Planning & Zoning Board
Monday, September 8, 2025 at 5:30 PM

City Commission Chambers
214 Sams Avenue, New Smyrna Beach, Florida 32168

1. CALL TO ORDER

A. Roll Call

2. APPROVAL OF MINUTES

2.A Consider the Approval of the Planning and Zoning Board July 7, 2025 Regular Meeting Minutes.

3. PUBLIC PARTICIPATION

4. OLD BUSINESS

4.A V-3-25 315 Faulkner, three variance requests to allow a house to encroach into side yard setbacks

5. NEW BUSINESS

5.A S-1-25 (Final Plat) Flagler Dunes, an 80-unit townhome subdivision on the south side of 10th Street, across from New Smyrna Beach High School

5.B SP-17-24 Flagler Dunes, Site Plan review for approval for an 80-unit townhome development on the south side of 10th Street, across from New Smyrna Beach High School

5.C S-4-23 Ardisia (formerly Shell Pointe) PUD Phases 3 and 4 Final Plat and Construction Documents

5.D V-8-25: Review a variance request for a new monument/ground sign for the Coconut Palms Beach Resort II located at 611 South Atlantic Avenue.

5.E SV-5-24: The applicant is seeking a positive recommendation from the Planning and Zoning Board for a proposed right of way vacation on New Smyrna Beach Airport property.

5.F A-0008-2025: Review and give a recommendation to the City Commission on an overall annexation application for 824 Ingham Road.

5.G A-0009-2025: Review and give a recommendation to the City Commission on an overall annexation application for 736 Louella Street.

5.H ZT-5-25: Review a request to add a conditional use of "Automotive Wholesale Used", to the I-3 Industrial Park zoning district.

5.I SV-1-25, A right-of-way vacation of platted Birch Street, between Slatton Street and Chisholm Street.

5.J ZT-9-25: Conduct a review and give a recommendation for a new proposed regulation for Outdoor Dog Dining based on Florida Statue 509.233.

5.K ZT-7-2025: Conduct a review and give a recommendation to the City Commission on a proposed amendment to Section 502.02, R-2 Single-Family Residential, Special Exception Use of School and or a House of Worship.

5.L A-0007-2025: Review and give a recommendation to the City Commission on an overall annexation application for 125 Jungle Road.

6. COMMENTS OR STATEMENTS BY MEMBERS OF THE BOARD

7. REPORTS AND COMMUNICATION BY THE STAFF

7.A Development Activity

8. ADJOURNMENT

Pursuant to Florida Statutes 286.0105, if an individual decides to appeal any decision made by the board, agency or commission of the City of New Smyrna Beach with respect to any matter considered at this meeting, a record of the proceedings will be required and the individual will need to ensure that a verbatim transcript of the proceedings is made, which record includes the testimony and evidence upon which the appeal is based. Such person must provide a method for recording the proceedings.

In accordance with the Americans with Disabilities Act, persons needing assistance to participate in any of these proceedings should contact the City Clerk's office in person or by mail at 210 Sams Avenue, New Smyrna Beach, Florida 32168, (386) 410-2630, prior to the meeting.

THE CITY OF NEW SMYRNA BEACH - PLANNING DEPARTMENT

CONSIDER THE APPROVAL OF THE PLANNING AND ZONING BOARD JULY 7, 2025 REGULAR MEETING MINUTES.

September 8, 2025

Background:
Florida Statutes require that minutes be prepared and approved for all meetings of the Planning and Zoning Board.

Findings:
Staff recommends the Planning and Zoning Board approve the minutes of the regular Planning and Zoning Board meeting held on July 7, 2025 Regular Meeting Minutes.

Fiscal Analysis:
N/A

Strategic Plan Item:
No

Staff Report Created By: Stephanie Ferrara - Development Services Coordinator

Attachments:

July 7, 2025 FULL MEETING MINUTES.pdf

Planning and Zoning Regular Meeting
Monday July 7, 2025, at 5:30 PM
MINUTES

1. CALL TO ORDER

Having been duly advertised as required by law, the regular meeting of the Planning and Zoning Board of the City of New Smyrna Beach, Florida, was held on Monday, July 7, 2025, at the City Commission Chambers, 214 Sams Avenue, New Smyrna Beach, Florida 32168.

Larry Wheatcraft called the meeting to order at 5:30 PM.

Roll Call

Attendee Name	Title	Status	Arrived
John Causey	Member	Present	5:30 PM
Thomas Bien	Member	Present	5:30 PM
Jon Hall	Member	Present	5:30 PM
Stephen Yates	Vice-Chair	Present	5:30 PM
Larry Wheatcraft	Chair	Present	5:30 PM
Curtis Hodges	Member	Present	5:30 PM
Kip Hulvershorn	Member	Present	5:30 PM

Also present were Shane Corbin, Director of Development Services, Stephanie Doster, Planning Manager, City Assistant Attorney Grant Day, and Board Secretary Stephanie Ferrara.

Chair Wheatcraft asked City Staff if there were any changes to the agenda. Stephanie Doster stated that the Applicant for agenda item 4.A, requested a continuance to August 4, 2025.

2. APPROVAL OF MINUTES

2.A Consider the Approval of the minutes from the Planning and Zoning Board regular meeting held on Monday, May 5, 2025.

Chair Wheatcraft asked the Board if they had any additional questions or comments.

DRAFT

Motion:
Member Hulvershorn moved to approve the minutes from the Planning and Zoning Board regular meeting held on Monday, May 5, 2025, as submitted. Member Hall seconded the motion, and the motion carried unanimously.

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Hulvershorn
SECONDER:	Hall
AYES:	Causey, Bien, Hall, Yates, Hodges, Hulvershorn, Wheatcraft

3. PUBLIC PARTICIPATION

None.

4. OLD BUSINESS

4.A V-03-25: 315 Faulkner, a variance to allow several structures to be located 2.1 feet from the side property line, a variance of 5.4 feet

Continued to August 4, 2025, Planning and Zoning Meeting.

Motion:
Vice-Chair Yates moved to continue V-03-25: 315 Faulkner, to August 4, 2025, Planning and Zoning Meeting. Member Hodges seconded the motion, and the motion carried unanimously.

RESULT:	**CONTINUED [UNANIMOUS]**
MOVER:	Yates
SECONDER:	Hodges
AYES:	Causey, Bien, Hall, Yates, Hodges, Hulvershorn, Wheatcraft

5. NEW BUSINESS

5.A ZT-4-25: Review and give a recommendation of a proposed text amendment, to the City's Land Development Regulations, to add a restriction on advertisement of unpermitted uses.

Stephanie Doster, Planning Manager, outlined the City's request for a Land Development Regulation text amendment to add a new regulation under Section 504.00.S, to restrict advertisement on any platform for any use that has not been permitted or approved.

Chair Wheatcraft opened Public Participation. As no citizens wished to speak, Chair Wheatcraft closed Public Participation.

Member Wheatcraft asked the Board if they had any additional questions or comments.

Motion:
Member Bien moved to recommend approval to City Commission ZT-4-25: To add a new regulation under Section 504.00.S, to restrict advertisement on any platform for any use that has not been permitted or approved, as submitted. Member Causey seconded the motion, and the motion carried unanimously.

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Bien
SECONDER:	Causey
AYES:	Causey, Bien, Hall, Yates, Hodges, Hulvershorn, Wheatcraft

5.B ZT-6-25: Review and give a recommendation of a proposed text amendment, to the City's Land Development Regulations, to amend sign definitions and required improvements.

Shane Corbin, Director of Development Services, outlined the City's request for a Land Development Regulation text amendment to amend sign definitions and required improvements under Sections 205.00 and 604.00.

Chair Wheatcraft opened Public Participation. As no citizens wished to speak, Chair Wheatcraft closed Public Participation.

Member Wheatcraft asked the Board if they had any additional questions or comments.

Member Hodges suggested to staff to mail out notices to all businesses that would be affected by this regulation.

Motion:
Member Hodges moved to recommend approval to City Commission ZT-6-25: amend sign definitions and required improvements under Sections 205.00 and 604.00, as submitted and condition to mail out notices to affected businesses. Member Hulvershorn seconded the motion, and the motion carried unanimously.

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	Hodges
SECONDER:	Hulvershorn
AYES:	Causey, Bien, Hall, Yates, Hodges, Hulvershorn, Wheatcraft

6. COMMENTS OR STATEMENTS BY MEMBERS OF THE BOARD

None.

7. REPORTS AND COMMUNICATIONS BY THE STAFF

7.A Development Activity Report – Listed on the City's Website

8. ADJOURNMENT

As there was no other business to discuss, Chair Wheatcraft declared the meeting adjourned at 5:58 P.M.

THE CITY OF NEW SMYRNA BEACH - PLANNING DEPARTMENT

V-3-25 315 FAULKNER, THREE VARIANCE REQUESTS TO ALLOW A HOUSE TO ENCROACH INTO SIDE YARD SETBACKS

September 8, 2025

Background:

Applicant: Mark Herwald, 2801 Sunset Drive, New Smyrna Beach, FL, 32168

Property Owner: Mark R. Hall, 315 Faulkner Street, New Smyrna Beach, FL 32168

Requests: A side yard setback variance to:
1. Extend the existing north wall of the primary structure (side yard) 8.0' at a 2.1' side yard setback;
2. Add a carport roof 26' in length 2.1' setback line in the front side yard (north); and
3. Increase the height of a non-conforming structure (existing portion of house 2.1' from side property line).

Site Information: The subject property is located at 315 Faulkner Street, is zoned R-4, is 50' X 145', contains approximately 0.166 acres, and is located on the east side of Faulkner Street, between Murray Street and Washington Street.

Tax I.D. Number: 7441-32-02-0030

Exhibits:
Exhibit A: Location Map
Exhibit B: Aerial Map
Exhibit C: Survey
Exhibit D: Pictures
Exhibit E: Depiction of Modification

Findings:

This case was originally considered April 7, 2025. After several continuations, the case is now to be considered.

The original request was: Side yard setback variances to:
1. Extend the existing north wall of the primary structure (side yard) 8.0' at a 2.1' side yard setback;

2. Add a carport roof 26’ in length 2.1’ setback line in the front side yard (north); and
3. Increase the height of a non-conforming structure (existing portion of house 2.1’ from side property line).

The original recommendation was: Staff recommends approving the raising of the existing section of the house 18", but cannot support the carport and new addition variances. If the Planning and Zoning Board chooses to approve the variance requests, staff recommends the entirety of the structure 2.1' from the property line to be guttered and the water diverted away from the north property line.

The primary difference between the original request and the current request is that the structures are now guttered, and the stormwater diverted away from the neighboring property to the north.

Variance Description from Original Request:
The applicant proposes to raise the floor level of the portion of the existing house **(Exhibit C)** labeled 378 square feet on 18”, as well as increase the wall height, so the interior wall is at least 8’ in height, with a new roof over the section of the house. Per the Appraiser’s webpage, it appears this section of the house was originally a porch which was later enclosed. This section of the house is 2.1' from the side (north) property line. The applicant also proposes to continue this setback line of 2.1' from the side property line an additional 8.0' from the rear of the existing house, and extending 42.0' across the rear of the house, bringing that side of the house within 5.8' to the side (south) property line. Another request is to add a 26.0' carport 2.1' from the same north property line, towards Faulkner Street. Thus, in total three separate requests; the first being to increase the height of the non-conforming structure, already 2.1' from the north property line; an 8.0' section of new wall 2.1' from the same north side property line; and the new 26.0' section of carport, 2.1' from the north side property line towards the front property line.

The difference between the original request and the revised request is the new structure will have 6" box gutters, 4" X 6" downspouts, underground rain leaders and two underground exfiltration systems to manage rainwater runoff.

The applicant has revised the variance criteria responses to provide greater detail regarding their requests and added gutters to divert the water away from the north property line, as noted as a recommended condition of approval if the Planning and Zoning Board chose to approve the variance requests. This packet is included as **ATTACHMENT A**. This will bring the sections of the house that are 2.1' from the side property line 6" closer to the property line, or 1.6' from the side property line.

Staff has included responses to the applicant's answers to the criteria, included below.

Also, the applicant has met the original recommendation, which was to gutter the structures to divert water away from the north property line if the Board was to approve the variance requests. The structures themselves are in the same location as originally proposed.

The applicant's revised responses to the criteria based on their revised application. See below.

The applicant's response is in *italics*, and the city's response is in **bold**.

1. Special circumstances exist which are peculiar to the subject property owner's land, structure, or building, and do not generally apply to the neighboring lands, structures, or buildings in the same district or vicinity.

This special circumstance is associated with the building. The house is 80 years old and built in 1946 with the current 2.1' setback. In most cases properties in the area do not have this unique characteristic. Apparently when the home was constructed the City did not have setback regulations to follow or the setback of the home was compliant at the time. Sometime later in 1992 the city initiated the LDR and the setback requirements as they are today. Now the house is non-conforming to the current minimum side yard setback of 7.5 feet. Because of the unique characteristic the non-conformity presents a special circumstance peculiar to this property.

Mr. Hall wants to keep the original flow and footprint of the residence. (see Exhibit C- **in ATTACHMENT** *A) Had the city codes not changed the setback requirements after the home was built, there would be no need for the variance and the addition and carport could be constructed. Thus, the special circumstance is associated with the unique characteristic of the 2.1' side yard setback requiring a dimensional variance.*

Allowing the addition and carport will preserve the integrity and character of the one-story historic building while allowing the property to be renovated for conventional living.

The City's Comprehensive plan encourages the granting of variances in order to preserve historic buildings. The Historical and Archaeological Preservation Element of the Comprehensive Plan specifically reads:

The city will make every effort to preserve, maintain, or rehabilitate housing structures or neighborhoods of historical significance. The city will also encourage efforts by commercial, private, or non-profit civic groups and organizations to maintain and rehabilitate historic structures.

More specifically the Historical & Archaeological Preservation Element Objective 5 reads:

Preserve privately owned historical and archaeological resources through use and reuse as an alternative to demolition and redevelopment. Even more specifically Objective 5, Policy b and d Reads:

b. Remove obstacles to the rehabilitation, use, or reuse of historic properties. Included, but not limited to this, are granting variances, liberal interpretation of codes, and providing code exemptions for historical buildings.

d. Provide flexibility in zoning regulations and applications to preserve, use, and or reuse historical properties.

Granting the variances would continue with the existing layout and site plan of the historic structure clearly being consistent with the Comprehensive Plan, and would help overcome the practical difficulty we are facing.

The house is already quite close to the property line (2.1'), which is relatively common in this area, as it was developed prior to the establishment of our current Land Development Regulations. That being said, the request is to add an additional combined 34.0' (8.0' house addition and 26.0 of new carport) of new structures 2.1' from the side property line, with the gutters bringing the improvements to 1.6' from the side property line. Thus, it is accurate that the house itself is a non-conforming structure that dates back almost 80 years but the new proposed improvements are not because of a peculiarity with the house or land. Capturing and diverting the rainwater is an improvement over the original proposal, however, the new proposed improvements are too close to the property line for staff to support. This criterion has not been met.

2. Strict application of the provisions of the Land Development Regulations would deprive the subject property owner of reasonable rights commonly applicable to other properties in the same district or may preclude a benefit to the community in general.

Strict application of the provisions of the Land Development Regulations would preclude a benefit to the community in general. The proposed additions and restoration of the existing principal building would be a beneficial historic asset for the neighborhood and community in general. It is more expensive to restore and add onto historical buildings than to remove and replace them. Any time one property owner improves their property it is an incentive for other owners to improve their property which increases their home value.
Although the neighborhood around 315 Faulkner St. is a nice historic neighborhood,

improvement should always be welcome which increases the benefit to the community. Homes over 80-years old were not planned to meet the needs of the 21st century and do not have the comforts conventional living or aging in place demands. Granting of the variances will make possible the restoration of a historic home while allowing an addition to make the property livable in modern times. Furthermore, there are other homes in the neighborhood that have been granted similar variances.

The original section of the house is only 624 square feet, and the area proposed to be raised is 378 square feet, a combined 1,002 square feet. It appears if and when the variances are approved and the construction completed, the house will be approximately 1,800 square feet. The proposed carport will add an approximate 260 square foot of building coverage on the lot as well. There is also a 768 square foot detached two-car garage on the parcel. In sum, approximately 2,828 square feet of building coverage, or 37.7%, below the maximum allowed building coverage of 40%.

There are houses and accessory structures that were built closer than currently allowed in the older areas of town such as the subject property. Staff can support allowing the existing section of house to be raised, but cannot support new construction in this section. The LDR has a provision that allows structures that are 5.0' from a side property line to be continued along that line in zoning districts that require a greater setback than 5.0'. In this instance, 2.1' is too close for staff to support as there are other options that could meet the setback requirements, or at the very least not encroach to such an extent. .Staff believes this criterion has not been met for the proposed new area to the rear and the carport, but has been met for the raised section.

3. The special circumstances and conditions that exist do not result from the direct or indirect actions of the present property owner(s) or past property owner(s). This criterion shall not be satisfied if the present or past property owner(s) created, to any degree, the hardship that is the subject of the variance request.

The current Florida Building code and the Land Development Regulations, established and changed since 1946, have redefined and created the special circumstances and non-conformities that are the subject of this Variance request. The special circumstances that exist are not a result of any action taken by the present or past property owners in interest of the property which was unlawful, or which could have been reasonably foreseen to create difficulty in complying with the ordinance for future improvements. In comparison, just as the home is now in a historic district and was not created from the present or past property owners, neither is the fact that when the city created or changed required ordinances and setbacks for the home, this is not due to the actions of the current or past property owners. The home was constructed according to the rules and

ordinances in effect at that time.

While the capturing and diverting of roof runoff is a definite improvement from the original request, the proposed improvements are still quite close to the property line. As noted above, the variance request to raise the existing section of house can be supported, however, the new construction is a direct result of the current property owner. This criterion has been met for the raised section of house, but not the addition or carport.

4. That granting of the variance will not cause substantial detriment to the public welfare or impair the purposes and intent of this Ordinance.

This request is historically mindful and is consistent with other neighborhood property improvements - all of which are impacted by this Ordinance, the current LDR and 2023 FBC requirements. The non- conforming 2.1' north side yard setback is a minor request that defines one intent of the Variance process: to give relief to strict application of current codes and standards to an existing code revision created nonconformity. In fact, it encourages people to save their older, existing homes in the City's historic districts.

Granting the variances will not cause substantial detriment to the public welfare or impair the purposes and intent of the land development regulations. One of the purposes of the land development regulations is to maintain public welfare and property values. Granting the variances to allow the addition and carport to be constructed will increase property values and desirability. The variance will improve the public welfare by building the North wall with fire rated materials not currently used by the neighbors. The Public welfare will also be improved by guttering and disposing of the rainwater runoff into an underground exfiltration system thus reducing surface water accumulation for 315 Faulkner and its neighbors. This system will also reduce evaporation and provide the rain water a direct path to the aquafer.

Given that the improvements are all proposed behind a fence and won't be visible from the street (unless the fence is opened), there will be little impact to the public, however, setback requirements are in place to allow people to access and maintain their structures, and a setback of 2.1 makes it difficult to maintain the structure. This criterion has not been fully met.

5. That granting of the variance will not constitute a grant of special privilege that is denied by the Land Development Regulations.

This historic neighborhood is unique because most buildings were constructed in historic times and have some sort of non-conformity associated with them as to current code and

development regulations. Granting of this variance request will not constitute a special privilege to this owner, in fact there are other notable properties in the neighborhood that have been granted similar variances recently, (e.g. 208 Rush St and 618 Faulkner St), both of which will enhance the character of their property with the privilege of a Variance(s) having been granted.

Everything below is from the original variance request.

A. The subject parcel is the third parcel south of Murray Street, on the west side of Faulkner Street. The parcel is platted 50.0' X 150.0'. There is an open alley off Murray Street that runs along the back of the property, providing access to a garage on the east side of the lot, in the rear yard. The house was built in 1946, 2.5' from the north property line, and 5.3' from the south property line. The R-4 zoning requires a setback of 7.5', thus both side yard setbacks are non-conforming.

B. The applicant proposes to raise the floor level of the portion of the existing house labeled 378 square feet on **(Exhibit C)** 18", as well as increase the wall height, so the interior wall is at least 8' in height, with a new roof over the section of the house. Per the Appraiser's webpage, it appears this section of the house was originally a porch which was later enclosed. This section of the house is 2.1' from the side (north) property line. The applicant also proposes to continue this setback line of 2.1' from the side property line an additional 8.0' from the rear of the existing house, and extending 42.0' across the rear of the house, bringing that side of the house within 5.8' to the side (south) property line. Another request is to add a 26.0' carport 2.1' from the same north property line, towards Faulkner Street. Thus, in total three separate requests; the first being to increase the height of the non-conforming structure, already 2.1' from the north property line; an 8.0' section of new wall 2.1' from the same north side property line; and the new 26.0' section of carport, 2.1' from the north side property line towards the front property line.

C. The reason for lifting the floor is that this area of the house has flooded, and the way to avoid this in the future is to add an 18" stem wall to keep water out in the future. Per LDR Section 505.05.A., "no such nonconforming structure may be altered or enlarged, except that where an enlargement or alteration is proposed in required yard space which contains an existing nonconforming structure." The section proposed to be raised is 2.5' from the side yard property line, thus elevating this section of the house requires a variance.

D. The LDR requires variance requests to meet all of the following criteria. The applicant's responses are *italicized,* Staff's responses are in **bold,** following each criterion.

1. Special circumstances exist which are peculiar to the subject property owner's land, structure, or building, and do not generally apply to the neighboring lands, structures, or buildings in the same district or vicinity.

The subject property is located in the R-4 Single Family Residential district and also in the designated Historic District. Existing non-conforming setbacks are present as to the Main residence, which are not unique to the Historic district. However, when the detached garage was built in 2000, near the rear alley (running parallel to Faulkner) special circumstances were considered to allow ample side yard access to emergency vehicles, on both the North and South side yards, which does not generally apply to neighboring Historic land, structures or buildings. This intentional placement was to mitigate the existing, non-conforming, setbacks of the main house and to provide adequate emergency access to the main home.

The house is already quite close to the property line (2.1'), which is relatively common in this area, as it was developed prior to the establishment of our current Land Development Regulations. That being said, the request is to add an additional combined 34.0' (8.0' house addition and 26.0 of new carport) of new structures 2.1' from the side property line. Thus, it is accurate that the house itself is a non-conforming structure that dates back almost 80 years but the new proposed improvements are not because of a peculiarity with the house or land. There appear to be options that don't include building quite that close to the side property line. This criterion has not been met.

2. Strict application of the provisions of the Land Development Regulations would deprive the subject property owner of reasonable rights commonly applicable to other properties in the same district or may preclude a benefit to the community in general.

The Main residence was built in 1946. The property owner is applying to improve and enlarge the substandard Northeast 378 SF area, which flooded during Hurricane Ian as it is 18" lower than the Main house. Please see Survey Exhibit A and Photo Exhibits B, C and D **(included as Exhibit F)***. This 378 SF lower level will be raised up 18", maintaining and extending the existing North residence wall eastward at a 2.1' side yard setback, for an additional 8' into the conforming rear yard. A new wall would parallel the rear yard, southward, for 42' and return westward to join the existing south side wall for 28' to match the existing 5.8' south side yard setback. This would allow for a symmetrical rear facing addition that would be raised to the same floor level as the Main home no wider*

than already built. The front porch of the home could remain unaltered and preserve its original historic features.

To the north of the existing Main house, and to the west of the 378 SF lower level (which we are proposing to raise up 18"), is the area marked on Exhibit A **(in Exhibit F)** *identified as a Concrete Drive and gated from the street view. We are proposing to add a covered accessibility ramp and entry door to accommodate "aging in place". This would remain "open air" much like a carport and would require a support/column or two to be placed along the existing 2.1' setback line to support the open roof.*

The original section of the house is only 624 square feet, and the area proposed to be raised is 378 square feet, a combined 1,002 square feet. It appears if and when the variances are approved and the construction completed, the house will be approximately 1,800 square feet. The proposed carport will add an approximate 260 square foot of building coverage on the lot as well. There is also a 768 square foot detached two-car garage on the parcel. In sum, approximately 2,828 square feet of building coverage, or 37.7%, below the maximum allowed building coverage of 40%.

There are houses and accessory structures that were built closer than currently allowed in the older areas of town such as the subject property. Staff can support allowing the existing section of house to be raised, but cannot support new construction in this section. The LDR has a provision that allows structures that are 5.0' from a side property line to be continued along that line in zoning districts that require a greater setback than 5.0'. In this instance, 2.1' is too close for staff to support as there are other options that could meet the setback requirements, or at the very least not encroach to such an extent. . Staff believes this criterion has not been met for the proposed new area to the rear and the carport, but has been met for the raised section.

3. The special circumstances and conditions that exist do not result from the direct or indirect actions of the present property owner(s) or past property owner(s). This criterion shall not be satisfied if the present or past property owner(s) created, to any degree, the hardship that is the subject of the variance request.

The current Florida Building code and the Land Development Regulations, established and changed since 1946, have redefined and created the special circumstances and non-conformities that are the subject of this Variance request.

As noted above, the variance request to raise the existing section of house can be supported, however, the new construction is a direct result of the current property owner. This criterion has been met for the raised section of house, but not the addition

or carport.

4. That granting of the variance will not cause substantial detriment to the public welfare or impair the purposes and intent of this Ordinance.

This request is historically mindful and is keeping with the other neighborhood property improvements - all of which are impacted by this Ordinance, the current LDR and 2023 FBC requirements. The 8' extension to the non-conforming 2.1' North side setback is a minor request that defines one intent of the Variance process: to give relief to strict application of current codes and standards to an existing code revision created nonconformity.

Given that the improvements are all proposed behind a fence and won't be visible from the street (unless the fence is opened), there will be little impact to the public, however, setback requirements are in place to allow people to access and maintain their structures, and a setback of 2.1 makes it difficult to not only maintain the structure. This criterion has not been met.

5. That granting of the variance will not constitute a grant of special privilege that is denied by the Land Development Regulations.

The current LDR, Ordinance and the current FBC 2023 were not in place in 1946, when this home was built existing non-conformity as defined by code changes and is not a special privilege that is not available to all NSB citizens if determined the criteria is met.

While the intent to "age in place" is certainly understandable, the proposed improvements are quite close to the property line, as noted repeatedly in this report. Staff could support a 5.0 setback for new construction, but with the gutters bringing the structure within 1.6' of the property line, it is simply too close for staff to support. This criterion has not been met.

E. Given that the house already has a two-car garage along the alley that conforms to the LDR setback requirements, and an addition can be added along the south property line at the existing 5.8' setback, there appears to be options to add onto the house that does not require this much of a variance from the LDR. For instance, a covered entryway that isn't quite that large might be an option, or bringing the house within 5.0' of the north property line, instead of 2.1', might be supportable, but as proposed, the request is too great to support.

Revised Recommendation:
Staff recommends **approving the raising of the existing section of the house 18"**, but

still cannot support the carport and new addition variances. The applicant has met the original recommendation to gutter the building, which is a definite improvement over the original request. The gutters will bring the improvements to 1.6' from the side property line.

Original Recommendation:

Staff recommends approving the raising of the existing section of the house 18", but cannot support the carport and new addition variances. If the Planning and Zoning Board chooses to approve the variance requests, staff recommends the entirety of the structure 2.1' from the property line to be guttered and the water diverted away from the north property line.

Fiscal Analysis:
N/A

Strategic Plan Item:
No

Staff Report Created By: Jake Baker - Senior Planner

Attachments:

ATTACHMENT A.pdf
Exhibit_A_Location_Map.pdf
Exhibit_B_Aerial_Map.pdf
Exhibit_C_Survey.pdf
Exhibit_D_Pictures.pdf
Exhibit_E_depiction_of_modification.pdf

Variance request V-3-25 315 Faulkner St. application and criteria information response

Introduction

Mr. Mark R Hall is the owner of the property addressed at 315 Faulkner Street in New Smyrna Beach in the heart of the City's mainland National Register of Historic Places district and appears on the Florida Master Site File. Mr. Hall purchased the property in 1996 and has lived there ever since. Mr. Hall is nearing retirement and has been told he will need hip surgery in the near future. He has no intention of moving to another location and is planning to age in place transforming 315 Faulkner St into his retirement home. To accomplish his goal, some improvements are necessary to make the building a more suitable property in which to retire. These necessary improvements, including the added living space, would accommodate accessibility, caregiving and updating of the existing. Letters of support from the neighbors will be supplied. (See Exhibit **J**)

Exhibit contents

Exhibit A Location map
Exhibit B Aerial map
Exhibit C Survey
Exhibit D Pictures 1
Exhibit D Pictures 2
Exhibit D Pictures 3
Exhibit E Modification 1 Aerial
Exhibit E Modifications 2
Exhibit E Modifications 3
Exhibit F Site Plan and Roof Overlay
Exhibit G Carport and Ramp
Exhibit H Cross section A
Exhibit I East Elevation
Exhibit I North Elevation
Exhibit I West Elevation
Exhibit J Neighboring Letters (To Be Supplied)

Variance request overview

To use and maintain an existing 2.1’ north side yard setback line for the following areas: **(see exhibit “C”)**

Addition to the 378 SF area

Raising the existing 378 SF 18”

Carport covering the existing driveway to include a wheelchair ramp

Addition to the 378 SF area

This request is for a 5.4' North side yard setback variance, from the required 7.5' side yard setback, to allow an existing block wall to be extended 8 linear feet eastward at the existing 2.1' side yard setback. This 8’ length of wall would only extend 1’-6” eastward of the adjacent neighbor’s home that has the same 2.1’ side yard setback. (See exhibit **E 1**) The entire length of the 28’ North wall would be guttered including a 6" box gutter, 4” x 6” downspouts, underground rain leaders and two underground exfiltration systems to manage rainwater runoff. This 28’ section of wall will be built with fire rated materials as per building code. The addition of these amenities will surely improve and better the conditions as they exist today. (see exhibits **F, H, I-East, I-North**).

The addition will be a new raised wood floor system proposed to be built at the same level as the existing home, approximately 18" above grade. Mr. Hall plans to remove the 119.2 SF porch area but maintain the 378 SF and 119.2 SF slabs to become the new bottom of the proposed 18' crawlspace. (see exhibits **C**, **H**)

The driveway width of 12.2’ and the addition of a wheelchair ramp is the main reason to maintain the 2.1’ side yard setback. At both the front driveway and at the 378 SF area we need to maintain the width of west wall **“A”** length (see exhibits **C** & **F**). Maintaining the existing wall width utilizes the 12.2’ length necessary in the rise run ramp calculation. This width is critical to facilitate a minimal wheelchair ramp slope of 8:1 (see exhibit **G**) The top of the ramp would be at the new entrance door with a landing, sloping north for 6’ to an intermediate landing then continuing west for 6’ feet.

In summary, to maintain the North wall setback of 2.1’ and keeping the 12.2’ west wall length, is to allow enough length so the ramp will end before interfering with the opening of the car door. On the other hand, with a 7.5’ side yard setback, effectively reducing the west facing wall to a length of 6.8’, the ramp would have to extend much further to the west not allowing for space functionality related to the car door. The car door must open out in front of the bottom of the ramp in order to properly exit the vehicle. Also, extending the ramp further to the west would push the vehicle further towards the street and would hinder the inswing gate operability. (see exhibits **D3 & G**) A covered carport and wheelchair ramp are necessary for aging in place as opposed to the current uncovered driveway and front porch steps which are not accessible nor sheltered. Mr. Hall would agree not to enclose this carport in the future as a condition of the Variance.

Raising the 378 SF area 18”

To request a variance from LDR Section 505.05.A., ***“no such nonconforming structure may be altered or enlarged, except that where an enlargement or alteration is proposed in required yard space which contains an existing nonconforming structure.”*** Raising the floor level is an important request since the main house is built on piers. It has an existing raised wood floor 18” above grade whereas the 378 SF area is currently built 18” lower on a concrete slab. Mr. Hall’s goal is to keep the new addition’s floor level flush with the existing floor of the home. This would help to minimize the change in floor elevations which could create a fall hazard. Also, raising the new floor 18” above grade would prevent water intrusion as was experienced during the hurricane Ian event. This property is not in a flood zone but in the (.2 PCT) zone. This flood level consistency would ensure a safer home environment especially during future weather anomalies. (see exhibit **H**)

Carport covering the existing driveway to include a wheelchair ramp

To request a 5.4' North side yard setback variance, from the required 7.5' side yard setback for 26’:

The carport would start at the 378 SF area west wall line and continue the existing setback of 2.1’ for 26’ to the west over the existing concrete driveway. There would be two columns along the north side of the carport spaced 13’ apart to support the structure. (see exhibit **G**) These supports would be 2.1’ from the property line requiring the 5.4’ variance. The ridge line would be a continuation of the existing main roof running north and south and would pitch the same way as the main roof sloping east and west. (see exhibit **F**) The carport and wheelchair ramp would be built over the existing concrete driveway, attaching the carport to the north and west side of the house. (see exhibit **C**) A covered carport and wheelchair ramp (in the scope of improvements) would alleviate Mr. Hall’s concern about a sheltered safe accessible entry when he arrives home in his vehicle. Mr. Hall would agree that the carport area would not become a habitable space and to maintain a fence along the property line for 26’ in perpetuity.

Meeting the five criteria

1. **Special circumstances exist which are peculiar to the subject property owner’s land, structure, or building, and do not generally apply to the neighboring lands, structures, or buildings in the same district or vicinity.**

Response

This special circumstance is associated with the building. The house is 80 years old and built in 1946 with the current 2.1’ setback. In most cases properties in the area do not have this unique characteristic. Apparently when the home was constructed the City did not have setback regulations to follow or the setback of the home was compliant at the time. Sometime later in 1992 the city initiated the LDR and the setback requirements as

they are today. Now the house is non- conforming to the current minimum side yard setback of 7.5' feet. Because of the unique characteristic the non-conformity presents a special circumstance peculiar to this property.

Mr. Hall wants to keep the original flow and footprint of the residence. (see Exhibit **C**) Had the city codes not changed the setback requirements after the home was built, there would be no need for the variance and the addition and carport could be constructed. Thus, the special circumstance is associated with the unique characteristic of the 2.1' side yard setback requiring a dimensional variance.

Allowing the addition and carport will preserve the integrity and character of the one- story historic building while allowing the property to be renovated for conventional living.

The City's Comprehensive plan encourages the granting of variances in order to preserve historic buildings. The Historical and Archaeological Preservation Element of the Comprehensive Plan specifically reads:

> ***The city will make every effort to preserve, maintain, or rehabilitate housing structures or neighborhoods of historical significance. The city will also encourage efforts by commercial, private, or non-profit civic groups and organizations to maintain and rehabilitate historic structures.***

More specifically the Historical & Archaeological Preservation Element Objective 5 reads:

> ***Preserve privately owned historical and archaeological resources through use and reuse as an alternative to demolition and redevelopment.***

Even more specifically Objective 5, Policy b and d Reads:

B. Remove obstacles to the rehabilitation, use, or reuse of historic properties. Included, but not limited to this, are granting variances, liberal interpretation of codes, and providing code exemptions for historical buildings.

D. Provide flexibility in zoning regulations and applications to preserve, use, and or reuse historical properties.

Granting the variances would continue with the existing layout and site plan of the historic structure clearly being consistent with the Comprehensive Plan, and would help overcome the practical difficulty we are facing.

2. **Strict application of the provisions of the Land Development Regulations would deprive the subject property owner of reasonable rights commonly applicable to other properties in the same district or may preclude a benefit to the community in general.**

Response

Strict application of the provisions of the Land Development Regulations would preclude a benefit to the community in general. The proposed additions and restoration of the existing principal building would be a beneficial historic asset for the neighborhood and community in general. It is more expensive to restore and add onto historical buildings than to remove and replace them. Any time one property owner improves their property

it is an incentive for other owners to improve their property which increases their home's value. Although the neighborhood around 315 Faulkner St. is a nice historic neighborhood, improvement should always be welcome which increases the benefit to the community. Homes over 80-years old were not planned to meet the needs of the 21st century and do not have the comforts conventional living or aging in place demands. Granting of the variances will make possible the restoration of a historic home while allowing an addition to make the property livable in modern times.
Furthermore, there are other homes in the neighborhood that have been granted similar variances.

3. **The special circumstances and conditions that exist do not result from the direct or indirect actions of the present property owner(s) or past property owner(s). This criterion shall not be satisfied if the present or past property owner(s) created, to any degree, the hardship that is the subject of the variance request.**

Response

The current Florida Building code and the Land Development Regulations, established and changed since 1946, have redefined and created the special circumstances and non-conformities that are the subject of this Variance request. The special circumstances that exist are not a result of any action taken by the present or past property owners in interest of the property which was unlawful, or which could have been reasonably foreseen to create difficulty in complying with the ordinance for future improvements. In comparison, just as the home is now in a historic district and was not created from the present or past property owners, neither is the fact that when the city created or changed required ordinances and setbacks for the home, this is not due to the actions of the current or past property owners. The home was constructed according to the rules and ordinances in effect at that time.

4. **That granting of the variance will not cause substantial detriment to the public welfare or impair the purposes and intent of this Ordinance**

Response

This request is historically mindful and is consistent with other neighborhood property improvements - all of which are impacted by this Ordinance, the current LDR and 2023 FBC requirements. The non-conforming 2.1' north side yard setback is a minor request that defines one intent of the Variance process: to give relief to strict application of current codes and standards to an existing code revision created nonconformity. In fact, it encourages people to save their older, existing homes in the City's historic districts.

Granting the variances will not cause substantial detriment to the public welfare or impair the purposes and intent of the land development regulations. One of the purposes of the land development regulations is to maintain public welfare and property values. Granting the variances to allow the addition and carport to be constructed will increase property values and desirability. The variance will improve the public welfare by building the North wall with fire rated materials not currently used by the neighbors. The Public welfare will also be improved by guttering and disposing of the rainwater runoff into an underground exfiltration system thus reducing surface water accumulation for 315 Faulkner and its neighbors. This system will also reduce evaporation and provide the rain water a direct path to the aquafer.

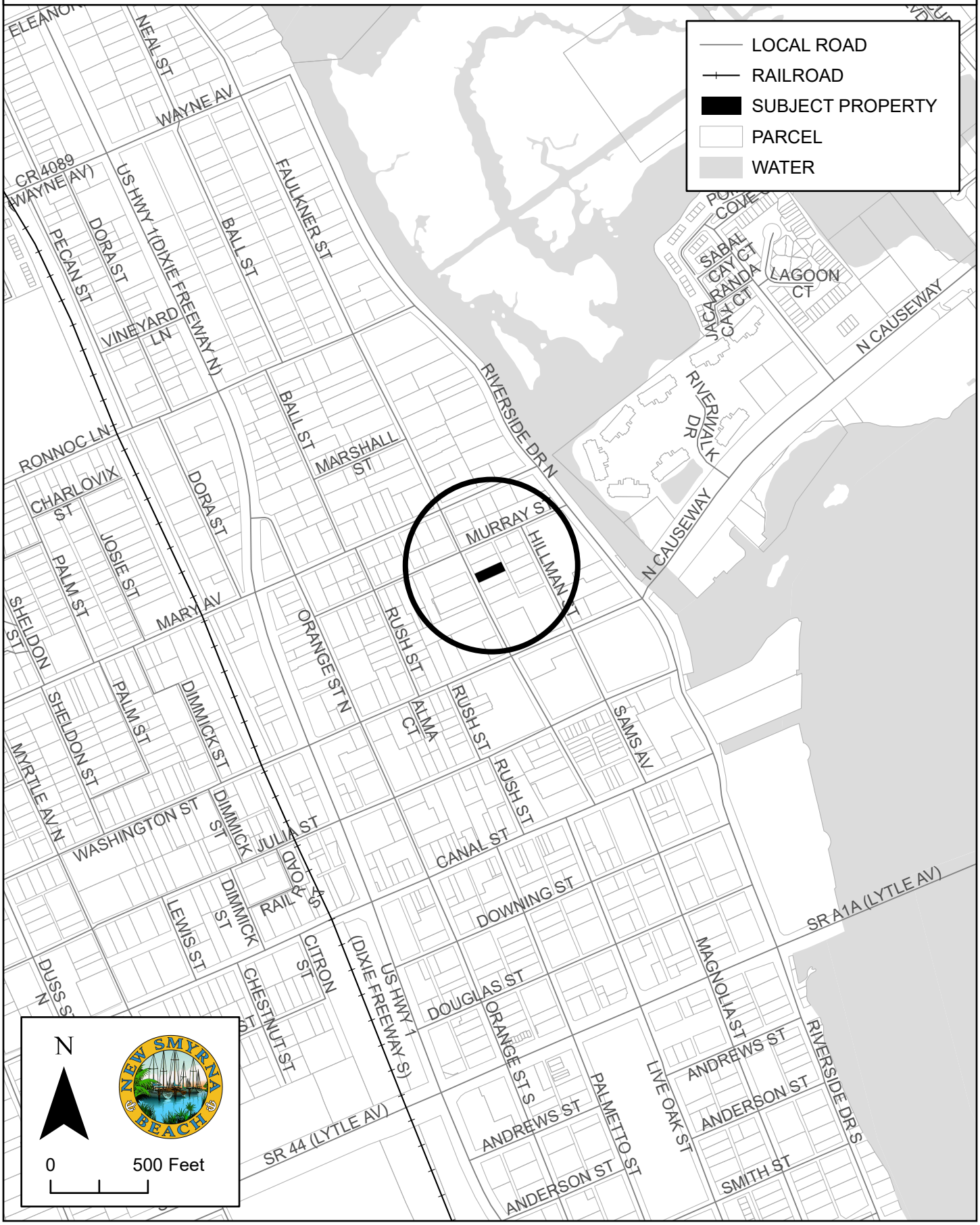
5 **That granting of the variance will not constitute a grant of special privilege that is denied by the Land Development Regulations.**

Response

This historic neighborhood is unique because most buildings were constructed in historic times and have some sort of non-conformity associated with them as to current code and development regulations. Granting of this variance request will not constitute a special privilege to this owner, in fact there are other notable properties in the neighborhood that have been granted similar variances recently, (e.g. 208 Rush St and 618 Faulkner St), both of which will enhance the character of their property with the privilege of a Variance(s) having been granted.

V-3-25: 315 FAULKNER STREET
PARCEL: 7441-32-02-0030 LOCATION MAP

EXHIBIT A



V-3-25: 315 FAULKNER STREET
PARCEL: 7441-32-02-0030 AERIAL MAP

EXIBIT B



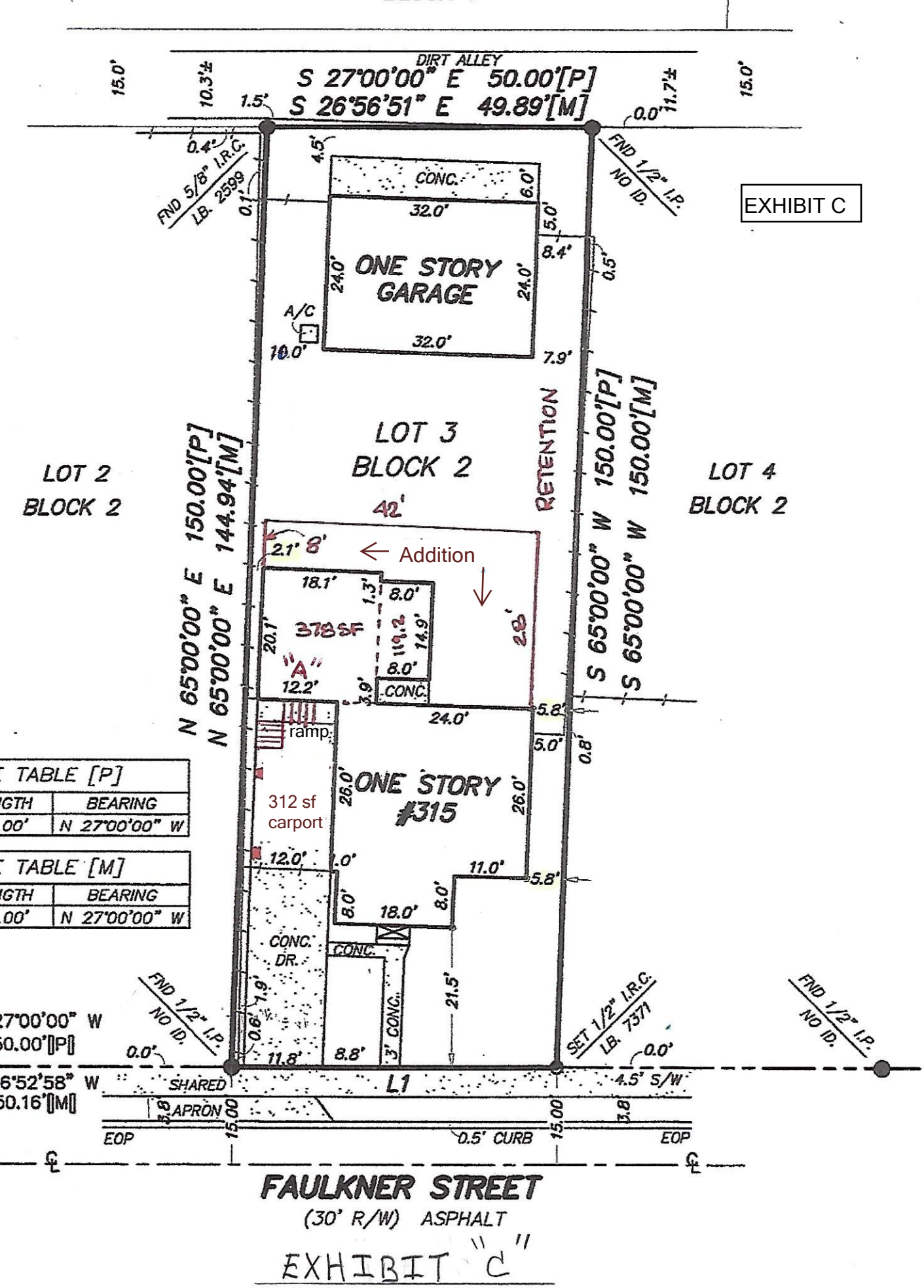


EXHIBIT C
DIRT ALLEY
S 27°00'00" E 50.00'[P]
S 26°56'51" E 49.89'[M]
15.0'
10.3'±
1.5'
0.0'
11.7'±
15.0'
0.4'
FND 5/8" I.R.C.
LB. 2599
0.1'
4.5'
CONC.
6.0'
FND 1/2" I.P.
NO ID.
32.0'
5.0'
8.4'
0.5'
ONE STORY
GARAGE
24.0'
24.0'
A/C
10.0'
32.0'
7.9'
LOT 3
BLOCK 2
RETENTION
LOT 2
BLOCK 2
LOT 4
BLOCK 2
N 65°00'00" E 150.00'[P]
N 65°00'00" E 144.94'[M]
S 65°00'00" W 150.00'[P]
S 65°00'00" W 150.00'[M]
42'
2.1'
8'
Addition
18.1'
1.3'
8.0'
20.1'
378 SF
119.2
14.9'
28'
"A"
8.0'
12.2'
3.9'
CONC.
24.0'
5.8'
5.0'
0.8'
ramp
26.0'
ONE STORY
#315
26.0'
312 sf
carport
12.0'
1.0'
11.0'
5.8'
8.0'
18.0'
8.0'
CONC.
DR.
CONC.
21.5'
1.9'
0.6'
11.8'
8.8'
3' CONC.
FND 1/2" I.P.
NO ID.
0.0'
SET 1/2" I.R.C.
LB. 7371
0.0'
FND 1/2" I.P.
NO ID.
L1
SHARED
4.5' S/W
APRON
3.8'
15.00
15.00
3.8'
EOP
0.5' CURB
EOP
FAULKNER STREET
(30' R/W) ASPHALT
TABLE [P]
BEARING
N 27°00'00" W
TABLE [M]
BEARING
N 27°00'00" W
27°00'00" W
50.00'[P]
6°52'58" W
50.16'[M]

EXHIBIT "C"

Exhibit D 1


3878027
3878019
313 FAULKNER ST
3878001
315 FAULKNER ST
317 FAULKNER ST

EXHIBIT D 2

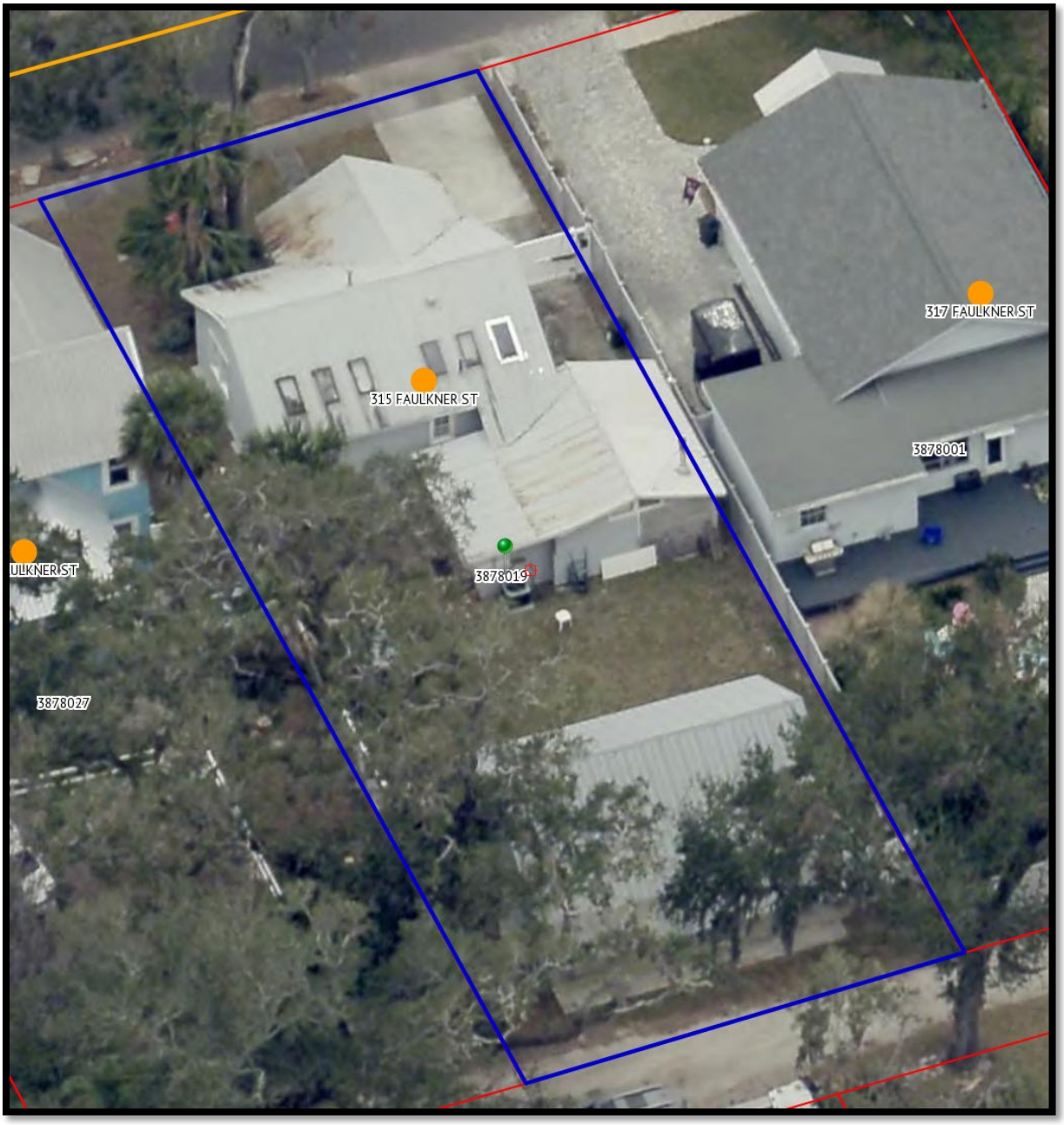

317 FAULKNER ST
315 FAULKNER ST
3878001
ULKNER ST
3878019
3878027

EXHIBIT D 3



EXHIBIT E 1



EXHIBIT E 2



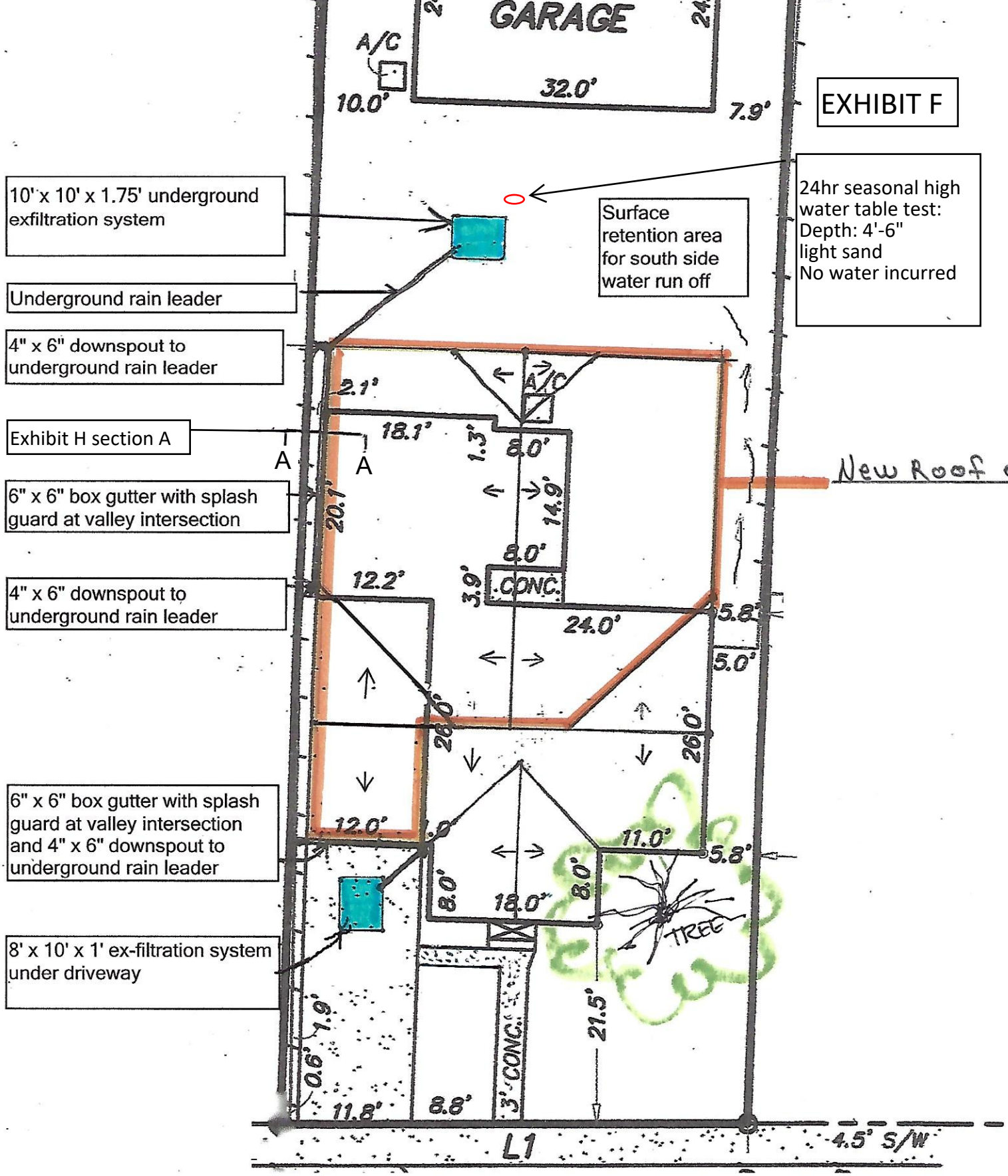
Extend existing north wall Eastward 8 LF. Build up on top of existg North wall to acheive min. 8' interior height above new raised floor.

← new 18" stem wall to support wood floor joists – to match existing residence floor elevation +/- 18"

Please note: Actual construction drawings have not yet been prepared, pending outcome of Variance Request. This drawing is for illustration purposes as to North and West walls.

EXHIBIT E 3





SITE PLAN AND ROOF OVERLAY
EXHIBIT "F"

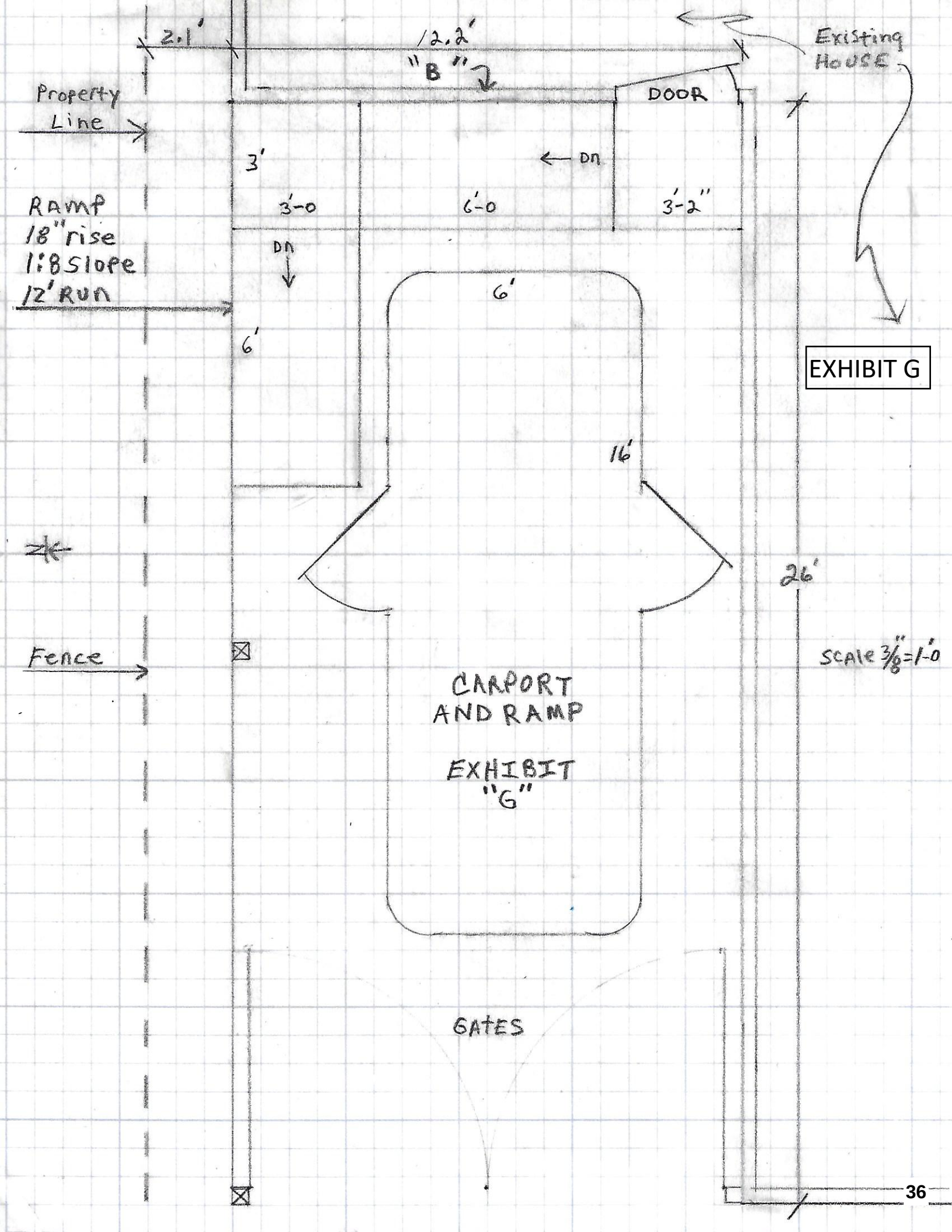
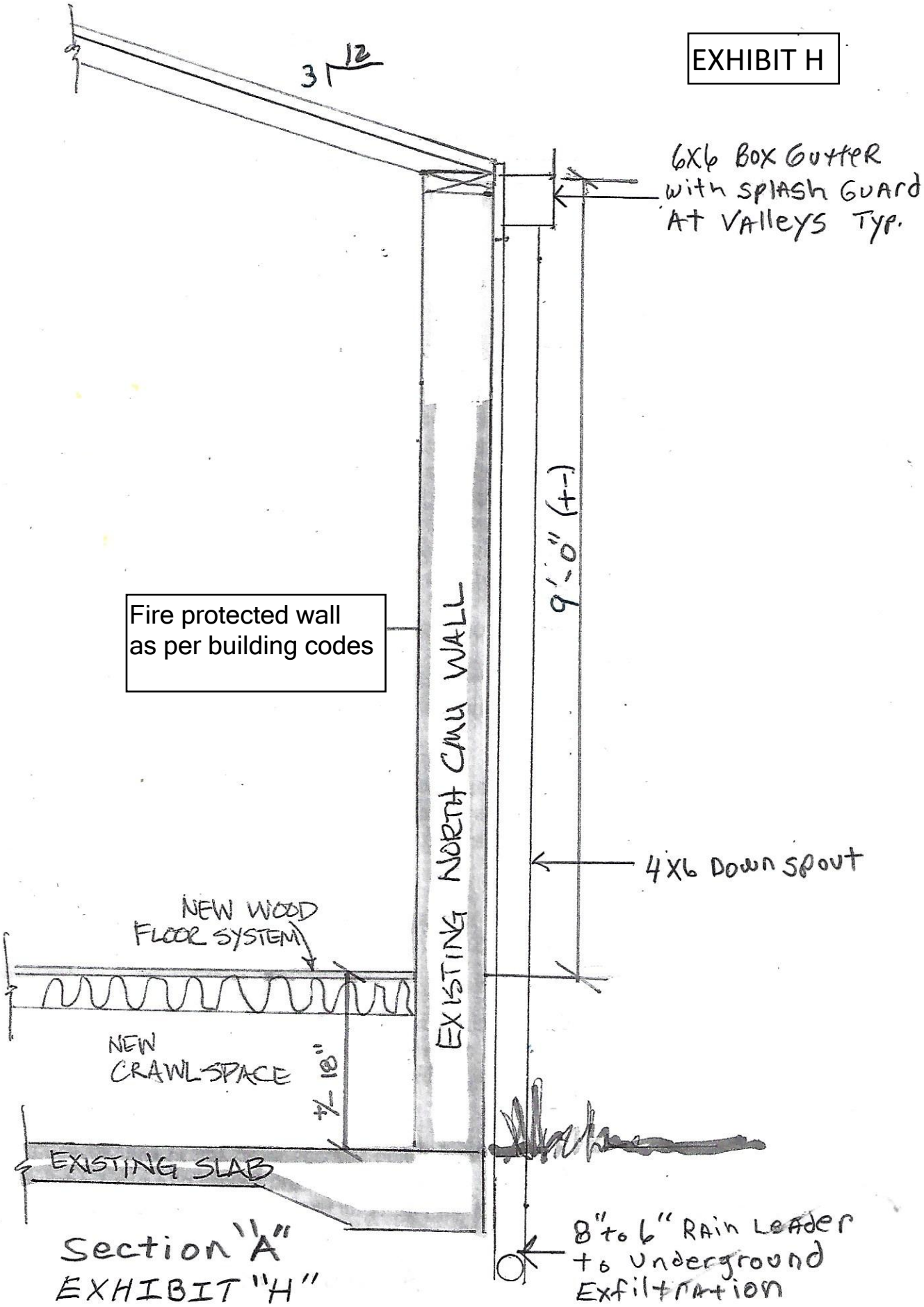

2.1'
12.2'
"B"
Existing House
Property Line
DOOR
3'
DN
RAMP
18" rise
1:8 Slope
12' RUN
3'-0
6'-0
3'-2"
DN
6'
6'
16'
26'
Fence
SCALE 3/8"=1'-0
CARPORT AND RAMP
EXHIBIT "G"
GATES

EXHIBIT G

EXHIBIT H



Section "A"
EXHIBIT "H"

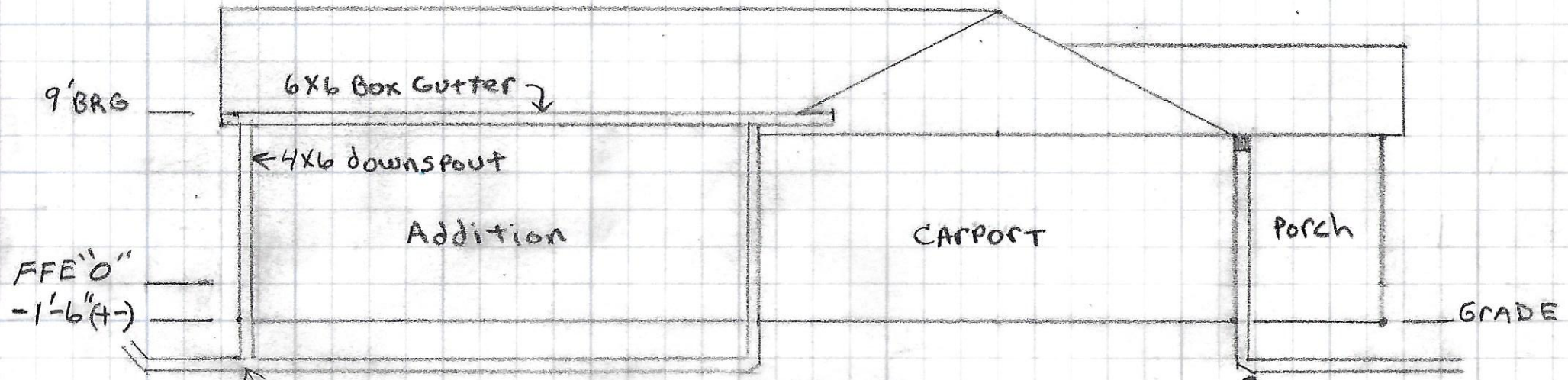
315 FAULKNER, NSB

EXHIBIT I EAST



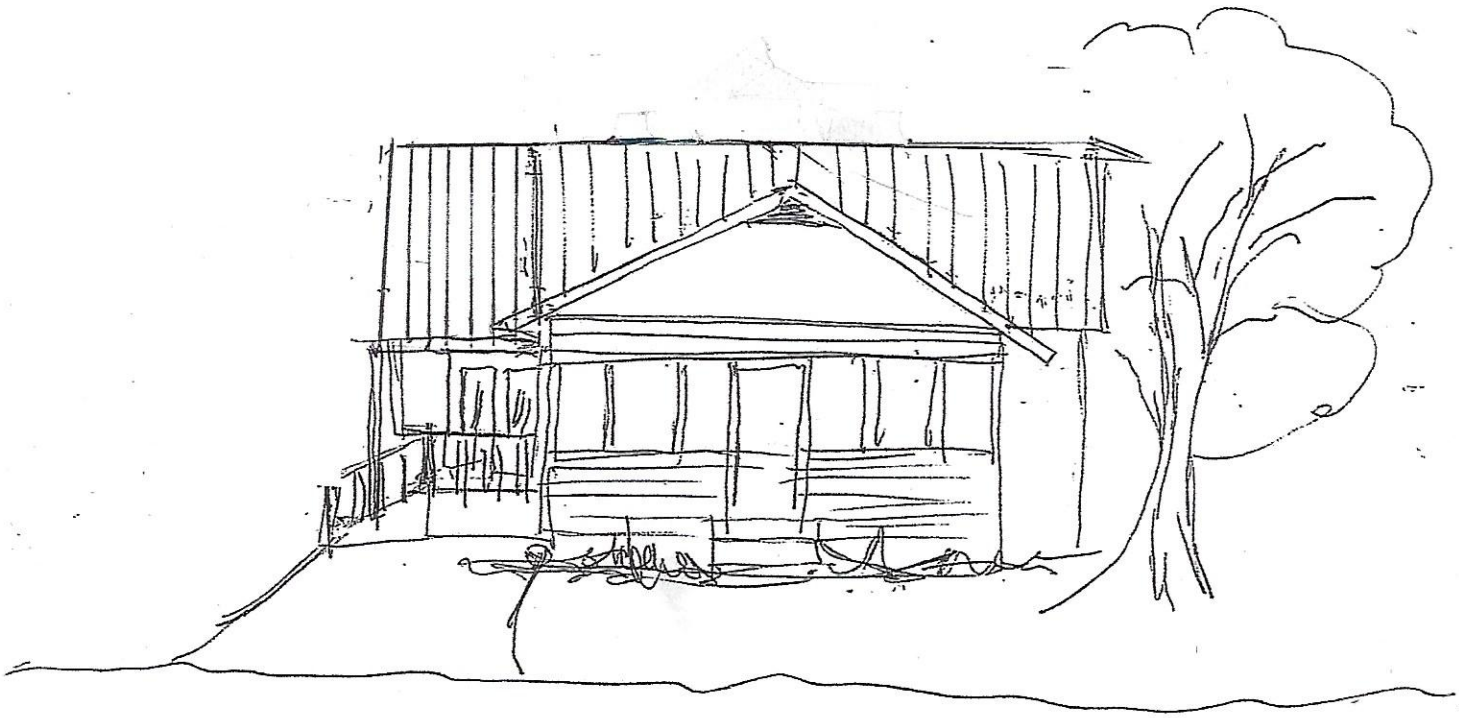
East Elevation
1/8" scale
EXHIBIT "I"

EXHIBIT I NORTH



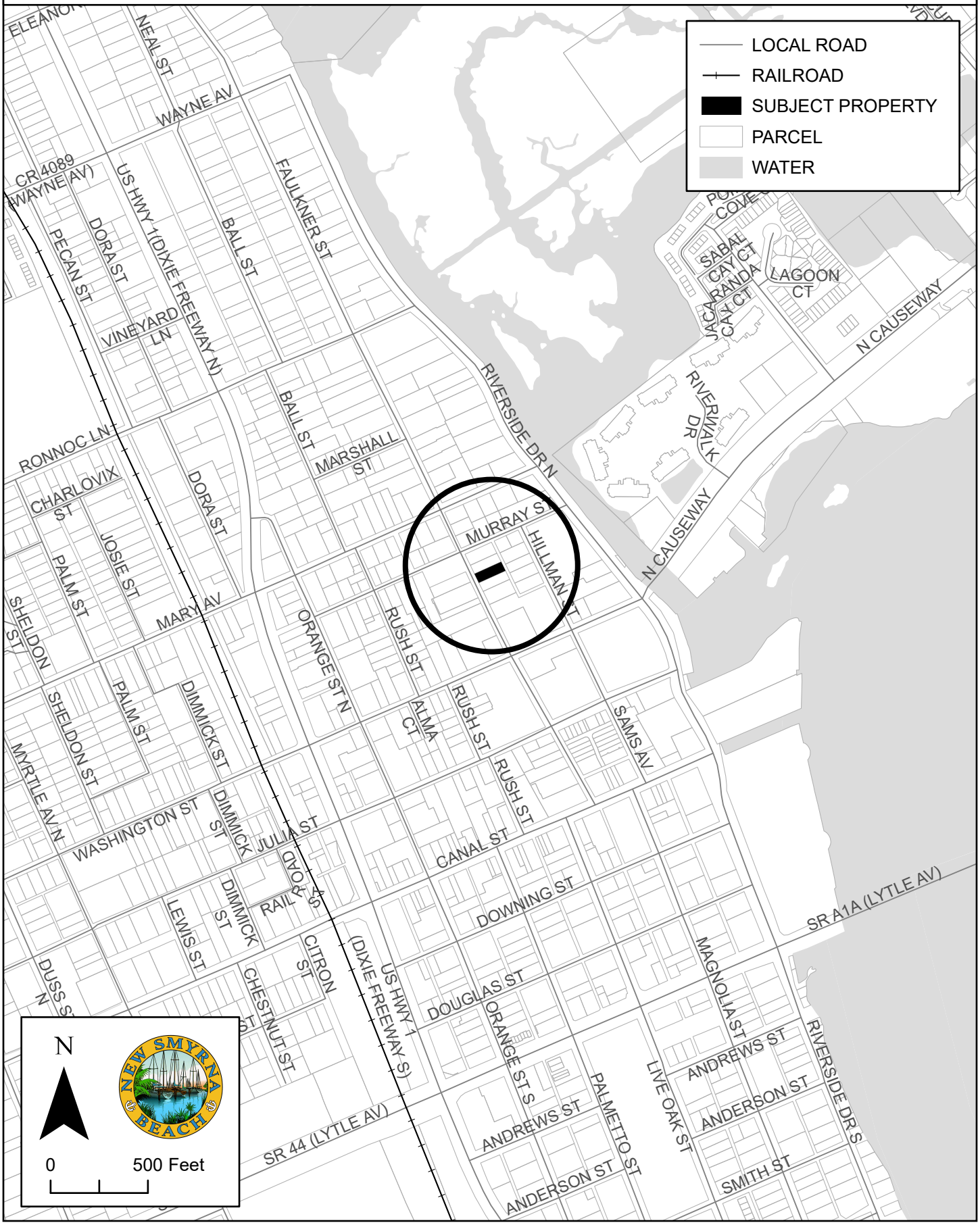
North Elevation
1/8" SCALE
EXHIBIT "I"

EXHIBIT I WEST



FRONT WEST ELEVATION
EXHIBIT "I"

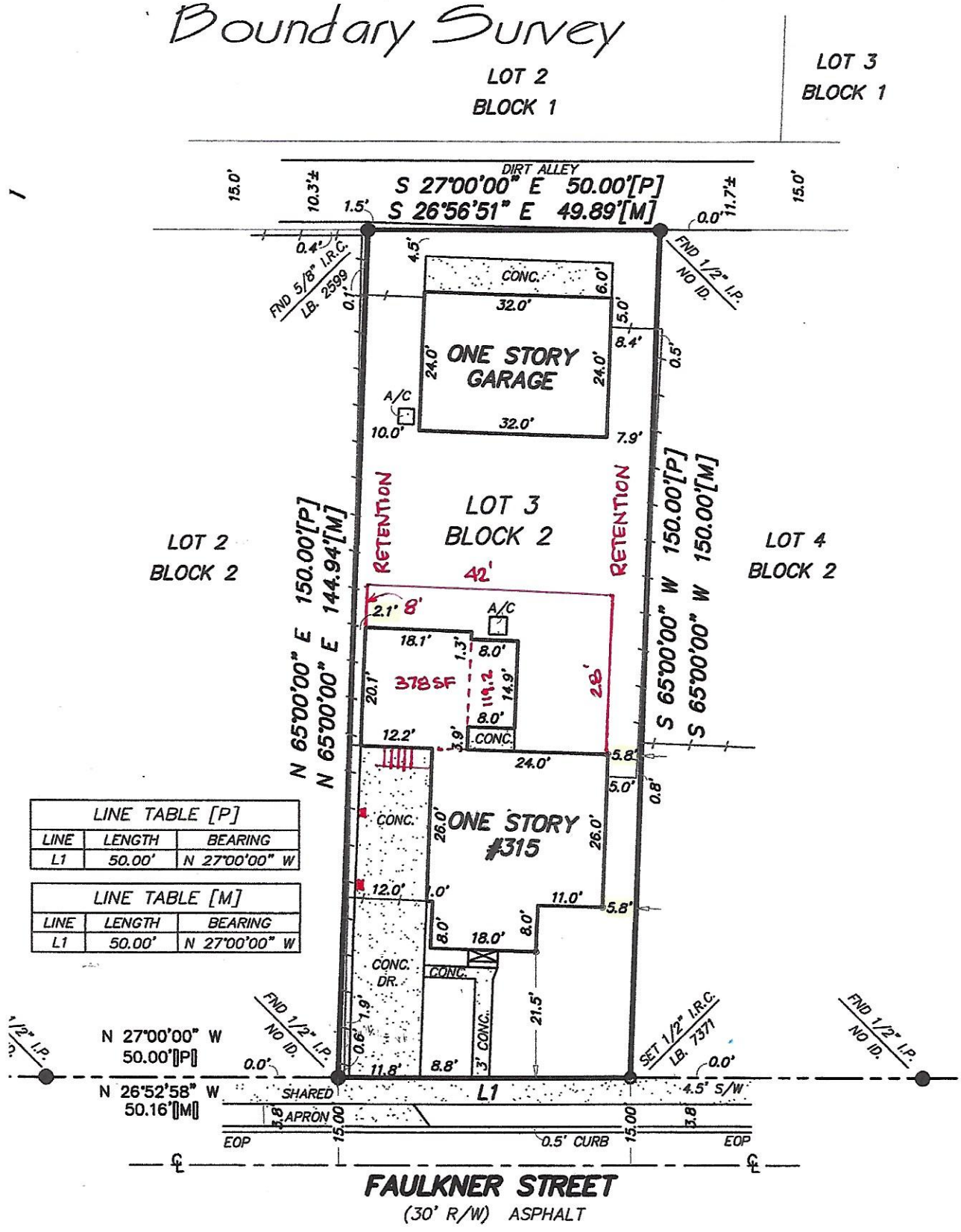
V-3-25: 315 FAULKNER STREET
PARCEL: 7441-32-02-0030 LOCATION MAP



V-3-25: 315 FAULKNER STREET
PARCEL: 7441-32-02-0030 AERIAL MAP



Boundary Survey



LINE TABLE [P]		
LINE	LENGTH	BEARING
L1	50.00'	N 27°00'00" W

LINE TABLE [M]		
LINE	LENGTH	BEARING
L1	50.00'	N 27°00'00" W

A/C
A.E.
B.C.
BLK
C.B.
C.B.S.
C.M.
CONC.
D
D.E.
E.O.P.
F.C.C.
F.F.E.
FND
ID.
I.P.
I.R.
I.R.C.
L
L.B.
L.S.
L.E.
M
M.E.
N&D
P
P.E.
P.C.
P.C.C.
P.C.P.
P.L.
P.O.B.
P.O.C.
P.O.L.
P.R.C.
P.R.M.
P.D.A.E.
P.T.
R
R/W
S/W
U.E.
W.F.S.
F.P.L.E.
R.P.
PK NAIL

BEARIN
THE

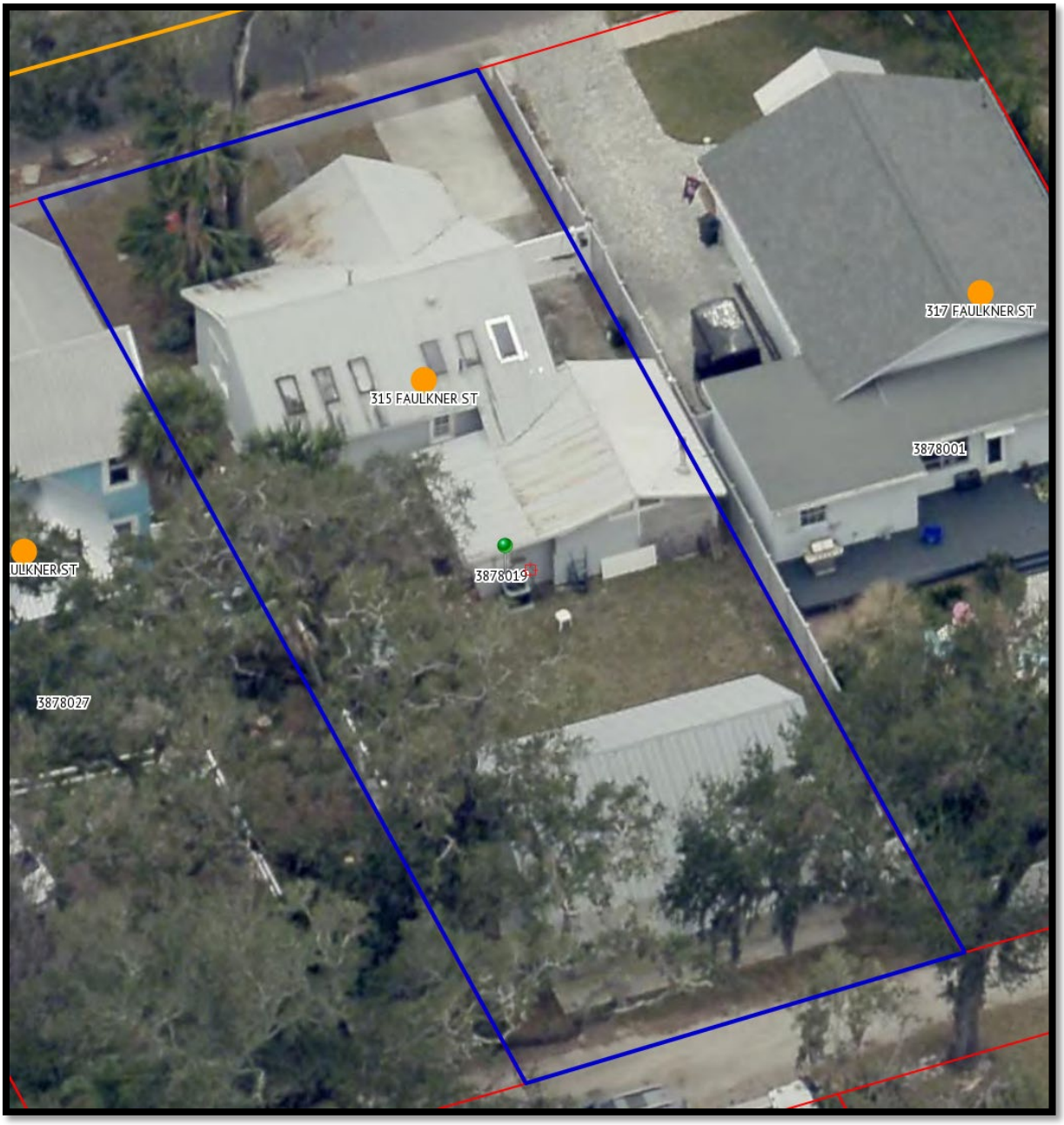
NOTES:
1) This su
the Clie
2) This Su
easeme
may af
3) Do not
4) No foo
5) No imp
shown
6) Not val
electror
licensec

Certification:
meets the m
Land Surveya

SURVEY No. 137396
03/06/25

Exhibit D


3878027
3878019
313 FAULKNER ST
3878001
315 FAULKNER ST
317 FAULKNER ST


317 FAULKNER ST
315 FAULKNER ST
3878001
ULKNER ST
3878019
3878027


TACOMA


From alley



Extend existing north wall Eastward 8 LF. Build up on top of existg North wall to acheive min. 8' interior height above new raised floor:

← new 18" stem wall to support wood floor joists – to match existing residence floor elevation +/- 18"

Please note: Actual construction drawings have not yet been prepared, pending outcome of Variance Request. This drawing is for illustration purposes as to North and West walls.


existing ±18"

THE CITY OF NEW SMYRNA BEACH - PLANNING DEPARTMENT

S-1-25 (FINAL PLAT) FLAGLER DUNES, AN 80-UNIT TOWNHOME SUBDIVISION ON THE SOUTH SIDE OF 10TH STREET, ACROSS FROM NEW SMYRNA BEACH HIGH SCHOOL

September 8, 2025

Background:

A. Applicant: Roger W. Strcula, P.E., CPESC of Upham, Inc., 265 Kenilworth, Avenue, Ormond Beach, FL 32174

B. Property Owner: Alicio & Nirma Pina, 15500 New Barn Road, Suite 104, Miami Lakes, FL 33014

C. Request: Final Plat approval for 80 20-foot-wide townhouse lots, with private roadways, common area tracts, master stormwater pond, with tree and wetland preservation areas.

D. Site Information:

- **Size:** 10.323 +- acres
- **Location:** South side of 10th Street, east of Tatum Boulevard

E: Tax I.D. Numbers: 7419-23-00-0492 & 7449-01-24-0011, 7419-23-00-0490

F. Exhibits:
Exhibit A: Location Map
Exhibit B: Aerial Map
Exhibit C: Final Plat
Exhibit D: Traffic Study
Exhibit E: Floor Plans/Elevations
Exhibit F: NSBU Approval Letter
Exhibit G: Survey of Site
Exhibit H: Engineering Approval Letter

Findings:

A. The subject property is currently un-developed and located on the south side of 10th Street, across from New Smyrna Beach High School, and north and west of the New Smyrna Beach Daytona State campus. South of the parcels is the Gabordy Canal, which

dates to the Turnbull era, and is maintained by Volusia County.

B. The property originally has a Future Land Use Category of Medium Density Residential which allows up to 8 units an acre to be developed. The property is zoned R-4, Multi-Family Residential, which allows townhouse lots to be 20-foot wide. Please see **Exhibit C** for a depiction of the proposed layout.

C. In sum, the project will contain 80 townhouse units. The buildings vary in size between 4 units and 8 units. The buildings that front on 10th Street have six units, and internal to the development is a private road- Flagler Dunes Circle- varying in size between 8 and 4 units.

D. The Flagler Dunes project includes a right-in and right-out on 10th Street, a Volusia County ROW. There is no westbound left-turn possibility as the road is divided. Per the Traffic Study:

Motorists traveling to the development from the east on 10th Street will need to find an alternative route to allow them return to the development via eastbound 10th Street. This may include using alternative roadways such as SR 44 or Park Avenue to travel to Old Mission Road and then 10th Street. Additionally, the County is continuing to pursue the eventual four-laning of 10th Street west of its current terminus, west of the high school. When this four-laning occurs, motorists will be able to perform a westbound-to-eastbound u-turn at locations west of the high school. Until the four-laning occurs, motorists will need to turn onto Tatum Boulevard or Pearl Street, perform a 3-point turn via existing driveways, and then return to the site. With all entering motorists performing a right-turn into the site from 10th Street, it will equate to nine rights in the AM peak hour and 26 rights in the PM peak hour. This is below the County's volume threshold of 100 rights. Given this volume and the "minor/intermediate driveway entrance" classification as previously discussed, a right-turn lane would not be warranted under this alternative.

E. Flagler Dunes has a secondary stabilized access ingress/egress at the light by the high school. This was the originally proposed main entrance/exit, but Volusia County required the developer to pay to install a new traffic light on a mast arm, which the developer determined to be prohibitively expensive.

F. Floor plans and elevations of the building are attached as **Exhibit E**.

G. The New Smyrna Beach Utilities has reviewed and approved the subdivision plans. Please see **Exhibit F.**

H. The site currently consists of three separate parcels. Combining the parcels prior to the issuance of a permits is required. Please see **Exhibit G** for a depiction of the three parcels.

Recommendation:

Staff recommends the Planning and Zoning Board recommend the City Commission approve this Final Plat.

Fiscal Analysis:
N/A

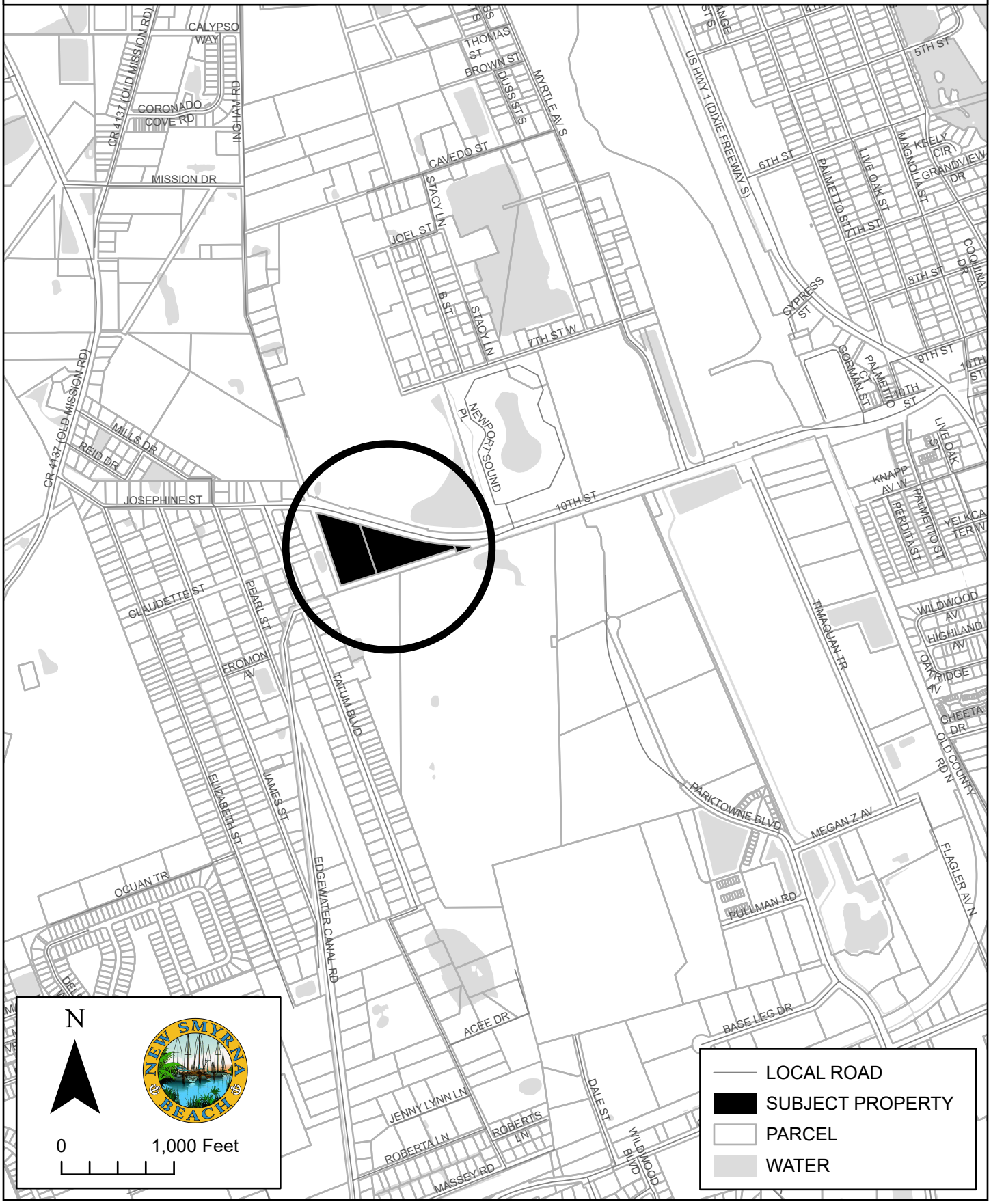
Strategic Plan Item:
No

Staff Report Created By: Jake Baker - Senior Planner

Attachments:

Exhibit A Location Map.pdf
Exhibit B Aerial Map.pdf
Exhibit C Final Plat.pdf
Exhibit E Preliminary Floor Plans and Building Elevations.pdf
Exhibit D Flagler Dunes TIA Memorandum.pdf
Exhibit F NSBU Approval Letter.pdf
Exhibit G Survey.pdf

S-1-25: FLAGLER DUNES (FINAL PLAT)
PARCELS: 7419-23-00-0490, 7419-23-00-0492, 7449-01-24-0011
LOCATION MAP



S-1-25: FLAGLER DUNES (FINAL PLAT)
PARCELS: 7419-23-00-0490, 7419-23-00-0492, 7449-01-24-0011
AERIAL MAP



FLAGLER DUNES

A REPLAT OF A PORTION LOTS 50 AND 51, MODEL LAND COMPANY SUBDIVISION AS RECORDED IN MAP BOOK 16, PAGE 61 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA AND A PORTION OF BLOCK 24, A.W. BARRS SUBDIVISION OF THE SEYMOUR PICKETT GRANT AS RECORDED IN MAP BOOK 17, PAGES 31 AND 32 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, BEING WITHIN SECTION 48, TOWNSHIP 17 SOUTH, RANGE 34 EAST, CITY OF NEW SMYRNA BEACH, VOLUSIA COUNTY, FLORIDA.

DESCRIPTION:

A PORTION OF LOTS 50 AND 51, MODEL LAND COMPANY SUBDIVISION AS RECORDED IN MAP BOOK 16, PAGE 61 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA AND A PORTION OF BLOCK 24, A.W. BARRS SUBDIVISION OF THE SEYMOUR PICKETT GRANT AS RECORDED IN MAP BOOK 17, PAGES 31 AND 32 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE SOUTHWEST CORNER OF SAID LOT 51, THENCE ALONG THE WESTERLY LINES OF SAID LOTS 50 AND 51, RUN N18°15'05"W FOR A DISTANCE OF 760.80 FEET TO A POINT ON THE SOUTHERLY RIGHT-OF-WAY OF TENTH STREET, BEING A RIGHT-OF-WAY THAT VARIES IN WIDTH, SAID POINT ALSO BEING A POINT ON A CURVE, SAID CURVE BEING CONCAVE SOUTHWESTERLY AND TO THE RIGHT, HAVING A CENTRAL ANGLE OF 09°57'44" AND A RADIUS OF 1432.08 FEET; HAVING A CHORD BEARING S77°46'23"E FOR A DISTANCE OF 248.69 FEET; THENCE ALONG THE ARC OF SAID CURVE AND THE SAID SOUTHERLY RIGHT-OF-WAY LINE FOR A DISTANCE OF 249.00 FEET; THENCE CONTINUING ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE, S73°00'29"E FOR A DISTANCE OF 631.33 FEET TO A POINT OF CURVE, SAID CURVE BEING CONCAVE NORTHEASTERLY AND TO THE LEFT, HAVING A CENTRAL ANGLE OF 21°14'15" AND A RADIUS OF 1384.32 FEET; HAVING A CHORD BEARING S83°29'55"E FOR A DISTANCE OF 510.19 FEET; THENCE ALONG THE ARC OF SAID CURVE AND THE SAID SOUTHERLY RIGHT-OF-WAY LINE FOR A DISTANCE OF 513.12 FEET; THENCE DEPARTING SAID CURVE AND CONTINUING ALONG SAID SOUTHERLY RIGHT-OF-WAY, S18°20'56"E FOR A DISTANCE OF 53.73 FEET; THENCE DEPARTING SAID SOUTHERLY RIGHT-OF-WAY, S71°36'15"W FOR A DISTANCE OF 1193.34 FEET TO THE POINT OF BEGINNING.

THE ABOVE DESCRIPTION CONTAINS 10.323 ACRES MORE OR LESS.

LEGEND:

- SET CONCRETE MONUMENT "PRM" LB 3612
- SET 5/8" IRON ROD & CAP "PRM" LB 3612
- SET PARKER KALON NAIL & DISK "PRM" LB 3612

RIGHT-OF-WAY LINE
CENTERLINE OF RIGHT-OF-WAY
EASEMENT LINE

HATCH DENOTES TREE CONSERVATION EASEMENT

CA	CENTRAL ANGLE	INC	INCORPORATED
CH	CHORD LENGTH	L	LENGTH
CHB	CHORD BEARING	LB	LICENSED BUSINESS
CM	CONCRETE MONUMENT	LC	LICENSED CORPORATION
FD	FOUND	MB	MAP BOOK

No.	NUMBER
NR	NON-RADIAL
ORB	OFFICIAL RECORDS BOOK
PDE	PUBLIC DRAINAGE EASEMENT
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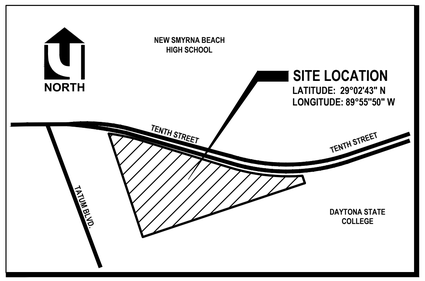
PKD	PARKER KALON NAIL & DISK
PRM	PERMANENT REFERENCE MONUMENT
PSM	PROFESSIONAL SURVEYOR & MAPPER
PUE	PUBLIC UTILITY EASEMENT
R	RADIUS
R/W	RIGHT-OF-WAY
SF	SQUARE FEET

GENERAL NOTES:

1. ACCURACY: THE BOUNDARY LINEAR ERROR OF CLOSURE DOES NOT EXCEED 1:10,000. THE BOUNDARY ANGULAR ERROR OF CLOSURE DOES NOT EXCEED 15 SECONDS MULTIPLIED BY THE SQUARE ROOT OF THE NUMBER OF ANGLES TURNED.
2. NOTICE: ALL MEASUREMENTS ON THIS PLAT IS IN U.S. FOOT AND DECIMALS THEREOF. ALL MEASUREMENTS REFER TO HORIZONTAL PLANE IN ACCORDANCE WITH THE DEFINITION OF THE UNITED STATES SURVEY FOOT OR METER ADOPTED BY THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY. ALL MEASUREMENTS SHALL USE THE 39.37/12=3.28083333333 EQUATION FOR CONVERSION FROM A U.S. FOOT TO METERS.
3. BEARINGS SHOWN HEREON ARE BASED ON THE STATE PLANE COORDINATE SYSTEM EAST ZONE NORTH AMERICAN DATUM OF 1983 (NAD83) WITH 2011 ADJUSTMENT AS DERIVED FROM THE LENGEMANN NETWORK (A TOPNET GNSS NETWORK). AS A REFERENCE FOR THIS SURVEY, ALONG THE SOUTH LINE OF LOT 51, THE MODEL LAND COMPANY SUBDIVISION, MAP BOOK 16, PAGE 61, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, HAVING A BEARING OF (S 71°36'15" W).
4. NOTICE: THIS PLAT, AS RECORDED IN ITS GRAPHIC FORM, IS THE OFFICIAL DEPICTION OF THE SUBDIVIDED LANDS DESCRIBED HEREIN AND WILL IN NO CIRCUMSTANCES BE SUPPLANTED IN AUTHORITY BY ANY OTHER GRAPHIC OR DIGITAL FORM OF THE PLAT. THERE MAY BE ADDITIONAL RESTRICTIONS THAT ARE NOT RECORDED ON THIS PLAT THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY.
5. UTILITIES INCLUDE BUT ARE NOT LIMITED TO SANITARY SEWER, POTABLE WATER, RECLAIMED WATER, STORM DRAINAGE, ELECTRIC, TELEPHONE, CABLE TELEVISION, TELECOMMUNICATIONS, FIBER OPTIC, SECURITY, AND NATURAL GAS.
6. ALL PLATTED UTILITY EASEMENTS SHOWN ON THIS PLAT INCLUDE EASEMENTS FOR THE CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES; PROVIDED, HOWEVER, NO SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES SHALL INTERFERE WITH THE FACILITIES AND SERVICES OF AN ELECTRIC, TELEPHONE, GAS OR OTHER PUBLIC UTILITY. IN THE EVENT A CABLE TELEVISION COMPANY DAMAGES THE FACILITIES OF A PUBLIC UTILITY, IT SHALL BE SOLELY RESPONSIBLE FOR THE DAMAGES. THIS SECTION SHALL NOT APPLY TO THOSE PRIVATE EASEMENTS GRANTED TO OR OBTAINED BY A PARTICULAR ELECTRIC, TELEPHONE, GAS OR OTHER PUBLIC UTILITY. SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE AND OPERATION SHALL COMPLY WITH THE NATIONAL ELECTRICAL SAFETY CODE AS ADOPTED BY THE FLORIDA PUBLIC SERVICE COMMISSION.
7. MONUMENTS SHALL BE SET AT ALL LOT CORNERS, POINTS OF INTERSECTION, AND CHANGES OF DIRECTION OF LINES WITHIN THE SUBDIVISION WHICH DO NOT REQUIRE A "P.R.M." OR "P.C.P." IN ACCORDANCE WITH FLORIDA STATUTES CHAPTER 177.091(9).
8. THE PROPERTY IS SUBJECT TO THE DECLARATION OF COVENANTS, RESTRICTIONS AGREEMENTS AS RECORDED IN OFFICIAL RECORDS BOOK _____ PAGE _____.
9. THIS SUBDIVISION INCLUDES 80 LOTS AND 4 TRACTS.



LOCATION MAP

SCALE 1" = 500'

UPHAM INC
CIVIL ENGINEERING • SURVEYING • LANDSCAPE ARCHITECTURE
265 Kenilworth Avenue • Ormond Beach • Florida 32174
Voice: 386.672.9515 • Fax: 386.673.6554 • uphaminc.com
LB # 0003612 LC # 0000357

SHEET 1 OF 5 | **MAP BOOK:** **PAGE:**

DEDICATION

KNOWN ALL MEN BY THESE PRESENTS, THAT THE UNDERSIGNED BEING THE OWNER IN FEE SIMPLE, OF THE LANDS SHOWN AND DESCRIBED HEREON AS THE PLAT ENTITLED "FLAGLER DUNES", LOCATED IN THE CITY OF NEW SMYRNA BEACH, VOLUSIA COUNTY, FLORIDA HEREBY DEDICATES THE SAID LANDS AND PLAT FOR THE USES AND PURPOSES HEREON EXPRESSED. TRACTS "A", "B", AND "C" ARE HEREBY GRANTED TO THE FLAGLER DUNES TOWNHOME OWNERS ASSOCIATION AS COMMON AREAS. ALL TREE CONSERVATION EASEMENTS SHOWN OR DESCRIBED ON THE PLAT ARE, UNLESS OTHERWISE INDICATED, GRANTED TO THE CITY OF NEW SMYRNA BEACH, FLORIDA. AN ACCESS EASEMENT FOR INGRESS AND EGRESS OVER TRACT "C" SHOWN OR DESCRIBED ON THE PLAT, HEREBY GRANTED TO THE CITY OF NEW SMYRNA BEACH FOR EMERGENCY VEHICLES AND GOVERNMENT SERVICES. A PUBLIC UTILITY EASEMENT OVER TRACT "C" SHOWN OR DESCRIBED ON THE PLAT, HEREBY GRANTED TO THE UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH, FLORIDA. THE PUBLIC DRAINAGE EASEMENT AND THE ACCESS AND MAINTENANCE EASEMENT SHOWN OR DESCRIBED ON THE PLAT ARE HEREBY GRANTED TO VOLUSIA COUNTY. ALL PUBLIC UTILITY EASEMENTS SHOWN OR DESCRIBED ON THE PLAT ARE HEREBY DEDICATED TO THE UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH, FLORIDA. TRACT "D" IS HEREBY DEDICATED TO THE UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH, FLORIDA.

ALL POTABLE WATER, SANITARY SEWER MAINS, SANITARY FORCE MAIN, AND ELECTRIC CONSTRUCTED WITHIN THE AREA ENCOMPASSED WITHIN THE PLAT ARE DEDICATED TO THE UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH, FLORIDA.

IN WITNESS THEREOF, THE UNDERSIGNED OWNER(S) HERETO SET THEIR HAND AND SEAL ON _____.

WITNESSES:

BY: _____

NAME: _____

BY: _____

NAME: _____

OWNER: CAP 5 DEVELOPMENT, LLC

BY: _____
CHRIS HELFRICH
ITS: MANAGER

STATE OF FLORIDA, COUNTY OF _____

THE FORGOING DEDICATION WAS ACKNOWLEDGED BEFORE ME, AN OFFICER DULY AUTHORIZED TO TAKE ACKNOWLEDGEMENTS IN THE STATE AND COUNTY AFORESAID,
BY MEANS OF [ ] PHYSICAL APPEARANCE OR [ ] ONLINE NOTARIZATION,

ON THIS _____ DAY OF _____ 2025, BY -

HE / SHE (IS PERSONALLY KNOWN TO ME) OR (HAS PRODUCED _____ AS IDENTIFICATION) AND (DID) OR (DID NOT) TAKE AN OATH.

_____
NOTARY PUBLIC
NAME: _____
COMMISSION No. _____
MY COMMISSION EXPIRES: _____

CERTIFICATE OF CLERK

I HEREBY CERTIFY THAT I HAVE EXAMINED THE FOREGOING PLAT AND FIND IT COMPLIES IN FORM WITH ALL THE REQUIREMENTS OF CHAPTER 177, FLORIDA STATUTES, AND IT WAS FILED FOR RECORD ON _____

AT _____.

FILE NO.: _____

_____
CLERK OF THE CIRCUIT COURT
IN AND FOR VOLUSIA COUNTY, FLORIDA

REVIEW BY SURVEYOR AND MAPPER FOR THE CITY

I HEREBY CERTIFY TO THE CITY, THAT I HAVE REVIEWED THE FOREGOING PLAT FOR COMPLIANCE WITH THE REQUIREMENTS OF CHAPTER 177, FLORIDA STATUTES, PART 1, AND THAT I HAVE PROVIDED BOTH THE CITY AND THE SURVEYOR AND MAPPER OF RECORD A LIST OF DEVIATIONS, IF ANY, FROM SUCH REQUIREMENTS.

JEFFREY W. CORY, LICENSED SURVEYOR 4139
DANIEL W. CORY SURVEYOR, LLC
300 CANAL STREET
NEW SMYRNA BEACH FLORIDA 32168
LICENSED BUSINESS 7893

SIGNED: _____ DATE: _____
JEFFREY W. CORY (LICENSE No. 4139)

CERTIFICATE OF APPROVAL BY CITY ATTORNEY

THIS IS TO CERTIFY THAT ON _____ THE FOREGOING PLAT WAS APPROVED

BY: _____
CITY ATTORNEY FOR NEW SMYRNA BEACH, FLORIDA

CERTIFICATE OF APPROVAL BY CITY OF NEW SMYRNA BEACH

THIS IS TO CERTIFY THAT ON _____ THE FOREGOING PLAT WAS APPROVED BY THE CITY OF NEW SMYRNA BEACH, FLORIDA.

BY: _____ ATTEST: _____
MAYOR OF THE CITY OF NEW SMYRNA BEACH — CITY CLERK OF THE CITY OF NEW SMYRNA BEACH

PRINT NAME: _____ PRINT NAME: _____

CERTIFICATE OF SURVEYOR AND MAPPER

KNOW ALL MEN BY THESE PRESENTS THAT THE UNDERSIGNED, BEING A LICENSED AND PROFESSIONAL SURVEYOR AND MAPPER, DOES HEREBY CERTIFY THAT THE PLAT SHOWN AND DESCRIBED HEREON, ENTITLED "FLAGLER DUNES", WAS PREPARED UNDER MY DIRECTION AND SUPERVISION, THAT THE PLAT COMPLIES WITH ALL OF THE SURVEY REQUIREMENTS OF CHAPTER 177, PART 1, FLORIDA STATUTES, AND THAT ALL MONUMENTATION SHOWN HEREON OR REQUIRED PER CHAPTER 177, PART 1, FLORIDA STATUTES, HAS BEEN PROPERLY PLACED.

UPHAM, INC.
265 KENILWORTH AVENUE
ORMOND BEACH, FLORIDA 32174
www.uphaminc.com

PHONE: (386) 672-9515
LICENSED BUSINESS No. 3612
cvankleeck@uphaminc.com

SIGNED: _____ DATE: _____
C.O. VAN KLEECK, JR. (LICENSE No. 6149)
FLORIDA PROFESSIONAL SURVEYOR AND MAPPER FIRM CERTIFICATE AUTHORIZATION NUMBER LB 3612

SHEET 2 OF 5	MAP BOOK:	PAGE:

FLAGLER DUNES

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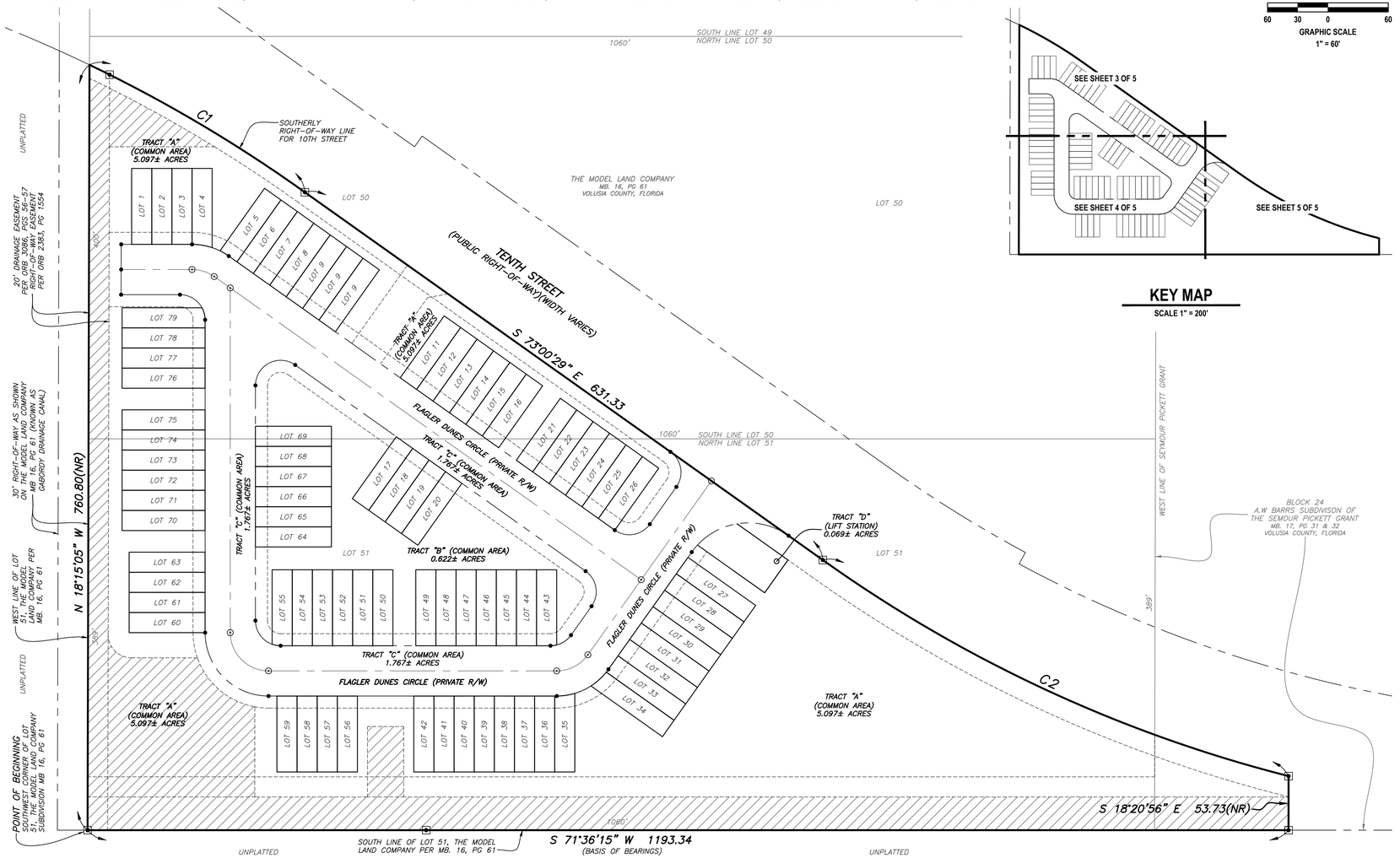

LEGEND:

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- CENTERLINE OF RIGHT-OF-WAY
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SHEET 3 OF 5	MAP BOOK:	PAGE:

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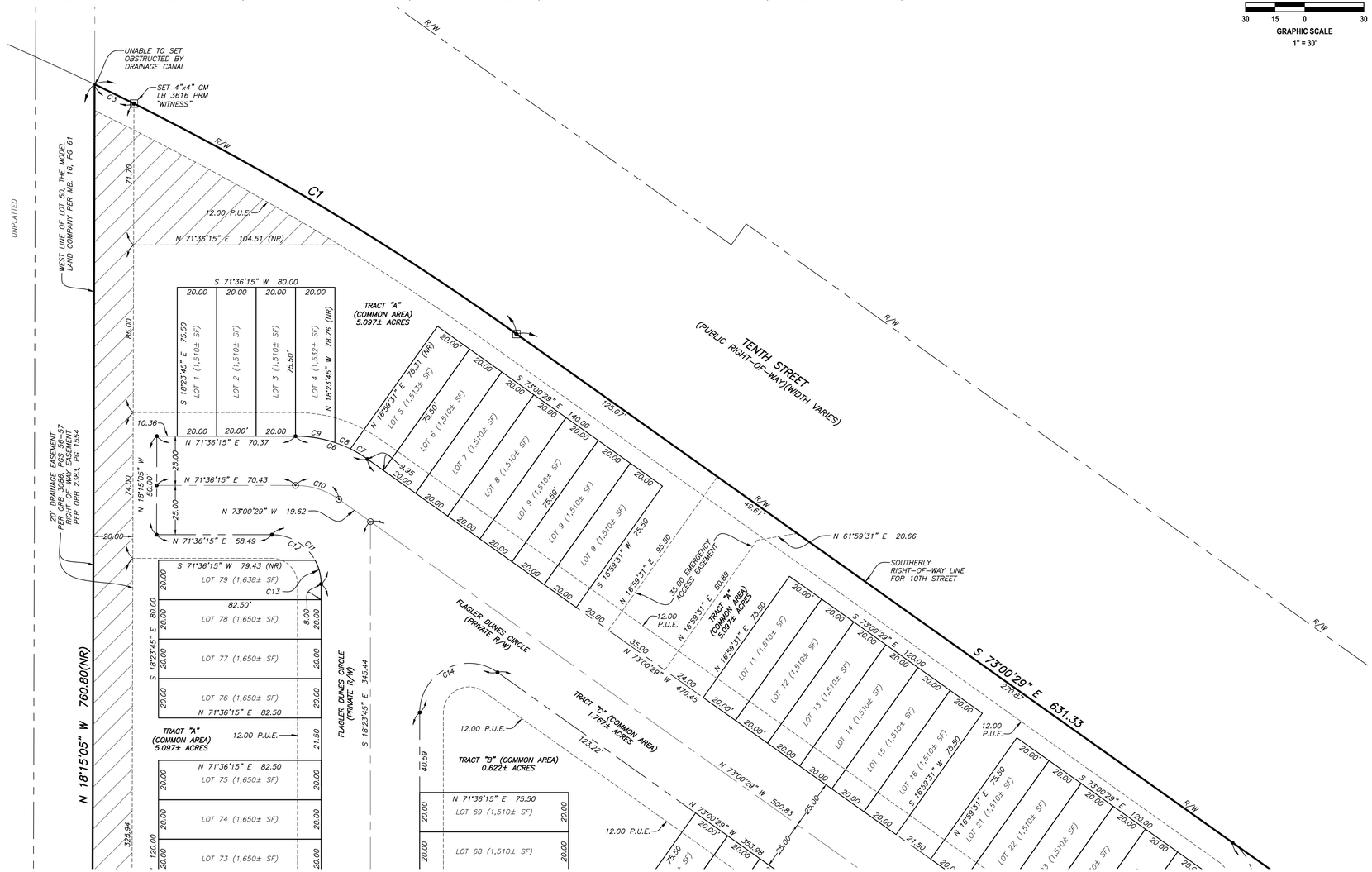
NORTH

30 15 0 30

GRAPHIC SCALE
1" = 30'



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CURVE TABLE						CURVE TABLE						CURVE TABLE					
No.	CA	R	CHB	CH	ARC	No.	CA	R	CHB	CH	ARC	No.	CA	R	CHB	CH	ARC
C1	9°57'44"	1432.08	S77°46'23"E	248.69	249.00	C8	7°41'58"	63.00	S86°02'12"E	8.46	8.47	C12	61°18'53"	25.00	S77°44'18"E	25.50	26.75
C3	0°57'18"	1334.16	S82°19'31"E	22.24	22.24	C9	18°30'34"	63.00	N80°51'32"E	20.26	20.35	C13	28°41'07"	25.00	N32°44'18"W	12.39	12.52
C6	35°23'16"	63.00	S89°17'53"W	38.30	38.91	C10	35°23'16"	38.00	S89°17'53"W	23.10	23.47	C14	125°23'16"	25.00	S44°17'53"W	44.43	54.71
C7	9°10'44"	63.00	N77°35'51"W	10.08	10.09	C11	90°00'00"	25.00	N63°23'45"W	35.36	39.27						

SHEET 4 OF 5	MAP BOOK:	PAGE:

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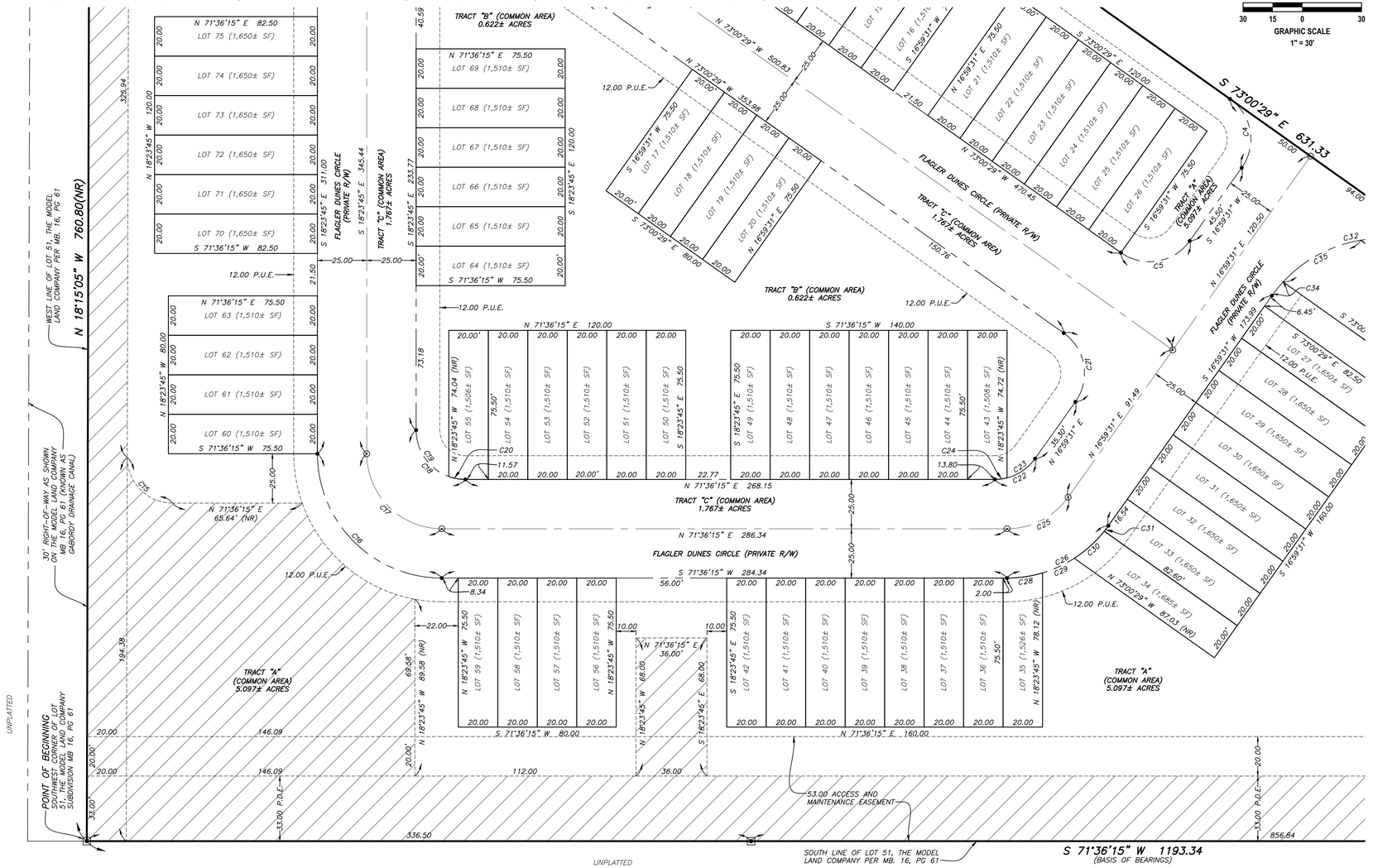

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CURVE TABLE						CURVE TABLE						CURVE TABLE					
No.	CA	R	CHB	CH	ARC	No.	CA	R	CHB	CH	ARC	No.	CA	R	CHB	CH	ARC
C4	90°00'00"	25.00	S28°00'29"E	35.36	39.27	C20	19°41'35"	25.00	S81°27'03"W	8.55	8.59	C28	16°35'50"	63.00	S63°18'21"W	18.19	18.25
C5	90°00'00"	25.00	S61°59'31"W	35.36	39.27	C21	90°00'00"	25.00	N28°00'29"W	35.36	39.27	C29	16°09'03"	63.00	N46°55'54"E	17.70	17.76
C15	90°08'40"	23.00	S63°19'25"E	32.57	36.19	C22	54°36'44"	25.00	N44°17'53"E	22.94	23.83	C30	18°42'52"	63.00	S29°29'56"W	20.49	20.58
C16	90°00'00"	63.00	S63°23'45"E	89.10	98.96	C23	40°15'47"	25.00	N37°07'25"E	17.21	17.57	C31	3°08'59"	63.00	S18°34'01"W	3.46	3.46
C17	90°00'00"	38.00	S63°23'45"E	53.74	59.69	C24	14°20'57"	25.00	N64°25'47"E	6.24	6.26	C32	90°00'00"	69.00	N61°59'31"E	97.58	108.38
C18	90°00'00"	25.00	S63°23'45"E	35.36	39.27	C25	54°36'44"	38.00	N44°17'53"E	34.86	36.22	C34	07°29'41"	69.00	N20°44'22"E	9.02	9.03
C19	70°18'25"	25.00	S53°32'57"E	28.79	30.68	C26	54°36'44"	63.00	N44°17'53"E	57.80	60.05	C35	37°45'07"	69.00	N43°21'46"E	44.65	45.46

SHEET 5 OF 5	MAP BOOK:	PAGE:

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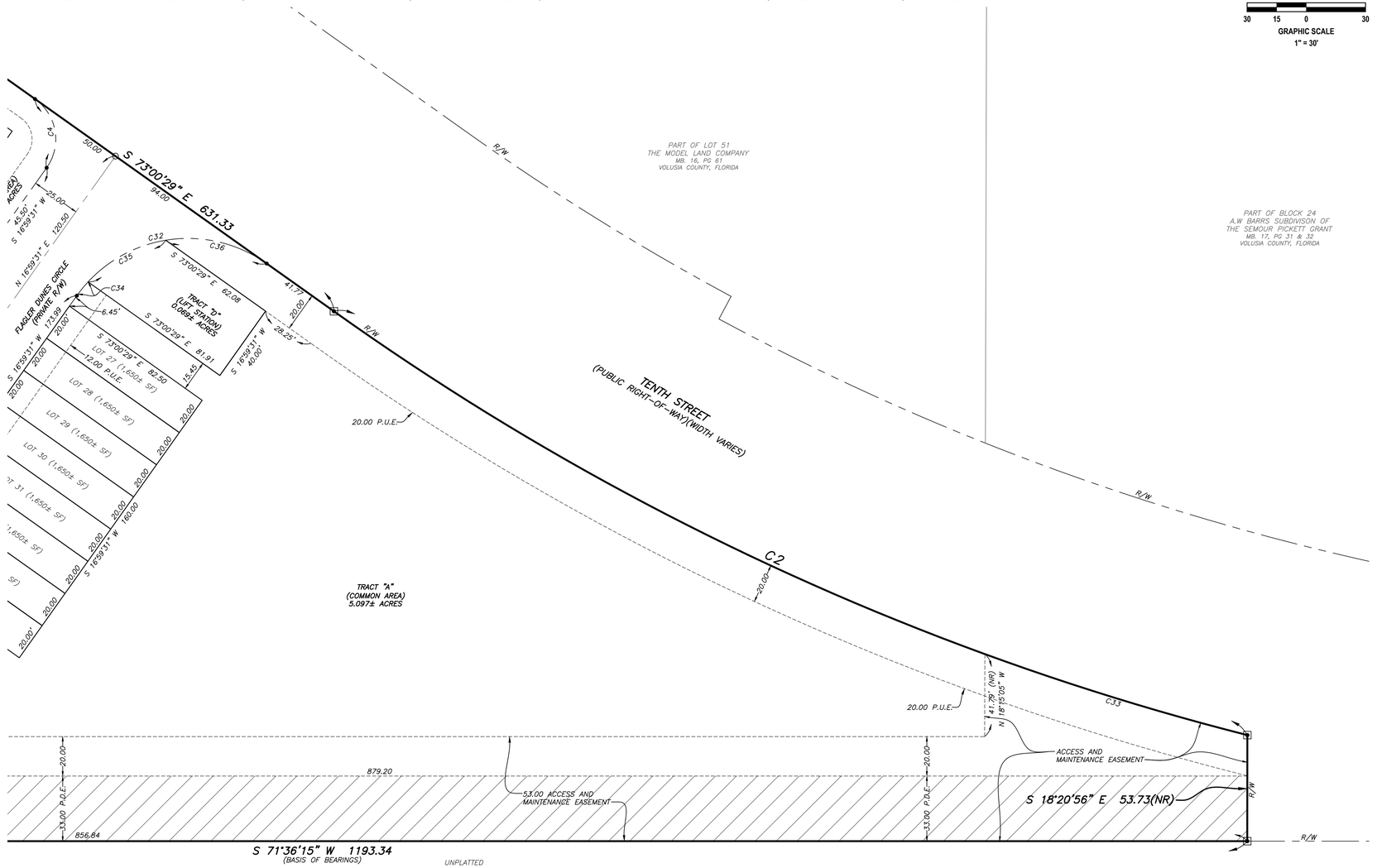

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CURVE TABLE

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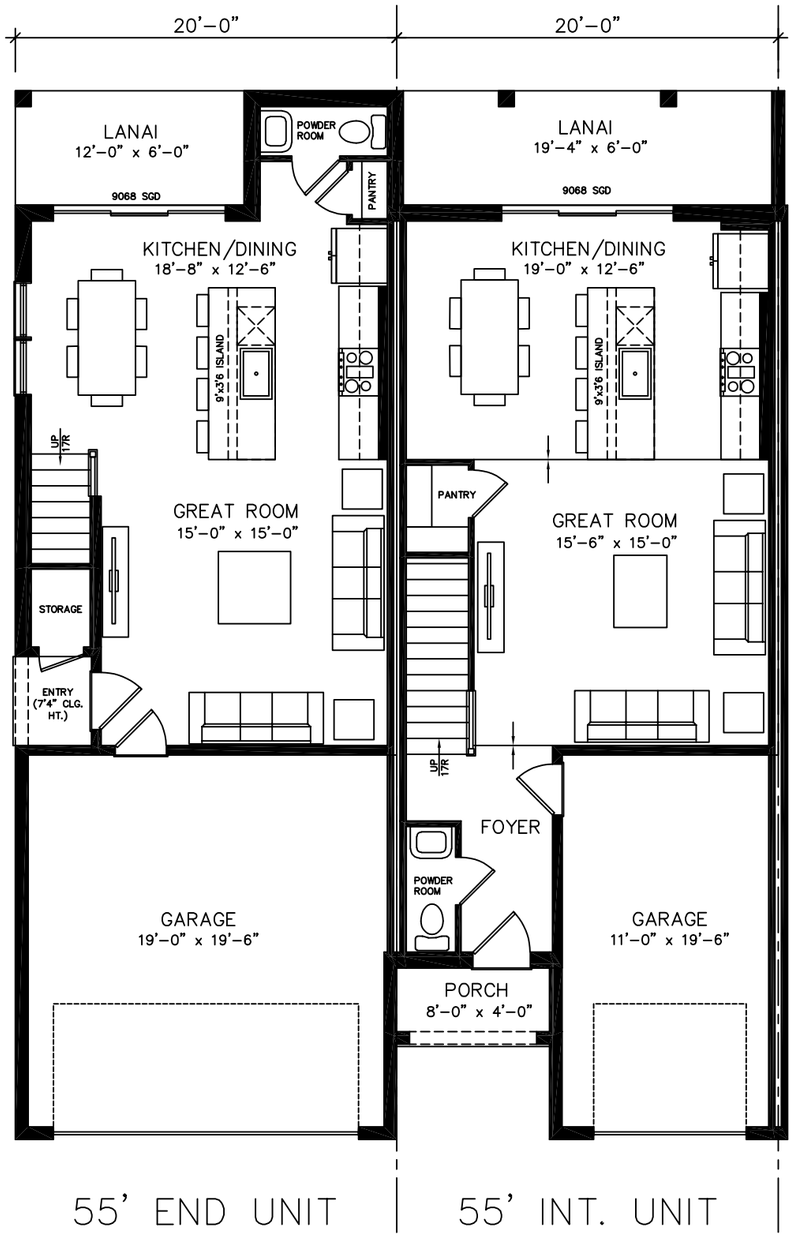
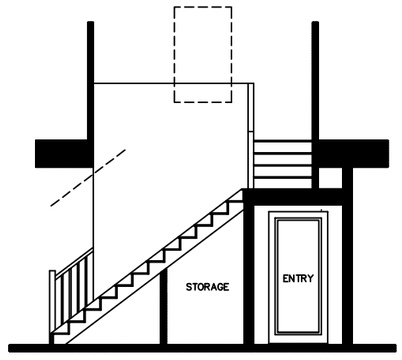
C32	90°00'00"	69.00	N61°59'31"E	97.58	108.38
C33	5°45'08"	1384.32	N88°46'10"E	138.92	138.98
C34	07°29'41"	69.00	N20°44'22"E	9.02	9.03
C35	37°45'07"	69.00	N43°21'46"E	44.65	45.46
C36	44°45'12"	69.00	N84°36'55"E	52.54	53.90

UPHAM INC
CIVIL ENGINEERING • SURVEYING • LANDSCAPE ARCHITECTURE
265 Kenilworth Avenue • Ormond Beach • Florida 32174
Voice: 386.672.9515 • Fax: 386.673.6554 • uphaminc.com
LB # 0003612 LC # 0000357





END UNIT STAIR SECTION

UNIT SQUARE FOOTAGE		
	INTERIOR	END
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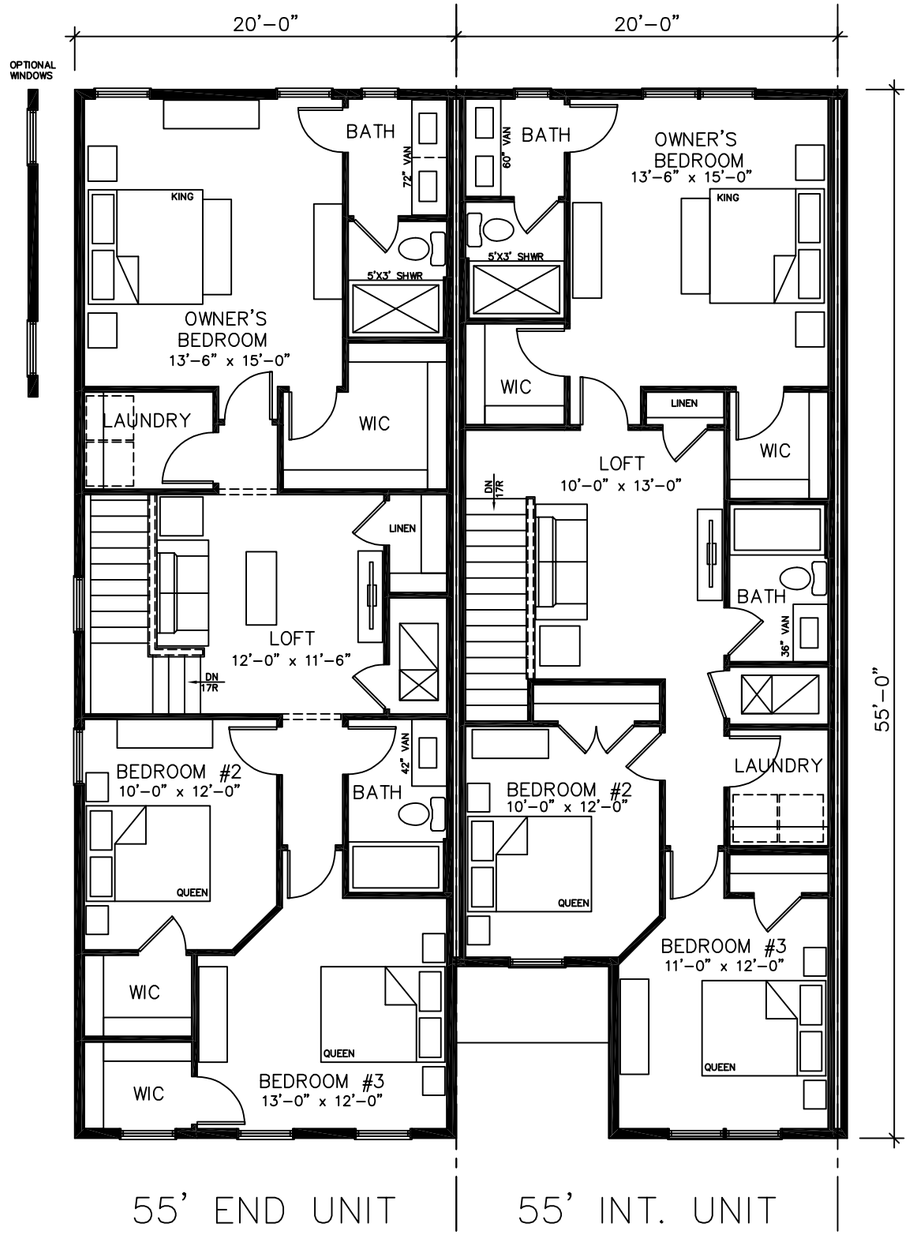
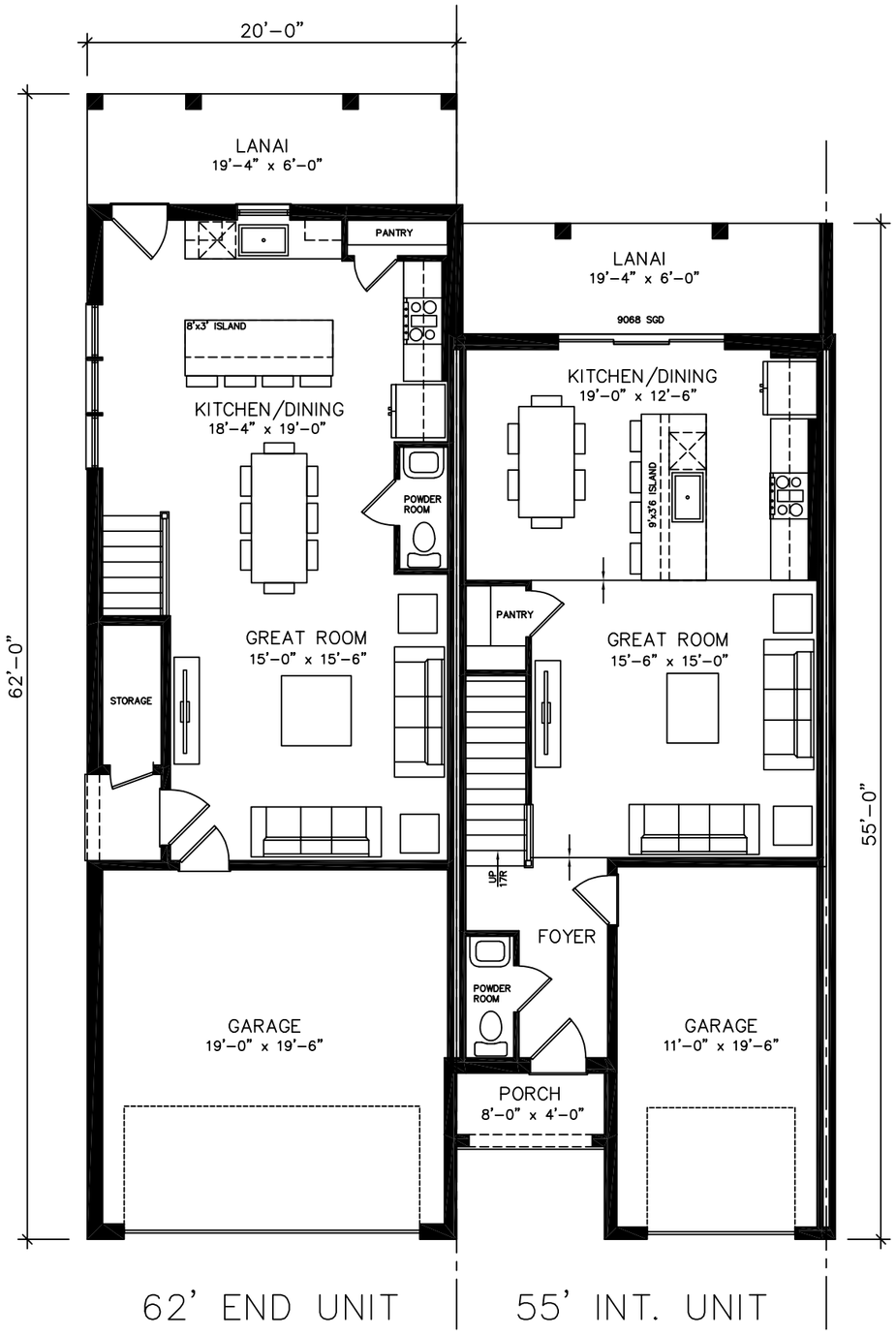
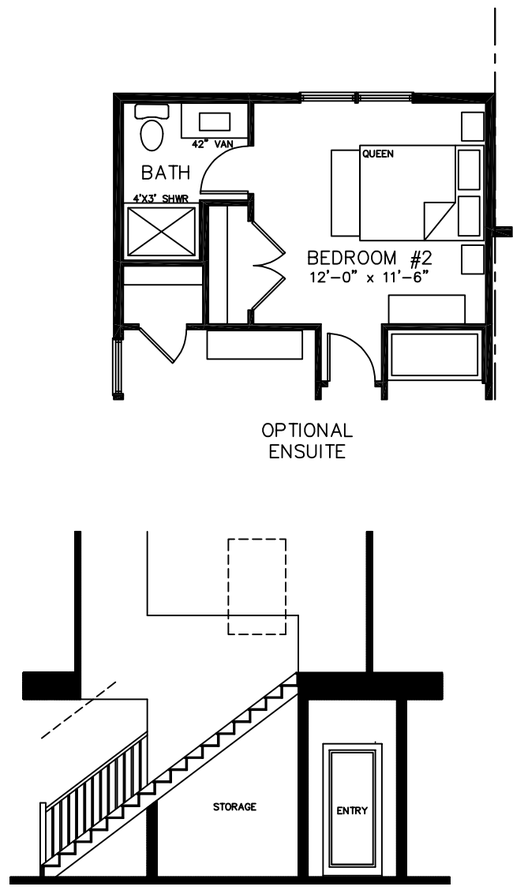
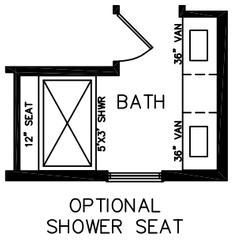
2ND FLOOR	1028	1100
TOTAL	1696	1704









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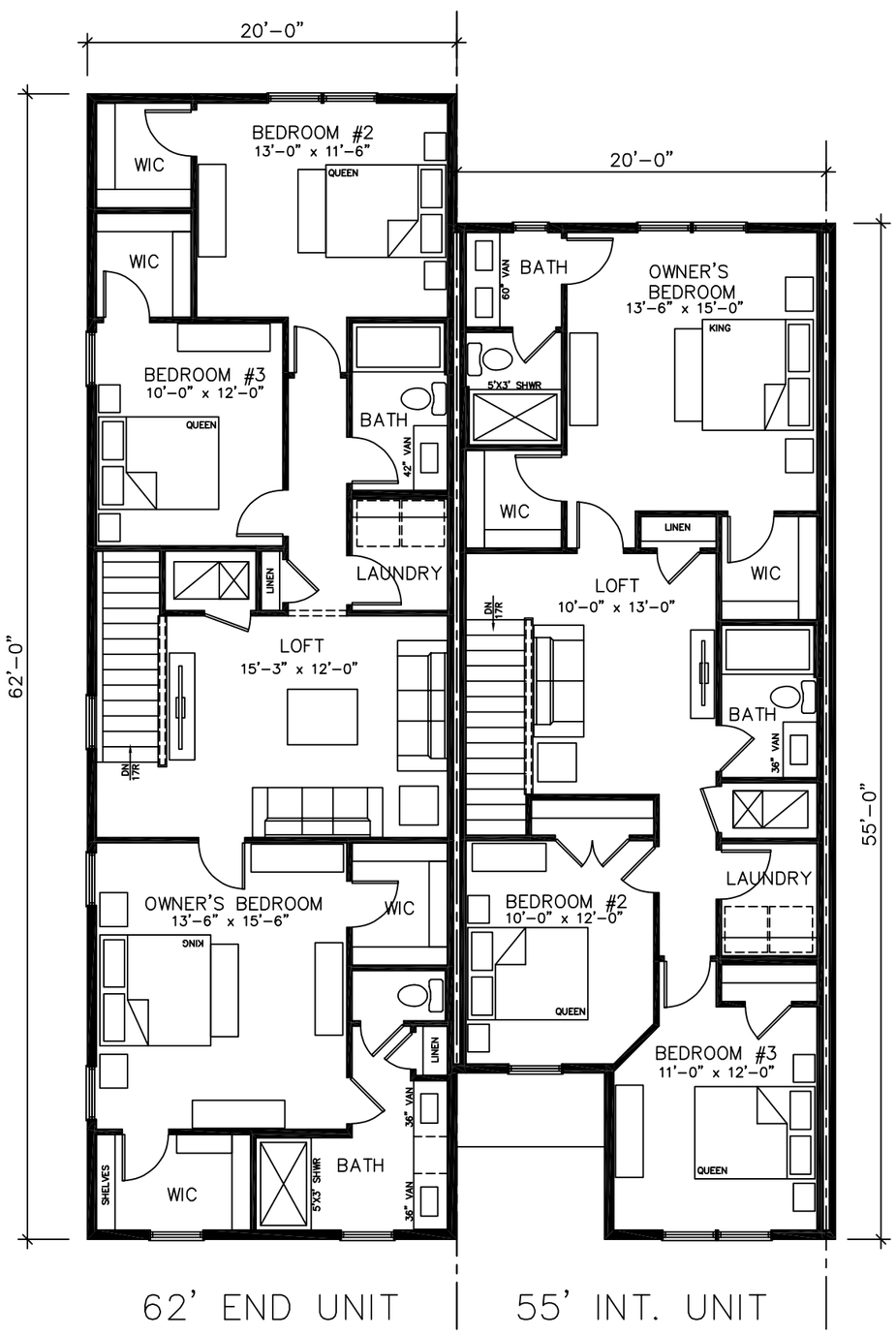


4–UNIT BUILDING



55’ END UNIT



62’ END UNIT

6–UNIT BUILDING



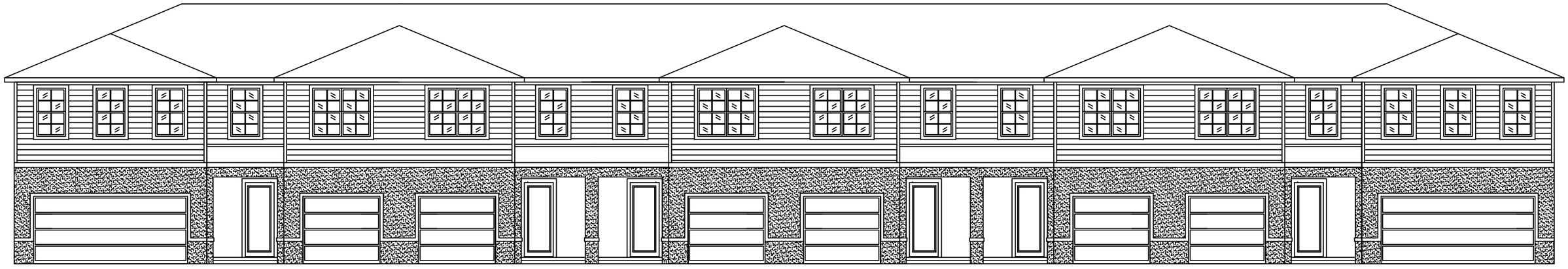
55’ END UNIT

5–UNIT BUILDING



55’ END UNIT

8–UNIT BUILDING



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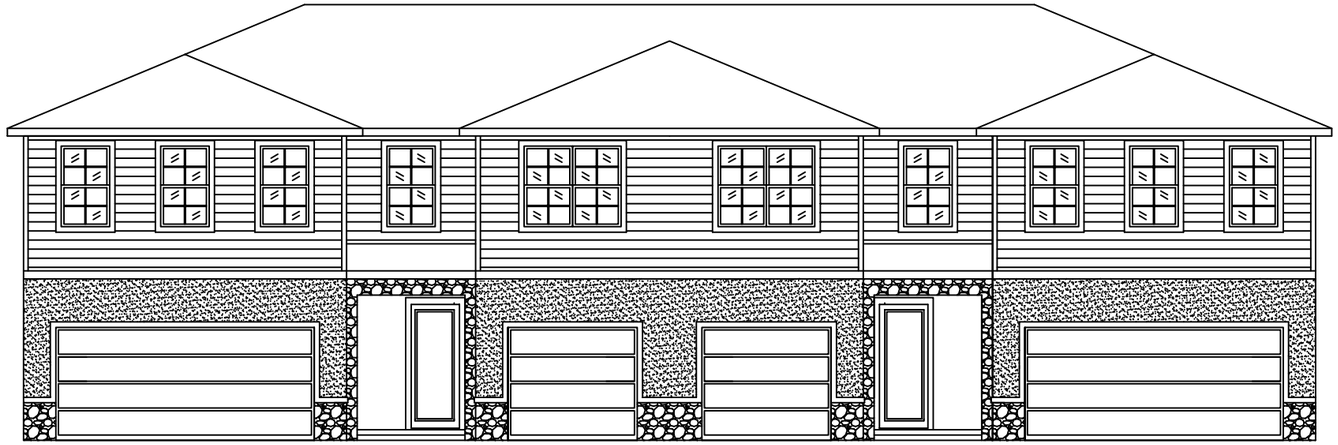
7–UNIT BUILDING



55’ END UNIT

PARTIAL STONE ELEVATION CONCEPTS

LOW



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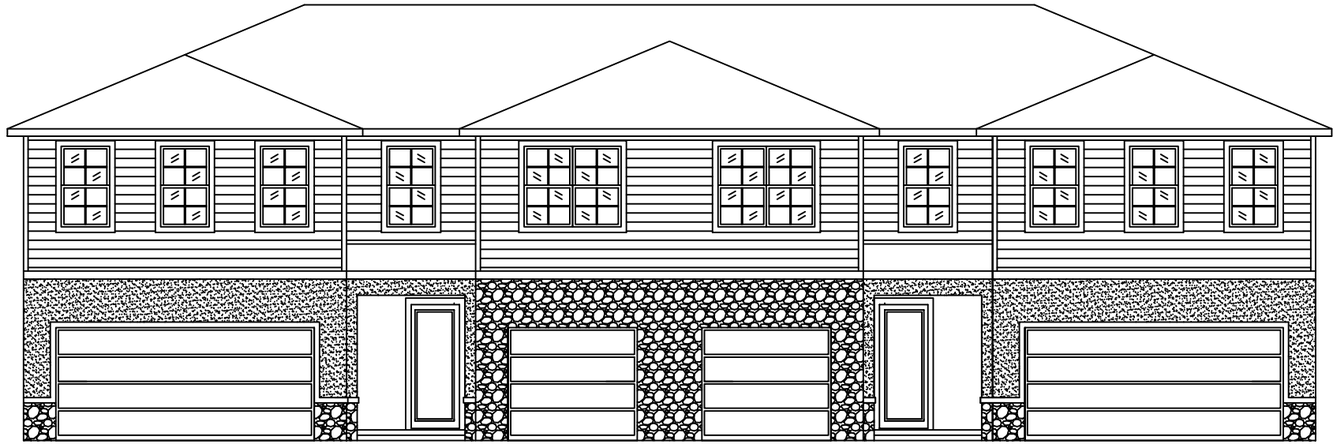

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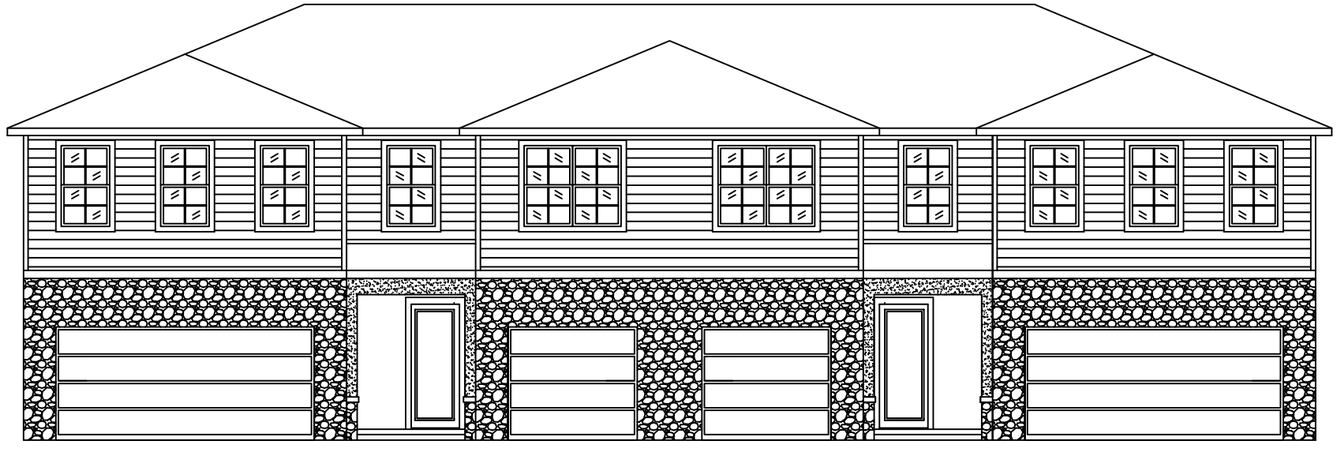

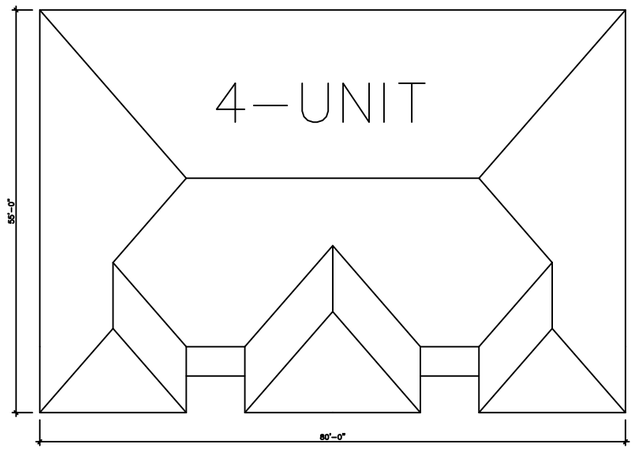
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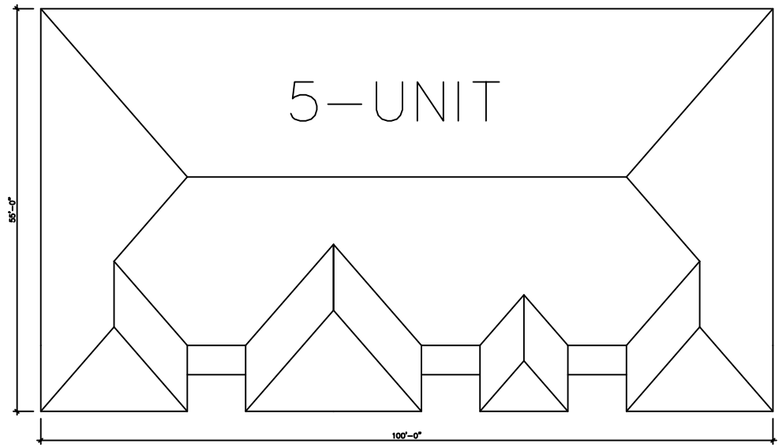
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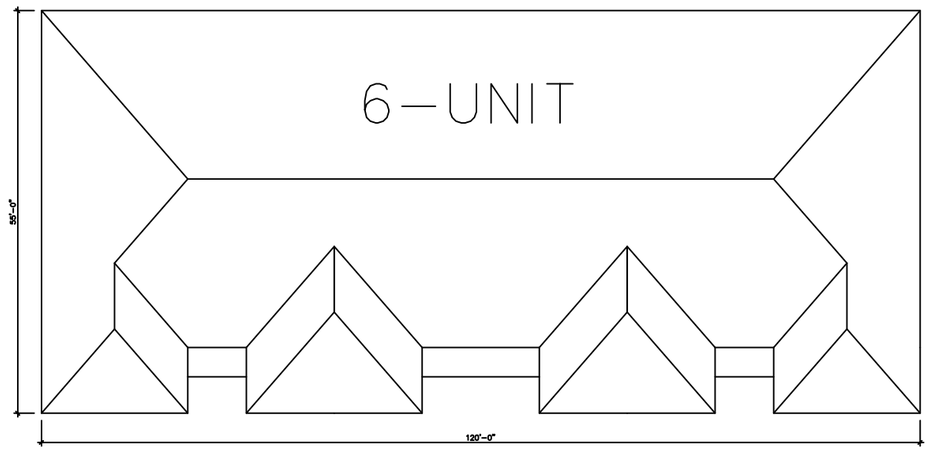
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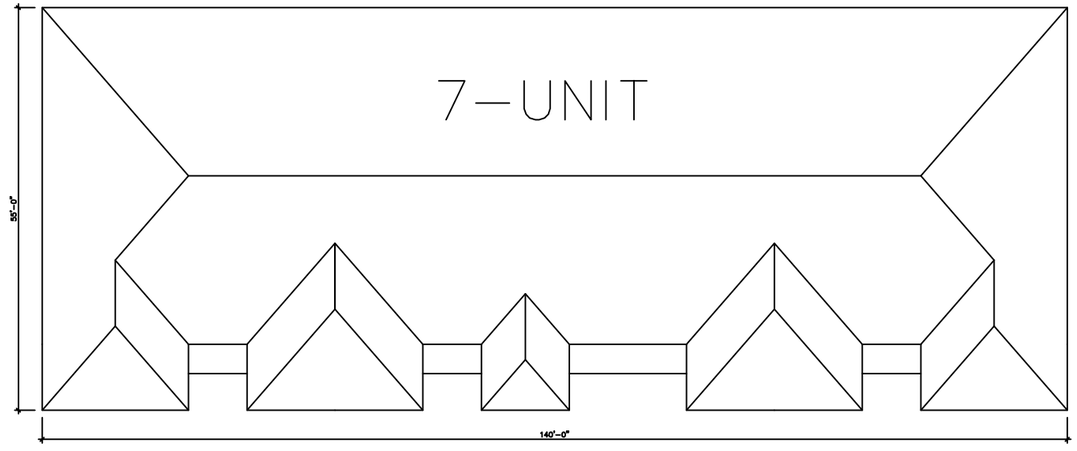
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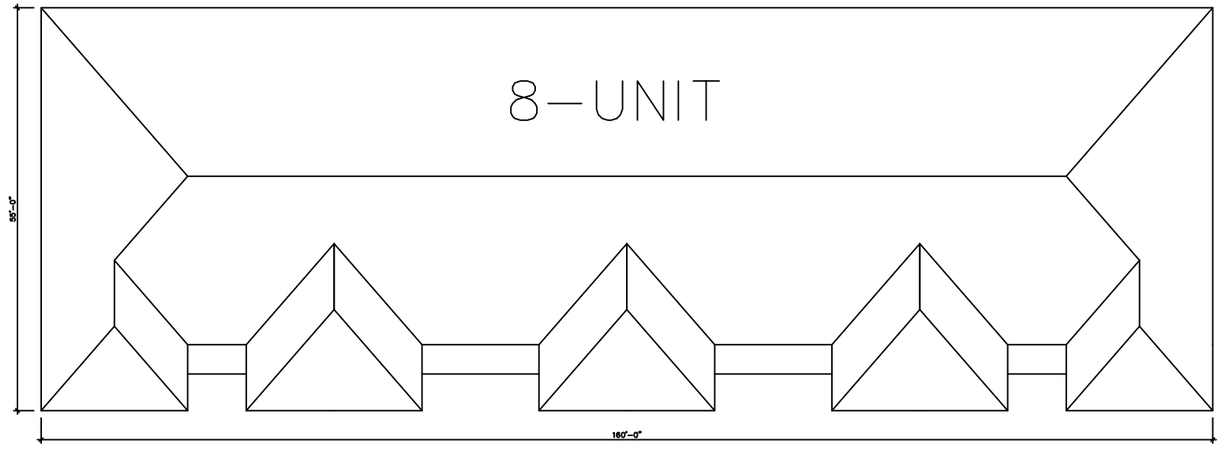
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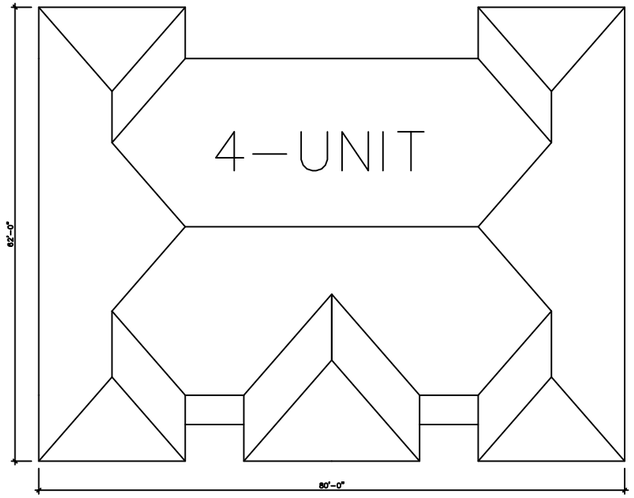
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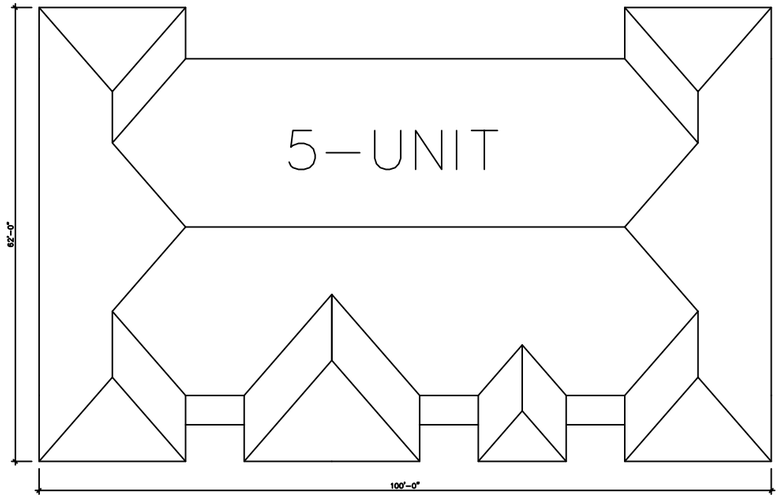
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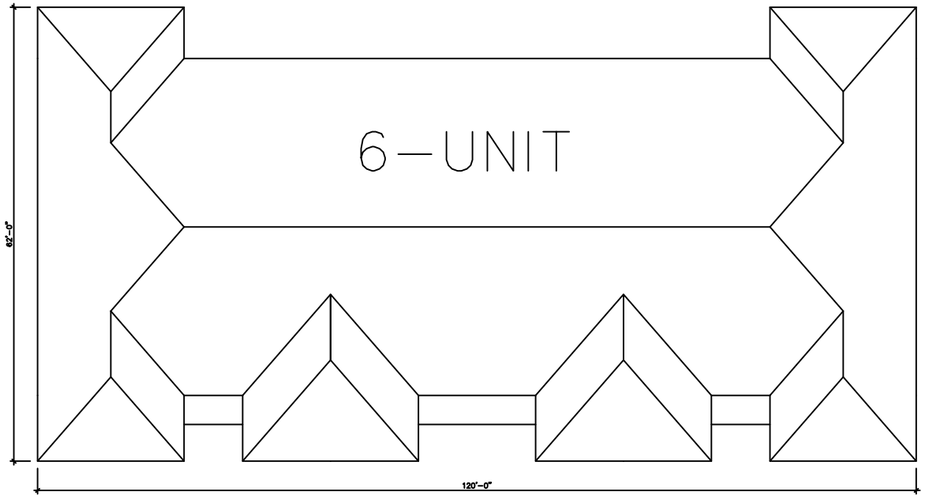
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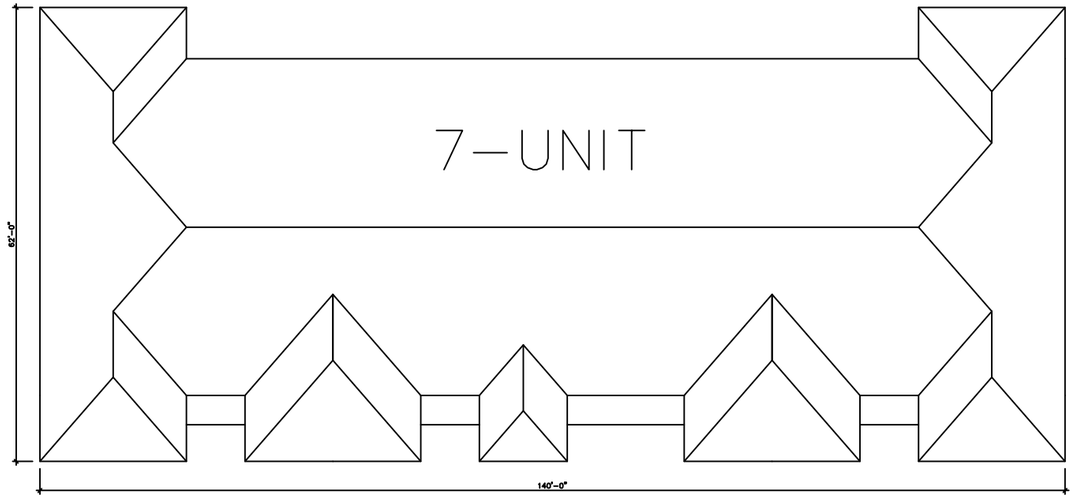
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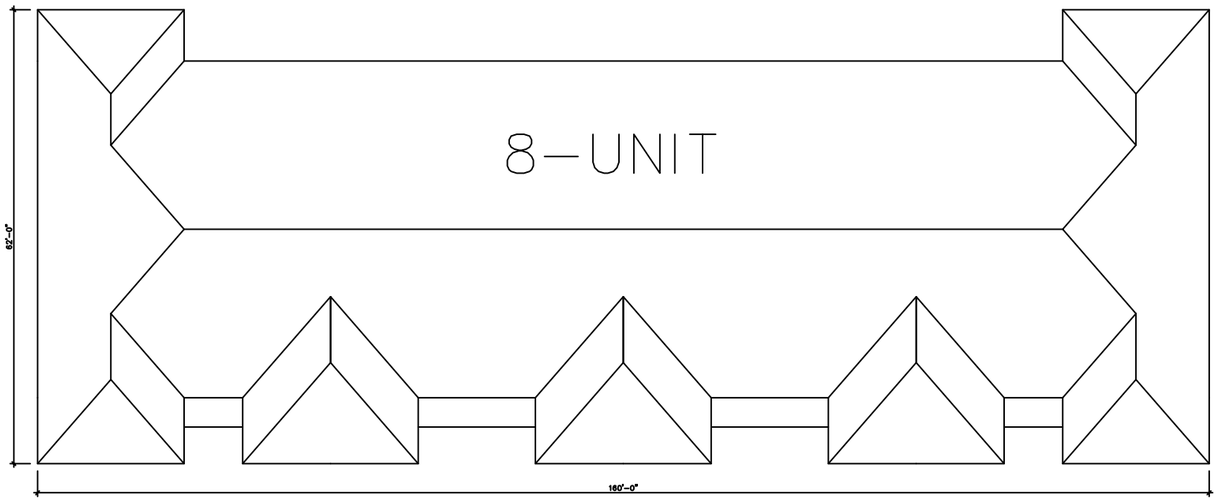
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160'-0"

MEMORANDUM

To: Mr. Jeff Gove, AICP – Chief Planner, New Smyrna Beach

From: Mr. Chris J. Walsh, P.E.

Date: July 1, 2025

Subject: Flagler Dunes Traffic Impact Analysis Memorandum – New Smyrna Beach, Florida

Walsh Traffic Engineering, LLC (Walsh Traffic) has been retained to conduct a Traffic Impact Analysis for the proposed Flagler Dunes multi-family development to be located on the south side of 10th Street, immediately south of New Smyrna Beach High School in New Smyrna Beach, Florida (see **Site Location Map** below). The property is currently vacant. The development will consist of 80 townhomes. As can be seen by the preliminary site plan attached herein, access to the development will be provided via a directional westbound left-turn driveway connection on 10th Street which will align with the New Smyrna Beach High School eastern driveway. The development is proposed to be built out by year 2027. The development is projected to generate less than 100 peak-hour trips (in fact, less than 50 peak-hour trips). Therefore, per the River to Sea TPO's TIA guidelines, a traffic impact analysis is not required. However, this memorandum is intended to identify the development's impacts on the project driveways and the immediately adjacent segment of 10th Street.



Walsh Traffic Engineering
285 Palmetto Springs Street, DeBary, Florida 32713
www.walshtraffic.com
Phone: 386.668.0062

Trip Generation

The total daily and PM peak-hour trip generation potential for the proposed development was determined based on trip generation equations/rates for Land Use Code 215 (Single-Family Attached Housing) as provided in the Institute of Transportation Engineer's (ITE) *Trip Generation Manual, 11th Edition*. As summarized in ***Table 1***, based on 80 townhome units, the development is projected to generate 559 total daily trips, 36 total AM peak-hour trips (9 in, 27 out) and 44 total PM peak-hour trips (26 in, 18 out).

Table 1 – Total Trip Generation Summary

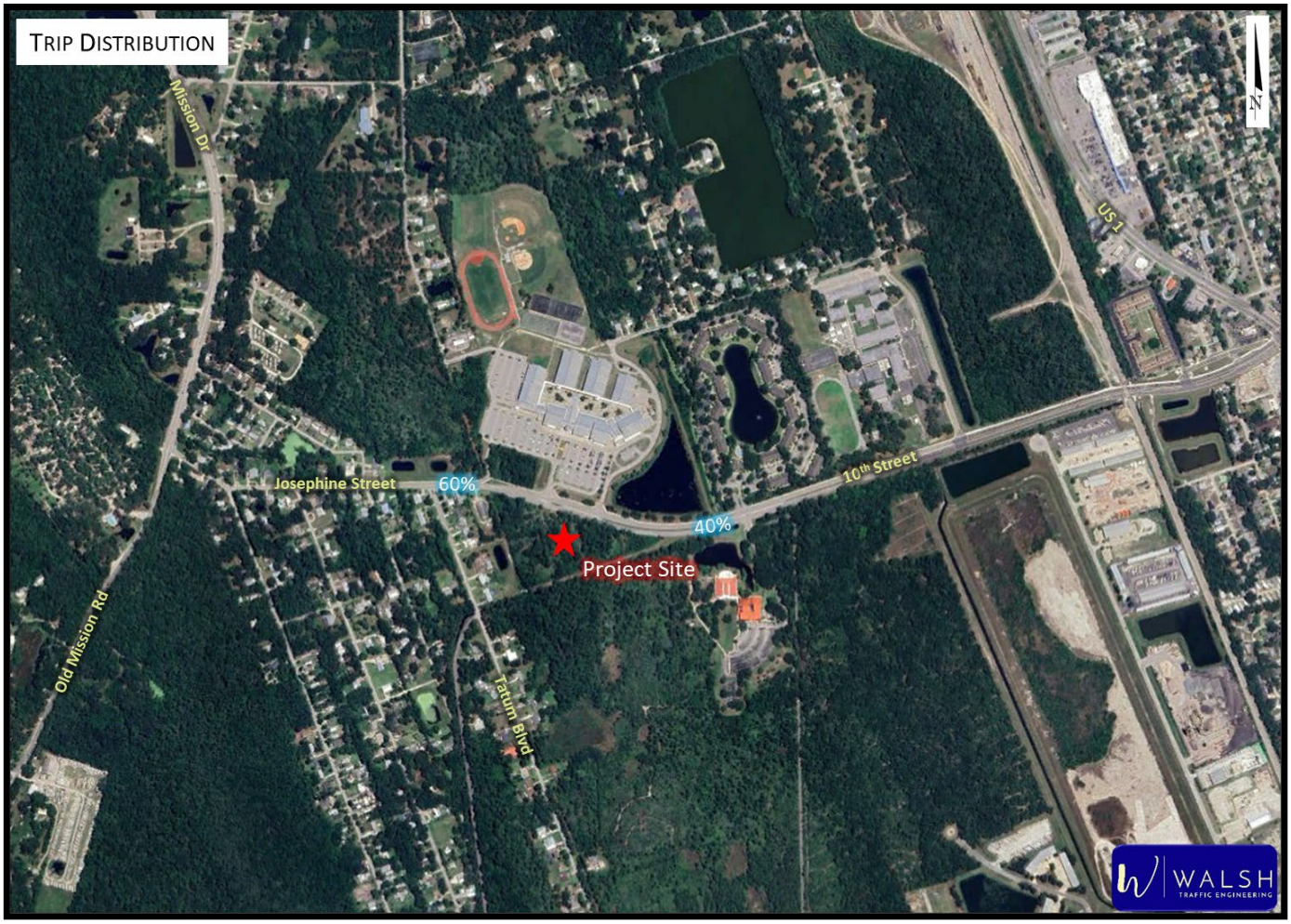
Land Use	ITE Land Use Code	Intensity	Daily		
			Total Trips		
			In	Out	Total
Single-Family Attached Housing	215	80 DU	280	279	559

Land Use	ITE Land Use Code	Intensity	AM Peak Hour		
			Total Trips		
			In	Out	Total
Single-Family Attached Housing	215	80 DU	9	27	36

Land Use	ITE Land Use Code	Intensity	PM Peak Hour		
			Total Trips		
			In	Out	Total
Single-Family Attached Housing	215	80 DU	26	18	44

Trip Distribution

The trip distribution for the development was estimated based on existing travel patterns, the type of use (residential), the proximity of trip attractors, and the roadway network. For this development, it is estimated that 60% of the trips will be to/from the west on 10th Street/Josephine Street. Thus, the remaining 40% will be to/from the east on 10th Street.



Roadway Segment Assessment

10th Street, from Old Mission Road to US 1 (adjacent to the proposed development) was evaluated. The existing PM peak-hour volume on Josephine Street/10th Street from Old Mission to Tatum Boulevard was obtained from Volusia County. The existing roadway segment volume on 10th Street from Tatum Boulevard to US 1 was based on the approach and departure volumes from the turning movement counts conducted at the New Smyrna Beach High School eastern driveway. The adopted peak-hour generalized service volumes were obtained from Volusia County. Based on the table below, the existing volumes are well below the existing service volume thus indicating the existing roadway segments currently operate acceptably.

Existing Conditions Summary (PM Peak Hour)

Roadway Segment	# of Lanes	Adopted LOS	Existing Conditions (2-Way)					
			Service Volume (vph)	Source	Existing Volume (vph)	Year	Source	Volume Exceeds Svc Vol?
10th Street								
Old Mission to Tatum Blvd	2	E	1,020	VC	550	2022	VC	no
Tatum Blvd to US 1	4	E	3,410	VC	442	2024	TMC	no

Source: VC = Volusia County; TMC = Turning Movement Count

Historical counts, as attached, were then obtained from Volusia County. A historical trends analysis was conducted resulting in a historical annual growth rate of less than 2%. Therefore, the existing volumes were factored to the buildout year (2027) based on a 2% annual growth rate.

Future Background Volumes (PM Peak Hour)

Roadway Segment	Future Background Volumes													
	5 Year			10 Year			Applied Growth			Volume Growth (2-Way)				
	Best Fit Regression	R^2	Historical Annual Growth Rate	Best Fit Regression	R^2	Historical Annual Growth Rate	Applied Growth Procedure	Applicable Annual Growth Rate	Applied Annual Growth Rate	Existing Volume (vph)	Existing Year	Buildout Year	Applied Volume Growth (vph)	Total Background Volume (vph)
10th Street														
Old Mission to Tatum Blvd	Decay Exp	15.2%	-0.8%	Exponential	20.1%	1.9%	Exponential	1.9%	2.0%	550	2022	2027	55	605
Tatum Blvd to US 1	Decay Exp	15.2%	-0.8%	Exponential	20.1%	1.9%	Exponential	1.9%	2.0%	442	2024	2027	27	469

The project trips were then added to assess the roadway operating conditions at buildout of the development. As summarized below, the study roadway segments are still projected to operate acceptably at buildout of the development.

Future Buildout Conditions Summary (PM Peak Hour)

Roadway Segment	# of Lanes	Adopted LOS	Future Total Volumes (2-Way)					
			Total Background Volume (vph)	Project Trips		Total Buildout Volume (vph)	Service Volume (vph)	Volume Exceeds Svc Vol?
				% Assign	Volume (vph)			
10th Street								
Old Mission to Tatum Blvd	2	E	605	60.0%	26	631	1,020	no
Tatum Blvd to US 1	4	E	469	40.0%	18	487	3,410	no

Project Driveway Intersections

As previously conveyed, the development is proposed to have one driveway on 10th Street. AM and PM peak-hour turning movement counts were obtained at the proposed driveway location as well as the 10th Street/New Smyrna Beach High School western driveway intersection and the 10th Street/Newport Sound Place intersection. The eastbound and westbound through volumes were factored to 2027 by applying a 2% annual growth rate. Then the project trips were assigned through each intersection. Turning movement worksheets summarizing the volume projections are attached. Diagrams showing the AM and PM peak-hour turning movement volumes at the study intersections are also attached.

The three intersections were analyzed at buildout in 2027 using *HCM 7th Edition* methodologies through the *Synchro 12* software. Based on the analysis printouts as attached, at the New Smyrna Beach High School's western driveway, under signalized control, all movements are projected to operate well at level of service (LOS) C or better and the intersection projected to operate at an overall LOS of B during the AM peak hour. During the PM peak hour, all movements are projected to operate LOS B or better and the intersection projected to operate acceptably at an overall LOS of A.

With regards to the development's driveway intersection (New Smyrna Beach High School eastern intersection), all STOP-controlled movements are projected to operate at LOS C or better during the AM and PM peak hours at buildout of the development. Additionally, the westbound left-turn movement is projected to operate at LOS A in the AM and PM peak hours with nominal queueing.

At the 10th Street/Newport Sound Place intersection, all STOP-controlled movements are projected to operate at LOS C or better in the AM and PM peak hours at buildout of the development. Additionally, the eastbound u-turn/left-turn movement is projected to operate at LOS A at buildout with the addition of eastbound-to-westbound U-turns from the proposed development. The 95th percentile queue for the eastbound u-turn/left-turn movement is 0.1 vehicles for both existing and buildout conditions, thereby demonstrating that the development will have a nominal impact on this movement and intersection.

The Synchro printouts are attached.

Project Driveway Turn-Lane Evaluation

The project driveway on 10th Street was evaluated for the need for an eastbound right-turn lane based on Section 72-619 of the Volusia County Land Development Code recognizing that 10th Street is a Volusia County roadway. Based on Volusia County's LDC, a right-turn lane is warranted for roadways with posted speed limits of 35 miles per hour or higher or where the right-turn volume is projected to exceed 100 vehicles per hour. At the project driveway (driveway #1), the eastbound right-turn volume is projected to be five vehicles in the AM peak hour and 16 vehicles in the PM peak hour. Thus, from a traffic volume perspective, the eastbound right-turn volume is well below the County's volume threshold for warranting a right-turn lane. Although the posted speed limit is 35 mph, the right-turn volumes are only projected to reach, at most, 10% of the County's volume threshold requirements. Additionally, this roadway section is currently four lanes and projected to be operating at a volume-to-capacity ratio of 0.14. Thus, there will be ample excess capacity on 10th Street such that decelerating right-turning vehicles entering the site will have a negligible impact on roadway operations. This driveway is also proposed to have an extended throat length such that entering vehicles will not be impeded and thus will not spill back onto 10th Street. Lastly, given that the development will only generate 559 daily trips and 44 PM peak-hour trips, the driveway entrance is classified as a "minor/intermediate driveway entrance" per the County's LDC. Right-turn lanes/tapers are not required at these driveways when abutting a thoroughfare with four or more lanes

A westbound left-turn lane of 230 feet, inclusive of a 50-foot taper, will be provided on 10th Street at the project driveway. Lastly, the northbound right-turn lane exiting the development will be channelized to prohibit/deter northbound left-turn movements.

Right-in/Right-out Driveway Alternative

Consideration was given for providing for a right-in/right-out only driveway on 10th Street, thereby prohibiting the westbound left-turn movement. Under this alternative, motorists traveling to the development from the east on 10th Street will need to find an alternative route to allow them return to the development via eastbound 10th Street. This may include using alternative roadways such as SR 44 or Park Avenue to travel to Old Mission Road and then 10th Street. Additionally, the County is continuing to pursue the eventual four-laning of 10th Street west of its current terminus, west of the high school. When this four-laning occurs, motorists will be able to perform a westbound-to-eastbound u-turn at locations west of the high school. Until the four-laning occurs, motorists will need to turn onto Tatum Boulevard or Pearl Street, perform a 3-point turn via existing driveways, and then return to the site.

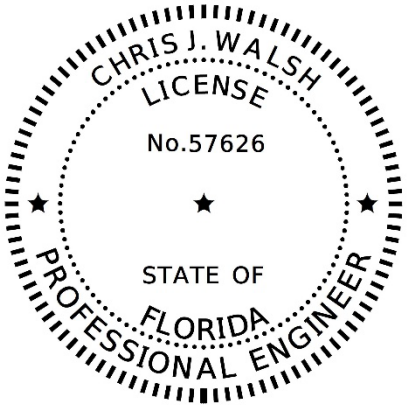
With all entering motorists performing a right-turn into the site from 10th Street, it will equate to nine rights in the AM peak hour and 26 rights in the PM peak hour. This is below the County's volume threshold of 100 rights. Given this volume and the "minor/intermediate driveway entrance" classification as previously discussed, a right-turn lane would not be warranted under this alternative.

Conclusion

Although the proposed Flagler Dunes multi-family development on 10th Street is projected to generate less than 100 peak-hour trips (in fact, less than 50 peak-hour trips), a traffic analysis memorandum was prepared to identify the development's impacts on the project driveways and the immediately adjacent segment of 10th Street. Based on the analysis, Josephine Street/10th Street is projected to operate well at buildout of the development. All movements at the project driveway intersection on 10th Street are also projected to operate acceptably at buildout with all movements operating at LOS C or better.

Relative to turn lanes at the project driveways, an eastbound right-turn lane on 10th Street is not required based on the County's LDC. Lastly, a westbound left-turn lane will be provided on 10th Street.

You may contact us at (386) 801-5682 should you have any questions.



THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

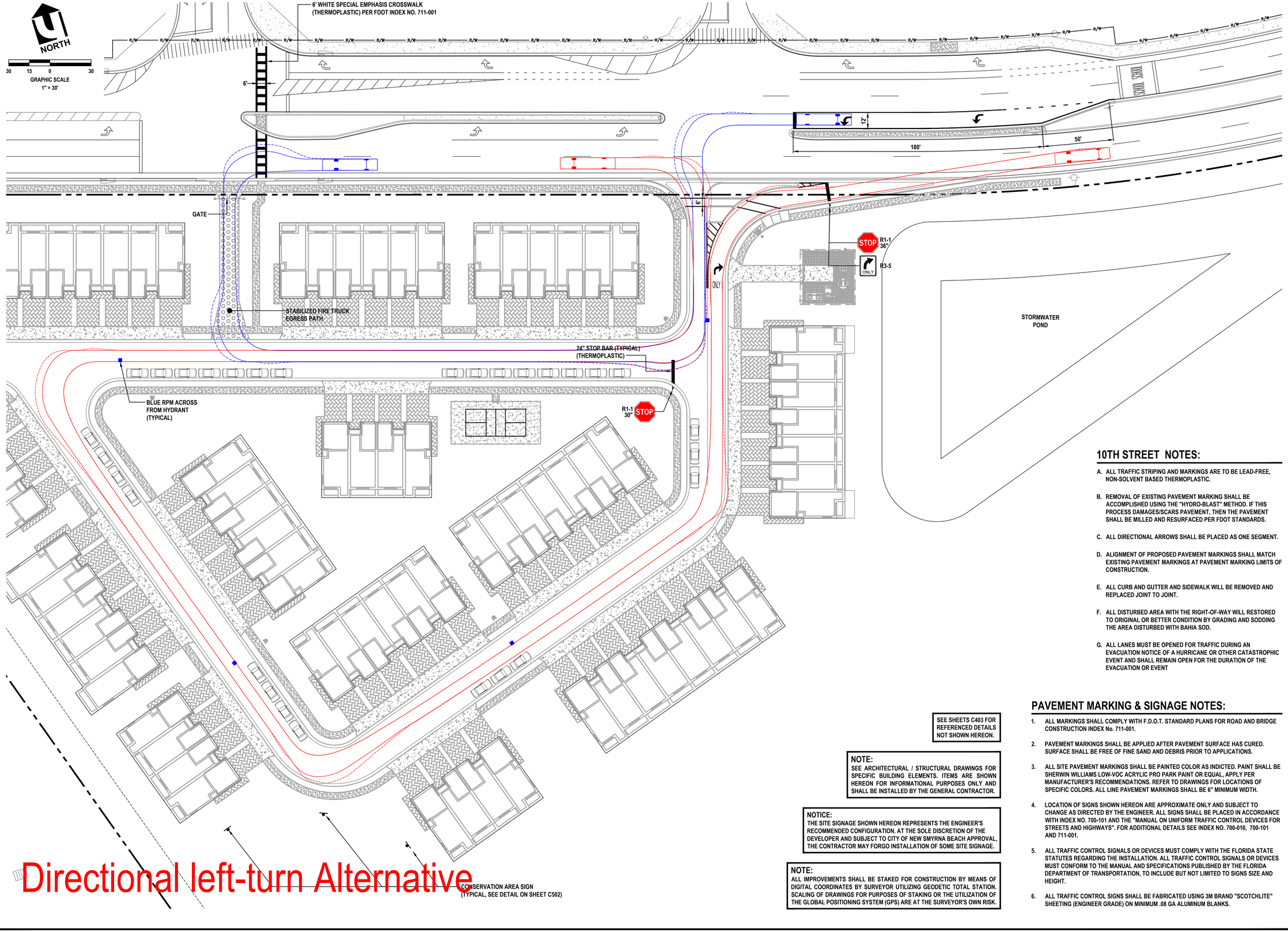
Chris J Walsh Date: 2025.07.01 18:22:13 -04'00'

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

Attachments

Preliminary Site Plan



SEE SHEETS C403 FOR REFERENCED DETAILS NOT SHOWN HEREON.

NOTE:
SEE ARCHITECTURAL / STRUCTURAL DRAWINGS FOR SPECIFIC BUILDING ELEMENTS. ITEMS ARE SHOWN HEREON FOR INFORMATIONAL PURPOSES ONLY AND SHALL BE INSTALLED BY THE GENERAL CONTRACTOR.

NOTICE:
THE SITE SIGNAGE SHOWN HEREON REPRESENTS THE ENGINEER'S RECOMMENDED CONFIGURATION. AT THE SOLE DISCRETION OF THE DEVELOPER AND SUBJECT TO CITY OF NEW SMYRNA BEACH APPROVAL, THE CONTRACTOR MAY FORGO INSTALLATION OF SOME SITE SIGNAGE.

NOTE:
ALL IMPROVEMENTS SHALL BE STAKED FOR CONSTRUCTION BY MEANS OF DIGITAL COORDINATES BY SURVEYOR UTILIZING GEODETIC TOTAL STATION. SCALING OF DRAWINGS FOR PURPOSES OF STAKING OR THE UTILIZATION OF THE GLOBAL POSITIONING SYSTEM (GPS) ARE AT THE SURVEYOR'S OWN RISK.

10TH STREET NOTES:

A. ALL TRAFFIC STRIPING AND MARKINGS ARE TO BE LEAD-FREE, NON-SOLVENT BASED THERMOPLASTIC.

B. REMOVAL OF EXISTING PAVEMENT MARKING SHALL BE ACCOMPLISHED USING THE "HYDRO-BLAST" METHOD. IF THIS PROCESS DAMAGES/SCARS PAVEMENT, THEN THE PAVEMENT SHALL BE MILLED AND RESURFACED PER FDOT STANDARDS.

C. ALL DIRECTIONAL ARROWS SHALL BE PLACED AS ONE SEGMENT.

D. ALIGNMENT OF PROPOSED PAVEMENT MARKINGS SHALL MATCH EXISTING PAVEMENT MARKINGS AT PAVEMENT MARKING LIMITS OF CONSTRUCTION.

E. ALL CURB AND GUTTER AND SIDEWALK WILL BE REMOVED AND REPLACED JOINT TO JOINT.

F. ALL DISTURBED AREA WITH THE RIGHT-OF-WAY WILL RESTORED TO ORIGINAL OR BETTER CONDITION BY GRADING AND SODDING THE AREA DISTURBED WITH BAHIA SOD.

G. ALL LANES MUST BE OPENED FOR TRAFFIC DURING AN EVACUATION NOTICE OF A HURRICANE OR OTHER CATASTROPHIC EVENT AND SHALL REMAIN OPEN FOR THE DURATION OF THE EVACUATION OR EVENT

PAVEMENT MARKING & SIGNAGE NOTES:

1. ALL MARKINGS SHALL COMPLY WITH F.D.O.T. STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION INDEX No. 711-001.
2. PAVEMENT MARKINGS SHALL BE APPLIED AFTER PAVEMENT SURFACE HAS CURED. SURFACE SHALL BE FREE OF FINE SAND AND DEBRIS PRIOR TO APPLICATIONS.
3. ALL SITE PAVEMENT MARKINGS SHALL BE PAINTED COLOR AS INDICTED. PAINT SHALL BE SHERWIN WILLIAMS LOW-VOC ACRYLIC PRO PARK PAINT OR EQUAL, APPLY PER MANUFACTURER'S RECOMMENDATIONS. REFER TO DRAWINGS FOR LOCATIONS OF SPECIFIC COLORS. ALL LINE PAVEMENT MARKINGS SHALL BE 6" MINIMUM WIDTH.
4. LOCATION OF SIGNS SHOWN HEREON ARE APPROXIMATE ONLY AND SUBJECT TO CHANGE AS DIRECTED BY THE ENGINEER. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH INDEX NO. 700-101 AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS". FOR ADDITIONAL DETAILS SEE INDEX NO. 700-010, 700-101 AND 711-001.
5. ALL TRAFFIC CONTROL SIGNALS OR DEVICES MUST COMPLY WITH THE FLORIDA STATE STATUTES REGARDING THE INSTALLATION. ALL TRAFFIC CONTROL SIGNALS OR DEVICES MUST CONFORM TO THE MANUAL AND SPECIFICATIONS PUBLISHED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION, TO INCLUDE BUT NOT LIMITED TO SIGNS SIZE AND HEIGHT.
6. ALL TRAFFIC CONTROL SIGNS SHALL BE FABRICATED USING 3M BRAND "SCOTCHLITE" SHEETING (ENGINEER GRADE) ON MINIMUM .08 GA ALUMINUM BLANKS.

REVISIONS

DATE	DESCRIPTION
09/12/24	REV PER 9/11
	VCS MEETING
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24
	CITY COMMENTS
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS

ROGER W. STRCULA * LICENSE * NO. 52784 * STATE OF FLORIDA * PROFESSIONAL ENGINEER
NOT VALID UNLESS SIGNED AND DATED

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UPHAM
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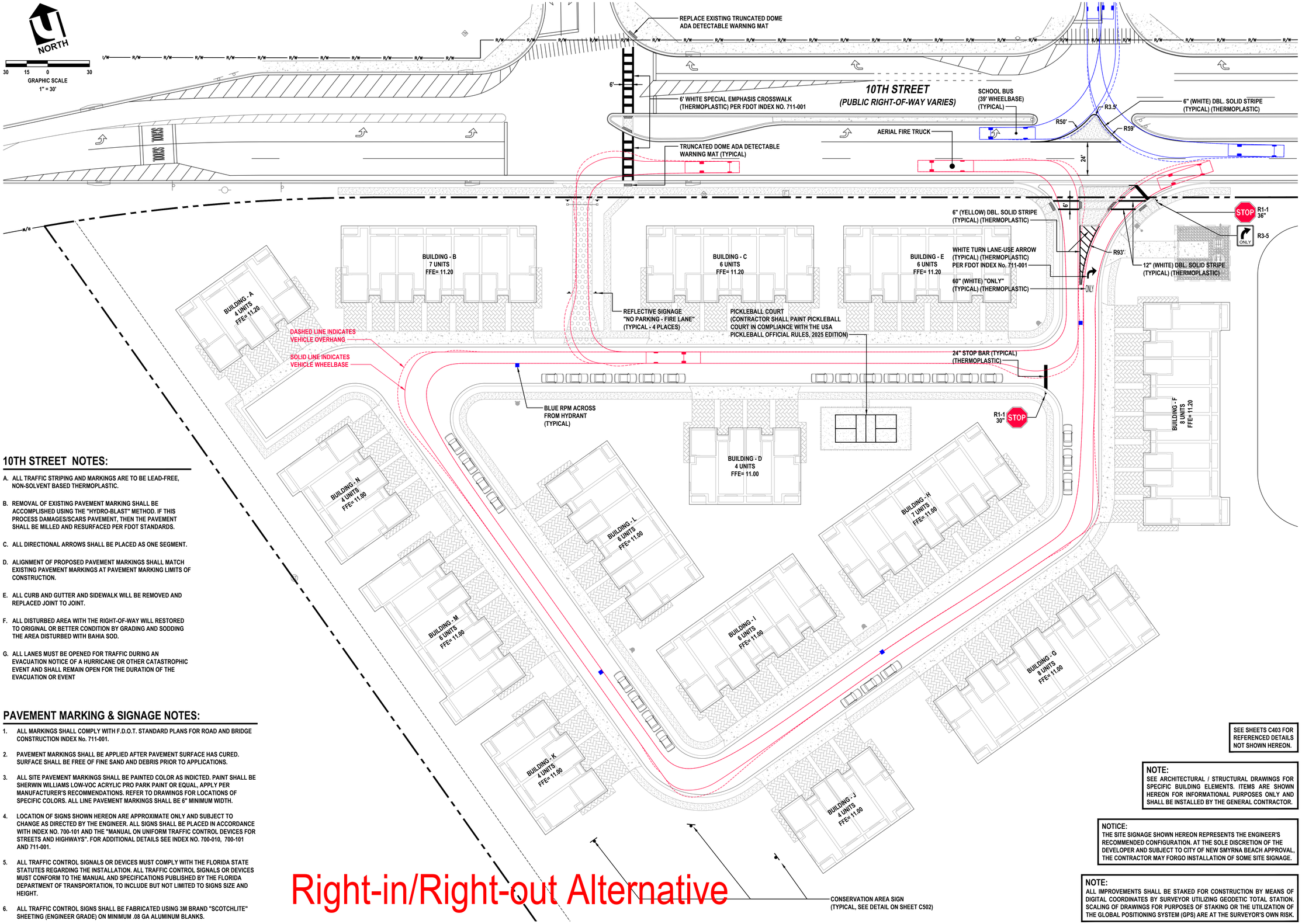
PAVEMENT MARKING AND SIGNAGE PLAN

FLAGLER DUNES
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	1" = 30'

SHEET NUMBER:
C402



10TH STREET NOTES:

A. ALL TRAFFIC STRIPING AND MARKINGS ARE TO BE LEAD-FREE, NON-SOLVENT BASED THERMOPLASTIC.

B. REMOVAL OF EXISTING PAVEMENT MARKING SHALL BE ACCOMPLISHED USING THE "HYDRO-BLAST" METHOD. IF THIS PROCESS DAMAGES/SCARS PAVEMENT, THEN THE PAVEMENT SHALL BE MILLED AND RESURFACED PER FDOT STANDARDS.

C. ALL DIRECTIONAL ARROWS SHALL BE PLACED AS ONE SEGMENT.

D. ALIGNMENT OF PROPOSED PAVEMENT MARKINGS SHALL MATCH EXISTING PAVEMENT MARKINGS AT PAVEMENT MARKING LIMITS OF CONSTRUCTION.

E. ALL CURB AND GUTTER AND SIDEWALK WILL BE REMOVED AND REPLACED JOINT TO JOINT.

F. ALL DISTURBED AREA WITH THE RIGHT-OF-WAY WILL RESTORED TO ORIGINAL OR BETTER CONDITION BY GRADING AND SODDING THE AREA DISTURBED WITH BAHIA SOD.

G. ALL LANES MUST BE OPENED FOR TRAFFIC DURING AN EVACUATION NOTICE OF A HURRICANE OR OTHER CATASTROPHIC EVENT AND SHALL REMAIN OPEN FOR THE DURATION OF THE EVACUATION OR EVENT

PAVEMENT MARKING & SIGNAGE NOTES:

1. ALL MARKINGS SHALL COMPLY WITH F.D.O.T. STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION INDEX No. 711-001.
2. PAVEMENT MARKINGS SHALL BE APPLIED AFTER PAVEMENT SURFACE HAS CURED. SURFACE SHALL BE FREE OF FINE SAND AND DEBRIS PRIOR TO APPLICATIONS.
3. ALL SITE PAVEMENT MARKINGS SHALL BE PAINTED COLOR AS INDICTED. PAINT SHALL BE SHERWIN WILLIAMS LOW-VOC ACRYLIC PRO PARK PAINT OR EQUAL, APPLY PER MANUFACTURER'S RECOMMENDATIONS. REFER TO DRAWINGS FOR LOCATIONS OF SPECIFIC COLORS. ALL LINE PAVEMENT MARKINGS SHALL BE 6" MINIMUM WIDTH.
4. LOCATION OF SIGNS SHOWN HEREON ARE APPROXIMATE ONLY AND SUBJECT TO CHANGE AS DIRECTED BY THE ENGINEER. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH INDEX NO. 700-101 AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS". FOR ADDITIONAL DETAILS SEE INDEX NO. 700-010, 700-101 AND 711-001.
5. ALL TRAFFIC CONTROL SIGNALS OR DEVICES MUST COMPLY WITH THE FLORIDA STATE STATUTES REGARDING THE INSTALLATION. ALL TRAFFIC CONTROL SIGNALS OR DEVICES MUST CONFORM TO THE MANUAL AND SPECIFICATIONS PUBLISHED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION, TO INCLUDE BUT NOT LIMITED TO SIGNS SIZE AND HEIGHT.
6. ALL TRAFFIC CONTROL SIGNS SHALL BE FABRICATED USING 3M BRAND "SCOTCHLITE" SHEETING (ENGINEER GRADE) ON MINIMUM .08 GA ALUMINUM BLANKS.

Right-in/Right-out Alternative

SEE SHEETS C403 FOR REFERENCED DETAILS NOT SHOWN HEREON.

NOTE:
SEE ARCHITECTURAL / STRUCTURAL DRAWINGS FOR SPECIFIC BUILDING ELEMENTS. ITEMS ARE SHOWN HEREON FOR INFORMATIONAL PURPOSES ONLY AND SHALL BE INSTALLED BY THE GENERAL CONTRACTOR.

NOTICE:
THE SITE SIGNAGE SHOWN HEREON REPRESENTS THE ENGINEER'S RECOMMENDED CONFIGURATION. AT THE SOLE DISCRETION OF THE DEVELOPER AND SUBJECT TO CITY OF NEW SMYRNA BEACH APPROVAL, THE CONTRACTOR MAY FORGO INSTALLATION OF SOME SITE SIGNAGE.

NOTE:
ALL IMPROVEMENTS SHALL BE STAKED FOR CONSTRUCTION BY MEANS OF DIGITAL COORDINATES BY SURVEYOR UTILIZING GEODETIC TOTAL STATION. SCALING OF DRAWINGS FOR PURPOSES OF STAKING OR THE UTILIZATION OF THE GLOBAL POSITIONING SYSTEM (GPS) ARE AT THE SURVEYOR'S OWN RISK.

REVISIONS

DATE	DESCRIPTION
09/12/24	REV PER 9/11
	VCS MEETING
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24
	CITY COMMENTS
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS

ROGER W. STRCULA LICENSE NO. 52784 STATE OF FLORIDA PROFESSIONAL ENGINEER
NOT VALID UNLESS SIGNED AND DATED

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PAVEMENT MARKING AND SIGNAGE PLAN

FLAGLER DUNES

1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	1" = 30'

SHEET NUMBER:

C402

Traffic Count Data

National Data & Surveying Services

Intersection Turning Movement Count

Location: New Smyrna Beach High School W Dwy & 10th St
City: New Smyrna Beach
Control: 1-Way Stop(SB)

Project ID: 24-130129-001
Date: 4/17/2024

Data - Total

NS/EW Streets:	New Smyrna Beach High School W Dwy				New Smyrna Beach High School W Dwy				10th St				10th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	4	16	0	0	0	16	4	0	40
7:15 AM	0	0	0	0	3	0	0	0	10	26	0	0	0	19	2	0	60
7:30 AM	0	0	0	0	12	0	2	0	24	44	0	0	0	21	21	0	124
7:45 AM	0	0	0	0	24	0	17	0	67	50	0	0	0	31	43	0	232
8:00 AM	0	0	0	0	33	0	16	0	145	34	0	0	0	33	112	0	373
8:15 AM	0	0	0	0	49	0	31	0	128	42	0	0	0	38	114	0	402
8:30 AM	0	0	0	0	22	0	12	0	24	50	0	0	0	34	19	0	161
8:45 AM	0	0	0	0	7	0	12	0	14	52	0	0	0	42	14	0	141
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	150	0	90	0	416	314	0	0	0	234	329	0	1533
APPROACH %'s :					62.50%	0.00%	37.50%	0.00%	56.99%	43.01%	0.00%	0.00%	0.00%	41.56%	58.44%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	128	0	76	0	364	176	0	0	0	136	288	0	1168
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.653	0.000	0.613	0.000	0.628	0.880	0.000	0.000	0.000	0.895	0.632	0.000	0.726
					0.638				0.754				0.697				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	22	0	22	0	6	39	0	0	0	57	6	0	152
4:15 PM	0	0	0	0	10	0	10	0	7	43	0	0	0	41	5	0	116
4:30 PM	0	0	0	0	8	0	7	0	4	57	0	0	0	53	5	0	134
4:45 PM	0	0	0	0	1	0	3	0	2	53	0	0	0	41	2	0	102
5:00 PM	0	0	0	0	4	0	6	0	1	39	0	0	0	47	2	0	99
5:15 PM	0	0	0	0	2	0	1	0	0	61	0	0	0	54	1	0	119
5:30 PM	0	0	0	0	2	0	2	0	4	60	0	0	0	38	3	0	109
5:45 PM	0	0	0	0	2	0	2	0	7	33	0	0	0	29	12	0	85
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	51	0	53	0	31	385	0	0	0	360	36	0	916
APPROACH %'s :					49.04%	0.00%	50.96%	0.00%	7.45%	92.55%	0.00%	0.00%	0.00%	90.91%	9.09%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	41	0	42	0	19	192	0	0	0	192	18	0	504
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.466	0.000	0.477	0.000	0.679	0.842	0.000	0.000	0.000	0.842	0.750	0.000	0.829
					0.472				0.865				0.833				

	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0%	#DIV/0!	0%	#DIV/0!	0%	10%	#DIV/0!	#DIV/0!	#DIV/0!	12%	0%	#DIV/0!	
	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0%	#DIV/0!	0%	#DIV/0!	0%	2%	#DIV/0!	#DIV/0!	#DIV/0!	3%	6%	#DIV/0!	

National Data & Surveying Services

Intersection Turning Movement Count

Location: New Smyrna Beach High School W Dwy & 10th St
City: New Smyrna Beach
Control: 1-Way Stop(SB)

Project ID: 24-130129-001
Date: 4/17/2024

Data - Cars

NS/EW Streets:	New Smyrna Beach High School W Dwy				New Smyrna Beach High School W Dwy				10th St				10th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	4	15	0	0	0	16	3	0	38
7:15 AM	0	0	0	0	1	0	0	0	10	26	0	0	0	18	2	0	57
7:30 AM	0	0	0	0	12	0	2	0	24	44	0	0	0	20	21	0	123
7:45 AM	0	0	0	0	24	0	17	0	67	45	0	0	0	29	43	0	225
8:00 AM	0	0	0	0	33	0	16	0	145	28	0	0	0	26	112	0	360
8:15 AM	0	0	0	0	49	0	31	0	128	38	0	0	0	35	114	0	395
8:30 AM	0	0	0	0	22	0	12	0	24	48	0	0	0	30	19	0	155
8:45 AM	0	0	0	0	7	0	12	0	14	51	0	0	0	41	14	0	139
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	148	0	90	0	416	295	0	0	0	215	328	0	1492
APPROACH %'s :					62.18%	0.00%	37.82%	0.00%	58.51%	41.49%	0.00%	0.00%	0.00%	39.59%	60.41%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	128	0	76	0	364	159	0	0	0	120	288	0	1135
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.653	0.000	0.613	0.000	0.628	0.828	0.000	0.000	0.000	0.857	0.632	0.000	0.718
					0.638				0.756				0.685				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	22	0	22	0	6	37	0	0	0	55	6	0	148
4:15 PM	0	0	0	0	10	0	10	0	7	43	0	0	0	39	4	0	113
4:30 PM	0	0	0	0	8	0	7	0	4	57	0	0	0	53	5	0	134
4:45 PM	0	0	0	0	1	0	3	0	2	52	0	0	0	40	2	0	100
5:00 PM	0	0	0	0	4	0	6	0	1	38	0	0	0	47	2	0	98
5:15 PM	0	0	0	0	2	0	1	0	0	61	0	0	0	53	1	0	118
5:30 PM	0	0	0	0	2	0	2	0	4	60	0	0	0	37	3	0	108
5:45 PM	0	0	0	0	2	0	2	0	7	33	0	0	0	29	12	0	85
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	51	0	53	0	31	381	0	0	0	353	35	0	904
APPROACH %'s :					49.04%	0.00%	50.96%	0.00%	7.52%	92.48%	0.00%	0.00%	0.00%	90.98%	9.02%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	41	0	42	0	19	189	0	0	0	187	17	0	495
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.466	0.000	0.477	0.000	0.679	0.829	0.000	0.000	0.000	0.850	0.708	0.000	0.836
					0.472				0.852				0.836				

National Data & Surveying Services

Intersection Turning Movement Count

Location: New Smyrna Beach High School W Dwy & 10th St
City: New Smyrna Beach
Control: 1-Way Stop(SB)

Project ID: 24-130129-001
Date: 4/17/2024

Data - HT

NS/EW Streets:	New Smyrna Beach High School W Dwy				New Smyrna Beach High School W Dwy				10th St				10th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	2
7:15 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	3
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	2	0	0	7
8:00 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	7	0	0	13
8:15 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	0	7
8:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	4	0	0	6
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	2	0	0	0	0	19	0	0	0	19	1	0	41
APPROACH %'s :					100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	95.00%	5.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	17	0	0	0	16	0	0	33
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.708	0.000	0.000	0.000	0.571	0.000	0.000	0.635
									0.708				0.571				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	4	0	0	0	7	1	0	12
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	87.50%	12.50%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	3	0	0	0	5	1	0	9
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.625	0.250	0.000	0.563
									0.375				0.500				

National Data & Surveying Services

Intersection Turning Movement Count

Location: New Smyrna Beach High School W Dwy & 10th St
City: New Smyrna Beach
Control: 1-Way Stop(SB)

Project ID: 24-130129-001
Date: 4/17/2024

Data - Bikes

NS/EW Streets:	New Smyrna Beach High School W Dwy				New Smyrna Beach High School W Dwy				10th St				10th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	5
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	5
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.375	0.000	0.000	0.625
									0.500				0.375				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
4:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	1	0	0	3	0	0	0	6	0	0	10
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	1	0	0	2	0	0	0	5	0	0	8
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.500	0.000	0.000	0.000	0.625	0.000	0.000	0.667
					0.250				0.500				0.625				

National Data & Surveying Services

Intersection Turning Movement Count

Location: New Smyrna Beach High School W Dwy & 10th St
City: New Smyrna Beach

Project ID: 24-130129-001
Date: 4/17/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	New Smyrna Beach High School W Dwy		New Smyrna Beach High School W Dwy		10th St		10th St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	1	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	1	1	0	0	0	0	0	0	2
APPROACH %'s :	50.00%	50.00%							
PEAK HR :	**07:45 AM - 08:45 AM**								TOTAL
PEAK HR VOL :	1	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.250								0.250
	0.250								

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	1	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	1	0	0	0	0	0	0	0	1
5:15 PM	0	1	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	1	2	0	0	0	0	0	0	3
APPROACH %'s :	33.33%	66.67%							
PEAK HR :	**04:00 PM - 05:00 PM**								TOTAL
PEAK HR VOL :	0	1	0	0	0	0	0	0	1
PEAK HR FACTOR :		0.250							0.250
	0.250								

Prepared by National Data & Surveying Services

New Smyrna Beach High School W Dwy & 10th St

Peak Hour Turning Movement Count

ID: 24-130129-001
City: New Smyrna Beach

Day: Wednesday
Date: 4/17/2024

PEAK HOURS		COUNT PERIODS
AM	07:45 AM - 08:45 AM	7:00 AM - 09:00 AM
NOON	NONE	NONE
PM	04:00 PM - 05:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND — New Smyrna Beach High School W Dwy

AM	76	0	128	0	652	AM
NOON	0	0	0	0	0	NOON
PM	42	0	41	0	37	PM

EASTBOUND — 10th St

AM	NOON	PM	
212	0	234	
0	0	0	0
364	0	19	0
176	0	192	0
0	0	0	0

WESTBOUND — 10th St

PM	NOON	AM	
18	0	288	0
192	0	136	0
0	0	0	0
0	0	0	0
233	0	304	

NORTHBOUND — New Smyrna Beach High School W Dwy

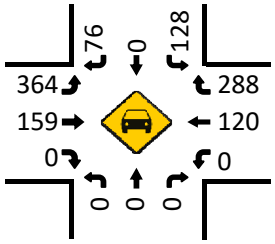
PM	0	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

CONTROL

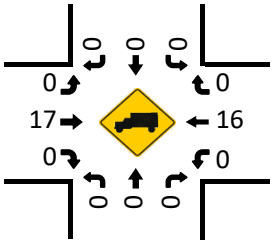
1-Way Stop(SB)

TEV	1168	0	504
	AM	NOON	PM
PHF	0.73		0.83

Cars (AM)



HT (AM)



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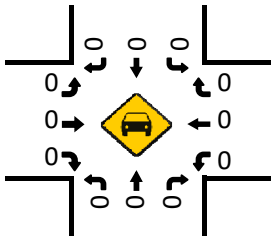
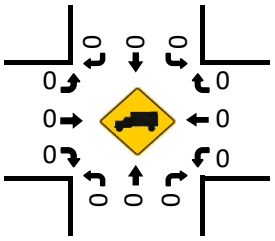
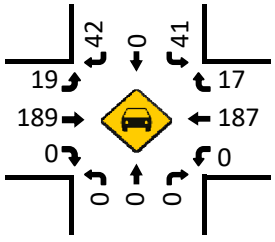


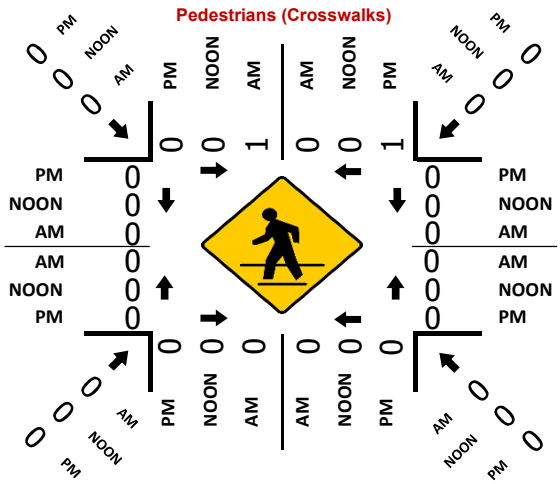
HT (NOON)



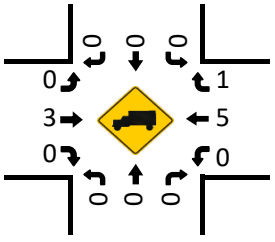
Cars (PM)



Pedestrians (Crosswalks)



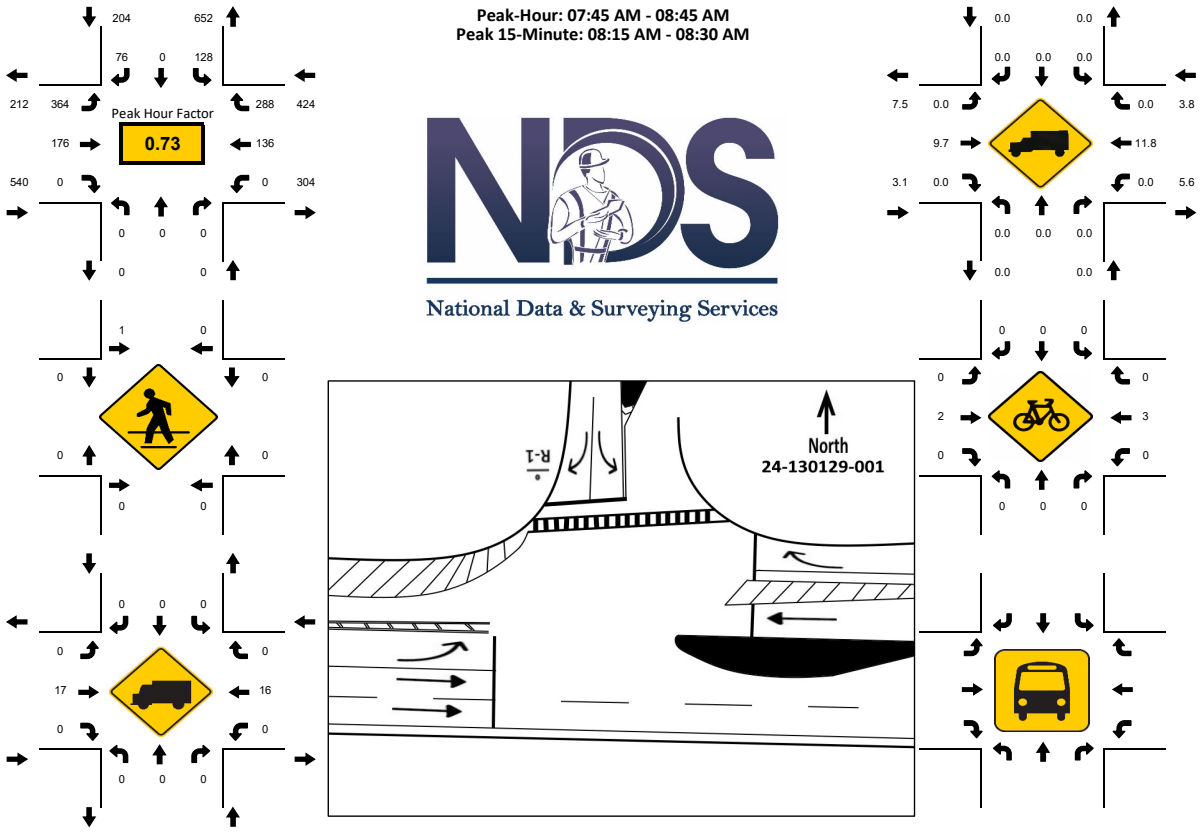
HT (PM)



LOCATION: New Smyrna Beach High School W Dwy & 10th St
CITY/STATE: New Smyrna Beach, FL

PROJECT ID: 24-130129-001
DATE: Wed, Apr 17, 2024

Peak-Hour: 07:45 AM - 08:45 AM
Peak 15-Minute: 08:15 AM - 08:30 AM

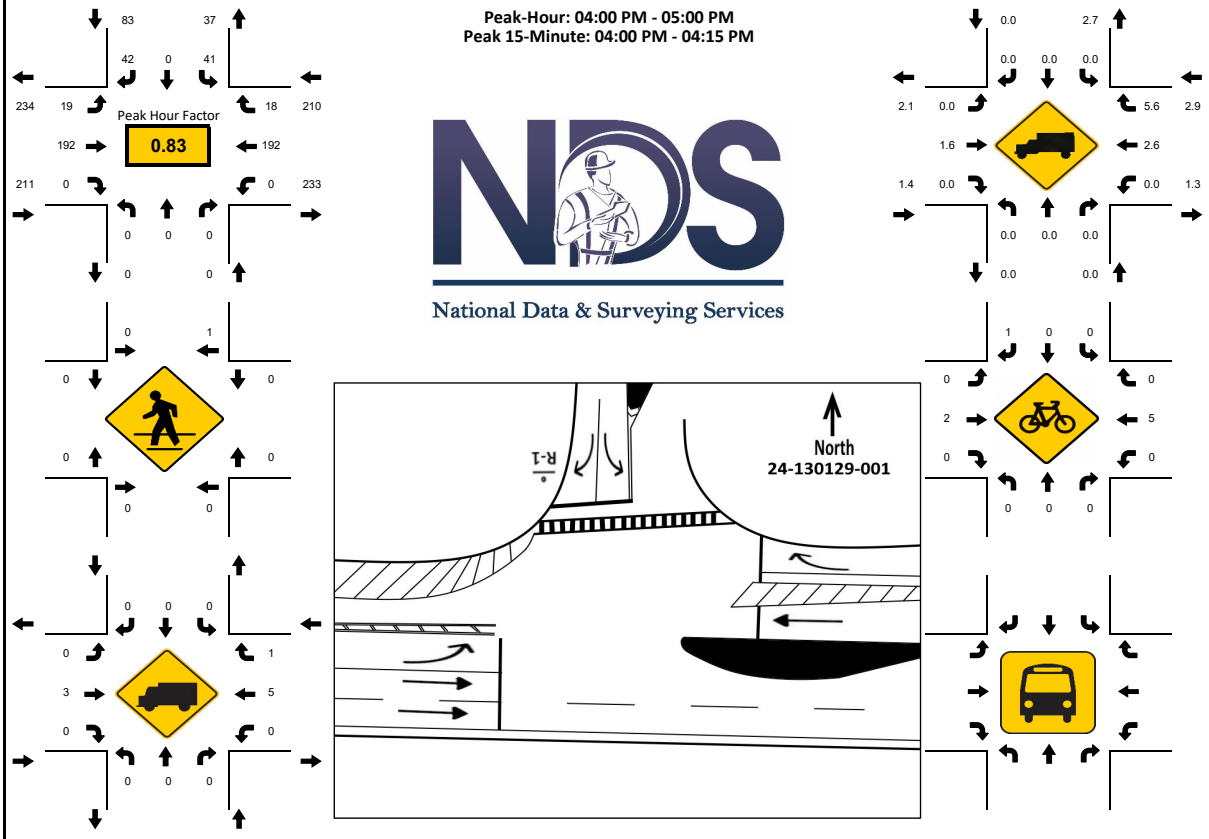


15-Min Count Period Beginning At	Smyrna Beach High School W Dwy Northbound					Smyrna Beach High School W Dwy Southbound					10th St Eastbound					10th St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
7:00 AM	0	0	0	0		0	0	0	0		4	16	0	0		0	16	4	0		40	456
7:15 AM	0	0	0	0		3	0	0	0		10	26	0	0		0	19	2	0		60	789
7:30 AM	0	0	0	0		12	0	2	0		24	44	0	0		0	21	21	0		124	1131
7:45 AM	0	0	0	0		24	0	17	0		67	50	0	0		0	31	43	0		232	1168
8:00 AM	0	0	0	0		33	0	16	0		145	34	0	0		0	33	112	0		373	1077
8:15 AM	0	0	0	0		49	0	31	0		128	42	0	0		0	38	114	0		402	704
8:30 AM	0	0	0	0		22	0	12	0		24	50	0	0		0	34	19	0		161	302
8:45 AM	0	0	0	0		7	0	12	0		14	52	0	0		0	42	14	0		141	141
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	0	0	0	0		196	0	124	0		580	200	0	0		0	152	456	0		**1708**	
Heavy Trucks	0	0	0	0		0	0	0	0		0	24	0	0		0	28	0	0		**52**	
Pedestrians		0					4					0					0				**4**	
Bicycles	0	0	0	0		0	0	0	0		0	4	0	0		0	8	0	0		**12**	
Buses																						
Stopped Buses																						

LOCATION: New Smyrna Beach High School W Dwy & 10th St
CITY/STATE: New Smyrna Beach, FL

PROJECT ID: 24-130129-001
DATE: Wed, Apr 17, 2024

Peak-Hour: 04:00 PM - 05:00 PM
Peak 15-Minute: 04:00 PM - 04:15 PM



15-Min Count Period Beginning At	Smyrna Beach High School W Dwy Northbound					Smyrna Beach High School W Dwy Southbound					10th St Eastbound					10th St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
4:00 PM	0	0	0	0		22	0	22	0		6	39	0	0		0	57	6	0		152	504
4:15 PM	0	0	0	0		10	0	10	0		7	43	0	0		0	41	5	0		116	451
4:30 PM	0	0	0	0		8	0	7	0		4	57	0	0		0	53	5	0		134	454
4:45 PM	0	0	0	0		1	0	3	0		2	53	0	0		0	41	2	0		102	429
5:00 PM	0	0	0	0		4	0	6	0		1	39	0	0		0	47	2	0		99	412
5:15 PM	0	0	0	0		2	0	1	0		0	61	0	0		0	54	1	0		119	313
5:30 PM	0	0	0	0		2	0	2	0		4	60	0	0		0	38	3	0		109	194
5:45 PM	0	0	0	0		2	0	2	0		7	33	0	0		0	29	12	0		85	85
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	0	0	0	0		88	0	88	0		28	228	0	0		0	228	24	0		**684**	
Heavy Trucks	0	0	0	0		0	0	0	0		0	8	0	0		0	8	4	0		**20**	
Pedestrians		0					4					0					0				**4**	
Bicycles	0	0	0	0		0	0	4	0		0	4	0	0		0	8	0	0		**16**	
Buses																						
Stopped Buses																						

National Data & Surveying Services

Intersection Turning Movement Count

Location: New Smyrna Beach High School E Dwy & 10th St
City: New Smyrna Beach
Control: 1-Way Stop(SB)

Project ID: 24-130129-002
Date: 4/17/2024

Data - Total

NS/EW Streets:	New Smyrna Beach High School E Dwy				New Smyrna Beach High School E Dwy				10th St				10th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	1	15	0	0	0	18	1	0	35
7:15 AM	0	0	0	0	1	0	0	0	5	24	0	0	0	21	1	0	52
7:30 AM	0	0	0	0	0	0	0	1	4	49	0	0	0	42	1	1	98
7:45 AM	0	0	0	0	0	0	2	0	10	67	0	0	0	72	3	1	155
8:00 AM	0	0	0	0	5	0	5	0	6	60	0	0	0	147	10	0	233
8:15 AM	0	0	0	0	5	0	3	0	6	82	0	1	0	141	2	6	246
8:30 AM	0	0	0	0	3	0	3	0	6	69	0	0	0	50	0	0	131
8:45 AM	0	0	0	0	2	0	0	0	1	57	0	1	0	55	1	0	117
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	16	0	13	1	39	423	0	2	0	546	19	8	1067
APPROACH %'s :					53.33%	0.00%	43.33%	3.33%	8.41%	91.16%	0.00%	0.43%	0.00%	95.29%	3.32%	1.40%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	13	0	13	0	28	278	0	1	0	410	15	7	765
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.650	0.000	0.650	0.000	0.700	0.848	0.000	0.250	0.000	0.697	0.375	0.292	0.777
					0.650				0.862				0.688				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	2	0	1	0	0	59	0	0	0	65	0	0	127
4:15 PM	0	0	0	0	0	0	0	0	0	54	0	0	0	42	0	0	96
4:30 PM	0	0	0	0	0	0	2	0	0	66	0	0	0	56	0	0	124
4:45 PM	0	0	0	0	0	0	0	0	0	53	0	0	0	45	0	0	98
5:00 PM	0	0	0	0	0	0	0	0	0	42	0	0	0	48	0	0	90
5:15 PM	0	0	0	0	0	0	0	0	0	65	0	0	0	54	0	0	119
5:30 PM	0	0	0	0	0	0	0	0	0	55	0	0	0	41	0	0	96
5:45 PM	0	0	0	0	0	0	0	0	0	42	0	0	0	41	0	0	83
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	2	0	3	0	0	436	0	0	0	392	0	0	833
APPROACH %'s :					40.00%	0.00%	60.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	2	0	3	0	0	232	0	0	0	208	0	0	445
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.375	0.000	0.000	0.879	0.000	0.000	0.000	0.800	0.000	0.000	0.876
					0.417				0.879				0.800				

#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	62%	#DIV/0!	77%	#DIV/0!	32%	3%	#DIV/0!	0%	#DIV/0!	1%	53%	0%	
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National Data & Surveying Services

Intersection Turning Movement Count

Location: New Smyrna Beach High School E Dwy & 10th St
City: New Smyrna Beach
Control: 1-Way Stop(SB)

Project ID: 24-130129-002
Date: 4/17/2024

Data - Cars

NS/EW Streets:	New Smyrna Beach High School E Dwy				New Smyrna Beach High School E Dwy				10th St				10th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	1	14	0	0	0	17	1	0	33
7:15 AM	0	0	0	0	0	0	0	0	4	23	0	0	0	20	1	0	48
7:30 AM	0	0	0	0	0	0	0	1	4	49	0	0	0	41	1	1	97
7:45 AM	0	0	0	0	0	0	1	0	8	64	0	0	0	71	1	1	146
8:00 AM	0	0	0	0	1	0	0	0	1	59	0	0	0	145	4	0	210
8:15 AM	0	0	0	0	2	0	0	0	5	79	0	1	0	141	2	6	236
8:30 AM	0	0	0	0	2	0	2	0	5	68	0	0	0	47	0	0	124
8:45 AM	0	0	0	0	2	0	0	0	1	56	0	1	0	54	1	0	115
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	7	0	3	1	29	412	0	2	0	536	11	8	1009
APPROACH %'s :					63.64%	0.00%	27.27%	9.09%	6.55%	93.00%	0.00%	0.45%	0.00%	96.58%	1.98%	1.44%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	5	0	3	0	19	270	0	1	0	404	7	7	716
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.625	0.000	0.375	0.000	0.594	0.854	0.000	0.250	0.000	0.697	0.438	0.292	0.758
					0.500				0.853				0.701				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	2	0	1	0	0	57	0	0	0	64	0	0	124
4:15 PM	0	0	0	0	0	0	0	0	0	54	0	0	0	39	0	0	93
4:30 PM	0	0	0	0	0	0	2	0	0	66	0	0	0	56	0	0	124
4:45 PM	0	0	0	0	0	0	0	0	0	53	0	0	0	44	0	0	97
5:00 PM	0	0	0	0	0	0	0	0	0	40	0	0	0	48	0	0	88
5:15 PM	0	0	0	0	0	0	0	0	0	65	0	0	0	53	0	0	118
5:30 PM	0	0	0	0	0	0	0	0	0	55	0	0	0	40	0	0	95
5:45 PM	0	0	0	0	0	0	0	0	0	42	0	0	0	41	0	0	83
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	2	0	3	0	0	432	0	0	0	385	0	0	822
APPROACH %'s :					40.00%	0.00%	60.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	2	0	3	0	0	230	0	0	0	203	0	0	438
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.375	0.000	0.000	0.871	0.000	0.000	0.000	0.793	0.000	0.000	0.883
					0.417				0.871				0.793				

National Data & Surveying Services

Intersection Turning Movement Count

Location: New Smyrna Beach High School E Dwy & 10th St
City: New Smyrna Beach
Control: 1-Way Stop(SB)

Project ID: 24-130129-002
Date: 4/17/2024

Data - HT

NS/EW Streets:	New Smyrna Beach High School E Dwy				New Smyrna Beach High School E Dwy				10th St				10th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
7:15 AM	0	0	0	0	1	0	0	0	1	1	0	0	0	1	0	0	4
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:45 AM	0	0	0	0	0	0	1	0	2	3	0	0	0	1	2	0	9
8:00 AM	0	0	0	0	4	0	5	0	5	1	0	0	0	2	6	0	23
8:15 AM	0	0	0	0	3	0	3	0	1	3	0	0	0	0	0	0	10
8:30 AM	0	0	0	0	1	0	1	0	1	1	0	0	0	3	0	0	7
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	9	0	10	0	10	11	0	0	0	10	8	0	58
APPROACH %'s :					47.37%	0.00%	52.63%	0.00%	47.62%	52.38%	0.00%	0.00%	0.00%	55.56%	44.44%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	8	0	10	0	9	8	0	0	0	6	8	0	49
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.500	0.000	0.500	0.000	0.450	0.667	0.000	0.000	0.000	0.500	0.333	0.000	0.533
					0.500				0.708				0.438				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	4	0	0	0	7	0	0	11
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	2	0	0	0	5	0	0	7
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.417	0.000	0.000	0.583
									0.250				0.417				

National Data & Surveying Services

Intersection Turning Movement Count

Location: New Smyrna Beach High School E Dwy & 10th St
City: New Smyrna Beach
Control: 1-Way Stop(SB)

Project ID: 24-130129-002
Date: 4/17/2024

Data - Bikes

NS/EW Streets:	New Smyrna Beach High School E Dwy				New Smyrna Beach High School E Dwy				10th St				10th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	4
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	2	0	0	0	3	6	0	11
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	33.33%	66.67%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	2	0	0	0	3	5	0	10
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.375	0.625	0.000	0.625
									0.500				0.500				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	3
4:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	2	0	0	3	0	0	0	4	1	1	11
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	66.67%	16.67%	16.67%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	2	0	0	2	0	0	0	3	0	1	8
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.750	0.000	0.250	0.667
							0.500				0.500				0.500		

National Data & Surveying Services

Intersection Turning Movement Count

Location: New Smyrna Beach High School E Dwy & 10th St
City: New Smyrna Beach

Project ID: 24-130129-002
Date: 4/17/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	New Smyrna Beach High School E Dwy		New Smyrna Beach High School E Dwy		10th St		10th St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	3	0	0	0	0	0	0	3
7:45 AM	0	3	0	0	0	0	0	0	3
8:00 AM	1	4	0	0	0	0	0	0	5
8:15 AM	0	8	0	0	0	0	0	0	8
8:30 AM	1	1	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	2	19	0	0	0	0	0	0	21
APPROACH %'s :	9.52%	90.48%							
PEAK HR :	**07:45 AM - 08:45 AM**								TOTAL
PEAK HR VOL :	2	16	0	0	0	0	0	0	18
PEAK HR FACTOR :	0.500	0.500							0.563
	0.563								

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	1	1	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	1	1	0	0	0	0	0	0	2
APPROACH %'s :	50.00%	50.00%							
PEAK HR :	**04:00 PM - 05:00 PM**								TOTAL
PEAK HR VOL :	1	1	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.250	0.250							0.250
	0.250								

Prepared by National Data & Surveying Services

New Smyrna Beach High School E Dwy & 10th St

Peak Hour Turning Movement Count

ID: 24-130129-002
City: New Smyrna Beach

Day: Wednesday
Date: 4/17/2024

PEAK HOURS	COUNT PERIODS
07:45 AM - 08:45 AM	7:00 AM - 09:00 AM
NONE	NONE
04:00 PM - 05:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND — New Smyrna Beach High School E Dwy

AM	13	0	13	0	43	AM
NOON	0	0	0	0	0	NOON
PM	3	0	2	0	0	PM

EASTBOUND — 10th St

AM	NOON	PM	
424	0	211	
1	0	0	0
28	0	0	0
278	0	232	0
0	0	0	0
AM	NOON	PM	

WESTBOUND — 10th St

PM	NOON	AM	
0	0	15	0
208	0	410	0
0	0	0	0
0	0	7	0
234	0	298	
PM	NOON	AM	

CONTROL

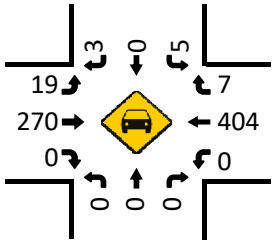
1-Way Stop(SB)

TEV	765	0	445
	AM	NOON	PM
PHF	0.78		0.88

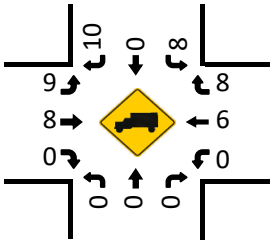
NORTHBOUND — New Smyrna Beach High School E Dwy

PM	0	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

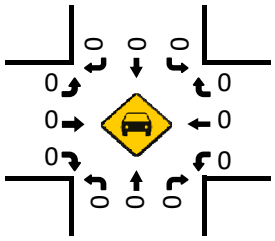
Cars (AM)



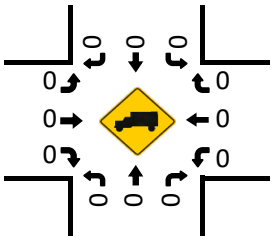
HT (AM)



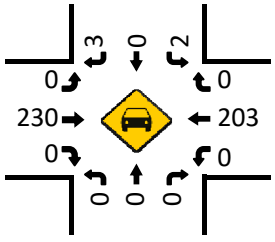
Cars (NOON)



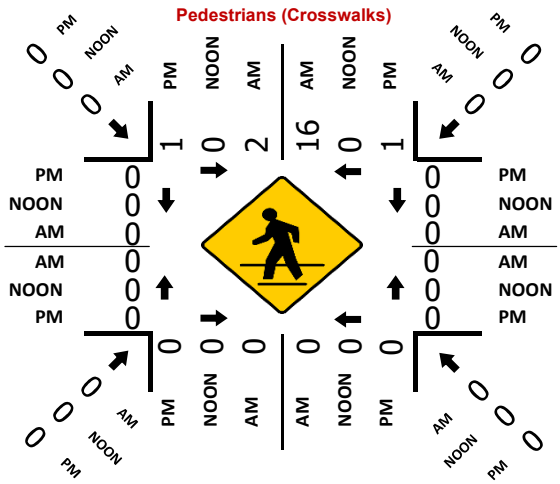
HT (NOON)



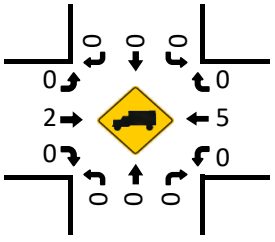
Cars (PM)



Pedestrians (Crosswalks)



HT (PM)

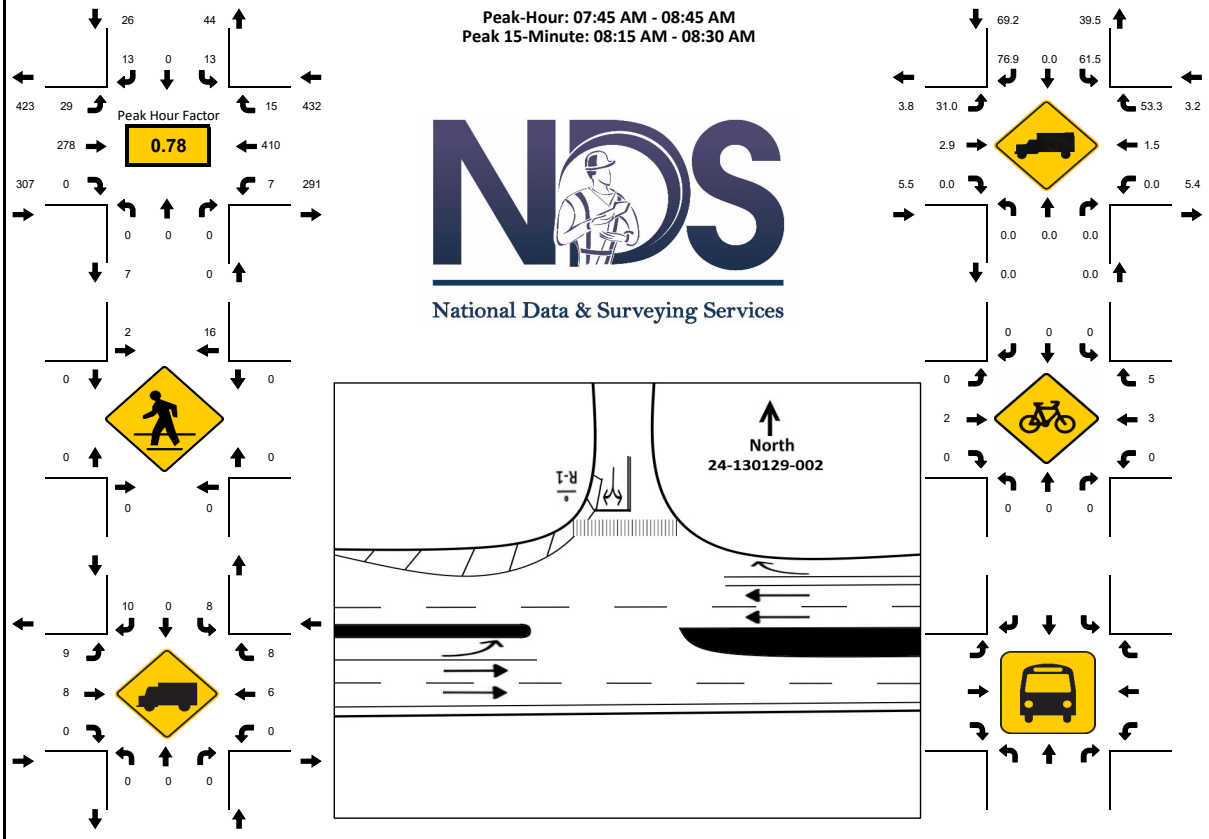


LOCATION: New Smyrna Beach High School E Dwy & 10th St
CITY/STATE: New Smyrna Beach, FL

PROJECT ID: 24-130129-002
DATE: Wed, Apr 17, 2024

Peak-Hour: 07:45 AM - 08:45 AM
Peak 15-Minute: 08:15 AM - 08:30 AM

Peak Hour Factor
0.78



15-Min Count Period Beginning At	New Smyrna Beach High School E Dwy Northbound					New Smyrna Beach High School E Dwy Southbound					10th St Eastbound					10th St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
7:00 AM	0	0	0	0		0	0	0	0		1	15	0	0		0	18	1	0		35	340
7:15 AM	0	0	0	0		1	0	0	0		5	24	0	0		0	21	1	0		52	538
7:30 AM	0	0	0	0		0	0	0	1		4	49	0	0		0	42	1	1		98	732
7:45 AM	0	0	0	0		0	0	2	0		10	67	0	0		0	72	3	1		155	765
8:00 AM	0	0	0	0		5	0	5	0		6	60	0	0		0	147	10	0		233	727
8:15 AM	0	0	0	0		5	0	3	0		6	82	0	1		0	141	2	6		246	494
8:30 AM	0	0	0	0		3	0	3	0		6	69	0	0		0	50	0	0		131	248
8:45 AM	0	0	0	0		2	0	0	0		1	57	0	1		0	55	1	0		117	117
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	0	0	0	0		20	0	20	0		40	328	0	4		0	588	40	24		**1064**	
Heavy Trucks	0	0	0	0		16	0	20	0		20	12	0	0		0	12	24	0		**104**	
Pedestrians		0					32					0					0				**32**	
Bicycles	0	0	0	0		0	0	0	0		0	4	0	0		0	8	8	0		**20**	
Buses																						
Stopped Buses																						

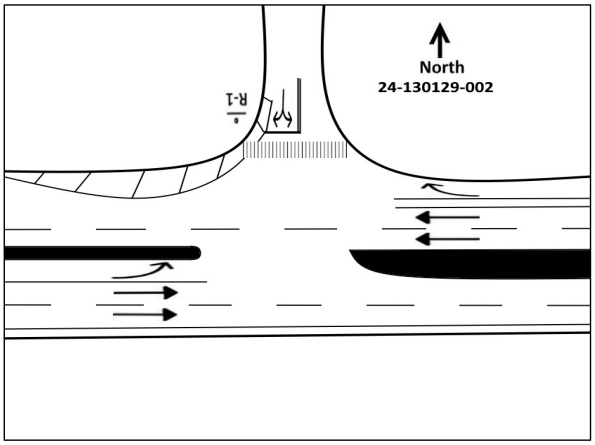
LOCATION: New Smyrna Beach High School E Dwy & 10th St
CITY/STATE: New Smyrna Beach, FL

PROJECT ID: 24-130129-002
DATE: Wed, Apr 17, 2024

Peak-Hour: 04:00 PM - 05:00 PM
Peak 15-Minute: 04:00 PM - 04:15 PM

Peak Hour Factor
0.88

National Data & Surveying Services



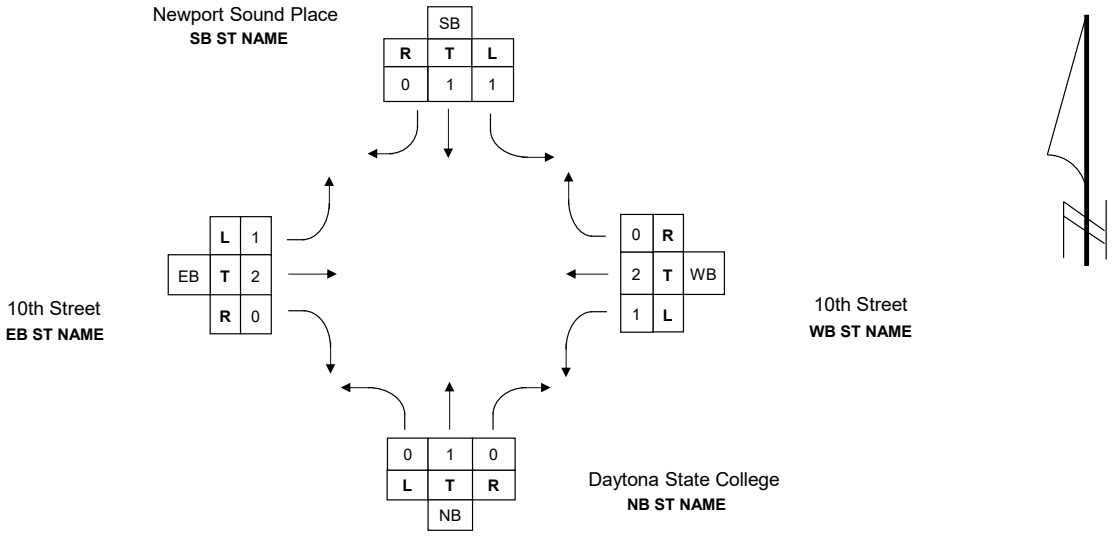
15-Min Count Period Beginning At	v Smyrna Beach High School E D Northbound					v Smyrna Beach High School E D Southbound					10th St Eastbound					10th St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
4:00 PM	0	0	0	0		2	0	1	0		0	59	0	0		0	65	0	0		127	445
4:15 PM	0	0	0	0		0	0	0	0		0	54	0	0		0	42	0	0		96	408
4:30 PM	0	0	0	0		0	0	2	0		0	66	0	0		0	56	0	0		124	431
4:45 PM	0	0	0	0		0	0	0	0		0	53	0	0		0	45	0	0		98	403
5:00 PM	0	0	0	0		0	0	0	0		0	42	0	0		0	48	0	0		90	388
5:15 PM	0	0	0	0		0	0	0	0		0	65	0	0		0	54	0	0		119	298
5:30 PM	0	0	0	0		0	0	0	0		0	55	0	0		0	41	0	0		96	179
5:45 PM	0	0	0	0		0	0	0	0		0	42	0	0		0	41	0	0		83	83
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	0	0	0	0		8	0	8	0		0	264	0	0		0	260	0	0		**540**	
Heavy Trucks	0	0	0	0		0	0	0	0		0	8	0	0		0	12	0	0		**20**	
Pedestrians		0					8					0					0				**8**	
Bicycles	0	0	0	0		0	0	4	0		0	4	0	0		0	4	0	4		**12**	
Buses																						
Stopped Buses																						

TRIUNE INFRASTRUCTURE GROUP

SUMMARY OF VEHICLE MOVEMENTS

SECTION	-	**CITY**	New Smyrna Beach	**COUNTY**	Volusia
MAIN ROUTE	10th Street	**INTERSECTING ROUTE**	Newport Sound Place		
OBSERVER	HF	**DATE**	4/3/2025	**MILEPOST**	-
WEATHER	Sunny	**ROAD CONDITION**	Good		
REMARKS					

FORM COMPLETED BY HF **DATE** 04/08/25



TIME	NORTHBOUND					SOUTHBOUND					TOTAL	EASTBOUND					WESTBOUND					TOTAL
BEGIN/END	**L**	**T**	**R**	**U**	**TOT**	**L**	**T**	**R**	**U**	**TOT**	**N/S**	**L**	**T**	**R**	**U**	**TOT**	**L**	**T**	**R**	**U**	**TOT**	**E/W**
7:00 - 8:00 AM	1	0	1	0	**2**	47	0	20	0	**67**	**69**	15	133	26	1	**175**	9	191	20	0	**220**	**395**
8:00 - 9:00 AM	2	0	5	0	**7**	24	0	25	0	**49**	**56**	14	254	22	1	**291**	12	367	28	0	**407**	**698**
4:00 - 5:00 PM	21	0	8	0	**29**	30	0	22	0	**52**	**81**	27	243	11	0	**281**	3	315	32	4	**354**	**635**
5:00 - 6:00 PM	5	0	8	0	**13**	21	0	29	0	**50**	**63**	29	188	5	0	**222**	8	185	33	3	**229**	**451**
TOTAL	**29**	**0**	**22**	**0**	**51**	**122**	**0**	**96**	**0**	**218**	**269**	**85**	**818**	**64**	**2**	**969**	**32**	**1,058**	**113**	**7**	**1,210**	**2,179**
Percentage	57%	0%	43%	0%		56%	0%	44%	0%			9%	84%	7%	0%		3%	87%	9%	1%		
Average	7	0	6	0	13	31	0	24	0	55		21	205	16	1	242	8	265	28	2	303	
Maximum	21	0	8	0	29	47	0	29	0	67		29	254	26	1	291	12	367	33	4	407	
Minimum	1	0	1	0	2	21	0	20	0	49		14	133	5	0	175	3	185	20	0	220	

TRIUNE INFRASTRUCTURE GROUP

PEDESTRIAN MOVEMENT SUMMARY

SECTION -
CITY New Smyrna Beach
COUNTY Volusia
STATE ROUTE 10th Street
INTERSECTING ROUTE Newport Sound Place
OBSERVER HF
DATE 4/3/2025

REMARKS

FORM COMPLETED BY HF **DATE** 04/08/25

HOURS	West side of Newport Sound Pl			East side of Newport Sound Pl			North side of 10th Street			South side of 10th Street			GRAND TOTAL
	NB	SB	TOTAL	NB	SB	TOTAL	EB	WB	TOTAL	EB	WB	TOTAL	
7:00 - 8:00 AM	0	0	**0**	2	4	**6**	1	2	**3**	0	0	**0**	**9**
8:00 - 9:00 AM	0	0	**0**	4	5	**9**	1	11	**12**	0	0	**0**	**21**
4:00 - 5:00 PM	0	0	**0**	7	7	**14**	14	14	**28**	0	0	**0**	**42**
5:00 - 6:00 PM	0	0	**0**	0	1	**1**	3	2	**5**	0	0	**0**	**6**
TOTAL	**0**	**0**	**0**	**13**	**17**	**30**	**19**	**29**	**48**	**0**	**0**	**0**	**78**

TRIUNE INFRASTRUCTURE GROUP

BICYCLE MOVEMENT SUMMARY

SECTION -
CITY New Smyrna Beach
COUNTY Volusia
STATE ROUTE 10th Street
INTERSECTING ROUTE Newport Sound Place
OBSERVER HF
DATE 4/3/2025

REMARKS

FORM COMPLETED BY HF **DATE** 04/08/25

HOURS	West side of Newport Sound Pl			East side of Newport Sound Pl			North side of 10th Street			South side of 10th Street			GRAND TOTAL
	NB	SB	TOTAL	NB	SB	TOTAL	EB	WB	TOTAL	EB	WB	TOTAL	
7:00 - 8:00 AM	0	0	**0**	0	0	**0**	1	2	**3**	0	0	**0**	**3**
8:00 - 9:00 AM	0	0	**0**	1	0	**1**	0	4	**4**	0	0	**0**	**5**
4:00 - 5:00 PM	0	0	**0**	2	1	**3**	3	4	**7**	0	0	**0**	**10**
5:00 - 6:00 PM	0	0	**0**	3	0	**3**	0	2	**2**	1	0	**1**	**6**
TOTAL	**0**	**0**	**0**	**6**	**1**	**7**	**4**	**12**	**16**	**1**	**0**	**1**	**24**

TRIUNE INFRASTRUCTURE GROUP

File Name : 10th Street at Newport Sound Place
Site Code : 00000000
Start Date : 4/3/2025
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Trucks

	DAYTONA STATE COLLEGE Northbound					NEWPORT SOUND PLACE Southbound					10TH STREET Eastbound					10TH STREET Westbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	0	0	1	0	1	7	0	2	0	9	2	14	0	0	16	0	23	1	0	24	50
07:15 AM	0	0	0	0	0	11	0	7	0	18	1	32	2	0	35	1	25	1	0	27	80
07:30 AM	0	0	0	0	0	15	0	4	0	19	9	39	10	0	58	4	48	8	0	60	137
07:45 AM	1	0	0	0	1	14	0	7	0	21	3	48	14	1	66	4	95	10	0	109	197
Total	1	0	1	0	2	47	0	20	0	67	15	133	26	1	175	9	191	20	0	220	464
08:00 AM	0	0	0	0	0	9	0	6	0	15	7	60	8	0	75	8	148	9	0	165	255
08:15 AM	0	0	1	0	1	6	0	8	0	14	3	63	1	1	68	1	115	8	0	124	207
08:30 AM	1	0	2	0	3	5	0	8	0	13	3	61	6	0	70	2	49	9	0	60	146
08:45 AM	1	0	2	0	3	4	0	3	0	7	1	70	7	0	78	1	55	2	0	58	146
Total	2	0	5	0	7	24	0	25	0	49	14	254	22	1	291	12	367	28	0	407	754
*** BREAK ***																					
04:00 PM	1	0	0	0	1	7	0	5	0	12	7	72	4	0	83	0	53	8	1	62	158
04:15 PM	11	0	6	0	17	5	0	6	0	11	7	67	2	0	76	0	102	11	2	115	219
04:30 PM	5	0	1	0	6	7	0	7	0	14	8	44	3	0	55	2	99	9	1	111	186
04:45 PM	4	0	1	0	5	11	0	4	0	15	5	60	2	0	67	1	61	4	0	66	153
Total	21	0	8	0	29	30	0	22	0	52	27	243	11	0	281	3	315	32	4	354	716
05:00 PM	1	0	4	0	5	3	0	7	0	10	4	55	1	0	60	4	62	12	0	78	153
05:15 PM	3	0	4	0	7	7	0	5	0	12	5	51	3	0	59	3	58	8	2	71	149
05:30 PM	1	0	0	0	1	6	0	7	0	13	13	46	1	0	60	0	41	5	1	47	121
05:45 PM	0	0	0	0	0	5	0	10	0	15	7	36	0	0	43	1	24	8	0	33	91
Total	5	0	8	0	13	21	0	29	0	50	29	188	5	0	222	8	185	33	3	229	514
Grand Total	29	0	22	0	51	122	0	96	0	218	85	818	64	2	969	32	1058	113	7	1210	2448
Apprch %	56.9	0	43.1	0		56	0	44	0		8.8	84.4	6.6	0.2		2.6	87.4	9.3	0.6		
Total %	1.2	0	0.9	0	2.1	5	0	3.9	0	8.9	3.5	33.4	2.6	0.1	39.6	1.3	43.2	4.6	0.3	49.4	
Passenger Vehicles	29	0	21	0	50	120	0	95	0	215	83	803	64	2	952	31	1046	112	7	1196	2413
% Passenger Vehicles	100	0	95.5	0	98	98.4	0	99	0	98.6	97.6	98.2	100	100	98.2	96.9	98.9	99.1	100	98.8	98.6
Heavy Trucks	0	0	1	0	1	2	0	1	0	3	2	15	0	0	17	1	12	1	0	14	35
% Heavy Trucks	0	0	4.5	0	2	1.6	0	1	0	1.4	2.4	1.8	0	0	1.8	3.1	1.1	0.9	0	1.2	1.4

	DAYTONA STATE COLLEGE Northbound					NEWPORT SOUND PLACE Southbound					10TH STREET Eastbound					10TH STREET Westbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	**1**	0	0	0	1	**14**	0	7	0	**21**	3	48	**14**	**1**	66	4	95	**10**	0	109	197
08:00 AM	0	0	0	0	0	9	0	6	0	15	**7**	60	8	0	**75**	**8**	**148**	9	0	**165**	**255**
08:15 AM	0	0	1	0	1	6	0	**8**	0	14	3	**63**	1	1	68	1	115	8	0	124	207
08:30 AM	1	0	**2**	0	**3**	5	0	8	0	13	3	61	6	0	70	2	49	9	0	60	146
Total Volume	2	0	3	0	5	34	0	29	0	63	16	232	29	2	279	15	407	36	0	458	805
% App. Total	40	0	60	0		54	0	46	0		5.7	83.2	10.4	0.7		3.3	88.9	7.9	0		
PHF	.500	.000	.375	.000	.417	.607	.000	.906	.000	.750	.571	.921	.518	.500	.930	.469	.688	.900	.000	.694	.789
Passenger Vehicles	2	0	2	0	4	34	0	28	0	62	15	225	29	2	271	14	400	36	0	450	787
% Passenger Vehicles	100	0	66.7	0	80.0	100	0	96.6	0	98.4	93.8	97.0	100	100	97.1	93.3	98.3	100	0	98.3	97.8
Heavy Trucks	0	0	1	0	1	0	0	1	0	1	1	7	0	0	8	1	7	0	0	8	18
% Heavy Trucks	0	0	33.3	0	20.0	0	0	3.4	0	1.6	6.3	3.0	0	0	2.9	6.7	1.7	0	0	1.7	2.2

TRIUNE INFRASTRUCTURE GROUP

File Name : 10th Street at Newport Sound Place
Site Code : 00000000
Start Date : 4/3/2025
Page No : 2

	DAYTONA STATE COLLEGE Northbound					NEWPORT SOUND PLACE Southbound					10TH STREET Eastbound					10TH STREET Westbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	08:00 AM					07:15 AM					08:00 AM					07:30 AM					
+0 mins.	0	0	0	0	0	11	0	**7**	0	18	**7**	60	**8**	0	75	4	48	8	0	60	
+15 mins.	0	0	1	0	1	**15**	0	4	0	19	3	63	1	**1**	68	4	95	**10**	0	109	
+30 mins.	**1**	0	**2**	0	**3**	14	0	7	0	**21**	3	61	6	0	70	**8**	**148**	9	0	**165**	
+45 mins.	1	0	2	0	3	9	0	6	0	15	1	**70**	7	0	**78**	1	115	8	0	124	
Total Volume	2	0	5	0	7	49	0	24	0	73	14	254	22	1	291	17	406	35	0	458	
% App. Total	28.6	0	71.4	0		67.1	0	32.9	0		4.8	87.3	7.6	0.3		3.7	88.6	7.6	0		
PHF	.500	.000	.625	.000	.583	.817	.000	.857	.000	.869	.500	.907	.688	.250	.933	.531	.686	.875	.000	.694	
Passenger Vehicles	2	0	4	0	6	49	0	24	0	73	13	246	22	1	282	16	398	35	0	449	
% Passenger Vehicles	100	0	80	0	85.7	100	0	100	0	100	92.9	96.9	100	100	96.9	94.1	98	100	0	98	
Heavy Trucks	0	0	1	0	1	0	0	0	0	0	1	8	0	0	9	1	8	0	0	9	
% Heavy Trucks	0	0	20	0	14.3	0	0	0	0	0	7.1	3.1	0	0	3.1	5.9	2	0	0	2	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	1	0	0	0	1	7	0	5	0	12	7	**72**	**4**	0	**83**	0	53	8	1	62	158
04:15 PM	**11**	0	**6**	0	**17**	5	0	6	0	11	7	67	2	0	76	0	**102**	**11**	**2**	**115**	**219**
04:30 PM	5	0	1	0	6	7	0	**7**	0	14	**8**	44	3	0	55	**2**	99	9	1	111	186
04:45 PM	4	0	1	0	5	**11**	0	4	0	**15**	5	60	2	0	67	1	61	4	0	66	153
Total Volume	21	0	8	0	29	30	0	22	0	52	27	243	11	0	281	3	315	32	4	354	716
% App. Total	72.4	0	27.6	0		57.7	0	42.3	0		9.6	86.5	3.9	0		0.8	89	9	1.1		
PHF	.477	.000	.333	.000	.426	.682	.000	.786	.000	.867	.844	.844	.688	.000	.846	.375	.772	.727	.500	.770	.817
Passenger Vehicles	21	0	8	0	29	29	0	22	0	51	27	239	11	0	277	3	311	31	4	349	706
% Passenger Vehicles	100	0	100	0	100	96.7	0	100	0	98.1	100	98.4	100	0	98.6	100	98.7	96.9	100	98.6	98.6
Heavy Trucks	0	0	0	0	0	1	0	0	0	1	0	4	0	0	4	0	4	1	0	5	10
% Heavy Trucks	0	0	0	0	0	3.3	0	0	0	1.9	0	1.6	0	0	1.4	0	1.3	3.1	0	1.4	1.4

Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM					04:00 PM					04:00 PM					04:15 PM				
+0 mins.	**11**	0	**6**	0	**17**	7	0	5	0	12	7	**72**	**4**	0	**83**	0	**102**	11	**2**	**115**
+15 mins.	5	0	1	0	6	5	0	6	0	11	7	67	2	0	76	2	99	9	1	111
+30 mins.	4	0	1	0	5	7	0	**7**	0	14	**8**	44	3	0	55	1	61	4	0	66
+45 mins.	1	0	4	0	5	**11**	0	4	0	**15**	5	60	2	0	67	**4**	62	**12**	0	78
Total Volume	21	0	12	0	33	30	0	22	0	52	27	243	11	0	281	7	324	36	3	370
% App. Total	63.6	0	36.4	0		57.7	0	42.3	0		9.6	86.5	3.9	0		1.9	87.6	9.7	0.8	
PHF	.477	.000	.500	.000	.485	.682	.000	.786	.000	.867	.844	.844	.688	.000	.846	.438	.794	.750	.375	.804
Passenger Vehicles	21	0	12	0	33	29	0	22	0	51	27	239	11	0	277	7	320	35	3	365
% Passenger Vehicles	100	0	100	0	100	96.7	0	100	0	98.1	100	98.4	100	0	98.6	100	98.8	97.2	100	98.6
Heavy Trucks	0	0	0	0	0	1	0	0	0	1	0	4	0	0	4	0	4	1	0	5
% Heavy Trucks	0	0	0	0	0	3.3	0	0	0	1.9	0	1.6	0	0	1.4	0	1.2	2.8	0	1.4

TRIUNE INFRASTRUCTURE GROUP

File Name : 10th Street at Newport Sound Place
Site Code : 00000000
Start Date : 4/3/2025
Page No : 1

Groups Printed- Passenger Vehicles

	DAYTONA STATE COLLEGE Northbound					NEWPORT SOUND PLACE Southbound					10TH STREET Eastbound					10TH STREET Westbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	0	0	1	0	1	7	0	2	0	9	2	13	0	0	15	0	23	1	0	24	49
07:15 AM	0	0	0	0	0	11	0	7	0	18	1	32	2	0	35	1	25	1	0	27	80
07:30 AM	0	0	0	0	0	15	0	4	0	19	9	38	10	0	57	4	47	8	0	59	135
07:45 AM	1	0	0	0	1	14	0	7	0	21	3	48	14	1	66	4	94	10	0	108	196
Total	1	0	1	0	2	47	0	20	0	67	15	131	26	1	173	9	189	20	0	218	460
08:00 AM	0	0	0	0	0	9	0	6	0	15	6	56	8	0	70	7	143	9	0	159	244
08:15 AM	0	0	0	0	0	6	0	7	0	13	3	60	1	1	65	1	114	8	0	123	201
08:30 AM	1	0	2	0	3	5	0	8	0	13	3	61	6	0	70	2	49	9	0	60	146
08:45 AM	1	0	2	0	3	4	0	3	0	7	1	69	7	0	77	1	55	2	0	58	145
Total	2	0	4	0	6	24	0	24	0	48	13	246	22	1	282	11	361	28	0	400	736
*** BREAK ***																					
04:00 PM	1	0	0	0	1	7	0	5	0	12	7	70	4	0	81	0	53	8	1	62	156
04:15 PM	11	0	6	0	17	5	0	6	0	11	7	66	2	0	75	0	100	11	2	113	216
04:30 PM	5	0	1	0	6	6	0	7	0	13	8	43	3	0	54	2	99	8	1	110	183
04:45 PM	4	0	1	0	5	11	0	4	0	15	5	60	2	0	67	1	59	4	0	64	151
Total	21	0	8	0	29	29	0	22	0	51	27	239	11	0	277	3	311	31	4	349	706
05:00 PM	1	0	4	0	5	3	0	7	0	10	4	55	1	0	60	4	62	12	0	78	153
05:15 PM	3	0	4	0	7	7	0	5	0	12	5	51	3	0	59	3	58	8	2	71	149
05:30 PM	1	0	0	0	1	5	0	7	0	12	12	45	1	0	58	0	41	5	1	47	118
05:45 PM	0	0	0	0	0	5	0	10	0	15	7	36	0	0	43	1	24	8	0	33	91
Total	5	0	8	0	13	20	0	29	0	49	28	187	5	0	220	8	185	33	3	229	511
Grand Total	29	0	21	0	50	120	0	95	0	215	83	803	64	2	952	31	1046	112	7	1196	2413
Apprch %	58	0	42	0		55.8	0	44.2	0		8.7	84.3	6.7	0.2		2.6	87.5	9.4	0.6		
Total %	1.2	0	0.9	0	2.1	5	0	3.9	0	8.9	3.4	33.3	2.7	0.1	39.5	1.3	43.3	4.6	0.3	49.6	

	DAYTONA STATE COLLEGE Northbound					NEWPORT SOUND PLACE Southbound					10TH STREET Eastbound					10TH STREET Westbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	**1**	0	0	0	1	**14**	0	7	0	**21**	3	48	**14**	**1**	66	4	94	**10**	0	108	196
08:00 AM	0	0	0	0	0	9	0	6	0	15	**6**	56	8	0	**70**	**7**	**143**	9	0	**159**	**244**
08:15 AM	0	0	0	0	0	6	0	7	0	13	3	60	1	1	65	1	114	8	0	123	201
08:30 AM	1	0	**2**	0	**3**	5	0	**8**	0	13	3	**61**	6	0	70	2	49	9	0	60	146
Total Volume	2	0	2	0	4	34	0	28	0	62	15	225	29	2	271	14	400	36	0	450	787
% App. Total	50	0	50	0		54.8	0	45.2	0		5.5	83	10.7	0.7		3.1	88.9	8	0		
PHF	.500	.000	.250	.000	.333	.607	.000	.875	.000	.738	.625	.922	.518	.500	.968	.500	.699	.900	.000	.708	.806
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	08:00 AM					07:15 AM					08:00 AM					07:45 AM					
+0 mins.	0	0	0	0	0	11	0	**7**	0	18	**6**	56	**8**	0	70	4	94	**10**	0	108	
+15 mins.	0	0	0	0	0	**15**	0	4	0	19	3	60	1	**1**	65	**7**	**143**	9	0	**159**	
+30 mins.	**1**	0	**2**	0	**3**	14	0	7	0	**21**	3	61	6	0	70	1	114	8	0	123	
+45 mins.	1	0	2	0	3	9	0	6	0	15	1	**69**	7	0	**77**	2	49	9	0	60	
Total Volume	2	0	4	0	6	49	0	24	0	73	13	246	22	1	282	14	400	36	0	450	
% App. Total	33.3	0	66.7	0		67.1	0	32.9	0		4.6	87.2	7.8	0.4		3.1	88.9	8	0		
PHF	.500	.000	.500	.000	.500	.817	.000	.857	.000	.869	.542	.891	.688	.250	.916	.500	.699	.900	.000	.708	

TRIUNE INFRASTRUCTURE GROUP

File Name : 10th Street at Newport Sound Place
Site Code : 00000000
Start Date : 4/3/2025
Page No : 2

	DAYTONA STATE COLLEGE Northbound					NEWPORT SOUND PLACE Southbound					10TH STREET Eastbound					10TH STREET Westbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	1	0	0	0	1	7	0	5	0	12	7	**70**	**4**	0	**81**	0	53	8	1	62	156
04:15 PM	**11**	0	**6**	0	**17**	5	0	6	0	11	7	66	2	0	75	0	**100**	**11**	**2**	**113**	**216**
04:30 PM	5	0	1	0	6	6	0	**7**	0	13	**8**	43	3	0	54	**2**	99	8	1	110	183
04:45 PM	4	0	1	0	5	**11**	0	4	0	**15**	5	60	2	0	67	1	59	4	0	64	151
Total Volume	21	0	8	0	29	29	0	22	0	51	27	239	11	0	277	3	311	31	4	349	706
% App. Total	72.4	0	27.6	0		56.9	0	43.1	0		9.7	86.3	4	0		0.9	89.1	8.9	1.1		
PHF	.477	.000	.333	.000	.426	.659	.000	.786	.000	.850	.844	.854	.688	.000	.855	.375	.778	.705	.500	.772	.817

Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM					04:00 PM					04:00 PM					04:15 PM				
+0 mins.	**11**	0	**6**	0	**17**	7	0	5	0	12	7	**70**	**4**	0	**81**	0	**100**	11	**2**	**113**
+15 mins.	5	0	1	0	6	5	0	6	0	11	7	66	2	0	75	2	99	8	1	110
+30 mins.	4	0	1	0	5	6	0	**7**	0	13	**8**	43	3	0	54	1	59	4	0	64
+45 mins.	1	0	4	0	5	**11**	0	4	0	**15**	5	60	2	0	67	**4**	62	**12**	0	78
Total Volume	21	0	12	0	33	29	0	22	0	51	27	239	11	0	277	7	320	35	3	365
% App. Total	63.6	0	36.4	0		56.9	0	43.1	0		9.7	86.3	4	0		1.9	87.7	9.6	0.8	
PHF	.477	.000	.500	.000	.485	.659	.000	.786	.000	.850	.844	.854	.688	.000	.855	.438	.800	.729	.375	.808

TRIUNE INFRASTRUCTURE GROUP

File Name : 10th Street at Newport Sound Place
Site Code : 00000000
Start Date : 4/3/2025
Page No : 1

Groups Printed- Heavy Trucks

	DAYTONA STATE COLLEGE Northbound					NEWPORT SOUND PLACE Southbound					10TH STREET Eastbound					10TH STREET Westbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
*** BREAK ***																					
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	2	0	0	2	4
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	4	0	0	5	1	5	0	0	6	11
08:15 AM	0	0	1	0	1	0	0	1	0	1	0	3	0	0	3	0	1	0	0	1	6
*** BREAK ***																					
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Total	0	0	1	0	1	0	0	1	0	1	1	8	0	0	9	1	6	0	0	7	18
*** BREAK ***																					
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	0	0	2	3
04:30 PM	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	1	0	1	3
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
Total	0	0	0	0	0	1	0	0	0	1	0	4	0	0	4	0	4	1	0	5	10
*** BREAK ***																					
05:30 PM	0	0	0	0	0	1	0	0	0	1	1	1	0	0	2	0	0	0	0	0	3
*** BREAK ***																					
Total	0	0	0	0	0	1	0	0	0	1	1	1	0	0	2	0	0	0	0	0	3
Grand Total	0	0	1	0	1	2	0	1	0	3	2	15	0	0	17	1	12	1	0	14	35
Apprch %	0	0	100	0		66.7	0	33.3	0		11.8	88.2	0	0		7.1	85.7	7.1	0		
Total %	0	0	2.9	0	2.9	5.7	0	2.9	0	8.6	5.7	42.9	0	0	48.6	2.9	34.3	2.9	0	40	

	DAYTONA STATE COLLEGE Northbound					NEWPORT SOUND PLACE Southbound					10TH STREET Eastbound					10TH STREET Westbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	**1**	**4**	0	0	**5**	**1**	**5**	0	0	**6**	**11**
08:15 AM	0	0	**1**	0	**1**	0	0	**1**	0	**1**	0	3	0	0	3	0	1	0	0	1	6
Total Volume	0	0	1	0	1	0	0	1	0	1	1	8	0	0	9	1	8	0	0	9	20
% App. Total	0	0	100	0		0	0	100	0		11.1	88.9	0	0		11.1	88.9	0	0		
PHF	.000	.000	.250	.000	.250	.000	.000	.250	.000	.250	.250	.500	.000	.000	.450	.250	.400	.000	.000	.375	.455

Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM					07:30 AM					07:30 AM					07:30 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	**1**	**4**	0	0	**5**	**1**	**5**	0	0	**6**
+45 mins.	0	0	**1**	0	**1**	0	0	**1**	0	**1**	0	3	0	0	3	0	1	0	0	1
Total Volume	0	0	1	0	1	0	0	1	0	1	1	8	0	0	9	1	8	0	0	9
% App. Total	0	0	100	0		0	0	100	0		11.1	88.9	0	0		11.1	88.9	0	0	
PHF	.000	.000	.250	.000	.250	.000	.000	.250	.000	.250	.250	.500	.000	.000	.450	.250	.400	.000	.000	.375

TRIUNE INFRASTRUCTURE GROUP

File Name : 10th Street at Newport Sound Place
Site Code : 00000000
Start Date : 4/3/2025
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	DAYTONA STATE COLLEGE Northbound					NEWPORT SOUND PLACE Southbound					10TH STREET Eastbound					10TH STREET Westbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	**2**	0	0	**2**	0	0	0	0	0	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	**2**	0	0	**2**	**3**
04:30 PM	0	0	0	0	0	**1**	0	0	0	**1**	0	1	0	0	1	0	0	**1**	0	1	3
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
Total Volume	0	0	0	0	0	1	0	0	0	1	0	4	0	0	4	0	4	1	0	5	10
% App. Total	0	0	0	0		100	0	0	0		0	100	0	0		0	80	20	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.000	.000	.250	.000	.500	.000	.000	.500	.000	.500	.250	.000	.625	.833

Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	12:00 PM					03:45 PM					03:45 PM					04:00 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	**2**	0	0	**2**	0	**2**	0	0	**2**
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	**1**	0	1
+45 mins.	0	0	0	0	0	**1**	0	0	0	**1**	0	1	0	0	1	0	2	0	0	2
Total Volume	0	0	0	0	0	1	0	0	0	1	0	4	0	0	4	0	4	1	0	5
% App. Total	0	0	0	0		100	0	0	0		0	100	0	0		0	80	20	0	
PHF	.000	.000	.000	.000	.000	.250	.000	.000	.000	.250	.000	.500	.000	.000	.500	.000	.500	.250	.000	.625

2023 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 7900 VOLUSIA COUNTYWIDE

MOCF: 0.95

WEEK	DATES	SF	PSCF
1	01/01/2023 - 01/07/2023	1.01	1.06
2	01/08/2023 - 01/14/2023	1.01	1.06
3	01/15/2023 - 01/21/2023	1.01	1.06
4	01/22/2023 - 01/28/2023	0.99	1.04
5	01/29/2023 - 02/04/2023	0.98	1.03
* 6	02/05/2023 - 02/11/2023	0.96	1.01
* 7	02/12/2023 - 02/18/2023	0.95	1.00
* 8	02/19/2023 - 02/25/2023	0.94	0.99
* 9	02/26/2023 - 03/04/2023	0.93	0.98
*10	03/05/2023 - 03/11/2023	0.92	0.97
*11	03/12/2023 - 03/18/2023	0.92	0.97
*12	03/19/2023 - 03/25/2023	0.93	0.98
*13	03/26/2023 - 04/01/2023	0.94	0.99
*14	04/02/2023 - 04/08/2023	0.95	1.00
*15	04/09/2023 - 04/15/2023	0.97	1.02
*16	04/16/2023 - 04/22/2023	0.97	1.02
*17	04/23/2023 - 04/29/2023	0.98	1.03
*18	04/30/2023 - 05/06/2023	0.98	1.03
19	05/07/2023 - 05/13/2023	0.99	1.04
20	05/14/2023 - 05/20/2023	1.00	1.05
21	05/21/2023 - 05/27/2023	1.01	1.06
22	05/28/2023 - 06/03/2023	1.02	1.07
23	06/04/2023 - 06/10/2023	1.03	1.08
24	06/11/2023 - 06/17/2023	1.04	1.09
25	06/18/2023 - 06/24/2023	1.04	1.09
26	06/25/2023 - 07/01/2023	1.05	1.11
27	07/02/2023 - 07/08/2023	1.06	1.12
28	07/09/2023 - 07/15/2023	1.06	1.12
29	07/16/2023 - 07/22/2023	1.06	1.12
30	07/23/2023 - 07/29/2023	1.06	1.12
31	07/30/2023 - 08/05/2023	1.06	1.12
32	08/06/2023 - 08/12/2023	1.06	1.12
33	08/13/2023 - 08/19/2023	1.06	1.12
34	08/20/2023 - 08/26/2023	1.05	1.11
35	08/27/2023 - 09/02/2023	1.05	1.11
36	09/03/2023 - 09/09/2023	1.04	1.09
37	09/10/2023 - 09/16/2023	1.04	1.09
38	09/17/2023 - 09/23/2023	1.03	1.08
39	09/24/2023 - 09/30/2023	1.02	1.07
40	10/01/2023 - 10/07/2023	1.01	1.06
41	10/08/2023 - 10/14/2023	1.00	1.05
42	10/15/2023 - 10/21/2023	0.99	1.04
43	10/22/2023 - 10/28/2023	0.99	1.04
44	10/29/2023 - 11/04/2023	0.99	1.04
45	11/05/2023 - 11/11/2023	0.99	1.04
46	11/12/2023 - 11/18/2023	1.00	1.05
47	11/19/2023 - 11/25/2023	1.00	1.05
48	11/26/2023 - 12/02/2023	1.00	1.05
49	12/03/2023 - 12/09/2023	1.00	1.05
50	12/10/2023 - 12/16/2023	1.01	1.06
51	12/17/2023 - 12/23/2023	1.01	1.06
52	12/24/2023 - 12/30/2023	1.01	1.06
53	12/31/2023 - 12/31/2023	1.01	1.06

* PEAK SEASON

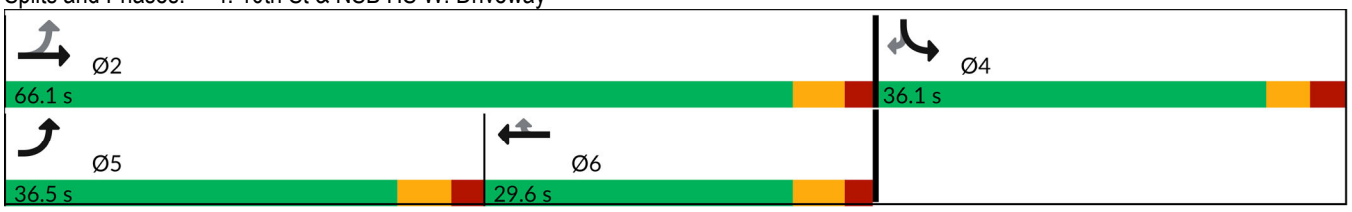
09-MAR-2024 18:41:41 830UPD 5_7900_PKSEASON.TXT

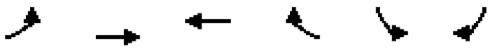
Synchro Printouts

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	364	176	136	288	128	76
Future Volume (vph)	364	176	136	288	128	76
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	15.0	15.0	15.0	15.0	10.0	10.0
Minimum Split (s)	21.5	21.1	21.1	21.1	16.1	16.1
Total Split (s)	36.5	66.1	29.6	29.6	36.1	36.1
Total Split (%)	35.7%	64.7%	29.0%	29.0%	35.3%	35.3%
Yellow Time (s)	4.1	4.1	4.1	4.1	3.4	3.4
All-Red Time (s)	2.4	2.0	2.0	2.0	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.1	6.1	6.1	6.1	6.1
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	Min	Min	Min	None	None
Act Effct Green (s)	47.0	47.4	16.7	16.7	13.0	13.0
Actuated g/C Ratio	0.64	0.65	0.23	0.23	0.18	0.18
v/c Ratio	0.59	0.11	0.48	0.59	0.56	0.28
Control Delay (s/veh)	9.8	5.1	31.2	7.3	36.2	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.8	5.1	31.2	7.3	36.2	8.8
LOS	A	A	C	A	D	A
Approach Delay (s/veh)		8.3	15.0		26.0	
Approach LOS		A	B		C	

Intersection Summary	
Cycle Length: 102.2	
Actuated Cycle Length: 72.9	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay (s/veh): 13.8	Intersection LOS: B
Intersection Capacity Utilization 56.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4: 10th St & NSB HS W. Driveway





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	364	176	136	288	128	76
Future Volume (veh/h)	364	176	136	288	128	76
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1752	1722	1870	1870	1870
Adj Flow Rate, veh/h	499	241	186	395	175	104
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73
Percent Heavy Veh, %	2	10	12	2	2	2
Cap, veh/h	722	2133	503	463	287	255
Arrive On Green	0.24	0.64	0.29	0.29	0.16	0.16
Sat Flow, veh/h	1781	3416	1722	1585	1781	1585
Grp Volume(v), veh/h	499	241	186	395	175	104
Grp Sat Flow(s),veh/h/ln	1781	1664	1722	1585	1781	1585
Q Serve(g_s), s	10.4	1.7	5.3	14.5	5.6	3.6
Cycle Q Clear(g_c), s	10.4	1.7	5.3	14.5	5.6	3.6
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	722	2133	503	463	287	255
V/C Ratio(X)	0.69	0.11	0.37	0.85	0.61	0.41
Avail Cap(c_a), veh/h	1156	3242	657	605	868	772
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.1	4.3	17.3	20.6	24.0	23.2
Incr Delay (d2), s/veh	1.2	0.0	0.5	9.1	2.1	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.7	0.7	3.5	9.9	4.3	6.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	10.3	4.3	17.8	29.7	26.1	24.2
LnGrp LOS	B	A	B	C	C	C
Approach Vol, veh/h		740	581		279	
Approach Delay, s/veh		8.3	25.9		25.4	
Approach LOS		A	C		C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		45.6		16.0	21.5	24.1
Change Period (Y+Rc), s		6.1		* 6.1	6.5	6.1
Max Green Setting (Gmax), s		60.0		* 30	30.0	23.5
Max Q Clear Time (g_c+I1), s		3.7		7.6	12.4	16.5
Green Ext Time (p_c), s		1.7		0.8	1.5	1.5

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	17.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	278	417	15	13	13
Future Vol, veh/h	29	278	417	15	13	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	185	-	-	170	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	32	3	2	53	62	77
Mvmt Flow	37	356	535	19	17	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	554	0	-	0	787	268
Stage 1	-	-	-	-	535	-
Stage 2	-	-	-	-	252	-
Critical Hdwy	4.74	-	-	-	8.04	8.44
Critical Hdwy Stg 1	-	-	-	-	7.04	-
Critical Hdwy Stg 2	-	-	-	-	7.04	-
Follow-up Hdwy	2.52	-	-	-	4.12	4.07
Pot Cap-1 Maneuver	831	-	-	-	229	547
Stage 1	-	-	-	-	410	-
Stage 2	-	-	-	-	614	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	831	-	-	-	219	547
Mov Cap-2 Maneuver	-	-	-	-	219	-
Stage 1	-	-	-	-	392	-
Stage 2	-	-	-	-	614	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.9	0	17.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	831	-	-	-	313
HCM Lane V/C Ratio	0.045	-	-	-	0.106
HCM Ctrl Dly (s/v)	9.5	-	-	-	17.9
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q (veh)	0.1	-	-	-	0.4

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	232	29	15	407	36	2	0	3	34	0	29
Future Vol, veh/h	18	232	29	15	407	36	2	0	3	34	0	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	220	-	-	240	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	6	3	2	7	2	2	2	2	33	2	2	3
Mvmt Flow	23	294	37	19	515	46	3	0	4	43	0	37

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	561	0	0	331	0	0	655	958	166	769	953	281
Stage 1	-	-	-	-	-	-	359	359	-	576	576	-
Stage 2	-	-	-	-	-	-	296	599	-	193	377	-
Critical Hdwy	4.22	-	-	4.24	-	-	7.54	6.54	7.56	7.54	6.54	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.26	-	-	2.27	-	-	3.52	4.02	3.63	3.52	4.02	3.33
Pot Cap-1 Maneuver	979	-	-	1190	-	-	351	256	760	291	258	713
Stage 1	-	-	-	-	-	-	632	626	-	470	500	-
Stage 2	-	-	-	-	-	-	688	489	-	790	614	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	979	-	-	1190	-	-	323	246	760	281	248	713
Mov Cap-2 Maneuver	-	-	-	-	-	-	323	246	-	281	248	-
Stage 1	-	-	-	-	-	-	617	612	-	459	492	-
Stage 2	-	-	-	-	-	-	642	481	-	768	600	-

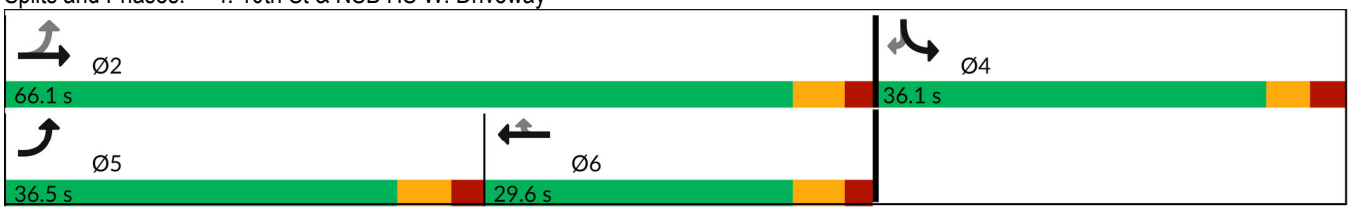
Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.6	0.3	12.4	15.6
HCM LOS			B	C

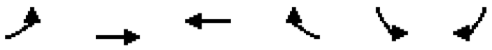
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	493	979	-	-	1190	-	-	281	713
HCM Lane V/C Ratio	0.013	0.023	-	-	0.016	-	-	0.153	0.051
HCM Ctrl Dly (s/v)	12.4	8.8	-	-	8.1	-	-	20.1	10.3
HCM Lane LOS	B	A	-	-	A	-	-	C	B
HCM 95th %tile Q (veh)	0	0.1	-	-	0	-	-	0.5	0.2

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	19	192	192	18	41	42
Future Volume (vph)	19	192	192	18	41	42
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	15.0	15.0	15.0	15.0	10.0	10.0
Minimum Split (s)	21.5	21.1	21.1	21.1	16.1	16.1
Total Split (s)	36.5	66.1	29.6	29.6	36.1	36.1
Total Split (%)	35.7%	64.7%	29.0%	29.0%	35.3%	35.3%
Yellow Time (s)	4.1	4.1	4.1	4.1	3.4	3.4
All-Red Time (s)	2.4	2.0	2.0	2.0	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.1	6.1	6.1	6.1	6.1
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	Min	Min	Min	None	None
Act Effct Green (s)	25.4	28.4	25.4	25.4	10.4	10.4
Actuated g/C Ratio	0.62	0.69	0.62	0.62	0.25	0.25
v/c Ratio	0.03	0.09	0.20	0.02	0.11	0.12
Control Delay (s/veh)	5.6	5.1	11.0	6.9	16.1	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	5.6	5.1	11.0	6.9	16.1	7.5
LOS	A	A	B	A	B	A
Approach Delay (s/veh)		5.1	10.6		11.7	
Approach LOS		A	B		B	

Intersection Summary	
Cycle Length: 102.2	
Actuated Cycle Length: 41.3	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.20	
Intersection Signal Delay (s/veh): 8.5	Intersection LOS: A
Intersection Capacity Utilization 35.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4: 10th St & NSB HS W. Driveway





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	19	192	192	18	41	42
Future Volume (veh/h)	19	192	192	18	41	42
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1856	1811	1870	1870
Adj Flow Rate, veh/h	23	231	231	22	49	51
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	3	6	2	2
Cap, veh/h	584	2013	625	517	284	253
Arrive On Green	0.08	0.57	0.34	0.34	0.16	0.16
Sat Flow, veh/h	1781	3647	1856	1535	1781	1585
Grp Volume(v), veh/h	23	231	231	22	49	51
Grp Sat Flow(s),veh/h/ln	1781	1777	1856	1535	1781	1585
Q Serve(g_s), s	0.3	1.3	4.2	0.4	1.1	1.2
Cycle Q Clear(g_c), s	0.3	1.3	4.2	0.4	1.1	1.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	584	2013	625	517	284	253
V/C Ratio(X)	0.04	0.11	0.37	0.04	0.17	0.20
Avail Cap(c_a), veh/h	1636	4791	980	810	1201	1068
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.9	4.5	11.2	9.9	16.2	16.2
Incr Delay (d2), s/veh	0.0	0.0	0.4	0.0	0.3	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.5	2.5	0.2	0.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.9	4.5	11.5	10.0	16.5	16.6
LnGrp LOS	A	A	B	A	B	B
Approach Vol, veh/h		254	253		100	
Approach Delay, s/veh		4.7	11.4		16.5	
Approach LOS		A	B		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		31.3		13.2	10.2	21.1
Change Period (Y+Rc), s		6.1		* 6.1	6.5	6.1
Max Green Setting (Gmax), s		60.0		* 30	30.0	23.5
Max Q Clear Time (g_c+I1), s		3.3		3.2	2.3	6.2
Green Ext Time (p_c), s		1.6		0.3	0.0	1.2

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	9.5
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	232	208	0	2	3
Future Vol, veh/h	0	232	208	0	2	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	185	-	-	170	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	264	236	0	2	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	236	0	-	0	368	118
Stage 1	-	-	-	-	236	-
Stage 2	-	-	-	-	132	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1328	-	-	-	605	912
Stage 1	-	-	-	-	781	-
Stage 2	-	-	-	-	880	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1328	-	-	-	605	912
Mov Cap-2 Maneuver	-	-	-	-	605	-
Stage 1	-	-	-	-	781	-
Stage 2	-	-	-	-	880	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	9.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1328	-	-	-	758
HCM Lane V/C Ratio	-	-	-	-	0.007
HCM Ctrl Dly (s/v)	0	-	-	-	9.8
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q (veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	243	11	7	315	32	21	0	8	30	0	22
Future Vol, veh/h	27	243	11	7	315	32	21	0	8	30	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	220	-	-	240	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	3	2	2	2	2	3	2	2
Mvmt Flow	33	296	13	9	384	39	26	0	10	37	0	27

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	423	0	0	309	0	0	579	810	155	636	797	212
Stage 1	-	-	-	-	-	-	369	369	-	422	422	-
Stage 2	-	-	-	-	-	-	210	441	-	214	375	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.56	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.56	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.56	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.53	4.02	3.32
Pot Cap-1 Maneuver	1133	-	-	1248	-	-	398	312	863	360	318	793
Stage 1	-	-	-	-	-	-	623	619	-	577	587	-
Stage 2	-	-	-	-	-	-	773	575	-	765	615	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1133	-	-	1248	-	-	374	301	863	346	307	793
Mov Cap-2 Maneuver	-	-	-	-	-	-	374	301	-	346	307	-
Stage 1	-	-	-	-	-	-	605	601	-	560	583	-
Stage 2	-	-	-	-	-	-	741	571	-	734	597	-

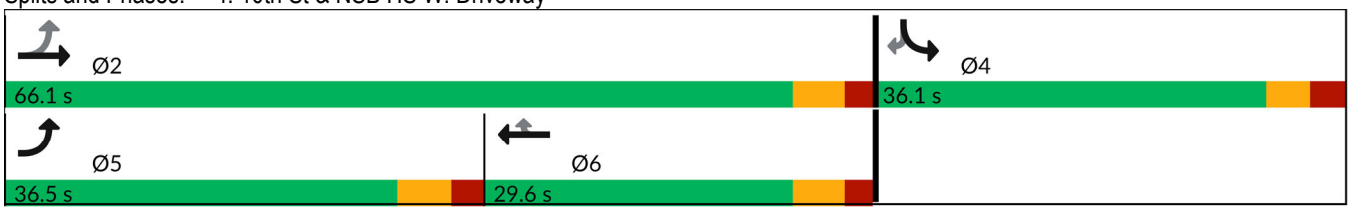
Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.8	0.2	13.8	13.7
HCM LOS			B	B

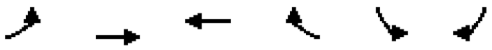
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	443	1133	-	-	1248	-	-	346	793
HCM Lane V/C Ratio	0.08	0.029	-	-	0.007	-	-	0.106	0.034
HCM Ctrl Dly (s/v)	13.8	8.3	-	-	7.9	-	-	16.6	9.7
HCM Lane LOS	B	A	-	-	A	-	-	C	A
HCM 95th %tile Q (veh)	0.3	0.1	-	-	0	-	-	0.4	0.1

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	364	192	160	288	128	76
Future Volume (vph)	364	192	160	288	128	76
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	15.0	15.0	15.0	15.0	10.0	10.0
Minimum Split (s)	21.5	21.1	21.1	21.1	16.1	16.1
Total Split (s)	36.5	66.1	29.6	29.6	36.1	36.1
Total Split (%)	35.7%	64.7%	29.0%	29.0%	35.3%	35.3%
Yellow Time (s)	4.1	4.1	4.1	4.1	3.4	3.4
All-Red Time (s)	2.4	2.0	2.0	2.0	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.1	6.1	6.1	6.1	6.1
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	Min	Min	Min	None	None
Act Effct Green (s)	48.0	48.5	17.5	17.5	13.1	13.1
Actuated g/C Ratio	0.65	0.65	0.24	0.24	0.18	0.18
v/c Ratio	0.60	0.12	0.55	0.59	0.56	0.28
Control Delay (s/veh)	10.1	5.2	32.6	7.0	37.0	8.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	10.1	5.2	32.6	7.0	37.0	8.9
LOS	B	A	C	A	D	A
Approach Delay (s/veh)		8.4	16.1		26.6	
Approach LOS		A	B		C	

Intersection Summary	
Cycle Length: 102.2	
Actuated Cycle Length: 74.1	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.60	
Intersection Signal Delay (s/veh): 14.3	Intersection LOS: B
Intersection Capacity Utilization 56.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4: 10th St & NSB HS W. Driveway





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	364	192	160	288	128	76
Future Volume (veh/h)	364	192	160	288	128	76
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1752	1722	1870	1870	1870
Adj Flow Rate, veh/h	499	263	219	395	175	104
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73
Percent Heavy Veh, %	2	10	12	2	2	2
Cap, veh/h	703	2136	505	465	286	255
Arrive On Green	0.24	0.64	0.29	0.29	0.16	0.16
Sat Flow, veh/h	1781	3416	1722	1585	1781	1585
Grp Volume(v), veh/h	499	263	219	395	175	104
Grp Sat Flow(s),veh/h/ln	1781	1664	1722	1585	1781	1585
Q Serve(g_s), s	10.4	1.9	6.4	14.5	5.6	3.6
Cycle Q Clear(g_c), s	10.4	1.9	6.4	14.5	5.6	3.6
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	703	2136	505	465	286	255
V/C Ratio(X)	0.71	0.12	0.43	0.85	0.61	0.41
Avail Cap(c_a), veh/h	1136	3236	656	604	866	771
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.4	4.3	17.7	20.5	24.1	23.3
Incr Delay (d2), s/veh	1.3	0.0	0.6	8.9	2.1	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.8	0.8	4.2	9.9	4.3	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	10.8	4.3	18.2	29.4	26.2	24.3
LnGrp LOS	B	A	B	C	C	C
Approach Vol, veh/h		762	614		279	
Approach Delay, s/veh		8.5	25.4		25.5	
Approach LOS		A	C		C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		45.7		16.0	21.5	24.2
Change Period (Y+Rc), s		6.1		* 6.1	6.5	6.1
Max Green Setting (Gmax), s		60.0		* 30	30.0	23.5
Max Q Clear Time (g_c+I1), s		3.9		7.6	12.4	16.5
Green Ext Time (p_c), s		1.8		0.8	1.5	1.6

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	17.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	29	295	5	11	451	15	0	0	27	13	0	13
Future Vol, veh/h	29	295	5	11	451	15	0	0	27	13	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	185	-	-	180	-	170	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	32	3	2	2	2	53	2	2	2	62	2	77
Mvmt Flow	37	378	6	14	578	19	0	0	35	17	0	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	597	0	0	384	0	0	-	-	192	869	1064	289
Stage 1	-	-	-	-	-	-	-	-	-	606	606	-
Stage 2	-	-	-	-	-	-	-	-	-	263	458	-
Critical Hdwy	4.74	-	-	4.14	-	-	-	-	6.94	8.74	6.54	8.44
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	7.74	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	7.74	5.54	-
Follow-up Hdwy	2.52	-	-	2.22	-	-	-	-	3.32	4.12	4.02	4.07
Pot Cap-1 Maneuver	796	-	-	1171	-	-	0	0	817	167	221	527
Stage 1	-	-	-	-	-	-	0	0	-	329	485	-
Stage 2	-	-	-	-	-	-	0	0	-	575	565	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	796	-	-	1171	-	-	-	-	817	153	208	527
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	153	208	-
Stage 1	-	-	-	-	-	-	-	-	-	314	479	-
Stage 2	-	-	-	-	-	-	-	-	-	525	539	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.9	0.2	9.6	22.7
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	817	796	-	-	1171	-	-	237
HCM Lane V/C Ratio	0.042	0.047	-	-	0.012	-	-	0.141
HCM Ctrl Dly (s/v)	9.6	9.7	-	-	8.1	-	-	22.7
HCM Lane LOS	A	A	-	-	A	-	-	C
HCM 95th %tile Q (veh)	0.1	0.1	-	-	0	-	-	0.5

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	252	30	16	427	37	2	0	3	35	0	29
Future Vol, veh/h	35	252	30	16	427	37	2	0	3	35	0	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	220	-	-	240	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	6	3	2	7	2	2	2	2	33	2	2	3
Mvmt Flow	44	319	38	20	541	47	3	0	4	44	0	37

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	588	0	0	357	0	0	737	1054	179	853	1050	294
Stage 1	-	-	-	-	-	-	426	426	-	605	605	-
Stage 2	-	-	-	-	-	-	311	628	-	248	445	-
Critical Hdwy	4.22	-	-	4.24	-	-	7.54	6.54	7.56	7.54	6.54	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.26	-	-	2.27	-	-	3.52	4.02	3.63	3.52	4.02	3.33
Pot Cap-1 Maneuver	956	-	-	1163	-	-	307	225	744	253	226	699
Stage 1	-	-	-	-	-	-	577	584	-	451	486	-
Stage 2	-	-	-	-	-	-	674	474	-	734	573	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	956	-	-	1163	-	-	277	211	744	240	212	699
Mov Cap-2 Maneuver	-	-	-	-	-	-	277	211	-	240	212	-
Stage 1	-	-	-	-	-	-	550	557	-	430	478	-
Stage 2	-	-	-	-	-	-	628	466	-	697	547	-

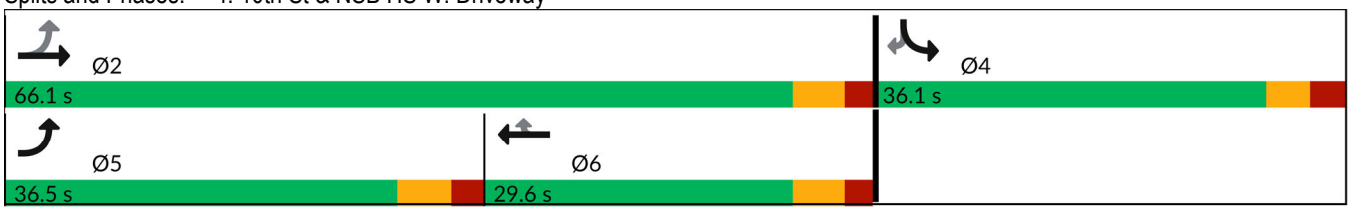
Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1	0.3	13.2	17.5
HCM LOS			B	C

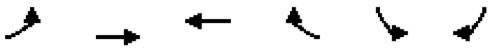
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	444	956	-	-	1163	-	-	240	699
HCM Lane V/C Ratio	0.014	0.046	-	-	0.017	-	-	0.185	0.053
HCM Ctrl Dly (s/v)	13.2	8.9	-	-	8.2	-	-	23.4	10.4
HCM Lane LOS	B	A	-	-	A	-	-	C	B
HCM 95th %tile Q (veh)	0	0.1	-	-	0.1	-	-	0.7	0.2

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	19	220	215	18	41	42
Future Volume (vph)	19	220	215	18	41	42
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	15.0	15.0	15.0	15.0	10.0	10.0
Minimum Split (s)	21.5	21.1	21.1	21.1	16.1	16.1
Total Split (s)	36.5	66.1	29.6	29.6	36.1	36.1
Total Split (%)	35.7%	64.7%	29.0%	29.0%	35.3%	35.3%
Yellow Time (s)	4.1	4.1	4.1	4.1	3.4	3.4
All-Red Time (s)	2.4	2.0	2.0	2.0	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.1	6.1	6.1	6.1	6.1
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	Min	Min	Min	None	None
Act Effct Green (s)	25.6	28.7	25.7	25.7	10.4	10.4
Actuated g/C Ratio	0.62	0.69	0.62	0.62	0.25	0.25
v/c Ratio	0.03	0.11	0.23	0.02	0.11	0.12
Control Delay (s/veh)	5.6	5.0	10.9	6.7	16.4	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	5.6	5.0	10.9	6.7	16.4	7.6
LOS	A	A	B	A	B	A
Approach Delay (s/veh)		5.1	10.6		11.9	
Approach LOS		A	B		B	

Intersection Summary	
Cycle Length: 102.2	
Actuated Cycle Length: 41.6	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.23	
Intersection Signal Delay (s/veh): 8.4	Intersection LOS: A
Intersection Capacity Utilization 35.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4: 10th St & NSB HS W. Driveway





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	19	220	215	18	41	42
Future Volume (veh/h)	19	220	215	18	41	42
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1856	1811	1870	1870
Adj Flow Rate, veh/h	23	265	259	22	49	51
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	3	6	2	2
Cap, veh/h	562	2013	625	517	284	253
Arrive On Green	0.08	0.57	0.34	0.34	0.16	0.16
Sat Flow, veh/h	1781	3647	1856	1535	1781	1585
Grp Volume(v), veh/h	23	265	259	22	49	51
Grp Sat Flow(s),veh/h/ln	1781	1777	1856	1535	1781	1585
Q Serve(g_s), s	0.3	1.6	4.8	0.4	1.1	1.2
Cycle Q Clear(g_c), s	0.3	1.6	4.8	0.4	1.1	1.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	562	2013	625	517	284	253
V/C Ratio(X)	0.04	0.13	0.41	0.04	0.17	0.20
Avail Cap(c_a), veh/h	1614	4791	980	810	1201	1068
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.0	4.5	11.4	9.9	16.2	16.2
Incr Delay (d2), s/veh	0.0	0.0	0.4	0.0	0.3	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.6	2.9	0.2	0.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	7.0	4.5	11.8	10.0	16.5	16.6
LnGrp LOS	A	A	B	A	B	B
Approach Vol, veh/h		288	281		100	
Approach Delay, s/veh		4.7	11.7		16.5	
Approach LOS		A	B		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		31.3		13.2	10.2	21.1
Change Period (Y+Rc), s		6.1		* 6.1	6.5	6.1
Max Green Setting (Gmax), s		60.0		* 30	30.0	23.5
Max Q Clear Time (g_c+I1), s		3.6		3.2	2.3	6.8
Green Ext Time (p_c), s		1.8		0.3	0.0	1.3

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	9.4
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	246	16	10	231	0	0	0	18	2	0	3
Future Vol, veh/h	0	246	16	10	231	0	0	0	18	2	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	185	-	-	180	-	170	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	280	18	11	263	0	0	0	20	2	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	263	0	0	298	0	0	-	-	149	425	583	132
Stage 1	-	-	-	-	-	-	-	-	-	285	285	-
Stage 2	-	-	-	-	-	-	-	-	-	140	298	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1298	-	-	1260	-	-	0	0	871	513	423	893
Stage 1	-	-	-	-	-	-	0	0	-	698	674	-
Stage 2	-	-	-	-	-	-	0	0	-	849	666	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1298	-	-	1260	-	-	-	-	871	498	419	893
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	498	419	-
Stage 1	-	-	-	-	-	-	-	-	-	698	668	-
Stage 2	-	-	-	-	-	-	-	-	-	829	666	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0.3	9.2	10.4
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	871	1298	-	-	1260	-	-	678
HCM Lane V/C Ratio	0.023	-	-	-	0.009	-	-	0.008
HCM Ctrl Dly (s/v)	9.2	0	-	-	7.9	-	-	10.4
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q (veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	265	12	7	344	34	22	0	8	32	0	23
Future Vol, veh/h	40	265	12	7	344	34	22	0	8	32	0	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	220	-	-	240	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	3	2	2	2	2	3	2	2
Mvmt Flow	49	323	15	9	420	41	27	0	10	39	0	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	461	0	0	338	0	0	657	908	169	719	895	231
Stage 1	-	-	-	-	-	-	429	429	-	459	459	-
Stage 2	-	-	-	-	-	-	228	479	-	260	436	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.56	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.56	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.56	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.53	4.02	3.32
Pot Cap-1 Maneuver	1096	-	-	1218	-	-	350	274	845	314	279	771
Stage 1	-	-	-	-	-	-	574	582	-	549	565	-
Stage 2	-	-	-	-	-	-	754	553	-	719	578	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1096	-	-	1218	-	-	324	260	845	298	264	771
Mov Cap-2 Maneuver	-	-	-	-	-	-	324	260	-	298	264	-
Stage 1	-	-	-	-	-	-	548	556	-	524	561	-
Stage 2	-	-	-	-	-	-	721	549	-	679	552	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.1	0.1	15.2	15.1
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	388	1096	-	-	1218	-	-	298	771
HCM Lane V/C Ratio	0.094	0.045	-	-	0.007	-	-	0.131	0.036
HCM Ctrl Dly (s/v)	15.2	8.4	-	-	8	-	-	18.9	9.8
HCM Lane LOS	C	A	-	-	A	-	-	C	A
HCM 95th %tile Q (veh)	0.3	0.1	-	-	0	-	-	0.4	0.1

(2) 2
(2) 4
(2) 6



3-SECT., 1-WAY
650-1-313 6 AS

(1) 5



4-SECT., 1-WAY
650-1-413 1 AS

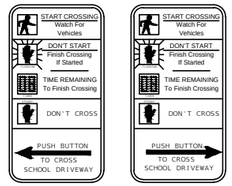
ALL SIGNAL HEADS SHALL INCLUDE YELLOW REFLECTIVE FLEXIBLE BACKPLATES, AND TOP SECTION OF THE SIGNAL HEADS SHALL BE ALUMINUM (TAP).

(2) P6

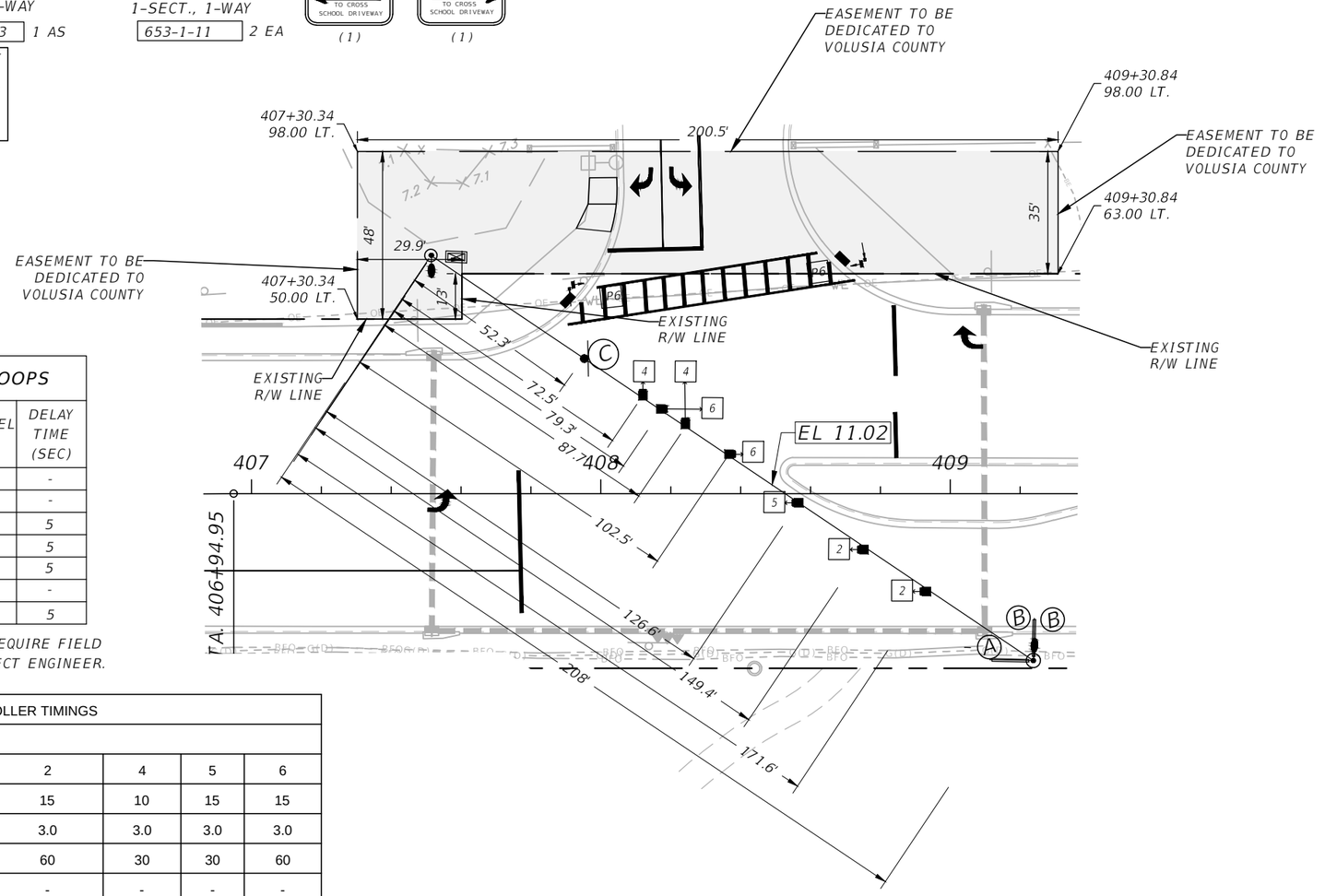


PED. SIGNAL
COUNT-DOWN
1-SECT., 1-WAY
653-1-11 2 EA

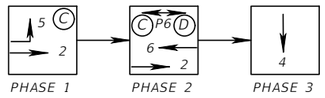
R10-3i(R)(L)



(1) (1)



MOVEMENT CHART



S.O.P. 13

NOTES:
1. MAJOR STREET: 10TH STREET (35 MPH)
   MINOR STREET: SCHOOL ENTRANCE (25 MPH)
2. FLASHING MODE: YELLOW - MOVEMENTS 2 & 6
   ALL OTHERS RED.
3. CONTROLLER TO BE SOP 10 CAPABLE, INITIALLY OPERATE AS MOVEMENT CHART SHOWS.
4. LOOPS L4A, L4B, L5, AND L6R ARE TYPE F LOOPS AND SHALL EXTEND 5' BEYOND STOP LINE.
5. FLASHING YELLOW ARROW (MOVEMENT 5), SHALL BE OMITTED WHEN THERE IS A PED CALL FOR P6.
6. LED BLANK-OUT SIGN SHALL BE ACTIVATED CONCURRENT WITH EASTBOUND LEFT TURN SIGNAL (MOVEMENT 5).



R3-1
30" x 30" 30" x 30"
LED BLANK-OUT SIGN
700-89-02B 1 EA

SIGNS "C" AND "D" ARE DIFFERENT MESSAGES IN ONE LED-BLANK-OUT SIGN.
"C" IS TO DISPLAY WHEN MOVEMENT 5 IS ACTIVATED AND FOLLOWED BY DISPLAY OF "D", AFTER TERMINATION OF MOVEMENT 5

STREET NAME SIGNS SHALL BE ALUMINUM AND SHALL BE RIGIDLY FACE MOUNTED ON CANTILEVER ARM BRACKET ATTACHED TO THE POLES

SINGLE SIDED
(A) 10th St

SINGLE SIDED, ONE ON EACH SIDE OF THE ARM BRACKET
(B) NSB High School

DETECTORS FOR LOOPS				
LOOP	NO. OF LOOPS	NO. OF NEW DETS.	CHANNEL NO.	DELAY TIME (SEC)
L2A	1	1	1	-
L2B	1		2	-
L4A	1	1	1	5
L4B	1		2	5
L5	1	1	1	5
L6	1	1	2	-
L6R	1	1	1	5

DELAY TIME IS INITIAL AND MAY REQUIRE FIELD ADJUSTING AS DIRECTED BY PROJECT ENGINEER.

CONTROLLER TIMINGS					
TIMING FUNCTION					
MOVEMENT NUMBER		2	4	5	6
TIMING FUNCTION	MINIMUM GREEN	15	10	15	15
	EXTENSION	3.0	3.0	3.0	3.0
	MAXIMUM GREEN 1	60	30	30	60
	MAXIMUM GREEN 2	-	-	-	-
	YELLOW CLEARANCE	4.1	3.4	4.1	4.1
	ALL RED	2.0	2.7	2.4	2.0
	PEDESTRIAN WALK	-	-		7
	PED. CLEARANCE	-	-		21
	RECALL	MIN			MIN
	FLASH MODE	Y	R	R	Y

REVISIONS	
DATE	DESCRIPTION

Volusia County FLORIDA

BAHRAM K. JOULAEE, P.E.
P.E. LICENSE NUMBER 74041
STANLEY CONSULTANTS, INC.
80 SPRING VISTA DRIVE
DEBARY, FL 32713

10TH AT NSB HIGH SCHOOL SIGNAL

COUNTY	TEDS PROJECT ID
VOLUSIA	11381 - TWO 24

SIGNALIZATION PLANS

SHEET NO. T-7

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

Historical Data/Trends

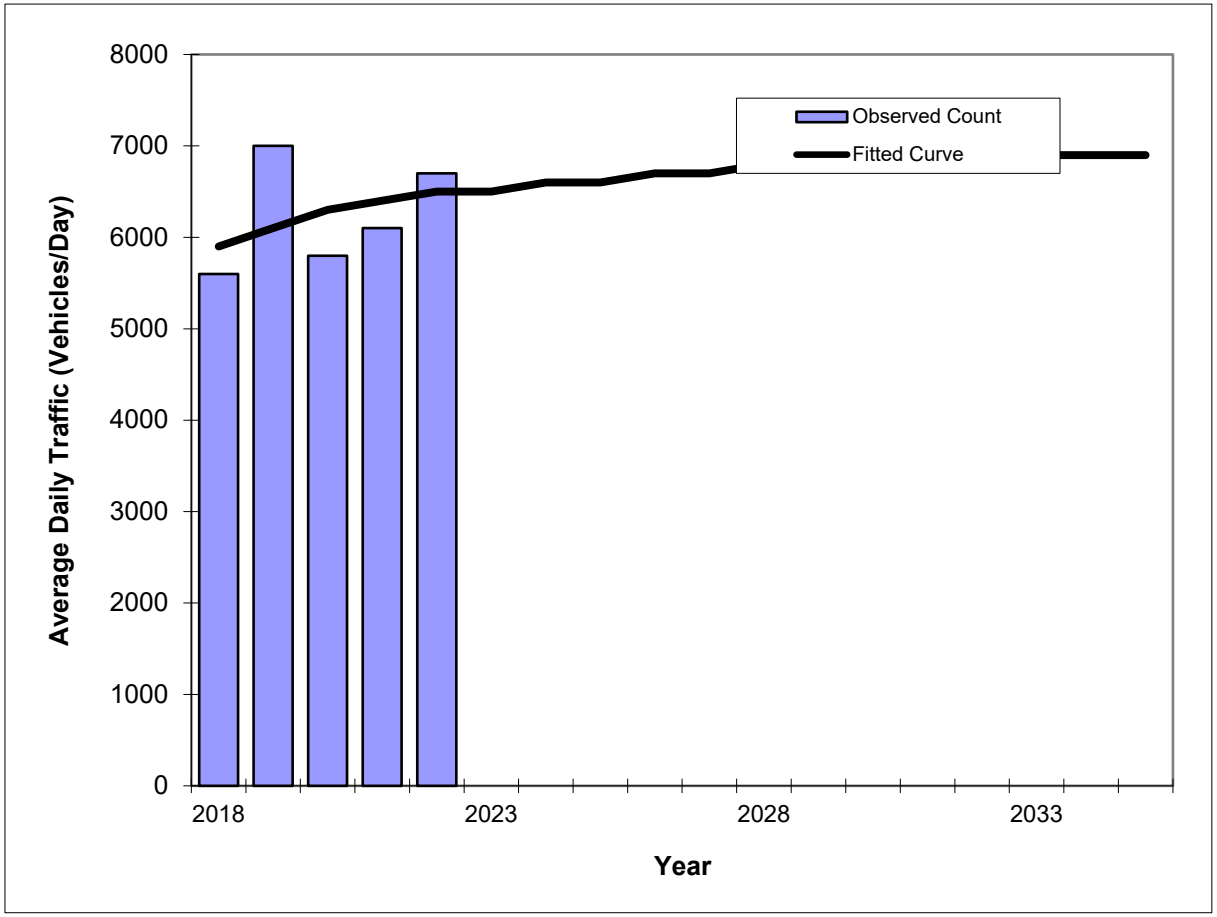
Road Name	Limits (From - To)	Count Station Number	Roadway Maintaining Agency	2021 Roadway on County's Thoroughfare	Distance (in miles)	Posted Speed	2021 QLOS Facility Type	2010 Federal Functional Classification	2011 AADT	2012 AADT	2013 AADT	2014 AADT	2015 AADT	2016 AADT	2017 AADT	2018 AADT	2019 AADT	2020 AADT	2021 AADT	2022 AADT	VC 2022 Allowable LOS	DAILY 2022 LOS Capacity	DAILY 2021 V/C Ratio	DAILY 2022 LOS	2022 AM Peak	2022 PM Peak	PEAK 2Way 2022 LOS Capacity	2021 No. of Lanes
Rd_Name	Limits	Cnt_Sta	MainRes	Tfare21	Distance	SPD2013	F_Type_21	Fun_Class_2010	AADT_11	AADT_12	AADT_13	AADT_14	AADT_15	AADT_16	AADT_17	AADT_18	AADT_19	AADT_20	AADT_21	AADT_22	VCA_LOS_22	Cap_22	VCRatio_22	LOS_22	AMPKHR_22	PMPKHR_22	2W_Cap_22	Lanes_20
Josephine St./10th St.	Old Mission Rd. to Tatum Blvd.	1000	County	Yes	0.30	30	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	5,810	5,860	5,910	5,820	4,830	6,650	6,230	5,590	7,020	5,840	6,100	6,700	E	13,640	0.49	D	780	550	1,020	2
Josephine St./10th St. (NS	Tatum Blvd. to US 1	1002	County	Yes	1.80	35	UA_NSSRC2_2W_2L_U_WL	Major Collector - Urban	7,350	7,140	-	-	4,940	6,990	-	-	-	-	-	-	E	14,040	0.00	A	-	-	1,270	2

Traffic Trends - V03.a

10th Street --

FIN#	
Location	

County:	Osceola (92)
Station #:	105
Highway:	10th Street



Year	Traffic (ADT/AADT) Count*	Trend**
2018	5600	5900
2019	7000	6100
2020	5800	6300
2021	6100	6400
2022	6700	6500
2024 Opening Year Trend		
2024	N/A	6600
2025 Mid-Year Trend		
2025	N/A	6600
2026 Design Year Trend		
2026	N/A	6700
TRANPLAN Forecasts/Trends		

Trend R-squared:	15.24%
Compounded Annual Historic Growth Rate:	2.45%
Compounded Growth Rate (2022 to Design Year):	0.76%
Printed:	30-Apr-24

Decaying Exponential Growth Option

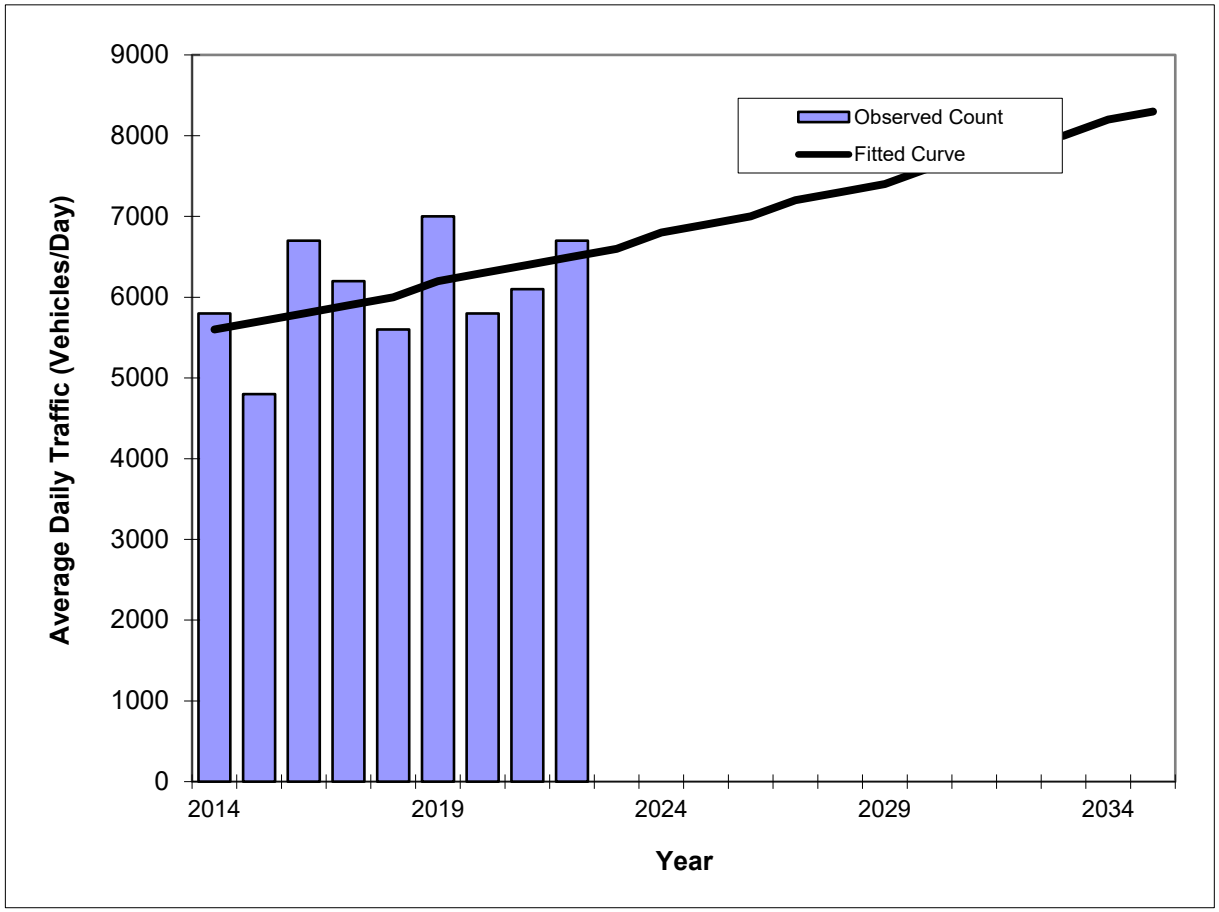
***Axle-Adjusted**

Traffic Trends - V03.a

10th Street --

FIN#	
Location	

County:	Osceola (92)
Station #:	105
Highway:	10th Street



Year	Traffic (ADT/AADT) Count*	Trend**
2014	5800	5600
2015	4800	5700
2016	6700	5800
2017	6200	5900
2018	5600	6000
2019	7000	6200
2020	5800	6300
2021	6100	6400
2022	6700	6500
2024 Opening Year Trend		
2024	N/A	6800
2025 Mid-Year Trend		
2025	N/A	6900
2026 Design Year Trend		
2026	N/A	7000
TRANPLAN Forecasts/Trends		

Trend R-squared:	20.06%
Compounded Annual Historic Growth Rate:	1.88%
Compounded Growth Rate (2022 to Design Year):	1.87%
Printed:	29-Apr-24

Exponential Growth Option

***Axle-Adjusted**

Turning Movement Worksheets

10th Street at NSB High School West Driveway
AM Peak Hour

Existing TMCs

	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Existing Count	0	364	176	0	0	0	136	288	0	0	0	0	0	128	0	76
Date of Count	4/17/2024				SF (0.97, use 1.0)				1.00							
Adjusted Count	0	364	176	0	0	0	136	288	0	0	0	0	0	128	0	76

	West Leg	East Leg	South Leg	North Leg
Existing Approach & Departure Volumes	EB: 540	EB: 304	NB: 0	NB: 652
	WB: 212	WB: 424	SB: 0	SB: 204
Directional Factors Based on Existing Counts	EB: 0.72	EB: 0.42	NB: #DIV/0!	NB: 0.76
	WB: 0.28	WB: 0.58	SB: #DIV/0!	SB: 0.24

Future Background **Year** 2027

Annual Growth Rate	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Simple Volume Growth	0	0	11	0	0	0	8	0	0	0	0	0	0	0	0	0
Applied Bckgrnd Growth	0	0	11	0	0	0	8	0	0	0	0	0	0	0	0	0
Total Bckgrnd Pk-Hr Vols	0	364	187	0	0	0	144	288	0	0	0	0	0	128	0	76

Project Trips

	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
New Ext Inbound	0.0%	0.0%	60.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Volume	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0
New Ext Outbound	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	60.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Volume	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	5	0	0	0	16	0	0	0	0	0	0	0	0	0

	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Total Pk-Hr Volumes	0	364	192	0	0	0	160	288	0	0	0	0	0	128	0	76

10th Street at NSB High School West Driveway
PM Peak Hour

Existing TMCs

	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Existing Count	0	19	192	0	0	0	192	18	0	0	0	0	0	41	0	42
Date of Count	4/17/2024				SF (0.97, use 1.0)				1.00							
Adjusted Count	0	19	192	0	0	0	192	18	0	0	0	0	0	41	0	42

	West Leg	East Leg	South Leg	North Leg
Existing Approach & Departure Volumes	EB: 211	EB: 233	NB: 0	NB: 37
	WB: 234	WB: 210	SB: 0	SB: 83
Directional Factors Based on Existing Counts	EB: 0.47	EB: 0.53	NB: #DIV/0!	NB: 0.31
	WB: 0.53	WB: 0.47	SB: #DIV/0!	SB: 0.69

Future Background **Year** 2027

Annual Growth Rate	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Simple Volume Growth	0	0	12	0	0	0	12	0	0	0	0	0	0	0	0	0
Applied Bckgrnd Growth	0	0	12	0	0	0	12	0	0	0	0	0	0	0	0	0
Total Bckgrnd Pk-Hr Vols	0	19	204	0	0	0	204	18	0	0	0	0	0	41	0	42

Project Trips

	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
New Ext Inbound	0.0%	0.0%	60.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Volume	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0
New Ext Outbound	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	60.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Volume	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	16	0	0	0	11	0	0	0	0	0	0	0	0	0

	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Total Pk-Hr Volumes	0	19	220	0	0	0	215	18	0	0	0	0	0	41	0	42

10th Street at Driveway #1
AM Peak Hour

Existing TMCs

	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Existing Count	1	28	278	0	7	0	410	15	0	0	0	0	0	13	0	13
Date of Count	4/17/2024				SF (0.97, use 1.0)				1.00							
Adjusted Count	1	28	278	0	7	0	410	15	0	0	0	0	0	13	0	13

	West Leg	East Leg	South Leg	North Leg
Existing Approach & Departure Volumes	EB: 307	EB: 298	NB: 0	NB: 43
	WB: 424	WB: 432	SB: 0	SB: 26
Directional Factors Based on Existing Counts	EB: 0.42	EB: 0.41	NB: #DIV/0!	NB: 0.62
	WB: 0.58	WB: 0.59	SB: #DIV/0!	SB: 0.38

Future Background **Year** 2027

Annual Growth Rate	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Simple Volume Growth	0	0	17	0	0	0	25	0	0	0	0	0	0	0	0	0
Applied Bckgrnd Growth	0	0	17	0	0	0	25	0	0	0	0	0	0	0	0	0
Total Bckgrnd Pk-Hr Vols	1	28	295	0	7	0	435	15	0	0	0	0	0	13	0	13

Project Trips

	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
New Ext Inbound	0.0%	0.0%	0.0%	60.0%	0.0%	40.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Volume	0	0	0	5	0	4	0	0	0	0	0	0	0	0	0	0
New Ext Outbound	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	60.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
Volume	0	0	0	0	0	0	16	0	0	0	0	27	0	0	0	0
Total Project Trips	0	0	0	5	0	4	16	0	0	0	0	27	0	0	0	0

	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Total Pk-Hr Volumes	1	28	295	5	7	4	451	15	0	0	0	27	0	13	0	13

10th Street at Driveway #1
PM Peak Hour

Existing TMCs

	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Existing Count	0	0	232	0	0	0	208	0	0	0	0	0	0	2	0	3
Date of Count	4/17/2024				SF (0.97, use 1.0)				1.00							
Adjusted Count	0	0	232	0	0	0	208	0	0	0	0	0	0	2	0	3

	West Leg	East Leg	South Leg	North Leg
Existing Approach & Departure Volumes	EB: 232	EB: 234	NB: 0	NB: 0
	WB: 211	WB: 208	SB: 0	SB: 5
Directional Factors Based on Existing Counts	EB: 0.52	EB: 0.53	NB: #DIV/0!	NB: 0.00
	WB: 0.48	WB: 0.47	SB: #DIV/0!	SB: 1.00

Future Background **Year** 2027

Annual Growth Rate	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Simple Volume Growth	0	0	14	0	0	0	12	0	0	0	0	0	0	0	0	0
Applied Bckgrnd Growth	0	0	14	0	0	0	12	0	0	0	0	0	0	0	0	0
Total Bckgrnd Pk-Hr Vols	0	0	246	0	0	0	220	0	0	0	0	0	0	2	0	3

Project Trips

	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
New Ext Inbound	0.0%	0.0%	0.0%	60.0%	0.0%	40.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Volume	0	0	0	16	0	10	0	0	0	0	0	0	0	0	0	0
New Ext Outbound	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	60.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
Volume	0	0	0	0	0	0	11	0	0	0	0	18	0	0	0	0
Total Project Trips	0	0	0	16	0	10	11	0	0	0	0	18	0	0	0	0

	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Total Pk-Hr Volumes	0	0	246	16	0	10	231	0	0	0	0	18	0	2	0	3

10th Street at Newport Sound Place
AM Peak Hour

Existing TMCs

	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Existing Count	2	16	232	29	0	15	407	36	0	2	0	3	0	34	0	29
Date of Count	4/3/2025				**SF (0.95, use 1.0)**				1.00							
Adjusted Count	2	16	232	29	0	15	407	36	0	2	0	3	0	34	0	29

	West Leg	East Leg	South Leg	North Leg
Existing Approach & Departure Volumes	EB: 279	EB: 269	NB: 5	NB: 52
	WB: 440	WB: 458	SB: 44	SB: 63
Directional Factors Based on Existing Counts	EB: 0.39	EB: 0.37	NB: 0.10	NB: 0.45
	WB: 0.61	WB: 0.63	SB: 0.90	SB: 0.55

Future Background **Year** 2027

Annual Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Simple Volume Growth	0	1	9	1	0	1	16	1	0	0	0	0	0	1	0	1
Applied Bckgrnd Growth	0	1	9	1	0	1	16	1	0	0	0	0	0	1	0	1
Total Bckgrnd Pk-Hr Vols	2	17	241	30	0	16	423	37	0	2	0	3	0	35	0	30

Project Trips

	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
New Ext Inbound	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	40.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Volume	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
New Ext Outbound	60.0%	0.0%	40.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Volume	16	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	16	0	11	0	0	0	4	0	0	0	0	0	0	0	0	0

	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Total Pk-Hr Volumes	18	17	252	30	0	16	427	37	0	2	0	3	0	35	0	30

10th Street at Newport Sound Place
PM Peak Hour

Existing TMCs

	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Existing Count	0	27	243	11	4	3	315	32	0	21	0	8	0	30	0	22
Date of Count	4/17/2024				SF (0.95, use 1.0)				1.00							
Adjusted Count	0	27	243	11	4	3	315	32	0	21	0	8	0	30	0	22

	West Leg	East Leg	South Leg	North Leg
Existing Approach & Departure Volumes	EB: 281	EB: 285	NB: 29	NB: 59
	WB: 358	WB: 354	SB: 14	SB: 52
Directional Factors Based on Existing Counts	EB: 0.44	EB: 0.45	NB: 0.67	NB: 0.53
	WB: 0.56	WB: 0.55	SB: 0.33	SB: 0.47

Future Background **Year** 2027

Annual Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Simple Volume Growth	0	2	15	1	0	0	19	2	0	1	0	0	0	2	0	1
Applied Bckgrnd Growth	0	2	15	1	0	0	19	2	0	1	0	0	0	2	0	1
Total Bckgrnd Pk-Hr Vols	0	29	258	12	4	3	334	34	0	22	0	8	0	32	0	23

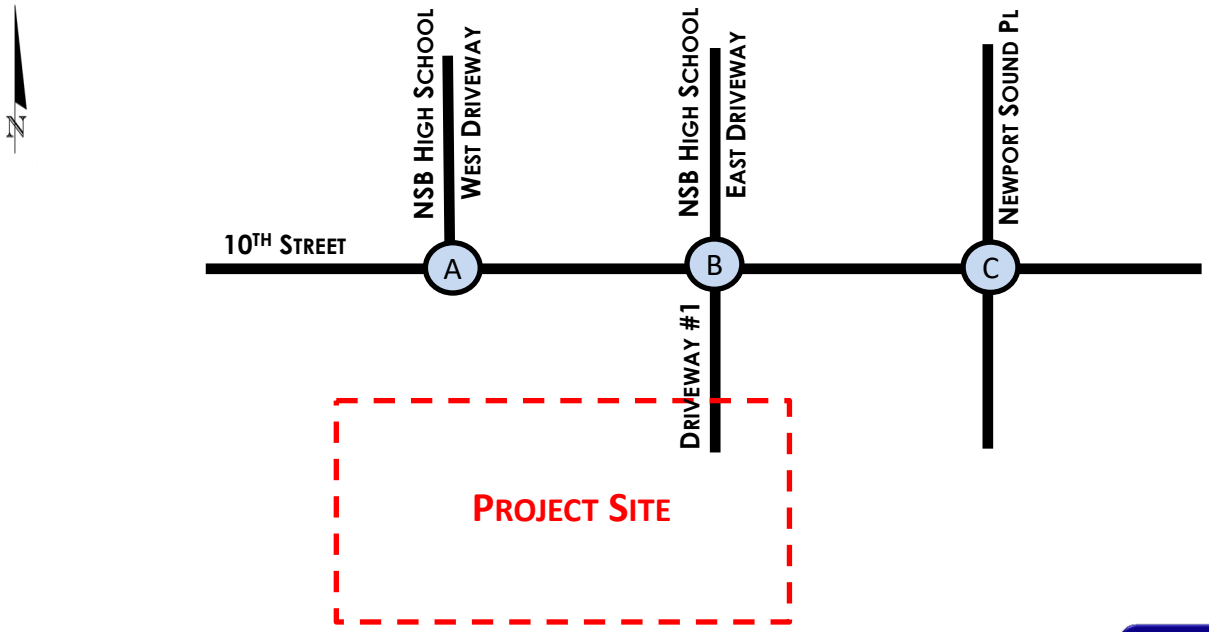
Project Trips

	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
New Ext Inbound	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	40.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Volume	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0
New Ext Outbound	60.0%	0.0%	40.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Volume	11	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	11	0	7	0	0	0	10	0	0	0	0	0	0	0	0	0

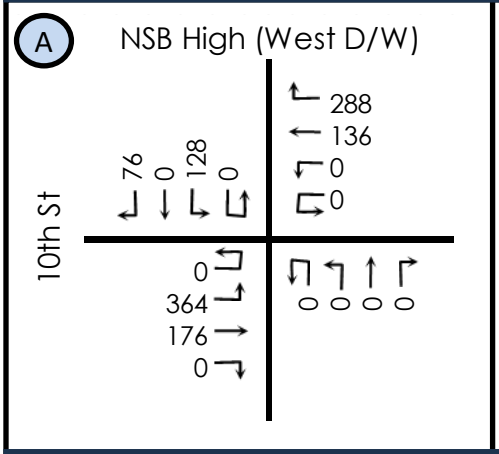
	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Total Pk-Hr Volumes	11	29	265	12	4	3	344	34	0	22	0	8	0	32	0	23

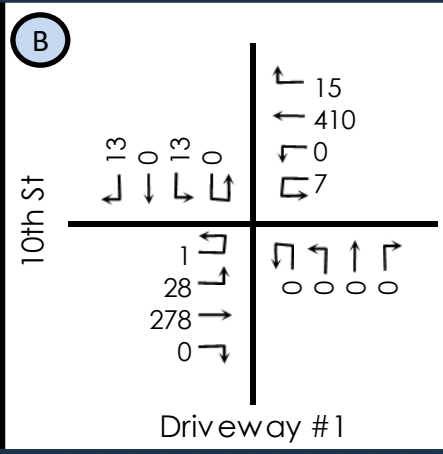
Traffic Volume Figures

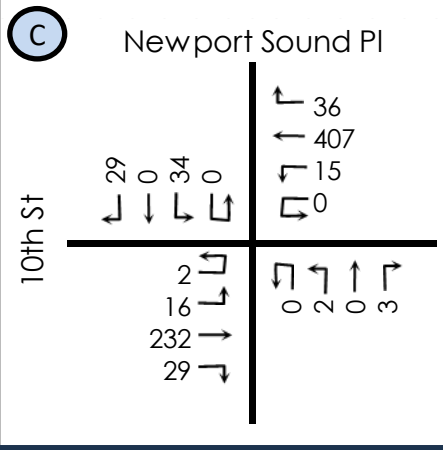
Existing Peak-Hour Intersection Volumes



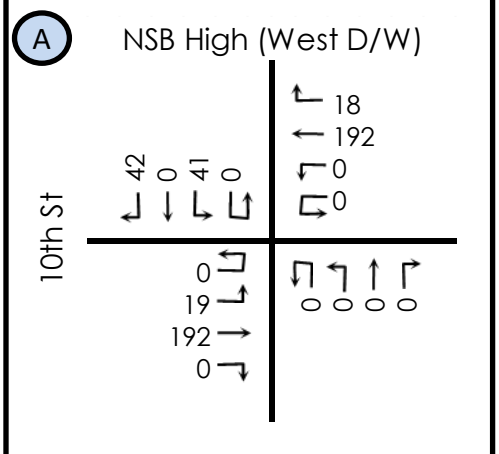
AM Peak Hour

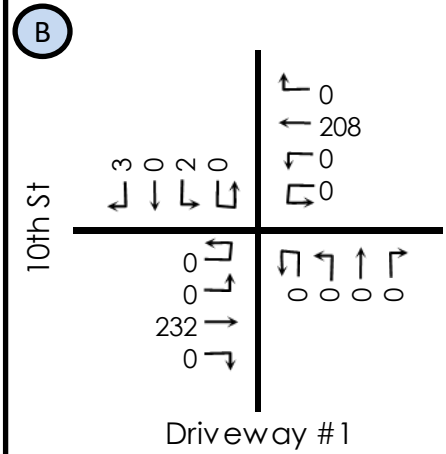


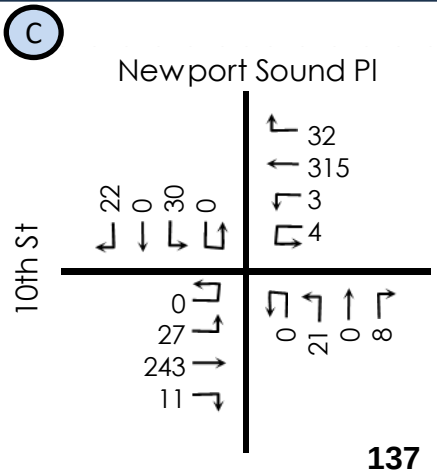




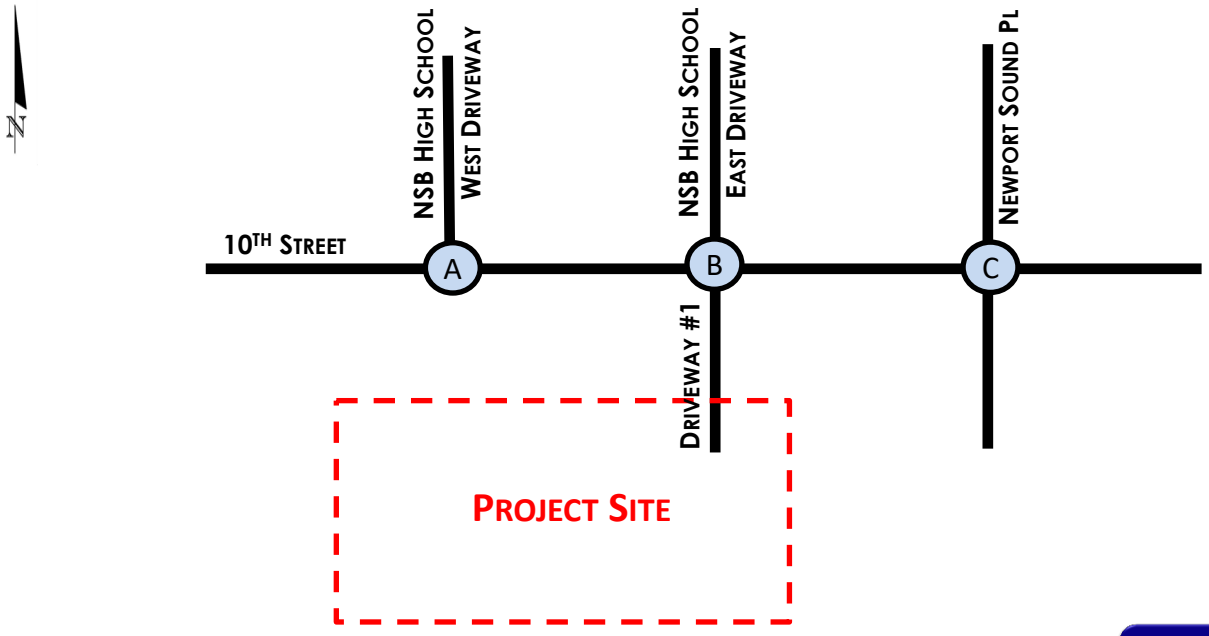
PM Peak Hour



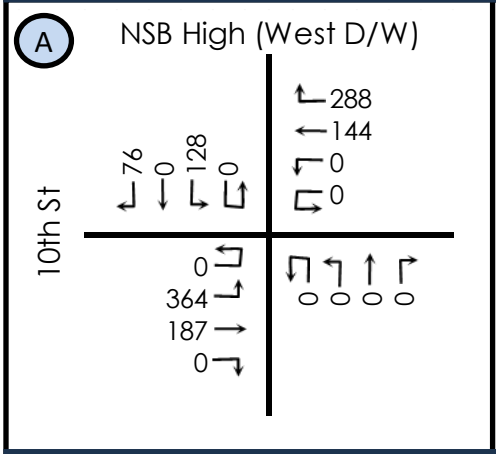


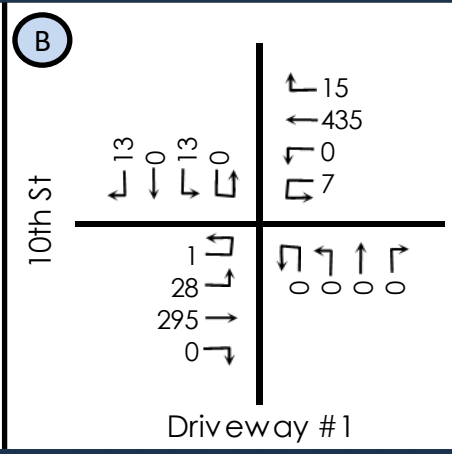


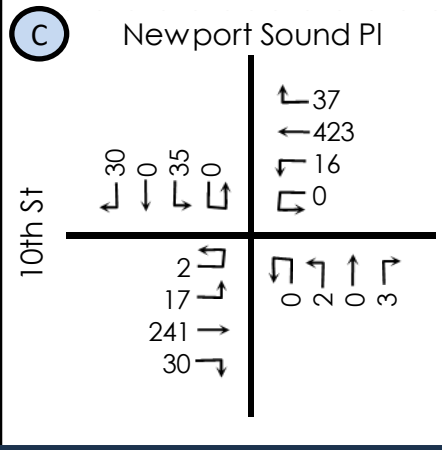
Future Background (Year 2027) Peak-Hour Intersection Volumes



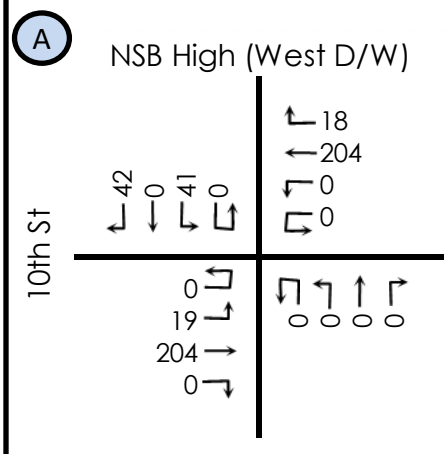
AM Peak Hour

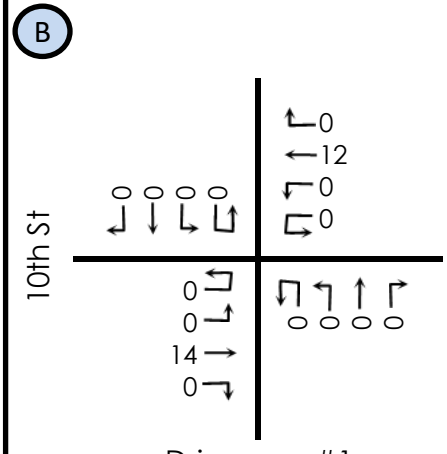


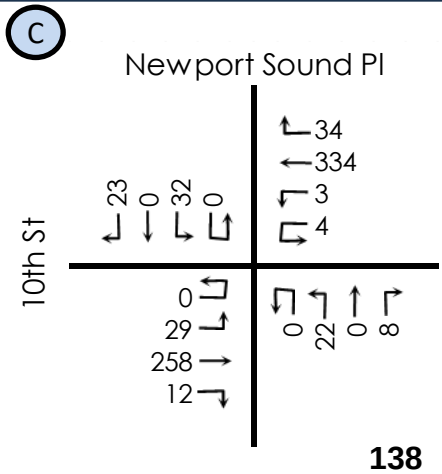




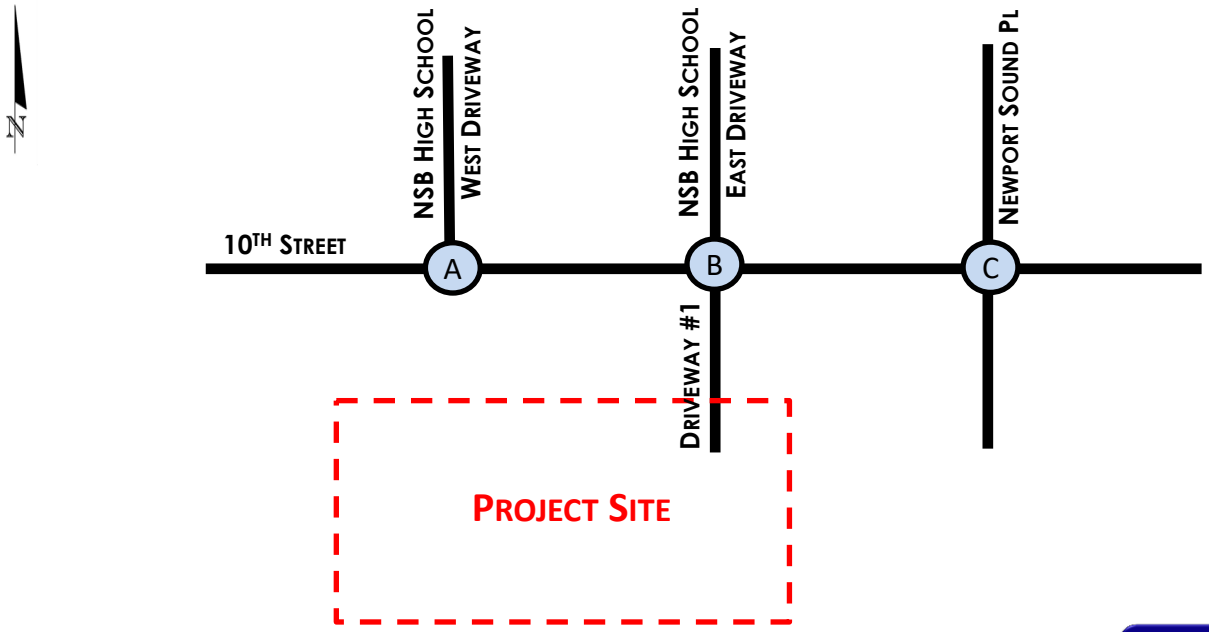
PM Peak Hour



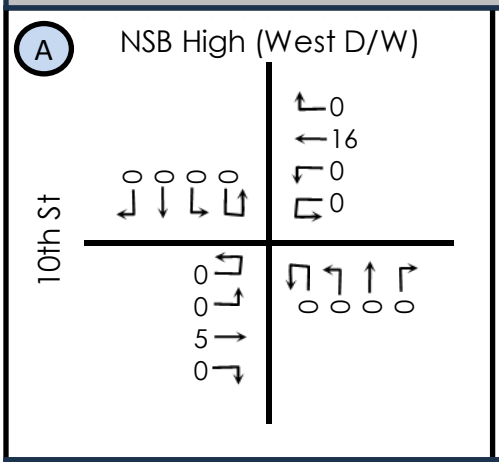


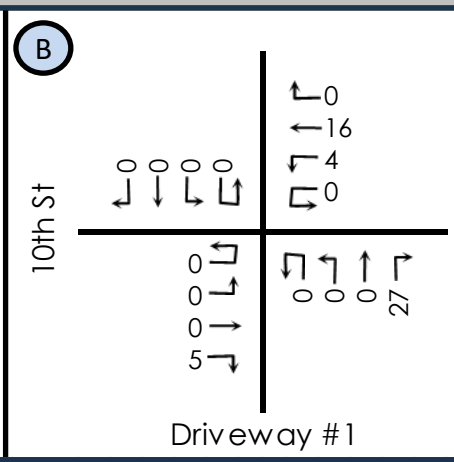


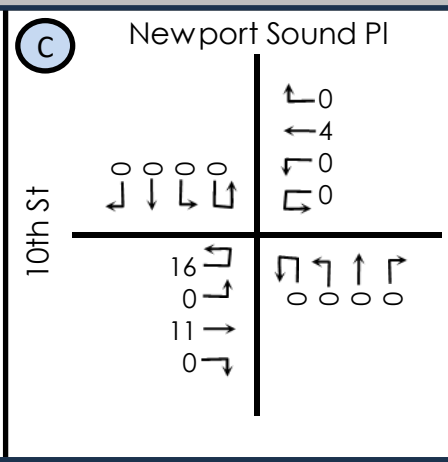
New External Project Trips



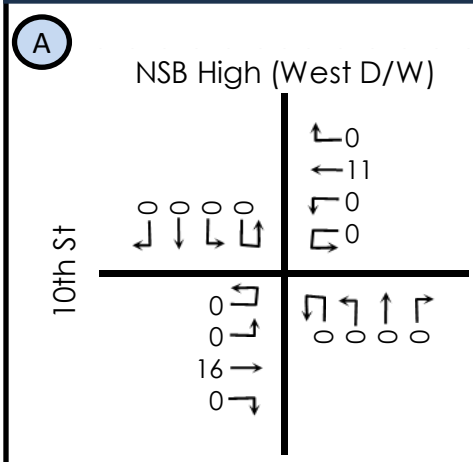
AM Peak Hour

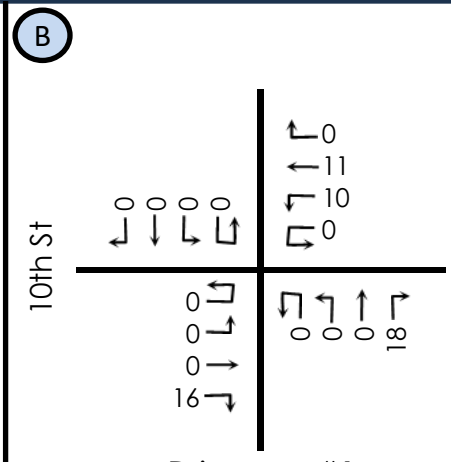


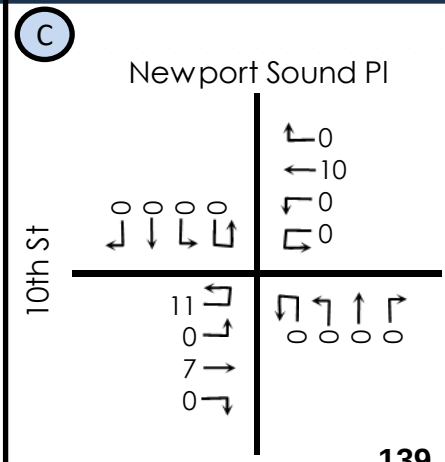




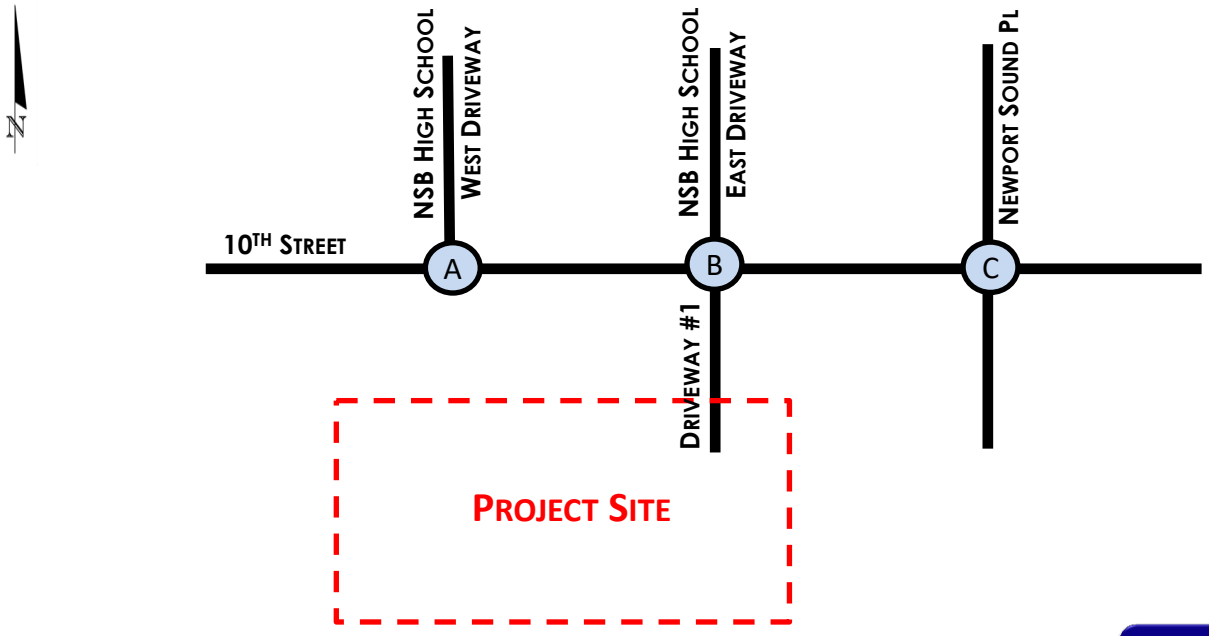
PM Peak Hour



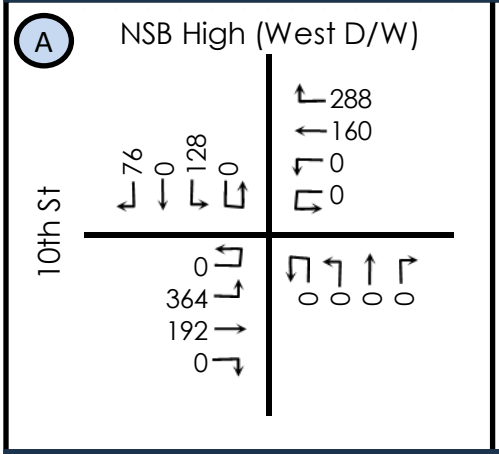


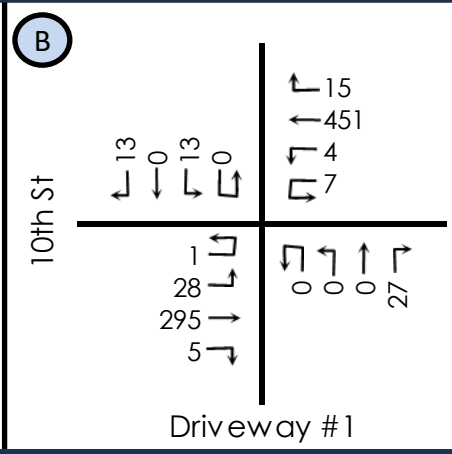


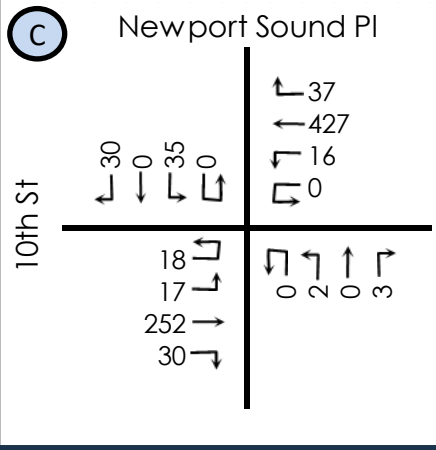
Future Buildout (Year 2027) Peak-Hour Intersection Volumes



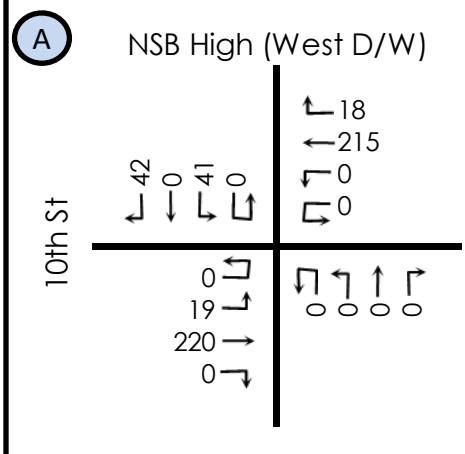
AM Peak Hour

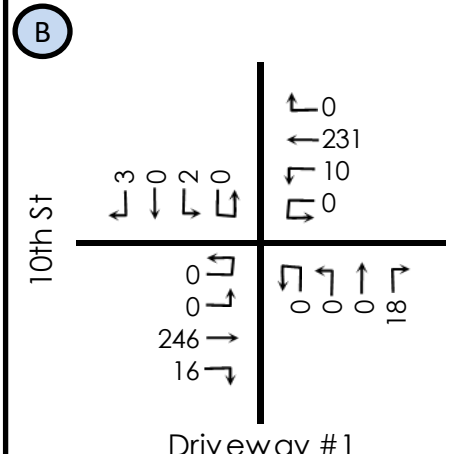


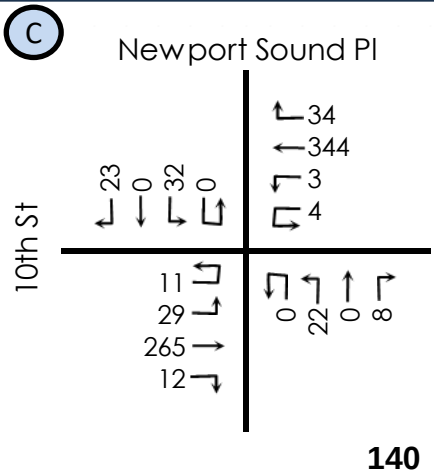




PM Peak Hour







New Smyrna Beach
• • • UTILITIES • • •

July 17, 2025

Stephanie Ferrara
Development Services Coordinator
City of New Smyrna Beach
214 Sams Ave
New Smyrna Beach, FL 32168
Email: sterrara@cityofnsb.com

Subject: **Flagler Dunes Plat (S-01-2025) NSBU Approval Letter**

Dear Ms. Ferrara:

New Smyrna Beach Utilities (NSBU) reviewed the **Flagler Dunes Plat** resubmittal dated July 11, 2025 and all previous comments have been addressed. The submitted plat dated July 11, 2025 is **Approved** by New Smyrna Beach Utilities.

Any future modification to the approved plat dated above, it is the responsibility of the developer/engineer of record to notify NSBU Engineering Department. New Smyrna Beach Utilities staff reserves the right to review the modification and provide review comments as needed. If you have any questions, feel free to contact me.

Sincerely,

July 17, 2025

Kenny Ho, P.E.
New Business Manager
Tel: 386.424.3076

cc:

NORTH

GRAPHIC SCALE
50 25 0 50
1" = 50'

CURVE DATA: (D)
CA=9°49'50"
R=1452.73'
CHB=N 77°48'08" W
CH=248.95'
L=249.25'

CURVE DATA:(M)
CA=9°57'44"
R=1432.08'
CHB=S 77°46'23" E
CH=248.69'
L=249.00'

LOT 49

SOUTH LINE LOT 49
NORTH LINE LOT 50
1060' (P)

FD 1/2" IR
NO ID

FD 5/8" IRC
LB 3612
"WITNESS"

FD 5/8" IRC
4165 RLS

FD 5/8" IRC
4165 RLS

25.00'

UNABLE TO SET
DUE TO DEBRIS

L1

L2

ASPHALT

WETLAND AREA #1
3,980± SQFT.

N 15°06'49" W
53.86'

FD 5/8" IRC
LB 2599

S 72°53'13" E
149.07' (D)

FD 5/8" IRC
LB 2599
"PT"

THE MODEL LAND COMPANY
MB. 4, PG 9
MB. 16, PG 61
VOLUSIA COUNTY, FLORIDA

LOT 50

CONCRETE

TENTH STREET
(100' PUBLIC RIGHT-OF-WAY)

ASPHALT

S 73°00'29" E (M) 482.45'
S 72°53'13" E 482.83 (D)'

1060' (P)

SOUTH LINE LOT 50
NORTH LINE LOT 51

LOT 2

LOT 3
BLOCK 11

LOT 4

LOT 5

LOT 6

LOT 1

LOT 7

LOT 8

TAX ID# 7430-00-00-0010
OWNERS: GRACE COMMUNITY CHURCH

400' (P)

20' DRAINAGE EASEMENT
PER ORB 3086, PGS 56-57

FD 1/2" MP
NO ID

PEARL ST.
(60' R/W)

N 18°15'05" W 760.80'

WEST LINE OF LOT 51
N 18°10'21" W 760.52' (D)

WEST LINE OF LOT 50

SPANISH MISSION
HEIGHTS UNIT NO.3
PB 19, PGS 197
VOLUSIA COUNTY, FLORIDA

TAX ID# 7430-00-00-0122
OWNERS: COUNTY OF VOLUSIA

PARCEL D
TAX ID# 7419-23-00-0490
OWNERS: REMILLARD ROGER & SARAH
PARCEL AREA: 5.106± ACRES

S 18°10'21" E 548.01' (D)
N 18°10'21" W 548.01' (D)

TOTAL AREA
(10.323± ACRES)

FLOOD ZONE "X"

389' (P)

WETLAND AREA #2
11,322± SQFT.

FLOOD ZONE "X"
"ORANGE"

PARCEL 2
TAX ID# 7419-23-00-0492
OWNERS: NCP BAYOU 2 LLC
PARCEL AREA: 4.994± ACRES

LOT 51

CURVE DATA:
OVERALL (M)
CA=21°14'15"
R=1384.32'
CHB=S 83°29'55" E
CH=510.19'
L=513.12'

CURVE 1

FD 5/8" IRC
LB 2599

FD 5/8" IRC
LB 7143

CURVE 2

FD 5/8" IRC
LB 2599

PARCEL 1
TAX ID# 7449012400011
OWNERS: NCP BAYOU 2 LLC
PARCEL AREA: 0.223± ACRES

S 18°10'21" E
95.18' (D)

N 18°10'21" W
95.12' (D)

S 71°44'13" W 132.97' (D)

SOUTHERLY LINE
OF BLOCK 24
S 18°18'09" E 53.97'(D)
S 18°20'56" E
53.73'(M)

FLOOD ZONE "X"

FLOOD ZONE "AE"
(BFE 5')

FLOOD ZONE "X"

FLOOD ZONE "AE"
(BFE 5')

FLOOD ZONE "X"

FD 5/8" IRC
LB 2599

FD 4"x4" CM
NO ID

FD 5/8" IRC
LB 2599

S 71°44'13" W 336.47' (D)

1060' (P)
208.26'

POINT OF
BEGINNING
PARCEL "D"
FD 4"x4" CM
ID NO

S 71°44'13" W 724.04' (D)
515.71'

FD 5/8" IRC
LB 2599

S 71°36'15" W 1193.34'(M)
(BASIS OF BEARING)

FD 4"x4" CM
RLS 2027

POINT OF BEGINNING
PARCEL 1&2
POINT OF REFERENCE
PARCEL "D"

SECTION 30,
TOWNSHIP 17 SOUTH,
RANGE 34 EAST
VOLUSIA COUNTY

UNPLATTED
TAX ID# 7430-00-00-0120
OWNERS: SAWYER WALTER C & LINDA B

TAX ID# 7430-00-00-0100
OWNERS: DAYTONA STATE COLLEGE INC

SECTION 30,
TOWNSHIP 17 SOUTH,
RANGE 34 EAST
VOLUSIA COUNTY

A.W BARRS SUBDIVISON OF THE
SEMOUR PICKETT GRANT
MB. 1, PG 106
MB. 17, PG 31&32
VOLUSIA COUNTY, FLORIDA

EAST LINE OF LOT 51
WEST LINE OF SEYMOUR PICKETT GRANT

EAST LINE OF LOT 50

400' (P)

389' (P)

CONCRETE

CURVE 1 DATA: (D)
CA=15°17'12"
R=1400.00'
CHB=S 80°31'49" E
CH=372.42'
L=373.52'

CURVE 2 DATA: (D)
CA=5°41'32"
R=1400.00'
CHB=N 88°58'44" E
CH=139.03'
L=139.09'

CURVE 1 DATA:(M)
CA=15°28'29"
R=1384.32'
CHB=S 80°37'02" E
CH=372.75'
L=373.88'

CURVE 2 DATA: (M)
CA=5°45'46"
R=1384.32'
CHB=N 88°45'51" E
CH=139.18'
L=139.24'

LINE TABLE		
LINE #	BEARING	DISTANCE
L1	S 76°03'46" E	39.62'
L2	S 78°51'46" E	55.21'
L3	S 04°07'00" E	27.37'
L4	S 28°53'07" W	25.95'
L5	S 67°23'41" W	28.02'
L6	N 32°15'09" W	30.44'
L7	N 38°28'36" W	33.25'
L8	N 33°22'21" W	34.99'

LINE TABLE		
LINE #	BEARING	DISTANCE
L9	N 31°55'38" W	31.36'
L10	S 73°25'33" W	24.46'
L11	S 84°30'56" W	31.70'
L12	S 46°25'44" W	19.14'
L13	N 60°31'16" W	42.26'
L14	N 48°27'52" W	21.58'
L15	S 28°53'09" W	28.85'
L16	S 09°51'44" E	41.95'
L17	S 24°39'48" E	29.14'
L18	S 45°11'58" E	20.72'
L19	S 37°31'44" E	22.01'
L20	N 62°18'31" E	15.08'
L21	N 00°02'06" W	14.71'
L22	N 82°17'27" E	50.48'
L23	N 65°52'10" E	31.68'
L24	N 15°34'44" E	46.89'

SHEET 1 OF 3

UPHAM
CIVIL ENGINEERING-SURVEYING-LANDSCAPE ARCHITECTURE
265 Kenilworth Avenue • Ormond Beach • Florida 32174
Voice: 386.672.9515 • Fax: 386.673.6554 • uphaminc.com
LB # 0003612 LC # 0000357

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THIS MAP IS INTENDED TO BE DISPLAYED AT A SCALE OF 1" = 50' OR SMALLER. ANY USE OF THIS FILE AT A SCALE LARGER THAN STATED SHALL BE AT THE USER'S OWN RISK.

SEE CERTIFICATION FOR SURVEYOR SIGNATURE

SURVEY MAP

THIS MAP IS NEITHER FULL NOR COMPLETE WITHOUT THE REPORT

TYPE OF SURVEY: BOUNDARY

MAP SUBJECT: PARCEL: 74-19-2300-0490

ADDRESS: 1070 TENTH STREET NEW SMYRNA BEACH, FLORIDA

LOCATION No:	17-34-48
PROJECT No:	220303
FIELD WORK BY:	JGP
DATE:	03/23/2022
OFFICE WORK BY:	JAE
DATE:	03/25/2022
FIELD BOOK & PG:	## - ##
SCALE:	1" = 50'

SHEET NUMBER:
SU-1

NORTH

GRAPHIC SCALE
1 0.5 0 1
1" = 1'

CURVE DATA: (D)
CA=9°49'50"
R=1452.73'
CHB=N 77°48'08" W
CH=248.95'
L=249.25'

CURVE DATA:(M)
CA=9°57'44"
R=1432.08'
CHB=S 77°46'23" E
CH=248.69'
L=249.00'

LOT 49

SOUTH LINE LOT 49
NORTH LINE LOT 50

1060' (P)

FD 1/2" IR
NO ID

FD 5/8" IRC
LB 3612
"WITNESS"

FD 5/8" IRC
4165 RLS

FD 5/8" IRC
4165 RLS

25.00'

UNABLE TO SET
DUE TO DEBRIS

L1

L2

ASPHALT

WETLAND AREA #1
3,900± SQFT

L3 L4 L5 L6

N 15°06'49" W
53.86'

FD 5/8" IRC
LB 2599

S 72°53'13" E
149.07' (D)

400' (P)

20' DRAINAGE EASEMENT
PER ORB 3086, PGS 56-57

TAX ID# 7430-00-00-0010
OWNERS: GRACE COMMUNITY CHURCH

LOT 2

LOT 3
BLOCK 11

LOT 4

LOT 5

LOT 6

LOT 7

LOT 8

FD 1/2" MP
NO ID

PEARL ST.
(60' R/W)

N 18°15'05" W 760.80'
WEST LINE OF LOT 50
N 18°10'21" W 760.52' (D)

TAX ID# 7430-00-00-0122
OWNERS: COUNTY OF VOLUSIA

FD 5/8" IRC
LB 2599

FD 5/8" IRC
LB 2599

FD 4"x4" CM
NO ID

PARCEL D
TAX ID# 7419-23-00-0490
OWNERS: REMILLARD ROGER & SARAH
PARCEL AREA: 5.106± ACRES

FLOOD ZONE "X"

WETLAND AREA #2
11,322± SQFT.

"FLOOD" ZONE "X"
"ORANGE"

FLOOD ZONE "X"

FLOOD ZONE "AE"
(BFE 5')

FLOOD ZONE "X"

FLOOD ZONE "X"

S 71°44'13" W 336.47' (D)

1060' (P)

S 71°44'13" W 724.04' (D)

S 71°44'13" W 132.97' (D)

S 71°36'15" W 1193.34'(M)
(BASIS OF BEARING)

POINT OF
BEGINNING
PARCEL "D"
FD 4"x4" CM
ID NO

FD 5/8" IRC
LB 2599
"P1"

FD 5/8" IRC
LB 2599

FD 5/8" IRC
LB 2599

FD 5/8" IRC
LB 7143

FD 5/8" IRC
LB 7143

FD 4"x4" CM
RLS 2027

POINT OF BEGINNING
PARCEL 1&2
POINT OF REFERENCE
PARCEL "D"

SECTION 30,
TOWNSHIP 17 SOUTH,
RANGE 34 EAST
VOLUSIA COUNTY

SECTION 30,
TOWNSHIP 17 SOUTH,
RANGE 34 EAST
VOLUSIA COUNTY

UNPLATTED
TAX ID# 7430-00-00-0120
OWNERS: SAWYER WALTER C & LINDA B

TAX ID# 7430-00-00-0100
OWNERS: DAYTONA STATE COLLEGE INC

THE MODEL LAND COMPANY
MB. 4, PG 9
MB. 16, PG 61
VOLUSIA COUNTY, FLORIDA

LOT 50

TENTH STREET
(100' PUBLIC RIGHT-OF-WAY)

S 73°00'29" E (M) 482.83 (D) 482.45'

S 18°10'21" E 548.01' (M)
N 18°10'21" W 548.01' (D)

TOTAL AREA
(10.323± ACRES)

PARCEL 2
TAX ID# 7419-23-00-0492
OWNERS: NCP BAYOU 2 LLC
PARCEL AREA: 4.994± ACRES

LOT 51

CURVE DATA:
OVERALL (M)
CA=21°14'15"
R=1384.32'
CHB=S 83°29'55" E
CH=510.19'
L=513.12'

CURVE 1

CURVE 2

PARCEL 1
TAX ID# 7449012400011
OWNERS: NCP BAYOU 2 LLC
PARCEL AREA: 0.223± ACRES

S 18°10'21" E
N 18°10'21" W
95.18' (D)

SOUTHERLY LIN
OF BLOCK 24
S 18°18'09" E 53.9
S 18°20'56"
53.73'(M)

SOUTH LINE LOT 50
NORTH LINE LOT 51

389' (P)

EAST LINE OF LOT 51
WEST LINE OF SEYMOUR PICKETT GRANT

EAST LINE OF LOT 50

400' (P)

A.W BARRS SUBDIVISON OF THE
SEMOUR PICKETT GRANT
MB. 1, PG 106
MB. 17, PG 31&32
VOLUSIA COUNTY, FLORIDA

CURVE 1 DATA: (D)
CA=15°17'12"
R=1400.00'
CHB=S 80°31'49" E
CH=372.42'
L=373.52'

CURVE 2 DATA: (D)
CA=5°41'32"
R=1400.00'
CHB=N 88°58'44" E
CH=139.03'
L=139.09'

CURVE 1 DATA:(M)
CA=15°28'29"
R=1384.32'
CHB=S 80°37'02" E
CH=372.75'
L=373.88'

CURVE 2 DATA: (M)
CA=5°45'46"
R=1384.32'
CHB=N 88°45'51" E
CH=139.18'
L=139.24'

LINE TABLE

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L3	S 04°07'00" E	27.37'
L4	S 28°53'07" W	25.95'
L5	S 67°23'41" W	28.02'
L6	N 32°15'09" W	30.44'
L7	N 38°28'36" W	33.25'
L8	N 33°22'21" W	34.99'

LINE TABLE

LINE #	BEARING	DISTANCE
L9	N 31°55'38" W	31.36'
L10	S 73°25'33" W	24.46'
L11	S 84°30'56" W	31.70'
L12	S 46°25'44" W	19.14'
L13	N 60°31'16" W	42.26'
L14	N 48°27'52" W	21.58'
L15	S 28°53'09" W	28.85'
L16	S 09°51'44" E	41.95'
L17	S 24°39'48" E	29.14'
L18	S 45°11'58" E	20.72'
L19	S 37°31'44" E	22.01'
L20	N 62°18'31" E	15.08'
L21	N 00°02'06" W	14.71'
L22	N 82°17'27" E	50.48'
L23	N 65°52'10" E	31.68'
L24	N 15°34'44" E	46.89'

SHEET 2 OF 3

UPHAM
CIVIL ENGINEERING-SURVEYING-LANDSCAPE ARCHITECTURE
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SEE CERTIFICATION FOR SURVEYOR SIGNATURE

SURVEY MAP

THIS MAP IS NEITHER FULL NOR COMPLETE WITHOUT THE REPORT

TYPE OF SURVEY: BOUNDARY & TOPOGRAPHIC SURVEY
MAP SUBJECT: PARCEL: 74-19-2300-0490
ADDRESS: 1070 TENTH STREET NEW SMYRNA BEACH, FLORIDA

LOCATION No:	17-34-48
PROJECT No:	220303
FIELD WORK BY:	JGP
DATE:	03/23/2022
OFFICE WORK BY:	JAE
DATE:	03/25/2022
FIELD BOOK & PG:	## - ##
SCALE:	1" = 1'

SHEET NUMBER:
SU-2

ABBREVIATIONS / LEGEND

±	MORE OR LESS
A/C	AIR CONDITIONING
AC	ACRES
ALTA	AMERICAN LAND TITLE ASSOCIATION
ADA	AMERICAN DISABILITY ACT
BFE	BASE FLOOD ELEVATION
BLDG	BUILDING
BTM	BOTTOM
(C)	CALCULATED
CA	CENTRAL ANGLE
CH	CHORD LENGTH
CHB	CHORD BEARING
CMP	CORRUGATED METAL PIPE
CPP	CORRUGATED PLASTIC PIPE
CONC	CONCRETE
CR	COUNTY ROAD
(D)	DESCRIPTION OR DEED
DIP	DUCTILE IRON PIPE
FD	FOUND
EL	ELEVATION
EOP	EDGE OF PAVEMENT
ERCP	ELLIPTICAL REINFORCED CONCRETE PIPE
ESMT	EASEMENT
FAC	FLORIDA ADMINISTRATIVE CODE
FDEP	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FDNR	FLORIDA DEPARTMENT OF NATURAL RESOURCES
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FFE	FINISH FLOOR ELEVATION
FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY
FIRM	FLOOD INSURANCE RATE MAP
FL	FLORIDA
FP&L	FLORIDA POWER & LIGHT
GNSS	GLOBAL NAVIGATION SATELLITE SYSTEM
HDPE	HIGH DENSITY POLYETHYLENE PIPE
ID	IDENTIFICATION
INV	INVERT ELEVATION
L	LENGTH
LB	LICENSED BUSINESS
LC	LICENSED CORPORATION
LF	LINEAL FEET
LLC	LIMITED LIABILITY COMPANY
LS	LICENSED SURVEYOR
(M)	FIELD MEASURED
MB	MAP BOOK
MES	MITERED-END SECTIO
MPH	MILES PER HOUR
NAD83	NORTH AMERICAN DATUM OF 1983
NAVD88	NORTH AMERICAN VERTICAL DATUM OF 1988
NGVD29	NATIONAL GEODETIC VERTICAL DATUM OF 1929
No.	NUMBER
NSPS	NATIONAL SOCIETY OF PROFESSIONAL SURVEYORS
ORB	OFFICIAL RECORD BOOK
(P)	REFERS TO PLAT OF RECORD
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PCP	PERMANENT CONTROL POINT
PG(S)	PAGE(S)
POC	POINT ON CURVE
PRC	POINT OF REVERSE CURVE
PRM	PERMANENT REFERENCE MONUMENT
PSM	PROFESSIONAL SURVEYOR AND MAPPER
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RLS	REGISTERED LAND SURVEYOR
R/W	RIGHT-OF-WAY
SF	SQUARE FEET
SJRWMD	ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
SR	STATE ROAD
STY	STORY
SP	STATE PLANE
TELECOM	TELECOMMUNICATIONS
TYP	TYPICAL
US	UNITED STATES
USACOE	UNITED STATES ARMY CORP OF ENGINEERS
VCP	VITRIFIED CLAY PIPE

- CM... 4"x4" CONCRETE MONUMENT (AS NOTED)
- IRC... IRON ROD & CAP (AS NOTED)
- IR... IRON ROD (NO ID)
- N&D... NAIL & DISK (AS NOTED)
- N&W... NAIL & WASHER (AS NOTED)
- IPC... IRON PIPE & CAP (AS NOTED)
- IP... IRON PIPE (NO ID)
- MP... METAL PIPE (AS NOTED)
- PKD... PARKER-KALON MAGNETIC NAIL & DISK (AS NOTED)
- SPIKE... RAILROAD SPIKE (NO ID)
- NAIL... NAIL IN PAVEMENT (NO ID)
- X-CUT... SURVEYOR'S X-CUT
- ADA / HANDICAP SYMBOL
- BICYCLE LANE SYMBOL
- THRU LANE ARROW
- TURN LANE ARROW
- A/C UNIT
- ANTENNA
- BOLLARD
- FENCE POST
- IRRIGATION CONTROL VALVE
- MAIL BOX
- MONITORING / OBSERVATION WELL
- PUMP
- SATELLITE DISH
- SIGN
- TRAFFIC SIGNAL BOX
- TRAFFIC SIGNAL POLE
- CONCRETE LIGHT POLE
- FIBERGLASS LIGHT POLE
- METAL LIGHT POLE
- WOOD LIGHT POLE
- MITER-END SECTION
- STORMWATER MANHOLE
- STORM INLET / CATCH BASIN
- YARD DRAIN
- ELECTRIC BOX
- ELECTRIC LINE MARKER
- ELECTRIC PANEL
- ELECTRIC PEDESTAL
- ELECTRIC METER
- GUY ANCHOR
- CONCRETE POWER POLE
- METAL POWER POLE
- WOOD POWER POLE
- TRANSFORMER PAD

- GAS LINE MARKER
- GAS METER
- GAS VALVE
- REUSE BACKFLOW PREVENTER
- REUSE SERVICE STUB
- REUSE WATER METER
- REUSE WATER VALVE
- GREASE TRAP MANHOLE
- LIFT STATION
- CLEANOUT
- SANITARY SEWER MANHOLE
- SANITARY SEWER VALVE
- FIBER OPTIC CABLE MARKER
- FIBER OPTIC PEDESTAL
- TELECOM BOX
- TELECOM MANHOLE
- TELECOM LINE MARKER
- TELECOM PEDESTAL
- CABLE TV PEDESTAL
- BACTERIOLOGICAL SAMPLE POINT
- END-CAP
- 11° BEND
- 22° BEND
- 45° BEND
- 90° BEND
- TEE
- CROSS
- HOSE BIB
- BLOW-OFF VALVE
- BACKFLOW PREVENTER
- DOUBLE DETECTOR CHECK VALVE
- FIRE DEPARTMENT CONNECTION
- FIRE HYDRANT
- POST INDICATOR VALVE
- REDUCER
- WATER METER
- WATER SERVICE STUB
- WATER VALVE
- WELL
- AIR RELEASE VALVE
- UNKNOWN MANHOLE
- UNKNOWN UTILITY PEDESTAL
- UTILITY VAULT (AS NOTED)

- BENCHMARK
- W1 WETLAND FLAG
- BORING ID NUMBER / BORING ELEVATION
- 12.3 EXISTING SOFT ELEVATION
- 12.34 EXISTING HARD ELEVATION
- 60 MAJOR CONTOUR LINE
- 59 MINOR CONTOUR LINE
- CLS CENTERLINE SWALE
- EOW EDGE OF WATER
- x BARB WIRE FENCE
- X CHAIN LINK FENCE
- <> GUARDRAIL
- V VINYL FENCE
- // WOOD FENCE
- STM STORM PIPE (# DENOTES SIZE)
- TOS TOE OF SLOPE
- TOB TOP OF BANK
- OHE OVERHEAD WIRE
- UGP UNDERGROUND POWER
- GAS GAS LINE (# DENOTES SIZE)
- REC REUSE LINE (# DENOTES SIZE)
- FM FORCE MAIN (# DENOTES SIZE)
- SAN SEWER LINE (# DENOTES SIZE)
- TEL TELECOM LINE
- FOC FIBER OPTIC CABLE
- WM WATER LINE (# DENOTES SIZE)
- R/W RIGHT-OF-WAY LINE
- UNK UNKNOWN UTILITY LINE
- OHT OVERHEAD TRAFFIC CABLE

TREE LEGEND

SIZE DENOTED IN SYMBOL

- ASH
- BAY
- CAMPHOR
- CEDAR
- CHINABERRY
- CHERRY
- CITRUS
- CYPRESS
- ELM
- SWEETGUM
- HACKBERRY
- HICKORY
- HOLLY
- JUNIPER
- MAGNOLIA
- MAPLE
- MYRTLE
- OAK
- LAUREL OAK
- LIVE OAK
- PALM
- PINE
- SYCAMORE
- MISC. 1
- MISC. 2
- MISC. 3
- UNKNOWN
- DENOTES SIZE

LEGAL DESCRIPTION:

OFFICIAL RECORD BOOK 5485, PAGES 2833 - 2834

PARCEL 1: A PORTION OF BLOCK 24, A.W. BARRS SUBDIVISION OF THE SEYMOUR PICKETT GRANT AS PER MAP THEREOF RECORDED IN MAP BOOK 1, PAGE 106 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF SAID BLOCK 24; THENCE NORTH 18 DEGREES 10 MINUTES 21 SECONDS WEST ALONG THE WESTERLY LINE OF SAID BLOCK 24, A DISTANCE OF 95.18 FEET TO A POINT ON THE SOUTHERLY RIGHT-OF-WAY LINE OF TENTH STREET EXTENSION; THENCE NORTHEASTERLY ALONG A CURVE CONCAVE NORTHERLY, SAID CURVE HAVING A CENTRAL ANGLE OF 05 DEGREES 41 MINUTES 32 SECONDS, A RADIUS OF 1400.00 FEET, AN ARC DISTANCE OF 139.09 FEET; THENCE LEAVING SAID RIGHT-OF-WAY AND CURVE ALONG A NONRADIAL LINE SOUTH 18 DEGREES 18 MINUTES 09 SECONDS EAST, A DISTANCE OF 53.97 FEET TO THE SOUTHERLY LINE OF SAID BLOCK 24; THENCE SOUTH 71 DEGREES 44 MINUTES 13 SECONDS WEST ALONG SAID SOUTHERLY LINE, A DISTANCE OF 132.97 FEET TO THE POINT OF BEGINNING.

PARCEL 2: A PART OF LOTS 50 AND 51, MODEL LAND COMPANY SUBDIVISION AS RECORDED IN MAP BOOK 4, PAGE 9, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, LYING SOUTHERLY OF TENTH STREET EXTENSION BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

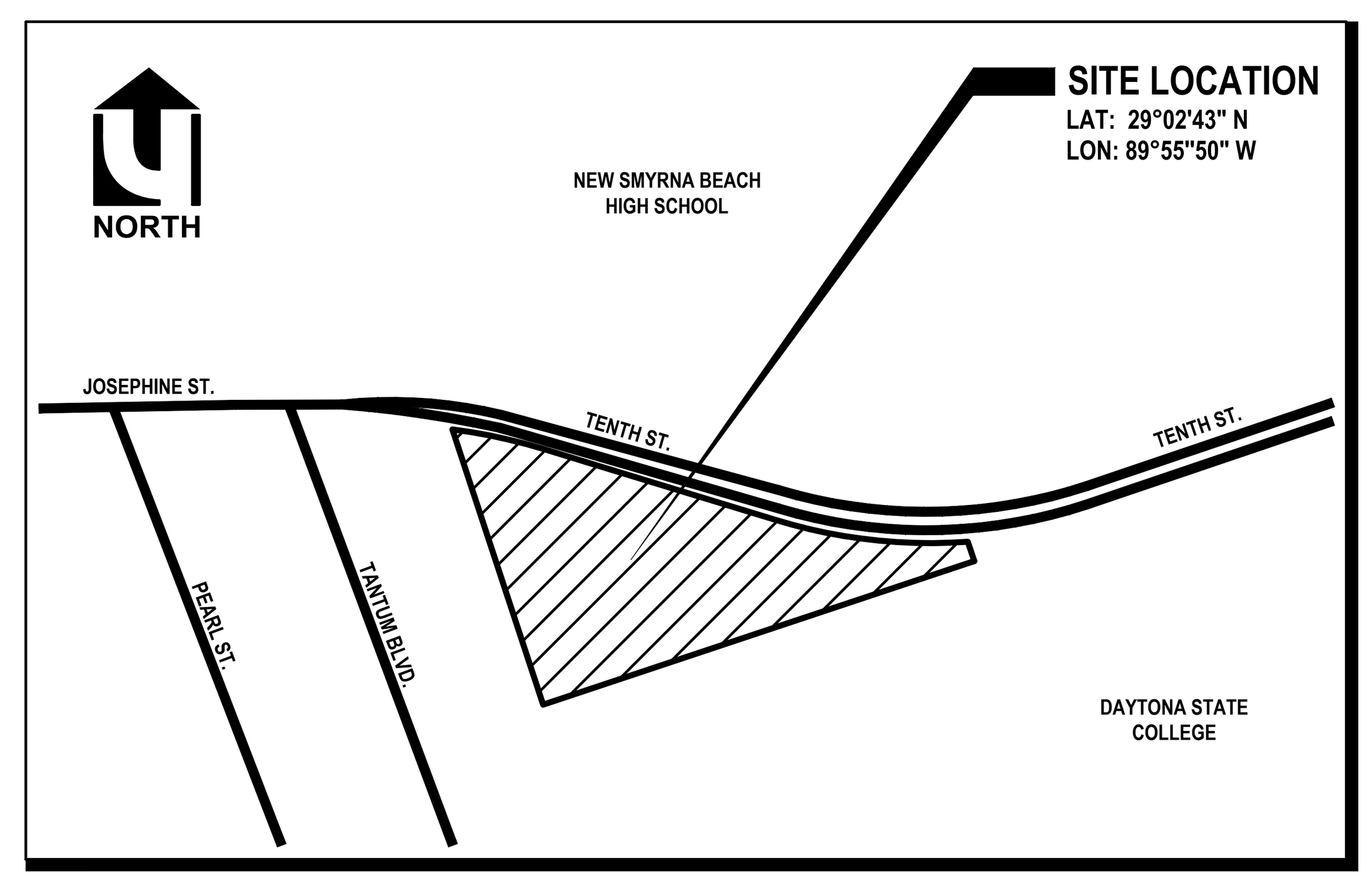
BEGINNING AT THE SOUTHEAST CORNER OF SAID LOT 51; THENCE SOUTH 71 DEGREES 44 MINUTES 13 SECONDS WEST ALONG THE SOUTHERLY LINE OF SAID LOT 51, A DISTANCE OF 724.04 FEET; THENCE NORTH 18 DEGREES 10 MINUTES 21 SECONDS WEST, A DISTANCE OF 548.01 FEET TO THE SOUTHERLY LINE OF SAID TENTH STREET; THENCE SOUTH 72 DEGREES 53 MINUTES 13 SECONDS EAST ALONG THE SAID SOUTHERLY LINE, A DISTANCE OF 482.83 FEET TO THE PC OF A CURVE; THENCE SOUTHEASTERLY ALONG A CURVE CONCAVE TO THE NORTH, SAID CURVE HAVING A CENTRAL ANGLE OF 15 DEGREES 17 MINUTES 12 SECONDS, A RADIUS OF 1400.00 FEET, AN ARC DISTANCE OF 373.52 FEET TO THE EAST LINE OF SAID LOT 51; THENCE SOUTH 18 DEGREES 10 MINUTES 21 SECONDS EAST ALONG SAID EAST LINE A DISTANCE OF 95.18 FEET TO THE POINT OF BEGINNING.

ALSO TOGETHER WITH,

OFFICIAL RECORD BOOK 3086, PAGES 56-57

PARCEL D: A APART OF LOTS 50 AND 51, MODEL LAND COMPANY SUBDIVISION AS RECORDED IN MAP BOOK 4, PAGE 9 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, LYING SOUTHERLY OF TENTH STREET EXTENSION BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF SAID LOT 51; THENCE S 71 DEGREES 44 MINUTES 13 SECONDS W ALONG THE SOUTHERLY LINE OF SAID LOT 51, A DISTANCE OF 724.04 FEET FOR THE POINT OF BEGINNING; THENCE CONTINUE S 71 DEGREES 41 MINUTES 13 SECONDS W, A DISTANCE OF 336.47 FEET TO THE WESTERLY LINE OF SAID LOT 51; THENCE N 18 DEGREES 10 MINUTES 21 SECONDS W ALONG THE WESTERLY LINE OF SAID LOT 50 AND LOT 51, A DISTANCE OF 760.52 FEET TO A POINT ON THE CURVE ON THE SOUTHERLY LINE OF SAID TENTH STREET EXTENSION; THENCE SOUTHEASTERLY ALONG A CURVE CONCAVE TO THE SOUTH, SAID CURVE HAVING A CENTRAL ANGLE OF 09 DEGREES 49 MINUTES 50 SECONDS, A RADIUS OF 1452.73 FEET, AN ARC DISTANCE OF 249.25 FEET TO THE PT OF SAID CURVE; THENCE S 72 DEGREES 53 MINUTES 13 SECONDS E ALONG THE TANGENT OF THE PREVIOUSLY DESCRIBED CURVE, A DISTANCE OF 149.07 FEET; THENCE S 18 DEGREES 10 MINUTES 21 SECONDS E, A DISTANCE OF 548.01 FEET TO THE POINT OF BEGINNING. CONTAINING 5.11 ACRES MORE OR LESS. THE WESTERLY 20 FEET SUBJECT TO A DRAINAGE EASEMENT.



LOCATION MAP

SCALE 1" = 500.0001'

GENERAL NOTES AND SURVEY REPORT:

1. BEARINGS DENOTED (SP) AS SHOWN HEREON ARE BASED ON THE FLORIDA STATE PLANE COORDINATE SYSTEM, EAST ZONE GRID, NORTH AMERICAN DATUM OF 1983 (NAD83) WITH 2011 ADJUSTMENT AS DERIVED FROM THE LENGEMANN NETWORK, A TOPCON GNSS NETWORK. AS A REFERENCE FOR THIS SURVEY, ALONG THE SOUTH LINE OF LOT 51 MODEL LAND COMPANY AS RECORDED MAP BOOK 16, PAGE 61, HAS A BEARING OF (S 71°36'15" E).
2. LEGAL DESCRIPTION PER VOLUSIA COUNTY OFFICIAL RECORDS
3. MEASURED DIMENSIONS ARE DENOTED (M), WHEN DIFFERS FROM RECORDED/DESCRIBED DIMENSIONS. DIMENSIONS INDICATED HEREON ARE IN U.S. STANDARD FEET AND DECIMAL PART THEREOF, UNLESS OTHERWISE NOTED HEREON.
4. FLOOD PLAIN CERTIFICATION ACCORDING TO THE FEMA (FEDERAL EMERGENCY MANAGEMENT AGENCY) F.I.R.M (FEDERAL INSURANCE RATE MAP), MAP NUMBER 12127C0543J, COMMUNITY OF VOLUSIA COUNTY, DATED: SEPTEMBER 29, 2017. THE PROPERTY IS IN FLOOD ZONE "X" AND ZONE "X" (ORANGE) WITH 0.2% ANNUAL CHANCE FLOOD HAZARD, AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH LESS THAN ONE SQUARE MILE. ALSO BEING WITHIN FLOOD ZONE "AE" WITH A BASE FLOOD ELEVATION OF 5 FEET
5. ACCURACY STATEMENT: THE EXPECTED ACCURACY OF THE CONTROL TO ESTABLISH THE BOUNDARY OF THE SUBJECT PROPERTY IS COMMERCIAL. THE CLOSURE OF THE TRAVERSE FOR THIS PROJECT EXCEEDS 1:10,000.
6. DATA SOURCES: NONE REQUESTED AT TIME OF SURVEY.
7. MEASUREMENT METHODS: HORIZONTAL AND VERTICAL MEASURES MADE BY ONE OR MORE OF THE FOLLOWING INSTRUMENTS: TOPCON INSTRUMENTS GPT-3003W, SOKKIA GRX-1 GPS INSTRUMENTS, TOPCON FC500 DATA COLLECTOR USING MAGNET SOFTWARE, PAL-2 LUFKIN STEEL TAPE, CST STEEL TAPE, STEEL HIGHWAY CHAIN, CST & LUFKIN FIBERGLASS TAPE FOR DIMENSIONS FOR BUILDINGS.
8. LINEAGE OF DATA HORIZONTAL DATA REFERENCES, DATE OF ORIGINAL PLAT.
   A) SPANISH MISSION HEIGHTS UNIT NO.2 PLAT, AS RECORDED IN PLAT BOOK 23, PAGE 119, DATED: JANUARY 14, 1956
   B) SPANISH MISSION HEIGHTS UNIT NO.3 PLAT, AS RECORDED IN PLAT BOOK 19, PAGE 197, DATED: DECEMBER 6, 1956
   C) MODEL LAND COMPANY PLAT, AS RECORDED IN PLAT BOOK 16, PAGE 61, DATED: OCTOBER, 1907
   D) BOUNDARY SURVEY PERFORMED BY: UPHAM INC., FILE: E-104, DATED: MAY 28, 2005
9. LIMITATIONS:
   A) NO INSTRUMENTS OF RECORD REFLECTING EASEMENTS, RIGHT-OF-WAY AND OR OWNERSHIP WERE FURNISHED TO THIS SURVEYOR. THERE MAY BE ADDITIONAL RESTRICTIONS AND/OR OTHER MATTERS THAT ARE NOT SHOWN ON THIS PLAT OF SURVEY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY, NO UNDERGROUND INSTALLATIONS OR IMPROVEMENTS HAVE BEEN LOCATED EXCEPT AS SHOWN. IF LOCATION OF EASEMENTS OR RIGHT-OF-WAY OF RECORD, OTHER THAN THOSE ON RECORD PLATS, IS REQUIRED, THIS INFORMATION MUST BE FURNISHED TO THE SURVEYOR AND MAPPER.

   B) IT IS UNDERSTOOD TO BE THE PROFESSIONAL OPINION OF THIS SURVEYOR AND THE FIRM, FROM WHICH IS FORMULATED ON HIS BEST KNOWLEDGE, INFORMATION AND BELIEF, AND AS SUCH, DOES NOT CONSTITUTE A GUARANTEE OR WARRANTY, EITHER EXPRESSED OR IMPLIED. FURTHERMORE, THIS SURVEYOR AND FIRM, DOES NOT ASSUME RESPONSIBILITY AND SHALL NOT BE LIABLE FOR CLAIMS ARISING FROM ERRONEOUS OR INCORRECT INFORMATION FURNISHED BY THE OWNER, LENDER, OR OWNER'S CONTRACTORS OR OTHERS, WHICH IS USED AS A BASIS TO FORMULATE THIS SURVEYOR'S OPINION.

   C) THE ACCEPTANCE OF THIS SURVEY AS CERTIFIED FOR THE EXCLUSIVE USE OF NAMES SHOWN HEREON SHALL CONSTITUTE FULFILLMENT OF MY CONTRACTUAL OBLIGATION. ADDITIONAL SEALED ORIGINALS MAY BE PURCHASED UP TO SIX MONTHS AFTER THE DATE OF THE INVOICE. "ORIGINAL" AS DEFINED HEREON REFERS TO THE SIGNED AND SEALED GRAPHIC REPRESENTATION OF THE FIELD SURVEY. CAD FILES ARE NOT THE SURVEY AND THERE WILL BE A SURCHARGE FOR THEM. ADDITIONS OR DELETIONS TO SURVEY MAPS OR REPORTS BY OTHER THAN THE SIGNING PARTY IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE PARTY.

   D) TAX PARCEL IDENTIFICATION NUMBERS, ADJACENT OWNERS NAMES AND ADDRESS WHEN SHOWN SHOWN IS EITHER SUPPLIED BY CLIENT AND/OR TAKEN FROM COUNTY APPRAISER'S INTERNET WEB PAGE AND MAY NOT BE THE MOST CURRENT.

   E) SPECIAL PURPOSE SURVEYS WHEN IDENTIFIED AS TYPE OF SURVEY:
      1) WHEN TREES AS SHOWN ON THE SURVEY IT IS FOR THE LOCATION OF THE TREES 6" INCHES DIAMETER AND ABOVE TREES TAKEN APPROXIMATELY 4 TO 4-1/2 FEET ABOVE GROUND LEVEL TREE IDENTIFICATION OTHER THAN LOCATION AND SIZE, SEE AN ARBORIST.
      2) JURISDICTIONAL WETLANDS WHEN SHOWN WERE LOCATED FROM FLAGS/MARKS BY BIOLOGIST / ENVIRONMENTALIST. AND THE DETERMINATION OF WETLANDS ARE OUT OF THE EXPERTISE OF THIS SURVEYOR AND MAPPER.
      3) ARCHAEOLOGICAL FEATURES WHEN SHOWN WERE LOCATED FROM OBJECTS IDENTIFIED BY OTHERS AND THE DETERMINATION OF WHAT CONSTITUTES A ARCHAEOLOGICAL FEATURES IS OUT OF THE EXPERTISE OF THIS SURVEYOR AND MAPPER.
      4) WILDLIFE CORRIDORS OR HABITATS WHEN SHOWN WERE LOCATED FROM OBJECTS IDENTIFIED BY WHAT CONSTITUTES A WILDLIFE CORRIDORS OR HABITATS IS OUT OF THE EXPERTISE OF THIS SURVEYOR AND MAPPER
      5) GEOTECHNICAL BORINGS SHOWN AS MARKED AND FIELD LOCATED.

   F) AS-BUILT / RECORD SURVEYS WHEN IDENTIFIED AS TYPE OF SURVEY:
      1) WHEN UNDERGROUND UTILITIES, SUCH AS UNDERGROUND CABLES, GAS MAINS, WATER MAINS, SANITARY SEWER SYSTEMS AND STORM COLLECTIONS SYSTEMS ARE SHOWN. THE LIMITS OF THIS SURVEY INCLUDE VISIBLE STRUCTURES / IMPROVEMENTS IN COMBINATION WITH AS-BUILT / RECORD DRAWINGS SUPPLIED BY OTHERS.
      2) WHEN THE PERCENTAGE OF SLOPES ARE SHOWN IT IS BASED ON THE INVERTS BETWEEN VISIBLE STRUCTURES. THIS SURVEY DOES NOT INCLUDE VIDEO PIPELINE INSPECTIONS. VERIFICATION OF LINE OF SITE HAS NOT BEEN VERIFIED. THIS SURVEYOR SUGGESTS VIDEO PIPELINE INSPECTION BY A PROFESSIONALS PROVIDING SERVICE OF THAT SPECIALTY.
      3) THIS SURVEYOR SUGGESTS VIDEO PIPELINE INSPECTION BY A PROFESSIONAL PROVIDING SERVICE OF THAT SPECIALTY.

   G) TOPOGRAPHIC SURVEY:
      1) CONTOURS ARE ON ONE FOOT INTERVALS, INTERPOLATED BETWEEN 100 FOOT GRIDS, VISIBLE GRADE BREAKS, ALONG WITH RANDOM GROUND ELEVATIONS.
      2) OFF-SITE TOPOGRAPHIC INFORMATION SHOWN IS BASED ON THE REQUEST BY THE CLIENT AND OR THE CLIENT'S AGENT, BEING AN ARCHITECT OR ENGINEER.

   H.) "AFFECT" AS USED HEREON REFERS TO AN ITEM BEING LOCATED ON OR INCLUDES THE SUBJECT PARCEL. "DOES NOT AFFECT" AS USED HEREON REFERS TO THE ITEM BEING LOCATED OFF THE SUBJECT PARCEL. ANY OTHER USE OF THE ABOVE TERMINOLOGY IS A MATTER OF LAW AND OUTSIDE THE EXPERTISE OF A FLORIDA PROFESSIONAL SURVEYOR AND MAPPER.
      1.) AFFECTS THE PROPERTY AND IS DEPICTED ON THE SURVEY
      2.) AFFECTS THE PROPERTY BUT IS NOT PLOTTABLE
      3.) DOES NOT AFFECT THE PROPERTY
      4.) IS NOT A SURVEY MATTER
      5.) DOCUMENTATION NOT PROVIDED TO SURVEYOR

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY MICHAEL E. AWAD, PSM ON THE DATE AND TIME STAMP, AS SHOWN HEREON, USING AN ELECTRONIC SIGNATURE. THIS ELECTRONIC SIGNATURE AND SEAL ARE IN COMPLIANCE WITH FLORIDA ADMINISTRATIVE CODE CHAPTER 5J-17.062 (3) EFFECTIVE DATE: JULY 15, 2018.

AN ELECTRONIC SIGNATURE IS A DIGITAL AUTHENTICATION PROCESS ATTACHED TO OR LOGICALLY ASSOCIATED WITH AN ELECTRONIC DOCUMENT AND SHALL CARRY THE SAME WEIGHT, AUTHORITY AND EFFECT AS AN ORIGINAL SIGNATURE AND SEAL. THE ELECTRONIC SIGNATURE, WHICH CAN BE GENERATED BY USING EITHER PUBLIC KEY INFRASTRUCTURE OR SIGNATURE DYNAMICS TECHNOLOGY, MUST BE AS FOLLOWS:
(A) UNIQUE TO THE PERSON USING IT
(B) CAPABLE OF VERIFICATION
(C) UNDER THE SOLE CONTROL OF THE PERSON USING IT
(D) LINKED TO A DOCUMENT IN SUCH MANNER THAT THE ELECTRONIC SIGNATURE IS INVALIDATED IF ANY DATA IN THE DOCUMENT IS CHANGED.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED & SEALED AND THE SIGNATURE & SEAL MUST BE VERIFIED ON ALL ELECTRONIC COPIES.

SURVEYOR'S CERTIFICATION:

CERTIFIED FOR THE EXCLUSIVE USE OF AS FOLLOWS:

...

THE FOREGOING PLAT IS CERTIFIED TO MEET THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS, EFFECTIVE DATE JULY 1, 2018, AS PURSUANT TO SECTION 472, FLORIDA STATUTES.

DATE OF FIELD WORK: 03/23/2022

THIS ITEM HAS BEEN SIGNED AND SEALED ON THE DATE AND TIME AS SHOWN HEREON; NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND THE RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER; FLORIDA ADMINISTRATIVE CODE 5J-17.062

BY:______________________ DATE: 03/25/2022
MICHAEL E. AWAD, PSM No. 5574

SHEET 3 OF 3

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SEE CERTIFICATION FOR SURVEYOR SIGNATURE

SURVEY REPORT

THIS REPORT IS NEITHER FULL NOR COMPLETE WITHOUT THE MAP

TYPE OF SURVEY: BOUNDARY
MAP SUBJECT: PARCEL: 74-19-2300-0490
ADDRESS: 1070 TENTH STREET NEW SMYRNA BEACH, FLORIDA

LOCATION No:	17-34-48
PROJECT No:	220303
FIELD WORK BY:	JGP
DATE:	03/23/2022
OFFICE WORK BY:	JAE
DATE:	03/25/2022
FIELD BOOK & PG:	## - ##
SCALE:	AS SHOWN
SHEET NUMBER:	SU-3

THE CITY OF NEW SMYRNA BEACH - PLANNING DEPARTMENT

SP-17-24 FLAGLER DUNES, SITE PLAN REVIEW FOR APPROVAL FOR AN 80-UNIT TOWNHOME DEVELOPMENT ON THE SOUTH SIDE OF 10TH STREET, ACROSS FROM NEW SMYRNA BEACH HIGH SCHOOL

September 8, 2025

Background:

A. **Applicant**: Roger W. Strcula, P.E., CPESC of Upham, Inc., 265 Kenilworth, Avenue, Ormond Beach, FL 32174

B. Property Owner: Alicio & Nirma Pina, 15500 New Barn Road, Suite 104, Miami Lakes, FL 33014

C. Request: Site Plan review for approval of an 80 20-foot-wide townhouse lots, with private roadways, common area tracts, master stormwater pond, with tree and wetland preservation areas.

D. Site Information:

- **Size:** 10.323 +/- acres
- **Location:** South side of 10th Street, east of Tatum Boulevard
- **Zoning:** R-4 Multi-Family Residential
- **Future Land Use:** Medium Density Residential

E: Tax I.D. Numbers: 7419-23-00-0492, 7449-01-24-0011, and 7419-23-00-0490

F. Exhibits:

Exhibit A: Location Map
Exhibit B: Aerial Map
Exhibit C: Site Plan
Exhibit D: Full civil and landscape construction plans

Findings:

A. The subject property is located on the south side of 10th Street, south of the New Smyrna Beach High School, and north and west of the New Smyrna Beach Daytona State campus. South of the parcels is the Gabordy Canal, which dates to the Turnbull era, and is maintained by Volusia County. The property is currently undeveloped, and has a large number of trees on it. South of the canal is largely wooded, and in Edgewater. To the

west is a retention pond, owned by Volusia County, and Grace Baptist church is along 10th, in adjacent to an area of the parcel is largely left natural on the subject site.

B. The property originally has a Future Land Use Category of Medium Density Residential which allows up to 8 units an acre to be developed. The property is zoned R-4, Multi-Family Residential, which allows townhouse lots to be 20-foot wide. Please see **Exhibit C** for a depiction of the proposed layout. The full set of plans are included as **Exhibit D**.

C. In sum, the project will contain 80 townhouse units, within 14 buildings. The buildings vary in size between 4 units and 8 units. Internal to the development is a private road, Flagler Dunes Circle, maintenance of which is the responsibility of the owner(s).

D. The egress/ingress to the parcel is on the east side of the site along 10th Street, which is a Volusia County roadway. There is a right-turn into the site, and a right-turn out, only. Across from the high school entrance is an emergency stabilized access to the parcel. A secondary access-even if it is a stabilized turf and not paved- is required for all developments, thus meets all requirements of the City's Land Development Regulations.

E. In total, 49.4% of the site will be pervious, with the remaining 50.6% being impervious, with a combination of buildings, roads, walkways and driveways/aprons. There are two small areas of wetlands on the site which are both preserved in wooded areas.

F. Each unit will have its own garage space, and a total of two parking spaces on each parcel. The buildings are to be two-stories tall.

G. Originally, the site had two different Future Land Use (FLU) classifications and zoning classifications. The eastern parcel had a FLU of High Density, which allows up to 18 units an acre, and the western parcel had a Medium Density FLU, which allows up to 8 units an acre. The owners decreased the High Density FLU to Medium Density, making the whole parcel Medium Density, or 8 units per acre for both parcels.

H. As can be seen in the aerial map (**Exhibit B**), there are a lot of trees on the site. The mitigation required for the site totals 628 trees with a minimum 2.5" diameter. Larger trees can be planted throughout the development to reduce the number of trees while still meeting mitigation requirements. Once minimum planting requirements have been met on site, the applicant has the option to meet the remaining mitigation by making payment to the City's Tree Fund.

I. Regarding amenities, there is a proposed pickle ball court in the project. In addition, there are sidewalks throughout Flagler Dunes, as well as a meandering sidewalk in the 20' landscape buffer along 10th Street.

Recommendation: Staff recommends **approval** of the site plan.

Fiscal Analysis:
N/A

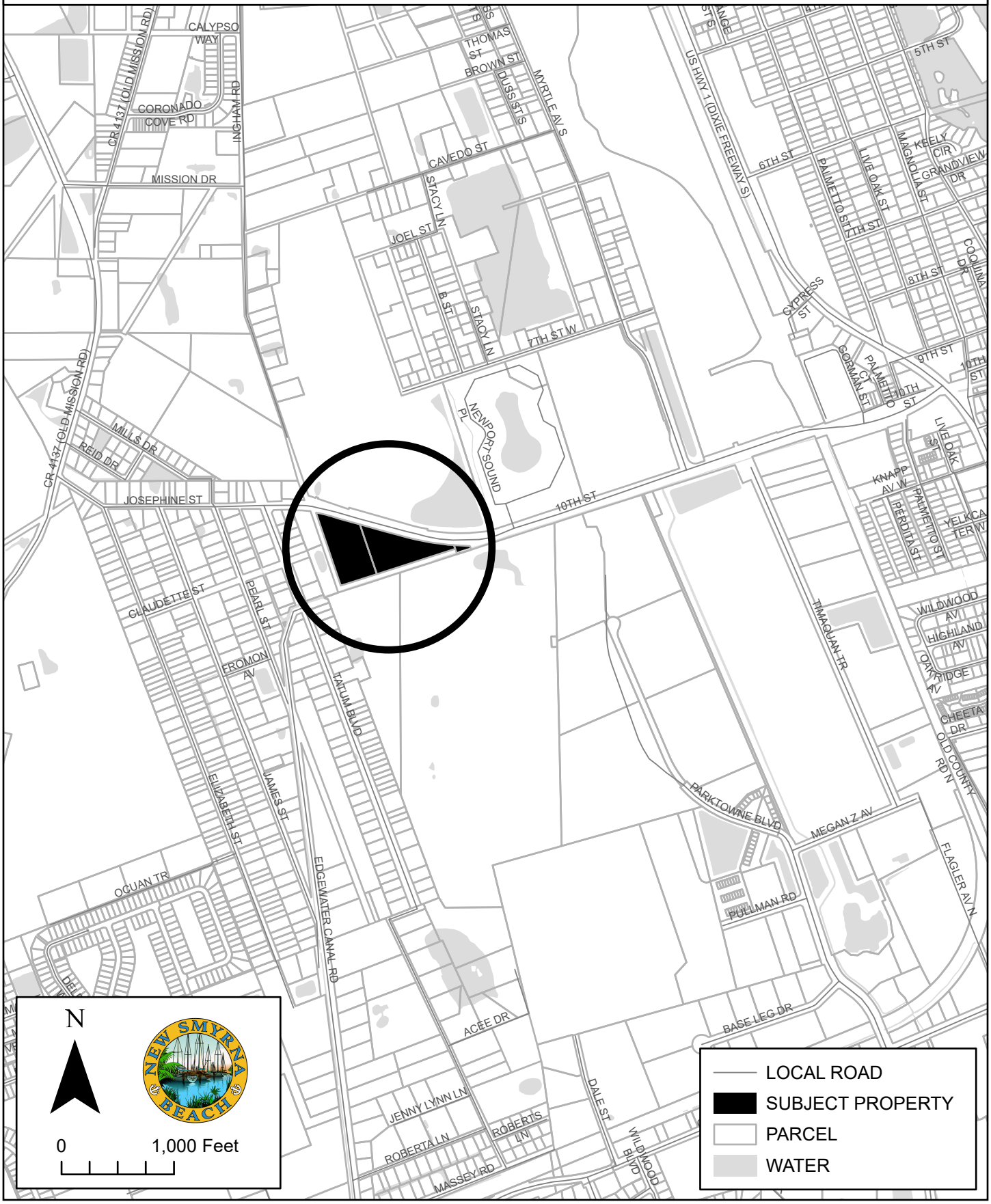
Strategic Plan Item:
No

Staff Report Created By: Jake Baker - Senior Planner

Attachments:

Exhibit A Location Map.pdf
Exhibit B Aerial Map.pdf
Exhibit C Site Plan.pdf
Exhibit D Full Civil and Landscape Construction Plans.pdf

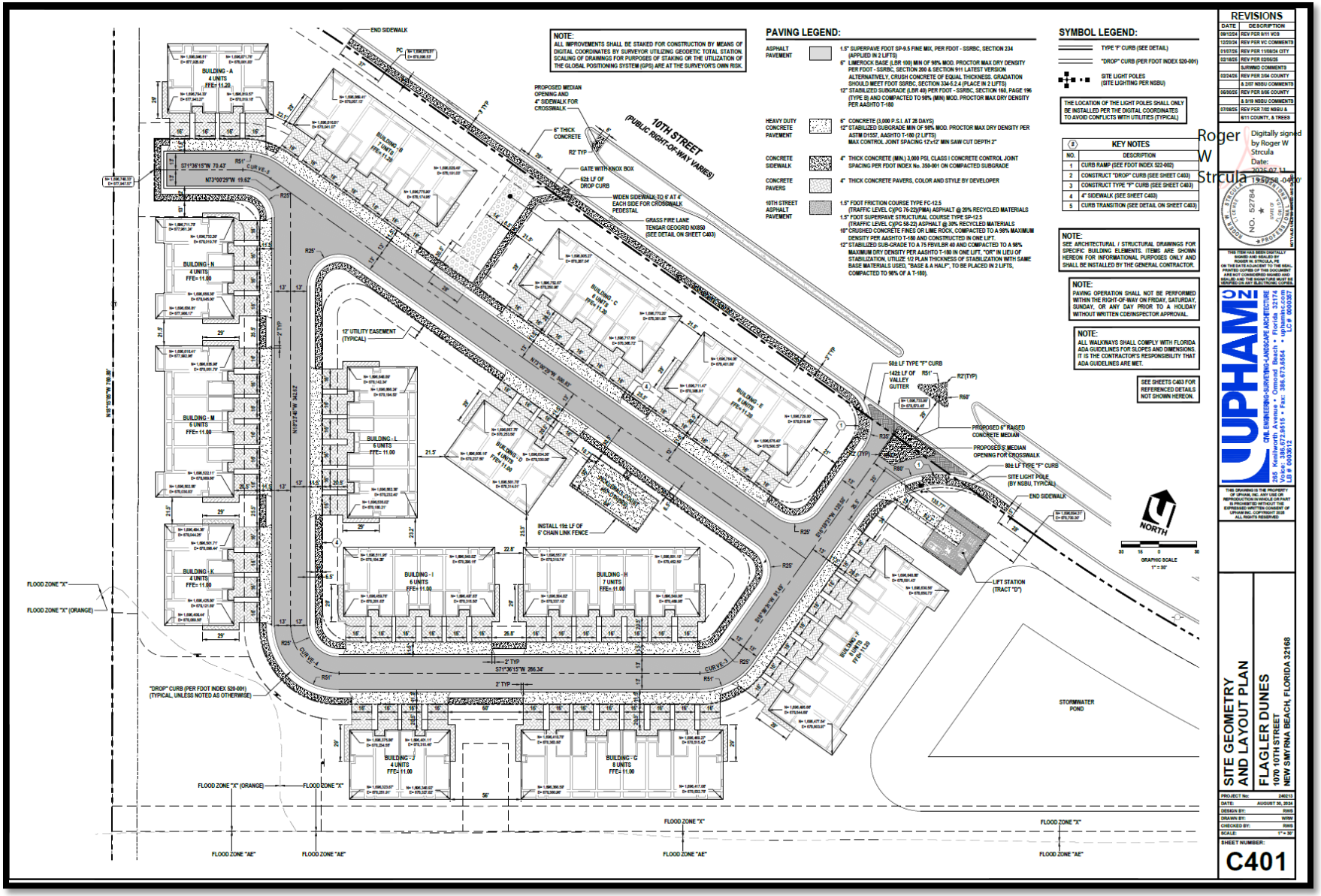
S-1-25: FLAGLER DUNES (FINAL PLAT)
PARCELS: 7419-23-00-0490, 7419-23-00-0492, 7449-01-24-0011
LOCATION MAP



S-1-25: FLAGLER DUNES (FINAL PLAT)
PARCELS: 7419-23-00-0490, 7419-23-00-0492, 7449-01-24-0011
AERIAL MAP



Exhibit C


NOTE:
ALL IMPROVEMENTS SHALL BE STAKED FOR CONSTRUCTION BY MEANS OF DIGITAL COORDINATES BY SURVEYOR UTILIZING GEODETIC TOTAL STATION. SCALING OF DRAWINGS FOR PURPOSES OF STAKING OR THE UTILIZATION OF THE GLOBAL POSITIONING SYSTEM (GPS) ARE AT THE SURVEYOR'S OWN RISK.
PAVING LEGEND:
ASPHALT PAVEMENT
1.5" SUPERPAVE FDOT SP-9.5 FINE MIX, PER FDOT - SSRBC, SECTION 234 (APPLIED IN 2 LIFTS)
6" LIMEROCK BASE (LBR 100) MIN OF 98% MOD. PROCTOR MAX DRY DENSITY PER FDOT - SSRBC, SECTION 200 & SECTION 911 LATEST VERSION ALTERNATIVELY, CRUSH CONCRETE OF EQUAL THICKNESS, GRADATION SHOULD MEET FDOT SSRBC, SECTION 334-5.2.4 (PLACE IN 2 LIFTS)
12" STABILIZED SUBGRADE (LBR 40) PER FDOT - SSRBC, SECTION 160, PAGE 196 (TYPE B) AND COMPACTED TO 98% (MIN) MOD. PROCTOR MAX DRY DENSITY PER AASHTO T-180
HEAVY DUTY CONCRETE PAVEMENT
6" CONCRETE (3,000 P.S.I. AT 28 DAYS)
12" STABILIZED SUBGRADE MIN OF 98% MOD. PROCTOR MAX DRY DENSITY PER ASTM D1557, AASHTO T-180 (2 LIFTS)
MAX CONTROL JOINT SPACING 12'x12' MIN SAW CUT DEPTH 2"
CONCRETE SIDEWALK
4" THICK CONCRETE (MIN.) 3,000 PSI, CLASS I CONCRETE CONTROL JOINT SPACING PER FDOT INDEX No. 300-001 ON COMPACTED SUBGRADE
CONCRETE PAVERS
4" THICK CONCRETE PAVERS, COLOR AND STYLE BY DEVELOPER
10TH STREET ASPHALT PAVEMENT
1.5" FDOT FRICTION COURSE TYPE FC-12.5 (TRAFFIC LEVEL C)PG 76-22)(PMA) ASPHALT @ 20% RECYCLED MATERIALS
1.5" FDOT SUPERPAVE STRUCTURAL COURSE TYPE SP-12.5 (TRAFFIC LEVEL C)PG 58-22) ASPHALT @ 30% RECYCLED MATERIALS
10" CRUSHED CONCRETE FINES OR LIME ROCK, COMPACTED TO A 98% MAXIMUM DENSITY PER AASHTO T-180 AND CONSTRUCTED IN ONE LIFT.
12" STABILIZED SUB-GRADE TO A 75 FBV/LBR 40 AND COMPACTED TO A 98% MAXIMUM DRY DENSITY PER AASHTO T-180 IN ONE LIFT, "OR" IN LIEU OF STABILIZATION, UTILIZE 1/2 PLAN THICKNESS OF STABILIZATION WITH SAME BASE MATERIALS USED, "BASE & A HALF", TO BE PLACED IN 2 LIFTS, COMPACTED TO 98% OF A T-180).
SYMBOL LEGEND:
TYPE 'F' CURB (SEE DETAIL)
"DROP" CURB (PER FDOT INDEX 520-001)
SITE LIGHT POLES (SITE LIGHTING PER NSBU)
THE LOCATION OF THE LIGHT POLES SHALL ONLY BE INSTALLED PER THE DIGITAL COORDINATES TO AVOID CONFLICTS WITH UTILITIES (TYPICAL)
KEY NOTES
NO. | DESCRIPTION
1 | CURB RAMP (SEE FDOT INDEX 522-002)
2 | CONSTRUCT "DROP" CURB (SEE SHEET C403)
3 | CONSTRUCT TYPE "F" CURB (SEE SHEET C403)
4 | 4" SIDEWALK (SEE SHEET C403)
5 | CURB TRANSITION (SEE DETAIL ON SHEET C403)
NOTE:
SEE ARCHITECTURAL / STRUCTURAL DRAWINGS FOR SPECIFIC BUILDING ELEMENTS. ITEMS ARE SHOWN HEREON FOR INFORMATIONAL PURPOSES ONLY AND SHALL BE INSTALLED BY THE GENERAL CONTRACTOR.
NOTE:
PAVING OPERATION SHALL NOT BE PERFORMED WITHIN THE RIGHT-OF-WAY ON FRIDAY, SATURDAY, SUNDAY, OR ANY DAY PRIOR TO A HOLIDAY WITHOUT WRITTEN CDE/INSPECTOR APPROVAL.
NOTE:
ALL WALKWAYS SHALL COMPLY WITH FLORIDA ADA GUIDELINES FOR SLOPES AND DIMENSIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY THAT ADA GUIDELINES ARE MET.
SEE SHEETS C403 FOR REFERENCED DETAILS NOT SHOWN HEREON.
10TH STREET (PUBLIC RIGHT-OF-WAY VARIES)
END SIDEWALK
PROPOSED MEDIAN OPENING AND 4' SIDEWALK FOR CROSSWALK
6" THICK CONCRETE
GATE WITH KNOX BOX
62± LF OF DROP CURB
WIDEN SIDEWALK TO 6' AT 4' EACH SIDE FOR CROSSWALK PEDESTAL
GRASS FIRE LANE
TENSAR GEOGRID NX850 (SEE DETAIL ON SHEET C403)
12' UTILITY EASEMENT (TYPICAL)
INSTALL 192 LF OF 6' CHAIN LINK FENCE
502± LF TYPE "F" CURB
142± LF OF VALLEY GUTTER
PROPOSED 6" RAISED CONCRETE MEDIAN
PROPOSED S MEDIAN OPENING FOR CROSSWALK
802± LF TYPE "F" CURB
SITE LIGHT POLE (BY NSBU, TYPICAL)
END SIDEWALK
LIFT STATION (TRACT "D")
STORMWATER POND
BUILDING - A 4 UNITS FFE= 11.20
BUILDING - B 4 UNITS FFE=11.20
BUILDING - C 6 UNITS FFE=11.00
BUILDING - D 4 UNITS FFE=11.00
BUILDING - E 4 UNITS FFE=11.20
BUILDING - F 4 UNITS FFE=11.20
BUILDING - G 8 UNITS FFE= 11.00
BUILDING - H 7 UNITS FFE=11.00
BUILDING - I 6 UNITS FFE=11.00
BUILDING - J 4 UNITS FFE= 11.00
BUILDING - K 4 UNITS FFE= 11.00
BUILDING - L 6 UNITS FFE= 11.00
BUILDING - M 6 UNITS FFE= 11.00
BUILDING - N 4 UNITS FFE= 11.00
FLOOD ZONE "X"
FLOOD ZONE "X" (ORANGE)
FLOOD ZONE "AE"
"DROP" CURB (PER FDOT INDEX 520-001) (TYPICAL, UNLESS NOTED AS OTHERWISE)
S71°36'15"W 70.43'
S71°36'15"W 286.34'
N73°00'29"W 15.62'
N17°23'45"W 443.12'
N16°35'57"W 706.38'
S16°35'57"E 706.38'
S73°24'03"W 134.00'
S16°35'57"E 706.38'
R25'
R50'
R51'
R2' TYP
2' TYP
CURVE-1
CURVE-2
CURVE-3
CURVE-4
NORTH
GRAPHIC SCALE
1" = 30'
REVISIONS
DATE | DESCRIPTION
09/12/24 | REV PER 9/11 VCS
12/20/24 | REV PER VC COMMENTS
01/07/25 | REV PER 11/08/24 CITY
02/18/25 | REV PER 2/05/25
| SJRWMD COMMENTS
02/24/25 | REV PER 2/04 COUNTY
| & 2/07 NSBU COMMENTS
06/30/25 | REV PER 5/06 COUNTY
| & 5/19 NSBU COMMENTS
07/08/25 | REV PER 7/02 NSBU &
| 6/11 COUNTY, & TREES
Roger W Strcula
Digitally signed by Roger W Strcula
Date: 2025.07.11 19:57:58 -04'00'
NO. 52784
STATE OF FLORIDA
PROFESSIONAL ENGINEER
ROGER W. STRCULA, P.E.
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY ROGER W. STRCULA, PE ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.
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CIVIL ENGINEERING • SURVEYING • LANDSCAPE ARCHITECTURE
265 Kentworth Avenue • Ormond Beach • Florida 32174
Phone: (386) 672-8510 • Fax: 386.673.6864 • LC# 0000367
LB # 0003612
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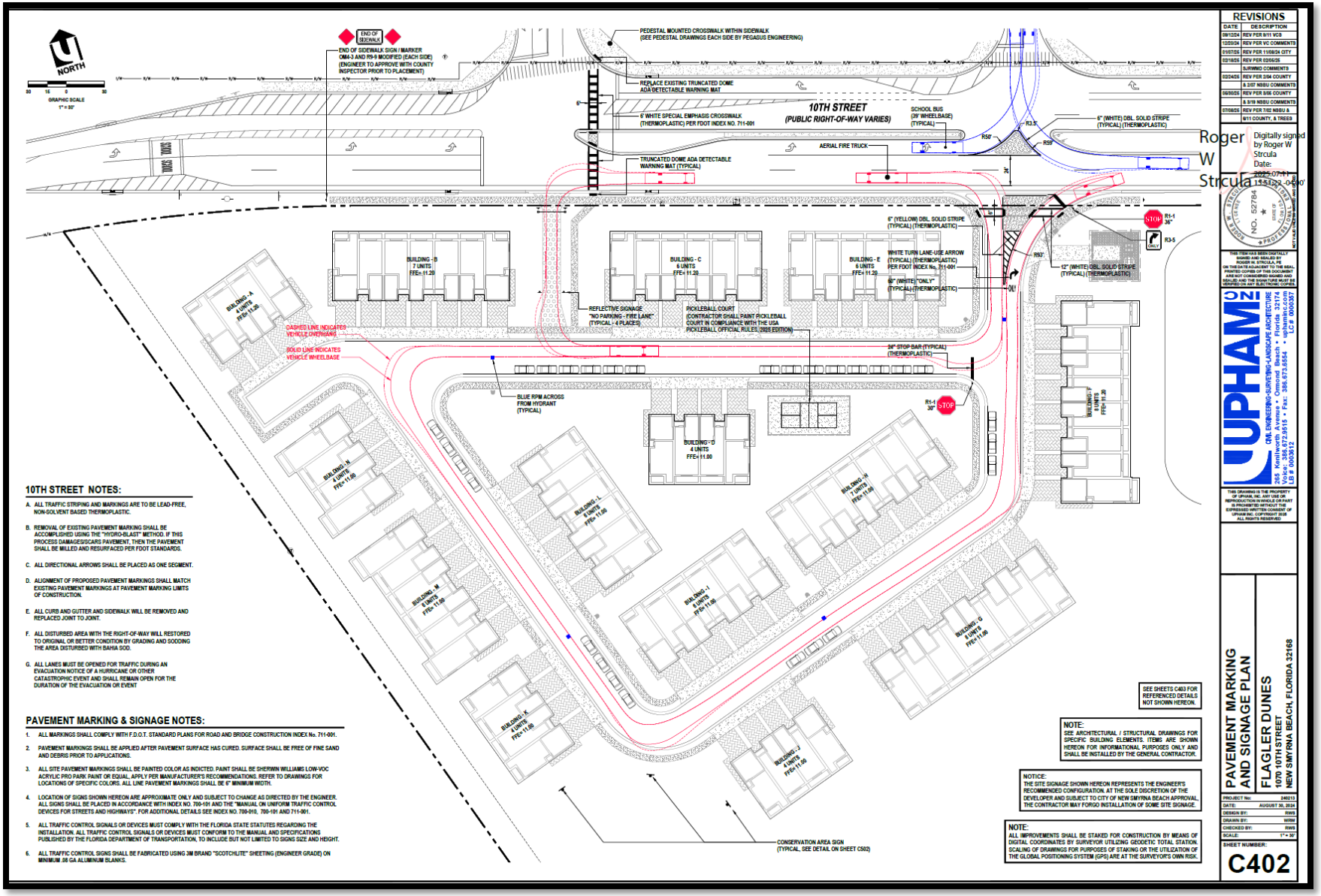
SITE GEOMETRY AND LAYOUT PLAN
FLAGLER DUNES
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168
PROJECT No: 240213
DATE: AUGUST 30, 2024
DESIGN BY: RWS
DRAWN BY: WRW
CHECKED BY: RWS
SCALE: 1" = 30'
SHEET NUMBER:
C401



10TH STREET NOTES:

A. ALL TRAFFIC STRIPING AND MARKINGS ARE TO BE LEAD-FREE, NON-SOLVENT BASED THERMOPLASTIC.

B. REMOVAL OF EXISTING PAVEMENT MARKING SHALL BE ACCOMPLISHED USING THE "HYDRO-BLAST" METHOD. IF THIS PROCESS DAMAGES/SCARS PAVEMENT, THEN THE PAVEMENT SHALL BE MILLED AND RESURFACED PER FDOT STANDARDS.

C. ALL DIRECTIONAL ARROWS SHALL BE PLACED AS ONE SEGMENT.

D. ALIGNMENT OF PROPOSED PAVEMENT MARKINGS SHALL MATCH EXISTING PAVEMENT MARKINGS AT PAVEMENT MARKING LIMITS OF CONSTRUCTION.

E. ALL CURB AND GUTTER AND SIDEWALK WILL BE REMOVED AND REPLACED JOINT TO JOINT.

F. ALL DISTURBED AREA WITH THE RIGHT-OF-WAY WILL RESTORED TO ORIGINAL OR BETTER CONDITION BY GRADING AND SODDING THE AREA DISTURBED WITH BAHIA SOD.

G. ALL LANES MUST BE OPENED FOR TRAFFIC DURING AN EVACUATION NOTICE OF A HURRICANE OR OTHER CATASTROPHIC EVENT AND SHALL REMAIN OPEN FOR THE DURATION OF THE EVACUATION OR EVENT

PAVEMENT MARKING & SIGNAGE NOTES:

1. ALL MARKINGS SHALL COMPLY WITH F.D.O.T. STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION INDEX No. 711-001.
2. PAVEMENT MARKINGS SHALL BE APPLIED AFTER PAVEMENT SURFACE HAS CURED. SURFACE SHALL BE FREE OF FINE SAND AND DEBRIS PRIOR TO APPLICATIONS.
3. ALL SITE PAVEMENT MARKINGS SHALL BE PAINTED COLOR AS INDICTED. PAINT SHALL BE SHERWIN WILLIAMS LOW-VOC ACRYLIC PRO PARK PAINT OR EQUAL. APPLY PER MANUFACTURER'S RECOMMENDATIONS. REFER TO DRAWINGS FOR LOCATIONS OF SPECIFIC COLORS. ALL LINE PAVEMENT MARKINGS SHALL BE 6" MINIMUM WIDTH.
4. LOCATION OF SIGNS SHOWN HEREON ARE APPROXIMATE ONLY AND SUBJECT TO CHANGE AS DIRECTED BY THE ENGINEER. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH INDEX NO. 700-101 AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS". FOR ADDITIONAL DETAILS SEE INDEX NO. 700-010, 700-101 AND 711-001.
5. ALL TRAFFIC CONTROL SIGNALS OR DEVICES MUST COMPLY WITH THE FLORIDA STATE STATUTES REGARDING THE INSTALLATION. ALL TRAFFIC CONTROL SIGNALS OR DEVICES MUST CONFORM TO THE MANUAL AND SPECIFICATIONS PUBLISHED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION, TO INCLUDE BUT NOT LIMITED TO SIGNS SIZE AND HEIGHT.
6. ALL TRAFFIC CONTROL SIGNS SHALL BE FABRICATED USING 3M BRAND "SCOTCHLITE" SHEETING (ENGINEER GRADE) ON MINIMUM .08 GA ALUMINUM SLANKS.

SEE SHEETS C403 FOR REFERENCED DETAILS NOT SHOWN HEREON.

NOTE:
SEE ARCHITECTURAL / STRUCTURAL DRAWINGS FOR SPECIFIC BUILDING ELEMENTS. ITEMS ARE SHOWN HEREON FOR INFORMATIONAL PURPOSES ONLY AND SHALL BE INSTALLED BY THE GENERAL CONTRACTOR.

NOTICE:
THE SITE SIGNAGE SHOWN HEREON REPRESENTS THE ENGINEER'S RECOMMENDED CONFIGURATION. AT THE SOLE DISCRETION OF THE DEVELOPER AND SUBJECT TO CITY OF NEW SMYRNA BEACH APPROVAL, THE CONTRACTOR MAY FORGO INSTALLATION OF SOME SITE SIGNAGE.

NOTE:
ALL IMPROVEMENTS SHALL BE STAKED FOR CONSTRUCTION BY MEANS OF DIGITAL COORDINATES BY SURVEYOR UTILIZING GEODETIC TOTAL STATION. SCALING OF DRAWINGS FOR PURPOSES OF STAKING OR THE UTILIZATION OF THE GLOBAL POSITIONING SYSTEM (GPS) ARE AT THE SURVEYOR'S OWN RISK.

REVISIONS

DATE	DESCRIPTION
09/13/24	REV PER 9/11 VC3
12/03/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
03/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
06/30/25	REV PER 5/06 COUNTY
	& 5/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Roger W Strcula — Digitally signed by Roger W Strcula Date: 2025.07.11 15:11:22 -04'00'

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY ROGER W. STRCULA, PE ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

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365 Kentworth Avenue • Ormond Beach • Florida 32174
Office: 386.672.3515 • Fax: 386.673.5584 • uphamcc.com
LA # 6666174 LC# 6666174

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PAVEMENT MARKING AND SIGNAGE PLAN

FLAGLER DUNES
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	1" = 30'

SHEET NUMBER:

C402

INDEX OF SHEETS

SHEET #	DESCRIPTION	REVISIONS
C000	COVER SHEET	
C100	SITE DEVELOPMENT INFORMATION	
C200	EXISTING SITE CONDITIONS AND CLEARING PLAN	
C201	FDOT TCP INDICES	
C202	FDOT TCP INDICES	
C203	FDOT TCP INDICES	
C300	EROSION CONTROL PLAN	
C301	EROSION CONTROL DETAILS AND NOTES	
C302	STORMWATER POLLUTION PREVENTION PLAN	
C400	OVERALL SITE GEOMETRY AND LAYOUT PLAN	
C401	SITE GEOMETRY & LAYOUT PLAN	
C402	PAVEMENT MARKING AND SIGNAGE PLAN	
C403	MISCELLANEOUS DETAILS AND NOTES	
C500	OVERALL STORM PIPING PLAN	
C501	SITE GRADING AND DRAINAGE PLAN	
C502	SECTIONS, DETAILS & NOTES	
C600	OVERALL SITE UTILITY PLAN	
C601	ENLARGED SITE UTILITY PLAN	
C602	OFF-SITE UTILITY PLAN (1 OF 2)	
C603	OFF-SITE UTILITY PLAN (2 OF 2)	
C604	SANITARY SEWER PLAN & PROFILE (1 OF 2)	
C605	SANITARY SEWER PLAN & PROFILE (2 OF 2)	
C700	NSBU STANDARD DETAILS AND NOTES (1 OF 7)	
C701	NSBU STANDARD DETAILS AND NOTES (2 OF 7)	
C702	NSBU STANDARD DETAILS AND NOTES (3 OF 7)	
C703	NSBU STANDARD DETAILS AND NOTES (4 OF 7)	
C704	NSBU STANDARD DETAILS AND NOTES (5 OF 7)	
C705	NSBU STANDARD DETAILS AND NOTES (6 OF 7)	
C706	NSBU STANDARD DETAILS AND NOTES (7 OF 7)	
L100	OVERALL LANDSCAPE PLAN AND CALCS	
L101	LANDSCAPE PLAN	
L200	LANDSCAPE DETAILS AND NOTES	
SU-1	ALTA /NSPS LAND TITLE & SPECIAL SURVEY (1 OF 3)	
SU-2	ALTA /NSPS LAND TITLE & SPECIAL SURVEY (2 OF 3)	
SU-3	ALTA /NSPS LAND TITLE & SPECIAL SURVEY (3 OF 3)	



300 150 0 300

GRAPHIC SCALE: 1" = 300'

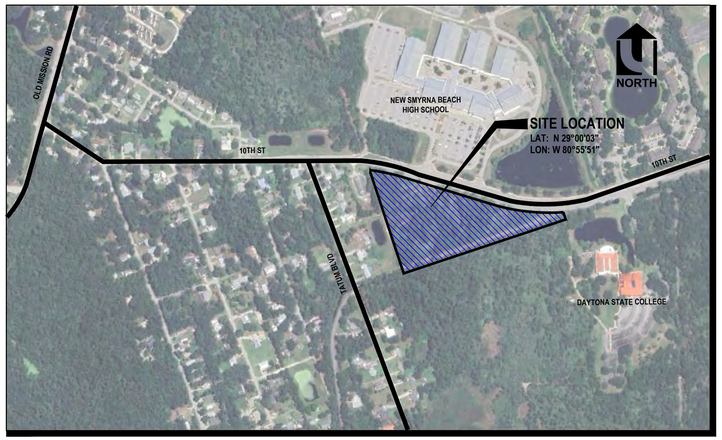
FLOOD ZONE MAP:

CONSTRUCTION DRAWINGS FOR

FLAGLER DUNES

MULTI-FAMILY TOWNHOME RESIDENTIAL DEVELOPMENT
1070 10TH STREET, NEW SMYRNA BEACH, FLORIDA 32168
SECTION 48, TOWNSHIP 17 SOUTH, RANGE 34 EAST

SUBMITTED AUGUST 30, 2024
REVISED DECEMBER 20, 2024
REVISED JANUARY 07, 2025
REVISED FEBRUARY 18, 2025
REVISED FEBRUARY 24, 2025
REVISED MAY 30, 2025
REVISED JULY 8, 2025



AERIAL PHOTO & LOCATION MAP

500 250 0 500

GRAPHIC SCALE: 1" = 500'

JURISDICTIONAL AGENCIES

	PERMIT No.
CITY OF NEW SMYRNA BEACH (DEVELOPMENT PERMIT)	SP-17-24
ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (STORMWATER)	99189-2
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (POTABLE WATER)	-
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (WASTEWATER)	-
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (NPDES)	-
VOLUSIA COUNTY (USE PERMIT)	2024-P-USE-0847

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

THE GENERAL CONTRACTOR SHALL ENSURE THAT ANY SUBCONTRACTOR HAS A COMPLETE SET OF CONSTRUCTION DRAWINGS FOR ITS RESPECTIVE WORK. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR SUBCONTRACTORS ONLY UTILIZING INDIVIDUAL DRAWINGS FOR ITS WORK WHERE ADDITIONAL INFORMATION MAY BE CONTAINED ON OTHER DRAWINGS WITHIN THE SET.

PROJECT DESCRIPTION:

A PROPOSED 80 UNIT MULTI-FAMILY TOWNHOME DEVELOPMENT CONSISTING OF (14) 2-STORY TOWNHOME BUILDINGS AND AMENITY AREA WITH A MASTER STORMWATER POND WITHIN A 10.32± ACRE PARCEL. INDIVIDUAL LOTS ARE 20' MINIMUM WIDTH, MINIMUM LOT DEPTH IS 75.5', AREAS OUTSIDE OF LOTS WILL BE COMMON AREA. THE MINIMUM 15% TREE PRESERVATION AREA IS PROVIDED. EACH LOT WILL HAVE SEPARATE WATER AND SEWER SERVICES WITHIN A UTILITY EASEMENT.

DEVELOPMENT CONTACTS:

DEVELOPER / OWNER:
ALICIO PINA AND NIRMA PINA AS
TRUSTEES OF THE ROYAL GROUP
INVESTMENTS ROTH 401(K) FOR THE
BENEFIT OF ALICIO PINA AND NIRMA PINA
15500 NEW BARN ROAD, SUITE 104
MIAMI LAKES, FL 33014
PHONE: 305.403.0140

TRAFFIC:
WALSH TRAFFIC ENGINEERING
285 PALMETTO SPRINGS STREET
DEBARY, FL 32173
CHRIS J. WALSH, PE
PHONE: 386.668.0062

ENGINEER / SURVEYOR / LANDSCAPE:
UPHAM, INC.
265 KENILWORTH AVENUE
ORMOND BEACH, FL 32174
ROGER W. STRCULA, PE, CPESC
PHONE: 386.672.9515

BIOLOGIST:
BIOLOGICAL CONSULTING SERVICES, INC.
208 RUSH STREET
NEW SMYRNA BEACH, FLORIDA 32168
JOE H. YOUNG
PHONE: 386.423.3402

GEOTECHNICAL:
S&ME, INC.
1615 EDGEWATER DRIVE, SUITE 200
ORLANDO, FL 32804
PHONE: 407.975.1273

PEDESTRIAN SIGNALIZATION :
PEGASUS ENGINEERING, LLC
301 W SR 434, SUITE 309
WINTER SPRINGS, FL 32708
FURSAN MUNJED, PE
PHONE: 407.992.9160

UTILITY SERVICE PROVIDERS:

WATER:
NEW SMYRNA BEACH UTILITIES
200 CANAL STREET
NEW SMYRNA BEACH, FL 32168
PHONE: (386) 427-1361

ELECTRIC:
NEW SMYRNA BEACH UTILITIES
200 CANAL STREET
NEW SMYRNA BEACH, FL 32168
PHONE: (386) 427-13611

GAS:
TECO PEOPLE'S GAS
1722 RIDGEWOOD AVENUE
DAYTONA BEACH, FL 32117
PHONE: (877) 832-6747

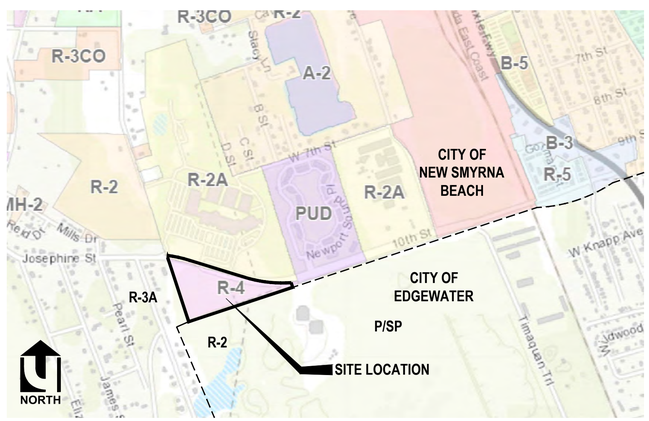
SEWER:
NEW SMYRNA BEACH UTILITIES
200 CANAL STREET
NEW SMYRNA BEACH, FL 32168
PHONE: (386) 427-1361

TELEPHONE / CABLE:
AT&T
268 N. RIDGEWOOD AVENUE
DAYTONA BEACH, FL 32114
PHONE: (386) 281-6961

ITS NETWORK:
VOLUSIA COUNTY TRAFFIC ENGINEERING
123 W. INDIANA AVENUE
DELAND, FL 32720
ALLEN CATES, PUBLIC WORK SERVICES SUPERVISOR
PHONE: (386) 736-5968

ITS NETWORK:
VOLUSIA COUNTY TRAFFIC ENGINEERING
123 W. INDIANA AVENUE
DELAND, FL 32720
KARL EWALD, TRAFFIC OPERATIONS SUPERVISOR
PHONE: (386) 736-5968

NOTE: CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION MEETING WITH NEW SMYRNA BEACH UTILITIES, 2 WEEKS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO ANY MATERIALS BEING DELIVERED ON-SITE.



300 150 0 300

GRAPHIC SCALE: 1" = 300'

ZONING MAP:

REVISIONS

DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
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	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Roger W Strcula

Digitally signed by Roger W Strcula
Date: 2025.07.11 15:42:20 -04'00'

ROGER W. STRCULA LICENSE NO. 52784 STATE OF FLORIDA PROFESSIONAL ENGINEER
NOT VALID UNLESS SIGNED AND SEALED

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ON THE DATE ADJACENT TO THE SEAL.
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UPHAM
CIVIL ENGINEERING • SURVEYING • LANDSCAPE ARCHITECTURE
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COVER SHEET

FLAGLER DUNES
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	AS SHOWN

SHEET NUMBER:

C000

GENERAL CONSTRUCTION NOTES:

1. GOVERNING SPECIFICATIONS: CITY OF NEW SMYRNA BEACH LAND DEVELOPMENT CODE, NEW SMYRNA BEACH UTILITIES, FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN AND CONSTRUCTION STANDARDS, LATEST EDITION, AND STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, LATEST EDITION, AND SUPPLEMENTS THERETO IF NOTED IN THE SPECIAL PROVISIONS FOR THIS PROJECT.
2. ALL UTILITY MATERIAL, CONSTRUCTION AND TESTING COVERED BY THESE DRAWINGS SHALL COMPLY WITH NEW SMYRNA BEACH UTILITIES CONSTRUCTION DETAILS AND SPECIFICATIONS, LATEST EDITION.
3. THE CONTRACTOR SHALL PAY FOR AND OBTAIN A BUILDING PERMIT. THE ENGINEER WILL SCHEDULE THE PRECONSTRUCTION CONFERENCE BEFORE THE CONTRACTOR'S START OF WORK. THE CONTRACTOR SHALL CONTACT THE BUILDING DEPARTMENT FOR INFORMATION ON ISSUANCE OF CITY PERMITS AND / OR OTHER REQUIREMENTS.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER OF ANY DEFICIENCIES OR DISCREPANCIES AMONG THE DIVISIONS OF THE DRAWING AND SPECIFICATIONS PRIOR TO THE BID DATE. NEITHER THE OWNER OR ENGINEER WILL BE RESPONSIBLE FOR ANY DEFICIENCIES OR DISCREPANCIES RAISED AFTER THE BID OPENING. ACCORDINGLY, IN LIGHT OF THESE OBLIGATIONS, THE ENGINEER IS OBLIGATED TO INTERPRET THE DRAWINGS AND SPECIFICATIONS IN A MANNER THAT WILL PROVIDE THE OWNER WITH A COMPLETE, FUNCTIONING FACILITY FOR THE BID PRICE.
5. THESE DRAWINGS AND THE PROJECT MANUAL ARE COMPLEMENTARY, AND ANY REQUIREMENT OF ONE SHALL BE A REQUIREMENT OF THE OTHER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CAREFULLY EXAMINE THE DRAWINGS AND SPECIFICATIONS AND TO COMPARE THE REQUIREMENTS OF EACH DIVISION AND ENSURE THAT EACH TRADE OR SUBCONTRACTOR IS MAKING THE ALLOWANCES NECESSARY TO PROVIDE THE OWNER A COMPLETE FACILITY, OPERATIONAL IN ALL RESPECTS, UNLESS OTHERWISE SPECIFICALLY STATED IN THE DRAWINGS.
6. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR INSTRUCTING THE CONTRACTOR IN THE METHODS OF CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE METHOD TO CONSTRUCT THE IMPROVEMENTS AS SHOWN ON THE PLANS.
7. MEASURES SHALL BE IMPLEMENTED AT THE CONTRACTOR'S DISCRETION TO VISIBLY BARRICADE THE WORK AREA AND PROVIDE SAFE MEANS OF INGRESS AND EGRESS AROUND THE CONSTRUCTION SITE.
8. LITTER CONTROL MEASURES TO PREVENT WIND-DRIVEN DEBRIS SHALL BE IMPLEMENTED THROUGHOUT THE DURATION OF CONSTRUCTION, ALL DEBRIS SHALL BE REMOVED AND THE PROJECT SITE CLEANED IMMEDIATELY AT THE COMPLETION OF CONSTRUCTION ACTIVITIES AND BE INSPECTED BY THE ENGINEER FOR ITS APPROVAL.
9. AT NO TIME SHALL EXCAVATIONS BE LEFT UNCOVERED AFTER WORKING HOURS. CONTRACTOR SHALL SECURE THE WORK AREA AT THE END OF EACH DAY'S WORK.
10. AT ALL TIMES, THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT UNDERGROUND UTILITIES, STRUCTURES AND OTHER ASSOCIATED FACILITIES FROM DAMAGE DURING CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE MEASURES OF PROTECTION. ANY DAMAGED FACILITIES SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE COUNTY OR ENGINEER AT THE CONTRACTORS EXPENSE.
11. THERE SHALL BE NO DEVIATIONS FROM THESE DRAWINGS UNLESS APPROVED IN WRITING BY THE ENGINEER AND THE OWNER.
12. THE CONTRACTOR SHALL CONTACT ALL CONCERNED UTILITIES AT LEAST FORTY-EIGHT (48) HOURS IN ADVANCE OF CONSTRUCTION OPERATIONS.
13. CONTRACTOR SHALL COORDINATE AND COMPLY WITH ALL UTILITY COMPANIES INVOLVED IN PROJECT AND PAY ALL REQUIRED FEES AND COST.
14. FILL MATERIAL SHALL BE CLASSIFIED AS A-1, A-3 OR A-1-4 IN ACCORDANCE WITH AASHTO M-145 AND SHALL BE FREE FROM VEGETATION AND ORGANIC MATERIAL. NOT MORE THAN 12% BY WEIGHT OF FILL MATERIAL SHALL PASS THE NO. 200 SIEVE.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CERTIFIED MATERIAL TEST RESULTS TO THE ENGINEER OF THE RECORD PRIOR TO THE RELEASE OF FINAL CERTIFICATION BY THE ENGINEER, TEST RESULTS MUST INCLUDE, BUT MAY NOT BE LIMITED TO, DENSITIES FOR SUBGRADE AND BASE DENSITIES AT UTILITY CROSSINGS, MANHOLES, INLETS, STRUCTURES. TEST SHALL INCLUDE ASPHALT GRADATION REPORTS, CONCRETE CYLINDERS, ETC.
16. WHERE NEW ASPHALT MEETS EXISTING ASPHALT, THE EXISTING ASPHALT SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE.
17. PRIOR TO REMOVING CURB OR GUTTER, THE ADJACENT ASPHALT SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE.
18. ALL PROPOSED ELEVATIONS REFER TO FINISHED GRADES.
19. CORE TESTS SHALL BE TAKEN TO VERIFY THICKNESS AND SUBSURFACE COMPACTION. PROVIDE FOR THREE SAMPLES, RANDOMLY LOCATED. TEST FOR EXTRACTION, GRADATION, LABORATORY DENSITY, AND MARSHALL'S STABILITY. PROVIDE A CERTIFICATE FROM THE TESTING AGENCY THAT MATERIALS AND INSTALLATION COMPLY WITH SPECIFICATIONS, SIGNED BY THE ASPHALTIC CONCRETE PRODUCER AND CONTRACTOR. ALL COSTS OF TESTS SHALL BE PAID BY THE CONTRACTOR. IF TESTS SHOW THE INSTALLATION DOES NOT MEET SPECIFICATIONS, THE PAVING SHALL BE REMOVED, REPLACED, AND RETESTED.
20. IF ANY CLAY-LIKE MATERIAL IS DISCOVERED, IT WILL BE REQUIRED TO BE REMOVED, BACKFILLED WITH APPROPRIATE FILL, COMPACTED, AND TESTED USING AASHTO T-180 MODIFIED PROCTOR METHOD. REFER TO GEOTECHNICAL REPORT PREPARED BY UNIVERSAL ENGINEERING SCIENCES, INC.
21. FILL MATERIAL IS TO BE PLACED IN ONE FOOT LIFTS AND COMPACTED TO THE APPROPRIATE DENSITY (98% FOR PAVED AREAS AND 95% FOR BUILDING PADS AND ALL OTHER AREAS AS PER AASHTO T-180). THE CONTRACTOR SHALL ADHERE TO THE RECOMMENDATIONS WITHIN THE GEOTECHNICAL REPORT FOR THE SITE AND BUILDING PREPARATIONS.
22. NO BURYING OF ANY ORGANIC OR CLAYEY MATERIALS ALLOWED WITHIN THE SITE BOUNDARY. THE CONTRACTOR SHALL EMPLOY A GEOTECHNICAL FIRM TO INSPECT AND MONITOR THE EARTHWORK AND MATERIALS TESTING.
23. THE CONTRACTOR SHALL ONLY UTILIZE A CITY OF NEW SMYRNA BEACH APPROVED ROLL OFF DUMPSTER FROM ITS APPROVED LIST FOR CONSTRUCTION DEBRIS.
24. REFER TO S&ME, INC. GEOTECHNICAL REPORT, PROJECT No. 22580386 DATED MARCH 15, 2023 FOR RECOMMENDATIONS FOR SITE PREPARATION AND PAVEMENT SECTIONS TO BE INCLUDED AS PART OF THE CONSTRUCTION DOCUMENTS.
25. ANY DAMAGE CAUSED TO EXISTING COUNTY TRAFFIC SIGNALS OR RELATED SIGNAL APPURTENANCES (DETECTION, FIBER, ETC.) WILL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
26. UNINTENTIONAL IMPACTS TO THE "ITS" NETWORK (COUNTY MAINTAINED FIBER) RESULTING IN A LOSS OF COMMUNICATION SHALL BE REPORTED IMMEDIATELY TO VOLUSIA COUNTY TRAFFIC ENGINEERING. THE EFFECTED DEVICES OR NETWORK SHALL BE RESTORED WITHIN 24 HOURS OF THE INITIAL BREAK.
27. VOLUSIA COUNTY TRAFFIC ENGINEERING IS NOT PART OF SUNSHINE 811. PLEASE CONTACT VCTE (386) 736-5968 A MINIMUM OF TWO BUSINESS DAYS PRIOR TO THE BEGINNING OF THE PROPOSED WORK TO REQUEST LOCATES.

ABBREVIATIONS:

A/C	AIR CONDITIONING	FH	FIRE HYDRANT	No.	NUMBER
AC	ACRES	FL	FLORIDA	NSBU	NEW SMYRNA BEACH UTILITIES
ALTA	AMERICAN LAND TITLE ASSOCIATION	FM	FORCE MAIN	NSPS	NATIONAL SOCIETY OF PROFESSIONAL SURVEYORS
ADA	AMERICAN DISABILITY ACT	FOC	FIBER-OPTIC CABLE	ORB	OFFICIAL RECORD BOOK
AWWA	AMERICAN WATER WORKS ASSOCIATION	FPD	FEET PER DAY	(P)	REFERS TO PLAT OF RECORD
BLDG	BUILDING	FP&L	FLORIDA POWER & LIGHT	PC	POINT OF CURVE
BTM	BOTTOM	FWS	FLUSH WITH SIDEWALK	PCC	POINT OF COMPOUND CURVE
(C)	CALCULATED	GNSS	GLOBAL NAVIGATION SATELLITE SYSTEM	PCP	PERMANENT CONTROL POINT
CA	CENTRAL ANGLE	GW	GROUND WATER	PG(S)	PAGE(S)
CH	CHORD LENGTH	HDPE	HIGH DENSITY POLYETHYLENE PIPE	POC	POINT ON CURVE
CHB	CHORD BEARING	ID	IDENTIFICATION	PRM	PERMANENT REFERENCE MONUMENT
CMP	CORRUGATED METAL PIPE	INV	INVERT ELEVATION	PSI	POUNDS PER SQUARE INCH
CPP	CORRUGATED PLASTIC PIPE	K_H	HORIZONTAL PERMEABILITY	PSM	PROFESSIONAL SURVEYOR AND MAPPER
CONC	CONCRETE	K_V	VERTICAL PERMEABILITY	PT	POINT OF TANGENCY
CR	COUNTY ROAD	KO	KNOCK OUT	PVC	POLYVINYL CHLORIDE
(D)	DESCRIPTION OR DEED	L	LENGTH	R	RADIUS
DIP	DUCTILE IRON PIPE	LB	LICENSED BUSINESS	RCP	REINFORCED CONCRETE PIPE
FD	FOUND	LC	LICENSED CORPORATION	RLS	REGISTERED LAND SURVEYOR
EL	ELEVATION	LF	LINEAL FEET	R/W	RIGHT-OF-WAY
EOP	EDGE OF PAVEMENT	LLC	LIMITED LIABILITY COMPANY	SF	SQUARE FEET
ERCP	ELLIPTICAL REINFORCED CONCRETE PIPE	LS	LICENSED SURVEYOR	SHW	SEASONAL HIGH WATER
ESMT	EASEMENT	(M)	FIELD MEASURED	SR	STATE ROAD
FAC	FLORIDA ADMINISTRATIVE CODE	MB	MAP BOOK	STY	STORY
FDEP	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION	MES	MITERED-END SECTION	SP	STATE PLANE
FDNR	FLORIDA DEPARTMENT OF NATURAL RESOURCES	MJ	MECHANICAL JOINT	SJRWMD	ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION	MPH	MILES PER HOUR	TELECOM	TELECOMMUNICATIONS
FFE	FINISH FLOOR ELEVATION	N/A	NOT APPLICABLE	TOP	TOP OF PIPE
FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY	NIC	NOT IN CONTRACT	TYP	TYPICAL
FIRM	FLOOD INSURANCE RATE MAP	NAD83	NORTH AMERICAN DATUM OF 1983	US	UNITED STATES
		NAVD88	NORTH AMERICAN VERTICAL DATUM OF 1988	USACOE	UNITED STATES ARMY CORP OF ENGINEERS
		NGVD29	NATIONAL GEODETIC VERTICAL DATUM OF 1929	VCP	VITRIFIED CLAY PIPE

SITE DEVELOPMENT NOTES:

1. THE PARCEL HAS A FUTURE LAND USE OF THE PROPERTY IS "MEDIUM DENSITY RESIDENTIAL" (MDR). THE EXISTING ZONING IS "URBAN SINGLE FAMILY RESIDENTIAL" (R-4).
2. THE PARCEL IS UNDEVELOPED AND WOODED.
3. FLOOD PLAIN CERTIFICATION ACCORDING TO THE FEMA (FEDERAL EMERGENCY MANAGEMENT AGENCY) F.I.R.M (FEDERAL INSURANCE RATE MAP), MAP NUMBER 12127C0543J, COMMUNITY: VOLUSIA COUNTY, DATED: SEPTEMBER 29, 2017. THE PROPERTY IS IN FLOOD ZONE "X" AND FLOOD ZONE "X ORANGE" WITH 0.2% ANNUAL CHANCE FLOOD HAZARD, AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH LESS THAN ONE SQUARE NILE.
4. DEVELOPMENT INFORMATION:

SITE COVERAGES	AREA (SF)	AREA (AC)	%
BUILDINGS	86,763	1.992	19.3
ASPHALT ROADWAYS	41,009	0.941	9.1
CONCRETE APRONS & WALKS	63,944	1.468	14.2
WET POND	35,903	0.824	8.0
OPEN SPACE / PRESERVATION	222,042	5.097	49.4
TOTAL PROPERTY AREA	449,661	10.323	100.0
TOTAL IMPERVIOUS AREA	227,619	5.225	50.6

DENSITY = 80 DWELLING UNITS (DU) / 10.32 ACRES (AC) = 7.75 DU/AC

5. THE STORMWATER POND WILL BE A WET DETENTION HARVESTING FACILITY TO RECEIVE THE STORMWATER RUNOFF AS PERMITTED BY THE SJRWMD PERMIT NO. 99189-2 AND CITY STORMWATER REQUIREMENTS.
6. PARKING TABULATION

	REQUIRED	PROVIDED
MULTI-FAMILY	2 SPACES PER UNITS (80 UNITS x 2) = 160 SPACES	- 80 DRIVEWAY SPACES - 80 GARAGE SPACES TOTAL PARKING = 160 SPACES

7. BUILDING SETBACKS

	REQUIRED		PROVIDED	
	BUILDING	BUFFER	BUILDING	BUFFER
FRONT (10TH STREET)	20 FEET	20 FEET	20 FEET	20 FEET
SIDE (WEST)	20 FEET	20 FEET	20 FEET	20 FEET
REAR (SOUTH)	55 FEET	55 FEET	55 FEET	55 FEET

8. BUILDING HEIGHT MAXIMUM = 35 FEET
PROPOSED BUILDINGS CONSIST OF (14) 2-STY TOWNHOME BUILDINGS
9. THE POTABLE WATER AND WASTEWATER UTILITIES WILL BE PROVIDED BY NEW SMYRNA BEACH UTILITIES. THE INTERIOR WATER MAIN WILL BE OWNED AND MAINTAINED BY NEW SMYRNA BEACH UTILITIES. THE INTERIOR WASTEWATER MAIN AND LIFT STATION WILL BE OWNED AND MAINTAINED BY NEW SMYRNA BEACH UTILITIES. ALL INTERIOR PAVED SURFACES, CURBS AND SIDEWALKS WILL BE PRIVATELY OWNED AND MAINTAINED. THE STORMWATER POND, DRAINAGE STRUCTURES AND PIPING WILL BE PRIVATELY OWNED AND MAINTAINED.
10. RECLAIM WATER IS NOT AVAILABLE. IRRIGATION WILL BE PROVIDED BY STORMWATER POND HARVESTING.
11. EXISTING SITE INFORMATION PER ALTA/NSPS LAND TITLE AND SPECIAL PURPOSE SURVEY PERFORMED BY UPHAM INC., PROJECT No. 240211, DATED JUNE 18, 2024, INCLUDING ANY UPDATES THEREAFTER.
12. SOLID WASTE MATERIAL WILL BE CONTAINED WITHIN INDIVIDUAL RECEPTACLES ON SITE AND COLLECTED BY WASTE MANAGEMENT, INC.

LEGAL DESCRIPTION:

PARCEL 1:
A PORTION OF BLOCK 24, A.W. BARRS SUBDIVISION OF THE SEYMOUR PICKETT GRANT AS PER MAP THEREOF RECORDED IN MAP BOOK 1, PAGE 106, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF SAID BLOCK 24; THENCE NORTH 18°10'21" WEST ALONG THE WESTERLY LINE OF SAID BLOCK 24, A DISTANCE OF 95.18 FEET TO A POINT ON THE SOUTHERLY R/W LINE OF TENTH STREET EXTENSION; THENCE NORTHEASTERLY ALONG A CURVE CONCAVE NORTHERLY, SAID CURVE HAVING A CENTRAL ANGLE OF 05°41'32", A RADIUS OF 1400.00 FEET, AN ARC DISTANCE OF 139.09 FEET; THENCE LEAVING SAID R/W AND CURVE ALONG A NON- RADIAL LINE SOUTH 18°18'09" EAST, A DISTANCE OF 53.97 FEET TO THE SOUTHERLY LINE OF SAID BLOCK 24; THENCE
SOUTH 71°44'13" WEST ALONG SAID SOUTHERLY LINE, A DISTANCE OF 132.97 FEET TO THE POINT OF BEGINNING.

PARCEL 2:
A PART OF LOTS 50 AND 51, MODEL LAND COMPANY SUBDIVISION AS RECORDED IN MAP BOOK 4, PAGE 9, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, LYING SOUTHERLY OF TENTH STREET EXTENSION BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF SAID LOT 51; THENCE SOUTH 71°44'13" WEST ALONG THE SOUTHERLY LINE OF SAID LOT 51, A DISTANCE OF 724.04 FEET; THENCE NORTH 18°10'21" WEST, A DISTANCE OF 548.01 FEET TO THE SOUTHERLY LINE OF SAID TENTH STREET; THENCE SOUTH 72°53'13" EAST ALONG THE SAID SOUTHERLY LINE, A DISTANCE OF 482.83 FEET TO THE PC OF A CURVE; THENCE SOUTHEASTERLY ALONG A CURVE CONCAVE TO THE NORTH, SAID CURVE HAVING A CENTRAL ANGLE OF 15°17'12", A RADIUS OF 1400.00 FEET, AN ARC DISTANCE OF 373.52 FEET TO THE EAST LINE OF SAID LOT 51; THENCE SOUTH 18°10'21" EAST ALONG SAID EAST LINE A DISTANCE OF 95.18 FEET TO THE POINT OF BEGINNING.

PARCEL 3:
A PART OF LOTS 50 AND 51, SUBDIVISION OF LANDS OF THE MODEL LAND CO., ACCORDING TO THE MAP OR PLAT THEREOF AS RECORDED IN PLAT BOOK 4, PAGE 9, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, LYING SOUTHERLY OF TENTH STREET EXTENSION BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF SAID LOT 51; THENCE S71°44'13" W ALONG THE SOUTHERLY LINE OF SAID LOT 51, A DISTANCE OF 724.04 FEET FOR THE POINT OF BEGINNING; THENCE CONTINUE S71°41'13" W, A DISTANCE OF 336.47 FEET TO THE WESTERLY LINE OF SAID LOT 51; THENCE N18°10'21" W ALONG THE WESTERLY LINE OF SAID LOT 50 AND LOT 51, A DISTANCE OF 760.52 FEET TO A POINT ON THE CURVE ON THE SOUTHERLY LINE OF SAID TENTH STREET EXTENSION; THENCE SOUTHEASTERLY ALONG A CURVE CONCAVE TO THE SOUTH, SAID CURVE HAVING A CENTRAL ANGLE OF 09°49'50", A RADIUS OF 1452.73 FEET, AN ARC DISTANCE OF 249.25 FEET TO THE PT OF SAID CURVE; THENCE S72°53'13" E ALONG THE TANGENT OF THE PREVIOUSLY DESCRIBED CURVE, A DISTANCE OF 149.07 FEET; THENCE S18°10'21" E, A DISTANCE OF 548.01 FEET TO THE POINT OF BEGINNING.

TAX PARCEL(S): 741923000490, 741923000492 & 744901240011

LEGEND:

NOTE: NOT ALL SYMBOLS SHOWN HERE MAY BE APPLICABLE TO THESE DRAWINGS, ALSO THERE MAY BE ADDITIONAL SYMBOLS WITHIN PLANS NOT SHOWN HERE, SEE INDIVIDUAL DRAWING LEGEND WHERE APPLICABLE.

- EXISTING CABLE TV PEDESTAL
- EXISTING CAP OR PLUG
- EXISTING CLEAN OUT
- EXISTING CONDUIT RISER/ MARKER
- EXISTING ELECTRIC METER
- EXISTING ELEVATION (SOFT) +12.3
- EXISTING ELEVATION (HARD) +12.34
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING FLOW DIRECTION
- PROPOSED FLOW DIRECTION
- EXISTING GAS METER
- EXISTING GAS VALVE
- EXISTING GUY WIRE & ANCHOR PIN
- EXISTING MAIL BOX
- EXISTING MANHOLE (UNKNOWN)
- PROPOSED MANHOLE
- EXISTING SANITARY SEWER CLEANOUT
- EXISTING SANITARY SEWER MANHOLE
- EXISTING ROAD SIGNS AND POSTS
- PROPOSED SIGN AND POST
- EXISTING TEE
- EXISTING UTILITY POLE
- EXISTING VALVE IRRIGATION
- EXISTING VALVE WATER
- PROPOSED WATER VALVE
- EXISTING WATER METER
- EXISTING STORM SEWER WITH INLET
- PROPOSED STORM SEWER WITH INLET
- PROPOSED SITE LIGHT POLES AND FIXTURES
- PROPOSED BACTERIOLOGICAL TEST POINT
- FOUND IRON ROD AND CAP (AS NOTED)
- FOUND CONCRETE MONUMENT (AS NOTED)
- EXISTING EASEMENT
- OHE — EXISTING OVERHEAD ELECTRIC CABLE
- EC — EXISTING UNDERGROUND ELECTRIC CONDUIT/CABLE
- FOC — EXISTING UNDERGROUND FIBER OPTIC CABLE
- FM — EXISTING FORCE MAIN (# INDICATES SIZE)
- GAS — EXISTING GAS MAIN (# INDICATES SIZE)
- REC — EXISTING RECLAIM WATER MAIN (# INDICATES SIZE)
- 8SAN — EXISTING SANITARY SEWER (# INDICATES SIZE)
- 8WM — EXISTING WATER MAIN (# INDICATES SIZE)
- UTEL — EXISTING UNDERGROUND TELEPHONE CABLE
- UTV — EXISTING UNDERGROUND TELEVISION CABLE
- UTC — EXISTING OVERHEAD TRAFFIC SIGNAL CABLE
- SAN — PROPOSED SANITARY SEWER (# INDICATES SIZE)
- WM — PROPOSED WATER MAIN (# INDICATES SIZE)
- EXISTING SWALE OR CENTER OF DITCH
- PROPOSED SWALE OR CENTER OF DITCH
- EXISTING TOP OF DITCH BANK
- EXISTING BOTTOM OF DITCH BANK
- EXISTING WOOD FENCE
- EXISTING WIRE OR CHAIN LINK FENCE
- PROPOSED WIRE OR CHAIN LINK FENCE
- PROPOSED SEDIMENT FENCE
- V — PROPOSED VISI-BARRIER
- 12 — EXISTING CONTOUR
- 10 — PROPOSED CONTOUR (SOFT)
- 10 — PROPOSED CONTOUR (HARD)

VOLUSIA COUNTY UTILITY AND COMMERCIAL USE PERMITS NOTES:

1. NOTIFY VOLUSIA COUNTY DEVELOPMENT ENGINEERING DIVISION AT (386) 736-5926 A MINIMUM OF 24 HOURS PRIOR TO THE START OF CONSTRUCTION. FAILURE OF THE PERMITTEE TO OBTAIN THE APPROPRIATE INSPECTIONS PRIOR TO PROCEEDING WITH WORK SHALL NOT RELIEVE THE PERMITTEE FROM REEXCAVATION OR OTHER MEASURES NECESSARY FOR THE INSPECTION OF WORK.
2. VOLUSIA COUNTY TRAFFIC ENGINEERING (386) 736-5968 IS NOT A MEMBER OF SUNSHINE ONE CALL. WHEN REQUESTING LOCATES, PLEASE PROVIDE A MINIMUM ADVANCED NOTIFICATION OF TWO (2) BUSINESS DAYS PRIOR TO PROPOSED WORK.
3. COORDINATION WITH VOLUSIA COUNTY ENGINEERING'S INSPECTOR JIM PRICE AT (386) 561-8666 IS REQUIRED WITH A MINIMUM ADVANCED NOTICE OF SEVEN (7) DAYS PRIOR TO ANY SIDEWALK, LANE OR ROAD CLOSURE (INCLUDING FLAGGING OPERATIONS).
4. OPERATIONS WITHIN THE COUNTY RIGHT-OF-WAY SHALL NORMALLY BE CONDUCTED 7:00 A.M. TO 7:00 P.M., MONDAY THROUGH FRIDAY. ANY DEVIATION FROM THESE HOURS REQUIRES PRIOR APPROVAL FROM THE COUNTY DEVELOPMENT ENGINEER. EMERGENCY REPAIRS ARE EXCLUDED FROM THIS TIME RESTRICTION.
5. ALL EXISTING SIDEWALKS WITHIN COUNTY RIGHT-OF-WAY SHALL EITHER REMAIN OPEN OR BE PROVIDED A TEMPORARY WALKWAY IN ACCORDANCE WITH THE CURRENT VERSION OF FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD INDEX NO. 660. ANY DAMAGE TO SIDEWALKS SHALL BE REPAIRED AND/OR REPLACED IN LIKE KIND BY THE CONTRACTOR. NEW SIDEWALKS AND SECTIONS THROUGH DRIVEWAYS MUST BE AT A 1.5% CROSS SLOPE AND 2% MAXIMUM CROSS SLOPE PER ADA STANDARDS.
6. DRIVING OR STAGING OF CONSTRUCTION VEHICLES OR MATERIALS IS NOT PERMITTED WITHIN THE COUNTY RIGHT-OF-WAY OR ON PEDESTRIAN WALKWAYS AND PATHS. THERE SHALL BE NO OVERNIGHT CONSTRUCTION VEHICLE RELATED PARKING, CONSTRUCTION MATERIAL PLACEMENT OR STORAGE OF ANY KIND PERMITTED WITHIN THE COUNTY RIGHT-OF-WAY.
7. NO TRENCH OR EXCAVATION SHALL BE LEFT OPEN OR UNATTENDED OVERNIGHT, UNLESS APPROVED BY THE COUNTY DEVELOPMENT ENGINEERING INSPECTOR. EXCAVATIONS SHALL MEET THE DROP OFF PROTECTION REQUIREMENTS OF THE LATEST FDOT DESIGN STANDARD INDEX NO. 600.
8. RESTORATION SHALL BE REQUIRED FOR ANY DAMAGE TO SIDEWALKS, CURBS, OR OTHER EXISTING STRUCTURES IN THE RIGHT-OF-WAY. ALL DISTURBED AREAS WITHIN THE COUNTY RIGHT OF WAY SHALL BE RE-GRADED AND SODDED. SEED AND MULCH IS NOT AN ACCEPTABLE ALTERNATIVE TO SODDING.
9. PAVING OPERATIONS SHALL NOT BE PERFORMED WITHIN THE RIGHT OF WAY ON FRIDAY, SATURDAY, SUNDAY, OR ANY DAY PRIOR TO A HOLIDAY WITHOUT WRITTEN CDE/INSPECTOR APPROVAL.

REVISIONS	
DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU & 6/11 COUNTY, & TREES

Roger W Strcula
Digitally signed by Roger W Strcula
Date: 2025.07.11 15:42:54 -04'00'

ROGER W. STRCULA LICENSE NO. 52784 STATE OF FLORIDA PROFESSIONAL ENGINEER
NOT VALID UNLESS SIGNED AND DATED

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SITE DEVELOPMENT INFORMATION

FLAGLER DUNES
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	AS SHOWN

SHEET NUMBER:
C100

NORTH

GRAPHIC SCALE
1" = 40'
40 20 0 40

ELEVATIONS SHOWN HEREON BASED ON NAVD 1988 DATUM

NOTE: ALL PIPES AND INLETS SHALL BE FLUSHED AND CLEANED OF DEBRIS AND SEDIMENTS UPON COMPLETION OF FINAL STAGE OF WORK, WHEN LANDSCAPE WORK IS COMPLETE. CAPTURE DEBRIS AND FINES IN DOWNSTREAM INLETS. DO NOT DISCHARGE INTO POND. REMOVE FINES OFF-SITE.

NOTE: REMOVE ALL CONSTRUCTION DEBRIS. ALL DISTURBED AREAS SHALL BE PROPERLY REGRADED AND SEEDED UNLESS SPECIFIED OTHERWISE. THE CONTRACTOR SHALL INSPECT THE SITE TO ENSURE ALL SPECIFICATIONS PER THE SWPPP HAVE BEEN COMPLETED.

TREE LEGEND

SIZE DENOTED IN SYMBOL

- CAMPHOR
- CEDAR
- LAUREL OAK
- LIVE OAK
- MAPLE
- PALM
- PINE
- DENOTES SIZE

LEGEND:

- STORMWATER MANHOLE
- STORM INLET / CATCH BASIN
- ELECTRIC BOX
- CLEANOUT
- SANITARY SEWER MANHOLE
- SANITARY SEWER VALVE
- BACKFLOW PREVENTER
- WATER VALVE
- WETLAND FLAG
- MAJOR CONTOUR LINE
- MINOR CONTOUR LINE
- TREE PROTECTION FENCE
- STORM PIPE (# DENOTES SIZE)
- TOE OF SLOPE
- TOP OF BANK
- OVERHEAD WIRE
- UNDERGROUND POWER
- FORCE MAIN (# DENOTES SIZE)
- JURISDICTIONAL WETLAND BOUNDARY
- SEWER LINE (# DENOTES SIZE)
- TELECOM LINE
- FIBER OPTIC CABLE
- WATER MAIN (# DENOTES SIZE)
- GAS MAIN
- LIMITS OF CONSTRUCTION
- PROPOSED SAWCUT
- PROPOSED SEDIMENT FENCE
- EASEMENT LINE
- WETLAND BUFFER LINE
- HATCH DENOTES REMOVAL OF EXISTING IMPROVEMENTS

THE CONTRACTOR IS RESPONSIBLE TO INSTALL AND MAINTAIN ADDITIONAL TRAFFIC CONTROL DEVICES AND FLAGGERS FOR WORK WITHIN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL PROVIDE ITS TRAFFIC CONTROL PLAN PREPARED BY AN ADVANCE MOT CERTIFIED INDIVIDUAL, THE ENGINEER IS NOT RESPONSIBLE FOR PROVIDING THE TCP, THE CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL DEVICES WITH THE VOLUSIA COUNTY CDE / INSPECTOR

NOTICE: THE CONTRACTOR SHALL DETERMINE FINAL LOCATIONS OF THE CONSTRUCTION STAGING ITEMS, INCLUDING THE TRAILER, STOCKPILE AREAS, LAYDOWN, AND CONSTRUCTION PARKING WITH THE EROSION CONTROL INSPECTOR. LOCATIONS SHOWN HEREON ARE FOR INFORMATIONAL ONLY.

NOTICE:
PERFORM ALL RIGHT-OF-WAY WORK FROM WITHIN THE CURB SIDE IF POSSIBLE, IF WORK MUST OCCUR WITHIN TRAFFIC / TURN LANE THEN THE CONTRACTOR SHALL PROVIDE THE NECESSARY MOT DEVICES PER THE APPLICABLE FDOT INDICES (SEE TRAFFIC CONTROL GUIDANCE NOTES ON SHEET C900)

NOTICE: THE SITE CONTRACTOR SHALL PROVIDE ITS TRAFFIC CONTROL PLAN TO THE COUNTY FOR WORK WITHIN THE RIGHT-OF-WAY

CONSTRUCTION NOTES:

1. LITTER CONTROL MEASURES TO PREVENT WIND-DRIVEN DEBRIS SHALL BE IMPLEMENTED THROUGHOUT THE DURATION OF CONSTRUCTION. ALL DEBRIS SHALL BE REMOVED AND THE PROJECT SITE CLEANED WITHIN 5 DAYS OF COMPLETION OF CONSTRUCTION. NEGLECT OR DISREGARD OF LITTER CONTROL MAY RESULT IN A FINE FOR VIOLATION OF OR FAILURE TO COMPLY TO ANY CORRECTIVE NOTICE.
2. ONLY ONE TEMPORARY CONSTRUCTION SIGN IS PERMITTED, NOT TO EXCEED 32 SQUARE FEET IN SIGN AREA AND SET BACK AT LEAST 10' FROM THE INTERSECTION OF ROAD RIGHTS-OF-WAY. THE SIGN MUST BE REMOVED AFTER THE DEVELOPMENT SIGNAGE IS INSTALLED.
3. THE GENERAL CONTRACTOR SHALL PAY FOR AND OBTAIN A BUILDING PERMIT FROM THE CITY OF NEW SMYRNA BEACH. THE ENGINEER WILL SCHEDULE THE PRECONSTRUCTION CONFERENCE WITH ALL FRANCHISE UTILITIES, THE CITY OF NEW SMYRNA BEACH AND OTHERS BEFORE THE CONTRACTOR'S START OF WORK. THE CONTRACTOR SHALL CONTACT THE CITY OF NEW SMYRNA BEACH BUILDING DEPARTMENT FOR INFORMATION ON ISSUANCE OF PERMITS AND / OR OTHER REQUIREMENTS.
4. CONSTRUCTION NOISE AND ACTIVITY IS RESTRICTED BETWEEN THE HOURS OF 7 AM TO 7 PM. ANY CONSTRUCTION ACTIVITIES OUTSIDE OF THESE HOURS ARE REQUIRED TO BE APPROVED BY THE CITY OF NEW SMYRNA BEACH.
5. ALL UTILITY MATERIAL, CONSTRUCTION AND TESTING COVERED BY THESE DRAWINGS SHALL COMPLY WITH THE CITY OF NEW SMYRNA BEACH LAND DEVELOPMENT REGULATIONS. ALL UTILITY WORK AND CONNECTIONS SHALL BE COORDINATED WITH NEW SMYRNA BEACH UTILITIES.
6. THESE DRAWINGS AND THE PROJECT MANUAL ARE COMPLEMENTARY, AND ANY REQUIREMENT OF ONE SHALL BE A REQUIREMENT OF THE OTHER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CAREFULLY EXAMINE THE DRAWINGS AND SPECIFICATIONS AND TO COMPARE THE REQUIREMENTS OF EACH DIVISION AND ENSURE THAT EACH TRADE OR SUBCONTRACTOR IS MAKING THE ALLOWANCES NECESSARY TO PROVIDE THE OWNER A COMPLETE FACILITY, OPERATIONAL IN ALL RESPECTS, UNLESS OTHERWISE SPECIFICALLY STATED IN THE DRAWINGS OR PROJECT MANUAL.
7. IT IS THE SITE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER OF ANY DEFICIENCIES OR DISCREPANCIES AMONG THE DIVISIONS OF THE DRAWING AND SPECIFICATIONS PRIOR TO THE BID DATE. NEITHER THE OWNER OR ENGINEER WILL BE RESPONSIBLE FOR ANY DEFICIENCIES OR DISCREPANCIES RAISED AFTER THE BID OPENING. ACCORDINGLY, IN LIGHT OF THESE OBLIGATIONS, THE ENGINEER IS OBLIGATED TO INTERPRET THE DRAWINGS AND SPECIFICATIONS IN A MANNER THAT WILL PROVIDE THE OWNER WITH A COMPLETE, FUNCTIONING FACILITY FOR THE BID PRICE.
8. GOVERNING SPECIFICATIONS: CITY OF NEW SMYRNA BEACH, FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN AND CONSTRUCTION STANDARDS, LATEST EDITION, STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, LATEST EDITION, AND SUPPLEMENTS THERETO IF NOTED IN THE SPECIAL PROVISIONS FOR THIS PROJECT.

Sunshine 811
Always call 811 before you dig

WARNING!! CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH BURIED GAS MAINS, OVERHEAD POWER LINES AND UNDERGROUND UTILITIES.

TREE PRESERVATION AREA #1
(SEE SHEET L100)
(117.75 SQ IN PRESERVED)

WETLAND "B"
0.09 ACRES

20' DRAINAGE EASEMENT PER ORB 3086, PGS 55-57

SAW CUT AND REMOVE 50± LF OF TYPE "F" CURB AND GUTTER

REMOVE PORTION OF CURBING AND SOD FOR PEDESTRIAN CROSSWALK OPENING

TRUCKS ENTERING HIGHWAY
SIZE: 36"
W20-1A

NOTE: PLACE SEDIMENT FENCE ON PROPERTY LINE OR AS CLOSE AS PRACTICAL UNLESS SPECIFIED OTHERWISE ON THESE DRAWINGS. (3,000± LF TOTAL)

TEMPORARY CONSTRUCTION ENTRANCE
MAINTAIN DAILY TO REMOVE FINES AND SAND FROM ROADWAY (SOIL TRACKING PREVENTION DEVICE, TYPE A)
(SEE SHEET C301 FOR MORE INFORMATION)

REMOVE PORTION OF PAVEMENT FOR RAISED CONCRETE MEDIAN

SAW CUT AND REMOVE 144± LF OF TYPE "F" CURB AND GUTTER

INSTALL SEDIMENT FENCE OUTSIDE OF TOP OF BANK OR EASEMENT LINE, WHICHEVER IS GREATER (TYPICAL)

50' PAVED

100' AGGREGATE

24'

R50' (MIN)

SIZE: 36"
R3-5
ONLY

SIZE: 36"
R1-1
STOP

NOTE: APPROXIMATE LIMITS OF CONSTRUCTION ACTIVITIES, DEMOLITION, CLEARING AND STRIPPING. TERMINATE AT PROPERTY LINE UNLESS SPECIFIED OTHERWISE ON THESE DRAWINGS. (TOTAL DISTURBED AREA DUE TO CONSTRUCTION ACTIVITY IS 8.68± ACRES.)

REMOVE ALL EXISTING TREES WITHIN LIMITS OF CONSTRUCTION (UNLESS OTHERWISE NOTED)

SEE SHEET L100 FOR REQUIRED TREE COVERAGE AND TREE MITIGATION

TREE PRESERVATION AREA #2
(SEE SHEET L100)
(354.82 SQ IN PRESERVED)

WETLAND "A"
0.23 ACRES

INSTALL FENCE ON TOP OF BANK

TRUCKS ENTERING HIGHWAY
SIZE: 36"
W20-1A
250' MIN FROM WORK AREA EACH END
VERIFY PLACEMENT WITH COUNTY INSPECTOR (TYP)

TREE REMOVAL QUANTITIES SUMMARY

		SIZES (INCHES AT DBH)																			
		6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
QNTY.	HARDWOODS	53	33	30	26	28	15	37	13	22	23	11	8	16	5	4	1	2	0	12	1	2	1	1
	PALMS	0	0	5	2	7	3	4	3	8	2	0	0	1	0	1	0	0	0	2	0	0	0	0

NEW SYMRNA BEACH HIGH SCHOOL BELL SCHEDULE:

REGULAR SCHEDULE
- WARNING BELL - 8:20 AM
- PERIOD 1 - 8:30 AM – 9:18 AM
- PERIOD 2 - 9:24 AM – 10:15 AM
- PERIOD 3 - 10:21 AM – 11:09 AM
- PERIOD 4 - 11:15 AM – 12:03 PM
- OFFICE HOURS - 12:03 PM - 12:18 PM
- LUNCH - 12:18 PM – 12:48 PM
- PERIOD 5 - 12:54 PM – 1:42 PM
- PERIOD 6 - 1:48 PM - 2:36 PM
- PERIOD 7 - 2:42 PM - 3:30 PM

EARLY RELEASE DAY (WEDNESDAY) SCHEDULE
- WARNING BELL - 8:20 AM
- PERIOD 1 - 8:30 AM – 9:11 AM
- PERIOD 2 - 9:17 AM – 10:00 AM
- PERIOD 3 - 10:06 AM – 10:47 AM
- PERIOD 4 - 10:53 AM – 11:34 AM
- LUNCH - 11:34 AM – 12:09 PM
- PERIOD 5 - 12:15 PM – 12:56 PM
- PERIOD 6 - 1:02 PM - 1:43 PM
- PERIOD 7 - 1:49 PM - 2:30 PM

REVISIONS

DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Roger W Strcula
Digitally signed by Roger W Strcula
Date: 2025.07.11 15:48:04 -04'00'

ROGER W. STRCULA, P.E. LICENSE NO. 52784 STATE OF FLORIDA PROFESSIONAL ENGINEER
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EXISTING SITE CONDITIONS

FLAGLER DUNES
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT NO:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	AS SHOWN

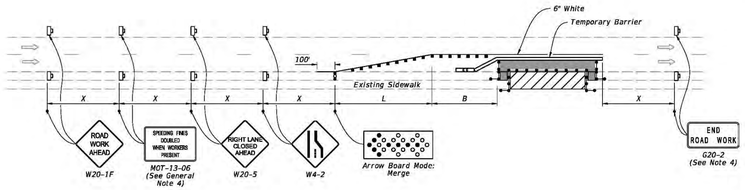
SHEET NUMBER:
C200

NOTES:

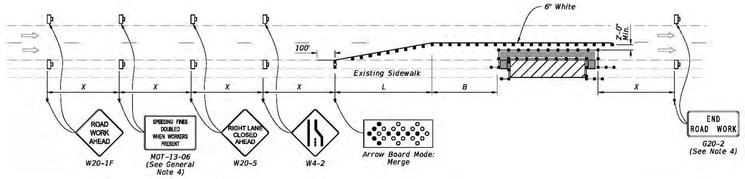
1. L = Taper Length
   B = Buffer Length
   X = Work Zone Sign Distance
   See Index 102-600 for "L", "B", "X", channelizing device spacing values.
2. Provide a 5' wide temporary pedestrian way with a maximum cross-slope of 0.02, except where space restrictions warrant a minimum width of 4'. Provide a 5' x 5' passing space for temporary pedestrian ways less than 5' in width at intervals not to exceed 200'.
3. When temporary pedestrian ways require curb ramps, meet the requirements of Index 522-002. Detectable warnings are not required for curb ramps diverting pedestrian traffic into a closed lane.
4. The "Speeding Fines Doubled When Workers Present" signs (MOT-13-06) and "End Road Work" signs (G20-2), along with associated work zone sign distances, may be omitted when the work operation will be in place for 24 hours or less.
5. Pedestrian Diversion Option 2 may only be used when called for in the Plans or as approved by an Engineer.

SYMBOLS:

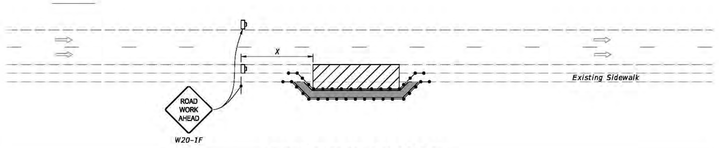
- Work Area
- Temporary Pedestrian Way
- Channelizing Device (See Index 102-600)
- Pedestrian Longitudinal Channelizing Device (LCD)
- Work Zone Sign
- Arrow Board
- Crash Cushion
- Lane Identification and Direction of Traffic



PEDESTRIAN DIVERSION - OPTION 1
(Temporary Barrier Shown, Low Profile Barrier Similar)



PEDESTRIAN DIVERSION - OPTION 2
(Work Zone Speed 35 mph or Less)



PEDESTRIAN SPECIAL DETOUR

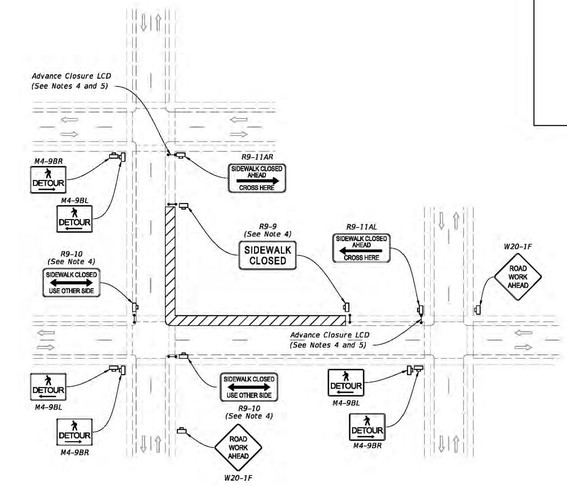
LAST REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	SIDEWALK CLOSURE	INDEX	SHEET
11/01/21					102-660	2 of 2

NOTES:

1. Cover or deactivate pedestrian traffic signal display(s) controlling closed crosswalks.
2. Place pedestrian LCDs across the full width of the closed sidewalk.
3. For post mounted signs located near or adjacent to a sidewalk, maintain a minimum 7' clearance from the bottom of the sign panel to the surface of the sidewalk.
4. "Sidewalk Closed" signs (R9-XX) may be mounted on pedestrian LCDs in accordance with the manufacturer's instructions.
5. Omit the Advance Closure LCD if it blocks access to other pedestrian facilities (e.g., transit stops, residences, or business entrances).

SYMBOLS:

- Work Area
- Work Zone Sign
- Pedestrian Longitudinal Channelizing Device (LCD)
- Lane Identification and Direction of Traffic



PEDESTRIAN DETOUR

LAST REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	SIDEWALK CLOSURE	INDEX	SHEET
11/01/20					102-660	1 of 2

GENERAL NOTES:

1. Use this Index only when called for in the Plans.
2. L = Taper Length
   B = Buffer Length
   X = Work Zone Sign Distance
   See Index 102-600 for "L", "B", "X", channelizing device spacing values.
3. Provide a minimum 5'-0" wide bicycle path.
4. The "Speeding Fines Doubled When Workers Present" signs (MOT-13-06) and "End Road Work" signs (G20-2), along with associated work zone sign distances, may be omitted when the work operation will be in place for 24 hours or less.
5. Include additional signage at intersections as required by the Engineer or shown in the Plans.

BICYCLE DETOUR

SYMBOLS:

- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Type III Barricade
- Lane Identification and Direction of Traffic

LAST REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	BICYCLE FACILITY CLOSURES	INDEX	SHEET
11/01/21					102-661	1 of 2

NOTES:

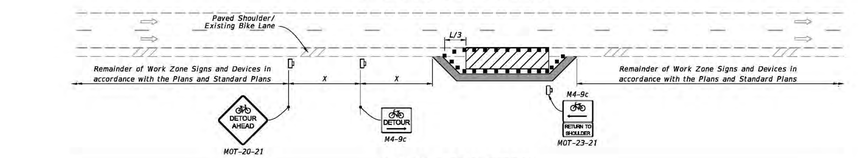
1. Temporary pavement markings may be omitted when the work operation is in place for 3 days or less.
2. If the Closed Bicycle Facility is a marked bicycle lane, use sign MOT 22-21 instead of sign W21-5a.
3. If the travel lane is less than 14' wide, use sign R4-11.

BICYCLE FACILITY SHIFT
(With Lane Closure)

BICYCLE FACILITY SHIFT
(Work Zone Speed of 35 mph or Less)

TYPICAL PCMS DISPLAY:

Message 1: BIKE FACILITY CLOSED
Message 2: BICYCLES ON ROAD



BICYCLE SPECIAL DETOUR

LAST REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	BICYCLE FACILITY CLOSURES	INDEX	SHEET
11/01/21					102-661	2 of 2

REVISIONS	
DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Roger W Strcula

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FDOT TCP INDICES

FLAGLER DUNES

1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	AS SHOWN

SHEET NUMBER:

C201

REVISIONS	
DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Roger W Strcula

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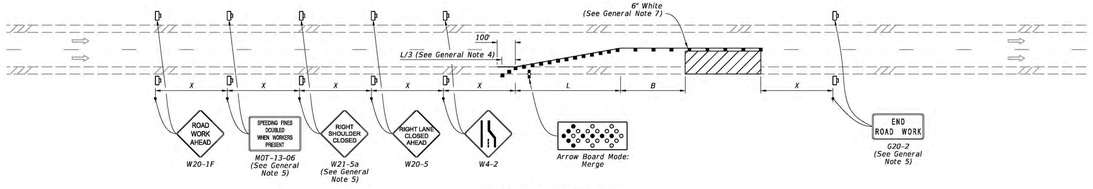


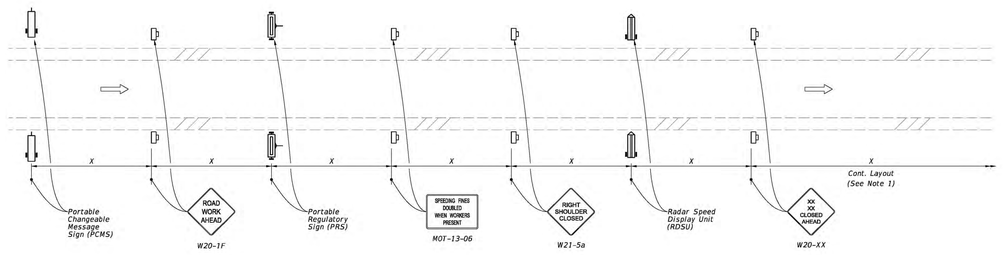
SINGLE LANE CLOSURE

SYMBOLS:

- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Arrow Board
- Lane Identification and Direction of Traffic

GENERAL NOTE:

1. L = Taper Length
   B = Buffer Length
   X = Work Zone Sign Distance
   See Index 102-600 for "L", "B", "X", and channelizing device spacing values.
2. On undivided highways the median signs as shown are to be omitted.
3. On limited access facilities, omit "Right Shoulder Closed" signs (W21-5a) and associated work zone sign spacing distances.
4. If the paved shoulder is less than 4' in width, omit the taper and channelizing devices from the paved shoulder.
5. The "Speeding Fines Doubled When Workers Present" signs (MOT-13-06) and "End Road Work" signs (G20-2) and "Right Shoulder Closed" (W21-5a), along with associated work zone sign distances, may be omitted when the work operation will be in place for 24 hours or less. For Single Lane Closures, arrow boards and buffer (B) may also be omitted when the work operation will be in place for 60 minutes or less and the speed limit is 45 mph or less.
6. Use inverted plan of the illustrations for work on left side of roadways.
7. Temporary pavement markings may be omitted when the work operation is in place for 3 days or less.



MOTORIST AWARENESS SYSTEM

SYMBOLS:

- Work Zone Sign
- (1) PCMS= Portable Changeable (Variable) Message Sign
- (2) PRS= Portable Regulatory Sign-Speed Limit When Flashing
- (2) RSDU= Radar Speed Display Unit
- Lane Identification and Direction of Traffic

NOTES:

1. Use the Motorist Awareness System (MAS) for lane closures of at least 5 days (consecutive or not) on multilane divided facilities with a posted speed of 55 or greater when workers are present and not protected by a barrier.
2. Locate the Motorist MAS devices (i.e., PCMS, PRS, and RDSU) within the advance warning signs as shown. Continue with the remainder of the work zone signs and devices in accordance with the Plans or Standard Plans after the appropriate "Lane Closed Ahead" (W20-XX) sign.
3. For a posted speed of 65 mph or greater, display speed with a ten mph reduction. For a posted speed of 60 mph, display a reduced speed of 55 mph. For areas outside of the lane closure, use the posted speed as the work zone speed.
4. Omit the PCMS in the median for roadways with three lanes or less in the same direction of traffic.

TYPICAL PCMS DISPLAY:

With speed reduction:
Message 1: WORKERS PRESENT AHEAD
Message 2: SPEED REDUCED NEXT XXMI

Without speed reduction:
Message 1: WORKERS PRESENT AHEAD
Message 2: NEXT XX MILES

LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
11/01/21			FDOT FY 2023-24 STANDARD PLANS	MULTILANE ROADWAY, LANE CLOSURES	102-613	1 of 5

LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
11/01/21			FDOT FY 2023-24 STANDARD PLANS	MULTILANE ROADWAY, LANE CLOSURES	102-613	5 of 5

FDOT TCP INDICES

FLAGLER DUNES
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	AS SHOWN

SHEET NUMBER:

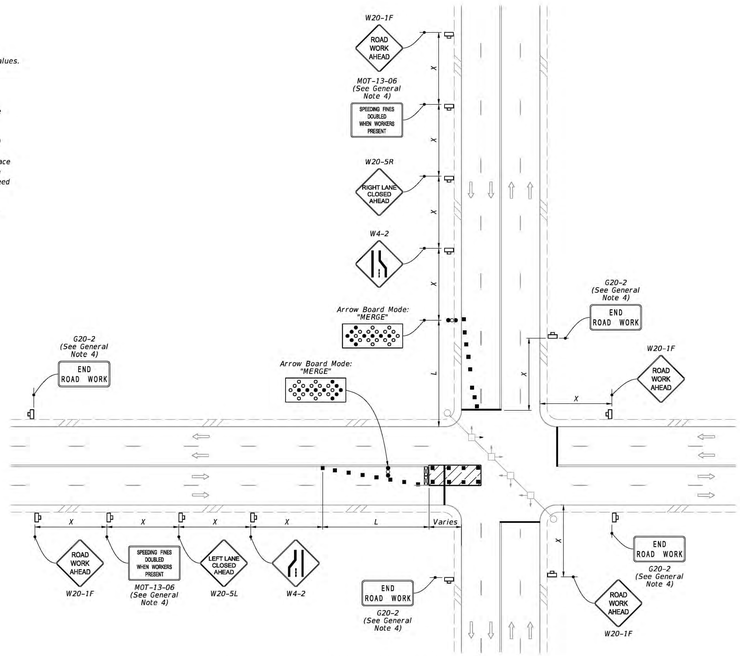
C202

GENERAL NOTES:

1. L = Taper Length
   B = Buffer Length
   X = Work Zone Sign Distance
   See Index 102-600 for "L", "B", "X", and channelizing device spacing values.
2. If vehicles in a parking zone block the line of sight to TCZ signs, locate and post mount signs in accordance with Index 700-101.
3. Use temporary "STOP" sign (R1-1) where the existing stop bar is more than 30' from the taper, remove or cover existing sign.
4. The "Speeding Fines Doubled When Workers Present" sign (MOT-13-06) and "End Road Work" Sign (G20-2), along with associated Work Zone Sign Distances, may be omitted when the work operation will be in place for 24 hours or less. Additionally, arrow boards may be omitted when the work operation will be in place for 60 minutes or less and the speed limit is 45 mph or less.
5. If the work area extends across a crosswalk, close the crosswalk in accordance with Index 102-660.
6. Dual signs are required for divided roadways.

SYMBOLS:

- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Type III Barricade
- Arrow Board
- Stop Bar
- Lane Identification and Direction of Traffic



WORK IN INTERSECTION OF MULTILANE ROADWAY

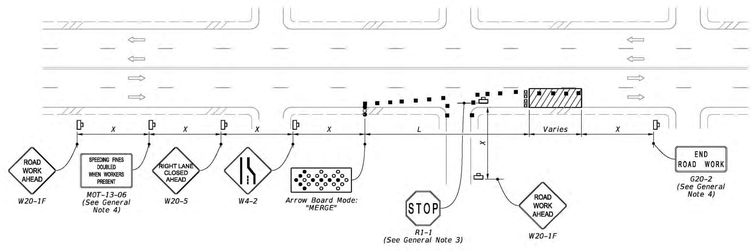
LAST REVISION 11/01/22	REVISION	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	MULTILANE ROADWAY, INTERSECTION WORK	INDEX 102-615	SHEET 1 of 5

NOTE:

Confine work operations to the following lane or lane combinations:

a. Outside travel lane
b. Outside auxiliary lane
c. Outside travel lane and adjoining auxiliary lane
d. Inside travel lane
e. Inside auxiliary lane
f. Inside travel lane and adjoining auxiliary lane

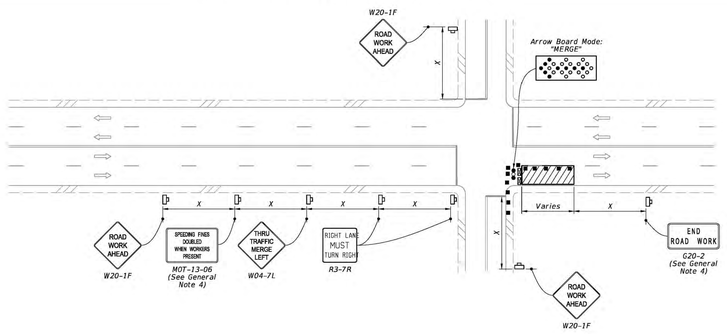
If the work area is confined to an auxiliary lane, the work area must be barricaded. Replace the RIGHT (LEFT) LANE CLOSED AHEAD signs with ROAD WORK AHEAD signs, and omit the merge symbol signs and arrow board.



RIGHT LANE CLOSED ON FAR SIDE OF MINOR SIDE STREET

SYMBOLS:

- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Type III Barricade
- Arrow Board
- Stop Bar
- Lane Identification and Direction of Traffic



RIGHT LANE CLOSED ON FAR SIDE OF INTERSECTION WITH SIGNIFICANT RIGHT TURNING MOVEMENTS

LAST REVISION 11/01/22	REVISION	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	MULTILANE ROADWAY, INTERSECTION WORK	INDEX 102-615	SHEET 2 of 5

NOTES:

1. Confine work operations to the following lane or lane combinations:

   a. Outside travel lane
   b. Outside auxiliary lane
   c. Outside travel lane and adjoining auxiliary lane
   d. Inside travel lane
   e. Inside auxiliary lane
   f. Inside travel lane and adjoining auxiliary lane

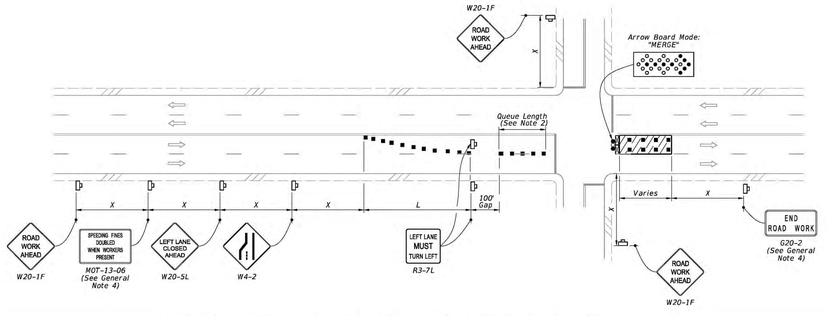
   If the work area is confined to an auxiliary lane, the work area must be barricaded. Replace the RIGHT (LEFT) LANE CLOSED AHEAD signs with ROAD WORK AHEAD signs, and omit the merge symbol signs and arrow board.

2. Provide sufficient Queue Length so that left-turning vehicles do not block through lanes.

LEFT LANE CLOSED ON FAR SIDE OF MINOR SIDE STREET - RESTRICTED TURNING MOVEMENTS

SYMBOLS:

- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Type III Barricade
- Arrow Board
- Stop Bar
- Lane Identification and Direction of Traffic



LEFT LANE CLOSED ON FAR SIDE OF INTERSECTION TURNING MOVEMENTS ALLOWED

LAST REVISION 11/01/22	REVISION	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	MULTILANE ROADWAY, INTERSECTION WORK	INDEX 102-615	SHEET 3 of 5

REVISIONS

DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Roger W Strcula

Digitally signed by Roger W Strcula
Date: 2025.07.11 15:49:03 -04'00'

ROGER W. STRCULA LICENSE NO. 52784 STATE OF FLORIDA PROFESSIONAL ENGINEER
NOT VALID UNLESS SIGNED AND DATED

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FDOT TCP INDICES

FLAGLER DUNES
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	AS SHOWN

SHEET NUMBER:

C203

NORTH

GRAPHIC SCALE
1" = 40'
40 20 0 40

Sunshine811
Always call 811 before you dig

LEGEND:

- STORMWATER MANHOLE
- STORM INLET / CATCH BASIN
- ELECTRIC BOX
- CLEANOUT
- SANITARY SEWER MANHOLE
- SANITARY SEWER VALVE
- DENOTE OFF-SITE TREE REMOVAL
- BORING ID NUMBER / BORING ELEVATION
- MAJOR CONTOUR LINE
- MINOR CONTOUR LINE
- TREE PROTECTION FENCE
- STORM PIPE (# DENOTES SIZE)
- TOE OF SLOPE
- TOP OF BANK
- OVERHEAD WIRE
- UNDERGROUND POWER
- FORCE MAIN (# DENOTES SIZE)
- JURISDICTIONAL WETLAND BOUNDARY
- SEWER LINE (# DENOTES SIZE)
- TELECOM LINE
- FIBER OPTIC CABLE
- WATER MAIN (# DENOTES SIZE)
- GAS MAIN
- LIMITS OF CONSTRUCTION
- PROPOSED SAWCUT
- PROPOSED SEDIMENT FENCE
- EASEMENT LINE
- WETLAND BUFFER LINE
- PROPOSED TEMPORARY INLET SILT PROTECTION (SEE APPLICABLE DETAIL)

ELEVATIONS SHOWN HEREON BASED ON NAVD 1988 DATUM

EROSION AND SEDIMENT CONTROL NOTES:

1. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES.
2. THE SITE CONTRACTOR SHALL STRICTLY ADHERE TO THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) DURING CONSTRUCTION OPERATIONS.
3. NO CONSTRUCTION ACTIVITIES SHALL BEGIN UNTIL ALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED.
4. ALL EXPOSED AREAS SHALL BE SEEDED AS SPECIFIED WITHIN 7 DAYS (OR SHORTER DURATION IF REQUIRED BY GOVERNING NPDES PERMIT) OF FINAL GRADING.
5. SHOULD CONSTRUCTION STOP FOR LONGER THAN 7 DAYS (OR SHORTER DURATION IF REQUIRED BY GOVERNING NPDES PERMIT), THE SITE SHALL BE SEEDED AS SPECIFIED.
6. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF 0.5 INCHES RAINFALL OR GREATER DURING A 24-HOUR PERIOD. ALL MAINTENANCE REQUIRED BY INSPECTION SHALL COMMENCE WITHIN 24 HOURS AND BE COMPLETED WITHIN 48 HOURS OF REPORT.
7. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE IT SHALL BE THE GENERAL CONTRACTOR'S RESPONSIBILITY TO TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SEDIMENT FROM LEAVING THE SITE.
8. THE SITE CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
9. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED AS DEEMED NECESSARY BY SITE INSPECTIONS.
10. THE SITE CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
11. THE CONTRACTOR SHALL EMPLOY AN ISA CERTIFIED ARBORIST TO PERFORM ROOT AND BRANCH PRUNING OF ALL TREES TO REMAIN. REMOVED BRANCHES SHALL BE 10' MINIMUM ABOVE GRADE AND CLEAR OF BUILDINGS.
12. THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR OR REPLACE ANY DAMAGED EXISTING IMPROVEMENTS TO THE SATISFACTION OF THE ENGINEER. ALL AREAS SHALL BE CLEANED OF ALL DEBRIS AND MATERIAL FROM CONTRACTOR'S ACTIVITIES, REGRADED IF NECESSARY, SEDIMENT FENCE REMOVED, SIDEWALK AND PAVEMENT SWEPT CLEAN AND ANY DISTURBED AREAS SODDED OR SEEDED TO MATCH EXISTING GROUND COVER.
13. THE SITE CONTRACTOR IS MADE AWARE OF EXISTING RESIDENTIAL PROPERTIES TO THE WEST. KEEP NOISE, DUST AND BLOWING SAND FROM AFFECTING THESE PROPERTIES BY WHATEVER MEANS ARE NECESSARY.

NOTE: PLACE SEDIMENT FENCE ON PROPERTY LINE OR AS CLOSE AS PRACTICAL UNLESS SPECIFIED OTHERWISE ON THESE DRAWINGS. (3,000± LF TOTAL)

HATCH DENOTES WETLAND IMPACT 0.026 AC

WETLAND "B" 0.09 ACRES

20' DRAINAGE EASEMENT PER ORB 3086, PGS. 56-57

TEMPORARY CONSTRUCTION ENTRANCE
MAINTAIN DAILY TO REMOVE FINES AND SAND FROM ROADWAY (SOIL TRACKING PREVENTION DEVICE, TYPE A) (SEE SHEET C301 FOR MORE INFORMATION)

APPROXIMATE LOCATION OF CONCRETE WASHOUT CONTRACTOR SHALL FIELD ADJUST PLACEMENT AS NECESSARY (SEE DETAIL ON SHEET C301)

CONTRACTOR SHALL CONSTRUCT TEMPORARY SEDIMENT BASIN WITHIN PROPOSED STORMWATER POND AREA AND PROVIDE 62,000 CF MIN. OF STORAGE TREATMENT VOLUME FOR EROSION AND SEDIMENTATION CONTROL

NOTE: INLET PROTECTION DEVICES SHALL REMAIN IN PLACE UNTIL AUTHORIZATION TO BE REMOVED IS OBTAINED FROM THE ENGINEER.

NOTE: APPROXIMATE LIMITS OF CONSTRUCTION ACTIVITIES, DEMOLITION, CLEARING AND STRIPPING. TERMINATE AT PROPERTY LINE UNLESS SPECIFIED OTHERWISE ON THESE DRAWINGS. (TOTAL DISTURBED AREA DUE TO CONSTRUCTION ACTIVITY IS 8.68± ACRES.)

SOLID WASTE CONTAINER (LOCATION BY CONTRACTOR)

PORT-LETS WITH CONTAINMENT (LOCATION BY CONTRACTOR)

SOD POND SLOPES WITH BAHIA SOD

WETLAND "A" 0.23 ACRES

INSTALL FENCE ON TOP OF BANK

INSTALL TURBIDITY BARRIER

NOTICE: THE CONTRACTOR SHALL DETERMINE FINAL LOCATIONS OF THE CONSTRUCTION STAGING ITEMS, INCLUDING THE TRAILER, STOCKPILE AREAS, LAYDOWN, AND CONSTRUCTION PARKING WITH THE EROSION CONTROL INSPECTOR. LOCATIONS SHOWN HEREON ARE FOR INFORMATIONAL ONLY.

NOTE: ALL PIPES AND INLETS SHALL BE FLUSHED AND CLEANED OF DEBRIS AND SEDIMENTS UPON COMPLETION OF FINAL STAGE OF WORK, WHEN LANDSCAPE WORK IS COMPLETE. CAPTURE DEBRIS AND FINES IN DOWNSTREAM INLETS. DO NOT DISCHARGE INTO POND. REMOVE FINES OFF-SITE.

NOTE: REMOVE ALL CONSTRUCTION DEBRIS. ALL DISTURBED AREAS SHALL BE PROPERLY REGRADED AND SEEDED UNLESS SPECIFIED OTHERWISE. THE CONTRACTOR SHALL INSPECT THE SITE TO ENSURE ALL SPECIFICATIONS PER THE SWPPP HAVE BEEN COMPLETED.

WARNING!! CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH BURIED GAS MAINS, OVERHEAD POWER LINES AND UNDERGROUND UTILITIES.

REVISIONS

DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
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Roger W Strcula

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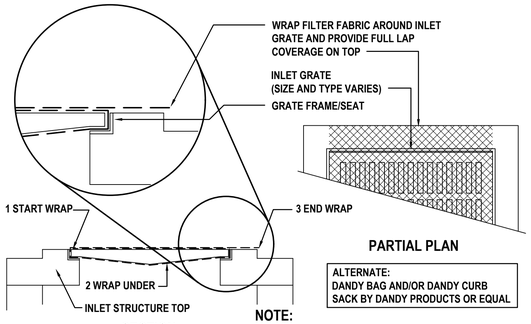
EROSION CONTROL PLAN

FLAGLER DUNES
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT NO:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	AS SHOWN

SHEET NUMBER:
C300



NOTE:
CONTRACTOR SHALL AT A MINIMUM OF ONCE PER WEEK REMOVE ANY ACCUMULATION OF DEBRIS FROM THE FILTER FABRIC AND PROPERLY DISPOSE OF MATERIAL.

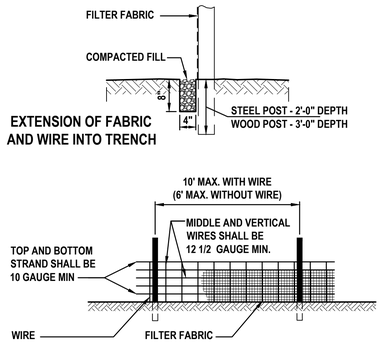
INLET SILT PROTECTION DETAIL

NOT TO SCALE

UTILIZE WHEN TOP AND GRADE ARE INSTALLED WITH STRUCTURE

NOTES:

1. WWM MINIMUM OF 32" WIDTH WITH A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
2. FILTER FABRIC SHALL BE 36" WIDE AND SHALL BE FASTENED ADEQUATELY TO THE WIRE.
3. STEEL POST SHALL BE 5'-0" IN HEIGHT AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
4. WOOD POST SHALL BE 5'-0" IN HEIGHT AND 2" IN DIAMETER.
5. SUPPORT POST SHALL BE INSTALLED ON THE DOWNHILL SIDE OF THE SEDIMENT FENCE (DOWNSTREAM FROM EXPECTED FLOWS)
6. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN 25% THE HEIGHT OF FENCE.
7. MAXIMUM DRAINAGE AREA 10,000 SF PER 100' OF FENCE.

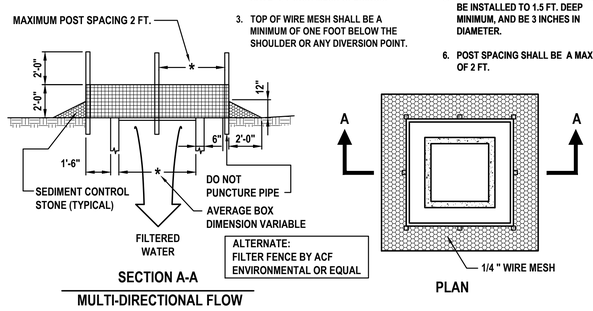


SEDIMENT FENCE DETAIL

NOT TO SCALE

NOTES:

1. SEDIMENT CONTROL STONE SHALL BE 3/4" WASHED STONE.
2. WIRE MESH SHALL BE HARDWARE CLOTH 23 GAUGE MIN. AND SHALL HAVE 1/4 INCH MESH OPENINGS.
3. TOP OF WIRE MESH SHALL BE A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR ANY DIVERSION POINT.
4. STEEL POST SHALL BE 5 FT. IN HEIGHT, BE INSTALLED 1.5 FT. DEEP MINIMUM, AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
5. WOOD POST SHALL BE 6 FT. IN HEIGHT, BE INSTALLED TO 1.5 FT. DEEP MINIMUM, AND BE 3 INCHES IN DIAMETER.
6. POST SPACING SHALL BE A MAXIMUM OF 2 FT.



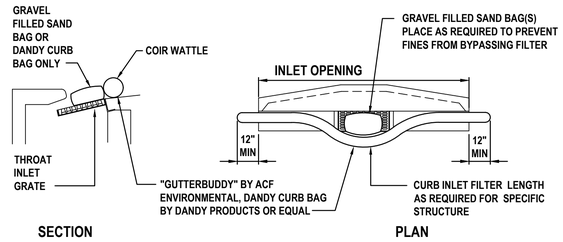
INLET PROTECTION

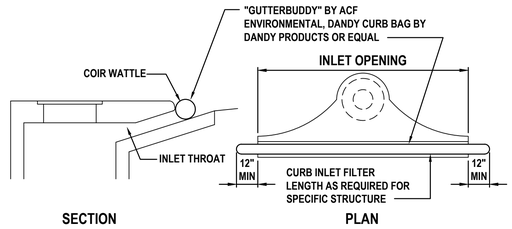
NOT TO SCALE

UTILIZE WHEN TOP AND GRADE ARE NOT INSTALLED WITH STRUCTURE

GENERAL CONSTRUCTION NOTES

1. MEASURES SHALL BE IMPLEMENTED AT THE CONTRACTOR'S DISCRETION TO VISIBLY BARRICADE THE WORK AREA AND PROVIDE SAFE MEANS OF INGRESS AND EGRESS AROUND THE CONSTRUCTION SITE.
2. THE ENGINEER DOES NOT WARRANT THE CONTRACTOR'S MEANS OR METHODS FOR ITS INTERPRETATION OF THE REPAIR WORK. THE CONTRACTOR SHALL UTILIZE IT'S DISCRETION TO DETERMINE ITS BEST METHOD TO PERFORM THE WORK TO CORRECT THE DRAINAGE PONDING.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING FACILITIES AND SHALL RESTORE ALL AREAS DAMAGED DUE TO CONSTRUCTION ACTIVITIES
4. PAVEMENT EDGES SHALL BE NEAT AND FREE OF DAMAGE OR BROKEN EDGES AT TIME OF PLACEMENT OF NEW ASPHALTIC PAVEMENT.
5. UPON COMPLETION OF ALL WORK, THE AREA SHALL BE SWEPT CLEAN OF ALL SAND AND DEBRIS.
6. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR ITS FINAL INSPECTION AND ACCEPTANCE.
7. REMOVAL OF ALL CONSTRUCTION DEBRIS, LIMEROCK, EXCESS OF BUILDERS SAND, CONCRETE AND MORTAR DEBRIS, EXISTING WEEDS AND GRASSES, AND ALL FOREIGN MATERIALS IN THE PLANTING BED AND SOD AREAS SHALL BE REMOVED PRIOR TO ANY INSTALLATION OF PLANTS OR TREES.
8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER OF ANY DEFICIENCIES OR DISCREPANCIES AMONG THE DIVISIONS OF THE DRAWING AND SPECIFICATIONS PRIOR TO THE BID DATE. NEITHER THE OWNER OR ENGINEER WILL BE RESPONSIBLE FOR ANY DEFICIENCIES OR DISCREPANCIES RAISED AFTER THE BID OPENING. ACCORDINGLY, IN LIGHT OF THESE OBLIGATIONS, THE ENGINEER IS OBLIGATED TO INTERPRET THE DRAWINGS AND SPECIFICATIONS IN A MANNER THAT WILL PROVIDE THE OWNER WITH A COMPLETE, FUNCTIONING FACILITY FOR THE BID PRICE.
9. THESE DRAWINGS AND THE PROJECT MANUAL ARE COMPLEMENTARY, AND ANY REQUIREMENT OF ONE SHALL BE A REQUIREMENT OF THE OTHER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CAREFULLY EXAMINE THE DRAWINGS AND SPECIFICATIONS AND TO COMPARE THE REQUIREMENTS OF EACH DIVISION AND ENSURE THAT EACH TRADE OR SUBCONTRACTOR IS MAKING THE ALLOWANCES NECESSARY TO PROVIDE THE OWNER A COMPLETE FACILITY, OPERATIONAL IN ALL RESPECTS, UNLESS OTHERWISE SPECIFICALLY STATED IN THE DRAWINGS.
10. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR INSTRUCTING THE CONTRACTOR IN THE METHODS OF CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE METHOD TO CONSTRUCT THE IMPROVEMENTS AS SHOWN ON THE PLANS.
11. LITTER CONTROL MEASURES TO PREVENT WIND-DRIVEN DEBRIS SHALL BE IMPLEMENTED THROUGHOUT THE DURATION OF CONSTRUCTION. ALL DEBRIS SHALL BE REMOVED AND THE PROJECT SITE CLEANED WITHIN 5 DAYS OF COMPLETION OF CONSTRUCTION.
12. AT NO TIME SHALL EXCAVATIONS BE LEFT UNCOVERED AFTER WORKING HOURS. CONTRACTOR SHALL SECURE THE WORK AREA AT THE END OF EACH DAY'S WORK.
13. AT ALL TIMES, THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT UNDERGROUND UTILITIES, STRUCTURES AND OTHER ASSOCIATED FACILITIES FROM DAMAGE DURING CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE MEASURES OF PROTECTION. ANY DAMAGED FACILITIES SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE AUTHORITY HAVING JURISDICTION OR ENGINEER AT THE CONTRACTOR'S EXPENSE.
14. THERE SHALL BE NO DEVIATIONS FROM THESE DRAWINGS UNLESS APPROVED IN WRITING BY THE ENGINEER AND THE OWNER.
15. THE CONTRACTOR SHALL CONTACT ALL CONCERNED UTILITIES AT LEAST FORTY-EIGHT (48) HOURS IN ADVANCE OF CONSTRUCTION OPERATIONS.
16. CONTRACTOR SHALL COORDINATE AND COMPLY WITH ALL UTILITY COMPANIES INVOLVED IN PROJECT AND PAY ALL REQUIRED FEES AND COST.
17. WHERE NEW ASPHALT MEETS EXISTING ASPHALT, THE EXISTING ASPHALT SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE.
18. PRIOR TO REMOVING CURB OR GUTTER, THE ADJACENT ASPHALT SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE.





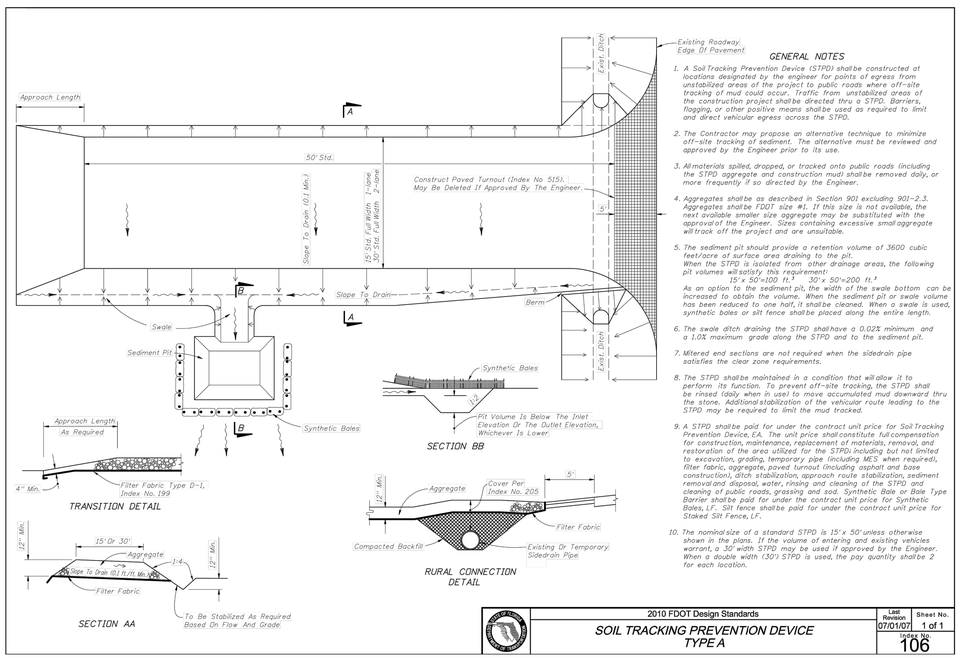
NOTE:
THE CONTRACTOR HAS THE DISCRETION TO UTILIZE THIRD PARTY PROPRIETARY EROSION AND SEDIMENTATION CONTROL PRODUCTS AND DEVICES AND IS NOT LIMITED TO THE DETAILS ON THIS SHEET.

NOTES:

1. INSTALL FILTER PRIOR TO BEGINNING CONSTRUCTION.
2. INSPECT ONCE EACH WEEK AND AFTER ANY RAIN EVENT. REMOVE ANY FINES AND DEBRIS THAT MAY HAVE ACCUMULATED AND DISPOSE OF PROPERLY.

CURB INLET SEDIMENT PREVENTION DETAIL

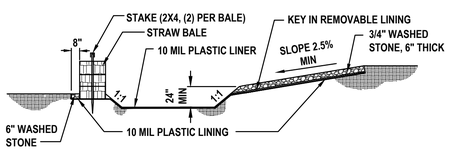
NOT TO SCALE

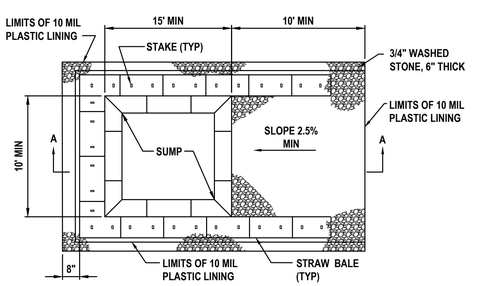


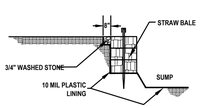
GENERAL NOTES

1. *A Soil Tracking Prevention Device (STPD) shall be constructed at locations designated by the engineer for points of egress from unstabilized areas of the project to public roads where off-site tracking of mud could occur. Traffic from unstabilized areas of the construction project shall be directed thru a STPD. Barriers, flogging, or other positive means shall be used as required to limit and direct vehicular egress across the STPD.*
2. *The Contractor may propose an alternative technique to minimize off-site tracking of sediment. The alternative must be reviewed and approved by the Engineer prior to its use.*
3. *All materials spilled, dropped, or tracked onto public roads (including the STPD aggregate and construction mud) shall be removed daily, or more frequently if so directed by the Engineer.*
4. *Aggregates shall be as described in Section 901 excluding 901-2.3. Aggregates shall be FDOT size #1. If this size is not available, the next available smaller size aggregate may be substituted with the approval of the Engineer. Sizes containing excessive small aggregate will track off the project and are unsuitable.*
5. *The sediment pit should provide a retention volume of 3600 cubic feet/acre of surface area draining to the pit. When the STPD is isolated from other drainage areas, the following pit volumes will satisfy this requirement:*
   15'x 50'=100 ft.³ 30'x 50'=200 ft.³
   As an option to the sediment pit, the width of the swale bottom can be increased to obtain the volume. When the sediment pit or swale volume has been reduced to one half, it shall be cleaned. When a swale is used, synthetic bales or silt fence shall be placed along the entire length.
6. *The swale ditch draining the STPD shall have a 0.02% minimum and a 1.0% maximum grade along the STPD and to the sediment pit.*
7. *Mitered end sections are not required when the sidedrain pipe satisfies the clear zone requirements.*
8. *The STPD shall be maintained in a condition that will allow it to perform its function. To prevent off-site tracking, the STPD shall be rinsed (daily when in use) to move accumulated mud downward thru the stone. Additional stabilization of the vehicular route leading to the STPD may be required to limit the mud tracked.*
9. *A STPD shall be paid for under the contract unit price for Soil Tracking Prevention Device, EA. The unit price shall constitute full compensation for construction, maintenance, replacement of materials, removal, and restoration of the area utilized for the STPD including but not limited to excavation, grading, temporary pipe (including MES when required), filter fabric, aggregate, paved turnout (including asphalt and base construction), ditch stabilization, approach route stabilization, sediment removal and disposal, water, rinsing and cleaning of the STPD and cleaning of public roads, grassing and sod. Synthetic Bale or Bale Type Barrier shall be paid for under the contract unit price for Synthetic Bales, LF. Silt fence shall be paid for under the contract unit price for Staked Silt Fence, LF.*
10. *The nominal size of a standard STPD is 15' x 50' unless otherwise shown in the plans. If the volume of entering and existing vehicles warrant, a 30' width STPD may be used if approved by the Engineer. When a double width (30') STPD is used, the pay quantity shall be 2 for each location.*

2010 FDOT Design Standards	Last Revision	Sheet No.
SOIL TRACKING PREVENTION DEVICE TYPE A	07/01/07	1 of 1
	Index No.	106









NOTES:

1. PIT IS SPECIFICALLY DESIGNATED, DIKED AND IMPERVIOUS CONTAINMENT TO PREVENT CONTACT BETWEEN CONCRETE WASH AND STORMWATER.
2. WASH WATER SHALL NOT BE ALLOWED TO FLOW TO SURFACE WATER.
3. FACILITY MUST HOLD SUFFICIENT VOLUME TO CONTAIN CONCRETE WASTE WITH A MINIMUM FREEBOARD OF 12."
4. FACILITY SHALL NOT BE FILLED BEYOND 95% CAPACITY UNLESS A NEW FACILITY IS CONSTRUCTED.
5. SAW CUT PORTLAND CEMENT CONCRETE, RESIDUE FROM SAWCUT & GRINDING TO BE DISPOSED OF IN THE PIT.
6. CONCRETE WASHOUTS SHALL BE LOCATED A MINIMUM OF 100' FROM DRAINAGE WAYS, INLETS, & SURFACE WATERS.
7. MANUFACTURED CONCRETE WASHOUT DEVICES MAY BE USED IF REMOVED FROM THE SITE WHEN 95% FULL CAPACITY.
8. WASHOUT AREA(S) SHALL BE INSTALLED IN A LOCATION EASILY ACCESSIBLE BY CONCRETE TRUCKS.
9. ONE OR MORE AREAS MAY BE INSTALLED ON THE CONSTRUCTION SITE AND MAY BE RELOCATED AS CONSTRUCTION PROGRESSES.
10. AT LEAST WEEKLY REMOVE ACCUMULATION OF SAND AND AGGREGATE AND DISPOSE OF PROPERLY.

CONCRETE WASHOUT AREA

NOT TO SCALE

REVISIONS	
DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU & 6/11 COUNTY, & TREES

Roger W Strcula

Digitally signed by Roger W Strcula
Date: 2025.07.11 15:49:47 -04'00'

ROGER W. STRCULA LICENSE NO. 52784 STATE OF FLORIDA PROFESSIONAL ENGINEER
NOT VALID UNLESS SIGNED AND DATED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY ROGER W. STRCULA, PE
ON THE DATE ADJACENT TO THE SEAL.
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UPHAM INC
CIVIL ENGINEERING•SURVEYING•LANDSCAPE ARCHITECTURE
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Voice: 386.672.9515 • Fax: 386.673.6554 • upham-inc.com
LB# 0003512 LC# 0000357

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EROSION CONTROL DETAILS & NOTES

FLAGLER DUNES
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT NO:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	AS SHOWN

SHEET NUMBER:
C301

PROJECT SITE INFORMATION:

PROJECT NAME: FLAGLER DUNES

DEVELOPER: ALICIO PINA AND NIRMA PINA AS TRUSTEES OF THE ROYAL GROUP INVESTMENTS ROTH 401(K) FOR THE BENEFIT OF ALICIO PINA AND NIRMA PINA
15500 NEW BARN ROAD, SUITE 104
MIAMI LAKES, FL 33014

PROJECT LOCATION: 1070 10TH STREET, NEW SMYRNA BEACH, FLORIDA 32168

LATITUDE: LAT: N 29°00'03"
LONGITUDE: LON: W 80°55'51"

AHJ: CITY OF NEW SMYRNA BEACH

WMD JURISDICTION: ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD)

PROJECT AREA: 10.32± ACRES

DISTURBED AREA: 8.68± ACRES

FLUCCS CODE: 1300 PINE FLATWOODS
1330 DRY PRAIRIE
2233 MIXED WETLAND HARDWOODS
4220 DITCH

ULTIMATE RECEIVING WATER BODY: GABORDY CANAL TO INDIAN RIVER LAGOON
CLASS: 2
OFW: YES
WBID #: 2924B2
TMDLs: CHLOROPHYLL-A
FECAL COLIFORM

SOILS / GEOTECH DATA:
(PER USDA NRCS WEB SOIL SURVEY)

SOIL NUMBER	SOIL NAME	HSG
17	DAYTONA SAND	A
32	MYAKKA-MYAKKA	A/D
34	MYAKKA-ST. JOHNS	A/D

CONSTRUCTION INFORMATION:

A) DESCRIPTION OF ACTIVITIES

CONSTRUCTION ACTIVITIES INCLUDE: MASS EARTHWORK GRADING AND EXCAVATION / FILL, VARIOUS UTILITIES INSTALLATION, PAVEMENT PARKING AND DRIVES, CURBING, BUILDINGS, PLANTINGS AND GRASS AND FINAL STABILIZATION AND RESTORATION.

SOIL DISTURBING ACTIVITIES INCLUDE: INSTALLING STABILIZED CONSTRUCTION ENTRANCES, INSTALLATION OF EROSION AND SEDIMENT CONTROLS, STRIPPING EXISTING GROUND COVER AND MASS EARTHWORK GRADING.

B) SEQUENCE OF MAJOR ACTIVITIES AND CONTROL MEASURES:

1. THE CONTRACTOR SHALL SCHEDULE AND ATTEND THE PRECONSTRUCTION MEETING WITH APPROPRIATE JURISDICTIONAL AGENCIES AS SPECIFIED PRIOR TO START OF CONSTRUCTION.
2. THE CONTRACTOR SHALL PROVIDE EMERGENCY TELEPHONE NUMBERS TO THE CITY AND/OR COUNTY AND ENGINEER OF AT LEAST TWO INDIVIDUALS THAT ARE CAPABLE OF CORRECTING ANY DRAINAGE PROBLEMS THAT MAY OCCUR AFTER WORK HOURS.
3. THE CONTRACTOR SHALL PROVIDE THE ENGINEER, COUNTY AND CITY A MOT PLAN AT PRECONSTRUCTION MEETING. TRAFFIC SHALL BE ALLOWED TO CONTINUE DURING WORK. PROVIDE MEASURES TO DETOUR TRAFFIC AROUND CONSTRUCTION ACTIVITIES WITH ADEQUATE BARRICADES, SIGNAGE AND FLAGPERSON TO DIRECT TRAFFIC. EMERGENCY SERVICES SHALL BE NOTIFIED 48 HOUR IN ADVANCE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE APPROPRIATE UTILITY DEPARTMENT, FLORIDA SUNSHINE AND EMERGENCY SERVICES FOR RESPECTIVE UTILITY LOCATIONS AND "NOTICE" OF CONSTRUCTION ACTIVITY.
5. ALL EROSION CONTROL DEVICES AND VISIBLE BARRICADES SHALL BE INSTALLED AND APPROVED BY THE ENGINEER PRIOR TO THE START OF CLEARING AND GRUBBING.
6. ALL EROSION CONTROL DEVICES SHALL BE PLACED PRIOR TO THE START OF WORK AND REMAIN IN PLACE UNTIL ALL WORK IS COMPLETE. IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
7. A 24' WIDE 6" MINIMUM COMPACTED STONE DRIVE LANE TO THE CONSTRUCTION ENTRANCE THAT SHALL BE PLACED PRIOR TO THE CLEARING AND GRUBBING. THE APPROXIMATE LOCATION IS INDICATED ON THE DRAWING. THE ELEVATION SHALL BE APPROXIMATELY PER THE GRADING PLAN. PROVIDE ACCESS ACROSS DRIVE LANE FOR EMERGENCY VEHICLES, COORDINATE WITH FIRE CHIEF.
8. THE SITE SHALL BE CLEARED AND GRUBBED OF ALL VEGETATION AND DEBRIS WITHIN THE APPROXIMATE LIMITS OF CLEARING AS INDICATED ON THE DRAWING.
9. SOILS ARE TO BE STABILIZED BY WATER OR OTHER MEANS DURING CONSTRUCTION. THIS IS INTENDED TO REDUCE SOIL EROSION, BLOWING SAND AND THE IMPACT TO NEIGHBORING PROPERTIES.
10. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN 21 DAYS WILL BE STABILIZED WITH A TEMPORARY GRASS AND MULCH WITHIN 5 DAYS OF THE LAST DISTURBANCE.
11. ALL REMOVED MATERIAL SHALL BE HAULED OFF-SITE TO AN APPROVED LANDFILL. TREES MAY BE LOGGED OR MULCHED FOR OFF-SITE DISPOSAL AT THE CONTRACTOR'S DISCRETION.
12. ALL OFF-SITE AREAS DISTURBED DURING CONSTRUCTION ACTIVITY SHALL BE IMMEDIATELY RESTORED TO PRIOR CONDITION UPON COMPLETION OF WORK.
13. THE SITE CONTRACTOR SHALL ONLY BE PERMITTED TO REMOVE ALL EROSION PROTECTION DEVICES WITHIN EACH CONTRIBUTING AREA FOLLOWING REMOVAL OF SEDIMENT AND DEBRIS AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS.

SEDIMENT, EROSION AND POLLUTANT CONTROL MEASURES:

1. BEST MANAGEMENT PRACTICES IN ACCORDANCE WITH PART 5 OF FDEP DOCUMENT NO. 62-621.300(4)(a) SHALL BE USED FOR THIS PROJECT TO CONTROL EROSION AND TURBIDITY CAUSED BY STORMWATER RUNOFF. THE LOCATION AND DETAILS OF EROSION CONTROL METHODS ARE SHOWN ON PLANS. THE CONTRACTOR IS RESPONSIBLE FOR PLACING AND MAINTAINING THESE CONTROL METHODS AS SHOWN ON THE PLANS OR AS REQUIRED. CONTRACTOR SHALL ALSO PROVIDE THE REQUIRED EROSION PROTECTION AS REQUIRED BY LOCAL, STATE AND FEDERAL LAWS.
2. STORMWATER MANAGEMENT STORMWATER COLLECTION SHALL BE PROVIDED BY CATCH BASINS. THE SITE WILL DISCHARGE TO THE EXISTING MASTER STORMWATER POND FOR TREATMENT.
3. STABILIZATION PRACTICES
   WIND EROSION STABILIZATION: THE CONTRACTOR SHALL DENUDE ONLY ARES WHERE IT IS EXPECTED TO BE GRADED OR ALTERED WITHIN A 2 WEEK TIME-FRAME. FINAL GRADES SHALL BE PERFORMED AND TEMPORARY OR PERMANENT SOIL STABILIZATION SHALL BE APPLIED. AREAS WHERE CONSTRUCTION OPERATIONS WILL BE CONTINUOUS, FUGITIVE DUST SHALL BE MANAGED BY APPLYING A WATER SPRAY TO SATURATE THE SURFACE SOILS ON A DAILY BASIS, OR AS NEEDED TO MAINTAIN MINIMAL DUST TRANSPORT. FUGITIVE DUST SHALL MONITORED CONTINUOUSLY AND ADDITIONAL MEASURES MAY NEED TO BE TAKEN TO CONTROL OFF-SITE TRANSPORT OF UNACCEPTABLE LEVELS OF DUST.

   TEMPORARY STABILIZATION: TOP OF SOIL STOCK PILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR 21 DAYS WILL BE STABILIZED WITH TEMPORARY GRASS AND MULCH NO LATER THAN 5 DAYS FROM THE LAST CONSTRUCTION ACTIVITY. GRASS SEED SHALL BE MIXTURE OF 20 PARTS OF BERMUDA SEED AND 80 PARTS OF PENSACOLA BAHIA. THE SEPARATE TYPES OF SEED USED SHALL BE THOROUGHLY DRY MIXED IMMEDIATELY BEFORE SOWING. SEED WHICH HAS BECOME WET SHALL NOT BE USED, THE MULCH MATERIAL USED SHALL NORMALLY BE DRY MULCH. DRY MULCH SHALL BE STRAW OR HAY, CONSISTING OF OAT, RYE OR WHEAT STRAW, OR OF PANGOLA, PEANUT, COASTAL BERMUDA OR BAHIA GRASS HAY. ONLY UNDETERIORATED MULCH WHICH CAN BE READILY CUT INTO THE SOIL SHALL BE USED. AREAS OF THE SITE WHICH ARE TO BE PAVED WILL BE TEMPORARILY STABILIZED BY APPLYING STABILIZATION AND BASE.

   PERMANENT STABILIZATION: DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASES SHALL BE STABILIZED WITH SOD NO LATER THAN 5 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY.
4. STRUCTURAL PRACTICES
   STAKED SILT FENCES: THE STAKED SILT FENCES WILL BE CONSTRUCTED ALONG THE PERIMETER AS SPECIFIED IN THE DRAWINGS. STAKED FENCE SHALL BE CLEARED OF SEDIMENT WHEN IF REACHES ONE-THIRD HEIGHT OF THE FENCE.

   EARTH DIKE: IF REQUIRED, AN EARTH DIKE SHALL BE CONSTRUCTED ALONG THE SITE PERIMETER. A PORTION OF THE DIKE SHALL DIVERT RUN-ON AROUND THE CONSTRUCTION SITE. THE REMAINING PORTION OF THE DIKE SHALL COLLECT RUNOFF FROM THE DISTURBED AREA AND DIRECT THE RUNOFF TO THE SEDIMENT BASIN.

   SEDIMENT BASIN: A EXISTING STORMWATER POND TO BE USED. BEST MANAGEMENT PRACTICES SUCH AS REMOVAL OF SEDIMENT FROM INLET PROTECTION DEVICES, PROPER WASTE DISPOSAL AND SWEEPING TO REDUCE AMOUNT OF SEDIMENT DISCHARGED INTO POND SHALL BE CONTINUOUSLY IMPLEMENTED.
5. WASTE DISPOSAL
   WASTE MATERIALS: ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN A METAL DUMPSTER WITH SECURE LID IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN THE DUMPSTER. THE SUPERINTENDENT SHALL COORDINATE WITH LOCAL UTILITIES TO HAVE THE DUMPSTER EMPTIED AT LEAST TWICE A WEEK AND WASTE TAKEN TO AN APPROPRIATE LANDFILL. NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE. THE SUPERINTENDENT SHALL ORGANIZE TRAINING FOR EMPLOYEES IN THE PROPER PRACTICES WHEN DEALING WITH WASTE MATERIALS. THE SUPERINTENDENT SHALL BE RESPONSIBLE FOR POSTING AND ENFORCING WASTE MATERIAL PROCEDURES.

   HAZARDOUS WASTE: HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL AND STATE LAWS OR AS DIRECTED BY THE MANUFACTURER. THE SUPERINTENDENT SHALL ORGANIZE THE PROPER TRAINING FOR EMPLOYEES IN THE PROPER PRACTICES WHEN DEALING WITH HAZARDOUS WASTE MATERIALS. THESE PROCEDURES SHALL BE RESPONSIBLE FOR ENFORCING THE PROCEDURES.

   SANITARY WASTE: SANITARY WASTE SHALL BE COLLECTED AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS. THE SUPERINTENDENT SHALL COORDINATE WITH LOCAL UTILITY FOR COLLECTION OF SANITARY WASTE AT LEAST THREE TIMES A WEEK TO PREVENT SPILLAGE ONTO THE SITE.
6. DUST CONTROL
   TO PREVENT OFF-SITE VEHICULAR TRACKING OF SEDIMENTS AND DUST GENERATION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE ESTABLISHED BY THE SITE CONTRACTOR. SEE DRAWINGS FOR DETAILS AND LOCATION(S).
7. NON-STORMWATER DISCHARGES
   IT IS EXPECTED THAT THE FOLLOWING NON-STORMWATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:

   WATER FROM FIRE FIGHTING ACTIVITIES, FIRE HYDRANT FLUSHING, WATER LINE FLUSHING, WATER USED TO SPRAY OFF LOOSE SOILS FROM VEHICLES, DUST CONTROL, PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED). ALL NON-STORMWATER DISCHARGES WILL BE DIRECTED TO THE EXISTING STORMWATER POND.

   DISCHARGE OF UNCONTAMINATED GROUNDWATER FROM CONSTRUCTION-RELATED DEWATERING OPERATIONS IS PERMITTED IN ACCORDANCE WITH PART 3.4 OF THE FDEP DOCUMENT NO. 62-621.300(4)(a)

ITEMS REQUIRING POLLUTION PREVENTION
THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED, BUT NOT LIMITED, TO BE PRESENT ON-SITE DURING CONSTRUCTION:

CONCRETE	WOOD	ROOFING SHINGLES	ASPHALT
GLASS	SAND / DIRT	METAL STUDS	LIMEROCK
STONE	CLEANING SOLVENTS	MASONRY BLOCK	PRECAST STRUCTURES
PAINT	PETROLEUM / FUELS	FERTILIZERS	PIPES

STORMWATER POLLUTION PREVENTION PLAN CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THESE CONSTRUCTION PLANS, THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM, AS SHOWN ON THESE CONSTRUCTION PLANS, DESIGNED TO ASSURE THAT APPROPRIATE POLLUTION PREVENTION MEASURES ARE IMPLEMENTED DURING CONSTRUCTION AND TO ASSURE THAT THE QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION. THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

OWNER:
SIGNATURE: _____
NAME / TITLE: _____
COMPANY: _____
ADDRESS: _____

MAINTENANCE AND INSPECTION PROCEDURES:

1. INSPECTOR QUALIFICATIONS
   INSPECTIONS MUST BE CONDUCTED BY A "QUALIFIED" INSPECTOR. "QUALIFIED" IS DEFINED AS A PERSON THAT A). HAS SUCCESSFULLY COMPLETED AND MET ALL REQUIREMENTS NECESSARY TO BE FULLY CERTIFIED THROUGH THE FDEP STORMWATER, EROSION AND SEDIMENTATION CONTROL INSPECTOR TRAINING PROGRAM; B). HAS SUCCESSFULLY COMPLETED AN EQUIVALENT FORMAL TRAINING PROGRAM; OR C). THAT IS QUALIFIED BY OTHER TRAINING OR PRACTICAL EXPERIENCE IN THE FIELD OF STORMWATER POLLUTION PREVENTION AND EROSION AND SEDIMENTATION CONTROL.
2. DISTURBED AREAS
   ALL DISTURBED AREAS AND AREAS USED FOR MATERIAL STORAGE SHALL BE INSPECTED FOR POLLUTANTS ENTERING THE STORMWATER SYSTEM. THE STORMWATER MANAGEMENT SYSTEM AND EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE INSPECTED REGULARLY TO ENSURE THEY ARE OPERATING CORRECTLY. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING.
3. MONITORING INSPECTIONS
   ARE REQUIRED TO BE PERFORMED BY A QUALIFIED INSPECTOR AT LEAST EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS FOLLOWING A RAINFALL EVENT OF ONE-HALF (1/2) OF AN INCH OF RAINFALL OR GREATER AND SHALL CONTINUE UNTIL THE SITE COMPLIES WITH FINAL STABILIZATION (NOTICE OF TERMINATION).
4. REPORTING
   EACH INSPECTION MUST BE FOLLOWED UP BY A REPORT DOCUMENTING THE INSPECTOR'S FINDINGS AND REQUEST THE REQUIRED MAINTENANCE AND/OR REPAIR FOR THE EROSION AND SEDIMENTATION CONTROL MEASURES. THESE RECORDS ARE USED TO PROVE THAT THE REQUIRED INSPECTION AND MAINTENANCE WERE PERFORMED AND SHALL BE PLACED IN THE SWPPP LEDGER.
5. RECORD KEEPING
   IN ADDITION TO INSPECTION AND MAINTENANCE REPORTS, RECORDS SHOULD BE KEPT OF CONSTRUCTION ACTIVITIES THAT OCCUR ON THE SITE. THE CONTRACTOR SHALL RETAIN COPIES OF THE SWPPP, ALL REPORTS AND DATA FOR A MINIMUM OF FIVE (5) YEARS AFTER THE PROJECT IS COMPLETE IN PAPER AND CD FORMAT.

SPILL PREVENTION PRACTICES AND CONTROL MEASURES:

1. GOOD HOUSEKEEPING
   - SUPERINTENDENT SHALL INSPECT PROJECT AREA DAILY FOR FOR PROPER STORAGE, USE, AND DISPOSAL OF CONSTRUCTION MATERIALS.
   - STORE ONLY ENOUGH MATERIAL ON SITE FOR PROJECT COMPLETION.
   - ALL SUBSTANCES SHOULD BE USED BEFORE DISPOSAL OF CONTAINER.
   - ALL CONSTRUCTION MATERIALS STORED SHALL BE ORGANIZED AND IN THE PROPER CONTAINER AND IF POSSIBLE, STORED UNDER A ROOF OR PROTECTIVE COVER.
   - PRODUCTS SHALL NOT BE MIXED UNLESS DIRECTED BY THE MANUFACTURER.
   - ALL PRODUCTS SHALL BE USED AND DISPOSED OF ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
2. HAZARDOUS PRODUCTS
   - MATERIALS SHOULD BE KEPT IN ORIGINAL CONTAINER WITH LABELS UNLESS THE ORIGINAL CONTAINERS CANNOT BE RESEALED. IF ORIGINAL CONTAINERS CANNOT BE USED, LABELS AND PRODUCT INFORMATION SHALL BE SAVED.
   - PROPER DISPOSAL PRACTICES SHALL ALWAYS BE FOLLOWED IN ACCORDANCE WITH MANUFACTURER AND LOCAL/STATE REGULATIONS.
3. PRODUCT SPECIFIC PRACTICES
   - PETROLEUM PRODUCTS MUST BE STORED IN PROPER CONTAINERS AND CLEARLY LABELED. VEHICLES CONTAINING PETROLEUM PRODUCTS SHALL BE PERIODICALLY INSPECTED FOR LEAKS. PRECAUTIONS SHALL BE TAKEN TO AVOID LEAKAGE OF PETROLEUM PRODUCTS ON SITE.
   - THE MINIMUM AMOUNT OF FERTILIZER SHALL BE USED AND MIXED INTO SOIL IN ORDER TO LIMIT EXPOSURE TO STORMWATER. FERTILIZERS SHALL BE STORED IN COVERED AREA. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO SEALABLE PLASTIC BIN TO AVOID SPILLS.
   - PAINT CONTAINERS SHALL BE SEALED AND STORED WHEN NOT IN USE. EXCESS PAINT MUST BE DISPOSED OF IN APPROVED MANNER.
   - CONCRETE TRUCKS SHALL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.
4. SPILL CONTROL AND CLEANUP RESPONSIBILITIES
   - SPILL CLEANUP INFORMATION SHALL BE POSTED ON SITE TO INFORM EMPLOYEES ABOUT CLEANUP PROCEDURES AND RESOURCES.
   - THE FOLLOWING CLEAN-UP EQUIPMENT MUST BE KEPT ON-SITE NEAR THE MATERIAL STORAGE AREA: GLOVES, MOPS, RAGS, BROOMS, DUST PANS, SAND, SAWDUST, LIQUID ABSORBER, GOGGLES, AND TRASH CONTAINERS.
   - ALL SPILLS SHALL BE CLEANED UP AS SOON AS POSSIBLE.
   - WHEN CLEANING A SPILL, THE AREA SHOULD BE WELL VENTILATED AND THE EMPLOYEE SHALL WEAR PROPER PROTECTIVE COVERING TO PREVENT INJURY.
   - TOXIC SPILLS MUST BE REPORTED TO THE PROPER AUTHORITY REGARDLESS OF THE SIZE OF THE SPILL.
   - AFTER A SPILL, THE PREVENTION PLAN SHALL BE REVIEWED AND CHANGED TO PREVENT FURTHER SIMILAR SPILLS FROM OCCURRING. THE CAUSE OF THE SPILL, MEASURES TO PREVENT IT, AND HOW TO CLEAN THE SPILL UP SHALL BE RECORDED.
   - THE SUPERINTENDENT SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR AND IS RESPONSIBLE FOR THE DAY TO DAY SITE OPERATIONS THE SUPERINTENDENT ALSO OVERSEES THE SPILL PREVENTION PLAN AND SHALL BE RESPONSIBLE FOR EDUCATING THE EMPLOYEES ABOUT SPILL PREVENTION AND CLEANUP PROCEDURES.

NOTICE OF INTENT (NOI) / NOTICE OF TERMINATION (NOT)

1. NOI: THE NOTICE OF INTENT (NOI), DEP FORM 62-621.300(4)(b), IS TO BE COMPLETED AND SUBMITTED TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) BEFORE USE OF THE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES PROVIDED IN SUBSECTION 62-621.300(4), F.A.C.
2. NOT: WHERE A SITE HAS BEEN FINALLY STABILIZED AND ALL STORMWATER DISCHARGES AUTHORIZED BY THIS PERMIT ARE ELIMINATED, THE PERMITTEE SHALL SUBMIT A NOTICE OF TERMINATION, DEP FORM 62-621.300(6), SIGNED IN ACCORDANCE WITH PART 7.C OF FDEP DOCUMENT NO. 62-621.300(4)(a), WITHIN 14 DAYS OF FINAL STABILIZATION OF THE SITE TO TERMINATE COVERAGE UNDER THIS PERMIT.

CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERIC STORMWATER PERMIT ISSUED PURSUIT TO SECTION 403.0885, F.S., THAT AUTHORIZES THE STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

SIGNATURE	COMPANY INFO	RESPONSIBLE FOR:
	COMPANY: _____ NAME: _____ TITLE: _____ DATE: _____	
	COMPANY: _____ NAME: _____ TITLE: _____ DATE: _____	
	COMPANY: _____ NAME: _____ TITLE: _____ DATE: _____	

REVISIONS

DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Roger W Strcula
Digitally signed by Roger W Strcula
Date: 2025.07.11 15:50:09 -04'00'

ROGER W. STRCULA LICENSE NO. 52784 STATE OF FLORIDA PROFESSIONAL ENGINEER
NOT VALID UNLESS SIGNED AND DATED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY ROGER W. STRCULA, PE
ON THE DATE ADJACENT TO THE SEAL.
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CIVIL ENGINEERING • SURVEYING • LANDSCAPE ARCHITECTURE
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LB # 0003612 LC # 0000357

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STORMWATER POLLUTION PREVENTION PLAN

FLAGLER DUNES
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	AS SHOWN

SHEET NUMBER:
C302

NORTH

GRAPHIC SCALE
40 20 0 40
1" = 40'

GENERAL NOTES:

1. ALL DIMENSIONS AND TIES ARE TO THE EDGE OF PAVEMENT AND OUTSIDE FACE OF BUILDING.
2. THE CONTRACTOR AT ITS OWN DISCRETION SHALL MAINTAIN THE CONSTRUCTION SITE SECURE FROM TRESPASS.

CURVE TABLE					
CURVE #	CENTRAL ANGLE	RADIUS	CHORD BEARING	CHORD	LENGTH
CURVE-1	009°57'44"	1432.08'	S77°46'23"E	248.69'	249.00'
CURVE-2	021°14'15"	1384.32'	S83°29'55"E	510.19'	513.12'
CURVE-3	054°36'44"	38.00'	S44°17'53"W	34.86'	36.22'
CURVE-4	090°00'00"	38.00'	N63°23'45"W	53.74'	59.69'
CURVE-5	035°23'16"	38.00'	N89°17'53"W	23.10'	250.35'

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS - 2024 AND APPROVED PRODUCTS LIST:

INDEX NO.	DESCRIPTION		
102-600	GENERAL INFORMATION FOR TRAFFIC CONTROL THROUGH WORK ZONES	520-001	CURB AND GUTTER
		522-001	CONCRETE SIDEWALK
425-010	STRUCTURE BOTTOMS TYPE J AND P	522-002	DETECTABLE WARNINGS AND
425-001	SUPPLEMENTARY DETAILS FOR MANHOLES AND INLETS		SIDEWALK CURB RAMPS
		570-001	PERMANENT EROSION CONTROL
425-021	CURB INLET TOPS - TYPES 5 AND 6	700-010	SINGLE COLUMN GROUND SIGNS
425-041	GUTTER INLET TYPE V	706-001	TYPICAL PLACEMENT OF RAISED
425-052	DITCH BOTTOM INLETS TYPES - C, D, E AND H		PAVEMENT MARKERS
430-001	MISCELLANEOUS DRAINAGE DETAILS	711-001	PAVEMENT MARKINGS

NOTE:
ALL IMPROVEMENTS SHALL BE STAKED FOR CONSTRUCTION BY MEANS OF DIGITAL COORDINATES BY SURVEYOR UTILIZING GEODETIC TOTAL STATION. SCALING OF DRAWINGS FOR PURPOSES OF STAKING OR THE UTILIZATION OF THE GLOBAL POSITIONING SYSTEM (GPS) ARE AT THE SURVEYOR'S OWN RISK.

NOTE:
SEE ARCHITECTURAL / STRUCTURAL DRAWINGS FOR SPECIFIC BUILDING ELEMENTS. ITEMS ARE SHOWN HEREON FOR INFORMATIONAL PURPOSES ONLY AND SHALL BE INSTALLED BY THE GENERAL CONTRACTOR.

NOTE:
ALL WALKWAYS SHALL COMPLY WITH FLORIDA ADA GUIDELINES FOR SLOPES AND DIMENSIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY THAT ADA GUIDELINES ARE MET.

CURB CONSTRUCTION NOTES:

1. ALL CURBS TO BE CONSTRUCTED OF 28 DAY, 3,000 P.S.I. CONCRETE.
2. 1/2" PRE-MOLDED EXPANSION JOINT REQUIRED EVERY 100', VERTICAL SAWCUT JOINT REQUIRED EVERY 10' MAXIMUM (4' MINIMUM).
3. 1/2" PRE-MOLDED EXPANSION JOINT REQUIRED AT EACH SIDE OF ALL STORM INLET STRUCTURES AND AT ALL RADIUS POINTS.
4. EXPANSION JOINT MATERIAL MUST COVER ENTIRE CROSS SECTION OF CURB.
5. IN NO INSTANCE SHALL EXTRUDED CURBS (DEFINED AS HEADER-TYPE CURBS INSTALLED DIRECTLY ON TOP OF PAVEMENT) BE PERMITTED.
6. SAW CUT JOINTS SHALL BE CUT WHILE CONCRETE IS STILL GREEN, IF JOINTS ARE CUT AFTER CONCRETE HAS CURED AND SHRINKAGE HAVE OCCURRED THROUGH THE THICKNESS OF THE CURB, THEN THE CONTRACTOR SHALL REPLACE THE CURB TO THE NEAREST JOINT OR 4' MINIMUM LENGTH.
7. CONTRACTOR SHALL BROOM FINISH CONCRETE VERTICALLY.

N= 1,696,931.47'
E= 677,853.48'
CURVE-1
23.9'
12' UTILITY EASEMENT (TYPICAL)
20.21'
N= 1,696,878.81'
E= 678,096.53'
POINT OF CURVATURE
31.63'
BUILDING - A
4 UNITS
FFE= 11.20
20' DRAINAGE EASEMENT PER ORB 3086, PGS. 56-57
BUILDING - B
7 UNITS
FFE= 11.20
26'
20.50'
N= 1,696,748.33'
E= 677,947.57'
S71°36'15"W 70.43'
CURVE-5
N73°00'29"W 19.62'
CONCRETE SIDEWALK (TYPICAL)
12:1 MAX LONGITUDINAL SLOPE
(PEDESTRIAN CONNECTION) (SEE DETAIL FOR MORE INFORMATION)
10TH STREET
(PUBLIC RIGHT-OF-WAY VARIES)
33.53'
BUILDING - N
4 UNITS
FFE= 11.00
33.73'
33.78'
21.5'
BUILDING - C
6 UNITS
FFE= 11.20
S73°00'29"E 831.33'
21.5'
20.50'
12' UTILITY EASEMENT (TYPICAL)
20' BUILDING SETBACK (TYPICAL)
FLAGLER DUNES CIRCLE
(PRIVATE RIGHT-OF-WAY)
N73°00'29"W 500.83'
12' UTILITY EASEMENT (TYPICAL)
N18°15'05"W 760.80'
N18°23'45"W 342.62'
BUILDING - M
6 UNITS
FFE= 11.00
BUILDING - L
6 UNITS
FFE= 11.00
BUILDING - D
4 UNITS
FFE=11.00
PICKLEBALL COURT (BY OTHERS)
21.5'
N= 1,696,733.99'
E= 678,570.45'
34.09'
41.14'
41.34'
BUILDING - K
4 UNITS
FFE= 11.00
23.2'
25.3'
22.8'
BUILDING - I
6 UNITS
FFE=11.00
BUILDING - H
7 UNITS
FFE=11.00
S16°59'31"W 120.50'
S16°59'31"W 91.49'
LIFT STATION
N= 1,696,694.31'
E= 678,700.30'
POINT OF CURVATURE
75.45'
BUILDING - F
8 UNITS
FFE=11.20
20' UTILITY EASEMENT (TYPICAL)
CURVE-4
S71°36'15"W 286.34'
FLAGLER DUNES CIRCLE
(PRIVATE RIGHT-OF-WAY)
CURVE-3
CURVE-2
PROPOSED LOT LINE (TYPICAL)
STORMWATER POND
BUILDING - J
4 UNITS
FFE=11.00
BUILDING - G
8 UNITS
FFE=11.00
56'
HATCH DENOTES CONSERVATION EASEMENT (1.834 AC)
YELLOW REFLECTIVE SIGN MOUNTED ON U-CHANNEL POST (27 TOTAL, 48" MIN. HEIGHT) INSTALL 50' OC (25' OC BEHIND PROPOSED BUILDINGS)
20' COUNTY HAUL TRAIL AREA PER USE PERMIT
N= 1,696,636.54'
E= 679,207.20'
56.38'
25.3'
58.32'
20' BUILDING SETBACK (TYPICAL)
58.32'
93.22'
20' COUNTY HAUL TRAIL AREA PER USE PERMIT
S18°20'56"E 53.73'
N= 1,696,208.95'
E= 678,091.75'
53' COUNTY ACCESS AND MAINTENANCE EASEMENT
S71°36'15"W 1193.34'
33' PUBLIC DRAINAGE EASEMENT
53' COUNTY ACCESS AND MAINTENANCE EASEMENT
N= 1,696,585.54'
E= 679,224.12'

REVISIONS

DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Roger W Strcula
Digitally signed by Roger W Strcula
Date: 2025.07.11 15:50:39 -04'00'

ROGER W. STRCULA LICENSE NO. 52784 STATE OF FLORIDA PROFESSIONAL ENGINEER
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OVERALL SITE GEOMETRY AND LAYOUT PLAN

FLAGLER DUNES
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	1" = 40'

SHEET NUMBER:
C400

NOTE:
ALL IMPROVEMENTS SHALL BE STAKED FOR CONSTRUCTION BY MEANS OF DIGITAL COORDINATES BY SURVEYOR UTILIZING GEODETIC TOTAL STATION. SCALING OF DRAWINGS FOR PURPOSES OF STAKING OR THE UTILIZATION OF THE GLOBAL POSITIONING SYSTEM (GPS) ARE AT THE SURVEYOR'S OWN RISK.

PAVING LEGEND:

ASPHALT PAVEMENT	1.5" SUPERPAVE FDOT SP-9.5 FINE MIX, PER FDOT - SSRBC, SECTION 234 (APPLIED IN 2 LIFTS) 6" LIMEROCK BASE (LBR 100) MIN OF 98% MOD. PROCTOR MAX DRY DENSITY PER FDOT - SSRBC, SECTION 200 & SECTION 911 LATEST VERSION ALTERNATIVELY, CRUSH CONCRETE OF EQUAL THICKNESS. GRADATION SHOULD MEET FDOT SSRBC, SECTION 334-5.2.4 (PLACE IN 2 LIFTS) 12" STABILIZED SUBGRADE (LBR 40) PER FDOT - SSRBC, SECTION 160, PAGE 196 (TYPE B) AND COMPACTED TO 98% (MIN) MOD. PROCTOR MAX DRY DENSITY PER AASHTO T-180
HEAVY DUTY CONCRETE PAVEMENT	6" CONCRETE (3,000 P.S.I. AT 28 DAYS) 12" STABILIZED SUBGRADE MIN OF 98% MOD. PROCTOR MAX DRY DENSITY PER ASTM D1557, AASHTO T-180 (2 LIFTS) MAX CONTROL JOINT SPACING 12'x12' MIN SAW CUT DEPTH 2"
CONCRETE SIDEWALK	4" THICK CONCRETE (MIN.) 3,000 PSI, CLASS I CONCRETE CONTROL JOINT SPACING PER FDOT INDEX No. 350-001 ON COMPACTED SUBGRADE
CONCRETE PAVERS	4" THICK CONCRETE PAVERS, COLOR AND STYLE BY DEVELOPER
10TH STREET ASPHALT PAVEMENT	1.5" FDOT FRICTION COURSE TYPE FC-12.5 (TRAFFIC LEVEL C)(PG 76-22)(PMA) ASPHALT @ 20% RECYCLED MATERIALS 1.5" FDOT SUPERPAVE STRUCTURAL COURSE TYPE SP-12.5 (TRAFFIC LEVEL C)(PG 58-22) ASPHALT @ 30% RECYCLED MATERIALS 10" CRUSHED CONCRETE FINES OR LIME ROCK, COMPACTED TO A 98% MAXIMUM DENSITY PER AASHTO T-180 AND CONSTRUCTED IN ONE LIFT. 12" STABILIZED SUB-GRADE TO A 75 FBV/LBR 40 AND COMPACTED TO A 98% MAXIMUM DRY DENSITY PER AASHTO T-180 IN ONE LIFT, "OR" IN LIEU OF STABILIZATION, UTILIZE 1/2 PLAN THICKNESS OF STABILIZATION WITH SAME BASE MATERIALS USED, "BASE & A HALF", TO BE PLACED IN 2 LIFTS, COMPACTED TO 98% OF A T-180).

SYMBOL LEGEND:

- TYPE 'F' CURB (SEE DETAIL)
- "DROP" CURB (PER FDOT INDEX 520-001)
- SITE LIGHT POLES (SITE LIGHTING PER NSBU)

THE LOCATION OF THE LIGHT POLES SHALL ONLY BE INSTALLED PER THE DIGITAL COORDINATES TO AVOID CONFLICTS WITH UTILITIES (TYPICAL)

KEY NOTES	
NO.	DESCRIPTION
1	CURB RAMP (SEE FDOT INDEX 522-002)
2	CONSTRUCT "DROP" CURB (SEE SHEET C403)
3	CONSTRUCT TYPE "F" CURB (SEE SHEET C403)
4	4" SIDEWALK (SEE SHEET C403)
5	CURB TRANSITION (SEE DETAIL ON SHEET C403)

NOTE:
SEE ARCHITECTURAL / STRUCTURAL DRAWINGS FOR SPECIFIC BUILDING ELEMENTS. ITEMS ARE SHOWN HEREON FOR INFORMATIONAL PURPOSES ONLY AND SHALL BE INSTALLED BY THE GENERAL CONTRACTOR.

NOTE:
PAVING OPERATION SHALL NOT BE PERFORMED WITHIN THE RIGHT-OF-WAY ON FRIDAY, SATURDAY, SUNDAY, OR ANY DAY PRIOR TO A HOLIDAY WITHOUT WRITTEN CDE/INSPECTOR APPROVAL.

NOTE:
ALL WALKWAYS SHALL COMPLY WITH FLORIDA ADA GUIDELINES FOR SLOPES AND DIMENSIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY THAT ADA GUIDELINES ARE MET.

SEE SHEETS C403 FOR REFERENCED DETAILS NOT SHOWN HEREON.

GRAPHIC SCALE
1" = 30'

REVISIONS

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09/12/24	REV PER 9/11 VCS
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01/07/25	REV PER 11/08/24 CITY
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	SJRWMD COMMENTS
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	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Roger W Strcula
Digitally signed by Roger W Strcula
Date: 2025.07.11 15:50:58 -04'00'

ROGER W. STRCULA LICENSE NO. 52784 STATE OF FLORIDA PROFESSIONAL ENGINEER
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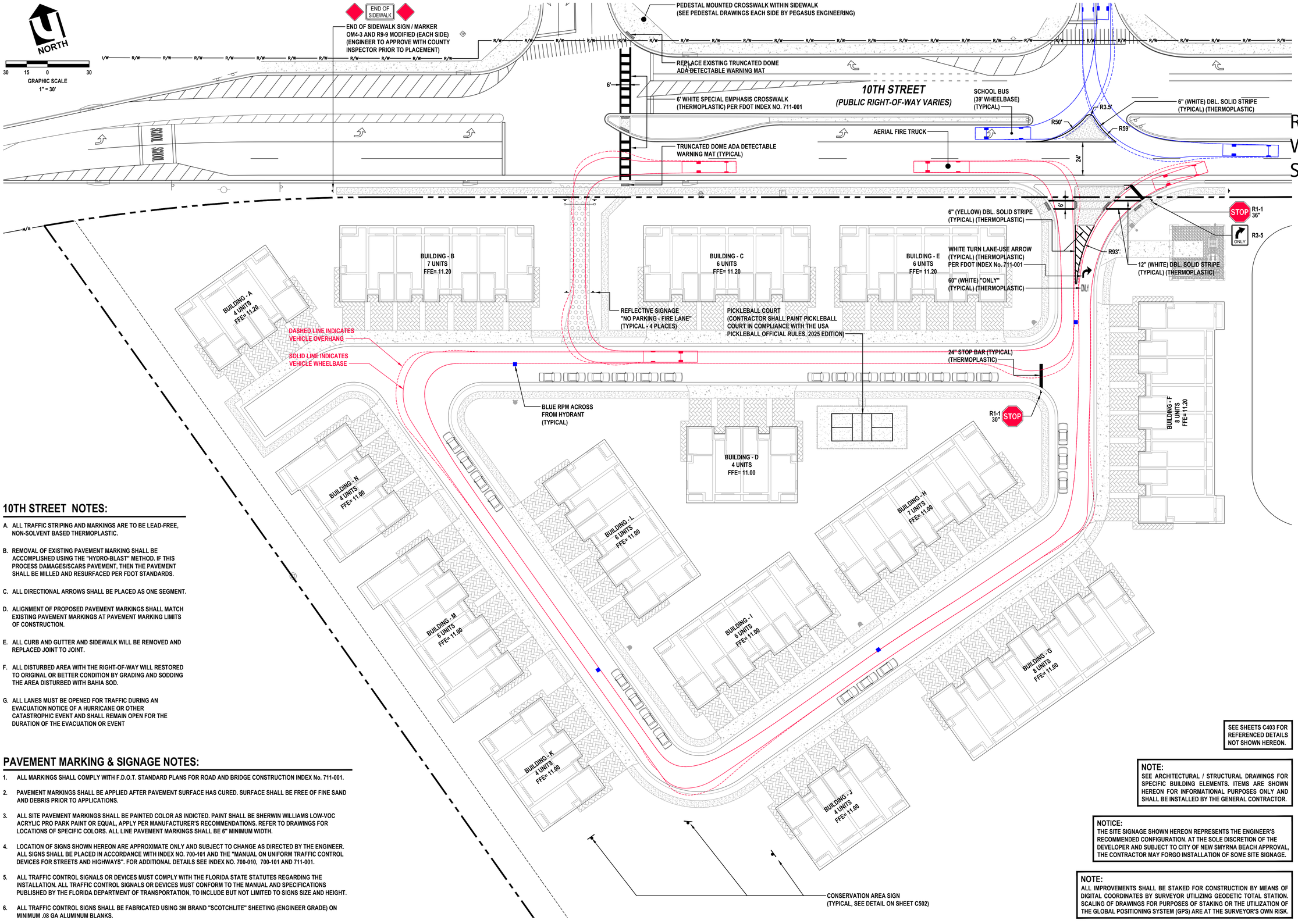
SITE GEOMETRY AND LAYOUT PLAN

FLAGLER DUNES

1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	1" = 30'

SHEET NUMBER:
C401



10TH STREET NOTES:

A. ALL TRAFFIC STRIPING AND MARKINGS ARE TO BE LEAD-FREE, NON-SOLVENT BASED THERMOPLASTIC.

B. REMOVAL OF EXISTING PAVEMENT MARKING SHALL BE ACCOMPLISHED USING THE "HYDRO-BLAST" METHOD. IF THIS PROCESS DAMAGES/SCARS PAVEMENT, THEN THE PAVEMENT SHALL BE MILLED AND RESURFACED PER FDOT STANDARDS.

C. ALL DIRECTIONAL ARROWS SHALL BE PLACED AS ONE SEGMENT.

D. ALIGNMENT OF PROPOSED PAVEMENT MARKINGS SHALL MATCH EXISTING PAVEMENT MARKINGS AT PAVEMENT MARKING LIMITS OF CONSTRUCTION.

E. ALL CURB AND GUTTER AND SIDEWALK WILL BE REMOVED AND REPLACED JOINT TO JOINT.

F. ALL DISTURBED AREA WITH THE RIGHT-OF-WAY WILL RESTORED TO ORIGINAL OR BETTER CONDITION BY GRADING AND SODDING THE AREA DISTURBED WITH BAHIA SOD.

G. ALL LANES MUST BE OPENED FOR TRAFFIC DURING AN EVACUATION NOTICE OF A HURRICANE OR OTHER CATASTROPHIC EVENT AND SHALL REMAIN OPEN FOR THE DURATION OF THE EVACUATION OR EVENT

PAVEMENT MARKING & SIGNAGE NOTES:

1. ALL MARKINGS SHALL COMPLY WITH F.D.O.T. STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION INDEX No. 711-001.
2. PAVEMENT MARKINGS SHALL BE APPLIED AFTER PAVEMENT SURFACE HAS CURED. SURFACE SHALL BE FREE OF FINE SAND AND DEBRIS PRIOR TO APPLICATIONS.
3. ALL SITE PAVEMENT MARKINGS SHALL BE PAINTED COLOR AS INDICTED. PAINT SHALL BE SHERWIN WILLIAMS LOW-VOC ACRYLIC PRO PARK PAINT OR EQUAL, APPLY PER MANUFACTURER'S RECOMMENDATIONS. REFER TO DRAWINGS FOR LOCATIONS OF SPECIFIC COLORS. ALL LINE PAVEMENT MARKINGS SHALL BE 6" MINIMUM WIDTH.
4. LOCATION OF SIGNS SHOWN HEREON ARE APPROXIMATE ONLY AND SUBJECT TO CHANGE AS DIRECTED BY THE ENGINEER. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH INDEX NO. 700-101 AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS". FOR ADDITIONAL DETAILS SEE INDEX NO. 700-010, 700-101 AND 711-001.
5. ALL TRAFFIC CONTROL SIGNALS OR DEVICES MUST COMPLY WITH THE FLORIDA STATE STATUTES REGARDING THE INSTALLATION. ALL TRAFFIC CONTROL SIGNALS OR DEVICES MUST CONFORM TO THE MANUAL AND SPECIFICATIONS PUBLISHED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION, TO INCLUDE BUT NOT LIMITED TO SIGNS SIZE AND HEIGHT.
6. ALL TRAFFIC CONTROL SIGNS SHALL BE FABRICATED USING 3M BRAND "SCOTCHLITE" SHEETING (ENGINEER GRADE) ON MINIMUM .08 GA ALUMINUM BLANKS.

SEE SHEETS C403 FOR REFERENCED DETAILS NOT SHOWN HEREON.

NOTE:
SEE ARCHITECTURAL / STRUCTURAL DRAWINGS FOR SPECIFIC BUILDING ELEMENTS. ITEMS ARE SHOWN HEREON FOR INFORMATIONAL PURPOSES ONLY AND SHALL BE INSTALLED BY THE GENERAL CONTRACTOR.

NOTICE:
THE SITE SIGNAGE SHOWN HEREON REPRESENTS THE ENGINEER'S RECOMMENDED CONFIGURATION. AT THE SOLE DISCRETION OF THE DEVELOPER AND SUBJECT TO CITY OF NEW SMYRNA BEACH APPROVAL, THE CONTRACTOR MAY FORGO INSTALLATION OF SOME SITE SIGNAGE.

NOTE:
ALL IMPROVEMENTS SHALL BE STAKED FOR CONSTRUCTION BY MEANS OF DIGITAL COORDINATES BY SURVEYOR UTILIZING GEODETIC TOTAL STATION. SCALING OF DRAWINGS FOR PURPOSES OF STAKING OR THE UTILIZATION OF THE GLOBAL POSITIONING SYSTEM (GPS) ARE AT THE SURVEYOR'S OWN RISK.

REVISIONS

DATE	DESCRIPTION
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12/20/24	REV PER VC COMMENTS
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	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Roger W Strcula — Digitally signed by Roger W Strcula Date: 2025.07.11 15:53:22 -04'00'

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PAVEMENT MARKING AND SIGNAGE PLAN

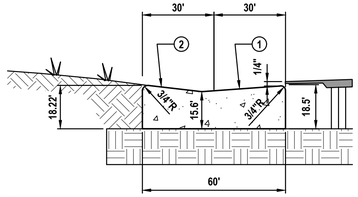
FLAGLER DUNES

1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	1" = 30'

SHEET NUMBER:

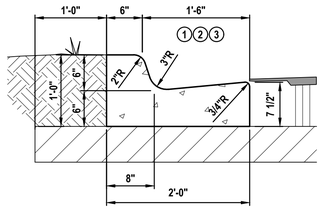
C402



1. WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT.
2. SLOPE TO FIT DRIVEWAY

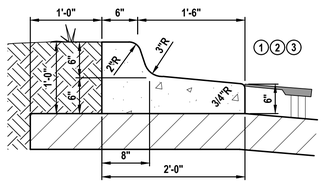
DROP CURB DETAIL

NOT TO SCALE



TYPE "F" CURB (CATCH) DETAIL

NOT TO SCALE

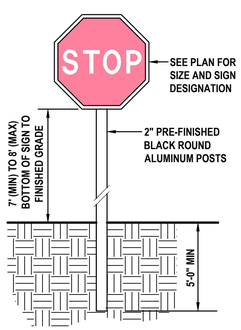


TYPE "F" CURB (SPILL) DETAIL

NOT TO SCALE

BUBBLE NOTES FOR CURB DETAILS:

1. PROVIDE CONTRACTION JOINTS @ 10' O.C. AND EXPANSION JOINTS @ 100' O.C. ALL JOINTS SEALED PER SPECIFICATIONS
2. 6" HEIGHT SHALL BE UNIFORM, IF HEIGHT VARIES ± 1/2" THEN CURB WILL BE REPLACED AT THE DISCRETION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
3. FACE OF CURB SHALL BE CLEAN OF SCUFF MARKS AND INTERFACE OF CURB AND PAVEMENT SHALL BE NEAT AND CLEAN OF CONCRETE OVERSPILL. CONTRACTOR SHALL REPLACE OR REPAIR AT ITS EXPENSE ANY LOCATIONS NOT ACCEPTABLE TO DEVELOPER. (BROOM FINISH VERTICALLY)



TYPICAL SIGN DETAIL

NOT TO SCALE

Tensar
A Division of CMC

Tensar International Corporation reserves the right to change its product specifications at any time. It is the responsibility of the person specifying the use of this product and of the purchaser to ensure that product specifications relied upon for design or procurement purposes are current and that the product is suitable for its intended use in each instance.

Project Performance Specification

InterAx™ NX850 with Giroud-Han Methodology

General

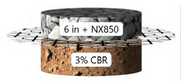
1. The conforming unsurfaced roadway for the project shall consist of a Mechanically Stabilized Layer (MSL) of defined thickness 6 in with a maximum surface rut depth limited to 1.5 in after a dynamically imposed 10,000 axle passes with an axle load of 40 kip and tire pressure of 130 psi over subgrade soils with a soaked CBR of 3%.

   The Mechanically Stabilized Layer shall consist of two components:
   A. The stabilization geogrid component of the MSL shall be Tensar InterAx™ NX850 which is manufactured from a coextruded, composite polymer sheet, which is then punched and oriented. The resulting structure consists of continuous and non-continuous ribs forming three aperture geometries (hexagon, trapezoid, and triangle) and an unimpeded suspended hexagon.
   B. The granular component of the MSL shall be a well graded granular fill with a CBR of 40% and a grading defined by a D50 of <= 22 mm.
2. The resulting quantified structural contribution of the stabilization geosynthetic component shall be included in analysis of the MSL by bespoke software which applies the geogrid benefit based on confirmed calibration to the Giroud-Han design equation through the review of the manufacturer's calculations and full scale testing.
3. Any alternative geosynthetic offered must be accompanied by product specific calibration in writing from Drs. Giroud and Han as well as project specific design calculations confirming compliance with project specific performance requirements.
4. The associated characteristics for the Tensar InterAx™ geogrid are included below. It should be noted that index properties or performance characteristics for any alternative geogrid in isolation, such as tensile properties measured in air, aperture stability modulus, or quality control data, will not be accepted as an adequate demonstration of equivalent trafficking performance.

InterAx™ NX850 Properties	Test/Measurement Method	General
Aperture shapes		Hexagonal, Trapezoidal, & Triangular
Structure		Coextruded & Integrally Formed
Rib shape		Rectangular
Continuous parallel rib pitch	Nominal	80 mm (3.2 in)
Rib aspect ratio[2]		> 1.0
Node thickness	Nominal	4.5 mm (0.18 in)
Color identification		White / Black / White

SGS_PSPS

Notes
1. Unless indicated otherwise, values shown are minimum average roll values determined in accordance with ASTM D4759-02
2. Ratio of the mid-rib depth to the mid-rib width



Parameters

Traffic

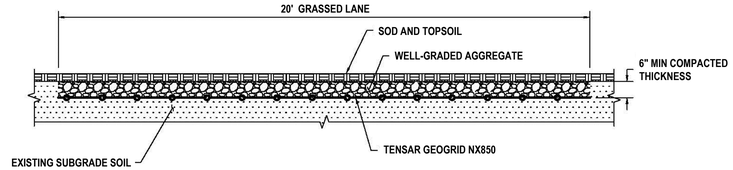
Axle load	40 kip
Tire pressure	130 psi
Axle passes	10,000
Rut depth	1.5 in

Aggregate

CBR	40%
Particle size	$D_{50} \leq 22$mm

Subgrade

CBR	3%
Assumed condition	Soaked

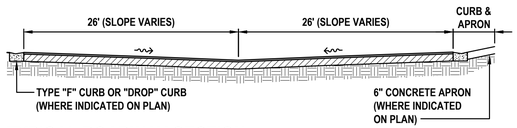


GRASSED FIRE LANE SECTION DETAIL
NOT TO SCALE

FIRE LANE DETAIL:

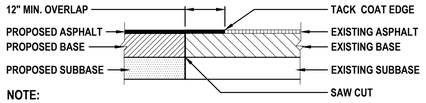
(CONTRACTOR SHALL PROVIDE THE FINAL TENSAR DESIGN SHOP DRAWINGS FOR APPROVAL)

NOT TO SCALE



TYPICAL ROADWAY SECTION:

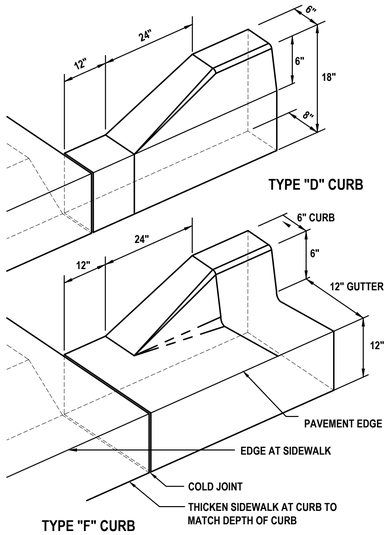
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 10'



NOTE:
THE WIDTH OF SAW CUT AT EXISTING ASPHALT PAVEMENT AT TACK COAT EDGE IS 1" MINIMUM.

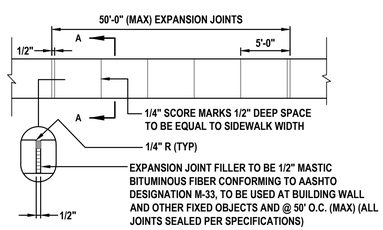
PAVEMENT BUTT JOINT DETAIL

NOT TO SCALE

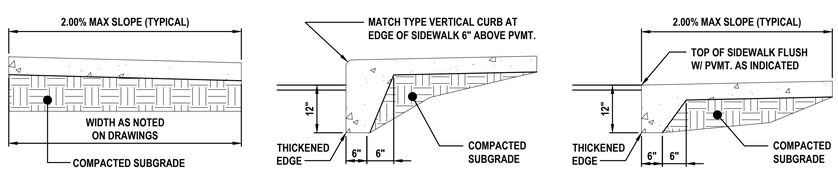


CURB TRANSITION DETAIL

NOT TO SCALE



CONCRETE WALKS SHALL BE 4 INCHES THICK HAVING A 3,000 PSI STRENGTH, POURED OVER PROPERLY PREPARED SUBGRADE. ALL CONCRETE SIDEWALKS SHALL BE 6 INCHES THICK ACROSS DRIVEWAYS. 1/2 INCH EXPANSION JOINTS SHALL BE PLACED AT A MAXIMUM OF 50'-0". CRACK CONTROL JOINTS SHALL BE 5' ON CENTERS.



SIDEWALK DETAILS

NOT TO SCALE

REVISIONS	
DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Roger W Strcula

Digitally signed by Roger W Strcula
Date: 2025.07.11 15:51:44 -04'00'

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MISCELLANEOUS DETAILS AND NOTES

FLAGLER DUNES
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	1" = 30'

SHEET NUMBER:
C403

NORTH

GRAPHIC SCALE
40 20 0 40
1" = 40'

NOTE:
ALL IMPROVEMENTS SHALL BE STAKED FOR CONSTRUCTION BY MEANS OF DIGITAL COORDINATES BY SURVEYOR UTILIZING GEODETIC TOTAL STATION. SCALING OF DRAWINGS FOR PURPOSES OF STAKING OR THE UTILIZATION OF THE GLOBAL POSITIONING SYSTEM (GPS) ARE AT THE SURVEYOR'S OWN RISK.

ELEVATIONS SHOWN HEREON BASED ON NAVD 1988 DATUM

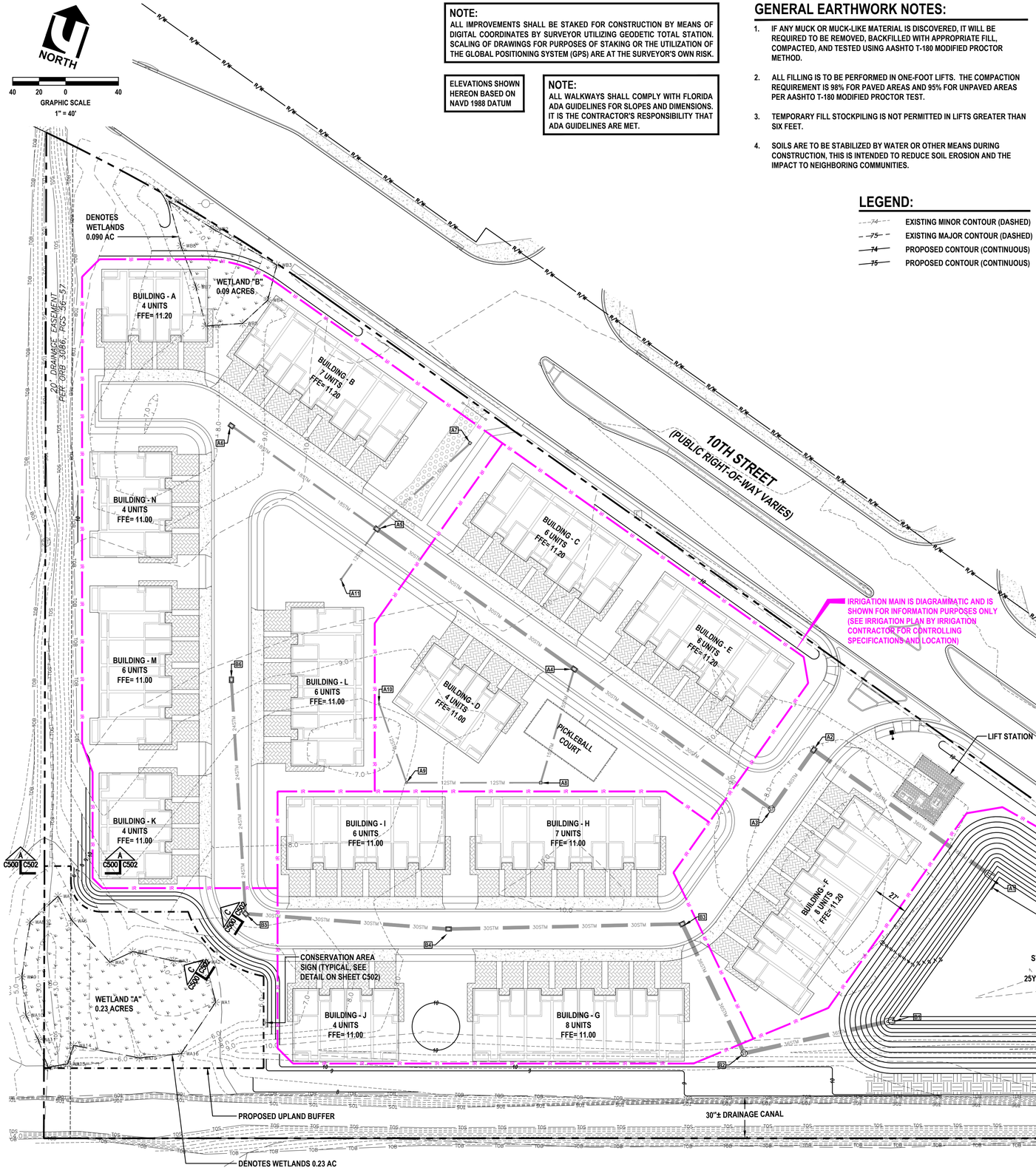
NOTE:
ALL WALKWAYS SHALL COMPLY WITH FLORIDA ADA GUIDELINES FOR SLOPES AND DIMENSIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY THAT ADA GUIDELINES ARE MET.

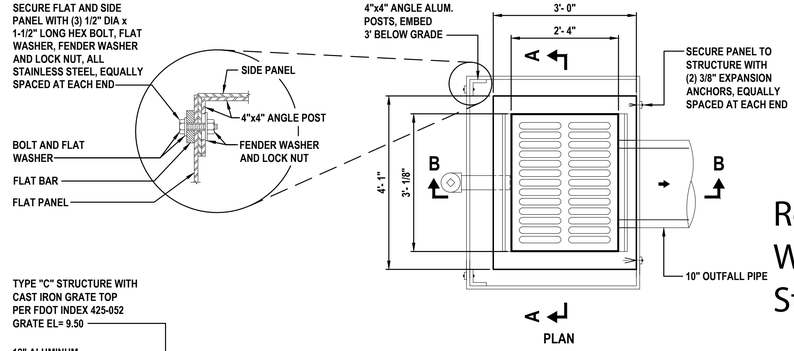
GENERAL EARTHWORK NOTES:

1. IF ANY MUCK OR MUCK-LIKE MATERIAL IS DISCOVERED, IT WILL BE REQUIRED TO BE REMOVED, BACKFILLED WITH APPROPRIATE FILL, COMPACTED, AND TESTED USING AASHTO T-180 MODIFIED PROCTOR METHOD.
2. ALL FILLING IS TO BE PERFORMED IN ONE-FOOT LIFTS. THE COMPACTION REQUIREMENT IS 98% FOR PAVED AREAS AND 95% FOR UNPAVED AREAS PER AASHTO T-180 MODIFIED PROCTOR TEST.
3. TEMPORARY FILL STOCKPILING IS NOT PERMITTED IN LIFTS GREATER THAN SIX FEET.
4. SOILS ARE TO BE STABILIZED BY WATER OR OTHER MEANS DURING CONSTRUCTION, THIS IS INTENDED TO REDUCE SOIL EROSION AND THE IMPACT TO NEIGHBORING COMMUNITIES.

LEGEND:

- EXISTING MINOR CONTOUR (DASHED)
- EXISTING MAJOR CONTOUR (DASHED)
- PROPOSED CONTOUR (CONTINUOUS)
- PROPOSED CONTOUR (CONTINUOUS)





CONTROL STRUCTURE DETAIL (CS-1)

NOT TO SCALE

STORM FACILITIES OPERATION AND MAINTAIN DESCRPTION:

DESCRIPTION	PROBABLE COST
MOWING POND SIDE SLOPES - MINIMUM EVERY 2 WEEKS OR WHEN GRASS EXCEEDS 4-INCHES	$800 PER MOW
STORM STRUCTURE, INSPECTIONS - MINIMUM QUARTERLY	$200 PER INSPECTION
REMOVAL OF DEBRIS AND SILT - MINIMUM QUARTERLY	$500 PER REMOVAL
POND NUISANCE VEGETATION REMOVAL - MINIMUM YEARLY WITH HERBICIDE BY QUALIFIED BIOLOGIST	$1,100 PER APPLICATION

REVISIONS	
DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Roger W Strcula

Digitally signed by Roger W Strcula
Date: 2025.07.11 15:52:12 -04'00'

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OVERALL STORM PIPING PLAN

FLAGLER DUNES

1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	1" = 40'

SHEET NUMBER:

C500

LEGEND:

- EXISTING SOFT ELEVATION
- EXISTING HARD ELEVATION
- PROPOSED SOFT ELEVATION
- PROPOSED HARD ELEVATION
- TOP OF WALK ELEVATION / EDGE OF PAVEMENT ELEVATION
- EXISTING MINOR CONTOUR (DASHED)
- EXISTING MAJOR CONTOUR (DASHED)
- MINOR CONTOUR (CONTINUOUS)
- MAJOR CONTOUR (CONTINUOUS)
- SURFACE FLOW ARROW

STORM PIPE TABLE

ID:	SIZE:	LENGTH:	SLOPE:	MAT:
A1 - A2	36"	158± LF	0.00%	HDPE
A2 - A3	36"	66± LF	0.00%	HDPE
A3 - A4	30"	50± LF	0.33%	HDPE
A4 - A5	30"	178± LF	0.33%	HDPE
A4 - A8	15"	88± LF	1.00%	PVC
A5 - A6	18"	180± LF	2.00%	HDPE
A5 - A7	15"	96± LF	2.00%	PVC
A5 - A11	12"	46± LF	2.00%	PVC
A8 - A9	12"	102± LF	1.00%	PVC
A9 - A10	12"	64± LF	1.00%	PVC
B1 - B2	36"	106± LF	0.00%	HDPE
B2 - B3	36"	104± LF	0.00%	HDPE
B3 - B4	30"	172± LF	0.33%	HDPE
B4 - B5	30"	162± LF	0.33%	HDPE
B5 - B6	24"	164± LF	0.33%	HDPE

STORM STRUCTURE TABLE

ID:	DESCRIPTION:	RIM EL:	INVERTS:
A1	M.E.S. (4:1)	N/A	NW INV = -1.50' (36")
A2	TYPE "C" INLET	10.00'	SW INV = -1.50' (36") SE INV = -1.50' (36")
A3	STORM MANHOLE	10.50'	NW INV = 1.80' (30") NE INV = -1.50' (36")
A4	TYPE "C" INLET	10.00'	NW INV = 2.40' (30") SW INV = 4.50' (15") SE INV = 2.40' (30")
A5	TYPE "C" INLET	10.00'	NW INV = 4.00' (18") NE INV = 3.00' (15") SW INV = 6.10' (12") SE INV = 3.00' (30")
A6	TYPE "C" INLET	10.00'	SE INV = 6.40' (18")
A7	18" YARD DRAIN	10.00'	SW INV = 4.90' (15")
A8	18" YARD DRAIN	10.00'	NE INV = 5.35' (15") W INV = 5.35' (12")
A9	12" YARD DRAIN	10.10'	N INV = 6.35' (12") E INV = 6.35' (12")
A10	12" YARD DRAIN	10.10'	S INV = 7.00' (12")
A11	12" YARD DRAIN	10.10'	N INV = 7.00' (12")
B1	M.E.S. (4:1)	N/A	W INV = -0.25' (36")
B2	STORM MANHOLE	10.30'	NW INV = -0.25' (36") E INV = -0.25' (36")
B3	TYPE "C" INLET	10.00'	W INV = 3.15' (30") SE INV = -0.25' (36")
B4	TYPE "C" INLET	10.00'	W INV = 3.70' (30") E INV = 3.70' (30")
B5	TYPE "C" INLET	10.20'	N INV = 4.25' (24") E INV = 4.25' (30")
B6	TYPE "C" INLET	10.00'	S INV = 4.80 (24")

GENERAL DRAINAGE NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGE TO DRAINAGE SYSTEM AND SHALL RESTORE ANY DAMAGED STRUCTURES OR PIPES.
2. ALL "ROUND" STORM PIPE SHALL BE CONSTRUCTED OF REINFORCED CONCRETE CLASS III WITH BUTYL MASTIC SEALANT, PVC OR HDPE (SICE) PIPE WITH CERTIFIED WATERTIGHT JOINTS BY THE MANUFACTURER WHERE SPECIFICALLY INDICATED ON THE DRAWING. RCP JOINTS SHALL BE WRAPPED WHERE APPLICABLE PER FDOT SPECIFICATIONS.
3. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL MATERIAL AND STRUCTURES TO THE ENGINEER (UPHAM, INC.) FOR APPROVAL PRIOR TO THE PRECONSTRUCTION MEETING. THE CONTRACTOR SHALL BE RESPONSIBLE AT ITS OWN RISK AND COST IF PRECAST STRUCTURES OR MATERIALS ARE ORDERED OR DELIVERED TO THE SITE PRIOR TO THE ENGINEER'S APPROVAL AND FOUND NOT TO BE ACCEPTABLE.
4. ALL DRAINAGE STRUCTURES SHALL BE PRECAST PER FDOT SPECIFICATIONS.
5. ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC (H20) LOADING AND BE INSTALLED ACCORDINGLY PER FDOT STANDARD SPECIFICATIONS AND MANUFACTURER'S SPECIFICATIONS RESPECTIVELY.
6. ALL DRAINAGE STRUCTURES AND PIPES SHALL BE CLEANED OF SAND AT THE LAST STAGE OF CONSTRUCTION PRIOR TO THE FINAL INSPECTION.
7. THE CONTRACTOR SHALL FIRST VERIFY THE INVERT(S) OF THE EXISTING STUBOUTS, MANHOLE(S) AND/OR INLETS FOR CONNECTION PRIOR TO INSTALLING ANY PIPES TO CONFIRM ELEVATION(S). IF ANY SUBSTANTIAL DIFFERENCES ARE DISCOVERED IN THE EXISTING INVERT(S), THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND COUNTY INSPECTOR.
8. MINIMUM PIPE COVER SHALL BE EIGHTEEN (18) INCHES MEASURED FROM THE OUTSIDE TOP OF PIPE TO THE BOTTOM OF THE ROADWAY BASE.
9. AS AN OPTION TO FITTINGS, CONTRACTOR MAY INSTALL "INSERTA-TEE" FITTINGS FOR STORM PIPING CONNECTIONS. MANUFACTURER'S SPECIFICATIONS FOR MATERIAL AND INSTALLATION MUST BE STRICTLY FOLLOWED TO VALIDATE WARRANTY.

NOTE:
CONTRACTOR SHALL FIELD ADJUST GRADE OUTSIDE OF BUILDING TO PROVIDE POSITIVE SLOPE AWAY FROM BUILDING. (TYPICAL)

ELEVATIONS SHOWN HEREON BASED ON NAVD 1988 DATUM

NORTH

GRAPHIC SCALE
30 15 0 30
1" = 30'

REVISIONS	
DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Roger W Strcula — Digitally signed by Roger W Strcula Date: 2025.07.11 15:52:37 -04'00'

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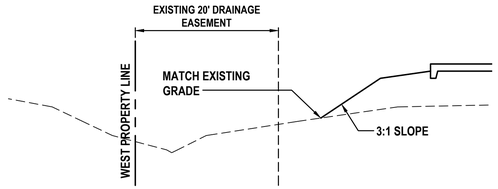
SITE GRADING AND DRAINAGE PLAN

FLAGLER DUNES
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

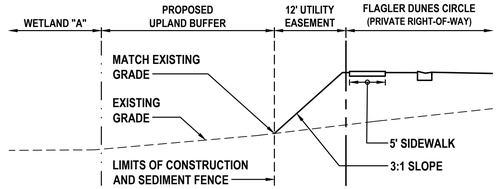
PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	1" = 30'

SHEET NUMBER:
C501



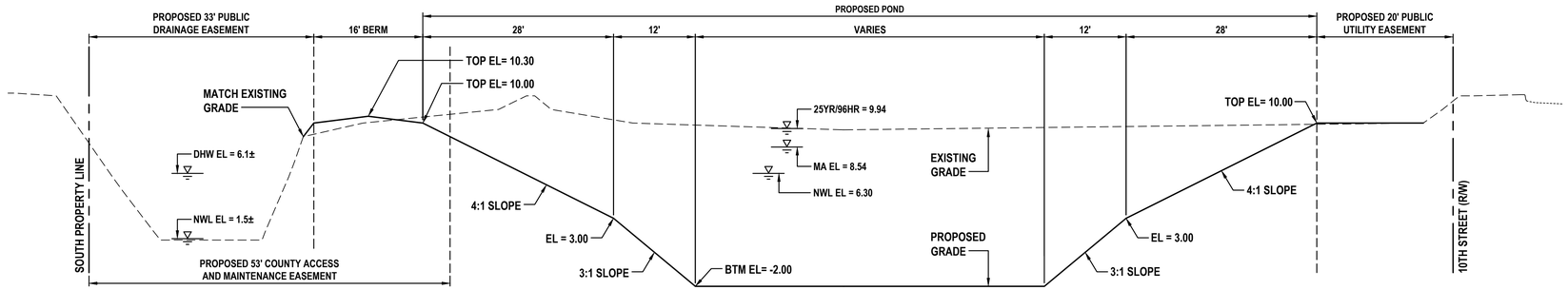
SECTION - A

H. SCALE: 1" = 10'
V. SCALE: 1" = 5'



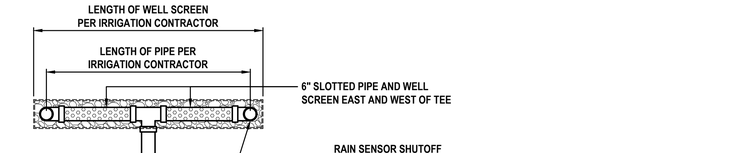
SECTION - C

H. SCALE: 1" = 10'
V. SCALE: 1" = 5'

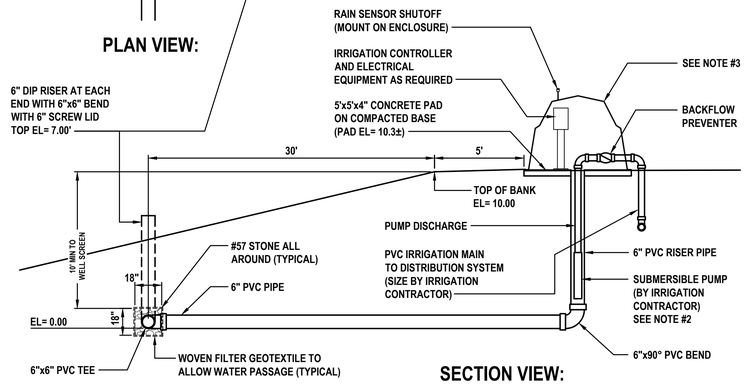


SECTION - B

H. SCALE: 1" = 10'
V. SCALE: 1" = 5'



PLAN VIEW:



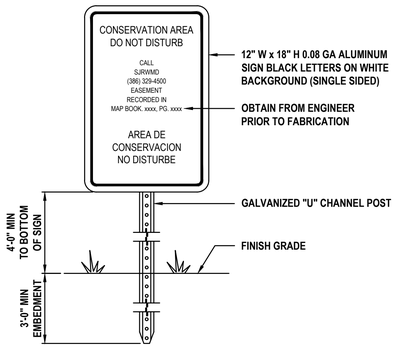
SECTION VIEW:

NOTES:

1. ELECTRICAL SERVICE TO IRRIGATION CONTROLLER SHALL BE SUPPLIED BY THE ELECTRICAL CONTRACTOR, NOT THE IRRIGATION CONTRACTOR.
2. THE IRRIGATION CONTRACTOR SHALL PROVIDE THE PUMP SPECIFICATIONS AND SHOP DRAWINGS TO THE LANDSCAPE ARCHITECT FOR APPROVAL. ALL MATERIAL, EQUIPMENT AND LABOR FOR THIS WORK SHALL BE INCLUDED IN ITS BID TO THE GENERAL CONTRACTOR OR DEVELOPER.
3. EQUIPMENT ENCLOSURE (COLOR, FACADE AND MATERIAL BY DEVELOPER)
4. THE LOCATION OF HARVESTING WELL SHALL BE DETERMINED BY THE IRRIGATION CONTRACTOR AND SHALL BE INCLUDED ON THE IRRIGATION PLANS.

WATER HARVESTING WELL DETAIL

NOT TO SCALE



CONSERVATION AREA SIGN DETAIL (3 TOTAL)

NOT TO SCALE

REVISIONS	
DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Roger W Strcula

Digitally signed by Roger W Strcula
Date: 2025.07.11 15:53:05 -04'00'

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SECTIONS, DETAILS & NOTES

FLAGLER DUNES
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	1" = 30'

SHEET NUMBER:

C502

NORTH

GRAPHIC SCALE
1" = 40'
40 20 0 40

UTILITY CONFLICT TABLE

#	LOWER PIPE	T.O.P.	UPPER PIPE	INVERT
1	36" STORM PIPE	1.70	8" SANITARY	2.72
2	36" STORM PIPE	1.70	8" SANITARY	3.02
3	36" STORM PIPE	2.45	8" SANITARY	3.48
4	15" STORM PIPE	4.57	8" SANITARY	5.84

UTILITIES LEGEND:

- PROPOSED BACKFLOW PREVENTER
- PROPOSED FDC
- PROPOSED FIRE HYDRANT
- PROPOSED WATER VALVE
- BACTERIOLOGICAL SAMPLE POINT
- PROPOSED DOMESTIC WATER METER
- PROPOSED SANITARY CLEANOUT
- PROPOSED SANITARY MANHOLE

PIPE LEGEND:

(36" MIN COVER, ALL UTILITIES)

- WM — 1" PE PIPE
- 4WM — 4" PVC C-900 DR-18 PIPE
- 6WM — 6" PVC C-900 DR-18 PIPE
- 8WM — 8" PVC C-900 DR-18 PIPE
- 10WM — 10" PVC C-900 DR-18 PIPE
- 10WM — 10" I.D. HDPE PIPE
- 4FM — 4" PVC C-900 DR-18 PIPE
- 4FM — 4" I.D. HDPE PIPE
- 4SAN — 4" PVC SDR-35 PIPE
- 6SAN — 6" PVC SDR-35 PIPE
- 8SAN — 8" PVC SDR-35 PIPE

GENERAL UTILITY NOTES:

1. THE GENERAL CONTRACTOR WILL SCHEDULE A PRECONSTRUCTION MEETING WITH NEW SMYRNA BEACH UTILITIES A MINIMUM OF 2 WEEKS PRIOR TO THE GENERAL CONTRACTOR'S START OF CONSTRUCTION AND PRIOR TO APPROVAL OF THE SHOP DRAWINGS AND DELIVERY OF ANY UTILITY MATERIAL. THE GENERAL CONTRACTOR AND UTILITY SUBCONTRACTOR IS REQUIRED TO ATTEND THIS MEETING.
2. ALL UTILITIES MATERIAL, TESTING AND CONSTRUCTION SHALL BE IN STRICT COMPLIANCE WITH NEW SMYRNA BEACH UTILITIES "STANDARD CONSTRUCTION SPECIFICATIONS FOR WATER AND WASTEWATER" LATEST REVISION; INCLUDING THE APPLICABLE FDEP REQUIREMENTS.
3. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO ENSURE THE UTILITIES ARE INSTALLED IN THE LOCATIONS INDICATED AND WITHIN ANY APPLICABLE EASEMENTS.
4. ALL IMPROVEMENTS SHALL BE STAKED FOR CONSTRUCTION FROM DIGITAL COORDINATES BY A SURVEYOR UTILIZING AS A MINIMUM A GEODETIC TOTAL STATION. SCALING OF DRAWINGS FOR PURPOSES OF STAKING ARE SOLELY AT THE SURVEYOR'S RISK.
5. SEE ARCHITECTURAL DRAWINGS FOR CONTINUATION OF ELECTRICAL, WATER / FIRE SERVICES AND SANITARY LATERAL INTO BUILDING.
6. CONDUITS FOR ELECTRIC AND TELEPHONE SHALL HAVE A PULL CABLE CAPABLE OF 200 LB MIN WEIGHT FOR FRANCHISE UTILITIES TO UTILIZE.
7. THE UTILITY SUBCONTRACTOR SHALL COORDINATE ALL UTILITY INSTALLATIONS WITH THE UTILITY COMMISSION CITY OF NEW SMYRNA BEACH.
8. ALL CLEANOUTS SHALL BE PVC RISER AND CAP WITHIN LAWN AREAS. ALL CLEANOUTS SHALL BE CAST IRON RISER AND CAP WITHIN PAVEMENT AREAS.
9. NSBU MANHOLE ID 41-35 MUST BE LINED WITH AN EPOXY PROTECTIVE COATING, ALUMINALINER BY QUADEX, ALL PREPARATION AND APPLICATION SHALL BE PER QUADEX SPECIFICATIONS, NO EXCEPTIONS.

mastercraft
PLUMBING, HEATING, MECHANICAL
AIR CONDITIONING & FIRE PROTECTION

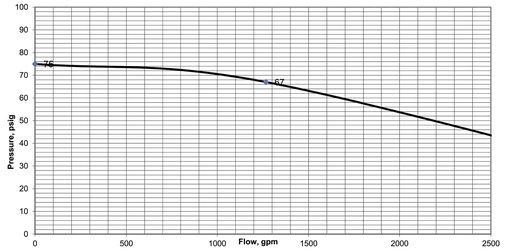
887 BRENTWOOD DR.
DAYTONA BEACH FL., 32117
PHONE 386-252-7047
FAX 386-98-0322
MasterCraftFl.com
194487-0001-2010

Customer: Upham Inc New Smyrna Beach hydrant — Date 7/9/2024
HYDRANT & LOCATION: Flowed: Hydrant 0734
Stat taken: same
TEST BY: Master Craft — Day or Week: Tuesday — TIME OF DAY: 2:10PM — MIN. OF FLOW: 2
WATER SUPPLIED BY: City of New Smyrna Beach — C. Monnin FPI23-000240
PURPOSE OF TEST: Design

DATA

FLOW HYDRANT(S)	A1	A2	A3
SIZE OPENING:	2.5	2.5	2.5
COEFFICIENT:	0.90	0.9	0.9
PITOT READING:	57		
GPM:	1267	0	0

TOTAL FLOW DURING TEST: 1267 GPM
STATIC READING: 75 PSI — RESIDUAL: 67 PSI
RESULTS: AT 20 PSI RESIDUAL 3587.9 GPM — AT 0 PSI 4242 GPM
ESTIMATED CONSUMPTION: 2534 GAL. — 10.67 % difference
REMARKS: Calibrated equipment used during testing. — Graph projection less accurate if Stat and Res. <20% different



PROJECTED UTILITIES USAGE

SERVICE	USAGE (GALLONS PER DAY)
DOMESTIC WATER	80 DU @ 300 GPD = 24,000 GPD
WASTEWATER	80 DU @ 250 GPD = 20,000 GPD

Sunshine811
Always call 811 before you dig

WARNING!! CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH BURIED GAS MAINS, OVERHEAD POWER LINES AND UNDERGROUND UTILITIES.

ELEVATIONS SHOWN HEREON BASED ON NAVD 1988 DATUM

Roger W Strcula
Digitally signed by Roger W Strcula
Date: 2025.07.11 15:53:33 -04'00'

ROGER W. STRCULA — LICENSE NO. 52784 — STATE OF FLORIDA — PROFESSIONAL ENGINEER
NOT VALID UNLESS SIGNED AND DATED

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REVISIONS

DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

OVERALL SITE UTILITY PLAN

FLAGLER DUNES
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	1" = 40'

SHEET NUMBER:
C600

ELEVATIONS SHOWN HEREON BASED ON NAVD 1988 DATUM

NORTH

GRAPHIC SCALE
30 15 0 30
1" = 30'

PIPE LEGEND:

(36" MIN COVER, ALL UTILITIES)

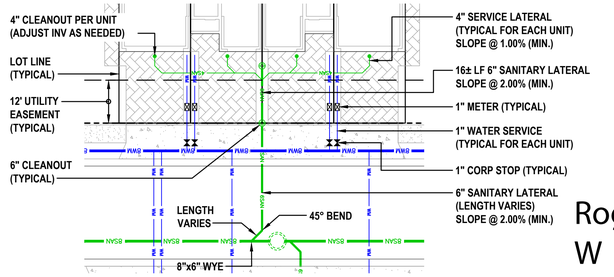
- WM — 1" PE PIPE
- 4WM — 4" PVC C-900 DR-18 PIPE
- 6WM — 6" PVC C-900 DR-18 PIPE
- 8WM — 8" PVC C-900 DR-18 PIPE
- 10WM — 10" PVC C-900 DR-18 PIPE
- 10WM — 10" I.D. HDPE PIPE
- 4FM — 4" PVC C-900 DR-18 PIPE
- 4FSC — 4" I.D. HDPE PIPE
- 4SAN — 4" PVC SDR-35 PIPE
- 6SAN — 6" PVC SDR-35 PIPE
- 8SAN — 8" PVC SDR-35 PIPE

UTILITIES LEGEND:

- PROPOSED BACKFLOW PREVENTER
- PROPOSED FIRE HYDRANT
- PROPOSED WATER VALVE
- BACTERIOLOGICAL SAMPLE POINT
- PROPOSED DOMESTIC WATER METER
- PROPOSED SANITARY CLEANOUT
- PROPOSED SANITARY MANHOLE

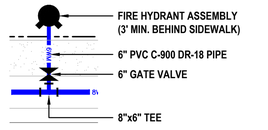
Sunshine 811
Always call 811 before you dig

WARNING! CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH BURIED GAS MAINS, OVERHEAD POWER LINES AND UNDERGROUND UTILITIES.



TYPICAL UTILITY LAYOUT

NOT TO SCALE



TYPICAL FIRE HYDRANT

NOT TO SCALE

BUILDING - A 4 UNITS FFE= 11.20
BUILDING - B 7 UNITS FFE= 11.20
BUILDING - C 6 UNITS FFE= 11.20
BUILDING - D 4 UNITS FFE= 11.00
BUILDING - E 6 UNITS FFE= 11.20
BUILDING - F 4 UNITS FFE= 11.20
BUILDING - G 8 UNITS FFE= 11.00
BUILDING - H 7 UNITS FFE= 11.00
BUILDING - I 6 UNITS FFE= 11.00
BUILDING - J 4 UNITS FFE= 11.00
BUILDING - K 4 UNITS FFE= 11.00
BUILDING - L 6 UNITS FFE= 11.00
BUILDING - M 6 UNITS FFE= 11.00
BUILDING - N 4 UNITS FFE= 11.00

10TH STREET (PUBLIC RIGHT-OF-WAY VARIES)

70± LF 4" PVC PIPE SLOPE @ 1.85%
146± LF 8" PVC WATER MAIN
8"x4" REDUCER
(2) 8" GATE VALVE
4" GATE VALVE
2" BLOW-OFF VALVE
TOP EL= 7.2±
BACTERIOLOGICAL SAMPLE POINT #3
SITE LIGHT POLE (BY NSBU, TYPICAL)
COORDINATE WITH FRANCHISE UTILITY FOR RELOCATION OF EXISTING FIBER-OPTIC PEDESTAL
12± LF 6" PVC WATER MAIN
452± LF 8" PVC WATER MAIN
228± LF 8" PVC PIPE SLOPE @ 0.75%
64± LF 8" PVC PIPE SLOPE @ 0.40%
TOP EL= 7.5±
88± LF 8" PVC PIPE SLOPE @ 0.40%
BACTERIOLOGICAL SAMPLE POINT #1
326± LF 10" PVC WATER MAIN
90± LF 10" I.D. HDPE WATER MAIN
SEE SHEET C602 FOR MORE INFORMATION ABOUT OFF-SITE UTILITY WORK
APPROXIMATE LOCATION OF GAS MAIN CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH THE BURIED GAS MAIN
LIFT STATION (TRACT "D") TOP EL= 11.40 INFLUENT INV = 2.20 (8")
TOP EL= 7.0±
250± LF 8" PVC PIPE SLOPE @ 0.75%
12' UTILITY EASEMENT (TYPICAL)
340± LF 8" PVC PIPE SLOPE @ 0.40%
12± LF 6" PVC WATER MAIN
14± LF 6" PVC WATER MAIN
(2) 8" GATE VALVE
TOP EL= 7.5±
BACTERIOLOGICAL SAMPLE POINT #2
10"x8" REDUCER
126± LF 8" PVC PIPE SLOPE @ 0.40%
694± LF 8" PVC WATER MAIN
340± LF 8" PVC PIPE SLOPE @ 0.40%
EACH UNIT SHALL HAVE SEPARATE CLEANOUT, TYPICAL (SEE NSBU DETAIL SS-23)
STORMWATER POND

SANITARY STRUCTURE TABLE

I.D.	DESCRIPTION	TOP	INVERT
*S-1	48" DIA. MANHOLE	10.40'	2.55' (SE) 2.65' (SW)
S-2	48" DIA. MANHOLE	10.55'	2.00' (NE) 3.00' (SW) 3.00' (NW)
S-3	48" DIA. MANHOLE	10.35'	3.50' (NE) 3.60' (W)
S-4	48" DIA. MANHOLE	10.45'	5.00' (E) 5.10' (N)
S-5	48" DIA. MANHOLE	10.35'	6.45' (S)
S-6	48" DIA. MANHOLE	10.55'	4.85' (SE) 4.95' (NW)
S-7	48" DIA. MANHOLE	10.35'	6.80' (SE) 6.90' (W)

* LINE MANHOLE WITH AGRU SURE-GRIP

SANITARY CLEANOUT TABLE

I.D.	DESCRIPTION	TOP	INVERT
SC-1	6" CLEANOUT	10.86'	8.20'
SC-2	6" CLEANOUT	11.05'	8.52'
SC-3	6" CLEANOUT	10.66'	8.00'
SC-4	6" CLEANOUT	10.85'	8.32'
SC-5	6" CLEANOUT	10.70'	8.00'
SC-6	6" CLEANOUT	10.85'	8.32'
SC-7	6" CLEANOUT	10.71'	8.00'
SC-8	6" CLEANOUT	10.85'	8.32'
SC-9	6" CLEANOUT	10.80'	8.00'
SC-10	6" CLEANOUT	10.85'	8.32'
SC-11	6" CLEANOUT	10.66'	8.00'
SC-12	6" CLEANOUT	10.85'	8.32'
SC-13	6" CLEANOUT	10.65'	8.00'
SC-14	6" CLEANOUT	10.85'	8.32'

SANITARY PIPE TABLE

I.D.	DESCRIPTION	TOP	INVERT
SC-15	6" CLEANOUT	10.66'	8.00'
SC-16	6" CLEANOUT	10.85'	8.32'
SC-17	6" CLEANOUT	10.64'	8.20'
SC-18	6" CLEANOUT	10.85	8.52'
SC-19	6" CLEANOUT	10.80'	8.20'
SC-20	6" CLEANOUT	11.05'	8.52'
SC-21	6" CLEANOUT	10.64'	8.20'
SC-22	6" CLEANOUT	10.85'	8.52'
SC-23	6" CLEANOUT	10.88'	8.20'
SC-24	6" CLEANOUT	11.05'	8.52'
SC-25	6" CLEANOUT	10.77'	8.20'
SC-26	6" CLEANOUT	11.05'	8.52'
SC-27	6" CLEANOUT	10.77'	8.20'
SC-28	6" CLEANOUT	11.05'	8.52'

REVISIONS

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09/12/24	REV PER 9/11 VCS
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	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Roger W Strcula
Digitally signed by Roger W Strcula
Date: 2025.07.11 15:54:03 -04'00'

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ENLARGED SITE UTILITY PLAN

FLAGLER DUNES

1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	1" = 30'

SHEET NUMBER:

C601

UTILITIES LEGEND:

- PROPOSED BACKFLOW PREVENTER
- PROPOSED FIRE HYDRANT
- PROPOSED WATER VALVE
- BACTERIOLOGICAL SAMPLE POINT
- PROPOSED DOMESTIC WATER METER
- PROPOSED SANITARY CLEANOUT
- PROPOSED SANITARY MANHOLE

PIPE LEGEND:

(36" MIN COVER, ALL UTILITIES)

- 8WM — 8" PVC C-900 DR-18 PIPE
- 10WM — 10" PVC C-900 DR-18 PIPE
- 10WU — 10" I.D. HDPE PIPE
- 4FM — 4" PVC C-900 DR-18 PIPE
- 4FSTC — 4" I.D. HDPE PIPE
- 4SAN — 4" PVC SDR-35 PIPE
- 6SAN — 6" PVC SDR-35 PIPE
- 8SAN — 8" PVC SDR-35 PIPE

Sunshine811
Always call 811 before you dig

NORTH

30 15 0 30
GRAPHIC SCALE
1" = 30'

ELEVATIONS SHOWN HEREON BASED ON NAVD 1988 DATUM

GENERAL UTILITY NOTES:

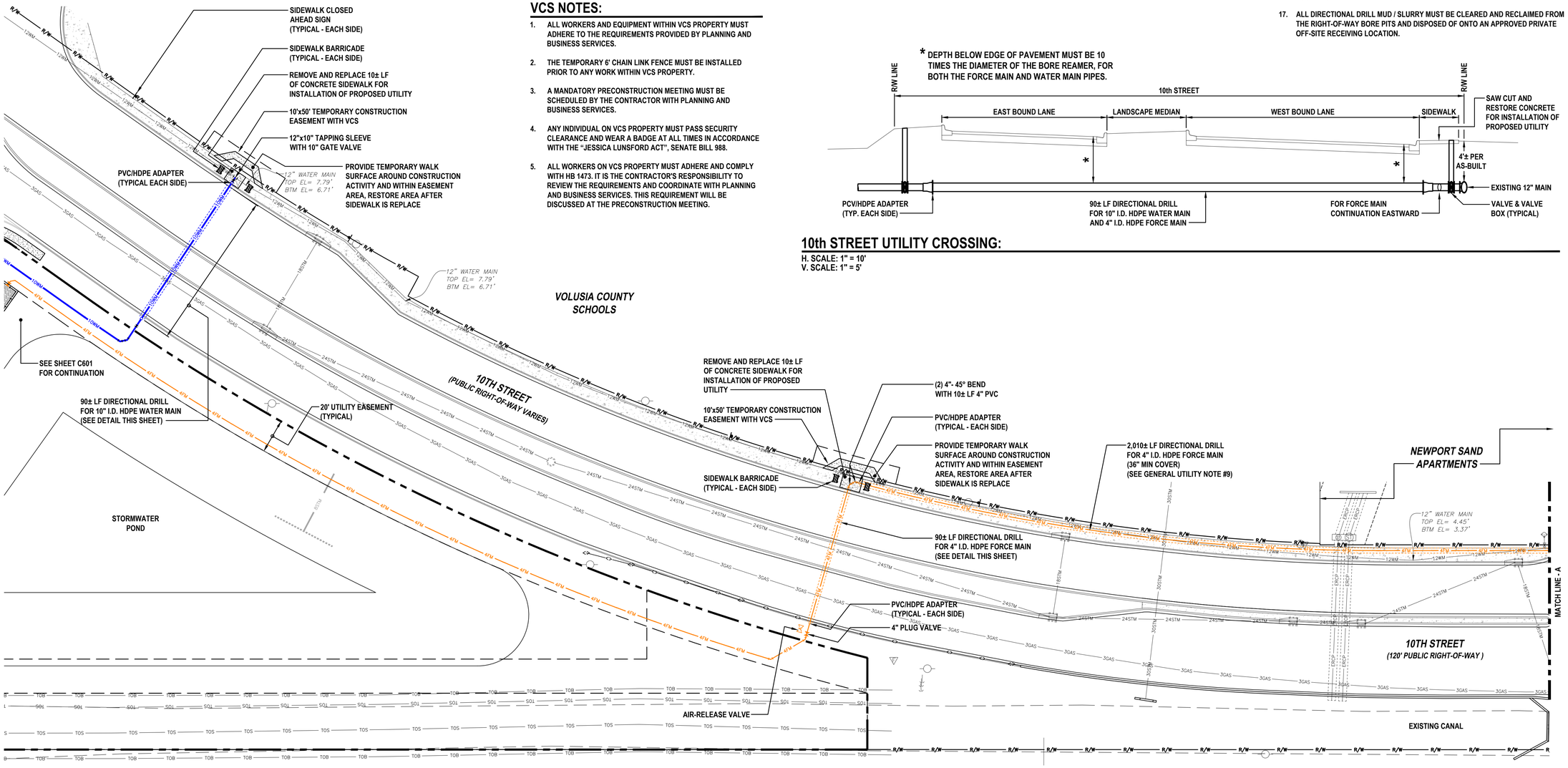
1. THE GENERAL CONTRACTOR WILL SCHEDULE A PRECONSTRUCTION MEETING WITH NEW SMYRNA BEACH UTILITIES A MINIMUM OF 2 WEEKS PRIOR TO THE GENERAL CONTRACTOR'S START OF CONSTRUCTION AND PRIOR TO APPROVAL OF THE SHOP DRAWINGS AND DELIVERY OF ANY UTILITY MATERIAL. THE GENERAL CONTRACTOR AND UTILITY SUBCONTRACTOR IS REQUIRED TO ATTEND THIS MEETING.
2. ALL UTILITIES MATERIAL, TESTING AND CONSTRUCTION SHALL BE IN STRICT COMPLIANCE WITH NEW SMYRNA BEACH UTILITIES "STANDARD CONSTRUCTION SPECIFICATIONS FOR WATER AND WASTEWATER" LATEST REVISION; INCLUDING THE APPLICABLE FDEP REQUIREMENTS.
3. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO ENSURE THE UTILITIES ARE INSTALLED IN THE LOCATIONS INDICATED AND WITHIN ANY APPLICABLE EASEMENTS.
4. ALL IMPROVEMENTS SHALL BE STAKED FOR CONSTRUCTION FROM DIGITAL COORDINATES BY A SURVEYOR UTILIZING AS A MINIMUM A GEODETIC TOTAL STATION. SCALING OF DRAWINGS FOR PURPOSES OF STAKING ARE SOLELY AT THE SURVEYOR'S RISK.
5. SEE ARCHITECTURAL DRAWINGS FOR CONTINUATION OF ELECTRICAL, WATER / FIRE SERVICES AND SANITARY LATERAL INTO BUILDING.
6. CONDUITS FOR ELECTRIC AND TELEPHONE SHALL HAVE A PULL CABLE CAPABLE OF 200 LB MIN WEIGHT FOR FRANCHISE UTILITIES TO UTILIZE.
7. THE UTILITY SUBCONTRACTOR SHALL COORDINATE ALL UTILITY INSTALLATIONS WITH THE UTILITY COMMISSION CITY OF NEW SMYRNA BEACH.
8. ALL CLEANOUTS SHALL BE PVC RISER AND CAP WITHIN LAWN AREAS. ALL CLEANOUTS SHALL BE CAST IRON RISER AND CAP WITHIN PAVEMENT AREAS.
9. AT THE CONTRACTOR'S DISCRETION WITH APPROVAL FROM NEW SMYRNA BEACH UTILITIES, THE FORCE MAIN CAN BE INSTALLED BY OPEN TRENCH ONLY AT LOCATION BETWEEN THE BACK OF CURB AND TOP OF DITCH BANK, THE CONTRACTOR SHALL RESPONSIBLE FOR ALL RESTORATION AND TRAFFIC CONTROL DEVICES AND MEASURES.

VCS NOTES:

1. ALL WORKERS AND EQUIPMENT WITHIN VCS PROPERTY MUST ADHERE TO THE REQUIREMENTS PROVIDED BY PLANNING AND BUSINESS SERVICES.
2. THE TEMPORARY 6' CHAIN LINK FENCE MUST BE INSTALLED PRIOR TO ANY WORK WITHIN VCS PROPERTY.
3. A MANDATORY PRECONSTRUCTION MEETING MUST BE SCHEDULED BY THE CONTRACTOR WITH PLANNING AND BUSINESS SERVICES.
4. ANY INDIVIDUAL ON VCS PROPERTY MUST PASS SECURITY CLEARANCE AND WEAR A BADGE AT ALL TIMES IN ACCORDANCE WITH THE "JESSICA LUNSFORD ACT", SENATE BILL 988.
5. ALL WORKERS ON VCS PROPERTY MUST ADHERE AND COMPLY WITH HB 1473. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW THE REQUIREMENTS AND COORDINATE WITH PLANNING AND BUSINESS SERVICES. THIS REQUIREMENT WILL BE DISCUSSED AT THE PRECONSTRUCTION MEETING.

DIRECTION DRILL NOTES:

1. PIPE MATERIAL SHALL BE IN ACCORDANCE WITH ASTM D3035 AND ASTM F714 SPECIFICATIONS AND THE MANUFACTURER'S SPECIFICATIONS, CHEVRON PHILLIPS DRISCOPIPE PE PIPING OR EQUAL. PIPE DIMENSIONS PROVIDED ARE THE INTERIOR DIAMETER.
2. PIPE JOINTS SHALL BE FUSION WELDED PER MANUFACTURER'S SPECIFICATIONS.
3. INSTALL PVC / HDPE COUPLER AT END JOINTS IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. PROVIDE AND INSTALL ALL FITTINGS AND JOINTS FOR A COMPLETE INSTALLATION.
4. ONLY A CONTRACTOR CERTIFIED TO PERFORM THIS WORK SHALL BE EMPLOYED.
5. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF NEW SMYRNA BEACH AND VOLUSIA COUNTY INSPECTORS FOR A PRE-INSTALLATION MEETING AND DURING THE INSTALLATION.
6. THE CONTRACTOR SHALL PROVIDE THE ENGINEER A LOG FOR THE LOCATIONS AND DEPTHS FOR THE PIPE.
7. THE CONTRACTOR SHALL DETERMINE THE SIDES FOR THE PITS PRIOR TO WORK AND COORDINATE WITH THE CITY UTILITIES AND COUNTY INSPECTORS.
8. ANY TEMPORARY SIDEWALK, IF APPLICABLE AND REQUIRED, ORANGE VISI-BARRIER INSTALLED AROUND WORK AREAS AND SIGNAGE PLACED PRIOR TO ANY OPEN EXCAVATIONS AND TEMPORARY SIDEWALK PROVIDED.
9. AN AS-BUILT SURVEY SHALL BE PERFORMED OF THE WATER MAIN AND THE FORCE MAIN FOR HORIZONTAL AND VERTICAL LOCATIONS OF PIPE, FITTINGS AT 100 FT INTERVALS AND EACH PIPE BEND AND VALVES. THE AS-BUILT SURVEY MUST INDICATE MINIMUM 3' HORIZONTAL AND 1' VERTICAL AT THE INTERVALS.
10. PIPE SEPARATION FROM THE EXISTING 12" WATER MAIN SHALL BE MAINTAINED AS BEST AS POSSIBLE WITHIN THE EXISTING CONDITIONS. HORIZONTAL AND VERTICAL AS-BUILT INFORMATION FOR THE WATER MAIN ARE PROVIDED ON THE DRAWINGS AND NOT VERIFIED, IT IS THE BEST AVAILABLE INFORMATION PROVIDED BY NSBU TO ASSIST THE CONTRACTOR FOR THE DIRECTIONAL DRILL INSTALLATION.
11. ADDITIONAL RESTRICTIONS MAY BE INDICATED ON THE FDEP OR VCEH UTILITY PERMITS, THE CONTRACTOR SHALL ADHERE TO ALL PERMIT CONDITIONS.
12. THE CONTRACTOR SHALL COORDINATE CLOSELY WITH THE COUNTY CDE/INSPECTOR AT ALL TIMES DURING WORK WITHIN THE RIGHT-OF-WAY. PROVIDE THE COUNTY INSPECTOR AN EMERGENCY 24 HR CONTACT AND NUMBER.
13. NO DRILL PIT SHALL BE PERMITTED TO REMAIN OPEN AT NIGHT UNLESS APPROVED BY THE COUNTY CDE/INSPECTOR, DURATION OF THE TEMPORARY SIDEWALK DETOUR SHALL BE KEPT AT A MINIMUM. TEMPORARY FENCING SHALL BE INSTALLED BETWEEN THE WORK AREA AND TEMPORARY SIDEWALK, AT THE CONTRACTOR'S DISCRETION ADDITIONAL DRILL PITS OR TEST PITS FOR THE WATER MAIN LOCATION SHALL BE COORDINATED WITH THE COUNTY INSPECTOR.
14. TEMPORARY SIDEWALK SHALL BE CONSTRUCTED OF NO LESS THAN 5' WIDTH X 5" THICK COMPACTED RECYCLED ASPHALT, (RAP) UPON COMPLETION REMOVAL THE MATERIAL, REGRADE AND SOD ALL DISTURBED AREAS.
15. IF ALLOWED BY THE COUNTY CDE/INSPECTOR, AN OPTION TO THE TEMPORARY RAP SIDEWALK SHALL BE TEMPORARY CLOSURE OF THE BICYCLE LANE PER FDOT INDICES AROUND THE WORK AREA WITH ADEQUATE PEDESTRIAN PROTECTION.
16. IF CONSTRUCTION OCCURS DURING SCHOOL HOURS, COORDINATE WITH VOLUSIA COUNTY SCHOOLS FACILITIES PLANNING.
17. ALL DIRECTIONAL DRILL MUD / SLURRY MUST BE CLEARED AND RECLAIMED FROM THE RIGHT-OF-WAY BORE PITS AND DISPOSED OF ONTO AN APPROVED PRIVATE OFF-SITE RECEIVING LOCATION.



10th STREET

SCALE: 1" = 30'

* DEPTH BELOW EDGE OF PAVEMENT MUST BE 10 TIMES THE DIAMETER OF THE BORE REAMER, FOR BOTH THE FORCE MAIN AND WATER MAIN PIPES.

10th STREET UTILITY CROSSING:

H. SCALE: 1" = 10'
V. SCALE: 1" = 5'

REVISIONS

DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Roger W Strcula
Digitally signed by Roger W Strcula
Date: 2025.07.11 15:54:29 -04'00'

ROGER W. STRCULA LICENSE NO. 52708 STATE OF FLORIDA PROFESSIONAL ENGINEER
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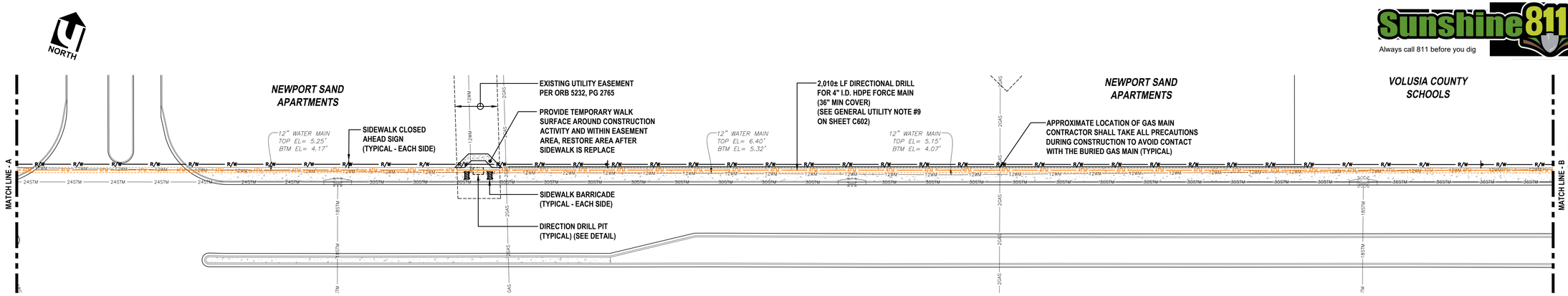
OFF-SITE UTILITY PLAN (1 OF 2)

FLAGLER DUNES
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

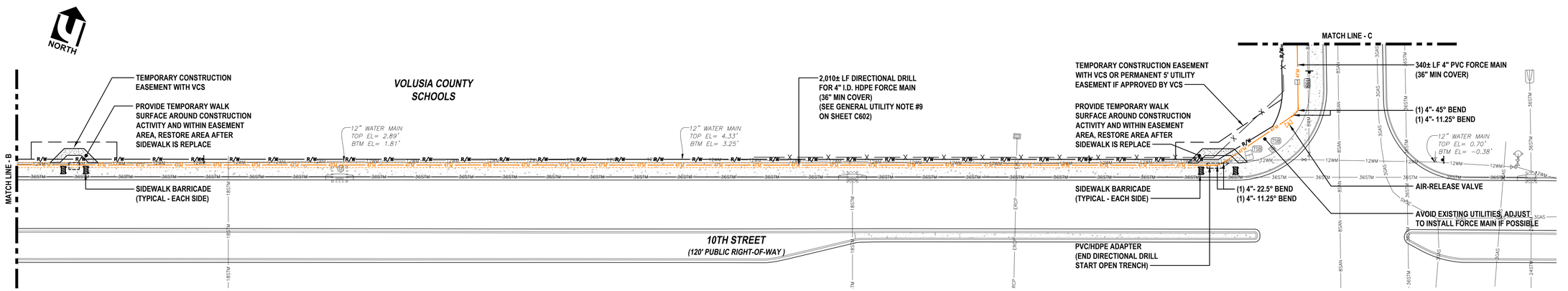
PROJECT NO:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	VARIES

SHEET NUMBER:
C602



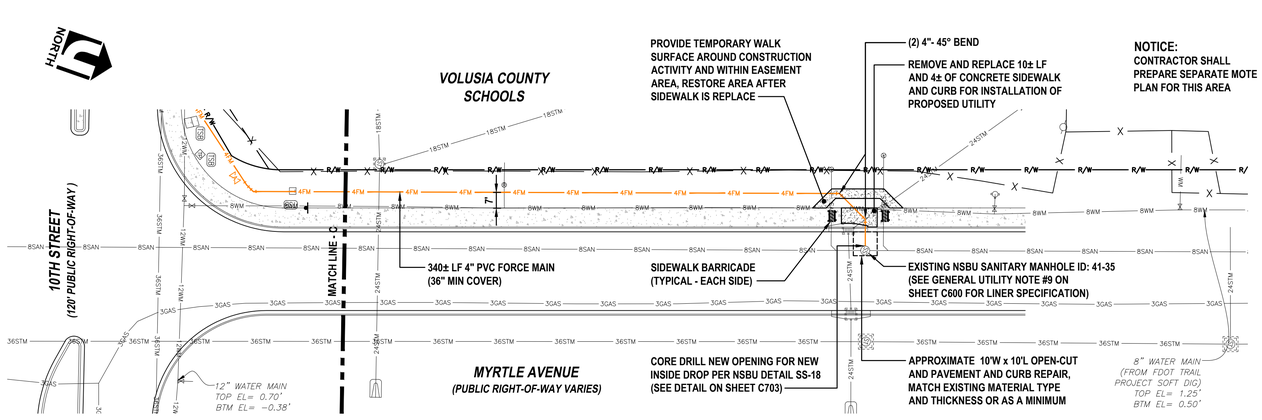
10th STREET

SCALE: 1" = 30'



10th STREET

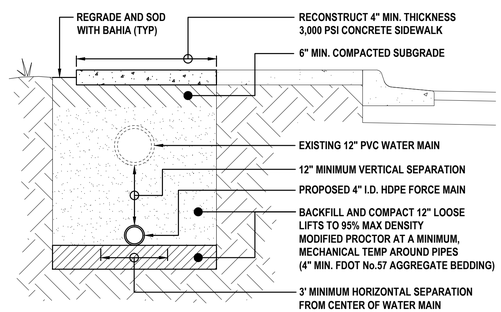
SCALE: 1" = 30'



MYRTLE AVENUE

SCALE: 1" = 30'

NOTES:
1. PIT WIDTH AND LENGTH PER CONTRACTOR BASED ON EXISTING CONDITIONS.
2. MINIMIZE THE TIME PIT IS OPEN TO EXPEDITE WORK AND TEMPORARY CLOSURE OF SIDEWALK.
3. COORDINATE LOCATION OF PIT WITH COUNTY INSPECTOR PRIOR TO EXCAVATION.



OPEN DRILL PIT AND TYPICAL SECTION:

NOT TO SCALE

ELEVATIONS SHOWN HEREON BASED ON NAVD 1988 DATUM

UTILITIES LEGEND:

- PROPOSED BACKFLOW PREVENTER
- PROPOSED FIRE HYDRANT
- PROPOSED WATER VALVE
- BACTERIOLOGICAL SAMPLE POINT
- PROPOSED DOMESTIC WATER METER
- PROPOSED SANITARY CLEANOUT
- PROPOSED SANITARY MANHOLE

PIPE LEGEND:

(36" MIN COVER, ALL UTILITIES)

- 10WM — 10" PVC C-900 DR-18 PIPE
- 10WM — 10" I.D. HDPE PIPE
- 4FM — 4" PVC C-900 DR-18 PIPE
- 4"I.D. HDPE PIPE
- 4SAN — 4" PVC SDR-35 PIPE
- 6SAN — 6" PVC SDR-35 PIPE
- 8SAN — 8" PVC SDR-35 PIPE

REVISIONS

DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Roger W Strcula — Digitally signed by Roger W Strcula Date: 2025.07.11 15:57:05 -04'00'

ROGER W. STRCULA LICENSE NO. 52784 STATE OF FLORIDA PROFESSIONAL ENGINEER — NOT VALID UNLESS SIGNED AND DATED

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OFF-SITE UTILITY PLAN (2 OF 2)

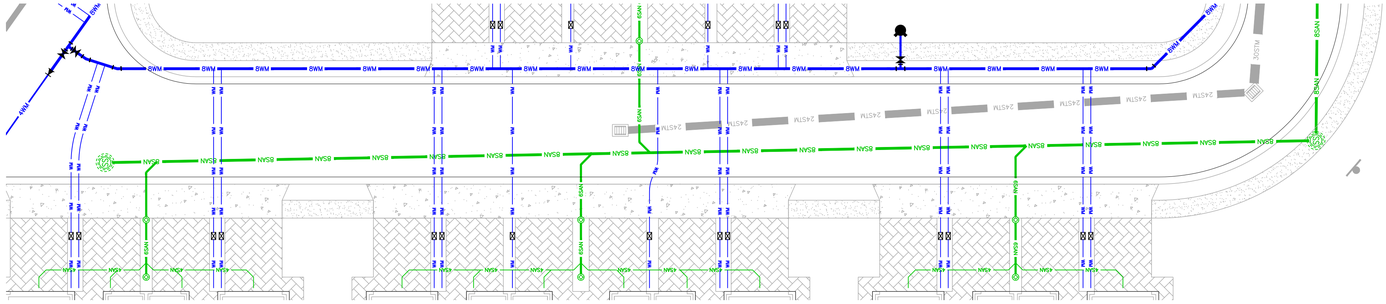
FLAGLER DUNES

1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

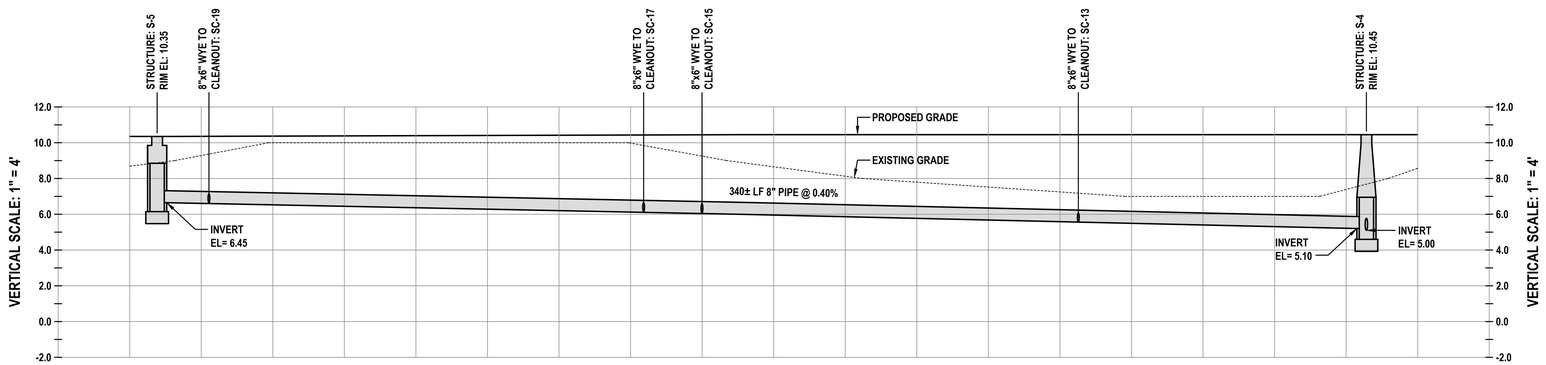
PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	1" = 30'

SHEET NUMBER:

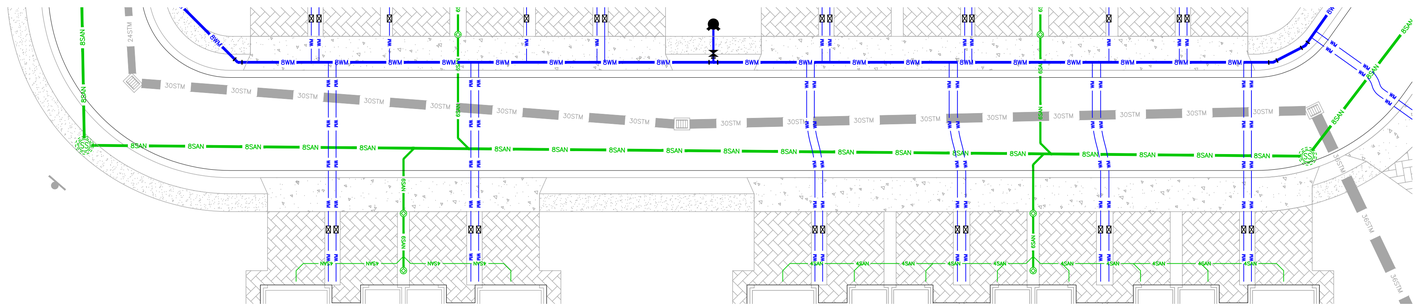
C603



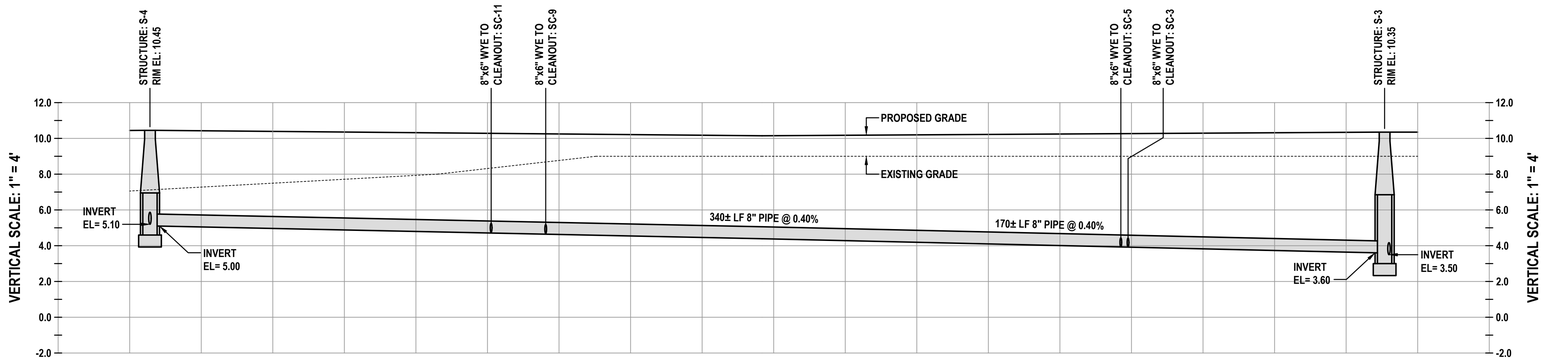
PLAN VIEW: SCALE: 1" = 20'



SANITARY PROFILE: STRUCTURE S-5 TO STRUCTURE S-4
HORIZONTAL SCALE: 1" = 20'



PLAN VIEW: SCALE: 1" = 20'



SANITARY PROFILE: STRUCTURE S-4 TO STRUCTURE S-3
HORIZONTAL SCALE: 1" = 20'

UTILITIES LEGEND:

- PROPOSED BACKFLOW PREVENTER
- PROPOSED FIRE HYDRANT
- PROPOSED WATER VALVE
- BACTERIOLOGICAL SAMPLE POINT
- PROPOSED DOMESTIC WATER METER
- PROPOSED SANITARY CLEANOUT
- PROPOSED SANITARY MANHOLE

PIPE LEGEND:

(36" MIN COVER, ALL UTILITIES)

- 1WM — 1" PE PIPE
- 6WM — 6" PVC C-900 DR-18 PIPE
- 8WM — 8" PVC C-900 DR-18 PIPE
- 4FM — 4" PVC C-900 DR-25 PIPE
- 4SAN — 4" PVC SDR-35 PIPE
- 6SAN — 6" PVC SDR-35 PIPE
- 8SAN — 8" PVC SDR-35 PIPE

Roger W Strcula

Digitally signed by Roger W Strcula
Date: 2025.07.11 15:57:52 -04'00'

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REVISIONS	
DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

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SANITARY SEWER PLAN & PROFILES (1 OF 2)

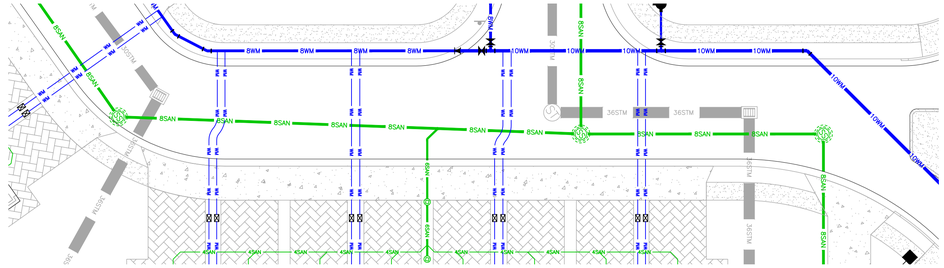
FLAGLER DUNES

1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

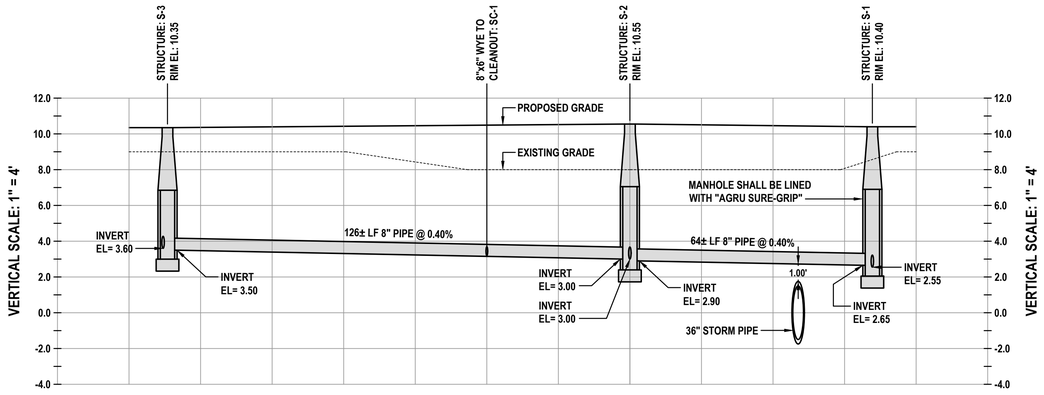
PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	1" = 40'

SHEET NUMBER:

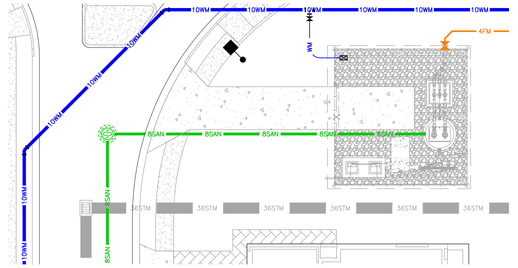
C604



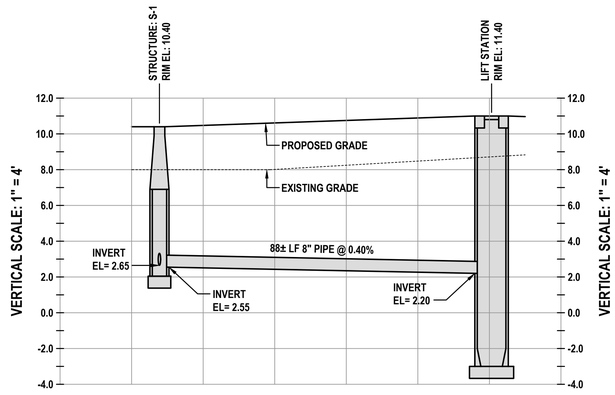
PLAN VIEW: SCALE: 1" = 20'



SANITARY PROFILE: STRUCTURE S-3 TO STRUCTURE S-1
HORIZONTAL SCALE: 1" = 20'



PLAN VIEW: SCALE: 1" = 20'



SANITARY PROFILE: STRUCTURE S-1 TO LIFT STATION
HORIZONTAL SCALE: 1" = 20'

UTILITIES LEGEND:

- PROPOSED BACKFLOW PREVENTER
- PROPOSED FIRE HYDRANT
- PROPOSED WATER VALVE
- BACTERIOLOGICAL SAMPLE POINT
- PROPOSED DOMESTIC WATER METER
- PROPOSED SANITARY CLEANOUT
- PROPOSED SANITARY MANHOLE

PIPE LEGEND:

(36" MIN COVER, ALL UTILITIES)

- WM — 1" PE PIPE
- 6WM — 6" PVC C-900 DR-18 PIPE
- 8WM — 8" PVC C-900 DR-18 PIPE
- 4FM — 4" PVC C-900 DR-25 PIPE
- 4SAN — 4" PVC SDR-35 PIPE
- 6SAN — 6" PVC SDR-35 PIPE
- 8SAN — 8" PVC SDR-35 PIPE

REVISIONS	
DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Roger W Strcula

Digitally signed by Roger W Strcula
Date: 2025.07.11 15:58:26 -04'00'

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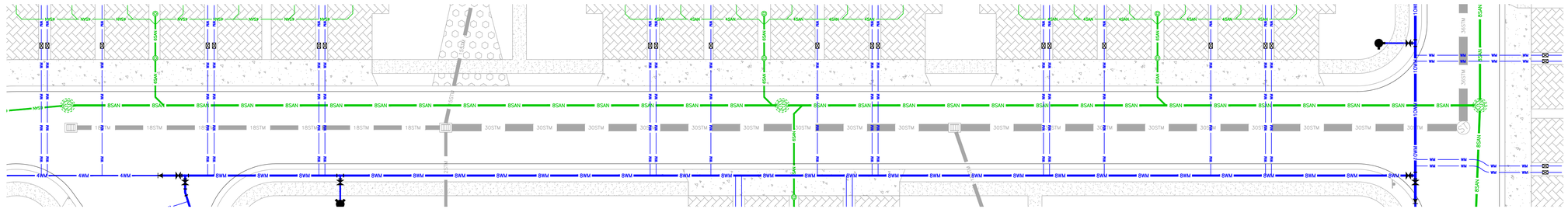
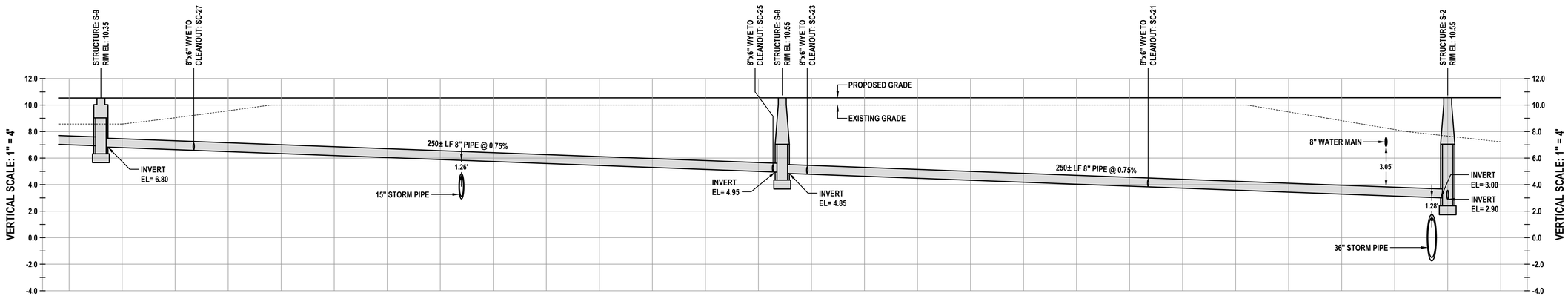


PLAN VIEW: SCALE: 1" = 20'



SANITARY PROFILE: STRUCTURE S-9 TO STRUCTURE S-2
HORIZONTAL SCALE: 1" = 20'

SANITARY SEWER PLAN & PROFILES (2 OF 2)

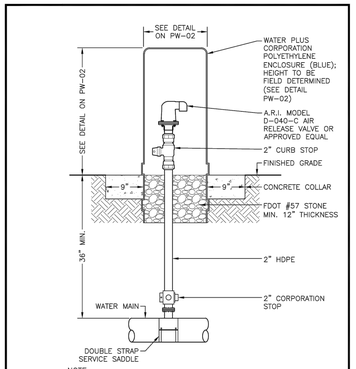
FLAGLER DUNES

1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	1" = 40'

SHEET NUMBER:

C605

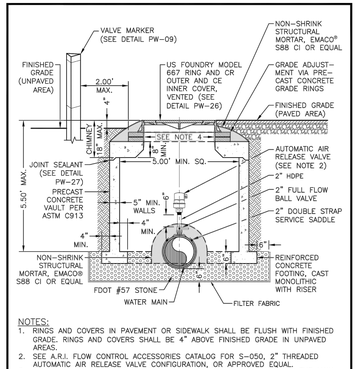


NOTE:
1. FITTINGS AND PIPE FOR VALVES SHALL BE LEAD FREE BRASS.
2. ALL JOINTS SHALL BE RESTRAINED.
3. FILTER FABRIC SHALL BE MIRAFI N-SERIES NON-WOVEN POLYPROPYLENE GEOTEXTILES.

NEW SMYRNA BEACH UTILITIES

ABOVE GROUND AIR RELEASE VALVE

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
PW-01

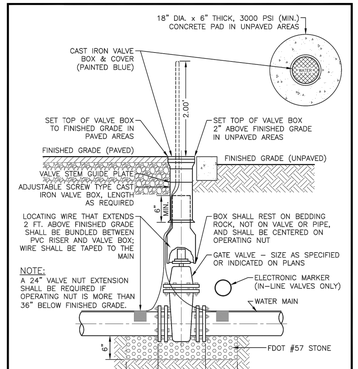


NOTES:
1. RINGS AND COVERS IN PAVEMENT OR SIDEWALK SHALL BE FLUSH WITH FINISHED GRADE. RINGS AND COVERS SHALL BE 4" ABOVE FINISHED GRADE IN UNPAVED AREAS.
2. SEE A.R.I. FLOW CONTROL ACCESSORIES CATALOG FOR S-050, 2" THREADED AUTOMATIC AIR RELEASE VALVE CONFIGURATION, OR APPROVED EQUAL.
3. COIL 6 FT. OF TRACER WIRE WITHIN VAULT; WIRE SHALL BE TAPED TO THE MAIN.
4. EPOXY MORTAR INSIDE OF CHIMNEY/PRECAST CONCRETE GRADE RINGS FOR A SMOOTH FINISH.
5. FILTER FABRIC SHALL BE MIRAFI N-SERIES NON-WOVEN POLYPROPYLENE GEOTEXTILES.

NEW SMYRNA BEACH UTILITIES

AIR RELEASE VALVE IN CONCRETE VAULT

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
PW-03

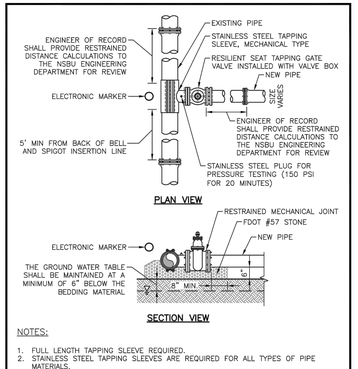


NOTE:
A 24" VALVE NUT EXTENSION SHALL BE REQUIRED IF OPERATING NUT IS MORE THAN 36" BELOW FINISHED GRADE.

NEW SMYRNA BEACH UTILITIES

GATE VALVE

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
PW-05

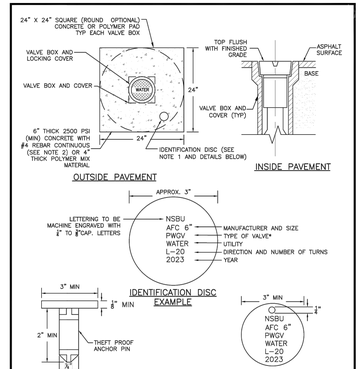


NOTES:
1. FULL LENGTH TAPPING SLEEVE REQUIRED.
2. STAINLESS STEEL TAPPING SLEEVES ARE REQUIRED FOR ALL TYPES OF PIPE MATERIALS.
3. INSTALLATION REQUIRES RESTRAINED JOINTS. IN NO INSTANCE SHALL THRUST BLOCKS BE PERMITTED.
4. REVERSE SIDE AND VERTICAL TAPPING REQUIRES NSBU ENGINEERING DEPARTMENT APPROVAL.
5. VALVES GREATER THAN 4" SHALL BE GEAR ACTUATED.

NEW SMYRNA BEACH UTILITIES

TAPPING SLEEVE AND VALVE

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
PW-06



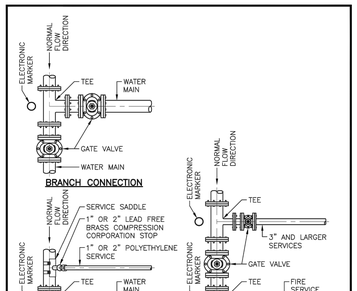
NOTES:
1. BRONZE (OR STAINLESS STEEL) IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES, EXCEPT HYDRANT VALVES.
2. IN LIEU OF PRECAST CONCRETE PAD, A 6" THICK X 24" (ROUND OR SQUARE) POURED CONCRETE PAD WITH TWO #4 REBAR AROUND PERIMETER MAY BE USED.

*PWOV Potable Water Gate Valve
PWGV Reclaimed Water Gate Valve
SSGV Sanitary Sewer Gate Valve
SSPV Sanitary Sewer Plug Valve

NEW SMYRNA BEACH UTILITIES

VALVE BOX CONCRETE PAD

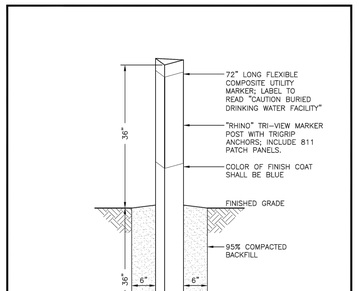
SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
PW-07



NEW SMYRNA BEACH UTILITIES

VALVE LAYOUT AT TEES AND SERVICES

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
PW-08

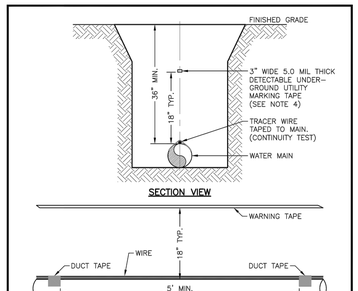


NOTES:
1. METER, GATE VALVES, WYE STRAINER, AND ALL SUPPORTS TO BE PAID FOR BY DEVELOPER AND INSTALLED BY CONTRACTOR.
2. GALVANIZED PIPE IS NOT ALLOWED.
3. INSTALL PROTECTIVE BOLLARD(S) AS REQUIRED BY THE NSBU. MAINTAIN A MINIMUM OF 3' CLEARANCE FREE OF ALL PLANTINGS & STRUCTURES AROUND METER/BACKFLOW ASSEMBLY.
4. BACKFLOW ASSEMBLY AND/OR LOR METER PROVIDED BY NSBU UPON PAYMENT.

NEW SMYRNA BEACH UTILITIES

VALVE MARKER

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
PW-09

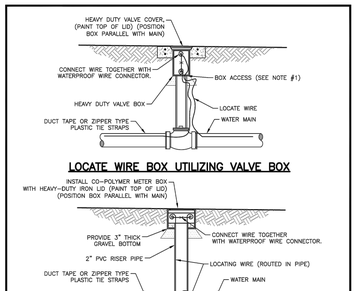


NOTES:
1. ALL PIPE SHALL REQUIRE #10 GAUGE (AWG) HIGH-STRENGTH COPPER CLAD STEEL CONDUCTOR (HS-CCS) TRACER WIRE COATED WITH A 30 MIL THICK, HIGH DENSITY POLYETHYLENE (HDPE) INSULATION, AND RATED FOR DIRECT BURIAL USE AT 30 VOLTS LOCATED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE AND TAPED TO THE PIPE AT 5 FT. TO 10 FT. INTERVALS.
2. AT RESTRAINED JOINTS, WRAP TRACER WIRE AROUND ONE LUG.
3. A CONTINUITY TEST SHALL BE PERFORMED IN THE PRESENCE OF THE NSBU
4. UTILITY MARKING TAPE SHALL BE COLOR CODED BLUE FOR POTABLE WATER, PURPLE FOR RECLAIMED WATER, AND GREEN FOR WASTEWATER.

NEW SMYRNA BEACH UTILITIES

PIPE LOCATING WIRE AND TAPE

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
PW-10

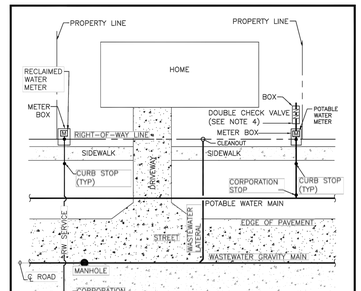


NOTES:
1. LOCATE WIRE SHALL ENTER THE VALVE BOX THROUGH A "V" CUT IN THE 6" PVC RISER PIPE.
2. LOCATE WIRE SHALL HAVE ENOUGH SLACK TO REACH 4" ABOVE FINAL GRADE AND LOCATE POINTS.
3. LOCATE WIRE CONNECTION SHALL ONLY BE A 2-WAY CONNECTION.

NEW SMYRNA BEACH UTILITIES

PIPE LOCATING WIRE BOX

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
PW-11

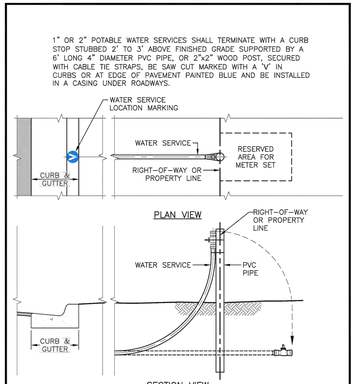


NOTE:
1. PRIOR TO METERS BEING INSTALLED, THE PROPERTY LINES AND BACK OF SIDEWALK ARE TO BE STAKED.
2. SANITARY CLEANOUT PADS SHALL BE PARALLEL TO THE SIDEWALK AND SET AT FINISHED GRADE.
3. METER BOXES AND CLEANOUTS SHALL MAINTAIN A MINIMUM SEPARATION OF 36" FROM ELECTRIC TRANSFORMERS, CABLE JUNCTION BOXES, OR ANY OTHER ABOVE GROUND SERVICE FIXTURE OR STRUCTURE.
4. METER AND BOX TO BE INSTALLED BY NSBU AND DOUBLE CHECK BACKFLOW PREVENTER TO BE INSTALLED BY CONTRACTOR.
5. EXISTING FIRE HYDRANTS, AUTOMATIC FLUSHING DEVICES OR VALVES ARE TO BE MAINTAINED AT FINISHED GRADE BETWEEN THE PROPERTY LINES TO THE EDGE OF THE PAVEMENT.
6. DOUBLE UTILITY SERVICES ARE NOT PERMITTED WITHOUT PRIOR WRITTEN APPROVAL BY NSBU.

NEW SMYRNA BEACH UTILITIES

RESIDENTIAL SERVICE LOCATIONS

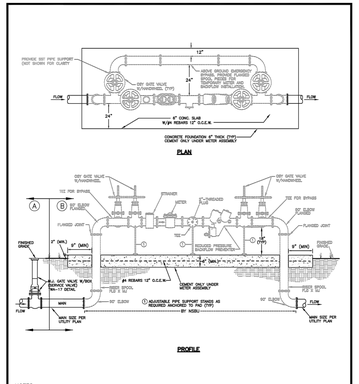
SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
PW-13



NEW SMYRNA BEACH UTILITIES

POTABLE WATER SERVICE LOCATION MARKING

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
PW-18

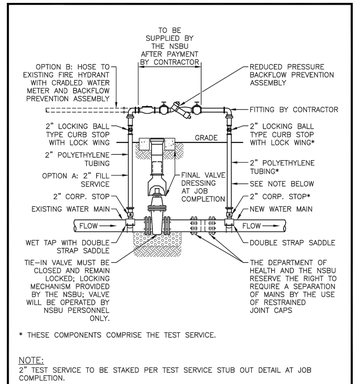


NOTES:
A. OWNED AND MAINTAINED BY THE UTILITY
B. OWNED AND MAINTAINED BY THE DEVELOPER/ OWNER
1. METER, GATE VALVES, WYE STRAINER, AND ALL SUPPORTS TO BE PAID FOR BY DEVELOPER AND INSTALLED BY CONTRACTOR.
2. GALVANIZED PIPE IS NOT ALLOWED.
3. INSTALL PROTECTIVE BOLLARD(S) AS REQUIRED BY THE NSBU. MAINTAIN A MINIMUM OF 3' CLEARANCE FREE OF ALL PLANTINGS & STRUCTURES AROUND METER/BACKFLOW ASSEMBLY.
4. BACKFLOW ASSEMBLY AND/OR LOR METER PROVIDED BY NSBU UPON PAYMENT.

NEW SMYRNA BEACH UTILITIES

BACKFLOW ASSEMBLY 3 – INCH AND LARGER

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
PW-19



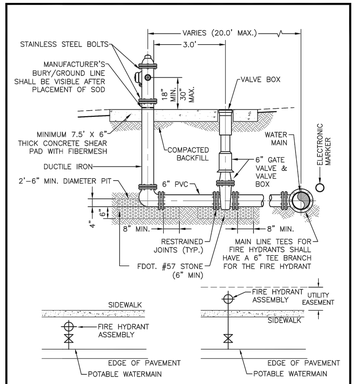
* THESE COMPONENTS COMPRISE THE TEST SERVICE.

NOTE:
2" TEST SERVICE TO BE STAKED PER TEST SERVICE STUB OUT DETAIL AT JOB COMPLETION.

NEW SMYRNA BEACH UTILITIES

TEMPORARY CONSTRUCTION METER CONNECTION

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
PW-20

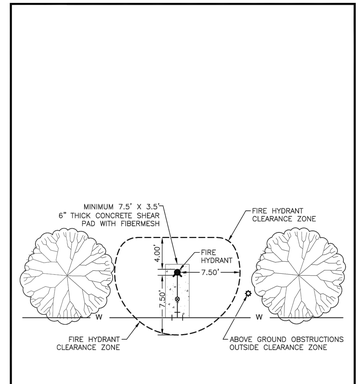


NOTES:
1. HYDRANT MUST BE LOCATED ON THE SAME SIDE OF THE ROAD OR PARKING LOT AS THE WATER MAIN, OUTSIDE THE CLEAR RECOVERY ZONE OF THE TRAVEL WAY, AND A MINIMUM OF 2' FROM SIDEWALK EDGE.
2. HYDRANT MUST HAVE A CLOSED WEEP HOLE.

NEW SMYRNA BEACH UTILITIES

FIRE HYDRANT ASSEMBLY

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
PW-22



NOTES:
1. CLEAR ZONE: NO ABOVE GROUND OBSTRUCTIONS GREATER THAN 8" IN HEIGHT. GROUND COVER SHALL BE ALLOWED ADJACENT TO THE FIRE HYDRANT.
2. HYDRANT SHALL BE MIN. 3' AWAY FROM THE CURB

NEW SMYRNA BEACH UTILITIES

FIRE HYDRANT CLEARANCE ZONE

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
PW-23

REVISIONS	
DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Roger W Strcula

Digitally signed by Roger W Strcula
Date: 2025.07.11 15:58:59 -04'07'

ROGER W. STRCULA LICENSE NO. 52784 STATE OF FLORIDA PROFESSIONAL ENGINEER
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ON THE DATE ADJACENT TO THE SEAL
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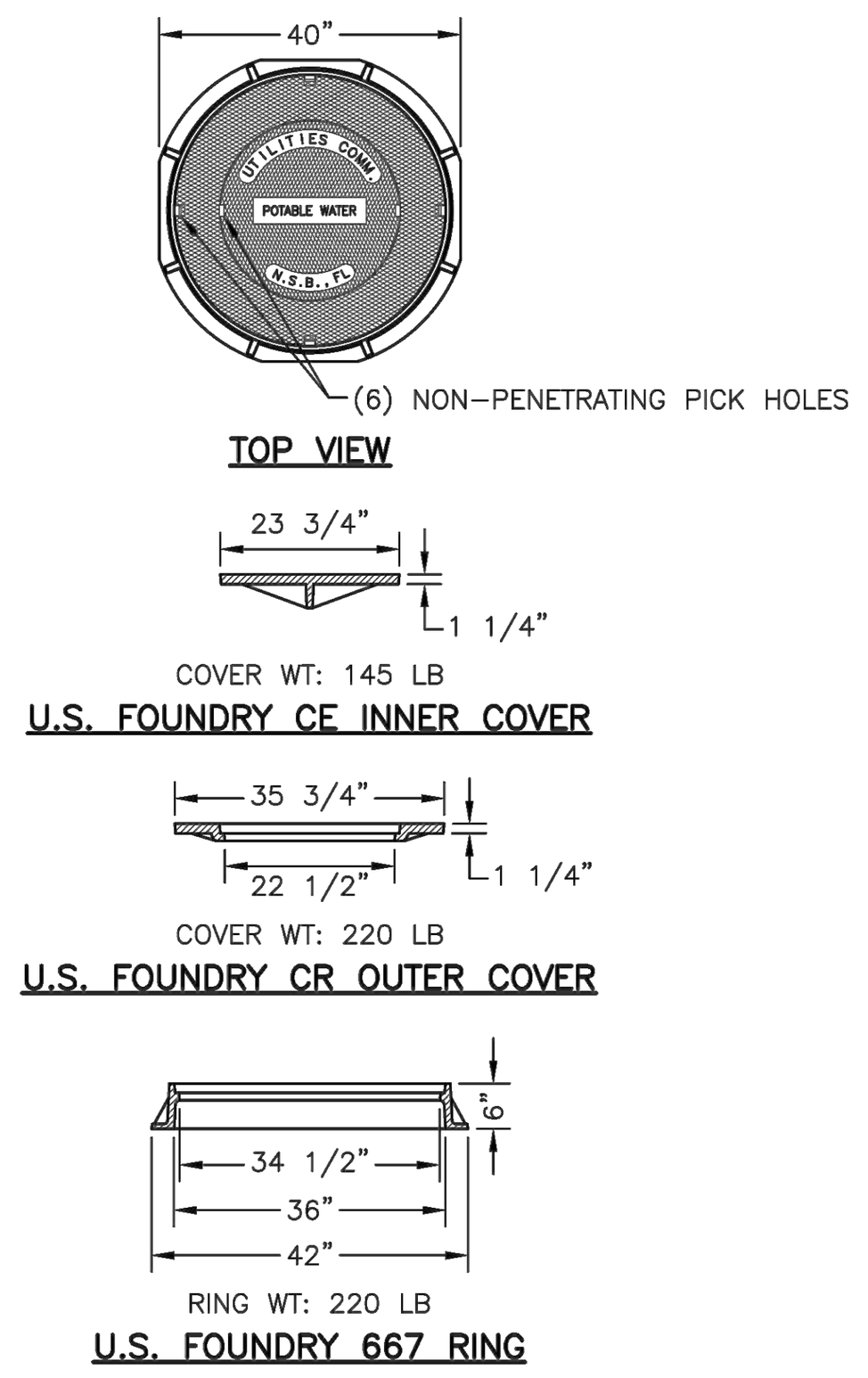
NSBU STANDARD DETAILS AND NOTES (1 OF 7)

FLAGLER DUNES
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	1" = 40'

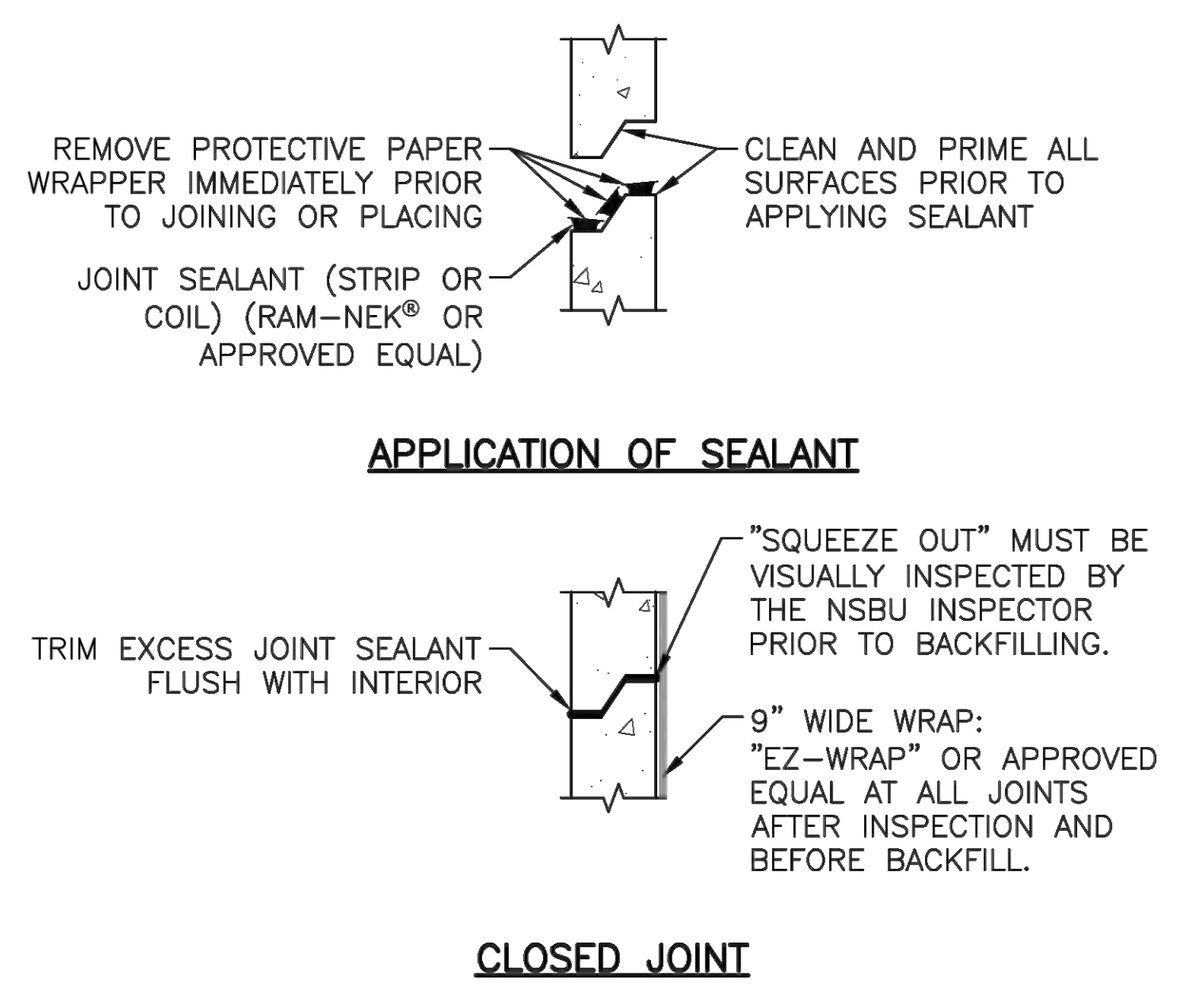
SHEET NUMBER:
C700



NEW SMYRNA BEACH UTILITIES

VAULT STRUCTURE RING AND COVER

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV. | **PW–26**



NEW SMYRNA BEACH UTILITIES

JOINT SEALANT

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV. | **PW–27**

SEPARATION REQUIREMENTS FOR WATER, WASTEWATER AND RECLAIMED WATER MAINS

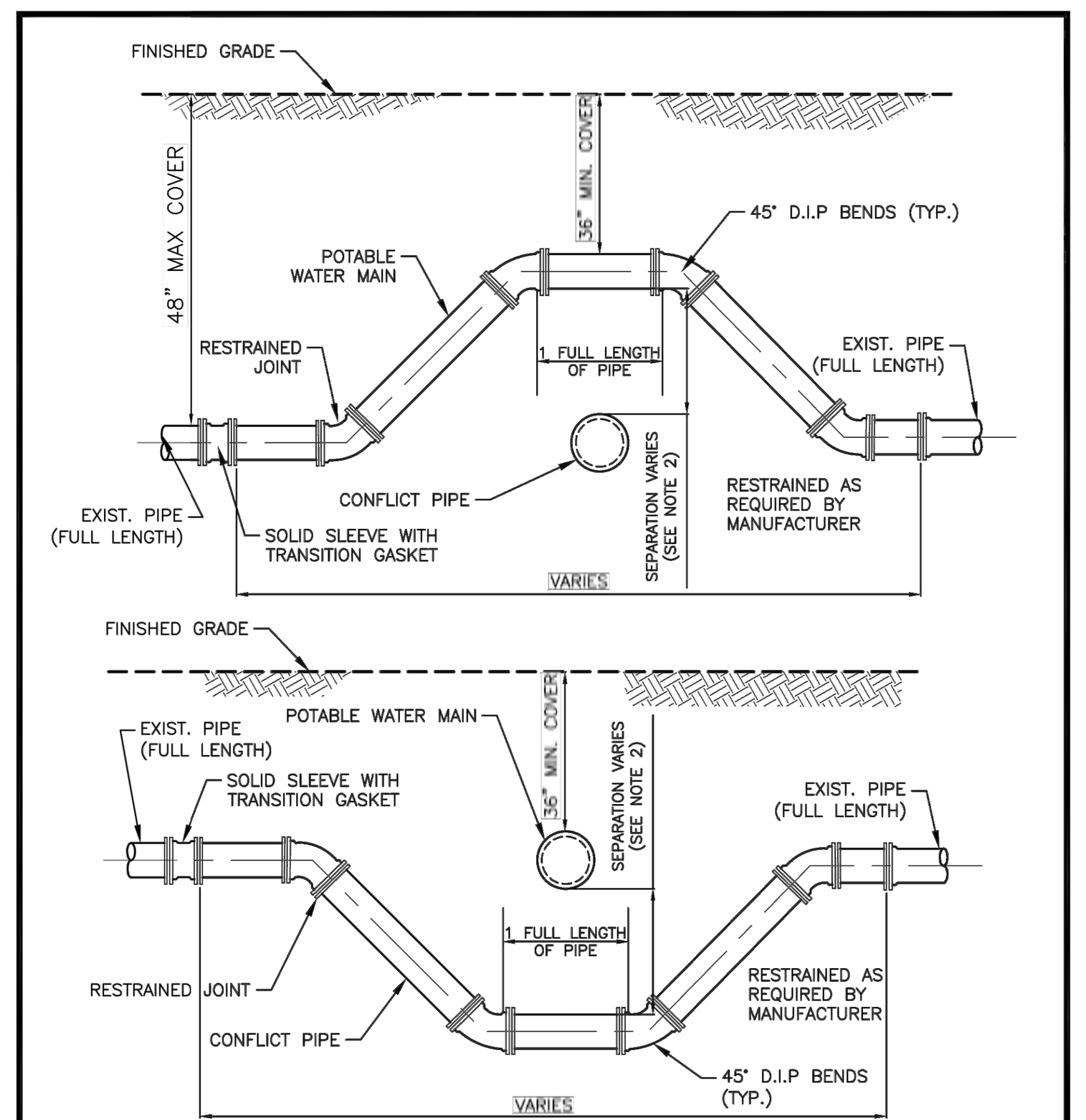
	PROPOSED UTILITY											
	POTABLE WATER			WASTEWATER GRAVITY AND FORCE MAIN			RECLAIMED WATER			VACUUM SEWER		
CONFLICTING UTILITY	HORIZ.	VERT.	JOINT* SPACING	HORIZ.	VERT.	JOINT* SPACING	HORIZ.	VERT.	JOINT* SPACING	HORIZ.	VERT.	JOINT* SPACING
POTABLE WATER	3' NOTE 1	12"	3' NOTE 2	6' TO 10'	12" NOTE 5	6' NOTE 2	3'	12"	6' NOTE 2	3' TO 10'	12"	3' NOTE 2
RECLAIMED WATER	3'	12"	6' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3'	12"	6' NOTE 2	3' NOTE 1	12"	3' NOTE 2
WASTEWATER (GRAVITY AND FORCE MAIN)	6' TO 10'	12"	6' NOTE 2	3' NOTE 1	12"	6"	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2
VACUUM SEWER	3' TO 10'	12"	3' NOTE 2	3' NOTE 1	12"	6"	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2
RIGHT OF WAY	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A
STORM SEWERS	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2
GAS	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2
TREES	3'–6'	N/A	N/A	3'–6'	N/A	N/A	3'–6' NOTE 1	N/A	N/A	3'–6'	N/A	N/A
ALL OTHER UTILITIES	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2

NOTES:
1. THIS SEPARATION REQUIREMENT IS TO PROVIDE ACCESSIBILITY FOR CONSTRUCTION AND MAINTENANCE. THREE FEET OF HORIZONTAL SEPARATION IS THE MINIMUM FOR PIPES WITH THREE FEET OF COVER. FOR PIPES INSTALLED AT GREATER DEPTH, PROVIDE AN ADDITIONAL FOOT OF SEPARATION FOR EACH ADDITIONAL FOOT OF DEPTH.
2. MINIMUM JOINT SPACING REQUIREMENT FROM A UTILITY CROSSING WHILE STILL MAINTAINING MINIMUM HORIZONTAL SEPARATION.
3. DISTANCES GIVEN ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
4. NO WATER PIPE SHALL PASS THROUGH OR COME INTO CONTACT WITH ANY PART OF SANITARY OR STORM WATER MANHOLES OR STRUCTURES.
5. WATER MAIN SHOULD CROSS ABOVE OTHER PIPES WHENEVER POSSIBLE. WHEN WATER MAIN MUST BE BELOW OTHER UTILITY PIPING, THE MINIMUM SEPARATION SHALL BE 12 INCHES.

NEW SMYRNA BEACH UTILITIES

UTILITY SEPARATION

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV. | **PW–28**



NOTES:
1. THE SOILS BETWEEN THE NEW MAIN AND THE CONFLICT PIPE SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY THE LABORATORY MODIFIED PROCTOR TEST, ASTM D1557.
2. FOR MINIMUM VERTICAL SEPARATION REQUIREMENTS SEE DETAIL PW–28.
3. LOCATING WIRE REQUIRED. SEE DETAIL PW–10.
4. MINIMUM 36–INCH AND MAXIMUM 48–INCH COVER SHALL BE REQUIRED FOR ALL PIPES UNLESS OTHERWISE STATED.
5. IF UTILITY CONFLICT IS LOCATED IN A NON–TRAFFIC AREA (NO TRAFFIC LOADS), THEN THE MINIMUM COVER MAY BE REDUCED TO 24 INCHES IN THE AREA OF THE CONFLICT.
6. ADDITIONAL RESTRAINTS MAY BE REQUIRED FOR VERTICAL BENDS.
7. INSTALL RESTRAINED JOINTS, AS REQUIRED, FROM DEFLECTION POINT IN BOTH DIRECTIONS (20' MIN.).
8. ALL DEFLECTIONS SHALL BE DIP.

NEW SMYRNA BEACH UTILITIES

WATER MAIN CROSSING

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV. | **PW–29**

RESTRAINED PIPE TABLE
WATER AND RECLAIMED WATER MAINS

MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)

TYPE	PIPE SIZE									
	PVC					DIP				
	4"	6"	8"	10"	12"	16"	20"	24"	30"	36"
90° BEND	19	25	33	39	45	46	55	64	75	86
45° BEND	8	11	14	16	19	19	23	27	31	36
22–1/2° BEND	4	5	8	9	10	10	11	13	15	17
11–1/4° BEND	3	3	4	5	5	5	6	7	8	9
PLUG OR BRANCH OF TEE	33	45	59	70	83	84	102	119	142	164
VALVE	27	38	49	59	68	69	83	97	116	133
REDUCER	VARIES BY SIZE; TO BE DETERMINED BY THE DESIGN ENGINEER.									

NOTES:
1. FITTINGS SHALL HAVE RESTRAINED JOINTS UNLESS OTHERWISE INDICATED.
2. INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO OR GREATER THAN LENGTH SHOWN IN THE TABLE.
3. WHERE TWO OR MORE FITTINGS ARE IN SERIES, SELECT FITTING RESTRAINT LENGTH THAT YIELDS THE LONGEST RESTRAINT DISTANCE.
4. ALL INLINE VALVES SHALL BE RESTRAINED.
5. WHERE INTERNAL RESTRAINED JOINTS ARE USED, THE ENTIRE BELL SHALL BE PAINTED RED.
6. LENGTHS SHOWN IN THE TABLE WERE CALCULATED IN ACCORDANCE WITH PROCEDURES OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" GUIDELINES PUBLISHED BY DIPRA, USING THE ASSUMPTIONS SHOWN BELOW:

WORKING PRESSURE: 150 PSI
SOIL DESIGNATION: SM (SAND SILT)
LAYING CONDITIONS: 3
DEPTH OF COVER: 3 FT
SAFETY FACTOR: 1.5
CONVERSION FACTOR FOR PVC PIPE: 1.25

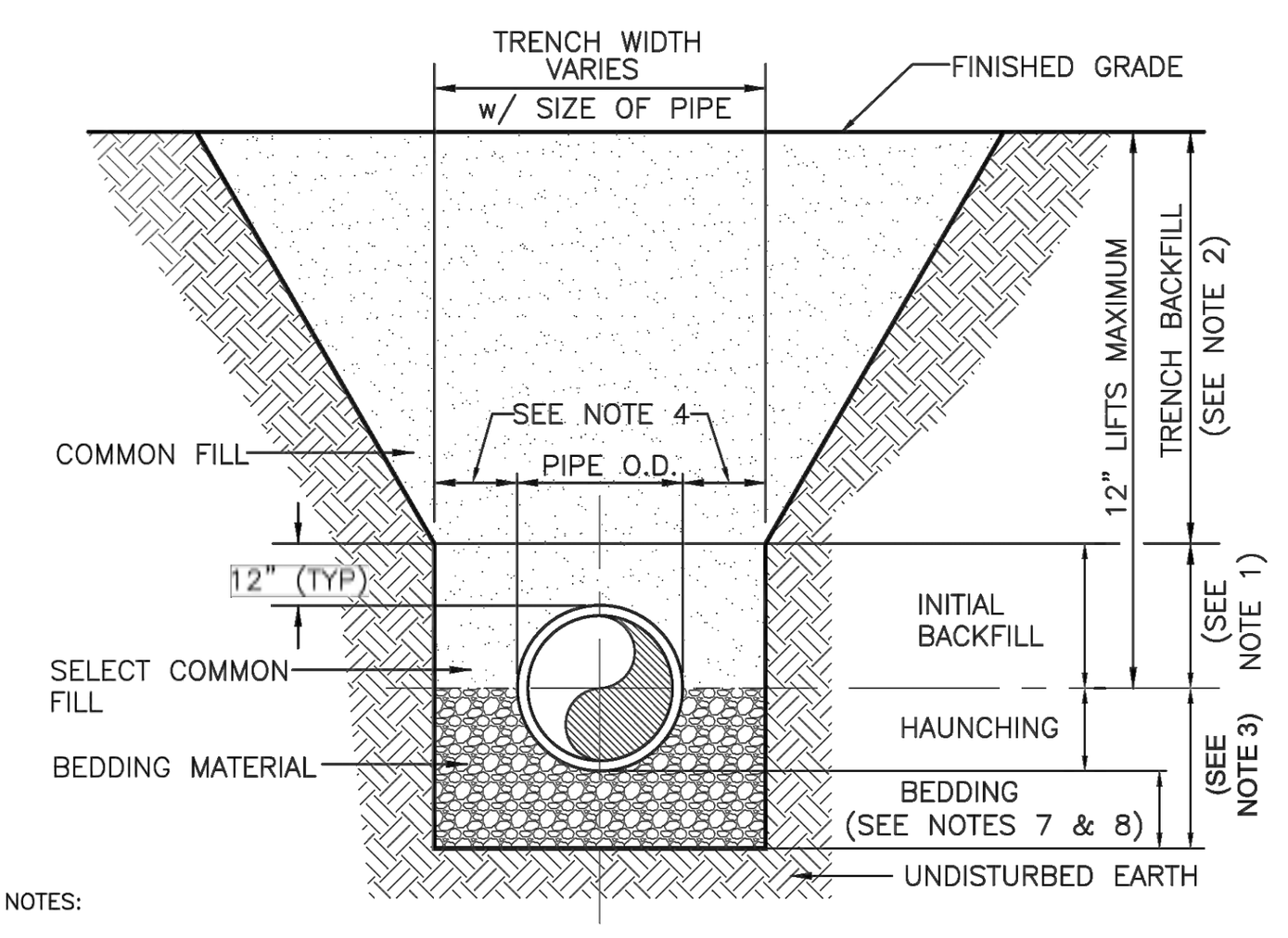
*SAFETY FACTOR AND PVC CONVERSION FACTOR ALREADY APPLIED TO TABLE.

7. THE DESIGN ENGINEER SHALL INCREASE THE VALUES IN THE TABLE AS WARRANTED BY SITE–SPECIFIC SOIL DESIGNATIONS, LAYING CONDITIONS, PIPE MATERIAL, ETC. FOR DIP ENCASED IN POLYETHYLENE, INCREASE THE GIVEN VALUE BY A FACTOR OF 1.25.
8. ALL THE JOINTS WITHIN THE CALCULATED LENGTH MUST BE RESTRAINED.
9. IF DISTANCE BETWEEN FITTINGS IS LESS THAN OR EQUAL TO THE CALCULATED RESTRAINT LENGTH, RESTRAIN ALL JOINTS BETWEEN THOSE FITTINGS.

NEW SMYRNA BEACH UTILITIES

RESTRAINED PIPE TABLE (WATER AND RECLAIMED WATER MAINS)

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV. | **PW–30**



NOTES:
1. INITIAL BACKFILL: SELECT COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY PER AASHTO T–180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T–180.
3. TYPE A BEDDING MATERIAL SHALL CONFORM TO FDOT NO. 57 AGGREGATE.
4. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (18" MIN) FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER UP TO 12" AND 6" MINIMUM FOR PIPE DIAMETER 16" AND LARGER.
8. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. NSBU SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.
9. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN NSBU RIGHT–OF–WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT–OF–WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

NEW SMYRNA BEACH UTILITIES

BEDDING AND TRENCHING – TYPE A

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
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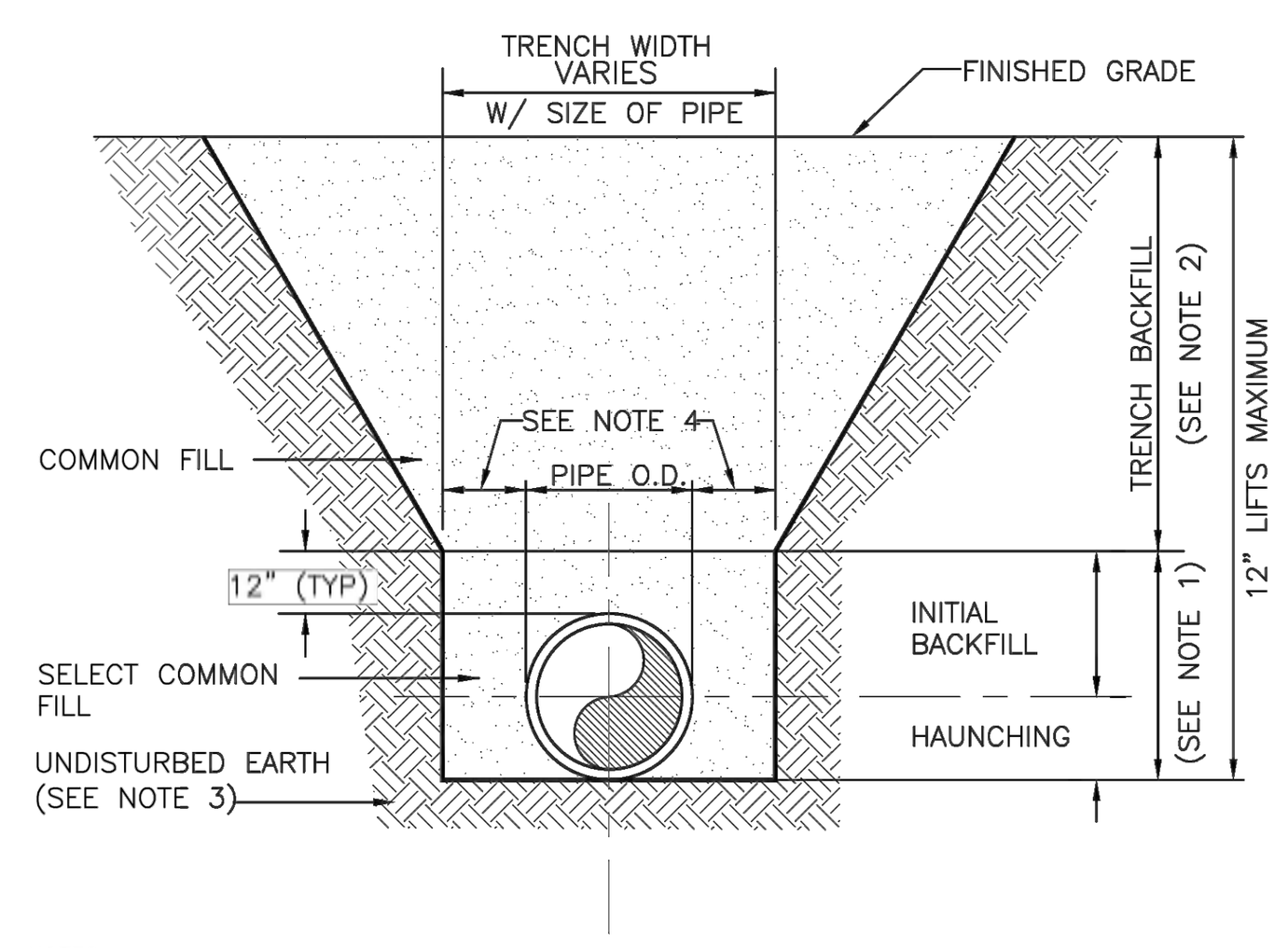
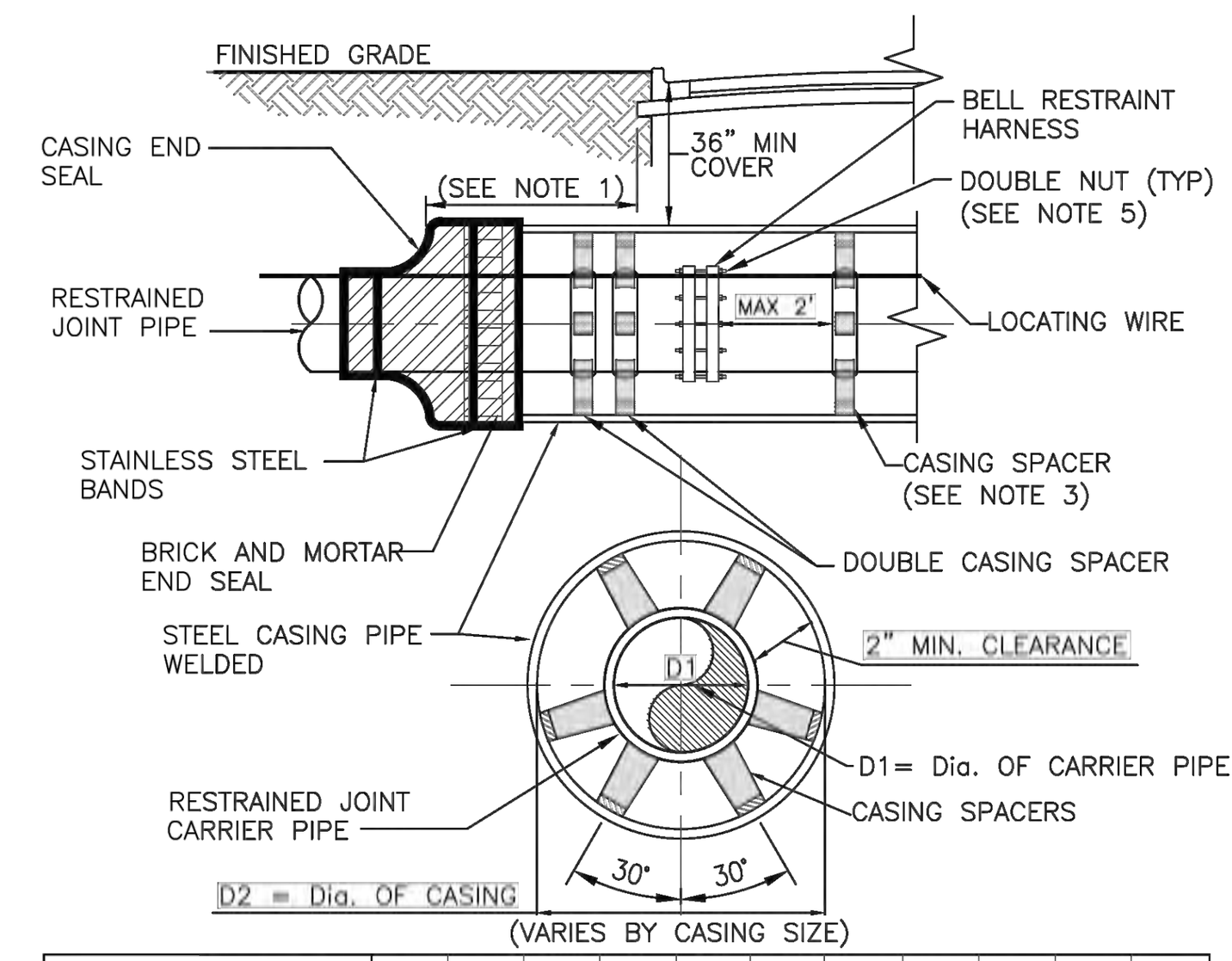


NOTES:
1. INITIAL BACKFILL AND HAUNCHING: SELECT COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T–180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T–180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY NSBU.
4. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (18" MIN) FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN NSBU RIGHT–OF–WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT–OF–WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

NEW SMYRNA BEACH UTILITIES

BEDDING AND TRENCHING – TYPE B

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV. | **PW–33**



CARRIER PIPE NOMINAL DIAMETER D1	4	6	8	10	12	16	20	24	30	36	42
MINIMUM CASING INSIDE DIAMETER (INCHES) D2	16	16	18	20	24	30	36	42	48	54	60
MINIMUM CASING WALL THICKNESS (INCHES)	.250"	.250"	.250"	.250"	.250"	.312"	.375"	.500"	.500"	.500"	.500"

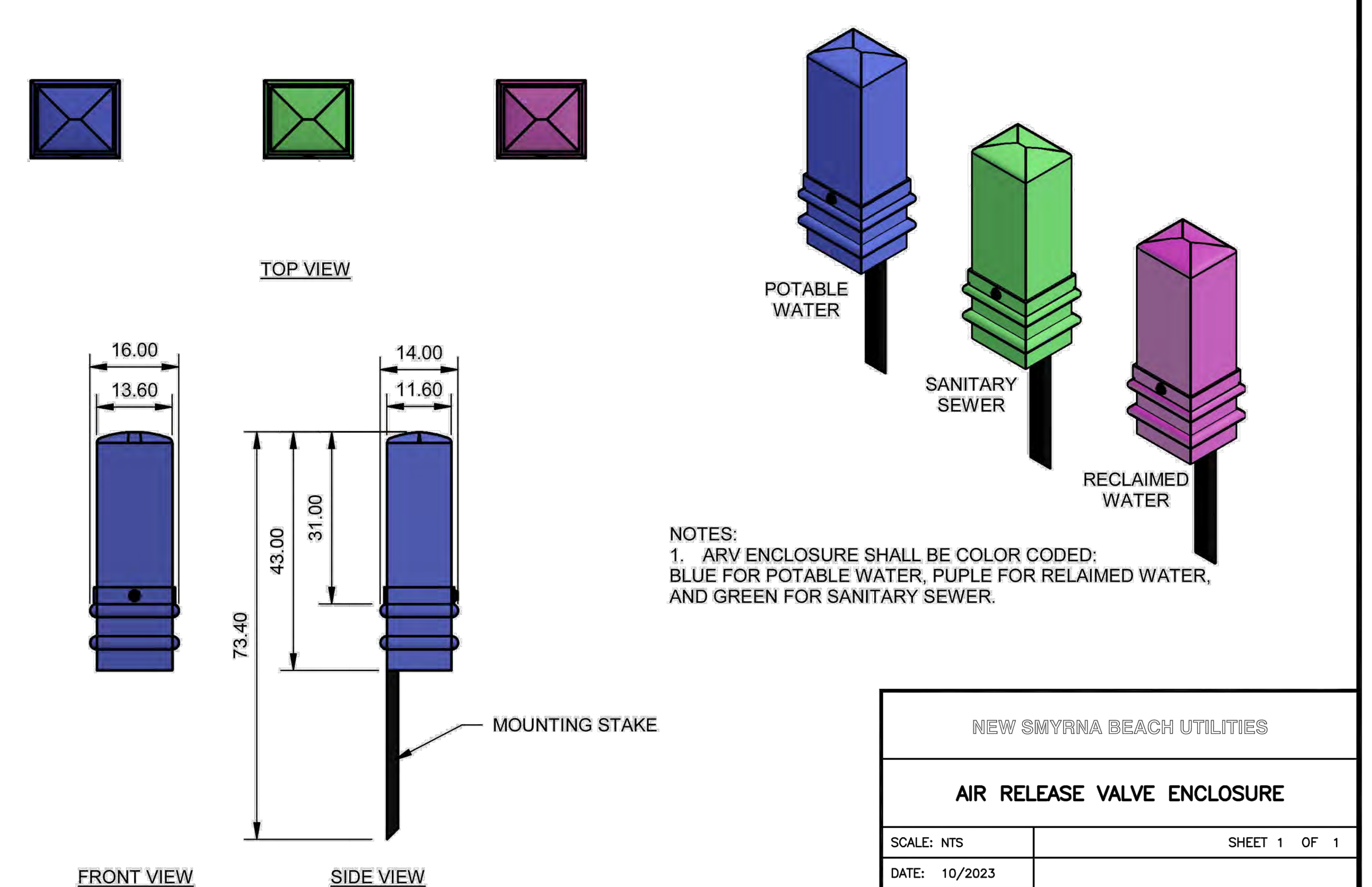
NOTES:
1. CASING SHALL EXTEND A MINIMUM OF TEN FEET BEYOND THE EDGE OF PAVEMENT OR MEET FDOT REQUIREMENTS, WHICHEVER IS GREATER.
2. REQUIREMENTS OF OTHER JURISDICTIONS SHALL BE MET. WHEN CONSTRUCTION IS WITHIN FDOT JURISDICTION, ADDITIONAL REQUIREMENTS OF THE "FDOT UTILITY ACCOMMODATION MANUAL", LATEST EDITION, SHALL BE MET.
3. DISTANCE BETWEEN SPACERS TO BE PER MANUFACTURER'S SPECIFICATIONS, OR MAX OF 6.5', WHICHEVER IS MORE STRINGENT.
4. ANNULAR SPACE SHALL REMAIN EMPTY. SEAL BOTH ENDS WITH 12" CONCRETE PLUGS. USE OF FLOWABLE FILL IN THE ANNULAR SPACE BETWEEN THE CASING AND CARRIER PIPE IS PROHIBITED.
5. PIPE IN CASING SHALL HAVE A MECHANICAL BELL RESTRAINT HARNESS WHERE RODS ARE DOUBLE NUTTED TO PRECLUDE OVERBELLING THE JOINT DURING PUSHING CARRIER PIPE CASING.
6. SHOP DRAWINGS OF CASING & CARRIER PIPE INSTALLATION SHALL BE SUBMITTED FOR APPROVAL PRIOR TO FABRICATION OF PIPING, CASING, AND APPURTENANCES. CERTIFICATION OF CASING PIPE IS REQUIRED.
7. WELDING OF CASING PIPE TO BE DONE BY STATE CERTIFIED WELDER. ALL ENDS OF CASING PIPE SHALL BE CHAMFERED PRIOR TO ANY WELDING. SEAL END OF CASING PIPE WITH NON–SHRINK GROUT.
8. CITY INSPECTOR SHALL BE PRESENT THROUGHOUT ALL JACK AND BORE ACTIVITIES.

NOTE TO ENGINEER: CROSSING DETAIL SHALL BE TO SCALE AND SHOW EXISTING UTILITIES, CLEARANCES, CASING LENGTH, LOCATION OF PAVED ROAD, AND LIMITS OF RIGHT–OF–WAY.

NEW SMYRNA BEACH UTILITIES

JACK AND BORE

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV. | **PW–34**



NOTES:
1. ARV ENCLOSURE SHALL BE COLOR CODED:
BLUE FOR POTABLE WATER, PUPLE FOR RELAIMED WATER, AND GREEN FOR SANITARY SEWER.

NEW SMYRNA BEACH UTILITIES

AIR RELEASE VALVE ENCLOSURE

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV. | **PW–02**

NSBU GENERAL NOTES:

1. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN EXCAVATING IN PROXIMITY OF WATER MAINS, WASTEWATER FORCE MAINS, GRAVITY MAINS AND RECLAIMED WATER MAINS. MAINS LOCATIONS SHOWN ON PLANS MAY NOT BE EXACT. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING UTILITY LOCATIONS.
2. SHOULD A PIPE EMERGENCY OCCUR, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE NEW SMYRNA BEACH UTILITIES (NSBU) DISPATCH OPERATOR (386–427–1368) AND THE NSBU INSPECTOR.
3. THE CONTRACTOR SHALL NOTIFY THE NSBU ENGINEERING INSPECTOR AT LEAST SEVEN DAYS PRIOR TO COMMENCEMENT OF THE CONSTRUCTION PROJECT.
4. THE CONTRACTOR SHALL NOTIFY THE NSBU ENGINEERING INSPECTOR AT LEAST 48 HOURS PRIOR TO ANY UTILITIES CONSTRUCTION.
5. THE MATERIALS, PRODUCTS, AND CONSTRUCTION OF ALL UTILITIES CONNECTING TO THE NSBU SYSTEM SHALL BE IN CONFORMANCE WITH THE NSBU RULES, DESIGN, AND CONSTRUCTION SPECIFICATIONS.
6. ALL NSBU MAINS AND FACILITIES WITHIN THE LIMITS OF THE PROJECT SHALL BE SUPPORTED AND PROTECTED AGAINST DAMAGE DURING CONSTRUCTION.
7. THE CONTRACTOR, AT THE CONTRACTOR'S EXPENSE, SHALL IMMEDIATELY REPAIR ALL DAMAGE TO NSBU MAINS AND FACILITIES. IF THE REPAIR IS NOT MADE IN A TIMELY MANNER, AS DETERMINED BY NSBU, NSBU MAY PERFORM REQUIRED REPAIRS AND CLEANUP. THE CONTRACTOR WILL BE CHARGED FOR ALL EXPENSES ASSOCIATED WITH THE REPAIR.
8. THE CONTRACTOR SHALL ADJUST ALL EXISTING NSBU MAINS AND FACILITIES IN CONFLICT WITH NEW GRADE, NEW OR ALTERED ROADWAYS, SIDEWALKS, DRIVEWAYS, OR STORM WATER IMPROVEMENTS. NSBU FACILITIES TO BE ADJUSTED INCLUDE, BUT ARE NOT LIMITED TO, PIPELINES, PUMP STATIONS, VALVE BOXES, AIR RELEASE VALVES, FIRE HYDRANTS, MANHOLE COVERS, AND METERS.
9. ONLY NSBU PERSONNEL SHALL OPERATE NSBU WATER, WASTEWATER, AND RECLAIMED WATER VALVES. THE CONTRACTOR SHALL COORDINATE VALVE OPERATION WITH THE NSBU INSPECTOR. FOR OPERATION OF MAINS NOT OWNED BY NSBU, IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE APPROPRIATE UTILITY REPRESENTATIVE.
10. CONSTRUCTION ACTIVITIES SHALL NOT CAUSE INTERRUPTIONS IN WATER, WASTEWATER, OR RECLAIMED WATER SERVICE. THE CONTRACTOR SHALL COORDINATE PRE–APPROVED INTERRUPTIONS OF SERVICE WITH THE NSBU INSPECTOR 7 WORKING DAYS IN ADVANCE.
11. ALL VALVES INSTALLED AS PART OF THIS CONSTRUCTION PROJECT SHALL REMAIN CLOSED DURING CONSTRUCTION. KEEP VALVES ON ALL WET TAPS CLOSED UNTIL CLEARED BY FDEP. DO NOT CONNECT NEWLY CONSTRUCTED WATER MAINS TO ANY EXISTING WATER MAINS UNLESS CLEARED BY FDEP AND NSBU.
12. THE CONTRACTOR SHALL PROVIDE A JUMPER ASSEMBLY WITH A BACKFLOW PREVENTER FOR MAKING TEMPORARY CONNECTIONS TO AN EXISTING POTABLE WATER SOURCE IN ORDER TO CHLORINATE AND FLUSH NEW WATER MAINS WITH POTABLE WATER. ANY TEMPORARY POTABLE WATER CONNECTIONS TO RECLAIMED WATER OR FORCE MAIN SHALL ALSO BE EQUIPPED WITH A BACKFLOW PREVENTER.
13. FOR PVC PIPE THAT WILL BE OWNED AND MAINTAINED BY NSBU, NO PIPE BENDING IS ALLOWED. THE MAXIMUM ALLOWABLE TOLERANCE FOR JOINT DEFLECTION IS 0.75 DEGREES (3–INCHES PER JOINT PER 20 FT STICK OF PIPE). ALIGNMENT CHANGE SHALL BE MADE ONLY WITH SLEEVES AND FITTINGS.
14. FOR NON–PVC PIPE THAT WILL BE OWNED AND MAINTAINED BY NSBU, LONG RADIUS CURVES, EITHER HORIZONTAL OR VERTICAL, MAY BE INSTALLED WITH STANDARD PIPE BY DEFLECTIONS AT THE JOINTS. MAXIMUM DEFLECTIONS AT PIPE JOINTS, FITTINGS AND LAYING RADIUS FOR THE VARIOUS PIPE LENGTHS SHALL NOT EXCEED 75 PERCENT OF THE PIPE MANUFACTURER'S RECOMMENDATION.

NEW SMYRNA BEACH UTILITIES

BEDDING AND TRENCHING – NOTES

SCALE: NTS | SHEET 1 OF 1
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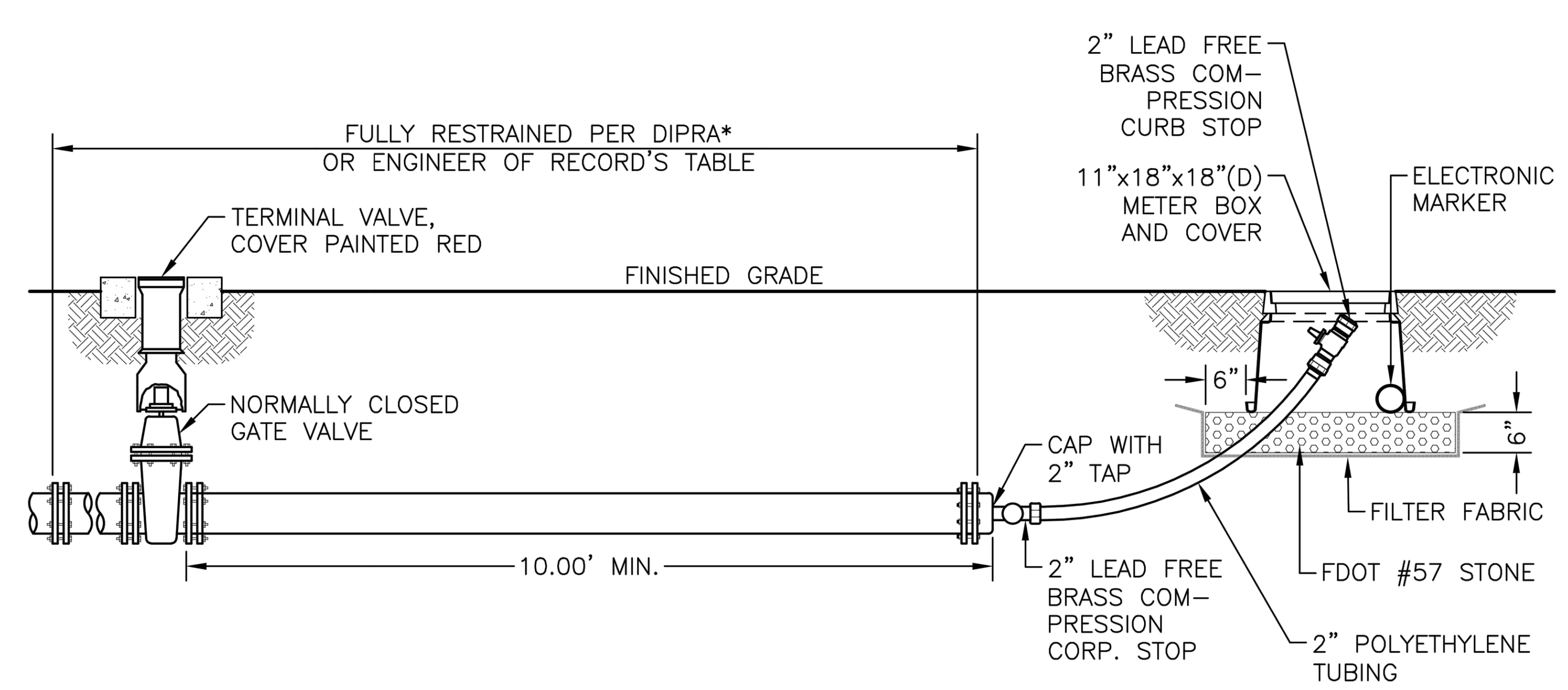

NOTES:
1. DUCTILE IRON PIPE RESEARCH ASSOCIATION
2. FILTER FABRIC SHALL BE MIRAFI N–SERIES NON–WOVEN POLYPROPYLENE GEOTEXTILES

NEW SMYRNA BEACH UTILITIES

BLOW OFF VALVE ASSEMBLY

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV. | **PW–04**

REVISIONS

DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Roger W Strcula
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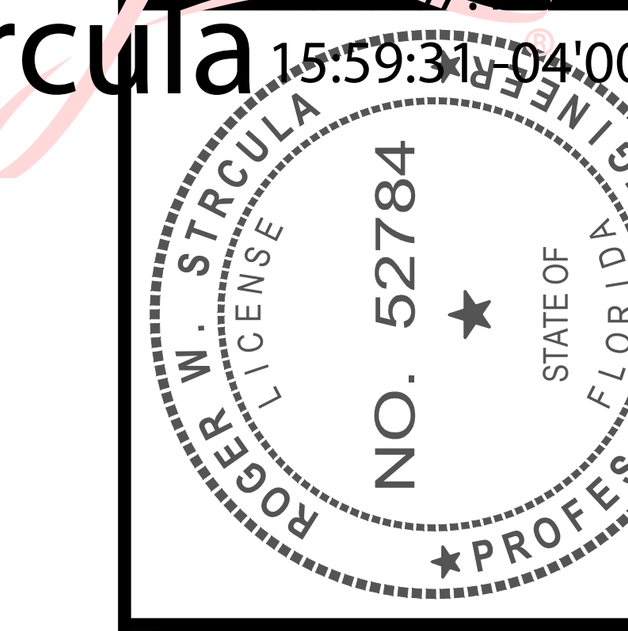
Date: 2025.07.11 15:59:31 -04'00'



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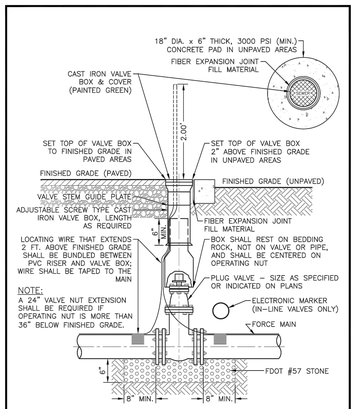
NSBU STANDARD DETAILS AND NOTES (2 OF 7)

FLAGLER DUNES
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	1" = 40'

SHEET NUMBER:

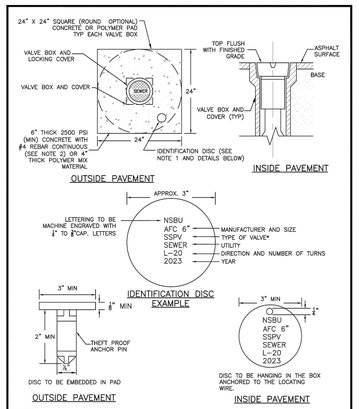
C701



NEW SMYRNA BEACH UTILITIES

PLUG VALVE

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS-04



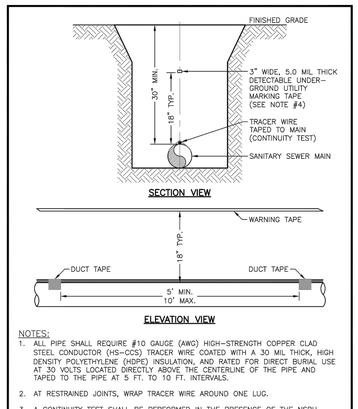
NOTES:
1. BRONZE (OR STAINLESS STEEL) IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES, EXCEPT HYDRANT VALVES.
2. IN LIEU OF PRECAST CONCRETE PAD, A 6" THICK X 24" (ROUND OR SQUARE) POURED CONCRETE PAD WITH TWO #4 REBAR AROUND PERIMETER MAY BE USED.

*PWOV Potable Water Gate Valve
RWOV Reclaimed Water Gate Valve
SSGV Sanitary Sewer Gate Valve
SSPV Sanitary Sewer Plug Valve

NEW SMYRNA BEACH UTILITIES

VALVE BOX CONCRETE PAD

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS-07

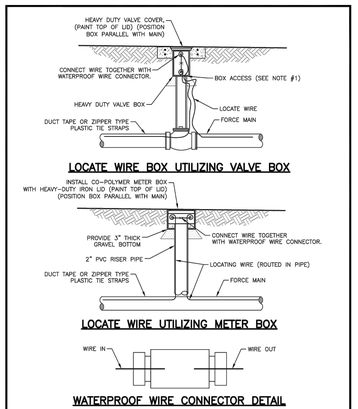


NOTES:
1. ALL PIPE SHALL REQUIRE #10 GAUGE (AWG) HIGH-STRENGTH COPPER CLAD STEEL CONDUCTOR (HS-CCS) TRACER WIRE COATED WITH A 30 MIL THICK, HIGH DENSITY POLYETHYLENE (HDPE) INSULATION, AND RATED FOR DIRECT BURIAL USE AT 30 VOLTS LOCATED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE AND TAPED TO THE PIPE AT 5 FT. TO 10 FT. INTERVALS.
2. AT RESTRAINED JOINTS, WRAP TRACER WIRE AROUND ONE LUG.
3. A CONTINUITY TEST SHALL BE PERFORMED IN THE PRESENCE OF THE NSBU.
4. UTILITY MARKING TAPE SHALL BE COLOR CODED BLUE FOR POTABLE WATER, PURPLE FOR RECLAIMED WATER, AND GREEN FOR WASTEWATER

NEW SMYRNA BEACH UTILITIES

PIPE LOCATING WIRE AND TAPE

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS-09

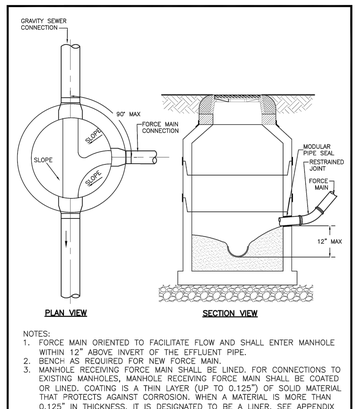


NOTE:
1. LOCATE WIRE SHALL ENTER THE VALVE BOX THROUGH A "Y" CUT IN THE 6" PVC RISER PIPE.
2. LOCATE WIRE SHALL HAVE ENOUGH SLACK TO REACH 4' ABOVE FINAL GRADE AND LOCATE CONNECTOR.
3. LOCATE WIRE CONNECTION SHALL ONLY BE A 2 WAY CONNECTION.

NEW SMYRNA BEACH UTILITIES

PIPE LOCATING WIRE BOX

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS-10

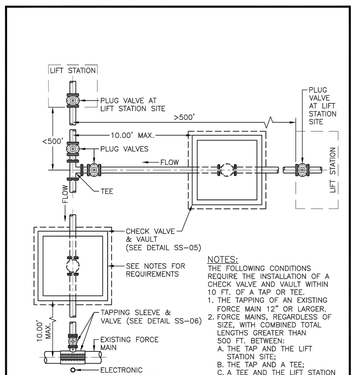


NOTES:
1. FORCE MAIN ORIENTED TO FACILITATE FLOW AND SHALL ENTER MANHOLE WITHIN 12" ABOVE INVERT OF THE EFFLUENT PIPE.
2. BENCH AS REQUIRED FOR NEW FORCE MAIN.
3. MANHOLE RECEIVING FORCE MAIN SHALL BE LINED. FOR CONNECTIONS TO EXISTING MANHOLES, MANHOLE RECEIVING FORCE MAIN SHALL BE COATED OR LINED. COATING IS A THIN LAYER (UP TO 0.125") OF SOLID MATERIAL THAT PROTECTS AGAINST CORROSION. WHEN A MATERIAL IS MORE THAN 0.125" IN THICKNESS, IT IS DESIGNATED TO BE A LINER. SEE APPENDIX A FOR APPROVED PRODUCTS.
4. A NSBU UTILITY INSPECTOR SHALL BE PRESENT FOR ALL CORING AND CONNECTIONS TO EXISTING MANHOLES.

NEW SMYRNA BEACH UTILITIES

FORCE MAIN TO GRAVITY SEWER CONNECTION

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS-11

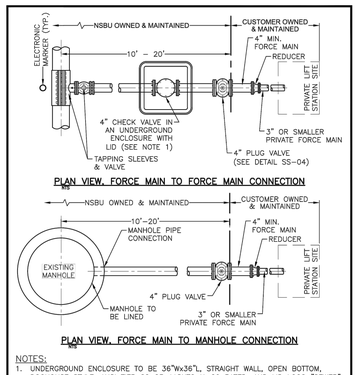


NOTES:
THE FOLLOWING CONDITIONS REQUIRE THE INSTALLATION OF A CHECK VALVE AND VAULT WITHIN 10 FT. OF A TAP OR TEE.
1. THE TAPPING OF AN EXISTING FORCE MAIN 12" OR LARGER.
2. FORCE MAINS, REGARDLESS OF SIZE, WITH COMBINED TOTAL LENGTHS GREATER THAN 500 FT. BETWEEN:
   A. THE TAP AND THE LIFT STATION SITE;
   B. THE TAP AND A TEE;
   C. A TEE AND THE LIFT STATION SITE.

NEW SMYRNA BEACH UTILITIES

FORCE MAIN VALVE LAYOUT (4" AND GREATER)

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS-12

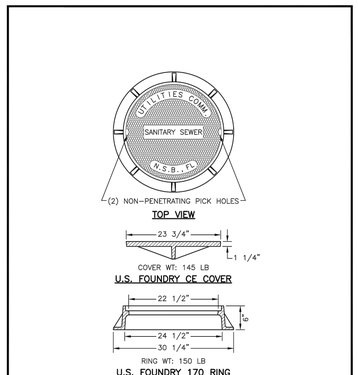


NOTES:
1. UNDERGROUND ENCLOSURE TO BE 36"Wx36"L, STRAIGHT WALL, OPEN BOTTOM, DOGHOUSE STYLE, ANSI TIER 22 OR AASHTO H-20 RATED, AND LID LOGO "SEWER".
2. FORCE MAIN INVERT AT MANHOLE TO BE WITHIN 24" OF THE LOWEST EXISTING INVERT.
3. NSBU OWNED/MAINTAINED FORCE MAIN SHALL BE 4" MINIMUM.
4. PRIVATE FORCE MAIN SHALL BE INCREASED ONE DIAMETER SIZE TO CONNECT TO THE NSBU PRESSURIZED SYSTEM (UP TO THE EXISTING FORCE MAIN SIZE).

NEW SMYRNA BEACH UTILITIES

PRIVATE FORCE MAIN CONNECTION

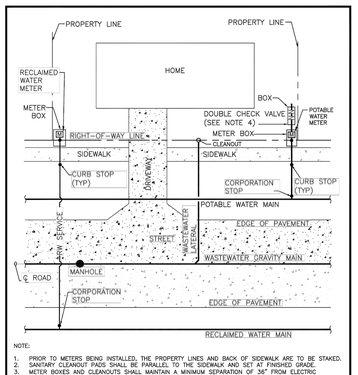
SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS-14



NEW SMYRNA BEACH UTILITIES

STANDARD MANHOLE RING AND COVER

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS-16

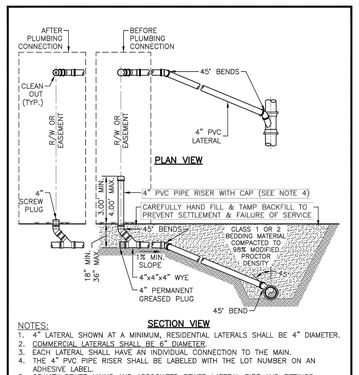


NOTE:
1. PRIOR TO METERS BEING INSTALLED, THE PROPERTY LINES AND BACK OF SIDEWALK ARE TO BE STAKED.
2. SANITARY CLEANOUT PADS SHALL BE PARALLEL TO THE SIDEWALK AND SET AT FINISHED GRADE.
3. METER BOXES AND CLEANOUTS SHALL MAINTAIN A MINIMUM SEPARATION OF 36" FROM ELECTRIC TRANSFORMERS, CABLE JUNCTION BOXES, OR ANY OTHER ABOVE GROUND SERVICE FIXTURE OR STRUCTURE.
4. METER AND BOX TO BE INSTALLED BY NSBU AND DOUBLE CHECK BACKFLOW PREVENTER TO BE INSTALLED BY CONTRACTOR.
5. EXISTING FIRE HYDRANTS, AUTOMATIC FLUSHING DEVICES OR VALVES ARE TO BE MAINTAINED AT FINISHED GRADE BETWEEN THE PROPERTY LINES TO THE EDGE OF THE PAVEMENT.
6. DOUBLE UTILITY SERVICES ARE NOT PERMITTED WITHOUT PRIOR WRITTEN APPROVAL BY NSBU.

NEW SMYRNA BEACH UTILITIES

RESIDENTIAL SERVICE LOCATIONS

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS-21

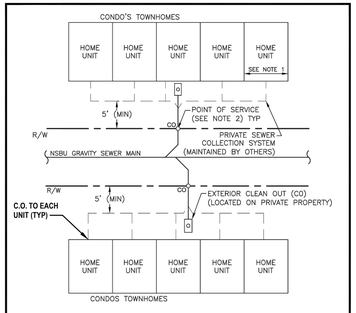


NOTES:
1. 4" LATERAL SHOWN AT A MINIMUM, RESIDENTIAL LATERALS SHALL BE 4" DIAMETER.
2. COMMERCIAL LATERALS SHALL BE 6" DIAMETER.
3. EACH LATERAL SHALL HAVE AN INDIVIDUAL CONNECTION TO THE MAIN.
4. THE 4" PVC PIPE RISER SHALL BE LABELED WITH THE LOT NUMBER ON AN ADHESIVE LABEL.
5. GRAVITY SEWER MAINS AND ASSOCIATED SEWER LATERAL PIPE AND FITTINGS (INCLUDING TEE-WYE FITTINGS) SHALL BE MINIMUM PVC SDR-26.
6. REFER TO "SEWER LATERAL CLEAN OUT" DETAIL FOR MORE INFORMATION.

NEW SMYRNA BEACH UTILITIES

GRAVITY SANITARY SEWER LATERAL SINGLE FAMILY RESIDENTIAL

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS-22

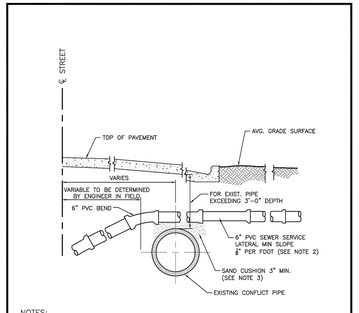


NOTES:
1. THIS STANDARD MAY APPLY TO CONDOS AND/OR TOWNHOMES WITH PRIVATE LOT LINE LESS THAN 40 FEET WIDE.
2. THE "POINT OF SERVICE" (P.O.S.) SHALL BE DEFINED AT THE R/W LINE FOR ALL LATERALS. NSBU WILL ONLY BE RESPONSIBLE FOR O&M (EXCLUDING STOPPAGES) BEGINNING AT THE P.O.S. TO THE MAIN (60 FEET MAX.). THEREFORE, O&M RESPONSIBILITY BETWEEN THE P.O.S. AND THE CUSTOMER IS BY OTHERS (HOMEOWNERS ASSOCIATION OR OTHER). CUSTOMER WILL CONTINUE TO BE RESPONSIBLE FOR FREE FLOW OF SEWAGE BETWEEN CUSTOMER TO MAIN.
3. SERVICE LATERALS BETWEEN MAIN AND R/W SHALL BE 6" SDR-26 (PVC) AT ¼" PER FOOT SLOPE, AT MINIMUM, AND SERVE A MAXIMUM OF 6 HOME UNITS. ENGRAVE AN "S" IN CURB TO SHOW LOCATION OF LATERAL. A MANHOLE SHALL BE REQUIRED AT THE MAIN IF THE LATERAL IS LARGER THAN 6 INCH SIZE. LARGER LATERALS SHALL BE SIZED BY DESIGN ENGINEER. ALL PIPING ON PRIVATE PROPERTY SHALL MEET LOCAL PLUMBING CODE REQUIREMENTS AND BE MAINTAINED BY OWNER. ALL CLEANOUTS LOCATED IN PAVED AREAS SHALL BE CAST IRON FRAME AND TOP.

NEW SMYRNA BEACH UTILITIES

GRAVITY SANITARY SEWER LATERAL FOR MULTI-FAMILY HOMES

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS-23

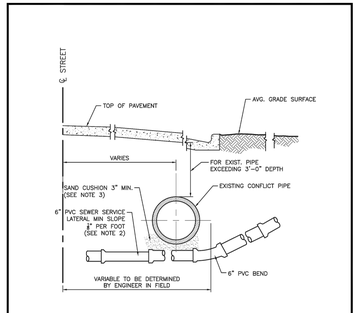


NOTES:
1. ALTERNATE GRADIENT FOR 6 INCH SEWER LATERAL AT CONFLICTS WITH EXISTING UTILITIES.
2. FLATTER SLOPES MUST BE PRE-APPROVED BY NSBU ENGINEERING DEPARTMENT PRIOR TO CONSTRUCTION.
3. THE SOILS BETWEEN THE NEW MAIN AND THE CONFLICT PIPE SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY THE LABORATORY MODIFIED PROCTOR TEST, ASTM D 1557.

NEW SMYRNA BEACH UTILITIES

GRAVITY SANITARY LATERAL OVER CONFLICT PIPE

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS-24

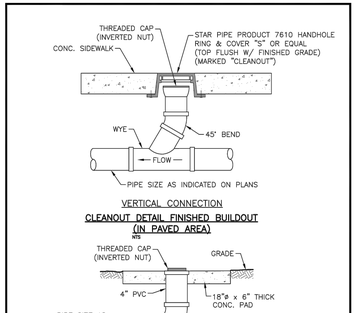


NOTES:
1. ALTERNATE GRADIENT FOR 6 INCH SEWER LATERAL AT CONFLICTS WITH EXISTING UTILITIES.
2. FLATTER SLOPES MUST BE PRE-APPROVED BY NSBU ENGINEERING DEPARTMENT PRIOR TO CONSTRUCTION.
3. THE SOILS BETWEEN THE NEW MAIN AND THE CONFLICT PIPE SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY THE LABORATORY MODIFIED PROCTOR TEST, ASTM D 1557.

NEW SMYRNA BEACH UTILITIES

GRAVITY SANITARY LATERAL UNDER CONFLICT PIPE

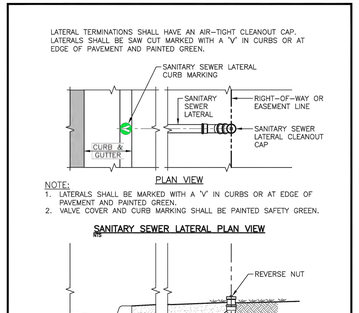
SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS-25



NEW SMYRNA BEACH UTILITIES

GRAVITY SANITARY SEWER LATERAL CLEANOUT

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS-26



NEW SMYRNA BEACH UTILITIES

GRAVITY SANITARY SEWER LATERAL LOCATION MARKING

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS-27

REVISIONS

DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Roger W Strcula

Digitally signed by Roger W Strcula
Date: 2025.07.11 16:00:05-04'00'

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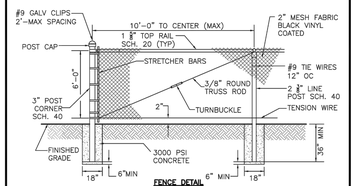
NSBU STANDARD DETAILS AND NOTES (3 OF 7)

FLAGLER DUNES
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	1" = 40'

SHEET NUMBER:

C702



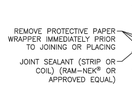
FENCE DETAIL

NOTES:
1. TRUSS RODS ARE REQUIRED FOR THE FIRST SPAN ON EACH SIDE OF A CORNER POST ONLY.
2. PROVIDE CHAIN AND LOCK FOR SECURING GATE.
3. FENCING AND POSTS SHALL BE BLACK, VINYL CLAD.
4. SEE SS--44 FOR CANTILEVER SLIDE GATE.

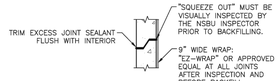
NEW SMYRNA BEACH UTILITIES

CHAIN LINK FENCE

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS--43



APPLICATION OF SEALANT



CLOSED JOINT

NEW SMYRNA BEACH UTILITIES

JOINT SEALANT

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS--45

SEPARATION REQUIREMENTS FOR
WATER, WASTEWATER AND RECLAIMED WATER MAINS

	PROPOSED UTILITY											
	POTABLE WATER			WASTEWATER GRAVITY AND FORCE MAIN			RECLAIMED WATER			VACUUM SEWER		
CONFLICTING UTILITY	HORIZ.	VERT.	JOINT* SPACING	HORIZ.	VERT.	JOINT* SPACING	HORIZ.	VERT.	JOINT* SPACING	HORIZ.	VERT.	JOINT* SPACING
POTABLE WATER	3' NOTE 1	12"	3' NOTE 2	6' TO 10'	12" NOTE 5	6' NOTE 2	3'	12"	6' NOTE 2	3' TO 10'	12"	3' NOTE 2
RECLAIMED WATER	3'	12"	3' NOTE 2	6' NOTE 1	12"	6' NOTE 2	3'	12"	6' NOTE 2	3' NOTE 1	12"	3' NOTE 2
WASTEWATER GRAVITY AND FORCE MAIN	6' TO 10'	12"	6' NOTE 2	3' NOTE 1	12"	6' NOTE 2	6"	12"	3' NOTE 1	3' NOTE 2	12"	3' NOTE 2
VACUUM SEWER	3' TO 10'	12"	3' NOTE 2	3' NOTE 1	12"	6"	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2
RIGHT OF WAY	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A
STORM SEWERS	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2
GAS	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2
TREES	3'-6"	N/A	N/A	3'-6"	N/A	N/A	3'-6" NOTE 1	N/A	N/A	3'-6"	N/A	N/A
ALL OTHER UTILITIES	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2

NOTES:
1. THIS SEPARATION REQUIREMENT IS TO PROVIDE ACCESSIBILITY FOR CONSTRUCTION AND MAINTENANCE. THREE FEET OF HORIZONTAL SEPARATION IS THE MINIMUM FOR PIPES WITH THREE FEET OF COVER. FOR PIPES INSTALLED AT GREATER DEPTH, PROVIDE AN ADDITIONAL FOOT OF SEPARATION FOR EACH ADDITIONAL FOOT OF DEPTH.
2. MINIMUM JOINT SPACING REQUIREMENT FROM A UTILITY CROSSING WHILE STILL MAINTAINING MINIMUM HORIZONTAL SEPARATION.
3. DISTANCES GIVEN ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
4. NO WATER PIPE SHALL PASS THROUGH OR COME INTO CONTACT WITH ANY PART OF SANITARY OR STORM WATER MANHOLES OR STRUCTURES.
5. WATER MAIN SHOULD CROSS ABOVE OTHER PIPES WHENEVER POSSIBLE. WHEN WATER MAIN MUST BE BELOW OTHER UTILITY PIPING, THE MINIMUM SEPARATION SHALL BE 12 INCHES.

NEW SMYRNA BEACH UTILITIES

UTILITY SEPARATION

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS--46

RESTRAINED PIPE TABLE
WASTEWATER FORCE MAINS

MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)									
TYPE	PVC PIPE SIZE								
	4"	6"	8"	10"	12"	16"	20"	24"	30"	36"
90° BEND	18	24	31	38	43	55	65	75	88	100
45° BEND	8	10	13	15	18	23	26	31	38	43
22--1/2° BEND	4	5	6	8	9	11	13	15	18	20
11--1/4° BEND	2	3	4	5	6	8	9	10	11	13
PLUG OR BRANCH OF TEE	38	50	65	79	90	117	139	163	194	223
VALVE	19	25	32	40	45	59	70	82	98	112
REDUCER	VARIES BY SIZE; TO BE DETERMINED BY THE DESIGN ENGINEER.									

NOTES:
1. FITTINGS SHALL HAVE RESTRAINED JOINTS UNLESS OTHERWISE INDICATED.
2. INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO OR GREATER THAN LENGTH SHOWN IN THE TABLE.
3. WHERE TWO OR MORE FITTINGS ARE IN SERIES, SELECT FITTING RESTRAINT LENGTH THAT YIELDS THE LONGEST RESTRAINT DISTANCE.
4. ALL IN-LINE VALVES SHALL BE RESTRAINED.
5. WHERE INTERNAL RESTRAINED JOINTS ARE USED, THE ENTIRE BELL SHALL BE PAINTED RED.
6. LENGTHS SHOWN IN THE TABLE WERE CALCULATED IN ACCORDANCE WITH PROCEDURES OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" GUIDELINES PUBLISHED BY DIPRA, USING THE ASSUMPTIONS SHOWN BELOW:

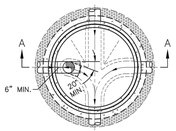
WORKING PRESSURE: 100 PSI
SOIL DESIGNATION: SM (SAND, SILT)
LAYING CONDITIONS: 4
DEPTH OF COVER: 3 FT
SAFETY FACTOR: 1.5
CONVERSION FACTOR FOR PVC PIPE: 1.25

THE DESIGN ENGINEER SHALL INCREASE THE VALUES IN THE TABLE AS WARRANTED BY SITE--SPECIFIC PARAMETERS, SUCH AS SOIL DESIGNATIONS AND LAYING CONDITIONS.

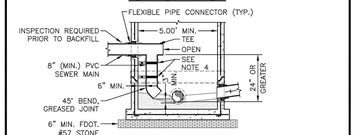
NEW SMYRNA BEACH UTILITIES

**RESTRAINED PIPE TABLE
WASTEWATER FORCE MAIN**

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS--47



PLAN VIEW – INVERT



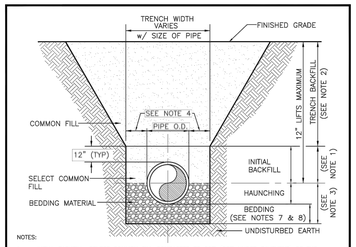
SECTION A--A

NOTES:
1. NEW DROP MANHOLES SHALL HAVE A MINIMUM INSIDE DIAMETER OF 5 FEET.
2. DROP CONNECTION PIPING SHALL BE PVC & THE SAME SIZE AS THE SEWER MAIN.
3. PIPE BRACKETS SHALL BE STAINLESS STEEL BANDS, TWO (2) MIN. AT 24" MAX. SPACING, ANCHORED TO THE MANHOLE WALL WITH STAINLESS STEEL BOLTS.
4. SEE STANDARD MANHOLE DETAIL FOR MANHOLE SPECIFICATIONS.
5. DROP CONNECTION IN AN EXISTING MANHOLE REQUIRES NSBU ENGINEERING DEPARTMENT APPROVAL. MANHOLE CORE SHALL NOT BE ON A JOINT.
6. INVERTS WITH A DROP OF LESS THAN 2' SHALL HAVE A CONCRETE SLIDE.

NEW SMYRNA BEACH UTILITIES

INSIDE DROP MANHOLE

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS--18

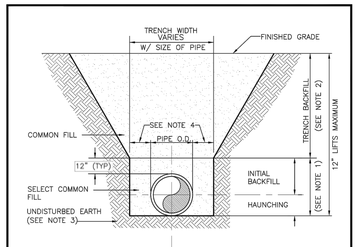


NOTES:
1. INITIAL BACKFILL: SELECT COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY PER AASHTO T--180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T--180.
3. TYPE A BEDDING MATERIAL SHALL CONFORM TO FDOT NO. 57 AGGREGATE.
4. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (18" MIN) FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER UP TO 12" AND 6" MINIMUM FOR PIPE DIAMETER 16" AND LARGER.
8. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW. THE PIPE. NSBU SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.
9. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN NSBU RIGHT--OF--WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT--OF--WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

NEW SMYRNA BEACH UTILITIES

BEDDING AND TRENCHING – TYPE A

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS--49

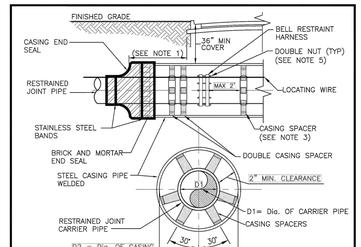


NOTES:
1. INITIAL BACKFILL AND HAUNCHING: SELECT COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T--180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T--180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY NSBU.
4. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (18" MIN) FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN NSBU RIGHT--OF--WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT--OF--WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

NEW SMYRNA BEACH UTILITIES

BEDDING AND TRENCHING – TYPE B

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS--50



CARRIER PIPE NOMINAL DIAMETER D1	4	6	8	10	12	16	20	24	30	36	42
MINIMUM CASING INSIDE DIAMETER (INCHES) D2	16	16	18	20	24	30	36	42	48	54	60
MINIMUM CASING WALL THICKNESS (INCHES)	.250"	.250"	.250"	.250"	.250"	.312"	.375"	.500"	.500"	.500"	.500"

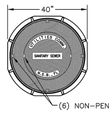
NOTES:
1. CASING SHALL EXTEND A MINIMUM OF TEN FEET BEYOND THE EDGE OF PAVEMENT OR MEET FDOT REQUIREMENTS, WHICHEVER IS GREATER.
2. REQUIREMENTS OF OTHER JURISDICTIONS SHALL BE MET. WHEN CONSTRUCTION IS WITHIN FDOT JURISDICTION, ADDITIONAL REQUIREMENTS OF THE "FDOT UTILITY ACCOMMODATION MANUAL", LATEST EDITION, SHALL BE MET.
3. DISTANCE BETWEEN SPACERS TO BE PER MANUFACTURER'S SPECIFICATIONS, OR MAX OF 6.5', WHICHEVER IS MORE STRINGENT.
4. ANNULAR SPACE SHALL REMAIN EMPTY; SEAL BOTH ENDS WITH 12" CONCRETE PLUGS. USE OF FLOWABLE FILL IN ANNULAR SPACE BETWEEN THE CASING AND CARRIER PIPE IS PROHIBITED.
5. THE CASING SHALL HAVE A MECHANICAL BELL RESTRAINT HARNESS WHERE RODS ARE DOUBLE NUTTED TO PRECLUDE OVERBILLING THE JOINT DURING PUSHING CARRIER PIPE CASING.
6. SHOP DRAWINGS OF CASING & CARRIER PIPE INSTALLATION SHALL BE SUBMITTED FOR APPROVAL PRIOR TO FABRICATION OF PIPING, CASING, AND APPURTENANCES. CERTIFICATION OF CASING PIPE IS REQUIRED.
7. WELDING OF CASING PIPE TO BE DONE BY STATE CERTIFIED WELDER. ALL ENDS OF CASING PIPE SHALL BE CHAMFERED PRIOR TO ANY WELDING. SEAL END OF CASING PIPE WITH NON--SHRINK GROUT.
8. CITY INSPECTOR SHALL BE PRESENT THROUGHOUT ALL JACK AND BORE ACTIVITIES.

NOTE TO ENGINEER: CROSSING DETAIL SHALL BE TO SCALE AND SHOW EXISTING UTILITIES, CLEARANCES, CASING LENGTH, LOCATION OF PAVED ROAD, AND LIMITS OF RIGHT--OF--WAY.

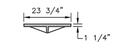
NEW SMYRNA BEACH UTILITIES

JACK AND BORE

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS--51

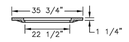


TOP VIEW



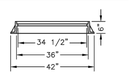
COVER WT: 145 LB

U.S. FOUNDRY CE INNER COVER



COVER WT: 220 LB

U.S. FOUNDRY CR OUTER COVER



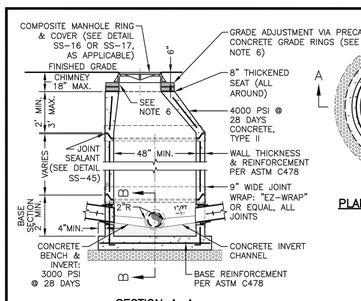
RING WT: 220 LB

U.S. FOUNDRY 667 RING

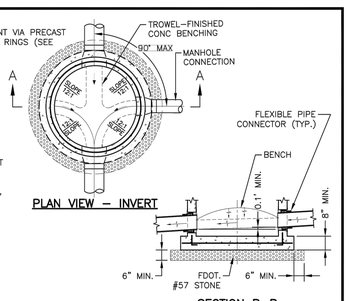
NEW SMYRNA BEACH UTILITIES

VAULT STRUCTURE RING AND COVER

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS--54



SECTION A--A



PLAN VIEW – INVERT

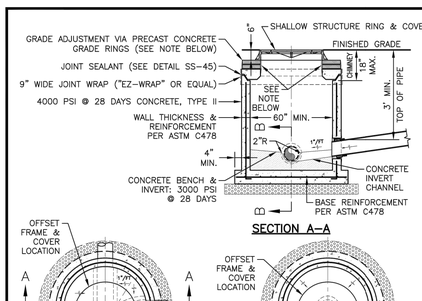
SECTION B--B

NOTES:
1. PRE--FORMED INVERTS ARE PERMITTED.
2. TOP SECTIONS SHALL BE ECCENTRIC.
3. STRUCTURES SHALL BE INSTALLED LEVEL IN ALL DIRECTIONS.
4. MANHOLE STRUCTURES SHALL BE COATED WITH COAL TAR EPOXY: 1 COAT OR 8 MILS OUTSIDE, 2 COATS OR 16 MILS INSIDE, THE FIRST COAT SHALL BE RED IN COLOR AND THE SECOND COAT SHALL BE GRAY; LINED MANHOLES SHALL BE COATED OUTSIDE ONLY.
5. PIPE CONNECTIONS AT MANHOLE JOINTS ARE NOT PERMITTED.
6. EPOXY MORTAR INSIDE & OUTSIDE OF CHIMNEY/PRECAST CONCRETE GRADE RINGS & PIPE OPENINGS FOR A SMOOTH FINISH.
7. CHANGES IN BENCH FLOW DIRECTION TO BE SMOOTH AND GRADUAL.
8. INVERTS WITH A DROP OF LESS THAN 2 FEET SHALL HAVE A CONCRETE SLIDE.

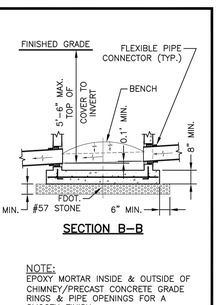
NEW SMYRNA BEACH UTILITIES

STANDARD SEWER MANHOLE

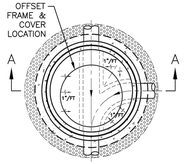
SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS--15



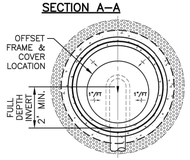
SECTION A--A



SECTION B--B



PLAN VIEW
IN LINE MANHOLE



PLAN VIEW
TERMINAL MANHOLE

SHALLOW MANHOLE
NTS

NOTE:
EPOXY MORTAR INSIDE & OUTSIDE OF CHIMNEY/PRECAST CONCRETE GRADE RINGS & PIPE OPENINGS FOR A SMOOTH FINISH.

NEW SMYRNA BEACH UTILITIES

SHALLOW MANHOLE

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS--20

NSBU GENERAL NOTES:

1. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN EXCAVATING IN PROXIMITY OF WATER MAINS, WASTEWATER FORCE MAINS, GRAVITY MAINS AND RECLAIMED WATER MAINS. MAINS LOCATIONS SHOWN ON PLANS MAY NOT BE EXACT. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING UTILITY LOCATIONS.
2. SHOULD A PIPE EMERGENCY OCCUR, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE NEW SMYRNA BEACH UTILITIES (NSBU) DISPATCH OPERATOR (386--427--1368) AND THE NSBU INSPECTOR.
3. THE CONTRACTOR SHALL NOTIFY THE NSBU ENGINEERING INSPECTOR AT LEAST SEVEN DAYS PRIOR TO COMMENCEMENT OF THE CONSTRUCTION PROJECT.
4. THE CONTRACTOR SHALL NOTIFY THE NSBU ENGINEERING INSPECTOR AT LEAST 48 HOURS PRIOR TO ANY UTILITIES CONSTRUCTION.
5. THE MATERIALS, PRODUCTS, AND CONSTRUCTION OF ALL UTILITIES CONNECTING TO THE NSBU SYSTEM SHALL BE IN CONFORMANCE WITH THE NSBU RULES, DESIGN, AND CONSTRUCTION SPECIFICATIONS.
6. ALL NSBU MAINS AND FACILITIES WITHIN THE LIMITS OF THE PROJECT SHALL BE SUPPORTED AND PROTECTED AGAINST DAMAGE DURING CONSTRUCTION.
7. THE CONTRACTOR, AT THE CONTRACTOR'S EXPENSE, SHALL IMMEDIATELY REPAIR ALL DAMAGE TO NSBU MAINS AND FACILITIES. IF THE REPAIR IS NOT MADE IN A TIMELY MANNER, AS DETERMINED BY NSBU, NSBU MAY PERFORM REQUIRED REPAIRS AND CLEANUP. THE CONTRACTOR WILL BE CHARGED FOR ALL EXPENSES ASSOCIATED WITH THE REPAIR.
8. THE CONTRACTOR SHALL ADJUST ALL EXISTING NSBU MAINS AND FACILITIES IN CONFLICT WITH NEW GRADE, NEW OR ALTERED ROADWAYS, SIDEWALKS, DRIVEWAYS, OR STORM WATER IMPROVEMENTS. NSBU FACILITIES TO BE ADJUSTED INCLUDE, BUT ARE NOT LIMITED TO, PIPELINES, PUMP STATIONS, VALVE BOXES, AIR RELEASE VALVES, FIRE HYDRANTS, MANHOLE COVERS, AND METERS.
9. ONLY NSBU PERSONNEL SHALL OPERATE NSBU WATER, WASTEWATER, AND RECLAIMED WATER VALVES. THE CONTRACTOR SHALL COORDINATE VALVE OPERATION WITH THE NSBU INSPECTOR. FOR OPERATION OF MAINS NOT OWNED BY NSBU, IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE APPROPRIATE UTILITY REPRESENTATIVE.
10. CONSTRUCTION ACTIVITIES SHALL NOT CAUSE INTERRUPTIONS IN WATER, WASTEWATER, OR RECLAIMED WATER SERVICE. THE CONTRACTOR SHALL COORDINATE PRE--APPROVED INTERRUPTIONS OF SERVICE WITH THE NSBU INSPECTOR 7 WORKING DAYS IN ADVANCE.
11. THE CONTRACTOR SHALL PROVIDE FOR BYPASSING AND/OR HAULING WASTEWATER DURING APPROVED INTERRUPTIONS OF WASTEWATER FLOWS AND CONNECTIONS. THE CONTRACTOR SHALL SUBMIT A BYPASS PLAN SIGNED AND SEALED BY A PROFESSIONAL ENGINEER TO NSBU ENGINEERING DEPARTMENT FOR APPROVAL PRIOR TO IMPLEMENTATION BY CONTRACTOR.
12. ALL VALVES INSTALLED AS PART OF THIS CONSTRUCTION PROJECT SHALL REMAIN CLOSED DURING CONSTRUCTION. KEEP VALVES ON ALL WET TAPS CLOSED UNTIL CLEARED BY FDEP. DO NOT CONNECT NEWLY CONSTRUCTED MAINS TO ANY EXISTING WATER MAINS UNLESS CLEARED BY FDEP AND NSBU.
13. THE CONTRACTOR SHALL PROVIDE A JUMPER ASSEMBLY WITH A BACKFLOW PREVENTER FOR MAKING TEMPORARY CONNECTIONS TO AN EXISTING WATER SOURCE IN ORDER TO CHLORINATE AND FLUSH NEW MAINS WITH WATER. ANY TEMPORARY WATER CONNECTIONS TO RECLAIMED WATER OR FORCE MAIN SHALL ALSO BE EQUIPPED WITH A BACKFLOW PREVENTER.
14. FOR PVC PIPE THAT WILL BE OWNED AND MAINTAINED BY NSBU, NO PIPE BENDING IS ALLOWED. THE MAXIMUM ALLOWABLE TOLERANCE FOR JOINT DEFLECTION IS 0.75 DEGREES (3--INCHES PER JOINT PER 20 FT STICK OF PIPE). ALIGNMENT CHANGE SHALL BE MADE ONLY WITH SLEEVES AND FITTINGS.
15. FOR NON--PVC PIPE THAT WILL BE OWNED AND MAINTAINED BY NSBU, LONG RADIUS CURVES, EITHER HORIZONTAL OR VERTICAL, MAY BE INSTALLED WITH STANDARD PIPE BY DEFLECTIONS AT THE JOINTS. MAXIMUM DEFLECTIONS AT PIPE JOINTS, FITTINGS AND LAYING RADIUS FOR THE VARIOUS PIPE LENGTHS SHALL NOT EXCEED 75 PERCENT OF THE PIPE MANUFACTURER'S RECOMMENDATION.

NEW SMYRNA BEACH UTILITIES

BEDDING AND TRENCHING – NOTES

SCALE: NTS | SHEET 1 OF 1
DATE: 10/2023
REV.
SS--48

REVISIONS	
DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Roger W Strcula

Digitally signed by Roger W Strcula
Date: 2025.07.11 16:00:40 -04'00'

ROGER W. STRCULA LICENSE NO. 52754 STATE OF FLORIDA PROFESSIONAL ENGINEER
NOT VALID UNLESS SIGNED & DATED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY ROGER W. STRCULA, PE ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

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NSBU STANDARD DETAILS AND NOTES (4 OF 7)

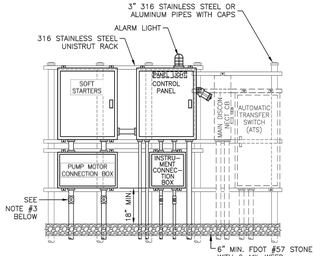
FLAGLER DUNES

1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	1" = 40'

SHEET NUMBER:

C703

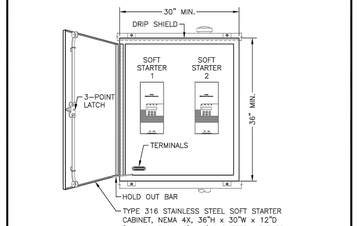


NOTES:
1. ALL MOUNTING HARDWARE SHALL BE TYPE 316 STAINLESS STEEL.
2. ALL ENCLOSURES SHALL BE TYPE 316 STAINLESS STEEL, NEMA 4X RATED, WITH GASKETED WEATHERPROOF DOORS.
3. SEAL-OFF CONNECTIONS & CONDUIT CONSTRUCTION FOR ALL CONDUITS PENETRATING INTO THE WET WELL SHALL COMPLY WITH, & BE INSTALLED PER, NEC ARTICLE 501, LATEST EDITION.

NEW SMYRNA BEACH UTILITIES

LIFT STATION EQUIPMENT RACK (WET WELL SIDE)

SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-31

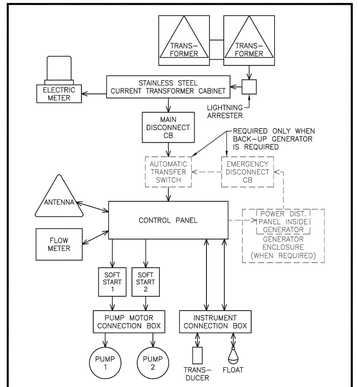


NOTE:
1. DEADFRONT LAYOUT SHOWN IS REPRESENTATIVE. ACTUAL LAYOUT SHALL BE COORDINATED WITH SOLCON RVSS REP ICON TECHNOLOGIES.
2. NSBU ENGINEERING AND LIFT STATION DEPARTMENTS MAY REQUIRE A VFD OVER A SOFT START, WHERE FLOW SUPERSEDES PUMP HORSEPOWER.

NEW SMYRNA BEACH UTILITIES

LIFT STATION SOFT STARTER PANEL ELEVATION

SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-33



NEW SMYRNA BEACH UTILITIES

LIFT STATION CONTROL RISER SINGLE LINE DIAGRAM

SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-35

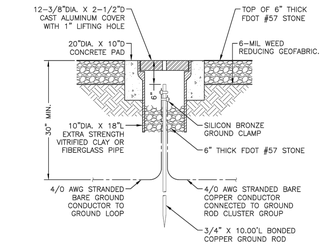


NOTES:
1. SIGNAGE SHALL BE (120) .080 ALUMINUM WITH HIP REFLECTIVE.

NEW SMYRNA BEACH UTILITIES

WASTEWATER ADVISORY SIGN

SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-53

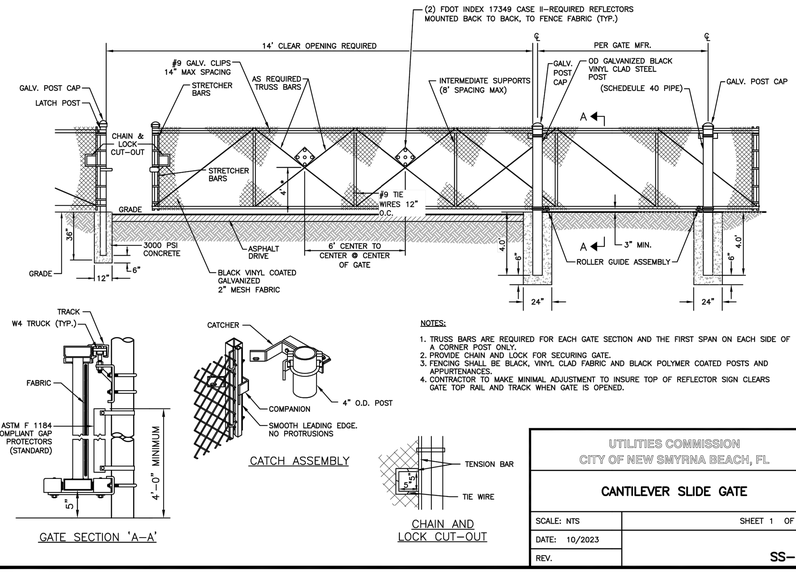


NOTE:
REFER TO PROJECT SPECIFICATION FOR MINIMUM SYSTEM RESISTANCE TO GROUND. IF THIS RESISTANCE CANNOT BE MET WITH SINGLE 10.00' RODS, ADD ADDITIONAL SECTIONS TO RODS OR ADD NEW RODS AS REQUIRED, SPACED AT 6.00' TO 10.00' OC.

NEW SMYRNA BEACH UTILITIES

LIFT STATION GROUND ROD/GROUND LOOP TEST POINT

SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-40



GATE SECTION 'A-A'

CATCH ASSEMBLY

CHAIN AND LOCK CUT-OUT

NOTES:
1. TRUSS BARS ARE REQUIRED FOR EACH GATE SECTION AND THE FIRST SPAN ON EACH SIDE OF A CORNER POST ONLY.
2. PROVIDE CHAIN AND LOCK FOR SECURING GATE.
3. FENCING SHALL BE BLACK, VINYL CLAD FABRIC AND BLACK POLYMER COATED POSTS AND APPURTENANCES.
4. CONTRACTOR TO MAKE MINIMAL ADJUSTMENT TO INSURE TOP OF REFLECTOR SIGN CLEARS GATE TOP RAIL AND TRACK WHEN GATE IS OPENED.

UTILITIES COMMISSION
CITY OF NEW SMYRNA BEACH, FL

CANTILEVER SLIDE GATE

SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-44

MINI POWER ZONE PANEL SCHEDULE
120/240VAC, 50A PANEL, 10KAIC (MIN)

	DESCRIPTION	VA		BKR	WIRES
	PANEL MAIN		☐	2P-50A	
	SPARE	–		1P-20A	
	SPARE	–		1P-20A	
	BATTERY CHARGER	920		1P-20A	2-#12, 1-#12 GND
	ENGINE BLOCK HEATER	1600 1600	☐	2P-20A	2-#12, 1-#12 GND
	SPARE	–		1P-20A	
	TOTAL	4120			

NEW SMYRNA BEACH UTILITIES

LIFT STATION GENERATOR ENCLOSURE PANEL SCHEDULE

SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-41

120V SCHEDULE SHOWN FOR GENERAL INFO ONLY. CIRCUIT BREAKERS ARE AN INTEGRAL PART OF THE FACTORY ASSEMBLED CONTROL PANEL. SEE SCHEMATIC FOR DETAILS.

CKT	DESCRIPTION	VA	BKR	WIRES	CONDUIT
PCB1,2	PUMP	000	OP-00A	2-#12, 1-#12 GND	INTERNAL
CCB	CONTROL CB/DFS TCU	500	1P-30A	2-#12, 1-#12 GND	INTERNAL
LCB	PUMP CP LIGHT	240	1P-20A	2-#12, 1-#12 GND	INTERNAL
DRB	PUMP CP RECEPTACLE	360	1P-20A	2-#12, 1-#12 GND	INTERNAL
RTU	REMOTE TELEMETRY UNIT	000	1P-20A	2-#12, 1-#12 GND	INTERNAL
FMCB	FLOW METER	100	1P-20A	2-#12, 1-#12 GND	INTERNAL
TCB	TRANSIENT FILTER SHIELD	300	1P-10A	2-#12, 1-#12 GND	INTERNAL
MS1A	PUMP 1 PROTECTION RELAY	000	1P-20A	2-#12, 1-#12 GND	INTERNAL
MS2A	PUMP 2 PROTECTION RELAY	000	1P-20A	2-#12, 1-#12 GND	INTERNAL
F11	FLOW TRANSMITTER		1A FUSE	2-#12, 1-#12 GND	SCH 40 PVC/INTERNAL
	TOTAL	0000			

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NEW SMYRNA BEACH UTILITIES

LIFT STATION CONTROL PANEL SCHEDULE

SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-38

REVISIONS	
DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Roger W Strcula

Digitally signed by Roger W Strcula
Date: 2025.07.11 16:01:18-04'00'

ROGER W. STRCULA LICENSE NO. 52784 STATE OF FLORIDA PROFESSIONAL ENGINEER
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NSBU STANDARD DETAILS AND NOTES (5 OF 7)

FLAGLER DUNES
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	1" = 40'

SHEET NUMBER:
C704

PUMP STATION DATA TABLE

PUMP STATION NUMBER	DISCHARGE PIPE SIZE	INFLUENT PIPE SIZE	INFLUENT PIPE INV.	A	B	C	D	E	F	G	H	J	K	L	M	N	O	S	T	U	V	W	X	Y	Z	GPM*	TDH	HP	VOLT	PHASE	HERTZ
0	4"	9"	2.20	15"	24"	36"	18"	5.5"	6"	12"	20"	20"	12"	64"	6"	6"	8"	8.0	-4.40	-1.00	-0.40	0.60	1.60	11.24	11.40	112	53.8	4.0	230	3	60

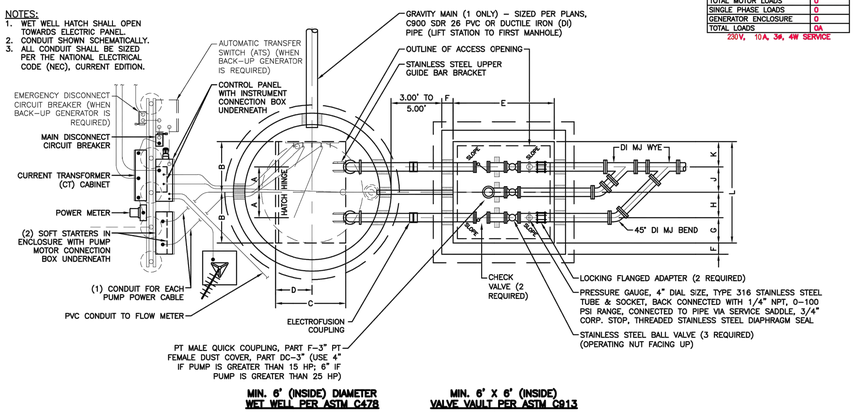
* 100 GPM MINIMUM

LOAD CALCULATIONS

DESCRIPTION	AMPERES @ 000V
2 PUMPS AT 4.0 HP EACH	0
25% OF LARGEST MOTOR	0
TOTAL MOTOR LOADS	0
SINGLE PHASE LOADS	0
GENERATOR ENCLOSURE	0
TOTAL LOADS	0A

230V, 10A, 3ø, 4W SERVICE

NOTES:
1. WET WELL HATCH SHALL OPEN TOWARDS ELECTRIC PANEL.
2. CONDUIT SHOWN SCHEMATICALLY.
3. ALL CONDUIT SHALL BE SIZED PER THE NATIONAL ELECTRICAL CODE (NEC), CURRENT EDITION.



MIN. 6' (INSIDE) DIAMETER WET WELL PER ASTM C478

MIN. 6' X 6' (INSIDE) VALVE VAULT PER ASTM C913

NEW SMYRNA BEACH UTILITIES

LIFT STATION WET WELL VALVE VAULT PLAN

SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS–29

LIFT STATION NOTES:

1. LIFT STATION SITE SHALL BE A MINIMUM OF 40' X 40' IN SIZE, EXCLUSIVE OF OTHER EASEMENT(S).
2. VARIATIONS TO STANDARD SITE PLAN MUST BE APPROVED BY THE NSBU ENGINEERING DEPARTMENT.
3. ALL UNPAVED AREAS INSIDE OF FENCE SHALL BE COVERED WITH 6" DEEP FDOT #57 STONE OVER 6–MIL WEED REDUCING GEOFABRIC.
4. ELEVATION OF EASEMENT AREA SHALL BE SET TO PROVIDE POSITIVE DRAINAGE AWAY FROM LIFT STATION AT 1.5% SLOPE.
5. DRIVEWAY: 6" THICK, 3,000 PSI CONCRETE WITH REINFORCED WIRE MESH OR FIBER; DRIVEWAY APRON PER APPLICABLE STATE OR LOCAL CODES.
6. POTABLE WATER SERVICE WITH METER, BACKFLOW PREVENTION DEVICE AND HOSE BIB IS REQUIRED. HOSE BIB SHALL BE POSTED 36" ABOVE GRADE AND THREADED FOR HOSE ATTACHMENT.
7. ONLY ONE INFLUENT PIPE PER WETWELL.
8. A CLARK SONIC ULTRASONIC FLOW METER, WHEN REQUIRED BY THE FDEP, SHALL BE INSTALLED WITHIN A 3 FT. X 3 FT. (INSIDE) STRUCTURE CONFORMING WITH ASTM C913.
9. LIFT STATIONS INTENDED TO SERVE MORE THAN 500 ERU'S SHALL HAVE PROVISIONS FOR A PERMANENT BACK–UP GENERATOR OR OTHER POWER SOURCE AND A FULLY AUTOMATIC OPERATING TRANSFER SWITCH TO SUPPLY A MINIMUM OF 24 HOURS NORMAL OPERATION IN THE EVENT OF A POWER OUTAGE. ADDITIONAL EASEMENT IS REQUIRED FOR AN EXTERNAL FUEL TANK.
10. ALL STRUCTURE OPENINGS BELOW GRADE SHALL BE SEALED WITH NON–SHRINK STRUCTURAL MORTAR, EMACO® S88 CI OR APPROVED EQUAL.
11. ENGINEERS SHALL INCLUDE A DETAILED SITE PLAN FOR PROPOSED LIFT STATIONS AT A SCALE OF 1" = 10'. AT A MINIMUM, SITE PLANS SHALL INCLUDE:
    - 11.1. PROFILE OF GRAVITY PIPE.
    - 11.2. COMPLETE LIFT STATION GRADING PLAN.
    - 11.3. LOCATION OF ALL APPURTENANCES.
12. ELECTRICAL SERVICE SHALL BE FURNISHED AND INSTALLED PER NSBU REQUIREMENTS.
13. ELECTRIC SERVICE METER AND ANTENNA SHALL BE LOCATED TO FIT FIELD CONDITIONS WITH THE NSBU'S APPROVAL.
14. CONTRACTOR SHALL FURNISH AND INSTALL:
    - 14.1. ONE (1) PUMP CONTROL PANEL WITH THE FOLLOWING EQUIPMENT:
      - 14.1.1 ONE (1) TCU MODULE PROVIDED BY DATA FLOW SYSTEMS (DFS).
      - 14.1.2 CIRCUIT BREAKERS.
      - 14.1.3 DISCONNECT SWITCHES.
      - 14.1.4 OTHER MISCELLANEOUS ELECTRICAL EQUIPMENT AS INDICATED ON THE RISER DIAGRAMS AND ELECTRICAL CONTROL SCHEMATIC.
    - 14.2. MINIMUM: TWO (2) FULL VOLTAGE, NON–REVERSING, MOTOR STARTERS. STARTERS SHALL HAVE SOFT START CAPABILITIES; PUMPS SHALL BE DESIGNED FOR SOFT STARTERS AND SHALL BE THREE–PHASE UNLESS OTHERWISE APPROVED BY THE NSBU ENGINEERING DEPARTMENT. NSBU ENGINEERING AND LIFT STATION DEPARTMENTS MAY REQUIRE A VFD OVER A SOFT START, WHERE FLOW SUPERSEDES PUMP HORSEPOWER.
15. ALL PIPE IN THE WET WELL AND VALVE VAULT SHALL BE DUCTILE IRON PIPE.
16. INFORMATION NOTED IN **RED** ON SUBSEQUENT DETAIL SHEETS SHALL BE SUBMITTED BY AN ENGINEER LICENSED IN THE STATE OF FLORIDA.

NEW SMYRNA BEACH UTILITIES

LIFT STATION NOTES

SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS–28

NOTE: ALL PARTS LISTED ARE "OR APPROVED EQUAL".

QTY.	ABBR.	DESCRIPTION	MANUFACTURER, PART#
2	ENC	ENCLOSURE, TYPE 316 STAINLESS STEEL, NEMA 4X	CUSTOM EQUIPMENT, 36X30X12 W/3PT. LATCH
1	ENC	ENCLOSURE, TYPE 316 STAINLESS STEEL, NEMA 4X	CUSTOM EQUIPMENT, 18X30X8 (PUMP CONNECTION BOX)
1	ENC	ENCLOSURE, TYPE 316 STAINLESS STEEL, NEMA 4X	CUSTOM EQUIPMENT, 18X18X8 (INSTR. CONNECTION BOX)
6		DIN RAIL, 1 METER	SCHNEIDER ELECTRIC, 16–7000N
1	MCB	MAIN CIRCUIT BREAKER, 000A	SQUARE D, X (SIZE PER PUMP MANUFACTURER)
1	ECB	EMERGENCY CIRCUIT BREAKER, 000A	SQUARE D, X (SIZE PER PUMP MANUFACTURER)
2	PCB1,2	PUMP CIRCUIT BREAKER, 000A	SQUARE D, X (SIZE PER PUMP MANUFACTURER)
2	PDPCB	POWER DISTRIBUTION PANEL CIRCUIT BREAKER, 20A	SQUARE D, QOU120
1	CCB	CONTROL CIRCUIT BREAKER, 30A	SQUARE D, QOU130
1	LCB	LIGHT CIRCUIT BREAKER, 20A	SQUARE D, QOU120
1	DRB	GFDR CIRCUIT BREAKER, 20A	SQUARE D, QOU120
1	RTUCB	RTU CIRCUIT BREAKER, 20A	SQUARE D, QOU120
1	FMCB	FLOW METER CIRCUIT BREAKER, 20A	SQUARE D, QOU120
1	TCB	TFS/TCU CIRCUIT BREAKER, 10A	DFS, 014–0010
2	F4,5	FUSE, 15A	BUSSMANN, FNQR15
2	F6,10	FUSE, 1/4A	BUSSMANN, KLM–1/4
1	XFMR	0KVA, 000V/000V, CONTROL TRANSFORMER	SQUARE D, X
1	GFDR	120V GROUND FAULT DUPLEX RECEPTACLE	HUBBELL, GFR5252IA
1	LS	LIGHT SWITCH & FACE PLATE	HUBBELL, CS12011 & P1
1		PANEL LIGHT	AMERICAN LIGHTING, LXC–2H–WH
1		COOLING FAN	EBM–PAPST, ACI 4420 HH
1		FLASHING ALARM LIGHT	INGRAM PRODUCTS, INC., SBN120AC
1	TCU	TAC PACK TELEMETRY CONTROL UNIT – TCU001	DFS, DFS–00367–011–02
1		WIRE/COMPONENT HARNESS	DFS, DFS–00396–108–02
7	F#	FUSE AND HOLDER, WAGO	DFS, DFS–00271–008–09, 1AMP SLOW BLOW
2	R1,2	RESISTOR BLOCK, 100K, WAGO	DFS, DFS–00271–008–07 (REQ'D FOR 480V)
0	R3,4	RESISTOR BLOCK, 47K, WAGO	DFS, DFS–00271–008–01
2	R3,4	RESISTOR BLOCK, 100K, WAGO	DFS, DFS–00271–008–07
1	TFS	TRANSIENT FILTER SHIELD – TFS001	DFS, DFS–00306–008–01
1		POLYPHASER COAXIAL SURGE PROTECTION KIT	DFS, DFS–00392–008–01
1		BATTERY BACKUP	DFS, DFS–00363–008–02
1		48" RF PIGTAIL	DFS, DFS–00125–008–12
1	SS1	000V SURGE SUPPRESSOR	DITEK, DTK–
1	SS2	120V SURGE SUPPRESSOR (DFS MODEL SPS001)	DITEK, DTK–120HW
1	ISR	INTRINSICALLY SAFE RELAY	ATC DIVERSIFIED, ISO–120–AFA
1	SA	SURGE ARRESTOR	PHOENIX CONTACT, TT–2–PE–24DC, 2838186
1		END COVER FOR SURGE ARRESTOR	PHOENIX CONTACT, 2838995
1	ISB	INTRINSICALLY SAFE BARRIER	DWYER INSTRUMENTS, MTL5041
2		PUMP SPLICER TERMINAL BLOCK	BUSSMANN, 16204–3
30	TB#	TERMINAL BLOCK	SQUARE D, 9080GR6
1		FOLDING LAPTOP SHELF, 18"	SCHAEFER'S ELECTRICAL ENCLOSURES, SP–SHELF18
1	GEN REC	GENERATOR RECEPTACLE	RUSSELLSTOLL, JRSB1044FR
1	FLOAT	ROTO–FLOAT SWITCH	ANCHOR SCIENTIFIC, S30NO
1	BCT	BIRDCAGE® LEVEL TRANSDUCER	BLUE RIBBON CORP., BC001
2	SOST1,2	SOFT STARTER	SOLCON, RVS–DX–##/SQUARE D, ALTISTART ATS22###
1	FM	FLOW METER, ULTRASONIC	CLARK SONIC®, CSLFC

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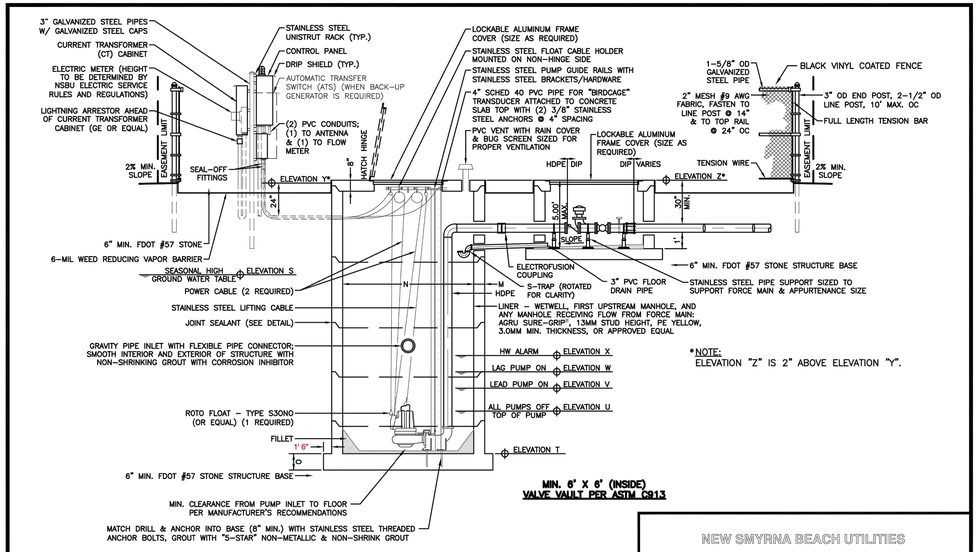
NEW SMYRNA BEACH UTILITIES

LIFT STATION CONTROL PANEL ELECTRICAL BILL OF MATERIALS

SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS–37



*NOTE:
ELEVATION "Z" IS 2" ABOVE ELEVATION "Y".

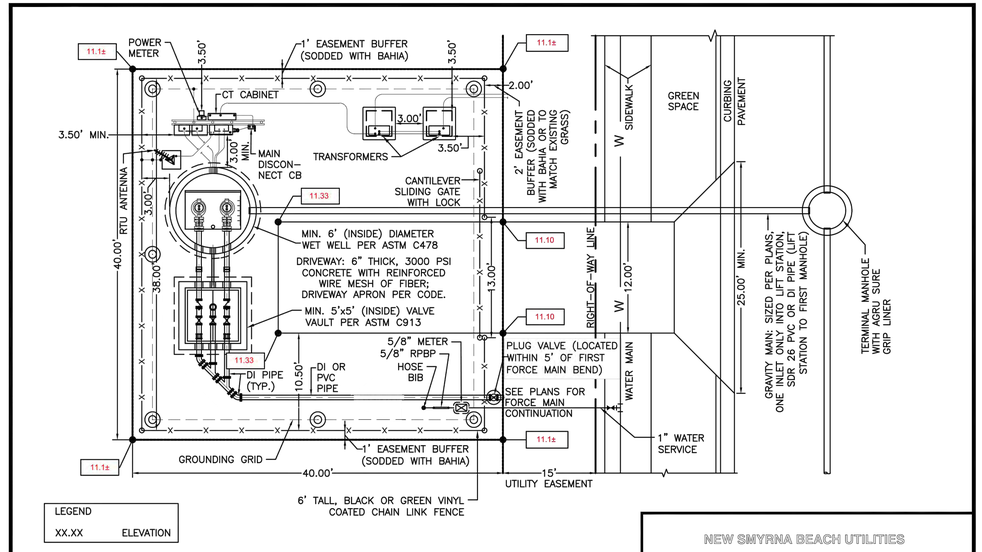
MIN. 6' X 6' (INSIDE) VALVE VAULT PER ASTM C913

MIN. 6' (INSIDE) DIAMETER WET WELL PER ASTM C478

NEW SMYRNA BEACH UTILITIES

LIFT STATION WET WELL VALVE VAULT PROFILE

SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS–30



LEGEND

XX.XX ELEVATION

NOTE: FENCE TO BE SEPARATED A MINIMUM OF 3'–6" CLEAR DISTANCE FROM ELECTRICAL EQUIPMENT PER THE NATIONAL ELECTRICAL CODE (NEC) ARTICLE 110, LATEST EDITION.

NEW SMYRNA BEACH UTILITIES

LIFT STATION WET WELL VALVE VAULT PLAN

SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV. 1 (2/2025)	SS–32–REV1

REVISIONS

DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Roger W Strcula

Digitally signed by Roger W Strcula
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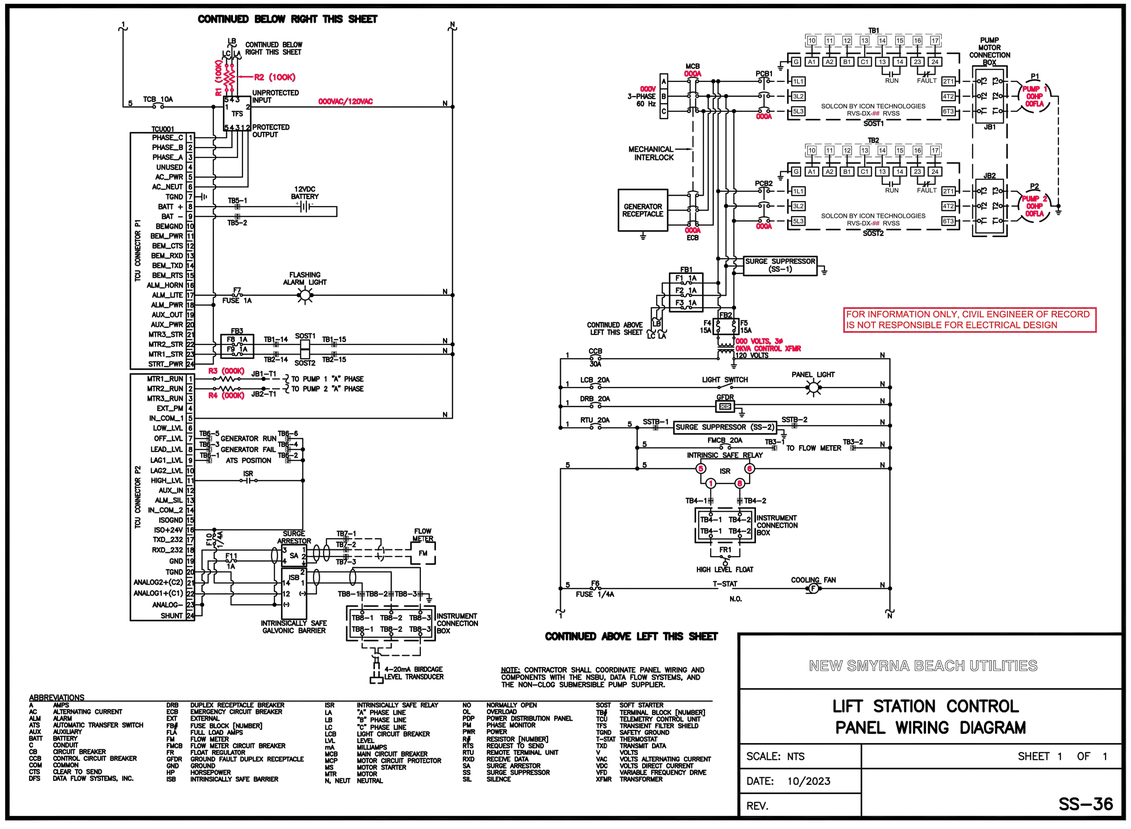
NSBU STANDARD DETAILS AND NOTES (6 OF 7)

FLAGLER DUNES
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	1" = 40'

SHEET NUMBER:

C705



CONTINUED ABOVE LEFT THIS SHEET

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NOTE: CONTRACTOR SHALL COORDINATE PANEL WIRING AND COMPONENTS WITH THE NSBU, DATA FLOW SYSTEMS, AND THE NON-CLOG SUBMERSIBLE PUMP SUPPLIER.

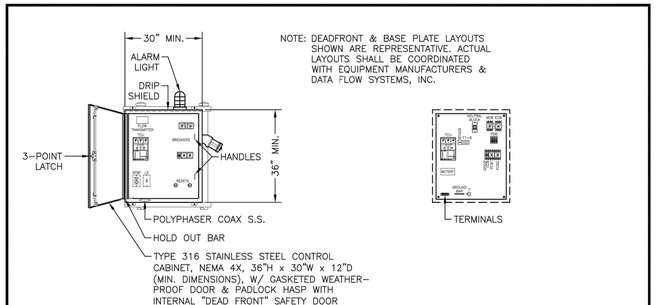
ABBREVIATIONS

A	AMPS	DRB	DUPLEX RECEPTACLE BREAKER	ISR	INTRINSICALLY SAFE RELAY	NO	NORMALLY OPEN	SOST	SOFT STARTER
AC	ALTERNATING CURRENT	ECB	EMERGENCY CIRCUIT BREAKER	LA	"A" PHASE LINE	OL	OVERLOAD	TBM	TERMINAL BLOCK [NUMBER]
ALM	ALARM	EXT	EXTERNAL	LB	"B" PHASE LINE	PDP	POWER DISTRIBUTION PANEL	TCU	TELEMETRY CONTROL UNIT
ATS	AUTOMATIC TRANSFER SWITCH	FBM	FUSE BLOCK [NUMBER]	LC	"C" PHASE LINE	PM	PHASE MONITOR	TFS	TRANSIENT FILTER SHIELD
AUX	AUXILIARY	FLA	FULL LOAD AMPS	LCB	LIGHT CIRCUIT BREAKER	PWR	POWER	TGND	SAFETY GROUND
BATT	BATTERY	FM	FLOW METER	LVL	LEVEL	R#	RESISTOR [NUMBER]	T–STAT	THERMOSTAT
C	CONTACT	FMCB	FLOW METER CIRCUIT BREAKER	mA	MILLIAMPS	RTS	REQUEST TO SEND	TXD	TRANSMIT DATA
CB	CIRCUIT BREAKER	FR	FREQUENCY REGULATOR	MCB	MAIN CIRCUIT BREAKER	RTU	REMOTE TERMINAL UNIT	V	VOLTS
CCB	CONTROL CIRCUIT BREAKER	GFDR	GROUND FAULT DUPLEX RECEPTACLE	MOP	MOTOR CIRCUIT PROTECTOR	RXD	RECEIVE DATA	VAC	VOLTS ALTERNATING CURRENT
COM	COMMON	GND	GROUND	MS	MOTOR STARTER	SA	SURGE ARRESTOR	VDC	VOLTS DIRECT CURRENT
CTS	CLEAR TO SEND	HP	HORSEPOWER	MTR	MOTOR	SS	SURGE SUPPRESSOR	VFD	VARIABLE FREQUENCY DRIVE
DFS	DATA FLOW SYSTEMS, INC.	ISB	INTRINSICALLY SAFE BARRIER	N, NEUT	NEUTRAL	SIL	SILENCE	XFMR	TRANSFORMER

NEW SMYRNA BEACH UTILITIES

LIFT STATION CONTROL PANEL WIRING DIAGRAM

SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS–36



NOTE: DEADFRONT & BASE PLATE LAYOUTS SHOWN ARE REPRESENTATIVE. ACTUAL LAYOUTS SHALL BE COORDINATED WITH EQUIPMENT MANUFACTURERS & DATA FLOW SYSTEMS, INC.

ENCLOSURE & DEADFRONT LAYOUT

BASE PLATE LAYOUT

NEW SMYRNA BEACH UTILITIES

LIFT STATION CONTROL PANEL ELEVATION

SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS–34

REVISIONS

DATE	DESCRIPTION

Roger W Strcula

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NSBU STANDARD DETAILS AND NOTES (7 OF 7)

FLAGLER DUNES
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RWS
DRAWN BY:	WRW
CHECKED BY:	RWS
SCALE:	1" = 40'

SHEET NUMBER:

C706

NORTH

GRAPHIC SCALE
1" = 40'
40 20 0 40

TREE REMOVAL QUANTITIES SUMMARY																						
		SIZES (INCHES AT DBH)																				
		6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
QNTY.	HARDWOODS	52	32	30	26	28	15	37	13	22	23	11	8	16	5	4	1	2	0	12	1	2	1	1
	PALMS	0	0	5	2	7	3	5	3	10	2	0	0	1	0	1	0	0	0	2	0	0	0	0

TREE PRESERVATION SUMMARY								
PRESERVATION AREA	#1				#2			
SIZE (INCHES AT DBH)	2.5	3	4	5	2.5	3	4	5
QUANTITY	8	2	2	2	12	8	5	9

TREE MITIGATION:

TOTAL CROSS SECTION REMOVED FROM SITE
HARDWOOD = 47,956.44 SQ INCH
PALM = 5,178.65 SQ INCH

REQUIRED 10% CROSS SECTIONAL AREA
HARDWOOD = 4,795.64 SQ INCH
PALM = 517.86 SQ INCH

PROVIDED REPLACEMENT CROSS SECTIONAL AREA
HARDWOOD (253) = 1,241.28 SQ INCH
PALM (11) = 552.64 SQ INCH

PROVIDED PRESERVATION CROSS SECTIONAL AREA
HARDWOOD = 472.57 SQ INCH
PALM = NOT REQUIRED

NET REQUIRED CROSS SECTIONAL AREA
HARDWOOD (628) = 3,081.79 SQ INCH
PALM = NOT DEFICIENT

REQUIRED PAYMENT TO CITY'S TREE FUND
DEFICIENT BY 628 TREES @ $500 PER TREE
TOTAL PAYMENT = $314,000 IF ADDITIONAL TREES NOT PLANTED

BUFFER CALCULATIONS:

SOUTH AND WEST BUFFERS TO REMAIN NATURAL

NORTHEAST BUFFER (10TH STREET)
1,393 LF - 500 LF (100 LF DRIVEWAYS + 400 LF NATURAL) = 893 LF
893 LF x 20 LF BUFFER = 17,860 SF

TREES REQUIRED (20%): 3,572 SF
SHRUBS REQUIRED (60%): 10,716 SF
GROUND COVER REQUIRED (20%): 3,572 SF

6 EXISTING OAK @ 80 = 480 SF
41 EXISTING PINES @ 30 = 1,230 SF
2 EXISTING MAPLE @ 40 = 80 SF
6 EXISTING SABAL @ 12 = 72 SF
TOTAL = 1,862 SF (EXISTING)
26 PROVIDED (QV) @ 80 = 2,080 SF
9 PROVIDED (LI) @ 10 = 90 SF
7 PROVIDED (IAE) @ 20 = 140 SF
TOTAL = 2,310 SF (PROVIDED)
TOTAL PROVIDED = 4,172 SF (1,862 + 2,310)

REQUIRED SHRUBS 10,956 SF
PROVIDED SHRUBS 10,956 SF
REQUIRED GROUND COVER 3,652 SF
PROVIDED GROUND COVER 3,652 SF

PROVIDE 472.57 SQIN CREDIT OF EXISTING TREES < 6" WITHIN PRESERVATION AREA TOWARD TREE MITIGATION

TREE COVERAGE:

TOTAL REQUIRED FOR SITE 449,661 SF / 2500 SF = 180 TREES
TOTAL EXISTING TREES ONSITE = 532
TOTAL TREES TO BE REMOVED = 363
TOTAL TREES TO BE PRESERVED = 169
TOTAL TREES PROVIDED (169 EXISTING + 254 NEW) = 423 TREES

THE TREES ONSITE AFTER DEVELOPMENT EXCEEDS 180 TREES

PLANT SCHEDULE					
CODE	QNTY	SPECIFIC NAME	COMMON NAME	SIZE REQUIREMENTS	NATIVE
- CANOPY TREE -					
AR	9	ACER RUBRUM	RED MAPLE	12' HGT, FULL, 2 1/2" DBH	YES
MGB	10	MAGNOLIA GRANDIFLORA	D.D. BLANCHARD	12' HGT, FULL, 2 1/2" DBH	YES
QV	54	QUERCUS VIRGINIANA	LIVE OAK	12' HGT, FULL, 2 1/2" DBH	YES
QV1	16	QUERCUS VIRGINIANA	LIVE OAK	14' HGT, FULL, 2 1/2" DBH	YES
SP	11	SABAL PALMETTO	SABAL PALM	12' CT	YES
TD	9	TAXODIUM DISTICHUM	BALD CYPRESS	12' HGT, FULL, 2 1/2" DBH	YES
PE	155	PINUS ELLIOTTII	SLASH PINE	12' HGT, FULL, 2 1/2" DBH	YES
- UNDERSTORY TREES -					
IAE	22	ILEX ATTENNATA EAGLESTON	EAGLESTON HOLLY	9' HGT, FULL, 1" DBH	YES
LI	20	LAGERSTROEMIA INDICA	CRAPE MYRTLE STD	10' HGT, FULL, 6"-7" CT	NO
- SHRUBS / GROUND COVER -					
AA	30	AGAPANTHUS AFRICANUS	LILY OF THE NILE (BLUE)	1 GAL, 18" HGT, FULL, 7-9 PIPS	NO
CV	28	CROTONS "SSP"	RED AND GREEN CROTONS	3 GAL, 18" HGT, FULL, 3' OC	NO
EG	197	EVOLVULUS GLOMERATUS	BLUE DAZE	1 GAL, 18" HGT, FULL	NO
HIB	136	HIBISCUS SPP.	HIBISCUS SHRUB	3 GAL, 18" HGT, FULL, 3' OC	YES
HP	195	HAMELIA PATENS	DWARF FIREBUSH	3 GAL, 18" HGT, FULL, 3' OC	YES
IVS	59	ILEX VOMITORIA NANA	DWARF YOUPON	3 GAL, 16" HGT, FULL, 3' OC	YES
IX	99	IXORA "SSP"	DWARF RED IXORA	3 GAL, 18" HGT, FULL	NO
JP	131	JUNIPERUS CHINENSIS	PARSONI JUNIPER	3 GAL, 20" SPR, FULL 3' OC	NO
LEG	135	LIRIOPE MUSCARI	EVERGREEN GIANT	1 GAL, 18" HGT, 7-9 PIPS	NO
LIG	60	LIGUSTRUM "SSP"	LIGUSTRUM JACK FROST	3 GAL, 18" HGT, FULL	NO
LJF	42	LIGUSTRUM "SST"	GREEN LIGUSTRUM	3 GAL, 18" HGT, FULL	NO
MCR	192	MUHLENBERGIA CAPILLARIS	MUHLY GRASS	3 GAL, 20" HGT, FULL	YES
NO	520	NERIUM OLEANDER	OLEANDER RED	3 GAL, 20" HGT, FULL, 3' OC	NO
NOD	14	NERIUM OLEANDER DWARF	DWARF PINK OLEANDER	3 GAL, 18" HGT, FULL, 3' OC	NO
RI	91	RAPHIOLEPIS INDICA	INDIAN HAWTHORN	3 GAL, 18" HGT, FULL, 3' OC	NO
SA	168	SCHEFFLERA ARBORICOLA	GOLD CAPELLA	3 GAL, 18" HGT, FULL, 3' OC	NO
VO	117	VIBURNUM ODERATISSIMUM	SWEET VIBURNUM	7 GAL, 30" HGT, FULL, 3' OC	NO
VS	356	VIBURNUM SUSPENSUM	SANDAKWA VIBURNUM	7 GAL, 30" HGT, FULL, 3' OC	NO
VW	264	VIBURNUM WALTER	WALTER'S VIBURNUM	3 GAL, 20" HGT, FULL, 3' OC	YES
TOTAL	3131				

MAINTAIN 3' BUFFER OF CLEARED LANDSCAPING AROUND ALL METERS, BACKFLOW PREVENTERS, CLEANOUTS AND MANHOLES

NOTE:
ALL PAVEMENT SURFACES AND GUTTERS SHALL BE SWEPT CLEAN AND DEBRIS REMOVED AFTER INSTALLATION OF PLANTINGS, SOD AND MULCH

LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY PLANT QUANTITIES

ALL CHANGES TO PLANT MATERIALS AND LOCATIONS MUST BE APPROVED BY THE CITY OF NEW SMYRNA BEACH

NOTE:
PRIOR TO COMMENCING ANY IRRIGATION OR LANDSCAPE WORK THE CONTRACTOR SHALL SCHEDULE A MEETING WITH THE LANDSCAPE ARCHITECT AND INSPECTOR. THIS MEETING IS TO HELP AVOID ANY MISINTERPRETATION OF THE INTENT OF THE DRAWINGS.

191' EXISTING NATURAL BUFFER
TREE PRESERVATION AREA #1 (SEE TABLE THIS SHEET) (117.75 SQ IN PRESERVED)
20' LANDSCAPE BUFFER
ST. AUGUSTINE SOD (TYPICAL)
BUILDING - A 4 UNITS FFE= 11.20
BUILDING - B 7 UNITS FFE=11.20
30' EMERGENCY ACCESS DRIVEWAY
10TH STREET (PUBLIC RIGHT-OF-WAY VARIES)
BUILDING - C 6 UNITS FFE= 11.20
20' LANDSCAPE BUFFER
FDOT LIMIT OF CLEAR SIGHT (TYPICAL)
BUILDING - E 6 UNITS FFE= 11.20
SITE LIGHT POLE (BY NSBU, TYPICAL)
70' DRIVEWAY
LIFT STATION
20' LANDSCAPE BUFFER
STORMWATER HARVESTING OF POND FOR IRRIGATION
APPROXIMATE LOCATION OF IRRIGATION PUMP FOR STORMWATER HARVESTING, FINAL LOCATION TO BE DETERMINED BY IRRIGATION CONTRACTOR (SEE DETAIL ON SHEET C502 FOR MORE INFORMATION)
209' EXISTING NATURAL BUFFER
STORMWATER POND
BUILDING - N 4 UNITS FFE= 11.00
BUILDING - M 6 UNITS FFE= 11.00
BUILDING - L 6 UNITS FFE= 11.00
BUILDING - D 4 UNITS FFE=11.00
PICKLEBALL COURT
BUILDING - K 4 UNITS FFE= 11.00
BUILDING - I 6 UNITS FFE= 11.00
BUILDING - H 7 UNITS FFE= 11.00
BUILDING - F 8 UNITS FFE=11.20
TREE PRESERVATION AREA #2 (SEE TABLE THIS SHEET) (354.82 SQ IN PRESERVED)
BUILDING - J 4 UNITS FFE= 11.00
BUILDING - G 8 UNITS FFE= 11.00
HATCH DENOTES TREE PRESERVATION EASEMENT (1.834 AC)
EXISTING NATURAL BUFFER
BAHIA SOD (TYPICAL)
EXISTING NATURAL BUFFER

REVISIONS	
DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Richard L. Poore
Digitally signed by Richard L. Poore
Date: 2025.07.11 15:25:16 -04'00'

REGISTERED LANDSCAPE ARCHITECT RICHARD L. POORE LA5330 STATE OF FLORIDA
NOT VALID UNLESS SIGNED AND DATED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY RICHARD L. POORE, RLA ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

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LB# 0003612 LC# 0000357

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OVERALL LANDSCAPE PLAN AND CALCS

FLAGLER DUNES
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RLP
DRAWN BY:	WRW
CHECKED BY:	RLP
SCALE:	1" = 40'

SHEET NUMBER:
L100

NOTE:
PRIOR TO COMMENCING ANY IRRIGATION OR LANDSCAPE WORK THE CONTRACTOR SHALL SCHEDULE A MEETING WITH THE LANDSCAPE ARCHITECT AND INSPECTOR. THIS MEETING IS TO HELP AVOID ANY MISINTERPRETATION OF THE INTENT OF THE DRAWINGS.

NOTE:
ALL PAVEMENT SURFACES AND GUTTERS SHALL BE SWEPT CLEAN AND DEBRIS REMOVED AFTER INSTALLATION OF PLANTINGS, SOD AND MULCH

MAINTAIN 3' BUFFER OF CLEARED LANDSCAPING AROUND ALL METERS, BACKFLOW PREVENTERS, CLEANOUTS AND MANHOLES

ALL CHANGES TO PLANT MATERIALS AND LOCATIONS MUST BE APPROVED BY THE CITY OF NEW SMYRNA BEACH

LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY PLANT QUANTITIES

SEE NOTE #32 ON SHEET L200 FOR IRRIGATION SYSTEM

MATCH LINE - THIS SHEET

10TH STREET
(PUBLIC RIGHT-OF-WAY VARIES)

BUILDING - A
4 UNITS
FFE= 11.20

BUILDING - B
7 UNITS
FFE= 11.20

BUILDING - C
6 UNITS
FFE= 11.20

BUILDING - D
4 UNITS
FFE= 11.00

BUILDING - E
6 UNITS
FFE=11.20

BUILDING - F
8 UNITS
FFE= 11.20

BUILDING - G
8 UNITS
FFE= 11.00

BUILDING - H
7 UNITS
FFE= 11.00

BUILDING - I
6 UNITS
FFE= 11.00

BUILDING - J
4 UNITS
FFE= 11.00

BUILDING - K
4 UNITS
FFE= 11.00

BUILDING - L
6 UNITS
FFE= 11.00

BUILDING - M
6 UNITS
FFE= 11.00

BUILDING - N
4 UNITS
FFE= 11.00

PICKLEBALL COURT (BY OTHERS)

LIFT STATION

APPROXIMATE LOCATION OF STORMWATER HARVESTING PUMP (FINAL LOCATION SHALL BE DETERMINED BY THE IRRIGATION CONTRACTOR, SEE SHEET C502 FOR MORE INFORMATION)

BAHIA SOD POND SLOPE FROM TOP OF BERM TO WATER LEVEL

STORMWATER POND

20' COUNTY HAUL TRAIL AREA PER USE PERMIT

23' MIN. CLEARANCE (TYPICAL, ALL PLANTINGS FROM TOP OF BANK OF EXISTING CANAL)

20' COUNTY HAUL TRAIL AREA PER USE PERMIT

MATCH LINE - THIS SHEET

LEGEND:

35 RI — QUANTITY OF PLANTS / PLANT CODE (SEE SCHEDULE)

ST. AUGUSTINE SOD

BAHIA SOD

NORTH

GRAPHIC SCALE
1" = 30'

REVISIONS

DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Richard L. Poore
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Date: 2025.07.11 15:24:50 -04'00'

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LANDSCAPE PLAN

FLAGLER DUNES

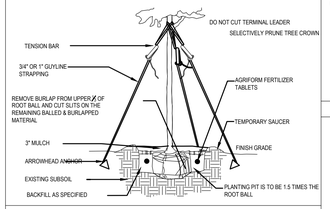
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RLP
DRAWN BY:	WRW
CHECKED BY:	RLP
SCALE:	1" = 30'

SHEET NUMBER:

L101

Tree Frog Environmental Products® (formerly Arborguy®) PRO20/PRO40/PRO60/PRO80STAKING DETAIL



Adjustable Guying Method Using a Tension Bar

The anchors for each kit are best installed using the Integrated Tool Assembly (ITA) from the manufacturer.

1. Once the arrowhead anchor has been driven into the ground and set (secured), the guyline should be passed through Hole #1 on the tension bar, then wrapped around the tree trunk just above the lowest established branch. Then, the guyline should be passed through Hole #2 in the tension bar just below the first established branch. After pulling taut any slack, a stop knot is established immediately below Hole #2 in the guyline. (See Figure 1)

2. The tension bar is then pulled downward until the tree is straight and the guyline is SNUG (NOT TIGHT). (See Figure 2)

3. The tension bar is locked into place by tying the loose end of the guyline itself just above Hole #2. (See Figure 3)

This tensioning method allows the guylines to be readjusted, if necessary, in order to keep the guylines snug until the tree root system is established and the staking material is removed.

✻Specify Anchor
1. Biodegradable (soft or hard soil)
2. Nylon (soft soil)
3. Heavy Duty (hard soil)

Tree Frog® PRO20 SYSTEM

PRO20:
For up to 2" Caliper Trees
(3) ARBORGUY™ Guylines 3/4" x 12' = 600 lb test Black or Green, UV resistant, polypropylene strapping
(3) "Tool-Free" Tension Bars™
(3) Arrowhead ✻Anchors (4" x 3-3/4")

Tree Frog® PRO40 SYSTEM

PRO40:
For up to 4" Caliper Trees
(3) ARBORGUY™ Guylines 1" x 12' = 600 lb test Black or Green, UV resistant, polypropylene strapping
(3) "Tool-Free" Tension Bars™
(3) Arrowhead ✻Anchors (4 ¾ " x 4 ½")

Tree Frog® PRO60 SYSTEM

PRO60:
For up to 6" Caliper Trees
(3) ARBORGUY™ Guylines 1" x 15' = 2400 lb break strength polyester black strapping
(3) "Tool-Free" Tension Bars™
(3) Arrowhead ✻Anchors (4 ¾" x 4 ½")

Tree Frog® PRO80 SYSTEM

PRO80:
For up to 8" Caliper Trees
(4) ARBORGUY™ Guylines 1" x 15' = 2400 lb break strength black polyester strapping
(4) Steel Cable leaders attached to anchors (optional)
(4) "Tool-Free" Tension Bars™
(4) Arrowhead ✻Anchors (4 ¾" x 4 ½")

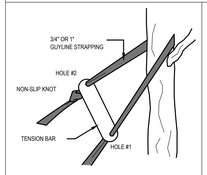


FIGURE 1

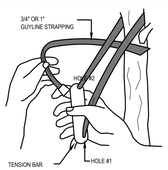


FIGURE 2

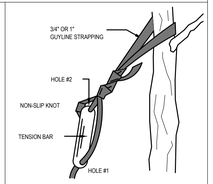
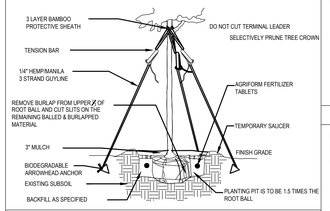


FIGURE 3

Tree Frog Environmental Products® (formerly Arborguy®) BIODEGRADABLE TREE GUYING DETAIL



Biodegradable Adjustable Guying Method Using a Tension Bar

The anchors for each kit are best installed using the Integrated Tool Assembly (ITA) from the manufacturer.

1. Once the Biodegradable arrowhead anchor has been driven into the ground and set (secured), the guyline should be passed through Hole #1 on the tension bar, then wrapped around the tree trunk just above the lowest established branch. Then, the guyline should be passed through Hole #2 in the tension bar just below the first established branch. After pulling taut any slack, a stop knot is established immediately below Hole #2 in the guyline. (See Figure 1)

2. The tension bar is then pulled downward until the tree is straight and the guyline is SNUG (NOT TIGHT). (See Figure 2)

3. The tension bar is locked into place by tying the loose end of the guyline itself just above Hole #2. (See Figure 3)

This tensioning method allows the guylines to be readjusted, if necessary, in order to keep the guylines snug until the tree root system is established and the staking material is removed.

Tree Frog® BIO20 SYSTEM

BIO20:
For up to 2" Caliper Trees
(3) FROG ANCHOR™ Guyline 1/4" x 12' = 560 lb tensile Hemp/Manila rope
(3) "Tool-Free" Tension Bars™
(3) Biodegradable Arrowhead Anchors (4 ¾" x 4 ½")

Tree Frog® BIO40 SYSTEM

BIO40:
For up to 4" Caliper Trees
(4) FROG ANCHOR™ Guyline 1/4" x 12' = 560 lb tensile Hemp/Manila rope
(4) "Tool-Free" Tension Bars™
(4) Biodegradable Arrowhead Anchors (4 ¾" x 4 ½")

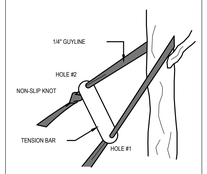


FIGURE 1

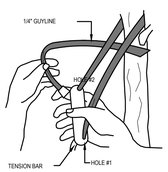


FIGURE 2

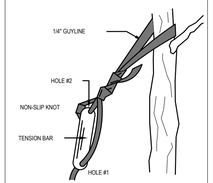
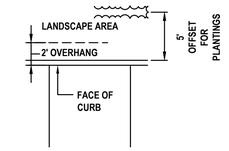


FIGURE 3

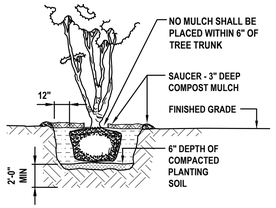
NOTE: TREE STAKING IS ONLY FOR MEDIUM AND LARGE TREES

PHONE: (352) 735-7411 EMAIL: info.treefrogep@gmail.com



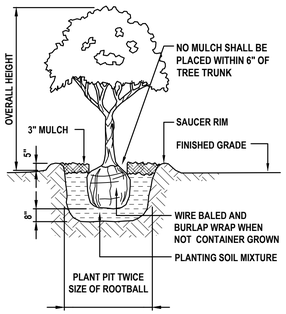
TYPICAL OVERHANG SPACE WITH HEDGE DETAIL

NOT TO SCALE



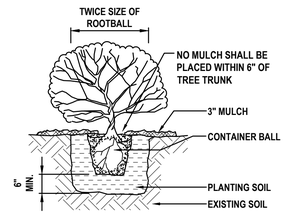
MULTI-TRUNK PLANTING DETAIL

NOT TO SCALE



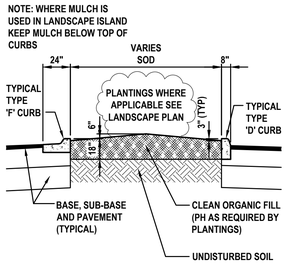
TREE PLANTING DETAIL

NOT TO SCALE



SHRUB PLANTING DETAIL

NOT TO SCALE



ISLAND PLANTING DETAIL

NOT TO SCALE

LANDSCAPE NOTES:

1. ALL PLANT MATERIAL SHALL CONFORM TO THE STANDARDS FOR FLORIDA #1 OR BETTER AS DESCRIBED IN THE CURRENT "GRADES AND STANDARDS FOR NURSERY PLANTS", STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE, TALLAHASSEE, OR THEIR EQUAL AS DETERMINED BY THE LANDSCAPE ARCHITECT.
2. MULCH SHALL BE PINE BARK, INSTALLED A MINIMUM OF 3" THICK AFTER SETTLEMENT, IN ALL PLANTING AREAS.
3. SOD SPECIFIED AS ST. AUGUSTINE SHALL BE 95% WEED-FREE. SOD SPECIFIED AS BAHIA SHALL BE 75% WEED-FREE. ALL SOD SHALL BE INSTALLED WITH TIGHT JOINTS, ROLLED AND FERTILIZED.
4. SEED, IF ANY, TO MEET SOUTHERN SEED CERTIFICATION ASSOCIATION.
5. ALL DIMENSIONS SHALL BE FIELD-CHECKED BY THE LANDSCAPE CONTRACTOR PRIOR TO CONSTRUCTION, WITH ANY DISCREPANCIES REPORTED IMMEDIATELY TO THE LANDSCAPE ARCHITECT.
6. *THE PLANT MATERIALS SCHEDULE IS PROVIDED FOR THE CONVENIENCE OF THE LANDSCAPE CONTRACTOR; SHOULD THERE BE ANY DISCREPANCY BETWEEN THE PLAN AND THE PLANT LIST, THE PLAN WILL PREVAIL.*
7. ALL MATERIALS MUST BE AS SPECIFIED ON THE LANDSCAPE PLAN. IF MATERIALS OR LABOR DO NOT ADHERE TO THE SPECIFICATIONS, THEY WILL BE REJECTED AT NO ADDITIONAL COST TO THE OWNER.
8. ALL PLANTING BEDS SHALL BE TREATED WITH HERBICIDE. USE AS DIRECTED BY MANUFACTURERS.
9. NO SUBSTITUTIONS OR CHANGES OF ANY KIND WILL BE ALLOWED AT THE TIME OF BIDDING SO AS TO PROVIDE FOR FAIR COMPARISON.
10. 100% AUTOMATIC IRRIGATION SYSTEM SHALL BE INSTALLED ACCORDING TO THE IRRIGATION PLAN AND SPECIFICATIONS.
11. THE CONTRACTOR SHALL VERIFY EXISTENCE AND LOCATION OF ALL EXISTING UTILITIES AND UNDERGROUND CONDITIONS PRIOR TO HIS COMMENCEMENT OF THE ANY WORK.
12. ALL BUILDING MATERIALS AND LABOR SHALL CONFORM TO THE SOUTHERN BUILDING CODE AND ALSO TO ALL LOCAL CODES THAT HAVE JURISDICTION.
13. ALL PERMIT AND VARIANCE APPLICATIONS SHALL BE MADE BY THE CONTRACTOR.
14. PRIOR TO CONSTRUCTION OF PLANTING BEDS, ALL AREAS ARE TO HAVE SOIL TESTS CONDUCTED TO DETERMINE pH AND SOIL FERTILITY. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO AMEND THE SOIL TO MEET ADEQUATE FERTILITY AND pH FOR CORRESPONDING PLANT MATERIAL. ALL TEST RESULTS SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT.
15. EQUIPMENT SHALL BE OPERATED IN A MANNER AS NOT TO INJURE OR DESTROY ANY TREES SHOWN TO REMAIN. CONTRACTOR SHALL NOT CAUSE OR ALLOW THE CLEANING OF EQUIPMENT OR MATERIAL WITHIN THE DRIP LINE OF ANY TREE OR GROUPS OF TREES TO BE RETAINED OR THOSE PROPOSED. NOR SHALL THE CONTRACTOR ALLOW THE DISPOSAL OF WASTE MATERIAL, SUCH AS PAINT, OIL SOLVENTS, ASPHALT, CONCRETE, MORTAR OR ANY OTHER MATERIAL HARMFUL TO THE LIFE OF A TREE WITHIN THE DRIP LINE OF ANY TREE OR GROUP OF TREES. NO ATTACHMENT, WIRES (OTHER THAN PROTECTIVE GUY WIRES), SIGNS, OR PERMITS MAY BE FASTENED TO A TREE.
16. ALL QUESTIONS CONCERNING THE PLAN AND/OR SPECIFICATIONS SHALL BE DIRECTED TO THE LANDSCAPE ARCHITECT (386) 672-9515.
17. ALL SHADE TREES AND SINGLE TRUNK UNDERSTORY TREES SHALL BE STAKED USING TREE FROG STAKING SYSTEM FOR SINGLE STEM TREE AND ALL MULTI-TRUNK UNDERSTORY TREES SHALL BE STAKED WITH ARBORGUY MULTI-TRUNK SYSTEM.
18. ANY CHANGE IN STAKING SYSTEM MUST BE APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT BEFORE BEING INSTALLED.
19. ALL UNIMPROVED AREA NOT OTHERWISE PLANTED OR MULCHED SHALL BE SODDED WITH BAHIA UNLESS OTHERWISE NOTED ON THE LANDSCAPE PLAN.
20. PLANT MATERIAL SHALL BE CLEARLY IDENTIFIED AS FLORIDA #1 OR BETTER ON EITHER LABELS OR INVOICES.
21. ALL PLANT MATERIAL SHALL BE GUARANTEED ONE YEAR AFTER ACCEPTANCE BY OWNER.
22. ALL TREES IN SOD TO BE IN A (4) FOOT MINIMUM DIAMETER MULCHED RING UNLESS NOTED OTHERWISE ON THE DRAWINGS.
23. TREES SHALL BE PLANTED SO THAT THE TRUNK FLARE IS EXPOSED AND TOPMOST ROOT IN THE ROOTBALL ORIGINATING FROM THE TRUNK IS AT SOIL SURFACE OR WITHIN THE TOP INCH OF SOIL ON THE ROOTBALL.
24. ALL SPECIFICATIONS MUST BE AS SPECIFIED OR GREATER.
25. PLANT TREE SO THAT ROOTBALL IS 1"-2" ABOVE FINISH GRADE.
26. REMOVAL OF ALL CONSTRUCTION DEBRIS, LIMEROCK, EXCESS OF BUILDERS SAND, CONCRETE AND MORTAR DEBRIS, EXISTING WEEDS AND GRASS, AND ALL FOREIGN MATERIALS IN THE PLANTING BED AND SOD AREAS SHALL BE REMOVED AND A MINIMUM OF 3' OF CLEAN SAND WITH A PH 5.5-6.5 SHALL BE INSTALLED PRIOR TO ANY INSTALLATION OF PLANTS OR TREES.
27. BALLED AND BURLAPPED STRAPPING WIRE, AND ANY SYNTHETIC MATERIAL SHALL BE REMOVED PRIOR TO FINAL INSPECTION. WIRE BASKETS SHOULD BE CUT AWAY FROM TOP ONE-THIRD OF ROOT BALL.
28. NON-CANOPY TREES SHALL NOT BE PLANTED CLOSER THAN 10 FEET FROM OTHER TREES AND CANOPY TREES NO CLOSER THAN 20-30 FEET, DEPENDING ON SPECIES.
29. A MULCH RING FOR ALL NEWLY PLANTED TREES SHALL BE PROVIDED AT LEAST FIVE (5) FEET IN DIAMETER AND NOT CLOSER THAN SIX (6) INCHES FROM THE TREE TRUNK.
30. TREES SHALL HAVE A MINIMUM HEIGHT OF EIGHT (8) TO TEN (10) FEET AND TWO (2) INCHES OF DBH.
31. SHRUB LINES ARE TO BE PLANTED AT THE REQUIRED MINIMUM HEIGHT, NOT BY CONTAINER SIZE.
32. THE IRRIGATION CONTRACTOR SHALL PROVIDE A DESIGN-BUILD OF ITS IRRIGATION PIPING AND HEADS TO PROVIDE A LOOPED SYSTEM WITH A 2" MINIMUM SIZE. AN IRRIGATION PLAN SHALL BE PREPARED AND PROVIDED TO CITY STAFF.
33. CONTRACTOR SHALL ENSURE ANY/ALL CRITICAL ROOT ZONES MUST HAVE ROOT PRUNING PRIOR TO PERMANENT IRRIGATION INSTALLATION.

REVISIONS

DATE	DESCRIPTION
09/12/24	REV PER 9/11 VCS
12/20/24	REV PER VC COMMENTS
01/07/25	REV PER 11/08/24 CITY
02/18/25	REV PER 02/05/25
	SJRWMD COMMENTS
02/24/25	REV PER 2/04 COUNTY
	& 2/07 NSBU COMMENTS
05/30/25	REV PER 3/05 COUNTY
	& 3/19 NSBU COMMENTS
07/08/25	REV PER 7/02 NSBU &
	6/11 COUNTY, & TREES

Richard L. Poore
Digitally signed by Richard L. Poore
Date: 2025.07.11 15:24:21 -04'00'

REGISTERED LANDSCAPE ARCHITECT RICHARD L. POORE LA533 STATE OF FLORIDA
NOT VALID UNLESS SIGNED AND DATED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY RICHARD L. POORE, RLA ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

UPHAM
CIVIL ENGINEERING•SURVEYING•LANDSCAPE ARCHITECTURE
265 Kenilworth Avenue • Ormond Beach • Florida 32174
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LANDSCAPE DETAILS & NOTES

FLAGLER DUNES
1070 10TH STREET
NEW SMYRNA BEACH, FLORIDA 32168

PROJECT No:	240213
DATE:	AUGUST 30, 2024
DESIGN BY:	RLP
DRAWN BY:	WRW
CHECKED BY:	RLP
SCALE:	1" = 30'

SHEET NUMBER:

L200

THE CITY OF NEW SMYRNA BEACH - PLANNING DEPARTMENT

S-4-23 ARDISIA (FORMERLY SHELL POINTE) PUD PHASES 3 AND 4 FINAL PLAT AND CONSTRUCTION DOCUMENTS

September 8, 2025

Background:

Applicant and Owners: Heather Isaacs, Taylor Morrison, 2600 Lake Lucien Dr. # 350, Maitland, FL 32751

Request: Final Plat approval for a single family residential subdivision and its associated infrastructure improvements, for a proposed 368 lots of varying sizes within a 275.8 acre total area to be platted as Phases 3 and 4 of a mixed-use PUD area with 5 total development Phases.

Site Data: The proposed subject property is currently undeveloped, zoned PUD Planned Unit Development, and generally located south of Pioneer Trail and west of Interstate 95, immediately north of and connecting to the existing Verano and Venetian PUD areas to the south and west through the previously approved 210 acre Phase 1 and 2 platted area. A location map showing this is attached as **Exhibit A**, along with an aerial photo of the site attached as **Exhibit B**. An overall development plan of the entire PUD area as provided by the applicant is attached as **Exhibit C**, showing all five Phase areas and the proposed residential development. The proposed 25 sheet Plat is also included, as **Exhibit E,** along with other exhibits listed below**.**

Tax Parcel Numbers: 7308-00-00-0030, 7308-00-00-0050, and 7305-00-00-0030

Exhibits Attached:

Exhibit A - Location Map

Exhibit B - Aerial Map

Exhibit C - Overall Development and Phasing Plan, entire PUD (from applicant group)

Exhibit D - Boundary Survey, Phases 3 and 4 area only

Exhibit E - Plat (25 sheets)

Exhibit F - Site Construction Plans (47 sheets)

Exhibit G - Landscape Plans, Open Space Exhibit (26 sheets)

Exhibit H - PUD MDA & CDP, as recorded in 2018
Exhibit H-1 - PUD MDA CDP 2018 Exhibits (11 clear sheets)

Exhibit H-2 -2nd Minor Amendment to MDA, re HOA funding

Exhibit I-1 - Amenity Center Color Rendering
Exhibit I-2 - Amenity Center Plan

Findings:

Findings

A. This is the second development application within the existing Shell Pointe PUD that was originally approved by the City in 2018, with these proposed Phases 3 and 4 plat areas comprising the northern and eastern 275.8 acre portion of the total 543.5 acre PUD area. The Shell Pointe PUD area is located on the south side of Pioneer Trail, immediately west of Interstate 95, and extending south to the existing Verano and Venetian Bay PUD developments.

B. This PUD area had previously been used as a sod farm, and thus is already largely cleared with some isolated wooded wetland areas remaining, most of which is proposed to be preserved. That 2018 PUD Master Development Agreement (MDA) is attached for reference (as Exhibit H), and calls for five Phases of mixed use development. That same recorded Exhibit H PUD MDA document also contains the PUD Conceptual Development Plan (CDP) then also approved for all five proposed development Phases. An Exhibit H-1 is also attached for reference, to present more legible and clear versions of those 11 MDA/CDP Exhibit sheets than the reduced and grainy versions attached within the recorded Exhibit H PUD MDA document.

C. That PUD MDA/CDP provides for a maximum of 745 Single Family (SF) residential

lots/units within the first four Phases (1-4), with the Phase 5 areas approved for a maximum of 400,000 square feet of Commercial uses as the last phase of PUD development. Per the MDA, no other residential development is permitted, for any additional units and with multi-family and/or townhouse development strictly prohibited.

D. The same applicant group for the first Single Family (SF) Phases (1 and 2) also now intends to develop the following two SF Phases (3 and 4) that were also approved within that 2018 PUD MDA, but not the Phase 5 areas approved for future Commercial development. These various Phase areas are shown on the Exhibits A and B Maps and the Exhibit C Overall Development Plan (ODP) provided by the applicant group.

E. The 210.57 acre Phase 1 and 2 area has already been platted and recorded to contain 319 residential lots/units. The proposed Phase 3 and 4 area comprises 282.67 total acres proposed for 368 residential lots/units. The total number of Lots within all four residential Phases would then be a total of 687 residential lots/units, well under the 745 maximum units permitted by the PUD MDA & CDP.

F. A key component of the Shell Pointe PUD CDP is the proposed dedication of 10.7 acres of public right-of-way for the southerly extension of Williamson Boulevard through the Shell Point/Ardisia PUD, from its current terminus and “T” connection to the north side of Pioneer Trail. That proposed roadway extension area is shown on Exhibits A, B, and C, along with the plat and development plans, and would connect to other proposed and more southerly alignments of Williamson Boulevard, through the adjacent property to the south that is owned and under the control of New Smyrna Beach Utilities (NSBU), to then connect with SR 44 and eventually to the City of Edgewater limits and further south to SR 442. Those southerly extension routes have all now been approved by Volusia County for their future construction of Williamson Blvd. The Phase 1 and 2 area is not affected by that future Williamson Blvd. extension, with that proposed right-of-way area instead being entirely within the proposed Phases 3 and 4 area.

G. As shown on various Exhibits, Phases 1 and 2 connect directly to Pioneer Trail to the north at a point further west of the existing Williamson Blvd. and a “plus/+” intersection with Cypress Springs Parkway on the north side of Pioneer Trail, within the City of Port

Orange. This proposed connection and all future Williamson Blvd. improvements and connections are under the permitting and direction of Volusia County, with Pioneer Trail and Williamson Blvd. both being County maintained roadways. Two roadway connections within Phases 1 and 2 are with existing stubbed-out roads to the south, which are Monaco Blvd. and Modena Way within Verano at Venetian Bay. Future roadway connections from Phases 1 and 2 to the north, east, and this Williamson Blvd. are also proposed and also shown to occur within the future Phases 3 and 4 areas.

H. Another roadway impact that affects the overall current Shell Pointe PUD area is the future interchange of Pioneer Trail with Interstate 95. As part of that, FDOT obtained additional property for that interchange construction, some of which was necessary to take from within the current 543 acre Shell Pointe PUD area. Those various areas to be removed from the Shell Pointe PUD comprise almost 19 acres, and are primarily along the southern edge of the Pioneer Trail right-of-way and the easternmost areas of Phases 3 and 4 adjacent to Interstate 95. These FDOT areas removed from the total PUD include the proposed interchange roadway off-ramp area to the east of Phases 3 and 4 and the FRL powerline easement at that eastern PUD boundary.

I. The PUD also provides for a 20 acre public park “with gazebo and access trail to be dedicated to the City of New Smyrna Beach.” That facility is shown on the PUD CDP to be on the east side of the future Williamson Blvd. right-of-way, within the Phases 3 and 4 area. That same text within MDA Section 6. I., Amenities, also requires a walking/biking trail along Pioneer Trail, a children’s area with playground equipment, and nature trails with gazebos/sitting areas. The construction plans for Phases 1 and 2 included the installation of a 8’ wide concrete bike trail along the Pioneer Trail plat area frontage as part of this initial Phase of PUD Development, with other sections to be constructed with each future PUD Phase per the MDA text. In addition, a dog park area is located at the south side of the Phases 1 & 2 Moon Shell Circle loop area, within an isolated upland area surrounded by existing wooded wetlands to be preserved, and various trails throughout including a large wooded portion of the southeastern area where no adjacent lots are proposed. These facilities can be most prominently seen on the Sheet EX1 Open Space Exhibit. Phases 3 & 4 will also include Trail/walkway connections and Park areas, also shown on that same Sheet EX1 Open Space Exhibit.

J. These applicants have also provided for the Phases 3 and 4 development plan to include a larger and separate Amenity Center site, within a proposed 5.8 acre Tract "U",

and to include a pool, playground, courts, open play spaces, etc., in a central area where lots had previously been proposed/approved by the current PUD CDP. That future Amenity Center area is now called out on the Exhibit EX1 Open Space Exhibit. While no formal site plan application has yet been submitted, a color rendering and conceptual plan for the Amenity Center has been submitted to the City for informal review, with those two documents attached here as Exhibits I-1 and I-2. It should be noted these Phases 1 through 4 development plans meet the requirements of the MDA for their number of proposed lots, for Minimum Public Open Space, Village Green/Neighborhood Common Areas, and Public Use Site/Civic Spaces. It should also be noted that the single Condition of Approval by the City Commission for Phases 1 & 2 at their June 27, 2023 meeting was that all required amenities must be completed prior to the issuance of a Certificate of Completion for Phase 3.

K. The PUD MDA requires Minimum Residential Lot Sizes of 6,600 SF and Lot Widths of 55’. The Phases 1 and 2 plat provided a Minimum Lot Size of 7,260 SF (55’ x 132’), with the Average Lot Size of its 319 proposed lots being 9,417 SF, using a combination of differing lot sizes of 55' wide, 65' wide, and 80' wide. The 368 proposed Lots in Phases 3 & 4 have an average Lot size of 7,892 SF. There are also a total of 24 proposed Tracts within the Phases 3 and 4 plat for various future uses, including stormwater management, perimeter landscape buffers, utilities, and common areas.

L. In addition, the Phases 3 and 4 plat contains four Tracts dedicated as Natural Areas, and totaling over 81 acres. Those are Tracts O (almost 28 acres), P (over 12 acres), Tract Q (over 12 acres, and Tract R (over 27 acres). As previously noted, the existing PUD is largely a former sod farm that had historically been cleared, with these four Natural Area Tracts primarily being those wetland areas that had been retained within that sod farm area. As a result, of the total 495 acres the applicants are proposing to develop in the proposed Phases 1 – 4, they are planning to impact just over two acres of existing wetlands, and have been permitted for that by FDEP.

M. During the City review and approval process for Phases 1 & 2, there were concerns voiced at that time about a provision in the original/2018 PUD MDA text that required future residents of Shell Pointe/Ardisia to contribute to the neighboring Venetian Bay HOA for certain shared maintenance costs. As part of that prior approval process, the 2nd Minor Amendment to the PUD MDA was initiated and completed at that time, which more clearly detailed how those future maintenance costs would be provided for, along with providing more detail as to membership and assessments in and by the respective

HOA's. That 2nd Minor Amendment to the PUD MDA is now attached as Exhibit H-2.

N. A review of the plat remains to be completed by an independent surveyor on behalf of the City, to confirm the survey and plat presented by the applicant, which typically occurs after the Planning & Zoning Board action & prior to the City Commission hearing and action to follow. In addition, Volusia County has completed their Use Permit process needed for the proposed connection to Pioneer Trail, as the final permitting authority for that aspect. Finally, the required Traffic Impact Analysis (TIA) and Proportionate Fair Share Agreement (PFSA) documents have been reviewed by both Volusia County and the City's traffic engineering consultant and are approved for all applicable required roadway improvements, Proportionate Fair Share Agreement (PFSA) payments, etc., all completed concurrent with the final approval by the City Commission of Phases 1 & 2 in 2023.

Recommendation

Staff recommends the Board vote to recommend approval of the plat to the City Commission at a future meeting, with the single condition that the plat be approved by the independent surveyor on behalf of the City.

Fiscal Analysis:
N/A

Strategic Plan Item:
No

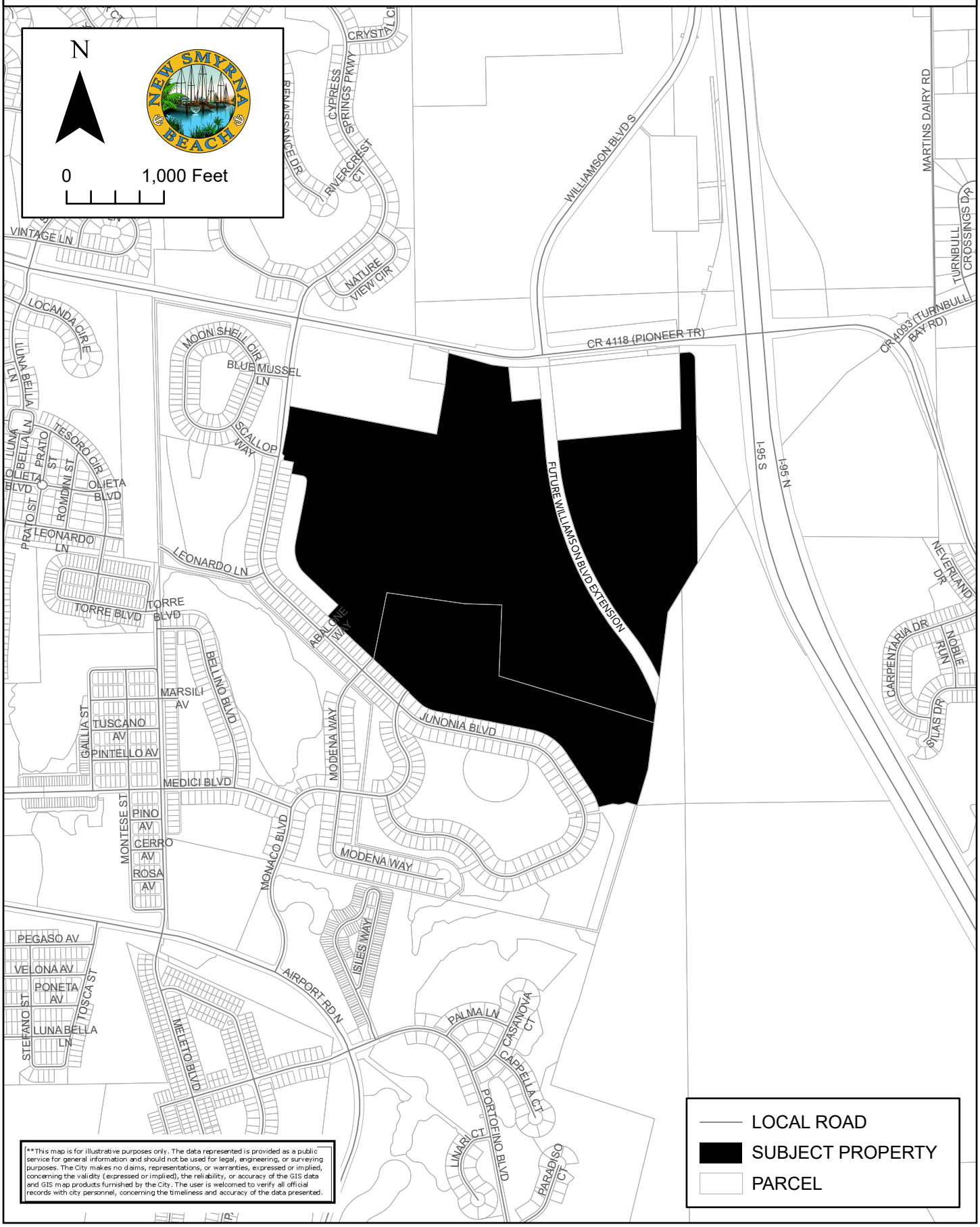
Staff Report Created By: Jeff Gove - Chief Planner

Attachments:

Ex_A_Location_Map_S-4-23_Location_Map.pdf
Ex._B_S-4-23_Aerial_Map.pdf
Ex._C_Revised_ODP__PHASING_PLAN_8-29-2025.pdf
Ex_D_Boundary_Survey_1351_PH3_4-ALTA_Svy__06-24-25__v1.pdf
Ex._E_Plat_25_Total_Sheets_1351_Shell_Pointe_Colony_Phase_3-4__06-25-25__v1.pdf
Ex._F_Engineering_Plans_Civil_v1.pdf
Ex._G._Final_Plans_Landscape_v1__1_.pdf
Ex._G_-_Shell_Point_Colony_PUD_recorded_7-25-18.pdf
Ex._H-1_PUD_MDA_Clean_Ex._H_-_PUD_MDA_Clean_Concept_and_Civil_Plans.pdf
Ex._H-
2_Minor_Amendment_to_PUD_Shell_Pointe_Colony_PUD_2nd_Minor_Amendment_to_

Ex._I-1_Amenity_Center_Coloe_Rendering_Color_24002999_ARDISIA_AMENITY_-_RMP_-_2025_06_11.pdf
Ex._I-2_Amenity__Center_Plan_24002999_ARDISIA_AMENITY_-_BW-_2025_06_11.pdf

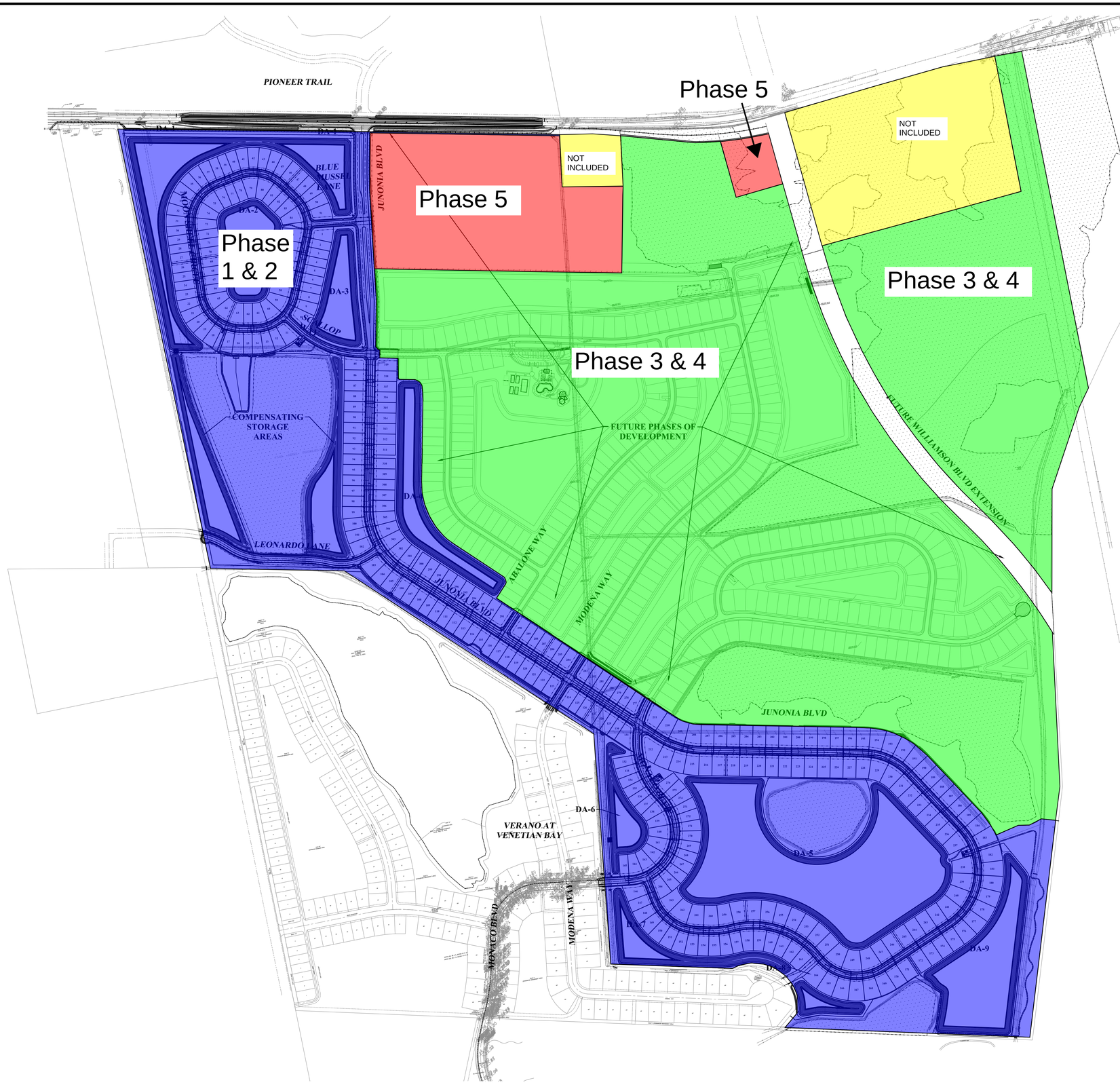
S-4-23: ARDISIA PARK - PHASES 3 & 4
LOCATION MAP



**This map is for illustrative purposes only. The data represented is provided as a public service for general information and should not be used for legal, engineering, or surveying purposes. The City makes no claims, representations, or warranties, expressed or implied, concerning the validity (expressed or implied), the reliability, or accuracy of the GIS data and GIS map products furnished by the City. The user is welcomed to verify all official records with city personnel, concerning the timeliness and accuracy of the data presented.

S-4-23: ARDISIA PARK - PHASES 3 & 4
AERIAL MAP





ZEV COHEN & ASSOCIATES, INC.
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CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 6516)

NO.	DATE	BY	SUBMITTALS / REVISIONS
1	07-01-20	MLR	INITIAL SUBMITTAL TO CITY
2	11-24-21	MLR	RESPONSE TO COUNTY COMMENTS
3	05-05-22	MLR	RESUBMITTED TO CITY
4	06-06-22	MLR	RESUBMITTED TO CITY
5	03-10-23	MLR	RESUBMITTED TO CITY
6	05-24-23	MLR	RESUBMITTED TO CITY
7	06-13-23	MLR	RESUBMITTED TO COUNTY AND NSB UTILITIES
8	07-25-23	MLR	RESUBMITTED TO COUNTY
9	08-04-23	SVK	REVISED PER CITY COMMENTS
10	09-12-23	MLR	REVISED PER SHOP DRAWING REVIEW
11	12-20-23	MLR	REVISED PER CLIENT REQUEST
12	04-23-24	MLR	REVISED PER NSBU
13	09-04-24	MLR	REVISED FOR MODEL HOME LAYOUT

ARDISIA PARK
FINAL ENGINEERING PLANS
OVERALL DEVELOPMENT PLAN

CITY OF NEW SMYRNA BEACH
VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169

DESIGNED BY: MLR

DRAFTED BY: MLR

CHECKED BY: MKW

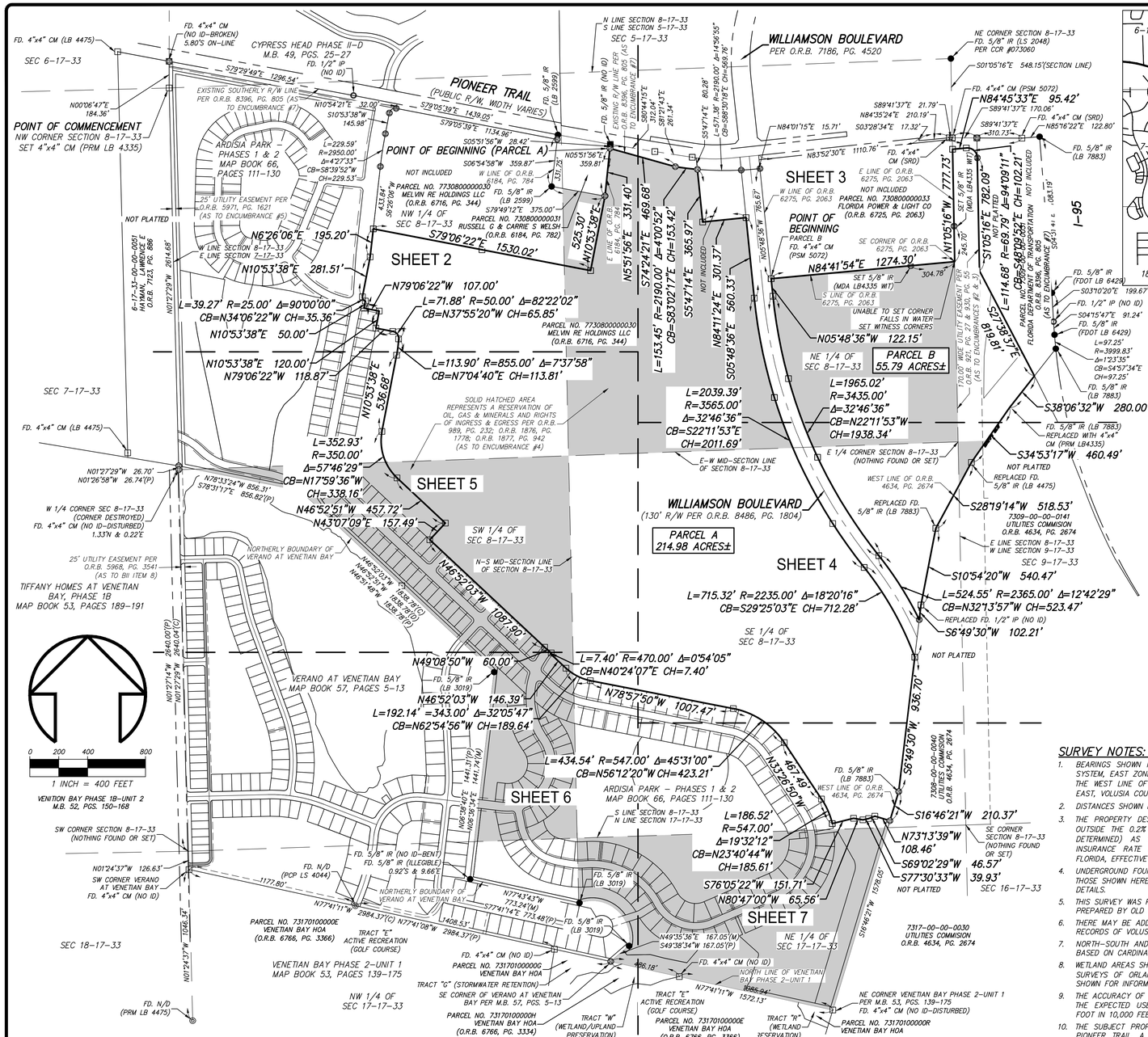
DRAWING FILE: 11_18169-OOP
XREF'S: 18169_BAS.DWG
XREF'S: —

MELIA L. RUSSELL, P.E., NO.68357
KRISTOPHER T. ROWLEY, P.E., NO.84263
NOT VALID WITHOUT SEAL

SHEET: C1 OF 1

E:\18169 - SHELL POINTE COLONY\FINAL ENGINEERING PLANS\ZJ\DWGS\11-18169-OOP.DWG - PRINTED: 9/29/2023 10:26 AM

ALTA/NSPS LAND TITLE SURVEY


FD. 4"x4" CM (LB 4475)
SEC 6-17-33
CYPRESS HEAD PHASE II-D
M.B. 49, PGS. 25-27
FD. 1/2" IP (NO ID)
S79°29'49"E 1296.54'
PIONEER TRAIL
(PUBLIC R/W, WIDTH VARIES)
S79°05'39"E 1439.05'
S79°05'39"E 1134.96'
N00°06'47"E 184.36'
POINT OF COMMENCEMENT
NW CORNER SECTION 8-17-33
SET 4"x4" CM (PRM LB 4335)
N10°54'21"E 32.00'
S10°53'38"W 145.98'
ARDISIA PARK
PHASES 1 & 2
MAP BOOK 66,
PAGES 111-130
L=229.59'
R=2950.00'
Δ=4°27'33"
CB=S8°39'52"W
CH=229.53'
POINT OF BEGINNING (PARCEL A)
S05°51'56"E 28.42'
S06°54'58"W 359.87'
N05°51'56"E 359.81'
FD. 5/8" IR (NO ID)
FD. 5/8" IR (LB 2599)
EXISTING R/W LINE PER O.R.B. 8396, PG. 805 (AS TO ENCUMBRANCE #7)
S80°44'15"E 312.04'
S80°44'15"E 261.34'
S53°47'14"E 80.28'
L=571.38' R=2190.00' Δ=14°56'55"
CB=S68°30'19"E CH=569.76'
N LINE SECTION 8-17-33
S LINE SECTION 5-17-33
WILLIAMSON BOULEVARD
PER O.R.B. 7186, PG. 4520
NE CORNER SECTION 8-17-33
FD. 5/8" IR (LS 2048)
PER COR #073060
S01°05'16"E 548.15'(SECTION LINE)
FD. 4"x4" CM (PSM 5072)
N84°45'33"E 95.42'
S89°41'37"E 21.79'
N84°35'24"E 210.19'
S03°28'34"E 17.32'
S89°41'37"E 170.08'
S89°41'37"E 310.73'
FD. 4"x4" CM (SRD)
N85°16'22"E 122.80'
FD. 5/8" IR (LB 7883)
N84°01'15"E 15.71'
N83°52'30"E 1110.76'
FD. 4"x4" CM (SRD)
SHEET 3
E LINE OF O.R.B. 6275, PG. 2063
NOT INCLUDED
FLORIDA POWER & LIGHT CO (O.R.B. 6725, PG. 2063)
POINT OF BEGINNING
PARCEL B
FD. 4"x4" CM (PSM 5072)
N84°41'54"E 1274.30'
SET 5/8" IR (MDA LB4335 WIT)
S LINE OF O.R.B. 6275, PG. 2063
UNABLE TO SET CORNER FALLS IN WATER
SET WITNESS CORNERS
SE CORNER OF O.R.B. 6275, PG. 2063
304.78'
N05°48'36"W 122.15'
PARCEL B
55.79 ACRES±
NE 1/4 OF SEC 8-17-33
L=1965.02'
R=3435.00'
Δ=32°46'36"
CB=N22°11'53"W
CH=1938.34'
E 1/4 CORNER SECTION 8-17-33
(NOTHING FOUND OR SET)
WEST LINE OF O.R.B. 4634, PG. 2674
REPLACED FD. 5/8" IR (LB 7883)
E LINE SECTION 8-17-33
W LINE SECTION 9-17-33
SEC 9-17-33
S10°54'20"W 540.47'
L=524.55' R=2365.00' Δ=12°42'29"
CB=N32°13'57"W CH=523.47'
REPLACED FD. 1/2" IP (NO ID)
S6°49'30"W 102.21'
NOT PLATTED
S6°49'30"W 9.36.70'
N73°13'39"W 108.46'
S69°02'29"W 46.57'
S77°30'33"W 39.93'
NOT PLATTED
SEC 16-17-33
S16°46'21"W 210.37'
SE CORNER SECTION 8-17-33 (NOTHING FOUND OR SET)
7308-00-00-0040 UTILITIES COMMISION O.R.B. 4634, PG. 2674
N05°51'56"E 331.40'
S74°24'21"E 469.68'
L=153.45' R=2190.00' Δ=4°00'52"
CB=S8°30'21"E CH=153.42'
S54°71'4"E 365.97'
N84°11'24"E 301.37'
S05°48'36"E 560.33'
N10°53'38"E 281.51'
N79°06'22"W 107.00'
L=71.88' R=50.00' Δ=82°22'02"
CB=N37°55'20"W CH=65.85'
L=39.27' R=25.00' Δ=90°00'00"
CB=N34°06'22"W CH=35.36'
N10°53'38"E 50.00'
N10°53'38"E 120.00'
N79°06'22"W 118.87'
L=113.90' R=855.00' Δ=7°37'58"
CB=N7°04'40"E CH=113.81'
N10°53'38"E 536.68'
SOLID HATCHED AREA REPRESENTS A RESERVATION OF OIL, GAS & MINERALS AND RIGHTS OF INGRESS & EGRESS PER O.R.B. 989, PG. 232; O.R.B. 1876, PG. 1778; O.R.B. 1877, PG. 942 (AS TO ENCUMBRANCE #4)
SEC 7-17-33
L=352.93'
R=350.00'
Δ=57°46'29"
CB=N17°59'36"W
CH=338.16'
N46°52'51"W 457.72'
N43°07'09"E 157.49'
SHEET 5
SHEET 2
SHEET 4
SHEET 6
SHEET 7
SW 1/4 OF SEC 8-17-33
N-S MID-SECTION LINE OF SECTION 8-17-33
PARCEL A
214.98 ACRES±
WILLIAMSON BOULEVARD
(130' R/W PER O.R.B. 8486, PG. 1804)
E-W MID-SECTION LINE OF SECTION 8-17-33
L=715.32' R=2235.00' Δ=18°20'16"
CB=S29°25'03"E CH=712.28'
SE 1/4 OF SEC 8-17-33
NOT PLATTED
L=7.40' R=470.00' Δ=0°54'05"
CB=N40°24'07"E CH=7.40'
N49°08'50"W 60.00'
FD. 5/8" IR (LB 3019)
N46°52'03"W 146.39'
N46°52'03"W 1087.90'
N78°57'50"W 1007.47'
L=192.14' =343.00' Δ=32°05'47"
CB=N62°54'56"W CH=189.64'
L=434.54' R=547.00' Δ=45°31'00"
CB=N56°12'20"W CH=423.21'
N37°26'50"W 467.49'
L=186.52' R=547.00' Δ=19°32'12"
CB=N23°40'44"W CH=185.61'
N76°05'22"W 151.71'
N80°47'00"W 65.56'
N49°35'36"E 167.05'(M)
S49°38'34"W 167.05'(P)
NORTH LINE OF VENETIAN BAY PHASE 2-UNIT 1
N77°41'11"W 1572.13'
1085.94'
S76°48'21"W 1578.05'
NE 1/4 OF SEC 17-17-33
FD. 4"x4" CM (NO ID)
FD. 4"x4" CM (NO ID-DISTURBED)
0.92'S & 9.66'E
FD. 5/8" IR (NO ID-BENT)
FD. 5/8" IR (ILLEGIBLE)
0.92'S & 9.66'E
FD. N/D (PCP LS 4044)
1177.80'
NORTHERLY BOUNDARY OF VERANO AT VENETIAN BAY
N77°43'43"W 773.24'(M)
S77°41'14"E 773.48'(P)
N77°41'11"W 2984.37'(C) N77°41'08"W 2984.37'(P)
L1408.53'
PARCEL NO. 7317010000000E VENETIAN BAY HOA (O.R.B. 6766, Pg. 3366)
TRACT "E" ACTIVE RECREATION (GOLF COURSE)
VENETIAN BAY PHASE 2-UNIT 1 MAP BOOK 53, PAGES 139-175
SEC 18-17-33
N01°24'37"W 126.63'
SW CORNER VERANO AT VENETIAN BAY FD. 4"x4" CM (NO ID)
N01°24'37"W 2640.04'(C)
N01°27'29"W 2640.01'(M)
N01°24'37"W 2640.04'(C)
SW CORNER SECTION 8-17-33 (NOTHING FOUND OR SET)
N01°27'29"W 2614.68'
6-17-33-00-00-0051 O.R.B. 7124, PG. 866
W LINE SECTION 8-17-33
E LINE SECTION 7-17-33
N01°27'29"W 26.70'
N01°26'58"W 26.74'(P)
N78°33'24"W 856.31'
S78°31'17"E 856.82'(P)
W 1/4 CORNER SEC 8-17-33 (CORNER DESTROYED)
FD. 4"x4" CM (NO ID-DISTURBED) 1.33'N & 0.22'E
NORTHERLY BOUNDARY OF VERANO AT VENETIAN BAY
25' UTILITY EASEMENT PER O.R.B. 5968, PG. 3541 (AS TO BII ITEM 8)
TIFFANY HOMES AT VENETIAN BAY, PHASE 1B MAP BOOK 53, PAGES 189-191
VERANO AT VENETIAN BAY MAP BOOK 57, PAGES 5-13
VENITION BAY PHASE 1B-UNIT 2 M.B. 52, PGS. 150-168
0 200 400 800
1 INCH = 400 FEET
NW 1/4 OF SEC 17-17-33
FD. N/D (PRM LB 4475)
TRACT "G" (STORMWATER RETENTION)
SE CORNER OF VERANO AT VENETIAN BAY PER M.B. 57, PGS. 5-13
PARCEL NO. 7317010000000E VENETIAN BAY HOA (O.R.B. 6766, PG. 3334)
TRACT "W" (WETLAND/UPLAND PRESERVATION)
PARCEL NO. 7317010000000E VENETIAN BAY HOA (O.R.B. 6766, Pg. 3366)
TRACT "E" ACTIVE RECREATION (GOLF COURSE)
TRACT "R" (WETLAND RESERVATION)
NE CORNER VENETIAN BAY PHASE 2-UNIT 1 PER M.B. 53, PGS. 139-175
FD. 4"x4" CM (NO ID-DISTURBED)
PARCEL NO. 7317010000000R VENETIAN BAY HOA
PARCEL NO. 7308000000033 MELVIN RE HOLDINGS LLC (O.R.B. 6716, PG. 344)
NW 1/4 OF SEC 8-17-33
PARCEL NO. 7308000000031 RUSSELL G & CARRIE S WELSH (O.R.B. 6184, PG. 782)
PARCEL NO. 7730800000030 MELVIN RE HOLDINGS LLC (O.R.B. 6716, PG. 344)
NOT INCLUDED
W LINE OF O.R.B. 6184, PG. 784
N LINE OF O.R.B. 6275, PG. 2063
E LINE OF O.R.B. 6275, PG. 2063
L=765.67'
N05°48'36"W
S05°48'36"E 560.33'
N84°11'24"E 301.37'
S54°71'4"E 365.97'
S74°24'21"E 469.68'
N51°56'E 331.40'
N10°53'38"E 525.30'
FD. 5/8" IR (LB 3019)
FD. 5/8" IR (LB 2599)
433.84' S02°26'08"E
NOT PLATTED
S79°06'22"E 1530.02'
N6°26'06"E 195.20'
525.30'
N10°53'38"E
FD. 5/8" IR (LB 3019)
S LINE OF O.R.B. 6275, PG. 2063
S LINE SECTION 8-17-33
N LINE SECTION 17-17-33
ARDISIA PARK - PHASES 1 & 2 MAP BOOK 66, PAGES 111-130
N08°38'40"E 1441.31'(P) 1441.74'(M)
N08°38'34"E
FD. 5/8" IR (LB 3019)
N77°41'11"W 2984.37'(C) N77°41'08"W 2984.37'(P)
L1408.53'
FD. 5/8" IR (LB 3019)
N49°35'36"E 167.05'(M)
S49°38'34"W 167.05'(P)
FD. 4"x4" CM (NO ID)
NORTH LINE OF VENETIAN BAY PHASE 2-UNIT 1
1085.94'
N77°41'11"W 1572.13'
NE 1/4 OF SEC 17-17-33
7317-00-00-0030 UTILITIES COMMISION O.R.B. 4634, PG. 2674
S76°48'21"W 1578.05'
NE CORNER VENETIAN BAY PHASE 2-UNIT 1 PER M.B. 53, PGS. 139-175
FD. 4"x4" CM (NO ID-DISTURBED)
PARCEL NO. 7317010000000R VENETIAN BAY HOA
TRACT "R" (WETLAND RESERVATION)
TRACT "W" (WETLAND/UPLAND PRESERVATION)
PARCEL NO. 7317010000000E VENETIAN BAY HOA (O.R.B. 6766, Pg. 3366)
TRACT "E" ACTIVE RECREATION (GOLF COURSE)
NW 1/4 OF SEC 17-17-33
FD. N/D (PRM LB 4475)
SEC 18-17-33
N01°24'37"W 2640.04'(C)
N01°27'29"W 2640.01'(M)
N01°24'37"W 2640.04'(C)
SW CORNER SECTION 8-17-33 (NOTHING FOUND OR SET)
N01°24'37"W 126.63'
SW CORNER VERANO AT VENETIAN BAY FD. 4"x4" CM (NO ID)
FD. N/D (PCP LS 4044)
1177.80'
NORTHERLY BOUNDARY OF VERANO AT VENETIAN BAY
N77°43'43"W 773.24'(M)
S77°41'14"E 773.48'(P)
N77°41'11"W 2984.37'(C) N77°41'08"W 2984.37'(P)
L1408.53'
PARCEL NO. 7317010000000E VENETIAN BAY HOA (O.R.B. 6766, Pg. 3366)
TRACT "E" ACTIVE RECREATION (GOLF COURSE)
VENETIAN BAY PHASE 2-UNIT 1 MAP BOOK 53, PAGES 139-175
SEC 18-17-33
NW 1/4 OF SEC 17-17-33
FD. N/D (PRM LB 4475)
TRACT "G" (STORMWATER RETENTION)
SE CORNER OF VERANO AT VENETIAN BAY PER M.B. 57, PGS. 5-13
PARCEL NO. 7317010000000E VENETIAN BAY HOA (O.R.B. 6766, PG. 3334)
TRACT "W" (WETLAND/UPLAND PRESERVATION)
NE CORNER VENETIAN BAY PHASE 2-UNIT 1 PER M.B. 53, PGS. 139-175
FD. 4"x4" CM (NO ID-DISTURBED)
PARCEL NO. 7317010000000R VENETIAN BAY HOA
TRACT "R" (WETLAND RESERVATION)
PARCEL NO. 7317010000000E VENETIAN BAY HOA (O.R.B. 6766, Pg. 3366)
TRACT "E" ACTIVE RECREATION (GOLF COURSE)
NW 1/4 OF SEC 17-17-33
FD. N/D (PRM LB 4475)
SEC 18-17-33
N01°24'37"W 2640.04'(C)
N01°27'29"W 2640.01'(M)
N01°24'37"W 2640.04'(C)
SW CORNER SECTION 8-17-33 (NOTHING FOUND OR SET)
N01°24'37"W 126.63'
SW CORNER VERANO AT VENETIAN BAY FD. 4"x4" CM (NO ID)
FD. N/D (PCP LS 4044)
1177.80'
NORTHERLY BOUNDARY OF VERANO AT VENETIAN BAY
N77°43'43"W 773.24'(M)
S77°41'14"E 773.48'(P)
N77°41'11"W 2984.37'(C) N77°41'08"W 2984.37'(P)
L1408.53'
PARCEL NO. 7317010000000E VENETIAN BAY HOA (O.R.B. 6766, Pg. 3366)
TRACT "E" ACTIVE RECREATION (GOLF COURSE)
VENETIAN BAY PHASE 2-UNIT 1 MAP BOOK 53, PAGES 139-175
SEC 18-17-33
NW 1/4 OF SEC 17-17-33
FD. N/D (PRM LB 4475)
TRACT "G" (STORMWATER RETENTION)
SE CORNER OF VERANO AT VENETIAN BAY PER M.B. 57, PGS. 5-13
PARCEL NO. 7317010000000E VENETIAN BAY HOA (O.R.B. 6766, PG. 3334)
TRACT "W" (WETLAND/UPLAND PRESERVATION)
PARCEL NO. 7317010000000E VENETIAN BAY HOA (O.R.B. 6766, Pg. 3366)
TRACT "E" ACTIVE RECREATION (GOLF COURSE)
TRACT "R" (WETLAND RESERVATION)
NE CORNER VENETIAN BAY PHASE 2-UNIT 1 PER M.B. 53, PGS. 139-175
FD. 4"x4" CM (NO ID-DISTURBED)
PARCEL NO. 7317010000000R VENETIAN BAY HOA
I-95
PARCEL NO. 7308000000033 FLORIDA DEPARTMENT OF TRANSPORTATION (AS TO ENCUMBRANCE #2 & 3)
O.R.B. 8396, PG. 805
S54°23'41"E 1083.19'
170.00' WIDE UTILITY EASEMENT PER O.R.B. 8396, PG. 805 (AS TO ENCUMBRANCES #2 & 3)
S05°48'36"E 560.33'
N05°48'36"W 765.67'
N10°53'38"E 525.30'
N10°05'16"W 777.73'
S10°05'16"E 782.09'
L=114.68' R=69.79' Δ=94°09'11"
CB=S54°59'52"E CH=102.21'
FD. 5/8" IR (FDOT LB 6429)
S03°10'20"E 199.67'
FD. 1/2" IP (NO ID)
S04°15'47"E 91.24'
FD. 5/8" IR (FDOT LB 6429)
L=97.25'
R=3999.83'
Δ=1°23'35"
CB=S4°57'34"E
CH=97.25'
FD. 5/8" IR (LB 7883)
S38°06'32"W 280.00'
FD. 5/8" IR (LB 7883) REPLACED WITH 4"x4" CM (PRM LB4335)
S34°53'17"W 460.49'
NOT PLATTED
REPLACED FD. 5/8" IR (LB 4475)
S28°19'14"W 518.53'
7309-00-00-0141 UTILITIES COMMISION O.R.B. 4634, PG. 2674
E LINE SECTION 8-17-33
W LINE SECTION 9-17-33
SEC 9-17-33
S10°54'20"W 540.47'
L=524.55' R=2365.00' Δ=12°42'29"
CB=N32°13'57"W CH=523.47'
REPLACED FD. 1/2" IP (NO ID)
S6°49'30"W 102.21'
NOT PLATTED
S6°49'30"W 9.36.70'
N73°13'39"W 108.46'
S69°02'29"W 46.57'
S77°30'33"W 39.93'
NOT PLATTED
SEC 16-17-33
S16°46'21"W 210.37'
SE CORNER SECTION 8-17-33 (NOTHING FOUND OR SET)
7308-00-00-0040 UTILITIES COMMISION O.R.B. 4634, PG. 2674
FD. 5/8" IR (LB 7883)
WEST LINE OF O.R.B. 4634, PG. 2674
L=186.52' R=547.00' Δ=19°32'12"
CB=N23°40'44"W CH=185.61'
N76°05'22"W 151.71'
N80°47'00"W 65.56'
SHEET 7
SHEET 3
SHEET 4
SHEET 6
SHEET 5
SHEET 2
N01°05'16"W 777.73'
N84°45'33"E 95.42'
N84°41'54"E 1274.30'
304.78'
N05°48'36"W 122.15'
PARCEL B
55.79 ACRES±
NE 1/4 OF SEC 8-17-33
L=1965.02'
R=3435.00'
Δ=32°46'36"
CB=N22°11'53"W
CH=1938.34'
E 1/4 CORNER SECTION 8-17-33
(NOTHING FOUND OR SET)
WEST LINE OF O.R.B. 4634, PG. 2674
REPLACED FD. 5/8" IR (LB 7883)
E LINE SECTION 8-17-33
W LINE SECTION 9-17-33
SEC 9-17-33
S10°54'20"W 540.47'
L=524.55' R=2365.00' Δ=12°42'29"
CB=N32°13'57"W CH=523.47'
REPLACED FD. 1/2" IP (NO ID)
S6°49'30"W 102.21'
NOT PLATTED
SE 1/4 OF SEC 8-17-33
L=715.32' R=2235.00' Δ=18°20'16"
CB=S29°25'03"E CH=712.28'
N46°52'03"W 1087.90'
N49°08'50"W 60.00'
FD. 5/8" IR (LB 3019)
N46°52'03"W 146.39'
L=192.14' =343.00' Δ=32°05'47"
CB=N62°54'56"W CH=189.64'
N78°57'50"W 1007.47'
L=7.40' R=470.00' Δ=0°54'05"
CB=N40°24'07"E CH=7.40'
L=434.54' R=547.00' Δ=45°31'00"
CB=N56°12'20"W CH=423.21'
N37°26'50"W 467.49'
L=186.52' R=547.00' Δ=19°32'12"
CB=N23°40'44"W CH=185.61'
N76°05'22"W 151.71'
N80°47'00"W 65.56'
SHEET 7
N49°35'36"E 167.05'(M)
S49°38'34"W 167.05'(P)
FD. 4"x4" CM (NO ID)
NORTH LINE OF VENETIAN BAY PHASE 2-UNIT 1
1085.94'
N77°41'11"W 1572.13'
NE 1/4 OF SEC 17-17-33
S76°48'21"W 1578.05'
7317-00-00-0030 UTILITIES COMMISION O.R.B. 4634, PG. 2674
NE CORNER VENETIAN BAY PHASE 2-UNIT 1 PER M.B. 53, PGS. 139-175
FD. 4"x4" CM (NO ID-DISTURBED)
PARCEL NO. 7317010000000R VENETIAN BAY HOA
TRACT "R" (WETLAND RESERVATION)
PARCEL NO. 7317010000000E VENETIAN BAY HOA (O.R.B. 6766, Pg. 3366)
TRACT "W" (WETLAND/UPLAND PRESERVATION)
TRACT "E" ACTIVE RECREATION (GOLF COURSE)
NW 1/4 OF SEC 17-17-33
FD. N/D (PRM LB 4475)
TRACT "G" (STORMWATER RETENTION)
SE CORNER OF VERANO AT VENETIAN BAY PER M.B. 57, PGS. 5-13
PARCEL NO. 7317010000000E VENETIAN BAY HOA (O.R.B. 6766, PG. 3334)
SEC 18-17-33
VENETIAN BAY PHASE 2-UNIT 1 MAP BOOK 53, PAGES 139-175
VERANO AT VENETIAN BAY MAP BOOK 57, PAGES 5-13
TIFFANY HOMES AT VENETIAN BAY, PHASE 1B MAP BOOK 53, PAGES 189-191
25' UTILITY EASEMENT PER O.R.B. 5968, PG. 3541 (AS TO BII ITEM 8)
NORTHERLY BOUNDARY OF VERANO AT VENETIAN BAY
SW 1/4 OF SEC 8-17-33
N-S MID-SECTION LINE OF SECTION 8-17-33
PARCEL A
214.98 ACRES±
WILLIAMSON BOULEVARD
(130' R/W PER O.R.B. 8486, PG. 1804)
E-W MID-SECTION LINE OF SECTION 8-17-33
SE 1/4 OF SEC 8-17-33
NOT PLATTED
N49°08'50"W 60.00'
FD. 5/8" IR (LB 3019)
N46°52'03"W 146.39'
N46°52'03"W 1087.90'
N78°57'50"W 1007.47'
L=192.14' =343.00' Δ=32°05'47"
CB=N62°54'56"W CH=189.64'
L=434.54' R=547.00' Δ=45°31'00"
CB=N56°12'20"W CH=423.21'
N37°26'50"W 467.49'
L=186.52' R=547.00' Δ=19°32'12"
CB=N23°40'44"W CH=185.61'
N76°05'22"W 151.71'
N80°47'00"W 65.56'
SHEET 7
SHEET 6
SHEET 5
SHEET 4
SHEET 3
SHEET 2
N01°05'16"W 777.73'
N84°45'33"E 95.42'
N84°41'54"E 1274.30'
304.78'
N05°48'36"W 122.15'
PARCEL B
55.79 ACRES±
NE 1/4 OF SEC 8-17-33
L=1965.02'
R=3435.00'
Δ=32°46'36"
CB=N22°11'53"W
CH=1938.34'
E 1/4 CORNER SECTION 8-17-33
(NOTHING FOUND OR SET)
WEST LINE OF O.R.B. 4634, PG. 2674
REPLACED FD. 5/8" IR (LB 7883)
E LINE SECTION 8-17-33
W LINE SECTION 9-17-33
SEC 9-17-33
S10°54'20"W 540.47'
L=524.55' R=2365.00' Δ=12°42'29"
CB=N32°13'57"W CH=523.47'
REPLACED FD. 1/2" IP (NO ID)
S6°49'30"W 102.21'
NOT PLATTED
S6°49'30"W 9.36.70'
N73°13'39"W 108.46'
S69°02'29"W 46.57'
S77°30'33"W 39.93'
NOT PLATTED
SEC 16-17-33
S16°46'21"W 210.37'
SE CORNER SECTION 8-17-33 (NOTHING FOUND OR SET)
7308-00-00-0040 UTILITIES COMMISION O.R.B. 4634, PG. 2674
FD. 5/8" IR (LB 7883)
WEST LINE OF O.R.B. 4634, PG. 2674

FD. 4"x4" CM
(NO ID-BROKEN)
S.80'S ON-LINE

CYPRESS HEAD PHASE II-D
M.B. 49, PGS. 25-27

SEC 5-17-33

CYPRESS SPRINGS PARKWAY

N LINE SECTION 8-17-33
S LINE SECTION 5-17-33

0 50 100 200
1 INCH = 100 FEET

FENCE CORNER 11.9'W

MES (TYP)
18" RCP
DRAINAGE DITCH (TYP)
ASPHALT PAVEMENT
DRAINAGE DITCH

N00°06'47"E 184.38'

DIRT ROAD

S79°29'49"E 1296.54'

TRACT A (R/W DEDICATION)
TRACT CC (UTILITIES)
TRACT BB (LANDSCAPE BUFFER)

POINT OF COMMENCEMENT
NW CORNER SECTION 8-17-33
(RESTABLISHED BASED ON DEED CALLS)

ZONE X
ZONE A

TRACT B
(STORM WATER MANAGEMENT)

FEMA FLOOD
ZONE LINE (TYP)

W LINE SECTION 8-17-33
E LINE SECTION 7-17-33

4' VF

TRACT DD (UTILITIES)
TRACT BB (LANDSCAPE BUFFER)

PIONEER TRAIL (PUBLIC R/W, WIDTH VARIES)

L=62.84'
R=40.00'
Δ=90°00'43"
CB=N55°54'00"E
CH=56.57'

S79°05'39"E 1439.05'

PROPOSED ACCESS EASEMENT

S79°05'39"E 1134.96'

CYPRESS HEAD PHASE II-D
M.B. 49, PGS. 25-27

NOT PLATTED

FD. 5/8" IR
(LB 2599)

FD. 5/8" IR
(NO ID)

MES (TYP)
30"x18" RCP

SET 5/8" IR
(PRM MDA LB 4335)

S80°44'15"E 312.04'

S74°24'21"E 469.68'

FENCE CORNER
33.3'W

PARCEL NO. 7308000000031
RUSSELL G & CARRIE S WELSH
(O.R.B. 6184, PG. 782)

E LINE OF O.R.B.
6184, PG. 784

NOT INCLUDED

6" CLF

EXISTING R/W LINE
PER O.R.B. 8396,
PG. 805 (AS TO
ENCUMBRANCE #7)

N03°51'56"E 331.40'

N03°51'56"E 359.87'

S06°54'58"W 331.75'

W LINE OF O.R.B.
6184, PG. 784

FENCE CORNER
9.4'W

FD. 5/8" IR (LB 2599)
FNC CORNER 0.3'N & 0.1'W

FD. 5/8" IR
(LB 2599)

S79°49'12"E 375.00'

FEMA FLOOD
ZONE LINE (TYP)

DRAINAGE DITCH (TYP)

N03°53'38"E 525.30'

WETLAND
4,542,977 SQ. FT.
OR
104.2924 ACRES

WETLAND LINE (TYP)

SOLID HATCHED AREA
REPRESENTS A RESERVATION OF
OIL, GAS & MINERALS AND RIGHTS
OF INGRESS & EGRESS PER O.R.B.
989 PG. 232, O.R.B. 1676, PG.
1778, O.R.B. 1877, PG. 942
(AS TO ENCUMBRANCE #4)

N-S MID-SECTION LINE
OF SECTION 8-17-33

MATCHLINE "A" - SEE SHEET 3 OF 7

TRACT B
(STORM WATER MANAGEMENT)

ZONE X

FEMA FLOOD
ZONE LINE (TYP)

TRACT B
(STORM WATER MANAGEMENT)

ZONE X

L=45.68'
R=40.00'
Δ=65°25'39"
CB=S10°53'38"W
CH=43.24'

L=209.59'
R=250.00'
Δ=47°71'31"
CB=S36°39'52"W
CH=228.53'

ZONE A

TRACT C
(STORM WATER MANAGEMENT)

ARDISIA PARK - PHASES 1 & 2
MAP BOOK 66, PAGES 111-130

PARCEL NO. 7730800000030
MELVIN RE HOLDINGS LLC
(O.R.B. 6716, PG. 344)

ZONE X

NOT INCLUDED

NW 1/4 OF
SEC 8-17-33

S5°26'06"W 433.64'

TRACT D
(STORM WATER
MANAGEMENT)

N6°26'06"E
195.20'

765.01'

S79°06'22"E 1530.02'

765.01'

N10°53'38"E 281.51'

FEMA FLOOD
ZONE LINE (TYP)

ZONE X

25' UTILITY EASEMENT PER
O.R.B. 5971, PG. 1621
(AS TO ENCUMBRANCE #5)

TRACT B
(STORM WATER MANAGEMENT)

ZONE X

ZONE A

4' VF

W LINE SECTION 8-17-33
E LINE SECTION 7-17-33

N01°27'29"W 2614.66'

TRACT DD (UTILITIES)
TRACT BB (LANDSCAPE BUFFER)

DIRT ROAD

TRACT Q (LIFT STATION)

L=39.27'
R=25.00'
Δ=90°00'00"
CB=N34°06'22"W
CH=35.36'

N10°53'38"E 50.00'

N79°06'22"W 107.00'

N10°53'38"E 120.00'

118.87'
N79°06'22"W

L=71.88' R=50.00' Δ=82°22'02"
CB=N37°55'20"W CH=65.85'

L=113.90' R=855.00' Δ=7°37'58"
CB=N7°04'40"E CH=113.81'

TRACT G
(STORM WATER
MANAGEMENT)

FEMA FLOOD
ZONE LINE (TYP)

ZONE X

ZONE A

TRACT P
(COMMON AREA)

12" PVC

24" RCP

6" PVC

TRACT Q
(COMMON AREA)

ZONE A

FEMA FLOOD
ZONE LINE (TYP)

TRACT II
(NATURAL AREA)

TRACT II
(NATURAL AREA)

WETLAND
661933 SQ. FT.
OR
15.1959 ACRES

FENCE CORNER
8.3'W

DRAINAGE DITCH (TYP)

ZONE X

DRAINAGE DITCH (TYP)

DIRT ROAD

30" CMP

METAL BUILDING

CONC.

4" WELL

6" WELL AND PUMP
ON CONCRETE

24" CMP

ZONE A

FEMA FLOOD
ZONE LINE (TYP)

ZONE X

MATCHLINE "B" - SEE SHEET 5 OF 7

MARK DOWST & ASSOCIATES, INC.
ENGINEERS PLANNERS SURVEYORS LB#4335
536 NORTH HALIFAX AVENUE, SUITE 100, DAYTONA BEACH, FLORIDA 32118 PH:386-258-7999

ALTA/NSPS LAND TITLE SURVEY					PROJECT # 1351
DRAWN BY: LAT	DRAW DATE: 12/13/21	CHECKED BY: LHD	SCALE: 1" = 100'	FILE NAME: 1351_suralta_PH3&4-update.dwg	
CREW: SC,JB	FIELD DATE: 12/10/21	F.B./PG.: 217/65-72; 234/42-51,71-72		SHEET 2 OF 7	

G:\Data\X:\JOBS\1351 - Melvin Property-Deer Point\1_Survey\Civil 3D-DWGs\1351_suralta_PH3&4-update.dwg Jul 24, 2025 12:00pm

WILLIAMSON BOULEVARD
PER O.R.B. 7186, PG. 4520

NOT PLATTED

NOT PLATTED

PIONEER TRAIL (PUBLIC R/W, WIDTH VARIES)

E LINE SECTION 8-17-33
W LINE SECTION 9-17-33

FD. 4"x4" CM (SRD)
N85°16'22"E
122.80'

FD. 5/8" IR
(LB 7883)

S03°28'34"E 17.32'

S89°41'37"E 21.79'

N84°35'24"E 210.19'

FD. 4"x4" CM (SRD)

170.06'

FD. 4"x4" CM
(PSM 5072)

S89°41'37"E 502.59'

310.73'

N01°05'16"W 79.32'

CONCRETE HEADWALL W/8'x2' BOX CULVERT

CONCRETE HEADWALL W/8'x2' BOX CULVERT

S80°44'15"E
312.04'

S81°21'43"E
261.34'

L=27.59'
R=1033.00'
Δ=1°31'49"

L=230.53'
R=1033.00'
Δ=12°47'11"

72.63'

N84°19'17"E 202.63'

N84°19'17"E

130.00'
N84°19'17"E

N83°52'30"E 1110.76'

SOUTHERLY R/W LINE

S74°24'21"E 469.68'

SET 5/8" IR
(PRM MDA LB 4335)

EXISTING SOUTHERLY R/W LINE PER O.R.B. 8396, PG. 805 (AS TO ENCUMBRANCE #7)

SET 5/8" IR
(PRM MDA LB 4335)

L=153.45'
R=2190.00'
Δ=4°00'52"
CB=S8°30'21"E
CH=153.42'

L=258.12' R=1033.00'
Δ=14°19'00" CH=257.45'
CB=S88°31'13"E
L=571.38' R=2190.00' Δ=14°56'55"
CB=S88°30'18"E CH=569.76'

L=303.60'
R=2190.00'
Δ=7°56'34"

L=114.33'
R=2190.00'
Δ=2°59'28"
S84°01'15"W
15.71'

N05°48'36"W
92.15'

N05°48'36"W
420.23'

130.00'

N05°48'36"W
765.67'

S5°47'14"E 365.97'

S5°47'14"E 446.25'

N84°11'24"E 301.37'

WILLIAMSON BOULEVARD
(100' R/W PER O.R.B. 8486, PG. 1804)

S5°48'36"E 560.33'

N05°48'36"W
122.15'

POINT OF BEGINNING
PARCEL B
FD. 4"x4" CM (PSM 5072)

N84°41'54"E 1274.30'

W LINE OF O.R.B.
6275, PG. 2063

S LINE OF O.R.B.
6275, PG. 2063

E LINE OF O.R.B.
6275, PG. 2063

SET 5/8" IR
(MDA LB4335 WIT)

UNABLE TO SET CORNER
FALLS IN WATER
SET WITNESS CORNERS

SET 5/8" IR
(MDA LB4335 WIT)

304.78'

SE CORNER OF O.R.B.
6275, PG. 2063

N01°05'16"W 95.42'

N84°45'33"E

L=114.68' R=69.79' Δ=94°09'11"
CB=S48°09'52"E CH=102.21'

SET 5/8" IR
(PRM MDA LB 4335)

N01°05'16"W 777.73'

S1°05'16"E 782.09'

S45°51'41"E 1083.19'

170.01'

245.70'

923.53'

NOT INCLUDED

PARCEL NO. 7730800000030
MELVIN RE HOLDINGS LLC
(O.R.B. 6716, PG. 344)

PARCEL NO. 730800000033
FLORIDA POWER & LIGHT CO
(O.R.B. 6725, PG. 2063)

PARCEL NO. 7309-00-00-0031
FLORIDA DEPARTMENT OF TRANSPORTATION
O.R.B. 8396, PG. 805
(AS TO ENCUMBRANCE #7)

WETLAND
4,542,977 SQ.FT.
OR
104.2924 ACRES

WETLAND
4,542,977 SQ. FT.
OR
104.2924 ACRES

WETLAND
21,080 SQ. FT.
OR
0.4839 ACRES

WETLAND
24649 SQ. FT.
OR
0.5659 ACRES

WETLAND LINE (TYP)

FEMA FLOOD ZONE LINE (TYP)

ZONE A

ZONE X

POND

DRAINAGE DITCH (TYP)

SOLID HATCHED AREA REPRESENTS A RESERVATION OF OIL, GAS & MINERALS AND RIGHTS OF INGRESS & EGRESS PER O.R.B. 989, PG. 232; O.R.B. 1876, PG. 1778; O.R.B. 1877, PG. 942 (AS TO ENCUMBRANCE #4)

NE 1/4 OF
SEC 8-17-33

SEC 9-17-33

NOT PLATTED

L=580.72'
R=3435.00'
Δ=9°41'11"

L=1965.02' R=3435.00' Δ=32°46'36"
CB=N21°11'53"W CH=1938.34'

L=2039.39' R=3565.00' Δ=32°46'36"
CB=S21°11'53"E CH=2011.69'

L=580.72'
R=3435.00'
Δ=9°41'11"

130.00'

130.00'

E LINE SECTION 8-17-33
W LINE SECTION 9-17-33

170.01' WIDE UTILITY EASEMENT PER O.R.B. 217 & 930, PG. 55 (AS TO ENCUMBRANCES #2 & 3)

FLOOD PLAIN COMPENSATION EASEMENT PER O.R.B. 8396, PG. 805 (AS TO ENCUMBRANCE #8)

BILLBOARD
LEASE AREA PER O.R.B.
6985, PG. 3244
(AS TO BII ITEM 10)

S27°39'17"E 819.81'

S03°10'20"E 196.67'

S04°15'47"E
91.24'

L=97.25'
R=3989.83'
Δ=1°23'44"
CB=S4°57'34"E
CH=97.25'

7309-00-00-0149
FLORIDA DEPARTMENT OF TRANSPORTATION
O.R.B. 8355, PG. 3937

S38°06'32"W 280.00'

7309-00-00-0141
UTILITIES COMMISION
O.R.B. 4634, PG. 2674

WEST LINE OF O.R.B.
4634, PG. 2674

FD. 5/8" IR (LB 7883)
REPLACED WITH 4"x4"
CM (PRM LB4335)

S34°53'17"W 460.49'

INTERSTATE 95

MATCHLINE "A" – SEE SHEET 2 OF 7

MATCHLINE "D" – SEE SHEET 5 OF 7

MATCHLINE "C" – SEE SHEET 4 OF 7

0 50 100 200
1 INCH = 100 FEET

MARK DOWST & ASSOCIATES, INC.
* ENGINEERS PLANNERS SURVEYORS LB#4335 *
536 NORTH HALIFAX AVENUE, SUITE 100, DAYTONA BEACH, FLORIDA 32118 PH:386-258-7999

ALTA/NSPS LAND TITLE SURVEY — PROJECT # 1351

DRAWN BY: LAT | DRAW DATE: 12/13/21 | CHECKED BY: LHD | SCALE: 1" = 100' | FILE NAME: 1351_suralta_PH3&4-update.dwg

CREW: SC,JB | FIELD DATE: 12/10/21 | F.B./PG.: 217/65-72; 234/42-51,71-72 | SHEET 3 OF 7

C:\Users\...\1351 - Main Property-Shell Pointe_Survey\Civil 3D 2018\1351_suralta_PH3&4-update.dwg Jan 24, 2022 - 12:00pm

MATCHLINE "C" – SEE SHEET 3 OF 7

MATCHLINE "D" – SEE SHEET 5 OF 7

MATCHLINE "F" – SEE SHEET 6 OF 7

MATCHLINE "E" – SEE SHEET 7 OF 7

SOLID HATCHED AREA REPRESENTS A RESERVATION OF OIL, GAS & MINERALS AND RIGHTS OF INGRESS & EGRESS PER O.R.B. 989, PG. 232; O.R.B. 1876, PG. 1778; O.R.B. 1877, PG. 942 (AS TO ENCUMBRANCE #4)

E-W MID-SECTION LINE OF SECTION 8-17-33

FEMA FLOOD ZONE LINE (TYP)

ZONE A

ZONE X

WETLAND LINE (TYP)

DRAINAGE DITCH (TYP)

WETLAND
4,542,977 SQ.FT.
OR
104.2924 ACRES

WILLIAMSON BOULEVARD
(130' R/W PER O.R.B. 8486, PG. 1804)

L=1965.02' R=3435.00' Δ=32°46'36"
CB=N27°11'53"W CH=1938.34'

L=2039.39' R=3565.00' Δ=32°46'36"
CB=S27°11'53"E CH=2011.69'

L=863.77'
R=3565.00'
Δ=13°52'32"

L=801.58'
R=3435.00'
Δ=13°22'41"

L=373.43'
R=3565.00'
Δ=6°00'08"

L=524.55' R=2365.00' Δ=12°42'29"
CB=N32°13'57"W CH=523.47'

L=715.32' R=2235.00' Δ=18°20'16"
CB=S29°25'03"E CH=712.58'

E 1/4 CORNER SECTION 8-17-33
(NOTHING FOUND OR SET)

S45°37'17"W 460.49'

S28°19'14"W 518.53'

S10°54'20"W 540.47'

S6°49'30"W 936.70'

102.21'
S06°49'30"W

REPLACED FD. 5/8" IR
(LB 4475) WITH 4"x4" CM
(PRM MDA LB 4335)

REPLACED FD. 5/8" IR
(LB 7883) WITH 4"x4" CM
(PRM MDA LB 4335)

SET 5/8" IR
(PRM MDA LB 4335)

GATE

10" CMP

24" CMP

24" CPP

WEST LINE OF O.R.B.
4634, PG. 2674

170.00' WIDE UTILITY EASEMENT PER
O.R.B. 921, PG. 27 & 930, PG. 55
(AS TO BII ITEMS 5 & 6)

7309-00-00-0141
UTILITIES COMMISION
O.R.B. 4634, PG. 2674

7308-00-00-0040
UTILITIES COMMISION
O.R.B. 4634, PG. 2674

E LINE SECTION 8-17-33
W LINE SECTION 9-17-33

SEC 9-17-33

NOT PLATTED

SE 1/4 OF
SEC 8-17-33

0 50 100 200
1 INCH = 100 FEET

N78°57'50"W 1007.47'

L=434.54'
R=547.00'
Δ=45°31'00"
CB=N56°12'20"W
CH=423.21'

ARDISIA PARK – PHASES 1 & 2
MAP BOOK 66, PAGES 111-130

203 202 201 200 199 198 197 196 195 194

WETLAND
847292 SQ. FT.
OR
19.4511 ACRES

MARK DOWST & ASSOCIATES, INC.
* ENGINEERS PLANNERS SURVEYORS LB#4335 *
536 NORTH HALIFAX AVENUE, SUITE 100, DAYTONA BEACH, FLORIDA 32118 PH:386-258-7999

ALTA/NSPS LAND TITLE SURVEY				PROJECT # 1351	
DRAWN BY: LAT	DRAW DATE: 12/13/21	CHECKED BY: LHD	SCALE: 1" = 100'	FILE NAME: 1351_suralta_PH3&4-update.dwg	
CREW: SC,JB	FIELD DATE: 12/10/21	F.B./PG.: 217/65-72; 234/42-51,71-72		SHEET 4 OF 7	

Drawing name: V:\DATA\1351 - Marsh Property - Silver Point\1_Survey\Civil 3D\DWG\1351_suralta_PH3&4-update.dwg Jan 24, 2022 12:03pm

MATCHLINE "B" – SEE SHEET 3 OF 7

L=113.90' R=855.00' Δ=7°37'58"
CB=N7°04'40"E CH=113.81'

N01°27'29"W 2614.68'

TRACT BB (LANDSCAPE BUFFER)

DRAINAGE DITCH (TYP)

FEMA FLOOD ZONE LINE (TYP)

TRACT II (NATURAL AREA)

WETLAND 6619.33 SQ. FT. OR 15.1959 ACRES

W LINE SECTION 8-17-33
E LINE SECTION 7-17-33

NOT PLATTED

25' UTILITY EASEMENT PER O.R.B. 5971, PG. 1621 (AS TO ENCUMBRANCE #5)

TRACT DD (UTILITIES)

TRACT E (STORM WATER MANAGEMENT)

TRACT F (STORM WATER MANAGEMENT)

6-17-33-00-00-0051
HAYMAN, LAWRENCE E
O.R.B. 7122, PG. 686

ARDISIA PARK – PHASES 1 & 2
MAP BOOK 66, PAGES 111-130

CONCRETE HEADWALL

36" CMP

6" PVC

TRACT EE (UTILITIES)

TRACT R (COMMON AREA)

N01°27'29"W 26.70'
N01°26'58"W 26.74'(P)

TRACT AA (LANDSCAPE BUFFER)

UPLAND BUFFER

N78°33'24"W 856.31'
S78°31'17"E 856.82'(P)

FD. 5/8" IR (LB 3019)

W 1/4 CORNER SEC 8-17-33
(CORNER DESTROYED)
FD. 4"x4" CM (NO ID-DISTURBED)
1.5'N & 0.2'E

TRACT "H" (CONSERVATION AREA)

TRACT V (STORM WATER MANAGEMENT)

TRACT G (STORM WATER MANAGEMENT)

N10°53'38"E 536.68'

NW 1/4 OF SEC 8-17-33

E-W MID-SECTION LINE OF SECTION 8-17-33

L=352.93'
R=350.00'
Δ=57°46'59"
CB=N17°59'36"W
CH=338.16'

N46°52'51"W 457.72'

N43°07'09"E 157.49'

SW 1/4 OF SEC 8-17-33

SOLID HATCHED AREA REPRESENTS A RESERVATION OF OIL, GAS & MINERALS AND RIGHTS OF INGRESS & EGRESS PER O.R.B. 989, PG. 232; O.R.B. 1876, PG. 1778; O.R.B. 1877, PG. 942 (AS TO ENCUMBRANCE #4)

N-S MID-SECTION LINE OF SECTION 8-17-33

DIRT ROAD

24" CMP

10" PVC

N46°52'03"W 1087.90'

TRACT U (STORM WATER MANAGEMENT)

WETLAND 847292 SQ. FT. OR 19.4511 ACRES

WETLAND LINE (TYP)

N49°08'50"W 60.00'

NORTHERLY BOUNDARY OF VERANO AT VENETIAN BAY

EXHIBIT "B"
DEED OF CONSERVATION EASEMENT
(O.R.B. 7122, PG. 4071)

RETENTION AREA

TRACT "J" (STORMWATER MANAGEMENT AREA)

BELLINO BOULEVARD

TIFFANY HOMES AT VENETIAN BAY, PHASE 1B
MAP BOOK 53, PAGES 189-191

W LINE SECTION 8-17-33
E LINE SECTION 7-17-33
R/W LINE

10.00' ACCESS EASEMENT

25' UPLAND BUFFER

TRACT "D" (STORMWATER MANAGEMENT AREA)

N01°27'14"W 2640.00'(P)
N01°27'29"W 2640.04'(C)

0 50 100 200
1 INCH = 100 FEET

MATCHLINE "G" – SEE SHEET 6 OF 7

MATCHLINE "D" – SEE SHEET 3 OF 7

MARK DOWST & ASSOCIATES, INC.
* ENGINEER'S PLANNERS SURVEYORS LB#4335 *
536 NORTH HALIFAX AVENUE, SUITE 100, DAYTONA BEACH, FLORIDA 32118 PH: 386-258-7999

ALTA/NSPS LAND TITLE SURVEY				PROJECT # 1351	
DRAWN BY: LAT	DRAW DATE: 12/13/21	CHECKED BY: LHD	SCALE: 1" = 100'	FILE NAME: 1351_suralta_PH3&4-update.dwg	
CREW: SC,JB	FIELD DATE: 12/10/21	F.B./PG.: 217/65-72; 234/42-51,71-72		SHEET 5 OF 7	

Drawing name: N:\DWGS\1351 - Melia Property Short Points_Survey\Alta 30-DWGs\1351_suralta_PH3&4-update.dwg Jan 24, 2022 12:01pm

MATCHLINE "G" – SEE SHEET 5 OF 7

MATCHLINE "F" – SEE SHEET 4 OF 7

MATCHLINE "F" – SEE SHEET 7 OF 7

0 50 100 200

1 INCH = 100 FEET

MODENA WAY

MONACO BOULEVARD

TRACT Z (LANDSCAPE BUFFER)

TRACT T (STORM WATER MANAGEMENT)

FD. 5/8" IR (LB 3019)

ZONE A

ZONE X

UPLAND BUFFER

VERANO AT VENETIAN BAY
MAP BOOK 57, PAGES 5–13
TRACT "F"
(STORMWATER MANAGEMENT AREA)

FEMA FLOOD ZONE LINE (TYP)

TRACT "G"
(STORMWATER MANAGEMENT AREA)

DIRT ROAD

TRACT H
(STORM WATER MANAGEMENT)

SOLID HATCHED AREA REPRESENTS A RESERVATION OF OIL, GAS & MINERALS AND RIGHTS OF INGRESS & EGRESS PER O.R.B. 989, PG. 232; O.R.B. 1876, PG. 1778; O.R.B. 1877, PG. 942 (AS TO ENCUMBRANCE #4)

TRACT N
(LIFT STATION)

ARDISIA PARK – PHASES 1 & 2
MAP BOOK 66, PAGES 111–130

N–S MID–SECTION LINE OF SECTION 8–17–33

N–S MID–SECTION LINE OF SECTION 17–17–33

S LINE SECTION 8–17–33
N LINE SECTION 17–17–33

TRACT HH
(NATURAL AREA)

WETLAND LINE (TYP)

WETLAND
847292 SQ. FT.
OR
19.4511 ACRES

WETLAND
199254 SQ. FT.
OR
4.5742 ACRES

DRAINAGE DITCH (TYP)

TRACT I
(STORM WATER MANAGEMENT)

TRACT J
(STORM WATER MANAGEMENT)

NW 1/4 OF
SEC 17–17–33

TRACT "F" (STORMWATER MANAGEMENT AREA)

TRACT Y (LANDSCAPE BUFFER)

NORTHERLY BOUNDARY OF VERANO AT VENETIAN BAY

N77°43'43"W 773.24'(M)
S77°41'14"E 773.48'(P)

MES W/18" RCP

FD. 5/8" IR (NO ID–BENT)
FD. 5/8" IR (ILLEGIBLE)
0.92'S & 9.66'E

TRACT FF (ACCESS, UTILITIES, DRAINAGE AND COMMON AREA)

TRACT X
(LANDSCAPE BUFFER)

TRACT K
(STORM WATER MANAGEMENT)

N49°35'36"E 167.05'(M)
S49°38'34"W 167.05'(P)

FD. 5/8" IR (LB 3019)

FD. 4"x4" CM (NO ID)

398.04'

TRACT GG
(NATURAL AREA)

SE CORNER OF VERANO AT VENETIAN BAY PER M.B. 57, PGS. 5–13

TRACT "H" (WETLAND/ UPLAND PRESERVATION)

PARCEL NO. 731701000000
VENETIAN BAY HOA
(O.R.B. 6766, PG. 3334)

N77°41'11"W 2984.37'(C) N77°41'08"W 2984.37'(P)

1408.53'

TRACT "E"
ACTIVE RECREATION
(GOLF COURSE)

PARCEL NO. 731701000000E
VENETIAN BAY HOA
(O.R.B. 6766, PG. 3366)

VENETIAN BAY PHASE 2–UNIT 1
MAP BOOK 53, PAGES 139–175

PARCEL NO. 731701000000G
VENETIAN BAY HOA

TRACT "G"
(STORMWATER RETENTION)

PARCEL NO. 731701000000G
VENETIAN BAY HOA

N06°38'40"E 1441.31'(M)
N06°38'34"E 1441.74'(P)

L=7.40' R=470.00' Δ=0°54'05"
CB=N40°24'07"E CH=7.40'

146.39'
N46°52'03"W

L=192.14'
R=343.00'
Δ=32°05'47"
CB=N62°54'56"W
CH=189.64'

N78°57'50"W 1007.47'

MARK DOWST & ASSOCIATES, INC.
* ENGINEERS PLANNERS SURVEYORS LB#3335 *
536 NORTH HALIFAX AVENUE, SUITE 100, DAYTONA BEACH, FLORIDA 32118 PH:386–258–7999

ALTA/NSPS LAND TITLE SURVEY				PROJECT #	1351
DRAWN BY: LAT	DRAW DATE: 12/13/21	CHECKED BY: LHD	SCALE: 1" = 100'	FILE NAME:	1351_suralta_PH3&4-update.dwg
CREW: SC,JB	FIELD DATE: 12/10/21	F.B./PG.: 217/65–72; 234/42–51,71–72		SHEET	6 OF 7

P:\Projects X\1000\1351 - Miele Property-Shell Points_Survey\Civil 3D\1000\1351_suralta_PH3&4-update.dwg Jan 24, 2025 12:40pm

MATCHLINE "E" – SEE SHEET 4 OF 7

MATCHLINE "F" – SEE SHEET 6 OF 7

WETLAND
199254 SQ. FT.
OR
4.5742 ACRES
TRACT HH
(NATURAL AREA)

DRAINAGE DITCH (TYP)

ARDISIA PARK – PHASES 1 & 2
MAP BOOK 66, PAGES 111–130

ZONE A

WETLAND LINE (TYP)

WETLAND
847292 SQ. FT.
OR
19.4511 ACRES

FEMA FLOOD
ZONE LINE (TYP)

ZONE X

7308–00–00–0040
UTILITIES COMMISION
O.R.B. 4634, PG. 2674

NOT PLATTED

E LINE SECTION 8–17–33
W LINE SECTION 9–17–33

FD. 5/8" IR
(LB 7883)

WEST LINE OF O.R.B.
4634, PG. 2674

S LINE SECTION 8–17–33
N LINE SECTION 17–17–33

SE CORNER SECTION 8–17–33
(NOTHING FOUND OR SET)

SEC 16–17–33

TRACT I
(STORM WATER MANAGEMENT)

TRACT M
(LIFT STATION)

TRACT S
(COMMON AREA)

TRACT W (LANDSCAPE BUFFER)

6" PVC

SOLID HATCHED AREA
REPRESENTS A RESERVATION OF
OIL, GAS & MINERALS AND RIGHTS
OF INGRESS & EGRESS PER O.R.B.
989, PG. 232; O.R.B. 1876, PG.
1778; O.R.B. 1877, PG. 942
(AS TO BII ITEM 7)

TRACT FF (ACCESS,
UTILITIES, DRAINAGE AND
COMMON AREA)

TRACT K
(STORM WATER MANAGEMENT)

TRACT L
(STORM WATER MANAGEMENT)

TRACT GG
(NATURAL AREA)
WETLAND
131556 SQ. FT.
OR
3.0201 ACRES

TRACT "H"
(WETLAND/UPLAND
PRESERVATION)

NORTH LINE OF VENETIAN
BAY PHASE 2–UNIT 1

FD. 4"x4" CM (NO ID)

PARCEL NO. 7317010000H
VENETIAN BAY HOA
(O.R.B. 6766, PG. 3334)

PARCEL NO. 7317010000E
VENETIAN BAY HOA
(O.R.B. 6766, PG. 3366)

TRACT "E"
ACTIVE RECREATION
(GOLF COURSE)

7' CONCRETE
CART PATH

TRACT "R"
(WETLAND
PRESERVATION)

NE CORNER VENETIAN BAY PHASE 2–UNIT 1
PER M.B. 53, PGS. 139–175
FD. 4"x4" CM (NO ID–DISTURBED)

PARCEL NO. 7317010000R
VENETIAN BAY HOA

7317–00–00–0030
UTILITIES COMMISION
O.R.B. 4634, PG. 2674

NE 1/4 OF
SEC 17–17–33

193
L=434.54'
R=547.00'
Δ=45°31'00"
CB=N56°12'20"W
CH=423.21'

N33°26'50"W 467.49'

L=186.52'
R=547.00'
Δ=19°32'12"
CB=N23°40'44"W
CH=185.61'

S76°05'22"W
151.71'

N80°47'00"W 65.56'

S77°30'33"W 39.93'

S69°02'29"W 46.57'

N73°13'39"W 108.46'

S16°46'21"W
210.37'

S6°49'30"W 936.70'

S16°46'21"W 1578.05'

N27°41'11"W 1572.13'

1085.94'

486.18'

0 50 100 200
1 INCH = 100 FEET

MARK DOWST & ASSOCIATES, INC.
ENGINEERS PLANNERS SURVEYORS LB#3335
536 NORTH HALIFAX AVENUE, SUITE 100, DAYTONA BEACH, FLORIDA 32118 PH:386–258–7999

ALTA/NSPS LAND TITLE SURVEY				PROJECT # 1351	
DRAWN BY: LAT	DRAW DATE: 12/13/21	CHECKED BY: LHD	SCALE: 1" = 100'	FILE NAME: 1351_suralta_PH3&4-update.dwg	
CREW: SC,JB	FIELD DATE: 12/10/21	F.B./PG.: 217/65–72; 234/42–51,71–72	SHEET 7 OF 7		

G:\Projects\1351 – Matia Property\Dwg Data\1_Survey\Civil 3D Data\1351_suralta_PH3&4-update.dwg Jan 24, 2025 12:04pm

ARDISIA PARK - PHASES 3 & 4

LOCATED IN SECTIONS 5, 8 & 17, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA

LEGAL DESCRIPTION:

PARCEL A

A PORTION OF SECTION 8, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA, BEING DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF SAID SECTION 8; THENCE RUN N00°06'47"E, ALONG THE WEST LINE OF SAID SECTION 5, A DISTANCE OF 184.36 FEET TO A POINT ON THE SOUTHERLY RIGHT OF WAY LINE OF PIONEER TRAIL, HAVING A VARIABLE WIDTH RIGHT-OF-WAY; THENCE S79°29'49"E, ALONG SAID RIGHT OF WAY LINE, A DISTANCE OF 1296.54 FEET; THENCE CONTINUE ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE, S79°05'39"E, A DISTANCE OF 1439.05 FEET TO A POINT ON THE WEST LINE OF THE LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 6184, PAGE 784, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE CONTINUE ALONG SAID RIGHT-OF-WAY LINE AND THE EASTERLY EXTENSION THEREOF, S79°44'38"E, A DISTANCE OF 368.42 FEET TO A POINT ON THE NORTHERLY EXTENSION OF THE EAST LINE OF SAID LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 6184, PAGE 784; THENCE S05°51'56"W ALONG SAID EAST LINE, A DISTANCE OF 28.42 FEET TO A POINT ON THE EXISTING SOUTHERLY RIGHT-OF-WAY LINE OF PIONEER TRAIL ACCORDING TO OFFICIAL RECORDS BOOK 8396, PAGE 805, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, AND THE POINT OF BEGINNING; THENCE RUN S74°24'21"E ALONG SAID SOUTHERLY RIGHT OF WAY LINE, A DISTANCE OF 469.68 FEET TO A POINT ON A NON-TANGENT CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 2190.00 FEET, A CENTRAL ANGLE OF 04°00'52", A CHORD BEARING OF S83°02'17"E AND A CHORD DISTANCE OF 153.42 FEET; THENCE EASTERLY ALONG THE ARC OF SAID CURVE AND ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE, A DISTANCE OF 153.45 FEET TO THE END OF SAID CURVE; THENCE DEPARTING SAID CURVE AND SAID SOUTHERLY RIGHT-OF-WAY LINE, RUN S05°41'14"E, A DISTANCE OF 365.97 FEET; THENCE N84°11'24"E, A DISTANCE OF 301.37 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF WILLIAMSON BOULEVARD, HAVING A 130.00 FOOT RIGHT-OF-WAY, AS DESCRIBED IN OFFICIAL RECORDS BOOK 8486, PAGE 1804, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE SOUTHEASTERLY ALONG SAID WESTERLY RIGHT-OF-WAY LINE THE FOLLOWING THREE (3) COURSES; S05°48'36"E, A DISTANCE OF 560.33 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 3565.00 FEET, A CENTRAL ANGLE OF 32°46'36", A CHORD BEARING OF S22°11'53"E AND A CHORD DISTANCE OF 2011.69 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 2039.39 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 2235.00 FEET, A CENTRAL ANGLE OF 18°20'16", A CHORD BEARING OF S29°25'03"E AND A CHORD DISTANCE OF 712.28 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 715.32 FEET TO A POINT ON THE WEST LINE OF THE LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 4634, PAGE 2674, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE S06°49'30"W ALONG SAID WEST LINE, A DISTANCE OF 936.70 FEET; THENCE CONTINUE ALONG SAID WEST LINE S16°46'21"W, A DISTANCE OF 210.37 FEET; THENCE DEPARTING SAID WEST LINE, RUN N73°13'39"W, A DISTANCE OF 108.46 FEET; THENCE S69°02'29"W, A DISTANCE OF 46.57 FEET; THENCE S77°30'33"W, A DISTANCE OF 39.93 FEET; THENCE N80°47'00"W, A DISTANCE OF 65.56 FEET; THENCE S76°05'22"W, A DISTANCE OF 151.71 FEET TO A POINT ON A NON-TANGENT CURVE CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 547.00 FEET, A CENTRAL ANGLE OF 19°32'12", A CHORD BEARING OF N23°40'44"W AND A CHORD DISTANCE OF 185.61 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 186.52 FEET TO THE POINT OF TANGENCY; THENCE N33°26'50"W, A DISTANCE OF 467.49 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 547.00 FEET, A CENTRAL ANGLE OF 45°31'00", A CHORD BEARING OF N56°12'20"W AND A CHORD DISTANCE OF 423.21 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 434.54 FEET TO THE POINT OF TANGENCY; THENCE N78°57'50"W, A DISTANCE OF 1007.47 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 343.00 FEET, A CENTRAL ANGLE OF 32°05'47", A CHORD BEARING OF N62°54'56"W AND A CHORD DISTANCE OF 189.64 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 192.14 FEET TO THE POINT OF TANGENCY; THENCE N46°52'03"W, A DISTANCE OF 146.39 FEET TO A POINT ON A NON-TANGENT CURVE CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 470.00 FEET, A CENTRAL ANGLE OF 00°54'05", A CHORD BEARING OF N40°24'07"E AND A CHORD DISTANCE OF 7.40 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 7.40 FEET; THENCE DEPARTING SAID CURVE, RUN N49°08'50"W, A DISTANCE OF 60.00 FEET; THENCE N46°52'03"W, A DISTANCE OF 1087.90 FEET; THENCE N43°07'09"E, A DISTANCE OF 157.49 FEET; THENCE N46°52'51"W, A DISTANCE OF 457.72 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 350.00 FEET, A CENTRAL ANGLE OF 57°46'29", A CHORD BEARING OF N17°59'36"W AND A CHORD DISTANCE OF 338.16 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 352.93 FEET TO THE POINT OF TANGENCY; THENCE N10°53'38"E, A DISTANCE OF 536.68 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 855.00 FEET, A CENTRAL ANGLE OF 07°37'58", A CHORD BEARING OF N07°04'40"E AND A CHORD DISTANCE OF 113.81 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 113.90 FEET TO THE POINT OF COMPOUND CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 50.00 FEET, A CENTRAL ANGLE OF 82°22'02", A CHORD BEARING OF N37°55'20"W AND A CHORD DISTANCE OF 65.85 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 71.88 FEET TO THE POINT OF TANGENCY; THENCE N79°06'22"W, A DISTANCE OF 118.87 FEET; THENCE N10°53'38"E, A DISTANCE OF 120.00 FEET; THENCE N79°06'22"W, A DISTANCE OF 107.00 FEET; THENCE N10°53'38"E, A DISTANCE OF 50.00 FEET TO A POINT ON A NON-TANGENT CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 25.00 FEET, A CENTRAL ANGLE OF 90°00'00", A CHORD BEARING OF N34°06'22"W AND A CHORD DISTANCE OF 35.36 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 39.27 FEET TO THE POINT OF TANGENCY; THENCE N10°53'38"E, A DISTANCE OF 281.51 FEET; THENCE N06°26'06"E, A DISTANCE OF 195.20 FEET; THENCE S79°06'22"E, A DISTANCE OF 1530.02 FEET; THENCE N10°53'38"E, A DISTANCE OF 525.30 FEET TO THE SOUTHEAST CORNER OF AFORESAID LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 6184, PAGE 784; THENCE N05°51'56"E, ALONG THE EAST LINE OF SAID LANDS, A DISTANCE OF 331.40 FEET TO THE POINT OF BEGINNING.

SAID LANDS CONTAINING 214.98 ACRES, MORE OR LESS.

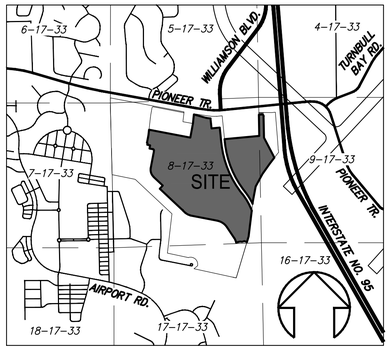
AND

PARCEL B

A PORTION OF SECTIONS 8 AND 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA, BEING DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF SAID SECTION 8; THENCE RUN N00°06'47"E, ALONG THE WEST LINE OF SAID SECTION 5, A DISTANCE OF 184.36 FEET TO A POINT ON THE SOUTHERLY RIGHT OF WAY LINE OF PIONEER TRAIL, HAVING A VARIABLE WIDTH RIGHT-OF-WAY; THENCE S79°29'49"E, ALONG SAID RIGHT OF WAY LINE, A DISTANCE OF 1296.54 FEET; THENCE CONTINUE ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE, S79°05'39"E, A DISTANCE OF 1439.05 FEET TO A POINT ON THE WEST LINE OF THE LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 6184, PAGE 784, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE CONTINUE ALONG SAID RIGHT-OF-WAY LINE AND THE EASTERLY EXTENSION THEREOF, S79°44'38"E, A DISTANCE OF 368.42 FEET TO A POINT ON THE NORTHERLY EXTENSION OF THE EAST LINE OF SAID LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 6184, PAGE 784; THENCE S05°51'56"W ALONG SAID EAST LINE, A DISTANCE OF 28.42 FEET TO A POINT ON THE EXISTING SOUTHERLY RIGHT-OF-WAY LINE OF PIONEER TRAIL ACCORDING TO OFFICIAL RECORDS BOOK 8396, PAGE 805, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE EASTERLY ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE THE FOLLOWING THREE (3) COURSES; S74°24'21"E, A DISTANCE OF 469.68 FEET TO A POINT ON A NON-TANGENT CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 2190.00 FEET, A CENTRAL ANGLE OF 14°56'55", A CHORD BEARING OF S88°30'18"E AND A CHORD DISTANCE OF 569.76 FEET; THENCE EASTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 571.38 FEET TO THE POINT OF TANGENCY; THENCE N84°01'15"E, A DISTANCE OF 15.71 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF WILLIAMSON BOULEVARD, HAVING A 130.00 FOOT RIGHT-OF-WAY, AS DESCRIBED IN OFFICIAL RECORDS BOOK 8486, PAGE 1804, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE S05°48'36"E, ALONG THE EASTERLY RIGHT-OF-WAY LINE OF SAID WILLIAMSON BOULEVARD, A DISTANCE OF 765.67 FEET TO THE SOUTHWEST CORNER OF THE LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 6275, PAGE 2063, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA AND THE POINT OF BEGINNING; THENCE DEPARTING SAID EASTERLY RIGHT-OF-WAY LINE, RUN N84°41'54"E, ALONG THE SOUTH LINE OF SAID LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 6275, PAGE 2063, A DISTANCE OF 1274.30 FEET TO THE SOUTHEAST CORNER OF SAID LANDS, ALSO BEING A POINT ON THE EAST LINE OF THE NORTHEAST 1/4 OF AFORESAID SECTION 8; THENCE N01°05'16"W, ALONG THE EAST LINE OF SAID LANDS AND THE EAST LINE OF SAID SECTION 8, A DISTANCE OF 777.73 FEET TO A POINT ON THE AFORESAID SOUTHERLY RIGHT-OF-WAY LINE OF PIONEER TRAIL AS RECORDED IN OFFICIAL RECORDS BOOK 8396, PAGE 805; THENCE N84°45'33"E, ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE, A DISTANCE OF 95.42 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 69.79 FEET, A CENTRAL ANGLE OF 94°09'11", A CHORD BEARING OF S48°09'52"E AND A CHORD DISTANCE OF 102.21 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE AND ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE, A DISTANCE OF 114.68 FEET TO A POINT ON THE EAST LINE OF THAT CERTAIN 170.00 FOOT WIDE UTILITY EASEMENT AS DESCRIBED IN OFFICIAL RECORDS BOOK 921, PAGE 27, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE DEPARTING SAID RIGHT-OF-WAY LINE, RUN S01°05'16"E, ALONG SAID EAST LINE, A DISTANCE OF 782.09 FEET TO A POINT ON THE SOUTHWESTERLY BOUNDARY OF THE LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 8396, PAGE 805 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE S27°38'37"E ALONG SAID SOUTHWESTERLY BOUNDARY, A DISTANCE OF 819.81 FEET TO A POINT ON THE WESTERLY LINE OF THE LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 4634, PAGE 2674, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE RUN ALONG SAID WEST LINE THE FOLLOWING FIVE (5) COURSES: S38°06'32"W, A DISTANCE OF 280.00 FEET; THENCE S34°53'17"W, A DISTANCE OF 460.49 FEET; THENCE S28°19'14"W, A DISTANCE OF 518.53 FEET; THENCE S10°54'20"W, A DISTANCE OF 540.47 FEET; THENCE S06°49'30"W, A DISTANCE OF 102.21 FEET TO A POINT ON AFORESAID EASTERLY RIGHT-OF-WAY LINE OF WILLIAMSON BOULEVARD; SAID POINT BEING A POINT ON A CURVE CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 2365.00 FEET, A CENTRAL ANGLE OF 12°42'29", A CHORD BEARING OF N32°13'57"W AND A CHORD DISTANCE OF 523.47 FEET; THENCE NORTHWESTERLY ALONG SAID EASTERLY RIGHT-OF-WAY LINE THE FOLLOWING THREE (3) COURSES; NORTHWESTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 524.55 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 3435.00 FEET, A CENTRAL ANGLE OF 32°46'36", A CHORD BEARING OF N22°11'53"W AND A CHORD DISTANCE OF 1938.34 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 1965.02 FEET TO THE POINT OF TANGENCY; THENCE N05°48'36"W, A DISTANCE OF 122.15 FEET TO THE POINT OF BEGINNING.

SAID LANDS CONTAINING 60.83 ACRES, MORE OR LESS.



VICINITY MAP: NOT TO SCALE

SHEET INDEX

SHEET 1:	COVER & DESCRIPTION
SHEET 2:	GENERAL NOTES, LEGEND, AND TRACT AND LOT TABLES
SHEET 3:	OVERALL BOUNDARY DIMENSIONS
SHEET 4:	KEY MAP
SHEETS 5-25:	DETAIL SHEETS

CERTIFICATE OF APPROVAL BY CITY ATTORNEY

THIS IS TO CERTIFY THAT ON _____, THE FOREGOING PLAT WAS APPROVED.

BY: _____
CITY ATTORNEY

MAP BOOK: PAGE:

DEDICATION

KNOW ALL MEN BY THESE PRESENTS, TAYLOR MORRISON OF FLORIDA, INC., A FLORIDA CORPORATION, UNDER THE LAWS OF THE STATE OF FLORIDA, BEING THE OWNER IN FEE SIMPLE OF THE LANDS DESCRIBED IN THE ATTACHED PLAT, ENTITLED ARDISIA PARK PHASES 3 & 4, LOCATED IN THE CITY OF NEW SMYRNA BEACH, VOLUSIA COUNTY, FLORIDA, HEREBY DEDICATES SAID LANDS AND PLAT FOR THE USES AND PURPOSES THEREIN EXPRESSED AND HEREBY DEDICATES: (1) ALL STREETS SHOWN OR DESCRIBED HEREON TO THE PERPETUAL USE OF THE PUBLIC; (2) TRACTS A, B, C, D, E, F, G, H, I, J, K AND L TO THE ARDISIA PARK HOMEOWNERS ASSOCIATION, INC. FOR STORMWATER MANAGEMENT WITH AN EASEMENT FOR DRAINAGE PURPOSES FROM ROADWAYS DEDICATED TO THE CITY OF NEW SMYRNA BEACH, FLORIDA OVER TRACTS A, B, C, D, E, F, G, H, I, J, K AND L; (3) TRACTS M AND N IN FEE SIMPLE TO THE UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH, FLORIDA (UCNSB) FOR SANITARY LIFT STATIONS; (4) TRACTS O, P, Q, R AND X TO THE ARDISIA PARK HOMEOWNERS ASSOCIATION, INC. FOR NATURAL AREAS; (5) TRACT S TO THE ARDISIA PARK HOMEOWNERS ASSOCIATION, INC. FOR UTILITIES AND OPEN SPACE; (6) TRACT T TO THE CITY OF NEW SMYRNA BEACH, FLORIDA FOR PUBLIC PARK AND NATURAL AREA; (7) TRACT U TO THE ARDISIA PARK HOMEOWNERS ASSOCIATION, INC. FOR AMENITY AND COMMON AREA; (8) TRACT V TO THE ARDISIA PARK HOMEOWNERS ASSOCIATION, INC. FOR UTILITIES, AND HEREBY GRANT AN EASEMENT FOR UTILITIES TO THE UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH, FLORIDA OVER TRACT V FOR PROPER USE AND PURPOSES; (9) TRACT W TO RETAINED BY TAYLOR MORRISON OF FLORIDA, INC. FOR FUTURE DEVELOPMENT; (10) ALL POTABLE WATER, RECLAIMED WATER, SANITARY SEWER MAINS, ELECTRIC AND SANITARY FORCE MAINS CONSTRUCTED WITHIN THE AREA ENCOMPASSED WITHIN THE PLAT ARE DEDICATED TO THE UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH, FLORIDA.

IN WITNESS WHEREOF, TAYLOR MORRISON OF FLORIDA, INC., HAS CAUSED THESE PRESENTS TO BE SIGNED THIS _____ DAY OF _____, 20_____.

SIGNED AND SEALED IN THE PRESENCE OF:

_____ _____

PRINTED NAME: _____ PRINTED NAME: _____

BY: TAYLOR MORRISON OF FLORIDA, INC.
2600 LAKE LUCIEN DR., SUITE 350
MAITLAND, FL 32751

BY _____
PRINTED NAME _____

STATE OF _____
COUNTY OF _____

I HEREBY CERTIFY THAT ON THIS DAY BEFORE ME, A NOTARY PUBLIC OF THE STATE OF FLORIDA, GARY MELVIN, AS MANAGER OF GWM REAL ESTATE II, LLC, AN ILLINOIS LIMITED LIABILITY COMPANY, SOLE MEMBER OF SHELL POINT COLONY HOMEOWNERS ASSOCIATION, INC., KNOWN TO ALL MEN TO BE THE PERSON WHO EXECUTED THE FOREGOING CERTIFICATION AND DEDICATION AS OWNER.

WITNESS MY HAND AND SEAL IN THE COUNTY AND STATE NAMED ABOVE THIS _____ DAY OF _____ _____, 20_____.

_____
NOTARY PUBLIC
STATE OF FLORIDA
MY COMMISSION EXPIRES: _____

CERTIFICATE OF SURVEYOR

KNOW ALL MEN BY THESE PRESENTS, THAT THE UNDERSIGNED, BEING A LICENSED AND REGISTERED LAND SURVEYOR IN THE STATE OF FLORIDA, DOES HEREBY CERTIFY THAT ON JULY 13, 2017, THE SURVEY WAS COMPLETED OF THE LANDS SHOWN ON THE ATTACHED PLAT; THAT SAID PLAT IS A TRUE AND CORRECT REPRESENTATION OF THE LANDS THEREIN DESCRIBED AND PLATTED; THAT THE BOUNDARY SURVEY WAS MADE UNDER MY RESPONSIBLE DIRECTION AND SUPERVISION AND MEETS THE REQUIREMENTS OF 5J-17.050 THROUGH 5J-17.052 FAC, MINIMUM TECHNICAL STANDARDS; THAT THE PLAT WAS PREPARED UNDER MY DIRECTION AND SUPERVISION, AND COMPLIES WITH ALL THE SURVEY REQUIREMENTS OF CHAPTER 177, PART 1, F.S., AND THAT SAID LAND IS LOCATED IN VOLUSIA COUNTY, FLORIDA.

_____ DATE _____
LEE H. DOWST, P.L.S. NO. 6860
MARK DOWST & ASSOCIATES, INC., LB NO. 4335
536 N. HALIFAX AVENUE, SUITE NO. 100
DAYTONA BEACH, FLORIDA 32118

CERTIFICATE OF APPROVAL BY THE CITY OF NEW SMYRNA BEACH

THIS IS TO CERTIFY, THAT ON _____ THE FOREGOING PLAT WAS APPROVED BY THE CITY OF NEW SMYRNA BEACH.

BY: _____
MAYOR

ATTEST: _____
CITY CLERK

REVIEW OF SURVEYOR AND MAPPER FOR THE CITY OF NEW SMYRNA BEACH

I HEREBY CERTIFY TO THE CITY THAT I HAVE REVIEWED THE FOREGOING PLAT FOR COMPLIANCE WITH THE REQUIREMENTS OF CHAPTER 177, PART I, FLORIDA STATUTES, AND HAVE PROVIDED BOTH THE CITY OF NEW SMYRNA BEACH AND THE SURVEYOR OF RECORD A LIST OF DEVIATIONS, IF ANY, FROM SAID REQUIREMENTS.

_____ DATE: _____
(PRINTED NAME)

P.L.S. NO. _____

CERTIFICATE OF CLERK

I HEREBY CERTIFY THAT I HAVE EXAMINED THE FOREGOING PLAT AND FIND THAT COMPLIES IN FORM WITH ALL OF THE REQUIREMENTS OF CHAPTER 177, PART I, FLORIDA STATUTES, AND WAS FILED FOR RECORD ON _____, FILE NUMBER _____,

_____
CLERK OF THE CIRCUIT COURT
IN AND FOR VOLUSIA COUNTY, FLORIDA

PREPARED BY:
MARK DOWST & ASSOCIATES, INC.
* ENGINEERS PLANNERS SURVEYORS LB#4335 *
536 NORTH HALIFAX AVENUE, SUITE 100, DAYTONA BEACH, FLORIDA 32118
PHONE: 386-258-7999 EMAIL: MDOWST@MDAENG.COM

SHEET 1 OF 25

NO.	DATE	APPR.	REVISION
5	06/03/25	LHD	REVISED LIFT STATION TRACTS AND UTILITY EASEMENTS PER COMMENTS.
4	04/01/25	LHD	REVISED TO ASS MISSING PARCEL TO PARCEL B.
3	01/02/25	LHD	REVISED PER CITY COMMENTS.
2	09/09/24	LHD	REVISED PER NEW CIVIL SITE PLAN AND CITY COMMENTS.
1	11/13/23	LHD	REVISE PER NEW R/W TAKINGS AND PHASE 1 & 2 COMMENTS.

MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7999 LB 4335

SCALE	DESIGNED	DRAWN	CHECKED	DATE
N/A	LAT	LAT	LHD	02/06/24

FINAL

BY DATE

RECORD PLAT

ARDISIA PARK

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 | 1 RECORD PLAT

Drawing name: K:\DWGS\1351 - Melvin Property-Shell Point_Survey\Civil 3D-DWGs\1351_surplat-ph3-4(4).dwg Plot: 51 Jun 25, 2025 10:31am by: lmb

ARDISIA PARK - PHASES 3 & 4

LOCATED IN SECTIONS 8 & 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA

MAP BOOK: PAGE:

LOT AREA TABLE

LOT #	AREA IN SQ.FT.
320	8579.79
321	9240.00
322	9248.61
323	8987.38
324	8987.38
325	8921.68
326	8580.00
327	8580.00
328	8580.00
329	8580.00
330	8830.55
331	8937.74
332	8937.74
333	8937.74
334	8627.46
335	8580.00
336	8580.00
337	8580.00
338	8580.00
339	8580.00
340	8580.00
341	8925.21
342	8987.38
343	8987.38
344	8693.65
345	8580.00
346	8580.00
347	8580.00
348	8580.00
349	8240.00
350	8240.00
351	8580.00
352	9782.42
353	9781.94
354	8580.48
355	8580.00
356	8579.96
357	8579.97
358	9782.40
359	9782.42
360	8817.67
361	8937.74
362	8937.74
363	8937.74
364	8619.03
365	8580.00
366	8834.61
367	8579.52
368	8580.00
369	8580.00
370	9945.79
371	10333.99
372	8779.93
373	7934.89
374	6961.65
375	6958.54
376	6702.21
377	6600.00
378	6600.00
379	6600.00
380	6600.00
381	6600.00
382	6600.00
383	6600.00
384	6600.00
385	7353.68
386	7875.98
387	8952.93
388	9008.61
389	8021.35
390	7565.41
391	6797.54
392	6600.00
393	6600.00
394	6600.00
395	6600.00
396	6600.00
397	6600.00
398	7260.00
399	7260.00
400	7260.00
401	7260.00
402	7260.00
403	7260.00
404	8132.03
405	9905.99
406	9905.99
407	7973.95

LOT AREA TABLE

LOT #	AREA IN SQ.FT.
408	7260.00
409	7260.00
410	7260.00
411	7260.00
412	7260.00
413	7260.00
414	7260.00
415	7260.00
416	7500.76
417	7562.36
418	7562.36
419	7260.00
420	7260.00
421	8077.09
422	9072.61
423	9072.61
424	7682.50
425	7260.00
426	7307.95
427	7465.80
428	7465.80
429	7465.80
430	7465.80
431	7465.80
432	7465.80
433	7465.80
434	7463.42
435	7260.00
436	7260.00
437	7260.00
438	7260.00
439	7260.00
440	7260.00
441	7260.00
442	7260.00
443	9429.35
444	8462.42
445	7258.50
446	6600.00
447	6600.00
448	7260.00
449	7260.00
450	7260.00
451	7260.00
452	7260.00
453	7260.00
454	7260.00
455	7260.00
456	7260.00
457	7260.00
458	7260.00
459	7260.00
460	7260.00
461	7260.00
462	7277.44
463	7479.70
464	7479.70
465	7479.70
466	7479.70
467	7479.70
468	7479.70
469	7301.87
470	7260.00
471	7514.95
472	8177.36
473	8177.36
474	8177.36
475	8177.36
476	8177.36
477	8177.36
478	7676.06
479	7260.00
480	7260.00
481	7260.00
482	7260.00
483	7260.00
484	7260.00
485	7260.00
486	7536.70
487	8076.39
488	8076.39
489	8076.39
490	8076.39
491	8076.39
492	8076.39
493	7906.88
494	7260.00
495	7260.00

LOT AREA TABLE

LOT #	AREA IN SQ.FT.
496	7260.00
497	7260.00
498	7264.27
499	7464.47
500	7464.47
501	7464.47
502	7464.47
503	7464.47
504	7464.47
505	7464.47
506	7413.42
507	7260.00
508	7260.00
509	7260.00
510	7260.00
511	7260.00
512	7260.00
513	7260.00
514	7260.00
515	7260.00
516	7260.00
517	7260.00
518	7260.00
519	7260.00
520	7260.00
521	7260.00
522	7260.00
523	7260.00
524	7260.00
525	7260.00
526	7260.00
527	7260.00
528	7260.00
529	7260.00
530	7260.00
531	7412.07
532	7478.09
533	7478.09
534	7478.09
535	7478.09
536	7478.09
537	7478.09
538	7290.38
539	7260.00
540	7260.00
541	7260.00
542	7260.00
543	7650.53
544	7840.12
545	7840.12
546	7840.12
547	7840.12
548	7840.12
549	7840.12
550	7840.12
551	7840.12
552	7840.12
553	7807.87
554	7260.00
555	7260.00
556	7260.00
557	7260.00
558	7260.00
559	7260.00
560	7260.00
561	7260.00
562	7260.00
563	7260.00
564	7260.00
565	7260.00
566	7260.00
567	8580.00
568	8580.00
569	8580.00
570	8580.00
571	8580.00
572	8958.48
573	9329.26
574	9329.26
575	9329.26
576	11807.38
577	9911.28
578	9329.26
579	9146.83
580	8580.00
581	8580.00
582	8580.00
583	8580.00

LOT AREA TABLE

LOT #	AREA IN SQ.FT.
584	8580.00
585	8580.00
586	8580.00
587	8580.00
588	8580.00
589	8580.00
590	8580.00
591	8580.00
592	8580.00
593	8580.00
594	9782.42
595	9782.42
596	8876.72
597	9942.98
598	9942.98
599	9645.06
600	8580.00
601	8580.00
602	8580.00
603	8588.26
604	9412.92
605	9412.92
606	9412.92
607	9412.92
608	9412.92
609	8715.30
610	8580.00
611	8580.00
612	8580.00
613	8580.00
614	8580.00
615	8580.00
616	8580.00
617	8580.00
618	8580.00
619	8580.00
620	8580.00
621	8580.00
622	8580.00
623	8580.00
624	8580.00
625	8580.00
626	8580.00
627	8580.00
628	9658.31
629	9721.42
630	9721.42
631	9721.42
632	9721.42
633	9085.70
634	8580.00
635	8580.00
636	8580.00
637	8580.00
638	8580.00
639	12868.33
640	9854.22
641	9854.22
642	9854.22
643	9854.22
644	8620.10
645	8580.00
646	8580.00
647	8580.00
648	8580.00
649	8580.00
650	8580.00
651	8580.00
652	8580.00
653	8580.00
654	8580.00
655	8580.00
656	8615.30
657	9854.22
658	9854.22
659	9854.22
660	9854.22
661	9854.22
662	9854.22
663	9854.22
664	9854.22
665	9160.60
666	8580.00
667	8580.00
668	8580.00
669	8580.00
670	9985.56
671	11712.58

LOT AREA TABLE

LOT #	AREA IN SQ.FT.
672	11712.58
673	11320.02
674	8580.00
675	8580.00
676	8580.00
677	8580.00
678	8580.00
679	8580.00
680	8580.00
681	8580.00
682	8580.00
683	8580.00
684	8580.00
685	8580.00
686	9143.11
687	11712.58

SETBACK REQUIREMENTS:

LANDSCAPE BUFFERS:
NORTH: 20.00'
SOUTH: 20.00'
EAST: 20.00'
WEST: 20.00'

BUILDING SETBACKS:
FRONT (LIVING & PORCHES): 17.50'
FRONT (GARAGES): 22.50'
REAR: 25.00'
SIDE: 5.00' (FROM EDGE OF EAVE)
MINIMUM RESIDENTIAL BUILDING SPACING: 10.00' (FROM EDGE OF EAVE)
MINIMUM RESIDENTIAL BUILDING SIZE: 1,500 SQ. FT.
MAXIMUM RESIDENTIAL BUILDING HEIGHT: 35.00'

TRACT TABLE

TRACT NAME	PURPOSE	ACREAGE
TRACT A	STORMWATER MANAGEMENT	13.846
TRACT B	STORMWATER MANAGEMENT	11.201
TRACT C	STORMWATER MANAGEMENT	3.953
TRACT D	STORMWATER MANAGEMENT	3.984
TRACT E	STORMWATER MANAGEMENT	4.634
TRACT F	STORMWATER MANAGEMENT	9.247
TRACT G	STORMWATER MANAGEMENT	0.161
TRACT H	STORMWATER MANAGEMENT	0.061
TRACT I	STORMWATER MANAGEMENT	0.064
TRACT J	STORMWATER MANAGEMENT	0.131
TRACT K	STORMWATER MANAGEMENT AND COMMON AREA	6.397
TRACT L	STORMWATER MANAGEMENT AND COMMON AREA	13.558
TRACT M	LIFT STATION	0.057
TRACT N	LIFT STATION	0.053
TRACT O	NATURAL AREA	27.968
TRACT P	NATURAL AREA	12.049
TRACT Q	NATURAL AREA	14.348
TRACT R	NATURAL AREA	27.278
TRACT S	UTILITIES AND COMMON AREA	8.513
TRACT T	PARK AND NATURAL AREA	20.000
TRACT U	AMENITY AND COMMON AREA	5.856
TRACT V	UTILITIES	0.359
TRACT W	FUTURE DEVELOPMENT	0.843
TRACT X	NATURAL AREA	5.038

LEGEND AND ABBREVIATIONS:

±	MORE OR LESS
AC	ACRES
CB	CHORD BEARING
CH	CHORD DISTANCE
℄	CENTER LINE
CM	CONCRETE MONUMENT
D.E.	DRAINAGE EASEMENT
ESMT.	EASEMENT
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FIRM	FLOOD (FLORIDA) INSURANCE RATE MAP
FD.	FOUND
ID	IDENTIFICATION
IP	IRON PIPE
IR	IRON ROD
L	ARC LENGTH
LB	LICENSED BUSINESS
M.B.	MAP BOOK
N/D	NAIL & DISK
NO.	NUMBER
(NR)	NON-RADIAL
O.R.B.	OFFICIAL RECORDS BOOK
PAE	PEDESTRIAN ACCESS EASEMENT
P.B.	PLAT BOOK
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCP	PERMANENT CONTROL POINT
PG(S).	PAGE/PAGES
PLS	PROFESSIONAL LAND SURVEYOR
PRC	POINT OF REVERSE CURVATURE
PRM	PERMANENT REFERENCE MONUMENT
PSM	PROFESSIONAL SURVEYOR MAPPER
PT	POINT OF TANGENCY
R	RADIUS
(R)	RADIAL
R/W	RIGHT OF WAY
SEC	SECTION-TOWNSHIP-RANGE
S.F.	SQUARE FEET
U.E	UTILITY EASEMENT
(TYP)	TYPICAL
W/	WITH
Δ	CENTRAL ANGLE
⌇	BREAK LINE
─┼─	INDICATES CHANGE IN DIRECTION
⊡	SET 4"x4" CM (PRM LB 4335)
■	FOUND 4"x4" CM (AS NOTED)
◬	SET N/D (PCP LB 4335)
◎	FOUND N/D (AS NOTED)
⊡	SET 5/8" IRC (PRM LB 4335)
●	FOUND IRON ROD (AS NOTED)
◯	FOUND IRON PIPE (AS NOTED)

GENERAL NOTES:

1. BEARINGS SHOWN HEREON ARE BASED ON THE FLORIDA STATE PLANE GRID COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (NAD 83), WITH A BEARING ALONG THE WEST LINE OF THE NORTHWEST 1/4 OF SECTION 8, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA AS BEING N01°27'29"W.
2. ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP (FIRM) NO. 12127C00517J AND 12127C0525H, VOLUSIA COUNTY, FLORIDA, REVISED DATE OF FEBRUARY 19, 2014, THE PROPERTY DESCRIBED HEREON LIES WITHIN ZONE(S) "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AND "A" (NO BASE FLOOD ELEVATION DETERMINED).
3. DISTANCES SHOWN HEREON ARE IN FEET AND DECIMALS THEREOF. ALL MEASUREMENTS REFER TO THE HORIZONTAL PLANE IN ACCORDANCE WITH THE DEFINITION OF THE U.S. SURVEY FOOT OR METER ADOPTED BY THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY. ALL MEASUREMENTS SHALL USE THE 39.27/12=3.28083333333 EQUATION FOR CONVERSION FROM U.S. FOOT TO METERS. DIMENSIONS SHOWN ON THIS PLAT ARE IN U.S. GROUND FEET AND DECIMALS THEREOF.
4. ALL CURVILINEAR LINES SHOWN HEREON ARE RADIAL UNLESS OTHERWISE NOTED.
5. ALL PLATTED UTILITY EASEMENTS SHALL PROVIDE THAT SUCH EASEMENTS SHALL ALSO BE EASEMENTS FOR THE CONSTRUCTION, INSTALLATION, MAINTENANCE AND OPERATION OF CABLE TELEVISION SERVICES; PROVIDED, HOWEVER, NO SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE OR OPERATION OF CABLE TELEVISION SERVICES SHALL INTERFERE WITH THE FACILITIES AND SERVICES OF AN ELECTRIC, TELEPHONE, GAS, OR OTHER PUBLIC UTILITY.
6. NOTICE: THIS PLAT, AS RECORDED IN IT'S GRAPHIC FORM, IS THE OFFICIAL DEPICTION OF THE SUBDIVIDED LANDS DESCRIBED HEREIN AND WILL IN NO CIRCUMSTANCES BE SUPPLANTED IN AUTHORITY BY ANY OTHER GRAPHIC OR DIGITAL FORM OF THE PLAT. THERE MAY BE ADDITIONAL RESTRICTIONS THAT ARE NOT RECORDED ON THIS PLAT THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY.
7. ALL LOTS AND TRACTS ARE SUBJECT TO A UTILITY EASEMENT ALONG THE FRONT AND STREET SIDE LOT LINES ABUTTING ALL ROAD RIGHT-OF-WAYS AS SHOWN HEREON.
8. THE COVENANTS AND RESTRICTIONS FOR ARDISIA PARK HOMEOWNERS ASSOCIATION, INC. ARE RECORDED IN O.R. BOOK _____, PAGE _____ OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.
9. THE ARTICLES OF INCORPORATION OF THE ARDISIA PARK HOMEOWNERS ASSOCIATION, INC., A FLORIDA NOT FOR PROFIT CORPORATION, WERE FILED ON APRIL 20, 2024, AND ASSIGNED DOCUMENT NUMBER N23000011589 WITH THE FLORIDA DEPARTMENT OF STATE, AS AMENDED.
10. ALL UTILITY EASEMENTS SHOWN HEREON ARE GRANTED AND CONVEYED TO ANY PUBLIC OR PRIVATE UTILITY, AND ARE SEVERABLE, NON-EXCLUSIVE EASEMENTS, GRANTING THE RIGHT TO CONSTRUCTION, OPERATION, MAINTENANCE AND REPAIR UNDERGROUND PUBLIC UTILITY SYSTEMS (INCLUDING WIRES, CABLES, CONDUITS AND ABOVE GROUND APPURTENANT EQUIPMENT) UNLESS OTHERWISE INDICATED.
11. TRACTS A, B, C, D, E, F, G, H, I AND J ARE HEREBY DESIGNATED FOR STORMWATER MANAGEMENT AND SHALL BE THE SOLE RESPONSIBILITY OF THE ARDISIA PARK HOMEOWNERS ASSOCIATION, INC. TO MAINTAIN IN COMPLIANCE WITH THE DESIGN AND PERMITTED CONDITIONS.
12. TRACTS K AND L ARE HEREBY DESIGNATED FOR STORMWATER MANAGEMENT AND COMMON AREAS AND SHALL BE THE SOLE RESPONSIBILITY OF THE ARDISIA PARK HOMEOWNERS ASSOCIATION, INC. TO MAINTAIN IN COMPLIANCE WITH THE DESIGN AND PERMITTED CONDITIONS.
13. TRACTS M AND N ARE HEREBY DESIGNATED FOR THE INSTALLATION AND MAINTENANCE OF LIFT STATIONS TO BE CONVEYED IN FEE SIMPLE TO THE UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH, FLORIDA.
14. TRACTS O, P, Q, R AND X ARE HEREBY DESIGNATED FOR NATURAL AREAS TO BE CONVEYED TO THE ARDISIA PARK HOMEOWNERS ASSOCIATION, INC. THESE NATURAL AREAS INCLUDE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRMWD) APPROVED WETLAND LIMITS AND A 25' MINIMUM UPLAND BUFFER AND ARE TO BE MAINTAINED IN THEIR NATURAL STATE. NO DEVELOPMENT OR CONSTRUCTION SHALL BE PERMITTED IN THESE AREAS WITHOUT APPROVAL FROM THE OFFICIAL GOVERNING ENTITY.
15. TRACT S IS HEREBY DESIGNATED FOR COMMON AREA AND UTILITIES TO BE CONVEYED TO THE ARDISIA PARK HOMEOWNERS ASSOCIATION, INC.; SAID TRACT IS SUBJECT TO A RIGHT-OF-WAY AGREEMENT FOR FLORIDA POWER & LIGHT COMPANY AS RECORDED IN OFFICIAL RECORDS BOOK 921, PAGE 27, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.
16. TRACT T IS HEREBY DESIGNATED FOR A PARK AND NATURAL AREA TO BE CONVEYED TO THE CITY OF NEW SMYRNA BEACH, FLORIDA. THE NATURAL AREAS INCLUDE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRMWD) APPROVED WETLAND LIMITS AND A 25' MINIMUM UPLAND BUFFER AND ARE TO BE MAINTAINED IN THEIR NATURAL STATE. NO DEVELOPMENT OR CONSTRUCTION SHALL BE PERMITTED IN THESE AREAS WITHOUT APPROVAL FROM THE OFFICIAL GOVERNING ENTITY.
17. TRACT U IS HEREBY DESIGNATED FOR AMENITY AND COMMON AREA TO BE CONVEYED TO THE ARDISIA PARK HOMEOWNERS ASSOCIATION, INC. AND SHALL BE THE SOLE RESPONSIBILITY OF THE ARDISIA PARK HOMEOWNERS ASSOCIATION, INC. TO MAINTAIN IN COMPLIANCE WITH THE DESIGN AND PERMITTED CONDITIONS.
18. TRACT V IS HEREBY DESIGNATED FOR UTILITIES TO BE CONVEYED TO THE ARDISIA PARK HOMEOWNERS ASSOCIATION, INC. AND SHALL BE THE SOLE RESPONSIBILITY OF THE ARDISIA PARK HOMEOWNERS ASSOCIATION, INC. TO MAINTAIN IN COMPLIANCE WITH THE DESIGN AND PERMITTED CONDITIONS.
19. TRACT W IS HEREBY DESIGNATED FOR FUTURE DEVELOPMENT TO BE RETAINED BY TAYLOR MORRISON OF FLORIDA, INC. AND SHALL BE THE SOLE RESPONSIBILITY OF THE TAYLOR MORRISON OF FLORIDA, INC. TO MAINTAIN IN COMPLIANCE WITH THE DESIGN AND PERMITTED CONDITIONS.
20. ALL SIDE LOT LINES ARE SUBJECT TO A 2.50 FOOT DRAINAGE EASEMENT FOR THE PURPOSE OF MAINTENANCE OF DRAINAGE FACILITIES, WITH FOREGOING EASEMENTS RESERVED AND DEDICATED TO ARDISIA PARK HOMEOWNERS ASSOCIATION, INC., ITS SUCCESSORS AND ASSIGNS.
21. THIS PLAT CONTAINS A TOTAL OF 24 TRACTS.
22. THIS PLAT CONTAINS 368 LOTS WITH A MINIMUM LOT SIZE OF 6,600.00 SQUARE FEET AND AN AVERAGE LOT SIZE OF 7,892.60 SQUARE FEET.
23. THE TOTAL RIGHT-OF-WAY FOR ALL ROADWAYS WITHIN THE PLAT CONTAIN 16.784 ACRES.
24. THE TOTAL LINEAR FEET OF STREETS IS 14,112.73 LINEAR FEET.
25. ALL PERMANENT CONTROL POINTS WILL BE PLACED ONCE ROADS HAVE BEEN COMPLETED PER F.S. 177.091.9.
26. ALL LOT AND TRACT CORNERS WILL BE SET PRIOR TO ANY TRANSFER OF LOTS OR TRACTS IN ACCORDANCE WITH F.S. 177.091.9.

PREPARED BY:
MARK DOWST & ASSOCIATES, INC.
* ENGINEERS PLANNERS SURVEYORS LB#4335 *
536 NORTH HALIFAX AVENUE, SUITE 100, DAYTONA BEACH, FLORIDA 32118
PHONE: 386-258-7999 EMAIL: MDOWST@MDAENG.COM

NO.	DATE	APPR.	REVISION

MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS
EB 4335 LB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7999

SCALE	DESIGNED	DRAWN	CHECKED	DATE
400'	LAT	LAT	LHD	02/06/24
FINAL			BY	DATE

RECORD PLAT
ARDISIA PARK
NEW SMYRNA BEACH, FLORIDA

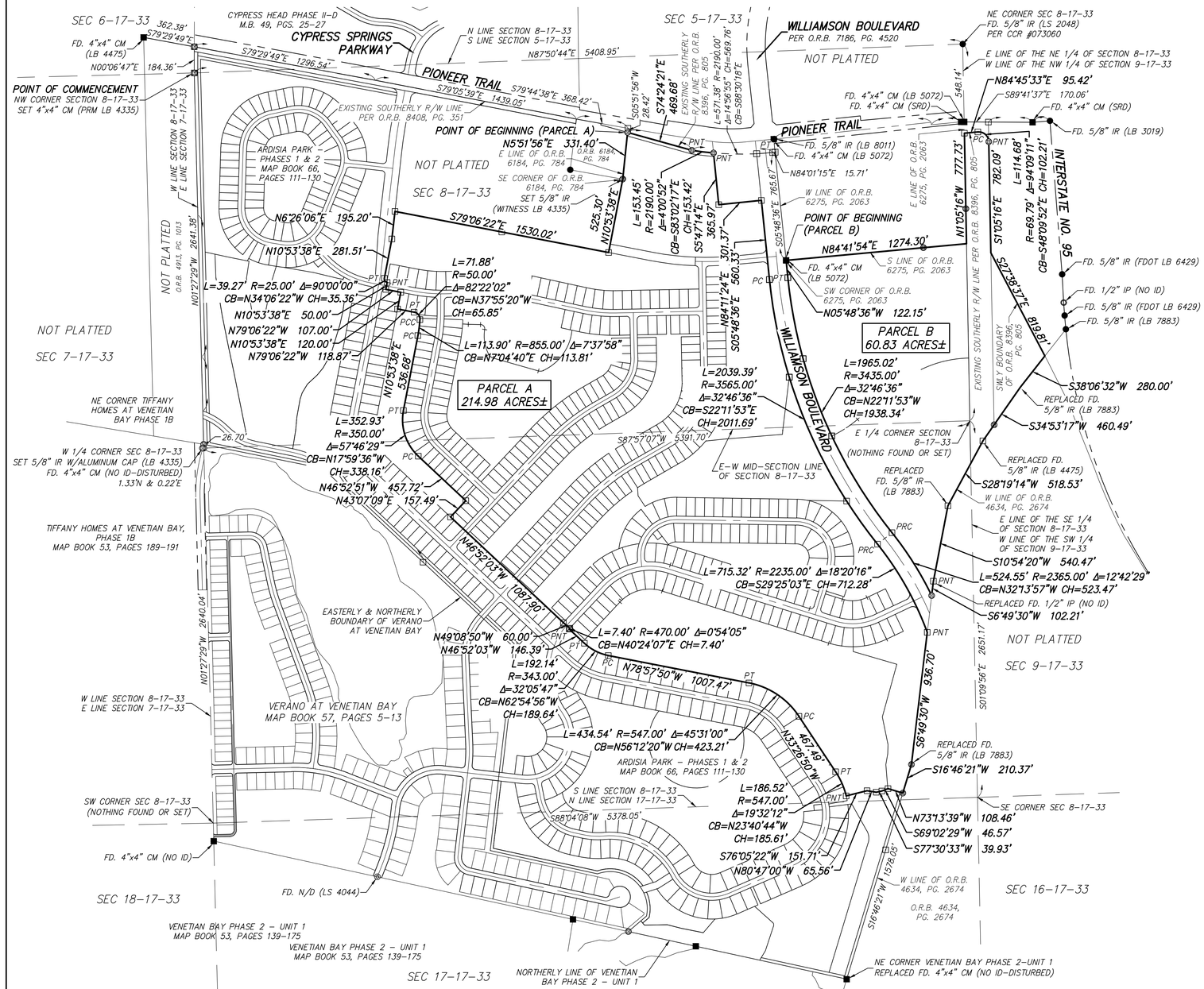
PROJECT NO. 1351 | 2
RECORD PLAT

Drawing name: V:\DWGS\1351 - Melvin Property-Shell Pointe_Survey\Civil 3D-DWGs\1351_surplat-ph3-4(4).dwg Plat S2 Jun 11, 2025 1:52pm by: lthib

ARDISIA PARK - PHASES 3 & 4

LOCATED IN SECTIONS 8 & 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA

MAP BOOK: PAGE:



BOUNDARY DETAIL SHEET

PREPARED BY:
MARK DOWST & ASSOCIATES, INC.
* ENGINEERS PLANNERS SURVEYORS LB#4335 *
536 NORTH HALIFAX AVENUE, SUITE 100, DAYTONA BEACH, FLORIDA 32118
PHONE: 386-258-7999 EMAIL: MDOWST@MDAENG.COM

SHEET 3 OF 25

REVISION

NO.	DATE	APPR.

MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS
EB 4335 LB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7999

DESIGNED	DRAWN	CHECKED	DATE
LAT	LAT	LHD	02/06/24

SCALE 400' FINAL BY

RECORD PLAT

ARDISIA PARK

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351

3

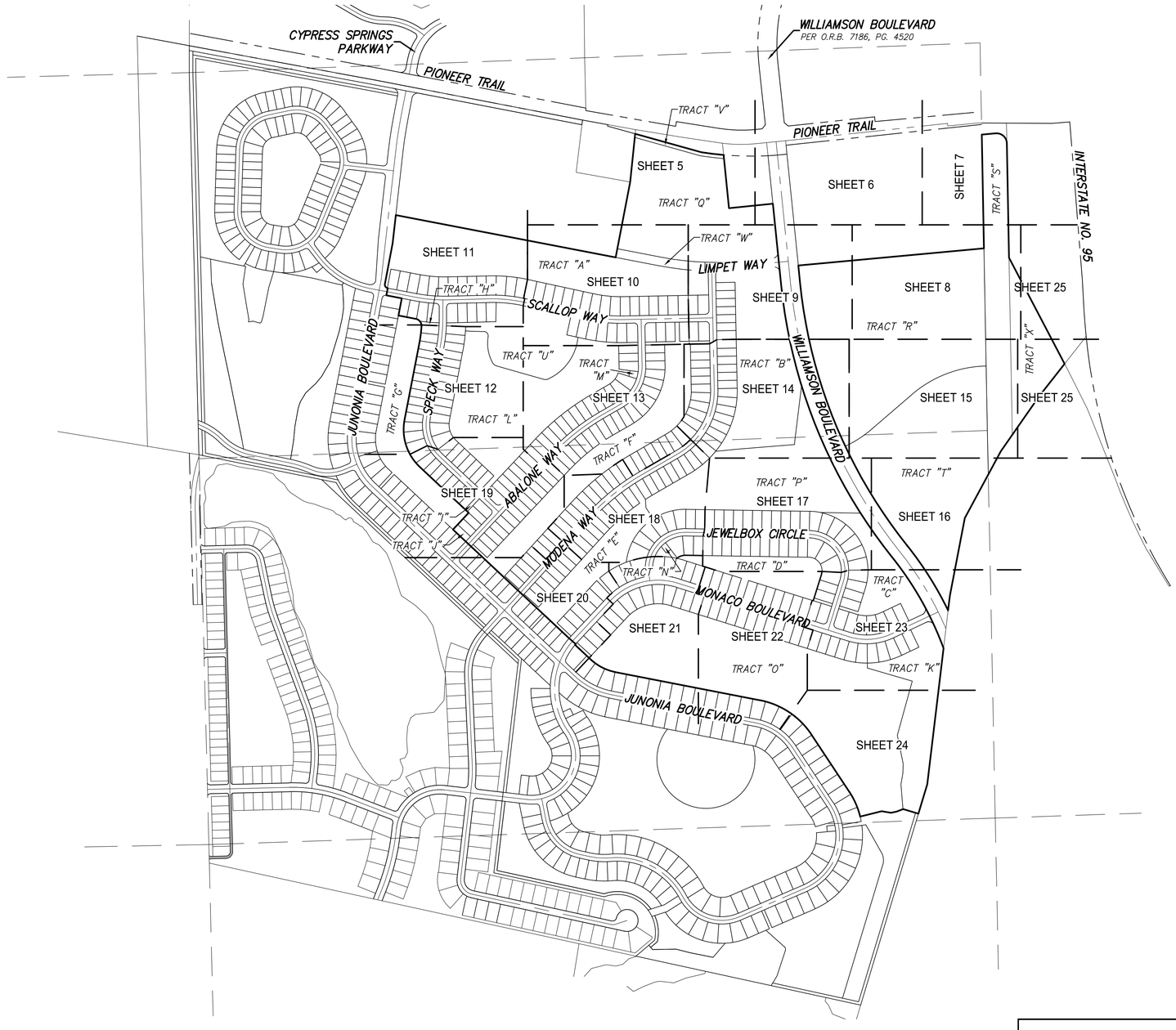
RECORD PLAT

Drawing name: V:\2JMDS\1351 - Marvin Property-Shell Points_Survey\Civil 3D-2JMDS\1351_surplat-ph3-4(4).dwg Plot: 53 Jun 11, 2025 1:33pm by: hhb

ARDISIA PARK - PHASES 3 & 4

LOCATED IN SECTIONS 8 & 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA

MAP BOOK: PAGE:



KEY SHEET

PREPARED BY:
MARK DOWST & ASSOCIATES, INC
* ENGINEERS PLANNERS SURVEYORS LB#4335 *
536 NORTH HALIFAX AVENUE, SUITE 100, DAYTONA BEACH, FLORIDA 32118
PHONE: 386-258-7999 EMAIL: MDOWST@MDAENG.COM

REVISION

NO.	DATE	APPR.

MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS
EB 4335 LB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7999

SCALE	DESIGNED	DRAWN	CHECKED	DATE
400'	LAT	LAT	LHD	02/06/24

FINAL

RECORD PLAT

ARDISIA PARK

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 | 4

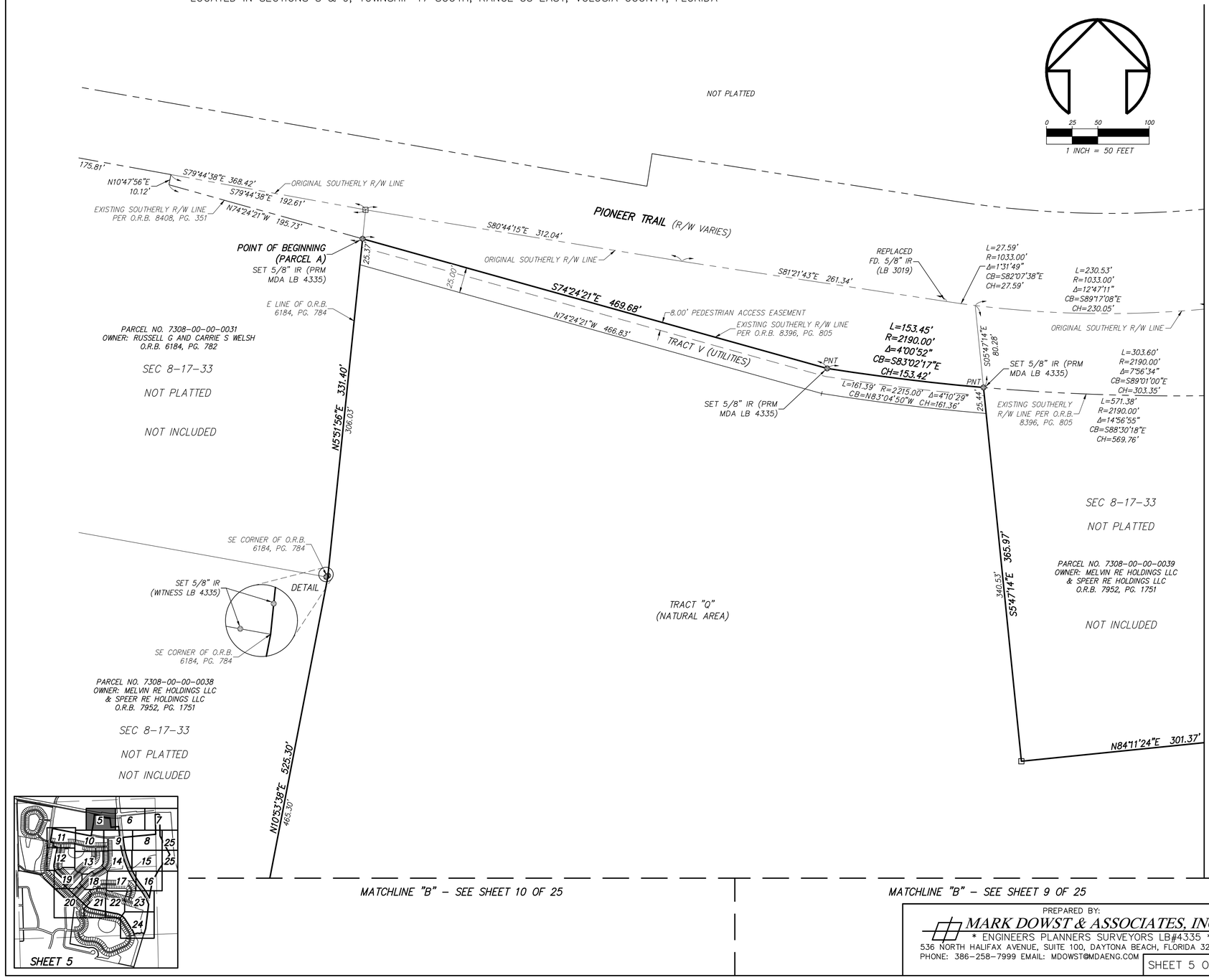
RECORD PLAT

Drawing name: V:\DWGS\1351 - Melvin Property-Sheet Pointe_Survey\Civil 3D-DWGs\1351_surplat-ph3-4(4).dwg Plot: 54 Jun 11, 2024 1:34pm by: ithb

ARDISIA PARK - PHASES 3 & 4

LOCATED IN SECTIONS 8 & 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA

MAP BOOK: PAGE:



PREPARED BY:
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536 NORTH HALIFAX AVENUE, SUITE 100, DAYTONA BEACH, FLORIDA 32118
PHONE: 386-258-7999 EMAIL: MDOWST@MDAENG.COM

SHEET 5 OF 25

NO.	DATE	APPR.	REVISION

MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS
EB 4335 LB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7999

SCALE	DESIGNED	DRAWN	CHECKED	DATE
50'	LAT	LAT	LHD	02/06/24
FINAL			BY	DATE

RECORD PLAT
ARDISIA PARK PHASE 3-4
NEW SMYRNA BEACH, FLORIDA

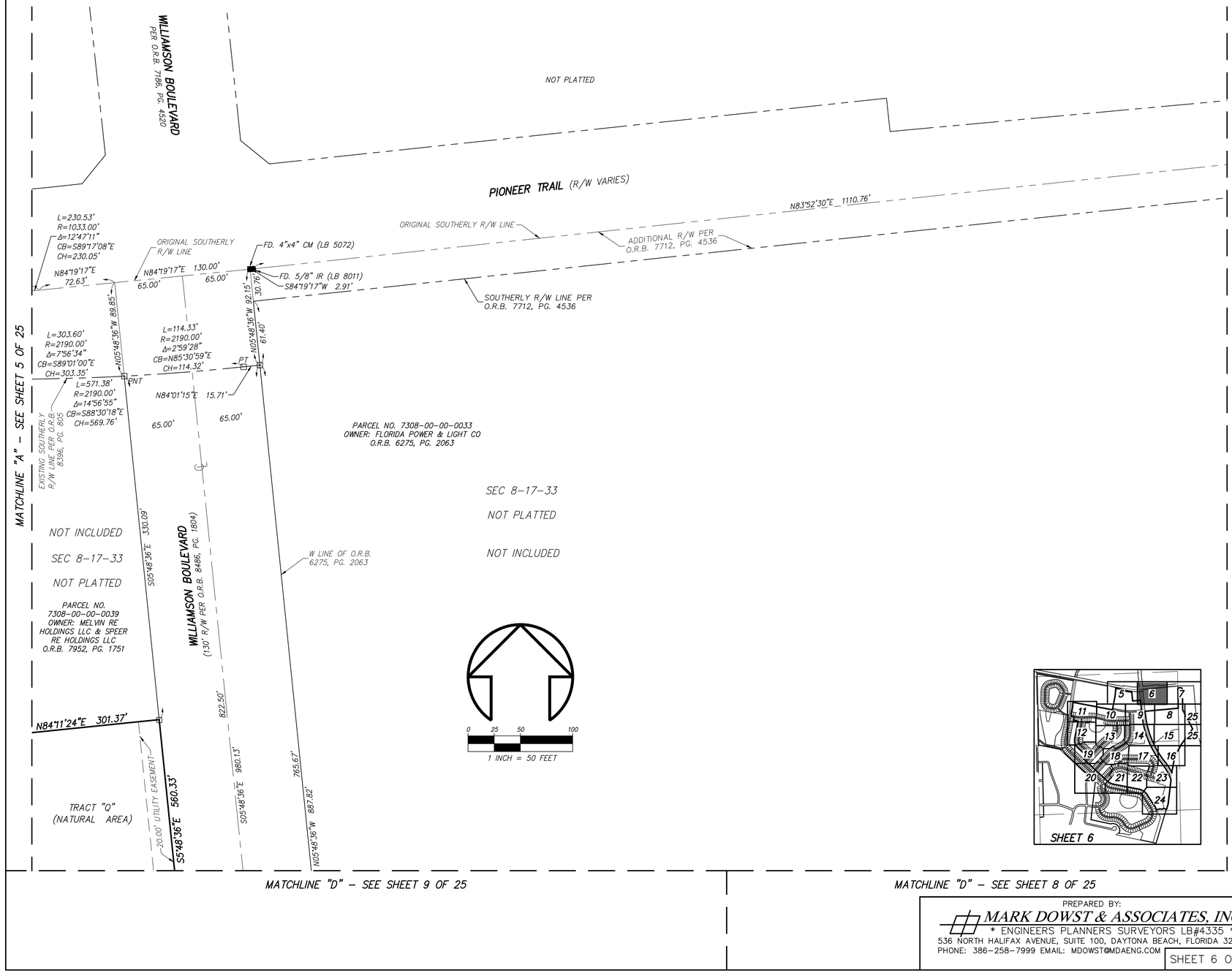
PROJECT NO. 1351 | 5
RECORD PLAT

Drawing name: V:\1351\1351 - Melvin Property-Shell Pointe_Survey\Dwg 3D-DWGs\1351_surpid-ph3-4(4).dwg Plot SS Jun 11, 2025 1:38pm by: mhb

ARDISIA PARK - PHASES 3 & 4

LOCATED IN SECTIONS 8 & 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA

MAP BOOK: PAGE:



PREPARED BY:
MARK DOWST & ASSOCIATES, INC.
* ENGINEERS PLANNERS SURVEYORS LB#4335 *
536 NORTH HALIFAX AVENUE, SUITE 100, DAYTONA BEACH, FLORIDA 32118
PHONE: 386-258-7999 EMAIL: MDOWST@MDAENG.COM

SHEET 6 OF 25

REVISION

NO.	DATE	APPR.

MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS
EB 4335 LB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7999

SCALE	DESIGNED	DRAWN	CHECKED	DATE
50'	LAT	LAT	LHD	02/06/24
FINAL			BY	DATE

RECORD PLAT

ARDISIA PARK PHASE 3-4

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 6

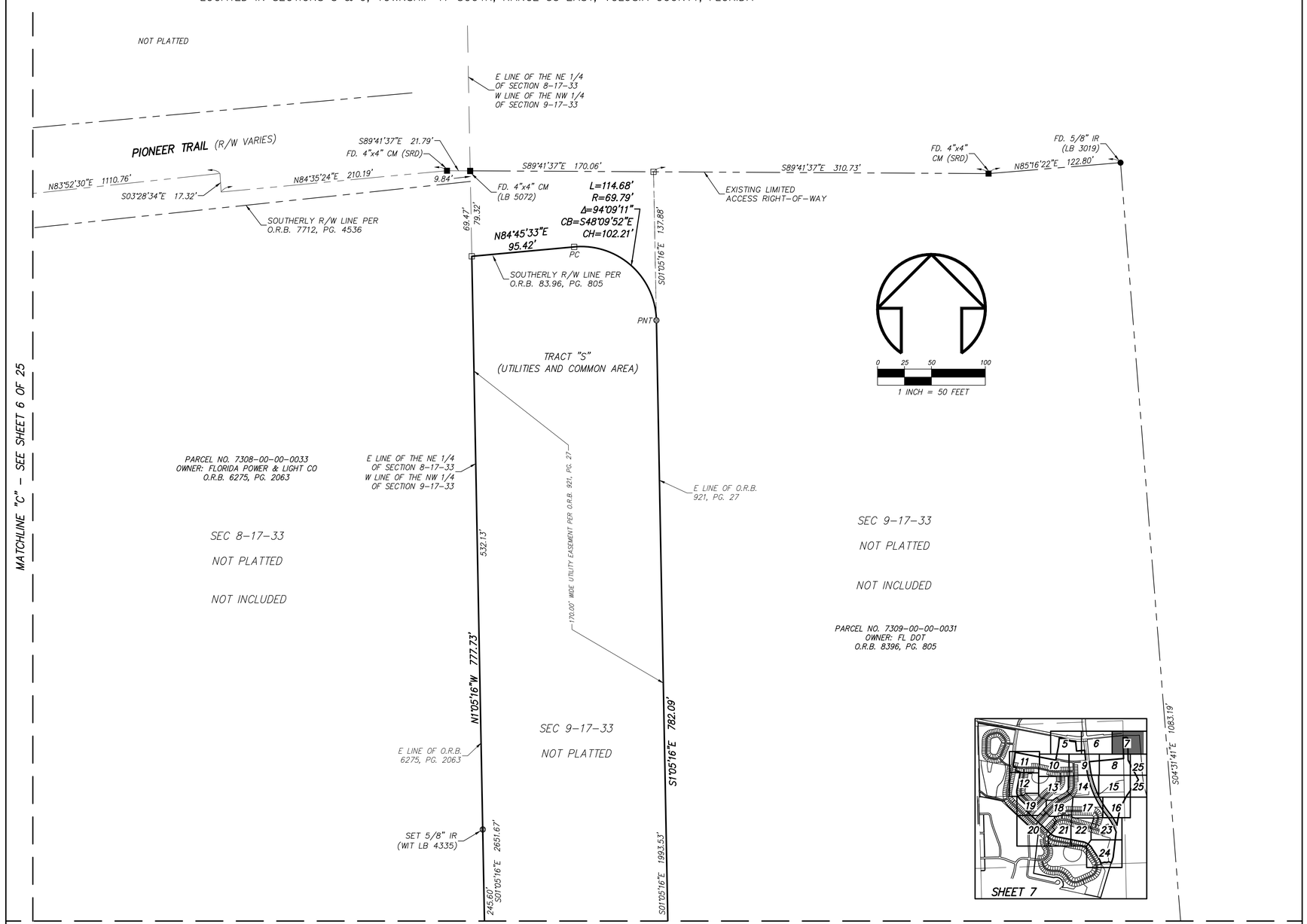
RECORD PLAT

Drawing name: V:\DWGS\1351 - Melvin Property-Sheet Points_Survey\Civil 3D-DWGs\1351_ardisia-ph3-4(4).dwg Plot: 5th Jun 11, 2025 1:35pm by: tmb

ARDISIA PARK - PHASES 3 & 4

LOCATED IN SECTIONS 8 & 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA

MAP BOOK: PAGE:



PREPARED BY:
MARK DOWST & ASSOCIATES, INC.
* ENGINEERS PLANNERS SURVEYORS LB#4335 *
536 NORTH HALIFAX AVENUE, SUITE 100, DAYTONA BEACH, FLORIDA 32118
PHONE: 386-258-7999 EMAIL: MDOWST@MDAENG.COM

SHEET 7 OF 25

NO.	DATE	APPR.	REVISION

MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS
EB 4335 LB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7999

SCALE	DESIGNED	DRAWN	CHECKED	DATE
50'	LAT	LAT	LHD	02/06/24

BY DATE

FINAL

RECORD PLAT

ARDISIA PARK PHASE 3-4

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 7

RECORD PLAT

Drawing name: k:\dwgs\1351 - Melvin Property-Sheet Packet_Survey\Civil 3D-DWGs\1351_surplat-ph3-4(4).dwg Plot: 07 Jun 11, 2025 1:36pm by: tlhb

ARDISIA PARK - PHASES 3 & 4

LOCATED IN SECTIONS 8 & 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA

MAP BOOK: PAGE:

MATCHLINE "D" – SEE SHEET 6 OF 25

MATCHLINE "E" – SEE SHEET 7 OF 25

MATCHLINE "F" – SEE SHEET 9 OF 25

MATCHLINE "GG" – SEE SHEET 25 OF 25

MATCHLINE "G" – SEE SHEET 15 OF 25

0 25 50 100

1 INCH = 50 FEET

SEC 8–17–33

NOT PLATTED

NOT INCLUDED

PARCEL NO. 7308–00–00–0033
OWNER: FLORIDA POWER & LIGHT CO
O.R.B. 6275, PG. 2063

E LINE OF O.R.B. 6275, PG. 2063

N1°05'16"W 777.73'

245.60'

S01°05'16"E 2651.67'

S LINE OF O.R.B. 6275, PG. 2063

SET 5/8" IR (WIT LB 4335)

304.79'

UNABLE TO SET PRM (FALLS IN WATER)

N84°41'54"E 1274.30'

969.51'

E LINE OF O.R.B. 921, PG. 27

S1°05'16"E 782.09'

PARCEL NO. 7309–00–00–0031
OWNER: FEC
O.R.B. 8396, PG. 805

SEC 9–17–33

NOT PLATTED

NOT INCLUDED

S21°38'37"E 819.81'

SWLY BOUNDARY OF O.R.B. 8396, PG. 805

E LINE OF THE NE 1/4 OF SECTION 8–17–33
W LINE OF THE NW 1/4 OF SECTION 9–17–33

170.00' WIDE UTILITY EASEMENT PER O.R.B. 921, PG. 27

S01°05'16"E 1993.53'

TRACT "R"
(NATURAL AREA)

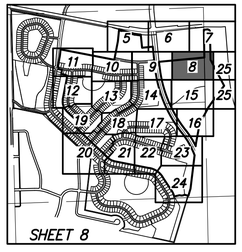
TRACT "S"
(UTILITIES AND COMMON AREA)

806.08'

TRACT "X"
(NATURAL AREA)

FLOOD PLAIN COMPENSATION EASEMENT PER O.R.B. 8396, PG. 805

1211.45'



PREPARED BY:
MARK DOWST & ASSOCIATES, INC.
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536 NORTH HALIFAX AVENUE, SUITE 100, DAYTONA BEACH, FLORIDA 32118
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SHEET 8 OF 25

REVISION

NO.	DATE	APPR.

MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS
EB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258–7999

SCALE	50'	DESIGNED	LAT	DRAWN	LAT	CHECKED	LHD	DATE	02/06/24
								BY	DATE

FINAL

RECORD PLAT

ARDISIA PARK PHASE 3–4

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351

8

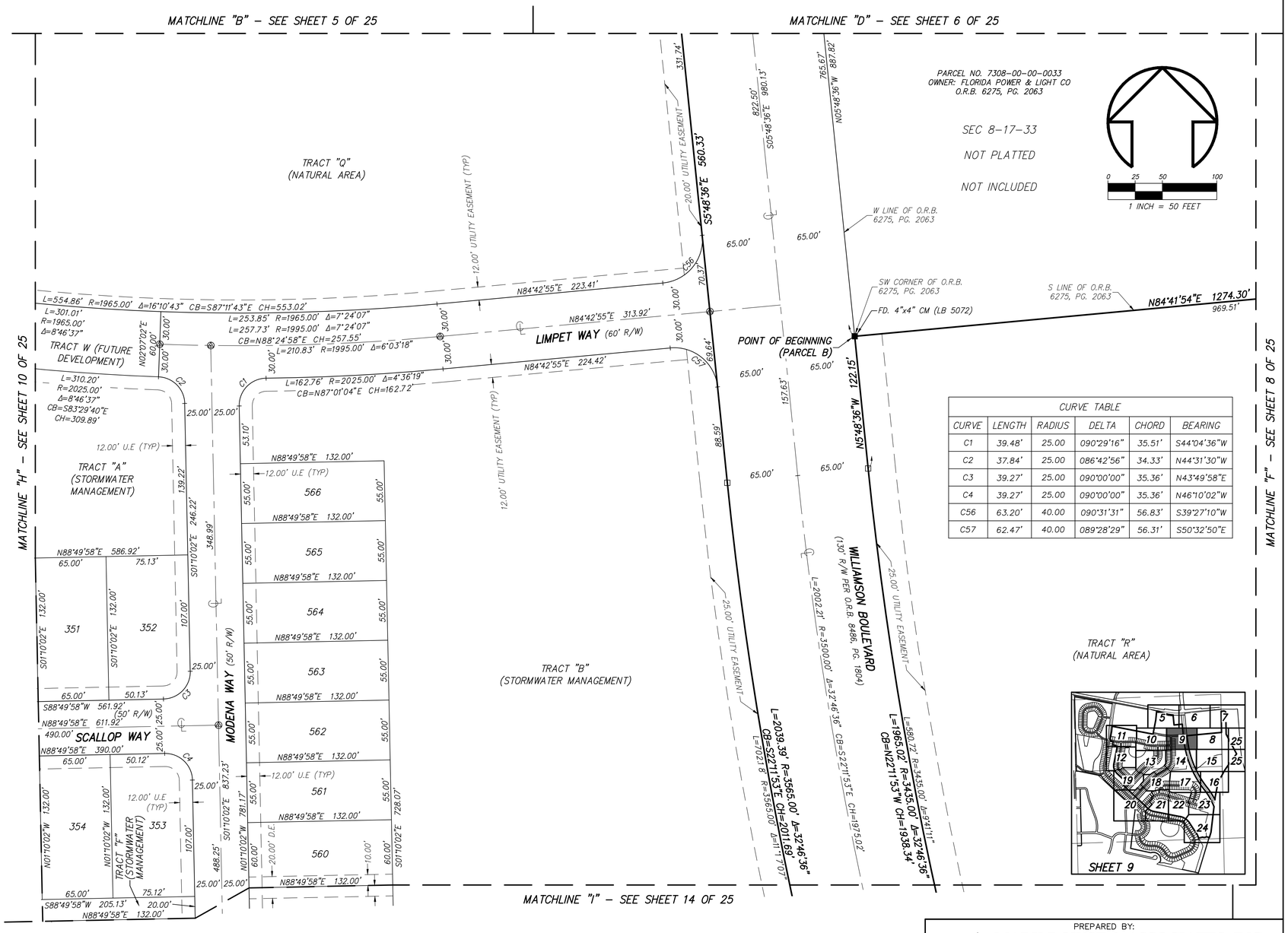
RECORD PLAT

Drawing name: V:\DWGS\1351 – Melvin Property–Sheet Points_Survey\Civil 3D–DWGs\1351_survplt–ph3–4(4).dwg Plot: 58 Jun 24, 2025 11:52am by: ithib

ARDISIA PARK - PHASES 3 & 4

LOCATED IN SECTIONS 8 & 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA

MAP BOOK: PAGE:



CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD	BEARING
C1	39.48'	25.00	090°29'16"	35.51'	S44°04'36"W
C2	37.84'	25.00	086°42'56"	34.33'	N44°31'30"W
C3	39.27'	25.00	090°00'00"	35.36'	N43°49'58"E
C4	39.27'	25.00	090°00'00"	35.36'	N46°10'02"W
C56	63.20'	40.00	090°31'31"	56.83'	S39°27'10"W
C57	62.47'	40.00	089°28'29"	56.31'	S50°32'50"E

PREPARED BY:
MARK DOWST & ASSOCIATES, INC.
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PHONE: 386-258-7999 EMAIL: MDOWST@MDAENG.COM

SHEET 9 OF 25

REVISION

NO.	DATE	APPR.

MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS
EB 4335 LB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7999

SCALE	DESIGNED	DRAWN	CHECKED
50'	LAT	LAT	LHD
FINAL			

DATE 02/06/24 BY DATE

RECORD PLAT

ARDISIA PARK PHASE 3-4

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351

9

RECORD PLAT

Drawing name: V:\2025\1351 - Marvin Property-Shell Points_Survey\Civil 3D-CMDs\1351_surplat-ph3-4(4).dwg Plot By Jun 11, 2025 1:36pm by: mbb

ARDISIA PARK - PHASES 3 & 4

LOCATED IN SECTIONS 8 & 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA

MAP BOOK: PAGE:

MATCHLINE "B" – SEE SHEET 5 OF 24

SEC 8–17–33

NOT PLATTED

PARCEL NO. 7308–00–00–0038
OWNER: MELVIN RE HOLDINGS LLC
& SPEER RE HOLDINGS LLC
O.R.B. 7952, PG. 1751

0 25 50 100
1 INCH = 50 FEET

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD	BEARING
C5	39.27'	25.00	090°00'00"	35.36'	S43°49'58"W
C6	39.27'	25.00	090°00'00"	35.36'	N46°10'02"W
C7	240.09'	1025.00	013°25'14"	239.54'	S84°27'25"E
C8	234.23'	1000.00	013°25'14"	233.70'	S84°27'25"E
C9	228.38'	975.00	013°25'14"	227.86'	S84°27'25"E
C10	39.27'	25.00	090°00'00"	35.36'	S57°15'12"W
C11	39.27'	25.00	090°00'00"	35.36'	N32°44'48"W

S79°06'22"E 1530.02'

765.01'

N10°53'38"E 525.30'

465.30'

TRACT "Q"
(NATURAL AREA)

12.00' UTILITY EASEMENT (TYP)

S79°06'22"E 306.45'

L=554.86' R=1965.00' Δ=16°10'43"
CB=S87°11'43"E CH=553.02'

L=301.01'
R=1965.00'
Δ=8°46'37"

TRACT W (FUTURE DEVELOPMENT)

S79°06'22"E 306.45'

L=310.20' R=2025.00' Δ=8°46'37"
CB=S83°29'40"E CH=309.89'

SHEET 10

MATCHLINE "J" – SEE SHEET 11 OF 25

MATCHLINE "H" – SEE SHEET 9 OF 25

L=275.28'
R=1157.00'
Δ=13°37'56"
CB=N84°33'46"W
CH=274.64'

TRACT "A"
(STORMWATER MANAGEMENT)

S11°46'47"W 132.00'

56.34'

L=9.56'
R=1157.00'
Δ=0°28'25"

L=8.47'
R=1025.00'
Δ=0°28'25"

56.34'

25.00'

65.00' 65.00' 65.00' 65.00' 65.00' 65.00' 65.00' 65.00' 65.00' 65.00' 65.00' 65.00' 65.00' 65.00' 65.00' 65.00' 65.00'

S77°44'48"E 456.28'

334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350

S12°15'12"W 132.00'

12.00' U.E (TYP)

L=197.46' R=843.00' Δ=13°25'14"
CB=S84°27'25"E CH=197.01'

L=53.49'
R=843.00'
Δ=3°38'09"

L=63.14'
R=843.00'
Δ=4°17'30"

9.93'

L=61.87'
R=975.00'
Δ=3°38'09"

S08°37'03"W 132.00'

S04°19'33"W 132.00'

L=73.03'
R=975.00'
Δ=4°17'30"

C9

L=46.80'
L=17.68'
R=843.00'
Δ=1°12'06"

L=20.45'
R=975.00'
Δ=1°12'06"

S00°02'04"W 132.00'

N88°49'58"E 586.92'

10.00'

20.00' D.E.

S01°10'02"E 132.00'

SCALLOP WAY (50' R/W)

S77°44'48"E 456.28'

333.39'

N77°44'48"W 456.28'

C8

S88°49'58"W 561.92'

N88°49'58"E 611.92'

490.00'

121.92'
N88°49'58"E
71.92'

25.00'

C7

L=63.61'
R=1025.00'
Δ=3°33'21"

L=42.28'
R=1025.00'
Δ=2°21'49"

21.80'

50.13'

C6

C5

N88°49'58"E 390.00'

29.75'

TRACT "U"
(AMENITY AND COMMON AREA)

12.00' U.E (TYP)

N12°15'12"E 132.00'

N11°51'50"E 131.99'

N08°18'29"E 132.00'

N04°45'07"E 132.00'

N01°11'46"E 132.00'

N01°10'02"W 132.00'

S01°10'02"E 132.00'

365 364 363 362 361 360 359 358 357 356 355

L=6.97'
R=1024.99'
Δ=0°23'22"

L=7.86'
R=1157.00'
Δ=0°23'22"

L=71.81'
R=1157.00'
Δ=3°33'21"

L=47.73'
R=1157.00'
Δ=2°21'49"

107.00'

266.95'

316.95'

ABALONE WAY (50' R/W)

N77°44'48"W 77.61'

57.88'

45.27'

N77°44'48"W

L=364.10'
R=350.00'
Δ=59°36'13"
CB=N35°20'22"E
CH=347.90'

L=271.01'

R=1157.00'

CB=S84°27'25"E CH=270.39'

S88°49'58"W 96.92'

N88°49'58"E 132.00'

20.00'

75.13'

TRACT "L"
(STORMWATER MANAGEMENT AND COMMON AREA)

TRACT "F"
(STORMWATER MANAGEMENT)

S88°49'57"W 205.13'

S88°49'58"W 205.13'

N88°49'58"E 132.00'

MATCHLINE "J" – SEE SHEET 12 OF 25

MATCHLINE "K" – SEE SHEET 13 OF 25

PREPARED BY:
MARK DOWST & ASSOCIATES, INC.
* ENGINEERS PLANNERS SURVEYORS LB#4335 *
536 NORTH HALIFAX AVENUE, SUITE 100, DAYTONA BEACH, FLORIDA 32118
PHONE: 386–258–7999 EMAIL: MDOWST@MDAENG.COM

SHEET 10 OF 25

REVISION

NO.	DATE	APPR.

MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS
LB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258–7999

SCALE	DESIGNED	DRAWN	CHECKED	DATE
50'	LAT	LAT	LHD	02/06/24

FINAL

BY DATE

RECORD PLAT

ARDISIA PARK PHASE 3–4

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 | 10

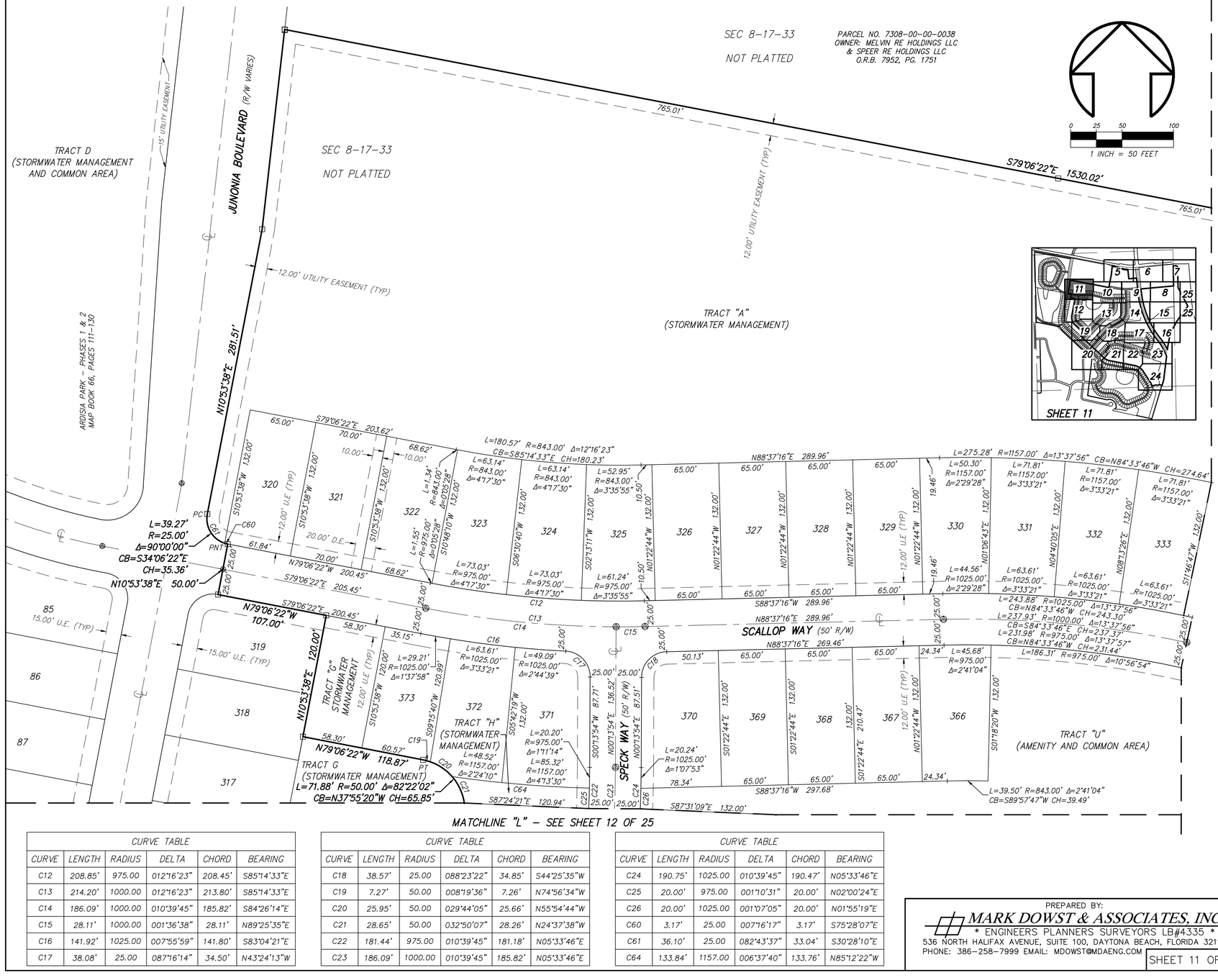
RECORD PLAT

Drawing name: V:\1JMDS\1351 – Melvin Property–Shell Points_Survey\Civil 3D–DWGs\1351_surplat–ph3–4(4).dwg Plot: 510 Jun 11, 2024 7:37am by: tlhb

ARDISIA PARK - PHASES 3 & 4

LOCATED IN SECTIONS 8 & 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA

MAP BOOK: PAGE:



CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD	BEARING
C12	208.85'	975.00	012°16'23"	208.45'	S85°14'33"E
C13	214.20'	1000.00	012°16'23"	213.80'	S85°14'33"E
C14	186.09'	1000.00	010°39'45"	185.82'	S84°26'14"E
C15	28.11'	1000.00	001°36'38"	28.11'	N89°25'35"E
C16	141.92'	1025.00	007°55'59"	141.80'	S83°04'21"E
C17	38.08'	25.00	087°16'14"	34.50'	N43°24'13"W

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD	BEARING
C18	38.57'	25.00	088°23'22"	34.85'	S44°25'35"W
C19	7.27'	50.00	008°19'36"	7.26'	N74°56'34"W
C20	25.95'	50.00	029°44'05"	25.66'	N55°54'44"W
C21	28.65'	50.00	032°50'07"	28.26'	N24°37'38"W
C22	181.44'	975.00	010°39'45"	181.18'	N05°33'46"E
C23	186.09'	1000.00	010°39'45"	185.82'	N05°33'46"E

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD	BEARING
C24	190.75'	1025.00	010°39'45"	190.47'	N05°33'46"E
C25	20.00'	975.00	001°10'31"	20.00'	N02°00'24"E
C26	20.00'	1025.00	001°07'05"	20.00'	N01°55'19"E
C60	3.17'	25.00	007°16'17"	3.17'	S75°28'07"E
C61	36.10'	25.00	082°43'37"	33.04'	S30°28'10"E
C64	133.84'	1157.00	006°37'40"	133.76'	N85°12'22"W

PREPARED BY:
MARK DOWST & ASSOCIATES, INC.
* ENGINEERS PLANNERS SURVEYORS LB#4335 *
536 NORTH HALIFAX AVENUE, SUITE 100, DAYTONA BEACH, FLORIDA 32118
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SHEET 11 OF 25

REVISION

NO.	DATE	APPR.

MARK DOWST & ASSOCIATES, INC.
* ENGINEERS * PLANNERS * SURVEYORS *
LB EB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7999

SCALE	DESIGNED	DRAWN	CHECKED	DATE
50'	LAT	LAT	LHD	02/06/24

FINAL

BY DATE

RECORD PLAT

ARDISIA PARK PHASE 3-4

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 | 11

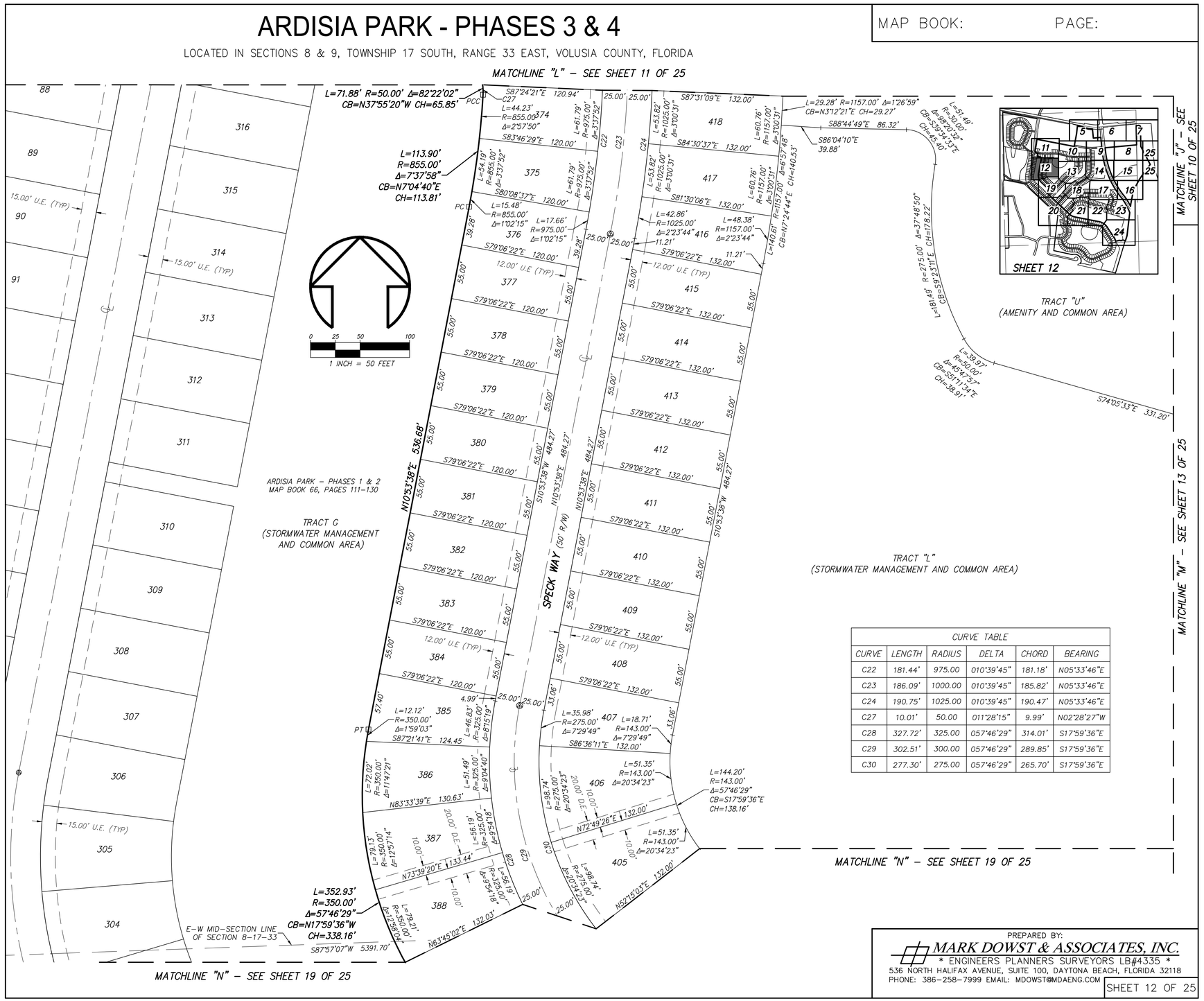
RECORD PLAT

Drawing name: k:\DWGS\1351 - Melvin Property-Sheet Pointe_Survey\Civil 3D-DWGs\1351_surplat-ph3-4(4).dwg Plot Sit Jun 11, 2025 1:53pm by: lmb

ARDISIA PARK - PHASES 3 & 4

LOCATED IN SECTIONS 8 & 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA

MAP BOOK: PAGE:



CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD	BEARING
C22	181.44'	975.00	010°39'45"	181.18'	N05°33'46"E
C23	186.09'	1000.00	010°39'45"	185.82'	N05°33'46"E
C24	190.75'	1025.00	010°39'45"	190.47'	N05°33'46"E
C27	10.01'	50.00	011°28'15"	9.99'	N02°28'27"W
C28	327.72'	325.00	057°46'29"	314.01'	S17°59'36"E
C29	302.51'	300.00	057°46'29"	289.85'	S17°59'36"E
C30	277.30'	275.00	057°46'29"	265.70'	S17°59'36"E

PREPARED BY:
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SHEET 12 OF 25

REVISION

NO.	DATE	APPR.

MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS
LB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7999

SCALE	DESIGNED	DRAWN	CHECKED	DATE
50'	LAT	LAT	LHD	02/06/24
FINAL		BY		DATE

RECORD PLAT

ARDISIA PARK PHASE 3-4

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 | 12

RECORD PLAT

Drawing name: V:\DWGS\1351 – Marvin Property–Shell Points_Survey\Civil 3D–DWGs\1351_surplot–ph3–4(4).dwg Plot: 3:2 Jun 11, 2025 11:38am by: mhb

ARDISIA PARK - PHASES 3 & 4

LOCATED IN SECTIONS 8 & 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA

MAP BOOK: PAGE:

MATCHLINE "K" – SEE SHEET 10 OF 25

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD	BEARING
C31	40.35'	275.00	008°24'26"	40.32'	N11°36'03"E
C32	9.72'	275.00	002°01'28"	9.72'	N16°49'00"E

0 25 50 100

1 INCH = 50 FEET

TRACT "U"
(AMENITY AND COMMON AREA)

S74°05'33"E 331.20'

L=364.10' R=350.00' Δ=59°36'13" CB=N33°20'22"E CH=347.90'

L=35.58'
R=50.00'
Δ=40°45'58"
CB=N85°31'28"E
CH=34.83'

TRACT "L"
(STORMWATER MANAGEMENT AND COMMON AREA)

TRACT "M"
LIFT STATION

TRACT "F"
(STORMWATER MANAGEMENT)

ABALONE WAY (50' R/W)

E-W MID-SECTION LINE OF SECTION 8-17-33

S87°57'07"W 5391.70'

MATCHLINE "M" – SEE SHEET 12 OF 25

MATCHLINE "N" – SEE SHEET 19 OF 25

MATCHLINE "O" – SEE SHEET 14 OF 25

MATCHLINE "Q" – SEE SHEET 18 OF 25

SHEET 13

PREPARED BY:
MARK DOWST & ASSOCIATES, INC.
* ENGINEERS PLANNERS SURVEYORS LB#4335 *
536 NORTH HALIFAX AVENUE, SUITE 100, DAYTONA BEACH, FLORIDA 32118
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SHEET 13 OF 25

REVISION

NO.	DATE	APPR.

MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS
EB 4335 LB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7999

SCALE	DESIGNED	DRAWN	CHECKED	DATE
50'	LAT	LAT	LHD	02/06/24
FINAL		BY	BY	DATE

RECORD PLAT

ARDISIA PARK PHASE 3-4

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 | 13

RECORD PLAT

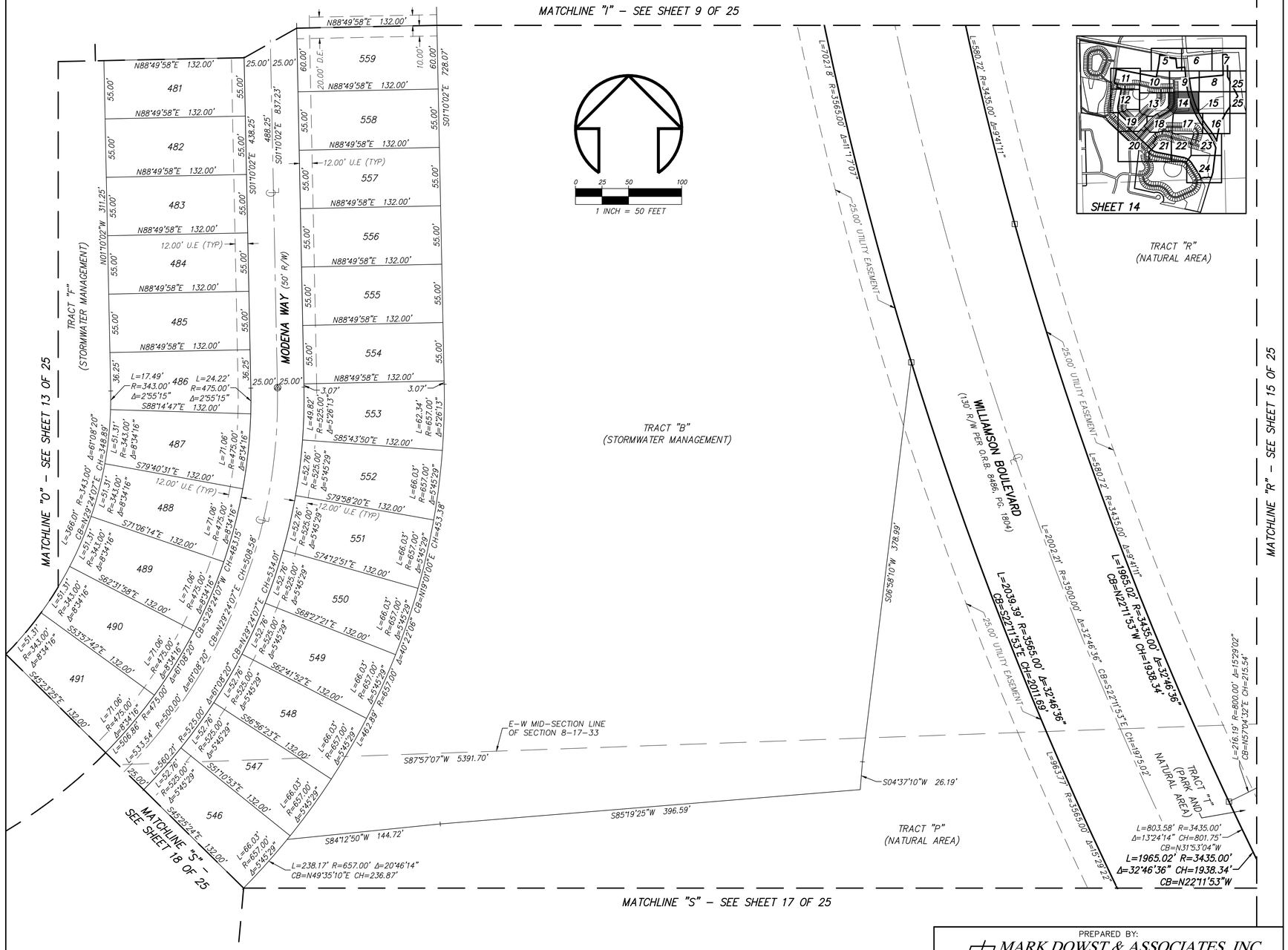
Drawing name: k:\UM\01\1351 – Melvin Property–Sheet Pointe_Survey\Civil 3D–DWGs\1351_keyplot–ph3-4(4).dwg Plot 513 Jun 11, 2025 11:38am by: tmb

ARDISIA PARK - PHASES 3 & 4

LOCATED IN SECTIONS 8 & 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA

MAP BOOK: PAGE:

MATCHLINE "I" – SEE SHEET 9 OF 25



PREPARED BY:
MARK DOWST & ASSOCIATES, INC.
* ENGINEERS PLANNERS SURVEYORS LB#4335 *
536 NORTH HALIFAX AVENUE, SUITE 100, DAYTONA BEACH, FLORIDA 32118
PHONE: 386-258-7999 EMAIL: MDOWST@MDAENG.COM

SHEET 14 OF 25

REVISION

NO.	DATE	APPR.

MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS
EB 4335 LB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7999

SCALE	50'	DESIGNED	LAT	DRAWN	LAT	CHECKED	LHD	DATE	02/06/24
								BY	

FINAL

RECORD PLAT

ARDISIA PARK PHASE 3-4

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 | 14

RECORD PLAT

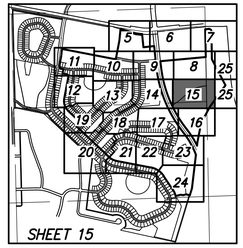
Drawing name: V:\1JMGS\1351 - Melvin Property-Dheli Pointe_Survey\Civil 3D-DWGs\1351_survplat-ph3-4(1).dwg Plot: 514 Jun 11, 2025 1:38pm by: tlhb

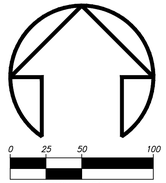
ARDISIA PARK - PHASES 3 & 4

LOCATED IN SECTIONS 8 & 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA

MAP BOOK: PAGE:

MATCHLINE "G" – SEE SHEET 8 OF 25





TRACT "R"
(NATURAL AREA)

L=552.62' R=800.00' Δ=39°34'43" CB=N69°07'22"E CH=541.70'

N49°20'01"E 363.74'

TRACT "S"
(UTILITIES AND COMMON AREA)

806.08'
S01°05'16"E 2651.67'

E LINE OF THE NE 1/4
OF SECTION 8-17-33
W LINE OF THE NW 1/4
OF SECTION 9-17-33

S01°05'16"E 1993.53'
1211.45'

E LINE OF O.R.B. 921, PG. 27
FLOOD PLAIN COMPENSATION
EASEMENT PER O.R.B. 8396, PG. 805

TRACT "X"
(NATURAL AREA)

MATCHLINE "R" – SEE SHEET 14 OF 25

MATCHLINE "I" – SEE SHEET 25 OF 25

L=216.19' R=800.00' Δ=15°29'02"
CB=N57°04'32"E CH=215.54'

S87°57'07"W 5391.70'

TRACT "T"
(PARK AND NATURAL AREA)

E 1/4 CORNER SECTION 8-17-33
(NOTHING FOUND OR SET)

SET 5/8" IR (PRM
MDA LB 4335)

W LINE OF O.R.B.
4634, PG. 2674

L=1965.02' R=3435.00' Δ=32°46'36"
CB=N22°11'53"W CH=1938.34'

L=803.58'
R=3435.00'
Δ=13°24'14"
CB=N31°53'04"W
CH=801.75'

25.00' UTILITY EASEMENT

E LINE OF THE SE 1/4
OF SECTION 8-17-33
W LINE OF THE SW 1/4
OF SECTION 9-17-33

300.82'
S01°05'16"E 2651.17'

440.40'

170.00' WIDE UTILITY EASEMENT PER O.R.B. 921, PG. 27

S34°53'17"W 137.81'

S34°53'17"W
460.49'

PARCEL NO. 7309-00-00-0141
UTILITIES COMMISSION, CITY OF
NEW SMYRNA BEACH, FLORIDA
O.R.B. 4634, PG. 2674

REPLACED
FD. 5/8" IR
(LB 4475)

180.54'

S28°19'14"W
518.53'

MATCHLINE "T" –
SEE SHEET 17 OF 25

MATCHLINE "T" – SEE SHEET 16 OF 25

PREPARED BY:
MARK DOWST & ASSOCIATES, INC.
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536 NORTH HALIFAX AVENUE, SUITE 100, DAYTONA BEACH, FLORIDA 32118
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SHEET 15 OF 25

REVISION

NO.	DATE	APPR.

MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS
EB 4335 LB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7999

SCALE	DESIGNED	DRAWN	CHECKED	DATE
50'	LAT	LAT	LHD	02/06/24

FINAL

BY DATE

RECORD PLAT

ARDISIA PARK PHASE 3-4

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 15

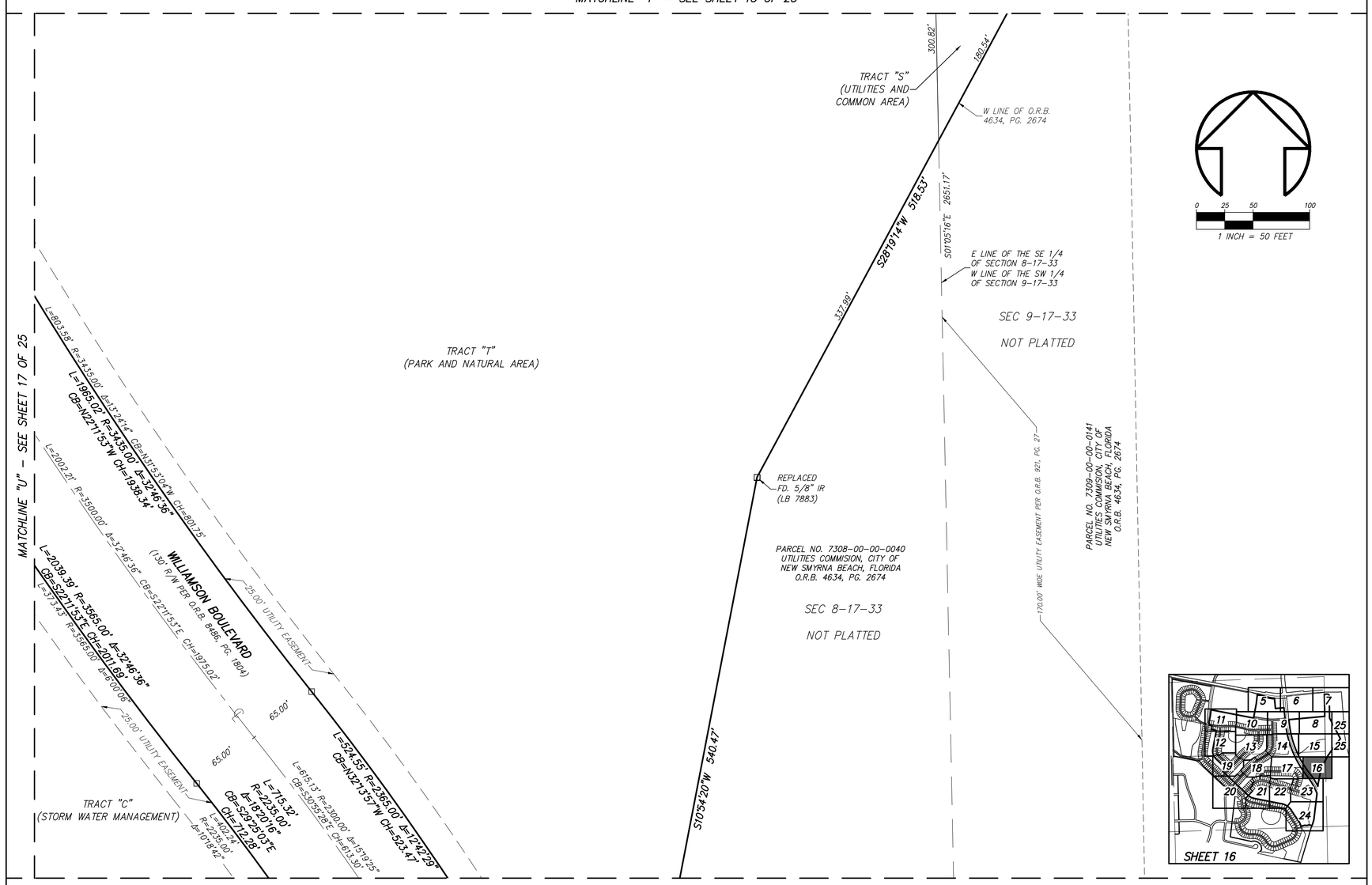
RECORD PLAT

Drawing name: V:\DMDS\1351 - Marvin Property-Shell Points_Survey\Civil 3D-DMDs\1351_surplat-ph3-4(4).dwg Plot STS Jun 24, 2025 11:32am by: tlhb

ARDISIA PARK - PHASES 3 & 4

LOCATED IN SECTIONS 8 & 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA

MAP BOOK: PAGE:



PREPARED BY:
MARK DOWST & ASSOCIATES, INC
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SHEET 16 OF 25

NO.	DATE	APPR.	REVISION

MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS
EB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7999

SCALE	DESIGNED	DRAWN	CHECKED	DATE
50'	LAT	LAT	LHD	02/06/24

FINAL BY DATE

RECORD PLAT

ARDISIA PARK PHASE 3-4

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 | 16

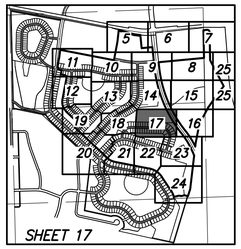
RECORD PLAT

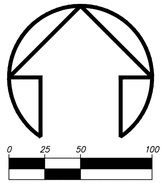
Drawing name: V:\DWGS\1351 - Melvin Property-Shell Pointe_Survey\Civil 3D-DWGs\1351_surplat-ph3-4(4).dwg Plot: 516 Jun 11, 2025 1:48pm by: lmb

ARDISIA PARK - PHASES 3 & 4

LOCATED IN SECTIONS 8 & 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA

MAP BOOK: PAGE:





MATCHLINE "S" – SEE SHEET 14 OF 25

MATCHLINE "T" – SEE SHEET 15 OF 25

MATCHLINE "W" – SEE SHEET 18 OF 25

MATCHLINE "U" – SEE SHEET 16 OF 25

MATCHLINE "DD" – SEE SHEET 21 OF 25

MATCHLINE "X" – SEE SHEET 22 OF 25

MATCHLINE "T" – SEE SHEET 23 OF 25

TRACT "P" (NATURAL AREA)

TRACT "T" (PARK AND NATURAL AREA)

TRACT "C" (STORMWATER MANAGEMENT)

TRACT "D" (STORMWATER MANAGEMENT)

WILLIAMSON BOULEVARD (130' R/W PER O.R.B. 8488, PG. 1804)

25.00' UTILITY EASEMENT

L=98.77' R=3565.00' Δ=1°57'12"

L=2039.39' R=3565.00' Δ=32°46'36" CB=S22°11'53"E CH=2011.69'

L=2002.21' R=3500.00' Δ=32°46'36" CB=S22°11'53"E CH=1975.02'

L=1965.02' R=3435.00' Δ=32°46'36" CB=N22°11'53"W CH=1938.34'

L=803.58' R=3435.00' Δ=13°24'14" CB=N31°53'04"W CH=801.75'

S89°04'52"E 841.09'

N89°04'52"W 841.09'

S89°04'52"E 275.29'

N89°04'31"E 132.00'

N87°12'55"W 132.00'

S72°37'52"E 405.82'

L=75.59' R=407.00' Δ=10°38'30" CB=N83°45'37"W CH=75.49'

L=89.10' R=407.00' Δ=12°32'36"

L=2.50' R=407.00' Δ=0°21'08"

L=1.69' R=275.00' Δ=0°21'08"

L=60.20' R=275.00' Δ=12°32'36"

L=510.92' R=275.00' Δ=106°27'00" CB=S35°51'22"E CH=440.55'

L=464.48' R=250.00' Δ=106°27'00" CB=S35°51'22"E CH=400.55'

L=418.03' R=225.00' Δ=106°27'00" CB=S35°51'22"E CH=360.45'

L=109.63' R=225.00' Δ=27°55'00"

L=125.56' R=225.00' Δ=31°58'28"

L=45.31' R=93.00' Δ=27°55'00"

L=51.90' R=93.00' Δ=31°58'28"

L=172.78' CB=N3°51'22"W CH=144.98'

L=380.57' R=407.00' Δ=53°35'48" CB=N30°32'07"W CH=367.04'

L=89.10' R=407.00' Δ=12°32'36"

L=60.20' R=275.00' Δ=12°32'36"

L=37.34' R=3565.00' Δ=0°36'00"

65.00' 65.00' 65.00' 65.00' 65.00' 65.00' 65.00' 65.00' 65.00' 65.00' 65.00' 63.17'

646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663

671 672 673 674 675 676 677 678 679 680 681 682 683 684

N00°55'08"E 132.00' S00°55'08"W 132.00'

12.00' U.E (TYP)

25.00' 25.00' 8.29'

PREPARED BY:

MARK DOWST & ASSOCIATES, INC.

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536 NORTH HALIFAX AVENUE, SUITE 100, DAYTONA BEACH, FLORIDA 32118

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SHEET 17 OF 25

REVISION

NO. | DATE | APPR.

MARK DOWST & ASSOCIATES, INC.

ENGINEERS * PLANNERS * SURVEYORS

LB 4335

536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7999

SCALE 50' | DESIGNED LAT | DRAWN LAT | CHECKED LHD | DATE 02/06/24 | BY | DATE

FINAL

RECORD PLAT

ARDISIA PARK PHASE 3-4

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 | 17

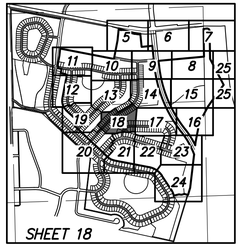
RECORD PLAT

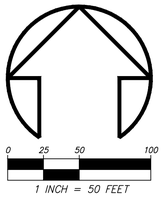
Drawing name: K:\DWGS\1351 - Melvin Property-Sheet Pointe_Survey\Civil 3D-DWGs\1351_surplat-ph3-4(4).dwg Plot: 517 Jun 11, 2025 1:48pm by: thib

ARDISIA PARK - PHASES 3 & 4

LOCATED IN SECTIONS 8 & 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA

MAP BOOK: PAGE:





CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD	BEARING
C33	81.64'	225.00	020°47'20"	81.19'	S32°22'43"W
C34	40.21'	225.00	010°14'25"	40.16'	S47°53'35"W

PREPARED BY:
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536 NORTH HALIFAX AVENUE, SUITE 100, DAYTONA BEACH, FLORIDA 32118
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SHEET 18 OF 25

REVISION

NO.	DATE	APPR.

MARK DOWST & ASSOCIATES, INC.
* ENGINEERS * PLANNERS * SURVEYORS
EB 4335 LB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7999

SCALE	DESIGNED	DRAWN	CHECKED	DATE
50'	LAT	LAT	LHD	02/06/24

FINAL

RECORD PLAT

ARDISIA PARK PHASE 3-4

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 | 18

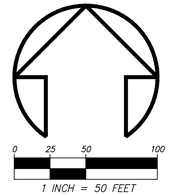
RECORD PLAT

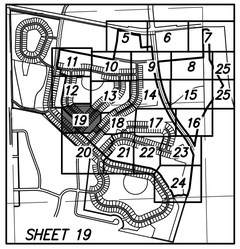
Drawing name: k:\UMGS\1351 – Melvin Property–Sheet Pointe_Survey\Civil 3D–DWGs\1351_surplat–ph3–4(4).dwg Plot: 518 Jun 11, 2025 11:41pm by: lmb

ARDISIA PARK - PHASES 3 & 4

LOCATED IN SECTIONS 8 & 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA

MAP BOOK: PAGE:





MATCHLINE "N" – SEE SHEET 12 OF 25

MATCHLINE "P" – SEE SHEET 13 OF 25

MATCHLINE "Y" – SEE SHEET 18 OF 25

MATCHLINE "BB" – SEE SHEET 20 OF 25

E–W MID–SECTION LINE OF SECTION 8–17–33

S87°57'07"W 5391.70'

TRACT "L" (STORMWATER MANAGEMENT AND COMMON AREA)

TRACT G (STORMWATER MANAGEMENT AND COMMON AREA)

TRACT "I" (STORMWATER MANAGEMENT)

TRACT "J" (STORMWATER MANAGEMENT)

TRACT "F" (STORMWATER MANAGEMENT)

TRACT AA (LANDSCAPE BUFFER)

TRACT V (STORMWATER MANAGE

ARDISIA PARK – PHASES 1 & 2
MAP BOOK 66, PAGES 111–130

SPECK WAY (50' R/W)

JUNONIA BOULEVARD (60' R/W)

ABALONE WAY (50' R/W)

MODENA WAY (50' R/W)

L=352.93'
R=350.00'
Δ=57°46'29"
CB=N17°59'36"W
CH=338.16'

L=144.20'
R=143.00'
Δ=57°46'29"
CB=S17°59'36"E
CH=138.16'

N46°52'51"W 457.72'

N43°07'09"E 157.49'

S46°52'03"E 1087.90'

S43°07'09"W 538.09'

S43°07'09"W 820.62'

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD	BEARING
C28	327.72'	325.00	057°46'29"	314.01'	S17°59'36"E
C29	302.51'	300.00	057°46'29"	289.85'	S17°59'36"E
C30	277.30'	275.00	057°46'29"	265.70'	S17°59'36"E

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD	BEARING
C35	39.27'	25.00	090°00'00"	35.36'	N88°07'09"E
C36	39.27'	25.00	090°00'00"	35.36'	N01°52'51"W

PREPARED BY:
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536 NORTH HALIFAX AVENUE, SUITE 100, DAYTONA BEACH, FLORIDA 32118
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SHEET 19 OF 25

REVISION

NO.	DATE	APPR.

MARK DOWST & ASSOCIATES, INC.
* ENGINEERS * PLANNERS * SURVEYORS *
EB 4335 LB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258–7999

SCALE	DESIGNED	DRAWN	CHECKED	DATE
50'	LAT	LAT	LHD	02/06/24

FINAL

BY DATE

RECORD PLAT

ARDISIA PARK PHASE 3–4

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 19

RECORD PLAT

Drawing name: K:\DWGS\1351 – Melvin Property–Shell Pointe_Survey\Civil 3D–DWGs\1351_surplat–ph3–4(4).dwg Plot By: Jun 11, 2025 1:41pm by: lmb

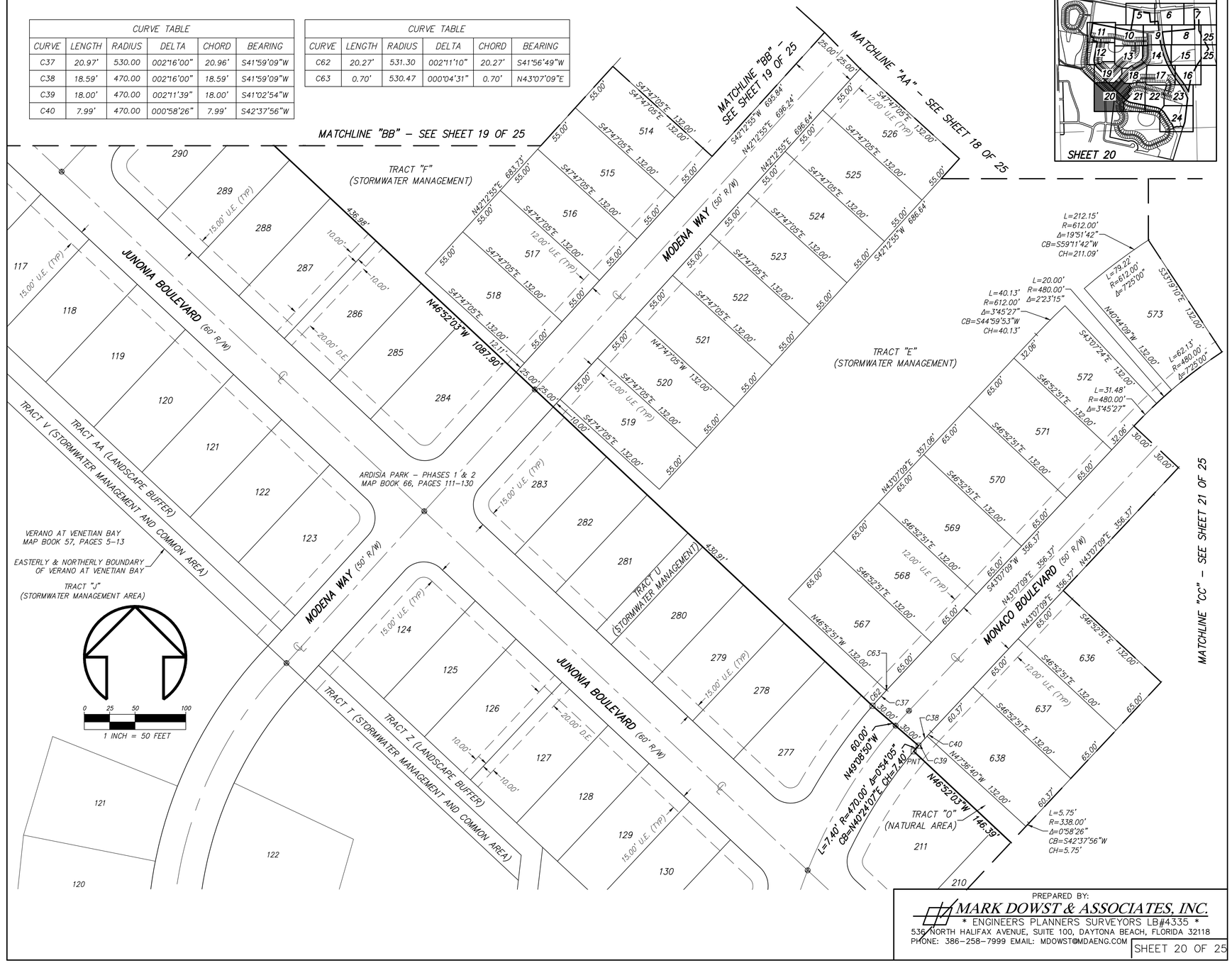
ARDISIA PARK - PHASES 3 & 4

LOCATED IN SECTIONS 8 & 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA

MAP BOOK: PAGE:

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD	BEARING
C37	20.97'	530.00	002°16'00"	20.96'	S41°59'09"W
C38	18.59'	470.00	002°16'00"	18.59'	S41°59'09"W
C39	18.00'	470.00	002°11'39"	18.00'	S41°02'54"W
C40	7.99'	470.00	000°58'26"	7.99'	S42°37'56"W

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD	BEARING
C62	20.27'	531.30	002°11'10"	20.27'	S41°56'49"W
C63	0.70'	530.47	000°04'31"	0.70'	N43°07'09"E



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SHEET 20 OF 25

REVISION | NO. | DATE | APPR.

MARK DOWST & ASSOCIATES, INC.
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LB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7999

SCALE	DESIGNED	DRAWN	CHECKED	DATE
50'	LAT	LAT	LHD	02/06/24

FINAL

RECORD PLAT

ARDISIA PARK PHASE 3-4

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 | 20

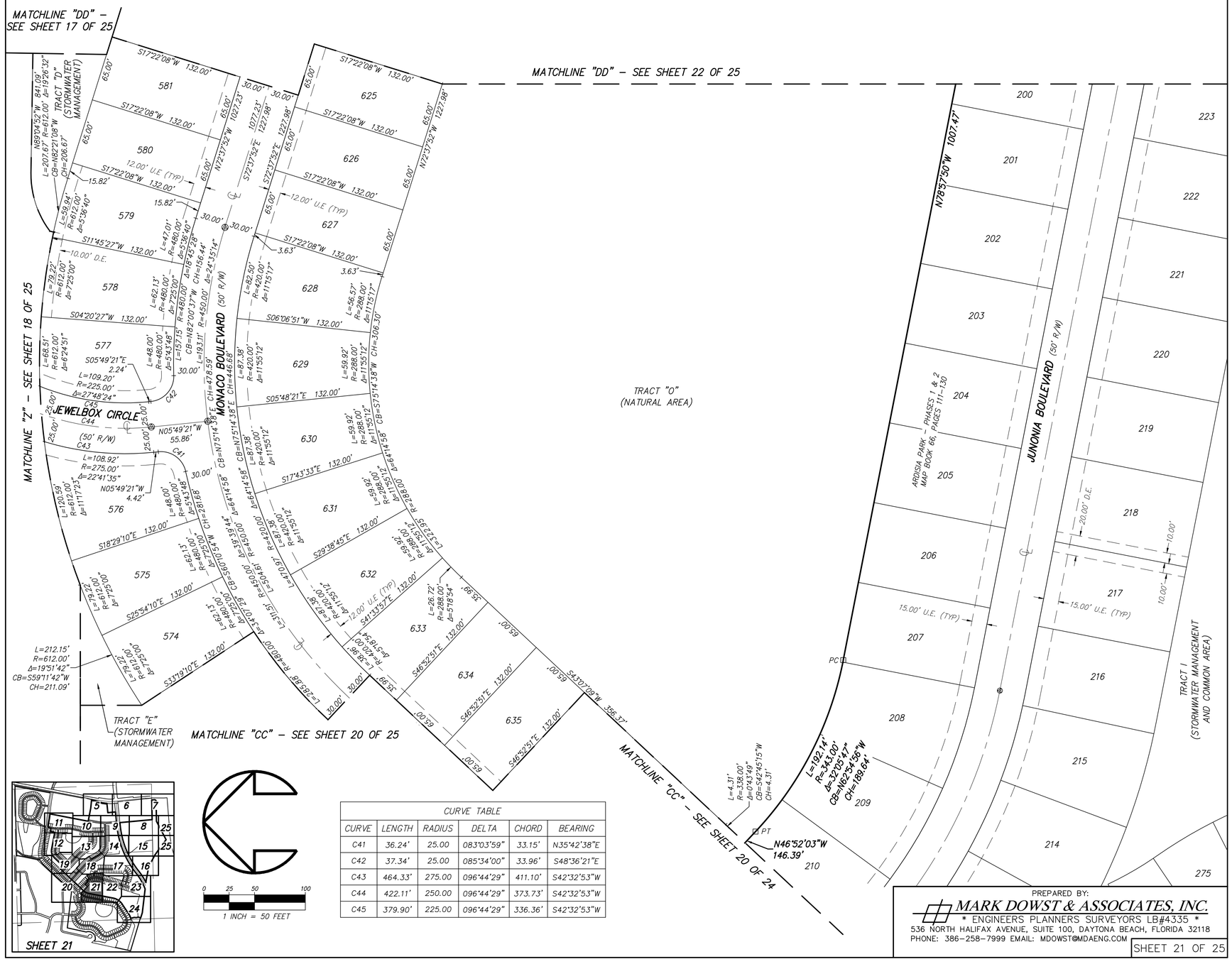
RECORD PLAT

Drawing name: V:\2025\1351 - Marvin Property\Survey\Civil 3D\2025\1351_surplat-ph3-4(4).dwg Plot: 520 Jun 11, 2025 1:45pm by: mhb

ARDISIA PARK - PHASES 3 & 4

LOCATED IN SECTIONS 8 & 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA

MAP BOOK: PAGE:



0 25 50 100

1 INCH = 50 FEET

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD	BEARING
C41	36.24'	25.00	083°03'59"	33.15'	N35°42'38"E
C42	37.34'	25.00	085°34'00"	33.96'	S48°36'21"E
C43	464.33'	275.00	096°44'29"	411.10'	S42°32'53"W
C44	422.11'	250.00	096°44'29"	373.73'	S42°32'53"W
C45	379.90'	225.00	096°44'29"	336.36'	S42°32'53"W

PREPARED BY:
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SHEET 21 OF 25

NO.	DATE	APPR.	REVISION

MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS
EB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7999

SCALE	DESIGNED	DRAWN	CHECKED	DATE
50'	LAT	LAT	LHD	02/06/24
FINAL			BY	DATE

RECORD PLAT

ARDISIA PARK PHASE 3-4

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 | 21

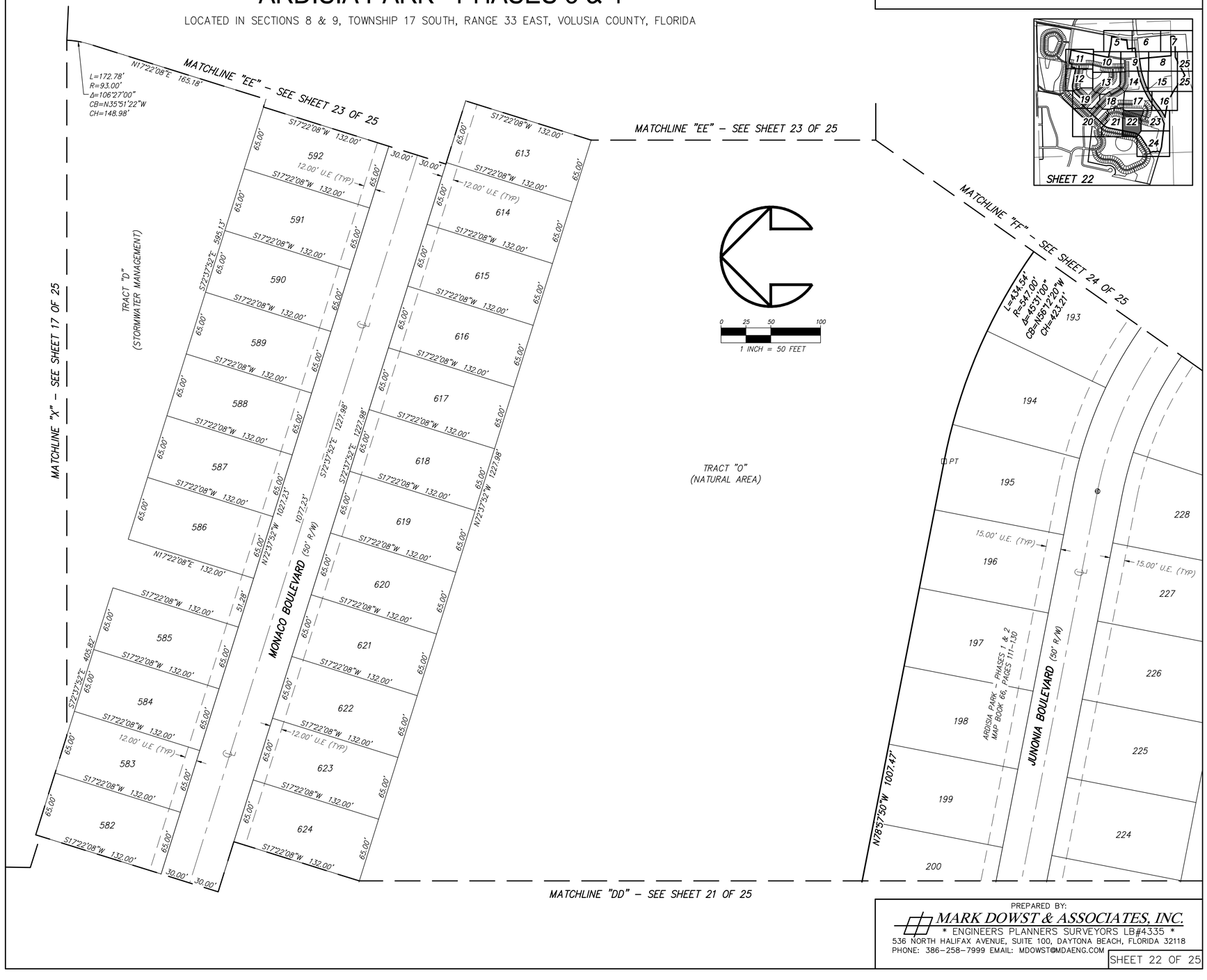
RECORD PLAT

Drawing name: V:\1JMGS\1351 – Melvin Property–Shell Pointe_Survey\Civil 3D–DWGs\1351_ardisia–ph3-4(4).dwg Plot: 521 Jun 11, 2025 1:42pm by: lmb

ARDISIA PARK - PHASES 3 & 4

LOCATED IN SECTIONS 8 & 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA

MAP BOOK: PAGE:



PREPARED BY:
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PHONE: 386-258-7999 EMAIL: MDOWST@MDAENG.COM

SHEET 22 OF 25

REVISION

NO.	DATE	APPR.

MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS
EB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7999

SCALE	DESIGNED	DRAWN	CHECKED	DATE
50'	LAT	LAT	LHD	02/06/24

FINAL

RECORD PLAT

ARDISIA PARK PHASE 3-4

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 | 22

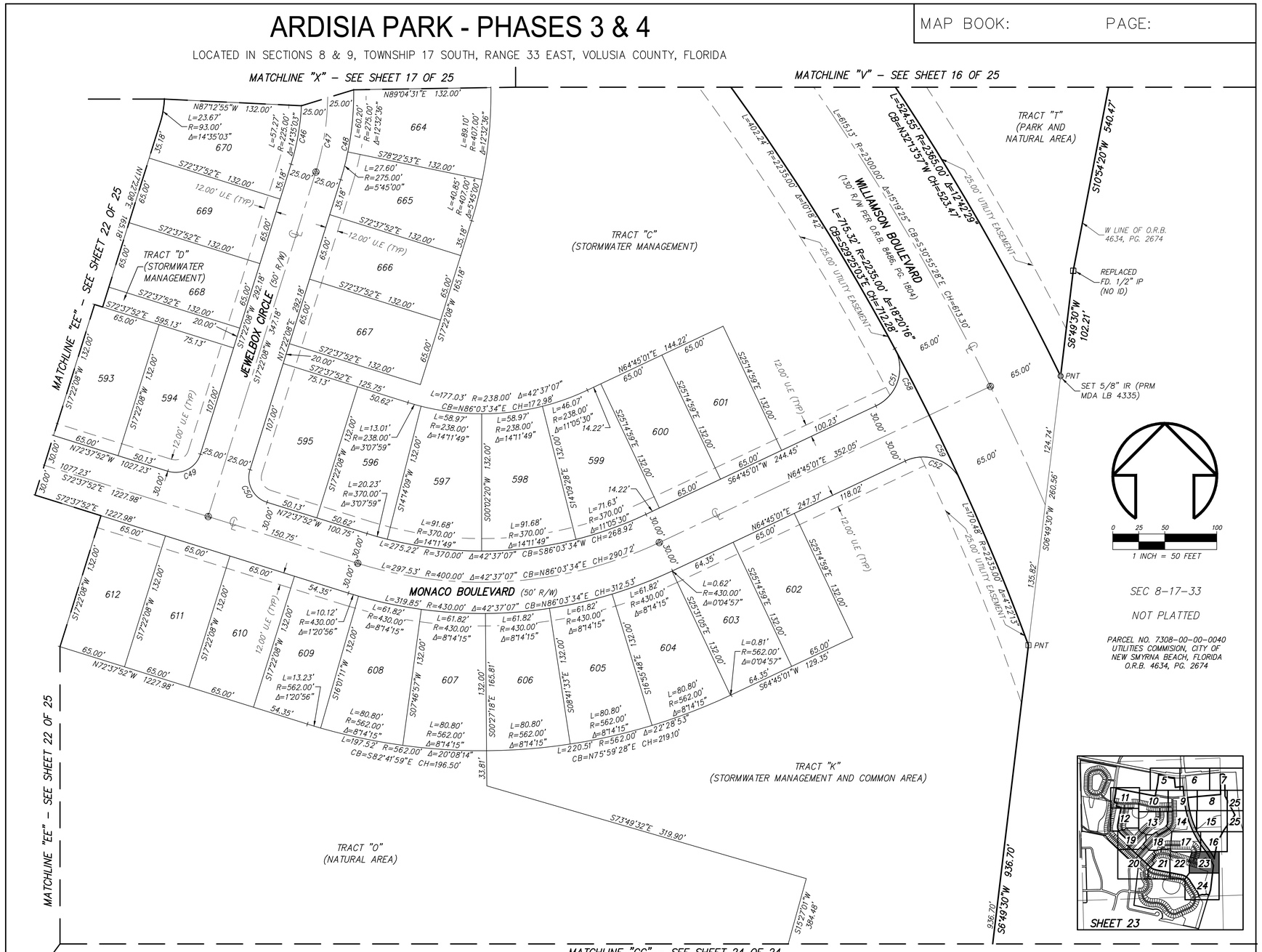
RECORD PLAT

Drawing name: V:\DWGS\1351 - Melvin Property-Shell Pointe_Survey\Civil 3D-DWGs\1351_surplat-ph3-4(4).dwg Plot: 322 Jun 11, 2025 1:43pm by: thib

ARDISIA PARK - PHASES 3 & 4

LOCATED IN SECTIONS 8 & 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA

MAP BOOK: PAGE:



SEC 8–17–33

NOT PLATTED

PARCEL NO. 7308–00–00–0040
UTILITIES COMMISION, CITY OF
NEW SMYRNA BEACH, FLORIDA
O.R.B. 4634, PG. 2674

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD	BEARING
C46	418.03'	225.00	106°27'00"	360.45'	N35°51'22"W
C47	464.48'	250.00	106°27'00"	400.50'	N35°51'22"W
C48	510.92'	275.00	106°27'00"	440.55'	N35°51'22"W

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD	BEARING
C49	39.27'	25.00	090°00'00"	35.36'	N62°22'08"E
C50	39.27'	25.00	090°00'00"	35.36'	S27°37'52"E
C51	64.94'	40.00	093°01'30"	58.04'	S18°14'16"W

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD	BEARING
C52	63.27'	40.00	090°37'51"	56.88'	S69°56'03"E
C58	72.16'	2235.00	001°51'00"	72.16'	S27°20'59"E
C59	70.44'	2235.00	001°48'21"	70.44'	S25°31'18"E

PREPARED BY:
MARK DOWST & ASSOCIATES, INC.
* ENGINEERS PLANNERS SURVEYORS LB#4335 *
536 NORTH HALIFAX AVENUE, SUITE 100, DAYTONA BEACH, FLORIDA 32118
PHONE: 386-258-7999 EMAIL: MDOWST@MDAENG.COM

SHEET 23 OF 25

REVISION

NO.	DATE	APPR.

MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS
EB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7999

SCALE	50'	DESIGNED	LAT	DRAWN	LAT	CHECKED	LHD	DATE	02/06/24
		FINAL				BY		DATE	

RECORD PLAT

ARDISIA PARK PHASE 3-4

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 | 23

RECORD PLAT

Drawing name: V:\DWGS\1351 - Melvin Property-Shell Pointe_Survey\Cvil 3D-DWGs\1351_survplt-ph3-4(4).dwg Plot: 523 Jun 11, 2025 1:43pm by: lmb

ARDISIA PARK - PHASES 3 & 4

LOCATED IN SECTIONS 8 & 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA

MAP BOOK: PAGE:

MATCHLINE "GG" – SEE SHEET 23 OF 25

MATCHLINE "FF" – SEE SHEET 22 OF 25

L=434.54'
R=541.00'
Δ=45°31'00"
CB=N56°12'20"W
CH=423.21'

192

191

190

189

188

187

186

185

184

183

233

234

235

236

237

PC

PT

15.00' U.E. (TYP)

N33°26'50"W 467.49'

JUNONIA BOULEVARD (50' R/W)

ARDISIA PARK – PHASES 1 & 2
MAP BOOK 66, PAGES 111–130

L=186.52'
R=541.00'
Δ=19°32'12"
CB=N23°40'44"W
CH=185.61'

S76°05'22"W 151.71'

65.56'
N80°47'00"W

S77°30'33"W 39.93'

46.57'
S69°02'29"W

N73°13'39"W
108.46'

TRACT S
(OPEN SPACE)

S LINE SECTION 8–17–33
N LINE SECTION 17–17–33

S88°04'08"W 5378.05'

TRACT W (LANDSCAPE BUFFER)

TRACT "O"
(NATURAL AREA)

S15°27'01"W 384.48'

TRACT "K"
(STORMWATER MANAGEMENT AND COMMON AREA)

S11°42'45"E 199.13'

S02°07'23"W
65.21'

S09°47'09"W
76.43'

S04°30'55"E 170.89'

936.70'
S6°49'30"W 936.70'

S16°46'21"W 210.37'

PARCEL NO. 7308–00–00–0040
UTILITIES COMMISION, CITY OF
NEW SMYRNA BEACH, FLORIDA
O.R.B. 4634, PG. 2674

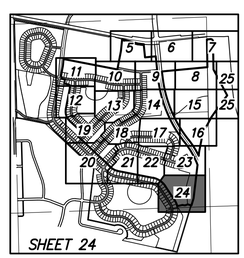
SEC 8–17–33

NOT PLATTED

W LINE OF O.R.B.
4634, PG. 2674

REPLACED
FD. 5/8" IR
(LB 7883)

0 25 50 100
1 INCH = 50 FEET



PREPARED BY:
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* ENGINEERS PLANNERS SURVEYORS LB#4335 *
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SHEET 24 OF 25

REVISION

NO.	DATE	APPR.

MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS
EB 4335 LB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258–7999

SCALE	DESIGNED	DRAWN	CHECKED	DATE
50'	LAT	LAT	LHD	02/06/24

FINAL

BY DATE

RECORD PLAT

ARDISIA PARK PHASE 3–4

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 24

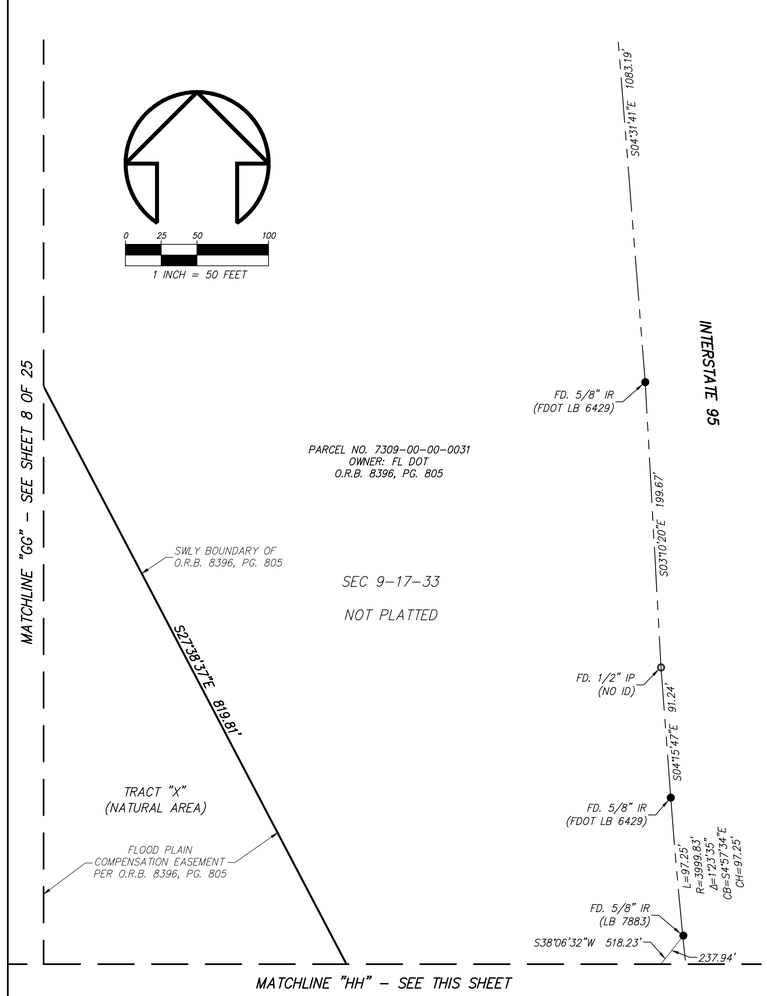
RECORD PLAT

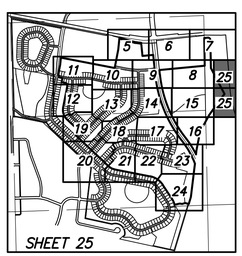
Drawing name: V:\JOBS\1351 – Melvin Property–Shell Pointe_Survey\Civil 3D–DWGs\1351_surplat–ph3–4(4).dwg Plot: 524 Jun 11, 2025 1:43pm by: rhb

ARDISIA PARK - PHASES 3 & 4

LOCATED IN SECTIONS 8 & 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA

MAP BOOK: PAGE:





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* ENGINEERS PLANNERS SURVEYORS LB#4335 *
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PHONE: 386-258-7999 EMAIL: MDOWST@MDAENG.COM

SHEET 25 OF 25

REVISION

NO.	DATE	APPR.

MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS
EB 4335 LB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7999

DRAWN	LAT	CHECKED	LHD	DATE	02/06/24
DESIGNED	LAT	BY		DATE	

SCALE 50' FINAL

RECORD PLAT

ARDISIA PARK PHASE 3-4

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 25

RECORD PLAT

Drawing name: V:\DWGS\1351 - Marvin Property-Shell Points_Survey\Civil 3D-DWGs\1351_surplot-ph3-4(4).dwg Plot SIZE Jun 24, 2025 11:53am by: tlhb

ARDISIA PARK - PHASES 3 AND 4

CITY OF NEW SMYRNA BEACH - VOLUSIA COUNTY, FL

FINAL ENGINEERING PLANS

OWNER/DEVELOPER:
TAYLOR MORRISON
2600 LAKE LUCIEN DRIVE, SUITE 350
MAITLAND, FL 32751
PHONE NUMBER: (407) 720-8680
CONTACT PERSON: FREDRICK MILLER
e-mail: fmiller@taylormorrison.com

CIVIL ENGINEER:
ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD, SUITE C
ORMOND BEACH, FL 32174
PHONE NUMBER: (386) 677-2482
FAX NUMBER: (386) 677-2505
CONTACT PERSON: KRISTOPHER T. ROWLEY, P.E.
e-mail: krowley@zevcohen.com

SURVEYOR:
MARK DOWST & ASSOCIATES, INC.
536 N. HALIFAX AVENUE, SUITE 100
DAYTONA BEACH, FL 32118
PHONE NUMBER: (386) 258-7999
FAX NUMBER: (386) 257-4310
CONTACT PERSON: MARK DOWST, P.E.
e-mail: markdowst@mdaeng.com

GEOTECHNICAL ENGINEER:
UNIVERSAL ENGINEERING SCIENCES
911 BEVILLE RD, SUITE C
SOUTH DAYTONA, FL 32119
PHONE NUMBER: (386) 756-1105
FAX NUMBER: (386) 760-4067
CONTACT PERSON: BRIAN POHL, P.E.
e-mail: bpohl@universalengineering.com

LANDSCAPE ARCHITECT:
ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD, SUITE C
ORMOND BEACH, FL 32174
PHONE NUMBER: (386) 677-2482
FAX NUMBER: (386) 677-2505
CONTACT PERSON: JAKE STEHR, PLA
e-mail: jstehr@zevcohen.com

PROJECT DESCRIPTION:

PHASE 3 & 4 OF THIS PROJECT INCLUDES THE CONSTRUCTION OF 368 SINGLE FAMILY RESIDENTIAL LOTS ALONG WITH ASSOCIATED UTILITY INFRASTRUCTURE AND STORMWATER CONVEYANCE & TREATMENT FACILITIES.

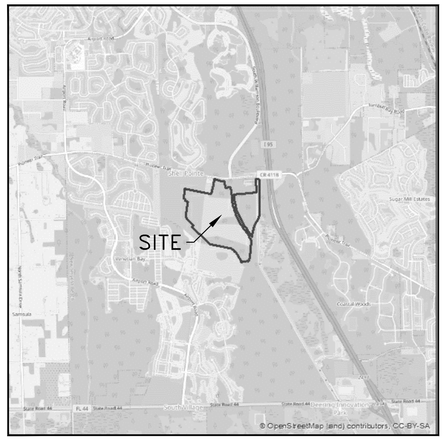
SITE INFORMATION:

SITE ADDRESS:	3350 PIONEER TRAIL, NEW SMYRNA BEACH, FL	
PHASE AREA:	± 270 AC	
TAX PARCEL I.D. #:	7308-00-00-0030 & 0050	
EXISTING ZONING:	PUD	
EXISTING LAND USE:	UNDEVELOPED/AGRICULTURE	
PROPOSED LAND USE:	SINGLE FAMILY RESIDENTIAL	
EXISTING FUTURE LAND USE:	SUSTAINABLE COMMUNITY DEVELOPMENT (SCD)	
UNIT/LOT COUNT:	368 LOTS	
UNIT/LOT DENSITY:	1.4 LOTS PER ACRE (PHASE 3 & 4 AREA ONLY)	
SETBACKS:		
FRONT:	17.5 FT (LIVING & PORCHES); 22.5 (GARAGES)	
SIDE:	5 FT (FROM EAVE)	
STREET SIDE:	15 FT	
REAR:	25 FT	
REQUIRED LANDSCAPE BUFFER(S):		
NORTH:	20 FT	
SOUTH:	20 FT	
EAST:	20 FT	
WEST:	20 FT	
MINIMUM LOT SIZE:	6,600 SF	
MINIMUM LOT WIDTH:	55 FT	
MAXIMUM BUILDING HEIGHT	35 FT	
UTILITIES:	PROVIDED BY UTILITIES COMMISSION	

LAND USE TABLE:		
	ACREAGE	PERCENTAGE
PROPOSED IMPROVEMENTS:		
LOT IMPERVIOUS AREA	30.6 AC	11.3%
PAVEMENT & SIDEWALK	12.4 AC	4.6%
POND AREA(S)	51.8 AC	19.2%
LANDSCAPE/GREEN SPACE	175.2 AC	64.9%
TOTAL PERVIOUS	175.2 AC	64.9%
TOTAL IMPERVIOUS	94.8 AC	35.1%

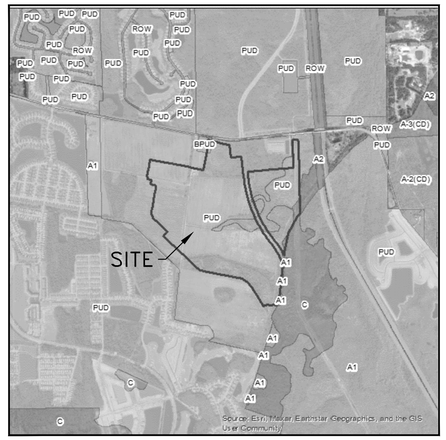
LEGAL DESCRIPTION:

SEE SHEET C4 FOR LEGAL DESCRIPTION.



VICINITY MAP

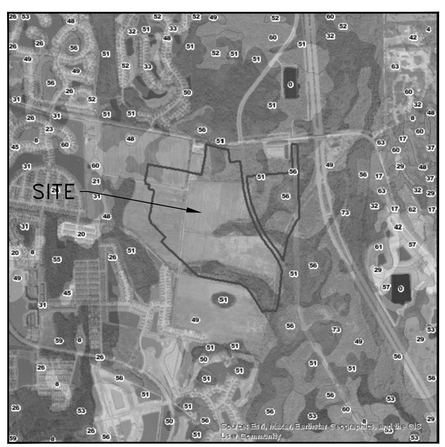
SCALE: 1" = 4000'



ZONING MAP

SCALE: 1" = 2000'

CURRENT ZONING FOR THIS SITE IS: PUD



SOILS MAP

SCALE: 1" = 1000'

THE SITE LIES WITHIN THE FOLLOWING VOLUSIA COUNTY SOIL CLASSIFICATIONS:
21 EAUGALLIE FINE SAND - DEPRESSIONAL (C/D) , 31 MALABAR FINE SAND (A/D), 48 PLACID FINE SAND - DEPRESSIONAL (A/D), 49 POMONA FINE SAND (A/D), 51 POMONA-ST JOHNS COMPLEX (A/D), 56 SAMSULA MUCK (A/D), 60 SMYRNA FINE SAND (A/D)



FLOOD ZONE MAP

SCALE: 1" = 2000'

THE PROPERTY LIES IN:
FLOOD ZONE "A" PER FEMA MAPS 12127C0517J EFF. 2/19/2014
ESTABLISHED FLOOD ELEVATION = 22.86 FT

SHEET INDEX:

C1	COVER SHEET
C2-C4	CONSTRUCTION NOTES
C5-C8	DEMOLITION & EROSION CONTROL PLANS
C9	OVERALL DEVELOPMENT PLAN
C10-C13	GEOMETRY, SIGNAGE & STRIPING PLANS
C14-C17	PAVING, GRADING & DRAINAGE PLANS
C18	STORMWATER STRUCTURE TABLES
C19-C22	UTILITY PLANS
C23-C37	PLAN & PROFILES
C38	CROSS-SECTIONS
C39-C47	CONSTRUCTION DETAILS
LA1-LA23	LANDSCAPE PLAN & DETAILS
EX-1	OPEN SPACE EXHIBIT
EX-2	OFFSITE SIDEWALK EXHIBIT
EX-3	CITY PARK EXHIBIT
C1-C14	OFFSITE WATERMAIN PLANS

PERMIT STATUS:

ST JOHNS RIVER WATER MANAGEMENT DISTRICT:	IN PROCESS
FDEP SEWER PERMIT:	NOT SUBMITTED
VCHD WATER PERMIT:	NOT SUBMITTED
FDEP NPDES:	NOT SUBMITTED
FDEP WETLAND:	NO PERMIT REQUIRED

MANDATORY PRE-CONSTRUCTION MEETING NOTE:

NO CONSTRUCTION ON THE PROPOSED PORTIONS OF THIS PROJECT MAY COMMENCE UNTIL A MANDATORY PRE-CONSTRUCTION MEETING IS HELD WITH THE CITY.

****NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION.****

ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD, STE C
ORMOND BEACH, FL 32174
WWW.ZEVCOHEN.COM

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 6583)

NO.	DATE	BY	SUBMITTALS / REVISIONS
1	10-20-23	MLR	INITIAL SUBMITTAL TO CITY
2	09-16-24	MLR	RESUBMITTED TO CITY
3	04-04-25	MLR	RESUBMITTED TO CITY
4	07-18-25	MLR	RESUBMITTED TO CITY

ARDISIA PARK
PHASE 3 & 4
FINAL ENGINEERING PLANS
COVER SHEET

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAWN BY: MLR
CHECKED BY: MKW

DRAWING FILE: 01_18169-COV-PH3-4
XREFS: 18169BAS.DWG
XREFS: 18169SUR.DWG

MELIA L. RUSSELL, P.E., NO.68357
KRISTOPHER T. ROWLEY, P.E., NO.84263
NOT VALID WITHOUT SEAL

SHEET: C1 OF 47

MELIA L. RUSSELL, P.E. No 68357 STATE OF FLORIDA PROFESSIONAL ENGINEER
Digitally signed by Melia L Russell
DN: C=Melia L Russell
Reason: I am the author of this document
Location: On the date and time electronically signed and sealed by Melia L. Russell, P.E. using a Sutd certificate.
Date: 2025.07.24 09:28:39-04'00'

R:\18169 - SHELL POINTE COLONY\FINAL ENGINEERING PLANS\CADD\PHASE 3 & 4\01-18169-COV-PH3-4.DWG - PRINTED: 7/25/2025 2:23 PM

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY'S LAND DEVELOPMENT CODE REQUIREMENTS, STANDARD CONSTRUCTION DETAILS & STANDARD SPECIFICATIONS, LATEST EDITIONS.
2. ALL DRAINAGE STRUCTURES AND OTHER IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MOST RECENT EDITION OF FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION.
3. SHOP DRAWINGS AND CERTIFICATIONS FOR ALL MATERIALS AND STRUCTURES ARE REQUIRED. THE CONTRACTOR SHALL REVIEW AND SIGN SHOP DRAWINGS. THE CONTRACTOR SHALL SUBMIT REVIEWED SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING THE MATERIALS REQUIRED FOR CONSTRUCTION.
4. CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL REQUIRED PERMITS. THE CONTRACTOR SHALL MAINTAIN COPIES OF ALL RELEVANT PERMITS AND CONSTRUCTION DOCUMENTS AVAILABLE ON THE JOB SITE AT ALL TIMES.
5. CONTRACTOR TO MAINTAIN THE SITE IN A SAFE AND SECURE MANNER TO PROTECT PUBLIC SAFETY AND THE CONDITIONS OF THE IMPROVEMENTS.
6. THE CONTRACTOR SHALL MAINTAIN, AT THE JOB SITE, A RECORD COPY OF ALL CONSTRUCTION DRAWINGS AND SPECIFICATIONS ON WHICH ALL FIELD CHANGES ARE TO BE SHOWN. THESE CHANGES ARE TO BE INCORPORATED IN THE "AS–BUILT" SURVEY FURNISHED TO THE ENGINEER.
7. SHOULD CONDITIONS VARY FROM THOSE SHOWN ON THESE PLANS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF RECORD PRIOR TO CONTINUING CONSTRUCTION.
8. ANY FIELD MODIFICATIONS OR DEVIATIONS TO THESE CONSTRUCTION PLANS REQUIRES APPROVAL BY BOTH THE ENGINEER OF RECORD AND THE CITY PRIOR TO PERFORMING THE WORK.
9. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE AN "AS–BUILT" SURVEY OF THE COMPLETED CONSTRUCTION. THE "AS–BUILT" SURVEY SHALL BE PREPARED IN ACCORDANCE WITH APPROPRIATE GOVERNMENTAL REGULATIONS AND ZCA REQUIREMENTS. THE "AS–BUILT" SURVEY SHALL BE PREPARED ON ZCA'S DESIGN/PERMITTED PLANS. ELECTRONIC AND PAPER COPIES OF THE AS–BUILT SURVEY SHALL BE PROVIDED TO THE ENGINEER OF RECORD. THE "AS–BUILT" SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED PROFESSIONAL LAND SURVEYOR.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING VEHICULAR AND PEDESTRIAN TRAFFIC SAFELY THROUGH THE WORK ZONE AT ALL TIMES, IF APPLICABLE. ANY SIDEWALK, LANE OR ROAD CLOSURE REQUIRES REVIEW AND APPROVAL IN ADVANCE AND A SEVEN (7) DAY MINIMUM NOTICE TO VOLUSIA COUNTY TRAFFIC OPERATIONS (386–239–6535). THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REQUIRED COORDINATION.
11. MAINTENANCE OF TRAFFIC WILL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAY CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS AND THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD PLANS, LATEST EDITIONS.
12. CONTRACTOR TO NOTIFY THE REGULATORY AGENCIES FORTY EIGHT (48) HOURS PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL SEND COPIES OF ALL TESTING REPORTS TO THE REGULATORY AGENCIES AND THE ENGINEER OF RECORD.
13. SURVEY INFORMATION PROVIDED BY MARK DOWST & ASSOCIATES, INC. DATED 01/04/22. ALL ELEVATIONS BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AND ARE SHOWN IN FEET. STATE PLANE COORDINATES ARE BASED UPON NAD 83.
14. ALL PUBLIC LAND CORNERS AND MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION ARE TO BE PROTECTED. THE CONTRACTOR SHALL EMPLOY A SURVEYOR, REGISTERED IN THE STATE OF FLORIDA, TO REPLACE/RESTORE ANY PROPERTY OR LAND MARKERS DISTURBED BY CONSTRUCTION ACTIVITIES.
15. NO LAND SHALL BE CLEARED, EXCAVATED OR FILLED AND NO STRUCTURES SHALL BE ERECTED, REPAIRED OR DEMOLISHED WITHOUT PROPER PERMIT(S).
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS AS WELL AS THE REQUIREMENTS OF ST. JOHNS RIVER WATER MANAGEMENT DISTRICT AND E.P.A. (NPDES). CONTRACTOR SHALL ESTABLISH BEST MANAGEMENT PRACTICES AND EROSION CONTROL METHODS PRIOR TO COMMENCING ANY SITE CLEARING OR DEMOLITION AND SHALL MAINTAIN THOSE BARRIERS UNTIL FINAL ACCEPTANCE OF THE PROJECT.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROJECT'S NPDES PERMITTING, INSPECTION AND REPORTING, IF APPLICABLE.
18. ALL DELINEATED WETLAND AREAS SHALL BE STAKED AND FENCED WITH TYPE III SILT FENCING PRIOR TO CONSTRUCTION. FENCING SHALL NOT BE REMOVED UNTIL ALL CONSTRUCTION IS COMPLETED. LIMITS OF SILT FENCE SHOWN ON PLANS ARE APPROXIMATE AND ARE TO BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS AND/OR AS DIRECTED BY THE ENGINEER.
19. THE EROSION, SEDIMENT AND TURBIDITY CONTROL MEASURES DELINEATED HEREON ARE THE MINIMUM REQUIRED. ADDITIONAL CONTROLS MAY BE NEEDED, DEPENDING UPON THE ACTUAL SITE CONDITIONS, JURISDICTIONAL AGENCY PERMIT REQUIREMENTS AND CONSTRUCTION OPERATIONS. STAKED SILT FENCE SHALL BE UTILIZED TO CONTROL EROSION AND RELEASE OF SUSPENDED SOLIDS. SEDIMENT TRACKING CONTROL DEVICES SHALL BE USED TO PREVENT THE OFFSITE TRANSPORT OF SEDIMENT BY MOTORIZED VEHICLES. IF CONTROL MEASURES DO NOT PROVE SATISFACTORY, WORK SHALL CEASE UNTIL NEW MEASURES ARE ADOPTED WITH SATISFACTORY RESULTS.
20. ALL EROSION AND SEDIMENT TRACKING CONTROL DEVICES SHALL BE INSPECTED DAILY AND IMMEDIATELY FOLLOWING A RAINFALL EVENT. REFER TO PROJECT'S STORMWATER POLLUTION PREVENT PLAN (SWPPP). ANY DEFICIENCIES FOUND IN THE EROSION CONTROL MEASURES SHALL BE REPAIRED IMMEDIATELY. THE CONTRACTOR SHALL KEEP A LOG BOOK DOCUMENTING THESE DAILY INSPECTIONS, DEFICIENCIES AND REMEDIAL ACTIONS.
21. ALL UNSUITABLE SOILS AND UNSUITABLE MATERIALS (SUCH AS CLAY, ORGANICS, ROCK, CEMENTED COQUINA, DEBRIS, ETC.) SHALL BE REMOVED, DISPOSED OF IN A LEGAL MANNER AND REPLACED WITH DRY COMPACTED GRANULAR MATERIAL SATISFACTORY TO THE CITY. THE COST OF ALL WORK AND MATERIALS IS TO BE INCLUDED IN THE UNIT PRICE OF THE ASSOCIATED CONSTRUCTION ITEMS UNLESS OTHERWISE SHOWN IN THE PLANS.
22. IN THE EVENT THAT WATER IS ENCOUNTERED DURING CONSTRUCTION, DEWATERING SHALL BE PERFORMED AS NEEDED. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN, PERMITTING, INSTALLATION, OPERATION AND SUBSEQUENT REMOVAL OF DEWATERING SYSTEMS AND THEIR SAFETY AND CONFORMITY WITH APPLICABLE CODES AND REGULATIONS.
23. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE ELECTRIC, TELEPHONE, GAS, CABLE TELEVISION, COMMUNICATIONS, ETC. COMPANIES TO DETERMINE THE TYPE AND LOCATION OF ALL UNDERGROUND FACILITIES IN THE AREA OF CONSTRUCTION.
24. ALL UNDERGROUND UTILITIES HAVE BEEN LOCATED HORIZONTALLY AND VERTICALLY BASED ON THE BEST INFORMATION AVAILABLE AND SHOULD BE CONSIDERED APPROXIMATE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND VERIFYING ALL ELEVATIONS OF EXISTING UTILITIES (PUBLIC AND PRIVATE) SHOWN OR NOT SHOWN PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE VARIOUS UTILITY COMPANIES TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATION, DISRUPTION OF SERVICE OR CLARIFICATION OF ACTIVITY REGARDING SAID UTILITY. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN WORKING NEAR OR CROSSING A UTILITY, WHETHER SHOWN ON THESE PLANS OR FIELD LOCATED. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE AND NOTIFY THE UTILITY COMPANIES FOR UTILITIES WHICH NEED TO BE RELOCATED FOR THE PROPOSED CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO PAY FOR ANY REPAIR, RELOCATION OR TEMPORARY MEASURES NEEDED FOR EXISTING OR PROPOSED UTILITIES.
25. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND AVOID ALL UTILITIES, OTHER STRUCTURES AND OBSTRUCTIONS BOTH ABOVE AND BELOW GROUND. ALL DAMAGE RESULTING FROM THE CONTRACTOR'S FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
26. THE CONTRACTOR SHALL NOTIFY ALL UTILITY PROVIDERS AT LEAST TWO (2) BUSINESS DAYS PRIOR TO ANY CONSTRUCTION.
27. THE CONTRACTOR SHALL MAINTAIN UNINTERRUPTED SERVICE AT ALL SERVICE CONNECTIONS. THE MANNER IN WHICH THIS IS ACCOMPLISHED SHALL BE LEFT TO THE DISCRETION OF THE CONTRACTOR, SUBJECT TO THE REQUIREMENTS OF THE CONTRACT SPECIFICATIONS.
28. ALL EXISTING DRAINAGE STRUCTURES AND UTILITIES WITHIN THE CONSTRUCTION LIMITS SHALL REMAIN, UNLESS OTHERWISE NOTED IN PLANS.
29. ALL STATIONS AND OFFSETS REFER TO CENTERLINE CONSTRUCTION UNLESS OTHERWISE NOTED IN PLANS.
30. THE LENGTH OF ALL DRAINAGE PIPES AND LOCATION OF ALL DRAINAGE STRUCTURES ARE APPROXIMATE. THE LOCATION OF THE DRAINAGE STRUCTURE SHALL DETERMINE THE LENGTH OF PIPE.
31. THE TOP OF CASTING ELEVATIONS (TC) OF ALL STRUCTURES ARE SHOWN. HOWEVER, THE CONTRACTOR SHALL INSTALL ALL FRAMES SO AS TO PROVIDE A SMOOTH SURFACE FOR VEHICULAR AND/OR PEDESTRIAN TRAFFIC.
32. CONTRACTOR SHALL CONFIRM PROPOSED TOP OF CASTING (TC) ELEVATIONS WILL ALLOW POSITIVE DRAINAGE TO PROPOSED INLETS. IF POSITIVE DRAINAGE DOES NOT EXIST, CONTRACTOR TO COORDINATE WITH ENGINEER OF RECORD FOR SOLUTION AND ADJUST PROPOSED INLETS AS NECESSARY.
33. CONTRACTOR SHALL CONFIRM ELEVATION OF EXISTING GRADE PRIOR TO PLACING DRAINAGE OUTFALL STRUCTURES. CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD IF EXISTING GRADE DOES NOT MATCH PROPOSED OUTFALL INVERT. CONTRACTOR SHALL ADJUST OUTFALL STRUCTURE INVERT AND/OR STRUCTURE LOCATION AS DIRECTED BY ENGINEER OF RECORD.
34. ANY DRAINAGE PROBLEMS CREATED BY CONSTRUCTION, OR EXISTING BEFORE CONSTRUCTION AND NOT ALLEVIATED, SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD AT THE TIME OF DISCOVERY.
35. ALL STORMWATER PIPES AND INLETS SHALL BE CLEANED OF DEBRIS AND ERODED MATERIALS AT LAST STAGES OF AND PRIOR TO COMPLETION OF CONSTRUCTION.
36. SPECIAL ATTENTION IS DIRECTED TO THE FACT THAT PORTIONS OF SOME DRAINAGE STRUCTURES MAY EXTEND INTO THE STABILIZED PORTION OF THE ROADBED. EXTREME CAUTION WILL BE NECESSARY DURING COMPACTION AND STABILIZATION OPERATIONS AT THESE LOCATIONS TO AVOID DAMAGE AND ACHIEVE THE REQUIRED COMPACTION.
37. DURING CONSTRUCTION, AN ALL–WEATHER ACCESSIBLE ROADWAY SHALL BE MAINTAINED AT ALL TIMES FOR FIRE ACCESS.

GENERAL NOTES (CONT'D)

38. ALL REQUIRED FIRE LINES & HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL & STATE REQUIREMENTS AND OPERATIONAL PRIOR TO THE START OF VERTICAL CONSTRUCTION.
39. NONE OF THE EXISTING LIMEROCK BASE THAT IS REMOVED IS TO BE USED IN THE CONSTRUCTION OF THE NEW LIMEROCK BASE UNLESS OTHERWISE NOTED ON PLANS.
40. EXISTING DRIVEWAYS WITHIN THE LIMITS OF THIS PROJECT ARE TO BE REPLACED AT THE SAME LOCATION AND WIDTH WITH THE SAME TYPE OF MATERIAL, UNLESS OTHERWISE SHOWN IN THE PLANS.
41. ALL RAMPS, SIDEWALKS AND ACCESSIBLE ROUTES ARE TO BE IN COMPLIANCE WITH CURRENT A.D.A. REQUIREMENTS.
42. SIGNS THAT ARE REMOVED AND ARE TO BE RELOCATED SHALL BE STOCK PILED BY THE CONTRACTOR. ANY EXISTING SIGNS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR AT HIS COST.
43. ROADWAY AND PARKING SIGNAGE AND MARKINGS SHALL BE IN CONFORMANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.
44. GRADES SHOWN ARE FINISHED GRADES.
45. OPERATION AND MAINTENANCE OF THE STORMWATER SYSTEM WILL BE PROVIDED BY THE OWNER OF PROPERTY. MAINTENANCE IS TO INCLUDE BI–WEEKLY MOWING OF SIDE SLOPES FOR VEGETATION CONTROL AND MONTHLY INSPECTION/CLEANING OF CULVERTS & STORM SYSTEMS.
46. ALL DISTURBED AREAS SHALL BE SODDED, UNLESS OTHERWISE SHOWN, AND SHALL HAVE SOD/ VEGETATED COVER ESTABLISHED PRIOR TO THE INSPECTION FOR THE CERTIFICATE OF OCCUPANCY.
47. INSTALLATION OF THE REQUIRED STREET SIGNS, TRAFFIC SIGNS, PAVEMENT STRIPING, STREET LIGHTS AND SIDEWALKS ALONG WITH THE PAINTING OF THE FIRE HYDRANTS MUST BE COMPLETED PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF COMPLETION.
48. CONTRACTOR IS RESPONSIBLE FOR INSPECTING AND PRE–TESTING PRIOR TO SCHEDULING A TEST OR WALK–THROUGH WITH THE UTILITY REPRESENTATIVES, MUNICIPAL REPRESENTATIVES AND ENGINEER OF RECORD. ANY COST ASSOCIATED WITH RETESTING SHALL BE PAID FOR BY THE CONTRACTOR.
49. THE ENGINEER OF RECORD AND LOCAL UTILITY SHALL BE GIVEN SEVENTY–TWO (72) HOURS NOTICE OF ALL REQUESTED MEETINGS AND/OR TESTING MEASURES.
50. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH THE REGULATORY REPRESENTATIVES TO DETERMINE THE INSPECTIONS NEED FOR THE PROJECT. CONTRACTOR SHALL PROVIDE PROPER NOTIFICATION TO INSPECTING AUTHORITIES BEFORE AND DURING CONSTRUCTION.
51. SITE DEVELOPMENT SHALL ADHERE TO THE CITY'S CONSTRUCTION MANAGEMENT GUIDELINES AS DEPICTED WITHIN ORDINANCE 60–19 THAT MAY REQUIRE A 6' CHAIN LINK FENCE WITH SINGLE COLOR FABRIC ALONG THE PIONEER TRAIL PERIMETER.
52. ZEV COHEN AND ASSOCIATES, INC (ZCA) LIABILITY SHALL BE LIMITED TO THE COMPANY'S DESIGN OF SPECIFIC IMPROVEMENTS AS DEPICTED ON THE SITE INFRASTRUCTURE CONSTRUCTION DOCUMENTS. FOR RESIDENTIAL SUBDIVISION DESIGN, ZCA SHALL NOT BE RESPONSIBLE OR HELD LIABLE FOR, EITHER LOT OR HOME IMPROVEMENTS PROPOSED TO BE CONSTRUCTED (OR ACTUALLY CONSTRUCTED) BY OTHERS AND/OR IMPROVEMENTS CONSTRUCTED AFTER CERTIFICATION OF COMPLETION OF THE SITE INFRASTRUCTURE. LOT IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO, WITH RESIDENTIAL HOME CONSTRUCTION, INDIVIDUAL LOT GRADING, GARAGES, DRIVEWAYS, SIDEWALKS, PATIOS, PORCHES, POOLS, POOL DECKS, SITTING AREAS, RETAINING WALLS, ETC. DESIGNED OR CONSTRUCTED BY THE HOMEBUILDER, HOMEOWNER, HOA, CONTRACTORS OR OTHER DESIGN PROFESSIONALS, NOT EMPLOYED BY ZCA, SHALL NOT BE THE RESPONSIBILITY OF ZCA.

EROSION & SEDIMENT CONTROL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND MAKING AVAILABLE ONSITE, ALL REQUIRED FEDERAL, STATE AND LOCAL PERMITS PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY POTENTIAL STORM WATER DISCHARGES TO THE CITY'S PERMITTED MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) MUST BE DESIGNATED ON THE FDEP NPDES CONSTRUCTION GENERIC PERMIT AND A COPY OF THE NOTICE OF INTENT PROVIDED TO THE CITY OF NEW SMYRNA STORM WATER COORDINATOR. THE CONTRACTOR SHALL MAINTAIN COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL PERMITS REQUIREMENTS.
2. THE CONTRACTOR SHALL AS A MINIMUM, PREPARE AND IMPLEMENT AN EROSION AND SEDIMENT CONTROL PLAN IN ACCORDANCE WITH FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) GUIDELINES.
3. INITIAL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED AND APPROVED BY THE CITY PRIOR TO ANY LAND DISTURBING ACTIVITIES.
4. PRIOR TO AND DURING CONSTRUCTION, THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN ALL EROSIONS AND SEDIMENT CONTROL MEASURES (BEST MANAGEMENT PRACTICES) REQUIRED TO RETAIN SEDIMENT ONSITE AND TO PREVENT VIOLATIONS OF WATER QUALITY STANDARDS. IF A PROJECT SPECIFIC EROSION AND SEDIMENT CONTROL PLAN IS APPROVED AS PART OF A PERMIT, THE PRACTICES MUST BE IN ACCORDANCE WITH THE APPROVED PLAN. IF SPECIFIC SITE CONDITIONS REQUIRE ADDITIONAL MEASURES DURING ANY PHASE OF CONSTRUCTION OR OPERATION TO PREVENT EROSION OR CONTROL OF SEDIMENT, BEYOND THOSE SPECIFIED IN THE EROSION AND SEDIMENT CONTROL PLAN, THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL BEST MANAGEMENT PRACTICES AS NECESSARY.
5. CONTRACTORS SHALL MINIMIZE DISTURBANCES OF EXISTING VEGETATION AND DRAINAGE PATTERNS TO MAXIMUM EXTENT PRACTICABLE. STABILIZATION MEASURES SHALL BE INITIATED FOR EROSION AND SEDIMENT CONTROL ON DISTURBED AREAS AS SOON AS PRACTICABLE, BUT IN NO CASE MORE THAN 7 CALENDAR DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
6. STORM WATER RETENTION, DETENTION, STORAGE AND CONVEYANCE SYSTEMS MUST BE EXCAVATED TO ROUGH GRADE PRIOR TO BUILDING CONSTRUCTION OF PLACEMENT OF IMPERVIOUS SURFACE WITHIN THE AREA SERVED BY THOSE SYSTEMS. ADEQUATE MEASURES MUST BE TAKEN TO PREVENT SILTATION OF THESE TREATMENT SYSTEMS AND CONTROL STRUCTURES DURING CONSTRUCTION. SILTATION MUST BE REMOVED FROM THE STORM WATER SYSTEM UPON REACHING 50% CAPACITY AND IMMEDIATELY PRIOR TO FINAL GRADING AND PAVING OF THE PROJECT.
7. CITY DEWATERING PERMITS SHALL BE OBTAINED AND APPROVED PRIOR TO ANY DEWATERING INTO THE CITY'S PERMITTED MS4 SYSTEM.

SITE CLEARING AND GRADING NOTES

THE FOLLOWING REPRESENTS MINIMUM STANDARDS TO BE ADHERED TO BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION OF A PROJECT. THE ENGINEER RESERVES THE RIGHT TO REQUIRE ADDITIONAL MEASURES TO BE EMPLOYED WHEN WARRANTED BY EXTREME CONDITIONS AND/OR THE FAILURE OF THE CONTRACTOR TO EMPLOY THE APPROPRIATE EROSION CONTROL BEST MANAGEMENT PRACTICES. FAILURE TO COMPLY WITH THESE PROVISIONS SHALL RESULT IN THE ISSUANCE OF A "STOP WORK ORDER".

1. NO DISTURBANCE OF EXISTING OR PROPOSED CONSERVATION EASEMENTS, NATURAL BUFFERS, OR WATER BODIES IS PERMITTED WITHOUT PRIOR APPROVAL FROM THE CITY ENGINEER OR DESIGNEE. THE CONTRACTOR SHALL LOCATE THESE AREAS IN THE FIELD AND BARRICADE THEM TO AVOID UNAUTHORIZED CLEARING. BARRICADES AND OTHER PROTECTIVE FENCING ARE TO BE LOCATED AT THE DRIP LINE OF EXISTING NATIVE TREES OR AT THE EDGE OF THE NATIVE UNDER–STORY HABITAT, WHICHEVER IS NEAREST TO THE CONSTRUCTION ACTIVITY.
2. SPECIMEN AND HISTORIC TREES, CLUSTERS OF TREES, NATURAL VEGETATION BUFFERS, AND SIMILAR AREAS MUST BE PROTECTED BY BARRICADES OR FENCING PRIOR TO CLEARING. BARRICADES ARE TO BE SET AT THE DRIP LINE OF THE TREES AND MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. BARBED WIRE IS NOT PERMITTED AS A PROTECTIVE BARRIER.
3. WHERE A CHANGE OF GRADE OCCURS AT THE DRIP LINE OF A SPECIMEN TREE, SILT FENCE WILL BE REQUIRED DURING CONSTRUCTION AND RETAINING WALLS MUST BE INSTALLED PRIOR TO FINAL ACCEPTANCE BY THE CITY.
4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL PROTECTIVE VEGETATION BARRICADES AND EROSION CONTROL STRUCTURES AND MEASURES IN PLACE PRIOR TO THE COMMENCEMENT OF ANY EARTHWORK, INCLUDING PRELIMINARY GRUBBING. THESE MEASURES INCLUDE, BUT ARE NOT LIMITED TO, TEMPORARY CONSTRUCTION FENCES, SYNTHETIC JUTE BALES, SILT FENCES, AND FLOATING TURBIDITY BARRIERS. FURTHER, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL EROSION CONTROL DEVICES THROUGHOUT THE DURATION OF THE ENTIRE PROJECT. MAINTENANCE SHALL INCLUDE PERIODIC INSPECTION AND REMOVAL OF DEBRIS ABUTTING EROSION CONTROL DEVICES IN ACCORDANCE WITH THE CITY'S UTILITY DEPARTMENT STANDARDS.
5. PRIOR TO THE INSTALLATION OF ANY FILL MATERIAL ON SUBJECT SITE, SILT FENCE SHALL BE INSTALLED:
   a. ALONG SUBJECT SITE BOUNDARY AND PROPERTY LINES,
   b. AT THE EDGE OF CONSERVATION EASEMENTS AND WETLANDS,
   c. ADJACENT TO NATURAL LANDSCAPE BUFFERS,
   d. AROUND THE PERIMETER OF EXISTING STORM WATER TREATMENT FACILITIES.
   e. AT ANY ADDITIONAL AREAS THAT THE CITY DEEMS NECESSARY TO BE PROTECTED FROM POTENTIAL EROSION IMPACTS DURING CONSTRUCTION. THESE CONDITIONS SHALL APPLY IN ALL INSTANCES WHERE FILL MATERIAL IS BEING INSTALLED WITHIN 25 FEET OF ANY OF THE AFOREMENTIONED LOCATIONS. WHILE THESE ITEMS REPRESENT THE MINIMUM REQUIREMENTS, THE CITY RESERVES THE RIGHT TO IMPOSE ADDITIONAL PROTECTIVE MEASURES, AS DETERMINED DURING ACTUAL SITE VISITS CONDUCTED AS PART OF THE STANDARD REVIEW OF THE SITE–SPECIFIC CLEARING PERMIT AND THROUGHOUT PROJECT CONSTRUCTION.
6. WHERE FILL MATERIAL IS INTENDED TO BE INSTALLED ADJACENT TO EXISTING VEGETATION WHICH IS INTENDED TO REMAIN NATURAL, THE CONTRACTOR MAY INSTALL SILT FENCING AS A TREE PROTECTION MEASURE, IN LIEU OF INSTALLING EITHER WOOD BRACING OR ORANGE MESH FENCING. THIS PRACTICE IS ENCOURAGED BY THE CITY. IF THE SILT FENCE FAILS TO PROVIDE ADEQUATE PROTECTION FROM IMPACT DUE TO CONSTRUCTION, THEN ADDITIONAL CONSTRUCTION FENCING OR WOOD BRACING SHALL BE REQUIRED.
7. AT A MINIMUM, THE CONTRACTOR SHALL SEED AND MULCH ALL DISTURBED AREAS. GRASS COVERAGE IS TO BE ESTABLISHED WITHIN THIRTY DAYS.
8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR THROUGH SCHEDULING, TO MINIMIZE THE DISTURBANCE OF SITE AREAS THAT HAVE BEEN BROUGHT TO THEIR PROPOSED FINAL GRADE. WITHIN TWENTY DAYS OF BRINGING A SUBJECT AREA TO ITS FINAL GRADE, THE CONTRACTOR SHALL INSTALL SEED AND MULCH OR SOD AND WATERING, AS REQUIRED.
9. FOR INDIVIDUAL CONSTRUCTION PROJECTS INVOLVING MULTIPLE PHASES, UPON COMPLETION OF EACH PHASE OF THE PROJECT, SEEDING AND MULCHING AND OR/ SODDING IS TO BE PERFORMED PRIOR TO COMMENCING THE NEXT PHASE OF CONSTRUCTION.
10. ONCE AN AREA IS SEEDED OR SODDED, IT MUST BE MAINTAINED, INCLUDING WATERING AND TRIMMING BY THE CONTRACTOR TO ALLOW THE GRASS TO BECOME ESTABLISHED.
11. ALL BURNING OF CLEARED MATERIALS MUST BE APPROVED AND PERMITTED THROUGH THE FL FOREST SERVICE, BUNNELL OFFICE.
12. ABSOLUTELY NO BURYING OF CLEARED & GRUBBED MATERIALS IS PERMITTED.
13. THE REMOVAL OF ALL VEGETATION AND TOPSOIL ON THE FUTURE ROADWAY, PARKING AND BUILDING LOT AREAS IS REQUIRED TO BE COMPLETED PRIOR TO THE PLACEMENT OF FILL ON THOSE AREAS. THE TOPSOIL MAY BE TEMPORARILY STOCKPILED AND USED AS TOPSOIL OVER PROPOSED GREEN AREAS SUCH AS PLANT BEDS, SODDED AREAS, AND WHERE TREES ARE TO BE INSTALLED OR RELOCATED. TEMPORARY STOCKPILE SLOPES SHALL NOT EXCEED 4:1 (H:V).
14. A SIGNED, DATED, AND SEALED LETTER FROM A SOILS ENGINEER OR THE ENGINEER OF RECORD CERTIFYING THAT THE AREAS TO BE FILLED HAVE BEEN STRIPPED OF ORGANIC MATERIALS, MUST BE SUBMITTED TO THE CITY PRIOR TO FILLING.
15. FILL MATERIAL IS TO BE PLACED IN ONE FOOT LIFTS AND COMPACTED TO THE APPROPRIATE DENSITY (98% FOR PAVED AREAS AND 95% FOR BUILDING PADS AND ALL OTHER AREAS AS PER MODIFIED AASHTO T–180).
16. DURING SUBDIVISION DEVELOPMENT WHEN FUTURE BUILDING LOTS ARE FILLED AS PART OF THE OVERALL SUBDIVISION IMPROVEMENTS, COMPACTION TEST REPORTS MUST BE PERFORMED ON THESE LOTS AT 300' INTERVALS. THESE TESTS ARE TO BE PERFORMED IN 1' VERTICAL INCREMENTS. THE RESULTS OF THESE TESTS ARE TO BE SUBMITTED TO THE CITY UPON COMPLETION OF THE 1' TESTS.

SITE CLEARING AND GRADING NOTES

17. IF ANY MUCK OR ANY UNSUITABLE MATERIAL IS DISCOVERED, IT SHALL BE REMOVED AND REPLACED WITH A SUITABLE MATERIAL THAT IS PROPERLY BACKFILLED, COMPACTED AND TESTED USING AASHTO T–180 MODIFIED PROCTOR METHOD.
18. STOCKPILING IS NOT GENERALLY PERMITTED BY THE CITY. WHEN ALLOWED, STOCKPILES SHALL NOT EXCEED SIX FEET IN HEIGHT MEASURED FROM THE ORIGINAL GRADE. AT A MINIMUM, STOCK PILES THAT WILL REMAIN IN PLACE IN EXCESS OF FIVE DAYS SHALL BE COVERED OR WATERED TO MINIMIZE THE ADVERSE IMPACT ON ADJACENT PROPERTY OWNERS AT NO ADDITIONAL COST TO THE CITY OR OWNER. SEED AND MULCH IMMEDIATELY UPON PLACEMENT OF THE FINAL LIFT.
19. SOILS ARE TO BE STABILIZED BY WATER OR OTHER MEANS DURING CONSTRUCTION. THIS IS INTENDED TO REDUCE SOIL EROSION AND THE IMPACT TO NEIGHBORING COMMUNITIES. ADEQUATE WATERING METHODS SHOULD BE EMPLOYED TO ALLOW DAILY COVERAGE OF THE ENTIRE LIMITS OF ALL AREAS THAT DO NOT HAVE AN ESTABLISHED VEGETATIVE COVER. METHODS TO BE EMPLOYED INCLUDE, BUT ARE NOT LIMITED TO, WATER TRUCKS, PERMANENT IRRIGATION SYSTEMS, TEMPORARY SPRINKLER SYSTEMS OPERATED BY PUMPING UNITS CONNECTED TO WET RETENTION PONDS, WATER CANNONS, TEMPORARY IRRIGATION SYSTEMS MOUNTED ATOP STOCKPILE AREAS, AND OTHER METHODS AS DEEMED NECESSARY BY THE CITY.
20. ALL FILL MATERIALS LOCATED BENEATH STRUCTURES AND PAVEMENT SHALL CONSIST OF CLEAN GRANULAR SAND FREE FROM ORGANICS AND SIMILAR MATERIAL THAT COULD DECOMPOSE.
21. ALL FILL TO BE PLACED IN LANDSCAPED AREAS SHALL HAVE A PH RANGE BETWEEN 5.5 AND 7.5, BE ORGANIC IN NATURE, FREE OF ROCKS AND DEBRIS, OR MATCH NATIVE EXISTING SOILS.

STORMWATER CONSTRUCTION NOTES

1. ALL MATERIALS, INSTALLATION AND SEDIMENT AND EROSION CONTROL FOR SUBDIVISIONS AND SITE PLANS SHALL CONFORM TO CITY STANDARDS, FDEP STANDARDS, FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), AND FDOT DESIGN STANDARDS (LATEST EDITION).
2. A PERMIT SHALL BE REQUIRED PRIOR TO ENGAGING IN ANY DEWATERING OR CONSTRUCTION ACTIVITY THAT CHANGES THE IMPERVIOUS AREA OF LAND. DEWATERING ACTIVITIES INCLUDE THE REMOVAL OF GROUND WATER FROM A CONSTRUCTION SITE, ENCLOSED VAULT, COFFERDAM, OR TRENCHES, ALLOWING CONSTRUCTION OR MAINTENANCE IN A DRY ENVIRONMENT.
3. CONTRACTOR SHALL FOLLOW REQUIRED EROSION AND SEDIMENT CONTROL PRACTICES AND INCLUDE AN EROSION CONTROL PLAN FOR REVIEW AND APPROVAL BY THE CITY PRIOR TO CONSTRUCTION. ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO THE CITY'S EROSION AND SEDIMENT CONTROL NOTES DETAIL.
4. CONTRACTOR SHALL FOLLOW ALL CITY'S REQUIRED BEST MANAGEMENT PRACTICES. ALL CONSTRUCTION, RENOVATION, AND DEMOLITION SITES ARE TO BE KEPT CLEAN AND FREE OF REFUSE, DEBRIS, AND LITTER DURING THE CONSTRUCTION, RENOVATION, OR DEMOLITION PROCESS. A CERTIFICATE OF OCCUPANCY FOR A NEWLY CONSTRUCTED OR RENOVATED BUILDING SHALL NOT BE ISSUED UNTIL ALL REFUSE AND LITT

SANITARY SEWER CONSTRUCTION & DESIGN STANDARDS TESTING REQUIREMENTS

1. THE CONTRACTOR SHALL EMPLOY AN INDEPENDENT TESTING LABORATORY AT HIS OWN EXPENSE TO INSURE COMPACTION OF ALL FILL MATERIAL IS COMPLETED PROPERLY. ALL TESTING WILL BE DONE ONE FOOT ABOVE THE PIPE AND AT ONE FOOT VERTICAL INTERVALS UNTIL FINAL GRADE IS REACHED. TESTS SHALL BE COMPLETED A MINIMUM FREQUENCY OF ONE SET OF TESTS EACH 300 FOOT LENGTH OF PIPING AND ONE ADDITIONAL SET OF TESTS AT EVERY MANHOLE. IDENTIFICATION OF TEST LOCATIONS SHALL BE CLEARLY INDICATED ON TEST REPORTS. TEST RESULTS SHALL BE FORWARDED PROMPTLY TO THE CITY'S PROGRAM ASSISTANT SITE INSPECTOR. INSPECTOR.
2. ALL TESTING REQUIRED BY THE CITY SHALL BE PAID FOR BY THE CONTRACTOR / DEVELOPER.
3. THE CITY OF NEW SMYRNA RESERVES THE RIGHT TO REQUIRE THE DEVELOPER TO PERFORM VACUUM TESTING OF ALL SANITARY MANHOLES AND TO AIR TEST SEWER MAINS.
4. ALL PROPOSED SEWER FORCE MAINS SHALL BE FLUSHED, PRESSURE TESTED AND CLEARED FOR SERVICE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS. THE CONTRACTOR SHALL NOTIFY THE CITY'S DESIGNATED SITE INSPECTOR AT LEAST 3 BUSINESS DAYS PRIOR TO BEGINNING A FULL–DIAMETER FLUSH OF THE MAINS FOR PRESSURE TESTING.
5. SANITARY SEWER FORCE MAINS SHALL BE PRESSURE TESTED TO 100 PSI FOR 2 HOURS WITH ALLOWABLE LEAKAGE BASED ON THE TABLE BELOW.

ALLOWABLE LEAKAGE PER 1000 FT. OF PIPELINE * –GPH

AVERAGE TEST PRESSURE	NOMINAL PIPE DIAMETER – INCHES																		AVERAGE TEST PRESSURE
(PSI)	3	4	6	8	10	12	14	16	18	20	24	30	36	42	48	54	60	64	(PSI)
450	0.48	0.64	0.95	1.27	1.59	1.91	2.23	2.55	2.87	3.18	3.82	4.78	5.73	6.69	7.64	8.60	9.56	10.19	450
400	0.45	0.60	0.90	1.20	1.50	1.80	2.10	2.40	2.70	3.00	3.60	4.50	5.41	6.31	7.21	8.11	9.01	9.61	400
350	0.42	0.56	0.84	1.12	1.40	1.69	1.97	2.25	2.53	2.81	3.37	4.21	5.06	5.90	6.74	7.58	8.43	8.99	350
300	0.39	0.52	0.78	1.04	1.30	1.56	1.82	2.08	2.34	2.60	3.12	3.90	4.68	5.46	6.24	7.02	7.80	8.32	300
275	0.37	0.50	0.75	1.00	1.24	1.49	1.74	1.99	2.24	2.49	2.99	3.73	4.48	5.23	5.98	6.72	7.47	7.97	275
250	0.36	0.47	0.71	0.95	1.19	1.42	1.66	1.90	2.14	2.37	2.85	3.56	4.27	4.99	5.70	6.41	7.12	7.60	250
225	0.34	0.45	0.68	0.90	1.13	1.35	1.58	1.80	2.03	2.25	2.70	3.38	4.05	4.73	5.41	6.03	6.76	7.21	225
200	0.32	0.43	0.64	0.85	1.06	1.28	1.48	1.70	1.91	2.12	2.55	3.19	3.82	4.46	5.09	5.73	6.37	6.80	200
175	0.30	0.40	0.59	0.80	0.99	1.19	1.39	1.59	1.79	1.98	2.38	2.98	3.58	4.17	4.77	5.36	5.96	6.36	175
150	0.28	0.37	0.55	0.74	0.92	1.10	1.29	1.47	1.66	1.84	2.21	2.76	3.31	3.86	4.41	4.97	5.52	5.88	150
125	0.25	0.34	0.50	0.67	0.84	1.01	1.18	1.34	1.51	1.68	2.01	2.52	3.02	3.53	4.03	4.53	5.04	5.37	125
100	0.23	0.30	0.45	0.60	0.75	0.90	1.05	1.20	1.35	1.50	1.80	2.25	2.70	3.15	3.60	4.05	4.50	4.80	100

** IF THE PIPELINE UNDER TEST CONTAINS SECTIONS OF VARIOUS DIAMETERS, THE ALLOWABLE LEAKAGE WILL BE THE SUM OF THE COMPUTED LEAKAGE FOR EACH SIZE.*

$$L = \frac{SD\sqrt{P}}{133{,}200}$$

WHERE:
L = ALLOWABLE LEAKAGE, IN GALLONS PER HOUR
S = LENGTH OF PIPE TESTED, IN FEET
D = NOMINAL DIAMETER OF PIPE, IN INCHES
P = AVERAGE TEST PRESSURE DURING THE LEAKAGE TEST, IN POUNDS PER SQUARE INCH (GAUGE)

POTABLE WATER CONSTRUCTION & DESIGN NOTES

1. THE UTILITIES COMMISSION SHALL BE GIVEN A MINIMUM OF 3 BUSINESS DAYS ADVANCE NOTICE (NOT INCLUDING HOLIDAYS OR WEEKENDS) PRIOR TO BEGINNING ANY POTABLE WATER SYSTEM CONSTRUCTION.
2. A PERMIT SHALL BE REQUIRED PRIOR TO ENGAGING IN ANY DEWATERING OR CONSTRUCTION ACTIVITY THAT CHANGES THE IMPERVIOUS AREA OF LAND. DEWATERING ACTIVITIES INCLUDE THE REMOVAL OF GROUND WATER FROM A CONSTRUCTION SITE, ENCLOSED VAULT, COFFERDAM, OR TRENCHES, ALLOWING CONSTRUCTION OR MAINTENANCE IN A DRY ENVIRONMENT.
3. ALL WORK PERFORMED ON POTABLE WATER FACILITIES OWNED OR PROPOSED TO BE OWNED BY THE CITY SHALL BE CONSTRUCTED BY AN UNDERGROUND UTILITY CONTRACTOR OR GENERAL CONTRACTOR LICENSED IN THE STATE OF FLORIDA AND REGISTERED WITH THE CITY.
4. UPON CONSTRUCTION COMPLETION AND ACCEPTANCE OF THE SYSTEM, IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ENSURE THAT THE SYSTEM IS PROPERLY CERTIFIED AND ACCEPTED BY THE DEPARTMENT OF HEALTH, AND THAT AS–BUILT DRAWINGS MEETING THE CITY'S REQUIREMENTS ARE PROVIDED TO THE CITY AND ACCEPTED PRIOR TO ANY USE OF THE SYSTEM.
5. THE WATER DISTRIBUTION SYSTEM SHALL BE DESIGNED TO COMPLY WITH THE CITY'S FIRE (WATER) FLOW CODE.
6. EACH WATER SERVICE TERMINATION SHALL BE MARKED WITH 2" X 4" PRESSURE TREATED LUMBER EXTENDING 4' ABOVE GRADE DIRECTLY IN FRONT OF THE METER BOX WITH 2" OF ENDGRAIN POLY–TUBE OR APPROVED EQUAL COILED AND CAPPED WITH AN ELSTER HYDROSERT CAP INSIDE EACH METER BOX.
7. ALL WATER SERVICES SHALL BE MARKED WITH A "/\" SAW CUT INTO THE CURB.
8. ALL WATER VALVES SHALL BE MARKED WITH AN "X" SAW CUT INTO THE CURB.
9. ALL TAPPING OF MAINS (12" OR SMALLER) SHALL BE PERFORMED BY CITY PERSONNEL. SCHEDULING OF THESE CONNECTIONS REQUIRES A MINIMUM OF 3 BUSINESS DAYS ADVANCE NOTICE AND SHALL BE COORDINATED WITH THE CITY INSPECTOR.
10. THE PLANS SHALL INCLUDE RIGHT OF WAY LINES AND STATIONING AND OFFSETS FROM THE CENTER LINE OF CONSTRUCTION.
11. DEWATERING ACTIVITIES SHALL KEEP THE GROUNDWATER ELEVATION A MINIMUM OF 6 INCHES BELOW THE WATER MAIN BEING INSTALLED.
12. ALL WATER MAINS SHALL BE INSTALLED ON A FIRM UNYIELDING FOUNDATION WITH ALL UNSUITABLE MATERIAL (MUCK, ROCK, COQUINA, ETC.) REMOVED AND REPLACED WITH CLEAN GRANULAR MATERIAL.
13. TRENCHES SHALL BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE CITY WITH A MINIMUM COMPACTION OF 98% IN PAVED AREAS AND 95% IN UNPAVED AREAS IN ACCORDANCE WITH AASHTO T–180 MODIFIED PROCTOR TEST.
14. WHERE POTABLE WATER AND SANITARY SEWER MAINS CROSS WITH LESS THAN TWELVE (12) INCHES OF VERTICAL CLEARANCE OR WHERE THE SEWER MAIN IS ABOVE THE WATER MAIN, MEDIATION MUST BE REVIEWED AND APPROVED BY FDEP.
15. WATER MAINS SHALL BE CONSTRUCTED A MINIMUM OF 4 FEET BEHIND THE BACK OF CURB OR THE EDGE OF ROADWAY PAVEMENT, WHICHEVER IS GREATER, AS MEASURED FROM OUTSIDE WALL OF THE WATER MAIN.
16. 3 INCH METALIZED PIPE LOCATION TAPE SHALL BE LOCATED 15 INCHES TO 24 INCHES BELOW FINISHED GRADE OR AS SPECIFIED BY THE MANUFACTURER FOR ALL WATER LINES. BLUE TRACER WIRE SHALL BE ATTACHED TO ALL PIPES. WIRE RUNS SHALL BE CONNECTED WITH SILICONE FILLED WIRE CONNECTORS. SERVICES SHALL BE CONNECTED TO THE MAIN WIRE WITH SILICONE FILLED WIRE CONNECTORS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE AND TEST FOR CONTINUITY (SEE CITY SPECIFICATION #15049 TRACER WIRE AND ALARMING TAPE). TRACER WIRE SHALL BE TESTED FOR CONTINUITY UNDER THE SUPERVISION OF A CITY REPRESENTATIVE AFTER INSTALLATION. IF A METER BOX IS NOT WITHIN 200 FEET OF A VALVE AND VALVE BOX AN ADDITIONAL VALVE BOX FOR TRACER WIRE IS REQUIRED.
17. SINGLE RESIDENTIAL WATER SERVICES SHALL BE A MINIMUM 1–INCH ENDOT, ENDOTRACE OR APPROVED EQUAL POLY–TUBE (MEETING THE SPECIFICATIONS OF NSF–14, AND AWWA C901.)
18. ALL WATER MAINS SHALL BE NSF–APPROVED FOR POTABLE WATER USE AND HAVE A MINIMUM COVER OF 36–INCHES.
19. WATER MAINS LESS THAN 18" MAY USE POLYVINYL CHLORIDE (PVC) C900, OR C905, SHALL MEET AWWA REQUIREMENTS AND HAVE A MINIMUM DIMENSION RATIO (DR–18) PRESSURE CLASS 150. WATER MAINS 18" AND LARGER SHALL BE DUCTILE IRON PIPE (D.I.P.), CLASS 350, CEMENT LINED. ALL NON–DUCTILE IRON PIPE HORIZONTAL DIRECTIONAL DRILL WATER MAINS SHALL HAVE A MINIMUM WORKING PRESSURE 160 PSI. THE CITY MAY REQUIRE A HIGHER PRESSURE RATING BASED ON SITE CONDITIONS. INSIDE DIAMETER OF NON D.I.P. HORIZONTAL DIRECTIONAL DRILL PIPE SHALL MATCH THE INSIDE DIAMETER OF CONNECTING PIPES. ALL GASKETS SHALL BE LUBRICATED BEFORE INSTALLATION.
20. DIRECTIONAL DRILLS SHALL HAVE FUSED MJ ADAPTERS.
21. ALL POTABLE WATER MAINS SHALL USE THRUST RESTRAINT AS CALCULATED BY A PROGRAM AVAILABLE AT EBAA.COM
22. ALL FITTINGS, VALVES, ETC. SHALL BE DUCTILE IRON (MJ OR FLANGED) AND SHALL BE RESTRAINED.
23. ALL RESTRAINED PIPE BELL JOINTS SHALL USE BELL RESTRAINTS OR GRIPPER TYPE GASKETS CAN BE USED FOR DUCTILE IRON PIPE JOINTS.
24. WATER VALVES SHALL BE INSTALLED AT ALL STREET INTERSECTIONS AND AT A MAXIMUM SPACING OF 750 FEET. SPACING OF VALVES ON PRIMARY TRANSMISSION MAINS WILL BE DETERMINED BY THE CITY.
25. VALVES SHALL BE INSTALLED ON ALL LEGS OF WATER MAIN TEES EXCEPT ONE.
26. ALL FITTINGS SHALL MEET MINIMUM RESTRAINT REQUIREMENTS PER ANSI/AWWA/EBAA, AND ALL PRESSURE PIPES UNDER THE ROADWAYS SHALL BE RESTRAINED.
27. METER LENGTHS REQUIRED FOR WATER METERS INSTALLATION ARE AS FOLLOWS: 3/4" TO 2" METER REQUIRES 6', 4" METER REQUIRES 12', 6" AND 8" METER REQUIRES 14',AND A 10" METER REQUIRES 20'.
28. ALL WATER VALVE BOXES SHALL BE ADJUSTED, INCLUDING DEBRIS CAP, AND CONCRETE COLLAR TO FINISHED GRADE. VALVE BOX LIDS SHALL BE PAINTED BLUE TO MAKE THEM CLEARLY VISIBLE.
29. UPON FINAL ACCEPTANCE OF NEW WATER SYSTEMS, WATER VALVES SHALL BE COMPLETELY OPENED BY CITY UTILITIES PERSONNEL. THE CONTRACTOR SHALL NOT OPERATE ANY EXISTING VALVES WITHOUT A CITY REPRESENTATIVE PRESENT.
30. ALL VALVES 2 INCHES AND SMALLER SHALL BE CURB STOPS. VALVES LARGER THAN 2 INCHES SHALL BE GATE VALVES.
31. A MINIMUM OF ONE FIRE HYDRANT SHALL BE LOCATED AT EVERY INTERSECTION. OTHER FIRE HYDRANTS SHALL BE LOCATED TO PRODUCE A MAXIMUM 500 FOOT RADIUS OF COVERAGE. ALL FIRE HYDRANTS SHALL BE INSTALLED IN EASILY ACCESSIBLE LOCATIONS FOR FIRE PERSONNEL. THE PRIMARY HYDRANT PORT ISHALL FACE THE STREET.
32. THE CONTRACTOR SHALL PIG ALL PIPES 6 INCHES OR LARGER IN DIAMETER. LAUNCHING AND EXTRACTION POINTS SHALL BE DETERMINED BY THE CONTRACTOR AND CITY REPRESENTATIVE.
33. FOR PIPE FLUSHING, PIGGING, TESTING, AND TIE–IN CONNECTIONS, THE CITY RESERVES THE RIGHT TO REQUIRE WORK TO BE PERFORMED DURING PERIODS OF LOW FLOW (MIDNIGHT TO 8 A.M.) THE CONTRACTOR SHALL COORDINATE WITH THE CITY REPRESENTATIVE AND WATER PLANT OPERATIONS TO SCHEDULE THE DATE AND TIME FOR THESE ACTIVITIES.
34. THE CITY RESERVES THE RIGHT TO PERFORM THE SAMPLING AND ANALYSIS FOR BACTERIOLOGICAL CLEARANCE OF THE WATER MAIN. ANY RETESTING WILL BE AT THE CONTRACTORS EXPENSE.
35. POTABLE WATER LINES SHALL NOT BE USED OR PLACED INTO SERVICE UNTIL CLEARANCE IS ACCEPTED BY VOLUSIA COUNTY HEALTH DEPARTMENT AND THE CITY OF NEW SMYRNA.
36. BACKFLOW PREVENTERS (BPP) SHALL BE PLACED ON ALL POTABLE AND FIRE LINES SERVING COMMERCIAL AND RESIDENTIAL PROPERTIES. THE TYPE OF BACKFLOW PREVENTERS REQUIRED ARE AS FOLLOWS:
    POTABLE WATER SERVICE; REDUCED PRESSURE ZONE (RPZ)(BFP)
    FIRE LINE SERVICING A FIRE SPRINKLER SYSTEM AND/OR PRIVATE FIRE HYDRANT; DOUBLE CHECK VALVE ASSEMBLY
    FIRE LINE; DOUBLE CHECK VALVE ASSEMBLY
    IN CASES WHERE A WATER LINE SERVES BOTH DOMESTIC AND FIRE SERVICES, A REDUCED PRESSURE ZONE BFP IS REQUIRED.

POTABLE WATER CONSTRUCTION & DESIGN NOTES (CONT'D)

37. ALL JACK & BORES REQUIRED FOR COMMERCIAL DEVELOPMENT SHALL BE PERFORMED AT THE SOLE COST OF THE OWNER\DEVELOPER.
38. ALL C–900 DR–18 PVC PIPE REQUIREMENTS REFERENCE TO THE C–900 STANDARDS.
39. CHLORINATED WATER MUST BE DECHLORINATED PRIOR TO DISCHARGE INTO ANY JURISDICTIONAL WETLAND OR WATER BODY PER AWWA STANDARD, ANSI/AWWA C655.

POTABLE WATER CONSTRUCTION & DESIGN STANDARDS TESTING REQUIREMENTS

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE TRENCH COMPACTION TESTS AT POINTS 12 INCHES ABOVE THE PIPE AND AT 12–INCH VERTICAL INTERVALS TO FINISHED GRADE AT A MAXIMUM HORIZONTAL SPACING OF 300 FEET.
2. ON ALL PROJECTS OTHER THAN THOSE INITIATED BY THE CITY THE CONTRACTOR SHALL EMPLOY AN INDEPENDENT TESTING LABORATORY AT HIS OWN EXPENSE TO INSURE THAT COMPACTION OF ALL FILL MATERIAL IS COMPLETED PROPERLY. ON ALL CITY PROJECTS THE TESTING WILL BE DONE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. IDENTIFICATION OF TEST LOCATIONS SHALL BE CLEARLY INDICATED ON TEST REPORTS. TEST RESULTS SHALL BE FORWARDED PROMPTLY TO THE CITY'S INSPECTOR.
3. ALL POTABLE WATER MAINS SHALL BE FLUSHED, DISINFECTED, PRESSURE TESTED AND BAC–TERIOLOGICALLY CLEARED FOR SERVICE WHEN APPROPRIATE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS. THE CONTRACTOR SHALL NOTIFY THE CITY'S DESIGNATED INSPECTOR WHO SHALL COORDINATE WITH CITY PERSONNEL AT THE WATER TREATMENT PLANT AT LEAST 3 BUSINESS DAYS PRIOR TO BEGINNING FLUSHING THE MAINS BEFORE PRESSURE TESTING. THE CITY MA REQUIRE WORK TO BE PERFORMED DURING PERIODS OF LOW FLOW (MIDNIGHT TO 8 AM). THE DATE AND TIME SCHEDULE FOR FLUSHING AND PIGGING MUST BE APPROVED BY THE WATER PLANT OPERATIONS. NO HOSE OR FIRE HYDRANT SHALL BE USED IN THE COLLECTION OF BACTERIOLOGICAL SAMPLES. THE SAMPLING TAP MUST BE DEDICATED, CLEAN, DISINFECTED AND FLUSHED PRIOR TO SAMPLING. SAMPLING TAP SHALL BE SMOOTH, UNTHREADED 1/2 INCH HOSE BIB. DISINFECTION AND SAMPLING SHALL BE SCHEDULED AT THE CITY'S CONVENIENCE.
4. PRESSURE TEST FOR TAPPING SADDLES AND VALVES FOR A MINIMUM OF 30 MINUTES AT 150 PSI OR 30 MINUTES AT MANUFACTURER'S RECOMMENDED TESTING PRESSURE.
5. WATERMAINS SHALL BE PRESSURE TESTED AT 150 PSI FOR 3 HOURS. TESTING SHALL BE IN ACCORDANCE WITH AWWA C–600 AND AWWA C–605 AS APPLICABLE WITH ALLOWABLE LEAKAGE TO BE BASED ON THE TABLE BELOW.

ALLOWABLE LEAKAGE PER 1000 FT. OF PIPELINE * –GPH

AVERAGE PRESSURE TEST	NOMINAL PIPE DIAMETER – INCHES																		AVERAGE TEST PRESSURE
(PSI)	3	4	6	8	10	12	14	16	18	20	24	30	36	42	48	54	60	64	(PSI)
450	0.48	0.64	0.95	1.27	1.59	1.91	2.23	2.55	2.87	3.18	3.82	4.78	5.73	6.69	7.64	8.60	9.56	10.19	450
400	0.45	0.60	0.90	1.20	1.50	1.80	2.10	2.40	2.70	3.00	3.60	4.50	5.41	6.31	7.21	8.11	9.01	9.61	400
350	0.42	0.56	0.84	1.12	1.40	1.69	1.97	2.25	2.53	2.81	3.37	4.21	5.06	5.90	6.74	7.58	8.43	8.99	350
300	0.39	0.52	0.78	1.04	1.30	1.56	1.82	2.08	2.34	2.60	3.12	3.90	4.68	5.46	6.24	7.02	7.80	8.32	300
275	0.37	0.50	0.75	1.00	1.24	1.49	1.74	1.99	2.24	2.49	2.99	3.73	4.48	5.23	5.98	6.72	7.47	7.97	275
250	0.36	0.47	0.71	0.95	1.19	1.42	1.66	1.90	2.14	2.37	2.85	3.56	4.27	4.99	5.70	6.41	7.12	7.60	250
225	0.34	0.45	0.68	0.90	1.13	1.35	1.58	1.80	2.03	2.25	2.70	3.38	4.05	4.73	5.41	6.03	6.76	7.21	225
200	0.32	0.43	0.64	0.85	1.06	1.28	1.48	1.70	1.91	2.12	2.55	3.19	3.82	4.46	5.09	5.73	6.37	6.80	200
175	0.30	0.40	0.59	0.80	0.99	1.19	1.39	1.59	1.79	1.98	2.38	2.98	3.58	4.17	4.77	5.36	5.96	6.36	175
150	0.28	0.37	0.55	0.74	0.92	1.10	1.29	1.47	1.66	1.84	2.21	2.76	3.31	3.86	4.41	4.97	5.52	5.88	150
125	0.25	0.34	0.50	0.67	0.84	1.01	1.18	1.34	1.51	1.68	2.01	2.52	3.02	3.53	4.03	4.53	5.04	5.37	125
100	0.23	0.30	0.45	0.60	0.75	0.90	1.05	1.20	1.35	1.50	1.80	2.25	2.70	3.15	3.60	4.05	4.50	4.80	100

** IF THE PIPELINE UNDER TEST CONTAINS SECTIONS OF VARIOUS DIAMETERS, THE ALLOWABLE LEAKAGE WILL BE THE SUM OF THE COMPUTED LEAKAGE FOR EACH SIZE.*

$$L = \frac{SD\sqrt{P}}{133{,}200}$$

WHERE:
L = ALLOWABLE LEAKAGE, IN GALLONS PER HOUR
S = LENGTH OF PIPE TESTED, IN FEET
D = NOMINAL DIAMETER OF PIPE, IN INCHES
P = AVERAGE TEST PRESSURE DURING THE LEAKAGE TEST, IN POUNDS PER SQUARE INCH (GAUGE)

RECLAIMED WATER CONSTRUCTION & DESIGN NOTES

1. THE UTILITIES COMMISSION SHALL BE GIVEN A MINIMUM OF THREE BUSINESS DAYS NOTICE (NOT INCLUDING HOLIDAYS) PRIOR TO BEGINNING ANY RECLAIMED WATER SYSTEM CONSTRUCTION.
2. A PERMIT SHALL BE REQUIRED PRIOR TO ENGAGING IN ANY DEWATERING OR CONSTRUCTION ACTIVITY THAT CHANGES THE IMPERVIOUS AREA OF LAND. DEWATERING ACTIVITIES INCLUDE THE REMOVAL OF GROUND WATER FROM A CONSTRUCTION SITE, ENCLOSED VAULT, COFFERDAM, OR TRENCHES, ALLOWING CONSTRUCTION OR MAINTENANCE IN A DRY ENVIRONMENT.
3. RECLAIMED WATER SERVICE ENDINGS SHALL BE SECURED BY WIRE TO 2" X 4" PRESSURE TREATED STAKES, APPROXIMATELY 2' ABOVE GRADE OR MAY BE PLACED IN RECLAIMED WATER METER BOXES PROVIDED BY THE CONTRACTOR AT THE TIME OF FINAL INSPECTION.
4. FOR PIPE FLUSHING, PIGGING, TESTING, AND TIE–IN CONNECTIONS, THE CITY RESERVES THE RIGHT TO REQUIRE WORK TO BE PERFORMED DURING PERIODS OF LOW FLOW (MIDNIGHT TO 8 A.M.) IN ORDER TO MINIMIZE SERVICE DISRUPTION TO EXISTING CUSTOMERS. THE CONTRACTOR SHALL COORDINATE AND SCHEDULE WITH THE CITY REPRESENTATIVE THE DATE AND TIME, THAT MUST BE APPROVED BY WATER PLANT OPERATIONS.
5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SUPPLY "AS–BUILT DRAWINGS" TO THE CITY PRIOR TO ANY USE OF THE SYSTEM. **SEE CITY OF NEW SMYRNA AS–BUILT REQUIREMENTS.**
6. ALL RECLAIMED WATER SERVICES SHALL BE MARKED ALONG THE OUTSIDE EDGE OF CURB WITH A "0" OR BY METAL TABS SET INTO PAVEMENT. VALVES AND BLOW–OFFS FOR RECLAIMED WATER MAINS SHALL BE MARKED BY A "+" SET INTO THE PAVEMENT AND PAINTED WITH PURPLE ENAMEL.
7. RECLAIMED WATER SERVICES SHALL BE LOCATED AT LOT LINES ALTERNATING WITH POTABLE WATER SERVICE LOCATIONS. IN INSTANCES WHERE RECLAIMED WATER SERVICES MUST BE OFFSET, THE SERVICES MAY BE OFFSET FROM THE LOT LINE A MAXIMUM DISTANCE OF 2 FEET.
8. ALL RECLAIMED WATER HAND–OPERATED CONNECTIONS AND OUTLETS SHALL BE CONTAINED IN UNDER–GROUND SERVICE VAULTS AND APPROPRIATELY TAGGED OR LABELED TO WARN THE PUBLIC AND EMPLOYEES THAT THE WATER IS NOT INTENDED FOR DRINKING OR SWIMMING. ANY SIGNIFICANT IRRIGATION SITE UTILIZING RECLAIMED WATER, SUCH AS AN ATHLETIC FIELD, GOLF COURSE, PARK OR POND, IS REQUIRED TO POST A 12" x 12" RECLAIMED WATER SIGN WARNING THE PUBLIC AND EMPLOYEES THAT RECLAIMED WATER IS NOT INTENDED FOR DRINKING OR SWIMMING. THIS SIGN SHALL BE PLACED AT THE ENTRANCE TO THE SITE AND THE LOCATION OF THE PRIVATE REUSE SYSTEM. SEE 'RECLAIMED WATER IN USE' DETAIL.
9. VAULTS FOR METERS SHALL BE LOCKED OR REQUIRE A SPECIAL TOOL FOR OPERATION.
10. A 75 FOOT SETBACK DISTANCE SHALL BE PROVIDED FROM PUBLIC ACCESS RECLAIMED WETTED AREAS TO PUBLIC OR PRIVATE POTABLE WATER SUPPLY WELLS.
11. LOW TRAJECTORY NOZZLES ARE REQUIRED WITHIN 100 FEET OF PUBLIC EATING, DRINKING OR BATHING FACILITIES.
12. ALL RECLAIMED WATER MAINS SHALL BE INSTALLED ON A FIRM FOUNDATION WITH ALL UNSUITABLE MATERIAL (MUCK, ROCK, COQUINA, ETC.) REMOVED AND REPLACED WITH CLEAN GRANULAR MATERIAL.
13. TRENCHES SHALL BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE CITY WITH A MINIMUM COMPACTION OF 95% IN UNPAVED AREAS AND 98% IN PAVED AREAS IN ACCORDANCE WITH AASHTO T–180.
14. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE TRENCH COMPACTION TESTS AT POINTS 12 INCHES ABOVE THE PIPE AND AT 12 INCHES VERTICAL INTERVALS TO FINISH GRADE AT A MAXIMUM SPACING OF EVERY 300 FEET.
15. 3" NEUTRALIZED PIPE LOCATION TAPE SHALL BE INSTALLED 15" TO 24" BELOW FINISHED GRADE OR AS SPECIFIED BY MANUFACTURER FOR ALL PVC LINES, AND A SINGLE STRAND INSULATED COPPER TRACER WIRE SHALL BE ATTACHED TO ALL PVC PIPE. WIRE RUNS SHALL BE CONNECTED WITH SILICONE FILLED WIRE CONNECTORS. EACH RUN SHALL TERMINATE AT EVERY VALVE. SEE STANDARD DETAIL "MAIN VALVE BOX" FOR INSTALLATION OF WIRE ON RISER PIPE. SERVICES SHALL BE CONNECTED TO THE MAIN WIRE WITH SILICONE FILLED CONNECTORS. IT IS THE CONTRACTOR'S RESPONSIBLY TO ENSURE CONTINUITY AND TEST FOR CONTINUITY (SEE CITY SPECIFICATIONS #15049 TRACER WIRE AND ALARMING TAPE).
16. ALL SINGLE RESIDENTIAL WATER SERVICES SHALL BE 1". SERVICES SHALL BE CTS 3408 HIGH DENSITY POLYETHYLENE TUBING RATED FOR A MINIMUM OF 200 PSI WITH SODR 9 (CTS). THE TUBING SHALL HAVE A VIRGIN HIGH DENSITY POLYETHYLENE CENTER FOR WHICH THE MANUFACTURER SHALL FURNISH A CERTIFICATE OF PURITY. THE TUBING SHALL BE PURPLE IN COLOR AND SHALL HAVE THE WORDS "RECLAIMED WATER" PERMANENTLY PRINTED ON THE OUTSIDE. THE TUBING SHALL HAVE U.V. PROTECTION AND SHALL NOT BE AFFECTED BY DIRECT SUNLIGHT. THE TUBING SHALL COMPLY WITH OR EXCEED THE APPLICABLE STANDARDS OF A.S.T.M. D1248, D3350, D2239, D2737, N.S.F.–14 AND A.W.W.A. C901 AND SHALL COME WITH A LIFETIME WARRANTY. APPROVED SIZES: 1" AND 2" DIAMETERS.
17. RECLAIMED WATER MAINS SHALL BE INSTALLED 4 FEET OFF THE BACK OF THE CURB ON THE OPPOSITE SIDE OF THE ROAD OF THE POTABLE WATER MAINS, OR AS APPROVED BY THE CITY. RECLAIMED WATER MAINS SHOULD NOT BE INSTALLED UNDER SIDEWALK.
18. ALL RECLAIMED WATER MAINS SHALL HAVE A MINIMUM COVER OF 36 INCHES. IN SPECIAL CASES WHERE IT IS IMPOSSIBLE OR INAPPROPRIATE TO PROVIDE ADEQUATE COVE, DUCTILE IRON PRESSURE CLASS 350 OR CONCRETE ENCASEMENT/PROTECTIVE SLAB MAY BE USED AT THE DISCRETION OF THE UTILITIES DEPARTMENT. ALL DIP SHALL HAVE 2" PURPLE STRIPES PAINTED AT 12 O'COLCK,3 O'CLOCK, 6 O'CLOCK AND 9 O'CLOCK FOR THE FULL LENGTH OF PIPE. NON PAINTED RECLAIMED PIPE OR PIPES SHALL BE PAINTED WITH AN EPOXY PAINT (PANTONE PURPLE) TO CLEARLY MARK THE RECLAIM PIPE OR PIPES.

RECLAIMED WATER CONSTRUCTION & DESIGN NOTES (CONT'D)

19. RECLAIMED WATER MAINS SHALL BE PURPLE PVC, DR–18 AWWA CLASS C–900 OR C–905, CL 150, OR DIP PRESSURE CLASS 350, STANDARD CEMENT LINED (PAINTED PANTONE PURPLE) UNLESS APPROVED OTHERWISE BY THE CITY. ALL HORIZONTAL DIRECTIONAL DRILLS SHALL HAVE A MINIMUM WORKING PRESSURE OF 160 PSI. THE CITY MAY REQUIRE A HIGHER PRESSURE RATING BASED ON SITE CONDITIONS. INSIDE DIAMETER OF HORIZONTAL DIRECTIONAL DRILL PIPE SHALL MATCH THE INSIDE DIAMETER OF CONNECTING PIPES. ALL GASKETS SHALL BE LUBRICATED BEFORE INSTALLATION.
20. DIRECTIONAL DRILLS SHALL HAVE FUSSED MJ ADAPTERS.
21. ALL RECLAIMED WATER MAINS SHALL USE THRUST RESTRAINT AS CALCULATED BY A PROGRAM AVAILABLE AT EBAA.COM
22. ALL FITTINGS, VALVES, ECT. SHALL BE DUCTILE IRON (MJ OR FLANGED) AND SHALL BE RESTRAINED.
23. BELL RESTRAINTS OR GRIPPER TYPE GASKETS SHALL BE USED FOR ALL RESTRAINED PIPE BELL JOINTS.
24. VALVES SHALL BE PLACED AT ALL STREET INTERSECTIONS AND AT MAXIMUM SPACING OF 750 FEET.
25. VALVES SHALL BE INSTALLED ON ALL LEGS EXCEPT ONE AT ALL RECLAIMED WATER MAIN TEES AND CROSSES.
26. ALL VALVES SHALL BE ADJUSTED TO FINISH GRADE AND CAPS SHALL BE PAINTED PURPLE.
27. THE CONTRACTOR IS REQUIRED TO PIG ALL RECLAIMED WATER MAINS EQUAL TO OR GREATER THAN 6" IN DIAMETER AND PRIMARY DISTRIBUTION MAINS LOCATED ON COLLECTOR AND ARTERIAL ROADWAYS. LAUNCHING AND EXTRACTION POINTS SHALL BE DETER

SITE PLAN & SUBDIVISION TESTING

A. MATERIALS:
THE INSPECTION AND TESTING OF MATERIALS AND FINISHED ARTICLES TO BE INCORPORATED IN THE WORK SHALL BE MADE BY BUREAUS, LABORATORIES, OR AGENCIES APPROVED BY THE ENGINEER OF RECORD. THE CONTRACTOR SHALL SUBMIT SUCH SAMPLES OR TEST PIECES OF MATERIALS AS THE ENGINEER OF RECORD MAY REQUIRE. THE CONTRACTOR SHALL NOT INCORPORATE ANY MATERIAL OR FINISHED ARTICLE INTO THE WORK UNTIL THE RESULTS OF THE INSPECTIONS OR TESTS ARE KNOWN AND THE CONTRACTOR HAS BEEN NOTIFIED BY THE ENGINEER OF RECORD THAT THE MATERIAL OR FINISHED ARTICLE IS ACCEPTED. ALL MATERIALS MUST BE OF THE SPECIFIED QUALITY AND BE EQUAL TO THE APPROVED SAMPLE IF A SAMPLE HAS BEEN SUBMITTED. CERTIFIED COPIES OF ALL TESTS MADE SHALL BE SUBMITTED TO THE ENGINEER OF RECORD AS WELL AS TO THE CITY'S DESIGNATED SITE INSPECTOR. THE CITY'S DESIGNATED SITE INSPECTOR MUST RECEIVE COPIES OF ALL TESTING REPORTS AND CERTIFICATES PRIOR TO THE ENGINEER OF RECORD REQUESTING A FINAL PROJECT INSPECTION FROM THE CITY.

B. LABORATORY CONTROL AND CERTIFICATES:
1. SPECIFICATIONS: SAMPLING, TESTING, AND LABORATORY METHODS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE AASHTO OR ASTM. WHERE AASHTO OR ASTM SPECIFICATIONS ARE USED, THE REFERENCE MUST BE CONSTRUED TO BE THE MOST RECENT STANDARD SPECIFICATIONS OR TENTATIVE SPECIFICATIONS OF THE AASHTO OR ASTM IN FORCE ON THE DATE OF THE TEST.
2. TEST & CERTIFICATES: THE CONTRACTOR SHALL ENGAGE AN APPROVED TESTING LABORATORY TO PROVIDE THE FOLLOWING TESTS AND CERTIFICATIONS SIGNED BY A REGISTERED ENGINEER OF THE STATE OF FLORIDA. ALL TECHNICIANS PERFORMING THE TESTS SHALL BE STATE CERTIFIED FOR THE TESTING PERFORMED. ADDITIONAL TESTS THAT MAY BE REQUIRED BY EITHER THE ENGINEER OF RECORD OR THE CITY SHALL ALSO BE PROVIDED BY THE CONTRACTOR, AND THE FOLLOWING SHALL NOT BE TAKEN AS A COMPLETE AND EXHAUSTIVE LIST OF THE CONTRACTOR'S TESTING RESPONSIBILITIES.
   a. SOIL ANALYSIS FOR STRUCTURAL FILL MATERIAL PRIOR TO INSTALLATION. SOIL ANALYSIS FOR STRUCTURAL FILL MATERIAL PRIOR TO INSTALLATION.
   b. PROCTOR DENSITIES, MOISTURE CONTENT, COMPACTED FIELD DENSITIES AND ATTERBERG LIMITS.
   c. ANALYSIS OF RECYCLED CONCRETE BASE MATERIAL PRIOR TO INSTALLATION.
   d. SPHALT MIX DESIGN, BITUMEN CONTENT, SIEVE ANALYSIS, HUBBARD FIELD STABILITY TESTS, NUCLEAR DENSITY TESTS (BACKSCATTER METHOD), AND ANALYSIS OF CORE SAMPLES.
   e. CONCRETE MIX DESIGNS FOR ALL APPLICATIONS INCLUDING PAVEMENT, CAST–IN–PLACE STRUCTURES, CURBING, GUTTERS, SIDEWALKS, BIKE PATHS, APRONS AND DRIVEWAYS.
   f. COMPRESSIVE TEST CYLINDERS AND SLUMP TESTS FOR ALL APPLICATIONS OF CONCRETE, INCLUDING PAVEMENT, CAST–IN–PLACE STRUCTURES, CURBING, GUTTERS, SIDEWALKS, BIKE PATHS, APRONS, AND DRIVEWAYS.
   g. ALL UNDERGROUND UTILITY TESTING TO BE COMPLETED IN ACCORDANCE WITH THE CITY'S UTILITIES DEPARTMENT DESIGN STANDARDS.

VOLUSIA COUNTY USE PERMIT NOTES

1. NOTIFY VOLUSIA COUNTY DEVELOPMENT ENGINEERING DIVISION AT (386) 736–5926 A MINIMUM OF 24 HOURS PRIOR TO THE START OF CONSTRUCTION. FAILURE OF THE PERMITTEE TO OBTAIN THE APPROPRIATE INSPECTIONS PRIOR TO PROCEEDING WITH WORK SHALL NOT RELIEVE THE PERMITTEE FROM REEXCAVATION OR OTHER MEASURES NECESSARY FOR THE INSPECTION OF WORK.
2. VOLUSIA COUNTY TRAFFIC ENGINEERING (386) 736–5968 IS NOT A MEMBER OF SUNSHINE ONE CALL. WHEN REQUESTING LOCATES, PLEASE PROVIDE A MINIMUM ADVANCED NOTIFICATION OF TWO (2) BUSINESS DAYS PRIOR TO PROPOSED WORK.
3. COORDINATION WITH VOLUSIA COUNTY TRAFFIC OPERATIONS (386) 239–6535 IS REQUIRED WITH A MINIMUM ADVANCED NOTICE OF SEVEN (7) DAYS PRIOR TO ANY SIDEWALK, LANE OR ROAD CLOSURE (INCLUDING FLAGGING OPERATIONS).
4. OPERATIONS WITHIN THE COUNTY RIGHT–OF–WAY SHALL NORMALLY BE CONDUCTED 7:00 AM TO 7:00 PM, MONDAY THROUGH FRIDAY. ANY DEVIATION FROM THESE HOURS REQUIRES PRIOR APPROVAL FROM THE COUNTY DEVELOPMENT ENGINEER. EMERGENCY REPAIRS ARE EXCLUDED FROM THIS TIME RESTRICTION.
5. ALL EXISTING SIDEWALKS WITHIN COUNTY RIGHT–OF–WAY SHALL EITHER REMAIN OPEN OR BE PROVIDED A TEMPORARY WALKWAY IN ACCORDANCE WITH THE LATEST VERSION OF FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD INDEX NO. 660. ANY DAMAGE TO SIDEWALKS SHALL BE REPAIRED AND/OR REPLACED IN LIKE KIND BY THE CONTRACTOR. NEW SIDEWALKS AND SECTIONS THROUGH DRIVEWAYS MUST BE AT A 1.5% CROSS SLOPE AND 2% MAXIMUM CROSS SLOPE PER ADA STANDARDS.
6. DRIVING OR STAGING OF CONSTRUCTION VEHICLES OR MATERIALS IS NOT PERMITTED WITHIN THE COUNTY RIGHT–OF–WAY OR ON PEDESTRIAN WALKWAYS AND PATHS. THERE SHALL BE NO OVERNIGHT CONSTRUCTION VEHICLE RELATED PARKING, CONSTRUCTION MATERIAL PLACEMENT OR STORAGE OF ANY KIND PERMITTED WITHIN THE COUNTY RIGHT–OF–WAY.
7. NO TRENCH OR EXCAVATION SHALL BE LEFT OPEN OR UNATTENDED OVERNIGHT, UNLESS APPROVED BY THE COUNTY DEVELOPMENT ENGINEERING INSPECTOR. EXCAVATIONS SHALL MEET THE DROP OFF PROTECTION REQUIREMENTS OF THE LATEST FDOT STANDARD PLANS INDEX 102–600.
8. RESTORATION SHALL BE REQUIRED FOR ANY DAMAGE TO SIDEWALKS, CURBS, OR OTHER EXISTING STRUCTURES IN THE RIGHT–OF–WAY. ALL DISTURBED AREAS WITHIN THE COUNTY RIGHT OF WAY SHALL BE RE–GRADED AND SODDED. SEED AND MULCH IS NOT AN ACCEPTABLE ALTERNATIVE TO SODDING.

AS–BUILT DRAWING REQUIREMENTS

IN ORDER TO ENSURE THAT NEW SUBDIVISIONS AND SITE PLANS ARE CONSTRUCTED SUBSTANTIALLY IN ACCORDANCE WITH CITY REGULATIONS AND THE APPROVED DRAWINGS, THE FOLLOWING INFORMATION IS REQUIRED ON ALL AS–BUILT DRAWINGS.

1. PAVEMENT AND CURB WIDTHS SHALL BE VERIFIED AND DIMENSIONED FOR EACH STREET AT EACH BLOCK. (FOR SUBDIVISIONS) AND AS APPROPRIATE TO CONFIRM PAVING LIMITS (ON SITE PLANS).
2. ALL RADII AT INTERSECTIONS SHALL BE VERIFIED AND DIMENSIONED. THIS INFORMATION IS TO BE CLEARLY INDICATED ON THE AS–BUILT.
3. ROADWAY ELEVATIONS SHALL BE RECORDED AT ALL GRADE CHANGES, 100' INTERVALS ALONG ROADWAY, AND OTHER INTERVALS AS NEEDED ALONG ALL STREETS. STREET CENTERLINE AND CURB INVERT ELEVATIONS SHALL BE RECORDED AS NOTED. THE AS–BUILT CENTERLINE PROFILE OF ALL STREETS SHALL ALSO BE SHOWN ON THE PLAN AND PROFILE SO IT MAY BE COMPARED TO THE DESIGN PROFILE GRADE LINES. IN THE EVENT THAT THE AS–BUILT CENTERLINE LONGITUDINAL GRADE DOES NOT MEET THE CITY MINIMUM STANDARDS, ADDITIONAL LONGITUDINAL GRADES OF THE ADJACENT CURBING AND SIMILAR ROADWAY CROSS–SECTION SURVEYS TO VERIFY THE CORRECT CROSS SLOPE, SHALL BE REQUIRED TO VERIFY THAT THE SYSTEM WILL FUNCTION AS ORIGINALLY DESIGNED.
4. STORM DRAINAGE STRUCTURES SHALL BE LOCATED AND/OR DIMENSIONED FROM CENTERLINES OR LOT LINES AS APPROPRIATE. EACH STRUCTURE SHALL BE LOCATED BY SUB–METER GPS WITH LATITUDE, LONGITUDE AND ELEVATION DATA PROVIDED.
5. STORM DRAINAGE PIPE INVERT AND INLET ELEVATIONS SHALL BE RECORDED AND CLEARLY DENOTED AS AS–BUILT INFORMATION. DESIGN ELEVATIONS SHALL BE CROSSED OUT AND AS–BUILT INFORMATION WRITTEN NEXT TO IT.
6. STORM DRAINAGE PIPE MATERIAL, LENGTH, AND SIZE SHALL BE MEASURED AND/OR VERIFIED. THIS INFORMATION IS TO BE CLEARLY INDICATED AS BEING AS–BUILT INFORMATION .
7. ALL APPLICABLE TOPOGRAPHIC INFORMATION PERTINENT TO THE ON–SITE DRAINAGE SYSTEM, SUCH AS DITCHES, SWALES, LAKES, CANALS, ETC. THAT ARE DEEMED NECESSARY BY THE CITY TO VERIFY THE FUNCTIONAL PERFORMANCE OF THE STORMWATER SYSTEM, SHALL BE NOTED. NORMALLY, RECORDING ELEVATIONS EVERY 100 FEET AT THE TOP OF BANK AND TOE OF SLOPE WILL BE REQUIRED. MEASUREMENTS SHALL BE TAKEN AND RECORDED IN ORDER TO ACCURATELY TIE DOWN THESE FEATURES TO THE ROADWAY CENTERLINES AND TO PLAT LINES. WHENEVER POSSIBLE, CONTOUR LINES SHALL BE UTILIZED TO GRAPHICALLY DESCRIBE THESE TOPOGRAPHIC FEATURES .
8. RETENTION AREAS, WETLAND CREATION/COMPENSATING STORAGE AREAS SHALL HAVE THEIR TOP–OF BANK AND BOTTOM ELEVATIONS RECORDED. ACTUAL MEASUREMENTS SHALL BE TAKEN AND DIMENSIONS RECORDED OF THE SIZE OF ALL RETENTION AREAS. MEASUREMENTS SHALL BE DONE FROM TOP–OF–BANK TO TOP–OF–BANK WITH SIDE SLOPES INDICATED. SEPARATE CALCULATIONS SHALL BE SUBMITTED TO INDICATE REQUIRED AND PROVIDED RETENTION VOLUMES.
9. ACTUAL MATERIALS USED AND ELEVATIONS AND DIMENSIONS OF OVERFLOW WEIR STRUCTURES AND SKIMMERS SHALL BE NOTED ON THE AS–BUILT.
10. STORM DRAINAGE SWALE CENTERLINES SHALL BE LOCATED AND ELEVATIONS OF FLOW LINE AND TOP OF BANK SHALL BE RECORDED EVERY 100 FEET. SIDE SLOPES SHALL ALSO BE INDICATED.
11. SANITARY SEWER MANHOLES SHALL BE VERIFIED AND DIMENSIONED FROM STREET CENTERLINES OR LOT LINES AS APPROPRIATE. ALL RIM AND INVERT ELEVATIONS SHALL BE VERIFIED AND RECORDED. THIS INFORMATION SHALL BE CLEARLY INDICATED AS BEING AS–BUILT INFORMATION. DESIGN ELEVATIONS SHALL BE CROSSED OUT AND AS–BUILT INFORMATION WRITTEN NEXT TO IT.
12. FOR SUBDIVISIONS, PROPOSED DESIGN FINISHED FLOOR ELEVATIONS SHALL APPEAR ON ALL SUBDIVISION LOTS ON THE APPROPRIATE PLAN AND PROFILE SHEET AS WELL AS ON THE MASTER DRAINAGE PLAN.
13. SANITARY SEWER LINE LENGTHS, SIZES, MATERIAL, ETC., SHALL BE VERIFIED AND RECORDED. THIS INFORMATION IS TO BE CLEARLY INDICATED AS BEING AS–BUILT INFORMATION.
14. SEWER LATERALS SHALL BE VERIFIED AND RECORDED AT THEIR CLEAN–OUT LOCATIONS. STATIONING AND OFFSET DISTANCES SHALL BE MEASURED FROM DOWNSTREAM MANHOLES TOWARDS UPSTREAM MANHOLES.
15. CURB OUTS OR METAL TABS, USED TO MARK SEWER LATERALS, WATER SERVICES AND WATER VALVES, SHALL BE VERIFIED FOR PRESENCE AND ACCURACY OF LOCATION.
16. POTABLE AND RECLAIMED WATER MAIN LINES SHALL BE DIMENSIONED OFF THE BASELINE CONSTRUCTION WATER MAIN LINE MATERIAL SIZE, LENGTH AND DEPTH PLACED SHALL BE NOTED. LOCATIONS OF VALVES SHALL ALSO BE SHALL BE TIED TO BASELINE CONSTRUCTION. THIS INFORMATION SHALL BE CLEARLY INDICATED AS BEING AS–BUILT INFORMATION.
17. POTABLE AND RECLAIMED WATER VALVES, TEES, BENDS, ALL SERVICES, AND FIRE HYDRANTS SHALL BE LOCATED BY TYING THEM TO BASELINE CONSTRUCTION (STA. & OFFSET). SIMILARLY, FORCE MAIN VALVES, TEES AND BENDS SHALL BE LOCATED IN THE SAME MANNER. STATIONING AND OFFSET DISTANCES SHALL BE MEASURED FROM DOWNSTREAM MANHOLES TO UPSTREAM MANHOLES. ALL VALVES AND HYDRANTS SHALL BE LOCATED BY SUB–METER GPS WITH LATITUDE, LONGITUDE AND ELEVATION DATA PROVIDED.
18. FOR PERPENDICULAR CROSSINGS OF STORMWATER, SANITARY SEWER, POTABLE WATER, OR RECLAIMED WATER, THE AS–BUILT PLANS SHALL CLEARLY INDICATE WHICH UTILITIES ARE LOCATED OVER OR UNDER OTHER UTILITIES, AS NECESSARY.
19. ANY SPECIAL FEATURES SUCH AS, CONCRETE FLUMES, LAKE BANKS, WALLS, FENCING, ETC., WHICH WERE A PART OF THE APPROVED CONSTRUCTION DRAWINGS SHOULD ALSO BE LOCATED AND DIMENSIONED.
20. IF AN APPROVED SUBDIVISION PLAT OR SITE PLAN SHOWS A CONSERVATION EASEMENT, THE PROJECT SURVEYOR SHOULD PROVIDE THE EXACT LOCATION OF THE SPECIMEN TREE(S) FROM THE RIGHT–OF–WAY OR PROPERTY LINES AND PROPOSED EASEMENT BOUNDARIES ON THE AS–BUILT DRAWING. THE AS–BUILT LOCATION OF THESE TREES WILL HELP VERIFY THE SUFFICIENCY OF THE CONSERVATION EASEMENT PRIOR TO PLAT RECORDING OR CERTIFICATE OF OCCUPANCY.
21. WHEN STORMWATER, POTABLE WATER, RECLAIMED WATER, OR SANITARY SEWER IMPROVEMENTS ARE LOCATED WITHIN AN EASEMENT, THE AS–BUILT DRAWING SHALL ACCURATELY DEPICT THE LOCATION OF THE EASEMENT ITSELF AS WELL AS THE EXACT LOCATION OF THE IMPROVEMENTS WITHIN THE EASEMENT. THIS IS REQUIRED IN ORDER TO VERIFY THAT THE IMPROVEMENTS HAVE BEEN PROPERLY LOCATED AND TO ENSURE THAT FUTURE SUBSURFACE EXCAVATION TO PERFORM REMEDIAL REPAIR CAN BE ACCOMPLISHED WITHOUT DISTURBANCE BEYOND THE EASEMENT.
22. REFERENCES TO WATER SHALL MEAN BOTH POTABLE AND RECLAIMED WATER.

2.01

SECTION 2– POTABLE WATER DISTRIBUTION SYSTEM

THIS SECTION INCLUDES THE MATERIAL STANDARDS FOR PIPE, FITTINGS, VALVES AND APPURTENANCES, APPLICABLE TO POTABLE WATER DISTRIBUTION SYSTEM INSTALLATIONS. REQUIRED SPECIALTY ITEMS NOT INCLUDED UNDER THIS SECTION SHALL BE HIGH QUALITY AND CONSISTENT WITH APPROVED INDUSTRY STANDARDS.

PIPE AND FITTINGS:
ALL PIPE AND FITTINGS SHALL BE CLEARLY MARKED WITH THE NAME OR TRADEMARK OF THE MANUFACTURER, THE BATCH NUMBER, THE LOCATION OF THE PLANT AND STRENGTH DESIGNATION, AS APPLICABLE. ALL POTABLE WATER PIPES AND ABOVE GROUND CROSS CONNECTION CONTROL DEVICES SHALL BE ADEQUATELY IDENTIFIED BY THE COLOR BLUE.

CONTRACTOR SHALL FOLLOW MANUFACTURER REQUIREMENTS FOR PIPE JOINT INSERTION. IF THE UTILITIES COMMISSION INSPECTS AND SEES THAT A PIPE JOINT IS OVER INSERTED, CONTRACTOR WILL BE REQUIRED TO REMOVE AND RE–INSTALL.

A. DUCTILE IRON:

DUCTILE IRON (DL) PIPE SHALL BE IN ACCORDANCE WITH AWWA C150 AND C151. DL PIPE FITTINGS SHALL CONFORM TO AWWA STANDARD C110. DL PIPE SHALL BE INSTALLED IN ACCORDANCE WITH AWWA C600 DUCTILE IRON PIPE AND FITTINGS FOR SHALL BE CEMENT–MORTAR LINED AS SPECIFIED IN AWWA STANDARD C104. POLYETHYLENE ENCASEMENT IS REQUIRED AND SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF AWWA STANDARD C105.

B. POLYVINYL CHLORIDE:

POLYVINYL CHLORIDE (PVC) PIPE SHALL BE MANUFACTURED FROM CLEAN VIRGIN TYPE I, GRADE I RIGID UN–PLASTICIZED POLYVINYL CHLORIDE RESIN CONFORMING TO ASTM DESIGNATION D1784. PVC PIPE FOR POTABLE WATER USE SHALL HAVE THE NATIONAL SANITATION FOUNDATION (NSF) SEAL AND SHALL CONFORM TO AWWA STANDARD C900 FOR 4–INCH THROUGH 12–INCH MAINS AND AWWA STANDARD C905 FOR 14–INCH AND LARGER MAINS. PVC PIPE FOR POTABLE WATER MAINS SHALL HAVE A MINIMUM DIMENSION RATIO (DR) 18.

PVC PIPE LENGTHS SHALL BE 20 FEET WITH BELL AND SPIGOT ENDS OR MECHANICAL JOINT ONLY. LUBRICATION USED FOR PIPE AND FITTING JOINTS SHALL BE NON–TOXIC AND NSF APPROVED. PVC PIPE SHALL BE INSTALLED IN ACCORDANCE TO AWWA C605.

LEGAL DESCRIPTION:

PARCEL A

A PORTION OF SECTION 8, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA, BEING DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF SAID SECTION 8; THENCE RUN N00°06'47"E, ALONG THE WEST LINE OF SAID SECTION 5, A DISTANCE OF 184.36 FEET TO A POINT ON THE SOUTHERLY RIGHT OF WAY LINE OF PIONEER TRAIL, HAVING A VARIABLE WIDTH RIGHT–OF–WAY; THENCE S79°29'49"E, ALONG SAID RIGHT OF WAY LINE, A DISTANCE OF 1296.54 FEET; THENCE CONTINUE ALONG SAID SOUTHERLY RIGHT–OF–WAY LINE, S79°05'39"E, A DISTANCE OF 1439.05 FEET TO A POINT ON THE WEST LINE OF THE LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 6184, PAGE 784, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE CONTINUE ALONG SAID RIGHT–OF–WAY LINE AND THE EASTERLY EXTENSION THEREOF, S79°44'38"E, A DISTANCE OF 368.42 FEET TO A POINT ON THE NORTHERLY EXTENSION OF THE EAST LINE OF SAID LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 6184, PAGE 784; THENCE S05°51'56"W ALONG SAID EAST LINE, A DISTANCE OF 28.42 FEET TO A POINT ON THE EXISTING SOUTHERLY RIGHT–OF–WAY LINE OF PIONEER TRAIL ACCORDING TO OFFICIAL RECORDS BOOK 8396, PAGE 805, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, AND THE POINT OF BEGINNING; THENCE RUN S74°24'21"E ALONG SAID SOUTHERLY RIGHT OF WAY LINE, A DISTANCE OF 469.68 FEET TO A POINT ON A NON–TANGENT CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 2190.00 FEET, A CENTRAL ANGLE OF 04°00'52", A CHORD BEARING OF S83°02'17"E AND A CHORD DISTANCE OF 153.42 FEET; THENCE EASTERLY ALONG THE ARC OF SAID CURVE AND ALONG SAID SOUTHERLY RIGHT–OF–WAY LINE, A DISTANCE OF 153.45 FEET TO THE END OF SAID CURVE; THENCE DEPARTING SAID CURVE AND SAID SOUTHERLY RIGHT–OF–WAY LINE, RUN S05°47'14"E, A DISTANCE OF 365.97 FEET; THENCE N84°11'24"E, A DISTANCE OF 301.37 FEET TO A POINT ON THE WESTERLY RIGHT–OF–WAY LINE OF WILLIAMSON BOULEVARD, HAVING A 130.00 FOOT RIGHT–OF–WAY, AS DESCRIBED IN OFFICIAL RECORDS BOOK 8486, PAGE 1804, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE SOUTHEASTERLY ALONG SAID WESTERLY RIGHT–OF–WAY LINE THE FOLLOWING THREE (3) COURSES; S05°48'36"E, A DISTANCE OF 560.33 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 3565.00 FEET, A CENTRAL ANGLE OF 32°46'36", A CHORD BEARING OF S22°11'53"E AND A CHORD DISTANCE OF 2011.69 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 2039.39 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 2235.00 FEET, A CENTRAL ANGLE OF 18°20'16", A CHORD BEARING OF S29°25'03"E AND A CHORD DISTANCE OF 712.28 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 715.32 FEET TO A POINT ON THE WEST LINE OF THE LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 4634, PAGE 2674, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE S06°49'30"W ALONG SAID WEST LINE, A DISTANCE OF 936.70 FEET; THENCE CONTINUE ALONG SAID WEST LINE S16°46'21"W, A DISTANCE OF 210.37 FEET; THENCE DEPARTING SAID WEST LINE, RUN N73°13'39"W, A DISTANCE OF 108.46 FEET; THENCE S69°02'29"W, A DISTANCE OF 46.57 FEET; THENCE S77°30'33"W, A DISTANCE OF 39.93 FEET; THENCE N80°47'00"W, A DISTANCE OF 65.56 FEET; THENCE S76°05'22"W, A DISTANCE OF 151.71 FEET TO A POINT ON A NON–TANGENT CURVE CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 547.00 FEET, A CENTRAL ANGLE OF 19°32'12", A CHORD BEARING OF N23°40'44"W AND A CHORD DISTANCE OF 185.61 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 186.52 FEET TO THE POINT OF TANGENCY; THENCE N33°26'50"W, A DISTANCE OF 467.49 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 547.00 FEET, A CENTRAL ANGLE OF 45°31'00", A CHORD BEARING OF N56°12'20"W AND A CHORD DISTANCE OF 423.21 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 434.54 FEET TO THE POINT OF TANGENCY; THENCE N78°57'50"W, A DISTANCE OF 1007.47 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 343.00 FEET, A CENTRAL ANGLE OF 32°05'47", A CHORD BEARING OF N62°54'56"W AND A CHORD DISTANCE OF 189.64 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 192.14 FEET TO THE POINT OF TANGENCY; THENCE N46°52'03"W, A DISTANCE OF 146.39 FEET TO A POINT ON A NON–TANGENT CURVE CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 470.00 FEET, A CENTRAL ANGLE OF 00°54'05", A CHORD BEARING OF N40°24'07"E AND A CHORD DISTANCE OF 7.40 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 7.40 FEET; THENCE DEPARTING SAID CURVE, RUN N49°08'50"W, A DISTANCE OF 60.00 FEET; THENCE N46°52'03"W, A DISTANCE OF 1087.90 FEET; THENCE N43°07'09"E, A DISTANCE OF 157.49 FEET; THENCE N46°52'51"W, A DISTANCE OF 457.72 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 350.00 FEET, A CENTRAL ANGLE OF 57°46'29", A CHORD BEARING OF N17°59'36"W AND A CHORD DISTANCE OF 338.16 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 352.93 FEET TO THE POINT OF TANGENCY; THENCE N10°53'38"E, A DISTANCE OF 536.68 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 655.00 FEET, A CENTRAL ANGLE OF 07°37'58", A CHORD BEARING OF N07°04'40"E AND A CHORD DISTANCE OF 113.81 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 113.90 FEET TO THE POINT OF COMPOUND CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 50.00 FEET, A CENTRAL ANGLE OF 82°22'02", A CHORD BEARING OF N37°55'20"W AND A CHORD DISTANCE OF 65.85 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 71.88 FEET TO THE POINT OF TANGENCY; THENCE N79°06'22"W, A DISTANCE OF 118.87 FEET; THENCE N10°53'38"E, A DISTANCE OF 120.00 FEET; THENCE N79°06'22"W, A DISTANCE OF 107.00 FEET; THENCE N10°53'38"E, A DISTANCE OF 50.00 FEET TO A POINT ON A NON–TANGENT CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 25.00 FEET, A CENTRAL ANGLE OF 90°00'00", A CHORD BEARING OF N34°06'22"W AND A CHORD DISTANCE OF 35.36 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 39.27 FEET TO THE POINT OF TANGENCY; THENCE N10°53'38"E, A DISTANCE OF 281.51 FEET; THENCE N06°26'06"E, A DISTANCE OF 195.20 FEET; THENCE S79°06'22"E, A DISTANCE OF 1530.02 FEET; THENCE N10°53'38"E, A DISTANCE OF 525.30 FEET TO THE SOUTHEAST CORNER OF AFORESAID LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 6184, PAGE 784; THENCE N05°51'56"E, ALONG THE EAST LINE OF SAID LANDS, A DISTANCE OF 331.40 FEET TO THE POINT OF BEGINNING.

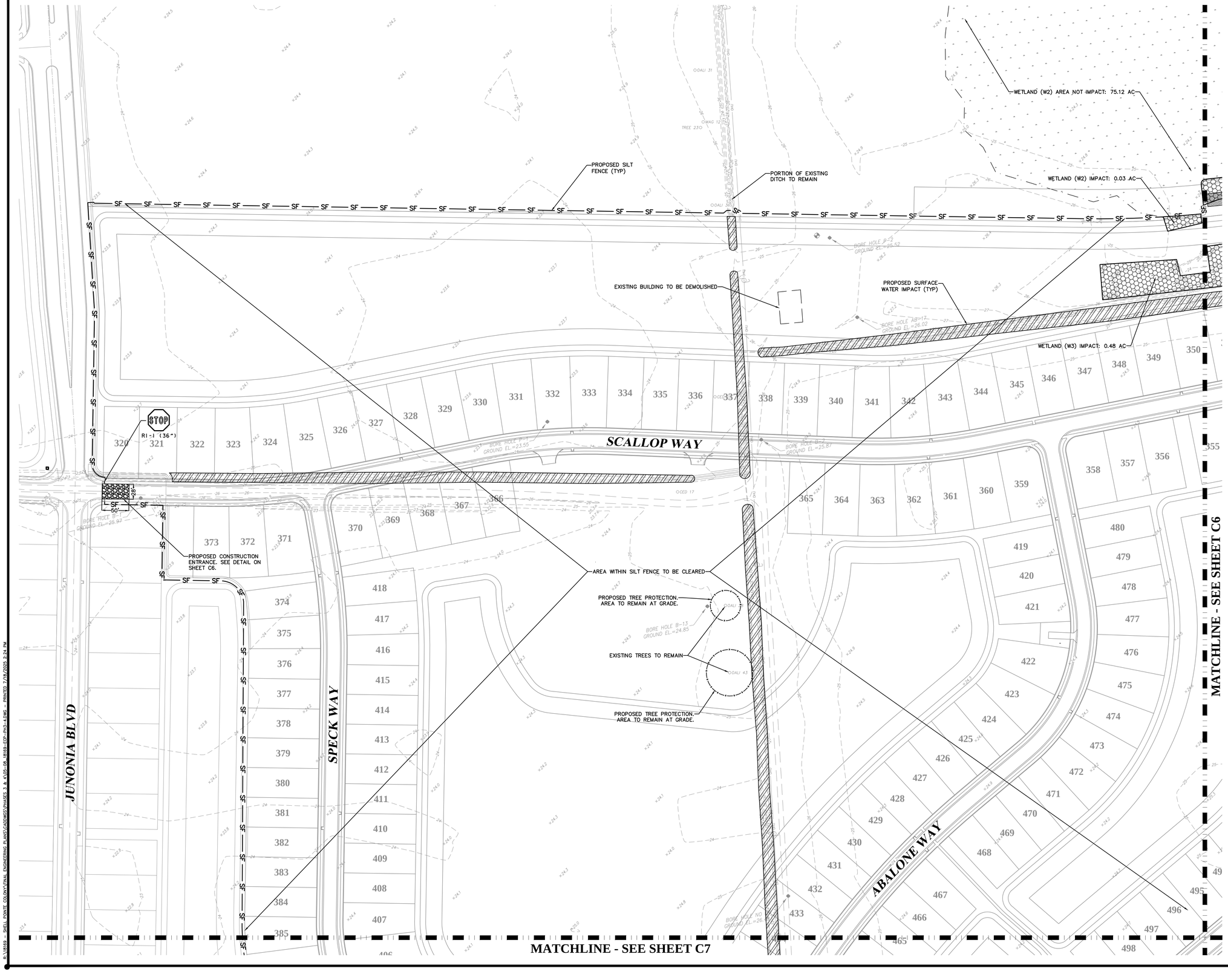
SAID LANDS CONTAINING 214.980 ACRES, MORE OR LESS.

AND

PARCEL B

A PORTION OF SECTIONS 8 AND 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA, BEING DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF SAID SECTION 8; THENCE RUN N00°06'47"E, ALONG THE WEST LINE OF SAID SECTION 5, A DISTANCE OF 184.36 FEET TO A POINT ON THE SOUTHERLY RIGHT OF WAY LINE OF PIONEER TRAIL, HAVING A VARIABLE WIDTH RIGHT–OF–WAY; THENCE S79°29'49"E, ALONG SAID RIGHT OF WAY LINE, A DISTANCE OF 1296.54 FEET; THENCE CONTINUE ALONG SAID SOUTHERLY RIGHT–OF–WAY LINE, S79°05'39"E, A DISTANCE OF 1439.05 FEET TO A POINT ON THE WEST LINE OF THE LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 6184, PAGE 784, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE CONTINUE ALONG SAID RIGHT–OF–WAY LINE AND THE EASTERLY EXTENSION THEREOF, S79°44'38"E, A DISTANCE OF 368.42 FEET TO A POINT ON THE NORTHERLY EXTENSION OF THE EAST LINE OF SAID LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 6184, PAGE 784; THENCE S05°51'56"W ALONG SAID EAST LINE, A DISTANCE OF 28.42 FEET TO A POINT ON THE EXISTING SOUTHERLY RIGHT–OF–WAY LINE OF PIONEER TRAIL ACCORDING TO OFFICIAL RECORDS BOOK 8396, PAGE 805, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE EASTERLY ALONG SAID SOUTHERLY RIGHT–OF–WAY LINE THE FOLLOWING THREE (3) COURSES; S74°24'21"E, A DISTANCE OF 469.68 FEET TO A POINT ON A NON–TANGENT CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 2190.00 FEET, A CENTRAL ANGLE OF 14°56'55", A CHORD BEARING OF S88°30'18"E AND A CHORD DISTANCE OF 569.76 FEET; THENCE EASTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 571.38 FEET TO THE POINT OF TANGENCY; THENCE N84°01'15"E, A DISTANCE OF 15.71 FEET TO A POINT ON THE EASTERLY RIGHT–OF–WAY LINE OF WILLIAMSON BOULEVARD, HAVING A 130.00 FOOT RIGHT–OF–WAY, AS DESCRIBED IN OFFICIAL RECORDS BOOK 8486, PAGE 1804, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE S05°48'36"E, ALONG THE EASTERLY RIGHT–OF–WAY LINE OF SAID WILLIAMSON BOULEVARD, A DISTANCE OF 765.67 FEET TO THE SOUTHWEST CORNER OF THE LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 6275, PAGE 2063, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA AND TO THE POINT OF BEGINNING; THENCE DEPARING SAID EASTERLY RIGHT–OF–WAY LINE, RUN N84°41'54"E, ALONG THE SOUTH LINE OF SAID LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 6275, PAGE 206, A DISTANCE OF 1274.30 FEET TO THE SOUTHEAST CORNER OF SAID LANDS; THENCE N01°05'16"W, ALONG THE EAST LINE OF SAID LANDS, A DISTANCE OF 777.73 FEET TO A POINT ON THE AFORESAID SOUTHERLY RIGHT–OF–WAY LINE OF PIONEER TRAIL AS RECORDED IN OFFICIAL RECORDS BOOK 8396, PAGE 805; THENCE N84°45'33"E, ALONG SAID SOUTHERLY RIGHT–OF–WAY LINE, A DISTANCE OF 95.42 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 69.79 FEET, A CENTRAL ANGLE OF 94°09'11", A CHORD BEARING OF S48°09'52"E AND A CHORD DISTANCE OF 102.21 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE AND ALONG SAID SOUTHERLY RIGHT–OF–WAY LINE, A DISTANCE OF 114.68 FEET TO A POINT ON THE EAST LINE OF THAT CERTAIN 170.00 FOOT WIDE UTILITY EASEMENT AS DESCRIBED IN OFFICIAL RECORDS BOOK 921, PAGE 27, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE DEPARTING SAID RIGHT–OF–WAY LINE, RUN S01°05'16"E, ALONG SAID EAST LINE, A DISTANCE OF 1993.53 FEET TO A POINT ON THE WEST LINE OF THE LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 4634, PAGE 2674, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE RUN ALONG SAID WEST LINE THE FOLLOWING FOUR (4) COURSES: S34°53'17"W, A DISTANCE OF 137.81 FEET; THENCE S28°19'14"W, A DISTANCE OF 518.53 FEET; THENCE S10°54'20"W, A DISTANCE OF 540.47 FEET; THENCE S06°49'30"W, A DISTANCE OF 102.21 FEET TO A POINT ON AFORESAID EASTERLY RIGHT–OF–WAY LINE OF WILLIAMSON BOULEVARD; SAID POINT BEING A POINT ON A CURVE CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 2365.00 FEET, A CENTRAL ANGLE OF 12°42'29", A CHORD BEARING OF N32°13'57"W AND A CHORD DISTANCE OF 523.47 FEET; THENCE NORTHWESTERLY ALONG SAID EASTERLY RIGHT–OF–WAY LINE THE FOLLOWING THREE (3) COURSES; NORTHWESTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 524.55 FEET TO THE



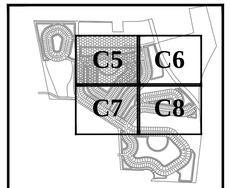
0 40 80 120 160

SCALE : 1" = 80'

LEGEND:

- SF — PROPOSED SILT FENCE
- EXISTING WETLANDS
- PROPOSED DIRECT WETLAND IMPACT (1.04 AC)
- PROPOSED SURFACE WATER IMPACT (3.02 AC)

NOTES:
ALL EXISTING WELLS WITHIN THE PROJECT LIMITS TO BE PROPERLY ABANDONED.



KEY MAP

ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
OMNIPARK BEACH, FL 32174
WWW.ZEVCOHEN.COM

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 6593)

NO.	DATE	BY	SUBMITTALS / REVISIONS
1	10-20-23	MLR	INITIAL SUBMITTAL TO CITY
2	09-16-24	MLR	RESUBMITTED TO CITY
3	04-04-25	MLR	RESUBMITTED TO CITY
4	07-16-25	MLR	RESUBMITTED TO CITY

ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS
DEMOLITION & EROSION CONTROL PLAN

CITY OF NEW SMYRNA BEACH — VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 05-08_18169-ECP-PH3-4
XREFS: 18169BAS.DWG
XREFS: 18169SUR.DWG

MELIA L. RUSSELL — No 68357 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

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KRISTOPHER T ROWLEY, P.E., NO.84263
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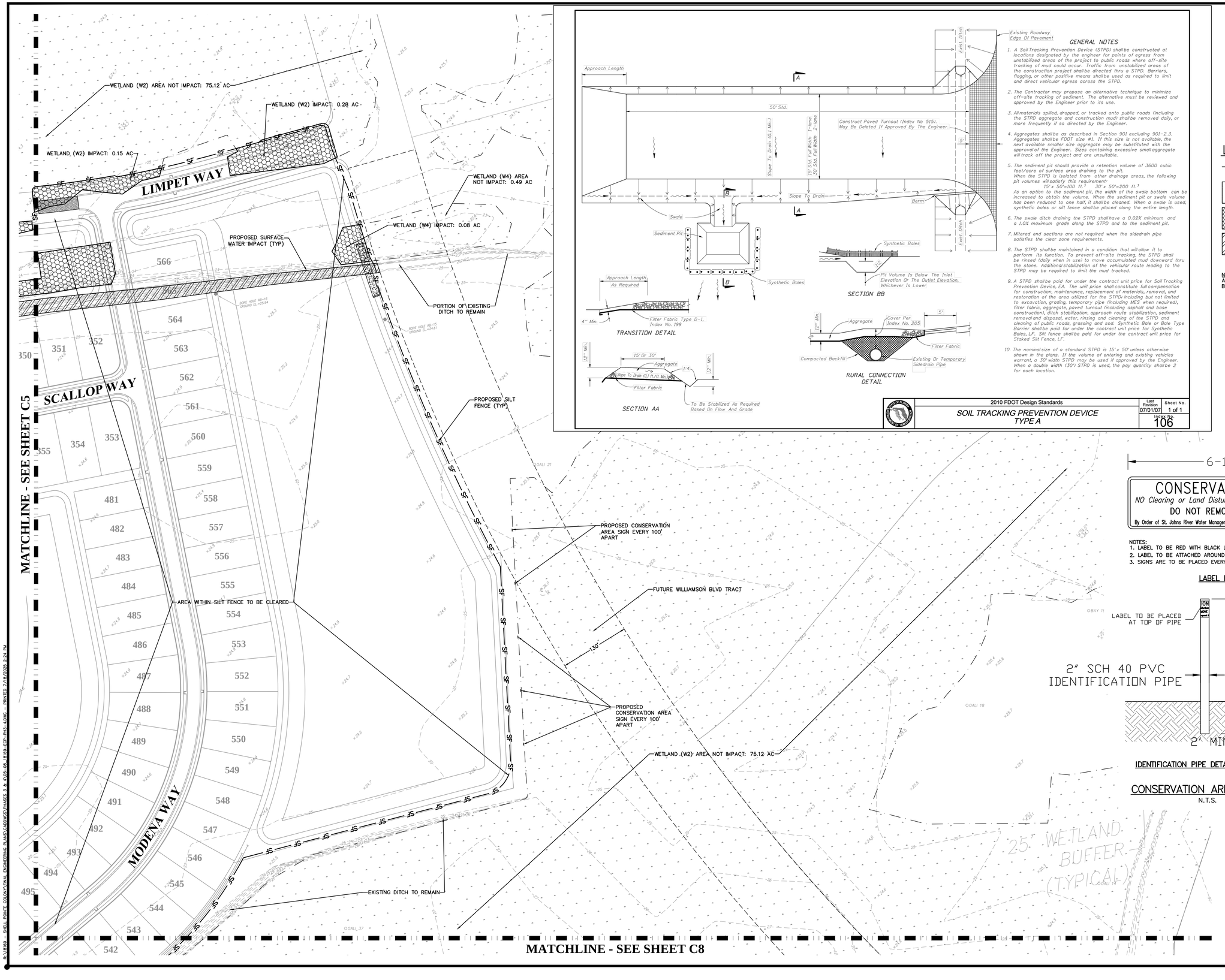
SHEET: C5 OF 47

R:\18169 - SHELL POINTE COUNTRY HAL ENGINEERING PLANS\ZADWGS\PHASES 3 & 4\05-08_18169-ECP-PH3-4.DWG - PRINTED: 7/25/2025 3:24 PM



GENERAL NOTES

1. A Soil Tracking Prevention Device (STPD) shall be constructed at locations designated by the engineer for points of egress from unstabilized areas of the project to public roads where off-site tracking of mud could occur. Traffic from unstabilized areas of the construction project shall be directed thru a STPD. Barriers, flagging, or other positive means shall be used as required to limit and direct vehicular egress across the STPD.
2. The Contractor may propose an alternative technique to minimize off-site tracking of sediment. The alternative must be reviewed and approved by the Engineer prior to its use.
3. All materials spilled, dropped, or tracked onto public roads (including the STPD aggregate and construction mud) shall be removed daily, or more frequently if so directed by the Engineer.
4. Aggregates shall be as described in Section 901 excluding 901-2.3. Aggregates shall be FDOT size #1. If this size is not available, the next available smaller size aggregate may be substituted with the approval of the Engineer. Sizes containing excessive small aggregate will track off the project and are unsuitable.
5. The sediment pit should provide a retention volume of 3600 cubic feet/acre of surface area draining to the pit. When the STPD is isolated from other drainage areas, the following pit volumes will satisfy this requirement:
   15' x 50'=100 ft.³ 30' x 50'=200 ft.³
   As an option to the sediment pit, the width of the swale bottom can be increased to obtain the volume. When the sediment pit or swale volume has been reduced to one half, it shall be cleaned. When a swale is used, synthetic bales or silt fence shall be placed along the entire length.
6. The swale ditch draining the STPD shall have a 0.02% minimum and a 1.0% maximum grade along the STPD and to the sediment pit.
7. Mitered end sections are not required when the sidedrain pipe satisfies the clear zone requirements.
8. The STPD shall be maintained in a condition that will allow it to perform its function. To prevent off-site tracking, the STPD shall be rinsed (daily when in use) to move accumulated mud downward thru the stone. Additional stabilization of the vehicular route leading to the STPD may be required to limit the mud tracked.
9. A STPD shall be paid for under the contract unit price for Soil Tracking Prevention Device, EA. The unit price shall constitute full compensation for construction, maintenance, replacement of materials, removal, and restoration of the area utilized for the STPD including but not limited to excavation, grading, temporary pipe (including MES when required), filter fabric, aggregate, paved turnout (including asphalt and base construction), ditch stabilization, approach route stabilization, sediment removal and disposal, water, rinsing and cleaning of the STPD and cleaning of public roads, grassing and sod. Synthetic Bale or Bale Type Barrier shall be paid for under the contract unit price for Synthetic Bales, L.F. Silt fence shall be paid for under the contract unit price for Staked Silt Fence, L.F.
10. The nominal size of a standard STPD is 15'x 50' unless otherwise shown in the plans. If the volume of entering and existing vehicles warrant, a 30' width STPD may be used if approved by the Engineer. When a double width (30') STPD is used, the pay quantity shall be 2 for each location.

2010 FDOT Design Standards

SOIL TRACKING PREVENTION DEVICE TYPE A

Last Revision 07/01/07 | Sheet No. 1 of 1 | Index No. 106



LEGEND:

- SF — PROPOSED SILT FENCE
- EXISTING WETLANDS
- PROPOSED DIRECT WETLAND IMPACT (1.04 AC)
- PROPOSED SURFACE WATER IMPACT (3.02 AC)

NOTES:
ALL EXISTING WELLS WITHIN THE PROJECT LIMITS TO BE PROPERLY ABANDONED.

6-1/4"

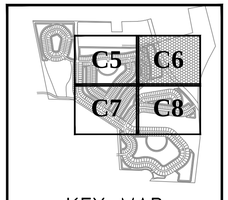
CONSERVATION AREA
NO Clearing or Land Disturbance Beyond This Stake
DO NOT REMOVE THIS SIGN
By Order of St. Johns River Water Management District and Army Corps of Engineers

NOTES:
1. LABEL TO BE RED WITH BLACK LETTERS
2. LABEL TO BE ATTACHED AROUND TOP PORTION OF IDENTIFICATION PIPE.
3. SIGNS ARE TO BE PLACED EVERY 100FT ADJACENT TO WETLANDS TO BE PRESERVED.

LABEL DETAIL

IDENTIFICATION PIPE DETAIL

CONSERVATION AREA SIGN DETAIL
N.T.S.



KEY MAP

ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
OWENSBORO, KENTUCKY 42303
WWW.ZEVCOHEN.COM

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 6583)

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ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS
DEMOLITION & EROSION CONTROL PLAN

CITY OF NEW SMYRNA BEACH — VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169
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DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 05-08_18169-ECP-PH3-4
XREFS: 18169BAS.DWG
XREFS: 18169SUR.DWG



MELIA L. RUSSELL P.E., NO.68357
KRISTOPHER T. ROWLEY, P.E., NO.84263
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SHEET: C6 OF 47

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MATCHLINE - SEE SHEET C5

MATCHLINE - SEE SHEET C8

SPECK WAY

ABALONE WAY

MODENA WAY

JUNONIA BLVD

MONACO BLVD

AREA WITHIN SILT FENCE TO BE CLEARED

PROPOSED SILT FENCE (TYP)

PROPOSED SURFACE WATER IMPACT (TYP)

PROPOSED TURBIDITY BARRIER (TYP)

WETLAND (W5) IMPACT: 0.01 AC

EXISTING DITCH TO BE EXTENDED

SF

0 40 80 120 160

SCALE : 1" = 80'

LEGEND:

- SF —— PROPOSED SILT FENCE
- EXISTING WETLANDS
- PROPOSED DIRECT WETLAND IMPACT (1.04 AC)
- PROPOSED SURFACE WATER IMPACT (3.02 AC)

NOTES:
ALL EXISTING WELLS WITHIN THE PROJECT LIMITS TO BE PROPERLY ABANDONED.

KEY MAP

C5 C6 C7 C8

ZEV COHEN & ASSOCIATES, INC.
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CIVIL ENGINEERING
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ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS
DEMOLITION & EROSION CONTROL PLAN

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

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XREF'S: 18169BAS.DWG
XREF'S: 18169SUR.DWG

MELIA L. RUSSELL
LICENSE
No. 68357
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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MATCHLINE - SEE SHEET C6

MATCHLINE - SEE SHEET C7

JEWELBOX CIRCLE

MONACO BLVD

JUNONIA BLVD

WETLAND (W2) AREA NOT IMPACT: 75.12 AC

PROPOSED SILT FENCE (TYP)

EXISTING DITCH TO REMAIN

PROPOSED TURBIDITY BARRIER (TYP)

PROPOSED SURFACE WATER IMPACT (TYP)

AREA WITHIN SILT FENCE TO BE CLEARED

FUTURE WILLIAMSON BLVD TRACT

130'

PROPOSED TURBIDITY BARRIER (TYP)

WETLAND (W5) IMPACT: 0.01 AC

EXISTING DITCH TO BE EXTENDED

EXISTING DITCH TO REMAIN

PROPOSED SILT FENCE (TYP)

WETLAND (W5) AREA NOT IMPACT: 19.44 AC

0 40 80 120 160

SCALE : 1" = 80'

LEGEND:

- SF — PROPOSED SILT FENCE
- EXISTING WETLANDS
- PROPOSED DIRECT WETLAND IMPACT (1.04 AC)
- PROPOSED SURFACE WATER IMPACT (3.02 AC)

NOTES:
ALL EXISTING WELLS WITHIN THE PROJECT LIMITS TO BE PROPERLY ABANDONED.

C5 C6 C7 C8

KEY MAP

ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
OSPREY BEACH FL. 33154
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CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
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ARDISIA PARK
PHASE 3 & 4
FINAL ENGINEERING PLANS
DEMOLITION & EROSION CONTROL PLAN

CITY OF NEW SMYRNA BEACH — VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169

DESIGNED BY: MLR

DRAFTED BY: MLR

CHECKED BY: MKW

DRAWING FILE: 05-08_18169-ECP-PH3-4
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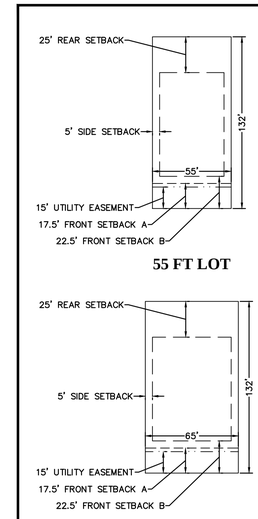
0 150 300 450 600

SCALE : 1" = 300'

LEGEND:

- EXISTING WETLANDS
- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE

NOTE:
1. EACH RESIDENTIAL LOT SHALL BE DESIGNED TO PARK AT LEASE FOUR (4) VEHICLES IN THE COMBINATION OF THE DRIVEWAY AND GARAGE.
2. AIR CONDITIONING UNITS TO BE SIDE YARDS, LIMITED TO ONLY ONE IN EACH SHARED SIDE YARD, WITH SOUND SCREENS PROVIDED FOR EACH A/C UNIT.



LOT DIMENSIONING NOTES:
1. 15 FT SIDE SETBACK WHEN ADJACENT TO STREETS.
2. 10 FT SIDE SETBACK WHEN LOTS HOST HALF OF A REQUIRED 20' DRAINAGE EASEMENT.
3. 5 FT SIDE SETBACK SHALL BE MEASURED TO THE EDGE OF EAVE WHEN ABUTTING ANOTHER LOT.
4. CORNER LOTS SHALL BE 15% WIDER THAN MINIMUM FRONTAGES SHOWN IN DETAILS.
5. FRONT SETBACK A – 17.5 FT FOR PORCH AND/OR LIVING AREA.
6. FRONT SETBACK B – 22.5 FT FOR GARAGE.

TYPICAL LOT LAYOUTS
NTS

RESIDENTIAL LOT BREAKDOWN

LOT WIDTH	LOT NUMBERS	LOT COUNT
55 Ft	374–566	193
65 Ft	320–373, 567–687	175
	TOTAL =	368

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OSPREY BEACH, FL 32174
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CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
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ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS
OVERALL DEVELOPMENT PLAN

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: MLR
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DRAWING FILE: 09_18169-ODP-PH3-4
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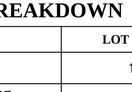

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SHEET: C9 OF 47

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0 40 80 120 160
SCALE : 1" = 80'

LEGEND:

PROPOSED ASPHALT PAVEMENT

PROPOSED CONCRETE

NOTES:
1. ALL HANDICAP RAMPS ARE TO BE CONSTRUCTED PER FDOT INDEX NO. 522-002, LATEST EDITION.
2. POSTED AND DESIGN SPEED IS 25 MPH.
3. ALL SIGNAGE TO BE COORDINATED WITH PROJECT SIGNAGE PACKAGE FOR AESTHETIC PURPOSES.
4. PARKING IS PROHIBITED ON ALL ROADWAYS WITHIN THE DEVELOPMENT.
5. EACH RESIDENTIAL LOT SHALL BE DESIGNED TO PARK AT LEASE FOUR (4) VEHICLES IN THE COMBINATION OF THE DRIVEWAY AND GARAGE.
6. STOP SIGNS AND DEAD END SIGN TO BE MINIMUM 30". SPEED LIMIT SIGNS TO BE MINIMUM 18"X24".
7. ALL STRIPING TO BE THERMOPLASTIC.

DA-10
PROPOSED WET DETENTION AREA

DA-4
EXISTING WET DETENTION AREA

DA-11
PROPOSED WET DETENTION AREA

DA-12
PROPOSED WET DETENTION AREA

FUTURE AMENITY AREA

SCALLOP WAY

JUNONIA BLVD

SPECK WAY

ABALONE WAY

AREA FOR FUTURE ROAD EXTENSION

60' PRIVATE RIGHT-OF-WAY

50' RIGHT-OF-WAY

90' RIGHT-OF-WAY

20' DRAINAGE EASEMENT

PROPOSED SETBACK LIMITS (TYP)

PROPOSED 5' SIDEWALK

PROPOSED 24" STOP BAR

PROPOSED CROSSWALK PER FDOT INDEX # 711-001

PROPOSED LIFTSTATION

PROPOSED STREETLIGHT (TYP)

12' UTILITY EASEMENT

CONTRACTOR TO CONNECT TO EXISTING SIDEWALK. MATCH EXISTING GRADES.

REMOVE EXISTING ROAD BARRICADES & CONNECT TO EXISTING ROAD STUB

MATCHLINE - SEE SHEET C11

MATCHLINE - SEE SHEET C12

KEY MAP

C10 C11
C12 C13

ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
OWENSBORO, KY 42303
WWW.ZEVCOHEN.COM
(270) 683-1660

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)

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ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS GEOMETRY, SIGNAGE & STRIPING PLAN

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW

DRAWING FILE: 10-13_18169-GSS-PH3-4
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KRISTOPHER T. ROWLEY, P.E., NO.84263
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PROPOSED TEMPORARY STABILIZED CRUSHED CONCRETE DRIVE
PROPOSED 8' SIDEWALK
BP: 10+00.00
PROPOSED SIDEWALK CLOSED BARRICADE
EP: 41+81.22
PT: 12+75.24
60' RIGHT-OF-WAY
R40'
PROPOSED SIDEWALK CLOSED BARRICADE
EP: 15+22.63
R40'
FUTURE CONNECTION TO WILLIAMSON BLVD EXTENSION
LIMPET WAY
PROPOSED 5' SIDEWALK
PROPOSED ROAD CLOSED BARRICADE
PROPOSED ROAD CLOSED BARRICADE
STOP
R1-1
566
565
564
PROPOSED CROSSWALK PER FDOT INDEX # 711-001
PROPOSED 24" STOP BAR (TYP)
351
352
563
SCALLOP WAY
EP: 39+07.38
562
PROPOSED 24" STOP BAR (TYP)
561
560
559
354
353
355
50' RIGHT-OF-WAY
N1° 10' 02.35"W 837.234
CONTRACTOR TO INSTALL DETECTABLE WARNINGS AT CROSSWALKS PER FDOT INDEX # 522-002 (TYP)
481
558
482
12' UTILITY EASEMENT
557
483
556
484
555
MODENA WAY
90' RIGHT-OF-WAY
485
554
PROPOSED STREETLIGHT
486 (TYP)
PT: 33+43.98
553
487
PROPOSED 5' SIDEWALK
552
488
1.65'
551
PROPOSED SETBACK LIMITS (TYP)
489
1.65'
550
490
549
L=533.54
R=500.00
D=61°08'20"
CL=508.58
CB=N29°24'07"E
491
548
492
547
493
546
494
545
495
PC: 28+10.45
544
N59° 58' 17.25"E
285.276
543
542
DA-13
PROPOSED WET DETENTION AREA
FUTURE WILLIAMSON BLVD EXTENSION
130'
PROPOSED CONSERVATION AREA SIGN EVERY 100' APART
PROPOSED CONSERVATION AREA SIGN EVERY 100' APART
PROPOSED CONSERVATION AREA SIGN EVERY 100' APART
OBAY 15
OGALI 18
OGALI 14
OGALI 37
25' WETLAND BUFFER (TYPICAL)
MATCHLINE - SEE SHEET C10
MATCHLINE - SEE SHEET C13

0 40 80 120 160
SCALE : 1" = 80'

LEGEND:

PROPOSED ASPHALT PAVEMENT
PROPOSED CONCRETE

NOTES:
1. ALL HANDICAP RAMPS ARE TO BE CONSTRUCTED PER FDOT INDEX NO. 522-002, LATEST EDITION.
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4. PARKING IS PROHIBITED ON ALL ROADWAYS WITHIN THE DEVELOPMENT.
5. EACH RESIDENTIAL LOT SHALL BE DESIGNED TO PARK AT LEASE FOUR (4) VEHICLES IN THE COMBINATION OF THE DRIVEWAY AND GARAGE.
6. STOP SIGNS AND DEAD END SIGN TO BE MINIMUM 30". SPEED LIMIT SIGNS TO BE MINIMUM 18"X24".
7. ALL STRIPING TO BE THERMOPLASTIC.

C10 | C11
C12 | C13
KEY MAP

ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
OMMUNITY BEACH, FL 32174
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ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS GEOMETRY, SIGNAGE & STRIPING PLAN
CITY OF NEW SMYRNA BEACH VOLUSIA COUNTY, FLORIDA

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XREFS: 18169SUR.DWG

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Location: My location is on the University of South Florida campus. This text has not been altered in any way since authorization took.
Date: 2025.07.24 15:29:33-04'00'

MELIA L RUSSELL, P.E., NO.68357
KRISTOPHER T ROWLEY, P.E., NO.84263
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SHEET: C11 OF 47

R:\18169 - SHELL POINTE CO\CIVIL\ENGINEERING PLANS\CAD\GSS\PHASES 3 & 4\10-13_18169-GSS-PH3-4.DWG - PRINTED 7/18/2025 2:26 PM

MATCHLINE - SEE SHEET C10

MATCHLINE - SEE SHEET C13

DA-11
PROPOSED WET DETENTION AREA

DA-4
EXISTING WET DETENTION AREA

DA-14
PROPOSED WET DETENTION AREA

DA-15
PROPOSED WET DETENTION AREA

ABALONE WAY

SPECK WAY

JUNONIA BLVD

MODENA WAY

MONACO BLVD

20' DRAINAGE EASEMENT

PROPOSED 5' SIDEWALK

L=302.51
R=300.00
D=57°46'29"
CL=289.85
CB=S17°59'36"E

PT: 21+09.39

12' UTILITY EASEMENT

PROPOSED SETBACK LIMITS (TYP)

CONTRACTOR TO INSTALL DETECTABLE WARNINGS AT CROSSWALKS PER FDOT INDEX # 522-002 (TYP.)

S46° 52' 50.77"E
550.302

PROPOSED 24" STOP BAR (TYP)

PROPOSED CROSSWALK PER FDOT INDEX # 711-001

EP: 26+59.69

PI: 12+00.00

N43° 07' 09.23"E
50.002

BP: 11+50.00

CONTRACTOR TO CONNECT TO EXISTING SIDEWALK. MATCH EXISTING GRADES.

CONTRACTOR TO CONNECT TO EXISTING ROAD. MATCH EXISTING GRADES.

PC: 20+02.62

L=464.86
R=1500.00
D=17°45'23"
CL=463.00
CB=N51°05'36"E

PT: 25+25.17

PROPOSED CROSSWALK PER FDOT INDEX # 711-001

PC: 20+60.31

PROPOSED STREETLIGHT (TYP.)

N42° 12' 54.58"E
660.312

PC: 28+01.73

PROPOSED 5' SIDEWALK

PROPOSED 8' SIDEWALK

PI: 14+00.00

N42° 12' 50.36"E
49.978

BP: 13+50.02

PT: 25+35.36

PI: 25+50.00

N43° 07' 09.23"E
14.640

BP: 25+00.00

L=35.36
R=500.00
D=4°03'08"
CL=35.36
CB=N41°05'35"E

0 40 80 120 160
SCALE : 1" = 80'

LEGEND:

PROPOSED ASPHALT PAVEMENT

PROPOSED CONCRETE

NOTES:
1. ALL HANDICAP RAMPS ARE TO BE CONSTRUCTED PER FDOT INDEX NO. 522-002, LATEST EDITION.
2. POSTED AND DESIGN SPEED IS 25 MPH.
3. ALL SIGNAGE TO BE COORDINATED WITH PROJECT SIGNAGE PACKAGE FOR AESTHETIC PURPOSES.
4. PARKING IS PROHIBITED ON ALL ROADWAYS WITHIN THE DEVELOPMENT.
5. EACH RESIDENTIAL LOT SHALL BE DESIGNED TO PARK AT LEASE FOUR (4) VEHICLES IN THE COMBINATION OF THE DRIVEWAY AND GARAGE.
6. STOP SIGNS AND DEAD END SIGN TO BE MINIMUM 30". SPEED LIMIT SIGNS TO BE MINIMUM 18"X24".
7. ALL STRIPING TO BE THERMOPLASTIC.

C10 C11
C12 C13
KEY MAP

ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
OSPREY, FLORIDA 34229
WWW.ZEVCOHEN.COM
(941) 966-1200
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 0583)

NO.	DATE	BY	SUBMITTALS / REVISIONS
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4	07-18-25	MLR	RESUBMITTED TO CITY

ARDISIA PARK
PHASE 3 & 4
FINAL ENGINEERING PLANS
GEOMETRY, SIGNAGE & STRIPING PLAN

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 10-13_18169-GSS-PH3-4
XREFS: 18169BAS.DWG
XREFS: 18169SUR.DWG

MELIA L. RUSSELL
LICENSE No. 68357
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Digitally signed by Melia L Russell
DN: c=US, o=Florida, ou=A01410D0000001F6F0D5...
Location: Printed copies of this document are not considered signed and sealed and the digital authentication code must be verified on any electronic copies.
Reason: I am the author of this document.
Melia L. Russell, P.E. No.68357 registered and sealed by Melia L. Russell, P.E. using a Sha1 with RSA Encryption
Date: 2025.07.18 15:25:26-04'00'

MELIA L. RUSSELL, P.E., NO.68357
KRISTOPHER T. ROWLEY, P.E., NO.84263
NOT VALID WITHOUT SEAL

SHEET: C12 OF 47

G:\18169 - SHELL POINT CO\CIVIL\FINAL ENGINEERING PLANS\CAD\DWGS\PHASES 3 & 4\10-13_18169-GSS-PH3-4.DWG - PRINTED: 7/18/2025 2:29 PM

MATCHLINE - SEE SHEET C11

MATCHLINE - SEE SHEET C12

JEWELBOX CIRCLE

MONACO BLVD

JUNONIA BLVD

DA-16
PROPOSED WET DETENTION AREA

DA-17
PROPOSED WET DETENTION AREA

DA-18
PROPOSED WET DETENTION AREA

FUTURE WILLIAMSON BLVD TRACT

PROPOSED LIFTSTATION

PROPOSED STREETLIGHT (TYP)

PROPOSED 5' SIDEWALK

PROPOSED 6' SIDEWALK

PROPOSED SETBACK LIMITS (TYP)

PROPOSED CROSSWALK PER FDOT INDEX # 711-001

PROPOSED 24" STOP BAR (TYP)

CONTRACTOR TO INSTALL DETECTABLE WARNINGS AT CROSSWALKS PER FDOT INDEX # 522-002 (TYP)

PROPOSED SIDEWALK CLOSED BARRICADE

PROPOSED ROAD CLOSED BARRICADE

PROPOSED TEMPORARY CUL-DE-SAC

FUTURE CONNECTION TO WILLIAMSON BLVD EXTENSION

12' UTILITY EASEMENT

10' DRAINAGE EASEMENT

PC: 10+55.86
PT: 14+77.98
PC: 23+19.07
PT: 27+83.55
PT: 33+96.34
PC: 46+24.32
PT: 49+21.85
EP: 31+30.72
EP: 52+10.83
BP: 10+00.00

L=422.11
R=256.00
D=96°44'29"
CL=373.73
CB=N42°32'53"E

L=464.48
R=250.00
D=106°27'00"
CL=400.50
CB=S35°51'22"E

L=504.61
R=450.00
D=64°14'58"
CL=478.59
CB=N75°14'38"E

L=297.53
R=400.00
D=42°37'07"
CL=290.72
CB=N86°03'34"E

S89° 04' 51.88"E
841.094

S17° 22' 07.63"W
547.176

N5° 49' 21.14"W
55.864

N64° 45' 01.12"E
288.975

S72° 57' 52.37"E
1227.880

R=R20'
R45'

0 40 80 120 160
SCALE : 1" = 80'

LEGEND:

PROPOSED ASPHALT PAVEMENT

PROPOSED CONCRETE

NOTES:
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7. ALL STRIPING TO BE THERMOPLASTIC.

C10 | C11
C12 | C13
KEY MAP

ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
OSPREY BEACH, FL 32174
WWW.ZEVCOHEN.COM

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 6583)

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ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS GEOMETRY, SIGNAGE & STRIPING PLAN

CITY OF NEW SMYRNA BEACH — VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169

DESIGNED BY: MLR

DRAFTED BY: MLR

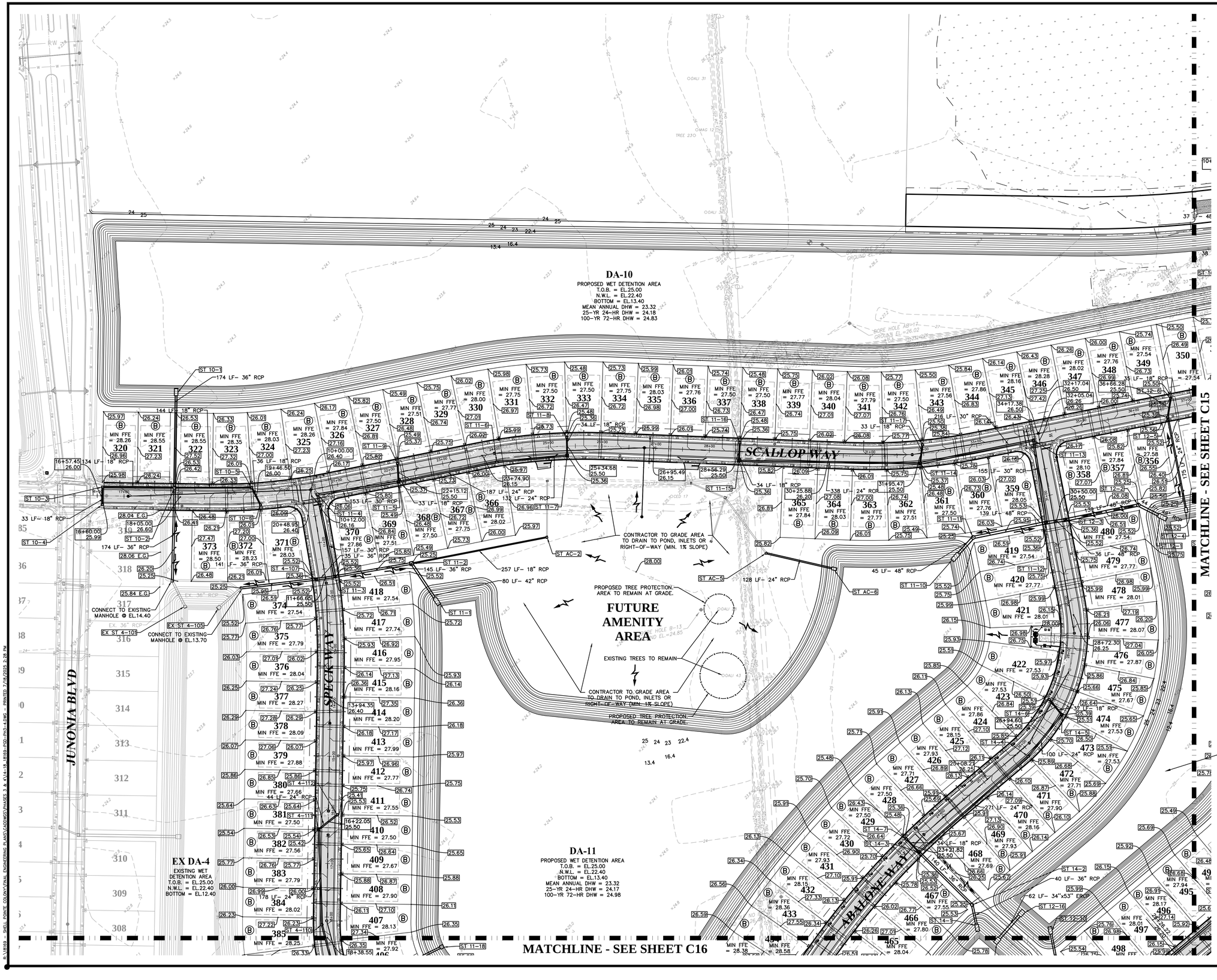
CHECKED BY: MKW

DRAWING FILE: 10-13_18169-GSS-PH3-4
XREF'S: 18169BAS.DWG
XREF'S: 18169SUR.DWG

MELIA L. RUSSELL, P.E., NO.68357
KRISTOPHER T. ROWLEY, P.E., NO.84263
NOT VALID WITHOUT SEAL

SHEET: C13 OF 47

R:\18169 - SHELL POINT CONVENTIAL ENGINEERING PLANS\CADD\GSS\PHASES 3 & 4\10-13_18169-GSS-PH3-4.DWG - PRINTED 7/17/2025 2:20 PM



0 40 80 120 160

SCALE : 1" = 80'

LEGEND:

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE
- OR — PROPOSED STORMWATER INLET
- PROPOSED STORMWATER MANHOLE
- PROPOSED MES
- 38.20 — PROPOSED GRADE
- M.E.G. — PROPOSED MATCH EXISTING GRADE LABEL
- FFE — PROPOSED FINISHED FLOOR ELEVATION
- PROPOSED FLOW DIRECTION
- A — PROPOSED LOT GRADING TYPE

NOTES:
1. SEE SHEET C18 FOR STORMWATER STRUCTURE TABLES.
2. SEE SHEET C15 FOR TYPICAL SIDE YARD SWALE SECTION.
3. CONTRACTOR TO REFER TO GEOTECHNICAL REPORT FOR SOIL REQUIREMENTS AND RECOMMENDATIONS.
4. FINISH FLOOR ELEVATION (FFE) OF THE LOTS SHALL BE MINIMUM 12 INCHES ABOVE ADJACENT ROAD CROWN AND MINIMUM 24 INCHES ABOVE THE STORMWATER POND 100-YEAR STORM EVENT.
5. MINIMUM LOT GRADING SLOPE IS 1.0% AND MUST BE DIRECTED TOWARD THE STREETS OR STORMWATER PONDS FOR POSITIVE DRAINAGE.
6. ESTABLISHED FLOOD ELEVATION = EL. 22.86 FT
7. ALL PEDESTRIAN CROSS WALK AREAS MUST MEET ADA GRADING REQUIREMENTS, CROSS-SLOPE MUST BE LESS THAN 2% AND LONGITUDINAL SLOPE (RUNNING SLOPE) MUST BE LESS THAN 5%.

ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
OWENSBORO BEACH, FL 32174
WWW.ZEVCOHEN.COM

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 4593)

NO.	DATE	BY	SUBMITTALS / REVISIONS
1	10-20-23	MLR	INITIAL SUBMITTAL TO CITY
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4	07-16-25	MLR	RESUBMITTED TO CITY

ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS PAVING, GRADING & DRAINAGE PLAN

CITY OF NEW SMYRNA BEACH — VOLUSIA COUNTY, FLORIDA

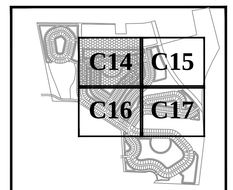
PROJECT NO: ZC 18169

DESIGNED BY: MLR

DRAFTED BY: MLR

CHECKED BY: MKW

DRAWING FILE: 14-18_18169-PGD-PH3-4
XREFS: 18169BAS.DWG
XREFS: 18169SUR.DWG



KEY MAP

Digitally signed by Melia L. Russell
DN: c=US, o=Florida, ou=A01410D000001E0E0005DD0E, cn=Melia L. Russell
Location: Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.
Reason: I am the author of this document.
Date: 2025.07.16 20:56:39 -04'00'

MELIA L. RUSSELL, P.E., NO.68357
KRISTOPHER T ROWLEY, P.E., NO.84263
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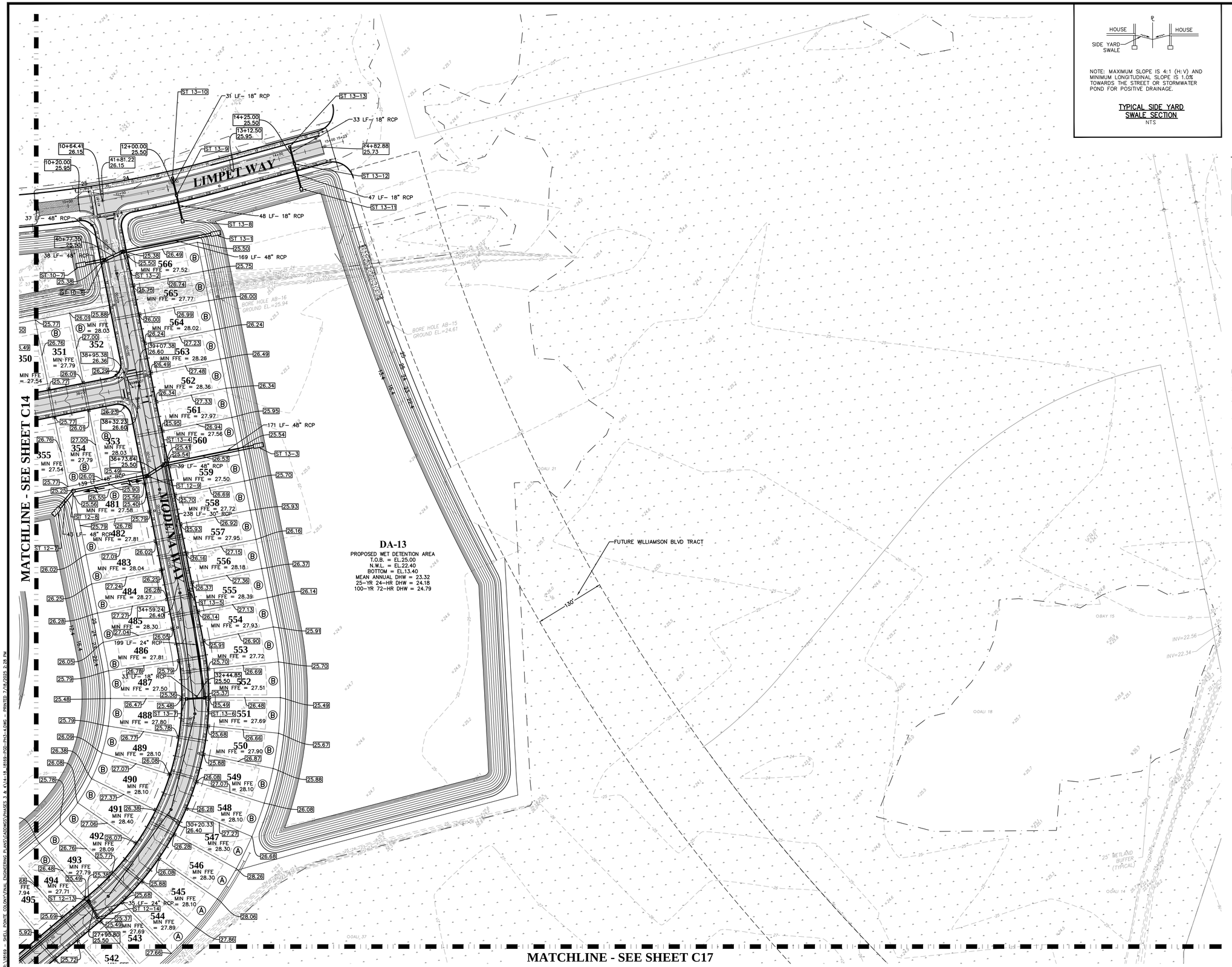
SHEET: C14 OF 47

R:\18169 - SHELL POINTE CONVENTIONAL ENGINEERING PLANS\CAD\ENGR\PHASES 3 & 4\14-18_18169-PGD-PH3-4.DWG - PRINTED 7/16/2025 8:28 PM



NOTE: MAXIMUM SLOPE IS 4:1 (H:V) AND MINIMUM LONGITUDINAL SLOPE IS 1.0% TOWARDS THE STREET OR STORMWATER POND FOR POSITIVE DRAINAGE.

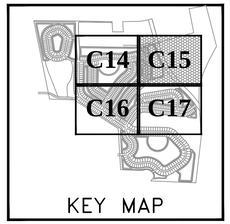
TYPICAL SIDE YARD SWALE SECTION
NTS

0 40 80 120 160
SCALE : 1" = 80'

LEGEND:

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE
- OR — PROPOSED STORMWATER INLET
- PROPOSED STORMWATER MANHOLE
- PROPOSED MES
- 38.20 — PROPOSED GRADE
- M.E.G. — PROPOSED MATCH EXISTING GRADE LABEL
- FFE — PROPOSED FINISHED FLOOR ELEVATION
- PROPOSED FLOW DIRECTION
- (A) — PROPOSED LOT GRADING TYPE

NOTES:
1. SEE SHEET C18 FOR STORMWATER STRUCTURE TABLES.
2. SEE THIS SHEET FOR TYPICAL SIDE YARD SWALE SECTION.
3. CONTRACTOR TO REFER TO GEOTECHNICAL REPORT FOR SOIL REQUIREMENTS AND RECOMMENDATIONS.
4. FINISH FLOOR ELEVATION (FFE) OF THE LOTS SHALL BE MINIMUM 12 INCHES ABOVE ADJACENT ROAD CROWN AND MINIMUM 24 INCHES ABOVE THE STORMWATER POND 100-YEAR STORM EVENT.
5. MINIMUM LOT GRADING SLOPE IS 1.0% AND MUST BE DIRECTED TOWARD THE STREETS OR STORMWATER PONDS FOR POSITIVE DRAINAGE.
6. ESTABLISHED FLOOD ELEVATION = EL. 22.86 FT
7. ALL PEDESTRIAN CROSS WALK AREAS MUST MEET ADA GRADING REQUIREMENTS, CROSS-SLOPE MUST BE LESS THAN 2% AND LONGITUDINAL SLOPE (RUNNING SLOPE) MUST BE LESS THAN 5%.



KEY MAP

ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
OSPREY BEACH, FL 32174
WWW.ZEVCOHEN.COM

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 6583)

NO.	DATE	BY	SUBMITTALS / REVISIONS
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4	07-18-25	MLR	RESUBMITTED TO CITY

ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS PAVING, GRADING & DRAINAGE PLAN

CITY OF NEW SMYRNA BEACH — VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 14-18_18169-PGD-PH3-4
XREFS: 18169BAS.DWG
XREFS: 18169SUR.DWG

STATE OF FLORIDA — MELIA L. RUSSELL — LICENSE No 68357 — PROFESSIONAL ENGINEER

Digitally signed by Melia L. Russell
DN: c=US, o=Zev Cohen & Associates, Inc, ou=Civil Engineer, cn=Melia L. Russell, email=melia@zevcohen.com
Reason: I am the author of this document
Location: Date: 2025-07-22 15:26:36-04'00'
Adobe Acrobat Reader version: 2025.001.20601

MELIA L. RUSSELL, P.E., NO.68357
KRISTOPHER T ROWLEY, P.E., NO.84263
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SHEET: C15 OF 47

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LEGEND:

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE
- OR — PROPOSED STORMWATER INLET
- PROPOSED STORMWATER MANHOLE
- PROPOSED MES
- 38.20 — PROPOSED GRADE
- M.E.G. — PROPOSED MATCH EXISTING GRADE LABEL
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- PROPOSED FLOW DIRECTION
- A — PROPOSED LOT GRADING TYPE

NOTES:
1. SEE SHEET C18 FOR STORMWATER STRUCTURE TABLES.
2. SEE SHEET C15 FOR TYPICAL SIDE YARD SWALE SECTION.
3. CONTRACTOR TO REFER TO GEOTECHNICAL REPORT FOR SOIL REQUIREMENTS AND RECOMMENDATIONS.
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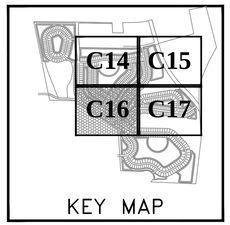

KEY MAP

ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
OWENSBORO, KY 42303 | 270.683.1460
WWW.ZEVCOHEN.COM

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 9583)

NO.	DATE	BY	SUBMITTALS / REVISIONS
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4	07-16-25	MLR	RESUBMITTED TO CITY

ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS PAVING, GRADING & DRAINAGE PLAN

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW

DRAWING FILE: 14-18_18169-PGD-PH3-4
XREFS: 18169BAS.DWG
XREFS: 18169SUR.DWG

MELIA L. RUSSELL, P.E., NO.68357
KRISTOPHER T. ROWLEY, P.E., NO.84263
NOT VALID WITHOUT SEAL

SHEET: C16 OF 47

S:\18169 - SHELL POINTE COLONY\FINAL ENGINEERING PLANS\CAD\PH3 PHASES 3 & 4\14-18_18169-PGD-PH3-4.DWG - PRINTED: 7/28/2025 2:29 PM

MATCHLINE - SEE SHEET C15

MATCHLINE - SEE SHEET C16

FUTURE WILLIAMSON BLVD TRACT

JEWEL BOX CIRCLE

MONACO BLVD

JUNONIA BLVD

CONTRACTOR TO GRADE OPEN SPACE AREA TO DRAIN TO ROADWAY

DA-16
PROPOSED WET DETENTION AREA
T.O.B. = EL.25.25
N.W.L. = EL.22.40
BOTTOM = EL.12.40
MEAN ANNUAL DHW = 23.43
25-YR 24-HR DHW = 24.33
100-YR 72-HR DHW = 25.04

DA-17
PROPOSED WET DETENTION AREA
T.O.B. = EL.25.25
N.W.L. = EL.22.40
BOTTOM = EL.12.40
MEAN ANNUAL DHW = 23.44
25-YR 24-HR DHW = 24.33
100-YR 72-HR DHW = 25.10

DA-18
PROPOSED WET DETENTION AREA
T.O.B. = EL.25.25
N.W.L. = EL.22.40
BOTTOM = EL.12.40
MEAN ANNUAL DHW = 23.44
25-YR 24-HR DHW = 24.32
100-YR 72-HR DHW = 25.11

AREA WITHIN SILT FENCE TO BE CLEARED

SCALE : 1" = 80'

LEGEND:

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE
- PROPOSED STORMWATER INLET (OR)
- PROPOSED STORMWATER MANHOLE
- PROPOSED MES
- 38.20 PROPOSED GRADE
- M.E.G. PROPOSED MATCH EXISTING GRADE LABEL
- FFE PROPOSED FINISHED FLOOR ELEVATION
- PROPOSED FLOW DIRECTION
- (A) PROPOSED LOT GRADING TYPE

NOTES:
1. SEE SHEET C18 FOR STORMWATER STRUCTURE TABLES.
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KEY MAP
C14 C15
C16 C17

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300 INTERCHANGE BLVD., STE. C
OWENSBORO, KY 42303
WWW.ZEVCOHEN.COM

CIVIL ENGINEERING
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ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS PAVING, GRADING & DRAINAGE PLAN

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW

DRAWING FILE: 14-18_18169-PGD-PH3-4
XREFS: 18169BAS.DWG
XREFS: 18169SUR.DWG

MELIA L. RUSSELL, P.E., NO.68357
KRISTOPHER T. ROWLEY, P.E., NO.84263
NOT VALID WITHOUT SEAL

SHEET: C17 OF 47

Digitally signed by Melia L. Russell
DN: CN=Melia L. Russell, C=US, O=Zev Cohen & Associates, Inc., OU=Civil Engineering, E=melia@zevcohen.com
Reason: I am the author of this document.
Location: Florida
Date: 2025.07.21 20:49:34-04'00'

STORMWATER STRUCTURE TABLE

STRUCTURE NUMBER	STRUCTURE TYPE	STRUCTURE T.C.	PIPE INVERT(S), DIRECTION(S), SIZE(S)
DCS-15A	TYPE H INLET (2 OR 3 GRATES) – INDEX NO. 425-052	25.50	22.10 (SW) 24"x38" ERCP
ST-1	MES (24" X 38") – INDEX NO. 430-021	–	23.00 (NW) 24"x38" ERCP
ST-2	MANHOLE (60" DIA.) – INDEX NO. 425-001	27.00	22.95 (SE) 24"x38" ERCP 22.95 (NW) 24"x38" ERCP
ST-3	MANHOLE (60" DIA.) – INDEX NO. 425-001	25.98	22.60 (SE) 24"x38" ERCP 22.60 (NW) 24"x38" ERCP
ST-4	MANHOLE (84" DIA.) – INDEX NO. 425-001	26.60	22.00 (SE) 24"x38" ERCP 22.00 (NE) 24"x38" ERCP
ST 4-107	TYPE C INLET RISER WITH 48"X48"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	14.85 (E) 36" RCP 14.40 (W) 36" RCP
ST 4-110	MANHOLE (48" DIA.) – INDEX NO. 425-001	26.12	18.10 (N) 24" RCP 18.10 (S) 24" RCP
ST 4-111	TYPE C INLET RISER WITH 48"X48"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	19.80 (NE) 24" RCP 19.00 (S) 24" RCP
ST 4-112	TYPE C INLET – INDEX NO. 425-052	25.25	20.00 (SW) 24" RCP
ST 4-113	TYPE C INLET – INDEX NO. 425-052	25.25	16.30 (E) 18" RCP 16.30 (N) 24" RCP
ST 4-114	TYPE C INLET – INDEX NO. 425-052	25.25	16.50 (W) 18" RCP
ST 4-115	MANHOLE (72" DIA.) – INDEX NO. 425-001	26.34	19.35 (NE) 24"x38" ERCP 18.20 (SW) 42" RCP 18.20 (NW) 19"x30" ERCP
ST 4-116	TYPE C INLET RISER WITH 48"X48"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	20.40 (SE) 24" RCP 20.25 (SW) 24"x38" ERCP
ST 4-117	TYPE C INLET – INDEX NO. 425-052	25.25	20.55 (NW) 24" RCP
ST 4-118	TYPE C INLET RISER WITH 48"X48"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	20.10 (NE) 18" RCP 19.00 (SE) 19"x30" ERCP
ST 4-119	TYPE C INLET – INDEX NO. 425-052	25.25	20.25 (SW) 18" RCP
ST 10-1	MES (36") – INDEX NO. 430-021	19.23	15.90 (S) 36" RCP
ST 10-2	MANHOLE (60" DIA.) – INDEX NO. 425-001	26.38	16.50 (N) 36" RCP 15.00 (S) 36" RCP 19.50 (W) 18" RCP 19.55 (E) 18" RCP
ST 10-3	TYPE C INLET – INDEX NO. 425-052	–	20.90 (S) 18" RCP 20.00 (E) 18" RCP
ST 10-4	TYPE C INLET – INDEX NO. 425-052	–	21.00 (N) 18" RCP
ST 10-5	TYPE C INLET – INDEX NO. 425-052	25.50	21.90 (S) 18" RCP 20.00 (W) 18" RCP
ST 10-6	TYPE C INLET – INDEX NO. 425-052	25.50	22.00 (N) 18" RCP
ST 10-7	MES (48") – INDEX NO. 430-021	19.82	15.40 (E) 48" RCP
ST 10-8	TYPE C INLET RISER WITH 60"X60"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	18.25 (E) 48" RCP 15.70 (W) 48" RCP
ST 11-1	MES (42") – INDEX NO. 430-021	18.28	14.40 (NW) 42" RCP
ST 11-2	TYPE C INLET RISER WITH 72"X72"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	14.55 (W) 36" RCP 14.55 (SE) 42" RCP 18.00 (E) 18" RCP
ST 11-3	TYPE C INLET RISER WITH 48"X48"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	15.00 (W) 36" RCP 15.00 (E) 36" RCP 16.40 (N) 30" RCP
ST 11-4	MANHOLE (60" DIA.) – INDEX NO. 425-001	26.12	17.55 (E) 30" RCP 17.25 (S) 30" RCP
ST 11-5	TYPE C INLET RISER WITH 48"X48"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	20.35 (N) 18" RCP 18.35 (W) 30" RCP 18.35 (E) 24" RCP
ST 11-6	MANHOLE (48" DIA.) – INDEX NO. 425-001	25.86	19.30 (E) 24" RCP 19.30 (W) 24" RCP
ST 11-7	TYPE C INLET RISER WITH 48"X48"TYPE J BOTTOM – INDEX NO. 425-010 & 052	–	20.35 (N) 18" RCP 20.00 (W) 24" RCP
ST 11-8	TYPE C INLET – INDEX NO. 425-052	25.25	20.50 (S) 18" RCP
ST 11-9	TYPE C INLET – INDEX NO. 425-052	25.25	20.50 (S) 18" RCP
ST 11-10	MES (48") – INDEX NO. 430-021	19.88	15.40 (NE) 48" RCP
ST 11-11	MANHOLE (72" DIA.) – INDEX NO. 425-001	25.25	15.50 (SW) 48" RCP 15.50 (E) 48" RCP
ST 11-12	TYPE C INLET RISER WITH 60"X60"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	15.90 (E) 48" RCP 15.90 (W) 48" RCP 16.60 (N) 30" RCP

STORMWATER STRUCTURE TABLE

STRUCTURE NUMBER	STRUCTURE TYPE	STRUCTURE T.C.	PIPE INVERT(S), DIRECTION(S), SIZE(S)
ST 11-13	MANHOLE (48" DIA.) – INDEX NO. 425-001	26.23	18.30 (W) 30" RCP 17.00 (S) 30" RCP
ST 11-14	TYPE C INLET RISER WITH 48"X48"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	20.35 (N) 18" RCP 18.95 (W) 24" RCP 18.95 (E) 30" RCP
ST 11-15	TYPE C INLET RISER WITH 48"X48"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	20.35 (N) 18" RCP 20.00 (E) 24" RCP
ST 11-16	TYPE C INLET – INDEX NO. 425-052	25.25	20.50 (S) 18" RCP
ST 11-17	TYPE C INLET – INDEX NO. 425-052	25.25	20.50 (S) 18" RCP
ST 11-18	MES (36") – INDEX NO. 430-021	–	13.40 (W) 36" RCP
ST 12-1	MES (48") – INDEX NO. 430-021	–	15.40 (NW) 48" RCP
ST 12-2	MANHOLE (72" DIA.) – INDEX NO. 425-001	25.25	15.60 (W) 48" RCP 15.60 (SE) 48" RCP
ST 12-3	TYPE C INLET RISER WITH 60"X60"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	16.00 (W) 48" RCP 16.00 (E) 48" RCP
ST 12-4	MES (24") – INDEX NO. 430-021	–	17.10 (N) 24" RCP
ST 12-5	TYPE C INLET – INDEX NO. 425-052	25.25	20.30 (N) 18" RCP 18.00 (S) 24" RCP
ST 12-6	TYPE C INLET – INDEX NO. 425-052	25.25	20.50 (S) 18" RCP
ST 12-7	MES (48") – INDEX NO. 430-021	20.28	15.90 (NE) 48" RCP
ST 12-8	MANHOLE (72" DIA.) – INDEX NO. 425-001	25.25	16.05 (SW) 48" RCP 16.05 (E) 48" RCP
ST 12-9	TYPE C INLET RISER WITH 60"X60"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	18.00 (NE) 48" RCP 15.65 (W) 48" RCP
ST 12-10	MES (36") – INDEX NO. 430-021	–	14.40 (S) 36" RCP
ST 12-11	MANHOLE (60" DIA.) – INDEX NO. 425-001	25.50	14.60 (SE) 36" RCP 14.60 (N) 36" RCP
ST 12-12	TYPE C INLET RISER WITH 48"X48"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	20.00 (SE) 18" RCP 15.00 (NW) 36" RCP 15.00 (NE) 30" RCP
ST 12-13	TYPE C INLET RISER WITH 48"X48"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	16.00 (S) 24" RCP 16.00 (SW) 30" RCP
ST 12-14	TYPE C INLET – INDEX NO. 425-052	25.25	16.15 (N) 24" RCP
ST 12-15	TYPE C INLET – INDEX NO. 425-052	25.25	20.15 (NW) 18" RCP
ST 12-16	MES (34" X 53") – INDEX NO. 430-021	–	17.40 (SW) 34"x53" ERCP
ST 13-1	MES (48") – INDEX NO. 430-021	–	15.40 (W) 48" RCP
ST 13-2	TYPE C INLET RISER WITH 60"X60"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	18.40 (W) 48" RCP 15.90 (E) 48" RCP
ST 13-3	MES (48") – INDEX NO. 430-021	–	15.00 (W) 48" RCP
ST 13-4	TYPE C INLET RISER WITH 72"X72"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	17.85 (SW) 48" RCP 15.50 (E) 48" RCP 17.80 (S) 30" RCP
ST 13-5	MANHOLE (48" DIA.) – INDEX NO. 425-001	26.14	19.00 (S) 24" RCP 19.00 (N) 30" RCP
ST 13-6	TYPE C INLET RISER WITH 48"X48"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	20.30 (W) 18" RCP 20.00 (N) 24" RCP
ST 13-7	TYPE C INLET – INDEX NO. 425-052	25.25	20.50 (E) 18" RCP
ST 13-8	MES (18") – INDEX NO. 430-021	–	17.90 (N) 18" RCP
ST 13-9	TYPE C INLET – INDEX NO. 425-052	25.25	20.35 (N) 18" RCP 18.15 (S) 18" RCP
ST 13-10	TYPE C INLET – INDEX NO. 425-052	25.25	20.50 (S) 18" RCP
ST 13-11	MES (18") – INDEX NO. 430-021	–	17.90 (N) 18" RCP
ST 13-12	TYPE C INLET – INDEX NO. 425-052	25.25	20.35 (N) 18" RCP 18.15 (S) 18" RCP
ST 13-13	TYPE C INLET – INDEX NO. 425-052	25.25	20.50 (S) 18" RCP
ST 14-1	MES (36") – INDEX NO. 430-021	–	16.90 (N) 36" RCP
ST 14-2	MANHOLE (60" DIA.) – INDEX NO. 425-001	25.50	17.10 (NW) 36" RCP 17.10 (S) 36" RCP
ST 14-3	TYPE C INLET RISER WITH 48"X48"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	19.80 (NW) 18" RCP 17.50 (SE) 36" RCP 18.90 (NE) 24" RCP
ST 14-4	MANHOLE (48" DIA.) – INDEX NO. 425-001	25.73	19.70 (NE) 24" RCP 19.70 (SW) 24" RCP
ST 14-5	TYPE C INLET RISER WITH 48"X48"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	20.35 (NW) 18" RCP 20.00 (SW) 24" RCP

STORMWATER STRUCTURE TABLE

STRUCTURE NUMBER	STRUCTURE TYPE	STRUCTURE T.C.	PIPE INVERT(S), DIRECTION(S), SIZE(S)
ST 14-6	TYPE C INLET – INDEX NO. 425-052	25.25	20.50 (SE) 18" RCP
ST 14-7	TYPE C INLET – INDEX NO. 425-052	25.25	20.00 (SE) 18" RCP
ST 14-8	MES (48") – INDEX NO. 430-021	–	16.00 (W) 48" RCP
ST 14-9	MANHOLE (72" DIA.) – INDEX NO. 425-001	25.25	16.15 (NW) 48" RCP 16.15 (E) 48" RCP
ST 14-10	MES (48") – INDEX NO. 430-021	–	13.40 (SE) 48" RCP
ST 14-11	TYPE C INLET RISER WITH 60"X60"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	14.00 (SE) 48" RCP 17.75 (SW) 24" RCP 14.00 (NW) 48" RCP
ST 14-12	MANHOLE (48" DIA.) – INDEX NO. 425-001	26.40	18.60 (NE) 24" RCP 18.60 (SW) 24" RCP
ST 14-13	TYPE C INLET – INDEX NO. 425-052	25.25	20.40 (SE) 18" RCP 19.50 (NE) 24" RCP
ST 14-14	TYPE C INLET – INDEX NO. 425-052	25.25	20.50 (NW) 18" RCP
ST 14-15	MES (34" X 53") – INDEX NO. 430-021	–	17.40 (NE) 34"x53" ERCP
ST 15-1	MES (48") – INDEX NO. 430-021	–	13.40 (NW) 48" RCP
ST 15-2	TYPE C INLET RISER WITH 60"X60"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	14.15 (NW) 48" RCP 14.15 (SE) 48" RCP
ST 15-3	MES (36") – INDEX NO. 430-021	–	16.40 (SE) 36" RCP
ST 15-4	TYPE C INLET RISER WITH 48"X48"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	16.85 (SE) 24" RCP 17.80 (SW) 30" RCP 16.85 (NW) 36" RCP
ST 15-5	MANHOLE (48" DIA.) – INDEX NO. 425-001	26.15	18.40 (NE) 30" RCP 18.40 (SW) 30" RCP
ST 15-6	TYPE C INLET RISER WITH 48"X48"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	21.10 (SE) 18" RCP 19.00 (NE) 30" RCP
ST 15-7	TYPE C INLET – INDEX NO. 425-052	25.25	21.25 (NW) 18" RCP
ST 15-8	TYPE C INLET – INDEX NO. 425-052	25.25	17.00 (NW) 24" RCP
ST 15-9	MES (48") – INDEX NO. 430-021	–	14.75 (SE) 48" RCP
ST 15-10	MANHOLE (72" DIA.) – INDEX NO. 425-001	25.50	14.90 (SE) 48" RCP 14.90 (NW) 48" RCP
ST 15-11	MANHOLE (84" DIA.) – INDEX NO. 425-001	25.74	15.35 (NW) 48" RCP 18.20 (E) 48" RCP 15.35 (SW) 48" RCP
ST 15-12	MANHOLE (48" DIA.) – INDEX NO. 425-001	26.22	18.55 (E) 30" RCP 18.55 (W) 48" RCP
ST 15-13	TYPE E INLET RISER WITH TYPE J BOTTOM	25.25	20.35 (S) 24" RCP 19.50 (W) 30" RCP
ST 15-14	TYPE C INLET – INDEX NO. 425-052	25.25	20.50 (N) 24" RCP
ST 16-1	MES (48") – INDEX NO. 430-021	–	14.40 (W) 48" RCP
ST 16-2	MANHOLE (72" DIA.) – INDEX NO. 425-001	25.50	15.05 (W) 48" RCP 15.05 (E) 48" RCP
ST 16-3	TYPE C INLET RISER WITH 60"X60"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	15.60 (E) 48" RCP 15.60 (NW) 48" RCP
ST 16-4	TYPE C INLET RISER WITH 60"X60"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	15.75 (SE) 48" RCP 15.75 (NE) 48" RCP
ST 16-5	MES (48") – INDEX NO. 430-021	–	15.40 (S) 48" RCP
ST 16-6	TYPE C INLET RISER WITH 60"X60"TYPE J BOTTOM – INDEX NO. 425-010 & 052	26.00	20.35 (S) 24" RCP 17.80 (E) 30" RCP 18.20 (W) 30" RCP 16.00 (N) 48" RCP
ST 16-7	TYPE C INLET RISER WITH 48"X48"TYPE J BOTTOM – INDEX NO. 425-010 & 052	26.00	19.80 (SW) 24" RCP 19.50 (E) 30" RCP
ST 16-8	TYPE C INLET – INDEX NO. 425-052	26.00	20.00 (NE) 24" RCP
ST 16-9	TYPE C INLET RISER WITH 48"X48"TYPE J BOTTOM – INDEX NO. 425-010 & 052	26.00	20.90 (S) 24" RCP 19.00 (W) 30" RCP
ST 16-10	TYPE C INLET – INDEX NO. 425-052	26.00	21.00 (N) 24" RCP
ST 16-11	TYPE C INLET – INDEX NO. 425-052	26.00	20.50 (N) 24" RCP
ST 16-12	MES (48") – INDEX NO. 430-021	–	15.40 (SE) 48" RCP
ST 16-13	MANHOLE (72" DIA.) – INDEX NO. 425-001	25.25	15.55 (NW) 48" RCP 15.55 (E) 48" RCP
ST 16-14	TYPE C INLET RISER WITH 60"X60"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	16.00 (W) 48" RCP 16.00 (E) 48" RCP
ST 17-1	MES (48") – INDEX NO. 430-021	–	15.40 (SW) 48" RCP
ST 17-2	MANHOLE (72" DIA.) – INDEX NO. 425-001	25.25	15.60 (W) 48" RCP 15.60 (NE) 48" RCP

STORMWATER STRUCTURE TABLE

STRUCTURE NUMBER	STRUCTURE TYPE	STRUCTURE T.C.	PIPE INVERT(S), DIRECTION(S), SIZE(S)
ST 17-3	TYPE C INLET RISER WITH 60"X60"TYPE J BOTTOM – INDEX NO. 425-010 & 052	25.25	16.15 (W) 48" RCP 16.15 (E) 48" RCP 16.15 (N) 42" RCP
ST 17-4	MANHOLE (60" DIA.) – INDEX NO. 425-001	26.01	16.80 (N) 36" RCP 16.80 (S) 42" RCP
ST 17-5	MANHOLE (48" DIA.) – INDEX NO. 425-001	26.24	17.20 (NW) 30" RCP 17.20 (S) 36" RCP
ST 17-6	MANHOLE (48" DIA.) – INDEX NO. 425-001	25.71	17.65 (NW) 30" RCP 17.65 (SE) 30" RCP
ST 17-7	TYPE E INLET RISER WITH TYPE J BOTTOM	25.25	21.60 (S) 19"x30" ERCP 18.00 (SE) 30" RCP
ST 17-8	TYPE C INLET – INDEX NO. 425-052	25.25	21.75 (N) 19"x30" ERCP
ST 17-9	MES (48") – INDEX NO. 430-021	–	15.40 (S) 48" RCP
ST 17-10	TYPE C INLET RISER WITH 60"X60"TYPE J BOTTOM – INDEX NO. 425-010 & 052	26.00	15.65 (N) 48" RCP 15.65 (S) 48" RCP
ST 18-1	MES (48") – INDEX NO. 430-021	–	14.40 (NE) 48" RCP
ST 18-2	MANHOLE (72" DIA.) – INDEX NO. 425-001	25.50	14.65 (NW) 48" RCP 14.65 (SW) 48" RCP
ST 18-3	TYPE C INLET RISER WITH 60"X60"TYPE J BOTTOM – INDEX NO. 425-010 & 052	26.00	15.75 (N) 48" RCP 15.30 (SE) 48" RCP 16.55 (W) 30" RCP
ST 18-4	MANHOLE (48" DIA.) – INDEX NO. 425-001	26.87	17.20 (W) 24" RCP 17.20 (E) 30" RCP
ST 18-5	TYPE C INLET – INDEX NO. 425-052	26.00	17.65 (N) 18" RCP 17.65 (E) 24" RCP
ST 18-6	TYPE C INLET – INDEX NO. 425-052	26.00	17.75 (S) 18" RCP
ST AC-1	TYPE C INLET – INDEX NO. 425-052	25.00	20.00 (S) 18" RCP
ST AC-2	TYPE C INLET – INDEX NO. 425-052	25.00	19.40 (W) 18" RCP
ST AC-3	TYPE C INLET – INDEX NO. 425-052	25.00	20.00 (SE) 18" RCP
ST AC-4	TYPE C INLET RISER WITH 48"X48"TYPE J BOTTOM – INDEX NO. 425-010 & 052	24.50	19.50 (NW) 18" RCP 19.50 (SE) 24" RCP 19.50 (SW) 18" RCP
ST AC-5	TYPE C INLET – INDEX NO. 425-052	24.50	18.80 (NW) 24" RCP 18.80 (SE) 24" RCP
ST AC-6	MES (24") – INDEX NO. 430-021	–	18.10 (NW) 24" RCP
ST AC-7	TYPE C INLET – INDEX NO. 425-052	24.50	20.00 (NE) 18" RCP

R:\18169 – SHELL POINTE COLONY\FINAL ENGINEERING PLANS\CADDWGS\PHASES 3 & 4\14-18_18169-PGD-PH3-4.DWG – PRINTED 7/18/2025 2:29 PM

ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
ORMOND BEACH, FL 32174
WWW.ZEVCOHEN.COM

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(EB 4516) (LC 62)

NO.	DATE	BY	SUBMITTALS / REVISIONS
1	10-20-23	MLR	INITIAL SUBMITTAL TO CITY
2	09-16-24	MLR	RESUBMITTED TO CITY
3	04-04-25	MLR	RESUBMITTED TO CITY
4	07-18-25	MLR	RESUBMITTED TO CITY

ARDISIA PARK PHASE 3 & 4 FINAL ENGINEERING PLANS STORMWATER STRUCTURE TABLES

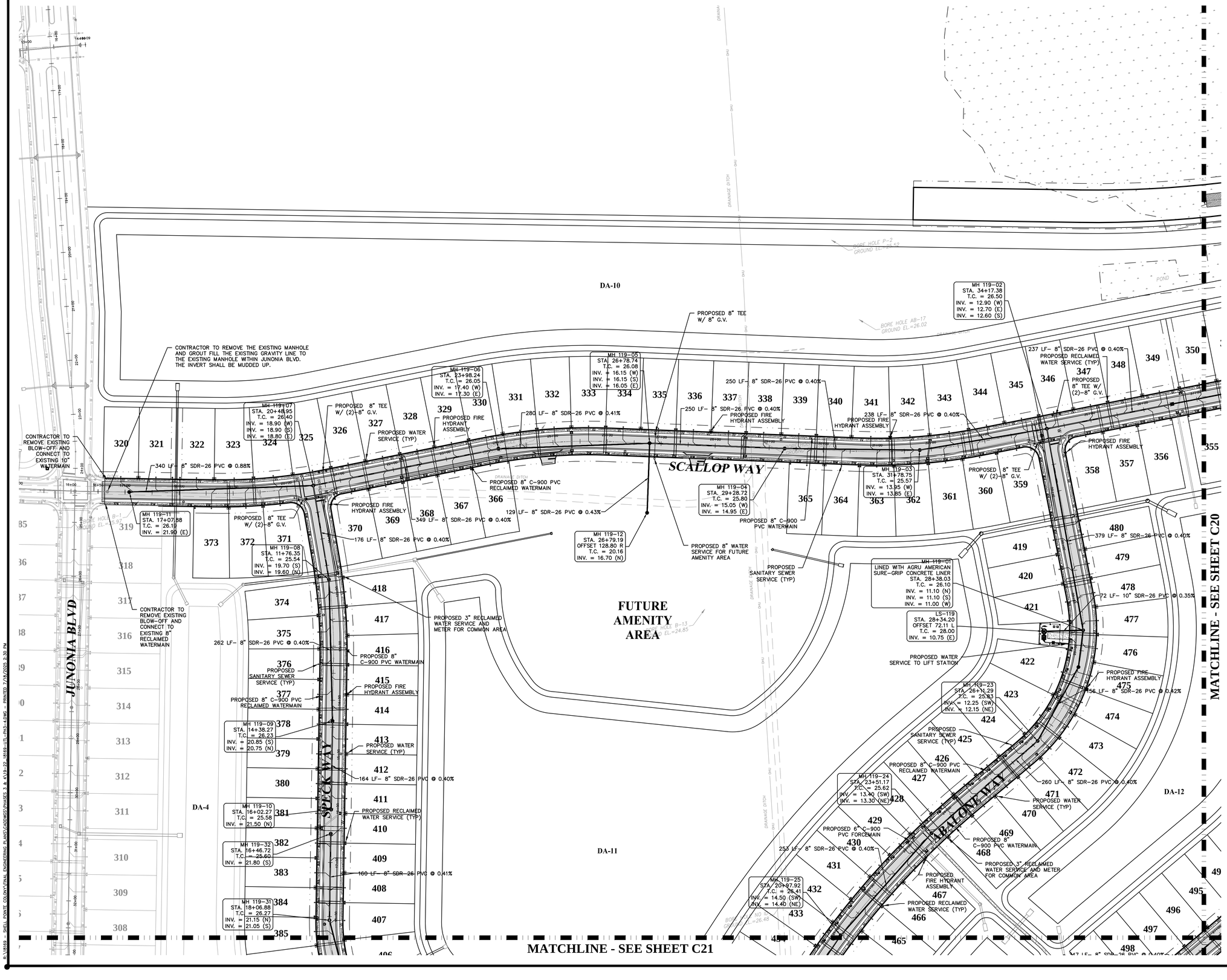
CITY OF NEW SMYRNA BEACH
VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 14-18_18169-PGD-PH3-4
XREF'S: 18169BAS.DWG
XREF'S: 18169SUR.DWG

MELIA L. RUSSELL LICENSE No 68357 STATE OF FLORIDA PROFESSIONAL ENGINEER

MELIA L. RUSSELL, P.E., NO.68357
KRISTOPHER T ROWLEY, P.E., NO.84263
NOT VALID WITHOUT SEAL

SHEET: C18 OF 47



0 40 80 120 160

SCALE : 1" = 80'

LEGEND:

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE
- PROPOSED SANITARY MAIN AND MANHOLE
- W — PROPOSED WATERMAIN
- RW — PROPOSED RECLAIMED WATERMAIN
- FM — PROPOSED FORCEMAIN
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED GATE VALVE

NOTES:
1. CONTRACTOR TO PROVIDE 10 LF CONCRETE ENCASEMENT OF GRAVITY SEWER WHERE MINIMUM DEP CLEARANCE CANNOT BE ACHIEVED AND/OR MAINTAINED.
2. ALL GRAVITY SEWER PIPE TO BE SDR-26 GREEN PVC WITH COMPATIBLE SERVICE FITTINGS.
3. FIRE HYDRANTS SHALL BE SET 2 FT FROM BACK OF SIDEWALK.

ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
OSPREY BEACH, FL 32174
WWW.ZEVCOHEN.COM

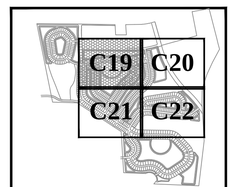
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 6565)

NO.	DATE	BY	SUBMITTALS/ REVISIONS
1	10-20-23	MLR	INITIAL SUBMITTAL TO CITY
2	09-16-24	MLR	RESUBMITTED TO CITY
3	04-04-25	MLR	RESUBMITTED TO CITY
4	07-16-25	MLR	RESUBMITTED TO CITY

ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS UTILITY PLAN

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 19-22_18169-UTL-PH3-4
XREFS: 18169BAS.DWG
XREFS: 18169SUR.DWG



KEY MAP

MELIA L. RUSSELL, P.E., NO.68357
KRISTOPHER T ROWLEY, P.E., NO.84263
NOT VALID WITHOUT SEAL

SHEET: C19 OF 47

R:\18169 — SHELL POINTE COVONTVIAL ENGINEERING PLANS\CADD\RCVISED 3 & 4\18-22_18169-UTL-PH3-4.DWG — PRINTED 7/16/2025 2:30 PM

CONTRACTOR TO INSTALL 12" G.V. & TEMPORARY BLOW-OFF ON PROPOSED 12" STUB FOR FUTURE CONNECTION

CONTRACTOR TO INSTALL 12" G.V. & TEMPORARY BLOW-OFF ON PROPOSED 12" STUB FOR FUTURE CONNECTION

PROPOSED 12" TEE & (3)-12" G.V.

MH 119-21A
T.C. = 26.15
INV. = 16.50 E
INV. = 16.40 S

212 LF- 8" SDR-26 PVC @ 0.40%

PROPOSED 12" C-900 PVC WATERMAIN

212 LF- 8" SDR-26 PVC @ 0.40%

CONTRACTOR TO INSTALL 12" G.V. & TEMPORARY BLOW-OFF ON PROPOSED 12" STUB FOR FUTURE CONNECTION

MH 119-21C
T.C. = 25.75
INV. = 18.30 W

LIMPET WAY

CONTRACTOR TO INSTALL 12" G.V. & TEMPORARY BLOW-OFF ON PROPOSED 12" STUB FOR FUTURE CONNECTION

MH 119-21B
T.C. = 25.80
INV. = 17.45 E
INV. = 17.35 W

PROPOSED 12" C-900 PVC RECLAIMED WATERMAIN

PROPOSED 12" TEE & (2)-12" G.V.

137 LF- 8" SDR-26 PVC @ 0.40%

PROPOSED FIRE HYDRANT ASSEMBLY

PROPOSED 3" RECLAIMED WATER SERVICE AND METER FOR COMMON AREA

DA-10

566

565

DRAINAGE DITCH

MH 119-21
STA. 40+44.55
T.C. = 25.65
INV. = 15.85 (N)
INV. = 15.75 (S)

BORE HOLE AB-16
GROUND EL.=25.94

212 LF- 8" SDR-26 PVC @ 0.40%

564

PROPOSED FIRE HYDRANT ASSEMBLY

PROPOSED 12" TEE W/ 12"X8" REDUCER, 12" G.V. & 8" G.V.

MH 119-14
STA. 38+32.23
T.C. = 26.60
INV. = 14.90 (N)
INV. = 14.90 (S)
INV. = 14.80 (W)

352

351

350

SCALLOP WAY

563

562

PROPOSED 12" TEE W/ 12"X8" REDUCER, 12" G.V. & 8" G.V.

561

195 LF- 8" SDR-26 PVC @ 0.41%

354

353

560

355

559

MH 119-15
STA. 36+37.23
T.C. = 25.65
INV. = 15.80 (S)
INV. = 15.70 (N)

481

558

482

195 LF- 8" SDR-26 PVC @ 0.41%

557

PROPOSED WATER SERVICE (TYP)

MATCHLINE - SEE SHEET C19

483

PROPOSED FIRE HYDRANT ASSEMBLY

556

MH 119-16
STA. 34+42.20
T.C. = 26.33
INV. = 16.70 (S)
INV. = 16.60 (N)

484

555

5%

485

554

225 LF- 8" SDR-26 PVC @ 0.40%

486

PROPOSED 12" C-900 PVC WATERMAIN

553

PROPOSED 12" C-900 PVC RECLAIMED WATERMAIN

487

552

DA-12

MH 119-17
STA. 32+16.28
T.C. = 25.61
INV. = 17.70 (SW)
INV. = 17.60 (N)

488

551

PROPOSED SANITARY SEWER SERVICE (TYP)

489

550

PROPOSED FIRE HYDRANT ASSEMBLY

183 LF- 8" SDR-26 PVC @ 0.41%

490

549

MH 119-18
STA. 30+32.73
T.C. = 26.35
INV. = 18.55 (SW)
INV. = 18.45 (NE)

491

548

492

547

PROPOSED RECLAIMED WATER SERVICE (TYP)

493

198 LF- 8" SDR-26 PVC @ 0.40%

546

494

545

495

544

MH 119-19
STA. 28+33.32
T.C. = 25.65
INV. = 19.45 (SW)
INV. = 19.35 (NE)

PROPOSED FIRE HYDRANT ASSEMBLY

543

542

DA-13

FUTURE WILLIAMSON BLVD TRACT

130'

BORE HOLE AB-15
GROUND EL.=24.61

25' WETLAND BUFFER (TYPICAL)

MATCHLINE - SEE SHEET C22

0 40 80 120 160

SCALE : 1" = 80'

LEGEND:

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE
- PROPOSED SANITARY MAIN AND MANHOLE
- W — PROPOSED WATERMAIN
- RW — PROPOSED RECLAIMED WATERMAIN
- FM — PROPOSED FORCEMAIN
- PROPOSED FIRE HYDRANT ASSEMBLY
- ⊗ PROPOSED GATE VALVE

NOTES:
1. CONTRACTOR TO PROVIDE 10 LF CONCRETE ENCASEMENT OF GRAVITY SEWER WHERE MINIMUM DEP CLEARANCE CANNOT BE ACHIEVED AND/OR MAINTAINED.
2. ALL GRAVITY SEWER PIPE TO BE SDR-26 GREEN PVC WITH COMPATIBLE SERVICE FITTINGS.
3. FIRE HYDRANTS SHALL BE SET 2 FT FROM BACK OF SIDEWALK.

C19 C20
C21 C22

KEY MAP

ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
DAYTONA BEACH, FL 32114
WWW.ZEVCOHEN.COM

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 6563)

NO.	DATE	BY	SUBMITTALS / REVISIONS
1	10-20-23	MLR	INITIAL SUBMITTAL TO CITY
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3	04-04-25	MLR	RESUBMITTED TO CITY
4	07-18-25	MLR	RESUBMITTED TO CITY

ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS
UTILITY PLAN

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 19-22_18169-UTL-PH3-4
XREFS: 18169BAS.DWG
XREFS: 18169SUR.DWG

MELIA L. RUSSELL LICENSE No 68357 STATE OF FLORIDA PROFESSIONAL ENGINEER

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DN: c=US, o=Florida, ou=A01410D0000018D3E6550A0F000, cn=Zev Cohen and Associates, l=Unit
Reason: I am the author of this document
Location: I have reviewed and approved the attached PDF version of this document using a Bluebeam Revu authentication seal
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MELIA L. RUSSELL, P.E., NO.68357
KRISTOPHER T ROWLEY, P.E., NO.84263
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SHEET: C20 OF 47

R:\18169 - SHELL POINTE CONVENTIAL ENGINEERING PLANS\CAD\ROS\PHASES 3 & 4\19-22_18169-UTL-PH3-4.DWG - PRINTED 7/18/2025 3:30 PM

MATCHLINE - SEE SHEET C19

MATCHLINE - SEE SHEET C22

LEGEND:

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE
- PROPOSED SANITARY MAIN AND MANHOLE
- W — PROPOSED WATERMAIN
- RW — PROPOSED RECLAIMED WATERMAIN
- FM — PROPOSED FORCEMAIN
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED GATE VALVE

NOTES:
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2. ALL GRAVITY SEWER PIPE TO BE SDR-26 GREEN PVC WITH COMPATIBLE SERVICE FITTINGS.
3. FIRE HYDRANTS SHALL BE SET 2 FT FROM BACK OF SIDEWALK.

SCALE : 1" = 80'

KEY MAP: C19 | C20 / C21 | C22

ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
OSPREY, FLORIDA 34229
WWW.ZEVCOHEN.COM

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 8583)

NO.	DATE	BY	SUBMITTALS / REVISIONS
1	10-20-23	MLR	INITIAL SUBMITTAL TO CITY
2	09-16-24	MLR	RESUBMITTED TO CITY
3	04-04-25	MLR	RESUBMITTED TO CITY
4	07-16-25	MLR	RESUBMITTED TO CITY

ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS
UTILITY PLAN

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW

DRAWING FILE: 19-22_18169-UTL-PH3-4
XREFS: 18169BAS.DWG
XREFS: 18169SUR.DWG

MELIA L. RUSSELL, P.E., NO.68357
KRISTOPHER T ROWLEY, P.E., NO.84263
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SHEET: C21 OF 47

R:\18169 — SHELL POINTE CONVENTIONAL ENGINEERING PLANS\CADD\ECS\PHASES 3 & 4\19-22_18169-UTL-PH3-4.DWG — PRINTED 7/15/2025 5:31 PM

MATCHLINE - SEE SHEET C20

MATCHLINE - SEE SHEET C21

MATCHLINE - SEE SHEET C19

FUTURE WILLIAMSON BLVD TRACT

JEWELBOX CIRCLE

MONACO BLVD

JUNONIA BLVD

DA-16

DA-17

DA-18

MH 118-01
LINED WITH AGRU AMERICAN SURE-GRIP CONCRETE LINER
STA. 12+87.83
T.C. = 25.80
INV. = 13.60 (NE)
INV. = 12.55 (SW)
INV. = 12.45 (SE)

MH 118-02
STA. 13+46.80
T.C. = 26.05
INV. = 14.10 (E)
INV. = 14.00 (SW)

MH 118-03
STA. 14+92.85
T.C. = 26.44
INV. = 15.10 (E)
INV. = 15.00 (W)

MH 118-04
STA. 17+66.07
T.C. = 25.64
INV. = 16.60 (E)
INV. = 16.50 (W)

MH 118-05
STA. 21+28.26
T.C. = 26.72
INV. = 18.15 (E)
INV. = 18.05 (W)

MH 118-06
STA. 23+97.12
T.C. = 25.65
INV. = 19.35 (SE)
INV. = 19.25 (W)

MH 118-07
STA. 25+32.56
T.C. = 25.89
INV. = 20.00 (SE)
INV. = 19.90 (NW)

MH 118-08
STA. 26+66.39
T.C. = 26.42
INV. = 20.65 (S)
INV. = 20.55 (NW)

MH 118-09
STA. 27+83.55
T.C. = 26.19
INV. = 21.25 (S)
INV. = 21.15 (N)

MH 118-10
STA. 29+16.22
T.C. = 25.64
INV. = 21.80 (N)

MH 118-11
STA. 12+39.33
T.C. = 25.59
INV. = 12.85 (S)
INV. = 12.75 (NE)

MH 118-12
STA. 11+14.14
T.C. = 26.01
INV. = 13.45 (S)
INV. = 13.35 (N)

MH 118-13
STA. 32+03.23
T.C. = 27.30
INV. = 14.00 (E)
INV. = 19.45 (W)
INV. = 13.90 (N)

MH 118-14
STA. 33+92.70
T.C. = 26.55
INV. = 14.85 (E)
INV. = 14.75 (W)

MH 118-15
STA. 37+58.81
T.C. = 26.84
INV. = 16.40 (E)
INV. = 16.30 (W)

MH 118-16
STA. 41+25.12
T.C. = 26.98
INV. = 17.95 (E)
INV. = 17.85 (W)

MH 118-17
STA. 44+73.57
T.C. = 27.65
INV. = 19.45 (E)
INV. = 19.35 (W)

MH 118-18
STA. 47+27.75
T.C. = 26.58
INV. = 20.60 (E)
INV. = 20.50 (W)

MH 118-19
STA. 48+86.52
T.C. = 27.06
INV. = 21.40 (NE)
INV. = 21.30 (W)

MH 118-20
STA. 50+33.62
T.C. = 26.64
INV. = 22.06 (SW)

LS-118
STA. 12+77.46
T.C. = 28.00
INV. = 12.20 (NW)

PROPOSED 6" C-900 PVC FORCEMAIN

PROPOSED 8" C-900 PVC RECLAIMED WATERMAIN

PROPOSED 10" C-900 PVC RECLAIMED WATERMAIN

PROPOSED 8" C-900 PVC WATERMAIN

PROPOSED 10" C-900 PVC WATERMAIN

PROPOSED RECLAIMED WATER SERVICE (TYP)

PROPOSED WATER SERVICE (TYP)

PROPOSED SANITARY SEWER SERVICE (TYP)

PROPOSED FIRE HYDRANT ASSEMBLY

144 LF- 8" SDR-26 PVC @ 0.62%

59 LF- 8" SDR-26 PVC @ 0.68%

74 LF- 10" SDR-26 PVC @ 0.34%

48 LF- 8" SDR-26 PVC @ 0.41%

124 LF- 8" SDR-26 PVC @ 0.40%

366 LF- 8" SDR-26 PVC @ 0.40%

273 LF- 8" SDR-26 PVC @ 0.51%

362 LF- 8" SDR-26 PVC @ 0.40%

268 LF- 8" SDR-26 PVC @ 0.41%

134 LF- 8" SDR-26 PVC @ 0.41%

132 LF- 8" SDR-26 PVC @ 0.42%

116 LF- 8" SDR-26 PVC @ 0.43%

133 LF- 8" SDR-26 PVC @ 0.41%

147 LF- 8" SDR-26 PVC @ 0.41%

158 LF- 8" SDR-26 PVC @ 0.44%

253 LF- 8" SDR-26 PVC @ 0.41%

348 LF- 8" SDR-26 PVC @ 0.40%

366 LF- 8" SDR-26 PVC @ 0.40%

188 LF- 8" SDR-26 PVC @ 0.40%

114 LF- 8" SDR-26 PVC @ 0.40%

PROPOSED 10"X8" TEE, 10" G.V. & 8" G.V

PROPOSED 3" RECLAIMED WATER SERVICE AND METER FOR COMMON AREA

CONTRACTOR TO INSTALL 10" G.V. & 2" TEMPORARY BLOW-OFF FOR FUTURE CONNECTION

"BORE HOLE AB-2 GROUND EL.=25.27"

"BORE HOLE AB-3 GROUND EL.=25.19"

0 40 80 120 160

SCALE : 1" = 80'

LEGEND:

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE
- PROPOSED SANITARY MAIN AND MANHOLE
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- RW — PROPOSED RECLAIMED WATERMAIN
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- PROPOSED GATE VALVE

NOTES:
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2. ALL GRAVITY SEWER PIPE TO BE SDR-26 GREEN PVC WITH COMPATIBLE SERVICE FITTINGS.
3. FIRE HYDRANTS SHALL BE SET 2 FT FROM BACK OF SIDEWALK.

KEY MAP

C19 | C20
C21 | C22

ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
OWENSBORO, KY 42303
WWW.ZEVCOHEN.COM

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 6583)

NO	DATE	BY	SUBMITTALS / REVISIONS
1	10-20-23	MLR	INITIAL SUBMITTAL TO CITY
2	09-16-24	MLR	RESUBMITTED
3	04-04-25	MKR	RESUBMITTED
4	07-18-25	MKR	RESUBMITTED

ARDISIA PARK
PHASE 3 & 4
FINAL ENGINEERING PLANS
UTILITY PLAN

VOLUSIA COUNTY, FLORIDA

CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169

DESIGNED BY: MLR

DRAWN BY: MLR

CHECKED BY: MKW

DRAWING FILE: 19-22_18169-UTL-PH3-4
XREF'S: 18169BAS.DWG
XREF'S: 18169SUR.DWG

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KRISTOPHER T ROWLEY, P.E., NO.84263
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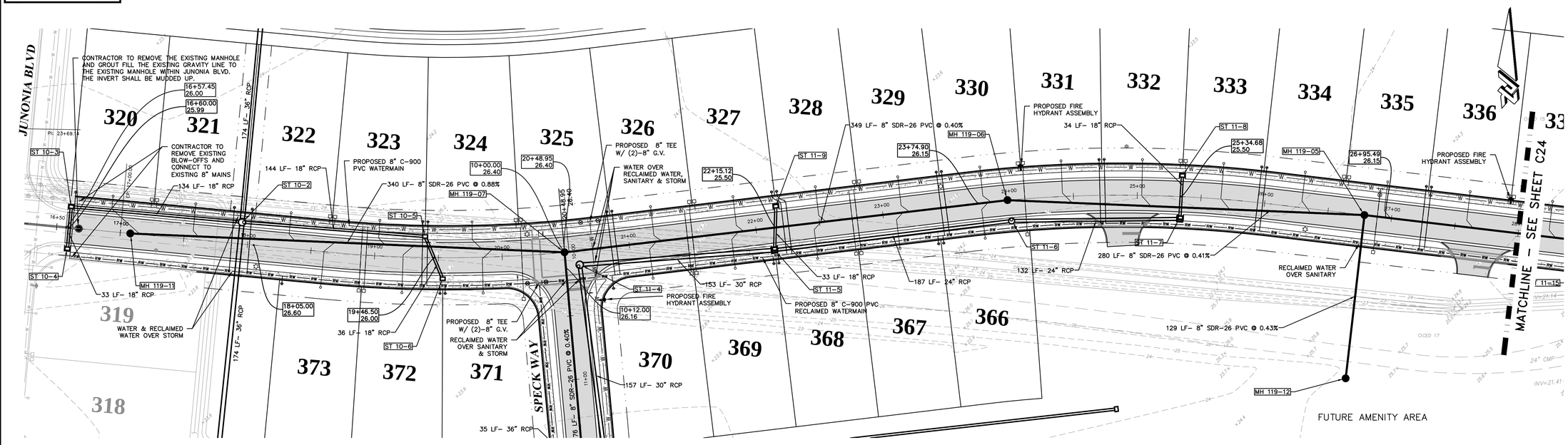
KEY MAP

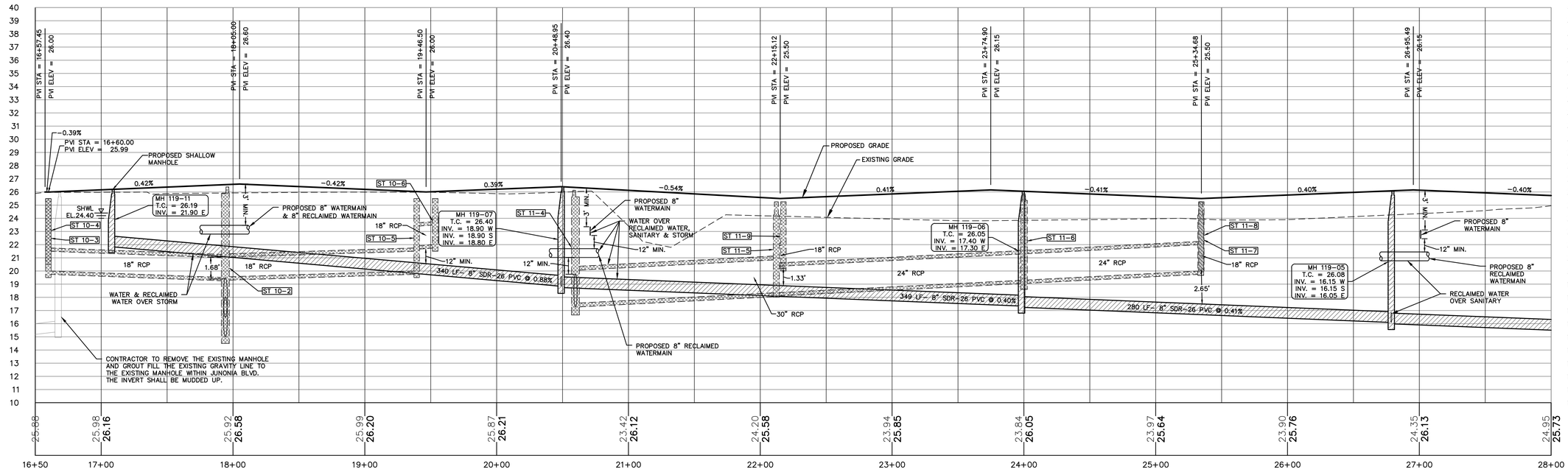
LEGEND:

- PROPOSED SANITARY MAIN AND MANHOLE
- W — PROPOSED WATERMAIN
- F — PROPOSED FIRE MAIN
- RW — PROPOSED RECLAIMED WATERMAIN
- FM — PROPOSED FORCEMAIN
- OR — PROPOSED STORMWATER INLET
- PROPOSED STORMWATER MANHOLE
- PROPOSED MES
- WATER SERVICE
- SANITARY SERVICE
- RECLAIM SERVICE



SCALLOP WAY PLAN & PROFILE

PLAN VIEW: 1"=40'
PROFILE VIEW: HORIZ: 1"=40'
VERT: 1"=4'



ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
OWENSBORO, KY 42303
WWW.ZEVCOHEN.COM
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 6583)

NO	DATE	BY	SUBMITTALS/ REVISIONS
1	10-20-23	MLR	INITIAL SUBMITTAL TO CITY
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4	07-18-25	MLR	RESUBMITTED TO CITY

ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS
PLAN AND PROFILE

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 23-37_18169-PP-PH3-4
XREF'S: ##########
XREF'S: ##########

MELIA L. RUSSELL P.E. No 68357 STATE OF FLORIDA PROFESSIONAL ENGINEER
Digitally signed by Melia L. Russell
DN: CN=Melia L Russell, C=US, E=mlr@zevcohen.com, O=ZEV COHEN & ASSOCIATES, INC., OU=Civil
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SHEET: C23 OF 47

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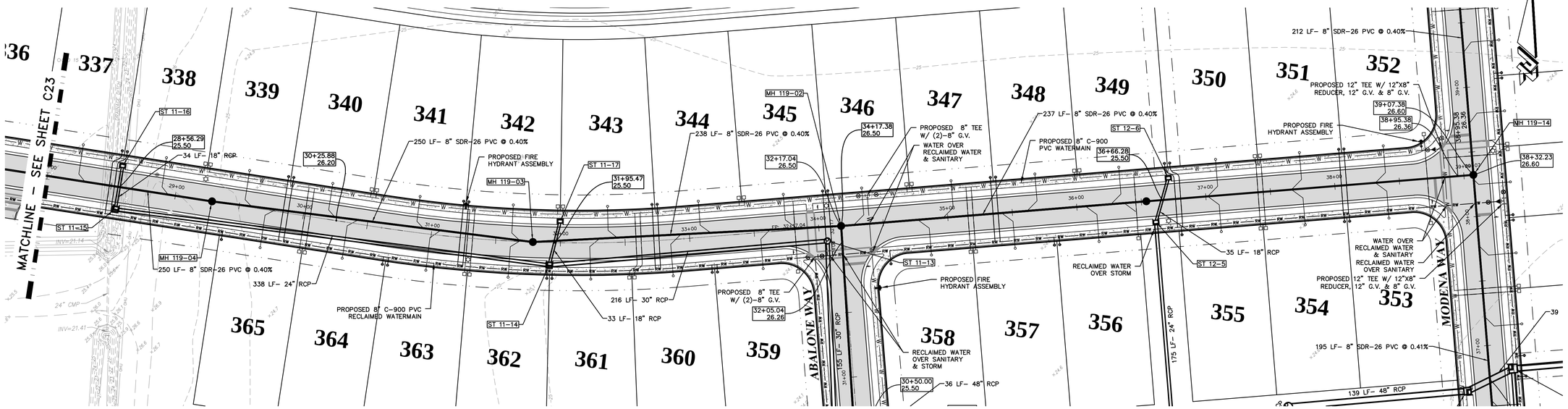
KEY MAP

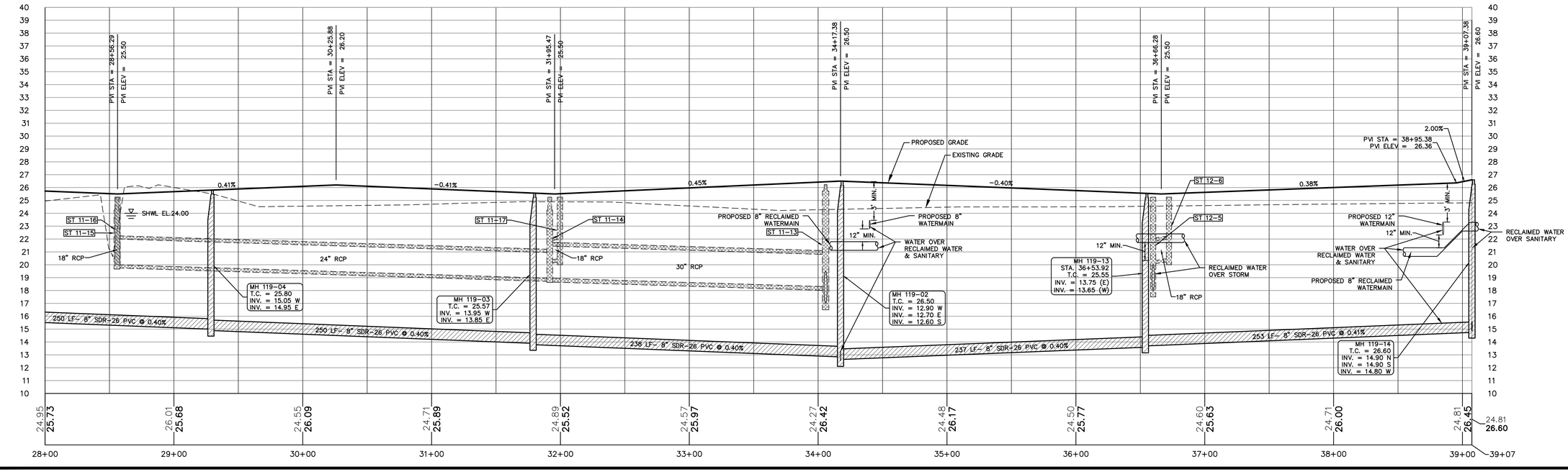
LEGEND:

- PROPOSED SANITARY MAIN AND MANHOLE
- W — PROPOSED WATERMAIN
- F — PROPOSED FIRE MAIN
- RW — PROPOSED RECLAIMED WATERMAIN
- FM — PROPOSED FORCEMAIN
- OR — PROPOSED STORMWATER INLET
- PROPOSED STORMWATER MANHOLE
- PROPOSED MES
- WATER SERVICE
- SANITARY SERVICE
- RECLAIM SERVICE



SCALLOP WAY PLAN & PROFILE

PLAN VIEW: 1"=40'
PROFILE VIEW: HORIZ: 1"=40'
VERT: 1"=4'



ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
OWENSBORO, KY 42303
WWW.ZEVCOHEN.COM

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 0263)

NO	DATE	BY	SUBMITTALS / REVISIONS
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4	07-18-25	MLR	RESUBMITTED TO CITY

ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS
PLAN AND PROFILE

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 23-37_18169-PP-PH3-4
XREF'S: ##########
XREF'S: ##########

MELIA L. RUSSELL
LICENSE
No. 68357
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Digitally signed by Melia L. Russell
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SHEET: C24 OF 47

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KEY MAP

LEGEND:

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- W — PROPOSED WATERMAIN
- F — PROPOSED FIRE MAIN
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- PROPOSED MES
- WATER SERVICE
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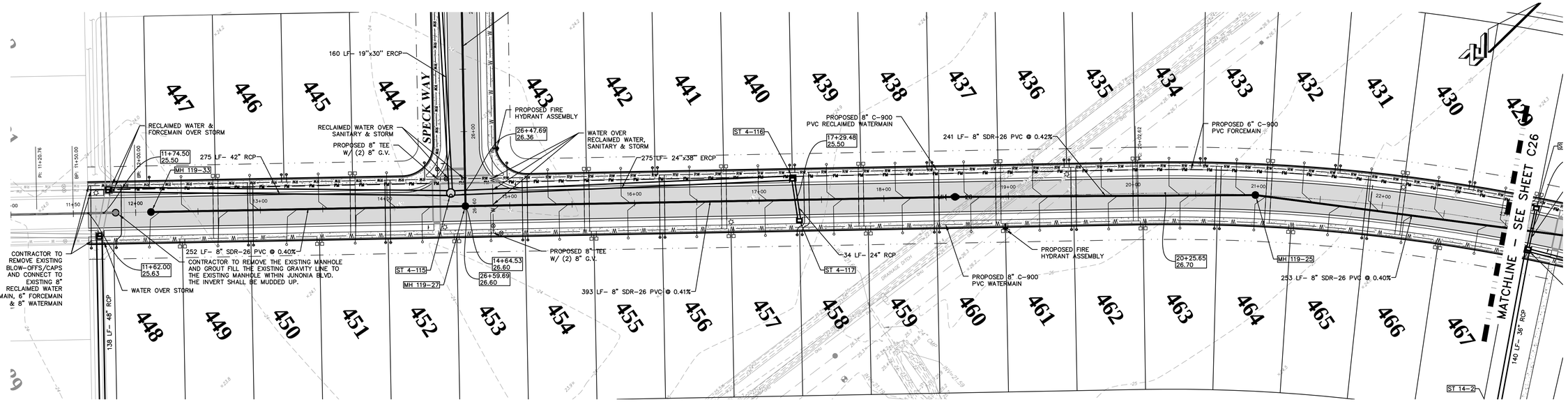
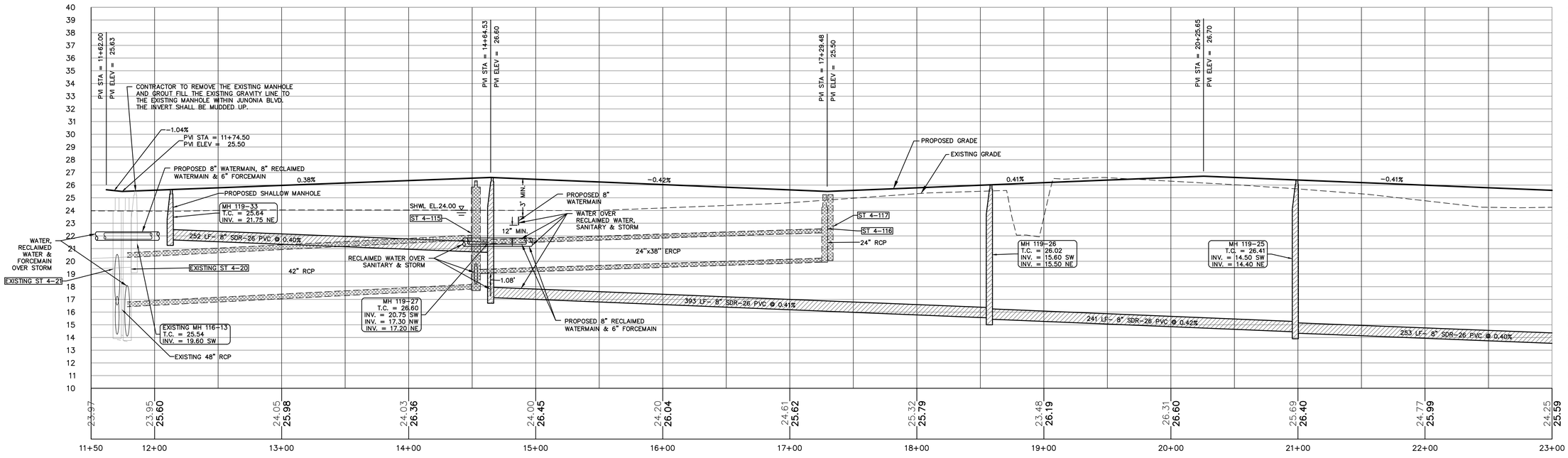
- RECLAIM SERVICE



ABALONE WAY PLAN & PROFILE

PLAN VIEW: 1"=40'
PROFILE VIEW: HORIZ: 1"=40'
VERT: 1"=4'



ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
OWENSBORO, KY 42303
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CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 6583)

NO.	DATE	BY	SUBMITTALS / REVISIONS
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3	04-04-25	MLR	RESUBMITTED TO CITY
4	07-18-25	MLR	RESUBMITTED TO CITY

ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS
PLAN AND PROFILE

CITY OF NEW SMYRNA BEACH — VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 23-37_18169-PP-PH3-4
XREF'S: ##########
XREF'S: ##########

MELIA L. RUSSELL — LICENSED — No. 68357 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

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DN: CN=Melia L Russell, O=Zev Cohen & Associates, Inc., OU=Melia L Russell, E=mrussell@zevcohen.com, C=US
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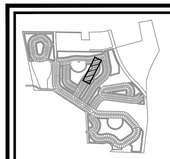
SHEET: C25 OF 47

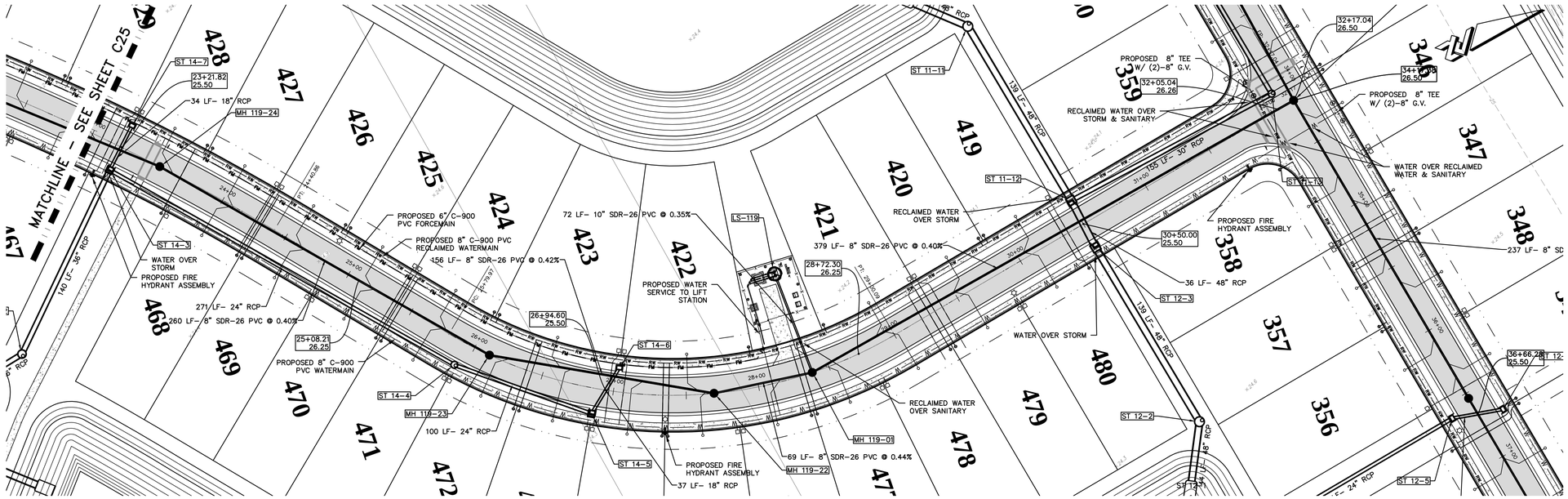
S:\18169 - SHELL POINTE COLONY\FINAL ENGINEERING PLANS\CAD\PHASES 3 & 4\23-37_18169_PP-PH3-4.DWG - PRINTED 7/18/2025 2:53 PM

KEY MAP



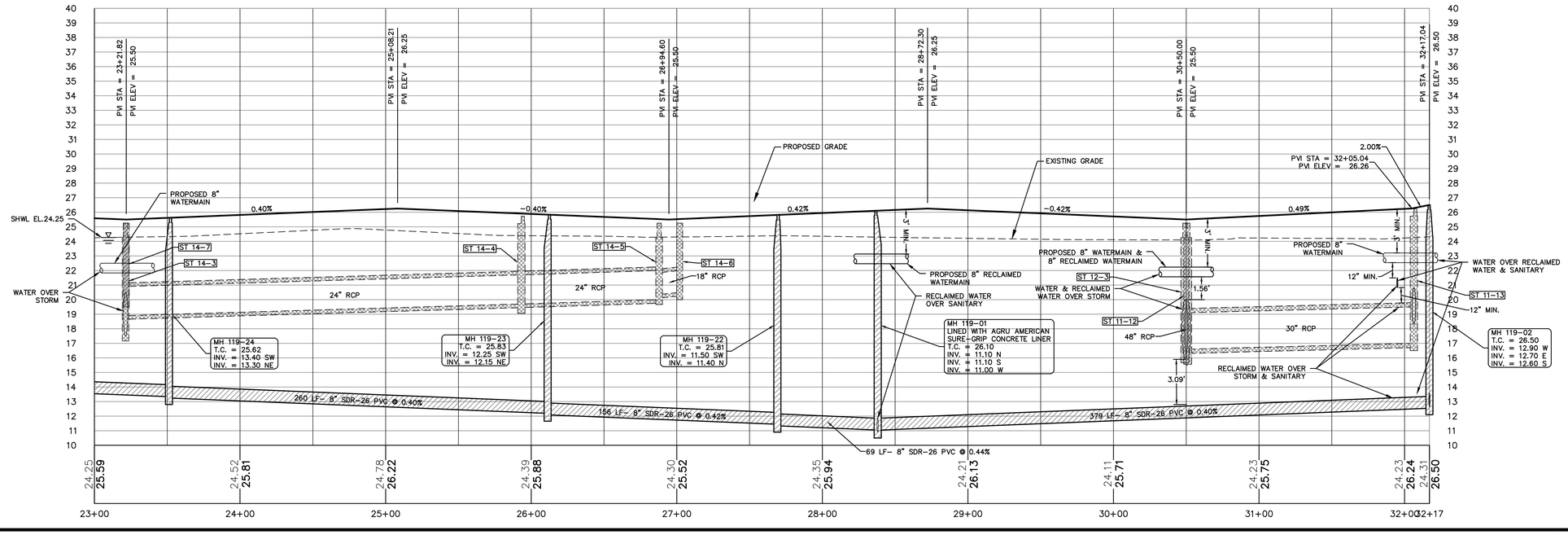
LEGEND:

- PROPOSED SANITARY MAIN AND MANHOLE
- W — PROPOSED WATERMAIN
- F — PROPOSED FIRE MAIN
- RW — PROPOSED RECLAIMED WATERMAIN
- FM — PROPOSED FORCEMAIN
- OR — PROPOSED STORMWATER INLET
- PROPOSED STORMWATER MANHOLE
- PROPOSED MES
- WATER SERVICE
- SANITARY SERVICE
- RECLAIM SERVICE



ABALONE WAY PLAN & PROFILE

PLAN VIEW: 1"=40'
PROFILE VIEW: HORIZ: 1"=40'
VERT: 1"=4'



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CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 0583)

NO.	DATE	BY	SUBMITTALS / REVISIONS
1	10-20-23	MLR	INITIAL SUBMITTAL TO CITY
2	09-16-24	MLR	RESUBMITTED TO CITY
3	04-04-25	MLR	RESUBMITTED TO CITY
4	07-18-25	MLR	RESUBMITTED TO CITY

ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS
PLAN AND PROFILE

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 23-37_18169-PP-PH3-4
XREFS: ##########
XREFS: ##########

MELIA L. RUSSELL P.E. No. 68357 STATE OF FLORIDA PROFESSIONAL ENGINEER
Digitally signed by Melia L. Russell
DN: C=US, E=melia.l.russell@gmail.com, O=Zev Cohen & Associates, Inc., CN=Melia L. Russell
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SHEET: C26 OF 47

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KEY MAP

LEGEND:

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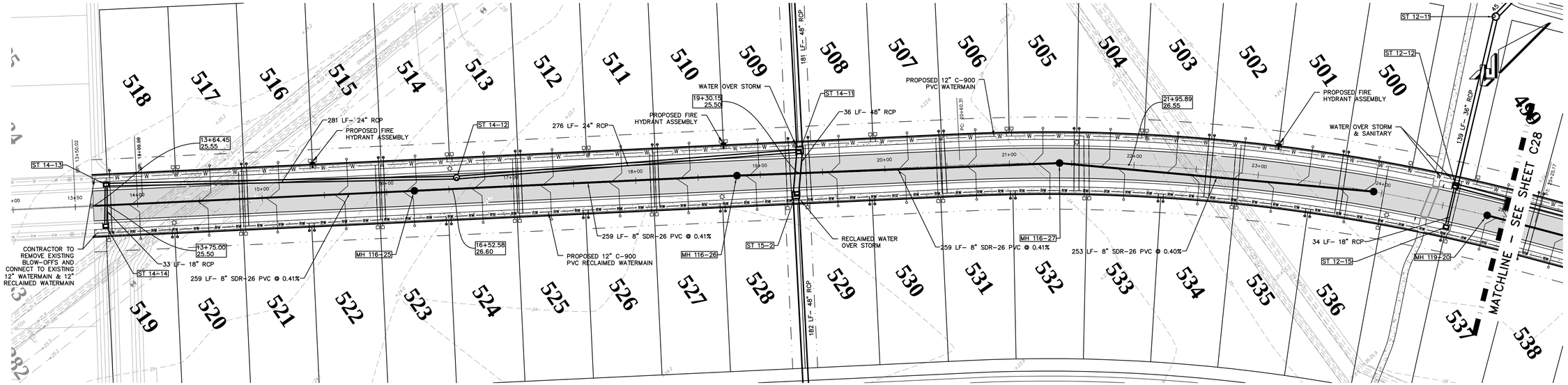
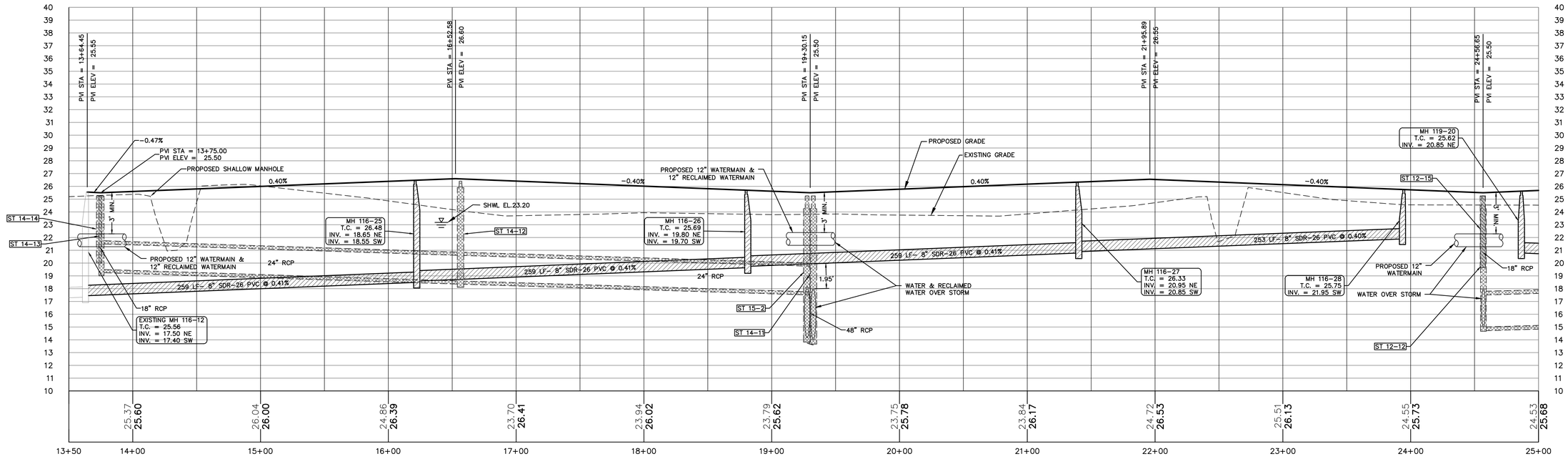
- OR — PROPOSED STORMWATER INLET
- PROPOSED STORMWATER MANHOLE
- PROPOSED MES
- WATER SERVICE
- SANITARY SERVICE
- RECLAIM SERVICE



MODENA WAY PLAN & PROFILE

PLAN VIEW: 1"=40'
PROFILE VIEW: HORIZ: 1"=40'
VERT: 1"=4'



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PLANNING
TRANSPORTATION
(LC 42)
(EB 0263)

NO	DATE	BY	SUBMITTALS / REVISIONS
1	10-20-23	MLR	INITIAL SUBMITTAL TO CITY
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3	04-04-25	MLR	RESUBMITTED TO CITY
4	07-18-25	MLR	RESUBMITTED TO CITY

ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS
PLAN AND PROFILE

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 23-37_18169-PP-PH3-4
XREF'S: ##########
XREF'S: ##########

MELIA L. RUSSELL LICENSE No 68357 STATE OF FLORIDA PROFESSIONAL ENGINEER

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SHEET: C27 OF 47

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KEY MAP

LEGEND:

- PROPOSED SANITARY MAIN AND MANHOLE
- W — PROPOSED WATERMAIN
- F — PROPOSED FIRE MAIN
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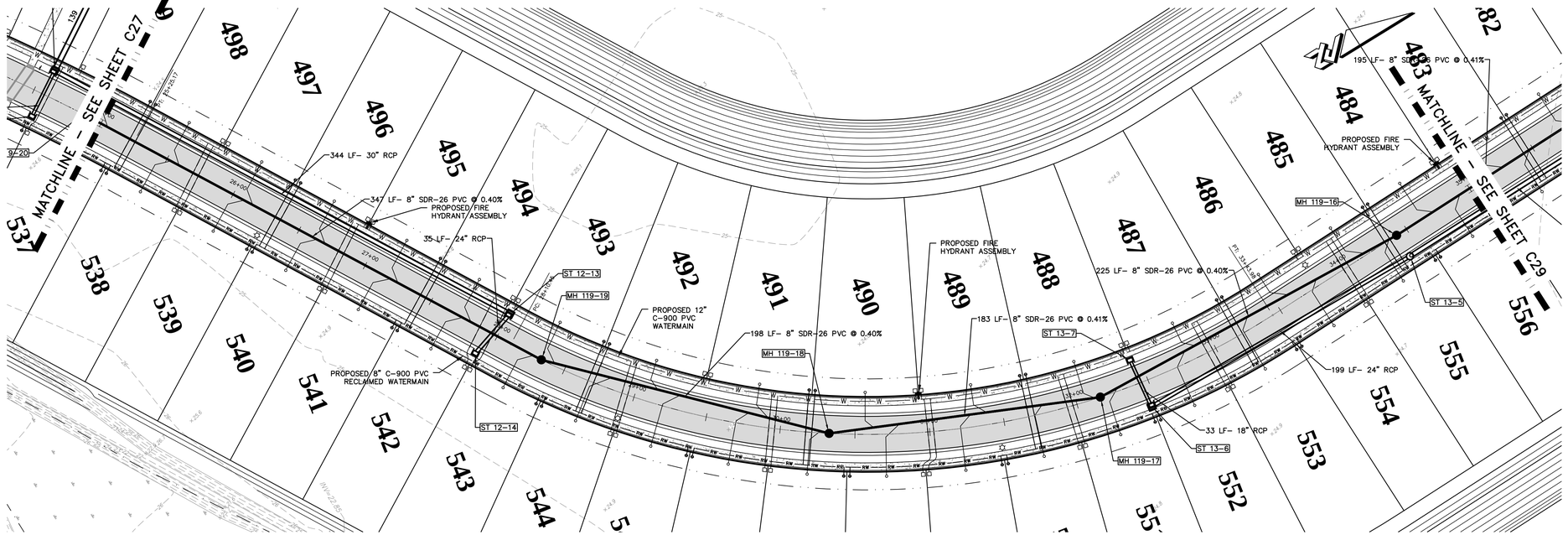
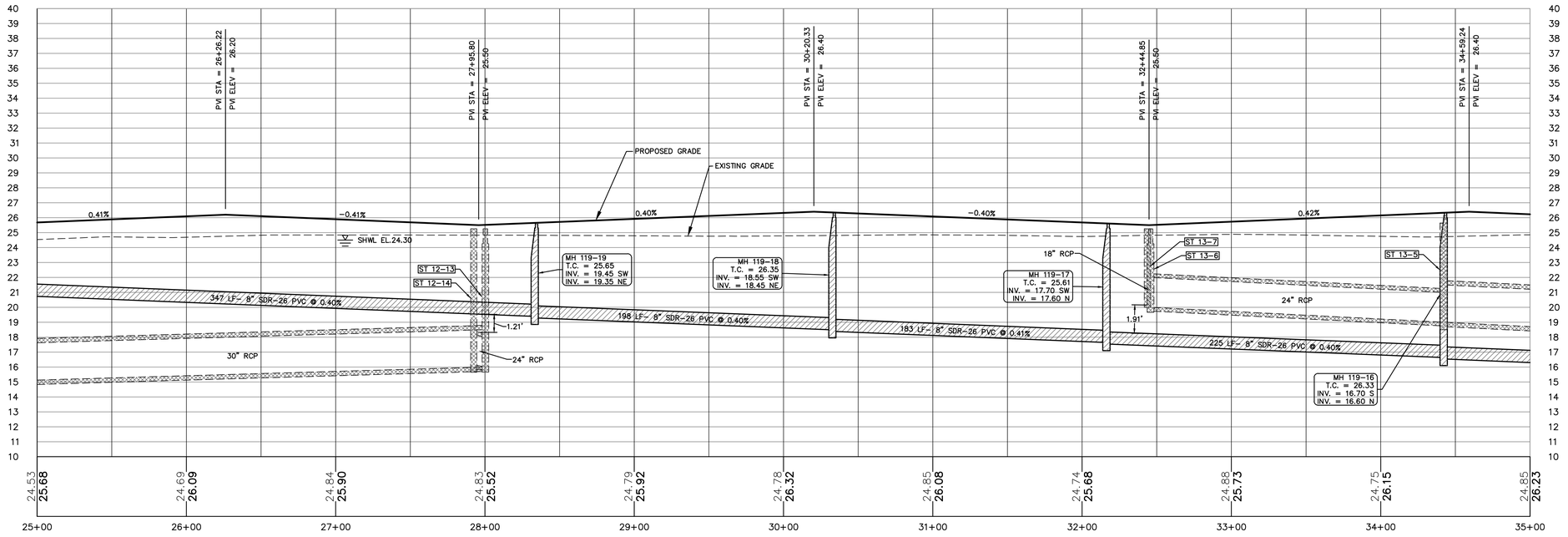
- PROPOSED STORMWATER MANHOLE
- PROPOSED MES
- WATER SERVICE
- SANITARY SERVICE
- RECLAIM SERVICE



MODENA WAY PLAN & PROFILE

PLAN VIEW: 1"=40'
PROFILE VIEW: HORIZ:1"=40'
VERT:1"=4'



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PLANNING
TRANSPORTATION
(LC-42)
(EB-0518)

NO	DATE	BY	SUBMITTALS / REVISIONS
1	10-20-23	MLR	INITIAL SUBMITTAL TO CITY
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ARDISIA PARK PHASE 3 & 4 FINAL ENGINEERING PLANS PLAN AND PROFILE

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 23-37_18169-PP-PH3-4
XREFS: ##########
XREFS: ##########

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SHEET: C28 OF 47

G:\18169 – SHELL POINT COLONY\FINAL ENGINEERING PLANS\CAD\PHASE3_4\23-37_18169-PP-PH3-4.DWG – PRINTED: 7/18/2025 2:33 PM

KEY MAP

LEGEND:

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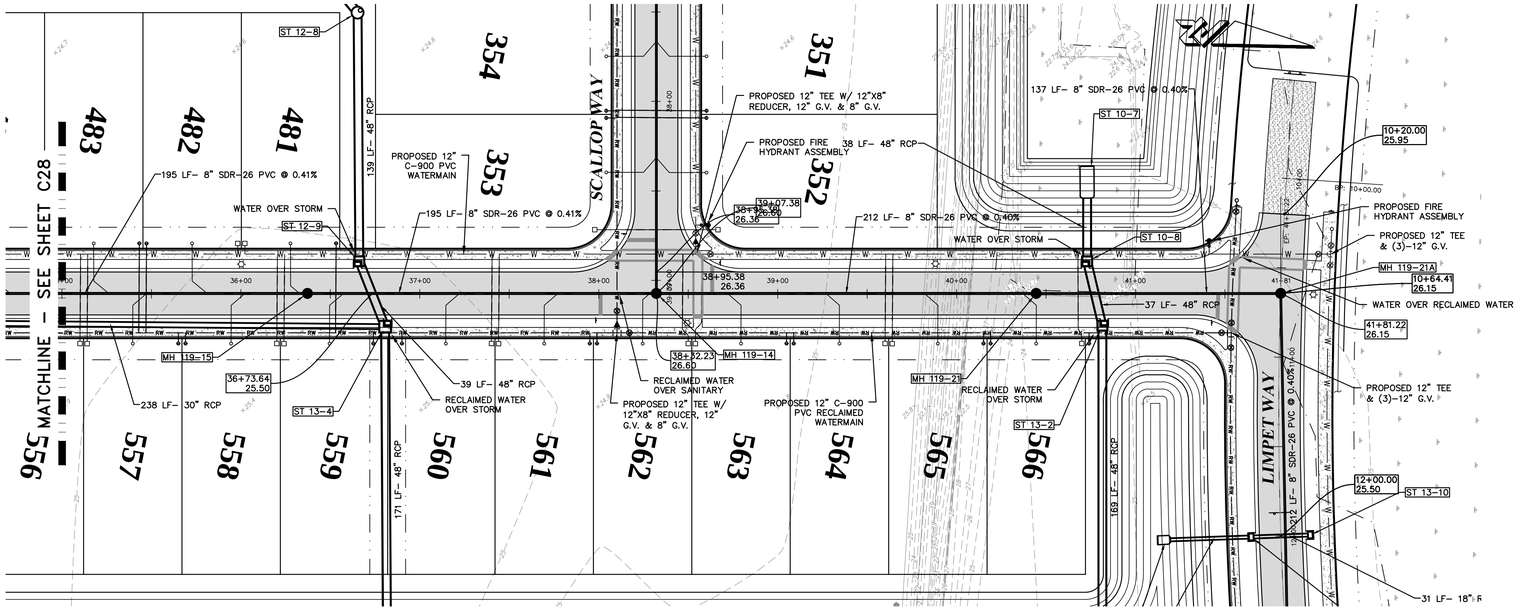
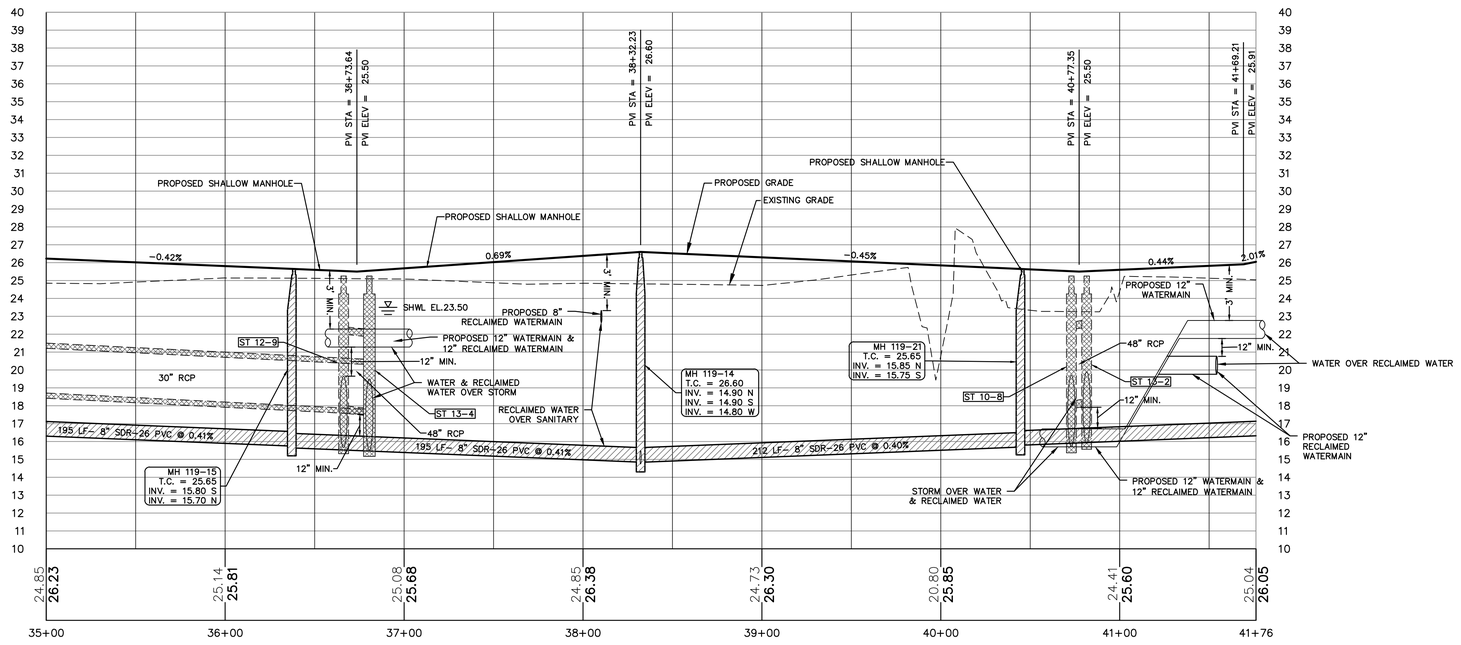
- PROPOSED MES
- WATER SERVICE
- SANITARY SERVICE
- RECLAIM SERVICE



MODENA WAY PLAN & PROFILE

PLAN VIEW: 1"=40'
PROFILE VIEW: HORIZ:1"=40'
VERT:1"=4'



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PLANNING
TRANSPORTATION
(LC 42)
(EB 4593)

NO	DATE	BY	SUBMITTALS / REVISIONS
1	10-20-23	MLR	INITIAL SUBMITTAL TO CITY
2	09-16-24	MLR	RESUBMITTED TO CITY
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4	07-18-25	MLR	RESUBMITTED TO CITY

ARDISIA PARK PHASE 3 & 4 FINAL ENGINEERING PLANS PLAN AND PROFILE

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 23-37_18169-PP-PH3-4
XREFS: ##########
XREFS: ##########

MELIA L. RUSSELL LICENSE No. 68357 STATE OF FLORIDA PROFESSIONAL ENGINEER

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SHEET: C29 OF 47

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KEY MAP

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- PROPOSED MES
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- SANITARY SERVICE
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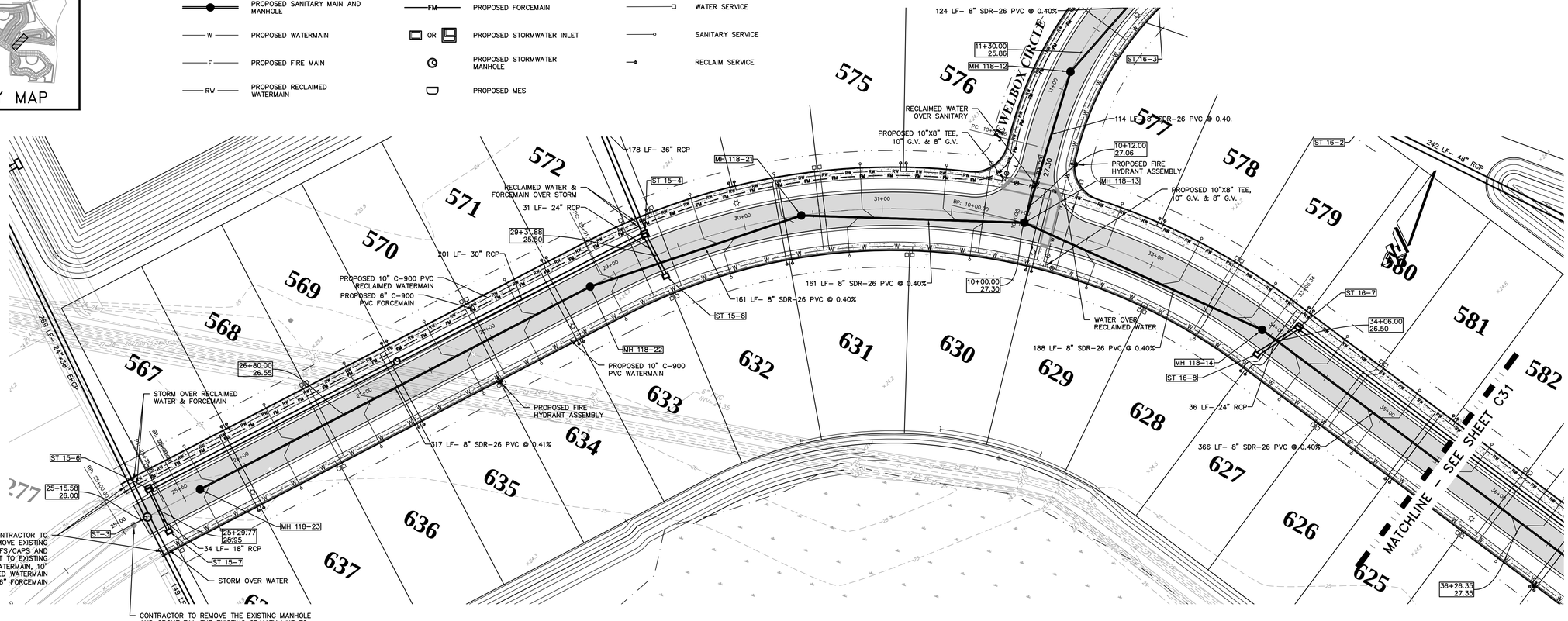

MONACO BLVD PLAN & PROFILE

PLAN VIEW: 1"=40'
PROFILE VIEW: HORIZ:1"=40'
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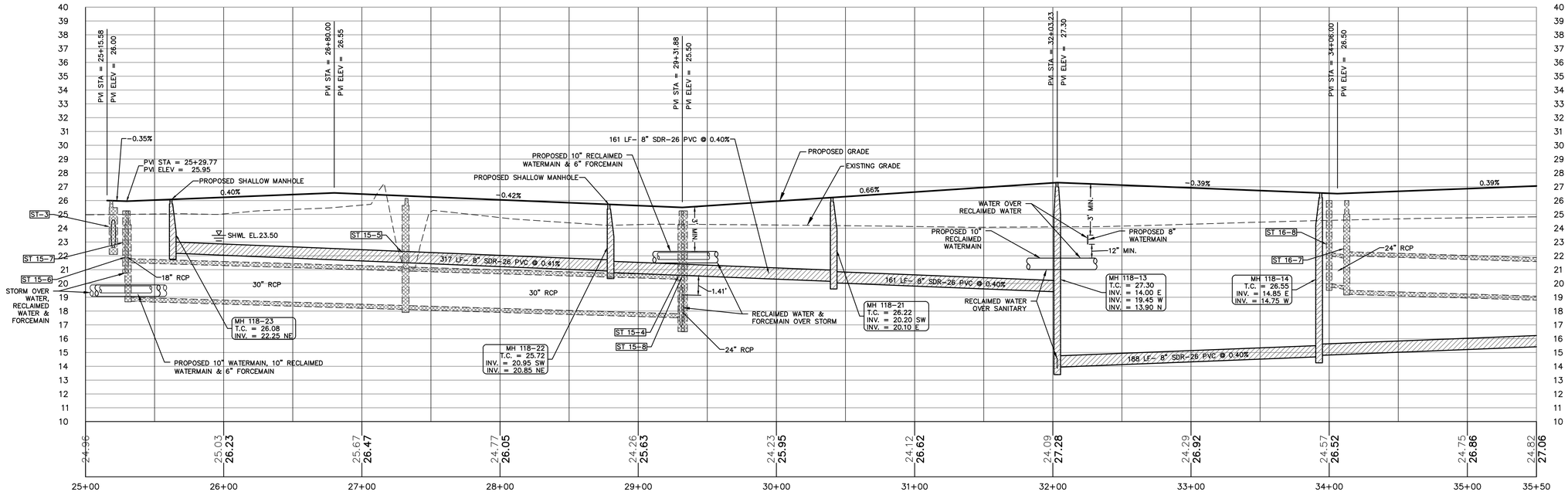

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CIVIL ENGINEERING
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ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 8583)

NO.	DATE	BY	SUBMITTALS / REVISIONS
1	10-20-23	MLR	INITIAL SUBMITTAL TO CITY
2	09-16-24	MLR	RESUBMITTED TO CITY
3	04-04-25	MLR	RESUBMITTED TO CITY
4	07-18-25	MLR	RESUBMITTED TO CITY

ARDISIA PARK
PHASE 3 & 4
FINAL ENGINEERING PLANS
PLAN AND PROFILE

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 23-37_18169-PP-PH3-4
XREFS: ##########
XREFS: ##########

MELIA L. RUSSELL
No 68357
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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SHEET: C30 OF 47

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KEY MAP

LEGEND:

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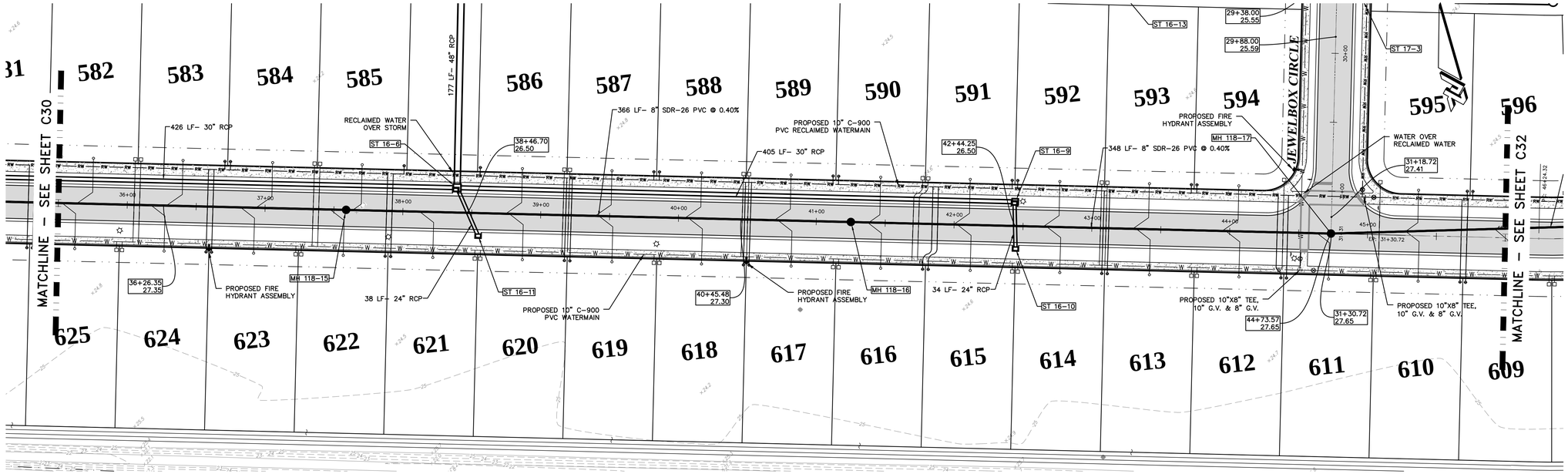
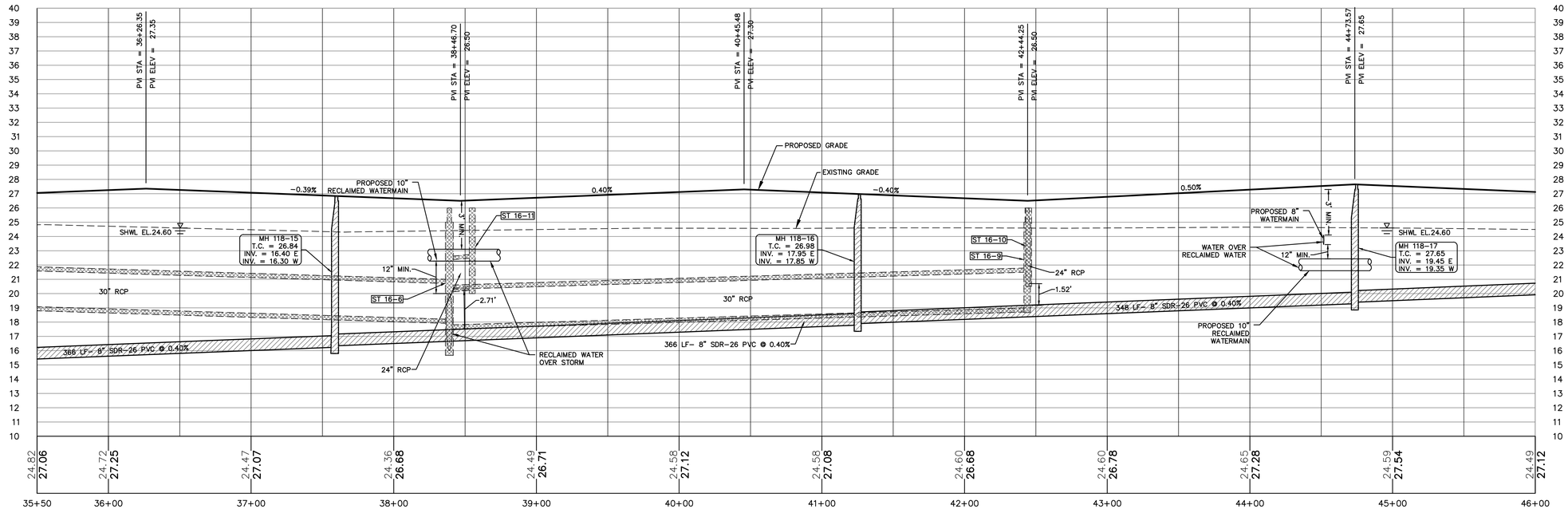


MONACO BLVD PLAN & PROFILE

PLAN VIEW: 1"=40'
PROFILE VIEW: HORIZ:1"=40'
VERT:1"=4'



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CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 8583)

NO	DATE	BY	SUBMITTALS / REVISIONS
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ARDISIA PARK PHASE 3 & 4 FINAL ENGINEERING PLANS PLAN AND PROFILE

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 23-37_18169-PP-PH3-4
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XREFS: ##########

STATE OF FLORIDA — No. 68357 — PROFESSIONAL ENGINEER — LICENSED

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DN: CN=Melia L Russell, O=Zev Cohen & Associates, Inc, OU=Zev Cohen and Associates, Inc, E=mrussell@zevcohen.com, C=US
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KEY MAP

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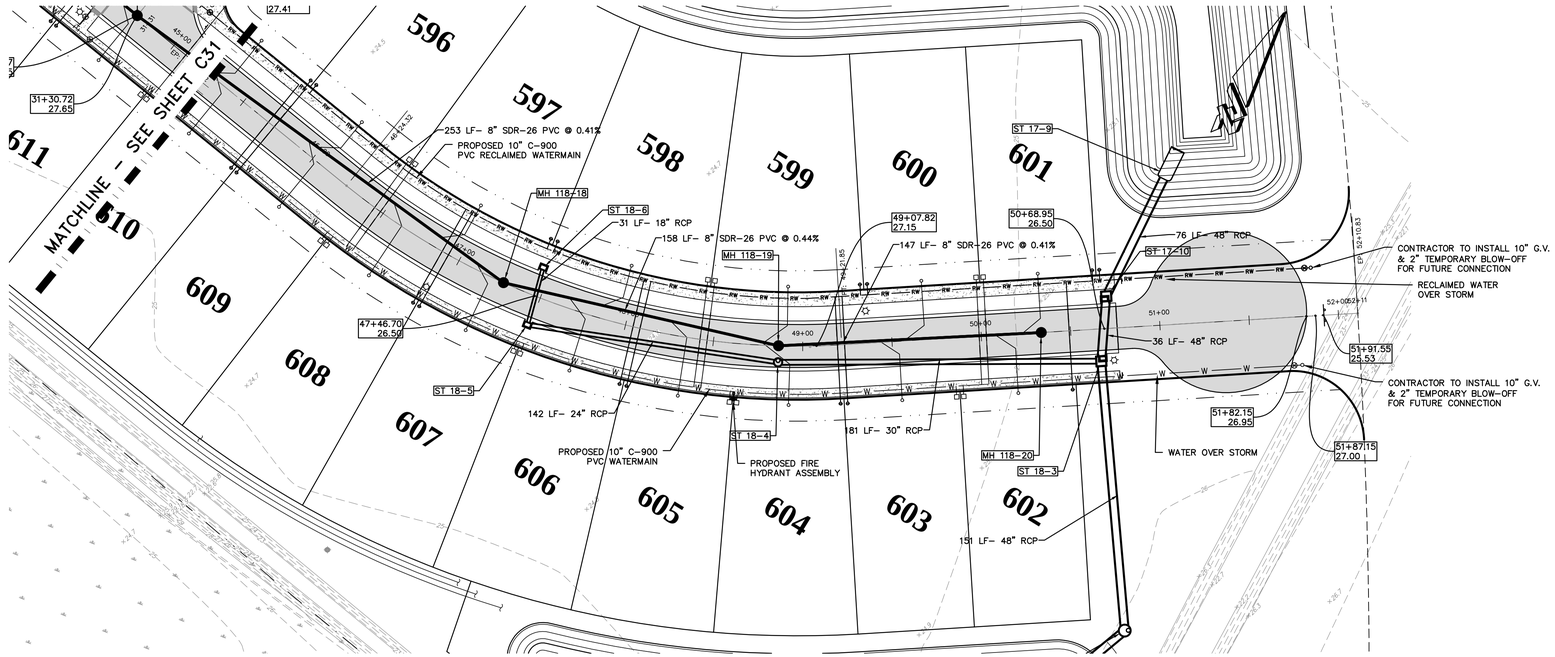
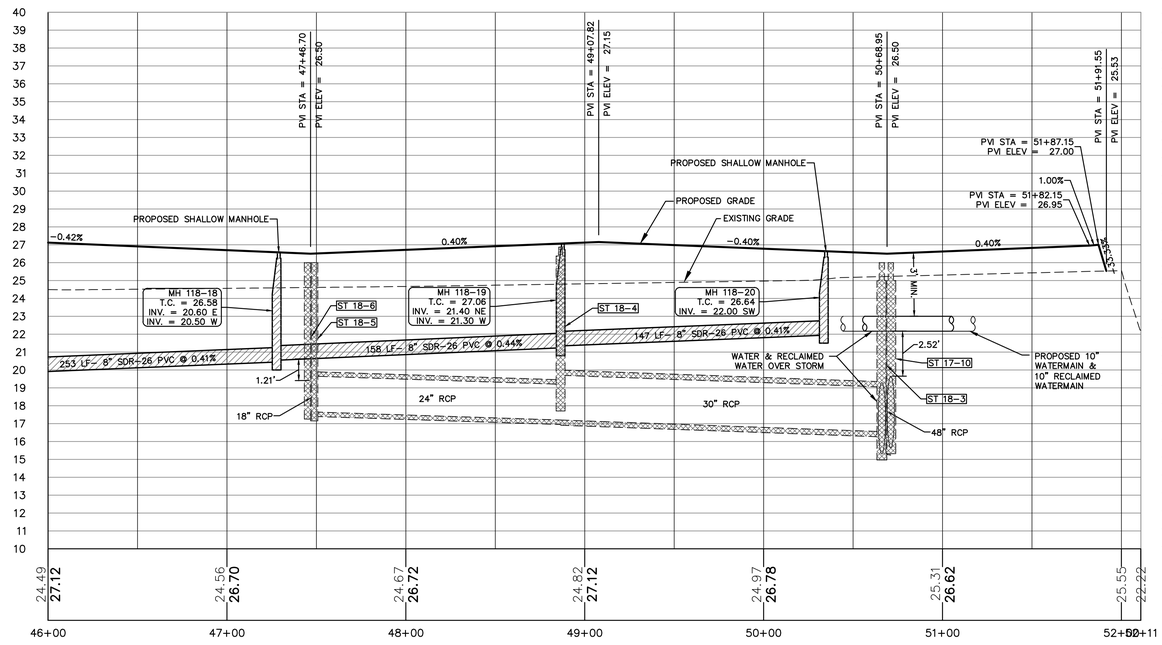


MONACO BLVD PLAN & PROFILE

PLAN VIEW: 1"=40'
PROFILE VIEW: HORIZ:1"=40'
VERT:1"=4'



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CIVIL ENGINEERING
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TRANSPORTATION
(LC 42)
(EB 8583)

NO	DATE	BY	SUBMITTALS / REVISIONS
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ARDISIA PARK PHASE 3 & 4 FINAL ENGINEERING PLANS PLAN AND PROFILE

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 23-37_18169-PP-PH3-4
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XREFS: ##########

MELLA L. RUSSELL
LICENSE
No. 68357
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FLORIDA
PROFESSIONAL ENGINEER

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KEY MAP

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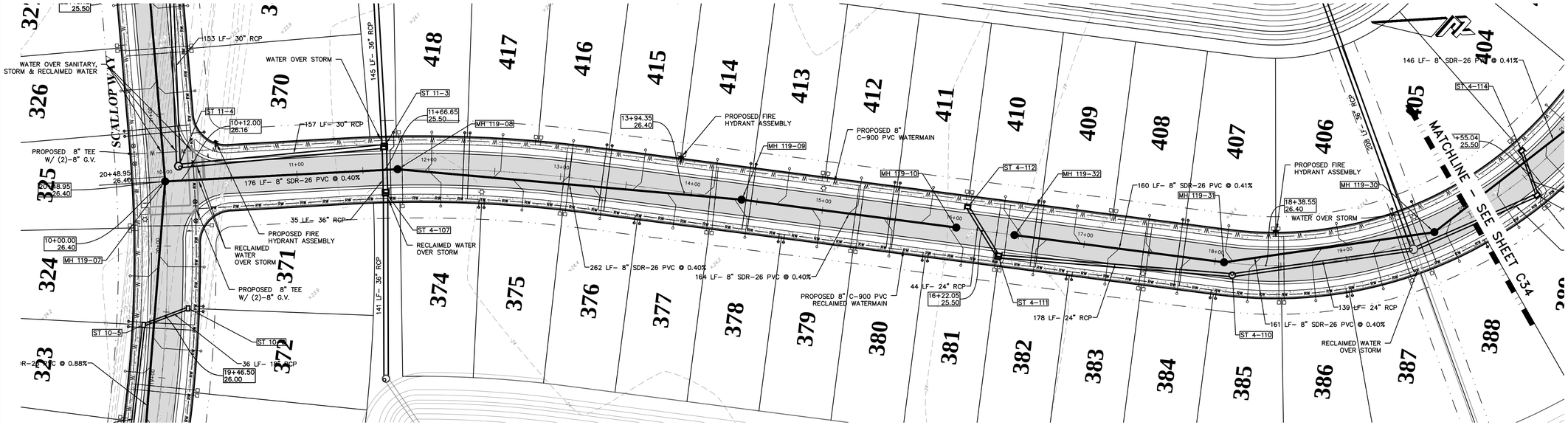
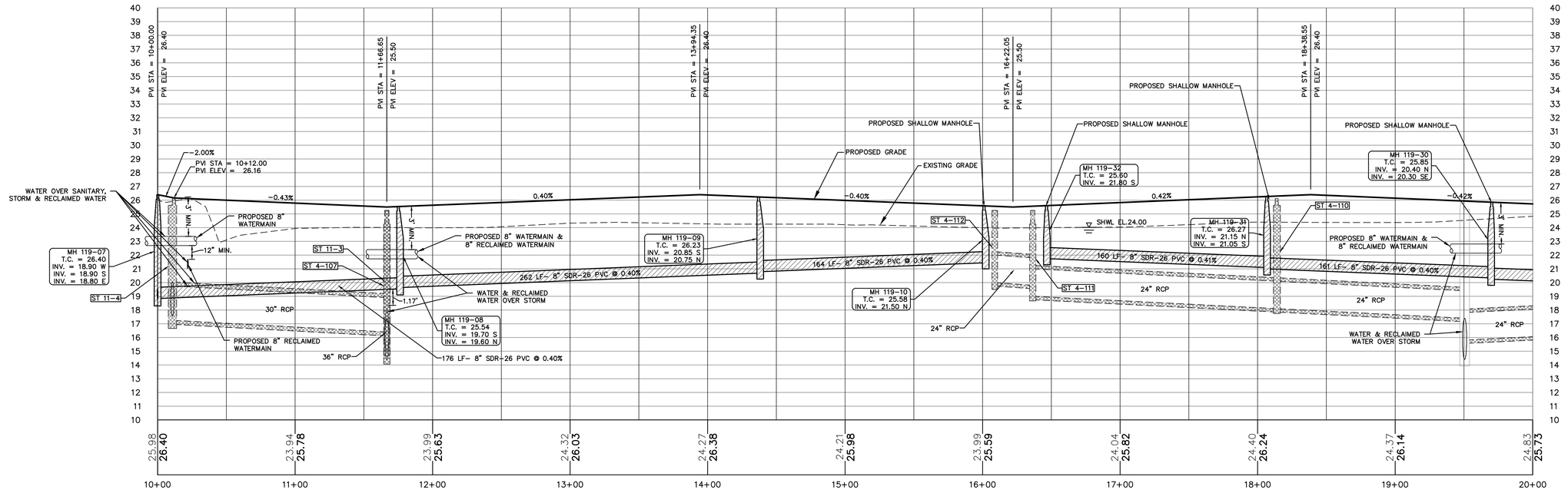


SPECK WAY PLAN & PROFILE

PLAN VIEW: 1"=40'
PROFILE VIEW: HORIZ: 1"=40'
VERT: 1"=4'



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(LC 42)
(EB 8583)

NO.	DATE	BY	SUBMITTALS / REVISIONS
1	10-20-23	MLR	INITIAL SUBMITTAL TO CITY
2	09-16-24	MLR	RESUBMITTED TO CITY
3	04-04-25	MLR	RESUBMITTED TO CITY
4	07-18-25	MLR	RESUBMITTED TO CITY

ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS
PLAN AND PROFILE

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 23-37_18169-PP-PH3-4
XREF'S: ##########
XREF'S: ##########

MELIA L. RUSSELL P.E. No. 68357 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Melia L. Russell
DN: CN=Melia L Russell, O=ZEV COHEN & ASSOCIATES INC, OU=Civil, E=mrussell@zevcohen.com, C=US
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Reason: I am the author of this document.
Contact Info: This item has been electronically signed and sealed by Melia L. Russell, using a .pfx authentication key.
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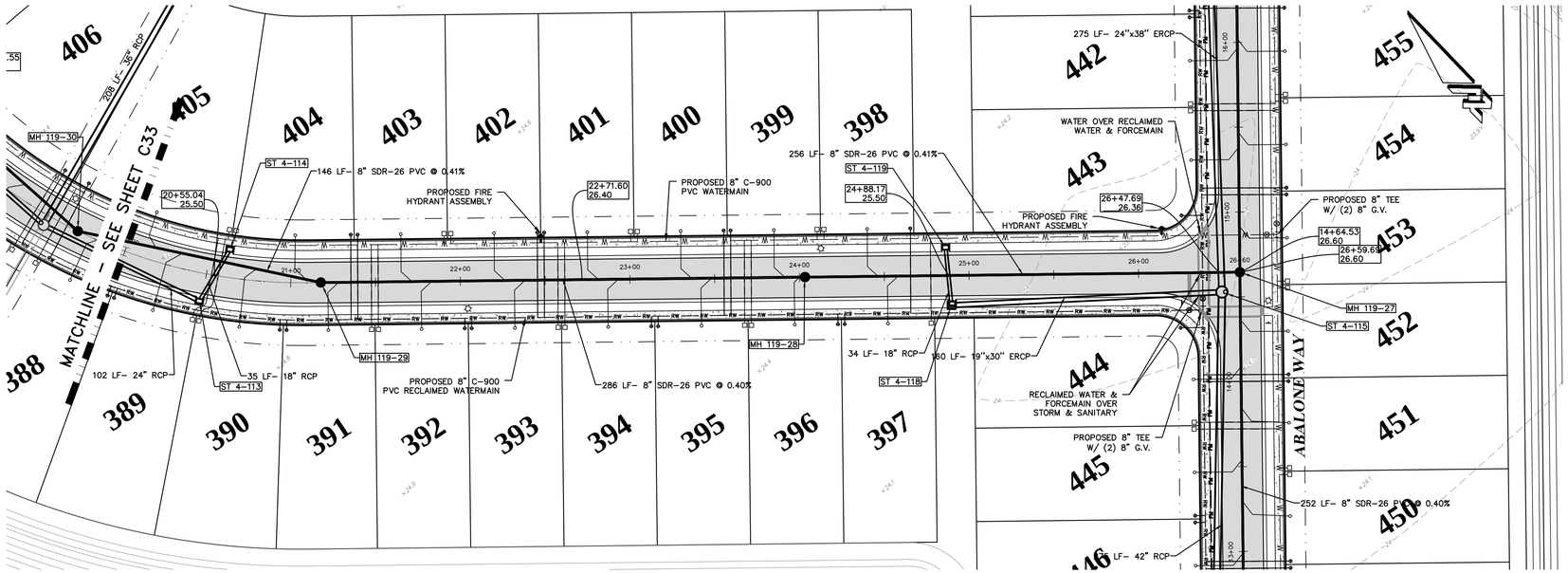
SHEET: C33 OF 47

N:\18169 – SHELL POINTE COLONY\FINAL ENGINEERING PLANS\CAD\PHASES 3 & 4\23-37_18169-PP-PH3-4.DWG – PRINTED: 7/18/2025 2:37 PM

KEY MAP

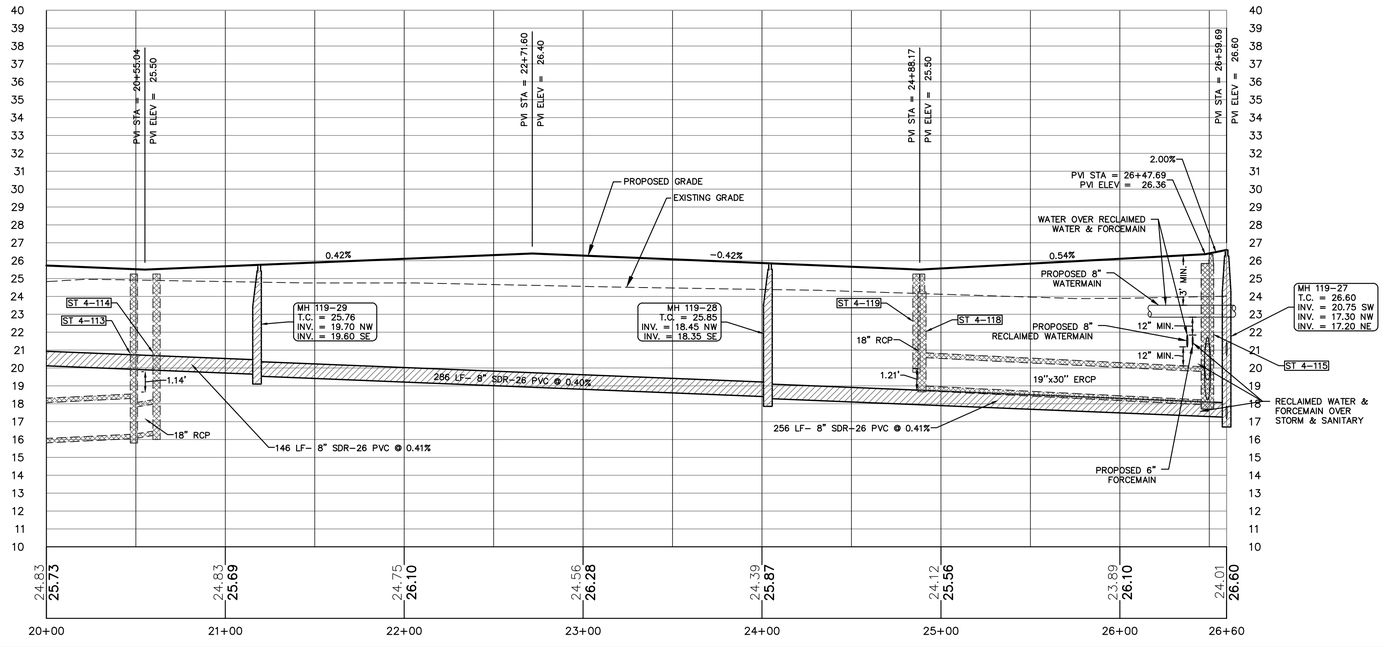
LEGEND:

- PROPOSED SANITARY MAIN AND MANHOLE
- W — PROPOSED WATERMAIN
- F — PROPOSED FIRE MAIN
- RW — PROPOSED RECLAIMED WATERMAIN
- FM — PROPOSED FORCEMAIN
- OR — PROPOSED STORMWATER INLET
- PROPOSED STORMWATER MANHOLE
- PROPOSED MES
- WATER SERVICE
- SANITARY SERVICE
- RECLAIM SERVICE



SPECK WAY PLAN & PROFILE

PLAN VIEW: 1"=40'
PROFILE VIEW: HORIZ: 1"=40'
VERT: 1"=4'



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CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 8583)

NO	DATE	BY	SUBMITTALS / REVISIONS
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ARDISIA PARK PHASE 3 & 4 FINAL ENGINEERING PLANS PLAN AND PROFILE

CITY OF NEW SMYRNA BEACH — VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 23-37_18169-PP-PH3-4
XREFS: ##########
XREFS: ##########

MELIA L. RUSSELL No 68357 STATE OF FLORIDA PROFESSIONAL ENGINEER

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Reason: I am the author of this document and am not considered signed and sealed and this electronic authenticated seal must be verified on any electronic copies.
Location: Owensboro, KY
Contact Info: The seal has been electronically signed and sealed by Melia L. Russell, P.E. using a Soft Copy Authentication Key
Date: 2025.07.21 08:45:34 -04'00'

MELIA L RUSSELL, P.E., NO.68357
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SHEET: C34 OF 47

R:\18169 - SHELL POINTE COLONY\FINAL ENGINEERING PLANS\ADOBES\PHASE 3 & 4\23-37_18169-PP-PH3-4.DWG - PRINTED: 7/18/2025 2:38 PM

KEY MAP

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- PROPOSED STORMWATER MANHOLE
- PROPOSED MES
- WATER SERVICE
- SANITARY SERVICE
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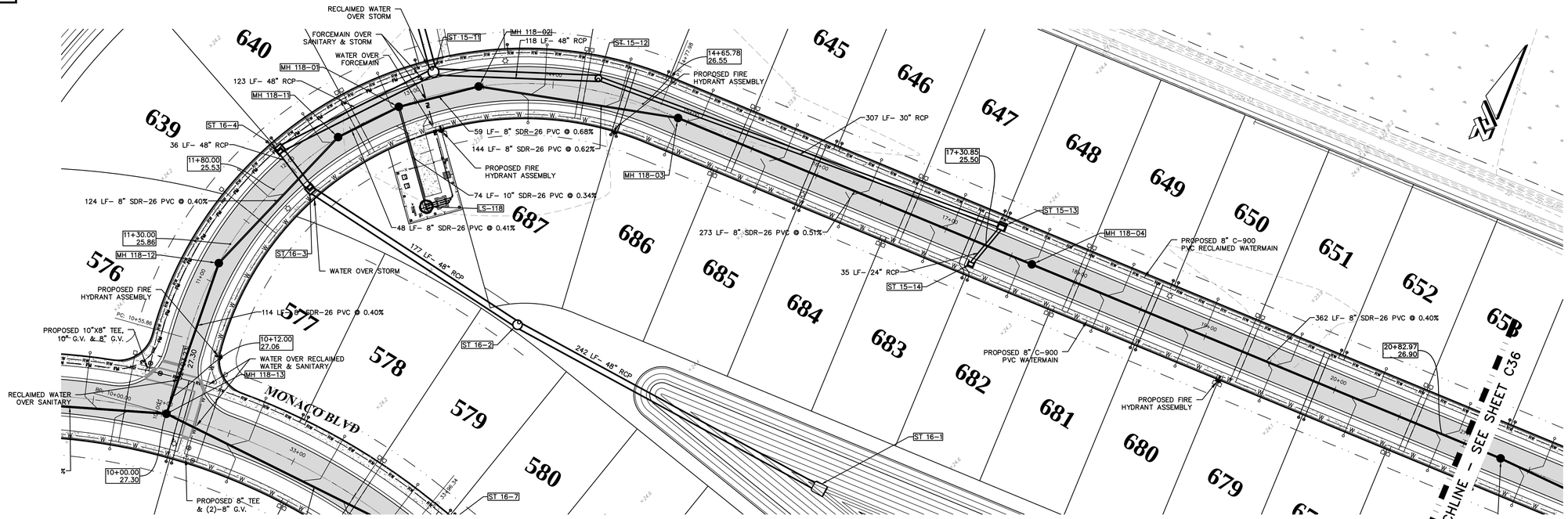
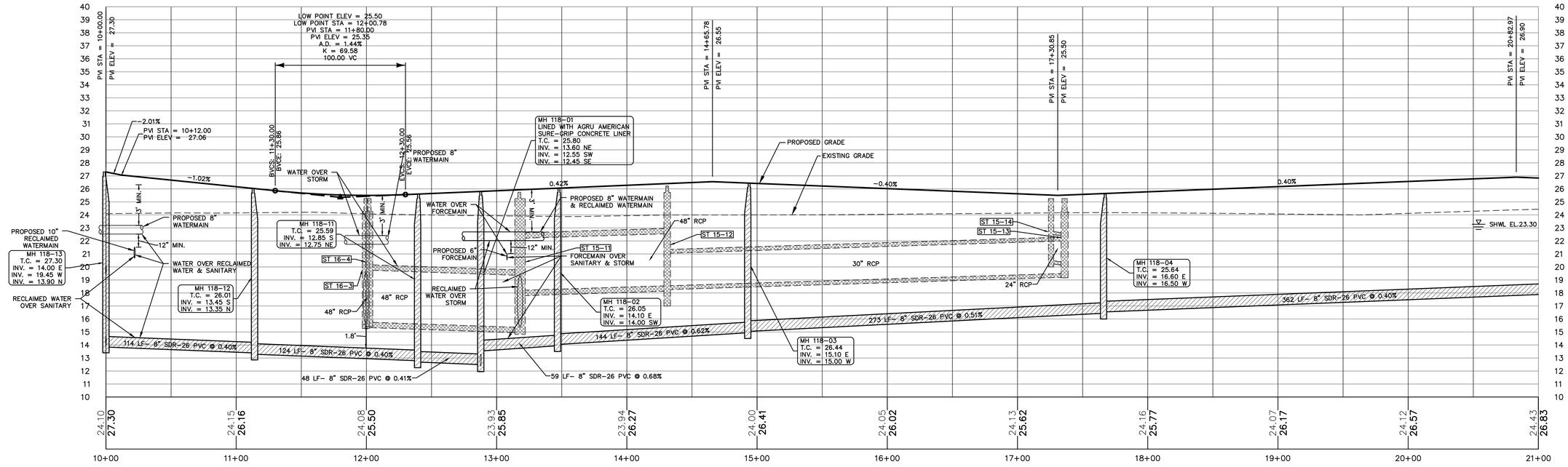


JEWELBOX CIRCLE PLAN & PROFILE

PLAN VIEW: 1"=40'
PROFILE VIEW: HORIZ:1"=40'
VERT:1"=4'



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OSPREY BEACH, FL 32174
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CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 8583)

NO.	DATE	BY	SUBMITTALS / REVISIONS
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ARDISIA PARK
PHASE 3 & 4
FINAL ENGINEERING PLANS
PLAN AND PROFILE

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 23-37_18169-PP-PH3-4
XREFS: ##########
XREFS: ##########

Melia L. Russell License No 68357 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Melia L. Russell
DN: c=US, o=Florida, ou=Engineer, cn=Melia L. Russell, 0.9.2342.19200300.100.1.1=68357@qq.com
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KEY MAP

LEGEND:

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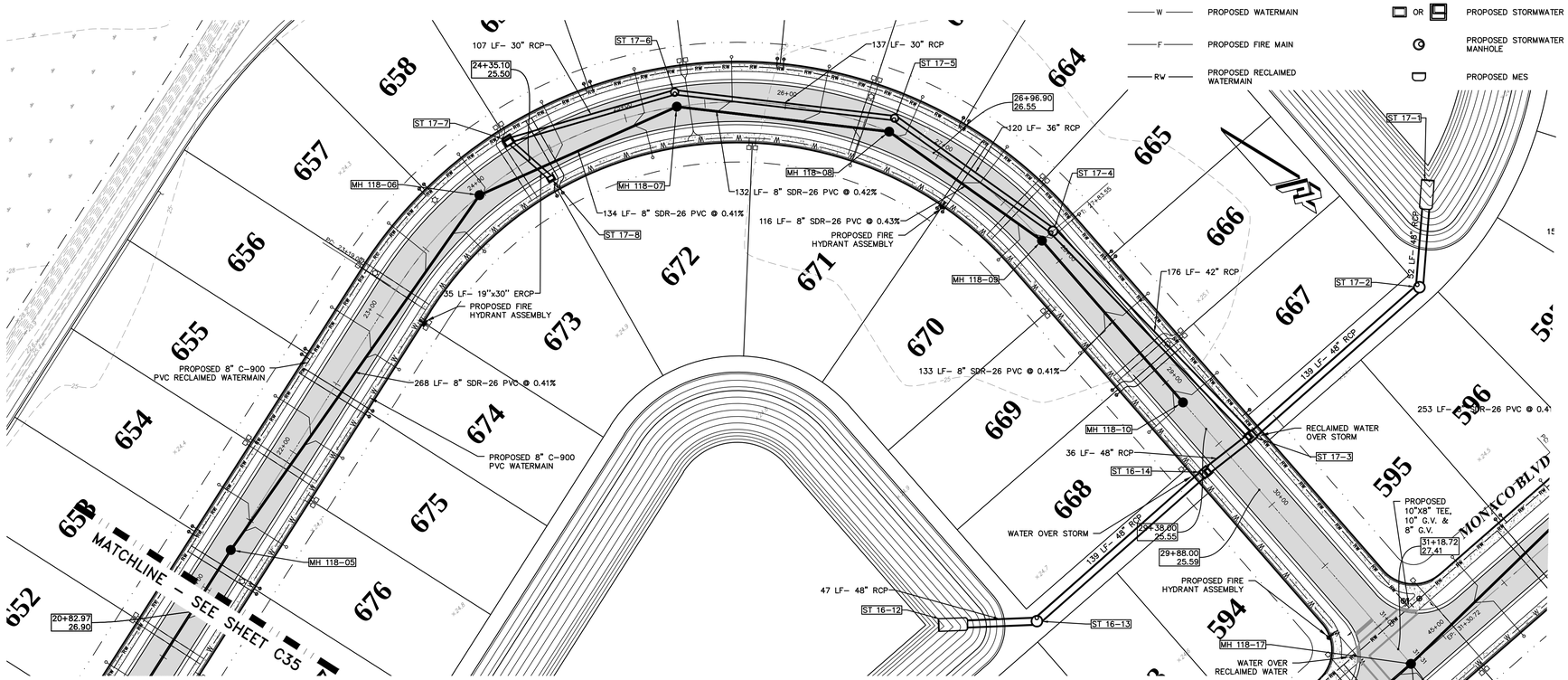
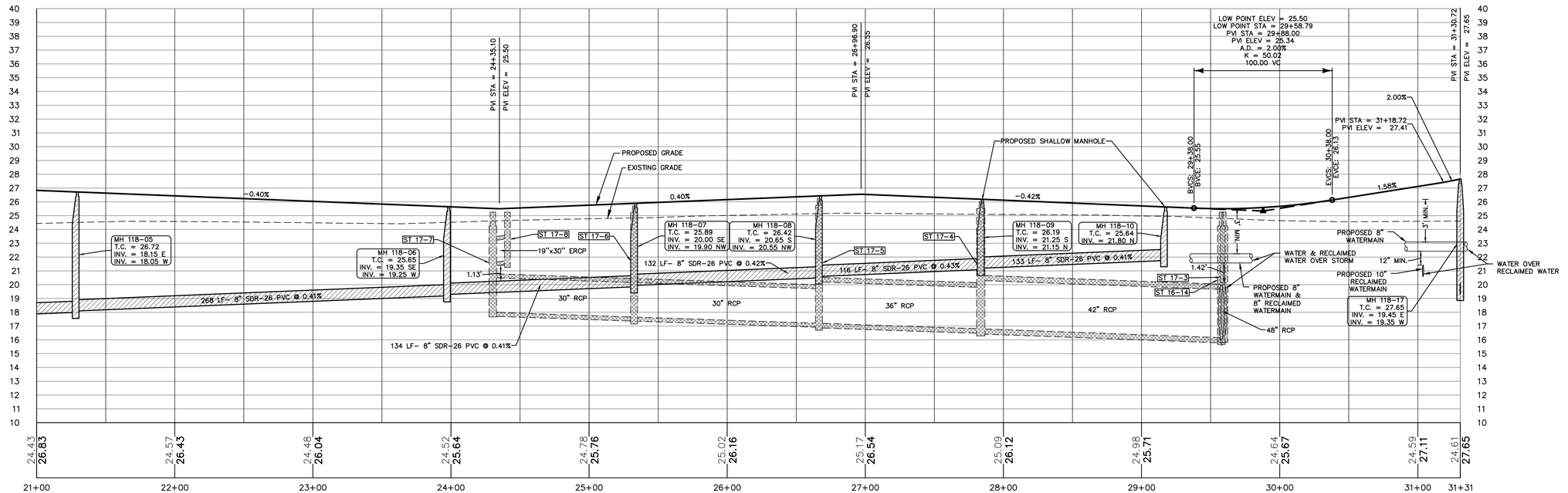
- PROPOSED STORMWATER MANHOLE
- PROPOSED MES
- WATER SERVICE
- SANITARY SERVICE
- RECLAIM SERVICE



JEWELBOX CIRCLE PLAN & PROFILE

PLAN VIEW: 1"=40'
PROFILE VIEW: HORIZ:1"=40'
VERT:1"=4'



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CIVIL ENGINEERING
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ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 4583)

NO	DATE	BY	SUBMITTALS / REVISIONS
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ARDISIA PARK
PHASE 3 & 4
FINAL ENGINEERING PLANS
PLAN AND PROFILE

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 23-37_18169-PP-PH3-4
XREFS: ##########
XREFS: ##########

MELIA L. RUSSELL, P.E., NO.68357
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SHEET: C36 OF 47

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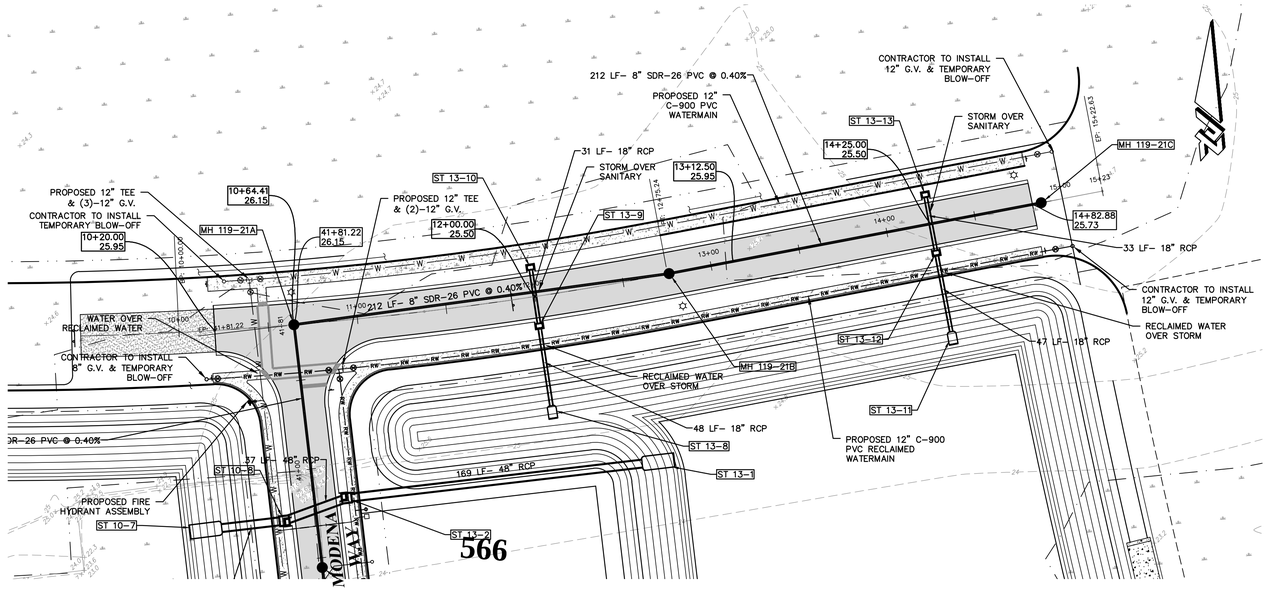
KEY MAP



LIMPET WAY PLAN & PROFILE

PLAN VIEW: 1"=40'
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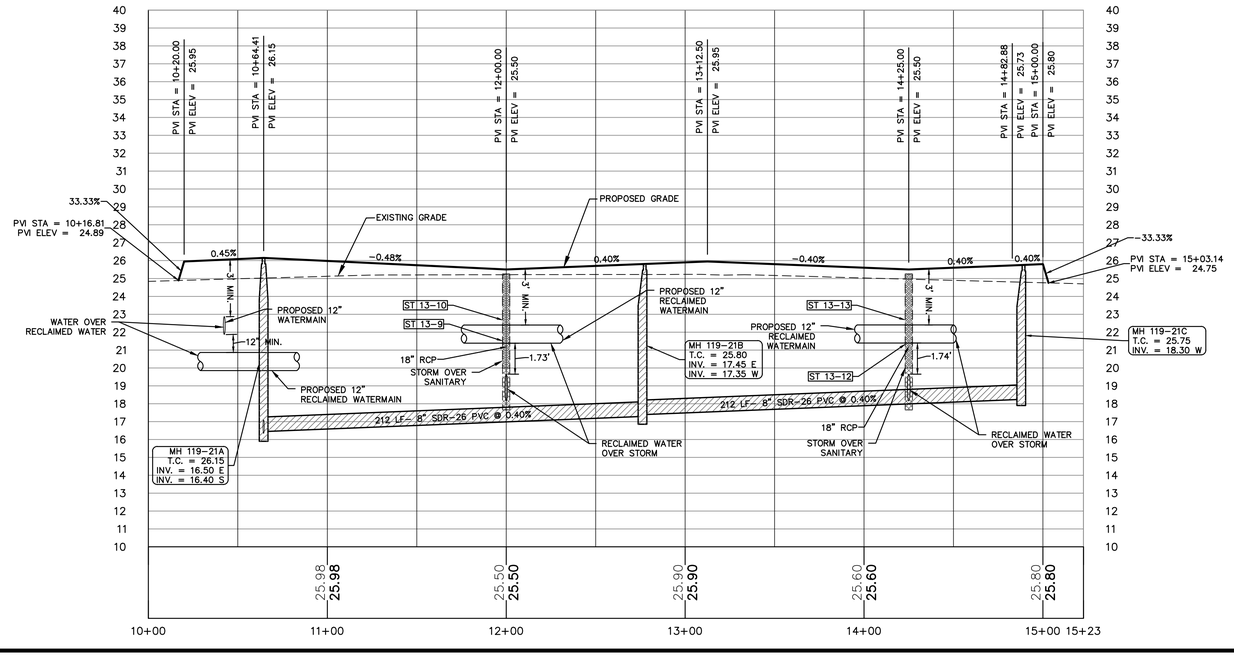

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CIVIL ENGINEERING
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ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)

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ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS
PLAN AND PROFILE

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 23-37_18169-PP-PH3-4
XREF'S: ##########
XREF'S: ##########

MELIA L. RUSSELL LICENSE No. 68357 STATE OF FLORIDA PROFESSIONAL ENGINEER
Digitally signed by Melia L. Russell
DN: CN=Melia L Russell, O=ZEVCOHEN & ASSOCIATES INC, OU=Civil, E=melia@zevcohen.com, C=US
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SHEET: C37 OF 47

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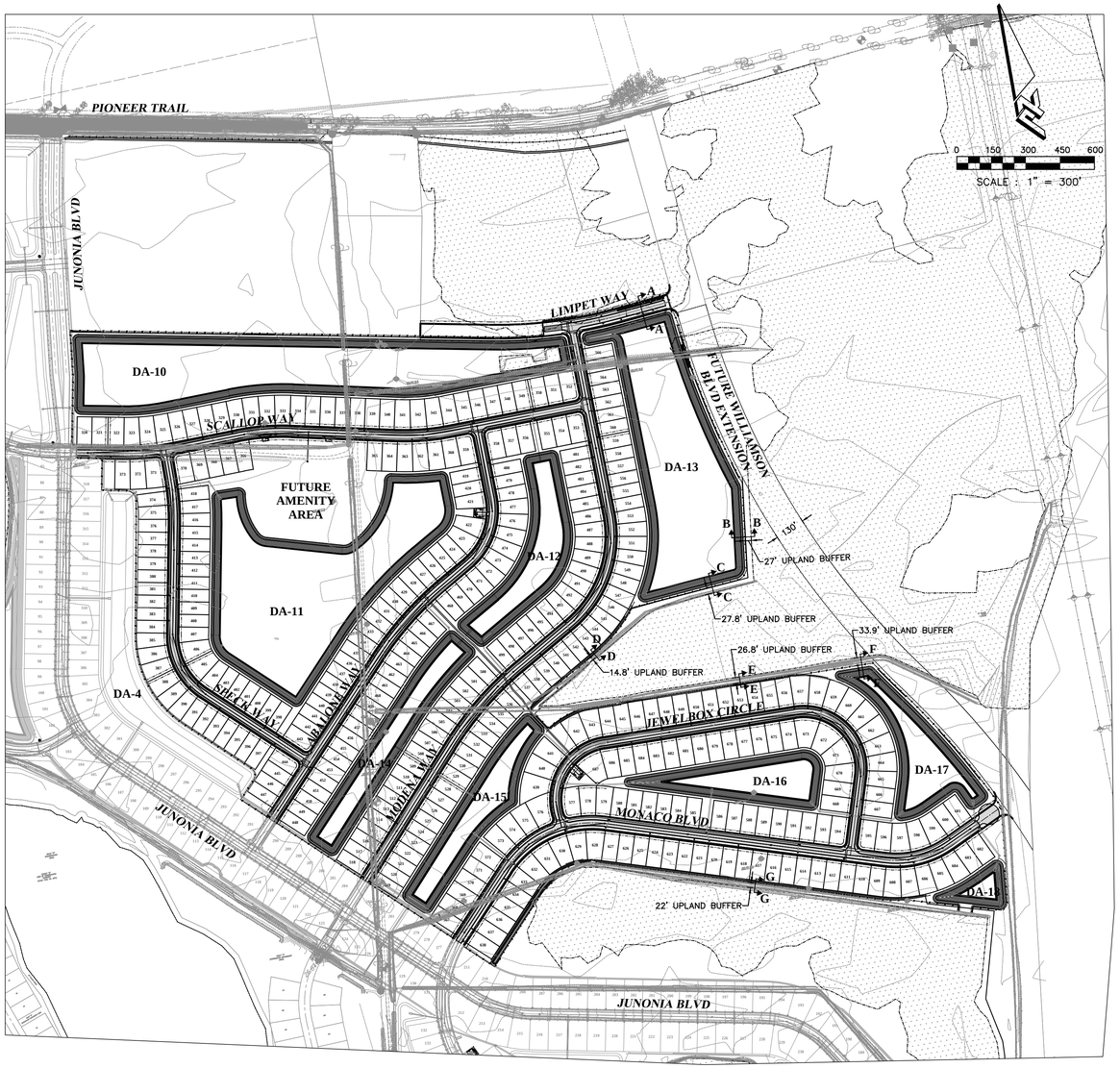

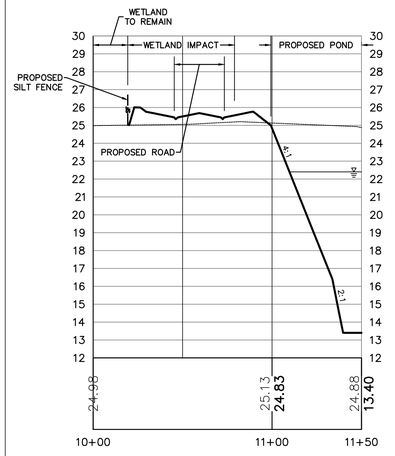

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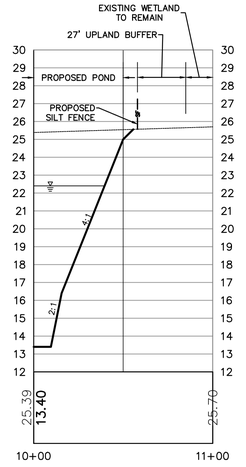

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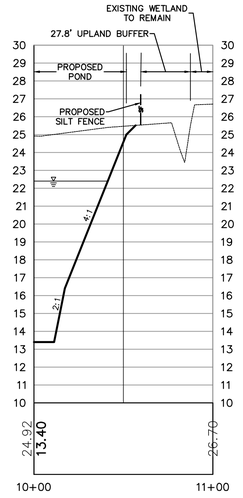
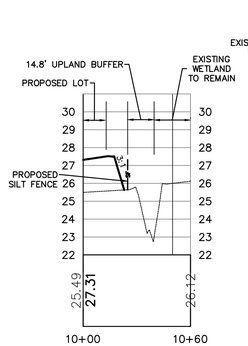


CROSS-SECTION C-C



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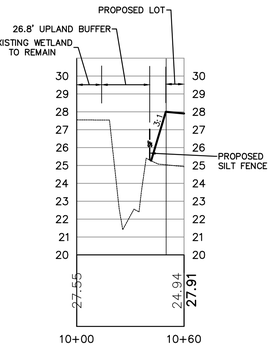

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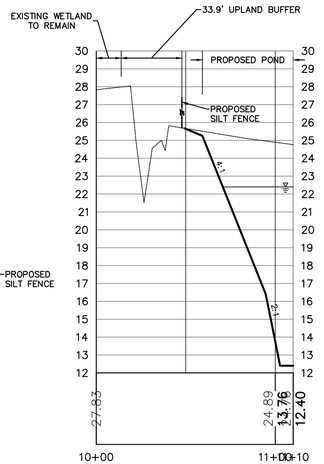

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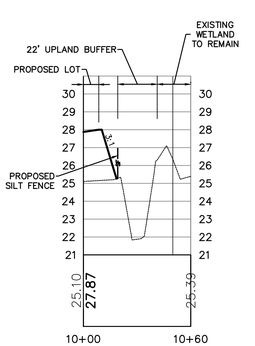

CROSS-SECTION G-G

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CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
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PLANNING
TRANSPORTATION
(LC 42)

NO	DATE	BY	SUBMITTALS / REVISIONS
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ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS
CROSS-SECTIONS

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 18169-CS-PH3-4
XREFS: 18169BAS.DWG
XREFS: 18169SUR.DWG

MELIA L. RUSSELL, P.E., NO.68357
KRISTOPHER T. ROWLEY, P.E., NO.84263
NOT VALID WITHOUT SEAL

SHEET: C38 OF 47

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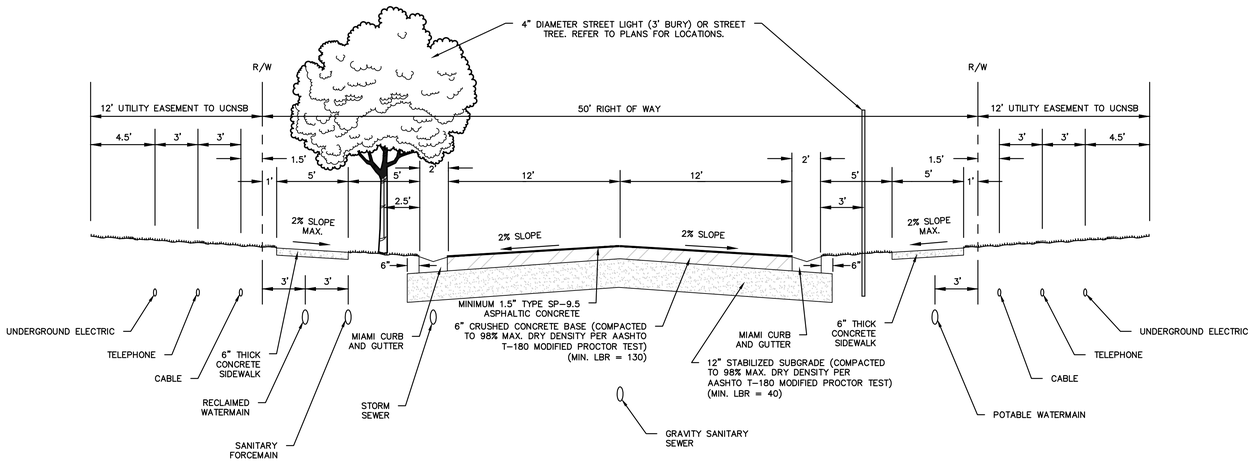
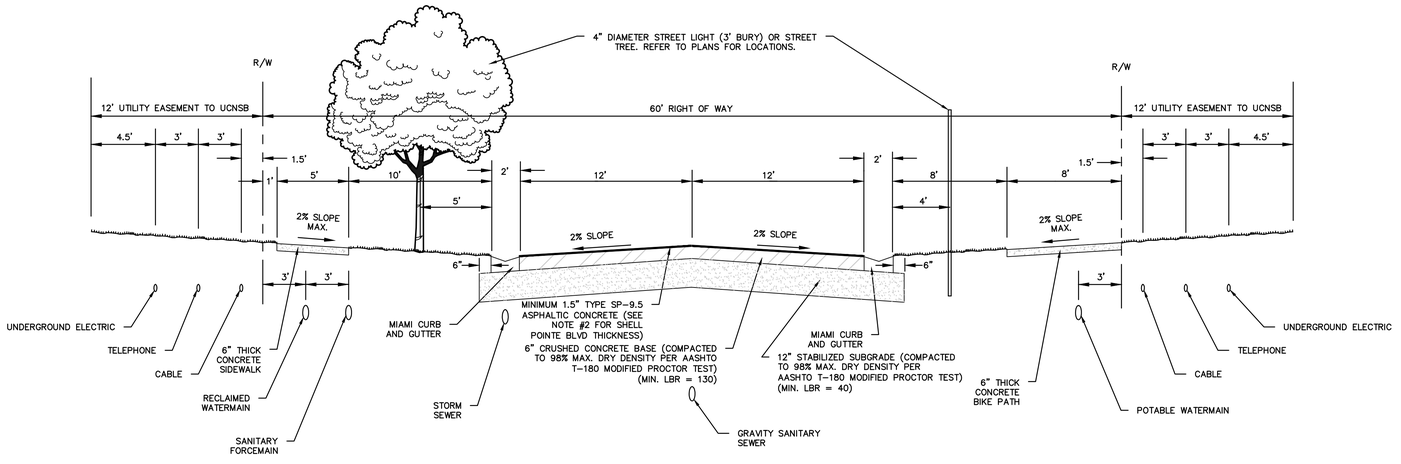


TYPICAL 50' RIGHT-OF-WAY SECTION

NTS

NOTE:
THE AMOUNT OF RAP MATERIAL SHALL NOT EXCEED 30 PERCENT.



TYPICAL 60' RIGHT-OF-WAY SECTION

NTS

ZEV COHEN & ASSOCIATES, INC.
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OCOEE, FLORIDA 34761
WWW.ZEVCOHEN.COM

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 4593)

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ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS
CONSTRUCTION DETAILS

CITY OF NEW SMYRNA BEACH — VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169

DESIGNED BY: MLR

DRAFTED BY: MLR

CHECKED BY: MKW

DRAWING FILE: 39-47_18169-DET-PH3-4
XREFS: 18169BAS.DWG
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MELIA L. RUSSELL LICENSED No 68357 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Melia L Russell
DN: C=US, E=, O=Zev Cohen & Associates, Inc, CN=Melia L Russell, 0.9.2342.19200300.100.1.1=68357
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Reason: I am the author of this document.
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MELIA L. RUSSELL, P.E., NO.68357
KRISTOPHER T. ROWLEY, P.E., NO.84263
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SHEET: C39 OF 47

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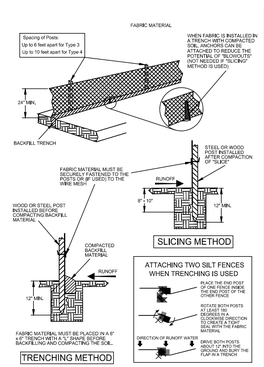
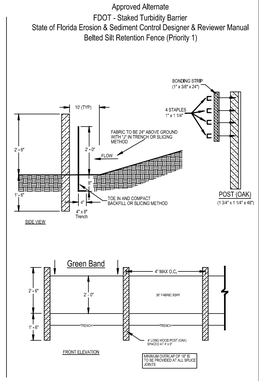




SILT FENCE BARRIER INSTALLATION

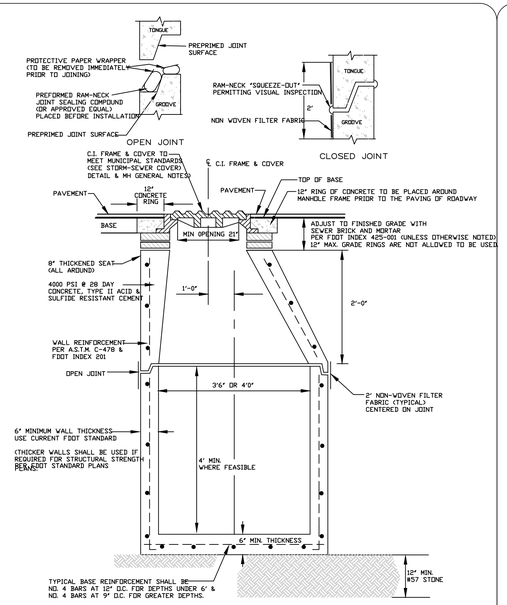
BELTED SILT RETENTION FENCE (BSRF)

Priority 1 - Green Band

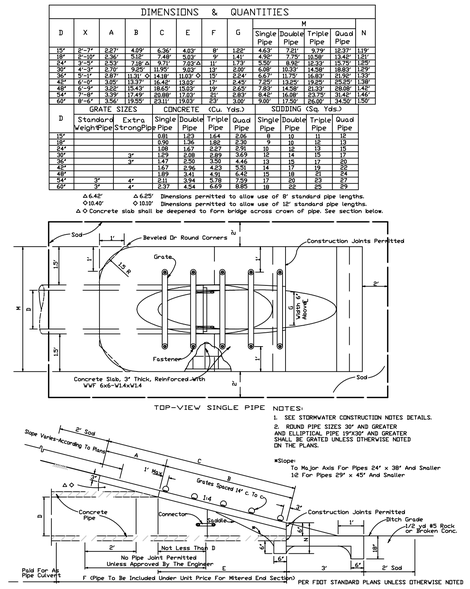
NOTES:

1. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, JULY 2013 UPDATE.
2. CONTRACTOR SHALL PROVIDE AND MAINTAIN SITE SPECIFIC EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES TO TREAT ALL STORMWATER DISCHARGES DURING CONSTRUCTION. DEPENDING UPON FLOW VELOCITIES AND VOLUME, ADDITIONAL MEASURES MAY BE REQUIRED.
3. CONTRACTOR SHALL ROUGH GRADE STORMWATER SWALES AND RETENTION AREAS IN COMPLIANCE WITH BEST MANAGEMENT PRACTICES PRIOR TO CONSTRUCTION OF SITE IMPROVEMENTS.
4. CONTRACTOR SHALL MEET ALL PERMIT CONDITIONS AS ESTABLISHED BY THE CITY OF DAYTONA BEACH AND ALL OTHER APPLICABLE AGENCIES, INCLUDING BUT NOT LIMITED TO COUNTY, FDOT, STATE, FEDERAL, AND THE SJRWMD.

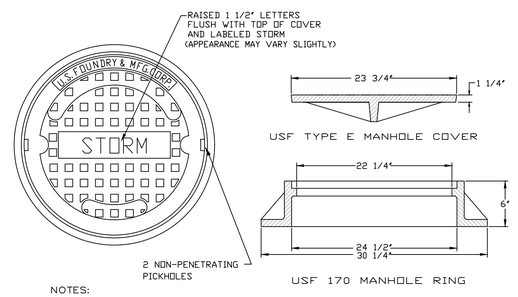
SILT FENCE DETAIL
NTS



STORMWATER MANHOLE DETAIL
NTS



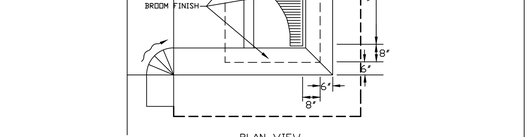
MITERED END SECTION DETAIL
NTS



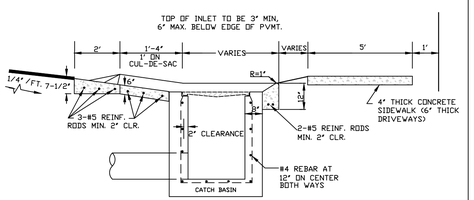
NOTES:

1. MORTAR TO CONTAIN "HYDRATITE", OR APPROVED EQUAL, TO PREVENT SHRINKAGE.
2. SUB-GRADE BENEATH MANHOLES SHALL BE FIRM UNDISTURBED GRANULAR UNSATURATED SOIL. No. 57 AGGREGATE STONE SHALL BE USED IN WET CONDITIONS AND/OR WHERE UNSUITABLE MATERIAL IS ENCOUNTERED.
3. UNLESS DETAILED PLANS SHOW OTHERWISE, ALL MANHOLE RING AND COVER CASTINGS IN PAVED AREAS ARE TO BE ADJUSTED TO FINAL GRADE, SEALED AND SECURED IN PLACE WITH A CONCRETE COLLAR AFTER THE ROAD BASE IS PLACED AND JUST PRIOR TO PLACEMENT OF ASHPALT WEARING SURFACE.
4. CONTRACTOR SHALL PROVIDE THICKER MANHOLE WALLS AND BASES AS REQUIRED TO PREVENT FLOTATION BASED ON HISTORIC HIGH GROUND WATER TABLE ELEVATIONS AS DETERMINED USING ACCEPTED ENGINEERING PRACTICES AND/OR APPROVED BY THE UTILITIES DEPARTMENT.
5. CONCRETE COLLAR AROUND MANHOLE FRAME IS REQUIRED IN PAVED AREAS ONLY.
6. SHOP DRAWINGS FOR ALL STRUCTURES SHALL BE SUBMITTED TO AND APPROVED BY THE DESIGN ENGINEER PRIOR TO INSTALLATION.
7. NO BUG HOLES OR HONEYCOMB WILL BE ACCEPTED.
8. ENDS OF SECTION SHALL FIT FLUSH TOGETHER
9. MANHOLES SHALL BE CLEARED OF ALL DEBRIS PRIOR TO CITY ACCEPTANCE AND SYSTEM USE.

STORM COVER DETAIL
NTS



PLAN VIEW



SECTION A-A
NTS

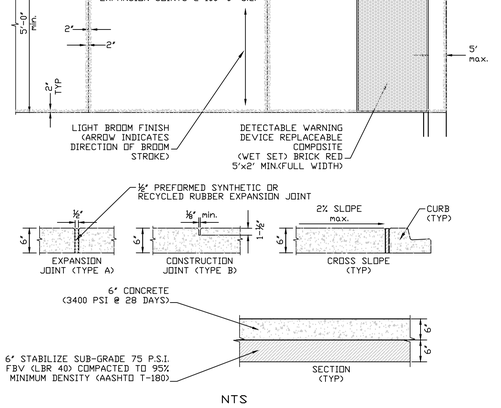
DIMENSIONS SHOWN ARE MINIMUM. FDOT STANDARD PLANS SHALL APPLY

CONCRETE STORM INLET AND APRON DETAIL
NTS

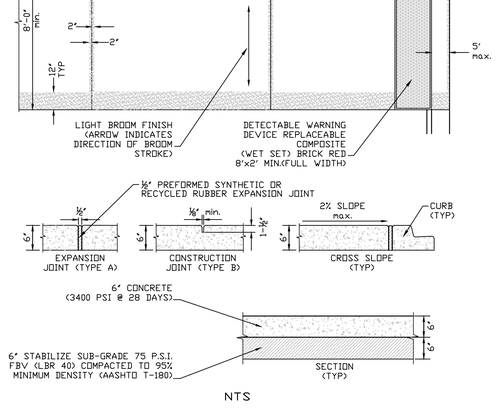
NOTES:

1. SIDEWALKS, BIKE PATHS, RAMPS AND DRIVEWAY APRONS SHALL BE CONSTRUCTED OF PLAIN PORTLAND CEMENT CONCRETE WITH A MAXIMUM SLUMP OF 3", A MINIMUM DEVELOPED COMPRESSIVE STRENGTH OF 3400 P.S.I. IN 28 DAYS AND A MINIMUM UNIFORM THICKNESS OF 6".
2. SIDEWALKS AND BIKE PATHS SHALL BE PLACED PARALLEL TO, AND ONE FOOT WITHIN THE RIGHT-OF-WAY LINE EXCEPT THAT THE CITY MAY APPROVE DEVIATIONS TO SAVE SPECIMEN TREES PROVIDED THAT THE SIDEWALK REMAINS WITHIN THE RIGHT-OF-WAY OR AN APPROVED SIDEWALK EASEMENT ABUTTING THE RIGHT OF WAY. SIDEWALKS AND BIKE PATHS SHOULD BE LOCATED A MINIMUM OF 4'-0" FROM THE EDGE OF THE STREET PAVEMENT UNLESS OTHERWISE APPROVED BY THE CITY.
3. ALL CURB CUTS AND HANDICAP RAMPS SHALL BE ADA COMPLIANT AND TO BE CONSTRUCTED IN ACCORDANCE WITH FDOT DESIGN STANDARDS AND FLORIDA BUILDING CODE ACCESSIBILITY, LATEST EDITIONS.
4. ABANDONED AND/OR UN-PERMITTED CURB CUTS: ANY ABANDONED AND/OR UN-PERMITTED CURB CUTS AND ACCESS POINTS SHALL BE REMOVED AND REPLACED WITH STANDARD CURBING AND REGRADING WITH SOD AS REQUIRED.
5. THE TOP OF THE CONCRETE SHALL BE AT AN ELEVATION NO LOWER THAN THE CROWN OF THE ADJACENT ROADWAY, AND NO HIGHER THAN 6" ABOVE THE CROWN UNLESS APPROVED BY THE CITY TO MAKE A MORE NATURAL TRANSITION WITH THE ADJACENT LAND.
6. EXPANSION AND ISOLATION JOINTS (TYPE A JOINTS) SHALL BE PROVIDED BETWEEN EXISTING SLABS OR STRUCTURES AND FRESH CONCRETE, TO SEPARATE PEDESTRIAN SECTIONS FROM SECTIONS WHICH WILL ENCOUNTER VEHICLE TRAFFIC, TO SEPARATE FRESH PLACEMENT OF CONCRETE WHICH HAS SET FOR MORE THAN 60 MINUTES, AND NO FARTHER APART THAN ONE HUNDRED FEET (100') IN SIDEWALKS AND THIRTY FEET (30') IN BIKE PATHS.
7. PREFORMED ½" EXPANSION JOINT MATERIAL SHALL BE AS SPECIFIED IN FDOT STANDARDS AND SPECIFICATIONS, LATEST EDITION, AND SHALL BE SYNTHETIC, RECYCLED RUBBER OR OTHER PRE-APPROVED NON-BIODEGRADABLE ELASTOMERIC MATERIAL. WOOD AND DECCA-DRAIN STYLE POOL DRAINS ARE STRICTLY PROHIBITED IN ACCORDANCE WITH CHAPTER 81.2 OF THE FDOT SOILS AND FOUNDATIONS HANDBOOK, LATEST EDITION.
8. CONTROL JOINTS (TYPE B JOINTS) SHALL BE TOOLED INTO THE FRESH CONCRETE OR SAW CUT INTO CURED CONCRETE TO A DEPTH EQUAL TO 25% THE SLAB THICKNESS AND SPACED APART A DISTANCE EQUAL TO THE WIDTH OF THE SLAB OR 5' WHICHEVER IS LESS.
9. THE SLAB SURFACE SHALL BE BROOM FINISHED TO BE SLIP RESISTANT, AND SHALL MATCH AS CLOSELY AS POSSIBLE THE FINISH OF EXISTING ADJACENT SLABS AND ALL EDGES SHALL BE TOOLED TO ELIMINATE SHARP CORNERS.
10. THE BEARING SUBSURFACE SHALL HAVE ALL ORGANIC, LOOSE, AND DELETERIOUS MATTER REMOVED, AND THE REMAINING CLEAN SOIL SHALL BE SMOOTH, SOUND, AND SOLID. ANY FILL MATERIAL SHALL BE COMPACTED WITH A VIBRATORY OR IMPACT COMPACTION MACHINE IN MAXIMUM 12" LIFTS OR COMPACTED WITH A HAND TAMPER IN MAXIMUM 4" LIFTS THE CITY SHALL REQUIRE A COMPACTION TEST FOR EACH LIFT IF THE TOTAL FILLED SECTION IS MORE THAN 12" DEEP OR IF THE SUBSURFACE HAS BEEN DISTURBED MORE THAN 12" DEEP. WHERE SUCH TEST IS REQUIRED, THE SIDEWALK BASE SHALL BE COMPACTED AND TESTED TO 95% WITH MINIMUM L.B.R. BASED ON AASHTO T-180 MODIFIED PROCTOR TEST. MOISTURE SHALL BE APPLIED TO DRY FILL MATERIAL TO ACHIEVE DENSITY REQUIREMENTS.
11. ALL CONCRETE WORK IN THE RIGHT-OF-WAY SHALL BE INSPECTED BY THE CITY AFTER THE SUBSOIL IS PREPARED AND THE FORMS ARE SET, BUT BEFORE THE CONCRETE PLACEMENT BEGINS.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE FINISHED SLAB FROM ALL DAMAGE AND VANDALISM UNTIL THE CITY ACCEPTS OR APPROVES THE SLAB, AFTER WHICH TIME THE OWNER OF THE ABUTTING LAND SHALL BE RESPONSIBLE FOR THE SLAB IN ACCORDANCE WITH THE CITY CODE. ANY SLAB SECTION DAMAGED OR VANDALIZED PRIOR TO ACCEPTANCE OR APPROVAL SHALL BE CUT OUT BETWEEN JOINTS AND REPLACED AT NO ADDITIONAL COST TO THE OWNER. REPAIRS ARE NOT ACCEPTABLE.
13. ALL FORMS SHALL BE REMOVED PRIOR TO ACCEPTANCE OR APPROVAL AND THE DISTURBED GROUND SHALL BE BACKFILLED, RE-GRADED, AND SODDED SO THAT THE WEAR SURFACE OF THE CONCRETE IS REASONABLY FLUSH WITH THE ADJACENT GRADE.
14. DETECTABLE WARNING DEVICES SHALL EXTEND THE FULL WIDTH OF THE SIDEWALK AND TO A DEPTH OF 2' min.
15. SEE FDOT STANDARD PLANS FOR ROAD CONSTRUCTION INDEX 522-002, LATEST EDITION, FOR REFERENCE.

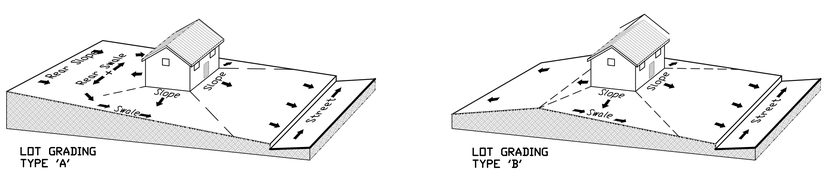
SIDEWALK/ BIKE PATH CONSTRUCTION NOTES
NTS



SIDEWALK CONSTRUCTION DETAIL
NTS



BIKE PATH CONSTRUCTION DETAIL
NTS


Ridge
Ridge
Slope
Slope
Swale
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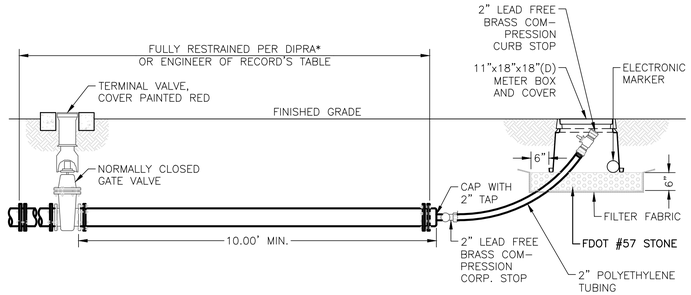
Swale
Slope
Slope
Swale

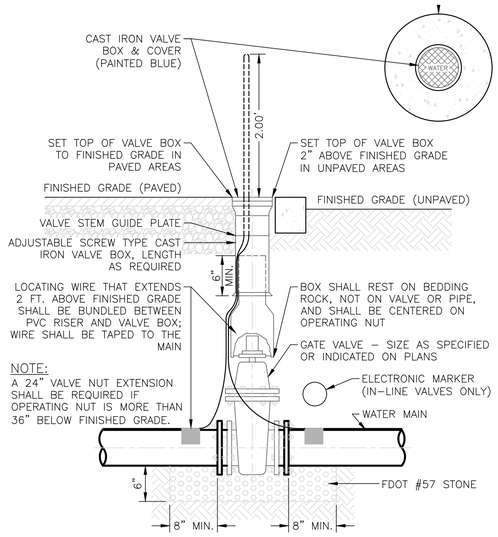


NOTES:
1. DUCTILE IRON PIPE RESEARCH ASSOCIATION
2. FILTER FABRIC SHALL BE MIRAFI N-SERIES NON-WOVEN POLYPROPYLENE GEOTEXTILES

NEW SMYRNA BEACH UTILITIES

BLOW OFF VALVE ASSEMBLY

SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	PW-04

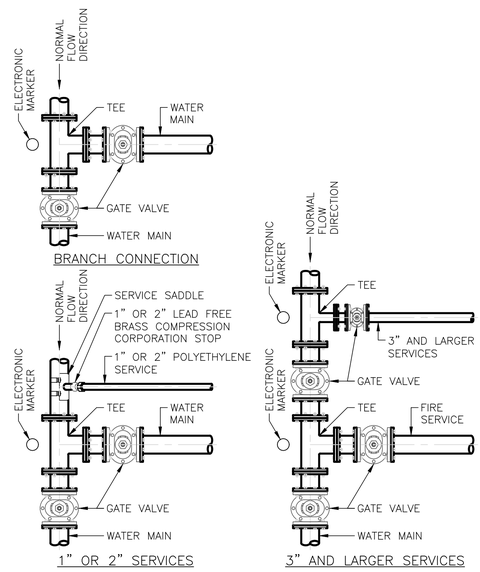


NOTE:
A 24" VALVE NUT EXTENSION SHALL BE REQUIRED IF OPERATING NUT IS MORE THAN 36" BELOW FINISHED GRADE.

NEW SMYRNA BEACH UTILITIES

GATE VALVE

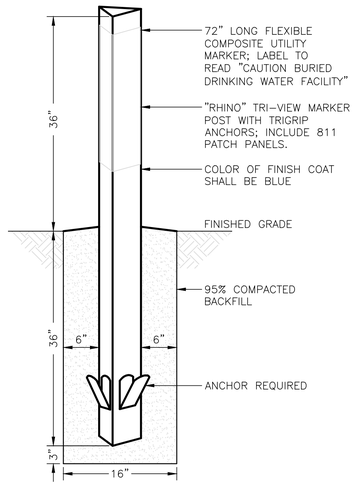
SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	PW-05



NEW SMYRNA BEACH UTILITIES

VALVE LAYOUT AT TEES AND SERVICES

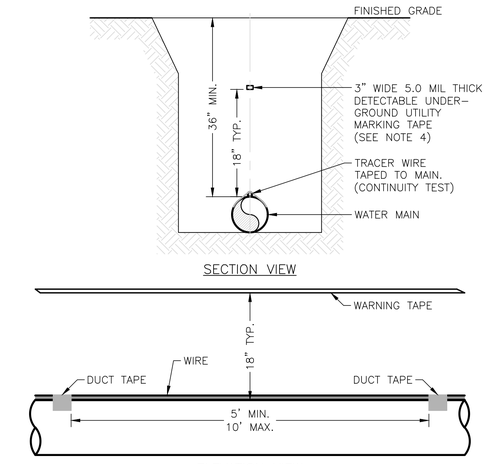
SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	PW-08



NEW SMYRNA BEACH UTILITIES

VALVE MARKER

SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	PW-09

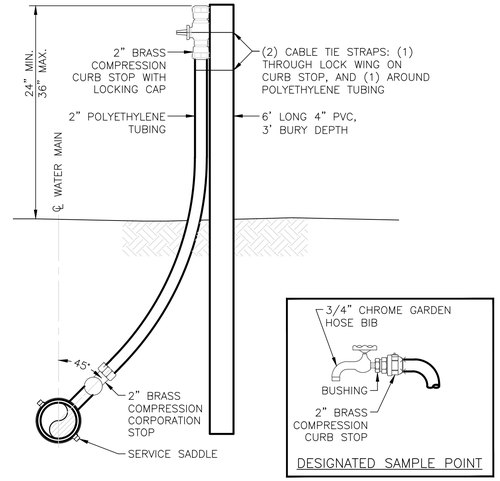


NOTES:
1. ALL PIPE SHALL REQUIRE #10 GAUGE (AWG) HIGH-STRENGTH COPPER CLAD STEEL CONDUCTOR (HS-CCS) TRACER WIRE COATED WITH A 30 MIL THICK, HIGH DENSITY POLYETHYLENE (HDPE) INSULATION, AND RATED FOR DIRECT BURIAL USE AT 30 VOLTS LOCATED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE AND TAPED TO THE PIPE AT 5 FT. TO 10 FT. INTERVALS.
2. AT RESTRAINED JOINTS, WRAP TRACER WIRE AROUND ONE LUG.
3. A CONTINUITY TEST SHALL BE PERFORMED IN THE PRESENCE OF THE NSBU.
4. UTILITY MARKING TAPE SHALL BE COLOR CODED BLUE FOR POTABLE WATER, PURPLE FOR RECLAIMED WATER, AND GREEN FOR WASTEWATER.

NEW SMYRNA BEACH UTILITIES

PIPE LOCATING WIRE AND TAPE

SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	PW-10



NOTE:
ALL FITTINGS SHALL BE LEAD FREE BRASS.

NEW SMYRNA BEACH UTILITIES

TEST SERVICE STUB OUT

SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	PW-15

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CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC-42)
(EB-0583)

NO.	DATE	BY	SUBMITTALS / REVISIONS
1	10-20-23	MLR	INITIAL SUBMITTAL TO CITY
2	09-16-24	MLR	RESUBMITTED TO CITY
3	04-04-25	MLR	RESUBMITTED TO CITY
4	07-16-25	MLR	RESUBMITTED TO CITY

ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS CONSTRUCTION DETAILS

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

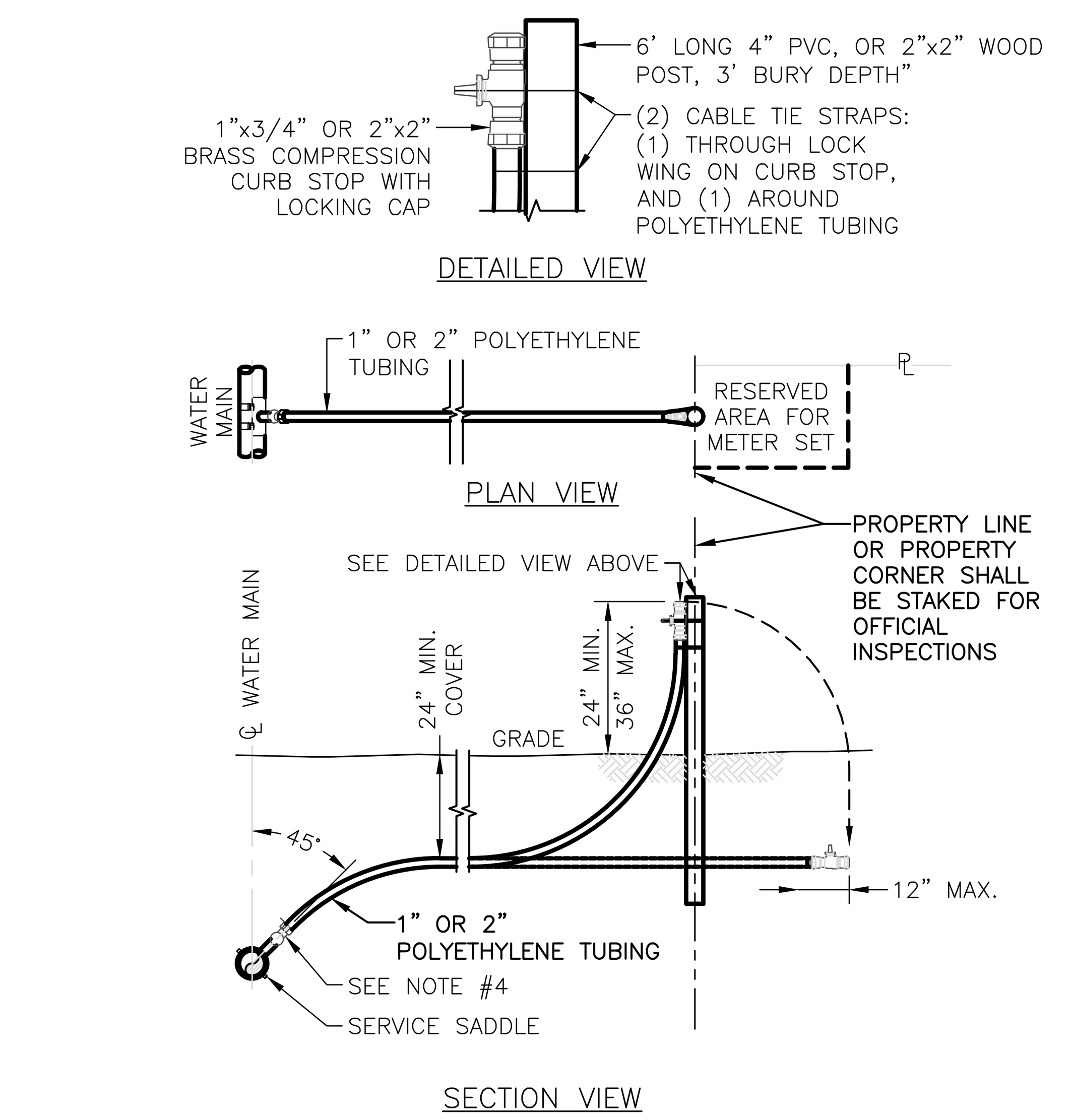
PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 39-47_18169-DET-PH3-4
XREFS: 18169BAS.DWG
XREFS: 18169SUR.DWG

MELIA RUSSELL LICENSE No 68357 STATE OF FLORIDA PROFESSIONAL ENGINEER
Digitally signed by Melia L Russell
DN: c=US, o=Florida, ou=Not Valid without the signature and the seal of Florida Licensed Professional Engineer, cn=Melia L Russell, email=melia@zevcohen.com
Reason: I am the author of this document.
Contact Info: This item has been electronically signed and sealed by Melia L Russell using a Scal authentication code.
Date: 2025.07.24 15:51:10 -04'00'

MELIA L. RUSSELL, P.E., NO.68357
KRISTOPHER T ROWLEY, P.E., NO.84263
NOT VALID WITHOUT SEAL

SHEET: C41 OF 47

R:\18169 - SHELL POINTE COVONTVNAL ENGINEERING PLANS\CADD\ISSUED\PHASES 3 & 4\39-47_18169-DET-PH3-4.DWG - PRINTED 7/31/2025 2:41 PM

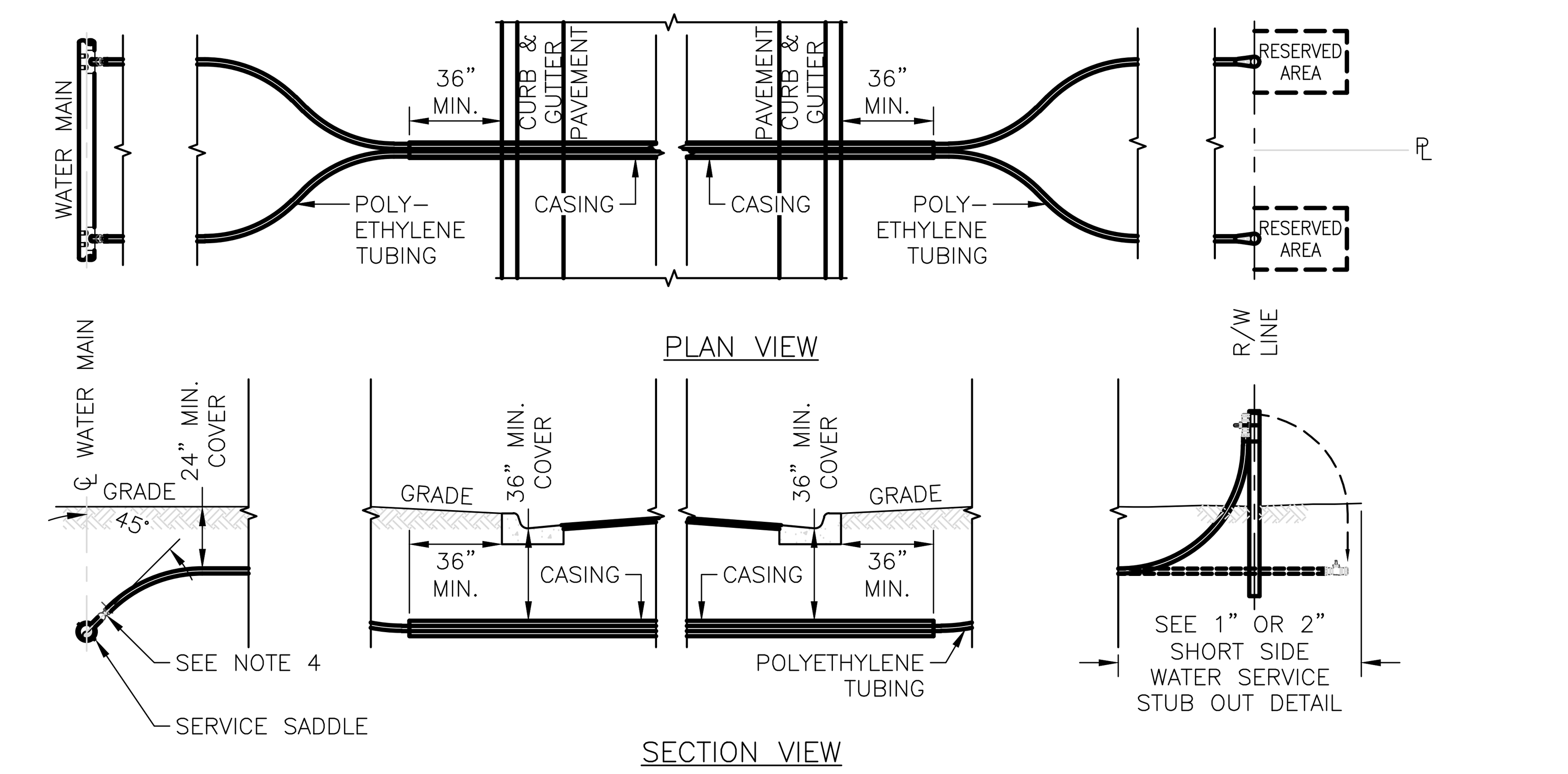


NOTES:
1. APPLIES TO NEW CONSTRUCTION ONLY.
2. ALL FITTINGS SHALL BE LEAD FREE BRASS.
3. ATTACH WATER SERVICE TO POST AS SHOWN ABOVE.
4. 1" TAPS REQUIRE A BRASS COMPRESSION CORPORATION STOP. 2" AND LARGER REQUIRE A GATE VALVE.
5. CONTRACTOR SHALL PROVIDE CURB STOP LOCK.

NEW SMYRNA BEACH UTILITIES

1" OR 2" SHORT SIDE WATER SERVICE STUB OUT

SCALE: NTS | SHEET 1 OF 1 | DATE: 10/2023 | REV. | PW–16

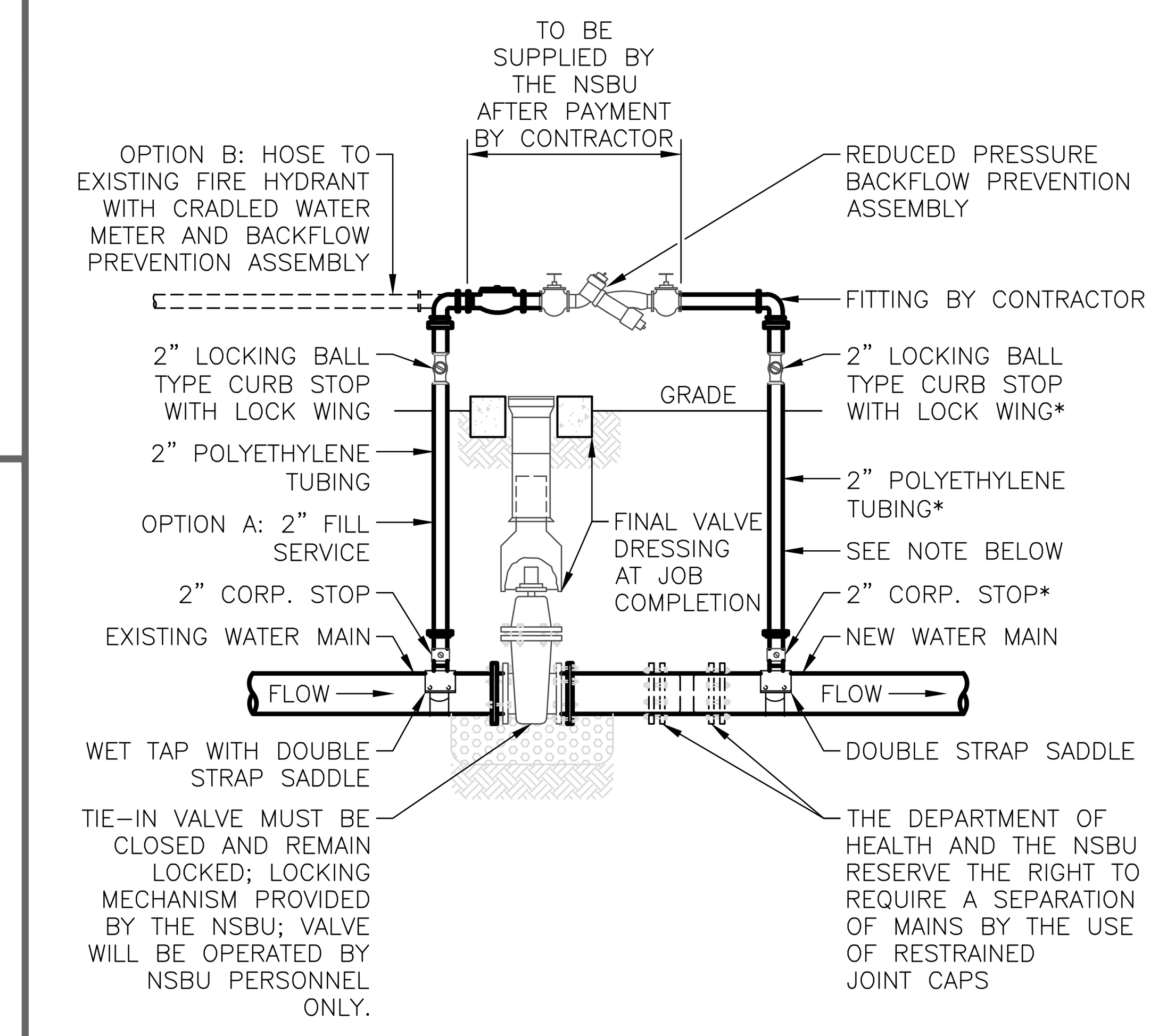


NOTES:
1. APPLIES TO NEW CONSTRUCTION ONLY.
2. ALL UNDER ROAD SERVICES IN NEW DEVELOPMENTS SHALL BE IN 4" SCHEDULE 40 PVC CASINGS WITH THE EXCEPTION OF DOUBLE 2" SERVICES WHICH REQUIRE A 6" CASING.
3. ALL FITTINGS SHALL BE LEAD FREE BRASS.
4. 1" TAPS REQUIRE A BRASS COMPRESSION CORPORATION STOP. 2" AND LARGER REQUIRE A GATE VALVE.
5. CONTRACTOR SHALL PROVIDE CURB STOP LOCK.

NEW SMYRNA BEACH UTILITIES

1" OR 2" LONG SIDE WATER SERVICE STUB OUT

SCALE: NTS | SHEET 1 OF 1 | DATE: 10/2023 | REV. | PW–17



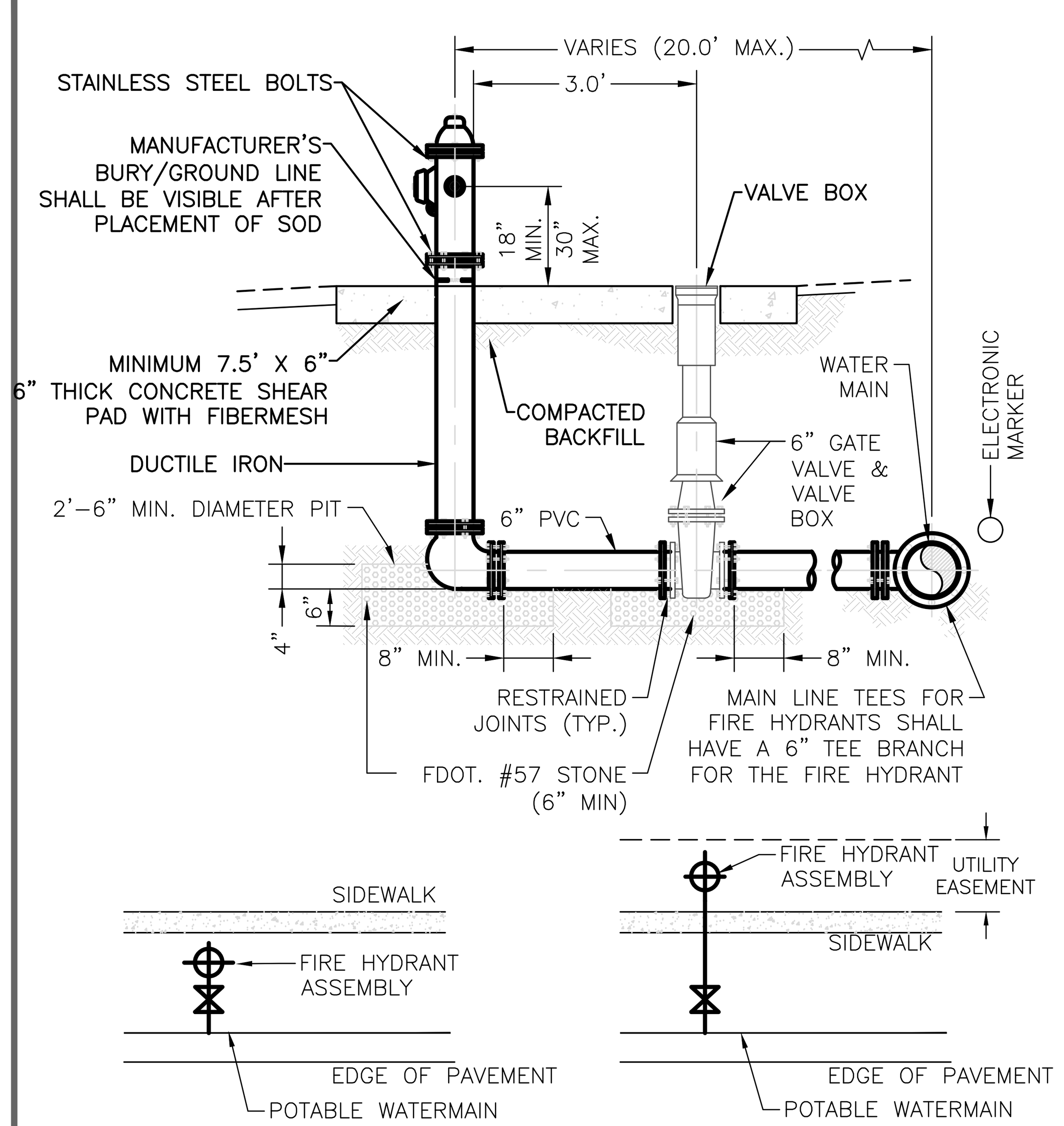
* THESE COMPONENTS COMPRISE THE TEST SERVICE.

NOTE:
2" TEST SERVICE TO BE STAKED PER TEST SERVICE STUB OUT DETAIL AT JOB COMPLETION.

NEW SMYRNA BEACH UTILITIES

TEMPORARY CONSTRUCTION METER CONNECTION

SCALE: NTS | SHEET 1 OF 1 | DATE: 10/2023 | REV. | PW–20

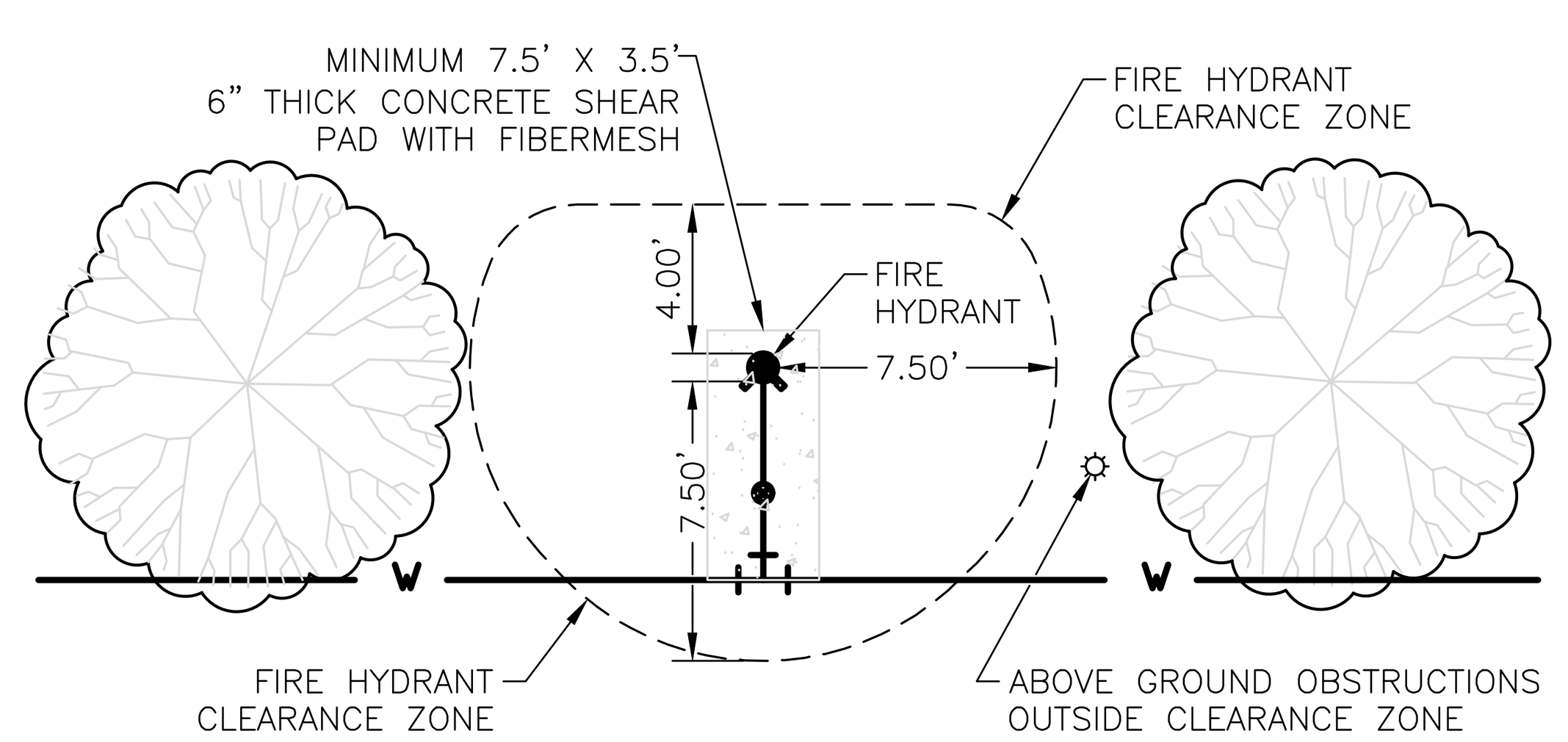


NOTES:
1. HYDRANT MUST BE LOCATED ON THE SAME SIDE OF THE ROAD OR PARKING LOT AS THE WATER MAIN, OUTSIDE THE CLEAR RECOVERY ZONE OF THE TRAVEL WAY, AND A MINIMUM OF 2' FROM SIDEWALK EDGE.
2. HYDRANT MUST HAVE A CLOSED WEEP HOLE.

NEW SMYRNA BEACH UTILITIES

FIRE HYDRANT ASSEMBLY

SCALE: NTS | SHEET 1 OF 1 | DATE: 10/2023 | REV. | PW–22



NOTES:
1. CLEAR ZONE: NO ABOVE GROUND OBSTRUCTIONS GREATER THAN 8" IN HEIGHT. GROUND COVER SHALL BE ALLOWED ADJACENT TO THE FIRE HYDRANT.
2. HYDRANT SHALL BE MIN. 3' AWAY FROM THE CURB

NEW SMYRNA BEACH UTILITIES

FIRE HYDRANT CLEARANCE ZONE

SCALE: NTS | SHEET 1 OF 1 | DATE: 10/2023 | REV. | PW–23

SEPARATION REQUIREMENTS FOR
WATER, WASTEWATER AND RECLAIMED WATER MAINS

PROPOSED UTILITY												
	POTABLE WATER			WASTEWATER GRAVITY AND FORCE MAIN			RECLAIMED WATER			VACUUM SEWER		
CONFLICTING UTILITY	HORIZ.	VERT.	JOINT* SPACING	HORIZ.	VERT.	JOINT* SPACING	HORIZ.	VERT.	JOINT* SPACING	HORIZ.	VERT.	JOINT* SPACING
POTABLE WATER	3' NOTE 1	12"	3' NOTE 2	6' TO 10'	12" NOTE 5	6' NOTE 2	3'	12"	6' NOTE 2	3' TO 10'	12"	3' NOTE 2
RECLAIMED WATER	3'	12"	6' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3'	12"	6' NOTE 2	3' NOTE 1	12"	3' NOTE 2
WASTEWATER (GRAVITY AND FORCE MAIN)	6' TO 10'	12"	6' NOTE 2	3' NOTE 1	12"	6'	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2
VACUUM SEWER	3' TO 10'	12"	3' NOTE 2	3' NOTE 1	12"	6'	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2
RIGHT OF WAY	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A
STORM SEWERS	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2
GAS	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2
TREES	3'–6'	N/A	N/A	3'–6'	N/A	N/A	3'–6' NOTE 1	N/A	N/A	3'–6'	N/A	N/A
ALL OTHER UTILITIES	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2

NOTES:
1. THIS SEPARATION REQUIREMENT IS TO PROVIDE ACCESSIBILITY FOR CONSTRUCTION AND MAINTENANCE. THREE FEET OF HORIZONTAL SEPARATION IS THE MINIMUM FOR PIPES WITH THREE FEET OF COVER. FOR PIPES INSTALLED AT GREATER DEPTH, PROVIDE AN ADDITIONAL FOOT OF SEPARATION FOR EACH ADDITIONAL FOOT OF DEPTH.
2. MINIMUM JOINT SPACING REQUIREMENT FROM A UTILITY CROSSING WHILE STILL MAINTAINING MINIMUM HORIZONTAL SEPARATION.
3. DISTANCES GIVEN ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
4. NO WATER PIPE SHALL PASS THROUGH OR COME INTO CONTACT WITH ANY PART OF SANITARY OR STORM WATER MANHOLES OR STRUCTURES.
5. WATER MAIN SHOULD CROSS ABOVE OTHER PIPES WHENEVER POSSIBLE. WHEN WATER MAIN MUST BE BELOW OTHER UTILITY PIPING, THE MINIMUM SEPARATION SHALL BE 12 INCHES.

NEW SMYRNA BEACH UTILITIES

UTILITY SEPARATION

SCALE: NTS | SHEET 1 OF 1 | DATE: 10/2023 | REV. | PW–28

RESTRAINED PIPE TABLE
WATER AND RECLAIMED WATER MAINS

MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)										
TYPE	PIPE SIZE									
	PVC					DIP				
	4"	6"	8"	10"	12"	16"	20"	24"	30"	36"
90° BEND	19	25	33	39	45	46	55	64	75	86
45° BEND	8	11	14	16	19	19	23	27	31	36
22–1/2° BEND	4	5	8	9	10	10	11	13	15	17
11–1/4° BEND	3	3	4	5	5	5	6	7	8	9
PLUG OR BRANCH OF TEE	33	45	59	70	83	84	102	119	142	164
VALVE	27	38	49	59	68	69	83	97	116	133
REDUCER	VARIES BY SIZE; TO BE DETERMINED BY THE DESIGN ENGINEER.									

NOTES:
1. FITTINGS SHALL HAVE RESTRAINED JOINTS UNLESS OTHERWISE INDICATED.
2. INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO OR GREATER THAN LENGTH SHOWN IN THE TABLE.
3. WHERE TWO OR MORE FITTINGS ARE IN SERIES, SELECT FITTING RESTRAINT LENGTH THAT YIELDS THE LONGEST RESTRAINT DISTANCE.
4. ALL INLINE VALVES SHALL BE RESTRAINED.
5. WHERE INTERNAL RESTRAINED JOINTS ARE USED, THE ENTIRE BELL SHALL BE PAINTED RED.
6. LENGTHS SHOWN IN THE TABLE WERE CALCULATED IN ACCORDANCE WITH PROCEDURES OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" GUIDELINES PUBLISHED BY DIPRA, USING THE ASSUMPTIONS SHOWN BELOW:

WORKING PRESSURE: 150 PSI
SOIL DESIGNATION: SM (SAND SILT)
LAYING CONDITIONS: 3
DEPTH OF COVER: 3 FT
SAFETY FACTOR: 1.5
CONVERSION FACTOR FOR PVC PIPE: 1.25

*SAFETY FACTOR AND PVC CONVERSION FACTOR ALREADY APPLIED TO TABLE.

7. THE DESIGN ENGINEER SHALL INCREASE THE VALUES IN THE TABLE AS WARRANTED BY SITE-SPECIFIC SOIL DESIGNATIONS, LAYING CONDITIONS, PIPE MATERIAL, ETC. FOR DIP ENCASED IN POLYETHYLENE, INCREASE THE GIVEN VALUE BY A FACTOR OF 1.25.
8. ALL THE JOINTS WITHIN THE CALCULATED LENGTH MUST BE RESTRAINED.
9. IF DISTANCE BETWEEN FITTINGS IS LESS THAN OR EQUAL TO THE CALCULATED RESTRAINT LENGTH, RESTRAIN ALL JOINTS BETWEEN THOSE FITTINGS.

NEW SMYRNA BEACH UTILITIES

RESTRAINED PIPE TABLE (WATER AND RECLAIMED WATER MAINS)

SCALE: NTS | SHEET 1 OF 1 | DATE: 10/2023 | REV. | PW–30

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CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(EB 4516) (LC 62)

NO.	DATE	BY	SUBMITTALS / REVISIONS
1	10-20-23	MLR	INITIAL SUBMITTAL TO CITY
2	09-16-24	MLR	RESUBMITTED TO CITY
3	04-04-25	MLR	RESUBMITTED TO CITY
4	07-18-25	MLR	RESUBMITTED TO CITY

ARDISIA PARK PHASE 3 & 4 FINAL ENGINEERING PLANS CONSTRUCTION DETAILS

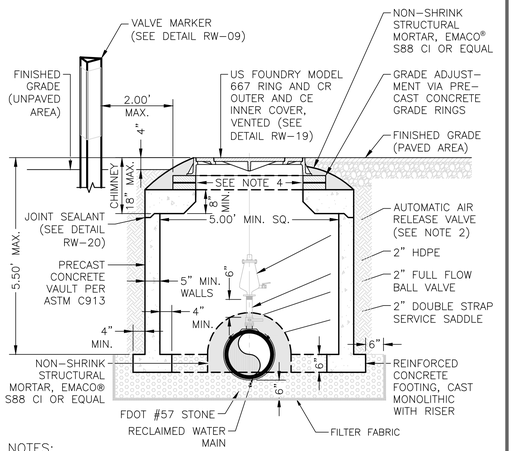
CITY OF NEW SMYRNA BEACH
VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 39-47_18169-DET-PH3-4
XREF'S: 18169BAS.DWG
XREF'S: 18169SUR.DWG

MELIA L. RUSSELL LICENSE No 68357 STATE OF FLORIDA PROFESSIONAL ENGINEER

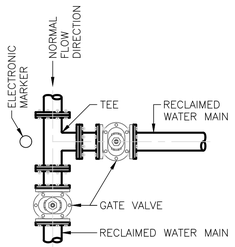
MELIA L. RUSSELL, P.E., NO.68357
KRISTOPHER T ROWLEY, P.E., NO.84263
NOT VALID WITHOUT SEAL

SHEET: C42 OF 47

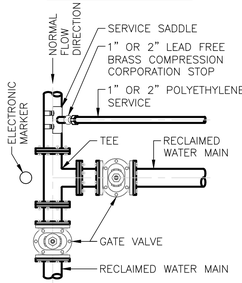


NOTES:
1. RINGS AND COVERS IN PAVEMENT OR SIDEWALK SHALL BE FLUSH WITH FINISHED GRADE. RINGS AND COVERS SHALL BE 4" ABOVE FINISHED GRADE IN UNPAVED AREAS.
2. SEE A.R.I. FLOW CONTROL ACCESSORIES CATALOG FOR S-020, 2" THREADED AUTOMATIC AIR RELEASE VALVE CONFIGURATION, OR APPROVED EQUAL.
3. COIL 6 FT. OF TRACER WIRE WITHIN VAULT; WIRE SHALL BE TAPED TO THE MAIN.
4. EPOXY MORTAR INSIDE OF CHIMNEY/PRECAST CONCRETE GRADE RINGS FOR A SMOOTH FINISH.
5. FILTER FABRIC SHOULD BE MIRAFI N-SERIES NON-WOVEN POLYPROPYLENE GEOTEXTILES.

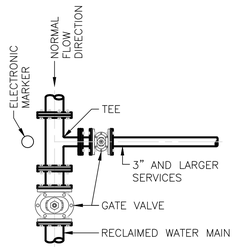
NEW SMYRNA BEACH UTILITIES	
AIR RELEASE VALVE IN CONCRETE VAULT	
SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	RW-03



BRANCH CONNECTION

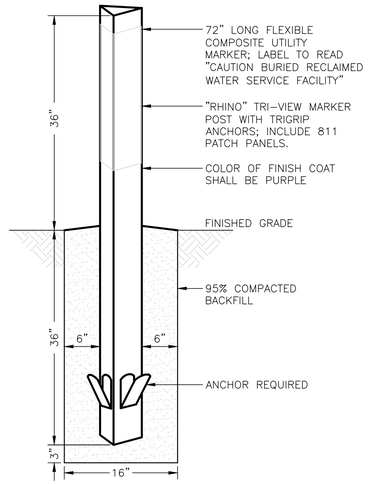


1" OR 2" SERVICES

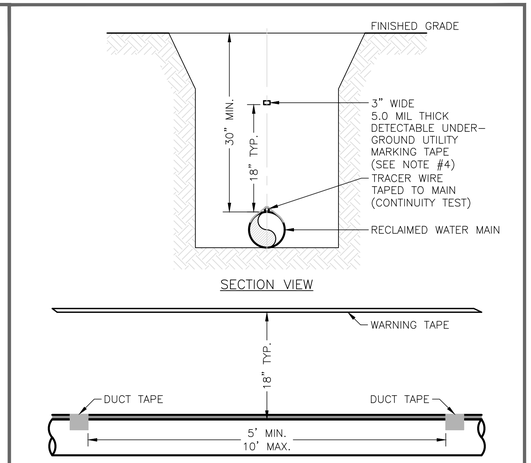


3" AND LARGER SERVICES

NEW SMYRNA BEACH UTILITIES	
VALVE LAYOUT AT TEES AND SERVICES	
SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	RW-08



NEW SMYRNA BEACH UTILITIES	
VALVE MARKER	
SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	RW-09

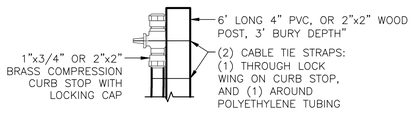


SECTION VIEW

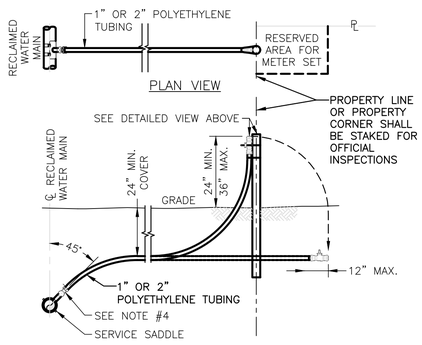
ELEVATION VIEW

NOTES:
1. ALL PIPE SHALL REQUIRE #10 GAUGE (AWG) HIGH-STRENGTH COPPER CLAD STEEL CONDUCTOR (HS-CCS) TRACER WIRE COATED WITH A 30 MIL THICK, HIGH DENSITY POLYETHYLENE (HDPE) INSULATION, AND RATED FOR DIRECT BURIAL USE AT 30 VOLTS LOCATED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE AND TAPED TO THE PIPE AT 5 FT. TO 10 FT. INTERVALS.
2. AT RESTRAINED JOINTS, WRAP TRACER WIRE AROUND ONE LUG.
3. A CONTINUITY TEST SHALL BE PERFORMED IN THE PRESENCE OF THE NSBU.
4. UTILITY MARKING TAPE SHALL BE COLOR CODED BLUE FOR POTABLE WATER, PURPLE FOR RECLAIMED WATER, AND GREEN FOR WASTEWATER.

NEW SMYRNA BEACH UTILITIES	
PIPE LOCATING WIRE AND TAPE	
SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	RW-10



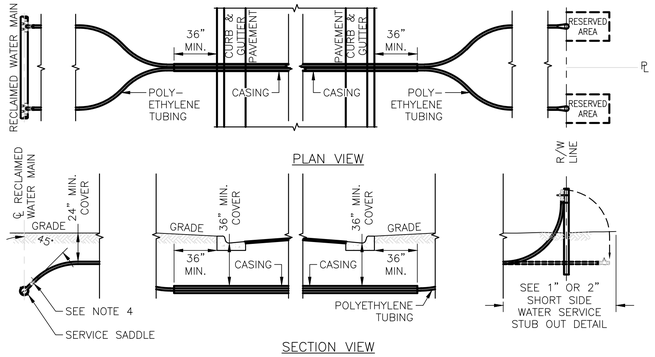
DETAILED VIEW



SECTION VIEW

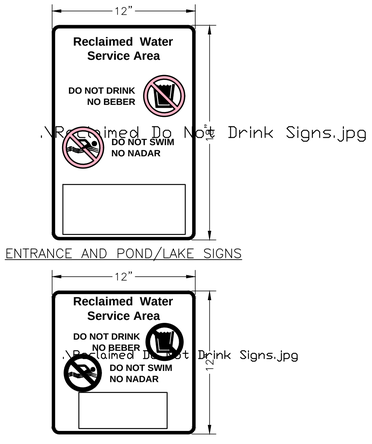
NOTES:
1. APPLIES TO NEW CONSTRUCTION ONLY.
2. ALL FITTINGS SHALL BE LEAD FREE BRASS.
3. ATTACH RECLAIMED WATER SERVICE TO POST AS SHOWN ABOVE.
4. 1" TAPS REQUIRE A BRASS COMPRESSION CORPORATION STOP. 2" AND LARGER REQUIRE A GATE VALVE.
5. CONTRACTOR SHALL PROVIDE CURB STOP LOCK.

NEW SMYRNA BEACH UTILITIES	
SHORT SIDE RECLAIMED WATER SERVICE STUB OUT	
SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	RW-15



NOTES:
1. APPLIES TO NEW CONSTRUCTION ONLY.
2. ALL UNDER ROAD SERVICES IN NEW DEVELOPMENTS SHALL BE IN 4" SCHEDULE 40 PVC CASINGS WITH THE EXCEPTION OF DOUBLE 2" SERVICES WHICH REQUIRE A 6" CASING.
3. ALL FITTINGS SHALL BE LEAD FREE BRASS.
4. 1" TAPS REQUIRE A BRASS COMPRESSION CORPORATION STOP. 2" AND LARGER REQUIRE A GATE VALVE.
5. CONTRACTOR SHALL PROVIDE CURB STOP LOCK.

NEW SMYRNA BEACH UTILITIES	
LONG SIDE RECLAIMED WATER SERVICE STUB OUT	
SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	RW-16



ENTRANCE AND POND/LAKE SIGNS

ALL OTHER LOCATIONS (E.G., FOUNTAINS)

NOTES:
1. AREAS IRRIGATED BY RECLAIMED WATER, SUCH AS RESIDENTIAL NEIGHBORHOODS AND GOLF COURSES, SHALL HAVE ADVISORY SIGNS POSTED AT THE ENTRANCES ALERTING THE PUBLIC. ADDITIONAL SIGNS SHALL BE POSTED AT THE FIRST AND TENTH TEES OF GOLF COURSES. SIGNS SHALL INCLUDE THE TEXT "DO NOT DRINK" IN BOTH ENGLISH AND SPANISH TOGETHER WITH THE EQUIVALENT STANDARD INTERNATIONAL SYMBOL.
2. ADVISORY SIGNS SHALL BE POSTED ADJACENT TO LAKES OR PONDS USED TO STORE RECLAIMED WATER AND DECORATIVE WATER FEATURES THAT USE RECLAIMED WATER. SIGNS SHALL INCLUDE THE TEXT "DO NOT DRINK" AND "DO NOT SWIM" IN BOTH ENGLISH AND SPANISH TOGETHER WITH THE EQUIVALENT STANDARD INTERNATIONAL SYMBOLS.
3. ALL SIGNAGE SHALL FOLLOW REQUIREMENTS OF FAC 62-610.468.

NEW SMYRNA BEACH UTILITIES	
RECLAIMED WATER ADVISORY SIGNS	
SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	RW-18

ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
AMELIA ISLAND, FL 32034
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CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 6563)

NO.	DATE	BY	SUBMITTALS / REVISIONS
1	10-20-23	MLR	INITIAL SUBMITTAL TO CITY
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ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS CONSTRUCTION DETAILS

CITY OF NEW SMYRNA BEACH — VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169

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DRAFTED BY: MLR

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XREF'S: 18169BAS.DWG
XREF'S: 18169SUR.DWG

MELIA L. RUSSELL, P.E., NO.68357
KRISTOPHER T ROWLEY, P.E., NO.84263
NOT VALID WITHOUT SEAL

SHEET: C43 OF 47

Digitally signed by Melia L Russell
DN: CN=Melia L Russell
Reason: I am approving this document
Location: Florida
Date: 2025.07.18 09:32:39-04'00'

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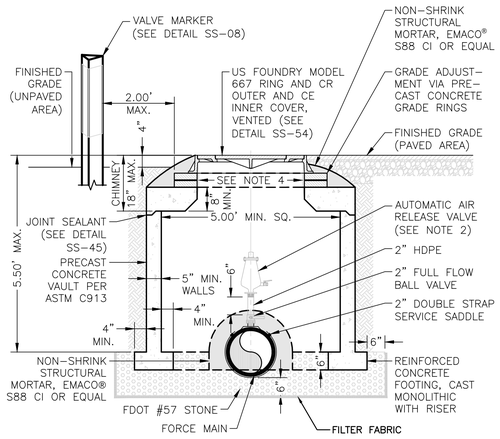
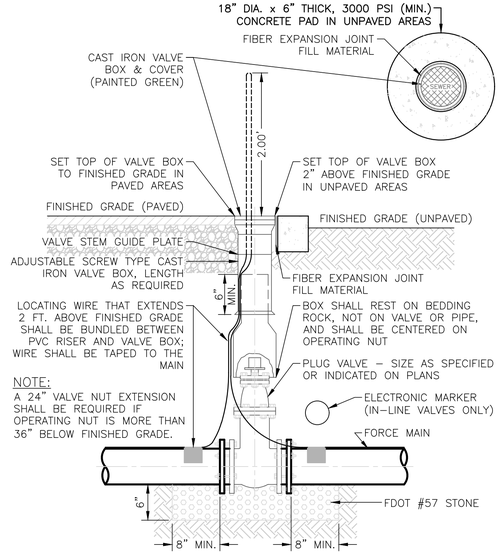


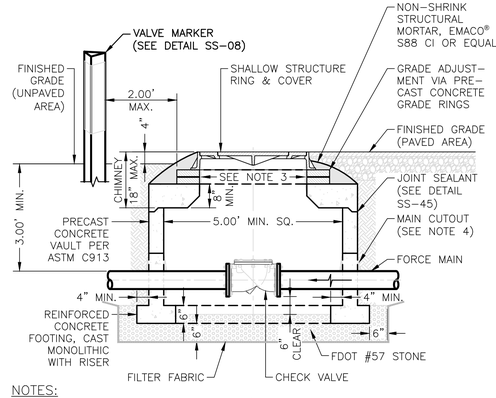
NOTES:
1. RINGS AND COVERS IN PAVEMENT OR SIDEWALK SHALL BE FLUSH WITH FINISHED GRADE. RINGS AND COVERS SHALL BE 4" ABOVE FINISHED GRADE IN UNPAVED AREAS.
2. SEE A.R.I. FLOW CONTROL ACCESSORIES CATALOG FOR S-020, 2" THREADED AUTOMATIC AIR RELEASE VALVE CONFIGURATION, OR APPROVED EQUAL.
3. COIL 6 FT. OF TRACER WIRE WITHIN VAULT; WIRE SHALL BE TAPED TO THE MAIN.
4. EPOXY MORTAR INSIDE OF CHIMNEY/PRECAST CONCRETE GRADE RINGS FOR A SMOOTH FINISH.
5. FILTER FABRIC SHALL BE MIRAFI N-SERIES NON-WOVEN POLYPROPYLENE GEOTEXTILES.

NEW SMYRNA BEACH UTILITIES	
AIR RELEASE VALVE IN CONCRETE VAULT	
SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-03



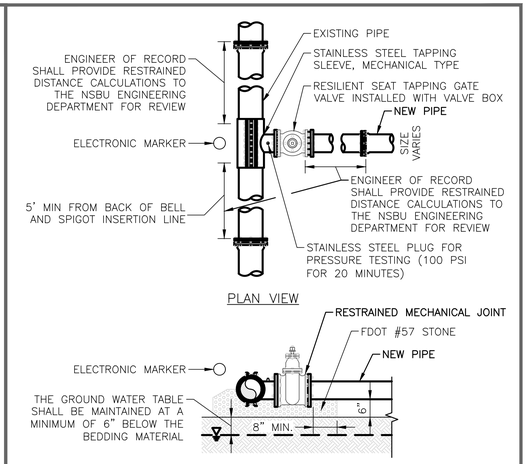
NOTE:
A 24" VALVE NUT EXTENSION SHALL BE REQUIRED IF OPERATING NUT IS MORE THAN 36" BELOW FINISHED GRADE.

NEW SMYRNA BEACH UTILITIES	
PLUG VALVE	
SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-04



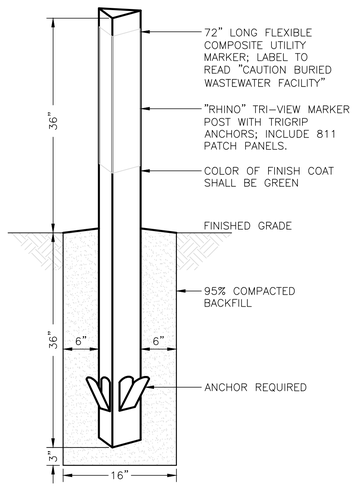
NOTES:
1. CONCRETE VAULT FOR FORCE MAINS 4" IN DIAMETER AND LARGER. FOR FORCE MAINS LESS THAN 4" IN DIAMETER, SEE THE PRIVATE FORCE MAIN CONNECTION DETAIL (SS-14).
2. VAULT SHALL BE SQUARE, DOGHOUSE STYLE WITH A MINIMUM 5'x5' INSIDE AREA AND 6" BASE THICKNESS.
3. RINGS AND COVERS IN PAVEMENT OR SIDEWALK SHALL BE FLUSH WITH FINISHED GRADE. RINGS AND COVERS SHALL BE 4" ABOVE FINISHED GRADE IN UNPAVED AREAS.
4. ONLY RUBBER GASKETS MAY BE USED WITH TAPPING AND CHECK VALVES AS WELL AS ALL MECHANICAL JOINTS; PAPER GASKETS ARE NOT PERMITTED.
5. EPOXY MORTAR INSIDE OF CHIMNEY/GRADE RINGS FOR A SMOOTH FINISH.
6. GROUT MAIN CUTOUT WITH NON-SHRINK STRUCTURAL MORTAR, EMACO® S88 CI OR EQUAL.
7. COIL 6 FT. OF TRACER WIRE WITHIN VAULT; WIRE SHALL BE TAPED TO THE MAIN.
8. FILTER FABRIC SHOULD BE MIRAFI N-SERIES NON-WOVEN POLYPROPYLENE GEOTEXTILES.

NEW SMYRNA BEACH UTILITIES	
CHECK VALVE AND VAULT	
SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-05

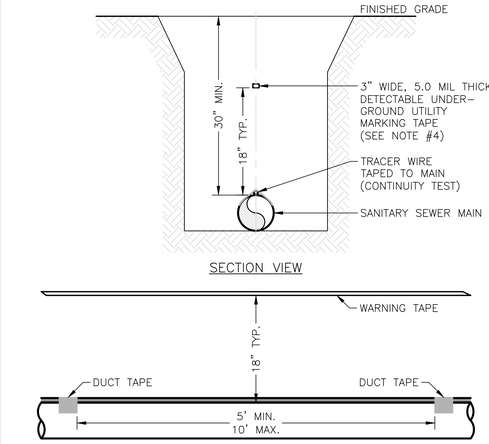


NOTES:
1. FULL LENGTH TAPPING SLEEVE REQUIRED.
2. STAINLESS STEEL TAPPING SLEEVES ARE REQUIRED FOR ALL TYPES OF PIPE MATERIALS.
3. INSTALLATION REQUIRES RESTRAINED JOINTS. IN NO INSTANCE SHALL THRUST BLOCKS BE PERMITTED.
4. REVERSE SIDE AND VERTICAL TAPPING REQUIRES NSBU ENGINEERING DEPARTMENT APPROVAL.
5. VALVES GREATER THAN 4" SHALL BE GEAR ACTUATED.

NEW SMYRNA BEACH UTILITIES	
TAPPING SLEEVE AND VALVE (SEWER)	
SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-06

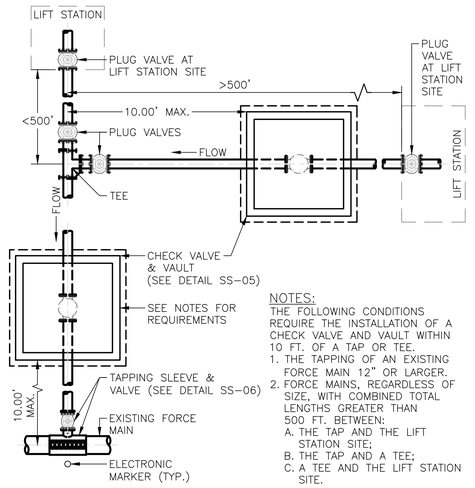


NEW SMYRNA BEACH UTILITIES	
VALVE MARKER	
SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-08



NOTES:
1. ALL PIPE SHALL REQUIRE #10 GAUGE (AWG) HIGH-STRENGTH COPPER CLAD STEEL CONDUCTOR (HS-CCS) TRACER WIRE COATED WITH A 30 MIL THICK, HIGH DENSITY POLYETHYLENE (HDPE) INSULATION, AND RATED FOR DIRECT BURIAL USE AT 30 VOLTS LOCATED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE AND TAPED TO THE PIPE AT 5 FT. TO 10 FT. INTERVALS.
2. AT RESTRAINED JOINTS, WRAP TRACER WIRE AROUND ONE LUG.
3. A CONTINUITY TEST SHALL BE PERFORMED IN THE PRESENCE OF THE NSBU.
4. UTILITY MARKING TAPE SHALL BE COLOR CODED BLUE FOR POTABLE WATER, PURPLE FOR RECLAIMED WATER, AND GREEN FOR WASTEWATER

NEW SMYRNA BEACH UTILITIES	
PIPE LOCATING WIRE AND TAPE	
SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-09



NOTES:
THE FOLLOWING CONDITIONS REQUIRE THE INSTALLATION OF A CHECK VALVE AND VAULT WITHIN 10 FT. OF A TAP OR TEE.
1. THE TAPPING OF AN EXISTING FORCE MAIN 12" OR LARGER.
2. FORCE MAINS, REGARDLESS OF SIZE, WITH COMBINED TOTAL LENGTHS GREATER THAN 500 FT. BETWEEN:
   A. THE TAP AND THE LIFT STATION SITE;
   B. THE TAP AND A TEE;
   C. A TEE AND THE LIFT STATION SITE.

NEW SMYRNA BEACH UTILITIES	
FORCE MAIN VALVE LAYOUT (4" AND GREATER)	
SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-12

ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
OMMUNITY BEACH, FL 32174
WWW.ZEVCOHEN.COM

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 4593)

NO.	DATE	BY	SUBMITTALS / REVISIONS
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ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS CONSTRUCTION DETAILS

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
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XREFS: 18169BAS.DWG
XREFS: 18169SUR.DWG

MELIA L. RUSSELL LICENSED PROFESSIONAL ENGINEER No 68357 STATE OF FLORIDA

Digitally signed by Melia L Russell
DN: CN=Melia L Russell, OU=Zev Cohen & Associates, Inc., O=Florida, C=US
Reason: I am the author of this document.
Location: Printed copies of this document are not considered signed and sealed and the electronic authentication code must be verified on any electronic copies.
Date: 2025.07.07 20:15:13-04'00'

MELIA L. RUSSELL, P.E., NO.68357
KRISTOPHER T. ROWLEY, P.E., NO.84263
NOT VALID WITHOUT SEAL

SHEET: C44 OF 47

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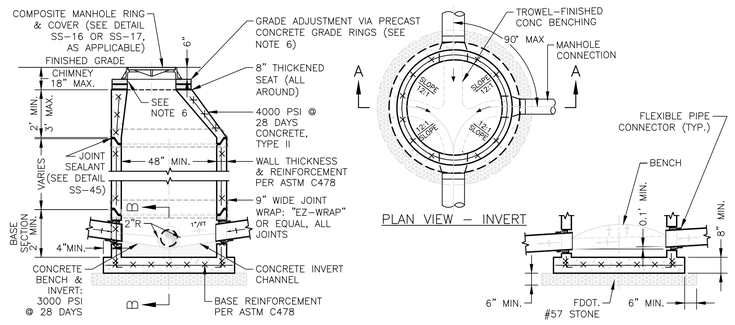
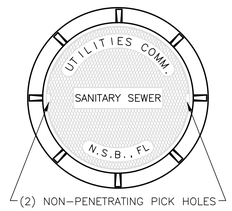
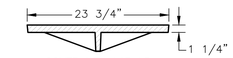


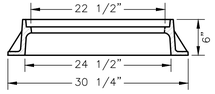
NOTES:
1. PRE-FORMED INVERTS ARE PERMITTED.
2. TOP SECTIONS SHALL BE ECCENTRIC.
3. STRUCTURES SHALL BE INSTALLED LEVEL IN ALL DIRECTIONS.
4. MANHOLE STRUCTURES SHALL BE COATED WITH COAL TAR EPOXY: 1 COAT OR 8 MILS OUTSIDE, 2 COATS OR 16 MILS INSIDE. THE FIRST COAT SHALL BE RED IN COLOR AND THE SECOND COAT SHALL BE GRAY; LINED MANHOLES SHALL BE COATED OUTSIDE ONLY.
5. PIPE CONNECTIONS AT MANHOLE JOINTS ARE NOT PERMITTED.
6. EPOXY MORTAR INSIDE & OUTSIDE OF CHIMNEY/PRECAST CONCRETE GRADE RINGS & PIPE OPENINGS FOR A SMOOTH FINISH.
7. CHANGES IN BENCH FLOW DIRECTION TO BE SMOOTH AND GRADUAL.
8. INVERTS WITH A DROP OF LESS THAN 2 FEET SHALL HAVE A CONCRETE SLIDE.

NEW SMYRNA BEACH UTILITIES	
STANDARD SEWER MANHOLE	
SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-15



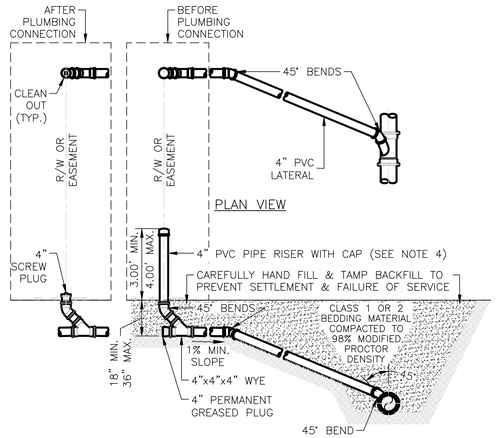


COVER WT: 145 LB
U.S. FOUNDRY CE COVER



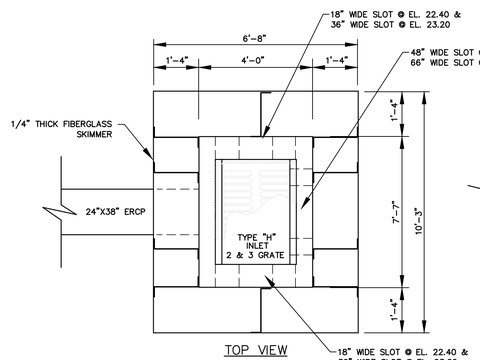
RING WT: 150 LB
U.S. FOUNDRY 170 RING

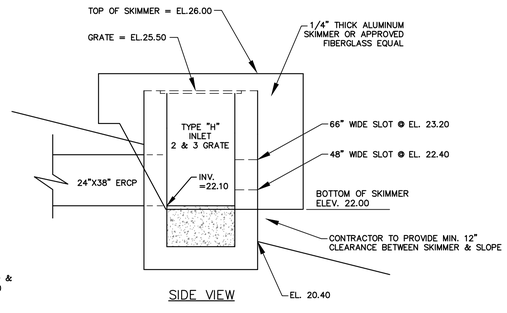
NEW SMYRNA BEACH UTILITIES	
STANDARD MANHOLE RING AND COVER	
SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-16

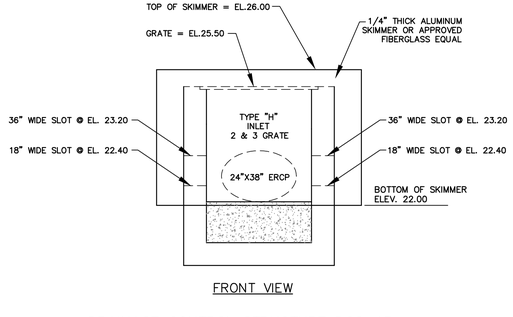


NOTES:
1. 4" LATERAL SHOWN AT A MINIMUM, RESIDENTIAL LATERALS SHALL BE 4" DIAMETER.
2. COMMERCIAL LATERALS SHALL BE 6" DIAMETER.
3. EACH LATERAL SHALL HAVE AN INDIVIDUAL CONNECTION TO THE MAIN.
4. THE 4" PVC PIPE RISER SHALL BE LABELED WITH THE LOT NUMBER ON AN ADHESIVE LABEL.
5. GRAVITY SEWER MAINS AND ASSOCIATED SEWER LATERAL PIPE AND FITTINGS (INCLUDING TEE-WYE FITTINGS) SHALL BE MINIMUM PVC SDR-26.
6. REFER TO "SEWER LATERAL CLEAN OUT" DETAIL FOR MORE INFORMATION.

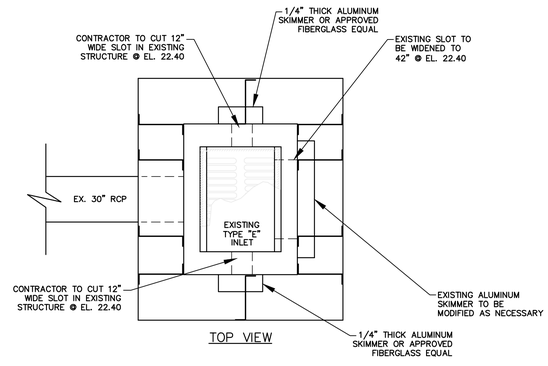
NEW SMYRNA BEACH UTILITIES	
GRAVITY SANITARY SEWER LATERAL SINGLE FAMILY RESIDENTIAL	
SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-22

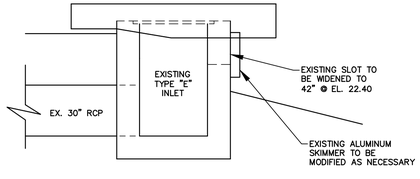




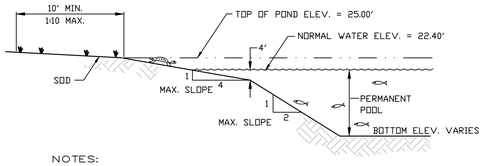


DRAINAGE CONTROL STRUCTURE DCS-15
N.T.S.



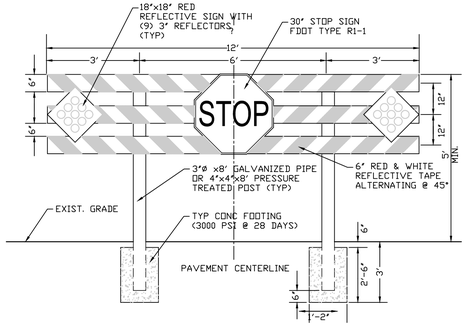


EXISTING DRAINAGE CONTROL STRUCTURE DCS-4 - TO BE MODIFIED
N.T.S.



NOTES:
1. SOD IS TO BE PLACED TO EDGE OF WATER EXCEPT IN LITTORAL PLANTING AREAS.
2. EXTEND LIMITS OF SODDING TO A MINIMUM OF TWO (2') BEYOND TOP OF BANK OR MATCH EXISTING GRADE, WHICHEVER IS GREATER.
3. PERMANENT POOL DEPTH & VOLUME SHALL MEET THE REQUIREMENTS OF THE SJRWMD.

WET POND CROSS-SECTION
NTS



NOTES:
1. STOP SIGN SHALL CONFORM WITH CURRENT FEDERAL, STATE & LOCAL CODES & REGULATIONS.
2. STOP SIGN R1-1 SHALL BE OCTAGONAL IN SHAPE. ALUMINUM SHALL BE A MINIMUM OF 0.80 IN THICKNESS. LEGEND AND BOARDER OF WHITE (RETROREFLECTIVE) AND A BACKGROUND OF RED (RETROREFLECTIVE).
3. LEGEND AND BOARDER SIZES SHALL BE IN ACCORDANCE WITH THE MUTCD AND STANDARD HIGHWAY SIGNS MANUAL, LATEST EDITION, FOR THE SIZE OF SIGN REQUIRED FOR THE APPLICATION.
4. CONCRETE FOOTING SHALL BE OF PORTLAND CEMENT AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 P.S.I.
5. SIGN SHALL BE MINIMUM 6'-0" CLEAR FROM EDGE OF PAVEMENT.
6. BARRICADE SHALL BE DESIGNED TO WITHSTAND 120 M.P.H. WIND LOAD.

ROAD BARRICADE DETAIL
NTS

ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
OWENSBORO, KY 42303
WWW.ZEVCOHEN.COM
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 4583)

NO.	DATE	BY	SUBMITTALS / REVISIONS
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4	07-08-25	MLR	RESUBMITTED TO CITY

ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS
CONSTRUCTION DETAILS

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 39-47_18169-DET-PH3-4
XREFS: 18169BAS.DWG
XREFS: 18169SUR.DWG



MELIA L. RUSSELL, P.E., NO.68357
KRISTOPHER T. ROWLEY, P.E., NO.84263
NOT VALID WITHOUT SEAL

SHEET: C45 OF 47

G:\18169 - SHELL POINT CO\CIVIL\ENGINEERING PLANS\CAD\DWGS\PHASES 3 & 4\39-47_18169-DET-PH3-4.DWG - PRINTED 7/30/2025 2:43 PM

PUMP STATION DATA TABLE																													
PUMP STATION NUMBER	DISCHARGE PIPE SIZE	INFLUENT PIPE SIZE	INFLUENT PIPE INV.	A	B	C	D	E	F	G	H	J	K	L	M	N	O	S	T	U	V	W	X	Y	Z	GPM*	TDH	HP	VOLT	PHASE	HERTZ
118	4"	10"	12.2'	8"	2'	3'	1.5'	2.5'	2.5'	1.25'	2'	2'	1.25'	6.5'	8"	6'	18"	22.4'	7.36'	8.86'	9.78'	10.7'	11.7'	28.0'	28.17	195	90.1	11	240	3	60
119	4"	10"	10.75'	8"	2'	3'	1.5'	2.5'	2.5'	1.25'	2'	2'	1.25'	6.5'	8"	6'	18"	22.4'	4.93'	6.43'	7.48'	9.25'	10.25'	28.0'	28.17	205	106.8	11	240	3	60

* 100 GPM MINIMUM

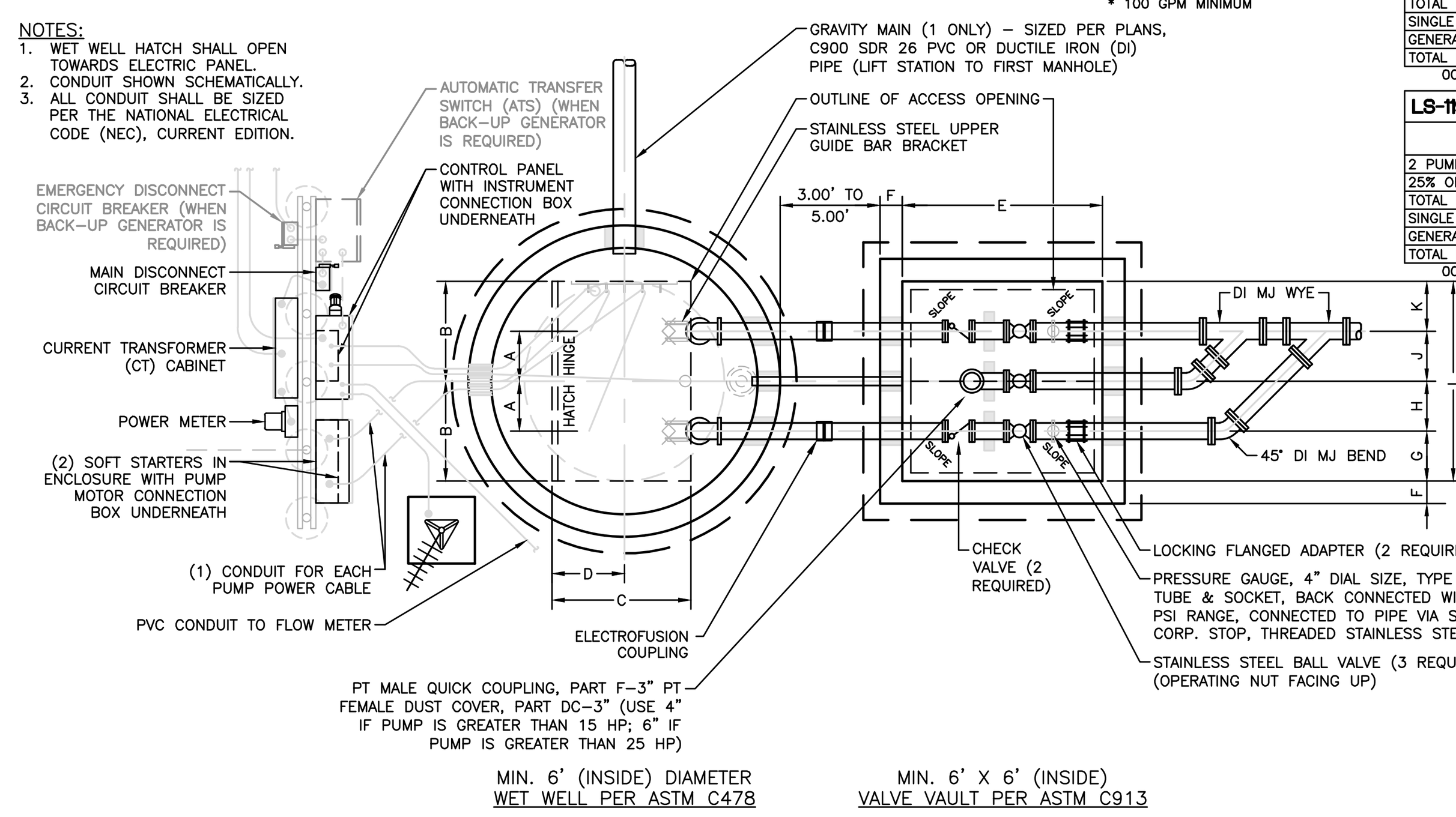
LS-118 LOAD CALCULATIONS	
DESCRIPTION	AMPERES @ 240V
2 PUMPS AT 11 HP EACH	26 A
25% OF LARGEST MOTOR	32.5 A
TOTAL MOTOR LOADS	52 A
SINGLE PHASE LOADS	32 A
GENERATOR ENCLOSURE	N/A
TOTAL LOADS	84 A

000V, 000A, 3Ø, 4W SERVICE

LS-119 LOAD CALCULATIONS	
DESCRIPTION	AMPERES @ 240V
2 PUMPS AT 11 HP EACH	26 A
25% OF LARGEST MOTOR	32.5 A
TOTAL MOTOR LOADS	52 A
SINGLE PHASE LOADS	32 A
GENERATOR ENCLOSURE	N/A
TOTAL LOADS	84 A

000V, 000A, 3Ø, 4W SERVICE

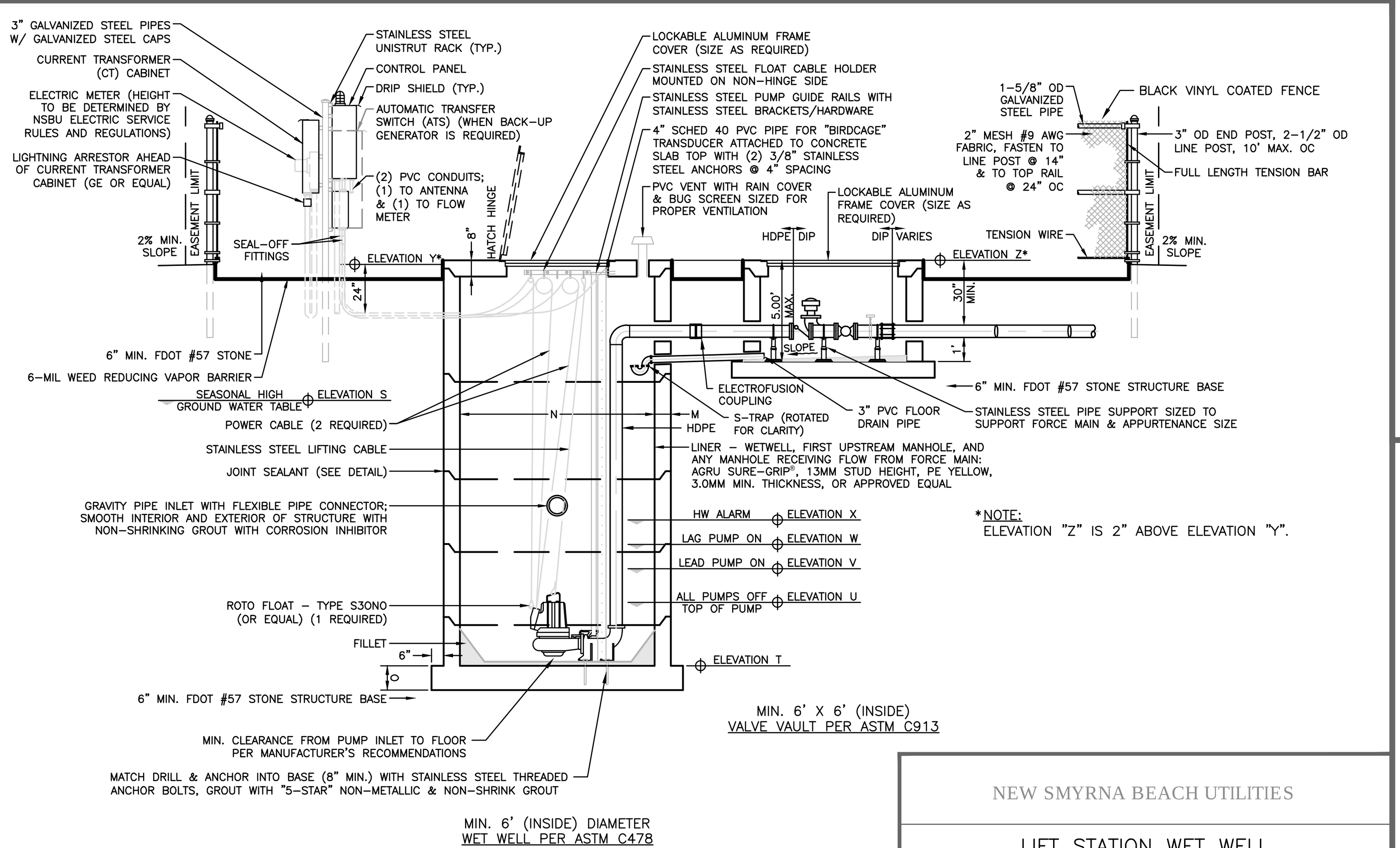
NOTES:
1. WET WELL HATCH SHALL OPEN TOWARDS ELECTRIC PANEL.
2. CONDUIT SHOWN SCHEMATICALLY.
3. ALL CONDUIT SHALL BE SIZED PER THE NATIONAL ELECTRICAL CODE (NEC), CURRENT EDITION.



NEW SMYRNA BEACH UTILITIES

LIFT STATION WET WELL
VALVE VAULT PLAN

SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-29

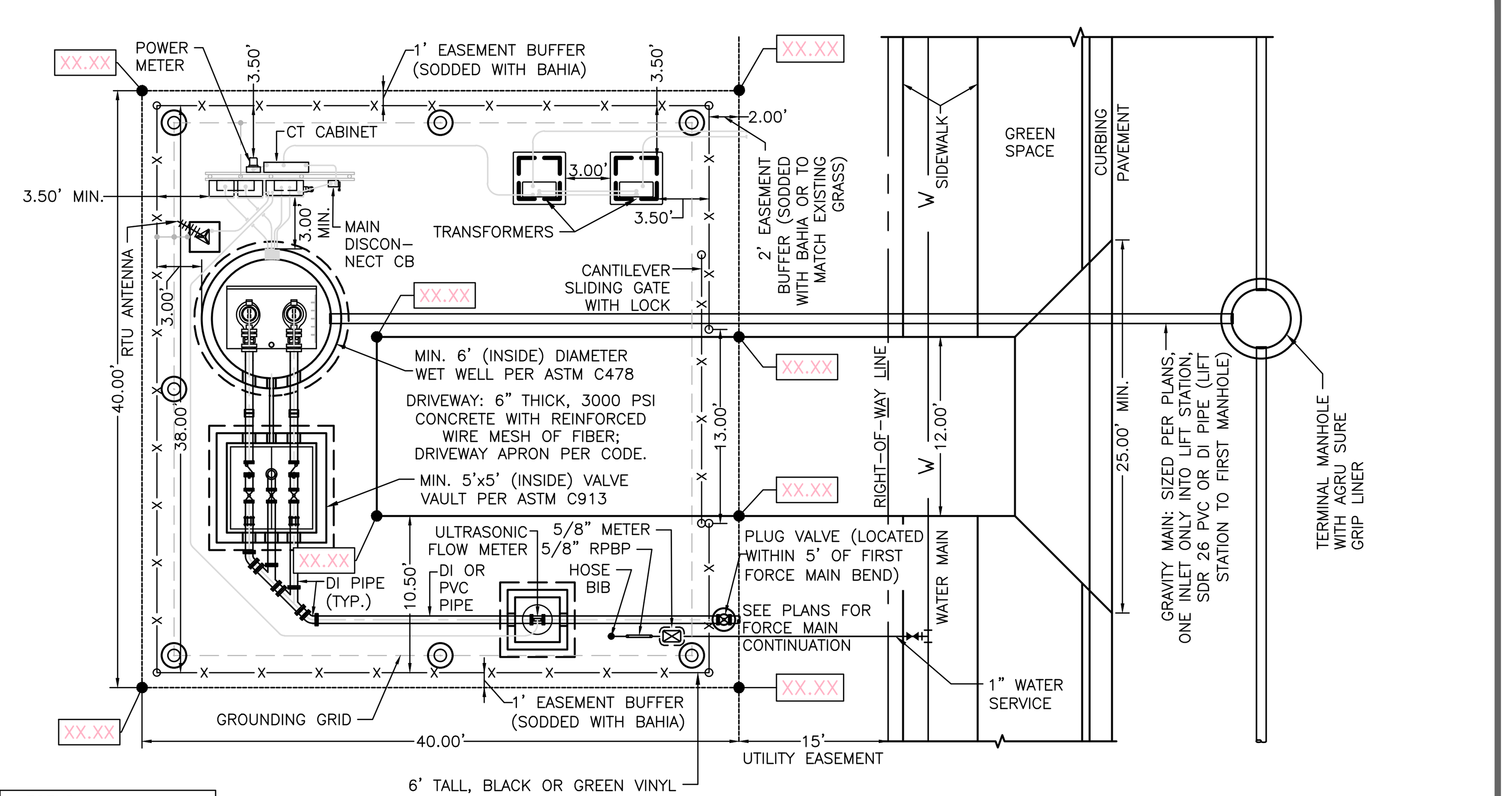


*NOTE:
ELEVATION "Z" IS 2" ABOVE ELEVATION "Y".

NEW SMYRNA BEACH UTILITIES

LIFT STATION WET WELL
VALVE VAULT PROFILE

SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-30



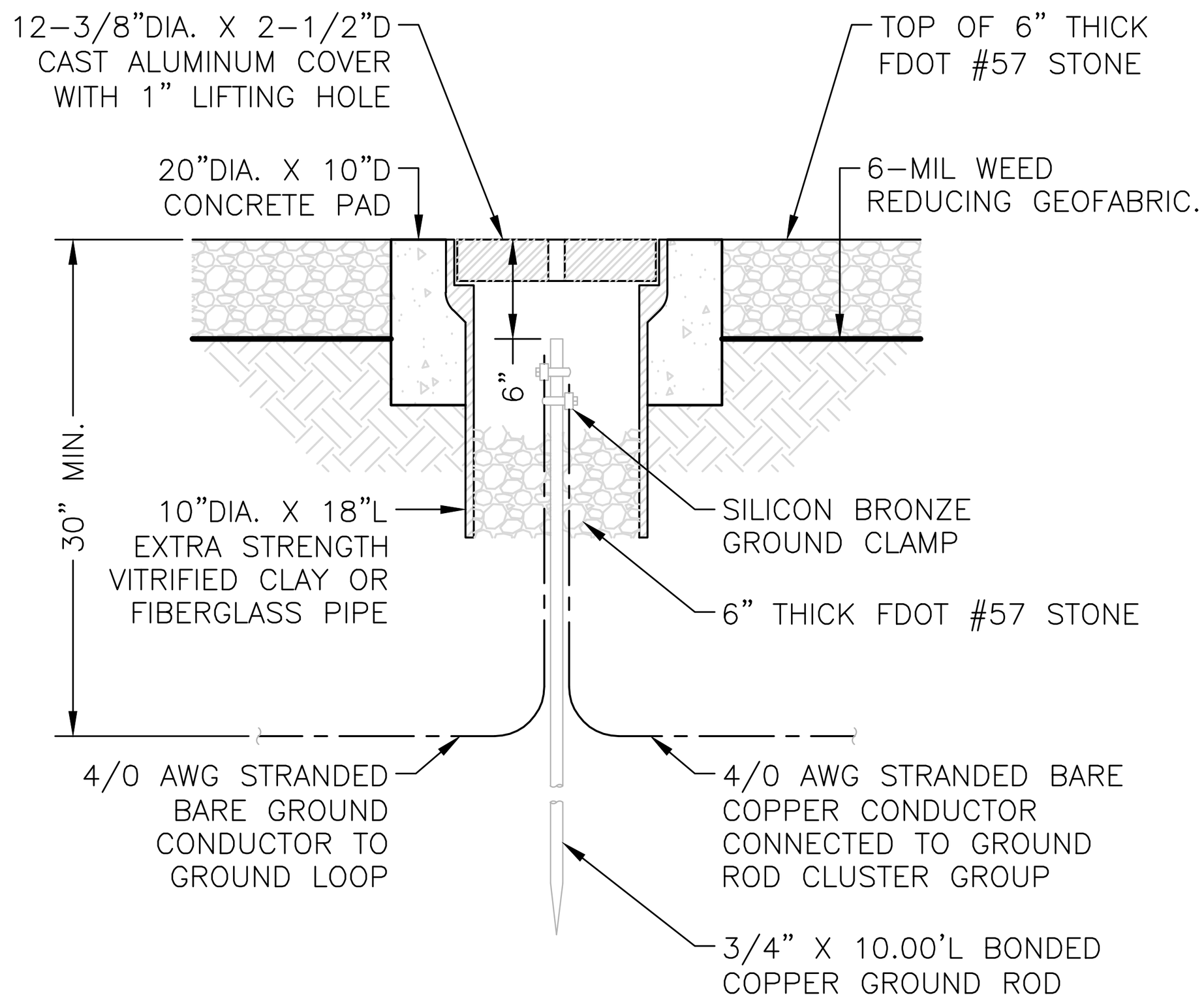
LEGEND	
XX.XX	ELEVATION

NOTE: FENCE TO BE SEPARATED A MINIMUM OF 3'-6" CLEAR DISTANCE FROM ELECTRICAL EQUIPMENT PER THE NATIONAL ELECTRICAL CODE (NEC) ARTICLE 110, LATEST EDITION.

NEW SMYRNA BEACH UTILITIES

LIFT STATION WET WELL
VALVE VAULT PLAN

SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-32



NOTE:
REFER TO PROJECT SPECIFICATION FOR MINIMUM SYSTEM RESISTANCE TO GROUND. IF THIS RESISTANCE CANNOT BE MET WITH SINGLE 10.00' RODS, ADD ADDITIONAL SECTIONS TO RODS OR ADD NEW RODS AS REQUIRED, SPACED AT 6.00' TO 10.00' OC.

NEW SMYRNA BEACH UTILITIES

LIFT STATION
GROUND ROD/GROUND LOOP
TEST POINT

SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-40

NOTE: ALL PARTS LISTED ARE "OR APPROVED EQUAL".

QTY.	ABBR.	DESCRIPTION	MANUFACTURER, PART#
2	ENC	ENCLOSURE, TYPE 316 STAINLESS STEEL, NEMA 4X	CUSTOM EQUIPMENT, 36X30X12 W/3PT. LATCH
1	ENC	ENCLOSURE, TYPE 316 STAINLESS STEEL, NEMA 4X	CUSTOM EQUIPMENT, 18X30X8 (PUMP CONNECTION BOX)
1	ENC	ENCLOSURE, TYPE 316 STAINLESS STEEL, NEMA 4X	CUSTOM EQUIPMENT, 18X18X8 (INSTR. CONNECTION BOX)
6		DIN RAIL, 1 METER	SCHNEIDER ELECTRIC, 16-700DIN
1	MCB	MAIN CIRCUIT BREAKER, 000A	SQUARE D, X (SIZE PER PUMP MANUFACTURER)
1	ECB	EMERGENCY CIRCUIT BREAKER, 000A	SQUARE D, X (SIZE PER PUMP MANUFACTURER)
2	PCB1,2	PUMP CIRCUIT BREAKER, 000A	SQUARE D, X (SIZE PER PUMP MANUFACTURER)
2	PDPCB	POWER DISTRIBUTION PANEL CIRCUIT BREAKER, 20A	SQUARE D, QOU120
1	CCB	CONTROL CIRCUIT BREAKER, 30A	SQUARE D, QOU130
1	LCB	LIGHT CIRCUIT BREAKER, 20A	SQUARE D, QOU120
1	DRB	GFDR CIRCUIT BREAKER, 20A	SQUARE D, QOU120
1	RTUCB	RTU CIRCUIT BREAKER, 20A	SQUARE D, QOU120
1	FMCB	FLOW METER CIRCUIT BREAKER, 20A	SQUARE D, QOU120
1	TCB	TFS/TCU CIRCUIT BREAKER, 10A	DFS, 014-0010
2	F4,5	FUSE, 15A	BUSSMANN, FNQR15
2	F6,10	FUSE, 1/4A	BUSSMANN, KLM-1/4
1	XFMR	0KVA, 000V/000V, CONTROL TRANSFORMER	SQUARE D, X
1	GFDR	120V GROUND FAULT DUPLEX RECEPTACLE	HUBBELL, GFR5252IA
1	LS	LIGHT SWITCH & FACE PLATE	HUBBELL, CS1201I & P1
1		PANEL LIGHT	AMERICAN LIGHTING, LXC-2H-WH
1		COOLING FAN	EBM-PAPST, ACI 4420 HH
1		FLASHING ALARM LIGHT	INGRAM PRODUCTS, INC., SBN120AC
1	TCU	TAC PACK TELEMETRY CONTROL UNIT – TCU001	DFS, DFS-00367-011-02
1		WIRE/COMPONENT HARNESS	DFS, DFS-00396-108-02
7	F#	FUSE AND HOLDER, WAGO	DFS, DFS-00271-008-09, 1AMP SLOW BLOW
2	R1,2	RESISTOR BLOCK, 100K, WAGO	DFS, DFS-00271-008-07 (REQ'D FOR 480V)
0	R3,4	RESISTOR BLOCK, 47K, WAGO	DFS, DFS-00271-008-01
2	R3,4	RESISTOR BLOCK, 100K, WAGO	DFS, DFS-00271-008-07
1	TFS	TRANSIENT FILTER SHIELD – TFS001	DFS, DFS-00306-008-01
1		POLYPHASER COAXIAL SURGE PROTECTION KIT	DFS, DFS-00392-008-01
1		BATTERY BACKUP	DFS, DFS-00363-008-02
1		46" RF PIGTAIL	DFS, DFS-00125-008-12
1	SS1	000V SURGE SUPPRESSOR	DITEK, DTK-
1	SS2	120V SURGE SUPPRESSOR (DFS MODEL SPS001)	DITEK, DTK-120HW
1	ISR	INTRINSICALLY SAFE RELAY	ATC DIVERSIFIED, ISO-120-AFA
1	SA	SURGE ARRESTOR	PHOENIX CONTACT, TT-2-PE-24DC, 2838186
1		END COVER FOR SURGE ARRESTOR	PHOENIX CONTACT, 2838995
1	ISB	INTRINSICALLY SAFE BARRIER	DWYER INSTRUMENTS, MTL5041
2		PUMP SPLICER TERMINAL BLOCK	BUSSMANN, 16204-3
30	TB#	TERMINAL BLOCK	SQUARE D, 9080GR6
1		FOLDING LAPTOP SHELF, 18"	SCHAEFER'S ELECTRICAL ENCLOSURES, SP-SHELF18
1	GEN REC	GENERATOR RECEPTACLE	RUSSELLSTOLL, JRSB1044FR
1	FLOAT	ROTO-FLOAT SWITCH	ANCHOR SCIENTIFIC, S30NO
1	BCT	BIRDCAGE® LEVEL TRANSDUCER	BLUE RIBBON CORP., BC001
2	SOST1,2	SOFT STARTER	SOLCON, RVS-DX-##/SQUARE D, ALTISTART ATS22###
1	FM	FLOW METER, ULTRASONIC	CLARK SONIC®, CSLFC

NEW SMYRNA BEACH UTILITIES

LIFT STATION
CONTROL PANEL
ELECTRICAL BILL OF MATERIALS

SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-37

ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
ORMOND BEACH, FL 32174
WWW.ZEVCOHEN.COM

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(EB 4516) (LC 62)

NO.	DATE	BY	SUBMITTALS / REVISIONS
1	10-20-23	MLR	INITIAL SUBMITTAL TO CITY
2	09-16-24	MLR	RESUBMITTED TO CITY
3	04-04-25	MLR	RESUBMITTED TO CITY
4	07-18-25	MLR	RESUBMITTED TO CITY

ARDISIA PARK
PHASE 3 & 4
FINAL ENGINEERING PLANS
CONSTRUCTION DETAILS

CITY OF NEW SMYRNA BEACH   VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169
DESIGNED BY: MLR
DRAFTED BY: MLR
CHECKED BY: MKW

DRAWING FILE: 39-47_18169-DET-PH3-4
XREF'S: 18169BAS.DWG
XREF'S: 18169SUR.DWG

MELIA L. RUSSELL LICENSE No 68357 STATE OF FLORIDA PROFESSIONAL ENGINEER

MELIA L. RUSSELL, P.E., NO.68357
KRISTOPHER T ROWLEY, P.E., NO.84263
NOT VALID WITHOUT SEAL

SHEET: C46 OF 47

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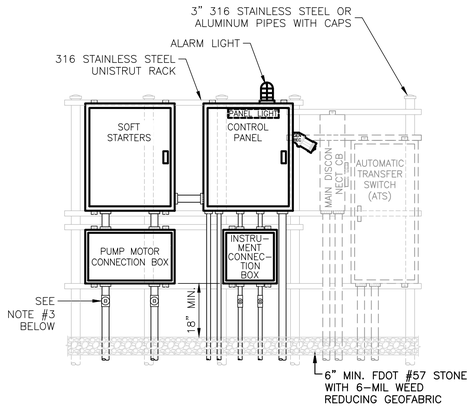
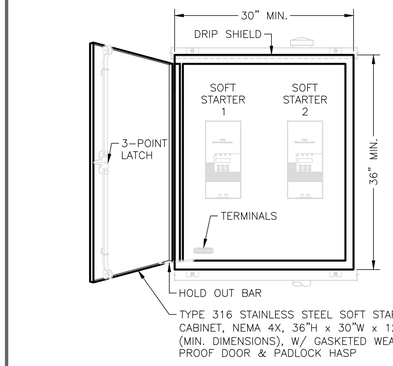


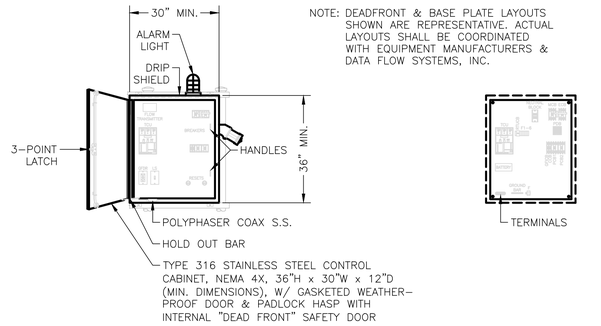
NOTES:
1. ALL MOUNTING HARDWARE SHALL BE TYPE 316 STAINLESS STEEL.
2. ALL ENCLOSURES SHALL BE TYPE 316 STAINLESS STEEL, NEMA 4X RATED, WITH GASKETED WEATHERPROOF DOORS.
3. SEAL-OFF CONNECTIONS & CONDUIT CONSTRUCTION FOR ALL CONDUITS PENETRATING INTO THE WET WELL SHALL COMPLY WITH, & BE INSTALLED PER, NEC ARTICLE 501, LATEST EDITION.

NEW SMYRNA BEACH UTILITIES	
LIFT STATION EQUIPMENT RACK (WET WELL SIDE)	
SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-31



NOTE:
1. DEADFRONT LAYOUT SHOWN IS REPRESENTATIVE. ACTUAL LAYOUT SHALL BE COORDINATED WITH SOLCON RVSS REP ICON TECHNOLOGIES.
2. NSBU ENGINEERING AND LIFT STATION DEPARTMENTS MAY REQUIRE A VFD OVER A SOFT START, WHERE FLOW SUPERSEDES PUMP HORSEPOWER.

NEW SMYRNA BEACH UTILITIES	
LIFT STATION SOFT STARTER PANEL ELEVATION	
SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-33

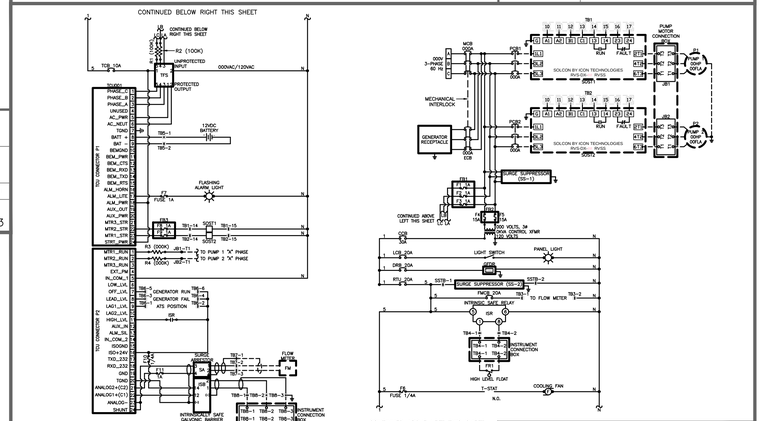


NOTE: DEADFRONT & BASE PLATE LAYOUTS SHOWN ARE REPRESENTATIVE. ACTUAL LAYOUTS SHALL BE COORDINATED WITH EQUIPMENT MANUFACTURERS & DATA FLOW SYSTEMS, INC.

ENCLOSURE & DEADFRONT LAYOUT

BASE PLATE LAYOUT

NEW SMYRNA BEACH UTILITIES	
LIFT STATION CONTROL PANEL ELEVATION	
SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-34

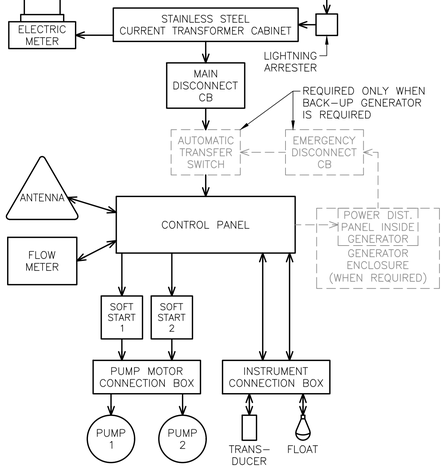


ABBREVIATIONS

A	AMPS	DRB	DUPLEX RECEPTACLE BREAKER	ISR	INTRINSICALLY SAFE RELAY	NO	NORMALLY OPEN
AC	ALTERNATING CURRENT	ECB	EMERGENCY CIRCUIT BREAKER	L1	"A" PHASE LINE	OL	OVERLOAD
ATB	ATS BREAKER	FB	FUSE BLOCK	L2	"B" PHASE LINE	PDP	PHASE DISTRIBUTION PANEL
ATS	AUTOMATIC TRANSFER SWITCH	FBM	FUSE BLOCK [NUMBER]	L3	"C" PHASE LINE	PM	PHASE MONITOR
AUX	AUXILIARY	FLA	FULL LOAD AMPS	LCB	LIGHT CIRCUIT BREAKER	PWR	POWER
CB	CIRCUIT BREAKER	FR	FUSE RATING	LT	LIGHT	R	RELAY/STARTER [NUMBER]
C	CONDUIT	FMCB	FLOW METER CIRCUIT BREAKER	MA	MILLIAMPS	RTU	REQUEST TO SEND
CR	CIRCUIT BREAKER	FR	FLOAT REGULATOR	MCB	MAIN CIRCUIT BREAKER	RTS2	REMOTE TERMINAL UNIT
DFCB	DUPLEX FAULT CIRCUIT BREAKER	GFI	GROUND FAULT DUPLEX RECEPTACLE	MP	MOTOR PROTECTOR	V	VOLTS
COM	COMMON	GND	GROUND	MS	MOTOR STARTER	VAC	VOLTS ALTERNATING CURRENT
CTS	CLEAR TO SEND	HP	HORSEPOWER	MTR	MOTOR	VDC	VOLTS DIRECT CURRENT
DFS	DATA FLOW SYSTEMS, INC.	ISB	INTRINSICALLY SAFE BARRIER	N	NEUTRAL	VFD	VARIABLE FREQUENCY DRIVE
						XFMR	TRANSFORMER

NOTE: CONTRACTOR SHALL COORDINATE PANEL WIRING AND TERMINATIONS DIRECTLY WITH THE PANEL BUILDER(S), AND THE NON-CLOG SUBMERSIBLE PUMP SUPPLIER.

NEW SMYRNA BEACH UTILITIES	
LIFT STATION CONTROL PANEL WIRING DIAGRAM	
SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-36



NEW SMYRNA BEACH UTILITIES	
LIFT STATION CONTROL RISER SINGLE LINE DIAGRAM	
SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-35

120V SCHEDULE SHOWN FOR GENERAL INFO ONLY. CIRCUIT BREAKERS ARE AN INTEGRAL PART OF THE FACTORY ASSEMBLED CONTROL PANEL. SEE SCHEMATIC FOR DETAILS.

CKT	DESCRIPTION	VA	BKR	WIRES	CONDUIT
PCB1,2	PUMP	000	OP-00A	2-#12, 1-#12 GND	INTERNAL
CCB	CONTROL CB/DFS TCU	500	1P-30A	2-#12, 1-#12 GND	INTERNAL
LCB	PUMP CP LIGHT	240	1P-20A	2-#12, 1-#12 GND	INTERNAL
DRB	PUMP CP RECEPTACLE	360	1P-20A	2-#12, 1-#12 GND	INTERNAL
RTU	REMOTE TELEMETRY UNIT	000	1P-20A	2-#12, 1-#12 GND	INTERNAL
FMCB	FLOW METER	100	1P-20A	2-#12, 1-#12 GND	INTERNAL
TCB	TRANSIENT FILTER SHIELD	300	1P-10A	2-#12, 1-#12 GND	INTERNAL
MS1A	PUMP 1 PROTECTION RELAY	000	1P-20A	2-#12, 1-#12 GND	INTERNAL
MS2A	PUMP 2 PROTECTION RELAY	000	1P-20A	2-#12, 1-#12 GND	INTERNAL
F11	FLOW TRANSMITTER	1A	1A FUSE	2-#12, 1-#12 GND	SCH 40 PVC/INTERNAL
	TOTAL	0000			

NEW SMYRNA BEACH UTILITIES	
LIFT STATION CONTROL PANEL SCHEDULE	
SCALE: NTS	SHEET 1 OF 1
DATE: 10/2023	
REV.	SS-38

ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
OMNIPARK BEACH, FL 32174
WWW.ZEVCOHEN.COM

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 4583)

NO.	DATE	BY	SUBMITTALS / REVISIONS
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ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS CONSTRUCTION DETAILS

CITY OF NEW SMYRNA BEACH — VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169
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DRAFTED BY: MLR
CHECKED BY: MKW
DRAWING FILE: 39-47_18169-DET-PH3-4
XREFS: 18169BAS.DWG
XREFS: 18169SUR.DWG

MELIA L. RUSSELL LICENSE No 68357 STATE OF FLORIDA PROFESSIONAL ENGINEER
Digitally signed by Melia L Russell
DN: c=US, o=Florida, ou=Not Valid without a Paper Copy and Associated Seal, cn=Melia L Russell, email=melia@zevcohen.com
Reason: I am the author of this document
Location: Florida
Date: 2025-07-24 15:31:36-04'00'

MELIA L. RUSSELL, P.E., NO.68357
KRISTOPHER T ROWLEY, P.E., NO.84263
NOT VALID WITHOUT SEAL

SHEET: C47 OF 47

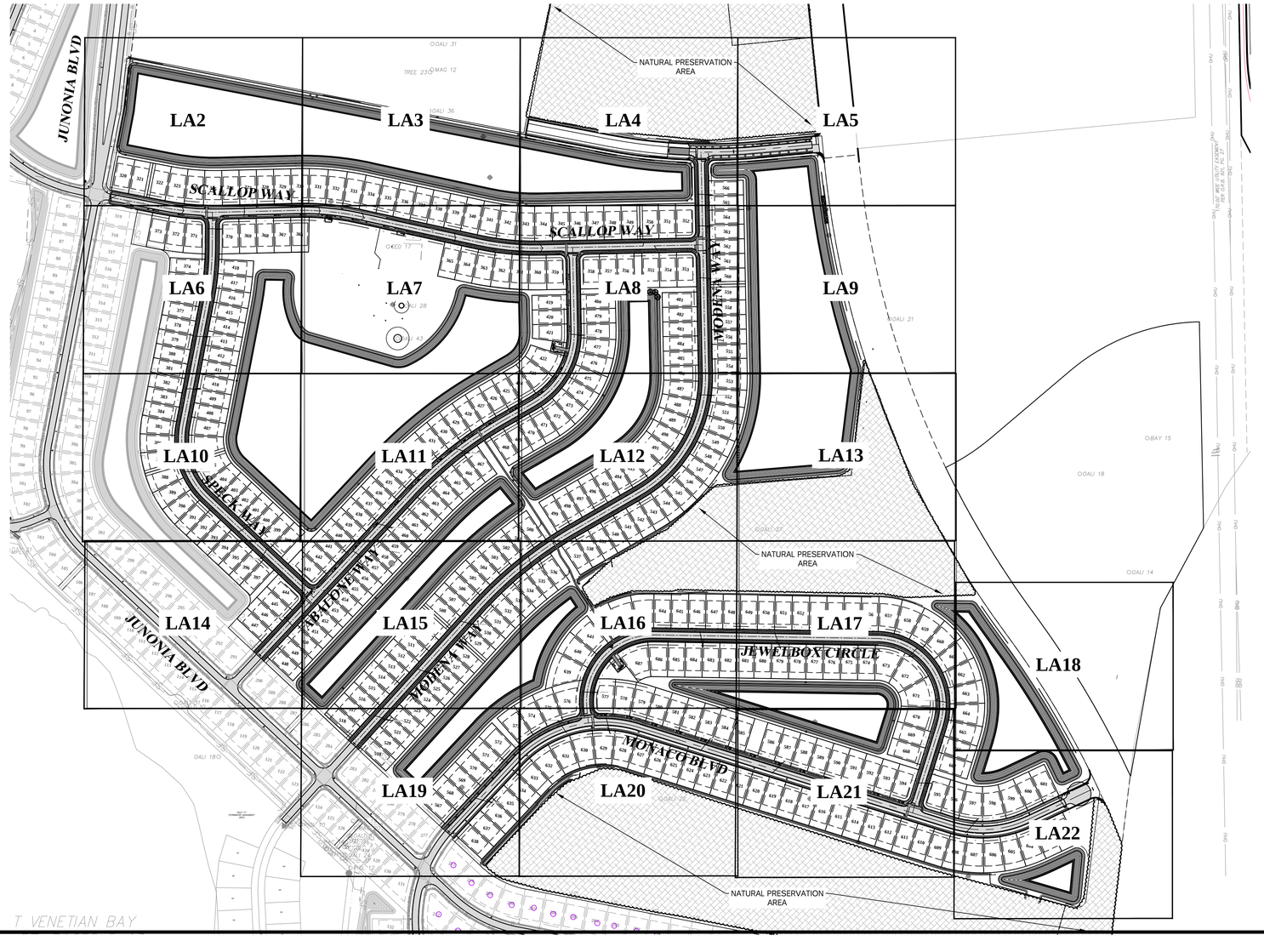
R:\18169 — SHELL POINTE CO\CIVIL ENGINEERING PLANS\CAD\DWGS\PHASES 3 & 4\39-47_18169-DET-PH3-4.DWG — PRINTED 7/31/2025 2:42 PM

PLANT SCHEDULE

CODE	QTY	LA 10	LA 11	LA 12	LA 13	LA 14	LA 15	LA 16	LA 17	LA 18	LA 19	LA 2	LA 20	LA 21	LA 22	LA 3	LA 4	LA 5	LA 6	LA 7	LA 8	LA 9	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER		REMARKS
TREES																												
CV	12									6								2				4	CALLISTEMON VIMINALIS	WEEPING BOTTLEBRUSH	3` CAL., 10` HT., MIN.	30 GAL.		
ED	102		38	10		14	16														24		ELAEOCARPUS DECIPIENS TM	JAPANESE BLUEBERRY TREE	3` CAL., 10` HT., MIN.			FULL TO GROUND
IP	96	37				13				6					2			2	30			6	ILEX VOMITORIA `PENDULA`	WEEPING YAUPON HOLLY	2.5" CAL.	45 GAL.		
QL	364			45			37	9			28	9	42	39	24		8		27	37	59		QUERCUS LAEVIS	TURKEY OAK	3` CAL., 10` HT., MIN.			
QS	14		3	3				8															QUERCUS SHUMARDII	SHUMARD OAK	3` CAL., 10` HT., MIN.			
QV	23	2	1	2			4	1	1		2	2				2	2		1		1	2	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	3` CAL., 10` HT., MIN.			
QV2	14									6					1			2				5	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	3` CAL., 10` HT., MIN.			
QH	22																10	12					QUERCUS VIRGINIANA `HIGH RISE`	HIGH RISE LIVE OAK	3` CAL., 10` HT., MIN.			
SB	10	1	2	2			2		1					2									SALIX BABYLONICA	WEEPING WILLOW	3` CAL., 10` HT., MIN.			
TD	174	3	8	1	3		2	43	46	3	4	6	1	19	8	5	10	3		3	3	3	TAXODIUM DISTICHUM	BALD CYPRESS	3` CAL., 10` HT., MIN.			
PALM TREES																												
SS	106		17	14	5		6	12	3	10		6		3		6	3		3		8	10	SABAL PALMETTO	CABBAGE PALM	8`-10` HT. O.A.			
CODE	QTY	LA 10	LA 11	LA 12	LA 13	LA 14	LA 15	LA 16	LA 17	LA 18	LA 19	LA 2	LA 20	LA 21	LA 22	LA 3	LA 4	LA 5	LA 6	LA 7	LA 8	LA 9	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	REMARKS
SHRUBS																												
MC2	198									99								24				75	MYRICA CERIFERA	WAX MYRTLE	24" HT. X 24" SP.	3 GAL.	36" o.c.	FULL
SR	344									129					43			43				129	SERENOA REPENS	SAW PALMETTO	24" HT. X 18" SP.	3 GAL.	36" o.c.	
GROUND COVERS																												
MC	468		20	10				30		153					51			51				153	MUHLENBERGIA CAPILLARIS	MUHLY GRASS	10" HT. X 10" SP.	1 GAL.	30" o.c.	
SP	950									441					34			147				328	SPARTINA PATENS	SALT MEADOW CORD GRASS	10" HT. X 10" SP.	1 GAL.	24" o.c.	
SOD																												
PNA	516,550 SF							253 SF						68,032 SF	272,931 SF		171,362 SF	3,972 SF					PASPALUM NOTATUM `ARGENTINE`	BAHIA SOD	---			
SSP	41,611 SF					1,337 SF					5,135 SF		9,717 SF		4,583 SF		1,494 SF		8,251 SF	2,985 SF	8,109 SF		STENOTAPHRUM SECUNDATUM `PROVISTA`	PROVISTA ST. AUGUSTINE SOD	---			

LEGEND

DENOTES NATURAL PRESERVATION / CONSERVATION AREA TO REMAIN.
PHASE 3&4 REQUIRED PRESERVATION 40.5
PHASE 3&4 PROVIDED PRESERVATION 61 ACRES



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CIVIL ENGINEERING
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PLANNING
TRANSPORTATION
(LC 42)
(EB 4583)

NO.	DATE	BY	SUBMITTALS / REVISIONS
1	10-20-23	MLR	INITIAL SUBMITTAL TO CITY
2	09-16-24	MLR	RESUBMITTED TO CITY
3	04-04-25	MLR	RESUBMITTED TO CITY
4	00-00-00	MLR	RESUBMITTED TO CITY

ARDISIA PARK
PHASE 3 & 4
FINAL ENGINEERING PLANS
LANDSCAPE PLAN & DETAILS

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

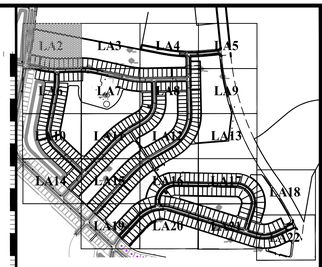
PROJECT NO: ZC 18169
DESIGNED BY: JES
DRAFTED BY: JES
CHECKED BY: JES
DRAWING FILE: 18169-LA-PHASE 3-4
XREF'S: 18169BAS.DWG
XREF'S: XXXXX.DWG

CHERYL W. CAMPBELL, RLA, NO. 001768
JAKE E. STEHR, RLA, NO. 6667462
NOT VALID WITHOUT SEAL

SHEET: LA1 OF 23

PLANT SCHEDULE LA 2

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
TREES					
QL	9	QUERCUS LAEVIS	TURKEY OAK	3" CAL., 10` HT., MIN.	
QV	2	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	3" CAL., 10` HT., MIN.	
TD	6	TAXODIUM DISTICHUM	BALD CYPRESS	3" CAL., 10` HT., MIN.	
PALM TREES					
SS	6	SABAL PALMETTO	CABBAGE PALM	8`-10` HT. O.A.	



KEY MAP

JUNONIA BLVD

BAHIA SOD

ST. AUGUSTINE SOD

SCALLOP WAY

SOD TWO COUNTOURS BELOW N.W.L TYP

3" MULCH RING TYP.

5' MULCH RING TYP.

320 321 322 323 324 325 326 327 328 329 330

MATCHLINE - SEE SHEET LA3

MATCHLINE - SEE SHEET LA6

0 15 30 45 60

SCALE : 1" = 30'

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(EB 4583)

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ARDISIA PARK
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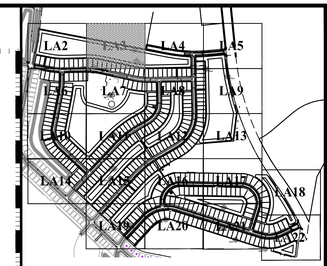
XREF'S: 18169BAS.DWG
XREF'S: XXXXX.DWG

CHERYL W. CAMPBELL, RLA, NO. 001768
JAKE E. STEHR, RLA, NO. 6667462
NOT VALID WITHOUT SEAL

SHEET: LA2 OF 23

PLANT SCHEDULE LA 3

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
TREES					
QV	2	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	3" CAL., 10` HT., MIN.	
TD	5	TAXODIUM DISTICHUM	BALD CYPRESS	3" CAL., 10` HT., MIN.	
PALM TREES					
SS	6	SABAL PALMETTO	CABBAGE PALM	8`-10` HT. O.A.	



KEY MAP

MATCHLINE - SEE SHEET LA2

MATCHLINE - SEE SHEET LA4

MATCHLINE - SEE SHEET LA7

BAHIA SOD

SOD TWO COUNTOURS BELOW N.W.L TYP

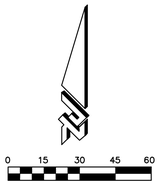
5' MULCH RING TYP.

3' MULCH RING TYP.

BORE HOLE B-2
GROUND EL.=25.52

BORE HOLE AB-17
GROUND EL.=26.02

331 332 333 334 335 336 337



SCALE : 1" = 30'

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(EB 4349) (LC 42)

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ARDISIA PARK
PHASE 3 & 4
FINAL ENGINEERING PLANS
LANDSCAPE PLAN & DETAILS

CITY OF NEW SMYRNA BEACH — VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169

DESIGNED BY: JES

DRAFTED BY: JES

CHECKED BY: JES

DRAWING FILE: 18169-LA-PHASE 3-4
XREF'S: 18169BAS.DWG
XREF'S: XXXXX.DWG

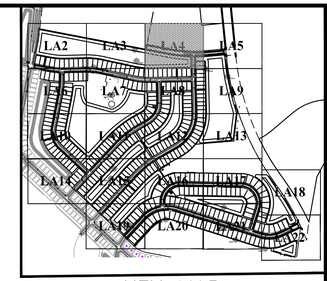
CHERYL W. CAMPBELL, RLA, NO. 001768
JAKE E. STEHR, RLA, NO.6667462
NOT VALID WITHOUT SEAL

SHEET: LA3 OF 23

PLANT SCHEDULE LA 4

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
TREES					
QL	8	QUERCUS LAEVIS	TURKEY OAK	3" CAL., 10` HT., MIN.	
QV	2	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	3" CAL., 10` HT., MIN.	
QH	10	QUERCUS VIRGINIANA `HIGH RISE`	HIGH RISE LIVE OAK	3" CAL., 10` HT., MIN.	
TD	10	TAXODIUM DISTICHUM	BALD CYPRESS	3" CAL., 10` HT., MIN.	
PALM TREES					
SS	3	SABAL PALMETTO	CABBAGE PALM	8`-10` HT. O.A.	

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	REMARKS
SOD						
PNA	171,362 SF	PASPALUM NOTATUM `ARGENTINE`	BAHIA SOD	---		
SSP	1,494 SF	STENOTAPHRUM SECUNDATUM `PROVISTA`	PROVISTA ST. AUGUSTINE SOD	---		



KEY MAP

LEGEND

DENOTES NATURAL PRESERVATION / CONSERVATION AREA TO REMAIN.
PHASE 3&4 REQUIRED PRESERVATION 40.5
PHASE 3&4 PROVIDED PRESERVATION 61 ACRES

MATCHLINE - SEE SHEET LA3

MATCHLINE - SEE SHEET LA5

NATURAL PRESERVATION AREA

SF

2 TD

BAHIA SOD

SOD TWO COUNTOURS BELOW N.W.L TYP.

5' MULCH RING TYP.

1 QV

3 SS

3' MULCH RING TYP.

3 TD

4 QL

4 QH

LIMPET WAY

ST. AUGUSTINE SOD

MODENA WAY

3 QL

566

565

MATCHLINE - SEE SHEET LA8

0 15 30 45 60

SCALE : 1" = 30'

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(LC 42)
(EB 4343)

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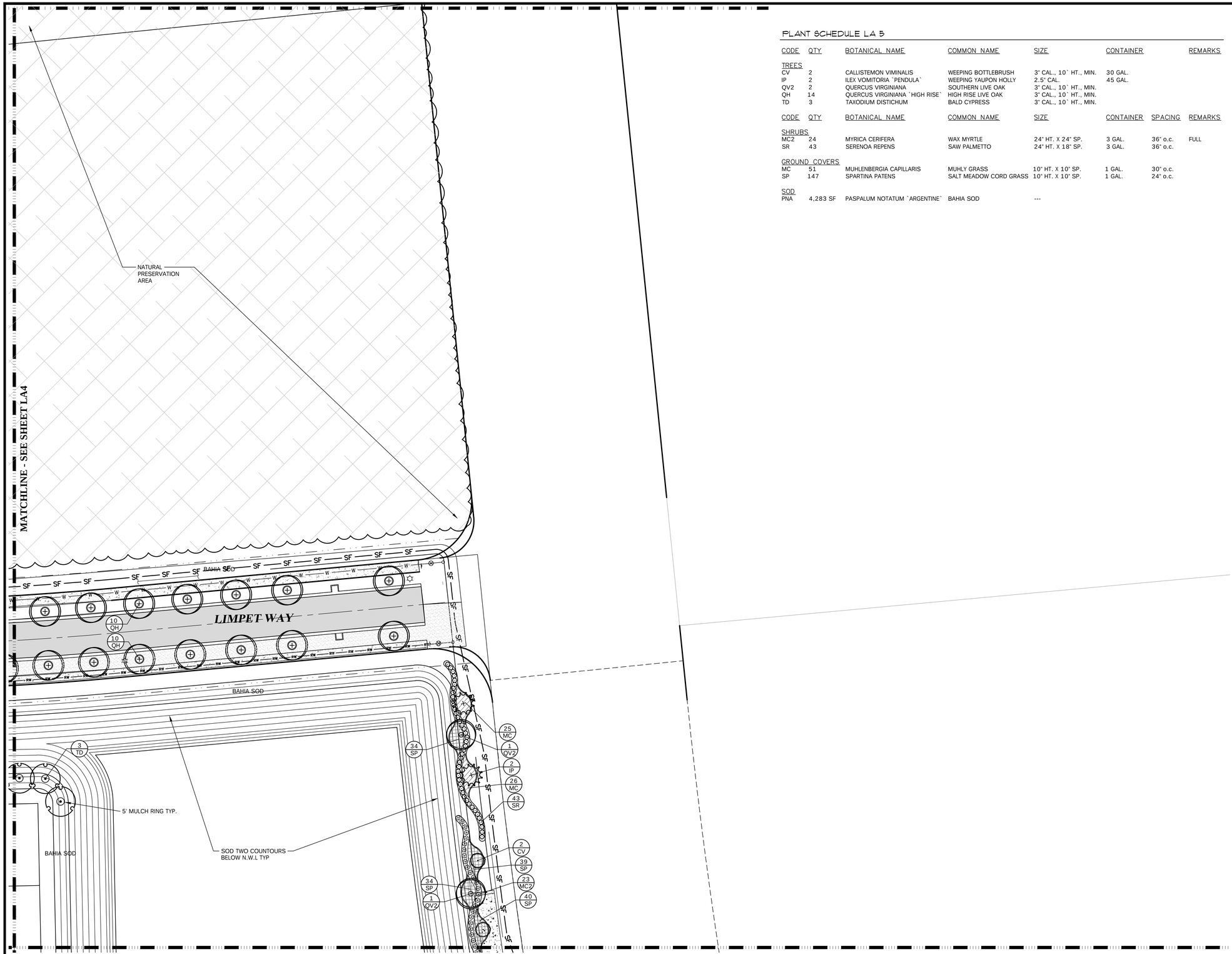
ARDISIA PARK
PHASE 3 & 4
FINAL ENGINEERING PLANS
LANDSCAPE PLAN & DETAILS

CITY OF NEW SMYRNA BEACH
VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169
DESIGNED BY: JES
DRAFTED BY: JES
CHECKED BY: JES
DRAWING FILE: 18169-LA-PHASE 3-4
XREFS: 18169BAS.DWG
XREFS: XXXXX.DWG

CHERYL W. CAMPBELL, RLA, NO. 001768
JAKE E. STEHR, RLA, NO.6667462
NOT VALID WITHOUT SEAL

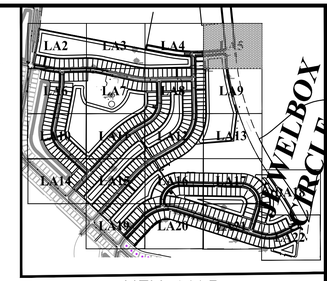
SHEET: LA4 OF 23



PLANT SCHEDULE LA 5

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	REMARKS
TREES						
CV	2	CALLISTEMON VIMINALIS	WEEPING BOTTLEBRUSH	3" CAL., 10` HT., MIN.	30 GAL.	
IP	2	ILEX VOMITORIA `PENDULA`	WEEPING YAUPON HOLLY	2.5" CAL.	45 GAL.	
QV2	2	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	3" CAL., 10` HT., MIN.		
QH	14	QUERCUS VIRGINIANA `HIGH RISE`	HIGH RISE LIVE OAK	3" CAL., 10` HT., MIN.		
TD	3	TAXODIUM DISTICHUM	BALD CYPRESS	3" CAL., 10` HT., MIN.		

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	REMARKS
SHRUBS							
MC2	24	MYRICA CERIFERA	WAX MYRTLE	24" HT. X 24" SP.	3 GAL.	36" o.c.	FULL
SR	43	SERENOA REPENS	SAW PALMETTO	24" HT. X 18" SP.	3 GAL.	36" o.c.	
GROUND COVERS							
MC	51	MUHLENBERGIA CAPILLARIS	MUHLY GRASS	10" HT. X 10" SP.	1 GAL.	30" o.c.	
SP	147	SPARTINA PATENS	SALT MEADOW CORD GRASS	10" HT. X 10" SP.	1 GAL.	24" o.c.	
SOD							
PNA	4,283 SF	PASPALUM NOTATUM `ARGENTINE`	BAHIA SOD	---			



KEY MAP

LEGEND

DENOTES NATURAL PRESERVATION / CONSERVATION AREA TO REMAIN.
PHASE 3&4 REQUIRED PRESERVATION 40.5
PHASE 3&4 PROVIDED PRESERVATION 61 ACRES

SCALE : 1" = 30'

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CIVIL ENGINEERING
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(LC 42)
(EB 4583)

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3	04-04-25	MLR	RESUBMITTED TO CITY
4	09-04-60	MLR	RESUBMITTED TO CITY

ARDISIA PARK
PHASE 3 & 4
FINAL ENGINEERING PLANS
LANDSCAPE PLAN & DETAILS

CITY OF NEW SMYRNA BEACH
VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169
DESIGNED BY: JES
DRAFTED BY: JES
CHECKED BY: JES
DRAWING FILE: 18169-LA-PHASE 3-4
XREFS: 18169BAS.DWG
XREFS: XXXXX.DWG

CHERYL W. CAMPBELL, RLA, NO. 001768
JAKE E. STEHR, RLA, NO.6667462
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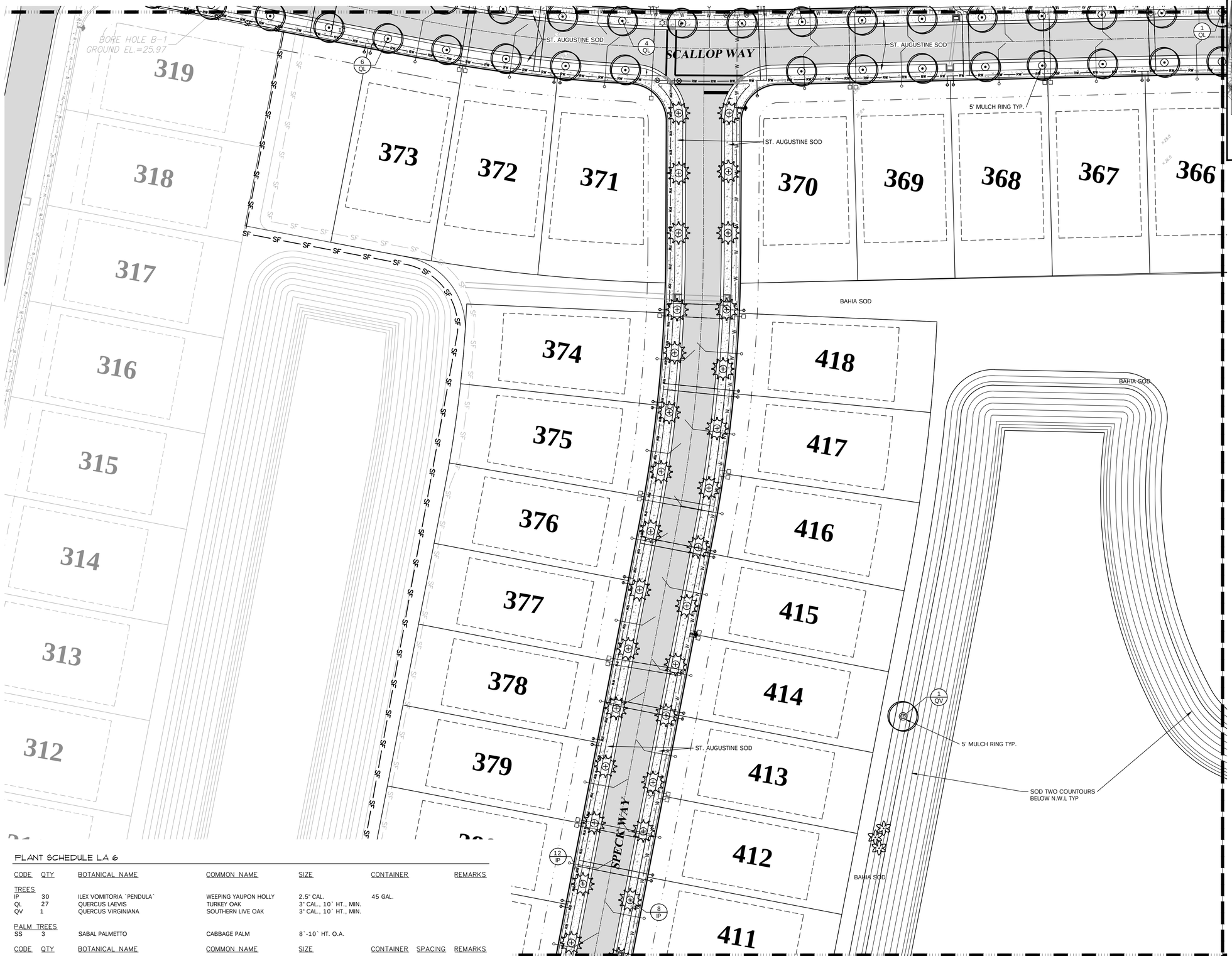
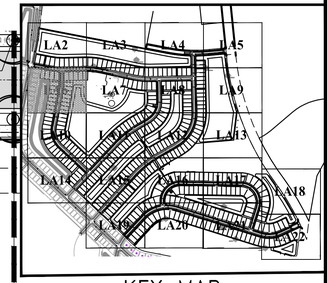
SHEET: LA5 OF 23

MATCHLINE - SEE SHEET LA2



MATCHLINE - SEE SHEET LA7

MATCHLINE - SEE SHEET LA10



KEY MAP

PLANT SCHEDULE LA 6

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	REMARKS
TREES						
IP	30	ILEX VOMITORIA `PENDULA`	WEEPING YAUPON HOLLY	2.5" CAL.	45 GAL.	
QL	27	QUERCUS LAEVIS	TURKEY OAK	3" CAL., 10` HT., MIN.		
QV	1	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	3" CAL., 10` HT., MIN.		
PALM TREES						
SS	3	SABAL PALMETTO	CABBAGE PALM	8`-10` HT. O.A.		

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	REMARKS
SOD							
SSP	8,251 SF	STENOTAPHRUM SECUNDATUM `PROVISTA`	PROVISTA ST. AUGUSTINE SOD	---			

0 15 30 45 60

SCALE : 1" = 30'

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TRANSPORTATION
(LC 42)
(EB 4593)

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ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS
LANDSCAPE PLAN & DETAILS

CITY OF NEW SMYRNA BEACH — VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169

DESIGNED BY: JES

DRAFTED BY: JES

CHECKED BY: JES

DRAWING FILE: 18169-LA-PHASE 3-4
XREF'S: 18169BAS.DWG
XREF'S: XXXXX.DWG

CHERYL W. CAMPBELL, RLA, NO. 001768
JAKE E. STEHR, RLA, NO 6667462
NOT VALID WITHOUT SEAL

SHEET: LA6 OF 23

MATCHLINE - SEE SHEET LA3

ST. AUGUSTINE SOD

1 QL

ST. AUGUSTINE SOD

16 QL

338

339

340

341

342

5' MULCH RING TYP.

SCALLOP WAY

BORE HOLE B-12
GROUND EL.=24.87

ST. AUGUSTINE SOD

4 QL

365

364

363

362

361

MATCHLINE - SEE SHEET LA8

MATCHLINE - SEE SHEET LA6

BAHIA SOD

BORE HOLE B-13
GROUND EL.=24.85

3 TD

SOD TWO COUNTOURS BELOW N.W.L TYP

TREES TO REMAIN

MATCHLINE - SEE SHEET LA11

KEY MAP

LA1 LA2 LA3 LA4 LA5 LA6 LA7 LA8 LA9 LA10 LA11 LA12 LA13 LA14 LA15 LA16 LA17 LA18 LA19 LA20 LA21 LA22

PLANT SCHEDULE LA 7

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	REMARKS
TREES						
QL	37	QUERCUS LAEVIS	TURKEY OAK	3" CAL., 10` HT., MIN.		
TD	3	TAXODIUM DISTICHUM	BALD CYPRESS	3" CAL., 10` HT., MIN.		
CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	REMARKS
SOD						
SSP	2,985 SF	STENOTAPHRUM SECUNDATUM `PROVISTA`	PROVISTA ST. AUGUSTINE SOD	---		

0 15 30 45 60

SCALE : 1" = 30'

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CIVIL ENGINEERING
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(LC 42)
(EB 6583)

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ARDISIA PARK
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LANDSCAPE PLAN & DETAILS

CITY OF NEW SMYRNA BEACH
VOLUSIA COUNTY, FLORIDA

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DRAWING FILE: 18169-LA-PHASE 3-4
XREFS: 18169BAS.DWG
XREFS: XXXXX.DWG

CHERYL W. CAMPBELL, RLA, NO. 001768
JAKE E. STEHR, RLA, NO.6667462
NOT VALID WITHOUT SEAL

MATCHLINE - SEE SHEET LA4

MATCHLINE - SEE SHEET LA4

MATCHLINE - SEE SHEET LA7

MATCHLINE - SEE SHEET LA9

MATCHLINE - SEE SHEET LA12

PLANT SCHEDULE LA 8

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
TREES					
ED	24	ELAEOCARPUS DECIPIENS TM	JAPANESE BLUEBERRY TREE	3" CAL., 10` HT., MIN.	FULL TO GROUND
QL	59	QUERCUS LAEVIS	TURKEY OAK	3" CAL., 10` HT., MIN.	
QV	1	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	3" CAL., 10` HT., MIN.	
TD	3	TAXODIUM DISTICHUM	BALD CYPRESS	3" CAL., 10` HT., MIN.	
PALM TREES					
SS	8	SABAL PALMETTO	CABBAGE PALM	8`-10` HT. O.A.	

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	REMARKS
SOD						
SSP	8,109 SF	STENOTAPHRUM SECUNDATUM `PROVISTA`	PROVISTA ST. AUGUSTINE SOD	---		

343 344 345 351 352 564 563 562 561 560 559 558 557 556 555 554 360 359 358 357 356 355 354 353 419 420 421 422 423 480 479 478 477 476 481 482 483 484 485 486

SCALLOP WAY

MODENA WAY

ABALONE WAY

ST. AUGUSTINE SOD

BAHIA SOD

SOD TWO COUNTOURS BELOW N.W.L TYP

12 QL · 2 QL · 5 QL · 4 QL · 10 QL · 13 QL · 2 QL · 3 SS · 5 SS · 1 QV · 3 TD · 12 ED · 12 ED

KEY MAP

LA1 LA2 LA3 LA4 LA5 LA6 LA7 LA8 LA9 LA10 LA11 LA12 LA13 LA14 LA15 LA16 LA17 LA18 LA19 LA20 LA21 LA22

0 15 30 45 60

SCALE : 1" = 30'

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ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 4358)

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1	10-20-23	MLR	INITIAL SUBMITTAL TO CITY
2	09-16-24	MLR	RESUBMITTED TO CITY
3	04-04-25	MLR	RESUBMITTED TO CITY
4	09-04-25	MLR	RESUBMITTED TO CITY

ARDISIA PARK
PHASE 3 & 4
FINAL ENGINEERING PLANS
LANDSCAPE PLAN & DETAILS

CITY OF NEW SMYRNA BEACH — VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169

DESIGNED BY: JES

DRAFTED BY: JES

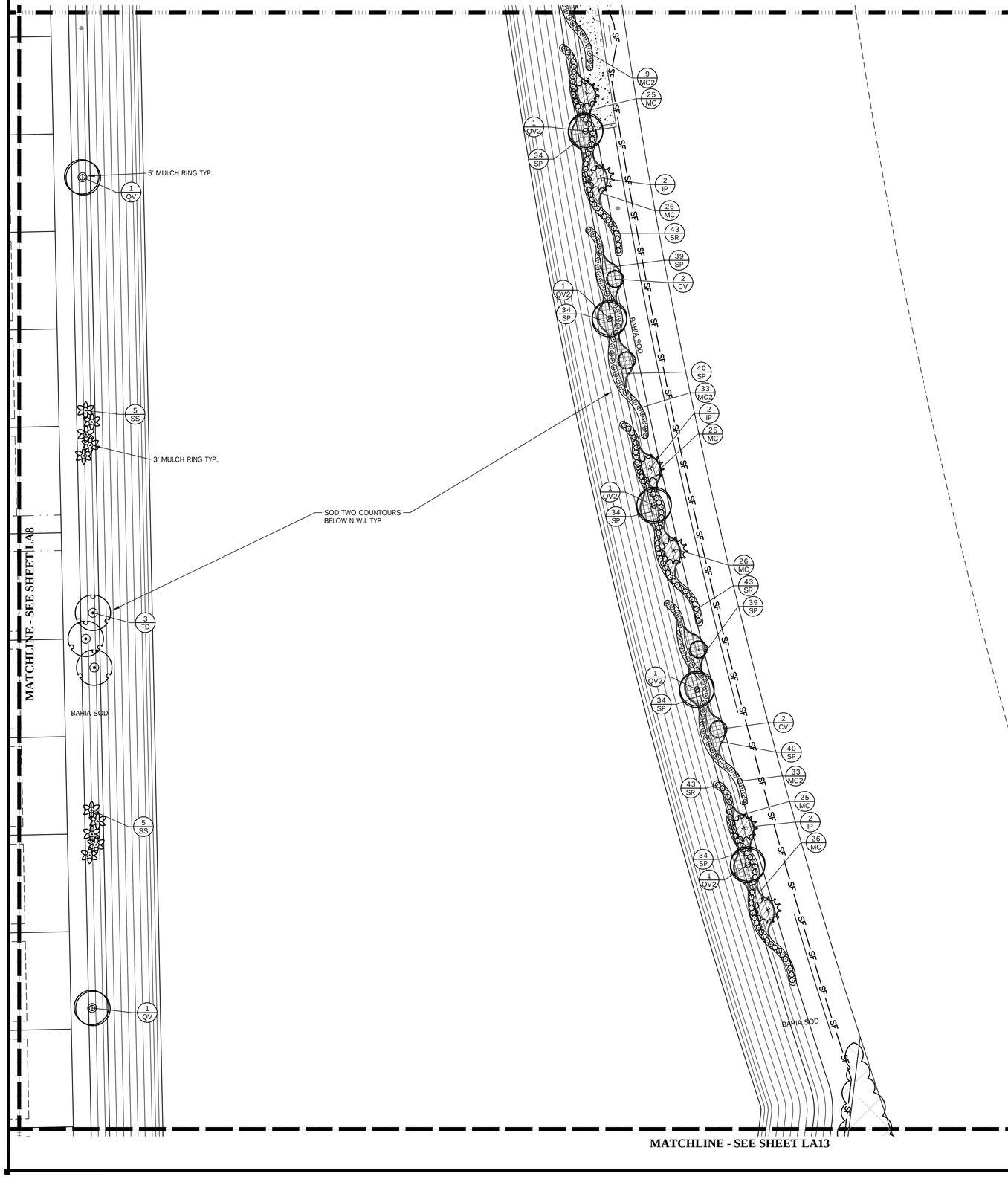
CHECKED BY: JES

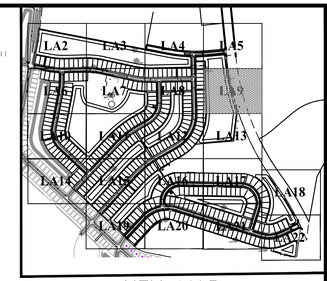
DRAWING FILE: 18169-LA-PHASE 3-4
XREFS: 18169BAS.DWG
XREFS: XXXXX.DWG

CHERYL W. CAMPBELL, RLA, NO. 001768
JAKE E. STEHR, RLA, NO.6667462
NOT VALID WITHOUT SEAL

SHEET: LA8 OF 23

MATCHLINE - SEE SHEET LA5





KEY MAP

PLANT SCHEDULE LA 9

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	REMARKS
TREES						
CV	4	CALLISTEMON VIMINALIS	WEEPING BOTTLEBRUSH	3" CAL., 10` HT., MIN.	30 GAL.	
IP	6	ILEX VOMITORIA `PENDULA`	WEEPING YAUPON HOLLY	2.5" CAL.	45 GAL.	
QV	2	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	3" CAL., 10` HT., MIN.		
QV2	5	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	3" CAL., 10` HT., MIN.		
TD	3	TAXODIUM DISTICHUM	BALD CYPRESS	3" CAL., 10` HT., MIN.		
PALM TREES						
SS	10	SABAL PALMETTO	CABBAGE PALM	8`-10` HT. O.A.		

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	REMARKS
SHRUBS							
MC2	75	MYRICA CERIFERA	WAX MYRTLE	24" HT. X 24" SP.	3 GAL.	36" o.c.	FULL
SR	129	SERENOA REPENS	SAW PALMETTO	24" HT. X 18" SP.	3 GAL.	36" o.c.	
GROUND COVERS							
MC	153	MUHLENBERGIA CAPILLARIS	MUHLY GRASS	10" HT. X 10" SP.	1 GAL.	30" o.c.	
SP	328	SPARTINA PATENS	SALT MEADOW CORD GRASS	10" HT. X 10" SP.	1 GAL.	24" o.c.	

0 15 30 45 60

SCALE : 1" = 30'

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ARDISIA PARK PHASE 3 & 4
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CITY OF NEW SMYRNA BEACH — VOLUSIA COUNTY, FLORIDA

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CHECKED BY: JES

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XREFS: 18169BAS.DWG
XREFS: XXXXX.DWG

CHERYL W. CAMPBELL, RLA, NO. 001768
JAKE E. STEHR, RLA, NO.6667462
NOT VALID WITHOUT SEAL

SHEET: LA9 OF 23

MATCHLINE - SEE SHEET LA6

382 383 384 385 386 387 388 389 390 391 392 393 410 409 408 407 406 405 404 403 402 401 400 399 398

ST. AUGUSTINE SOD

BAHIA SOD

5' MULCH RING TYP.

SOD TWO COUNTOURS BELOW N.W.L TYP

SPECK WAY

1 SB

1 QV

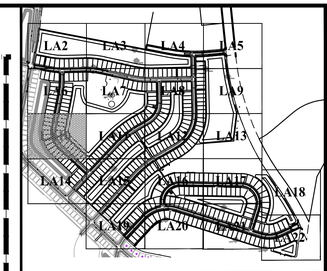
3 TD

17 IP

15 IP

MATCHLINE - SEE SHEET LA14

MATCHLINE - SEE SHEET LA11



KEY MAP

0 15 30 45 60

SCALE : 1" = 30'

PLANT SCHEDULE LA 10

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	REMARKS
TREES						
IP	37	ILEX VOMITORIA `PENDULA`	WEEPING YAUPON HOLLY	2.5" CAL.	45 GAL.	
QV	2	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	3" CAL., 10` HT., MIN.		
SB	1	SALIX BABYLONICA	WEEPING WILLOW	3" CAL., 10` HT., MIN.		
TD	3	TAXODIUM DISTICHUM	BALD CYPRESS	3" CAL., 10` HT., MIN.		

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PLANNING
TRANSPORTATION
(LC 42)
(EB 4353)

NO	DATE	BY	SUBMITTALS / REVISIONS
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ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS
LANDSCAPE PLAN & DETAILS

CITY OF NEW SMYRNA BEACH — VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169

DESIGNED BY: JES

DRAFTED BY: JES

CHECKED BY: JES

DRAWING FILE: 18169-LA-PHASE 3-4
XREFS: 18169BAS.DWG
XREFS: XXXXX.DWG

CHERYL W. CAMPBELL, RLA, NO. 001768
JAKE E. STEHR, RLA, NO.6667462
NOT VALID WITHOUT SEAL

SHEET: LA10 OF 23

PLANT SCHEDULE LA 11

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	REMARKS
TREES						
ED	38	ELAEOCARPUS DECIPIENS TM	JAPANESE BLUEBERRY TREE	3" CAL., 10` HT., MIN.		FULL TO GROUND
QS	3	QUERCUS SHUMARDII	SHUMARD OAK	3" CAL., 10` HT., MIN.		
QV	1	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	3" CAL., 10` HT., MIN.		
SB	2	SALIX BABYLONICA	WEEPING WILLOW	3" CAL., 10` HT., MIN.		
TD	8	TAXODIUM DISTICHUM	BALD CYPRESS	3" CAL., 10` HT., MIN.		
PALM TREES						
SS	17	SABAL PALMETTO	CABBAGE PALM	8`-10` HT. O.A.		

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	REMARKS
GROUND COVERS							
MC	20	MUHLENBERGIA CAPILLARIS	MUHLY GRASS	10" HT. X 10" SP.	1 GAL.	30" o.c.	

REFERENCE NOTES SCHEDULE

SYMBOL	CODE	DESCRIPTION	QTY	DETAIL
	1	ANOVA AL1980R ALLURE RECYCLED PLASTIC 6` CONTOUR BENCH	2	

MATCHLINE - SEE SHEET LA10

MATCHLINE - SEE SHEET LA12

MATCHLINE - SEE SHEET LA7

MATCHLINE - SEE SHEET LA15

BAHIA SOD

SOD TWO COUNTOURS BELOW N.W.L TYP

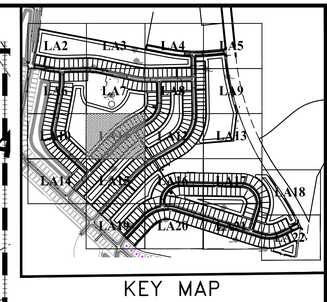
ST. AUGUSTINE SOD

5' MULCH RING TYP.

ABALONE WAY

424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 460 461 462 463 464 465 466 467 468 469 501

1 SB; 5 SS; 17 ED; 15 ED; 3 QS; 3 TD; 3 SS; 10 MC; 1 QV; 2 TD



KEY MAP

0 15 30 45 60

SCALE : 1" = 30'

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4	09-04-00	MLR	RESUBMITTED TO CITY

ARDISIA PARK
PHASE 3 & 4
FINAL ENGINEERING PLANS
LANDSCAPE PLAN & DETAILS

CITY OF NEW SMYRNA BEACH — VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169

DESIGNED BY: JES

DRAFTED BY: JES

CHECKED BY: JES

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XREFS: 18169BAS.DWG
XREFS: XXXXX.DWG

CHERYL W. CAMPBELL, RLA, NO. 001768
JAKE E. STEHR, RLA, NO.6667462
NOT VALID WITHOUT SEAL

MATCHLINE - SEE SHEET LA8

MATCHLINE - SEE SHEET LA11

MATCHLINE - SEE SHEET LA13

MATCHLINE - SEE SHEET LA16

ABALONE WAY

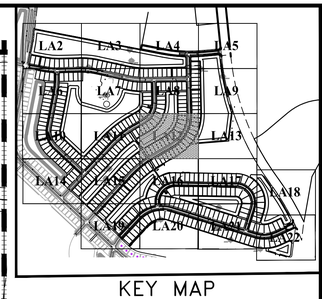
MODENA WAY

BAHIA SOD

ST. AUGUSTINE SOD

5' MULCH RING TYP.

SOD TWO COUNTOURS BELOW N.W.L TYP



KEY MAP

REFERENCE NOTES SCHEDULE

SYMBOL	CODE	DESCRIPTION	QTY	DETAIL
	1	ANOVA AL1980R ALLURE RECYCLED PLASTIC 6` CONTOUR BENCH	1	

PLANT SCHEDULE LA 12

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	REMARKS
TREES						
ED	10	ELAEOCARPUS DECIPIENS TM	JAPANESE BLUEBERRY TREE	3" CAL., 10` HT., MIN.		FULL TO GROUND
QL	45	QUERCUS LAEVIS	TURKEY OAK	3" CAL., 10` HT., MIN.		
QS	3	QUERCUS SHUMARDII	SHUMARD OAK	3" CAL., 10` HT., MIN.		
QV	2	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	3" CAL., 10` HT., MIN.		
SB	2	SALIX BABYLONICA	WEEPING WILLOW	3" CAL., 10` HT., MIN.		
TD	1	TAXODIUM DISTICHUM	BALD CYPRESS	3" CAL., 10` HT., MIN.		
PALM TREES						
SS	14	SABAL PALMETTO	CABBAGE PALM	8`-10` HT. O.A.		

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	REMARKS
GROUND COVERS							
MC	10	MUHLENBERGIA CAPILLARIS	MUHLY GRASS	10" HT. X 10" SP.	1 GAL.	30" o.c.	

0 15 30 45 60

SCALE : 1" = 30'

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3	04-04-25	MLR	RESUBMITTED TO CITY
4	06-06-00	MLR	RESUBMITTED TO CITY

ARDISIA PARK
PHASE 3 & 4
FINAL ENGINEERING PLANS
LANDSCAPE PLAN & DETAILS

CITY OF NEW SMYRNA BEACH — VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169

DESIGNED BY: JES

DRAFTED BY: JES

CHECKED BY: JES

DRAWING FILE: 18169-LA-PHASE 3-4
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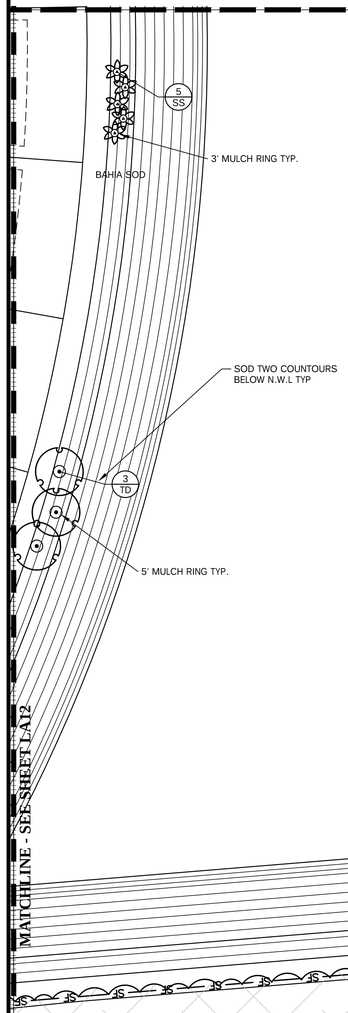
XREFS: XXXXX.DWG

CHERYL W. CAMPBELL, RLA, NO. 001768
JAKE E. STEHR, RLA, NO.6667462
NOT VALID WITHOUT SEAL

SHEET: LA12 OF 23

MATCHLINE - SEE SHEET LA9

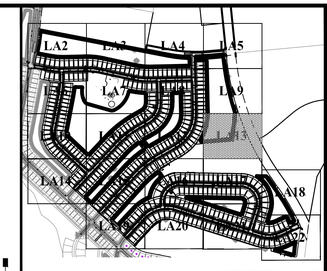




FUTURE WILLIAMSON BLVD EXTENSION

PLANT SCHEDULE LA 13

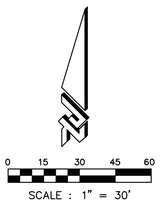
CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
TREES					
TD	3	TAXODIUM DISTICHUM	BALD CYPRESS	3" CAL., 10` HT., MIN.	
PALM TREES					
SS	5	SABAL PALMETTO	CABBAGE PALM	8`-10` HT. O.A.	



KEY MAP

LEGEND

DENOTES NATURAL PRESERVATION / CONSERVATION AREA TO REMAIN.
PHASE 3&4 REQUIRED PRESERVATION 40.5
PHASE 3&4 PROVIDED PRESERVATION 61 ACRES



SCALE : 1" = 30'

MATCHLINE - SEE SHEET LA17

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(LC 42)
(EB 4518)

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4	00-00-00	MLR	RESUBMITTED TO CITY

ARDISIA PARK
PHASE 3 & 4
FINAL ENGINEERING PLANS
LANDSCAPE PLAN & DETAILS

CITY OF NEW SMYRNA BEACH
VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169

DESIGNED BY: JES

DRAFTED BY: JES

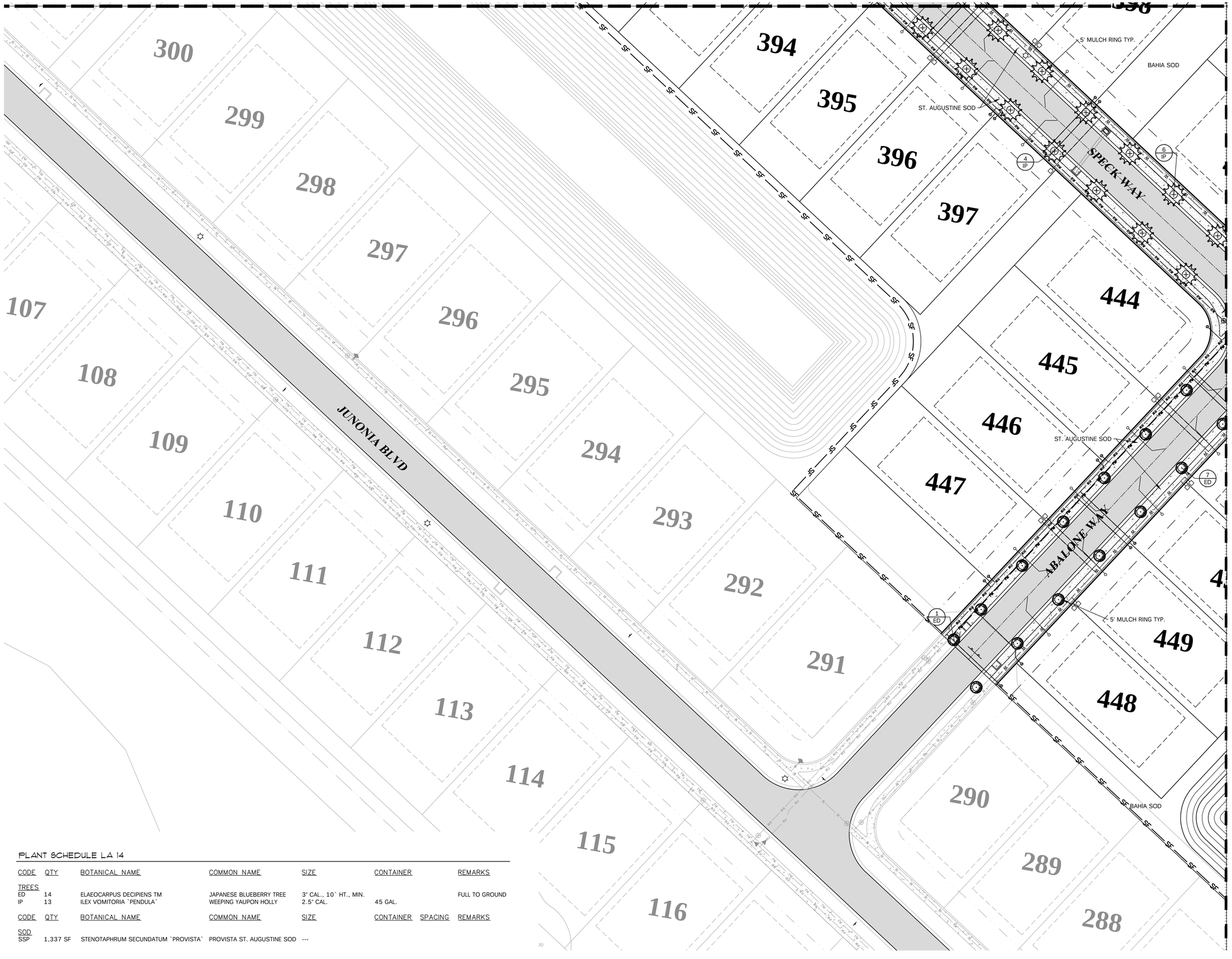
CHECKED BY: JES

DRAWING FILE: 18169-LA-PHASE 3-4
XREF'S: 18169BAS.DWG
XREF'S: XXXXX.DWG

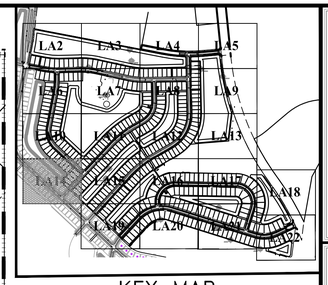
CHERYL W. CAMPBELL, RLA, NO. 001768
JAKE E. STEHR, RLA, NO.6667462
NOT VALID WITHOUT SEAL

SHEET: LA13 OF 23

MATCHLINE - SEE SHEET LA10



MATCHLINE - SEE SHEET LA15



KEY MAP

PLANT SCHEDULE LA 14

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	REMARKS
TREES						
ED	14	ELAEOCARPUS DECIPIENS TM	JAPANESE BLUEBERRY TREE	3" CAL., 10` HT., MIN.		FULL TO GROUND
IP	13	ILEX VOMITORIA `PENDULA`	WEEPING YAUPON HOLLY	2.5" CAL.	45 GAL.	

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	REMARKS
SOD							
SSP	1,337 SF	STENOTAPHRUM SECUNDATUM `PROVISTA`	PROVISTA ST. AUGUSTINE SOD	---			

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(EB 4583)

NO.	DATE	BY	SUBMITTALS / REVISIONS
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3	04-04-25	MLR	RESUBMITTED TO CITY
4	00-00-00	MLR	RESUBMITTED TO CITY

ARDISIA PARK
PHASE 3 & 4
FINAL ENGINEERING PLANS
LANDSCAPE PLAN & DETAILS

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169

DESIGNED BY: JES

DRAFTED BY: JES

CHECKED BY: JES

DRAWING FILE: 18169-LA-PHASE 3-4
XREFS: 18169BAS.DWG
XREFS: XXXXX.DWG

CHERYL W. CAMPBELL, RLA, NO. 001768
JAKE E. STEHR, RLA, NO.6667462
NOT VALID WITHOUT SEAL

SHEET: LA14 OF 23

MATCHLINE - SEE SHEET LA11

ABALONE WAY

MODENA WAY

ST. AUGUSTINE SOD

BAHIA SOD

5' MULCH RING TYP.

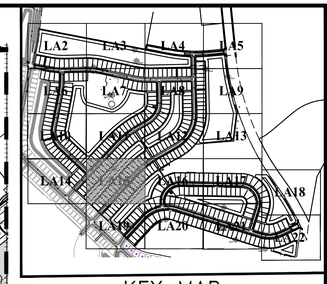
SOD TWO COUNTOURS BELOW N.W.L TYP

BORE HOLE B-8 GROUND EL.=23.85

MATCHLINE - SEE SHEET LA14

MATCHLINE - SEE SHEET LA16

MATCHLINE - SEE SHEET LA19



KEY MAP

PLANT SCHEDULE LA 15

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
TREES					
ED	16	ELAEOCARPUS DECIPIENS TM	JAPANESE BLUEBERRY TREE	3" CAL., 10` HT., MIN.	FULL TO GROUND
QL	37	QUERCUS LAEVIS	TURKEY OAK	3" CAL., 10` HT., MIN.	
QV	4	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	3" CAL., 10` HT., MIN.	
SB	2	SALIX BABYLONICA	WEEPING WILLOW	3" CAL., 10` HT., MIN.	
TD	2	TAXODIUM DISTICHUM	BALD CYPRESS	3" CAL., 10` HT., MIN.	
PALM TREES					
SS	6	SABAL PALMETTO	CABBAGE PALM	8`-10` HT. O.A.	

0 15 30 45 60

SCALE : 1" = 30'

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(EB-0583)

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4	06-06-00	MLR	RESUBMITTED TO CITY

ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS LANDSCAPE PLAN & DETAILS

CITY OF NEW SMYRNA BEACH — VOLUSIA COUNTY, FLORIDA

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DESIGNED BY: JES

DRAFTED BY: JES

CHECKED BY: JES

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XREF'S: 18169BAS.DWG
XREF'S: XXXXX.DWG

CHERYL W. CAMPBELL, RLA, NO. 001768
JAKE E. STEHR, RLA, NO.6667462
NOT VALID WITHOUT SEAL

MATCHLINE - SEE SHEET LA12

MODENA WAY

ST. AUGUSTINE SOD

BAHIA SOD

NATURAL PRESERVATION AREA

JEWELBOX CIRCLE

5' MULCH RING TYP.

SOD TWO COUNTOURS BELOW N.W.L TYP

MATCHLINE - SEE SHEET LA15

MATCHLINE - SEE SHEET LA17

MATCHLINE - SEE SHEET LA20

PLANT SCHEDULE LA 16

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	REMARKS
TREES						
QL	9	QUERCUS LAEVIS	TURKEY OAK	3" CAL., 10` HT., MIN.		
QS	8	QUERCUS SHUMARDII	SHUMARD OAK	3" CAL., 10` HT., MIN.		
QV	1	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	3" CAL., 10` HT., MIN.		
TD	43	TAXODIUM DISTICHUM	BALD CYPRESS	3" CAL., 10` HT., MIN.		
PALM TREES						
SS	12	SABAL PALMETTO	CABBAGE PALM	8`-10` HT. O.A.		

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	REMARKS
GROUND COVERS							
MC	30	MUHLENBERGIA CAPILLARIS	MUHLY GRASS	10" HT. X 10" SP.	1 GAL.	30" o.c.	
SOD							
PNA	253 SF	PASPALUM NOTATUM `ARGENTINE`	BAHIA SOD	---			

REFERENCE NOTES SCHEDULE

SYMBOL	CODE	DESCRIPTION	QTY	DETAIL
	1	ANOVA AL1980R ALLURE RECYCLED PLASTIC 6` CONTOUR BENCH	3	

KEY MAP

LEGEND

DENOTES NATURAL PRESERVATION / CONSERVATION AREA TO REMAIN.
PHASE 3&4 REQUIRED PRESERVATION 40.5
PHASE 3&4 PROVIDED PRESERVATION 61 ACRES

SCALE : 1" = 30'

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CIVIL ENGINEERING
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(LC 42)
(EB 4549)

NO	DATE	BY	SUBMITTALS / REVISIONS
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ARDISIA PARK
PHASE 3 & 4
FINAL ENGINEERING PLANS
LANDSCAPE PLAN & DETAILS

CITY OF NEW SMYRNA BEACH — VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169

DESIGNED BY: JES

DRAFTED BY: JES

CHECKED BY: JES

DRAWING FILE: 18169-LA-PHASE 3-4
XREF'S: 18169BAS.DWG
XREF'S: XXXXX.DWG

CHERYL W. CAMPBELL, RLA, NO. 001768
JAKE E. STEHR, RLA, NO.6667462
NOT VALID WITHOUT SEAL

SHEET: LA16 OF 23

MATCHLINE - SEE SHEET LA13

NATURAL PRESERVATION AREA

MATCHLINE - SEE SHEET LA16

MATCHLINE - SEE SHEET LA18

649 650 651 652 653 654 655 656 657 658 659 660 661 671 672 673 674 675 676 677 678 679 680 681

JEWELBOX CIRCLE

4 TD
18 TD
5 TD
4 TD
11 TD
1 QV
1 SB

ST. AUGUSTINE SOD
5' MULCH RING TYP.
BAHIA SOD
SOD TWO COUNTOURS BELOW N.W.L TYP

MATCHLINE - SEE SHEET LA21

PLANT SCHEDULE LA 17

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
TREES					
QV	1	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	3" CAL., 10` HT., MIN.	
SB	1	SALIX BABYLONICA	WEEPING WILLOW	3" CAL., 10` HT., MIN.	
TD	46	TAXODIUM DISTICHUM	BALD CYPRESS	3" CAL., 10` HT., MIN.	
PALM TREES					
SS	3	SABAL PALMETTO	CABBAGE PALM	8`-10` HT. O.A.	

KEY MAP

LEGEND

DENOTES NATURAL PRESERVATION / CONSERVATION AREA TO REMAIN.
PHASE 3&4 REQUIRED PRESERVATION 40.5
PHASE 3&4 PROVIDED PRESERVATION 61 ACRES

0 15 30 45 60
SCALE : 1" = 30'

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(EB 6563)

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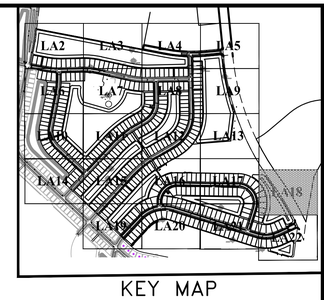
CHERYL W. CAMPBELL, RLA, NO. 001768
JAKE E. STEHR, RLA, NO.6667462
NOT VALID WITHOUT SEAL

PLANT SCHEDULE LA 18

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	REMARKS
TREES						
CV	6	CALLISTEMON VIMINALIS	WEEPING BOTTLEBRUSH	3" CAL., 10` HT., MIN.	30 GAL.	
IP	6	ILEX VOMITORIA `PENDULA`	WEEPING YAUPON HOLLY	2.5" CAL.	45 GAL.	
QV2	6	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	3" CAL., 10` HT., MIN.		
TD	3	TAXODIUM DISTICHUM	BALD CYPRESS	3" CAL., 10` HT., MIN.		
PALM TREES						
SS	10	SABAL PALMETTO	CABBAGE PALM	8`-10` HT. O.A.		

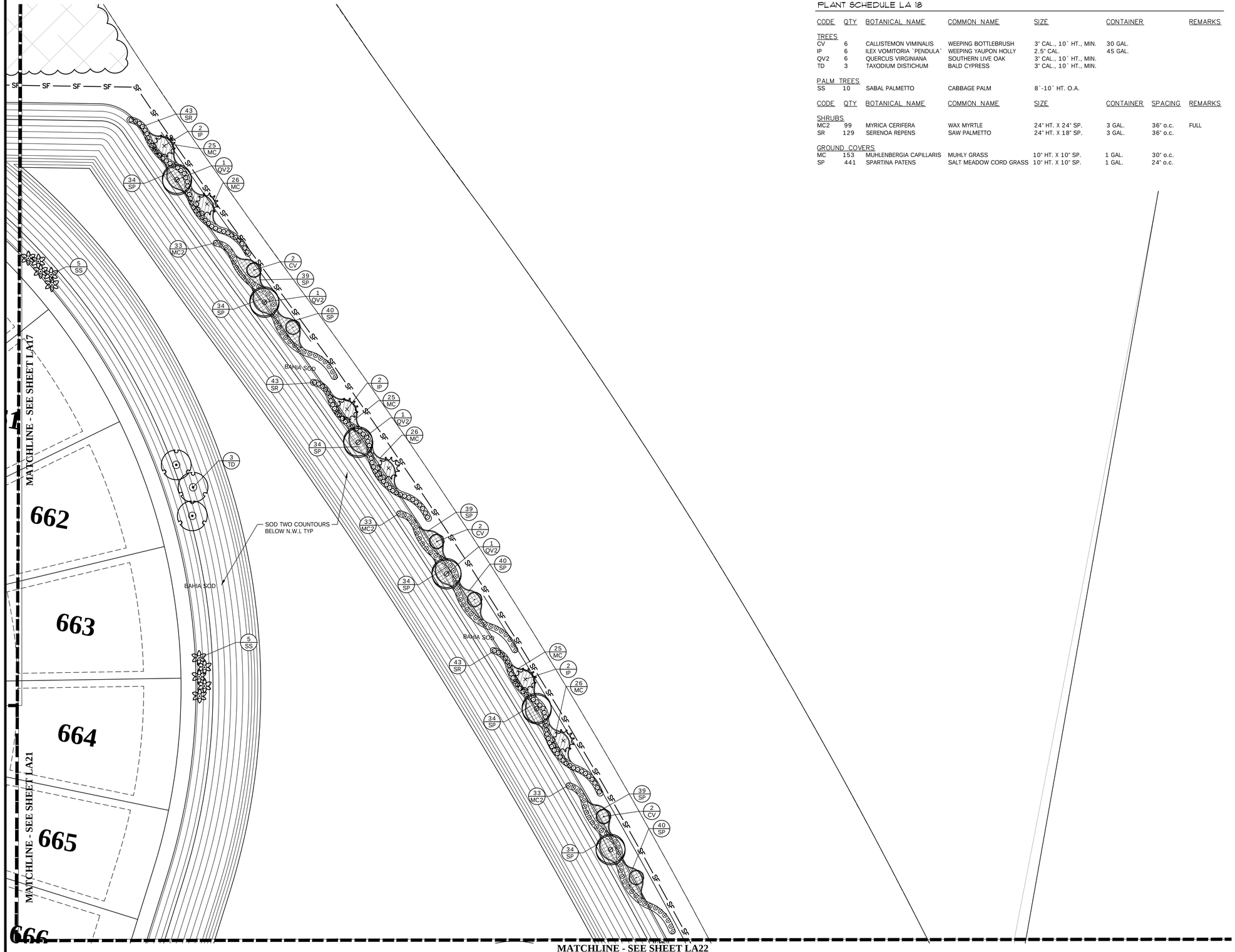
CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	REMARKS
SHRUBS							
MC2	99	MYRICA CERIFERA	WAX MYRTLE	24" HT. X 24" SP.	3 GAL.	36" o.c.	FULL
SR	129	SERENOA REPENS	SAW PALMETTO	24" HT. X 18" SP.	3 GAL.	36" o.c.	
GROUND COVERS							
MC	153	MUHLENBERGIA CAPILLARIS	MUHLY GRASS	10" HT. X 10" SP.	1 GAL.	30" o.c.	
SP	441	SPARTINA PATENS	SALT MEADOW CORD GRASS	10" HT. X 10" SP.	1 GAL.	24" o.c.	



KEY MAP

LEGEND

DENOTES NATURAL PRESERVATION / CONSERVATION AREA TO REMAIN.
PHASE 3&4 REQUIRED PRESERVATION 40.5
PHASE 3&4 PROVIDED PRESERVATION 61 ACRES



0 15 30 45 60

SCALE : 1" = 30'

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(EB 6563)

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CHERYL W. CAMPBELL, RLA, NO. 001768
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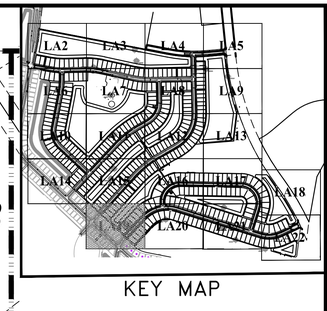
SHEET: LA18 OF 23

MATCHLINE - SEE SHEET LA15

MATCHLINE - SEE SHEET LA20





KEY MAP

PLANT SCHEDULE LA 19

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
TREES					
QL	28	QUERCUS LAEVIS	TURKEY OAK	3" CAL., 10` HT., MIN.	
QV	2	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	3" CAL., 10` HT., MIN.	
TD	4	TAXODIUM DISTICHUM	BALD CYPRESS	3" CAL., 10` HT., MIN.	

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	REMARKS
SOD						
SSP	5,135 SF	STENOTAPHRUM SECUNDATUM `PROVISTA`	PROVISTA ST. AUGUSTINE SOD	---		

0 15 30 45 60

SCALE : 1" = 30'

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ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS
LANDSCAPE PLAN & DETAILS

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: JES
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DRAWING FILE: 18169-LA-PHASE 3-4
XREF'S: 18169BAS.DWG
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CHERYL W. CAMPBELL, RLA, NO. 001768
JAKE E. STEHR, RLA, NO. 6667462
NOT VALID WITHOUT SEAL

SHEET: LA19 OF 23

MATCHLINE - SEE SHEET LA16

MATCHLINE - SEE SHEET LA19

MATCHLINE - SEE SHEET LA21

574 581 582 583 584

631 630 629 628 627 626 625 624 623 622

632 633

MONACO BLVD

ST. AUGUSTINE SOD

5' MULCH RING TYP.

BAHIA SOD

NATURAL PRESERVATION AREA

6 QL

21 QL

1 TD

4 QL

5

LA2 LA3 LA4 LA5 LA6 LA7 LA8 LA9 LA10 LA11 LA12 LA13 LA14 LA15 LA16 LA17 LA18 LA19 LA20 LA21 LA22

KEY MAP

LEGEND

DENOTES NATURAL PRESERVATION / CONSERVATION AREA TO REMAIN.
PHASE 3&4 REQUIRED PRESERVATION 40.5
PHASE 3&4 PROVIDED PRESERVATION 61 ACRES

PLANT SCHEDULE LA 20

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
TREES					
QL	42	QUERCUS LAEVIS	TURKEY OAK	3" CAL., 10` HT., MIN.	
TD	1	TAXODIUM DISTICHUM	BALD CYPRESS	3" CAL., 10` HT., MIN.	

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	REMARKS
SOD						
SSP	9,717 SF	STENOTAPHRUM SECUNDATUM `PROVISTA`	PROVISTA ST. AUGUSTINE SOD	---		

0 15 30 45 60

SCALE : 1" = 30'

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SHEET: LA20 OF 23

MATCHLINE - SEE SHEET LA17

MATCHLINE - SEE SHEET LA20

MATCHLINE - SEE SHEET LA22

585 586 587 588 589 590 591 592 593 594 595 596

620 619 618 617 616 615 614 613 612 611 610 609 608

670 669 668 667

MONACO BLVD

JEWELBOX CIRCLE

SOD TWO COUNTOURS BELOW N.W.L TYP

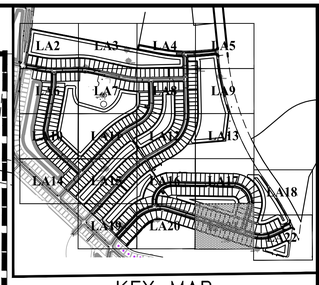
BAHIA SOD

ST. AUGUSTINE SOD

5' MULCH RING TYP.

NATURAL PRESERVATION AREA

1 SB · 2 TD · 3 SS · 4 TD · 3 TD · 3 TD · 18 QL · 4 QL · 2 QL



KEY MAP

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PLANT SCHEDULE LA 21

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
TREES					
QL	39	QUERCUS LAEVIS	TURKEY OAK	3" CAL., 10` HT., MIN.	
SB	2	SALIX BABYLONICA	WEEPING WILLOW	3" CAL., 10` HT., MIN.	
TD	19	TAXODIUM DISTICHUM	BALD CYPRESS	3" CAL., 10` HT., MIN.	
PALM TREES					
SS	3	SABAL PALMETTO	CABBAGE PALM	8`-10` HT. O.A.	

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	REMARKS
SOD						
PNA	68,032 SF	PASPALUM NOTATUM `ARGENTINE`	BAHIA SOD	---		

0 15 30 45 60

SCALE : 1" = 30'

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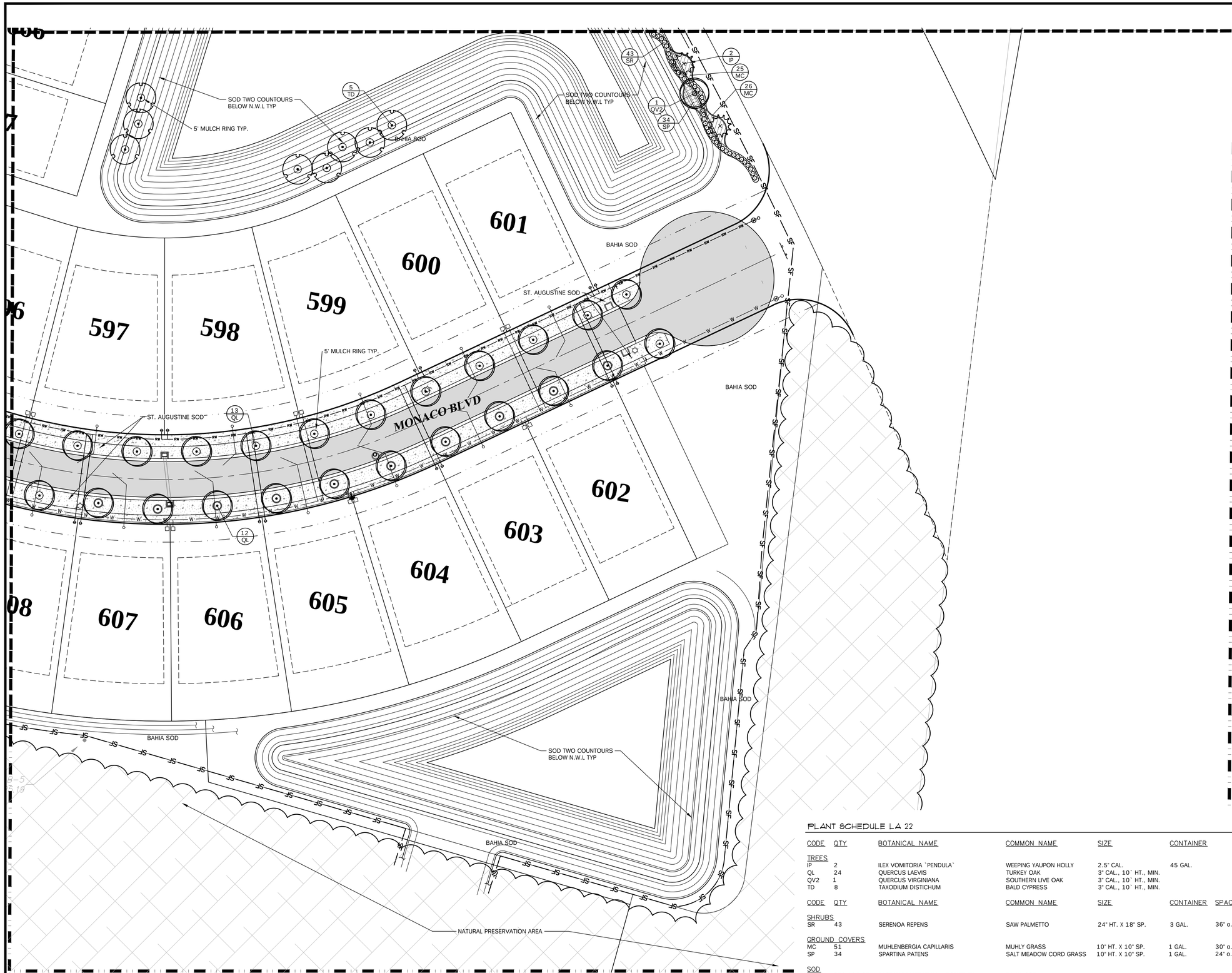
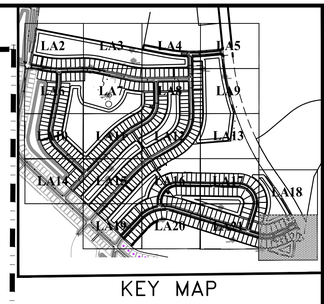
SHEET: LA21 OF 23





KEY MAP

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PLANT SCHEDULE LA 22

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	REMARKS
TREES						
IP	2	ILEX VOMITORIA `PENDULA`	WEEPING YAUPON HOLLY	2.5" CAL.	45 GAL.	
QL	24	QUERCUS LAEVIS	TURKEY OAK	3" CAL., 10` HT., MIN.		
QV2	1	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	3" CAL., 10` HT., MIN.		
TD	8	TAXODIUM DISTICHUM	BALD CYPRESS	3" CAL., 10` HT., MIN.		

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	REMARKS
SHRUBS							
SR	43	SERENOA REPENS	SAW PALMETTO	24" HT. X 18" SP.	3 GAL.	36" o.c.	
GROUND COVERS							
MC	51	MUHLENBERGIA CAPILLARIS	MUHLY GRASS	10" HT. X 10" SP.	1 GAL.	30" o.c.	
SP	34	SPARTINA PATENS	SALT MEADOW CORD GRASS	10" HT. X 10" SP.	1 GAL.	24" o.c.	
SOD							
PNA	273,199 SF	PASPALUM NOTATUM `ARGENTINE`	BAHIA SOD	---			
SSP	5,306 SF	STENOTAPHRUM SECUNDATUM `PROVISTA`	PROVISTA ST. AUGUSTINE SOD	---			

0 15 30 45 60

SCALE : 1" = 30'

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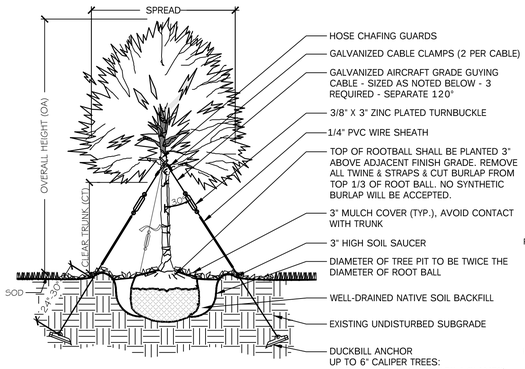
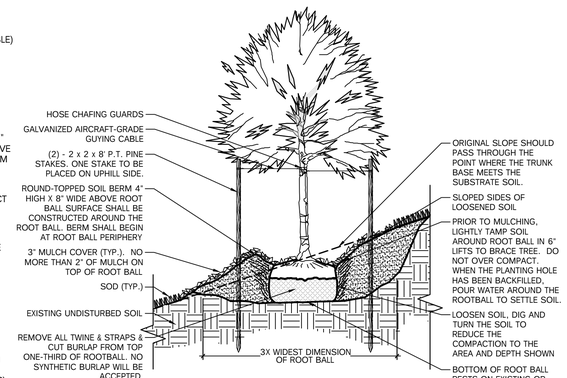


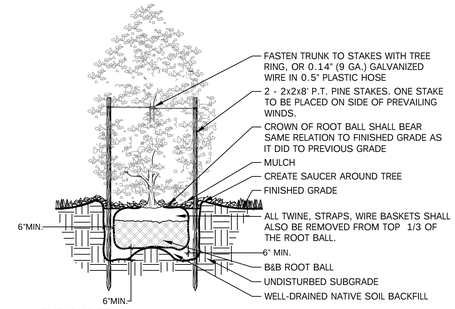
1 LARGE TREE PLANTING DETAIL

N.T.S. P-LA-TRE1-01



2 TREE PLANTING ON SLOPE DETAIL

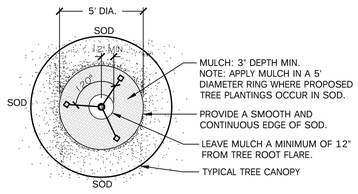
N.T.S. P-LA-TRE1-05



SPECIFICATIONS:
1. DO NOT DAMAGE MAIN ROOTS OR DESTROY ROOT BALL WHEN INSTALLING TREE STAKE.
2. WATER THOROUGHLY AFTER INSTALLATION.
3. REMOVE TREE RINGS AND STAKES UPON TREE ESTABLISHMENT (MAX. ONE YEAR AFTER INSTALLATION)
4. PROVIDED DRAINAGE FOR PLANTING PIT IN IMPERMEABLE SOIL.

3 FULL TO GROUND TREE PLANTING DETAIL

N.T.S P-LA-TRE1-02

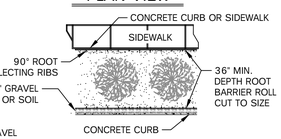


4 TREE MULCHING DETAIL IN SOD AREAS

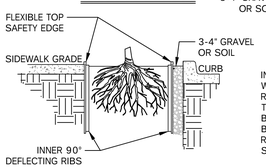
N.T.S. P-LA-MUL-TREE-01

ROOT BARRIERS ARE BLACK, MANUFACTURED FROM 50% RECYCLED POLYSTYRENE PLASTIC WITH ULTRAVIOLET INHIBITORS, COMES IN 20' ROLLS OR 2' PANELS, AND ARE .06" IN THICKNESS, AS MANUFACTURED BY CENTURY ROOT BARRIERS, A WHOLESALE VENDOR AND MANUFACTURER: 714-632-7083; ALSO MANUFACTURED BY VILLA ROOT BARRIER: 800-654-4067.

PLAN VIEW



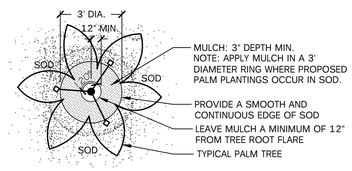
SECTION VIEW



INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. THE RAISED ROOT GUIDING RIBS MUST BE FACING TOWARDS THE TREE ROOTS. THE TOP OF THE ROOT BARRIER MUST BE SLIGHTLY ABOVE GRADE AND SHALL BE COVERED BY MULCH ONLY (NEVER BELOW GRADE). POSITION ROOT BARRIER VERTICALLY WITH TOP AGAINST THE STRUCTURE TO BE PROTECTED.

5 ROOT BARRIER DETAIL (LINEAR APPLICATION)

N.T.S. P-LA-ROO-01



6 PALM MULCHING DETAIL IN SOD AREAS

N.T.S. P-LA-MUL-PALM-01

STREET TREES NOTES:

1. STREET TREES INDICATED ON THIS PLAN SHALL BE PLANTED MIN. 2 FEET FROM B.O.C. (TYPICAL).
2. STREET TREES SHALL BE PLANTED APPROXIMATELY 40 FOOT ON CENTER.
3. THE FINAL LOCATION OF THE TREES INDICATED ON THIS PLAN SHALL BE FIELD DETERMINED AFTER EACH INDIVIDUAL LOT IS CONSTRUCTED IN ORDER TO AVOID CONFLICTS WITH PROPOSED UTILITIES AND ENTRANCE DRIVEWAYS. ALL STREET TREES TO BE PLANTED A MINIMUM OF 5' AWAY FROM ANY WATER, SEWER OR ELECTRIC SERVICES. (TYPICAL)
4. THE TOTAL NUMBER OF STREET TREES TO BE INSTALLED SHALL BE EQUAL TO OR GREATER THAN 675 TREES.
5. TREES SHALL BE PLANTED A MINIMUM OF 2 FEET AWAY FROM PROPOSED SIDEWALKS, CURBING, DRIVEWAYS, AND UTILITIES.
6. ALL MEDIAN AND STREET TREE PLANTINGS SHALL BE INSTALLED IN ACCORDANCE WITH F.D.O.T STANDARD INDEX 546 FOR INTERSECTION SIGHT LINES AND CLEAR ZONES.
7. ALL STREET TREES AND PALMS PROVIDED SHALL BE IN CONFORMANCE WITH MINIMUM SIZE REQUIREMENTS AS DESCRIBED IN THE MASTER DEVELOPERS AGREEMENT OR LAND DEVELOPMENT CODE AS SPECIFIED IN THE PLANT LISTED PROVIDED HEREIN.
8. STREET TREE LOCATIONS INDICATED FOR PHASE 1 SHALL BE INSTALLED AT TIME OF RESIDENTIAL HOME CONSTRUCTION.
9. CONFLICTS WITH TREE LOCATION, IN REFERENCE TO (BUT NOT LIMITED TO) SIDEWALKS AND ROADS, ARE TO BE FINALIZED AT CONSTRUCTION OF SUCH STRUCTURES AND COORDINATED WITH THE LANDSCAPE ARCHITECT
10. STREET TREES SHALL BE A MINIMUM OF 2 ¾" INCH CALIPER, WITH A 6' FOOT CLEAR TRUNK.

LANDSCAPE SPECIFICATIONS

1. FLORIDA #1: ALL PLANT MATERIAL SHALL BE GRADE FLORIDA NO. 1 OR BETTER IN QUALITY AS DESIGNATED IN THE MOST RECENT PUBLICATION OF 'GRADES AND STANDARDS FOR NURSERY PLANTS', PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES.
2. EXISTING PLANTS: IF EXISTING LANDSCAPING INTERFERES WITH PROPOSED PLANTINGS SHOWN ON PLAN, THE EXISTING LANDSCAPING IS TO BE REMOVED IN FAVOR OF THE NEW PLANTINGS, UNLESS OTHERWISE INDICATED. IF THE EXISTING VEGETATION IS INTENDED TO REMAIN, THE PROPOSED LANDSCAPING SHALL BE LOCATED AS CLOSE AS POSSIBLE TO ITS INTENDED LOCATION.
3. MULCH: ALL PLANTING BEDS SHALL BE TOP DRESSED WITH 3" PINE BARK MULCH, GRADE "B" OR APPROVED EQUAL. ALL TREES NOT IN BEDS SHALL HAVE A 5' DIAMETER MULCH RING. ALL PALMS NOT IN BEDS SHALL HAVE A 3' DIAMETER MULCH RING UNLESS OTHERWISE NOTED ON PLANS.
4. SOD: SOD SHALL BE ARGENTINE BAHIA SOD UNLESS OTHERWISE SPECIFIED ON THE PLANS AS FLORATAM ST. AUGUSTINE SOD. ALL SOD SHALL BE ROLLED UPON INSTALLATION. CONTRACTOR TO SOD ALL AREAS THAT ARE DISTURBED BY CONSTRUCTION RELATED ACTIVITIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THE SOD IS FREE OF WEEDS & INSECTS UPON INSTALLATION AND FOR THE DURATION OF THE 90 DAY MAINTENANCE PERIOD. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE NO GAPS BETWEEN SOD. SOD QUANTITY TAKEOFFS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
5. QUANTITIES: IN THE EVENT OF A VARIATION BETWEEN THE QUANTITIES SHOWN ON THE PLANT LIST AND THE QUANTITIES OF PLANTS SHOWN ON THE PLAN, THE PLAN SHALL CONTROL.
6. UNFORESEEN CONFLICTS: CONTRACTOR SHALL NOT WILLFULLY INSTALL ANY PORTION OF THE LANDSCAPE PLAN AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNFORESEEN OBSTRUCTIONS, GRADE DIFFERENCES, STANDING WATER, SOIL CONDITIONS OR OTHER CONFLICTS EXIST. SUCH UNFORESEEN CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
7. SUBSTITUTIONS: NO SUBSTITUTIONS OR VARIATIONS OF ANY PLANT MATERIAL OR ITS INSTALLED LOCATION SHALL BE PERMITTED WITHOUT THE PRIOR CONSENT OF THE LANDSCAPE ARCHITECT.
8. CONTAINERS: IF GALLONAGE FOR PLANTS OR TREES IS SHOWN THEY SHALL BE CONTAINER GROWN AND THE SIZE SHOWN SHALL REPRESENT THE MINIMUM ALLOWABLE GALLONAGE. IN ALL CASES THE PLANT SPECIFIED SIZE SHALL GOVERN OVER THE GALLONAGE INDICATED.
9. PLANTING SOIL: CONTRACTOR SHALL VERIFY THAT SOIL CONDITIONS ARE SUITABLE TO THE PLANT SPECIES SPECIFIED. IF SOIL CONDITIONS ARE DEEMED UNSUITABLE FOR PROPER PLANT HEALTH, CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT AND PROPER SUBSTITUTIONS SHALL BE SPECIFIED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. THE CONTRACTOR SHALL REMOVE LIME ROCK, CONCRETE AND OTHER DELETERIOUS DEBRIS FROM PLANTING BEDS. IF DEBRIS IS INTEGRATED IN THE SOIL, THE SOIL MUST BE EXCAVATED AND REPLACED WITH ACCEPTABLE SOIL. ALL FILL TO BE PLACED IN LANDSCAPE AREAS MUST HAVE A pH RANGE BETWEEN 5.8 AND 7.5, BE ORGANIC IN NATURE, AND BE FREE OF ROCKS AND DEBRIS.
10. TOPSOIL: TOPSOIL MATERIAL SHALL BE FREE FROM ALL HARD CLODS, WEEDS, STONES OVER 1" IN DIAMETER, CLAY, HARD PAN, NOXIOUS OR OTHER UNDESIRABLE PLANTS, SOD, INSECTS, SEEDS, OR MATERIAL WHICH MAY BE HARMFUL FOR GROWTH.
11. WEEDS: IF PRESENT, THE CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE ANY WEEDS FROM PLANTING AND SOD AREAS PRIOR TO THE INSTALLATION OF PROPOSED PLANT MATERIAL AND MULCH COVER. CONTRACTOR SHALL BE RESPONSIBLE TO KEEP BEDS AND SOD FREE OF WEEDS FOR THE DURATION OF THE 90 DAY MAINTENANCE PERIOD.
12. GRADING: UNLESS OTHERWISE STATED ON THESE PLANS, THE LANDSCAPE CONTRACTOR SHALL FINE GRADE ALL AREAS TO BE PLANTED AND SODDED IN ORDER TO ELIMINATE BUMPS AND DEPRESSIONS. FINE GRADING SHALL BE DEFINED AS THE FINAL 2" OF GRADE TO BE ACHIEVED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AND RE-GRADING WASHOUT AREAS CAUSED BY EROSION UNTIL FINAL ACCEPTANCE OF THE PROJECT.
13. STAKING: ALL TREES AND PALMS ARE TO BE STAKED ACCORDING TO THE DETAILS IN THESE PLANS. IF THE CONTRACTOR PREFERS TO USE OTHER STAKING METHODS THAN SHOWN IN THE DETAILS, HE OR SHE MUST SUBMIT PROPOSED STAKING DETAILS TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION. THE LANDSCAPE CONTRACTOR SHALL STRAIGHTEN, REPAIR, AND/OR REPLACE ANY PLANTS DAMAGED BY FAILURE TO PROPERLY STAKE OR GUY ANY TREES & PALMS ON SITE, AT THEIR OWN EXPENSE.
14. BED LINES: CONTRACTOR TO ENSURE CURVILINEAR LANDSCAPE BEDS ARE TO BE EDGED WITH SMOOTH FLOWING CURVES. STRAIGHT-LINE LANDSCAPE BEDS ARE TO BE EDGED IN A STRAIGHT LINE PARALLEL TO ADJACENT STRUCTURES UNLESS DESIGNED OTHERWISE.
15. FERTILIZER: OSMOCOTE SLOW RELEASE FERTILIZER OR EQUIVALENT SHALL BE APPLIED TO ALL TREE, SHRUB, AND GROUNDCOVER PLANTING AREAS AT THE RATE OF THREE (3) TABLESPOONS PER 2 S.F. OF PLANTING AREA.
16. DRAINAGE: THE LANDSCAPE CONTRACTOR SHALL ENSURE THAT THIS WORK DOES NOT INTERRUPT EXISTING OR PROPOSED DRAINAGE PATTERNS AND SHALL NOTIFY THE OWNERS REPRESENTATIVE IMMEDIATELY SHALL A CONFLICT ARISE. CONTRACTOR IS RESPONSIBLE FOR ALL LANDSCAPE/SOD AREAS TO PROPERLY DRAIN AWAY FROM BUILDINGS/STRUCTURES.
17. SPECIFICATIONS: THE LANDSCAPE ARCHITECT SHALL BE PERMITTED THE RIGHT DURING INSTALLATION, TO REJECT ANY AND ALL PLANT MATERIAL AND WORKMANSHIP WHICH IN HIS OR HER OPINION DOES NOT MEET THE REQUIREMENTS OF THESE SPECIFICATIONS.
18. NATURAL AREAS: NATURALLY PRESERVED VEGETATED AREAS SHALL BE CLEANED UP, INCLUDING BUT NOT LIMITED TO THE REMOVAL OF ANY DEBRIS OR WEEDS AND PRUNING OF DEAD OR YELLOW BRANCHES AND PALM FRONDS. MULCH EDGE OF NATURAL AREA 5' FEET.
19. WILDLIFE NOTIFICATION: THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT WHO SHALL PROPOSE PLANT SUBSTITUTIONS UPON WRITTEN NOTIFICATION OF NUISANCE ANIMAL EXISTENCE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE ANY/ALL INSTALLED PLANT MATERIAL DESTROYED/DAMAGED BY WILDLIFE WITHIN THE MAINTENANCE PERIOD.
20. TURNOVER: CONTRACTOR SHALL CONTACT OWNERS REPRESENTATIVE FOR A TURNOVER DATE TO INCLUDE A WALK-THROUGH AND ACCEPTANCE OF WORK BY THE LANDSCAPE ARCHITECT OR OWNER. ANY WORK DEEMED UNACCEPTABLE SHALL BE CORRECTED IMMEDIATELY AND RE-INSPECTED AS SCHEDULED.
21. MAINTENANCE: CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE TO BEGIN AFTER EACH PLANT HAS BEEN INSTALLED AND SHALL CONTINUE 90 DAYS AFTER FINAL WRITTEN ACCEPTANCE BY THE OWNER. MAINTENANCE SHALL INCLUDE WATERING, PRUNING, WEEDING, MULCHING, MOWING, REPLACEMENT OF SICK OR DEAD PLANTS, AND ANY OTHER CARE NECESSARY IN ORDER TO MAINTAIN PROPER PLANT HEALTH AND SOIL MOISTURE CONTENT.
22. GUARANTEE: CONTRACTOR SHALL GUARANTEE AND REPLACE ALL INSTALLED PLANT MATERIAL FOR ONE (1) CALENDAR YEAR STARTING FROM THE TURNOVER DATE FOR WORK FOUND ACCEPTABLE. ANY CORRECTED WORK SHALL HAVE A PROPORTIONAL EXTENSION OF WARRANTY ONCE APPROVED. ANY SICK OR DEAD MATERIAL SHALL BE REPLACED IMMEDIATELY. THE LANDSCAPE CONTRACTOR SHALL NOT BE RESPONSIBLE TO HONOR ANY WARRANTY FOR THE LOSS OF ANY PLANT MATERIAL CAUSED BY FLOODING, FIRE, ABNORMAL FREEZING TEMPERATURES, WINDS OVER 50 MPH, LIGHTNING, ANY OTHER NATURAL DISASTER, OR ANY LOSS/DAMAGE CAUSED BY VANDALISM OR NEGLIGENCE ON THE PART OF THE OWNER.
23. ROOT BARRIER: ROOT BARRIER TO BE INSTALLED FOR ALL STREET TREES AT AN APPROPRIATE DISTANCE AWAY FROM TREE WHERE ROOTS WILL DISTURB INFRASTRUCTURE.
24. CALL BEFORE YOU DIG: CONTRACTOR SHALL NOTIFY SUNSHINE 811 AND HAVE UTILITIES LOCATED, PRIOR TO DIGGING, BY CALLING 811. CONTRACTOR SHALL NOT PLANT TREES WITHIN 3' OF AN UNDERGROUND UTILITY, EITHER AS LOCATED OR AS SHOWN ON THE PLAN, WITHOUT FIRST OBTAINING WRITTEN PERMISSION FROM OWNER'S REPRESENTATIVE.
25. RECORD DRAWINGS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT 'REDLINED' MARK-UPS OF THE LANDSCAPE AND IRRIGATION IMPROVEMENTS. THESE AS-BUILT 'REDLINES' SHALL BE REPRESENTED ON ZEV COHEN & ASSOCIATES, INC. PLAN SHEETS AND PROVIDED TO THE LANDSCAPE ARCHITECT.
26. SEED & MULCH: CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING SEEDED AREA AFTER FIRST APPLICATION TO ASSURE THE TOP ONE (1) INCH OF SOIL IS MOIST. CONTRACTOR SHALL RE-INPSECT SEEDED AREA (MINIMUM OF THREE (3) TIMES WEEKLY), AND WATER AS NECESSARY TO ASSURE SURVIVABILITY. IF THERE ARE AREAS IN DECLINE THE CONTRACTOR SHALL BE RESPONSIBLE FOR RE-APPLICATION OF SEED TO FAILED AREAS.

IRRIGATION NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING 'REDLINED' MARK-UPS OF THE IRRIGATION IMPROVEMENTS AND PROVIDE TO THE LANDSCAPE ARCHITECT.
2. AN AUTOMATIC TIME CONTROLLED IRRIGATION SYSTEM WITH A RAIN SENSOR SHALL BE INSTALLED TO PROVIDE 100% HEAD TO HEAD COVERAGE OF ALL NEW PLANTINGS. IRRIGATION PLAN SHALL BE PROVIDED UPON SUBSTANTIAL SITE PLAN APPROVAL.
3. AMEND EXISTING AUTOMATIC TIME CONTROLLED IRRIGATION SYSTEM TO PROVIDE 100% COVERAGE OF ALL NEW PLANTINGS.

ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
OWENSBORO, KY 42303
WWW.ZEVCOHEN.COM

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC 42)
(EB 4363)

NO	DATE	BY	SUBMITTALS / REVISIONS
1	10-20-23	MLR	INITIAL SUBMITTAL TO CITY
2	09-16-24	MLR	RESUBMITTED TO CITY

ARDISIA PARK PHASE 3 & 4
FINAL ENGINEERING PLANS
LANDSCAPE PLAN & DETAILS

VOLUSIA COUNTY, FLORIDA
CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169
DESIGNED BY: JES
DRAFTED BY: JES
CHECKED BY: JES
DRAWING FILE: 18169-LA-PHASE 3-4
XREF'S: 18169BAS.DWG
XREF'S: XXXXX.DWG

CHERYL W. CAMPBELL, RLA, NO. 001768
JAKE E. STEHR, RLA, NO 6667462
NOT VALID WITHOUT SEAL

SHEET: LA23 OF 23



ZONING SCHEDULE

SYMBOL	NOTES
	PARK
	OPEN SPACE
	COMMON OPEN SPACE
	VILLAGE GREEN
	FDOT R.O.W. TAKING

CONCEPT GRAPHICS SCHEDULE

- 8' WIDE PEDESTRIAN/ BICYCLE PATHWAY
- 5' WIDE NATURE TRAIL
- 5' WIDE SIDEWALK

OPEN SPACE CALCULATION

PUD ZONING ORDINANCE	REQUIRED	PROVIDED	AFTER R.O.W. TAKING
OPEN SPACE (50% OF TOTAL PROJECT AREA)	271.77 AC	322.98 AC	307.03
COMMON OPEN SPACE (35% OF OPEN SPACE)	95.12 AC	127.29 AC	108.35
SUSTAINABLE COMMUNITY DEVELOPMENT FLU	REQUIRED	PROVIDED	AFTER R.O.W. TAKING
OVERALL PROJECT OPEN SPACE	271.77 AC	323.74 AC	307.03
PUBLIC OPEN SPACE (MIN 3% OF PROJECT AREA)	16.31 AC	20.03 AC (20 AC DEDICATED PUBLIC PARK NOT INCLUDED)	20.03 AC
PHASE 1-2&3-4 VILLAGE GREEN/ NEIGHBORHOOD COMMON AREA	2.78 AC	9.5 AC	9.5 AC

PUD PROJECT AREA

TOTAL	543.532 AC
PHASE 1-2	210.6 AC
PHASE 3-4	270.8 AC
FDOT ROW TAKING	18.779 AC
NOT INCLUDED	
PHASE 5 PROPOSED VILLAGE NEIGHBORHOOD CENTER	31.48 AC

0 150 300 450 600

SCALE : 1" = 300'

ZEV COHEN & ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
DAYTONA BEACH, FL 32114
WWW.ZEVCOHEN.COM

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC-662)
(EB 4016)

NO.	DATE	BY	SUBMITTALS / REVISIONS
1	10-20-23	MLR	INITIAL SUBMITTAL TO CITY
2	09-16-24	MLR	RESUBMITTED TO CITY
3	12-04-24	MLR	RESUBMITTED TO CITY
4	05-06-25	MLR	RESUBMITTED TO CITY

ARDISIA PARK PHASE 1-4 FINAL ENGINEERING PLANS OPEN SPACE EXHIBIT

VOLUSIA COUNTY, FLORIDA

CITY OF NEW SMYRNA BEACH

PROJECT NO: ZC 18169

DESIGNED BY: JES

DRAFTED BY: JES

CHECKED BY: MKW

DRAWING FILE: 18169-OS_EX
XREFS: 18169_BAS.DWG
XREFS: —

MELIA L. RUSSELL, P.E., NO.68357
KRISTOPHER T. ROWLEY, P.E., NO.84263
NOT VALID WITHOUT SEAL

SHEET: EX-1

ZEV COHEN
& ASSOCIATES, INC.
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NEW SMYRNA BEACH, FL 32114
WWW.ZEVCOHEN.COM

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION

(LC-042)
(EB 4016)

NO.	DATE	BY	SUBMITTALS / REVISIONS
1	10-20-23	MLR	INITIAL SUBMITTAL TO CITY
2	09-16-24	MLR	RESUBMITTED TO CITY
3	04-04-25	MLR	RESUBMITTED TO CITY
4	00-00-00	MLR	RESUBMITTED TO CITY
5	00-00-00	???	ISSUE/REVISION
6	00-00-00	???	ISSUE/REVISION
7	00-00-00	???	ISSUE/REVISION
8	00-00-00	???	ISSUE/REVISION
9	00-00-00	???	ISSUE/REVISION
10	00-00-00	???	ISSUE/REVISION
11	00-00-00	???	ISSUE/REVISION
12	00-00-00	???	ISSUE/REVISION
13	00-00-00	???	ISSUE/REVISION

ARDISIA PARK
FINAL ENGINEERING PLANS
SIDEWALK EXHIBIT

CITY OF NEW SMYRNA BEACH — VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169

DESIGNED BY: JES

DRAFTED BY: JES

CHECKED BY: MKW

DRAWING FILE: 18169-SW_EX
XREF'S: 18169_BAS.DWG
XREF'S: ----

MELIA L. RUSSELL, P.E., NO.68357
KRISTOPHER T. ROWLEY, P.E., NO.84263
NOT VALID WITHOUT SEAL

SHEET: EX-2

ZEV COHEN
& ASSOCIATES, INC.
300 INTERCHANGE BLVD., STE. C
DAYTONA BEACH, FL 32114
WWW.ZEVCOHEN.COM

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
PLANNING
TRANSPORTATION
(LC-42)
(EB 4016)

NO.	DATE	BY	SUBMITTALS / REVISIONS
1	10-20-23	MLR	INITIAL SUBMITTAL TO CITY
2	09-16-24	MLR	RESUBMITTED TO CITY
3	04-14-25	MLR	RESUBMITTED TO CITY
4	00-00-00	MLR	RESUBMITTED TO CITY
5	00-00-00	???	ISSUE/REVISION
6	00-00-00	???	ISSUE/REVISION
7	00-00-00	???	ISSUE/REVISION
8	00-00-00	???	ISSUE/REVISION
9	00-00-00	???	ISSUE/REVISION
10	00-00-00	???	ISSUE/REVISION
11	00-00-00	???	ISSUE/REVISION
12	00-00-00	???	ISSUE/REVISION
13	00-00-00	???	ISSUE/REVISION

ARDISIA PARK
PUBLIC PARK
FINAL ENGINEERING PLANS
CONCEPTUAL PARK EXHIBIT

CITY OF NEW SMYRNA BEACH
VOLUSIA COUNTY, FLORIDA

PROJECT NO: ZC 18169

DESIGNED BY: JES

DRAFTED BY: JES

CHECKED BY: MKW

DRAWING FILE: 18169-PARK_EX
XREF'S: 18169_BAS.DWG
XREF'S: ----

MELIA L. RUSSELL, P.E., NO.66357
KRISTOPHER T ROWLEY, P.E., NO.84263
NOT VALID WITHOUT SEAL

SHEET: EX-3

Document Prepared By:
Glenn D. Storch, Esquire
GLENN D. STORCH, P.A.
420 South Nova Road
Daytona Beach, FL 32114

Return recorded document to:
City of New Smyrna Beach Records Clerk
210 Sams Avenue
New Smyrna Beach, FL 32168

MASTER DEVELOPMENT AGREEMENT FOR SHELL POINTE COLONY PUD

The **CITY OF NEW SMYRNA BEACH, FLORIDA**, a chartered municipal corporation located in Volusia County, Florida (the "City"), and **BG AGENCY, LLC**, a Florida limited liability company ("Developer" and "Owner"), hereby agree and covenant, and bind their heirs, successors and assigns, as follows:

1. OWNERSHIP OF THE PROPERTY:

The property that is subject to this Master Development Agreement (the "Agreement") consists of approximately 543.532 +/- acres of real property (hereinafter "the Property") and is described in Exhibit "A" attached hereto and by reference made a part hereof. The Developer intends to subject the Property to the conditions and restrictions of this Agreement and the City intends to permit development of the Property in accordance with the terms of this Agreement. The Property is under the sole ownership of **BG AGENCY, LLC.**

2. DEVELOPMENT PLAN:

A. Development of the Property shall be controlled by the terms of this Agreement and, to the extent not in conflict with this Agreement, the New Smyrna Beach Land Development Regulations (LDR), and City of New Smyrna Beach Code of Ordinances, including the regulations contained therein. The Developer has designated the Property as "SHELL POINTE COLONY PUD".

B. The Property shall be developed as a mixed-use residential and commercial development as shown on the Conceptual Development Plan (CDP), which is attached hereto and incorporated herein as Exhibit "B". The Property shall generally be developed as depicted on the CDP. In case of conflict between any textual provision of this Agreement and the CDP, the textual provision shall govern. If this Agreement or the CDP fails to address a particular subject or requirement, the requirements of the City's Land Development Regulations (LDR) in effect at the time of development plan approval shall control. Failure of either to address a particular permit, condition, term or restriction shall not relieve the Developer of the necessity of complying with the law governing said permitting requirements, conditions, terms or restrictions. Density of use and compliance with all LDR provisions will be determined at the time of approval of this Agreement. The CDP is conceptual only and the plan may be adjusted by Developer, in cooperation with Staff, as the parties proceed through Site Plan approvals, provided same complies with the maximum area and other terms provided herein. Accordingly, the following site data is provided:

Total Project Area:	543.532 +/- acres
Open Space Required:	50%
Max. Impervious Coverage (entire Property):	50%
Project Perimeter Landscape Buffers:	
North:	20 ft.
South:	20 ft.
East:	20 ft.
West:	20 ft.
Minimum Natural Vegetation Requirement:	30%
Minimum Tree Preservation Requirement:	15%
Maximum Residential Density:	1.5 dwelling units per acre
Residential Common Open Space Required:	35% of required Open Space
Minimum Public Open Space:	3%
Village Green / Neighborhood Common Areas:	200 sq. ft. per dwelling unit
Public Use Sites / Civic Spaces:	300 sq. ft. per dwelling unit
Minimum Residential Lot Size:	6,600 sq. ft.
Minimum Residential Lot Width:	55 ft.

Minimum Required Residential Yard Size:	
Front (living and porches):	17.5 ft.
Front (garages):	22.5
Rear:	25 ft.
Side:	5 ft. (from edge of eave)
Street Side:	15 ft.
Minimum Residential Building Spacing:	10 ft. (from edge of eave)
Minimum Residential Building Size:	1,500 sq. ft.
Maximum Residential Building Height:	35 ft.
Minimum Project Development Within 3000 feet of Village Center:	60%
Maximum Floor Area Ratio For Commercial Areas:	1.0 FAR
Maximum Building Coverage:	50%
Minimum Commercial Lot Size:	40,000 sq. ft.
Minimum Commercial Building Setbacks:	
	200 ft. from Pioneer Trail right-of-way (the setback area may have stormwater infrastructure and water features)
	50 ft. from property lines abutting public rights-of-way
	40 ft. for outparcel lines abutting public rights-of-way
	25 ft. from other exterior property lines
	10 ft.minimum building spacing
Max. Commercial Impervious Lot Coverage:	75%
Commercial Landscape Buffers Abutting:	
Pioneer Trail:	25 ft.
Street A:	25 ft.
Tract RR:	25 ft.
Future Williamson Blvd.	20 ft.
Alt. Key PID # 6273391	10 ft.
Maximum Commercial Building Height:	45 ft.
Total Minimum Commercial Development:	15,000 sq. ft.
Commercial Parking Lot Interior Landscaping:	20%

C. The parties acknowledge that compliance with the City's LDR may necessitate modification of the CDP. Any minor modifications to the CDP that are not in conflict with the textual provisions of this Agreement and do not increase the size or intensity of the use by more than 10% of the lot area provided herein, and do not conflict with any City ordinances not superseded by this Agreement, shall be deemed "minor" and may be approved without formal amendment of this Agreement. Any change to density or height shall require a full-scale PUD Amendment approved by the City Commission. Minor amendments may include revisions to the CDP that may reconfigure the lot, phase and/or building layout so long as the modified conceptual development plan does not exceed by more than 10% the lot area depicted on the CDP. Such modifications shall require the City Administrative Official's written approval. If the Developer is not satisfied with resolution of any problem or decision by the City Administrative Official regarding such modification, the Developer may appeal the decision to the City Manager.

3. SUBDIVISION OF PROPERTY AND PHASING:

Development of the Property shall occur in multiple phases, with all required easements for development and all infrastructure servicing the phases being constructed as required by each phase. Developer intends to have five (5) phases for residential and commercial development, as shown on the CDP. Phase 1 shall be developed first, followed by Phase 2, Phase 3, Phase 4 and Phase 5, in that order; however, Developer may develop the Phase 2 property first so long as it is followed by development of the Phase 1 property. The Phase 5 Village Neighborhood Center may not be developed prior to the completion of all development infrastructure for Phases 1-4. Phase lines, however, may be adjusted at the site plan/platting stage in order to ensure proper engineering of public utilities. Phases for residential development shall be subdivided consistent with the CDP and the City's Land Development Regulations. Townhome and multi-family development shall not be permitted unless this Agreement is amended in writing after public hearing.

The Village Neighborhood Center (Phase 5) shall be developed in the areas designated for such on the CDP and shall be required to include a combination of commercial, office, public/civic space and recreational components. Required cross access and utility easements shall be recorded in the Public Records of Volusia County, Florida. All construction access for the development of the Property shall be from Pioneer Trail via the extension of Cypress Springs Parkway until such time as the Williamson Boulevard extension is completed, and construction access thereafter shall be from

either Pioneer Trail or Williamson Boulevard. Connection of Phase 1 to Monaco Boulevard shall only occur after the completion of all Phase 1 infrastructure; however, all construction access for the closeout and construction of individual homes shall continue to be from either Pioneer Trail or the Williamson Boulevard extension.

In the area that is adjacent to lots in the Estates of Verano and adjacent to and south of the Monaco Boulevard extension, including lots along Modena Way, Developer shall provide a combination of enhanced minimum buffer and water features, including stormwater wet retention, with a minimum width of one hundred (100) feet in order to provide additional separation and enhanced aesthetics between the back-to-back lots of the adjoining subdivisions.

4. CONFORMANCE WITH COMPREHENSIVE PLAN:

The City has determined that the Property is suitable in size, location and character for the uses proposed, that the uses proposed meet the needs of the City and that the uses proposed are consistent with the Comprehensive Plan of New Smyrna Beach, Florida.

5. PERMITTED USES:

Permitted Principal Uses

Residential Uses including:

Attached and detached single-family dwelling units

Commercial uses, including:

Art galleries

Automotive parts sales

Bakeries, non-manufacturing

Banks

Barber and beauty shops

Business and communications systems

Ceramic shops

College level and adult educational facilities

Convenience market with gas pumps

Delicatessens

Department stores

Dry cleaning establishments

Financial institutions

Garden supplies and equipment stores

Government buildings and offices

Grocery stores

Home improvement supply stores

Income tax services

Laundries, including self-service

Liquor stores

Men's and women's figure salons / Fitness center

Parking lots

Personal enrichment establishments

Personal services

Professional offices, including accountants, architects, consultants, dentists, engineers, financial, insurance, lawyers, medical, and stockbrokers

Real estate brokers

Restaurants, type "A", "B", "C" and "D"

Retail sales and services

Specialty food shops

Sport facilities

Supermarkets

Taverns

Theaters

Travel agents

Other Uses:

Playfields

Playgrounds

Public parks

Recreation buildings and complexes for exclusive use by residents and guests

Any accessory use customarily incidental to a permitted principal use.

6. PUD INFRASTRUCTURE/TRANSPORTATION:

A. Access easements and utility easements for utilities within the Development shall be owned by the Developer and/or the Property Owners' Association, their successors and assigns, subject to dedications of easement and rights of ingress and egress in favor of the City and/or Utilities Commission for the purpose of owning and maintaining utilities located within the Property. The access easements shall be constructed to City and/or Utilities Commission standards. The Developer acknowledges for itself, its successors and assigns, that the access easements are private and shall be a private responsibility without recourse to the City and/or Utilities Commission.

B. The Developer will build or provide for the construction of electric, potable water, sanitary sewer and reuse utility lines, which must be placed underground, to Utilities Commission specifications and, upon acceptance by the Utilities Commission, the lines shall be dedicated to the Utilities Commission together with all easements and licenses necessary for the Utilities Commission to maintain and operate the utility systems located on the Property.

C. Stormwater drainage will be constructed for the development within the Property. All stormwater retention will be held on site, and the storm water retention facility will be maintained by the Property Owners' Association at a level consistent with the standards and permit conditions of the St. Johns River Water Management District (SJRWMD). Such conditions may include maintenance of the stormwater system by a Property Owners' Association and/or Developer. Collection and conveyance facilities shall be located pursuant to the CDP and site development plan approvals for the individual buildings. The Developer agrees to participate in any proportionate fair share program and the development will be subject to transportation impact fees. Developer also agrees to pay the annual, non-ad valorem stormwater fee.

D. Developer agrees to dedicate the future Williamson Boulevard right-of-way extension, as depicted on the CDP ("Future Williamson Boulevard"). There shall be at least two (2) connections from the Property to the Future Williamson Boulevard, subject to Volusia County connection requirements. The City, Volusia County and Developer shall enter into a proportionate fair share agreement for transportation prior to plat approval for the Property, which must be approved by the City in order to be binding on the parties thereto. The City and Developer intend for the

proportionate fair share contributions for the Property to be utilized for the improvement of Pioneer Trail and the Future Williamson Boulevard within the City of New Smyrna Beach. The typical right-of-way sections for 50' and 60' rights-of-way within the Property, as shown in the CDP, are matched and consistent with the construction of Monaco Boulevard (60') and Modena Way (50') within Verano at Venetian Bay. Speed limits on the Monaco Boulevard, Modena Way and Leonardo Lane extensions within the Property shall be limited to 25 mph, which is designed to match the posted speed limits on those already-existing roadways to the west of the Property. In addition, the Shell Pointe Colony Property Owners'/Homeowners' Association(s) shall prohibit parking on all roadways within the Property.

E. A traffic impact analysis shall be required for the commercial areas of the Property referred to as "Village Neighborhood Center" on the CDP prior to any site plan approval for said commercial areas.

F. Developer has received a finding of adequate school capacity for the development on the Property. Should it be required by the Volusia County School Board, Developer shall update the school capacity determination with the Volusia County School Board prior to plat approval. In addition, the subdivisions within the Property shall be subject to school concurrency review and determinations.

G. Developer shall dedicate an 8 ft. wide pedestrian and bicycle pathway for the full length of the Property abutting Pioneer Trail upon the first site plan approval for the Property. Said pathway shall be constructed separately in Phases 2 and 5 as the infrastructure for each of those Phases is constructed. The pathway section along Pioneer Trail in Phase 4 shall be funded upon commencement of construction of the Phase 4 infrastructure.

7. ARCHITECTURAL/DESIGN STANDARDS:

The purpose of the architectural guidelines contained herein is to promote design treatments that enhance the visual appearance of development, ensure compatibility of buildings and create a strong community image and identity and to protect community aesthetics. These guidelines shall apply to the development of the property except where they are superseded or conflict with the CDP or other sections of this Agreement:

A. **Applicability.** These design standards shall apply to all uses provided herein.

B. **Site Plan Design Standards.** Site layouts shall be as provided in the CDP

attached hereto as Exhibit "B".

C. **Architectural Design Standards.** The following architectural design standards shall be required:

(1) All architectural styles within the Property shall harmonize with each other and the surrounding communities. Specific architectural details shall be approved at the site plan and subdivision approval stages. Development other than single-family residential within the Property, including in the Village Neighborhood Center, shall comply with the architectural standards in the Venetian Bay Master Development Agreement provided said standards are not in conflict with any City of New Smyrna Beach architectural standards. Single-family residential development shall meet the architectural standards provided herein.

(2) Residential Façades. The principal orientation of the front façade of all primary buildings shall be towards the street on which it fronts and shall meet the following requirements:

i. Primary Entrance: The front facing façade shall contain the primary entrance and face the street.

ii. Façade Design:

- Front Façade: Shall not consist of an unobstructed blank wall, and along street frontages, housing façades shall be varied and articulated to provide visual interest.
- Articulation Devices: May include color, texture, arcades, bays, windows, balconies, porches, roof treatment (hip and gable are preferred) and other architectural treatments.

(3) Residential Porches. The design concept is to permit porches to create a buffer and human scale layer between the sidewalk and the houses, to provide a social edge to a private dwelling in which people can choose to "see or be seen" along neighborhood streets, and to merge the public realm and private realm. Where porches are provided, the design standards below shall apply:

i. Size: Porches shall have a minimum depth of seven feet (7'), with a minimum length of ten feet (10').

ii. Covered Balconies or Balustrade Area: May be used to meet the porch

requirement if they meet dimensional requirements for porches.

iii. Setbacks: Porches may intrude into setbacks, but shall maintain a minimum front setback of seven feet (17.5').

(4) Garages. The design concept is to reduce the physical prominence of garages and improve the pedestrian environment as follows:

i. Architectural Design:

- Compatibility: Garages shall be of the same architectural form, style and materials as the primary structure.
- Visual Impact: Architectural Devices should be used to reduce the visual impacts of garage doors.

(5) All single-family homes shall be constructed with roof gutters on the sides of the homes, with stormwater directed toward any adjacent stormwater ponds to prevent stormwater from accumulating between homes. Air conditioning units shall be placed on the side of the house, and no two houses shall have an air conditioning unit adjoining the same common property line. In addition, a sound screen shall be required for all air conditioning units.

D. Site Circulation and Access. Safe, comfortable and consistent pedestrian connections are required throughout the PUD development. Commercial areas will be public transit-ready. All street rights-of-way in the development will be dedicated to the public upon completion.

E. Landscaping and Buffer Requirements.

(1) Landscaping and landscape buffers shall be as provided on the Conceptual Development Plan, attached hereto as Exhibit "B". Landscaping will meet the requirements of the LDR, with specific landscape plans for each phase. Said landscaping shall be consistent throughout the PUD. Perimeter buffers shall be as provided herein and in the Conceptual Development Plan and shall be used to meet the required natural vegetation preservation requirements except as modified by this Agreement. Drought-tolerant and Florida-friendly plant materials shall be used in landscape buffers whenever possible.

(2) Landscaping shall also be required to soften the visual appearance of pond edges. Features such as fountains are required to accent the ponds and provide adequate aeration to prevent stagnation.

(3) Trees shall be incorporated into the design of each street built within the

Property, forming a continuous, predictable border and reinforcing the function of a street as a public space. Street trees shall be incorporated into every street, planted in straight lines, between the sidewalk and the curb. Only one type of tree shall be placed on both sides of a residential street in one block. Permitted street trees shall include, but not be limited to, crape myrtles or other tree species agreed to by the City and Developer. Minor collector roads shall have street trees planted in staggered rows at a maximum of fifty (50) foot intervals on center. Neighborhood local streets shall have trees planted at a maximum of forty (40) foot intervals on center on both side of the street. Minimum size for street trees shall be two and a half (2.5) inch caliper, measured six (6) inches above the ground. Adjustments for spacing are permitted to deal with driveways and other features within the Property that interrupt the spacing pattern. The property owners association(s) for the Property shall be responsible for the replacement of street trees that die or fall due to storms.

F. **Parking Standards.** Parking for the commercial phase(s) will be determined based on the actual uses intended for said phase(s) as part of the site plan approval process and in compliance with the City's Land Development Regulations. Each residential lot shall be designed to park at least four (4) cars in the combination of driveway and garage.

G. **Street Lighting.** Developer shall install street lighting within the development right-of-ways as power becomes available pursuant to a street lighting plan submitted by Developer at the site plan/subdivision approval stage. Streets shall have lighting spaced in a staggered, alternating pattern at a maximum of four hundred foot (400') intervals. Street lights shall have a minimum height of fourteen feet (14').

H. **Commercial.** Commercial development shall be designed consistent with any design standards for the surrounding area pursuant to the City's LDR at the time of site plan review.

I. **Amenities**. The Property shall feature several amenities for residents and guests, including: a 20 +/- acre public park with gazebo and access trail to be dedicated to the City of New Smyrna Beach; walking / biking path along Pioneer Trail; children's area with playground equipment that meets City standards; and nature trails and walking paths with gazebos / sitting areas throughout the Property that feature views of lakes and preservation areas.

8. ENVIRONMENTAL CONSIDERATION:

A. The parties desire that the area is developed in an attractive, environmentally sensitive manner. The Developer shall comply with all rules, statutes, laws and regulations pertaining to protected wildlife species, including, but not limited to, the rules and permitting requirements of the Florida Game and Freshwater Fish Commission concerning gopher tortoises.

B. The majority of the Property has been used as a sod farm and cleared of trees; however, a number of wooded, wetland areas remain on the Property. Although these wooded areas will be preserved, there may be some impacts to trees where required for roadway and other connections between more developed areas. All wooded areas intended to be impacted by the development of a particular phase will require tree studies and review of same prior to subdivision and/or site plan approval for said phase. The Developer will avoid impacts to historic and specimen trees wherever practicable. No burning shall occur on the Property, and vegetative materials from clearing of the Property shall be mulched. Any clearing operations and dirt access roads into construction sites shall include dust control measures to limit impacts to surrounding properties.

9. UTILITY MASTER PLAN:

Public utilities consisting of electric, water, wastewater and reuse water for the Property or portion thereof and any applicable off-site infrastructure shall be obtained from the Utilities Commission, City of New Smyrna Beach ("UC"), and shall be applied for, built and conveyed in accordance with UC Rules and Standards, requirements, tariffs, policies and agreements prevailing at the time of Developer's requested approval of a utilities agreement(s) from the UC. Other utilities not provided by the UC shall be built in accordance with and consistent with the City of New Smyrna Beach Land Development Regulations standards.

10. SIGNAGE:

The PUD Development shall have a uniform sign program complying with the provisions and requirements of the City's LDR. A main entrance feature may be provided at Pioneer Trail and the extension of Cypress Springs Parkway, which may include walls, architectural icons, water features, or other ornamental entry features with a maximum height of 15 feet and a maximum copy area of 200 sq. ft. Entrances to individual residential areas will each be permitted to have entry

signage up to 100 sq. ft. in copy area. The commercial areas of the Property shall comply with LDR Section 604.12 G.., as amended. Specific sign plans shall be approved at the site plan and subdivision approval stages.

11. PROJECT DEVELOPMENT CRITERIA:

The terms of this Agreement shall be superior to the terms of the New Smyrna Beach LDR, and conflicting zoning or overlay regulations, unless otherwise specifically provided herein. In the event a subject is not addressed in this Agreement, the LDR shall control.

12. PROPERTY OWNERS ASSOCIATION:

A. The Developer shall form and incorporate non-profit property owners associations, which will operate, maintain and control, subject to other documents of record, the common areas and common facilities, including but not limited to, the common private access ways, bike paths, sidewalks, parking and lighting within the Property, any common storm water retention and drainage systems within the Property and the entrance areas to the Property. Each property owner will be required to become a member of an association by virtue of purchasing property in the PUD, subject to the rules, covenants and restrictions of that association, with responsibilities and voting privileges based upon the number of residential units owned or the gross building square footage constructed. The general scope and format of the association documents and covenants and restrictions will be similar in concept to the documents of similar property owners associations in New Smyrna Beach. The covenants and restrictions governing the Property and association responsibilities shall be executed and recorded in the Public Records of Volusia County, Florida. Each association will have a board of directors to legislate and govern the rules and orders of each association. The association boards will have the means and authority to carry out and regulate the by-laws and restrictions governing the perpetual maintenance, operation and repairs of all common areas and facilities. Not only will the boards of directors be able to regulate and govern the common areas, the boards will also regulate each and every member requiring the maintenance and service of his own individual property. The association rules may be enforced by fines and liens upon a member's own property in order to maintain, operate and service all common facilities on the Property. The associations will have authority to place liens against individually owned properties in order to collect unpaid dues. The

associations will have the power and means to hire, supervise and regulate persons employed by them for the maintenance, repair and operation of common areas and facilities. In addition, the associations shall prohibit short-term rentals within the Property.

B. If the associations fail to perform the maintenance, repair or replacement, as necessary, on the stormwater retention and drainage facilities, the City shall have the right, but not the obligation, after notice, to enter upon the common area of the Property and to provide the maintenance, repair or replacement of the stormwater retention and drainage facilities and shall have the right to lien all owners of record in the Property for the cost of such maintenance, repair and replacement as the City may deem necessary.

C. Developer reserves for itself, its successors and assigns, the right to maintain and operate separate facilities within the Property, which shall not be construed to be common facilities owned by the association(s). If requested by the City and as otherwise needed for plat improvements, the Developer will provide access easements and grants for the installation, maintenance and construction of the public utilities including drainage, water, sewer, reclaimed water and electricity. The Developer may from time to time add additional covenants and restrictions or make changes in the association by-laws as may be required to guarantee that the project will be developed in accordance with the policies outlined in this Agreement.

D. Developer recognizes that property owners in Shell Pointe Colony will make use of portions of Venetian Bay, and especially the Estates at Verano, via roadway and pedestrian connections, in addition to potential use of the Venetian Bay Village Center. As such, the associations in Shell Pointe Colony, as described herein above, shall also be subject to the Venetian Bay Homeowners' Association, Inc. (Master Association), which shall collect assessments from the associations to pay for the upkeep of landscaping and infrastructure within the Venetian Bay PUD and the Estates at Verano.

13. COSTS:

No costs of development of the Property, hereunder, shall be borne by the City or Utilities Commission unless the City or Utilities Commission specifically agrees in writing to assume such cost.

14. EFFECTIVE DATE AND EXPIRATION:

A. This Agreement shall be effective upon approval by the City Commission. The Developer will be required to record the Agreement with the Volusia County Clerk of the Court and provide a copy to the City Clerk and Administrative Official. The restrictions on use and development imposed by this Agreement shall be binding upon all successors in interest in the Property, unless and until the City alters or eliminates such restrictions in the course of the City's actions as zoning authority or until this Agreement expires.

B. The development rights under this Agreement shall expire five (5) years from the date of its execution. This Agreement may be extended for an additional 5-year term as an amendment to this Agreement.

C. The term "development" shall mean that the Developer, his successors or assigns, shall actively be in pursuit of installation of improvements, permits for installation of improvements, or installation of improvements over a portion or all of the Property.

D. If the City does not approve this Agreement, it shall be null, void and without further effect.

15. AMENDMENTS:

A. Amendments to this Agreement, other than minor modifications to the CDP as referred to in Section 2.D. of this Agreement, shall not be effective unless in writing and signed by all record title property owners of the land for which the amendment is to be applied and the City.

B. Before amending this Agreement, the City shall conduct two or more public hearings. At the City's option, one of these public hearings may be held by the Planning and Zoning Board.

(1) Notice of intent to consider an amendment to this Agreement shall be published by the City, at the Owner's cost, in a newspaper of general circulation and readership in Volusia County, Florida.

(2) If applicable, notice of intent to consider an amendment shall comply with the requirements of Section 166.041(3) (c), Florida Statutes (2014), as amended from time to time.

(3) The day, time and place at which the second public hearing, if any, will be held shall be announced at the first public hearing.

(4) The notices required above shall specify the location of the Property, the location of that portion of the Property subject to the proposed amendment, the nature of the proposed amendment, and the following information to the extent applicable:

(a) Changes in permitted and/or conditional uses;

(b) Changes in building intensities and/or height proposed.

(5) All notices shall specify a place where a copy of the proposed amendment can be obtained prior to the public hearing.

16. PUBLIC RECORD:

The parties agree this Agreement shall be recorded in the Public Records of Volusia County, Florida, at the Developer's expense. The provisions of this Agreement shall constitute covenants running with the land applicable to the entire subject Property described herein or any portion thereof. The restrictions on use and development imposed by this Agreement shall be binding upon all successors in interest in the Property, unless and until the City alters or eliminates such restrictions in the course of the City's actions as zoning authority.

17. SEVERABILITY:

If any provision of this Agreement is held by a court of competent jurisdiction to be invalid or otherwise unenforceable, such holding shall not affect the validity or enforceability of any other provision of this Agreement unless the holding so states.

18. POLICE POWER AND SOVEREIGN IMMUNITY NOT WAIVED:

Nothing contained in this Agreement shall be construed as a waiver of or attempted waiver of contract with respect to the regulatory and permitting authority of the City as it now or hereafter exists under applicable laws, rules and regulations. Further, nothing contained in this Agreement shall be construed as a waiver of or attempted waiver by the City of its sovereign immunity under the constitution and laws of the State of Florida.

19. COMPLETE AGREEMENT:

This Agreement represents the complete understanding by and between the parties with respect to the development and continued use of the subject Property. Any and all prior agreements between the parties with respect to any subject comprehended by this Agreement is hereby voided and superseded by this Agreement. Any amendment to this Agreement shall be in writing and signed by the City and the Owner.

IN WITNESS WHEREOF, the parties hereto attached their hands and seals on the dates set forth below.

[Signatures on following pages.]

Signed, sealed and delivered
in the presence of:

Barbara Billings
Witness 1

Barbara Billings
Print Name of Witness 1

Fran Gosnell
Witness 2

Fran Gosnell
Print Name of Witness 2

CITY OF NEW SMYRNA BEACH,
a Florida Municipal Corporation

By: _____
James Hathaway, Mayor

By: _____
Johnny Bledsoe, City Clerk

Dated: July 16, 2018

STATE OF FLORIDA
COUNTY OF VOLUSIA

The foregoing instrument was acknowledged before me this 16th day of July, 2018, by JAMES HATHAWAY and JOHNNY BLEDSOE, Mayor and City Clerk, respectively, of the City of New Smyrna Beach, Florida, a chartered municipal corporation, on behalf of the City. They are personally known to me and did not take an oath.

(Seal)

KELLY MCQUILLEN
MY COMMISSION # FF 981362
EXPIRES: April 12, 2020
Bonded Thru Budget Notary Services

Kelly McQuillen
Notary Public

APPROVED AS TO FORM AND CORRECTNESS
As Attested to

By: Carrie Avallone
City Attorney, Carrie Avallone

Dated: 7/25/18

Signed, sealed and delivered in the presence of:

Witness 1

Brian S. Hutchins
Print Name of Witness 1

Witness 2

SHERRI ALDRICH
Print Name of Witness 2

BG AGENCY, LLC, a Florida limited liability company

By: BRUCE O. SPEER

Dated: 7/3/2018

STATE OF ILLINOIS
COUNTY OF COLES

The foregoing instrument was acknowledged before me this 3rd day of July, 2018, by Bruce Speer, as Member of **BG AGENCY, LLC**, who is [4] personally known to me or who [ ] produced _____ as identification who and did not take an oath.

(Seal)

OFFICIAL SEAL
JOHNA VON BEHRENS
NOTARY PUBLIC - STATE OF ILLINOIS
MY COMMISSION EXPIRES:12/28/21

Notary Public

EXHIBIT "A"

OFFICIAL RECORDS BOOK 6716, PAGE 344

LAND DEEDED TO WILLIAM E. LOUCKS, AS TRUSTEE UNDER THAT CERTAIN LAND TRUST KNOWN AS THE PIONEER TRAIL LAND TRUST, FEBRUARY 14, 2008, AS DESCRIBED IN OFFICIAL RECORDS BOOK 6193, PAGE 642, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

PARCEL OF LAND IN SECTIONS 5, 8, AND 9, TOWNSHIP 17 SOUTH, RANGE 33 EAST, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
COMMENCE AT THE WEST 1/4 CORNER OF SAID SECTION 8; THENCE RUN ALONG THE WEST LINE N 01°28' 01" W, A DISTANCE OF 26.70 FEET TO THE NORTHEAST CORNER OF TIFFANY HOMES AT VENETIAN BAY, PHASE 1B AS RECORDED IN MAP BOOK 53, PAGE 189-191, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, AND THE POINT OF BEGINNING; THENCE CONTINUE ALONG THE WEST LINE OF SECTION 8, N 01° 28' 01" W, A DISTANCE OF 2614.68 FEET TO THE NORTHWEST CORNER OF SAID SECTION 8, SAID POINT ALSO BEING THE SOUTHWEST CORNER OF SECTION 5, TOWNSHIP 17 SOUTH, RANGE 33 EAST; THENCE N 00° 04' 16" E, ALONG THE WEST LINE OF SAID SECTION 5, A DISTANCE OF 184.08 FEET TO THE SOUTHERLY RIGHT OF WAY LINE OF PIONEER TRAIL A 66 FT. RIGHT OF WAY AS NOW ESTABLISHED AND OCCUPIED; THENCE RUN ALONG THE SAID RIGHT OF WAY LINE THE FOLLOWING TWO COURSES S 79° 32' 51" E, A DISTANCE OF 1296.65 FEET; THENCE S 79° 06' 22" E, A DISTANCE OF 1439.03 FEET TO THE WEST LINE OF THE LAND DESCRIBED IN OFFICIAL RECORDS BOOK 6184, PAGE 784, THENCE RUN ALONG THE WEST LINE OF SAID LAND, S 06° 56' 00" W, A DISTANCE OF 360.00 FEET TO THE SOUTH LINE OF SAID LAND; THENCE RUN ALONG THE SOUTH LINE OF SAID LAND S 79° 48' 53" E, A DISTANCE OF 375.00 FEET TO THE EAST LINE OF SAID LAND; THENCE RUN ALONG THE EAST LINE OF SAID LAND, N 06° 55' 46" E, A DISTANCE OF 360.00 FEET TO THE SOUTHERLY RIGHT OF WAY LINE OF SAID PIONEER TRAIL; THENCE CONTINUE ALONG SAID SOUTHERLY RIGHT OF WAY LINE OF PIONEER TRAIL THE FOLLOWING 9 COURSES: S 80° 34' 35" E, A DISTANCE OF 305.65 FEET; THENCE S 81° 26' 18" E, A DISTANCE OF 261.34 FEET TO THE BEGINNING OF A CURVE CONCAVE TO THE NORTH, SAID CURVE HAVING A CENTRAL ANGLE OF 14° 19' 00", A RADIUS OF 1033.00 FEET AND A CHORD BEARING OF S 88° 35' 48" E; THENCE EASTERLY ALONG THE ARC OF SAID CURVE, 258.12 FEET; THENCE CONTINUE ALONG SAID SOUTHERLY RIGHT OF WAY LINE N 84° 14' 42" E, A DISTANCE OF 205.57 FEET; THENCE N 83° 52' 05" E, A DISTANCE OF 1110.76 FEET; THENCE S 03° 20' 59" E, A DISTANCE OF 17.32 FEET; THENCE N 84° 42' 59" E, A DISTANCE OF 210.19 FEET; THENCE S 89° 34' 21" E, A DISTANCE OF 502.45 FEET; THENCE N 84° 42' 59" E, A DISTANCE OF 122.93 FEET TO THE WEST RIGHT OF WAY LINE OF HIGHWAY I-95; THENCE RUN ALONG THE WEST RIGHT OF WAY LINE OF I-95 THE FOLLOWING 4 COURSES: S 04° 32' 18" E, A DISTANCE OF 1083.12 FEET; THENCE S 03° 06' 43" E, A DISTANCE OF 200.06 FEET; THENCE S 04° 32' 18" E, A DISTANCE OF 90.82 FEET TO THE BEGINNING OF A CURVE CONCAVE EASTERLY, SAID CURVE HAVING A RADIUS OF 3999.83 FEET AND A CENTRAL ANGLE OF 1° 23' 01"; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 96.59 FEET TO THE WEST LINE OF THE LAND DESCRIBED IN OFFICIAL RECORDS BOOK 4634, PAGE 2646; THENCE DEPART SAID RIGHT OF WAY OF I-95 AND RUN ALONG THE SAID WEST LINE THE FOLLOWING 5 COURSES: S 38° 05' 37" W, A DISTANCE OF 519.09 FEET; THENCE S 34° 52' 24" W, A DISTANCE OF 460.54 FEET; THENCE S 28° 18' 22" W, A DISTANCE OF 518.53 FEET; THENCE S 10° 54' 28" W, A DISTANCE OF 540.52 FEET; THENCE S 06° 48' 48" W, A DISTANCE OF 634.92 FEET TO THE NORTHEAST CORNER OF THAT LAND DESCRIBED IN OFFICIAL RECORD BOOK 6106 PG. 1858, SAID PUBLIC RECORDS; THENCE DEPART ALONG THE LAND DESCRIBED IN OFFICIAL RECORDS BOOK 6106, PAGE 1858 THE FOLLOWING 5 COURSES: N 73° 02' 06" W, A DISTANCE OF 1636.14 FEET; THENCE N 02° 20' 33" E, A DISTANCE OF 730.38 FEET; THENCE N 88° 09' 05" W, A DISTANCE OF 384.46 FEET; THENCE N 81° 59' 03" W, A DISTANCE OF 804.77 FEET; THENCE S 11° 25' 45" W, A DISTANCE OF 977.34 FEET TO THE NORTH LINE OF THAT LAND DESCRIBED IN OFFICIAL RECORDS BOOK 5855 PG. 4451, SAID PUBLIC RECORDS; THENCE ALONG SAID NORTH LINE THE FOLLOWING 2 COURSES: N 48° 34' 15" W, A DISTANCE OF 1536.43 FEET; THENCE N 78° 32' 34" W, A DISTANCE OF 1015.86 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT THE FOLLOWING DESCRIBED LAND DEEDED TO FLORIDA POWER & LIGHT COMPANY AS DESCRIBED IN OFFICIAL RECORDS BOOK 6275, PAGE 2063, SAID PUBLIC RECORDS, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

A PORTION OF SECTION 8, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING FROM A FOUND 5/8" IRON ROD WITH AN UNREADABLE CAP NEAR (0.39' EAST AND 0.46' NORTH) THE NORTHEAST CORNER OF SECTION 8, TOWNSHIP 17 SOUTH, RANGE 33 EAST; THENCE S01°05'36"E, A DISTANCE OF 548.46 FEET TO A POINT IN THE SOUTHERLY RIGHT-OF-WAY OF PIONEER TRAIL SAID POINT BEING THE POINT OF BEGINNING; THENCE S01°08'01"E ALONG THE EAST LINE OF SAID SECTION 8, A DISTANCE OF 857.05 FEET; THENCE S84°42'55"W, A DISTANCE OF 1,275.29 FEET; THENCE N05°47'14"W, A DISTANCE OF 857.87 FEET; THENCE N84°14'42"W A DISTANCE OF 2.92 FEET; THENCE N83°52'05"E, A DISTANCE OF 1,110.76 FEET; THENCE S03°20'59"E, A DISTANCE OF 17.32 FEET; THENCE N84°42'59"E, A DISTANCE OF 210.19 FEET; THENCE S89°34'21"E, A DISTANCE OF 21.79 FEET TO THE POINT OF BEGINNING.

OFFICIAL RECORDS BOOK 6716, PAGE 332

LAND DEEDED TO WILLIAM E. LOUCKS, AS TRUSTEE UNDER THAT CERTAIN LAND TRUST KNOWN AS THE PIONEER TRAIL LAND TRUST, JULY 30, 2007, AS DESCRIBED IN OFFICIAL RECORDS BOOK 6106, PAGE 1858, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

A PORTION OF SECTION 8, TOWNSHIP 17 SOUTH, RANGE 33 EAST AND SECTION 17, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE NORTHEAST CORNER OF VENETIAN BAY PHASE 2 – UNIT 1, AS RECORDED IN MAP BOOK 53, PAGES 139 THROUGH 175, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE RUN N77°42'19"W ALONG THE NORTH LINE OF SAID VENETIAN BAY PHASE 2 – UNIT 1 , A DISTANCE OF 2513.87 FEET TO THE EASTERLY LINE OF THAT PROPERTY DESCRIBED IN OFFICIAL RECORDS BOOK 5855, PAGE 4451, SAID PUBLIC RECORDS; THENCE DEPART SAID NORTH LINE N07°34'30"E ALONG SAID EASTERLY LINE, 1878.62 FEET; THENCE CONTINUE ALONG SAID EASTERLY LINE N48°34'14"W, 222.94 FEET; THENCE DEPART SAID EASTERLY LINE N11°25'43"E, 977.41 FEET; THENCE S81°58'56"E, 804.77 FEET; THENCE S88°08'55E", 384.47 FEET; THENCE S02°20'05"W, 730.35 FEET; THENCE S73°02'01"E, 1636.07 FEET TO THE EASTERLY LINE OF THAT PROPERTY DESCRIBED IN OFFICIAL RECORDS BOOK 3526, PAGE 1971, SAID PUBLIC RECORDS; THENCE S06°48'48"W ALONG SAID EASTERLY LINE, 664.93 FEET; THENCE S16°46'13"W ALONG SAID EASTERLY LINE, 1578.12 FEET TO THE POINT OF BEGINNING.

OFFICIAL RECORDS BOOK 6716, PAGE 332 PARCEL 3

A PORTION OF THAT PROPERTY DESCRIBED IN OFFICIAL RECORDS BOOK 5855, PAGE 4451, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

A PORTION OF SECTION 8, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE NORTHEAST CORNER OF VENETIAN BAY PHASE 2 – UNIT 1, AS RECORDED IN MAP BOOK 53, PAGES 139 THROUGH 175, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE RUN N77°42'19"W ALONG THE NORTH LINE OF SAID VENETIAN BAY PHASE 2 – UNIT 1 , A DISTANCE OF 2513.87 FEET TO THE EASTERLY LINE OF THAT PROPERTY DESCRIBED IN OFFICIAL RECORDS BOOK 5855, PAGE 4451, SAID PUBLIC RECORDS; THENCE DEPART SAID NORTH LINE N07°34'30"E ALONG SAID EASTERLY LINE, 1878.62 FEET; THENCE CONTINUE ALONG SAID EASTERLY LINE N48°34'14"W, 152.05 FEET TO THE POINT OF BEGINNING; THENCE DEPART SAID EASTERLY LINE S22°23'02"W, 59.40 FEET; THENCE N66°18'51"W, 29.25 FEET; THENCE N22°23'02"E, 68.83 FEET; THENCE S48°34'14"E, 30.93 FEET TO THE POINT OF BEGINNING.

OFFICIAL RECORDS BOOK 6908, PAGE 4682

A PORTION OF SECTION 8, TOWNSHIP 17 SOUTH, RANGE 33 EAST AND SECTION 17, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
COMMENCE AT A 4" x 4" CONCRETE MONUMENT BEING THE SOUTHWEST CORNER OF SAID SECTION 8 AND THE NORTHWEST CORNER OF SAID SECTION 17, AS SHOWN ON THE PLAT OF VENETIAN BAY PHASE 1B–UNIT 1, AS RECORDED IN MAP BOOK 52, PAGES 71 THROUGH 91 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, THENCE N01°28'01"W ALONG THE EAST LINE OF SAID PHASE 1B–UNIT 1 AND THE WESTERLY LINE OF THE SOUTHWEST ONE–QUARTER OF SAID SECTION 8, A DISTANCE OF 431.61 FEET TO A CONCRETE MONUMENT MARKING THE NORTHEASTERLY CORNER OF SAID PHASE 1B–UNIT 1 AND THE SOUTHEASTERLY CORNER OF VENETIAN BAY PHASE 1B–UNIT 2, AS RECORDED IN MAP BOOK 52, PAGES 150 THROUGH 168 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, THENCE CONTINUE N01°28'01"W ALONG THE EASTERLY LINE OF SAID PHASE 1B–UNIT 2 AND THE WESTERLY LINE OF SAID SOUTHWEST ONE–QUARTER, 2208.43 FEET TO A 1–1/4" IRON PIPE BEING THE WEST QUARTER CORNER OF SAID SECTION 8; THENCE CONTINUE N01°28'01"W ALONG THE WEST LINE OF THE NORTHWEST ONE–QUARTER OF SAID SECTION 8, A DISTANCE OF 26.70 FEET; THENCE DEPARTING SAID WEST LINE OF SECTION 8, S78°32'20"E, 856.82 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE S78°32'20"E, 159.08 FEET; THENCE S48°34'14"E, 1576.31 FEET; THENCE S22°23'02"W, 68.83 FEET; THENCE S66°18'51"E, 29.25 FEET; THENCE N22°23'02"E, 59.40 FEET; THENCE S48°34'14"E, 152.05 FEET; THENCE S07°34'30"W, 1527.43 FEET; THENCE N77°42'17"W, 100.07 FEET; THENCE N06°37'38"E, 1441.31 FEET; THENCE N46°52'51"W, 1838.78 FEET TO THE POINT OF BEGINNING.

EXCEPTION OFFICIAL RECORDS BOOK 6908, PAGE 4691

A PORTION OF SECTION 17, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
COMMENCE AT A 4" x 4" CONCRETE MONUMENT BEING THE SOUTHWEST CORNER OF SAID SECTION 8 AND THE NORTHWEST CORNER OF SAID SECTION 17, AS SHOWN ON THE PLAT OF VENETIAN BAY PHASE 1B–UNIT 1, AS RECORDED IN MAP BOOK 52, PAGES 71 THROUGH 91 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, THENCE N01°28'01"W ALONG THE EAST LINE OF SAID PHASE 1B–UNIT 1 AND THE WESTERLY LINE OF THE SOUTHWEST ONE–QUARTER OF SAID SECTION 8, A DISTANCE OF 431.61 FEET TO A CONCRETE MONUMENT MARKING THE NORTHEASTERLY CORNER OF SAID PHASE 1B–UNIT 1 AND THE SOUTHEASTERLY CORNER OF VENETIAN BAY PHASE 1B–UNIT 2, AS RECORDED IN MAP BOOK 52, PAGES 150 THROUGH 168 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, THENCE CONTINUE N01°28'01"W ALONG THE EASTERLY LINE OF SAID PHASE 1B–UNIT 2 AND THE WESTERLY LINE OF SAID SOUTHWEST ONE–QUARTER, 2208.43 FEET TO A 1–1/4" IRON PIPE BEING THE WEST QUARTER CORNER OF SAID SECTION 8; THENCE CONTINUE N01°28'01"W ALONG THE WEST LINE OF THE NORTHWEST ONE–QUARTER OF SAID SECTION 8, A DISTANCE OF 26.70 FEET; THENCE DEPARTING SAID WEST LINE OF SECTION 8, S78°32'20"E, 1015.90 FEET; THENCE S48°34'14"E, 1576.31 FEET; THENCE S22°23'02"W, 68.83 FEET; THENCE S66°18'51"E, 29.25 FEET; THENCE N22°23'02"E, 59.40 FEET; THENCE S48°34'14"E, 152.05 FEET; THENCE S07°34'30"W, 1527.43 FEET TO THE POINT OF BEGINNING; THENCE S77°42'17"E, 673.41 FEET TO THE BEGINNING OF A NON TANGENT CURVE CONCAVE SOUTHWESTERLY HAVING A RADIUS OF 260.00 FEET, A CENTRAL ANGLE OF 121°42'01" AND A CHORD BEARING S49°03'54"E; THENCE EASTERLY ALONG THE ARC OF SAID CURVE, 552.26 FEET; THENCE S49°37'32"W, 166.40 FEET TO THE NORTH LINE OF VENETIAN BAY PHASE 2 – UNIT 1, AS RECORDED IN MAP BOOK 53, PAGES 139–175 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE N77°42'19"W ALONG SAID NORTH LINE, 942.19 FEET; THENCE N07°34'30"E, 351.19 FEET TO THE POINT OF BEGINNING.

NET AREA OF THE ABOVE 543.53 ACRES

Instrument #20181503382 #22 Book:7576 Page:1105

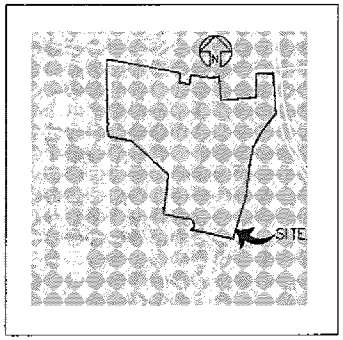
EXHIBIT "B"

CONCEPTUAL DEVELOPMENT PLAN
FOR
SHELL POINTE COLONY
NEW SMYRNA BEACH, FLORIDA
OCTOBER 2016

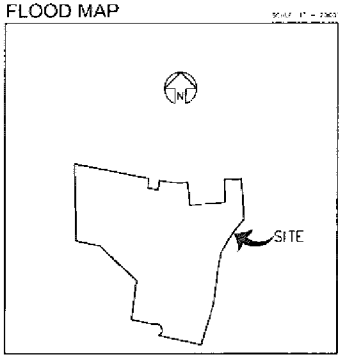
PREPARED BY:

MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS

AERIAL MAP



FLOOD MAP



OWNER
BG AGENCY, LLC
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MATTOON, ILLINOIS 61938
PHONE: (217) 235-7102 X356
E-MAIL: bhutchins@rollking.com

ENGINEER
MARK DOWST AND ASSOCIATES, INC.
536 N. HALIFAX AVENUE, SUITE 100
DAYTONA BEACH, FLORIDA 32118
PHONE: (386) 258-7999 FAX: (386) 257-4310
E-MAIL: mdowst@mdaeng.com

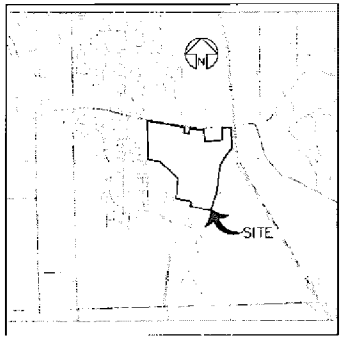
ENVIRONMENTAL
BIOLOGICAL CONSULTING SERVICES INC.
CONTACT: JOE YOUNG III
206 RUSH STREET
NEW SMYRNA BEACH, FLORIDA 32168
PHONE: (386) 423-3402 FAX: (386) 423-0107

ATTORNEY
STORCH AND HARRIS, LLC
CONTACT: GLENN D. STORCH, ESQ.
420 S. NOVA ROAD
DAYTONA BEACH, FLORIDA 32114
PHONE: (386) 238-8363 FAX: (386) 236-0988

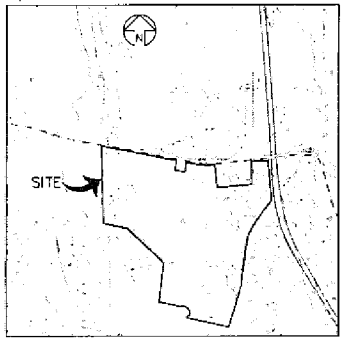
SHEET INDEX

No.	DESCRIPTION
C1	COVER SHEET
C2	CONCEPT PLAN
C3	OPEN SPACE / PATHWAY EXHIBIT
C4	VILLAGE CENTER PROXIMITY EXHIBIT
C5	WETLAND IMPACT EXHIBIT
C6-C7	LOT LAYOUT
C8-C9	EXISTING SITE CONDITIONS
C10	ROADWAY TYPICAL SECTIONS
C11	ROADWAY TYPICAL SECTIONS

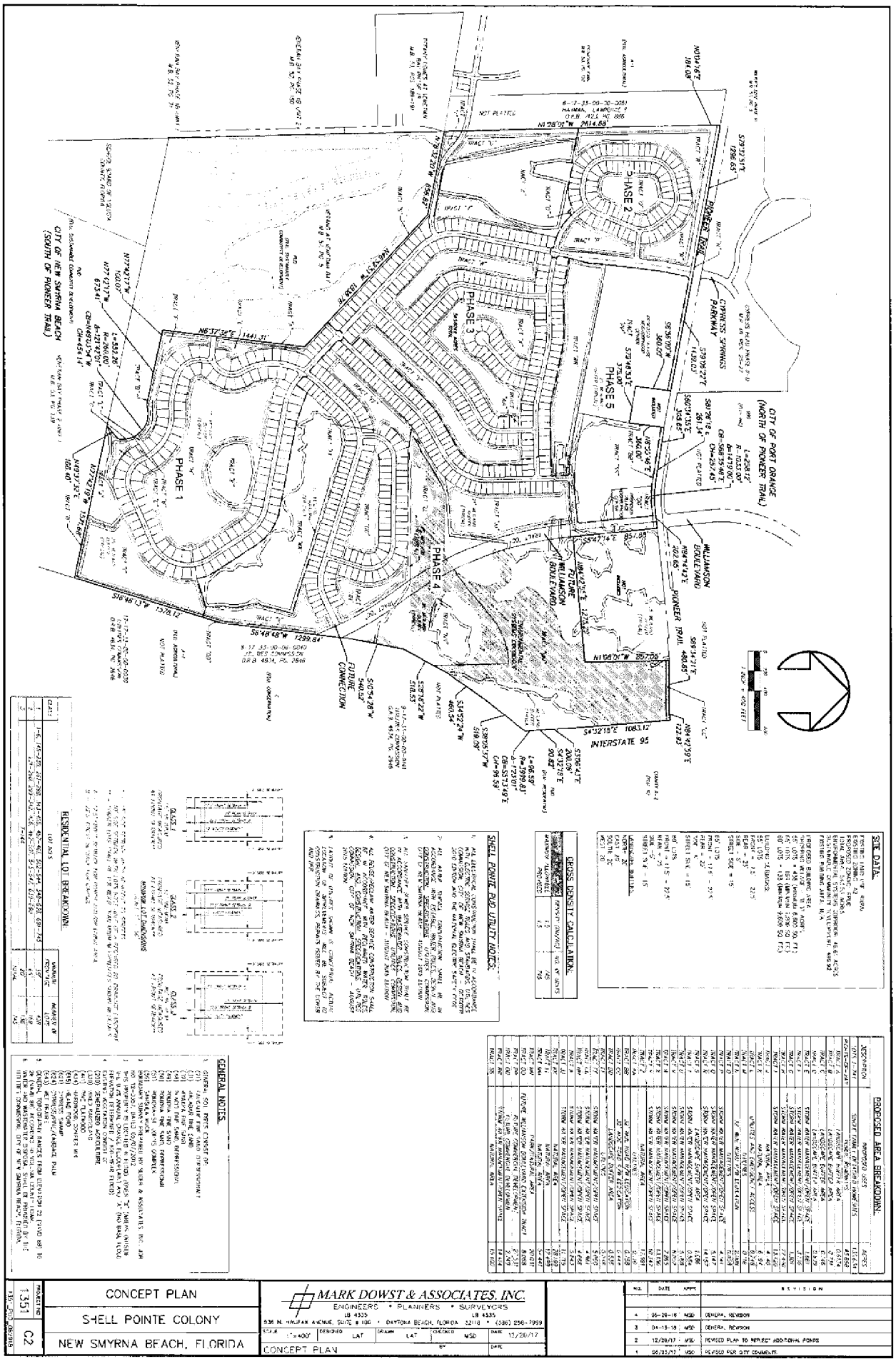
VICINITY MAP

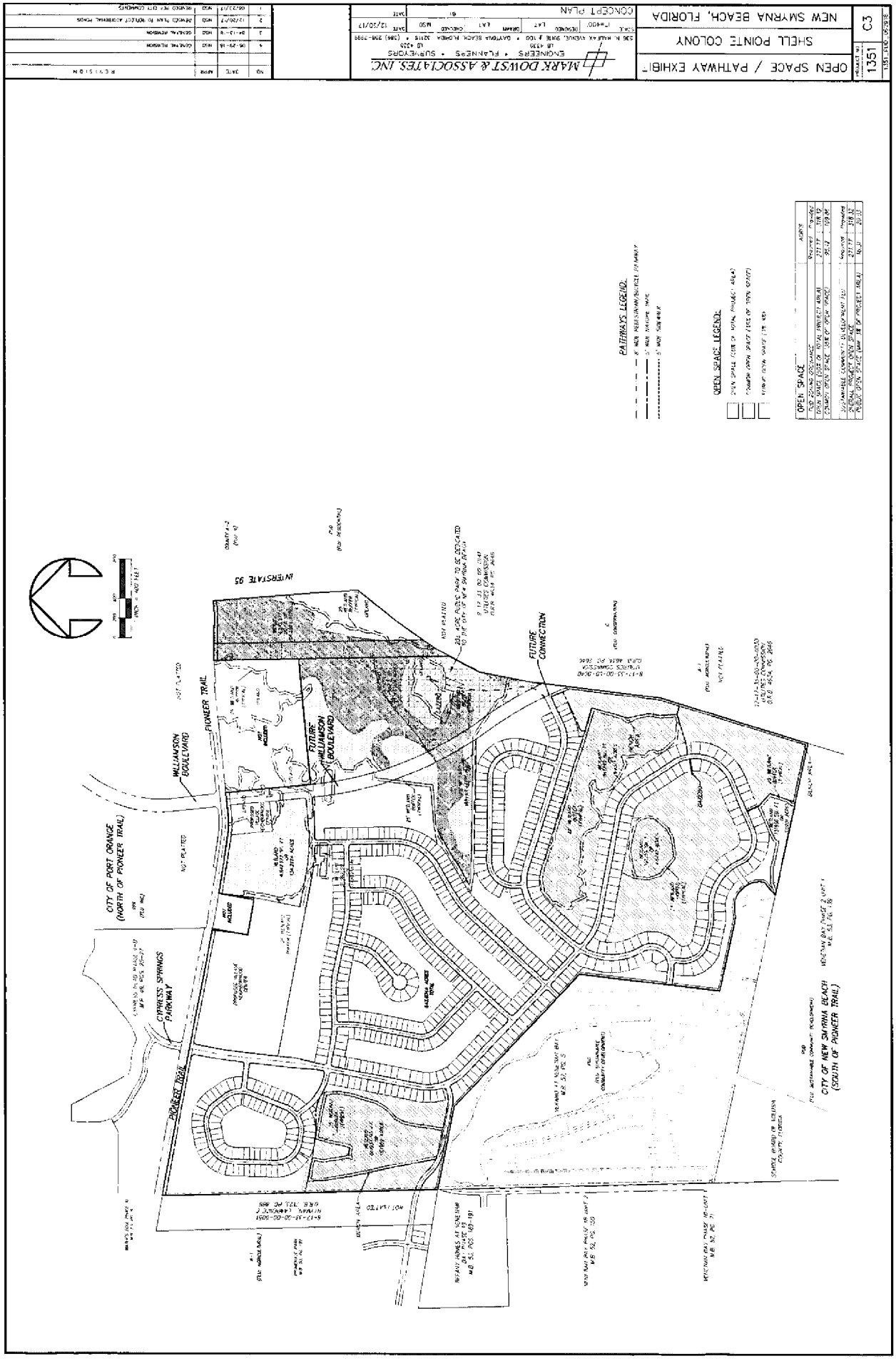


QUAD MAP



SECTION 8, TOWNSHIP 17 SOUTH, RANGE 33 EAST


CITY OF NEW SMYRNA BEACH (SOUTH OF PIONEER TRAIL)
CITY OF PORT ORANGE (NORTH OF PIONEER TRAIL)
PHASE 1
PHASE 2
PHASE 3
PHASE 4
PHASE 5
CYPRESS SPRINGS PARKWAY
WILLIAMSON BOULEVARD
FUTURE WILLIAMSON BOULEVARD
PIONEER TRAIL
INTERSTATE 95
FUTURE CONNECTION
N89°42'59"E 1322.93'
N0°17'01"W 1324.66'
S0°49'48"W 1299.84'
S0°54'29"W 540.52'
S52°42'27"W 518.53'
S54°22'47"W 460.54'
S57°41'47"E 200.08'
S54°32'19"E 1083.12'
S57°32'35"E 1286.65'
N0°17'01"W 1324.66'
N1°28'01"W 2614.68'
N89°42'59"E 1322.93'
S0°49'48"W 1378.12'
N89°42'42"E 662.65'
S89°51'21"E 480.05'
N1°08'01"W 80.00'
S0°49'48"W 1299.84'
S.17, T.17-S., R.33-E. ORD. 2006-19 ORB 4634, PG. 3846


OPEN SPACE / PATHWAY EXHIBIT
SHELL POINTE COLONY
NEW SMYRNA BEACH, FLORIDA
C3
MARK DOWST & ASSOCIATES, INC.
ENGINEERS • PLANNERS • SURVEYORS
CONCEPT PLAN
PATHWAYS LEGEND:
OPEN SPACE LEGEND:
OPEN SPACE
INTERSTATE 95
WILLIAMSON BOULEVARD
PIONEER TRAIL
FUTURE WILLIAMSON BOULEVARD
FUTURE CONNECTION
CITY OF PORT ORANGE (NORTH OF PIONEER TRAIL)
CYPRESS SPRINGS PARKWAY
CITY OF NEW SMYRNA BEACH (SOUTH OF PIONEER TRAIL)

VILLAGE CENTER PROXIMITY EXHIBIT
SHELL POINTE COLONY
NEW SMYRNA BEACH, FLORIDA
C4
1351
CONCEPT PLAN
MARK DOWST & ASSOCIATES, INC
ENGINEERS • PLANNERS • SURVEYORS
LEGEND:
VILLAGE CENTER
WILLIAMSON BOULEVARD
INTERSTATE 95
PIONEER TRAIL
FUTURE CONNECTION
FUTURE WILLIAMSON BOULEVARD
CYPRESS SPRINGS PARKWAY
CITY OF FORT ORANGE (NORTH OF PIONEER TRAIL)
CITY OF NEW SMYRNA BEACH (SOUTH OF PIONEER TRAIL)
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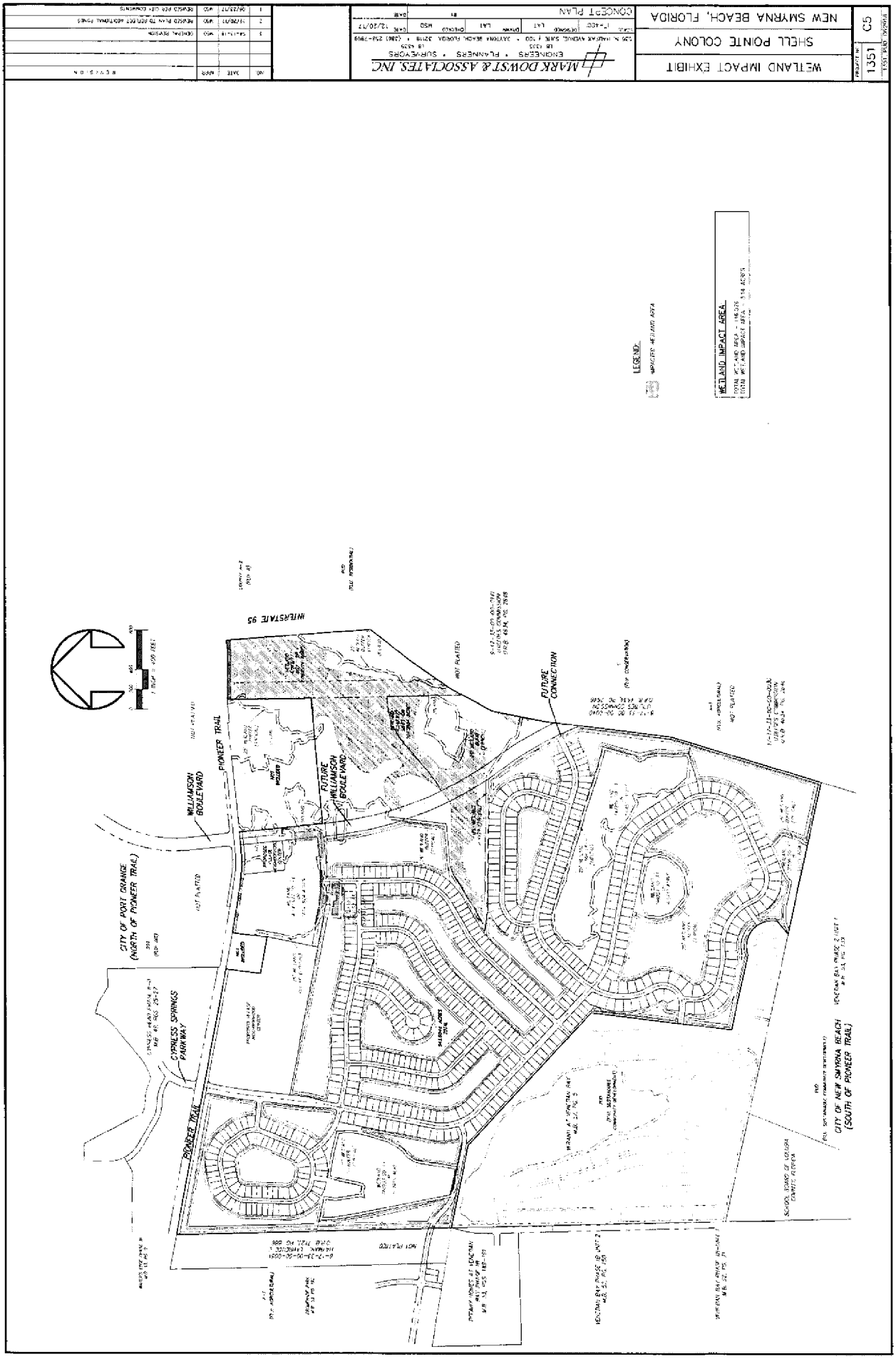
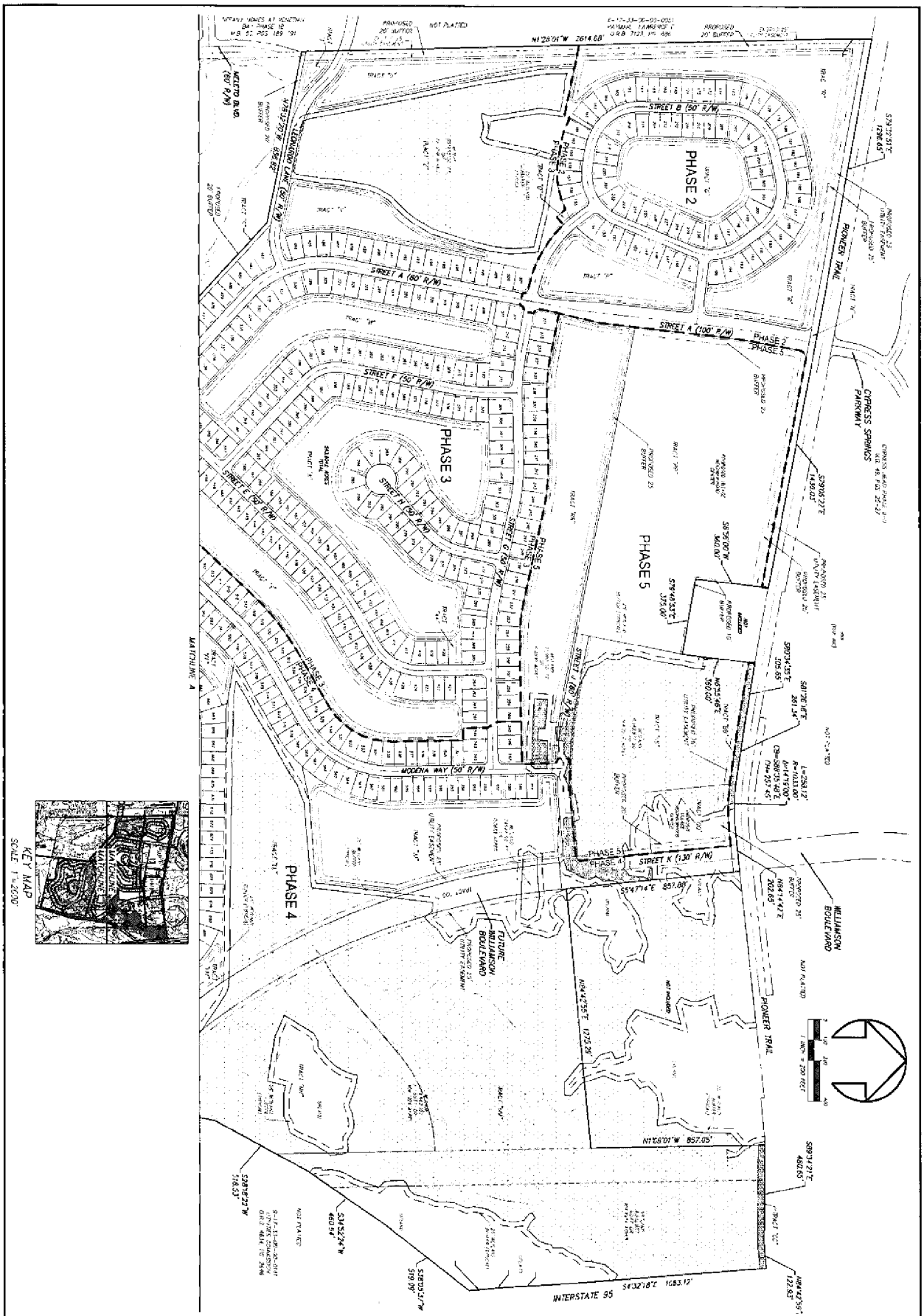
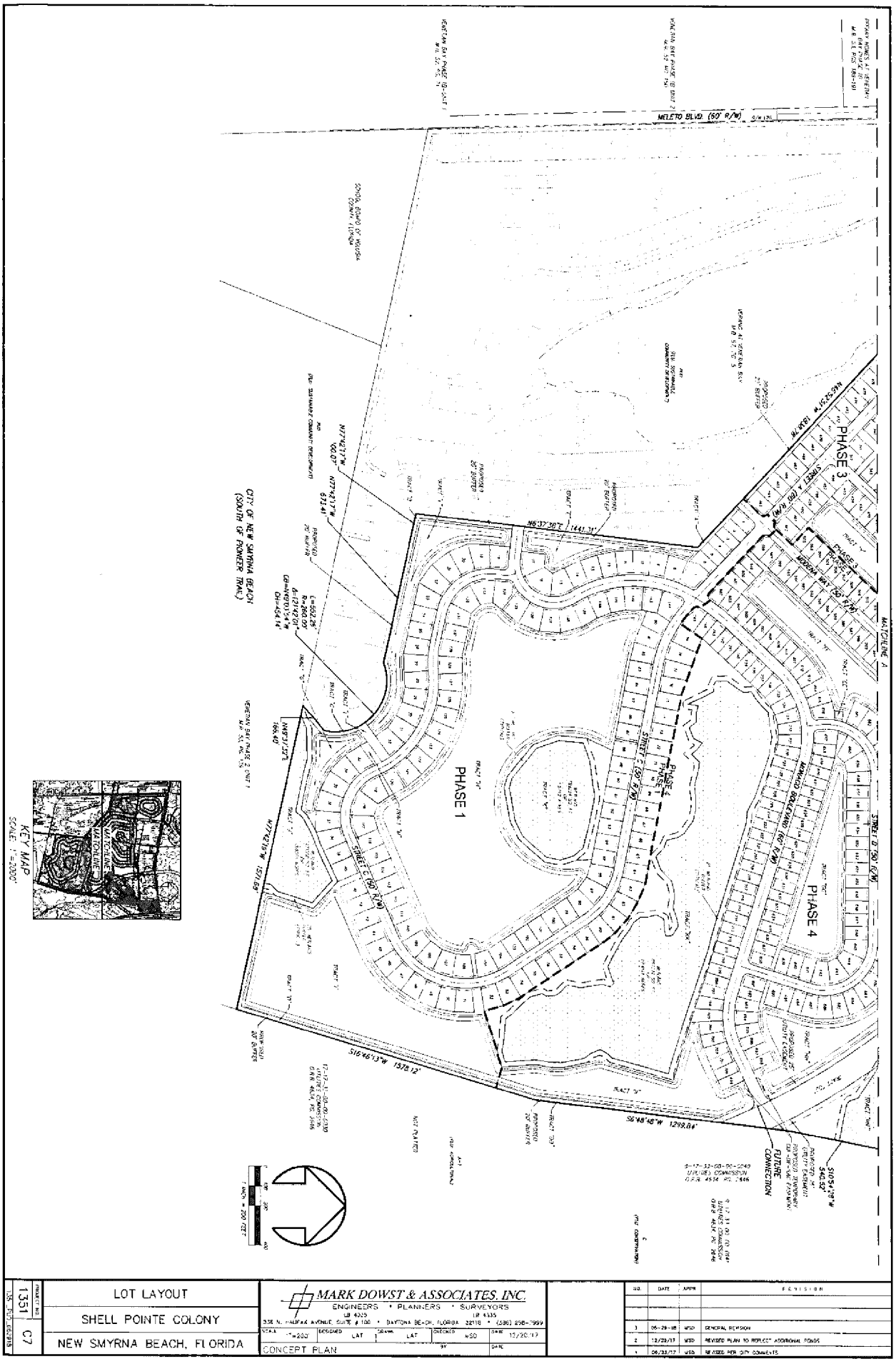
NOT PLATTED
NOT PLATTED

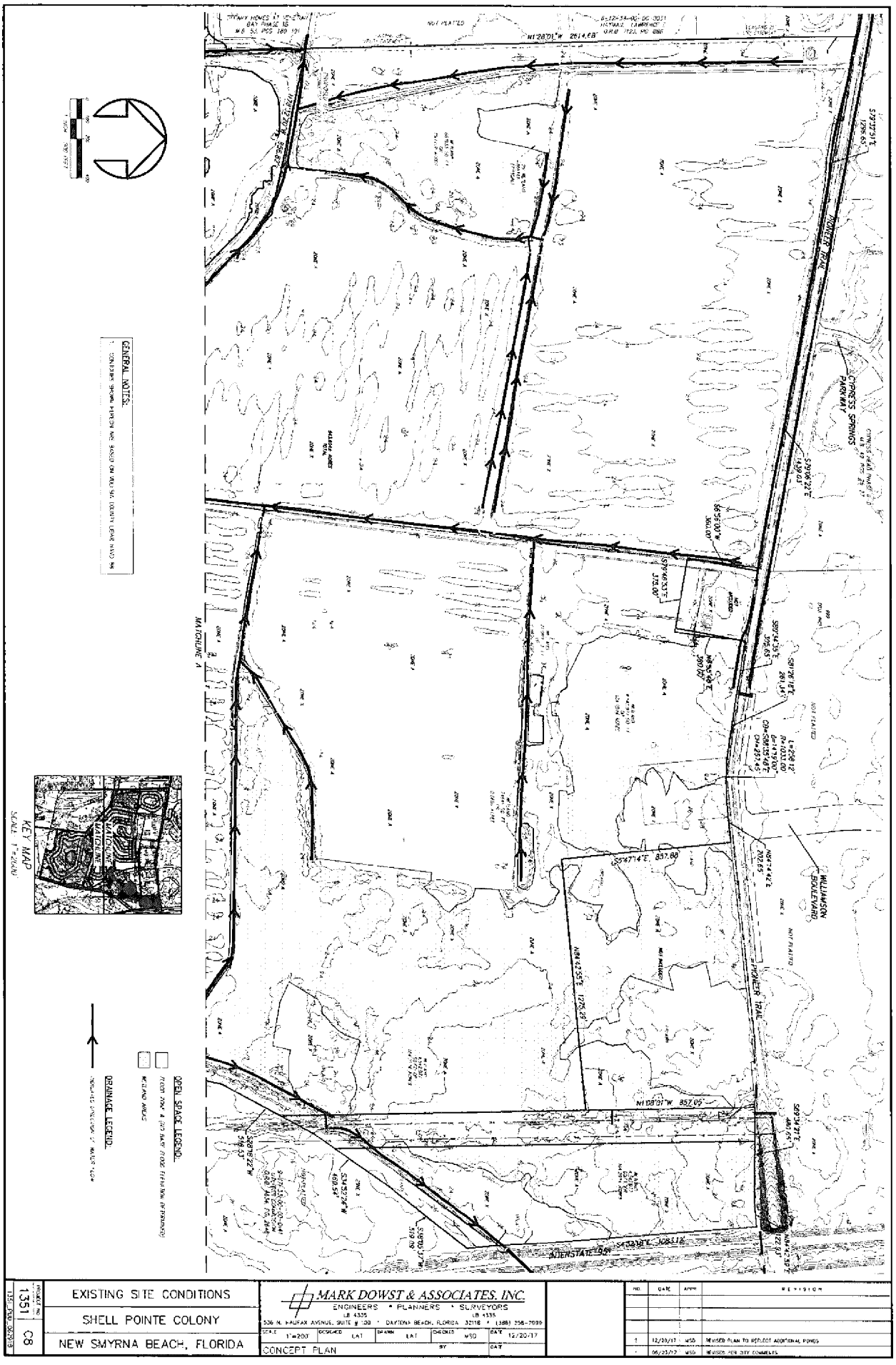

WETLAND IMPACT EXHIBIT
SHELL POINTE COLONY
NEW SMYRNA BEACH, FLORIDA
C5
1351
CONCEPT PLAN
MARK DOWSTA & ASSOCIATES, INC
ENGINEERS • PLANNERS • SURVEYORS
WETLAND IMPACT AREA
LEGEND:
INTERSTATE 95
WILLIAMSON BOULEVARD
PIONEER TRAIL
FUTURE WILLIAMSON BOULEVARD
FUTURE CONNECTION
CITY OF PORT ORANGE (NORTH OF PIONEER TRAIL)
CYPRESS SPRINGS PARKWAY
CITY OF NEW SMYRNA BEACH (SOUTH OF PIONEER TRAIL)

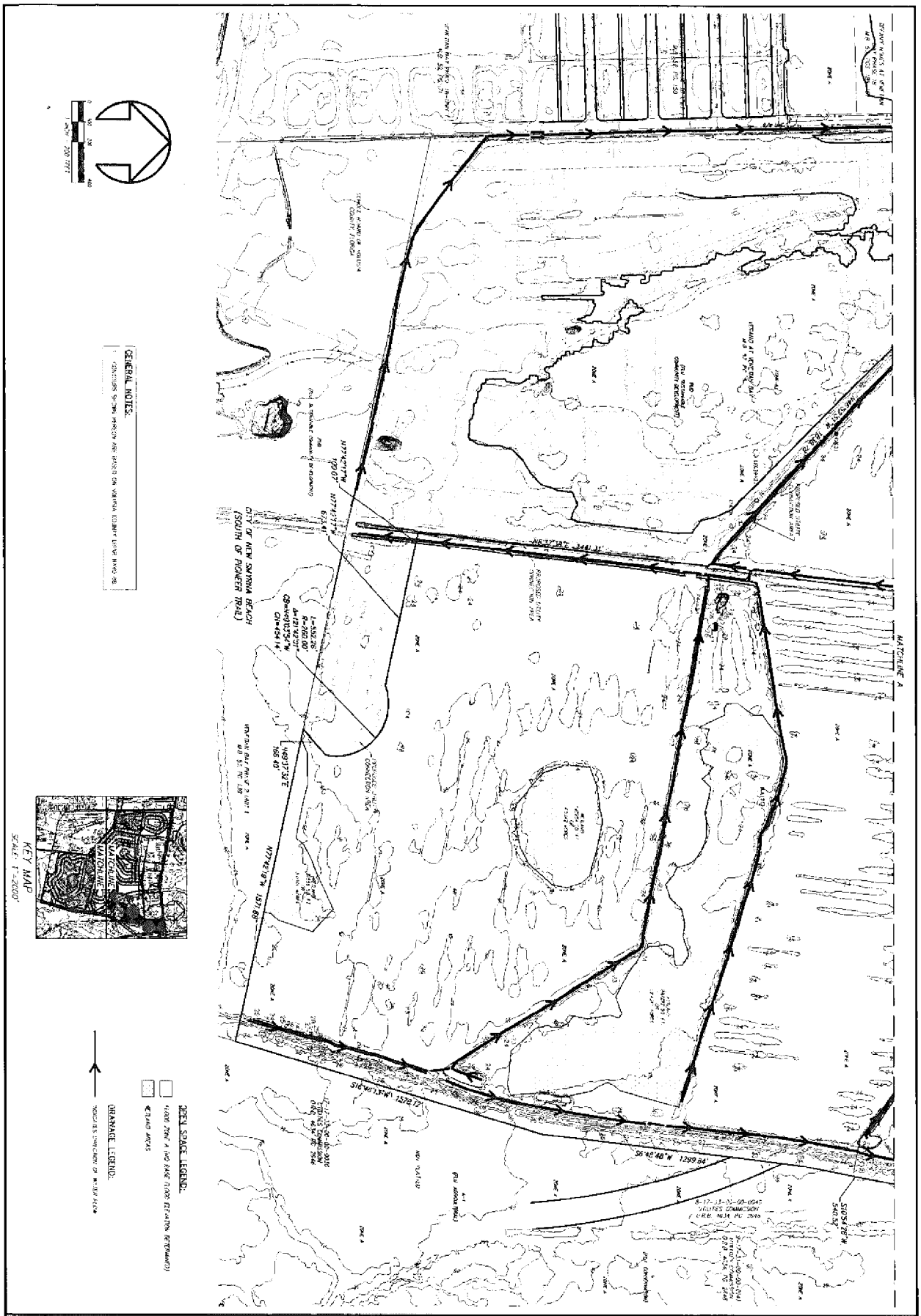


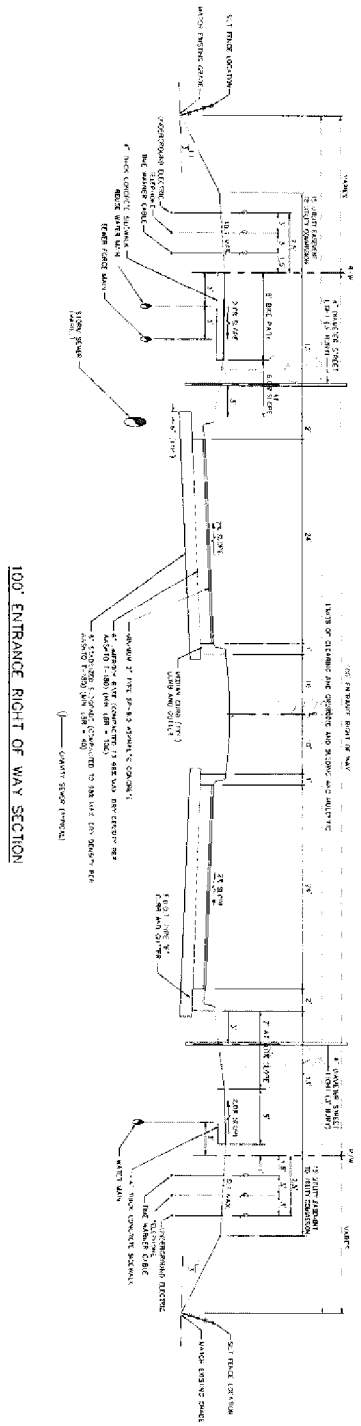
Project No. 1351	LOT LAYOUT	MARK DOWST & ASSOCIATES, INC. ENGINEERS • PLANNERS • SURVEYORS LB 4335 LB 4335	REVISION
C6	SHELL POINTE COLONY	529 N. HALIFAX AVENUE, SUITE # 100 • DAYTONA BEACH, FLORIDA 32118 • (386) 255-7959	4 6-29-18 MSD GENERAL REVISION
1351_PUD_06-29-18	NEW SMYRNA BEACH, FLORIDA	SCALE 1"=200' DESIGNED LAT DRAWN LAT CHECKED MSD DATE 12/20/17	3 04-13-18 MSD GENERAL REVISION
		CONCEPT PLAN BY DATE	2 12/20/17 MSD REVISED PLAN TO REFLECT ADDITIONAL BONDS
			1 05/23/17 MSD REVISED PER CITY COMMENTS



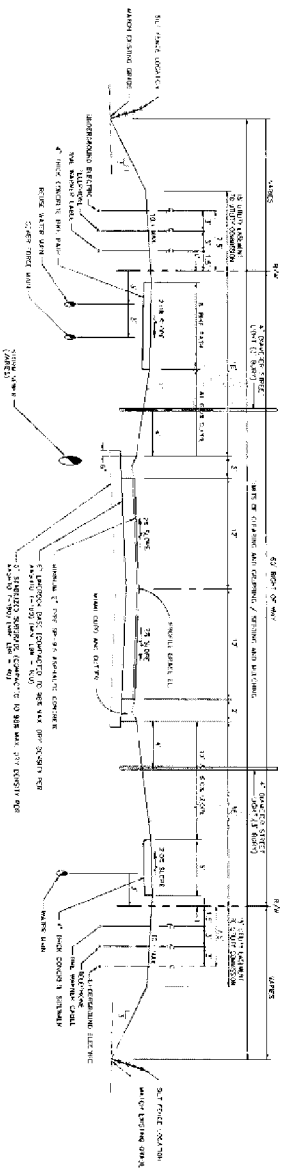
PROJECT NO. 1351	LOT LAYOUT	MARK DOWST & ASSOCIATES, INC. ENGINEERS • PLANNERS • SURVEYORS LB 4325	NO.	DATE	APPR	REVISION
SHEET NO. C7	SHELL POINTE COLONY	336 N. HALIFAX AVENUE, SUITE # 100 • DAYTONA BEACH, FLORIDA 32118 • (386) 258-7999 LB 4325	3	06-29-18	MSD	GENERAL REVISION
	NEW SMYRNA BEACH, FLORIDA	SCALE 1"=200' DESIGNED LAT DRAWN LAT CHECKED MSD DATE 12/20/17	2	12/29/17	MSD	REVISED PLAN TO REFLECT ADDITIONAL ROADS
		CONCEPT PLAN BY DATE	1	06/23/17	MSD	REVISED PER CITY COMMENTS


GENERAL NOTES:
KEY MAP
SCALE 1"=2000'
DRAINAGE LEGEND:
OPEN SPACE LEGEND:
WILLIAMSON BOULEVARD
CYPRESS SPRINGS PARKWAY
MATCHLINE A
PIONEER TRAIL
INTERSTATE 95
EXISTING SITE CONDITIONS
SHELL POINTE COLONY
NEW SMYRNA BEACH, FLORIDA
MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS
LB 4335
536 N. NAUAX AVENUE, SUITE #100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7699
CONCEPT PLAN
REVISED PLAN TO REFLECT ADDITIONAL PONDS
REVISED PER CITY COMMENTS
C8

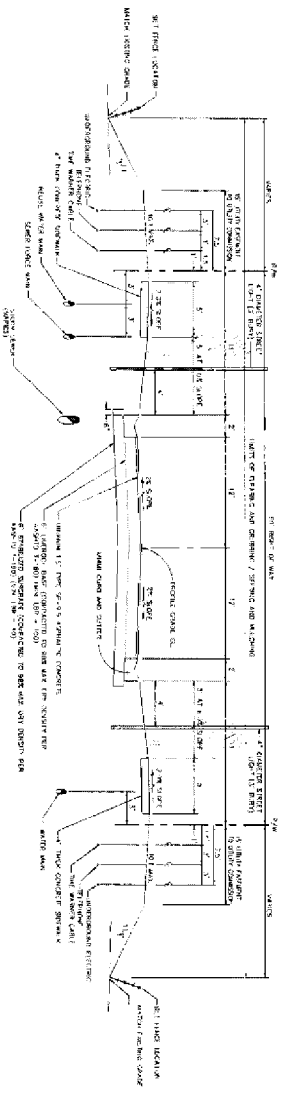

GENERAL NOTES:
KEY MAP
SCALE: 1"=2000'
OPEN SPACE LEGEND:
DRAINAGE LEGEND:
EXISTING SITE CONDITIONS
SHELL POINTE COLONY
NEW SMYRNA BEACH, FLORIDA
CONCEPT PLAN
MARK DOWST & ASSOCIATES, INC.
ENGINEERS • PLANNERS • SURVEYORS
LB 4315
836 N. HALIFAX AVENUE, SUITE 100 • DAYTONA BEACH, FLORIDA 32118 • (386) 258-7999
PROJECT NO. 1351
SHEET NO. C9
SCALE: 1"=200'
DESIGNED LAT
DRAWN LAT
CHECKED MSD
DATE 11/20/17
BY
DATE
NO. DATE APPR REVISION
2 10/20/17 MSD REVISED PLAN TO REFLECT ADDITIONAL PONDS
1 09/13/17 MSD REVISED PER CITY COMMENTS



100' ENTRANCE RIGHT OF WAY SECTION



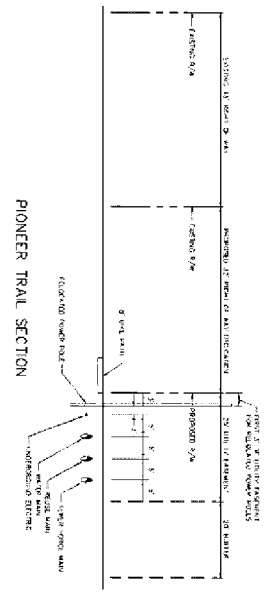
TYPICAL 60' RIGHT-OF-WAY SECTION



TYPICAL 50' RIGHT-OF-WAY SECTION

PROJECT NO. 1351	ROADWAY TYPICAL SECTIONS	MARK DOWST & ASSOCIATES, INC. ENGINEERS • PLANNERS • SURVEYORS FB 4115 LB 4115
SHEET NO. C10	SHELL POINTE COLONY	330 N. HALIFAX AVENUE, SUITE # 100 • DAYTONA BEACH, FLORIDA 32118 • (386) 258-7389
	NEW SMYRNA BEACH, FLORIDA	SCALE: N.T.S. DESIGNED: MSD DRAWN: JAY CHECKED: MSD DATE: 10-5-16 BY: DATE:

NO.	DATE	APP'D	REVISION
2	6-29-18	MSD	GENERAL REVISION
1	5-23-17	MSD	REVISED PER COMMENTS DATED MARCH 8TH, 2017



PROJECT NO. 1351	ROADWAY TYPICAL SECTIONS	MARK DOWST & ASSOCIATES, INC. ENGINEERS * PLANNERS * SURVEYORS LB 4335 LB 4139 536 S. ATLANTIC AVENUE, SUITE #100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-2948
SHEET NO. C11	SHELL POINTE COLONY	SCALE N.T.S. DESIGNED MSD DRAWN JAY CHECKED MSD DATE 10-5-16 BY JAL
	NEW SMYRNA BEACH, FLORIDA	NO. DATE APP'D REVISIONS 6-23-17 MSD REVISED PER W/MSD COMMENTS DATED MARCH 9TH, 2017

EXHIBIT "B"

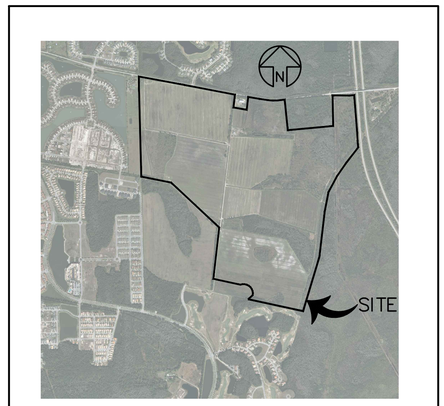
CONCEPTUAL DEVELOPMENT PLAN
FOR
SHELL POINTE COLONY
NEW SMYRNA BEACH, FLORIDA
OCTOBER 2016

PREPARED BY:

MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS

AERIAL MAP

SCALE: 1" = 2000'



FLOOD MAP

SCALE: 1" = 2000'



OWNER

BG AGENCY, LLC
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4216 DEWITT AVENUE
MATTOON, ILLINOIS 61938
PHONE: (217) 235-7102 X356
E-MAIL: bhutchins@ruralking.com

ENGINEER

MARK DOWST AND ASSOCIATES, INC.
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E-MAIL: mdowst@mdaeng.com

ENVIRONMENTAL

BIOLOGICAL CONSULTING SERVICES INC.
CONTACT: JOE YOUNG III
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PHONE: (386) 423-3402 FAX: (386) 423-0107

ATTORNEY

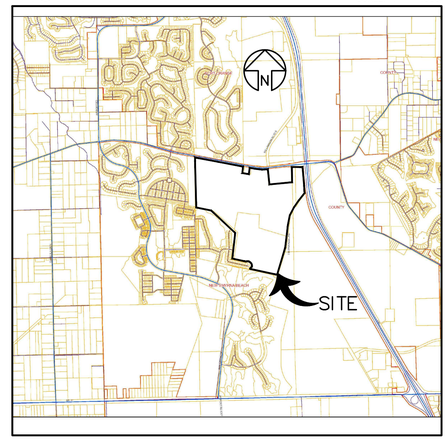
STORCH AND HARRIS, LLC
CONTACT: GLENN D. STORCH, ESQ.
420 S. NOVA ROAD
DAYTONA BEACH, FLORIDA 32114
PHONE: (386) 238-8383 FAX: (386) 238-0988

SHEET INDEX

No.	DESCRIPTION
C1	COVER SHEET
C2	CONCEPT PLAN
C3	OPEN SPACE / PATHWAY EXHIBIT
C4	VILLAGE CENTER PROXIMITY EXHIBIT
C5	WETLAND IMPACT EXHIBIT
C6-C7	LOT LAYOUT
C8-C9	EXISTING SITE CONDITIONS
C10	ROADWAY TYPICAL SECTIONS
C11	ROADWAY TYPICAL SECTIONS

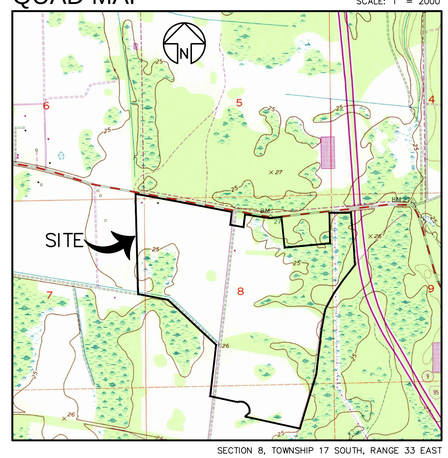
VICINITY MAP

SCALE: 1" = 4000'

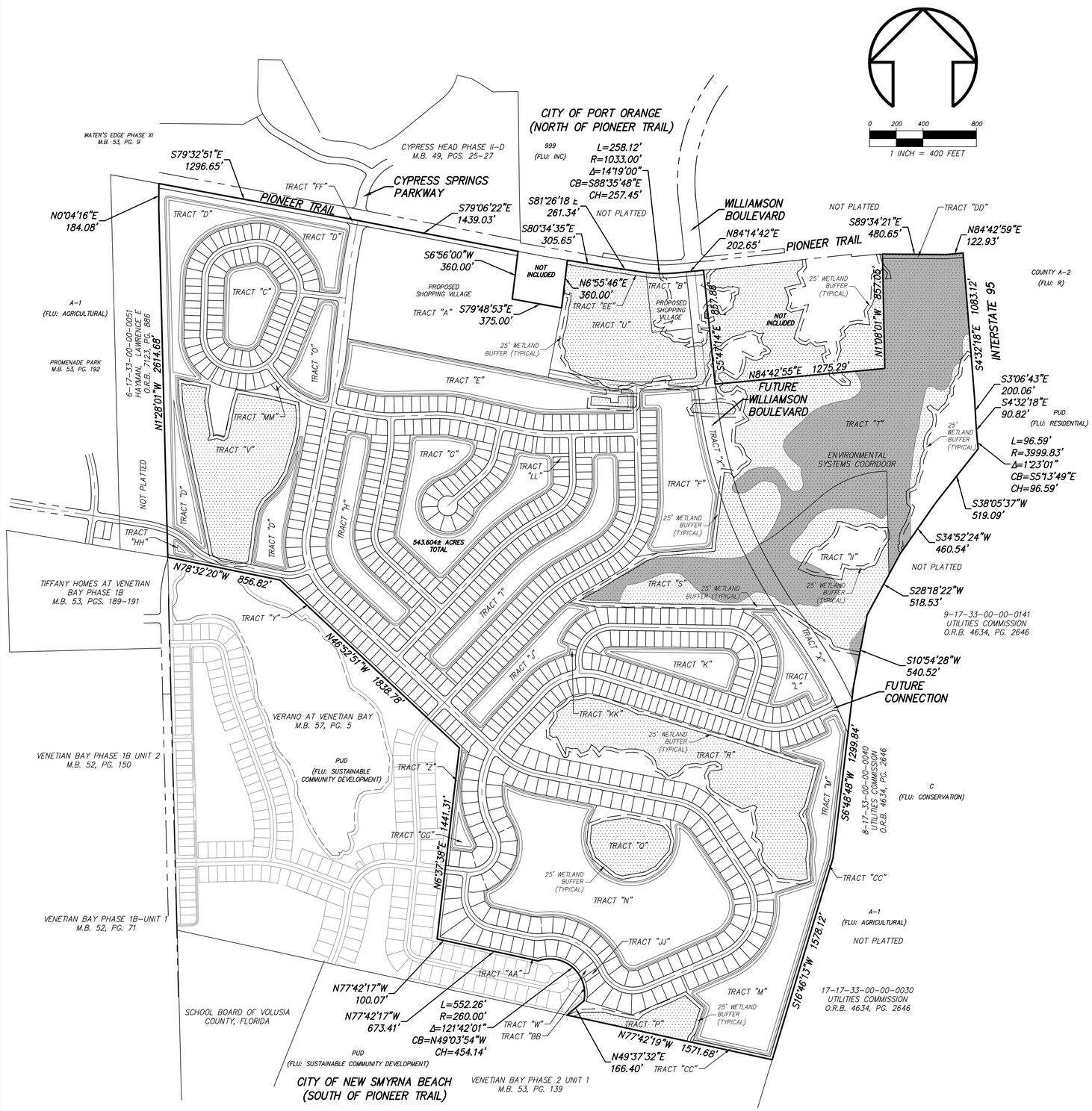


QUAD MAP

SCALE: 1" = 2000'



SECTION 8, TOWNSHIP 17 SOUTH, RANGE 33 EAST



SITE DATA:

EXISTING LAND USE: RURAL
EXISTING ZONING: A2
PROPOSED ZONING: RPUD
TOTAL AREA: 543.53 ACRES
ENVIRONMENTAL SYSTEMS CORRIDOR: 46.61 ACRES
SUSTAINABLE COMMUNITY DEVELOPMENT: 496.92
EXISTING BUILDING AREA: N/A

PROPOSED BUILDING AREA:
SHOPPING VILLAGE = 31.37 ACRES
55' LOTS = (MINIMUM 6,600 SQ. FT.)
65' LOTS = (MINIMUM 7,800 SQ. FT.)
80' LOTS = (MINIMUM 9,600 SQ. FT.)

BUILDING SETBACKS:
55' LOTS
FRONT = 17.5' - 22.5'
REAR = 25'
SIDE = 5'
STREET SIDE = 15'

65' LOTS
FRONT = 17.5' - 22.5'
REAR = 25'
SIDE =5'
STREET SIDE = 15'

80' LOTS
FRONT = 17.5' - 22.5'
REAR = 25'
SIDE =5'
STREET SIDE = 15'

LANDSCAPE BUFFERS:
NORTH: 20'
EAST: 20'
SOUTH: 20'
WEST: 20'

PROPOSED AREA BREAKDOWN:

DESCRIPTION	PROPOSED USES	ACRES
LOTS 1-745	SINGLE FAMILY DETACHED HOMESITES	137.678
RIGHTS-OF-WAY	PUBLIC ROADWAYS	42.807
TRACT A	FUTURE COMMERCIAL DEVELOPMENT	27.531
TRACT B	FUTURE COMMERCIAL DEVELOPMENT	2.749
TRACT C	STORM WATER MANAGEMENT/OPEN SPACE	5.147
TRACT D	STORM WATER MANAGEMENT/OPEN SPACE	25.396
TRACT E	STORM WATER MANAGEMENT/OPEN SPACE	14.414
TRACT F	STORM WATER MANAGEMENT/OPEN SPACE	11.867
TRACT G	STORM WATER MANAGEMENT/OPEN SPACE	13.156
TRACT H	STORM WATER MANAGEMENT/OPEN SPACE	7.865
TRACT I	STORM WATER MANAGEMENT/OPEN SPACE	10.520
TRACT J	STORM WATER MANAGEMENT/OPEN SPACE	5.467
TRACT K	STORM WATER MANAGEMENT/OPEN SPACE	4.961
TRACT L	STORM WATER MANAGEMENT/OPEN SPACE	4.686
TRACT M	STORM WATER MANAGEMENT/OPEN SPACE	19.263
TRACT N	STORM WATER MANAGEMENT/OPEN SPACE	29.799
TRACT O	STORM WATER MANAGEMENT/OPEN SPACE	4.141
TRACT P	NATURAL AREA	4.146
TRACT Q	NATURAL AREA	6.194
TRACT R	NATURAL AREA	28.169
TRACT S	NATURAL AREA	12.499
TRACT T	NATURAL AREA	54.441
TRACT U	NATURAL AREA	15.400
TRACT V	NATURAL AREA	17.591
TRACT W	UTILITIES AND EMERGENCY ACCESS	0.165
TRACT X	FUTURE WILLIAMSON BOULEVARD EXTENSION TRACT	8.088
TRACT Y	LANDSCAPE BUFFER AREA	1.086
TRACT Z	LANDSCAPE BUFFER AREA	0.613
TRACT AA	LANDSCAPE BUFFER AREA	0.731
TRACT BB	LANDSCAPE BUFFER AREA	0.081
TRACT CC	LANDSCAPE BUFFER AREA	1.430
TRACT DD	32' WIDE ROAD R/W DEDICATION	0.444
TRACT EE	32' WIDE ROAD R/W DEDICATION	0.758
TRACT FF	32' WIDE ROAD R/W DEDICATION	2.008
TRACT GG	STORM WATER MANAGEMENT/OPEN SPACE	1.368
TRACT HH	STORM WATER MANAGEMENT/OPEN SPACE	0.584
TRACT II	PARK/NATURAL AREA	20.031
TRACT JJ	UTILITIES/OPEN SPACE	0.116
TRACT KK	UTILITIES/OPEN SPACE	0.046
TRACT LL	UTILITIES/OPEN SPACE	0.011
TRACT MM	UTILITIES/OPEN SPACE	0.058

SHELL POINTE PUD UTILITY NOTES:

1: ALL ELECTRICAL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ELECTRIC SERVICE RULES AND STANDARDS, UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH – OCTOBER 2010 EDITION AND THE NATIONAL ELECTRIC SAFETY CODE.

2: ALL WATER SERVICE CONSTRUCTION SHALL BE IN ACCORDANCE WITH POTABLE WATER RULES, DESIGN AND CONSTRUCTION SPECIFICATIONS, UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH – AUGUST 2015 EDITION.

3: ALL SANITARY SEWER SERVICE CONSTRUCTION SHALL BE IN ACCORDANCE WITH WASTEWATER RULES, DESIGN AND CONSTRUCTION SPECIFICATIONS, UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH – AUGUST 2015 EDITION.

4: ALL REUSE/RECLAIM WATER SERVICE CONSTRUCTION SHALL BE IN ACCORDANCE WITH RECLAIMED WATER RULES, DESIGN AND CONSTRUCTION SPECIFICATIONS, UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH – AUGUST 2015 EDITION.

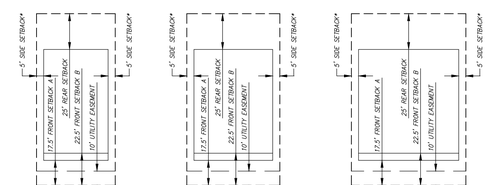
5: LAYOUT OF UTILITIES SHOWN IS CONCEPTUAL; ACTUAL LOCATION OF IMPROVEMENTS WILL BE SUBJECT TO CONSTRUCTION DRAWINGS, PERMITS ISSUED BY THE UCNSB AND DEP.

GENERAL NOTES:

1. GENERAL SOIL TYPES CONSIST OF:
   (21) EAUGALLIE FINE SAND, DEPRESSIONAL?
   (31) MALABAR FINE SAND
   (32) MYAKKA FINE SAND
   (48) PLACID FINE SAND, DEPRESSIONAL
   (49) POMONA FINE SAND
   (50) POMONA FINE SAND, DEPRESSIONAL
   (51) POMONA–ST. JOHNS COMPLEX
   (56) SAMSULA MUCK
2. BOUNDARY SURVEY PREPARED BY SLIGER & ASSOCIATES, INC., JOB NO. 12-0357, DATED 05/07/2012.
3. THIS PROPERTY IS LOCATED IN FLOOD ZONES "X" (AREAS OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AND "A" (NO BASE FLOOD ELEVATION DETERMINED / 100-YEAR FLOOD).
4. EXISTING VEGETATION CONSIST OF:
   (200) GENERALIZED AGRICULTURE
   (330) MIXED RANGELAND
   (411) PINE FLATWOOD
   (434) HARDWOOD/CONIFER MIX
   (616) INLAND POND
   (621) CYPRESS SWAMP
   (624) CYPRESS/PINE/CABBAGE PALM
   (643) WET PRAIRIE
5. GENERAL TOPOGRAPHY RANGES FROM ELEVATION 22 (NAVD 88) TO 28 (NAVD 88) ACCORDING TO VOLUSIA COUNTY LIDAR.
6. WATER AND WASTEWATER DISPOSAL SHALL BE PROVIDED BY THE UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH, FLORIDA.

RESIDENTIAL LOT BREAKDOWN:

CLASS	LOT NO.S	MINIMUM FRONTAGE	NUMBER OF LOTS
1	1-86, 127-131, 166-213, 225-419, 453-458, 602-656, 709-745	55'	433
2	87-126, 132-165, 214-224, 420-452, 657-708	65'	169
3	459-601	80'	143
		TOTAL	745



CLASS 1
55' MINIMUM FRONTAGE MEASURED AT FRONT SETBACK**

CLASS 2
65' MINIMUM FRONTAGE MEASURED AT FRONT SETBACK**

CLASS 3
80' MINIMUM FRONTAGE MEASURED AT FRONT SETBACK**

MINIMUM LOT DIMENSIONS
SCALE 1" = 50'

* – 15' SIDE SETBACK WHEN ADJACENT TO STREETS
10' SIDE SETBACK WHEN LOTS HOST HALF OF A REQUIRED 20' DRAINAGE EASEMENT
** – CORNER LOTS SHALL BE 15% WIDER THAN MINIMUM FRONTAGES SHOWN IN DETAILS

A – 17.5' FRONT SETBACK FOR PORCH AND/OR LIVING AREA.
B – 22.5' FRONT SETBACK FOR GARAGE.

GROSS DENSITY CALCULATION:

	DENSITY (DU/AC)	NO. OF UNITS
MAXIMUM ALLOWABLE	1.5	745
PROVIDED	1.5	745

NO.	DATE	APPR.	REVISION
1	06/23/17	MSD	REVISED PER CITY COMMENTS.

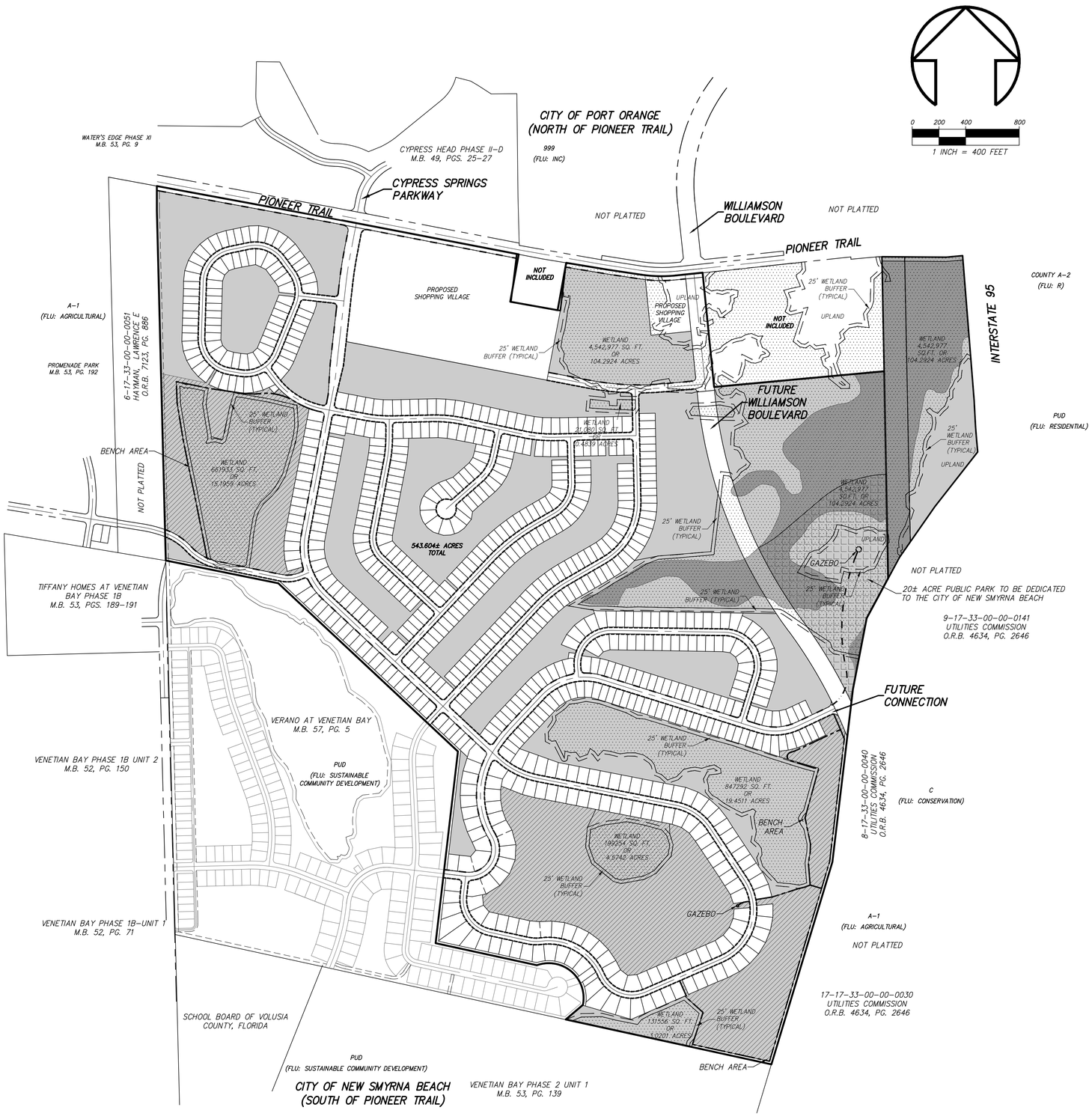
MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS
LB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7999

SCALE	DESIGNED	DRAWN	CHECKED	DATE
1"=400'	LAT	LAT	MSD	06/15/17

CONCEPT PLAN

CONCEPT PLAN
SHELL POINTE COLONY
NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 C2
1351PUD



PATHWAYS LEGEND:

- 8' WIDE PEDESTRIAN/BICYCLE PATHWAY
- 5' WIDE NATURE TRAIL
- 5' WIDE SIDEWALK

OPEN SPACE LEGEND:

- OPEN SPACE (50% OF TOTAL PROJECT AREA)
- COMMON OPEN SPACE (35% OF OPEN SPACE)
- PUBLIC OPEN SPACE (3%-8%)

OPEN SPACE	ACRES	
PUD ZONING ORDINANCE	Required	Provided
OPEN SPACE (50% OF TOTAL PROJECT AREA)	271.77	315.73
COMMON OPEN SPACE (35% OF OPEN SPACE)	95.12	104.46
SUSTAINABLE COMMUNITY DEVELOPMENT FLU	Required	Provided
OVERALL PROJECT OPEN SPACE	271.77	315.73
PUBLIC OPEN SPACE (MIN. 3% OF PROJECT AREA)	16.31	20.03

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SCALE	DESIGNED	DRAWN	CHECKED	DATE
1"=400'	LAT	LAT	MSD	06/15/17

BY DATE

CONCEPT PLAN

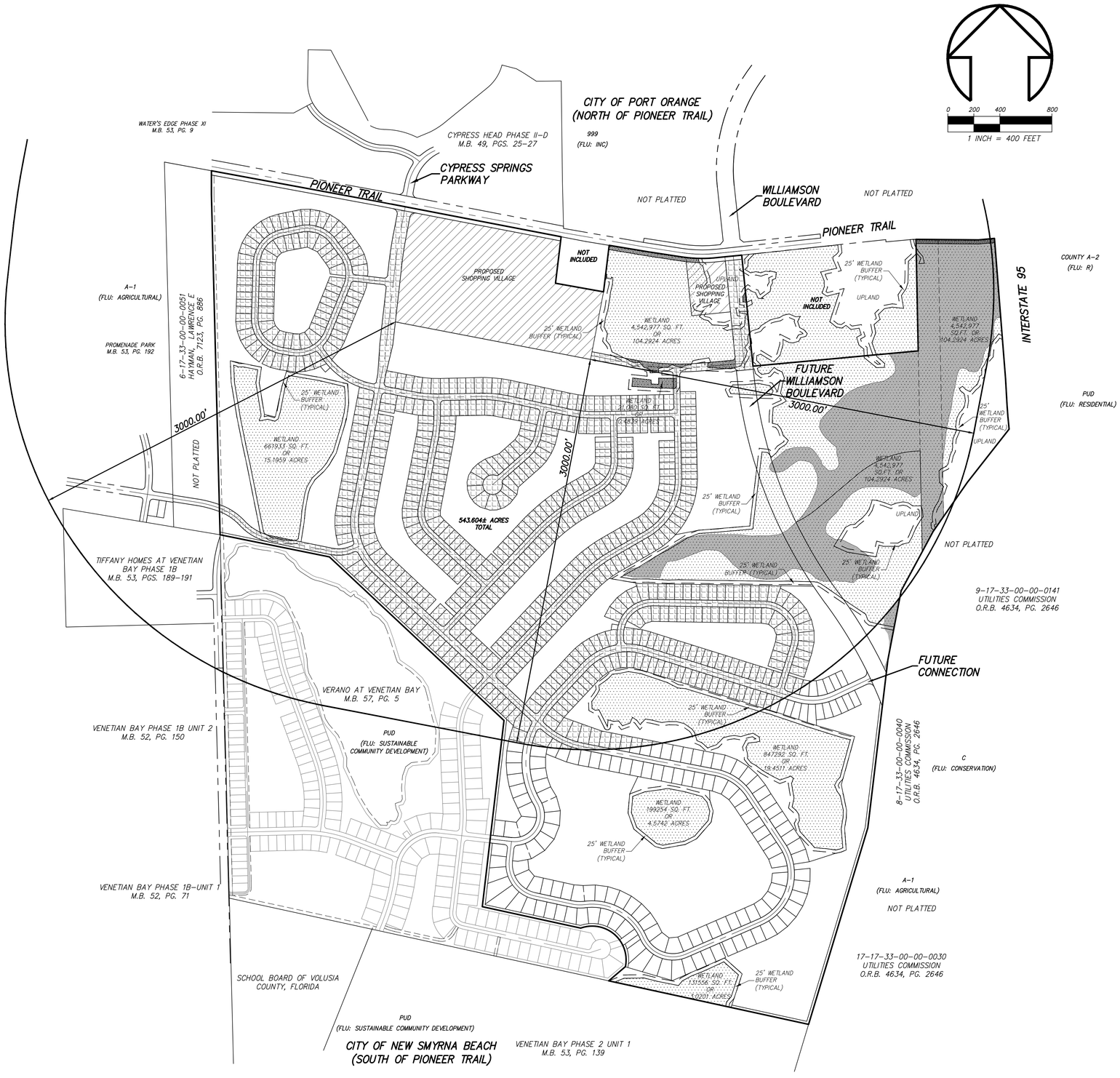
OPEN SPACE / PATHWAY EXHIBIT

SHELL POINTE COLONY

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 C3

1351PUD



LEGEND:

- VILLAGE CENTER
- PROJECT DEVELOPMENT

VILLAGE CENTER PROXIMITY		
DESCRIPTION	Provided	%
LOTS WITHIN 3,000 FT OF VILLAGE CENTER	606	81%
LOTS BEYOND 3,000 FT OF VILLAGE CENTER	139	19%
TOTAL	745	100%

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1"=400'	LAT	LAT	MSD	06/15/17

CONCEPT PLAN

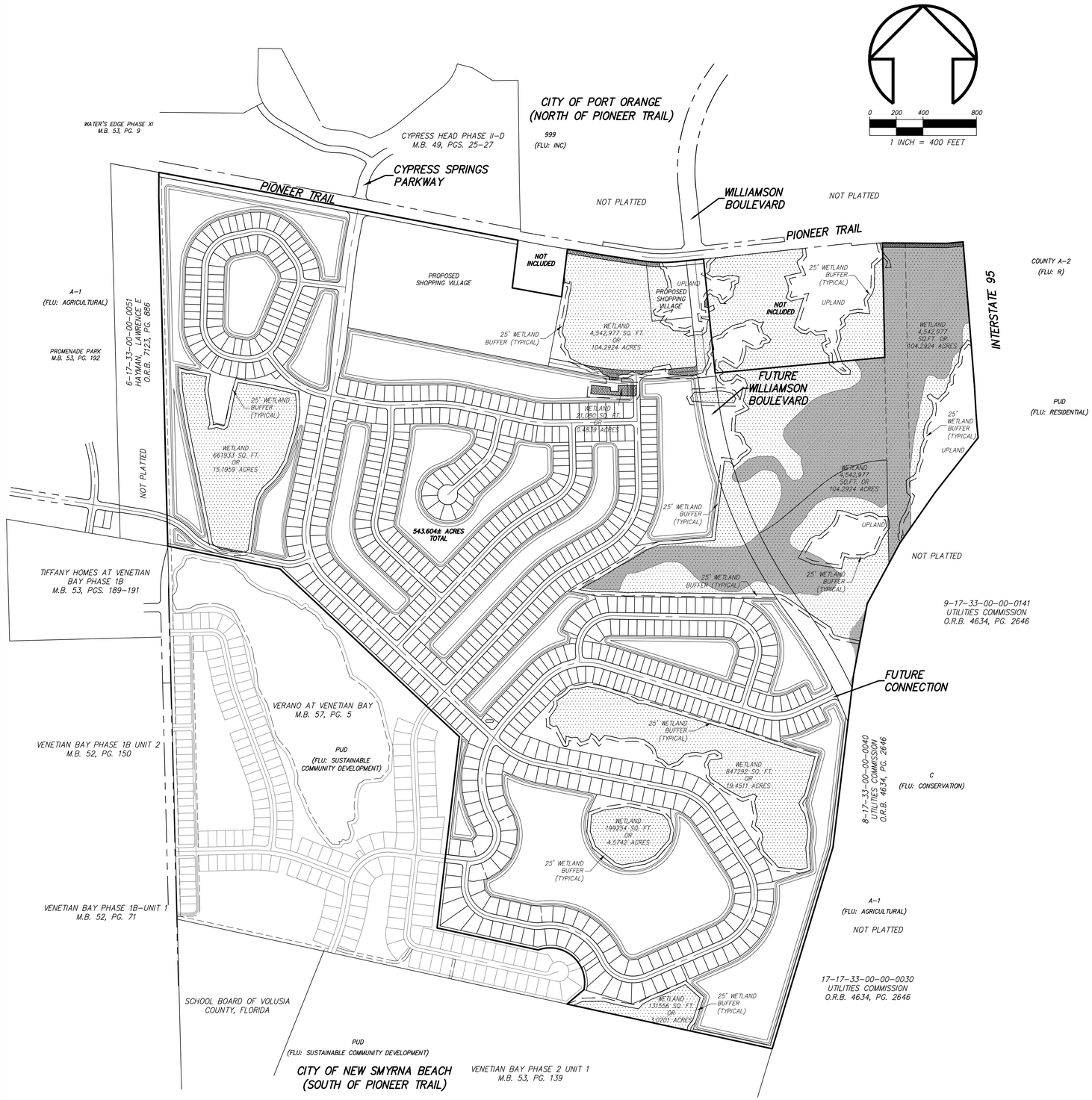
VILLAGE CENTER PROXIMITY EXHIBIT

SHELL POINTE COLONY

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 | C4

1351PUD



LEGEND:

IMPACTED WETLAND AREA

WETLAND IMPACT AREA:

TOTAL WETLAND AREA = 147.018
TOTAL WETLAND IMPACT AREA = 2.08 ACRES

NO.	DATE	APPR.	REVISION
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1"=400'	LAT	LAT	MSD	06/15/17

CONCEPT PLAN

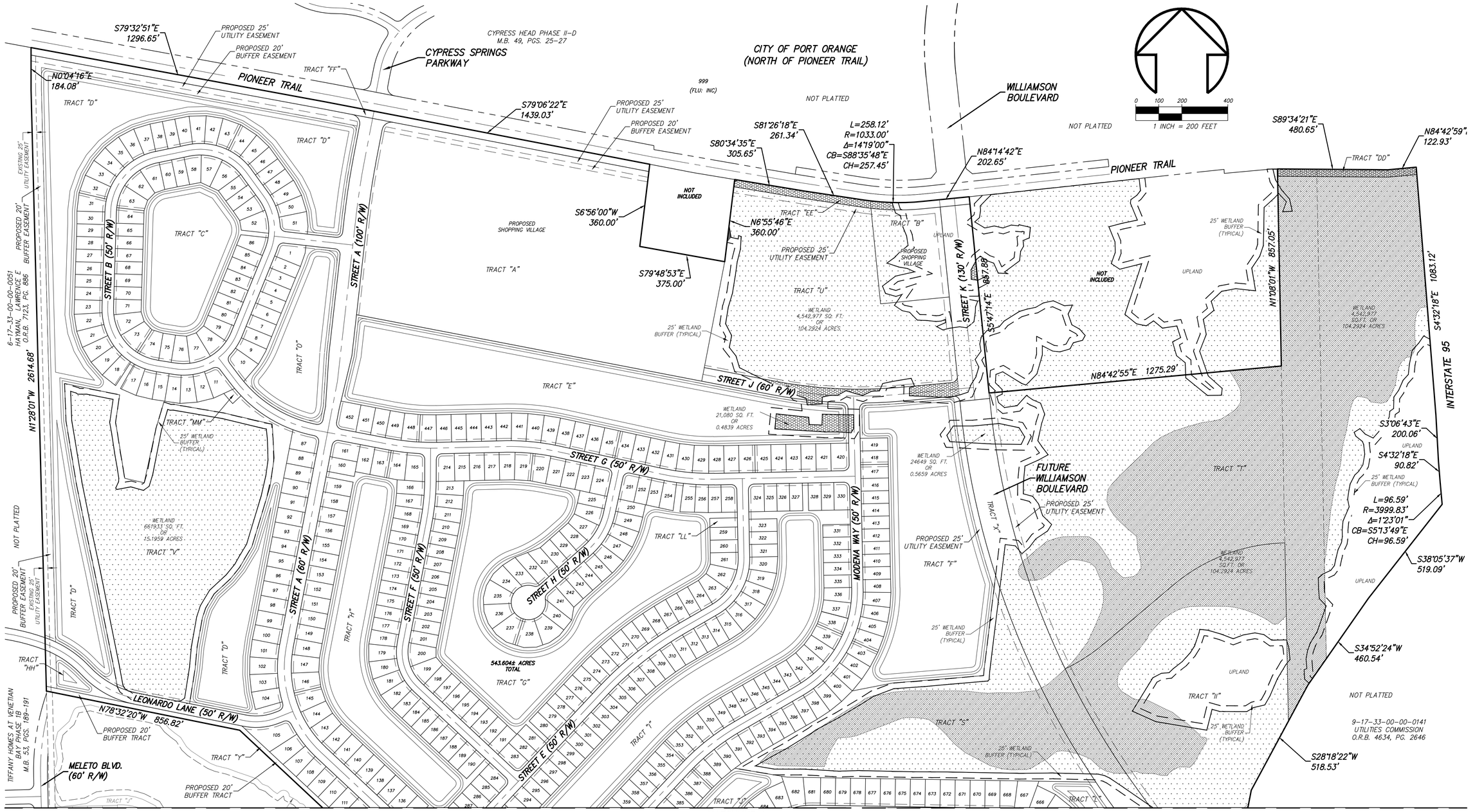
WETLAND IMPACT EXHIBIT

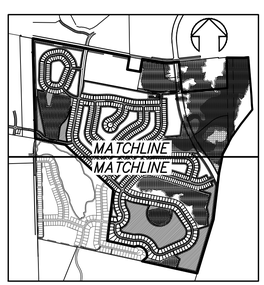
SHELL POINTE COLONY

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 | C5

1351PUD





KEY MAP
SCALE: 1"=2000'

NO.	DATE	APPR.	REVISION
1	06/23/17	MSD	REVISED PER CITY COMMENTS.

MARK DOWST & ASSOCIATES, INC.
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SCALE	DESIGNED	DRAWN	CHECKED
1"=200'	LAT	LAT	MSD

DATE 06/15/17
BY

CONCEPT PLAN

LOT LAYOUT
SHELL POINTE COLONY
NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 C6
1351PUD

MATCHLINE A

TIFFANY HOMES AT VENETIAN BAY PHASE 1B M.B. 53, PGS. 189–191

VENETIAN BAY PHASE 1B UNIT 2 M.B. 52, PG. 150

VENETIAN BAY PHASE 1B–UNIT 1 M.B. 52, PG. 71

SCHOOL BOARD OF VOLUSIA COUNTY, FLORIDA

CITY OF NEW SMYRNA BEACH (SOUTH OF PIONEER TRAIL)

VENETIAN BAY PHASE 2 UNIT 1 M.B. 53, PG. 139

VERANO AT VENETIAN BAY M.B. 57, PG. 5

PUD
(FLU: SUSTAINABLE COMMUNITY DEVELOPMENT)

MELETO BLVD. (60' R/W)

BELLINO BOULEVARD

MEDICI BOULEVARD

MONACO BOULEVARD

MODENA WAY (50' R/W)

STREET A (60' R/W)

STREET C (50' R/W)

STREET D (50' R/W)

MONACO BOULEVARD (60' R/W)

TRACT "A" (STORMWATER MANAGEMENT AREA)

TRACT "B" (STORMWATER MANAGEMENT AREA)

TRACT "C" (STORMWATER MANAGEMENT AREA)

TRACT "D" (STORMWATER MANAGEMENT AREA)

TRACT "E" (STORMWATER MANAGEMENT AREA)

TRACT "F" (STORMWATER MANAGEMENT AREA)

TRACT "H" (CONSERVATION AREA)

EXHIBIT "B" DEED OF CONSERVATION EASEMENT (O.R.B. 7122, PG. 4071)

TRACT "I" (STORMWATER MANAGEMENT AREA)

TRACT "J" (STORMWATER MANAGEMENT AREA)

TRACT "K"

TRACT "L"

TRACT "M"

TRACT "N"

TRACT "P"

TRACT "Q"

TRACT "R"

TRACT "W"

TRACT "X"

TRACT "Y"

TRACT "Z"

TRACT "AA"

TRACT "BB"

TRACT "CC"

TRACT "GG"

TRACT "JJ"

TRACT "KK"

N46°52'51"W 1838.78'

N63°37'38"E 1441.31'

N77°42'17"W 100.07'

N77°42'17"W 673.41'

L=552.26'
R=260.00'
Δ=121°42'01"
CB=N49°03'54"W
CH=454.14'

N49°37'32"E 166.40'

N77°42'19"W 1571.68'

S16°46'13"W 1578.12'

S6°48'48"W 1299.84'

S10°54'28"W 540.52'

PROPOSED 20' BUFFER TRACT

PROPOSED 25' UTILITY EASEMENT

PROPOSED TEMPORARY CUL-DE-SAC EASEMENT

FUTURE CONNECTION

25' WETLAND BUFFER (TYPICAL)

WETLAND 847292 SQ. FT. OR 19.4511 ACRES

WETLAND 199254 SQ. FT. OR 4.5742 ACRES

WETLAND 131556 SQ. FT. OR 3.0201 ACRES

8–17–33–00–00–0040
UTILITIES COMMISSION
O.R.B. 4634, PG. 2646

9–17–33–00–00–0141
UTILITIES COMMISSION
O.R.B. 4634, PG. 2646

17–17–33–00–00–0030
UTILITIES COMMISSION
O.R.B. 4634, PG. 2646

C
(FLU: CONSERVATION)

A–1
(FLU: AGRICULTURAL)

NOT PLATTED

0 100 200 400
1 INCH = 200 FEET

MATCHLINE
MATCHLINE

KEY MAP
SCALE: 1"=2000'

NO.	DATE	APPR.	REVISION
1	06/23/17	MSD	REVISED PER CITY COMMENTS.

MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS
LB 4335
536 N. HALIFAX AVENUE, SUITE # 100 • DAYTONA BEACH, FLORIDA 32118 • (386) 258–7999

SCALE	DESIGNED	DRAWN	CHECKED
1"=200'	LAT	LAT	MSD

DATE 06/15/17
BY

CONCEPT PLAN

LOT LAYOUT

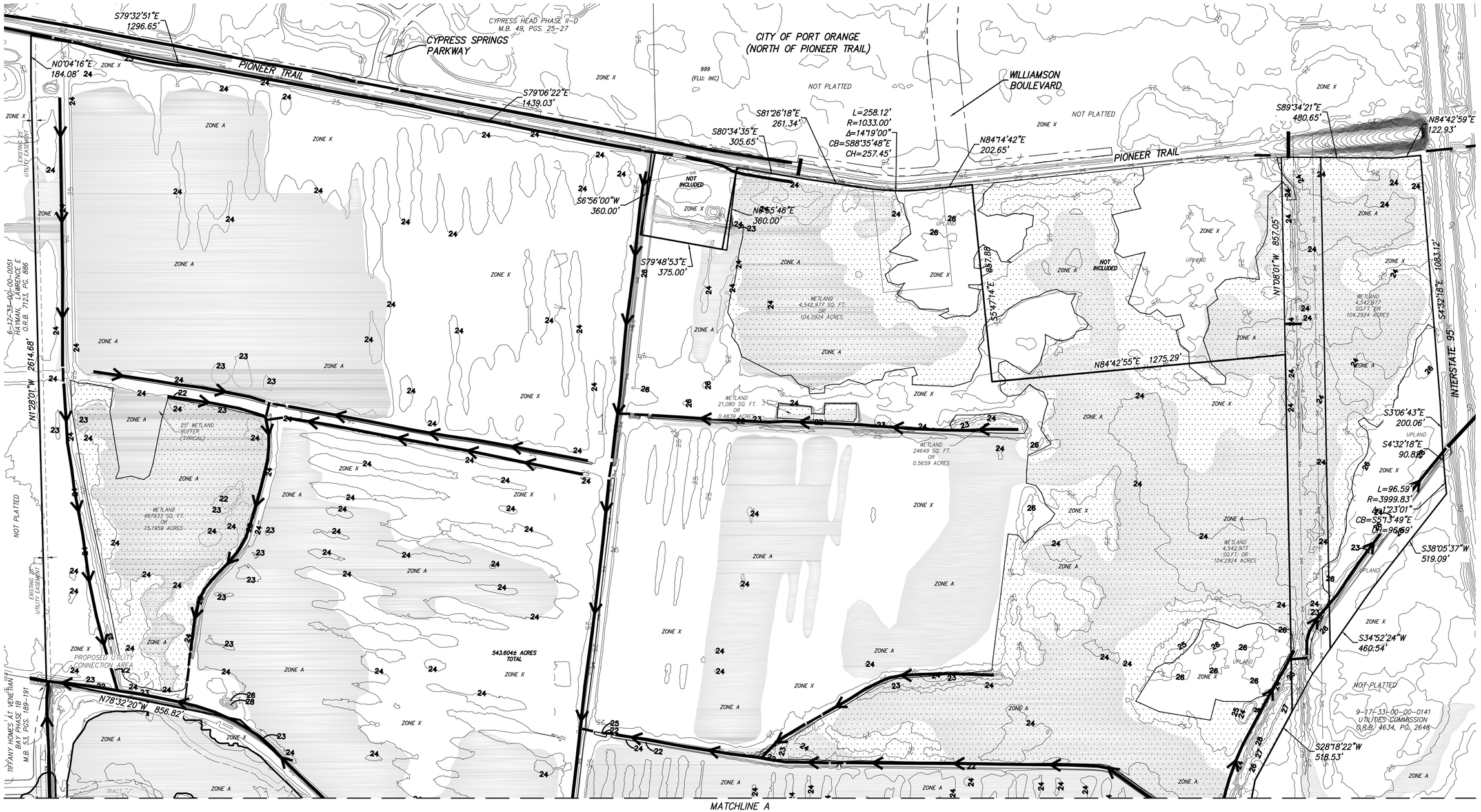
SHELL POINTE COLONY

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351

C7

1351PUD

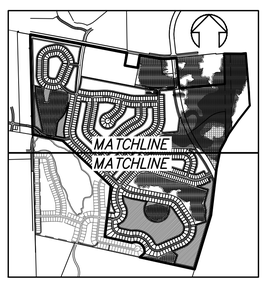


0 100 200 400

1 INCH = 200 FEET

GENERAL NOTES:

1. CONTOURS SHOWN HEREON ARE BASED ON VOLUSIA COUNTY LIDAR NAVD 88.



KEY MAP
SCALE: 1"=2000'

OPEN SPACE LEGEND:

FLOOD ZONE A (NO BASE FLOOD ELEVATION DETERMINED)

WETLAND AREAS

DRAINAGE LEGEND:

INDICATES DIRECTION OF WATER FLOW

NO.	DATE	APPR.	REVISION
1	06/23/17	MSD	REVISED PER CITY COMMENTS.

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LB 4335
536 N. HALIFAX AVENUE, SUITE # 100 • DAYTONA BEACH, FLORIDA 32118 • (386) 258-7999

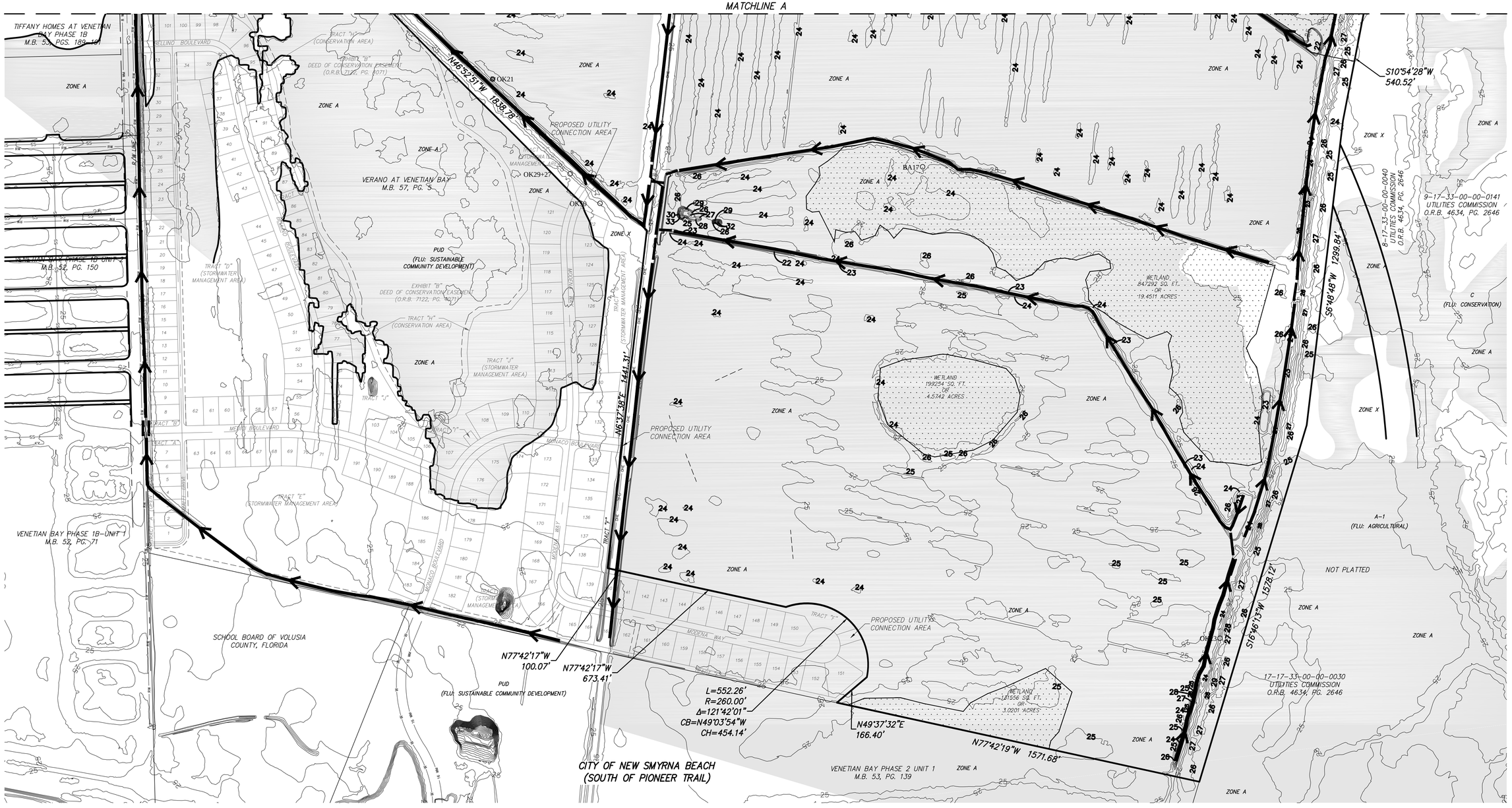
SCALE	DESIGNED	LAT	DRAWN	LAT	CHECKED	MSD	DATE	06/15/17
1"=200'							BY	

CONCEPT PLAN

EXISTING SITE CONDITIONS
SHELL POINTE COLONY
NEW SMYRNA BEACH, FLORIDA

PROJECT NO.	
1351	C8

1351PUD

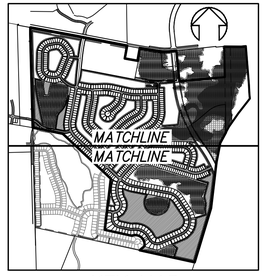


0 100 200 400

1 INCH = 200 FEET

GENERAL NOTES:

1. CONTOURS SHOWN HEREON ARE BASED ON VOLUSIA COUNTY LIDAR NAVD 88.



KEY MAP
SCALE: 1"=2000'

OPEN SPACE LEGEND:

FLOOD ZONE A (NO BASE FLOOD ELEVATION DETERMINED)

WETLAND AREAS

DRAINAGE LEGEND:

INDICATES DIRECTION OF WATER FLOW

NO.	DATE	APPR.	REVISION
1	06/23/17	MSD	REVISED PER CITY COMMENTS.

MARK DOWST & ASSOCIATES, INC.
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LB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7999

SCALE	1"=200'	DESIGNED	LAT	DRAWN	LAT	CHECKED	MSD	DATE	06/15/17
						BY		DATE	

CONCEPT PLAN

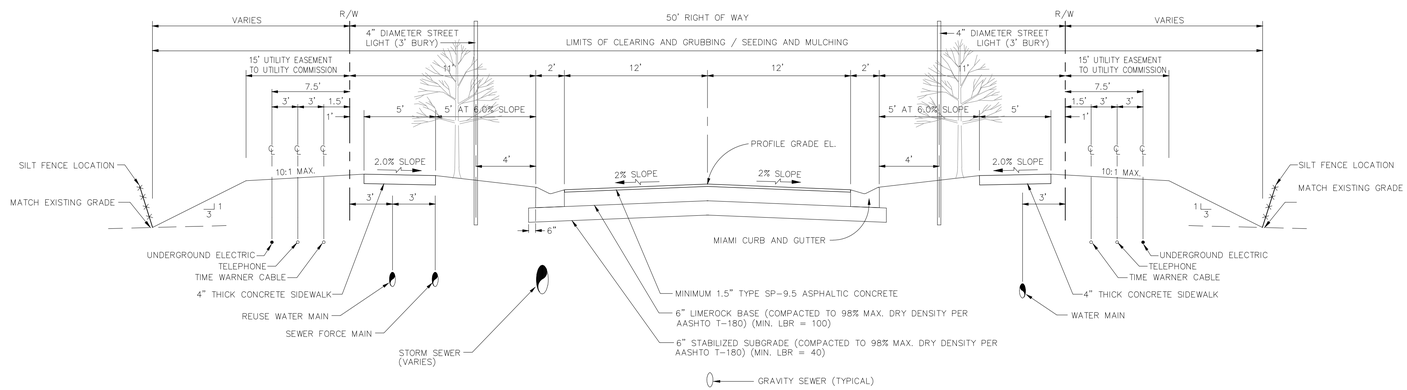
EXISTING SITE CONDITIONS

SHELL POINTE COLONY

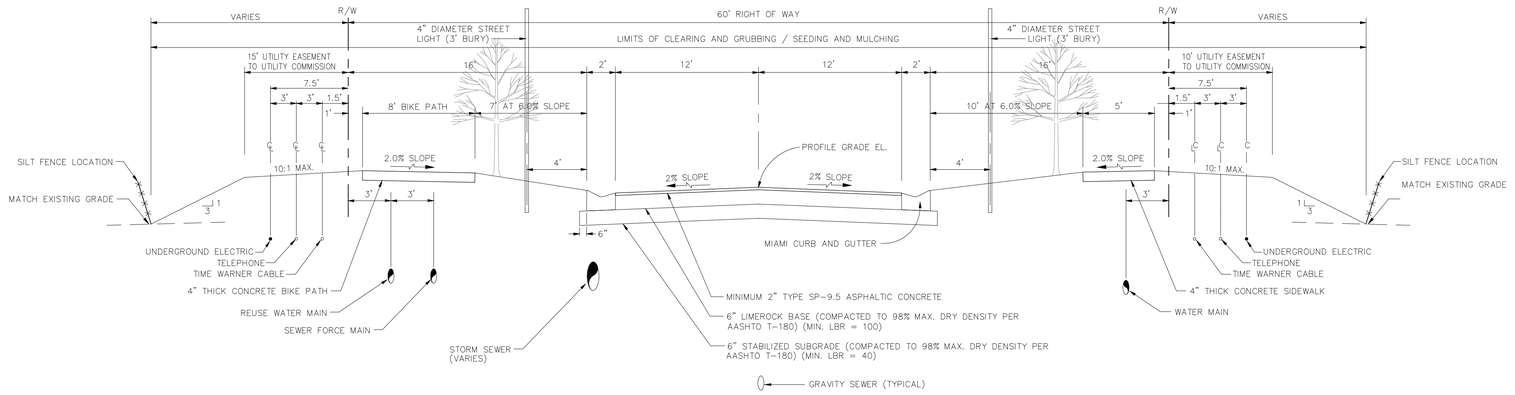
NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 C9

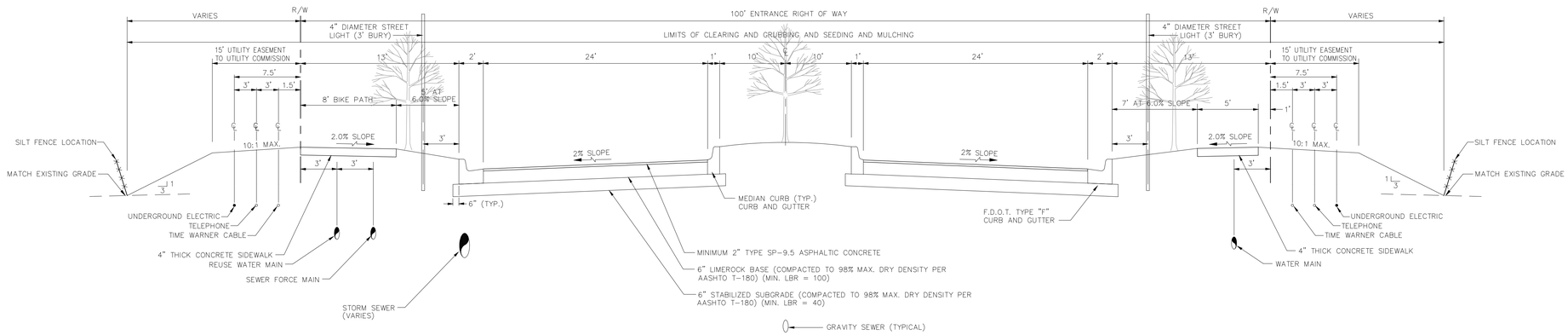
1351PUD



TYPICAL 50' RIGHT-OF-WAY SECTION



TYPICAL 60' RIGHT-OF-WAY SECTION



100' ENTRANCE RIGHT OF WAY SECTION

NO.	DATE	APPR.	REVISION
1	6-23-17	MSD	REVISED PER UCNSB COMMENTS DATED MARCH 9TH, 2017

MARK DOWST & ASSOCIATES, INC.
ENGINEERS * PLANNERS * SURVEYORS
EB 4335 LB 4335
536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7999

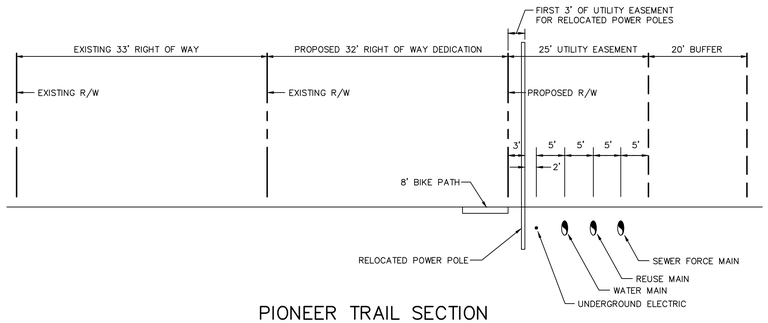
SCALE	DESIGNED	DRAWN	CHECKED	DATE
N.T.S.	MSD	JAY	MSD	10-5-16

BY

ROADWAY TYPICAL SECTIONS
SHELL POINTE COLONY
NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 | C10

1351-DET3



PIONEER TRAIL SECTION

NO.	DATE	APPR.	REVISION
1	6-23-17	MSD	REVISED PER UCNSB COMMENTS DATED MARCH 9TH, 2017

MARK DOWST & ASSOCIATES, INC.
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536 N. HALIFAX AVENUE, SUITE # 100 * DAYTONA BEACH, FLORIDA 32118 * (386) 258-7999

SCALE	DESIGNED	DRAWN	CHECKED	DATE
N.T.S.	MSD	JAY	MSD	10-5-16

BY DATE

ROADWAY TYPICAL SECTIONS

SHELL POINTE COLONY

NEW SMYRNA BEACH, FLORIDA

PROJECT NO. 1351 C11

1351-DET2

SECOND MINOR AMENDMENT TO THE MASTER DEVELOPMENT AGREEMENT FOR THE SHELL POINTE COLONY PUD

THIS SECOND MINOR AMENDMENT to the Master Development Agreement for the Shell Pointe Colony PUD (the "Second Minor Amendment") is made and entered into by and among the **City of New Smyrna Beach**, a Florida municipal corporation (the "City"); and **Speer Real Estate Holdings, LLC**, an Illinois limited liability company, and **Melvin Real Estate Holdings, LLC**, an Illinois limited liability company (the "Property Owners").

WITNESSETH:

WHEREAS, the City of New Smyrna Beach, a Florida municipal corporation (the "City") and BG Agency, LLC, a Florida limited liability company, entered into that certain Master Development Agreement for the Shell Pointe Colony PUD recorded in Official Records Book 7576, Page 1084, Public Records of Volusia County, Florida (hereinafter, the "Agreement"); and

WHEREAS, Speer Real Estate Holdings, LLC, an Illinois limited liability company, and Melvin Real Estate Holdings, LLC, an Illinois limited liability company, are the record title property owners (the "Property Owners") of the real property subject to the terms and provisions of the Agreement; and

WHEREAS, the Property Owners and the City entered into that certain First Minor Amendment to the Master Development Agreement for the Shell Pointe Colony PUD recorded in Official Records Book 8331, Page 3450, Public Records of Volusia County, Florida; and

WHEREAS, pursuant to Section 2.C. of the Agreement, certain minor amendments to the Agreement may be approved by the City Administrative Official without City Commission approval; and

WHEREAS, the Property Owners and City desire to amend the Agreement to clarify how certain maintenance costs will be shared by homeowners associations in Shell Pointe Colony and Venetian Bay; and

WHEREAS, this Second Minor Amendment meets the requirements for a minor amendment pursuant to Section 2.C. of the Agreement.

NOW, THEREFORE, the parties, in consideration of the mutual and covenants contained herein, and with the intent to be legally bound and to bind their successors and assigns, due hereby agree as follows:

1. The recitals and premises set forth above are true and correct, form a material part of this Second Minor Amendment and are incorporated herein by reference.

2. Section 12.D. of the Agreement is hereby amended, with insertions and deletions in underline and strikethrough formats, respectively, as follows:

*****
*****

12. PROPERTY OWNERS ASSOCIATION:

*****

D. Developer recognizes that property owners in Shell Pointe Colony will make use of portions of Venetian Bay~~, and especially the Estates at Verano,~~ via roadway and pedestrian connections~~, in addition to potential use of Venetian Bay Village Center~~. However, the parties recognize that some roadways and sidewalks are maintained by the Venetian Bay Homeowners' Association, Inc. (the "Venetian Bay HOA"). As such, the master homeowners association or associations in Shell Pointe Colony (the "Shell Pointe Colony HOA"), as described herein above, shall ~~also~~ be required ~~subject~~ to enter into an agreement with the Venetian Bay HOA~~omeowners' Association, Inc. (Master Association)~~, which shall require payment by the Shell Point Colony HOA to the Venetian Bay HOA for pro-rata share contributions. Said contributions shall be based on the cost of Airport Road landscaping and private sidewalk maintenance and, separately, the maintenance cost of those areas of the stormwater system in Venetian Bay that are being used or impacted by the Shell Pointe Colony stormwater system. The costs for each of those maintenance issues shall be based on a pro-rata share of the total number of homes within the Venetian Bay HOA, with the addition of the number of homes within Shell Pointe Colony, for the total pro-rata computation. The agreement shall include a requirement that the Venetian Bay HOA provide evidence of such maintenance costs, with evidence of payment and the proposed pro-rate share, to the Shell Pointe Colony HOA for Airport Road landscaping and private sidewalk maintenance, and impacted stormwater system maintenance, on an annual basis. Developer specifically clarifies that there is no requirement for the Shell Pointe Colony master association or associations to merge into the Venetian Bay HOA, and there is no requirement to provide voting rights to residents of Shell Point Colony, and that the required agreement providing for contribution shall not require or permit said merger of Shell Pointe Colony homes and residents into the Venetian Bay HOA. The Shell Pointe Colony HOA shall maintain the storm water system within Shell Pointe Colony consistent with permit requirements and provide proof of such work, including inspection reports, to the Venetian Bay HOA to ensure the integrity of the overall system. Any agreement between

the associations shall provide that the Venetian Bay HOA will also maintain their storm water system consistent with permit requirements and provide such proof, including inspection reports, to the Shell Point Colony HOA~~collect assessments from the associations to pay for the upkeep of landscaping and infrastructure within the Venetian Bay PUD and the Estates of Verano.~~

*****
*****

3. This Second Minor Amendment shall be effective as of the date it is executed by all parties.

4. This Second Minor Amendment shall be recorded in the Public Records of Volusia County, Florida, at the Property Owners' expense.

5. The Agreement, as previously enacted and amended, shall remain in full force and effect except with respect to those matters specifically amended by this Second Minor Amendment.

IN WITNESS WHEREOF, the parties have executed this Second Minor Amendment, by and through their duly authorized representatives, on the respective dates below:

[Signatures on following pages.]

"CITY"

WITNESSES:

CITY OF NEW SMYRNA BEACH, a Florida municipal corporation

Print Name: Jeff Goe

By: _____
Shane Corbin, Development Services Director

Print Name: Joe Bayle

STATE OF FLORIDA
COUNTY OF VOLUSIA

The foregoing instrument was acknowledged before me by means of [✓] physical presence or [ ] online notarization on this 27th day of June, 2023, by Shane Corbin, as Development Services Director of the City of New Smyrna Beach. He is personally known to me and has not taken an oath.

NOTARY PUBLIC:

STEPHANIE FERRARA
Commission # GG 949785
Expires May 2, 2024
Bonded Thru Budget Notary Services

Sign: _____

Print: Stephanie Ferrara

"PROPERTY OWNER"

MELVIN REAL ESTATE HOLDINGS, LLC, an Illinois limited liability company

WITNESSES:

Print Name: KYLE OGDEN

By: _____
Gary Melvin, Manager

Print Name: Lauren Norris

STATE OF ILLINOIS
COUNTY OF COLES

The foregoing instrument was acknowledged before me by means of [ ] physical presence or [ ] online notarization on this 6th day of June, 2023, by Gary Melvin, as Manager of Melvin Real Estate Holdings, LLC, an Illinois limited liability company. He is [✓] personally known to me or [ ] has produced _____ as identification and has not taken an oath.

NOTARY PUBLIC:

Sign: Sherri L. Aldrich

Print: SHERRI ALDRICH

OFFICIAL SEAL
Sherri L. Aldrich
NOTARY PUBLIC, STATE OF ILLINOIS
My Commission Expires 12/29/2024

"PROPERTY OWNER"

SPEER REAL ESTATE HOLDINGS, LLC, an Illinois limited liability company

WITNESSES:

Print Name: Kyle Ogden

By: Bruce D. Speer
Bruce Speer, Manager

Print Name Lauren Norris

STATE OF Illinois
COUNTY OF Coles

The foregoing instrument was acknowledged before me by means of [ ] physical presence or [ ] online notarization on this 12th day of June, 2023, by Bruce Speer, as Manager of Speer Real Estate Holdings, LLC, an Illinois limited liability company. He is [✓] personally known to me or [ ] has produced _____ as identification and has not taken an oath.

NOTARY PUBLIC:

Sign: Sherri L. Aldrich

Print: Sherri Aldrich

OFFICIAL SEAL
Sherri L. Aldrich
NOTARY PUBLIC, STATE OF ILLINOIS
My Commission Expires 12/29/2024



AMENITY SITE PLAN

ARDISIA PARK

All information (including, but not limited to prices, views, availability, school assignments and ratings, incentives, floor plans, site plans, features, standards and options, assessments and fees, planned amenities, programs, conceptual artists' renderings, tax rates and community development plans) is not guaranteed and remains subject to change, or delay without notice. Maps and plans are not to scale, dimensions are approximate and may vary in actual construction. Site Map is a conceptual artist's rendering only and for illustrative purposes only. Proposed home locations, amenities, landscaping, street alignments and future development by others are subject to change without notice. Photos are for illustration only and do not necessarily represent actual community. This is not an offering in any state where prohibited or otherwise restricted by law. Please see a Taylor Morrison Community Sales Manager for details and visit www.taylormorrison.com for additional disclaimers © June 11, 2025, Taylor Morrison of Florida, Inc., CBC1257462. All rights reserved.

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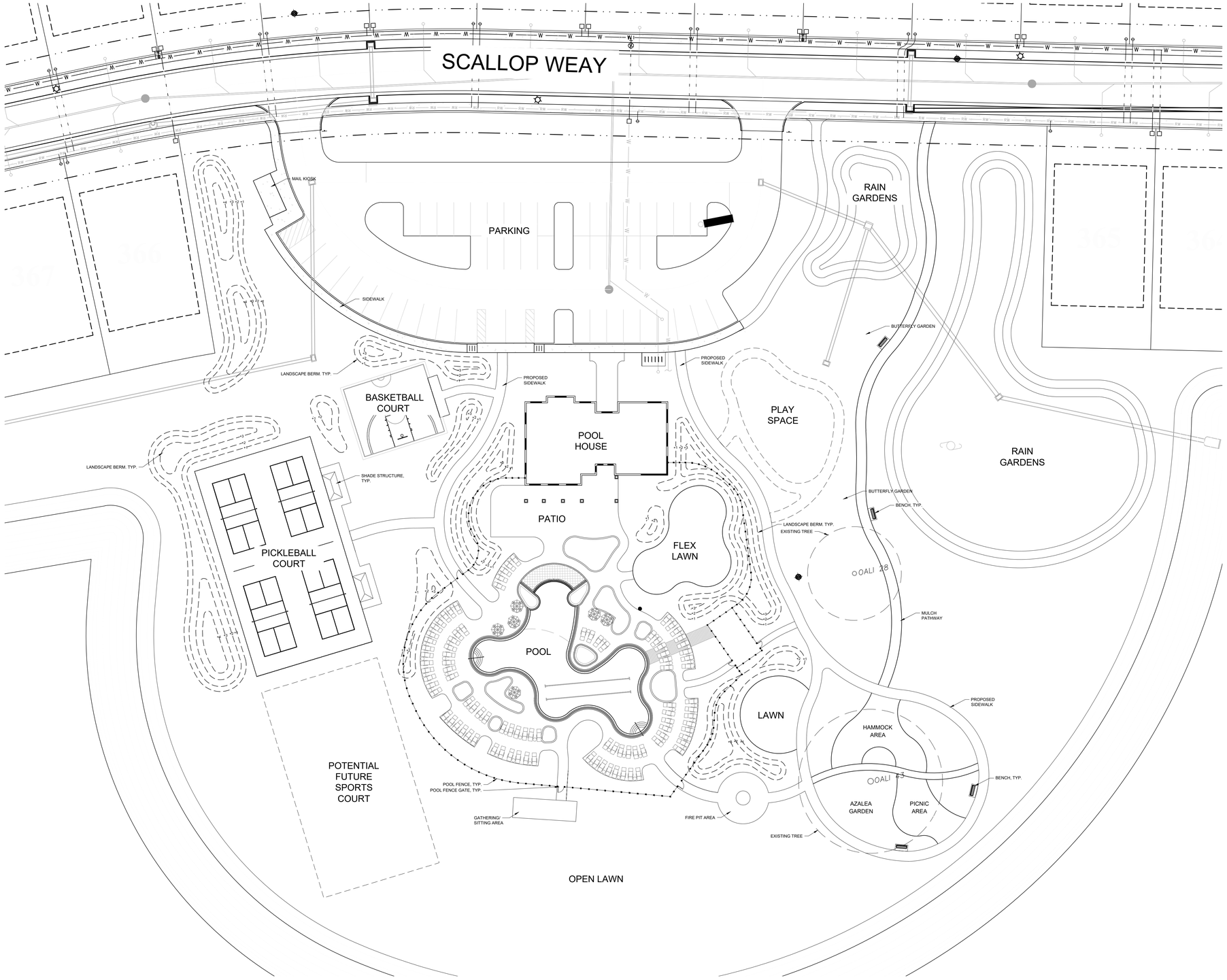
HOMES INSPIRED BY YOU

June 11, 2025



AMENITY SITE PLAN

ARDISIA PARK

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HOMES INSPIRED BY YOU

June 11, 2025

THE CITY OF NEW SMYRNA BEACH - PLANNING DEPARTMENT

V-8-25: REVIEW A VARIANCE REQUEST FOR A NEW MONUMENT/GROUND SIGN FOR THE COCONUT PALMS BEACH RESORT II LOCATED AT 611 SOUTH ATLANTIC AVENUE.

September 8, 2025

Background:

Applicant: Colleen Hearn, with Lauretano Sign Group, 7205 Waelti Drive, Melbourne, Florida 32940.

Property Owner: Coconut Palms Condo Association, 1 Vance Gap Road, Asheville, North Carolina, 28805.

Request: The following variances to allow for a new monument or ground sign at the Coconut Palms condominium.

1. Section 604.12.G, to allow for a 10-foot-tall monument or ground sign to be measured from the property grade and not the road grade. This would allow for an overall ground sign to be 14 feet above the road grade.
2. Section 604.12.F.(11), to allow for a ground or monument sign to be closer than 5-feet to the front property line.
3. Section 604.12.F.(12), to allow for a copy area to exceed the 10% width of the base width.

Parcel Number: 7416-25-00-5000.

Exhibits Used in this Report:

Exhibit A: Location Map
Exhibit B: Aerial Map
Exhibit C: Applicants Response to Criteria
Exhibit D: Proposed Sign Exhibit

Findings:

The subject parcel per the Volusia County Property Appraisers website, has a six-story, time share condo building and accessory structures located on the east side of South Atlantic Avenue, north of Ocean Avenue. This structure was constructed around 1999.

See **Exhibits A and B**.

The property has an existing double pole sign, and the property owners wish to comply with the current city sign regulation and install a new monument/ground sign.

After reviewing the site, the property elevation is about 4 feet above the road grade. This elevation increase was designed and required to construct the parking lot and condo building in 1999. The existing double pole sign was installed above the retaining wall and met the 10-foot maximum height requirement. Because of the approved parking lot location, the current double pole sign was installed at the front property line and landscaping was installed to help shield the wall and give a nice finish to the overall project.

Also, the parking lot space east of the existing double pole sign is the two handicap parking spaces with a van accessibility isle.

Years have gone by, and the current sign does not meet the current sign regulation that prohibits pole signs outside of the National Registered Historic Districts. Also, the landscaping has nicely matured and is covering part of the current double pole sign.

If the proposed sign was reduced by 4-feet in height, to meet the current sign code, the mature landscaping would still cover part of the proposed monument/ground sign and if the sign was relocated 5-feet off the front property line, the sign would encroach into the handicap van accessible isle.

The sign base has proposed to be narrow due to the limitation of the wall location. To meet the required 10% allowable width between the copy area and sign base, the copy area would have to be reduced.

The applicant has requested to allow for the proposed monument/ground sign to have an overall height of 14 feet above the road grade which would be 10-feet above the retaining wall. The applicant has also requested that the sign copy area be more than the 10% width of the base and for the overall sign to be placed up to the front retaining wall so that the mature landscaping can survive and the handicap accessibility can remain.

The LDR requires variance requests to meet all of the following criteria. The applicant's responses are *italicized,* see **Exhibit C***.* Staff's responses are in **bold,** following each criterion.

1. Special circumstances exist which are peculiar to the subject property owner's land, structure, or building, and do not generally apply to the neighboring lands, structures, or

buildings in the same district or vicinity.

- *There is a retaining wall where the monument is going. The retaining wall is the same level as the parking lot. We are measuring the grade from the same level as the bottom of the sign. We would propose the overall sign height from the allowable 10 feet to 14 feet above ground.*

- **There are special circumstances to this lot because the previous grade had to be increased to meet the flood elevation required by the city engineer's office and to direct storm water to the designed locations. The base width was reduced because of the required retaining wall location. And the required sign setback would encroach into the existing required handicap parking spots. During the evaluation by the Planning Department, the criteria has been met.**

2. Strict application of the provisions of the Land Development Regulations would deprive the subject property owner of reasonable rights commonly applicable to other properties in the same district *or* may preclude a benefit to the community in general.

- *Strict application of the Land Development Regulations (LDR) would deprive the property owner of the reasonable right to effectively identify and promote their business, a right commonly exercised by other properties within the same zoning district. Without the requested variance, the sign would be either non-visible or significantly less effective due to parking lot restrictions and the retaining wall. Granting the variance would not only allow the property owner to enjoy rights similar to those of neighboring businesses but also enhance wayfinding and contribute positively to the community by supporting local commerce."*

- **Strict application of the Land Development Regulations would limit the proposed location of the sign. The proposed design location would be above the mature landscape height and help with the visibility for visitors. The proposed location would also keep the existing handicap parking spaces and accessibility isle in place. By saving the landscape height and handicap accessibility location this could be a benefit to the community. During the evaluation by the Planning**

Department, the criteria has been met.

3. The special circumstances and conditions that exist do not result from the direct or indirect actions of the present property owner(s) or past property owner(s). This criterion shall not be satisfied if the present or past property owner(s) created, to any degree, the hardship that is the subject of the variance request.

- *These circumstances include - the retaining wall on half of the property as well as the size of the sign. The regulations that require the base being the same size as the size. We would propose that the main sign cabinet to be wider than the allowable 10% of the sign base. The limited number of places the ground sign about to go. The proximity to the road is limiting where the sign can be placed. The parking lot covers most areas on the property. We are trying to avoid digging into parking spaces. We would also have to reduce the front yard setback from the required 5 feet to a different measurement that would fit. The bottom of the sign (grade would be within regulations of the sign begin 10 ft in height. This unique property with a retaining wall is limiting the ability to install a compliant sign that is visible and effective for identifying the property or business. The hardship is therefore not self-created, but rather the result of conditions beyond the control of the property owners.*

- **The special circumstances and conditions were created by the required elevation of the development. The current double pole sign was allowable before 2011, but changes in the sign code will not allow a replacement of the same type of sign. To meet the current requirement of a monument/ground sign, a reduction in the front yard setback and overall heigh would be required for the current proposed sign. During the evaluation by the Planning Department, the criteria may have been met.**

4. That granting of the variance(s) will not cause substantial detriment to the public welfare or impair the purposes and intent of the Land Development Regulations.

- *The hardship necessitating this variance arises from the physical characteristics and*

constraints of the property, such as its [e.g., irregular shape, limited area before the road, elevation changes on the retaining wall, which were established prior to the current ownership and were not caused by any actions of the present or past property owners. These unique site conditions limit the visibility and effectiveness of a sign installed in strict compliance with current regulations. Therefore, the need for the variance is not self-imposed but results from conditions beyond the control of the property owners.

- **The current LDR prohibits pole signs outside of the national registered historic districts. So current developments that propose to update those types of signs to a current allowable sign design, may need to seek variances if the development has not enough space for a monument/ground sign or if there are major grade differences between a right-of-way and property elevation. With the dune system along the beach, those properties may have to have a higher elevation for the storm water system to work. This request should not be detriment to the public welfare. During the evaluation by the Planning Department, the criteria has been met.**

5. That granting of the variance will not constitute a grant of special privilege that is denied by the Land Development Regulations to other lands, structures or buildings in the same district.

- *Granting this variance would not constitute a special privilege, as it merely seeks to allow the property owner the same reasonable opportunity for signage visibility that is afforded to other properties in the same zoning district. The variance request is intended to address specific site-related limitations that are not common to all properties, and approval would ensure equitable treatment under the Ordinance rather than an advantage over others.*

- **Again, each property could be different based on the property elevation, storm water design, existing or proposed development, landscape buffers. If other properties in this area have the same issue, they would have the right for a due process to request relief with a replacement sign that may not meet the current standards. This proposed sign would be in the current location of the existing sign**

but would be 4-foot taller. The location from the front property line and parking lot would remain the same. During the evaluation by the Planning Department, the criteria has been met.

Recommendation:

In Summary, the property owner has requested a reduction in the front yard sign setback, relief of the required base width, and the overall allowable height for a monument/ground sign. The request, if approved, would allow for the existing mature landscaping to thrive and have a better visibility for visitors to find the time share condominium.

After the evaluation by the Planning Department, the criteria either has been or may have been met and based on that evaluation the Planning Department would recommend **approval** of the requested sign variances with the following condition:

1. All parts of the sign must be located east of the existing retaining wall.
2. A building permit would be required for the proposed monument/ground sign.

Fiscal Analysis:
N/A

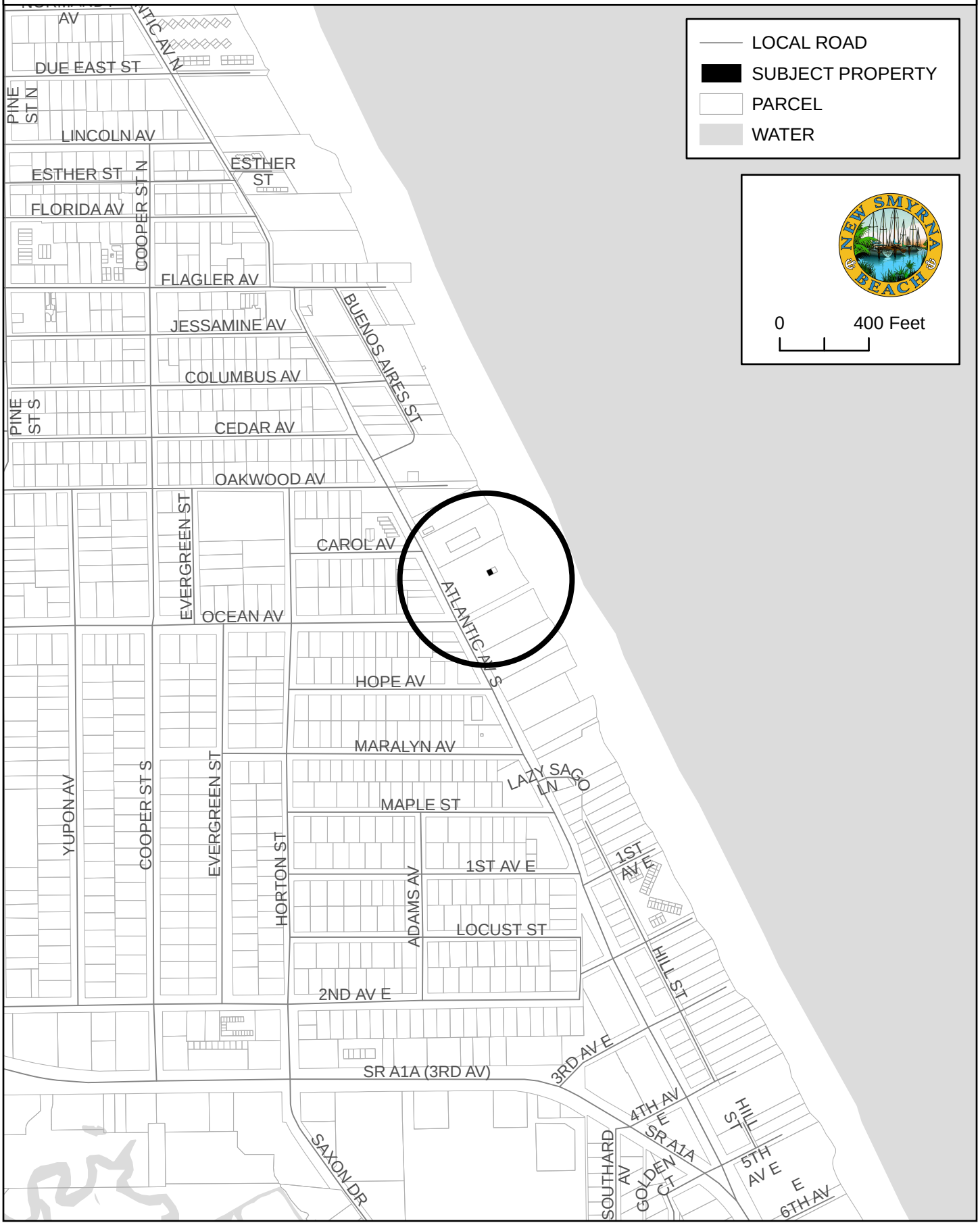
Strategic Plan Item:
No

Staff Report Created By: Robert Mathen - Senior Planner

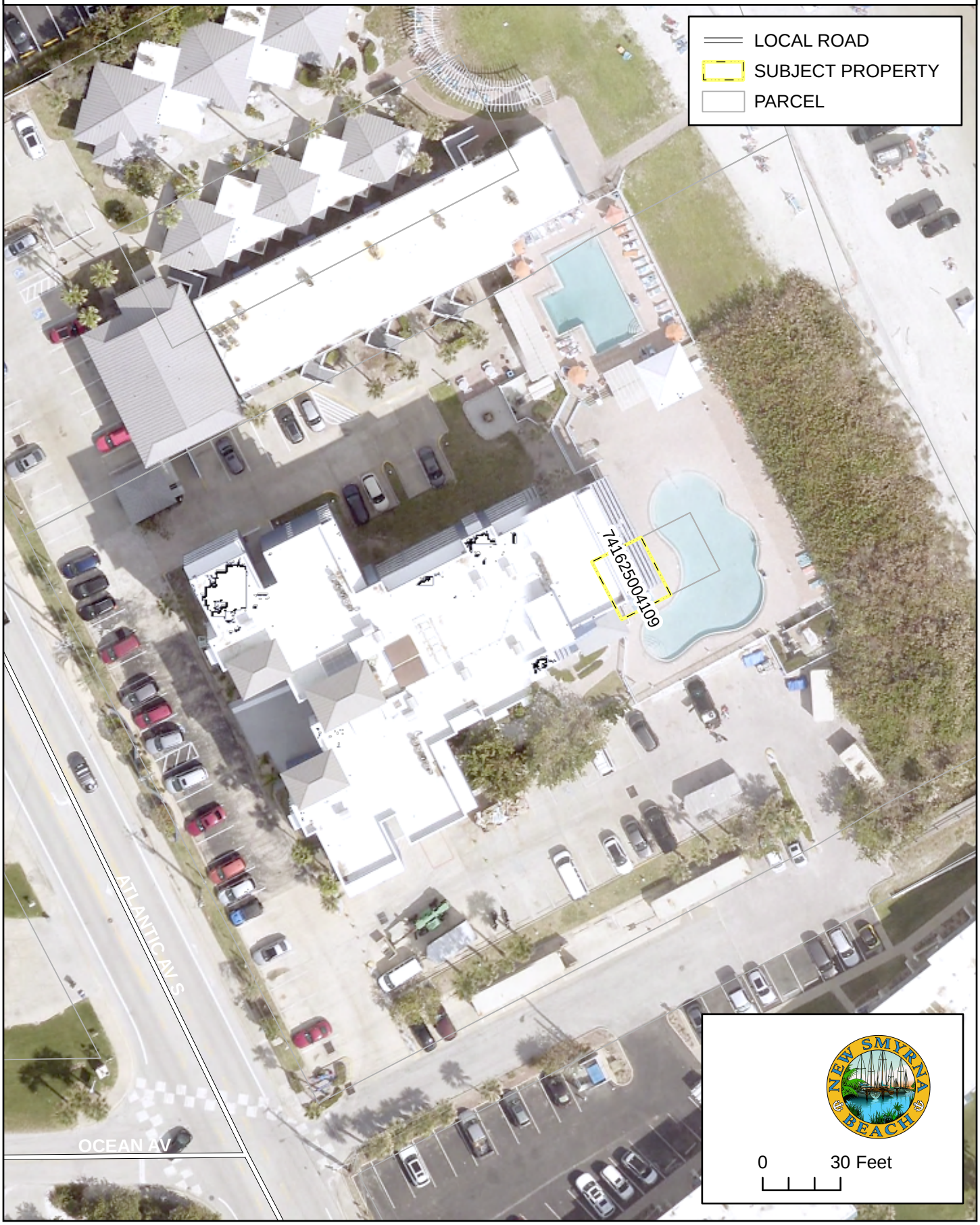
Attachments:

Exhibit A Location Map.pdf
Exhibit B Aerial Map.pdf
Exhibit C Response to Criteria for Variance Request2.pdf
Exhibit D Sign Exhibit.pdf

V-8-25: 611 S. ATLANTIC AVENUE
PARCEL: 7416-25-00-4109 LOCATION MAP



V-8-25: 611 S. ATLANTIC AVENUE
PARCEL: 7416-25-00-4109 AERIAL MAP



Response to Criteria for Variance Request

(a) Special circumstances exist which are peculiar to the subject property owner's land, structure, or building, and do not generally apply to the neighboring lands, structures, or buildings, in the same district or vicinity.

There is a retaining wall where the monument is going. The retaining wall is the same level as the parking lot. We are measuring the grade from the same level as the bottom of the sign. We would propose the overall sign height from the allowable 10 feet to 14 feet above ground.

(b) Strict application of the provisions of this LDR would deprive the subject property owner of reasonable rights commonly applicable to other properties in the same district or may preclude a benefit to the community in general.

Strict application of the Land Development Regulations (LDR) would deprive the property owner of the reasonable right to effectively identify and promote their business, a right commonly exercised by other properties within the same zoning district. Without the requested variance, the sign would be either non-visible or significantly less effective due to parking lot restrictions and the retaining wall. Granting the variance would not only allow the property owner to enjoy rights similar to those of neighboring businesses but also enhance wayfinding and contribute positively to the community by supporting local commerce.

(c) The special circumstances and conditions exist that do not result from the direct or indirect actions of the present property owner(s) or past property owner(s). This criterion shall not be satisfied if the present or past property owner created, to any degree, the hardship that is the subject of the variance request.

These circumstances include - the retaining wall on half of the property as well as the size of the sign. The regulations that require the base being the same size as the size. We would propose that the main

sign cabinet to be wider than the allowable 10% of the sign base. The limited number of places the ground sign about to go. The proximity to the road is limiting where the sign can be placed. The parking lot covers most areas on the property. We are trying to avoid digging into parking spaces. We would also have to reduce the front yard setback from the required 5 feet to a different measurement that would fit. The bottom of the sign (grade would be within regulations of the sign begin 10 ft in height. This unique property with a retaining wall is limiting the ability to install a compliant sign that is visible and effective for identifying the property or business. The hardship is therefore not self-created, but rather the result of conditions beyond the control of the property owners.

(d) That granting of the variance will not cause substantial detriment to the public welfare or impair the purposes and intent of this LDR.

The hardship necessitating this variance arises from the physical characteristics and constraints of the property, such as its [e.g., irregular shape, limited area before the road, elevation changes on the retaining wall, which were established prior to the current ownership and were not caused by any actions of the present or past property owners. These unique site conditions limit the visibility and effectiveness of a sign installed in strict compliance with current regulations. Therefore, the need for the variance is not self-imposed but results from conditions beyond the control of the property owners

(e)That granting of the variance will not constitute a grant of special privilege that is denied by this LDR to other lands, structures, or buildings, in the same district.

Granting this variance would not constitute a special privilege, as it merely seeks to allow the property owner the same reasonable opportunity for signage visibility that is afforded to other properties in the same zoning district. The variance request is intended to address specific site-related limitations that are not common to all properties, and approval would ensure equitable treatment under the Ordinance rather than an advantage over others.



Proposed Signage

Exhibit D



Existing Signage

Print 2619JK-11 Date 4/21/25	ES# 49396 Line 2 SP AS	Sign Type	Monument
CLIENT APPROVAL	Title Coconut Palms Beach Resort	Location	As Illustrated
	City/State New Smyrna Beach, FL	Size	5' 4" x 9' 0" (48 sqft)
	Customer Coconut Palms Beach Resort	Description	Double Sided Illuminated Monument
AUTHORIZED SIGNATURE DATE	Int. Note		

LAURETANO SIGN GROUP
1 Tremco Drive. Terryville, CT 06786
phone: 860.582.0233 fax: 860.583.0949
signs@lauretano.com www.lauretano.com

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Existing Sign Location



Proposed Sign Location
(Replace Sign using same setback of current sign)

Exhibit D

PROCEED TO PRODUCTION	Print 2619JK-11	Date 4/21/25	Installation Method
	ES# 49396	Line 2	
AUTHORIZED SIGNATURE DATE	= Critical Dimension for Internal Quality Control	**UL FILE NO. E70436**	Amps Volts

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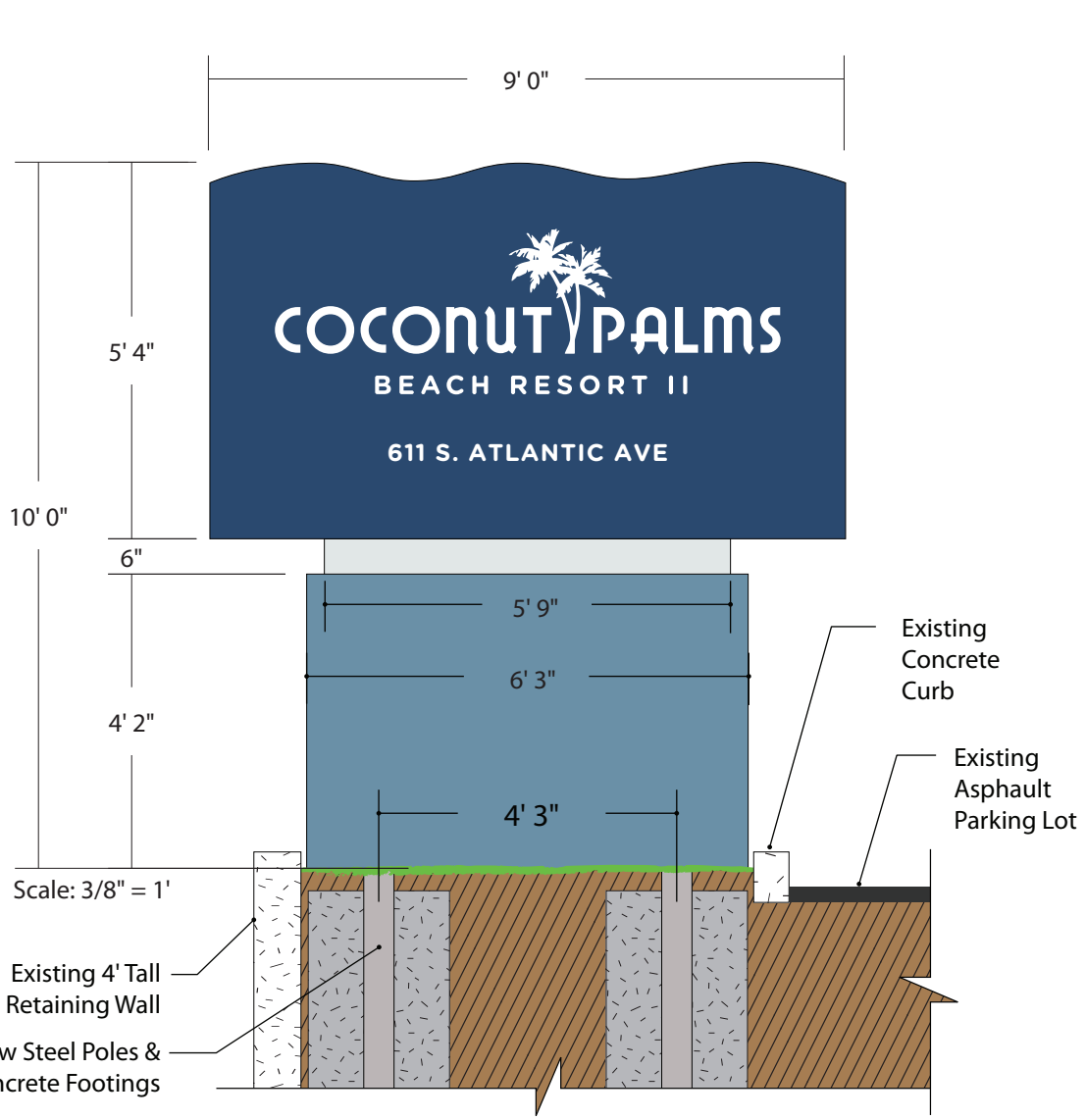
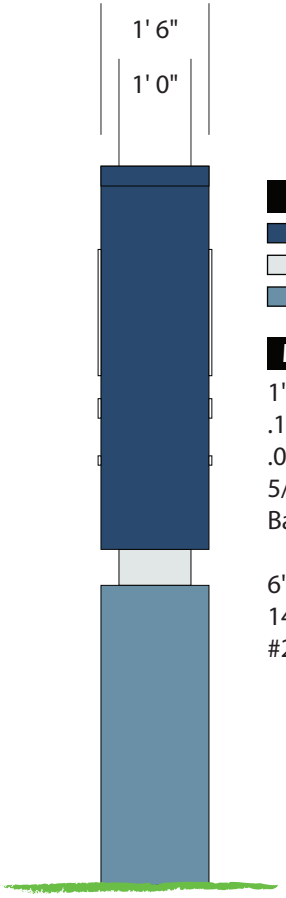
Exhibit D





COLORS

- SW 6531 - Indigo Blue
- SW 6525 - Rarified Air
- SW 7606 - Blue Cruise

MATERIALS

1" x 1" Alum. Tube Frame.
.125" Alum Faces.
.063" Alum. Cladding.
5/16" Push Thru w/ 1/2" White Acrylic.
Backed Up w/ 1/8" Clear Polycarbonate.

6" x 6" x 3/8" Steel Post.
14" x 14" x 1" Steel Base Plate.
#2500 Concrete Footing.

Note: For preliminary design purposes only.
Accurate field survey and dimension verification
required before beginning construction.

☒ Survey and Verification Complete

PROCEED TO PRODUCTION

AUTHORIZED SIGNATURE DATE

Print 2619JK-11	Date 4/21/25	Installation Method	
ES# 49396	Line 2		
= Critical Dimension for Internal Quality Control	**UL FILE NO. E70436**	Amps	Volts

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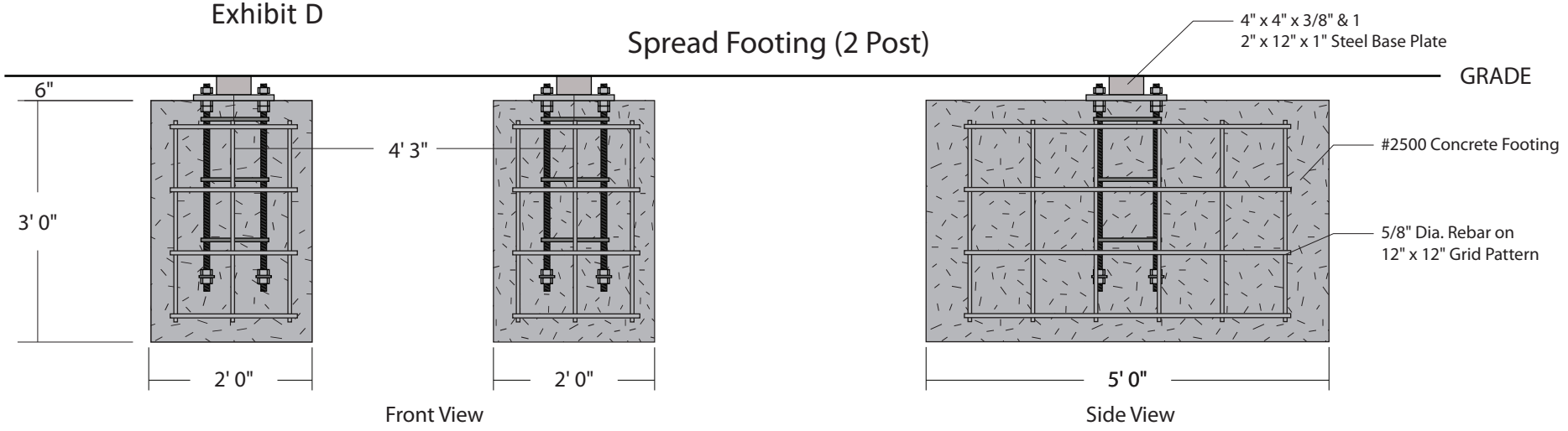
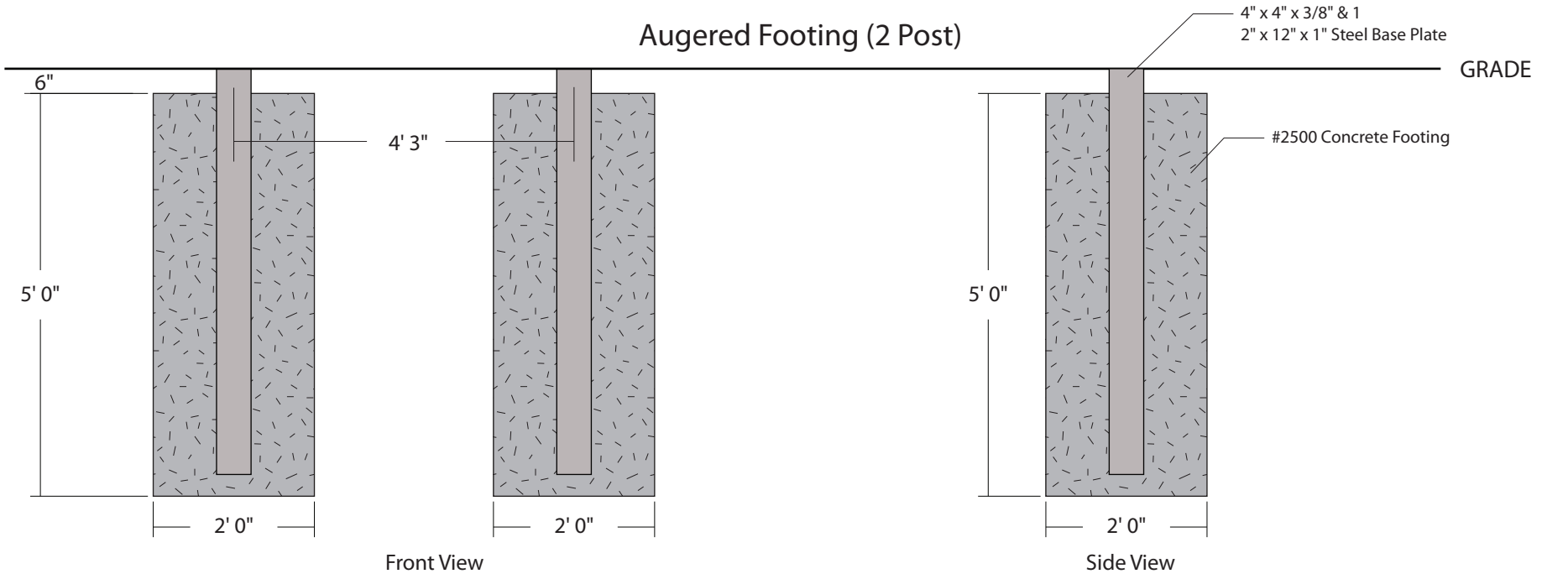
Exhibit D

Spread Footing (2 Post)



Augered Footing (2 Post)



Scale: 1/2" = 1'

PROCEED TO PRODUCTION	Print 2619JK-11	Date 4/21/25	Installation Method
	ES# 49396	Line 2	
AUTHORIZED SIGNATURE DATE	= Critical Dimension for Internal Quality Control	**UL FILE NO. E70436**	Amps Volts

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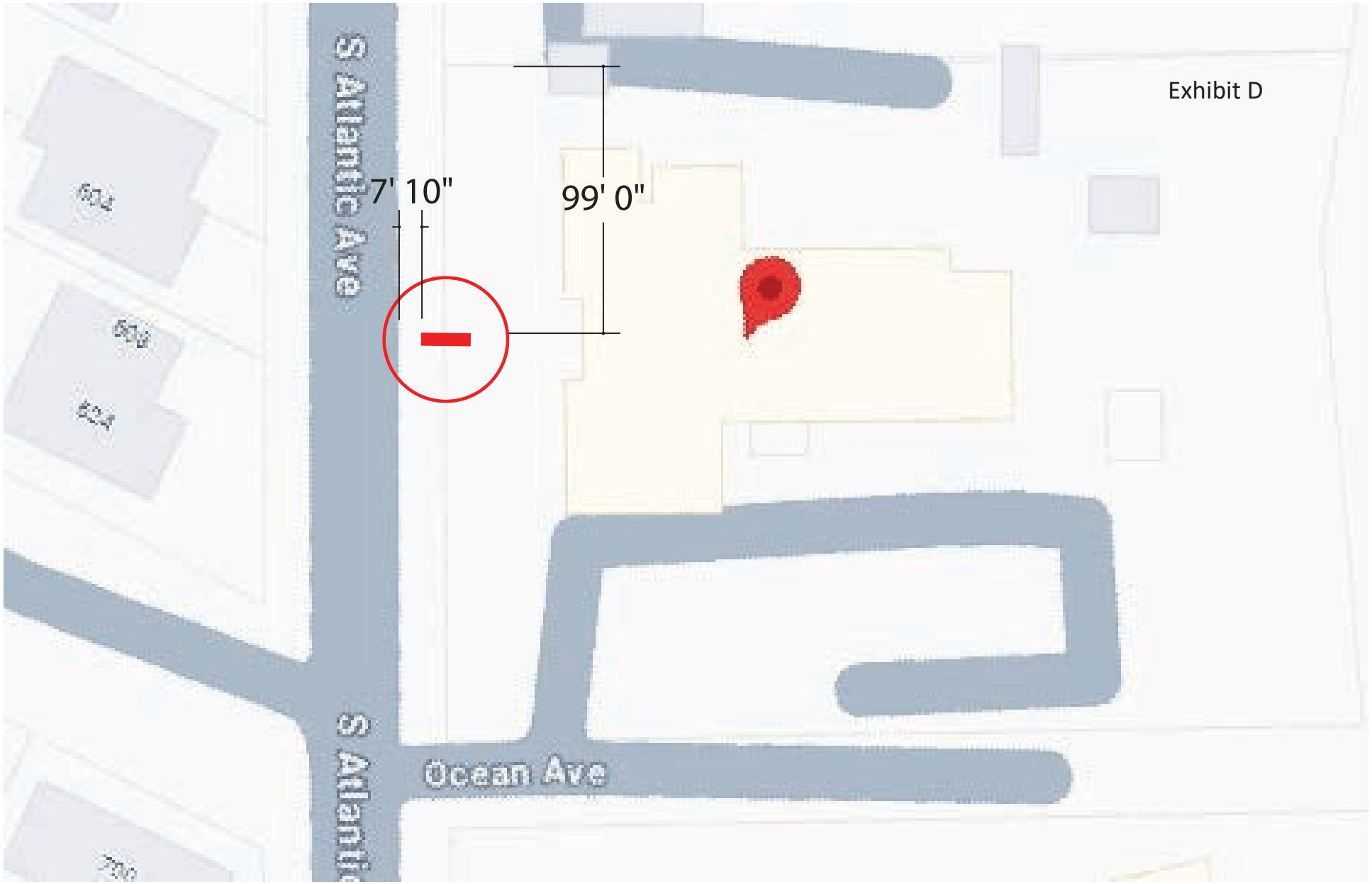

Site Plan (Scale: 1' + 50')

PROCEED TO PRODUCTION	Print 2619JK-11	Date 4/21/25	Installation Method
	ES# 49396	Line 2	
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THE CITY OF NEW SMYRNA BEACH - PLANNING DEPARTMENT

SV-5-24: THE APPLICANT IS SEEKING A POSITIVE RECOMMENDATION FROM THE PLANNING AND ZONING BOARD FOR A PROPOSED RIGHT OF WAY VACATION ON NEW SMYRNA BEACH AIRPORT PROPERTY.

September 8, 2025

Background:

Applicant: Jacob Cosat, Assistant Airport Manager, 602 Skyline Drive, New Smyrna Beach, Florida 32168

Request: Vacation of platted rights-of-way (ROW) at the City's Municipal Airport

Right-of-Way Information: The platted, un-opened ROWs are located on airport property, on the west side of North Dixie Freeway, north and south of Skyline Drive.

Exhibits uses in this report:

Exhibit A: Location Map

Exhibit B: Aerial Map

Exhibit C: Depiction of ROW to be vacated

Exhibit D: Surveys (4) with Legal Descriptions

Exhibit E: Letter of No Objection Florida Gas

Exhibit F: Letter of No Objection NSB Utilities

Exhibit G: Recorded Plats

Exhibit H: Area to be Leased for Development
Exhibit I: NSBU Easement Area
Exhibit J: Letter Explaining Public Good

Findings:

A. The proposed ROW vacations are shown on **Exhibit C**. While treated as one vacation, it actually consists of four separate sections of ROW on airport property.

B. Section 305.03 of the City's Land Development Regulations (LDR) requires the following items for a street vacation (staff's response is in **bold**):

1. Completed application form. **Received.**

2. Receipt of application fee payment. **Received.**
3. Plat of survey, including legal description and acreage of street or alley proposed to be vacated. **Received, included as Exhibit D.**
4. List of all abutting property owner. **As the plat ends along US 1, there are no affected parties besides the City of New Smyrna Beach.**
5. Letter from New Smyrna Beach Utilities indicating:
a. No objection to the vacation; **They do not object, but require an easement over an existing force main and water line.**
b. No utilities are within the right-of-way proposed to be vacated; or **There are utilities.**
c. If utilities exist with right-of-way then a letter must indicate what utilities are located in the right-of-way, **Force main and water line.**
d. If utilities exist in right-of-way, then letter must indicate easements required. **An easement is being put in place to protect the force main and water line.**

C. Letter from applicant explaining how the vacation is in the interest of the public good. **Included as Exhibit J.**

D. This application for street vacation is consistent with the City Land Development Regulations. This street vacation application complies with all matters of general provision, enforcement, administration, concurrency and zoning district requirement as outlined in the City of New Smyrna Beach LDR.

E. This application for street vacation is consistent with the City Comprehensive Plan.

F. This vacation does not impact any level of service indicated within the Transportation Element of the Comprehensive Plan.

G. In regard to how this action would be in the interest of the public good, vacating this unopened ROW would allow the airport to construct a new building on the property, in the same location it a building previously was located, on platted ROW. This essentially "cleans up" the previous situation, in which a structure was constructed on a platted ROW, and will ideally foster future development at the airport.

H. The Florida Gas Transmission Company, and the City's Engineering department have provided notification that they do not object to the proposed ROW vacation. A copy of the Gas Company's no objection letter is included as **Exhibit E**. New Smyrna Beach Utilities (NSBU) requires a 20.0' easement along the 40' platted ROW, parallel to US 1, as it contains an existing 14" force main and a 12" watermain, the easement is shown in **Exhibit I**. A copy of the New Smyrna Beach Utilities no objection letter is included as **Exhibit F**.

I. Because the ROW is wholly on airport property and not abutting another plat, all of the vacated ROW will revert back to the airport, and not to any adjacent property owners, which is the case when there are property owners abutting a ROW.

Recommendation: Staff supports the Planning and Zoning Board recommending the City Commission **approve** the ROW vacations.

Fiscal Analysis:
N/A

Strategic Plan Item:
No

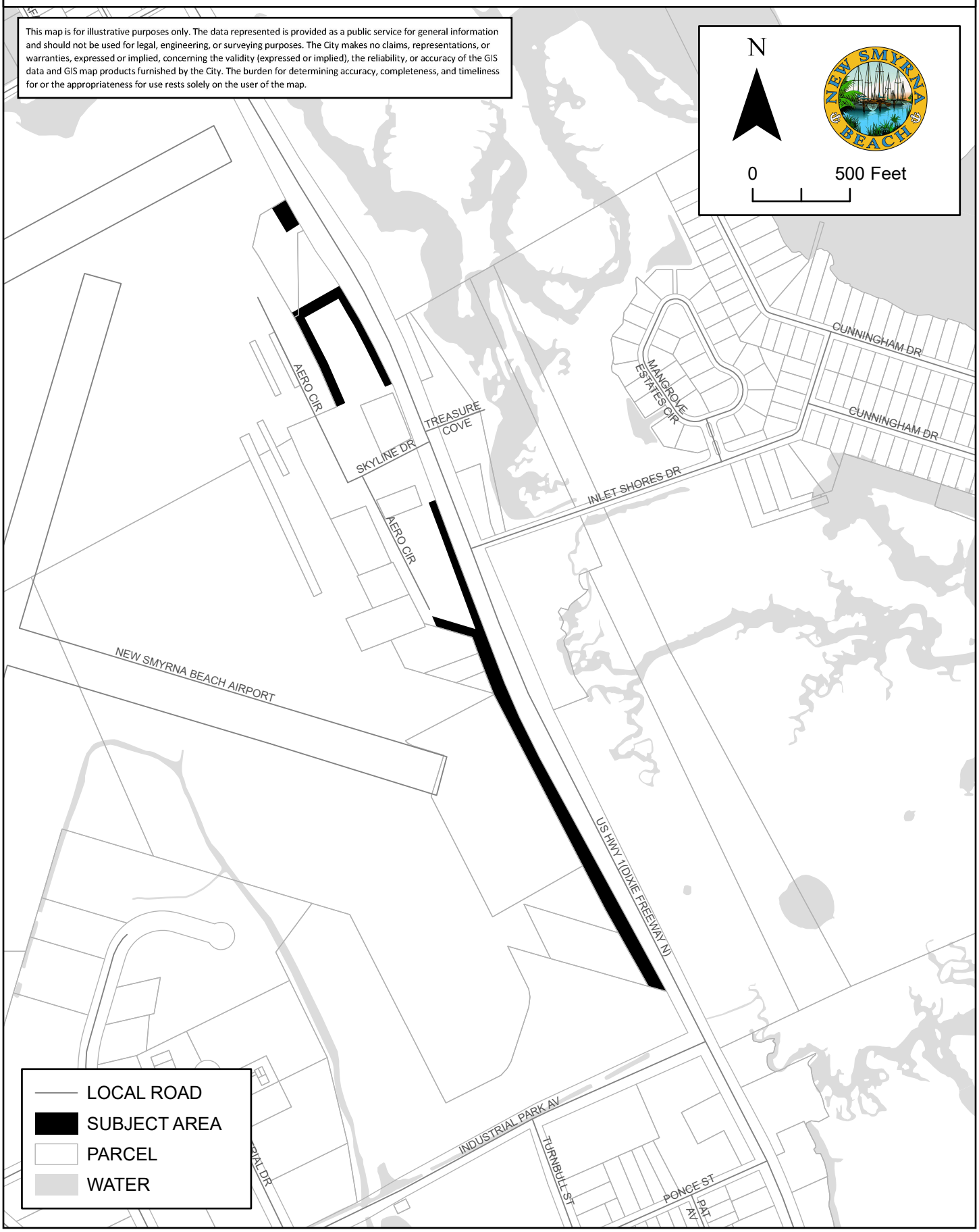
Staff Report Created By: Jake Baker - Senior Planner

Attachments:

Exhibit_A_Location_Map.pdf
Exhibit_B_Aerial_Map.pdf
Exhibit_C_Depiction_of_ROW_to_be_Vacated.pdf
Exhibit_D_Surveys_w_Legal_Descriptions__4_.pdf
Exhibit E Letter of Support.docx

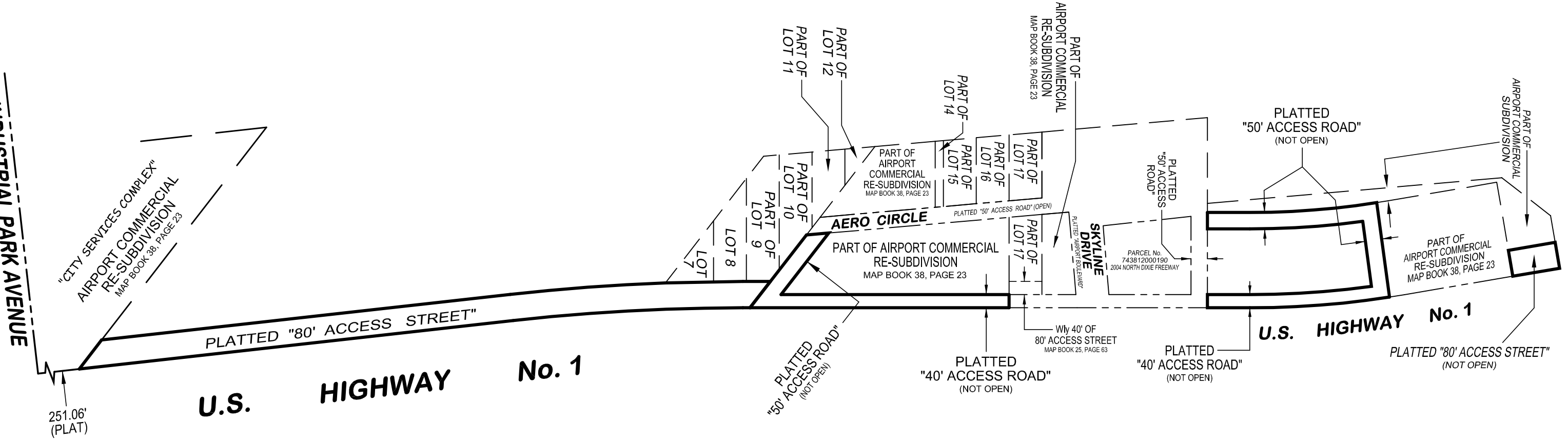
Exhibit F NSB_Airport__EVB__-_Right_of_Way_Vacation__Approval_Ltr_.pdf
Exhibit_G_Plat_Maps.pdf
Exhibit H Area to be Leased for Development.pdf
Exhibit I NSBU Easement Area.pdf
Exhibit J Letter Explaining Public Good.pdf

SV-5-24: 601 SKYLINE DRIVE
LOCATION MAP



SV-5-24: 601 SKYLINE DRIVE
AERIAL MAP





GRAPHIC SCALE

300 0 150 300 600

(IN FEET)

1 inch = 300 ft.

DANIEL W. CORY
SURVEYOR, LLC
300 CANAL STREET
NEW SMYRNA BEACH, FLORIDA 32168
(386) 427-9575
FAX (386) 427-1783
website: corysurveyor.com

CAD FILE: 24090082

SKETCH OF DESCRIPTION OF
(NOT A SURVEY)

That portion of the 80-foot Access Street, AIRPORT COMMERCIAL SUBDIVISION, according to the map or plat thereof as recorded in Map Book 25, Page 63 of the Public Records of Volusia County, Florida lying Northerly of "City Services Complex" parcel and lying Southerly platted 50-foot Access Road, Airport Commercial Re-Subdivision, according to the map or plat thereof as recorded in Map Book 38, Page 23 of the Public Records of Volusia County, Florida, being more particularly described as follows: Commence at the Northwesterly corner of Lot 17, said Airport Commercial Subdivision; thence South 26° 06' 56" East, along the Westerly line of Lots 9 through 17, inclusive, said Airport Commercial Subdivision, a distance of 850.91 feet to the Southwesterly corner of Lot 9, said Airport Commercial Subdivision; thence South 73° 21' 26" East, along the Southerly line of Lots 7 through 9, inclusive, said Airport Commercial Subdivision, a distance of 487.82 feet to the Southeasterly corner of Lot 7, said Airport Commercial Subdivision, said point being on the Westerly right of way of said platted 80-foot Access Street and for the Point of Beginning; thence 236.06 feet along the Westerly right of way of said 80-foot Access Street and along the arc of a curve to the right, said curve being non-tangent to the last described line and having a radius of 6395.50 feet, a central angle of 02° 06' 53" and a chord of 236.05 feet which bears North 22° 12' 23" West to a point of tangency; thence North 21° 08' 56" West, along the Westerly right of way of said 80-foot Access Street, a distance of 83.73 feet to the Southerly line of said Airport Commercial Re-Subdivision; thence South 73° 21' 26" East, along the Southerly line of said Airport Commercial Re-Subdivision, a distance of 101.23 feet to the Westerly right of way of U.S. Highway No. 1; thence South 21° 08' 56" East, along the Westerly right of way of U.S. Highway No.1, a distance of 21.69 feet to a point of curvature; thence 700.86 feet along the Westerly right of way of U.S. Highway No.1 and along the arc of a curve to the left, said curve having a radius of 6315.50 feet, a central angle of 06° 21' 30" and a chord of 700.50 feet which bears South 24° 19' 41" East to a point of tangency; thence South 27° 30' 26" East. along the Westerly right of way of U.S. Highway No.1, a distance of 1329.55 feet to the Northerly line of said "City Services Complex" parcel; thence North 73° 22' 26" West, along the Northerly line of said "City Services Complex" parcel, a distance of 111.50 feet to the Westerly right-of-way of said 80-foot Access Street; thence North 27° 30' 26" West, along the Westerly right-of-way of said 80-foot Access Street, a distance of 1251.89 feet to a point of curvature; thence 473.67 feet along the Westerly right-of-way of said 80-foot Access Street and along the arc of the curve to the right, said curve having a radius of 6395.50 feet, a central angle of 04° 14' 37" and a chord of 473.56 feet which bears North 25° 23' 08" West to the Point of Beginning. Containing 3.76 more or less.

REPORT:

1. Description prepared by the undersigned at the request of the client.
2. Bearings refer to plat and based on the north line of said Lot 17 as being North 68° 51' 04" East.
3. Subject to restrictions, reservations, limitations, easements and rights of way, if any, appearing of record.
4. This sketch of description and report prepared without the benefit of an abstract and no title work has been performed or provided to this surveyor.
5. This sketch of description and report is subject to any facts that may be disclosed by a full and accurate title search.
6. The location of any subsurface foundations, improvements, features or utilities which may or may not exist and which may or may not violate deed or easement lines are not determined or addressed by this survey.
7. Dimensions indicated hereon are in U.S. standard feet and decimals thereof, unless otherwise noted.
8. **This sketch is not an actual Boundary Survey.**
9. Additions or deletions to this survey map or report by other than the signing party or parties is prohibited without written consent of the signing party or parties per F.A.C. Rule 5J-17.051(3)(b)6.
10. The survey map and report or copies thereof are not valid without the signature and the original raised seal of a Florida licensed surveyor and mapper.

DATE PREPARED: 09/26/2024 **SEE PAGE 2 FOR SKETCH**

I hereby certify that this sketch of description of the subject property is true and correct to the best of my knowledge, information and belief as prepared under my supervision on the dates shown thereon. I further certify that this sketch of description meets the Standards of Practice set forth in F.A.C. Rule 5J-17, adopted by the Florida Board of Professional Surveyors and Mappers, pursuant to Florida Statutes Ch. 472.027, subject to the qualifications noted hereon.

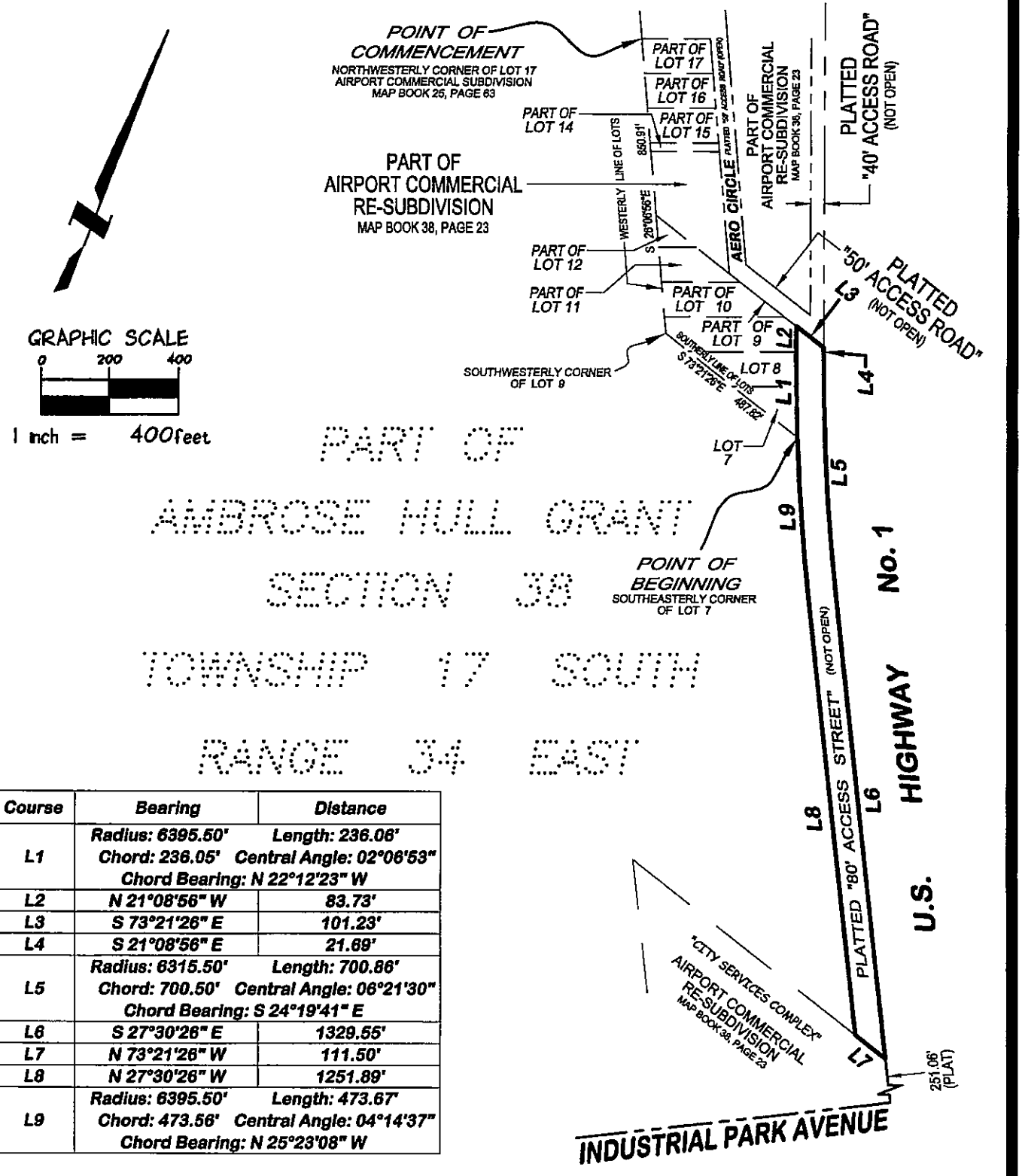
Signed: _____ Seal:

Jeffrey W. Cory, Professional Surveyor and Mapper License Number 4139

THIS SKETCH OF DESCRIPTION CONTAINS 3 PAGES
EACH PAGE IS NOT FULL AND COMPLETE WITHOUT THE OTHER PAGE

Daniel W. Cory Surveyor, LLC
Certificate of Authorization Number LB 7883
300 Canal Street
New Smyrna Beach, Florida 32168
(386) 427-9575

FILE # 1068
Work Order #24-09-008
Part of Access St. - SOUTH
Airport Commercial Sub.



Course	Bearing	Distance
L1	Radius: 6395.50' Chord: 236.05' Chord Bearing: N 22°12'23" W	Length: 236.06' Central Angle: 02°06'53"
L2	N 21°08'56" W	83.73'
L3	S 73°21'26" E	101.23'
L4	S 21°08'56" E	21.69'
L5	Radius: 6315.50' Chord: 700.50' Chord Bearing: S 24°19'41" E	Length: 700.86' Central Angle: 06°21'30"
L6	S 27°30'26" E	1329.55'
L7	N 73°21'26" W	111.50'
L8	N 27°30'26" W	1251.89'
L9	Radius: 6395.50' Chord: 473.56' Chord Bearing: N 25°23'08" W	Length: 473.67' Central Angle: 04°14'37"

NOT A BOUNDARY SURVEY
(DESCRIPTION ON PAGE 1)

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300 Canal Street
New Smyrna Beach, Florida 32168
(386) 427-9575

FILE # 1068
Work Order #24-09-008
Part of Access St. - SOUTH
Airport Commercial Sub.

CAD FILE: 2409008A

SKETCH OF DESCRIPTION OF
(NOT A SURVEY)

A portion of a platted 50-foot Access Road and a portion of a platted 40-foot Access Road, AIRPORT COMMERCIAL RE-SUBDIVISION, according to the map or plat thereof as recorded in Map Book 38, Page 23 of the Public Records of Volusia County, Florida, being described as follows: Commence at the Northwesterly corner of Lot 17, Airport Commercial Subdivision, according to the map or plat thereof as recorded in Map Book 25, Page 63 of the Public Records of Volusia County, Florida; thence North 68° 51' 04" East, along the Northerly line of said Lot 17, a distance of 200.71 feet to Westerly line of a 50-foot Access Road, per said Airport Commercial Re-Subdivision; thence South 26° 06' 56" East, along the Westerly line of said 50-foot Access Road, a distance of 677.93 feet to the Southwesterly corner of 50-foot Access Roads, per said Airport Commercial Re-Subdivision; thence South 73° 21' 26" East, along the Southerly line of said 50-foot Access Road, a distance of 68.10 feet to the Southerly prolongation of the Easterly line of said 50-foot Access Road and for the Point of Beginning; thence North 26° 06' 56" West, along the Southerly prolongation of the Easterly line of said 50-foot Access Road, a distance of 68.10 feet to the Northeasterly corner of said 50-foot Access Roads; thence South 73° 21' 26" East, along the Northerly line of said 50-foot Access Road, a distance of 237.25 feet to the Northwesterly corner of the intersection of said 50-foot Access Road and 40-foot Access Road, said Airport Commercial Re-Subdivision; thence North 21° 08' 56" West, along the Westerly line of said 40-foot Access Road, a distance of 694.66 feet to the Easterly prolongation of the Southerly line of said Lot 17; thence North 68° 51' 04" East, along the Easterly prolongation of the Southerly line of said Lot 17, a distance of 40.00 feet to the Westerly right of way of U.S. Highway No. 1; thence South 21° 08' 56" East, along the Westerly right of way of U.S. Highway No. 1, a distance of 788.95 feet to the Southeasterly corner of the intersection of said 50-foot Access Road and said 40-foot Access Road; thence North 73° 21' 26" West, along the Southerly line of said 50-foot Access Road, a distance of 280.41 feet to the Point of Beginning. Containing 0.98 more or less.

REPORT:

1. Description prepared by the undersigned at the request of the client.
2. Bearings refer to plat and based on the north line of said Lot 17 as being North 68° 51' 04" East.
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DATE PREPARED: 11/20/2024 **SEE PAGE 2 FOR SKETCH**

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Professional Surveyor and Mapper License Number 4139

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New Smyrna Beach, Florida 32168
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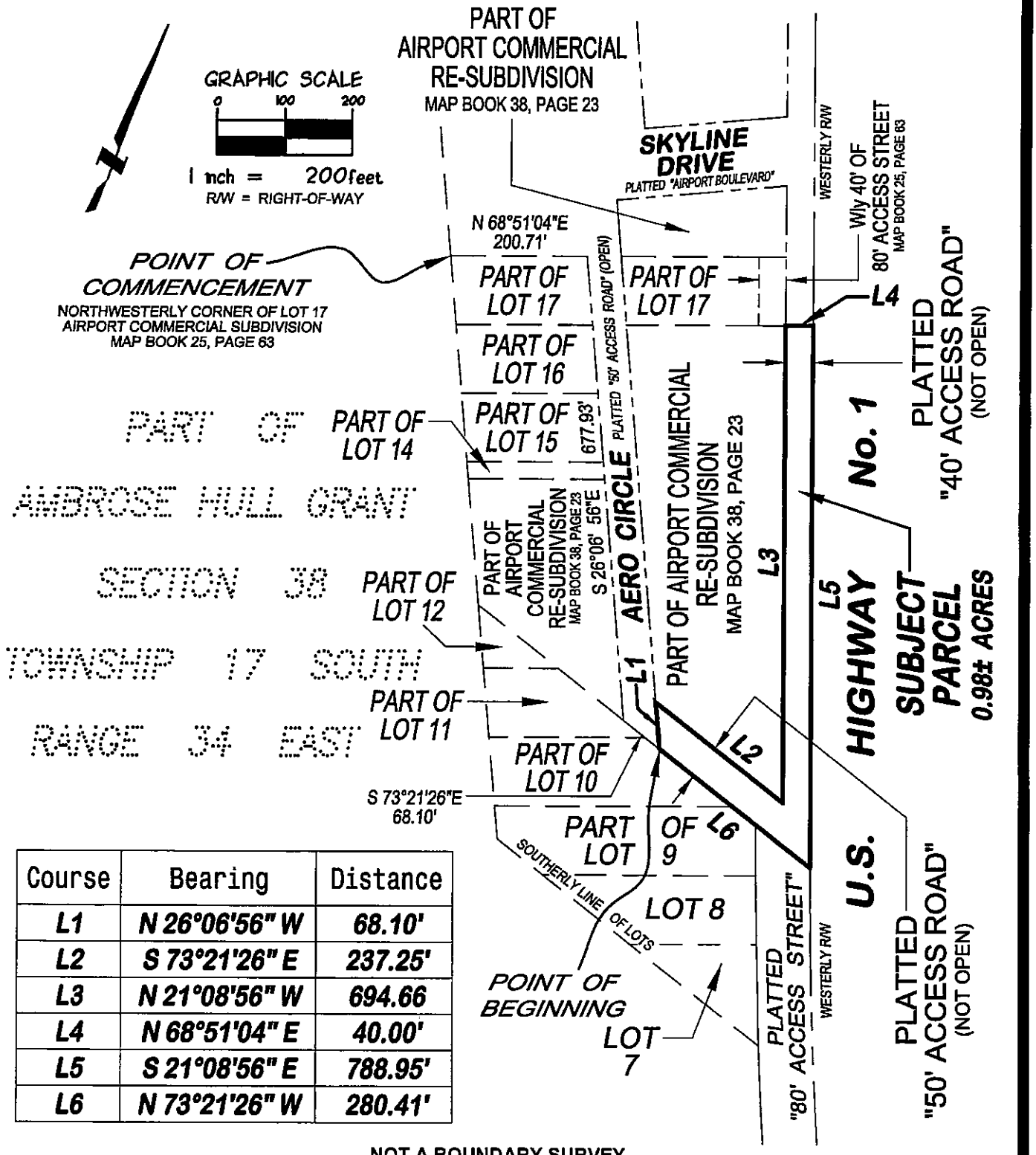
FILE # 1068
Work Order #24-11-006
Part of Access Road - SOUTH
Airport Commercial Re-Sub.



Course	Bearing	Distance
L1	N 26°06'56" W	68.10'
L2	S 73°21'26" E	237.25'
L3	N 21°08'56" W	694.66
L4	N 68°51'04" E	40.00'
L5	S 21°08'56" E	788.95'
L6	N 73°21'26" W	280.41'

NOT A BOUNDARY SURVEY
(DESCRIPTION ON PAGE 1)

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(386) 427-9575

FILE # 1068
Work Order #24-11-006
Part of Access Road - SOUTH
Airport Commercial Re-Sub.
Page 2 of 2

CAD FILE: 2411006

SKETCH OF DESCRIPTION OF
(NOT A SURVEY)

A portion of a platted 50-foot Access Road and a portion of a platted 40-foot Access Road, AIRPORT COMMERCIAL RE-SUBDIVISION, according to the map or plat thereof as recorded in Map Book 38, Page 23 of the Public Records of Volusia County, Florida, being described as follows: Commence at the Northwesterly corner of Lot 17, Airport Commercial Subdivision, according to the map or plat thereof as recorded in Map Book 25, Page 63 of the Public Records of Volusia County, Florida, said point being on the Westerly line of said Airport Commercial Re-Subdivision; thence North 26° 06' 56" West, along the Westerly line of said Airport Commercial Re-Subdivision, a distance of 505.72 feet; thence North 68° 51' 04" East, along the Westerly line of said Airport Commercial Re-Subdivision, a distance of 288.53 feet for the Point of Beginning; thence North 21° 08' 56" West, along the Westerly line of said Airport Commercial Re-Subdivision, a distance of 129.06 feet to a point of curvature; thence 387.33 feet along the Westerly line of said Airport Commercial Re-Subdivision and along the arc of a curve to the left, said curve having a radius of 2509.90 feet, a central angle of 08° 50' 31" and a chord of 387.33 feet which bears North 25° 34' 11" West to the Northwesterly corner of said 50-foot Access Roads; thence North 61° 09' 01" East, along the Northerly line of said 50-foot Access Road, a distance of 290.00 feet to the Westerly right of way of U.S. Highway No. 1; thence 427.02 feet along the Westerly right of way of U.S. Highway No. 1 and along the arc of curve to the right, said curve being non-tangent to the last described line and having a radius of 2799.90 feet, a central angle of 08° 44' 17" and a chord of 426.60 feet which bears South 25° 31' 05" East to a point of tangency; thence South 21° 08' 56" East, along the Westerly line of U.S. Highway No. 1, a distance of 129.06 feet; thence South 68° 51' 04" West, a distance of 40.00 to the Northwesterly corner of the intersection of said 50-foot Access Road and said 40-foot Access Road; thence North 21° 08' 56" West, along the Westerly line of said 40-foot Access Road, a distance of 129.06 feet to a point of curvature; thence 370.93 feet along the Westerly line of said 40-foot Access Road and along the arc of a curve to the left, said curve having a radius of 2759.90 feet, a central angle of 07° 42' 02" and a chord of 370.65 feet which bears North 24° 59' 57" West; thence South 61° 09' 01" West, along the Southerly line of said 50-foot Access Road and along a line non-tangent and non-radial to the last described curve, a distance of 200.00 feet thence; thence 344.05 feet along the Easterly line of said 50-foot Access Road and along the arc of a curve to the right, said curve being non-tangent to the last described line and having a radius of 2559.90 feet, a central angle of 07° 42' 02" and a chord of 343.79 feet which bears South 24° 59' 57" East to a point of tangency; thence South 21° 08' 56" East, along the Easterly line of said 50-foot Access Road, a distance of 129.06 feet; thence South 68° 51' 04" West, a distance of 50.00 feet to the Point of Beginning. Containing 1.34 more or less.

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EACH PAGE IS NOT FULL AND COMPLETE WITHOUT THE OTHER PAGE

Daniel W. Cory Surveyor, LLC
Certificate of Authorization Number LB 7883
300 Canal Street
New Smyrna Beach, Florida 32168
(386) 427-9575

FILE # 1068
Work Order #24-09-008
Part of Access Road - NORTH
Airport Commercial Re-Sub.

REPORT:

1. Description prepared by the undersigned at the request of the client.
2. Bearings refer to plat and based on the north line of said Lot 17 as being North 68° 51' 04" East.
3. Subject to restrictions, reservations, limitations, easements and rights of way, if any, appearing of record.
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DATE PREPARED: 09/26/2024

SEE PAGE 3 FOR SKETCH

I hereby certify that this sketch of description of the subject property is true and correct to the best of my knowledge, information and belief as prepared under my supervision on the dates shown thereon. I further certify that this sketch of description meets the Standards of Practice set forth in F.A.C. Rule 5J-17, adopted by the Florida Board of Professional Surveyors and Mappers, pursuant to Florida Statutes Ch. 472.027, subject to the qualifications noted hereon.

Signed: _____ Seal:

Jeffrey W. Cory
Professional Surveyor and Mapper License Number 4139

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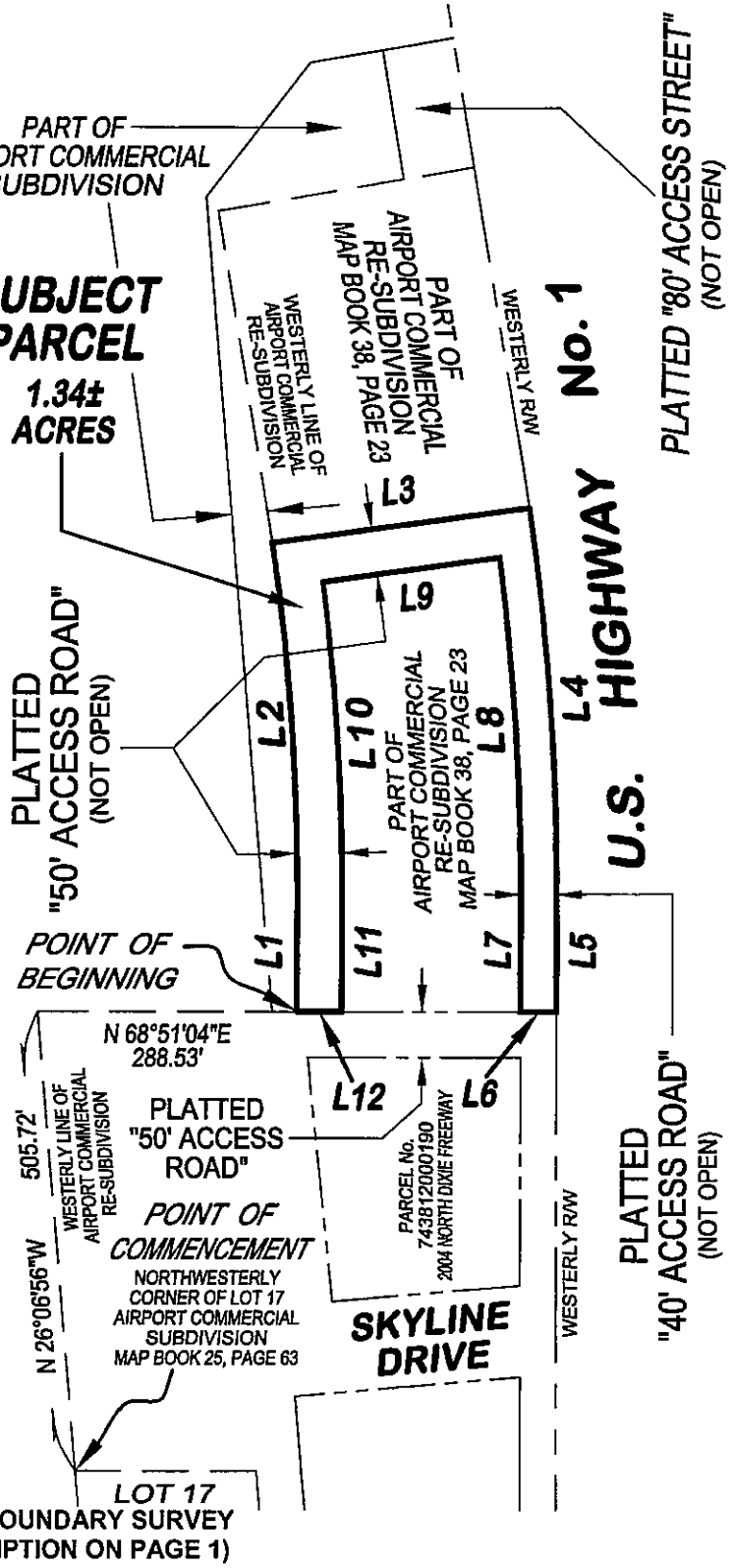
(386) 427-9575

GRAPHIC SCALE
0 100 200
1 inch = 200 feet

PART OF AMBROSE HULL GRANT SECTION 38 TOWNSHIP 17 SOUTH RANGE 34 EAST



Course	Bearing	Distance
L1	N 21°08'56" W	129.06'
L2	Radius: 2509.90' Length: 387.33' Chord: 387.33' Central Angle: 08°50'31" Chord Bearing: N 25°34'11" W	
L3	N 61°09'01" E	290.00'
L4	Radius: 2799.90' Length: 427.02' Chord: 426.60' Central Angle: 08°44'17" Chord Bearing: S 25°31'05" E	
L5	S 21°08'56" E	129.06'
L6	S 68°51'04" W	40.00'
L7	N 21°08'56" W	129.06'
L8	Radius: 2759.90' Length: 370.93' Chord: 370.65' Central Angle: 07°42'02" Chord Bearing: N 24°59'27" W	
L9	S 61°09'01" W	200.00'
L10	Radius: 2559.90' Length: 344.05' Chord: 343.79' Central Angle: 07°42'02" Chord Bearing: S 24°59'57" E	
L11	S 21°08'56" E	129.06'
L12	S 68°51'04" W	50.00'

NOT A BOUNDARY SURVEY
(DESCRIPTION ON PAGE 1)

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FILE # 1068
Work Order #24-09-008
Part of Access Road - NORTH
Airport Commercial Re-Sub.
Page 3 of 3

CAD FILE: 240900BC

SKETCH OF DESCRIPTION OF
(NOT A SURVEY)

That portion of the 80-foot Access Street, AIRPORT COMMERCIAL SUBDIVISION, according to the map or plat thereof as recorded in Map Book 25, Page 63 of the Public Records of Volusia County, Florida, lying Northerly of Airport Commercial Re-Subdivision, according to the map or plat thereof as recorded in Map Book 38, Page 23 of the Public Records of Volusia County, Florida, being more particularly described as follows: Commence at the Northwesterly corner of Lot 17, said Airport Commercial Subdivision, said point being on the Westerly line of said Airport Commercial Re-Subdivision; thence North 26° 06' 56" West, along the Westerly line of said Airport Commercial Re-Subdivision, a distance of 505.72 feet; thence North 68° 51' 04" East, along the Westerly line of said Airport Commercial Re-Subdivision, a distance of 288.53 feet; thence North 21° 08' 56" West, along the Westerly line of said Airport Commercial Re-Subdivision, a distance of 129.06 feet to a point of curvature; thence 423.46 feet along the Westerly line of said Airport Commercial Re-Subdivision and along the arc of a curve to the left, said curve having a radius of 2509.90 feet, a central angle of 09° 40' 00" and a chord of 422.96 feet which bears North 25° 58' 56"' West to a point of tangency; thence North 30° 48' 56" West, along the Westerly line of said Airport Commercial Re-Subdivision, a distance of 335.23 feet to the Northwesterly corner of said Airport Commercial Re-Subdivision; thence North 59° 11' 04" East, along the Northerly line of said Airport Commercial Re-Subdivision, a distance of 210.00 feet to the Westerly line of said 80-foot Access Street and for the Point of Beginning; thence North 30° 48' 56" West, along the Westerly line of said 80-foot Access Street, a distance of 144.49 feet to the Northwesterly corner of said 80-foot Access Street; thence North 59° 11' 04" East, along the Northerly line of said 80-foot Access Street, a distance of 80.00 feet to the Westerly right of way of U.S. Highway No. 1; thence South 30° 48' 56" East, along the Westerly right of way of U.S. Highway No. 1, a distance of 144.49 feet to the Northerly line of said Airport Commercial Re-Subdivision; thence South 59° 11' 04" West, along the Northerly line of said Airport Commercial Re-Subdivision, a distance of 80.00 feet to the Point of Beginning. Containing 0.27 more or less.

REPORT:

1. Description prepared by the undersigned at the request of the client.
2. Bearings refer to plat and based on the north line of said Lot 17 as being North 68° 51' 04" East.
3. Subject to restrictions, reservations, limitations, easements and rights of way, if any, appearing of record.
4. This sketch of description and report prepared without the benefit of an abstract and no title work has been performed or provided to this surveyor.
5. This sketch of description and report is subject to any facts that may be disclosed by a full and accurate title search.
6. The location of any subsurface foundations, improvements, features or utilities which may or may not exist and which may or may not violate deed or easement lines are not determined or addressed by this survey.
7. Dimensions indicated hereon are in U.S. standard feet and decimals thereof, unless otherwise noted.
8. **This sketch is not an actual Boundary Survey.**
9. Additions or deletions to this survey map or report by other than the signing party or parties is prohibited without written consent of the signing party or parties per F.A.C. Rule 5J-17.051(3)(b)6.
10. The survey map and report or copies thereof are not valid without the signature and the original raised seal of a Florida licensed surveyor and mapper.

DATE PREPARED: 09/26/2024 **SEE PAGE 2 FOR SKETCH**

I hereby certify that this sketch of description of the subject property is true and correct to the best of my knowledge, information and belief as prepared under my supervision on the dates shown thereon. I further certify that this sketch of description meets the Standards of Practice set forth in F.A.C. Rule 5J-17, adopted by the Florida Board of Professional Surveyors and Mappers, pursuant to Florida Statutes Ch. 472.027, subject to the qualifications noted hereon.

Signed: _____ Seal:

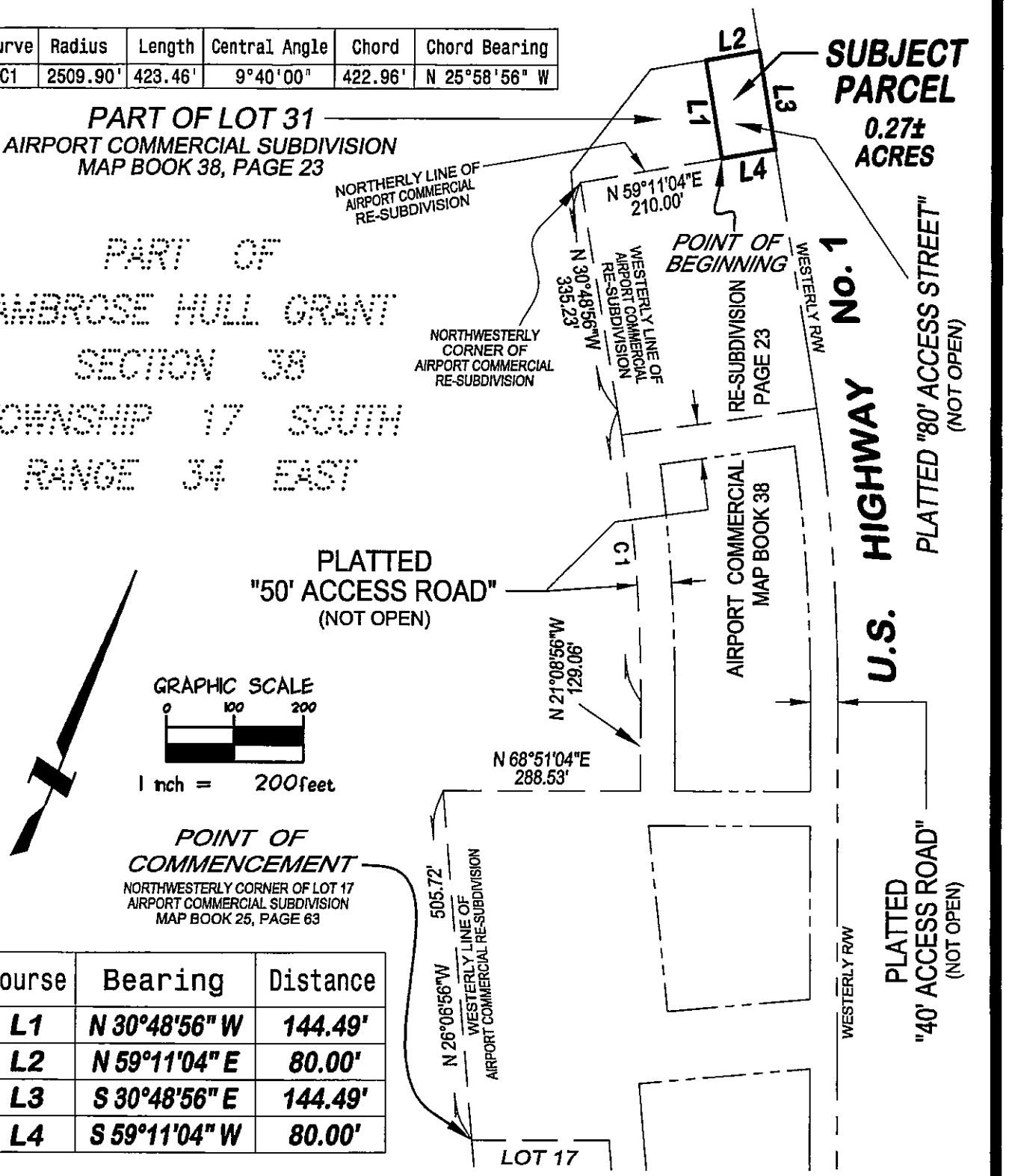
Jeffrey W. Cory
Professional Surveyor and Mapper License Number 4139

THIS SKETCH OF DESCRIPTION CONTAINS 2 PAGES
EACH PAGE IS NOT FULL AND COMPLETE WITHOUT THE OTHER PAGE

Daniel W. Cory Surveyor, LLC
Certificate of Authorization Number LB 7883
300 Canal Street
New Smyrna Beach, Florida 32168
(386) 427-9575

FILE # 1068
Work Order #24-09-008
Part of Access St. - NORTH
Airport Commercial Sub.

Curve	Radius	Length	Central Angle	Chord	Chord Bearing
C1	2509.90'	423.46'	9°40'00"	422.96'	N 25°58'56" W



Course	Bearing	Distance
L1	N 30°48'56" W	144.49'
L2	N 59°11'04" E	80.00'
L3	S 30°48'56" E	144.49'
L4	S 59°11'04" W	80.00'

NOT A BOUNDARY SURVEY
(DESCRIPTION ON PAGE 1)

THIS SKETCH OF DESCRIPTION CONTAINS 2 PAGES
EACH PAGE IS NOT FULL AND COMPLETE WITHOUT THE OTHER PAGE

Daniel W. Cory Surveyor, LLC
Certificate of Authorization Number LB 7883
300 Canal Street
New Smyrna Beach, Florida 32168
(386) 427-9575

FILE # 1068
Work Order #24-09-008
Part of Access St. - NORTH
Airport Commercial Sub.
Page 2 of 2

CAD FILE: 24090080

Florida Gas Transmission Company
An Energy Transfer/Kinder Morgan Affiliate

2301 Lucien Way
Suite 200
Maitland, FL 32751
Right-of-Way Department

August 28, 2024

City of New Smyrna Beach
214 Sams Avenue
New Smyrna Beach, FL 32168

Re: Vacation Request – 602 Skyline Road

To Whom it May Concern:

Florida Gas Transmission Company, LLC (FGT) has **No Objection** to the vacation of the property shown on the attached drawing. Our nearest pipeline is approximately .75 miles South.

Please call me at (407) 838-7059, if you have any further questions or concerns.

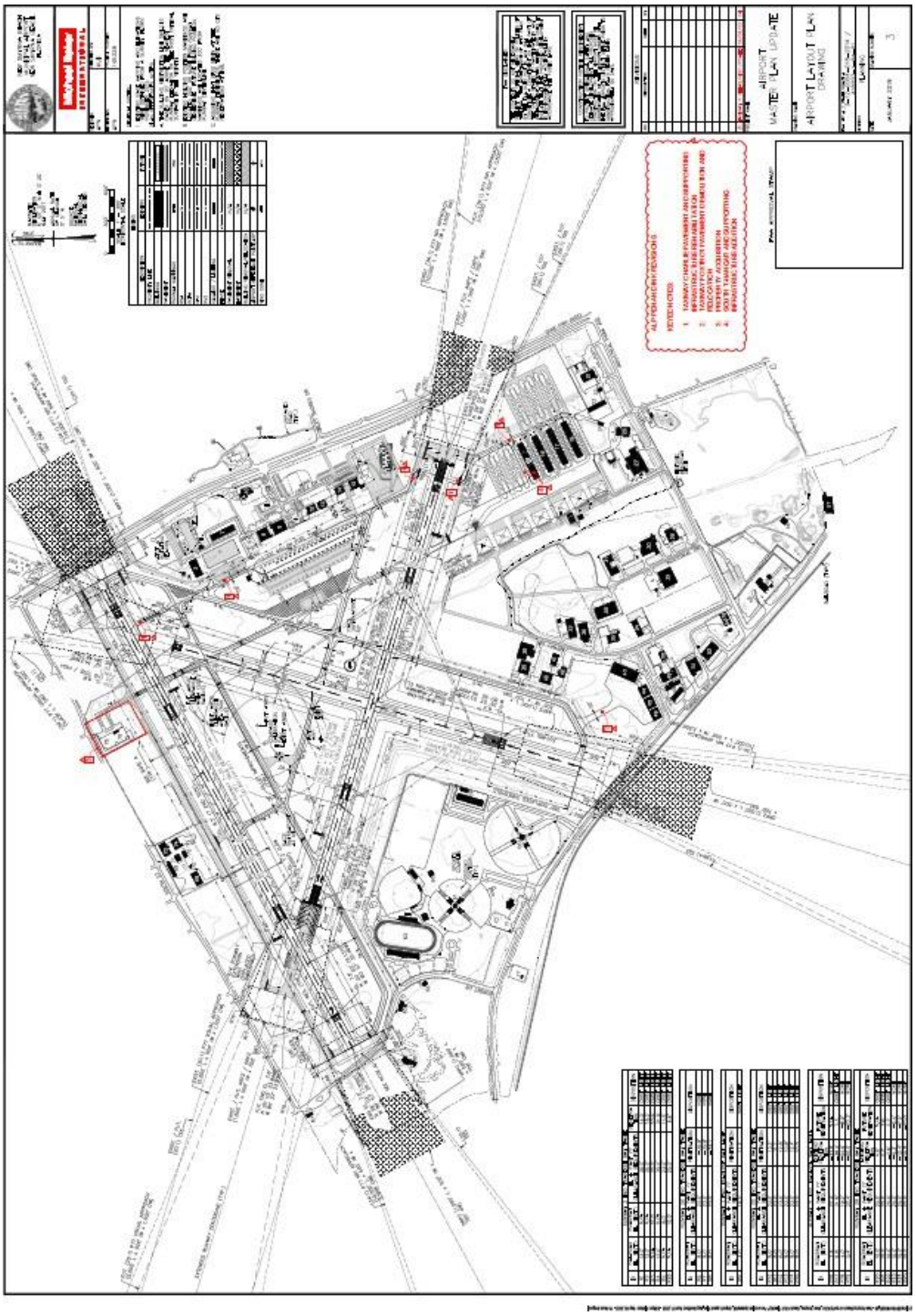
Thank you,
Amy Powell

Amy Powell
Right of Way Representative

Florida Gas Transmission Company

An Energy Transfer/Kinder Morgan Affiliate

2301 Lucien Way
Suite 200
Maitland, FL 32751



New Smyrna Beach
• • • UTILITIES • • •

June 19, 2025

Mr. Jacob Cosat
Assistant Airport Director
602 Skyline Drive
New Smyrna Beach, FL 32168

SUBJECT: **Proposed Vacation of Highlighted Portion of Platted Right-of-Way Located Within the City of NSB Municipal Airport Complex, Public Records of Volusia County**

Dear Mr. Cosat:

New Smyrna Beach Utilities (NSBU) has no objection to the proposed vacation of highlighted portion of the platted Right-of-Way located within the City of NSB Municipal Airport Complex as depicted in your letter dated June 9, 2025 (attached).

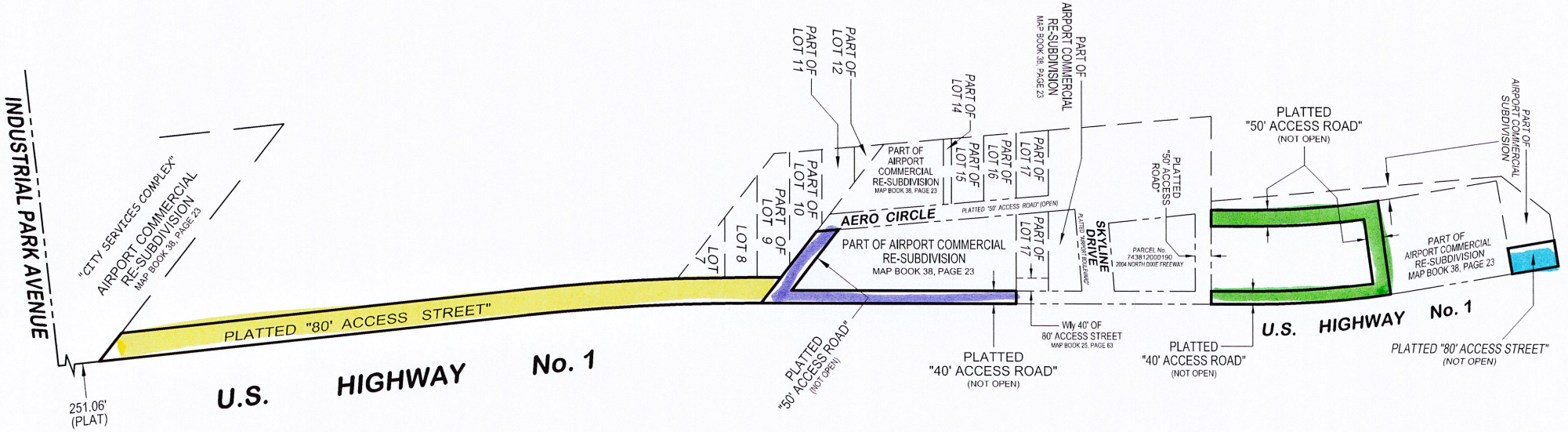
New Smyrna Beach Utilities has electric, water, and sanitary sewer main infrastructures within the right-of-way to be vacated. The City of New Smyrna Beach and the New Smyrna Beach Airport (EVB) agreed to dedicate utilities easement over the entire aforementioned proposed right-of-way to be vacated to NSBU. NSBU staff have approved the new utilities easement sketches and legal description. It is understood and agreed by all parties (City of New Smyrna Beach, New Smyrna Beach Airport and NSBU), the proposed utilities easement will be executed and recorded by the City of New Smyrna Beach concurrently or within 120 calendar days of the proposed right-of-way vacation.

Please do not hesitate to call me if you have any questions or require additional information.

Sincerely,

JUNE 19, 2025

Kenny Ho, P.E.
New Business Manager
Office: 386-424-3076



GRAPHIC SCALE

300 0 150 300 600

(IN FEET)

1 inch = 300 ft.

DANIEL W. CORY
SURVEYOR, LLC
300 CANAL STREET
NEW SMYRNA BEACH, FLORIDA 32168
(386) 427-9575
FAX (386) 427-1783
website: corysurveyor.com

New Smyrna Beach Airport (EVB)
602 Skyline Drive • New Smyrna Beach, FL 32168
Phone: (386) 410-2680 • Email: Airport@cityofnsb.com

6/9/2025

Subject: Request for Right of Way vacation for the New Smyrna Beach Airport

To New Smyrna Beach Utilities,

I am requesting that the City of New Smyrna Beach vacate the right-of-ways (ROW) that are described and shown on exhibits B and C. The ROWs are located along US1 at the New Smyrna Beach Airport Business Park. These ROWs will be replaced with an easement for areas where the NSBU has an interest in having access for any future events.

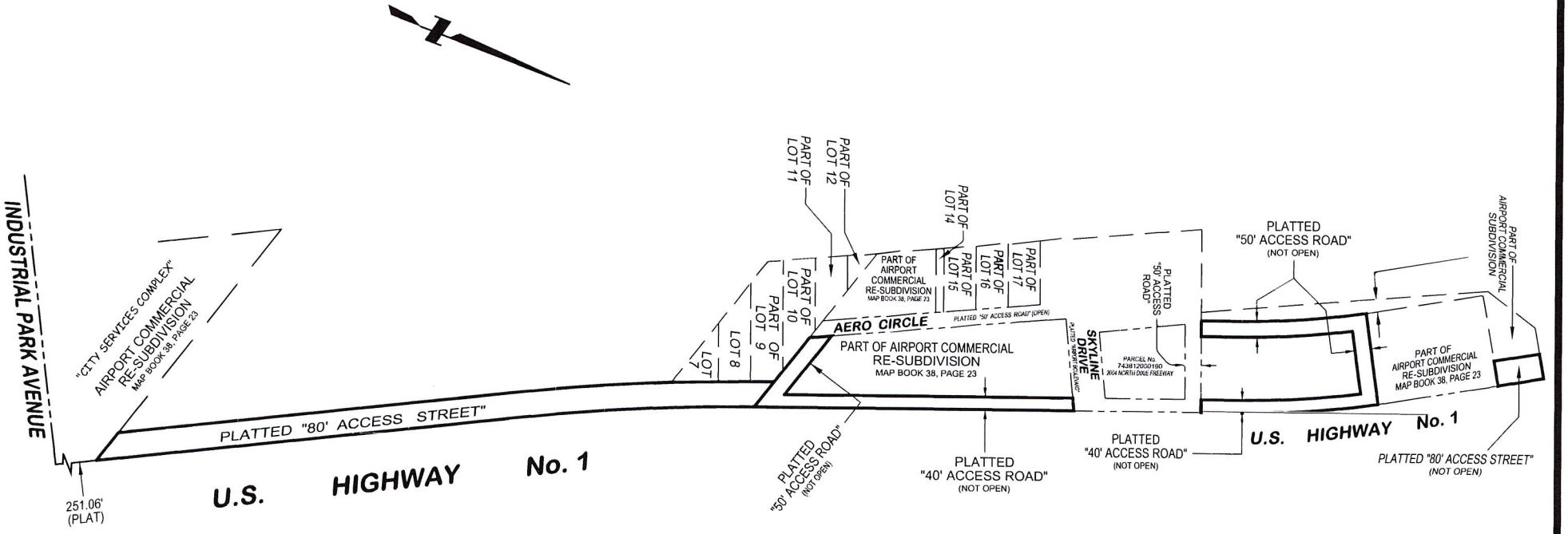
Thank you,

Jacob Cosat
Assistant Airport Director
New Smyrna Beach Airport

SV-5-24: 601 SKYLINE DRIVE
AERIAL MAP



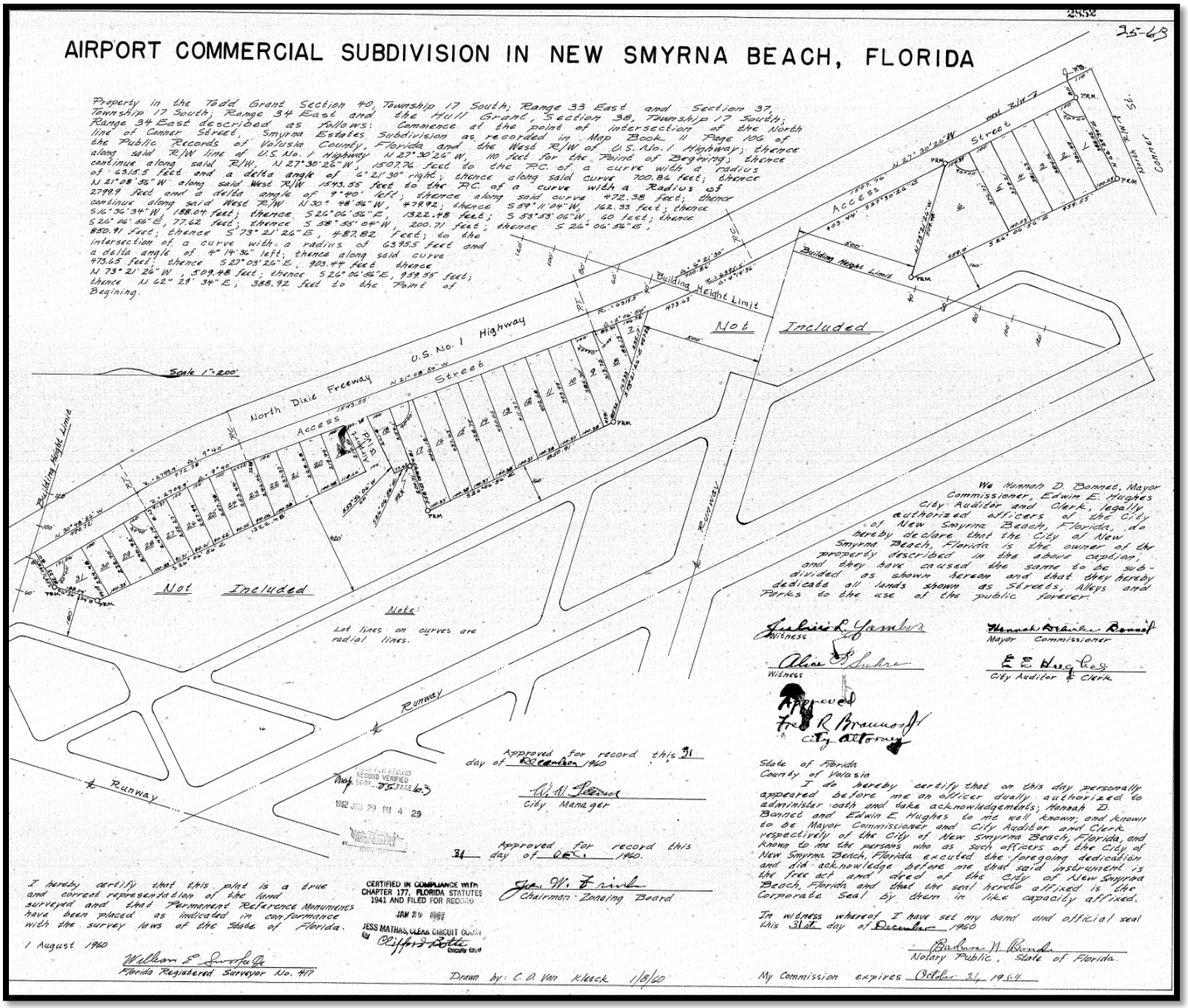
Exhibit C



DANIEL W. CORY
SURVEYOR, LLC
300 CANAL STREET
NEW SMYRNA BEACH, FLORIDA 32168
(386) 427-9575
FAX (386) 427-1783
website: corysurveyor.com

CAD FILE: 24040082

Exhibit G


AIRPORT COMMERCIAL SUBDIVISION IN NEW SMYRNA BEACH, FLORIDA
25-63
Property in the Todd Grant Section 40, Township 17 South; Range 33 East and Section 37, Township 17 South; Range 34 East and the Hull Grant, Section 38, Township 17 South; Range 34 East described as follows: Commence at the point of intersection of the North line of Canner Street, Smyrna Estates Subdivision as recorded in Map Book 11 Page 106 of the Public Records of Volusia County, Florida and the West R/W of U.S. No. 1 Highway; thence along said R/W line of U.S. No. 1 Highway N 27° 30' 26" W, 110 feet for the Point of Beginning; thence continue along said R/W, N 27° 30' 26" W, 1507.76 feet to the P.C. of a curve with a radius of 6315.5 feet and a delta angle of 6° 21' 30" right; thence along said curve 700.86 feet; thence N 21° 08' 56" W along said West R/W 1343.55 feet to the P.C. of a curve with a Radius of 2799.9 feet and a delta angle of 9° 40' left; thence along said curve 472.38 feet; thence continue along said West R/W N 30° 48' 56" W, 479.92; thence S 59° 11' 04" W, 162.33 feet; thence S 16° 36' 34" W, 188.04 feet; thence S 26° 06' 56" E, 1322.48 feet; S 83° 53' 06" W, 60 feet; thence S 26° 06' 56" E, 77.62 feet; thence S 58° 35' 04" W, 200.71 feet; thence S 26° 06' 56" E, 850.91 feet; thence S 73° 21' 26" E, 487.82 feet; to the intersection of a curve with a radius of 6395.5 feet and a delta angle of 4° 14' 36" left; thence along said curve 473.65 feet; thence S 27° 03' 26" E, 903.44 feet thence N 73° 21' 26" W, 509.48 feet; thence S 26° 06' 56" E, 959.56 feet; thence N 62° 29' 34" E, 388.92 feet to the Point of Begining.
Scale 1" = 200'
North Dixie Freeway
U.S. No. 1 Highway
Street
Access
Building Height Limit
Runway
Not Included
Note: Lot lines on curves are radial lines.
We Hannah D. Bonnet, Mayor Commissioner, Edwin E. Hughes City Auditor and Clerk, legally authorized officers of the City of New Smyrna Beach, Florida, do hereby declare that the City of New Smyrna Beach, Florida is the owner of the property described in the above caption, and they have caused the same to be subdivided as shown hereon and that they hereby dedicate all lands shown as Streets, Alleys and Parks to the use of the public forever.
Witness
Mayor Commissioner
Witness
City Auditor & Clerk
Approved
City Attorney
Approved for record this 31 day of December 1960
City Manager
Approved for record this 31 day of Dec. 1960.
Chairman Zoning Board
I hereby certify that this plat is a true and correct representation of the land surveyed and that Permanent Reference Monuments have been placed as indicated in conformance with the survey laws of the State of Florida.
1 August 1960
Florida Registered Surveyor No. 417
CERTIFIED IN COMPLIANCE WITH CHAPTER 177, FLORIDA STATUTES 1941 AND FILED FOR RECORD
JAN 24 1962
JESS MATHAS, CLERK CIRCUIT COURT
RECORD VERIFIED
1962 JAN 29 PM 4 25
Drawn by: C. A. Van Kleeck 1/8/60
State of Florida
County of Volusia
I do hereby certify that on this day personally appeared before me an officer duly authorized to administer oath and take acknowledgements; Hannah D. Bonnet and Edwin E. Hughes to me well known; and known to be Mayor Commissioner and City Auditor and Clerk respectively of the City of New Smyrna Beach, Florida, and known to me the persons who as such officers of the City of New Smyrna Beach, Florida executed the foregoing dedication and did acknowledge before me that said instrument is the free act and deed of the City of New Smyrna Beach, Florida and that the seal hereto affixed is the Corporate Seal by them in like capacity affixed.
In witness whereof I have set my hand and official seal this 31st day of December 1960
Notary Public, State of Florida.
My Commission expires October 24, 1964

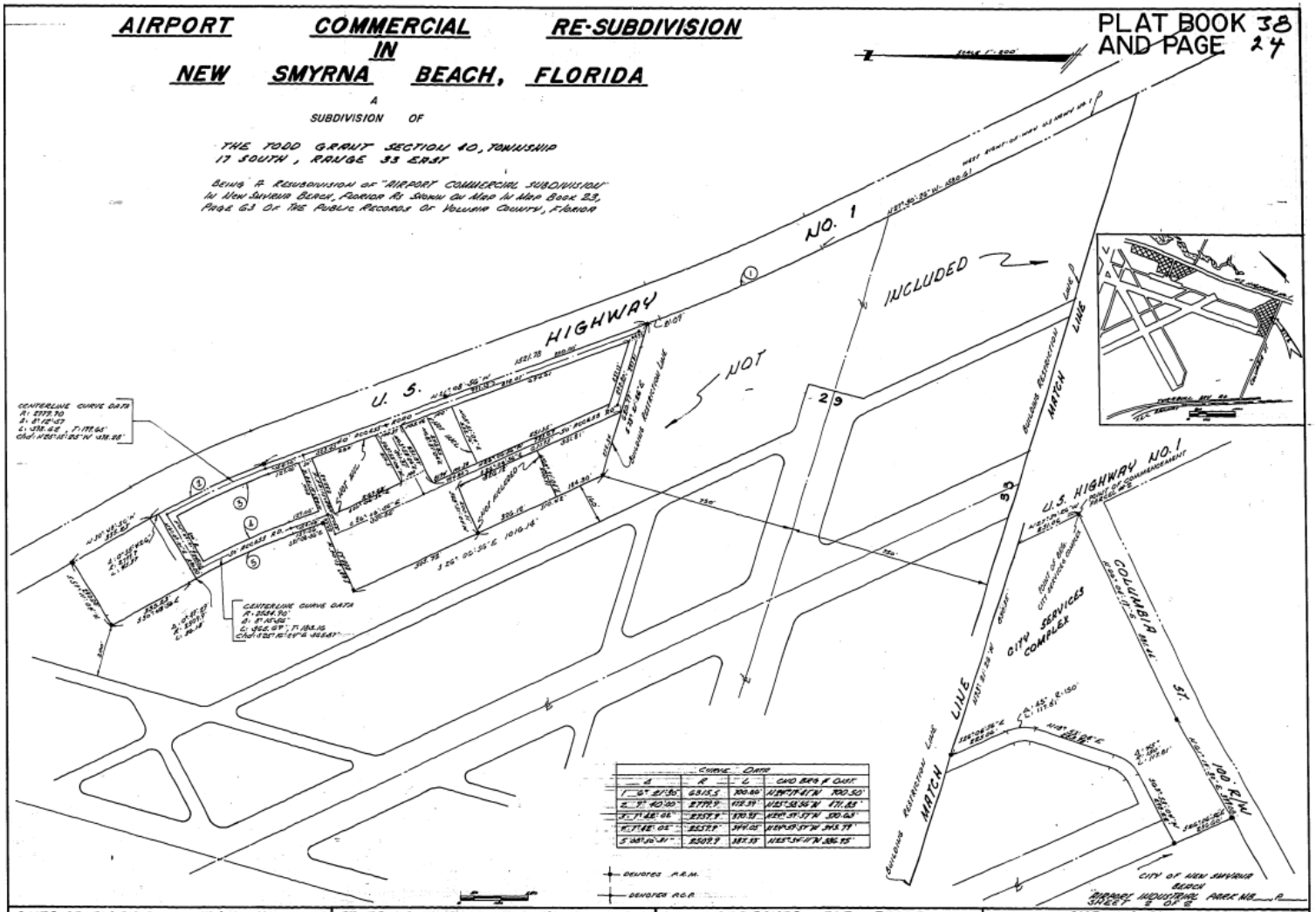
AIRPORT COMMERCIAL RE-SUBDIVISION IN NEW SMYRNA BEACH, FLORIDA

PLAT BOOK 38 AND PAGE 24

A SUBDIVISION OF

THE TODD GRANT SECTION 40, TOWNSHIP 17 SOUTH, RANGE 33 EAST

Being A Resubdivision of "AIRPORT COMMERCIAL SUBDIVISION" In New Smyrna Beach, Florida As Shown On Map In Map Book 23, Page 63 Of The Public Records Of Volusia County, Florida



STATE OF FLORIDA COUNTY OF VOLUSIA

We GEORGE MUSSON AND LINDA SCHMIDT, Mayor-Commissioner and City Clerk Respectively, having been duly authorized by the City Commission of the City of New Smyrna Beach, Florida to execute the hereon dedication, do hereby declare that the City of New Smyrna Beach, Florida is the owner of the above described property and has caused the same to be subdivided as shown hereon and that the City of New Smyrna Beach, Florida does hereby dedicate all lands shown as streets, alleys, avenues and other public thoroughfares to the use of the public forever.

George E. Musson — 8/20/80
Witness — Mayor-Commissioner — Date

George E. Musson — Loraine D. Schmidt — 8/20/80
Witness — City Clerk — Date

STATE OF FLORIDA COUNTY OF VOLUSIA

I hereby certify that GEORGE MUSSON and LINDA SCHMIDT, Mayor-Commissioner and City Clerk Respectively of the City of New Smyrna Beach, Florida, whose names are signed to the hereon dedication, and who are personally known to me as such officers came before me this day and severally acknowledged that they executed the said dedication as such officers for and on behalf of the City of New Smyrna Beach, Florida for the use and purpose therein expressed, and that they further acknowledge that they have affixed the seal of the official New Smyrna Beach, Florida hereto and that the said seal affixed hereto is the true seal of the City of New Smyrna Beach, Florida.

Sworn to and Subscribed before me this 20th day of August 1980

Notary Public Patricia Brock

My commission expires 8 January 1983

APPROVED FOR RECORD BY CITY OF NEW SMYRNA BEACH, FLA.

Loraine D. Schmidt — City Clerk — 8-20-80 Date
George E. Musson — Mayor — 8/20/80 Date
Charles A. Hall — City Attorney — 8/20/80 Date
Chairman of Planning — Date

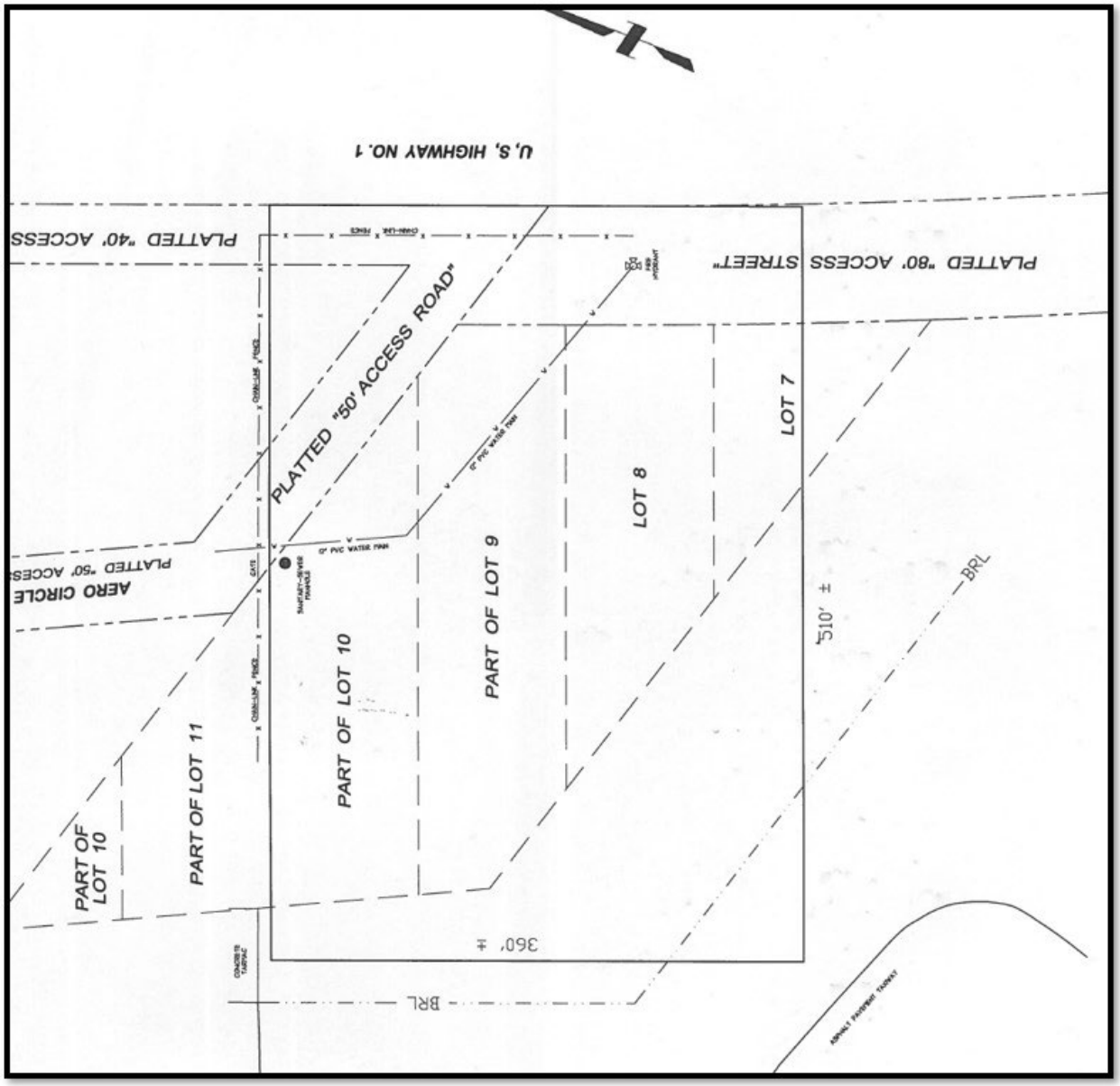
SURVEYOR'S CERTIFICATE

THIS IS TO CERTIFY THAT THIS PLAT DELINEATED HEREON IS A TRUE AND CORRECT REPRESENTATION OF THE LAND SURVEYED AND THAT PERMANENT REFERENCE MONUMENTS HAVE BEEN PLACED IN CONFORMANCE WITH THE SURVEY LAWS OF THE STATE OF FLORIDA.

Signed Earle L. Gordon
EARLE L. GORDON JAN 17, 1981
FLA REG. SURVEYOR NO. 2577

Talley, Cary, Gordon, Inc.
Fla. Reg. Surveyors
114 & 116 Palmetto Ave.
Daytona Beach, Fla. 32014

Exhibit H


U. S. HIGHWAY NO. 1
PLATTED "40' ACCESS
PLATTED "80' ACCESS STREET"
PLATTED "50' ACCESS ROAD"
AERO CIRCLE
PLATTED "50' ACCES
LOT 7
LOT 8
PART OF LOT 9
PART OF LOT 10
PART OF LOT 11
PART OF LOT 10
510' ±
360' ±
BRL
BRL

OCE INDUSTRIES INC., PGH., PA. REORDER 00139

FAIRFAX AVE 50' R/W

CONRAD DR.

30'. D.I.P. BY L.S. CONTRACTOR

10"-16" D.I.P. BY L.S. CONTRACTOR

LIMITS E.M. CONTRACTOR

MAIN 19

F.M. 22"

SCATTERED BRUSH ALONG WATER EDGE

LIFT STATION 19

0+00

B.M. TOP NORTH BOLT OF F.H. EL. 1194

WATER

TEL

WOOD POSTS

8+60 30' FROM TEL. POLE 33' FROM UTILITY POLE

FITTINGS 2-14"x45° BEND

SOUTH ST.

MATCH LINE 9+50

8+70 40' FROM TEL. POLE 39' FROM UTILITY POLE

WOODS

MATCH LINE 9+50

SOUTH ST.

BELMONT AVE.

50' R/W

20' S/R

20' B/P

MATCH LINE 14+50

FORCE MAIN 19 (14" D.I.P.)

FITTINGS 2-14"x45° BEND

SOUTH ST.

MATCH LINE 14+50

20' B/P

15+60 33' TO UTILITY POLE 46' TO UTILITY POLE

15+50 38' TO UTILITY POLE 44' TO UTILITY POLE

AIR RELEASE VALVE 35' TO FIRST 45°

NORTH DIXIE FREEWAY U.S. NO. 1 (S.R.5)

MATCH LINE 16+95

NORTH DIXIE FREEWAY U.S. NO. 1 (S.R.5)

MATCH LINE 16+95

24' B/P

S/A

24' B/P

36" RCP

D.O.T. R/W

CITY R/W

RIP RAP

SIGN

MATCH LINE 29+65

FORCE MAIN 19 (14" D.I.P.)

NORTH DIXIE FREE

MATCH LINE 29+65

24' B/P

24' B/P

TEL BOX

AIR RELEASE VALVE

MATCH LINE 33+35

MATCH LINE 33+35

24' B/P

SIGN

WAYSIDE PARK

WOOD FENCE

TV BOX

24' B/P

STONE POST SIGN

LIGHTED SIGN

AIR PORT ENT. RD.

D.O.T. R/W

SIGNS

CITY R/W

MATCH LINE 44+80

FORCE MAIN 19 (14" D.I.P.)

NORTH DIXIE FREEWAY U.S. NO. 1 (S.R.5)

MATCH LINE 44+80

BRICK SIGN

15" R.C.P.

CONC M.H. MHW BLOW OFF

24' B/P

S/A

11" B/P

24' B/P

INLET

SHORE DR.

100' R/W

12" RCP

10' B/P

12" RCP

24' B/P

S/A

S/A

S/A

12" RCP

24' B/P

MATCH LINE 57+10 SEE SH. 12

TV BOX

SIGN

AIR RELEASE VALVE

D.O.T. R/W

CITY R/W

NOTE: BURIED ELECTRIC CABLE. CONTACT NEW SMYRNA BEACH UTILITIES COMMISSION FOR EXACT LOCATION BEFORE DIGGING.

FORCE MAIN 19 (14" D.I.P.)

RECORD DRAWING DATE 2-17-82

A 20.0' utilities easement is required and center over the existing 14" forcemain (highlighted in green). The existing 14" forcemain must be physically field located and survey in order to draft the new utilities easement legal description and sketch. KHO

EPA C-120426050

NO.	DATE	DESCRIPTION	BY	CKD.
		REVISIONS		

RUSSELL & AXON
Engineers — Planners — Architects
DAYTONA BEACH, FLORIDA

SANITARY SEWER IMPROVEMENTS
PART A
FORCE MAIN 19
NEW SMYRNA BEACH, FLORIDA

DESIGNED BY	LGP/DVD
DRAWN BY	
CHECKED BY	R.J.C./D.V.D.
DATE	JULY 1979
FILE No.	620-691-15 / 620-711-06
SHEET No.	11 OF 67 SHEETS
SCALE:	1" = 50'

SEAL
DOMENIC T. D'AGOSTINO CERTIFICATE NO. 14740 STATE OF FLORIDA REGISTERED ENGINEER

Present street name is Industrial Parks Ave. KHO

A 20.0' utilities easement is required and center over the existing 14" forcemain (highlighted in green). The existing 14" forcemain must be physically field located and survey in order to draft the new utilities easement legal description and sketch. KHO

NORTH DIXIE FREEWAY U.S.NO.1 (S.R.5) 150' R/W

NORTH DIXIE FREEWAY U.S.NO.1 (S.R.5) 110' R/W

U.S. HIGHWAY NO.1 100' R/W

NORTH DIXIE FREEWAY U.S. NO.1 (S.R.5) 100' R/W

FAULKNER ST. 60' R/W

EPA C-120426050

NO.	DATE	DESCRIPTION	BY	CKD.

REVISIONS

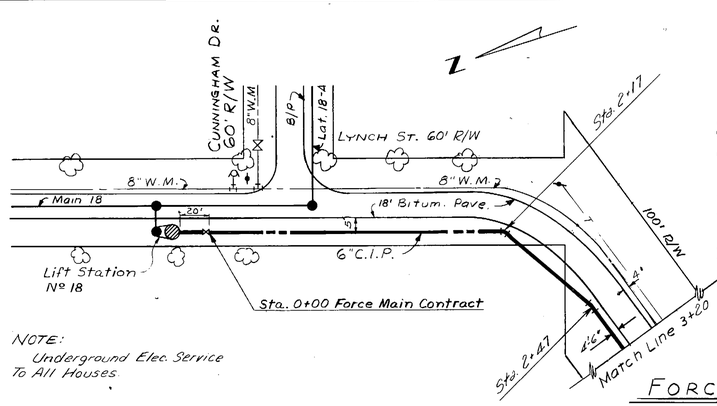
RUSSELL & AXON
Engineers — Planners — Architects
DAYTONA BEACH, FLORIDA

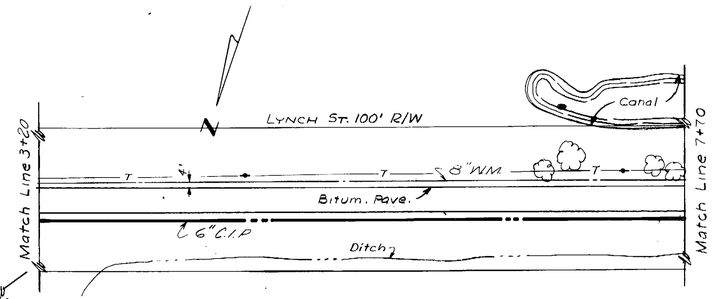
SANITARY SEWER IMPROVEMENTS
PART A
FORCE MAIN 19
NEW SMYRNA BEACH, FLORIDA

DESIGNED BY LGP/DVD	FILE No. 620-691-15 / 620-711-06
DRAWN BY WLT	SHEET No. 12
CHECKED BY R.J.C./D.V.D.	OF 67 SHEETS
DATE JULY 1979	SCALE: 1" = 50'

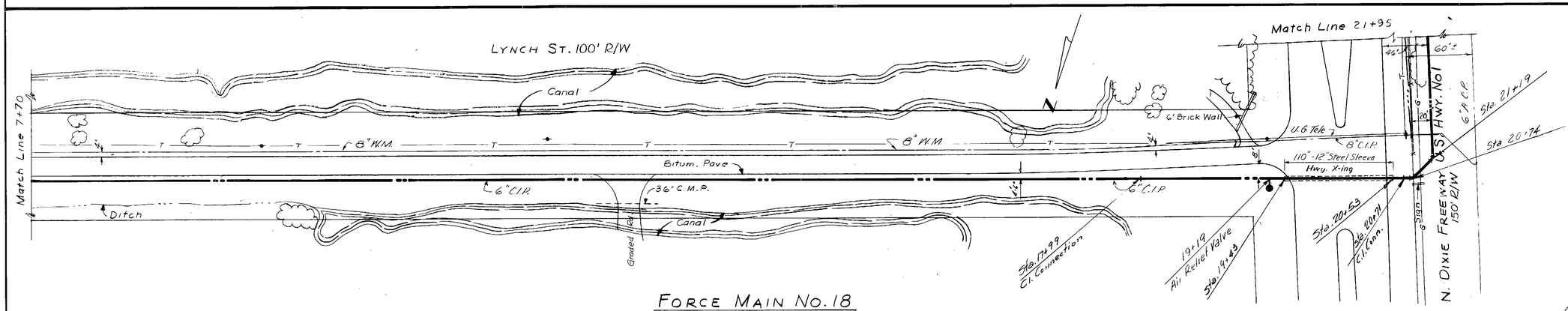
SEAL: DOMINIC V. D'AGOSTA, CERTIFICATE NO. 14740, STATE OF FLORIDA, REGISTERED ENGINEER

RECORD DRAWING
DATE 7-12-82

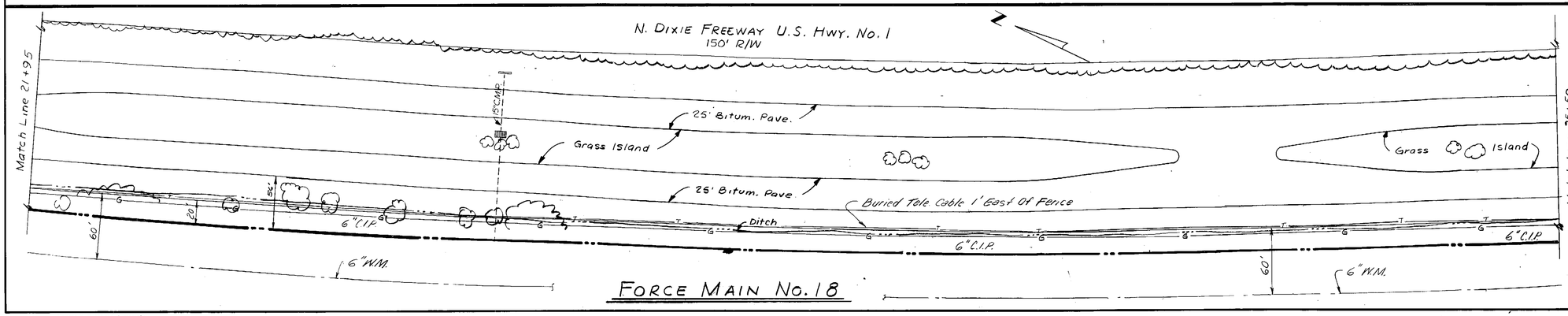




FORCE MAIN NO. 18



FORCE MAIN NO. 18



FORCE MAIN NO. 18

NO.	DATE	DESCRIPTION	BY	CKD.
		REVISIONS		

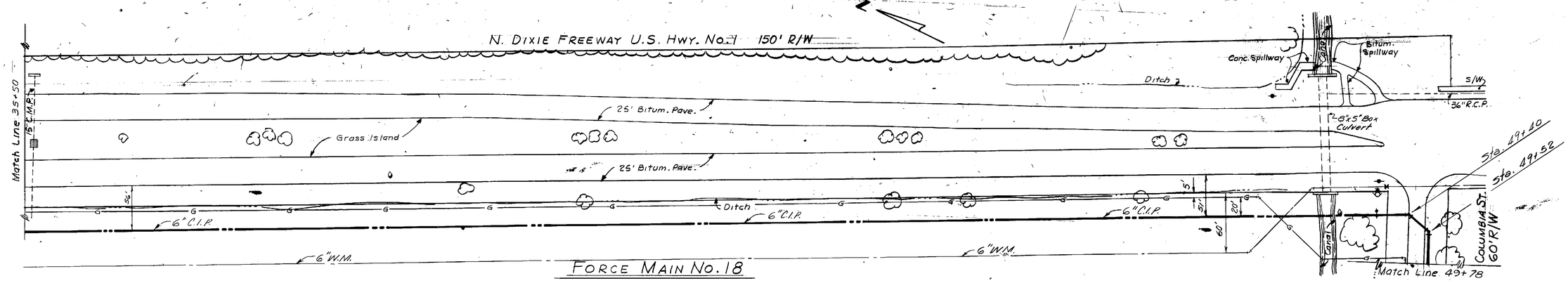
• RUSSELL & AXON • INC. •
CONSULTING ENGINEERS
DAYTONA BEACH, FLA. ST. LOUIS, MO.

SEWAGE WORKS PROJECT
FORCE MAIN 18
NEW SMYRNA BEACH, FLORIDA

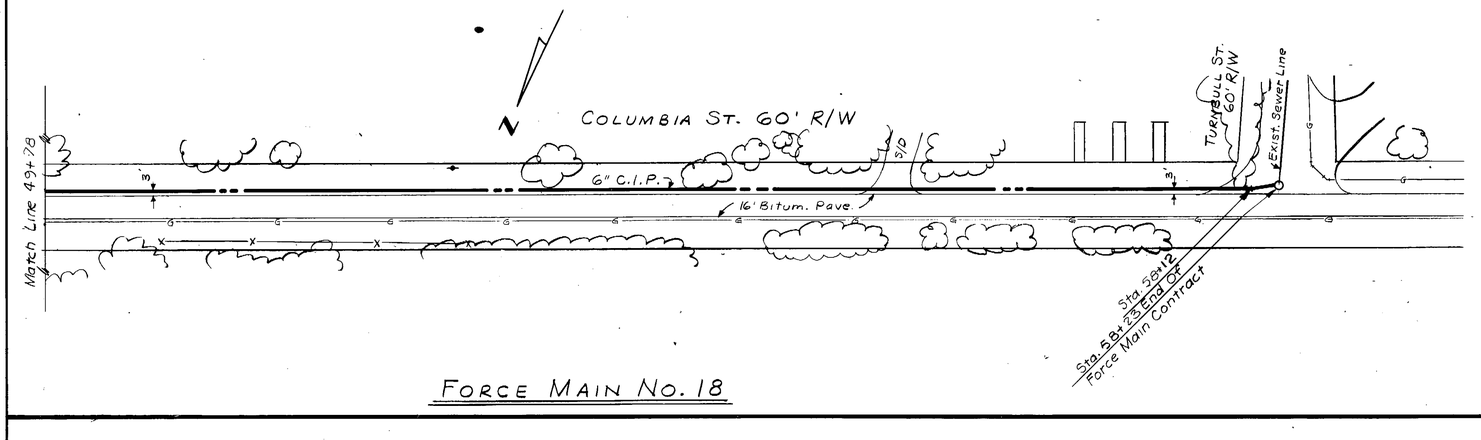
DESIGNED BY	FILE No. 6153-8a-20-II
DRAWN BY R.C.T.	SHEET No. 20 II
CHECKED BY	OF 23 SHEETS
DATE OCT. 1964	SCALE: 1"= 50'

SEAL
E. K. KAPINOS
No. 3718
STATE OF
REGISTERED ENGINEER

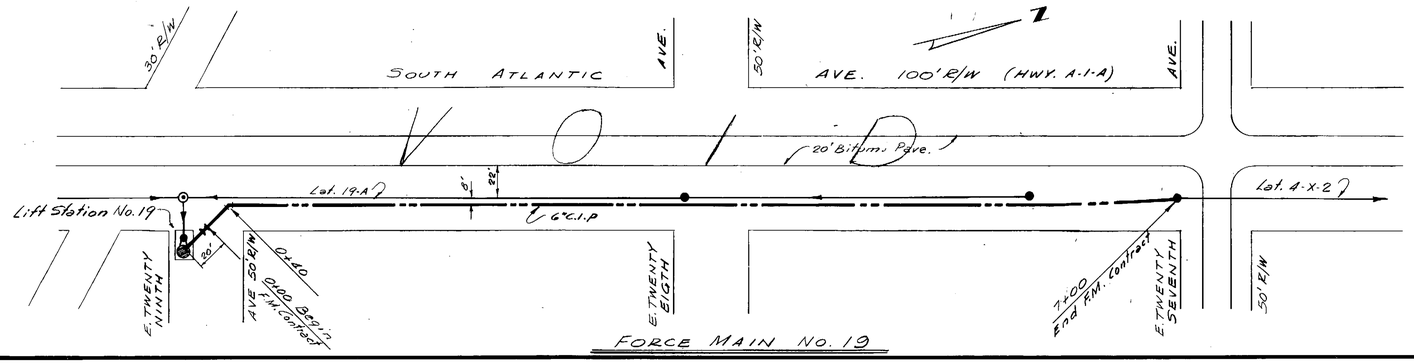
Dietzgen N. O. 138 M-3 "Ageproof"



FORCE MAIN NO. 18



FORCE MAIN NO. 18



FORCE MAIN NO. 19

NO.	DATE	DESCRIPTION	BY	CKD.
	1-66	Added F.M. #19	RK	
		REVISIONS		

· RUSSELL & AXON · INC. ·
CONSULTING ENGINEERS
DAYTONA BEACH, FLA. ST. LOUIS, MO.

SEWAGE WORKS PROJECT
FORCE MAIN 18
NEW SMYRNA BEACH, FLORIDA

DESIGNED BY	FILE No. 6153-8a-21-II	SEAL: J. F. KAPINOS, CERTIFICATE No. 3748 STATE OF FLORIDA, REGISTERED ENGINEER
DRAWN BY R.C.T.	SHEET No. 21	
CHECKED BY MEN	OF 23 SHEETS	
DATE OCT. 1964	SCALE: 1" = 50'	

Dietzgen N. O. 138 M-3 "Ageproof"

NEW SMYRNA BEACH MUNICIPAL AIRPORT

COMMERCIAL HANGAR

RECORD DRAWING

RECORD INFORMATION FURNISHED TO ENGINEER BY CONTRACTOR.

MATCH LINE – SEE BELOW RIGHT

MATCH LINE – SEE ABOVE LEFT

NOTE: FOR PARKING SPACE CALCULATIONS, SEE LAYOUT PLAN (SITE PLAN NOTE 8).

FOR EXISTING TREES SEE SHT. C-6.

PROPOSED SAN. PUMP STATION (SEE LAYOUT AT RIGHT) REV. 6

ACTUAL LAYOUT OF PUMP STATION (1" = 10') REV. 6

PROPOSED BUILDING

EXISTING BUILDING NOTE 4

DRY POND 1 (SEE GRADING PLAN)

DRY POND 2

DRY POND 3 (SEE SHT. C-4)

AERO CIRCLE

SKYLINE DRIVE

EXISTING PAVEMENT

EXISTING 6" C.I.P.

EXISTING WATER LINES (SIZE UNKNOWN)

PROPOSED 4" PVC FORCE MAIN

PROPOSED 4" PVC FORCE MAIN

EXISTING WATER LINE (SIZE UNKNOWN)

EXISTING SMALL WATER SERVICE LINE INTERFERED WITH PUMP STATION AND FORCE MAIN. IT WAS REMOVED, AND REPLACED WITH A NEW LINE SEPARATED 15' FROM THE FORCE MAIN.

FORCE MAIN SHALL BE DEFLECTED UNDER EXISTING WATER MAIN TO PROVIDE 18" MINIMUM CLEAR VERTICAL SEPARATION. IF THIS IS NOT POSSIBLE IT WILL BE ACCEPTABLE TO USE ONE – 20' LONG PIECE OF DUCTILE IRON PIPE CENTERED ON THE WATER MAIN CROSSING, IN WHICH CASE THE VERTICAL CLEARANCE MAY BE REDUCED TO 6". IN ANY CASE, THE FORCE MAIN SHALL CROSS UNDER.

CONNECT TO EXISTING 14" CAST IRON FORCE MAIN USING TAPPING SADDLE AND VALVE. PROVIDE 4" CHECK VALVE, SUITABLE FOR DIRECT BURIAL.

INV. ELEV. 8.19 AT TAP

INV. EL. 7.69

276' ACTUAL 255'± OF 4" PVC

REV. 8 NOTE: THIS DRAWING SHOWS THE ACTUAL LOCATIONS OF THE FACILITIES INSTALLED IN THIS GRASS ISLAND, IN THE "COMMERCIAL HANGAR PHASE 1" PROJECT IN 2000. IT DOES NOT SHOW THE IMPROVEMENTS SUBSEQUENTLY INSTALLED FOR THE "PHASE 2" PROJECT IN 2004. FOR REFERENCE, THE CURB IS SHOWN AT ITS CURRENT LOCATION (2006.)

FIRE WALL ON NORTH SIDE OF BLDG. DELETED; ANY REQUIRED FIRE WALL CONSTRUCTION WILL BE DEFERRED TO A FUTURE HANGAR PROJECT.

FOR POND IN THIS AREA SEE SHEET C-3

ABBREVIATIONS

UE	UNDERGROUND ELECTRIC
C.I.P.	CAST IRON PIPE
FCO	FLUSH CLEANOUT
FM	FORCE MAIN
HV	HIGH VOLTAGE (OVER 600V.)
I.D.	INSIDE DIAMETER
L	240V. UNDERGROUND FEED TO AREA LIGHT
LV	LOW VOLTAGE (600V. OR LESS)
OE	OVERHEAD ELECTRIC
SAN	SANITARY SEWER OR LATERAL
SD	STORM DRAIN
W	WATER LINE
WS	WATER SERVICE

LIGHTING LEGEND

- EXISTING LIGHT POLE AND FIXTURE TO BE REMOVED
- EXISTING LIGHT POLE AND FIXTURE TO REMAIN
- (A) PROPOSED 400 WATT, 208V. METAL HALIDE CUTOFF-TYPE FIXTURE ON FIBERGLASS POLE, 30' MOUNTING HEIGHT, FED FROM PHOTOCONTROLLED CIRCUIT IN PROPOSED BUILDING (2 REQ'D.)
- (B) SAME AS (A) EXCEPT FED FROM EXISTING BUILDING

CODED NOTES

1. UTILITIES COMMISSION – CITY OF NEW SMYRNA BEACH (U.C.C.N.S.B.) WILL MOVE THE POWER POLE NORTH OF SKYLINE DRIVE AS INDICATED. CONTRACTOR SHALL COORDINATE WITH U.C.C.N.S.B. TO MAINTAIN ELECTRIC SERVICE TO EXISTING BUILDING AT ALL TIMES, EXCEPT FOR BRIEF CHANGEOVER TO NEW SERVICE.
2. REPLACE EXISTING WATER METER WITH TWO-3/4" WATER METERS WITH SEPARATE REDUCED-PRESSURE TYPE ABOVE-GROUND BACKFLOW PREVENTERS.
3. THE SEMICIRCULAR DRIVE UNDER THE FUTURE CANOPY AND THE ACCESS AREA FOR THE DOUBLE DETECTOR CHECK VALVE ARE DESIGNATED AS FIRE LANES AND SHALL BE MARKED IN ACCORDANCE WITH THE CITY OF N.S.B. FIRE DEPARTMENT GUIDELINES.
4. REPLACE EXISTING 120/240V. 1Ø 200A. ELECTRIC SERVICE WITH 120/208V. 3Ø 150A. SERVICE; INSTALL SERVICE DISCONNECT ON OUTSIDE OF BLDG.

GENERAL UTILITY NOTES

1. ALL ITEMS ARE PROPOSED UNLESS OTHERWISE INDICATED.
2. EXISTING AND PROPOSED BURIED TELEPHONE LINES ARE NOT SHOWN. UNDERGROUND TELEPHONE SERVICE SHALL BE PROVIDED TO THE NEW BUILDING.
3. EXISTING UNDERGROUND UTILITIES ARE SHOWN USING THE BEST INFORMATION AVAILABLE; HOWEVER NO GUARANTEE IS MADE THAT THE INFORMATION IS COMPLETE OR ACCURATE. CONTRACTOR SHALL CALL "SUNSHINE STATE ONE CALL CENTER" AND THE U.C.C.N.S.B. TO HAVE THE UNDERGROUND LINES LOCATED, PRIOR TO PROCEEDING WITH ANY EXCAVATION.
4. ALL ELECTRICAL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ELECTRIC SERVICE RULES AND REGULATIONS, UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH AND THE NATIONAL ELECTRIC SAFETY CODE.
5. ALL WATER SERVICE CONSTRUCTION SHALL BE IN ACCORDANCE WITH WATER SERVICE RULES AND REGULATIONS, UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH.
6. ALL SANITARY SEWER CONSTRUCTION INCLUDING FORCE MAIN AND PUMP STATION SHALL BE IN ACCORDANCE WITH POLLUTION CONTROL RULES AND REGULATIONS, UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH.

REVISIONS

No.	DATE	DESCRIPTION
1	4-19-99	GENERAL REVISIONS
2	4-29-99	GENERAL REVISIONS
3	6-21-99	GENERAL REVISIONS
4	1-07-00	SITE PLAN CHG. ORDER 1
5	1-20-00	REVISIONS PER FDEP COMMENTS
6	5-17-00	RECORD COMMENTS – SANITARY
7	8-18-00	RECORD COMMENTS – GENERAL
8	4-24-06	RECORD COMMENTS – WATER

FDOT ITEM No.: 248368

FDOT WPI No.: 5829016

PREPARED BY: AEC

DRAWN BY: AHW

CHECKED BY: BP

ISSUE DATE: 3-99

DRAWING SCALE: 1" = 20'

DRAWING TITLE:

MARKING, SIGN, AND UTILITY PLAN

FILE: 9737-C-5.DWG

DRAWING No.:

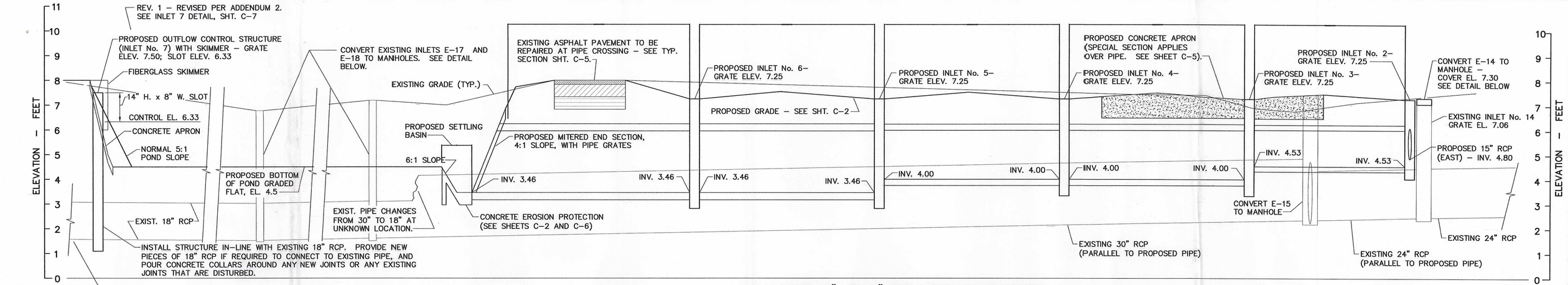
C-5

System 54

RECORD DRAWING

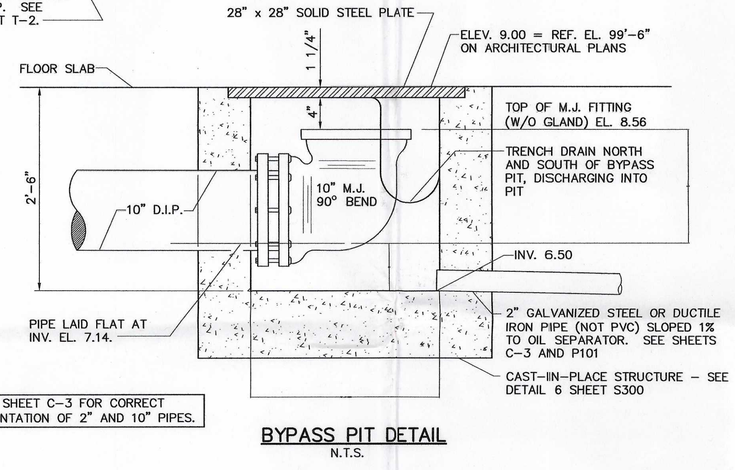
THE HNTB TEAM

BLANKENSHIP McMILLEN AEC HNTB



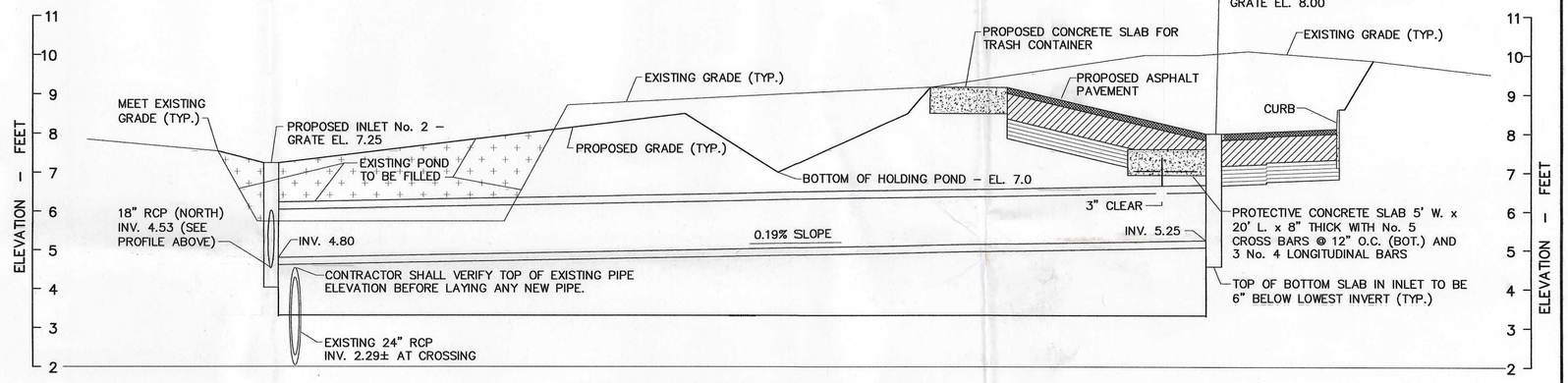
PROPOSED 18" TO 30" RCP STORM DRAIN PROFILE

SCALES: HORIZ.: 1" = 20'
VERT.: 1" = 2'



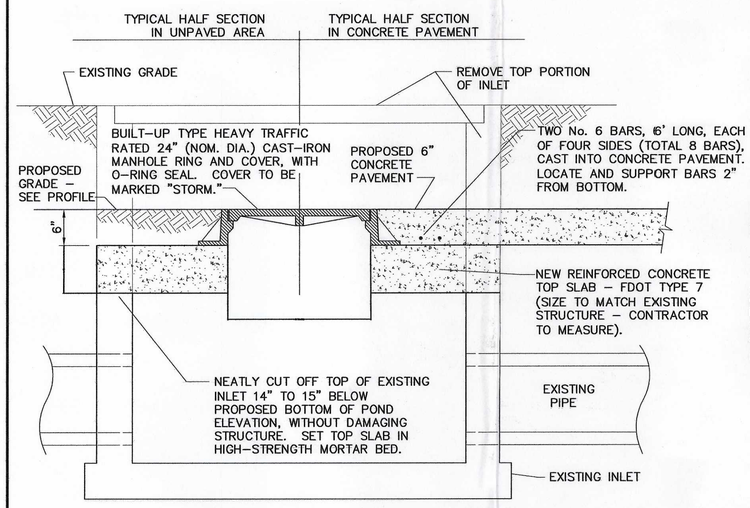
BYPASS PIT DETAIL

N.T.S.



PROPOSED 15" RCP STORM DRAIN PROFILE

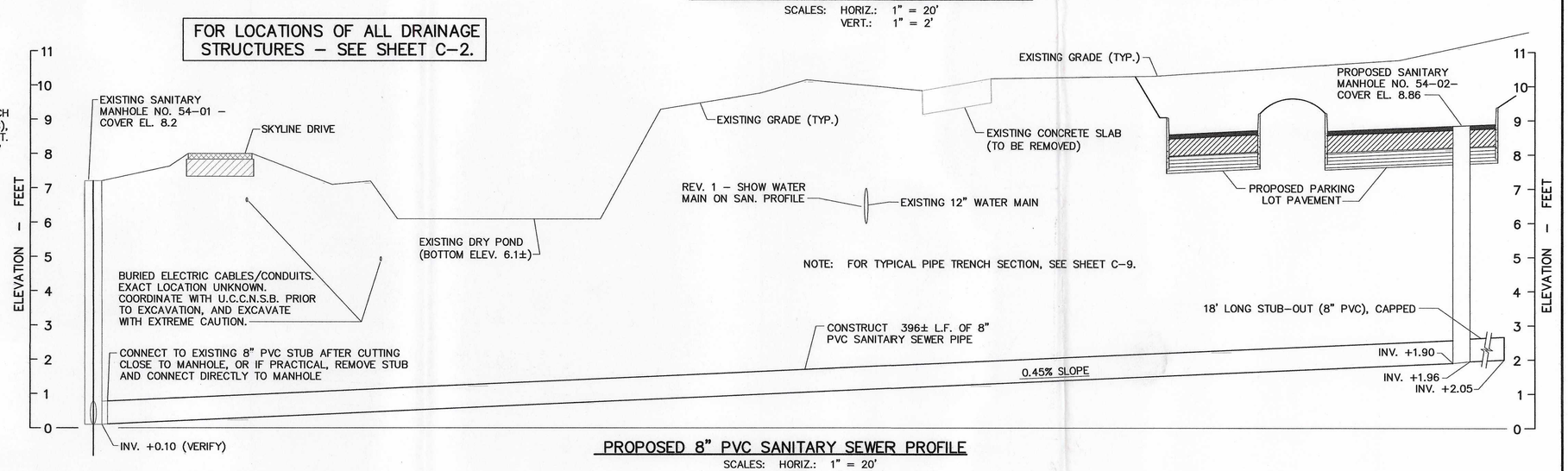
SCALES: HORIZ.: 1" = 20'
VERT.: 1" = 2'



DETAIL – CONVERSION OF EXISTING INLET TO MANHOLE

N.T.S.

FOR LOCATIONS OF ALL DRAINAGE STRUCTURES – SEE SHEET C–2.



PROPOSED 8" PVC SANITARY SEWER PROFILE

SCALES: HORIZ.: 1" = 20'
VERT.: 1" = 2'

NO.	DATE	REVISION	BY
1	8–18–03	REVISE CONTROL INLET 7 PER ADDENDUM 2	BP

AIRPORT ENGINEERING CO., INC.
1024 FAIRLAWN DRIVE
ROCKLEDGE, FLORIDA 32955
Tel. (321) 633–3034
Fax (321) 633–7358
E–MAIL aec1@earthlink.net
BUS. LICENSE: EB0007633

NEW SMYRNA BEACH MUNICIPAL AIRPORT

CITY OF NEW SMYRNA BEACH
NEW SMYRNA BEACH, FLORIDA

COMMERCIAL HANGAR – PHASE 2

DRAINAGE AND SEWER PROFILES

FDOT ITEM Nos. 407677 AND 248378

DATE 05–03

REVISION DATES (SEE DESCRIPTION AT LEFT)
R1 8–18–03 | R2 | R3 | R4 | R5 | R6

AEC JOB NO. 0206

DWG. NO. 0206–C6

SHT. C–6

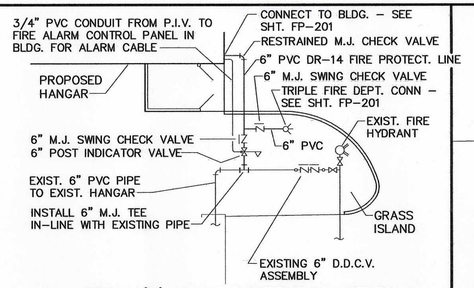
GENERAL SITE PLAN INFORMATION:

1. PROPERTY (INCLUDING SITE AND SURROUNDING AREAS WITHIN 50 FEET) IS ZONED I-3 (INDUSTRIAL.)
2. PROJECT IS LOCATED ENTIRELY ON AIRPORT PROPERTY; LEGAL DESCRIPTION IS NOT APPLICABLE. THE APPROXIMATE AREA WITHIN THE LIMITS OF CONSTRUCTION (EXCLUDING REMOTE STORMWATER POND) IS 1.0 AC.
3. OWNER – CITY OF NEW SMYRNA BEACH. CONTACT: RON WILSBACH, AIRPORT MANAGER, AT 424-2199.
4. ARCHITECT – NELSON BLANKENSHIP, BLANKENSHIP McMILLEN ARCHITECTS INC., TEL. 407-331-8868.
5. ENGINEER FOR SITE IMPROVEMENTS – BRIAN PENDLETON, AIRPORT ENGINEERING CO., INC., TEL. 321-633-3034.
6. PROPOSED USE – AIRCRAFT HANGAR WITH ASSOCIATED OFFICE AREA. ESTIMATED NUMBER OF OCCUPANTS – 24.
7. NO EASEMENTS ARE KNOWN TO EXIST, EXCEPT BLANKET UTILITY EASEMENTS.
8. PARKING CALCULATION FOR NEW HANGAR BUILDING – 10,000 S.F. x 1.5 SPCS. PER 1000 S.F. = 15 SPACES REQUIRED. SPACES PROVIDED: 22 STANDARD + 2 H/C
9. STORM DRAINAGE: DRY RETENTION POND. SEE SHEET C-2.
10. ENVIRONMENTAL IMPACTS: THIS PROJECT DOES NOT IMPACT ANY WETLANDS OR IMPACT ANY THREATENED OR ENDANGERED SPECIES. EXISTING OAK TREES WILL BE PRESERVED TO THE EXTENT POSSIBLE. SEE TREE MITIGATION CALCULATIONS ON SHEET C-4.
11. SOLID WASTE PRODUCTION: TRASH ONLY. WASTE RECEPTACLE (DUMPSTER) WITH SCREENED ENCLOSURE WILL BE PROVIDED. THERE WILL BE NO DISPOSAL OF HAZARDOUS MATERIALS. USED ENGINE OIL WILL BE STORED IN THE HANGAR IN SMALL QUANTITIES AND IN SUITABLE CONTAINERS, TO BE PICKED UP BY A PRIVATE RECYCLER AT REGULAR INTERVALS. DOMESTIC-TYPE RECYCLABLES (GLASS, PLASTIC, PAPER, ETC.) WILL BE IN SMALL QUANTITY, AND WILL BE PLACED CURBSIDE IN AN APPROVED CONTAINER.

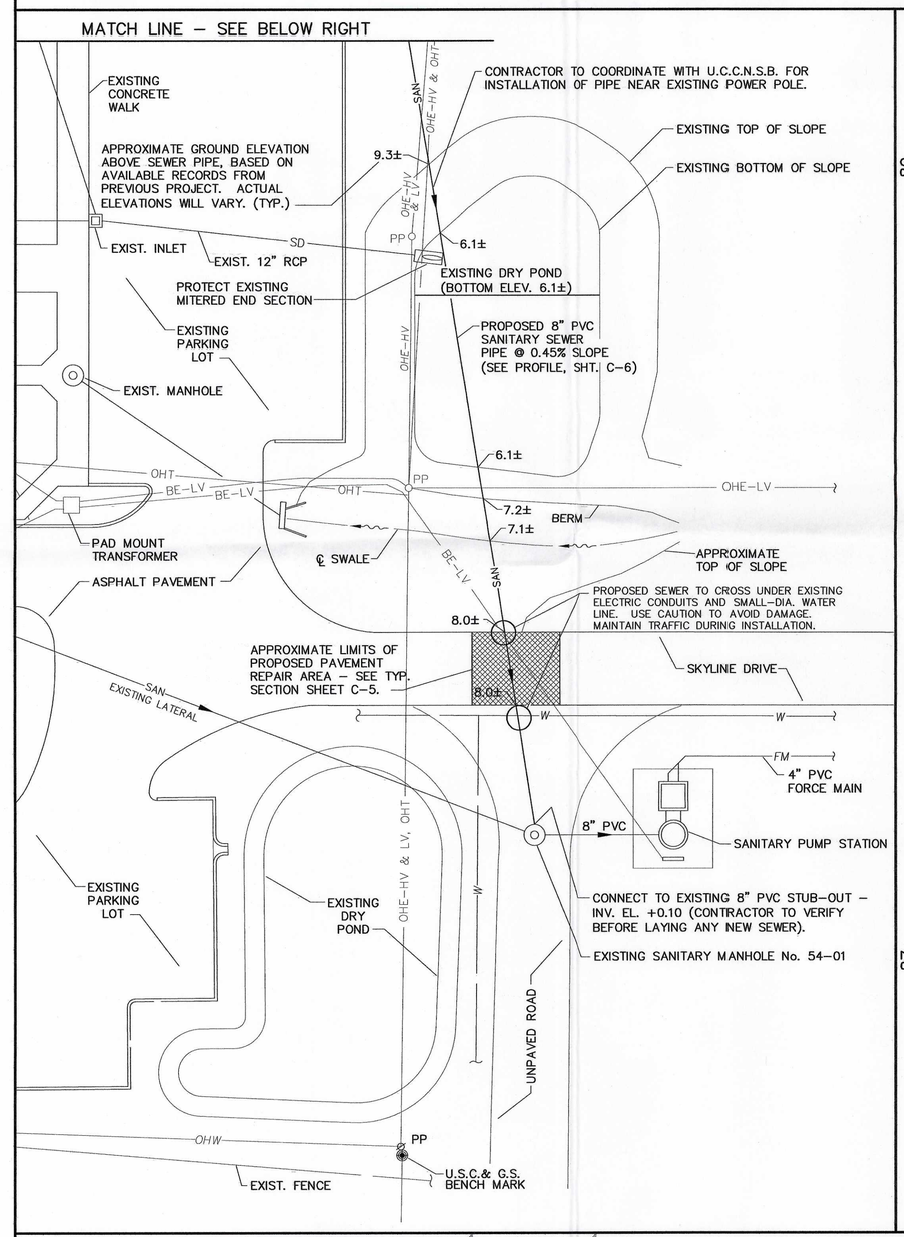
GENERAL SITE PLAN INFORMATION IS CONTINUED ON SHEET C-8

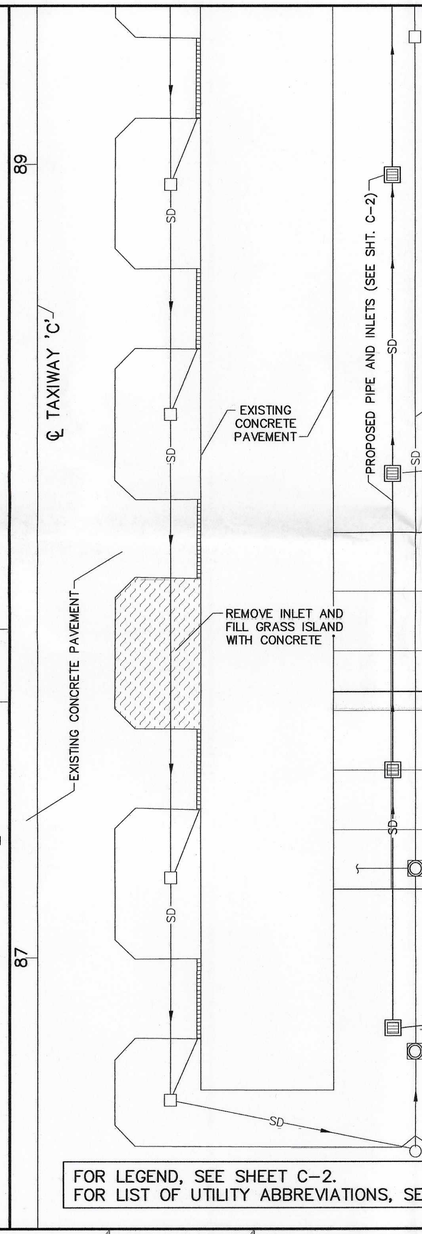
UTILITY ABBREVIATIONS:

BE-HV	BURIED ELECTRIC (OVER 600V.)
BE-LV	BURIED ELECTRIC (UNDER 600 V.)
BT	BURIED TELEPHONE
FH	FIRE HYDRANT
L	LIGHTING CONDUIT
LP	LIGHT POLE (LIGHT FIXTURE ONLY)
OHE-HV	OVERHEAD ELECTRIC (OVER 600 V.)
OHE-LV	OVERHEAD ELECTRIC (UNDER 600 V.)
OHT	OVERHEAD TELEPHONE
PP	POWER POLE (ANY POLE WITH OVERHEAD WIRES)
RD	ROOF DRAIN
SAN	SANITARY SEWER
SD	STORM DRAIN
TTB	TELEPHONE TERMINAL BOX
U/G	UNDERGROUND
W	WATER MAIN

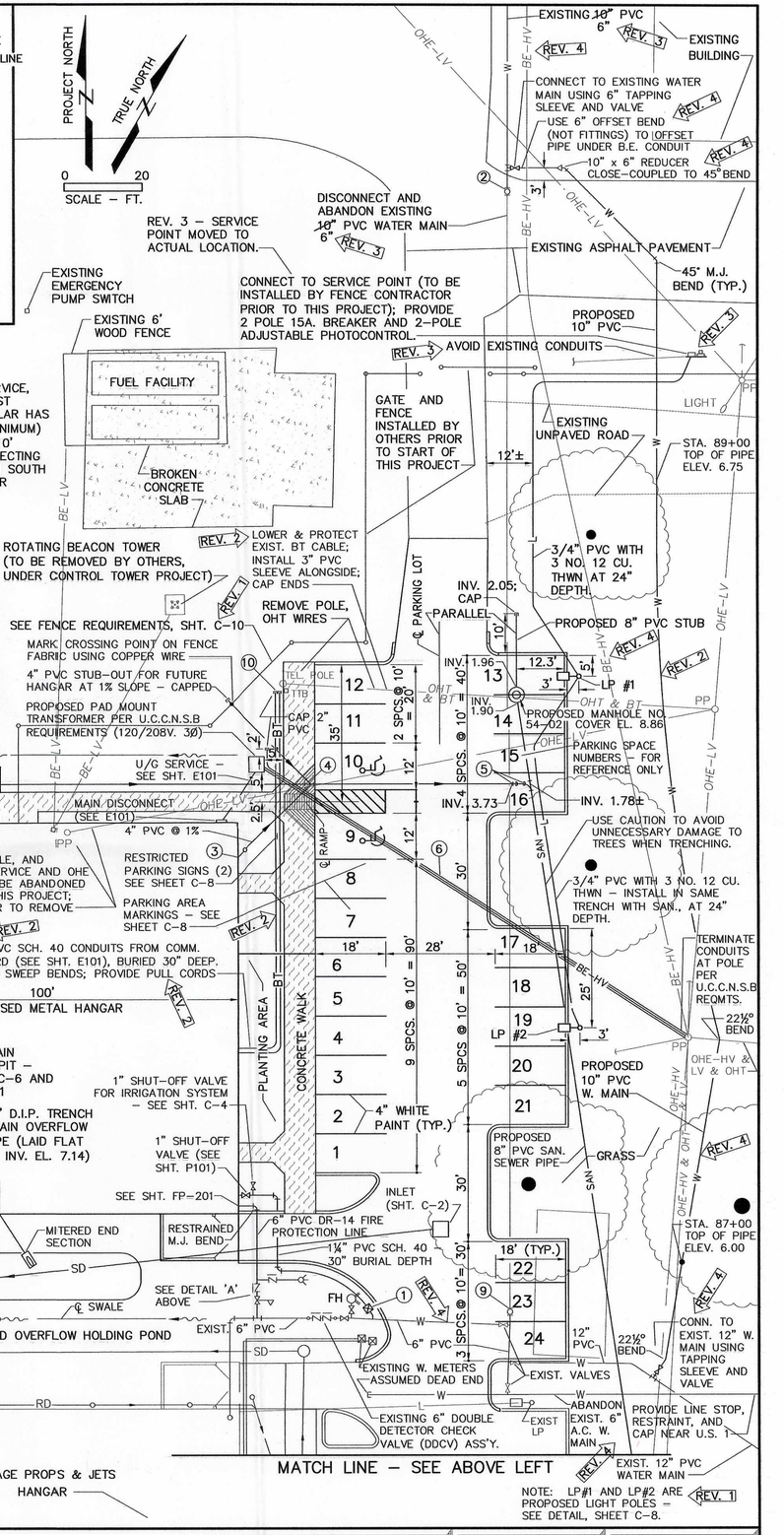


DETAIL 'A' – FIRE PROTECTION LINE TO HANGAR BUILDING





FOR LEGEND, SEE SHEET C-2.
FOR LIST OF UTILITY ABBREVIATIONS, SEE ABOVE.



NO.	DATE	REVISION	BY
4	2-04-04	REVISE W. MAIN DATA PER OBSERVATIONS ON 2-2-04	BP
3	1-28-04	REVISE EXISTING W. MAIN SIZE; SERVICE POINT LOC.	BP
2	12-01-03	REVISE B.T. CONDUITS PER BELLSOUTH REQMTS.	BP
1	10-06-03	ADDENDUM 1	BP

AEC AIRPORT ENGINEERING CO., INC.
1024 FAIRLAWN DRIVE
ROCKLEDGE, FLORIDA 32955
Tel. (321) 633-3034
Fax (321) 633-7358
E-MAIL aec1@earthlink.net
BUS. LICENSE: EB0007633

NEW SMYRNA BEACH MUNICIPAL AIRPORT

CITY OF NEW SMYRNA BEACH
NEW SMYRNA BEACH, FLORIDA

COMMERCIAL HANGAR – PHASE 2

LIGHTING, MARKING, AND UTILITY PLAN

FDOT ITEM Nos. 407677 AND 248378

DATE	05-03
AEC JOB NO.	0206
REVISION DATES (SEE DESCRIPTION AT LEFT)	R1 10-06-03, R2 12-01-03, R3 1-28-04, R4 2-04-04, R5, R6
DWG. NO.	0206-C03
SHT.	C-3

CONSTRUCTION PLANS FOR

HANGAR 1996
SEWER IMPROVEMENTS

AT

NEW SMYRNA BEACH
MUNICIPAL AIRPORT

NEW SMYRNA BEACH, FLORIDA

FDOT ITEM NO. 420860



NEW SMYRNA BEACH MUNICIPAL AIRPORT

PROJECT LOCATION PLAN

PREPARED FOR:

THE CITY OF NEW SMYRNA BEACH

ADAM BARRINGER	MAYOR
JAMES HATHAWAY	VICE MAYOR
JUDY REIKER	COMMISSIONER
JACK S. GRASTY	COMMISSIONER
LYNNE PLASKETT	COMMISSIONER
PAM BRANGACCIO	CITY MANAGER
FRANK B. GUMMEY III	CITY ATTORNEY
KHALID RESHEIDAT	PUBLIC WORKS DIRECTOR
RHONDA WALKER	ASST. PUBLIC WORKS DIRECTOR

PREPARED BY:

AIRPORT ENGINEERING CO., INC.
3612 McLEAN AVE. ROCKLEDGE, FLORIDA 32955
OFFICE: 321-633-3034
MOBILE: 321-427-1661
CERTIFICATE OF AUTHORIZATION NO. 7633
BRIAN PENDLETON, P.E. NO. 23722 (FL)
ROBERT ROBB, P.E. NO. 55645 (FL)

AEC JOB No. 1108

FEBRUARY 2012

LIST OF DRAWINGS		
SHEET No.	DESCRIPTION	LATEST REVISION
1	COVER SHEET	
2	SEWER PLAN AND PROFILE	
3	SEWER DETAILS	
4	DETAILS	
FOR PAY ITEMS AND ESTIMATED QUANTITIES, SEE PROPOSAL IN SPEC. BOOK		

RECORD DRAWING

12/05/12

NOTE: AS-BUILT INFORMATION PROVIDED BY THE CONTRACTOR.

Call 48 hours before you dig in Florida



It's the law
CALL 811
Sunshine State One Call of Florida, Inc.

ARCHEOLOGICAL TEST HOLE

① STA. 0+43 5'LT
- 3" ASPHALT MILLINGS
- 3" SHELL
- DEPTH OF 6'-8" TO COQUINA
- WATER TABLE NOT ENCOUNTERED

② STA. 1+43 5'LT
- 3" ASPHALT MILLINGS
- 3" SHELL
- DEPTH OF 2'-6" TO COQUINA
- WATER TABLE NOT ENCOUNTERED

③ STA. 2+43 6'LT
- 1 3/4" ASPHALT MILLINGS
- 3" SHELL
- DEPTH OF 8'-0" TO COQUINA
- WATER TABLE ±8'

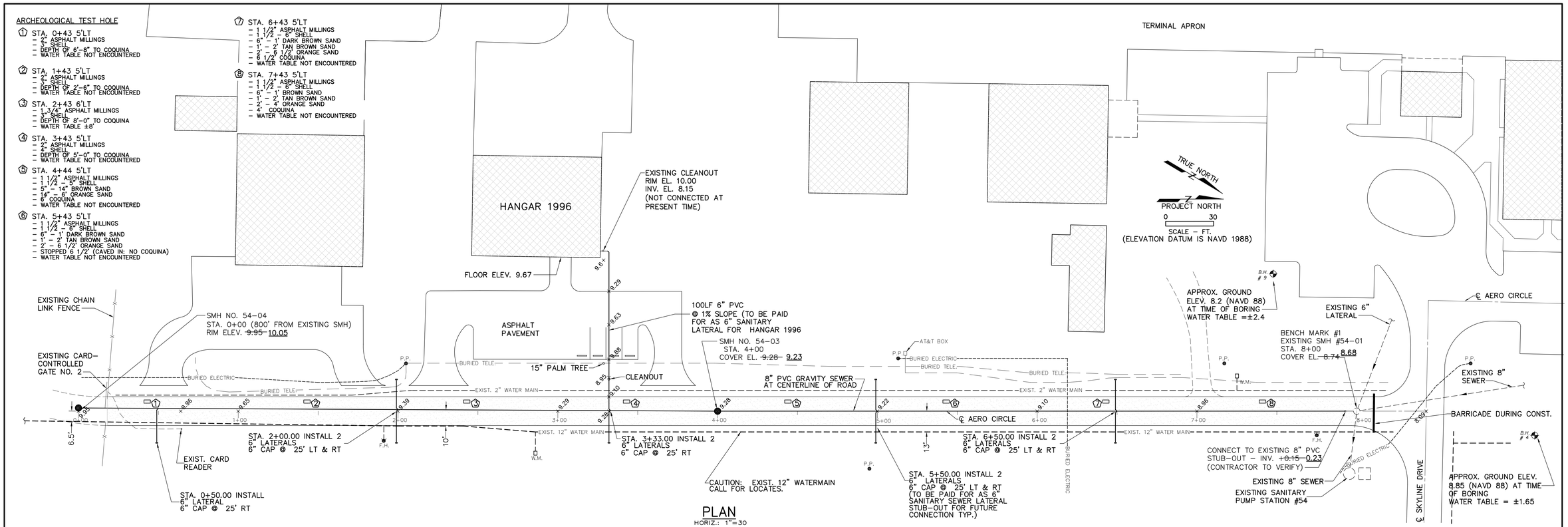
④ STA. 3+43 5'LT
- 2" ASPHALT MILLINGS
- 2" SHELL
- DEPTH OF 5'-0" TO COQUINA
- WATER TABLE NOT ENCOUNTERED

⑤ STA. 4+44 5'LT
- 1 1/2" ASPHALT MILLINGS
- 1 1/2" – 5" SHELL
- 5" – 14" BROWN SAND
- 14" – 6' ORANGE SAND
- 6' COQUINA
- WATER TABLE NOT ENCOUNTERED

⑥ STA. 5+43 5'LT
- 1 1/2" ASPHALT MILLINGS
- 1 1/2" – 6" SHELL
- 6" – 1' DARK BROWN SAND
- 1' – 2' TAN BROWN SAND
- 2' – 6 1/2' ORANGE SAND
- STOPPED @ 1/2' (CAVED IN: NO COQUINA)
- WATER TABLE NOT ENCOUNTERED

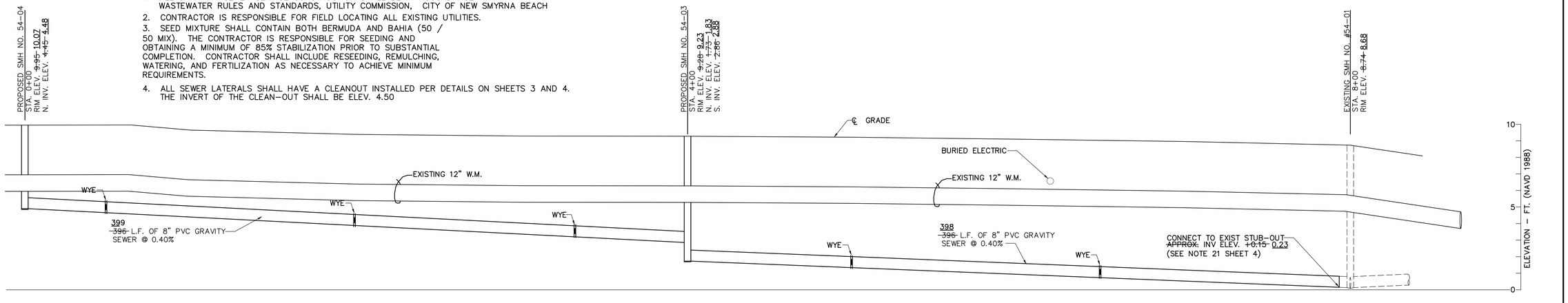
⑦ STA. 6+43 5'LT
- 1 1/2" ASPHALT MILLINGS
- 1 1/2" – 6" SHELL
- 6" – 1' DARK BROWN SAND
- 1' – 2' TAN BROWN SAND
- 2' – 6 1/2' ORANGE SAND
- 6 1/2' COQUINA
- WATER TABLE NOT ENCOUNTERED

⑧ STA. 7+43 5'LT
- 1 1/2" ASPHALT MILLINGS
- 1 1/2" – 6" SHELL
- 6" – 1' BROWN SAND
- 1' – 2' TAN BROWN SAND
- 2' – 4' ORANGE SAND
- 4' COQUINA
- WATER TABLE NOT ENCOUNTERED



PLAN
HORIZ.: 1"=30

NOTE:
1. ALL SANITARY SEWER SERVICE CONSTRUCTION SHALL BE IN ACCORDANCE WITH WASTEWATER RULES AND STANDARDS, UTILITY COMMISSION, CITY OF NEW SMYRNA BEACH
2. CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING ALL EXISTING UTILITIES.
3. SEED MIXTURE SHALL CONTAIN BOTH BERMUDA AND BAHIA (50 / 50 MIX). THE CONTRACTOR IS RESPONSIBLE FOR SEEDING AND OBTAINING A MINIMUM OF 85% STABILIZATION PRIOR TO SUBSTANTIAL COMPLETION. CONTRACTOR SHALL INCLUDE RESEEDING, REMULCHING, WATERING, AND FERTILIZATION AS NECESSARY TO ACHIEVE MINIMUM REQUIREMENTS.
4. ALL SEWER LATERALS SHALL HAVE A CLEANOUT INSTALLED PER DETAILS ON SHEETS 3 AND 4. THE INVERT OF THE CLEAN–OUT SHALL BE ELEV. 4.50



SEWER MAIN PROFILE
HORIZ.: 1"=30 VERT.: 1"=3

RECORD DRAWING
12/05/12
NOTE: AS–BUILT INFORMATION PROVIDED BY THE CONTRACTOR.

NO.	DATE	REVISION	BY

AIRPORT ENGINEERING CO., INC.
3612 McLEAN AVE.
ROCKLEDGE, FLORIDA 32955
Tel. 321–633–3034
E–MAIL aec633@yahoo.com
Brian Pendleton, P.E. 23722
Robert F. Robb, P.E. 55645
CERT. OF AUTHORIZATION 7633

NEW SMYRNA BEACH
MUNICIPAL AIRPORT
CITY OF NEW SMYRNA BEACH
NEW SMYRNA BEACH, FLORIDA

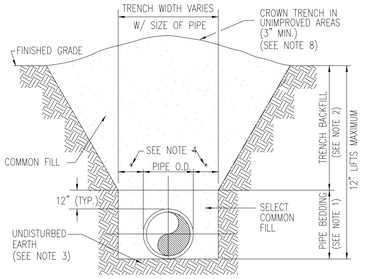
HANGAR 1996 SEWER IMPROVEMENTS

SEWER PLAN AND PROFILE

AIP NO. 3–12–0046–0054–14–2010 | FDOT ITEM NO. 418486

DATE 2–12
AEC JOB NO. 1108
REVISION DATES (SEE DESCRIPTION AT LEFT)
R1 R4
R2 R5
R3 R6
DWG. NO. 1108–SEWER.DWG
SHT. 2 OF 4

399

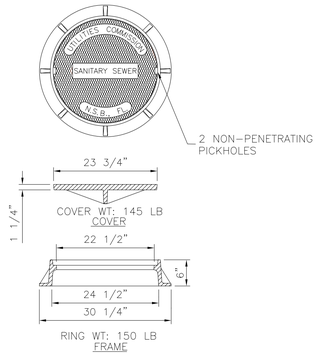


NOTES:

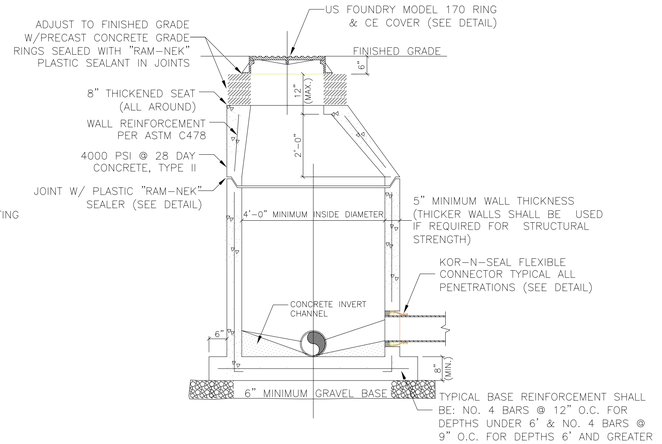
1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY THE ENGINEER.
4. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW FOR SEWERS.
7. REFER TO SPECIFICATIONS FOR SHEETING AND BRACING IN EXCAVATIONS.
8. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH SPECIFICATIONS. ROAD SURFACE RESTORATION SHALL COMPLY WITH SPECIFICATIONS.

PIPE BEDDING DETAILS TYPE "B"
N.T.S.

NOTE: TYPE "B" BEDDING IS ACCEPTABLE WHERE BOTTOM OF TRENCH IS IN SANDY SOIL. TYPE "A" BEDDING IS REQ'D WHERE BOTTOM OF TRENCH IS IN ROCK.

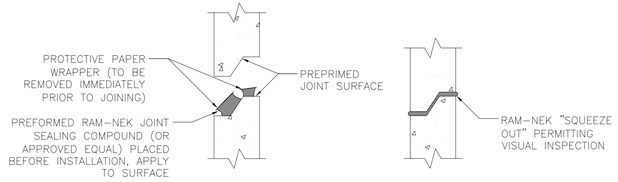


MANHOLE COVER – USF MODEL 170 RING & CE COVER
NTS UCNSB 11/09



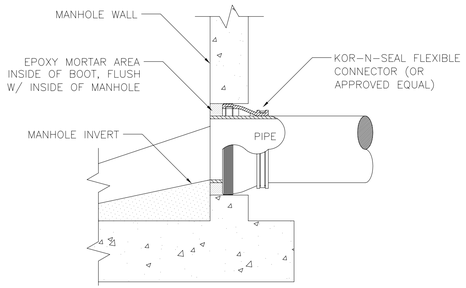
SECTION – STANDARD MANHOLE
NTS UCNSB 11/09

NOTE: 6"& 8" SANITARY SEWER PIPE SHALL BE PVC GASKETED PUSH-ON JOINT ASTM D-3034 DR-35. SEALS SHALL COMPLY WITH ASTM D-3212.

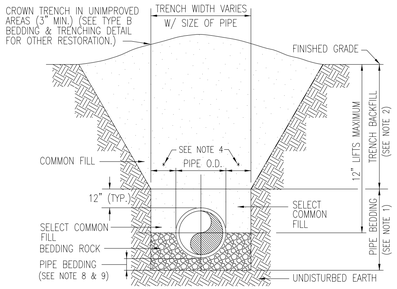


APPLICATION OF SEALANT CLOSED JOINT

JOINT SEAL
NTS UCNSB 11/09



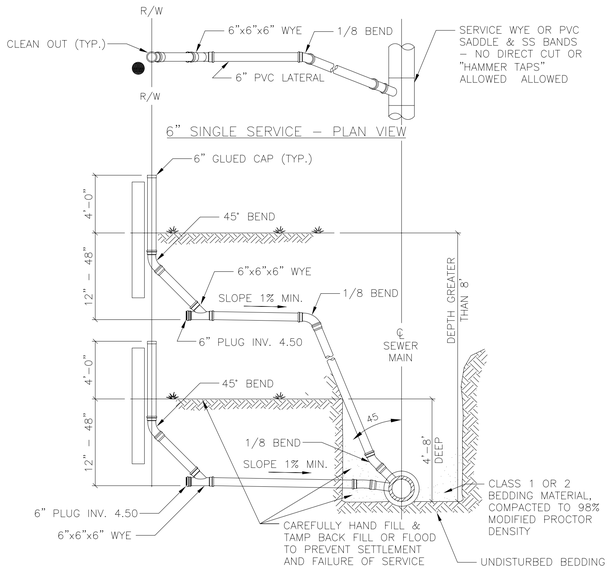
FLEXIBLE MANHOLE PIPE CONNECTION
NTS UCNSB 11/09



NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. USE TYPE A BEDDING TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE ENGINEER.
4. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF FLOW FOR SEWERS.
7. REFER TO SPECIFICATIONS FOR SHEETING AND BRACING IN EXCAVATIONS.
8. GRAVITY SEWERS SHALL UTILIZE TYPE A BEDDING, IF REQUIRED BY THE ENGINEER. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER LESS THAN 15", AND 6" MINIMUM FOR PIPE DIAMETER 16" AND LARGER.
9. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. THE ENGINEER SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.

PIPE BEDDING DETAILS TYPE "A"
N.T.S.



6" SINGLE SERVICE – PLAN VIEW

SERVICE – ELEVATION
(6" SINGLE SERVICE SHOWN)

SINGLE AND DOUBLE SEWER LATERAL
NTS UCNSB 11/09

OTHER PIPE	HORIZONTAL SEPARATION	CROSSING	JOINT SPACING AT CROSSINGS (FULL JOINT CENTERED)
STORM SEWER, STORMWATER FORCE MAIN, RECLAIMED WATER	WATER MAIN 3 FT MINIMUM	WATER MAIN 12 INCHES IS THE MINIMUM, EXCEPT FOR STORM SEWER, THEN 6 INCHES IS THE MINIMUM AND 12 INCHES IS PREFERRED	ALTERNATE 3 FT MINIMUM WATER MAIN
VACUUM SANITARY SEWER	WATER MAIN 10 FT PREFERRED 3 FT MINIMUM	WATER MAIN 12 INCHES PREFERRED 6 INCHES MINIMUM	ALTERNATE 3 FT MINIMUM WATER MAIN
GRAVITY OR PRESSURE SANITARY SEWER, SANITARY SEWER FORCE MAIN, RECLAIMED WATER	WATER MAIN 10 FT PREFERRED 6 FT MINIMUM	WATER MAIN 12 INCHES IS THE MINIMUM, EXCEPT FOR GRAVITY SEWER, THEN 6 INCHES IS THE MINIMUM AND 12 INCHES IS PREFERRED	ALTERNATE 6 FT MINIMUM WATER MAIN
ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM	10 FT MINIMUM		

NOTE:

1. LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314.
2. WATER MAIN SHOULD CROSS ABOVE OTHER PIPE. WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MINIMUM SEPARATION IS 12 INCHES.
3. IN ADDITION TO F.A.C. RULE 62-555.314, THE UC REQUIRES THAT ALL OTHER UTILITY SEPARATIONS SHALL BE 1 FT VERTICALLY ON CROSSINGS AND 3 FT PARALLEL.

UTILITY SEPARATION
NTS UCNSB 11/09

NO.	DATE	REVISION	BY

AIRPORT ENGINEERING CO., INC.
3612 McLEAN AVE.
ROCKLEDGE, FLORIDA 32955
Tel. 321-633-3034
E-MAIL aec633@yahoo.com
Brian Pendleton, P.E. 23722
Robert F. Robb, P.E. 55645
CERT. OF AUTHORIZATION 7633

NEW SMYRNA BEACH MUNICIPAL AIRPORT
CITY OF NEW SMYRNA BEACH
NEW SMYRNA BEACH, FLORIDA

HANGAR 1996 SEWER IMPROVEMENTS

SEWER DETAILS

FDOT ITEM NO. 420860

DATE 2-12

AEC JOB NO. 1108

REVISION DATES (SEE DESCRIPTION AT LEFT)
R1 R4
R2 R5
R3 R6

DWG. NO. 1108-SEWER.DWG

SHT. 3 OF 4

GENERAL NOTES:

1. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING UTILITIES (UNDERGROUND AND OVERHEAD) PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY UTILITY CONFLICTS SHALL BE REPORTED TO THE ENGINEER PRIOR TO CONSTRUCTION.

2. ALL CONSTRUCTION AND SITE PRACTICES SHALL COMPLY WITH THE NEW SMYRNA BEACH AND THE UTILITY COMMISSION REQUIREMENTS.

3. CONSTRUCTION SHALL BE PERFORMED BY A LICENSED UTILITY CONTRACTOR

4. INSPECTIONS SHALL BE CALLED IN TO THE CITY OF NEW SMYRNA BEACH BUILDING DEPT. AS WELL AS THE UTILITY COMMISSION.

5. CONTRACTOR IS ENCOURAGED TO PHOTOGRAPH OR VIDEO ALL EXISTING CONDITIONS. ANY DAMAGE TO EXISTING R.O.W. INCLUDING PAVEMENT, SIDEWALKS, SWALES, AND OTHER IMPROVEMENTS SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING PUBLIC ROADWAY, CURBS, GUTTERS, SIDEWALKS, DRAINAGE SYSTEMS, AND UTILITIES AS A DIRECT RESULT OF NEW CONSTRUCTION. ROAD IMPROVEMENTS SUCH AS BUT NOT LIMITED TO RESURFACING MAY BE REQUIRED.

7. FOR PROJECT BENCHMARK INFORMATION, SEE PLAN.

8. CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DISTURBED AREAS EITHER ON OR OFF SITE WHICH HAVE BEEN DISTURBED. AT THE COMMENCEMENT OF THE PROJECT, CONTRACTOR SHALL NOTIFY ENGINEER IF EXISTING DISTURBED AREAS EXIST WHICH WERE NOT CAUSED BY CONSTRUCTION ACTIVITIES.

9. THE CONTRACTOR SHALL THOROUGHLY REVIEW THE CONSTRUCTION PLANS AND EXISTING SITE CONDITIONS SO HE IS PREPARED TO PROVIDE AN ALL INCLUSIVE BID. THE SCOPE OF WORK AND GENERAL SITE REQUIREMENTS ARE OUTLINED WITHIN THE CONSTRUCTION DOCUMENTS. THEREFORE IT WILL BE THE CONTRACTORS RESPONSIBILITY TO ADJUST HIS BID PRICE TO REFLECT ALL NECESSARY WORK WHETHER DIRECTLY SHOWN ON THE PLANS OR AS A NECESSARY TASK TO COMPLETE AN ITEM SHOWN ON THE PLAN. THIS WORK WILL BE SUCCESSFULLY COMPLETED WITHOUT ADDITIONAL COSTS TO THE OWNER.

10. EXISTING AND PROPOSED UTILITIES ARE TO BE PROTECTED BY THE CONTRACTOR UNTIL THE PROJECT IS ACCEPTED. ANY DAMAGE TO UTILITIES SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.

11. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANYS A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.

12. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE LATEST REVISIONS AND APPROVED PLANS FROM THE DESIGN FIRM.

13. THE CONTRACTOR SHALL FIELD VERFIY ALL DIMENSIONS AND/OR SITE CONDITIONS AND REPORT DISCREPANCIES TO THE ENGINEER PRIOR TO COMMENCEMENT OF CONSTRUCTION.

14. THE CONTRACTOR MUST OBTAIN ALL REQUIRED PERMITS PRIOR TO COMMENCEMENT OF CONSTRUCTION. INCLUDING BUT NOT LIMITED TO A SEPTIC TANK CLOSURE THROUGH THE VOLUSIA COUNTY HEALTH DEPARTMENT. APPLICATION AND PERMIT FEES ARE REIMBURSABLE ITEMS.

15. THE CONTRACTOR SHALL INCLUDE IN THE BID THE PROPER CLOSURE OF THE EXISTING SEPTIC TANK AND DRAIN FIELD. CLOSURE REQUIREMENTS SHALL MEET THE REQUIREMENTS OF VOLUSIA COUNTY HEALTH DEPARTMENT.

16. BY SUBMITTING A BID FOR THE PROJECT, CONTRACTOR ACKNOWLEDGES THAT INCLUDED WITH THE BID ARE COSTS ASSOCIATED WITH COMPLYING WITH THE FLORIDA TRENCH SAFETY ACT (90-96, LAWS OF FLORIDA). THE BID PRICES SHALL INCLUDE COMPLIANCE WITH THE FLORIDA TRENCH SAFETY ACT AND OSHA GUIDELINES.

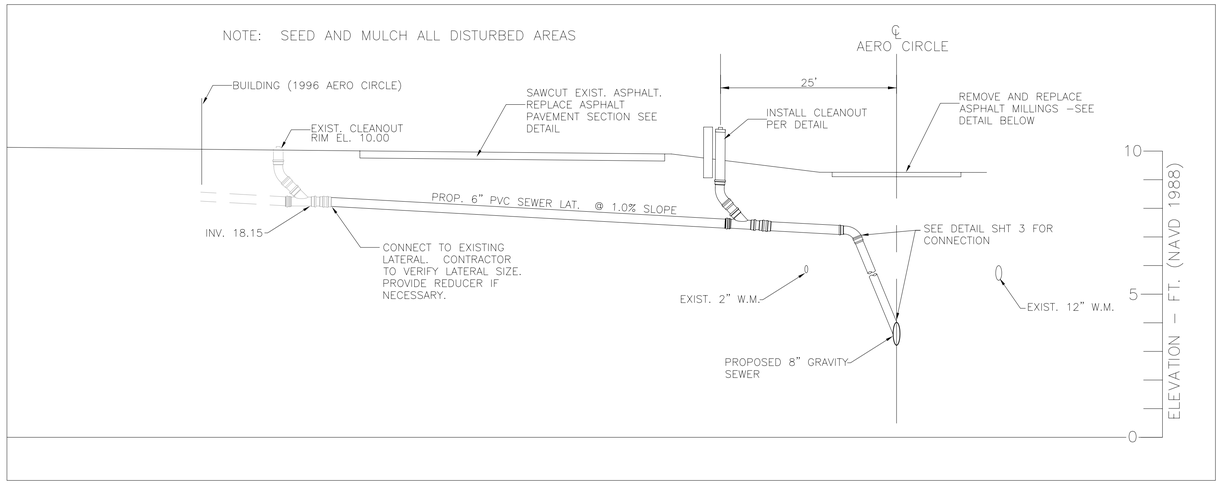
17. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ANY NECESSARY DEWATERING AND/OR CONSUMPTIVE USE PERMITS PRIOR TO CONSTRUCTION.

18. ALL DISTURBED AREAS SHALL BE RESTORED TO PRE-DEVELOPMENT CONDITIONS. ALL SOD WITHIN THE R.O.W. SHALL BE COMMON BERMUDA GRASS. SOD REPLACED OUTSIDE OF R.O.W. WILL MATCH EXISTING GRASS.

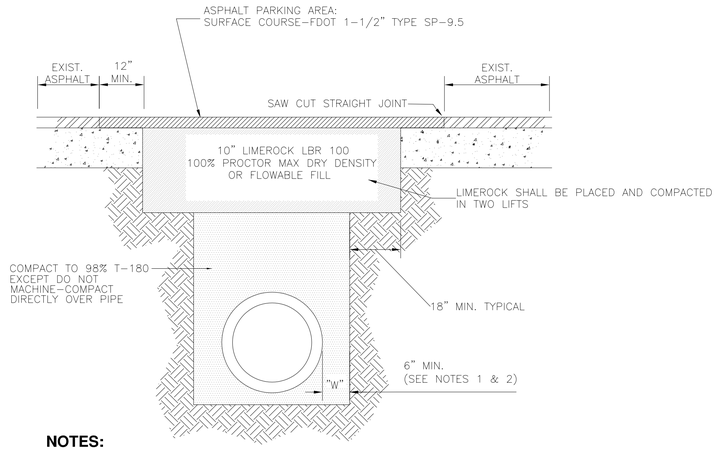
19. CONTRACTOR SHALL VERIFY AND LOCATE ALL PROTECTED TREES PRIOR TO CONSTRUCTION. FLAGGING OF THE TREE AND INSTALLATION OF A PROTECTIVE BARRIER SHALL BE INPLACE PRIOR TO CLEARING ACTIVITIES. PROTECTION OF TREES IS MANDATORY THROUGHOUT CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR REPLACEMENT OF ANY TREE WHICH IS DAMAGED BY HIMSELF OR A SUBCONTRACTOR.

20. UNLESS OTHERWISE NOTED CONTRACTOR SHALL LAY 18" SOD ADJACENT TO ALL HARD SURFACES (IE BLDG, PAVEMENT, SIDEWALKS, ETC.) AND ALL SLOPES 4:1 AND GREATER. SOD AT SLOPES SHALL EXTEND 3 FEET BEYOND THE TOP OF BANK. ALL OTHER DISTURBED AREAS SHALL BE SEED AND MULCHED.

21. PRIOR TO ORDERING NEW MAHOLES, CONTRACTOR SHALL FIELD VERIFY THE INVERT ELEVATION OF THE EXISTING MANHOLE. NOTIFY THE ENGINEER IN THE EVENT THE SOUTH INVERT OF THE EXISTING MANHOLE IS IN ERROR.



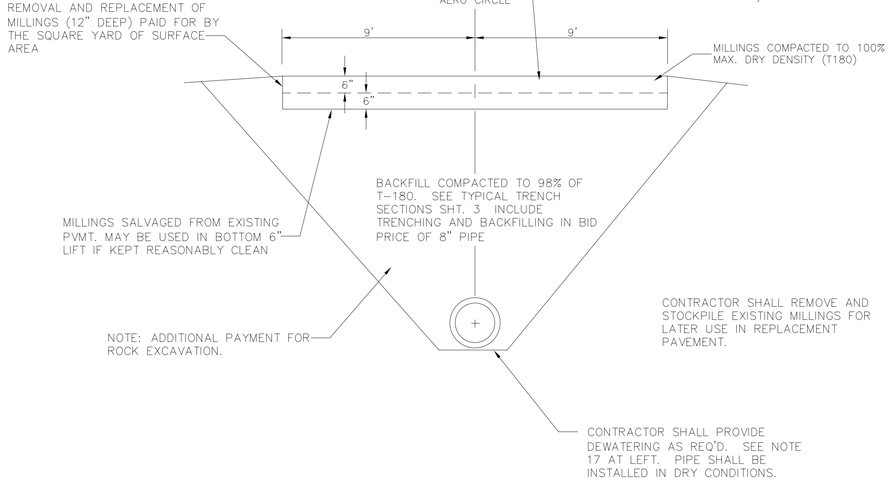
SEWER LATERAL PROFILE
1"=10' HORIZONTAL



NOTES:

1. "W" SHALL BE A MINIMUM OF 6" WIDE AND OF SUFFICIENT WIDTH TO ACCOMMODATE NECESSARY COMPACTION EFFORTS. IN THE EVENT THE REQUIRED MINIMUM DENSITY IS NOT ACHIEVED, LOOSE MATERIAL SHALL BE REMOVED, REPLACED AND COMPACTED TO THE REQUIRED DENSITY, OR REPLACED WITH FULL DEPTH FLOWABLE FILL. DENSITY TESTS BELOW THE SPRING LINE OF THE PIPE ARE REQUIRED IN ADDITION TO OTHER TESTING REQUIREMENTS (IN THE EVENT FULL DEPTH FLOWABLE FILL IS USED AS BACKFILL, DENSITY REQUIREMENTS ARE WAIVED).
2. MINIMUM ALLOWABLE BACKFILL DENSITY SHALL BE 98% OF THE MAXIMUM DENSITY AT OPTIMUM MOISTURE PER AASHTO T-180.
3. FLOWABLE FILL SHALL COMPLY WITH FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 121, LATEST EDITION.
4. THESE ARE MINIMUM REQUIREMENTS. ADDITIONAL RESTRICTIONS MAY BE NECESSARY ON A CASE BY CASE BASIS, AS APPROVED BY THE ROADWAY AUTHORITY.
5. CONTRACTOR SHALL EXCAVATE BOTTOM OF TRENCH TO ALLOW FOR BELL SECTION OF PIPE.
6. ASPHALT GRADATION SHALL BE AN APPROVED F.D.O.T. MIX.

ASPHALT OPEN-CUT / REPLACEMENT DETAIL
(ASPHALT PARKING LOT ONLY)



AERO CIRCLE - ASPHALT MILLING REPLACEMENT SECTION

GRAVITY SEWER TESTING:

1. CONTRACTOR SHALL PROVIDE THE NECESSARY EQUIPMENT AND ASSIST THE ENGINEER AND AGENCIES IN PERFORMING A DEFLECTION TEST. NO PIPE SHALL DEFLECT MORE THAN 5%. tESTING SHALL BE IN ACCORDANCE WITH CURRENT ASTM SPECIFICATIONS.
2. THE CONTRACTOR SHALL CONDUCT A LEAKAGE / INFILTRATION TEST IN THE PRESENCE OF THE ENGINEER AND AGENCIES. LEAKAGE SHALL NOT EXCEED 200 GAL PER INCH OF PIPE DIAMETER PER MILE PER DAY. EXFILTRATION / INFILTRATION TEST SHALL BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET. AIR TESTING SHALL CONFORM TO THE TERSTING PROCEDURES DESCRIBED IN ASTM F-1417.

NO.	DATE	REVISION	BY

AIRPORT ENGINEERING CO., INC.
3612 McLEAN AVE.
ROCKLEDGE, FLORIDA 32955
Tel. 321-633-3034
E-MAIL aec633@yahoo.com
Brian Pendleton, P.E. 23722
Robert F. Robb, P.E. 55645
CERT. OF AUTHORIZATION 7633

NEW SMYRNA BEACH MUNICIPAL AIRPORT
CITY OF NEW SMYRNA BEACH
NEW SMYRNA BEACH, FLORIDA

HANGAR 1996 SEWER IMPROVEMENTS

SEWER DETAILS

FDOT ITEM NO. 420860

DATE 2-12

REVISION DATES (SEE DESCRIPTION AT LEFT)
R1 R4
R2 R5
R3 R6

AEC JOB NO. 1108

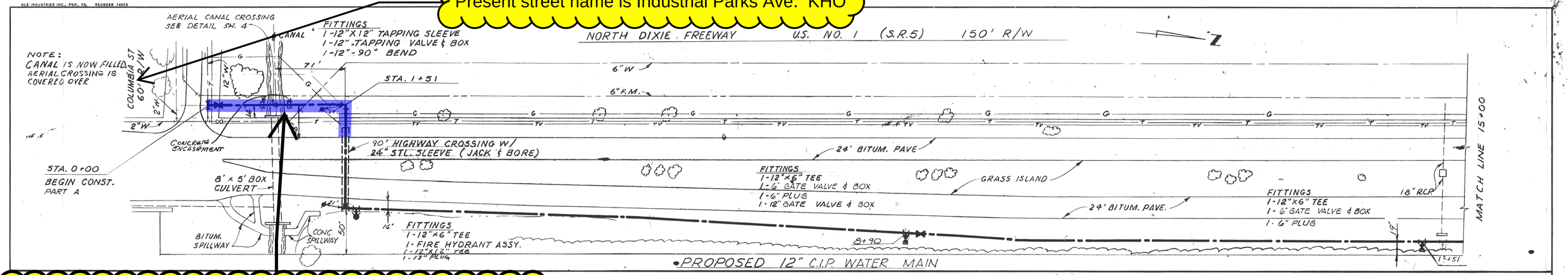
DWG. NO. 1108-SEWER.DWG

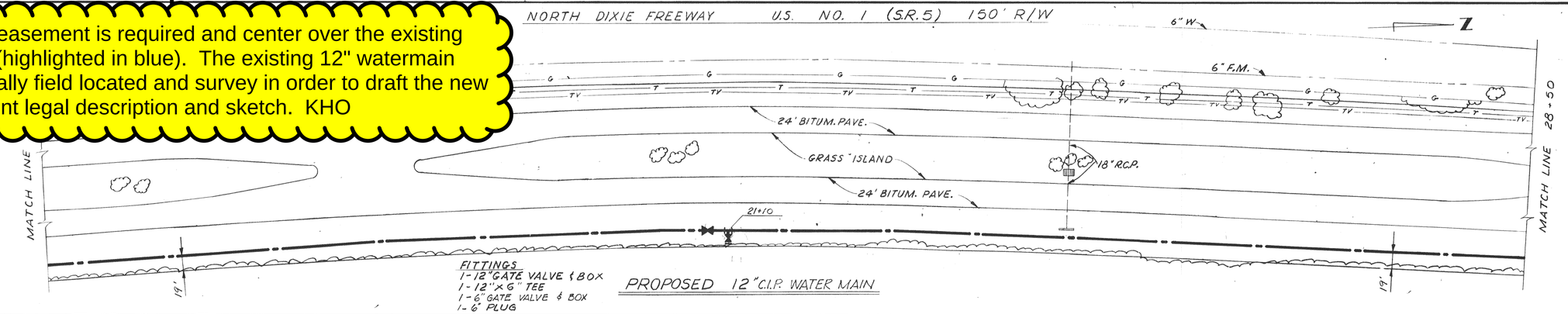
SHT. 4 OF 4

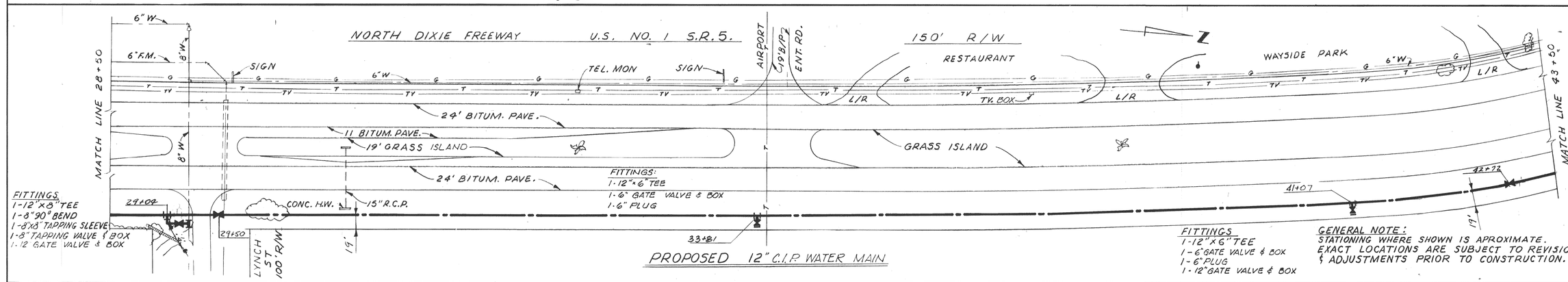
Present street name is Industrial Parks Ave. KHO

A 20.0' utilities easement is required and center over the existing 12" watermain (highlighted in blue). The existing 12" watermain must be physically field located and survey in order to draft the new utilities easement legal description and sketch. KHO

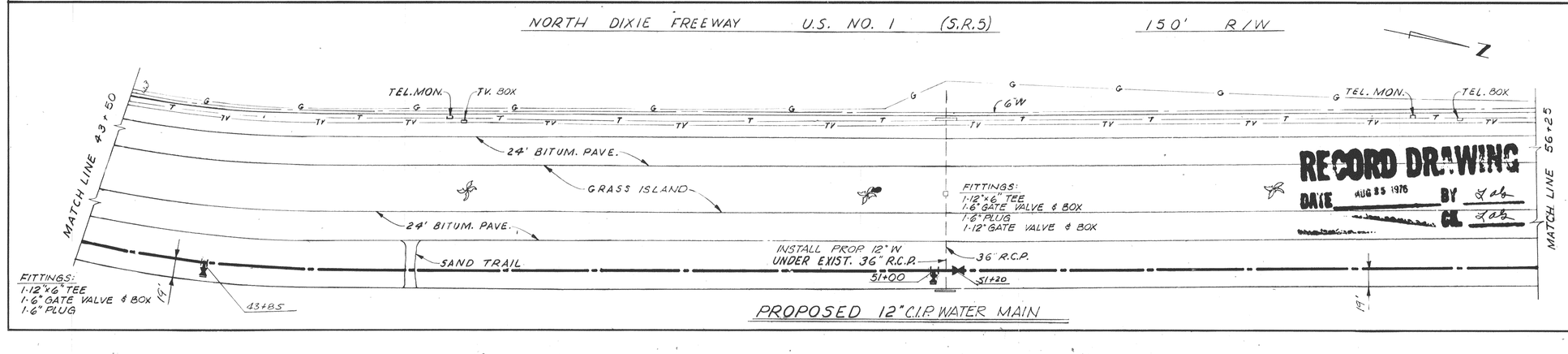
OCE INDUSTRIES INC., PGH., PA. REORDER 14074







GENERAL NOTE:
STATIONING WHERE SHOWN IS APROXIMATE. EXACT LOCATIONS ARE SUBJECT TO REVISIONS & ADJUSTMENTS PRIOR TO CONSTRUCTION.



RECORD DRAWING
DATE AUG 25 1976 BY GL Lab

HUD PROJECT WS FLA 313

NO.	DATE	DESCRIPTION	BY	CKD.
		REVISIONS		
1	10-75	RECORD DWGS	LAG	LAG

RUSSELL & AXON
Engineers — Planners — Architects
DAYTONA BEACH, FLORIDA

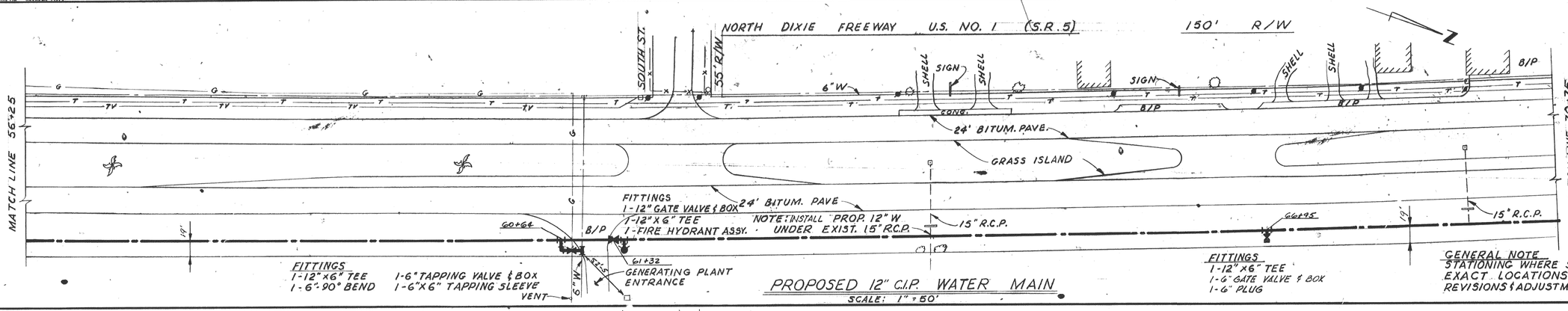
WATER WORKS IMPROVEMENTS
PART A
12" WATER MAIN

NEW SMYRNA BEACH FLORIDA

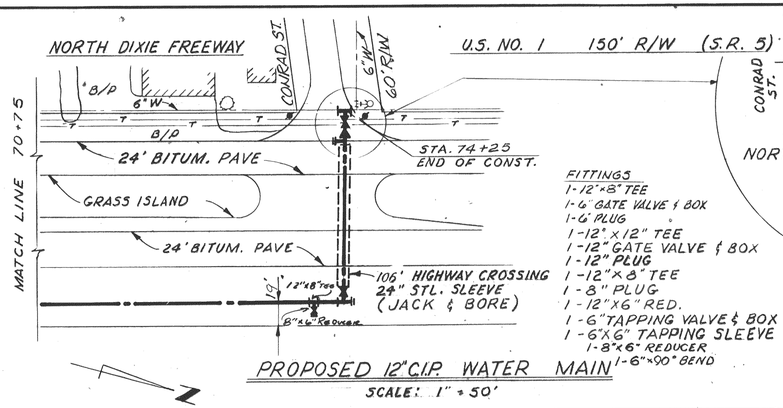
DESIGNED BY SYT	FILE No. 7158-5
DRAWN BY W.H.B.	SHEET No. 3 OF 14 SHEETS
CHECKED BY JHB SYT	
DATE APRIL 1974	SCALE: 1" = 50'

SEAL
JOHN B. HARRELL JR. CERTIFICATE No 6298 STATE OF FLORIDA REGISTERED ENGINEER

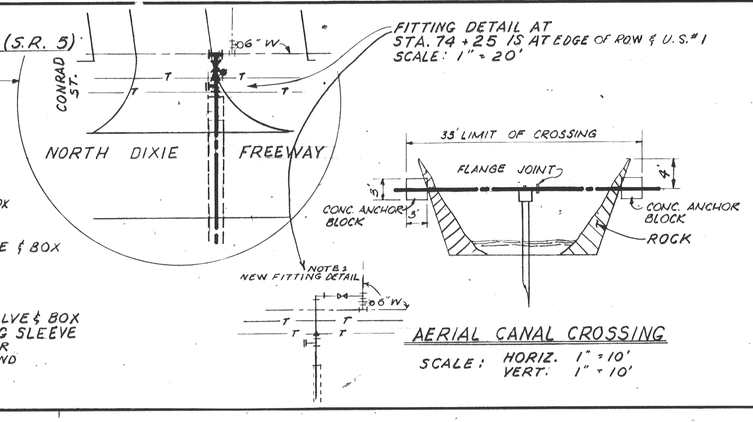
OCE INDUSTRIES INC., PSM., PA. RECORDER 14074



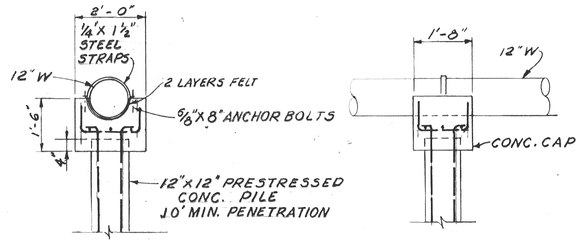
PROPOSED 12" C.I.P. WATER MAIN
SCALE: 1" = 50'



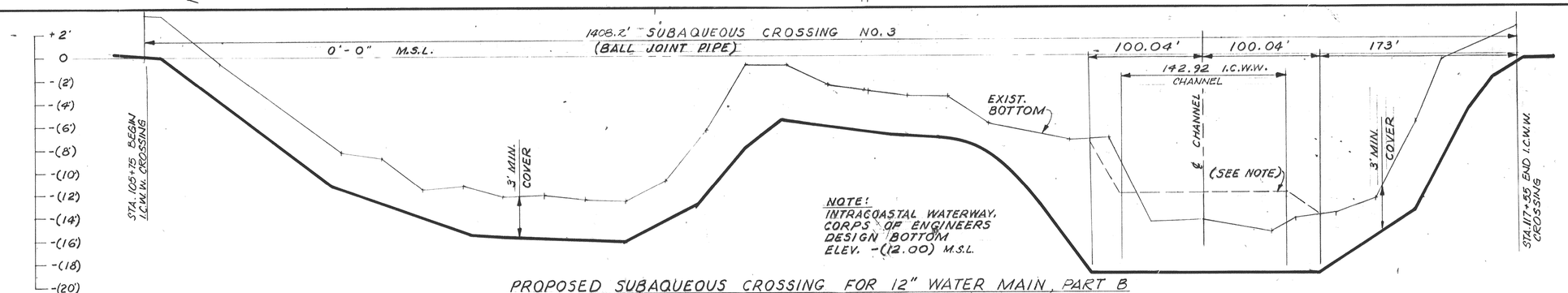
PROPOSED 12" C.I.P. WATER MAIN
SCALE: 1" = 50'



AERIAL CANAL CROSSING
SCALE: HORIZ. 1" = 10'
VERT. 1" = 10'



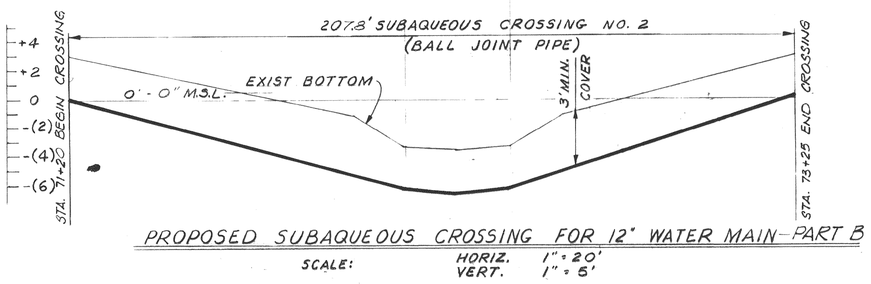
PIPE SUPPORT DETAIL
SCALE: 1/2" = 1'-0"



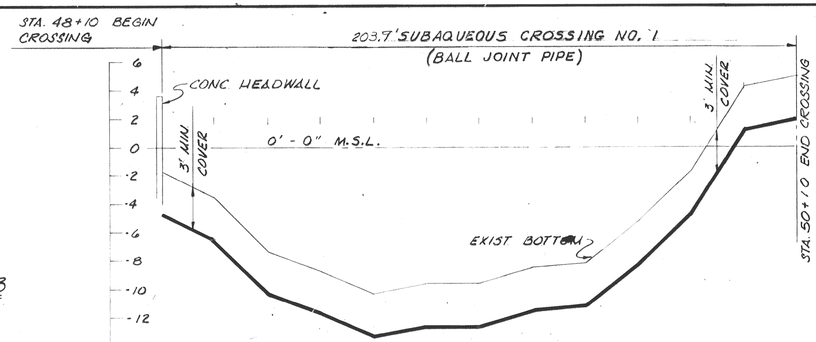
PROPOSED SUBAQUEOUS CROSSING FOR 12" WATER MAIN, PART B
SCALE: HORIZ. 1" = 50'
VERT. 1' = 5'

RECORD DRAWING
DATE AUG 25 1976 BY Lab
CIL Lab

John B. Harrell
APR. 25 1974



PROPOSED SUBAQUEOUS CROSSING FOR 12" WATER MAIN-PART B
SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'



PROPOSED SUBAQUEOUS CROSSING FOR 12" WATER MAIN-PART B
SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

HUD PROJECT WS FLA 313

NO.	DATE	DESCRIPTION	BY	CKD.
		REVISIONS		
1	10-75	RECORD DWGS	LAG	LAG

RUSSELL & AXON
Engineers — Planners — Architects
DAYTONA BEACH, FLORIDA

WATER WORKS IMPROVEMENTS
PART A & PART B
12" WATER MAIN & SUBAQUEOUS CROSSING DETAILS
NEW SMYRNA BEACH FLORIDA

DESIGNED BY	SYT
DRAWN BY	WHB/RLB
CHECKED BY	MAM. SYT
DATE	APRIL, 1974
FILE No.	7158-5
SHEET No.	4 OF 14 SHEETS
SCALE:	AS SHOWN

SEAL
JOHN B. HARRELL CERTIFICATE No. 6298 REGISTERED

"AS-BUILT"

~~CONSTRUCTION DRAWINGS~~

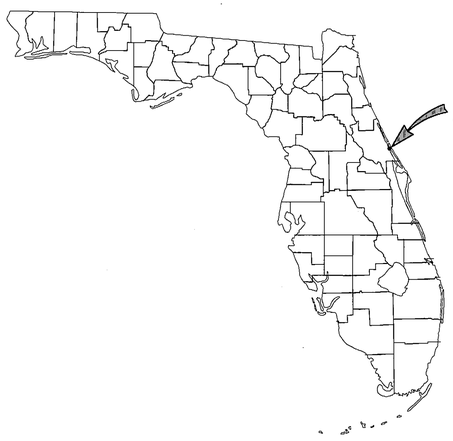
FOR

UTILITIES COMMISSION

CITY OF NEW SMYRNA BEACH, FLORIDA

NSB COMMERCIAL HANGER

12" WATER MAIN EXTENSION



LOCATION MAP

NO SCALE

UTILITIES COMMISSION
CITY OF NEW SMYRNA BEACH

INDEX OF DRAWINGS	
SHEET NO.	DESCRIPTION
1	COVER SHEET
2	LOCATION MAP AND GENERAL NOTES
3	WATER MAIN PLAN
4	WATER MAIN PLAN
5	WATER MAIN PLAN
6	WATER MAIN PLAN
7	SATNDARD DETAILS

MAY 10 2002

W.O. #61-2-13347-20-0116W

RECORD DRAWING

U.C. PROJECT NO. 01752-05

ENRIQUE A. TORRENS, P.E. #33379
NOT VALID FOR CONSTRUCTION UNLESS
ORIGINALLY SIGNED AND SEALED

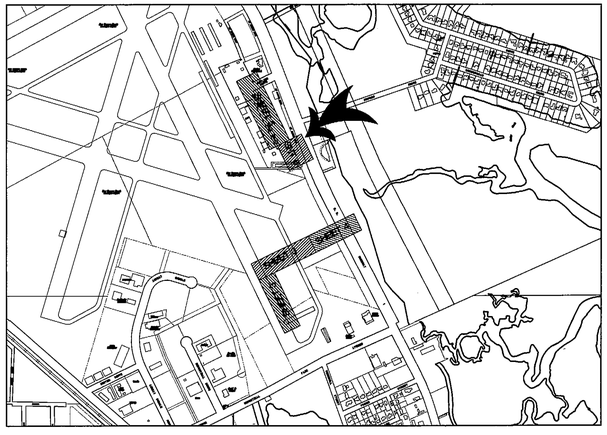
NEW SMYRNA BEACH, FLORIDA

00110101

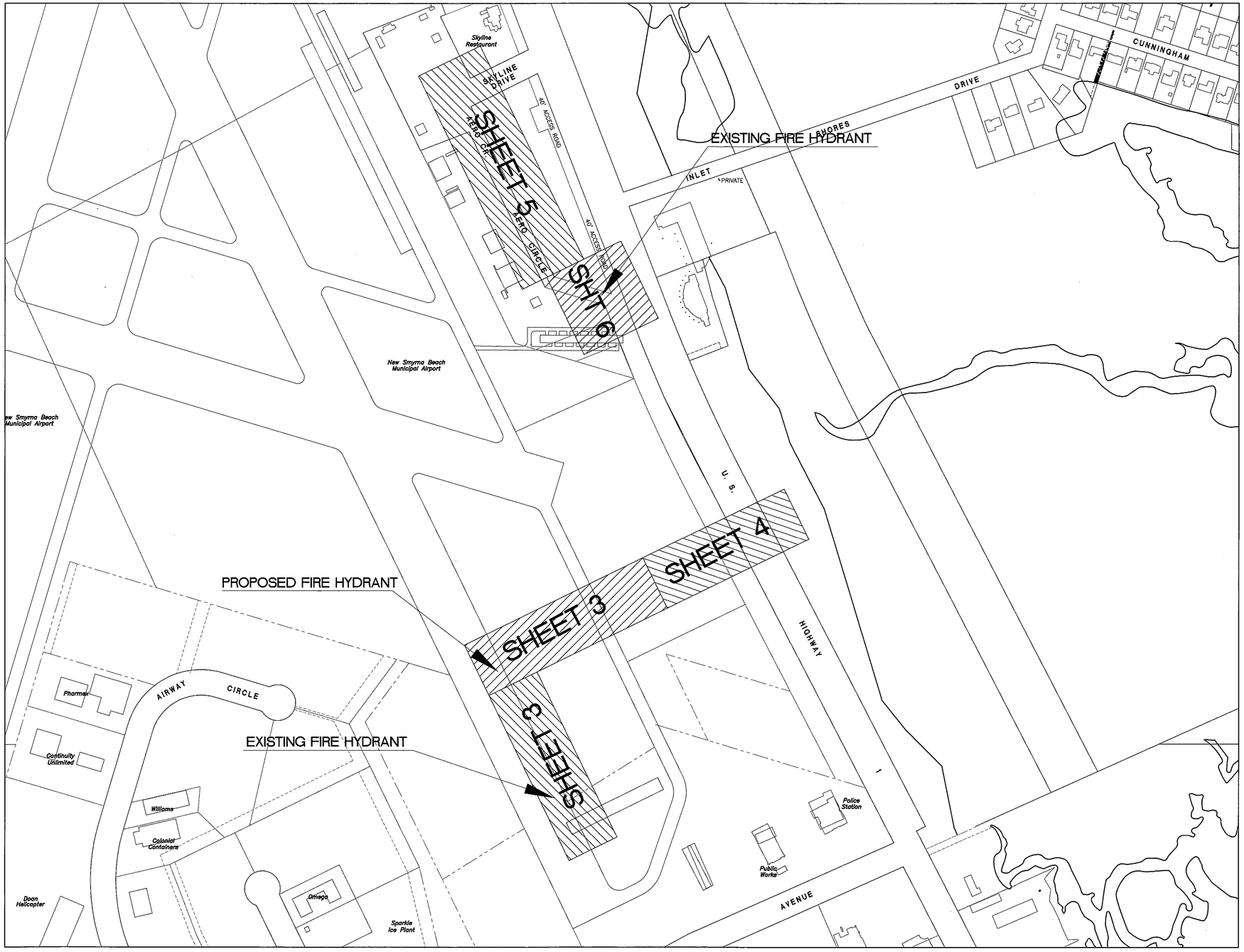
SHEET_#

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "WATER SERVICE RULES AND REGULATIONS MANUAL", UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH, FLORIDA.
2. PIPE SHALL BE AWWA C-900, DR 18 UNLESS OTHERWISE NOTED. ALL DUCTILE IRON PIPE SHALL MEET AWWA C151/A21.51-96.
3. ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF 30 INCHES.
4. ALL PIPE SHALL BE PRESSURE TESTED AND LEAK TESTED IN ACCORDANCE WITH AWWA STANDARDS, MANUAL M-23.
5. WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA C-651.
6. MAINTAIN A MINIMUM VERTICAL SEPARATION OF 18 INCHES AND MINIMUM HORIZONTAL SEPARATION OF 10 FEET FROM ALL SANITARY AND STORM SEWERS. WHERE THE MINIMUM SEPARATION CANNOT BE MAINTAINED, THE WATER MAIN SHALL BE ENCASED IN CONCRETE OR BE D.I.P.
7. ALL PIPING SHALL BE RESTRAINED IN ACCORDANCE WITH THRUST BLOCK DETAILS SHOWN ON THESE PLANS.
8. ALL PIPE SHALL BE STAMPED BY THE NATIONAL SANITATION FOUNDATION (NSF) FOR POTABLE WATER USE.
9. DEFLECT PIPE AS NECESSARY AT DITCH CROSSINGS TO MAINTAIN COVER.
10. THE LOCATIONS OF EXISTING UNDERGROUND FACILITIES SHOWN ON THESE PLANS ARE APPROXIMATE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UNDERGROUND FACILITIES PRIOR TO EXCAVATION.
11. UNDERGROUND UTILITIES SHOWN ON THESE PLANS WERE OBTAINED FROM UTILITY MAPS PROVIDED BY THE OWNERS. CONTRACTOR SHALL NOTIFY ALL UTILITY OWNERS TO FIELD LOCATE ALL UNDERGROUND UTILITIES AT LEAST 72 HOURS PRIOR TO CONSTRUCTION.
12. LOCATION OF EXISTING STRUCTURES, EQUIPMENT, ROADWAY, TREES, GROUND AND OTHER TOPOGRAPHIC FEATURES ARE BASED ON ENGINEERING DEPT. FIELD LOCATIONS AS WELL AS SURVEY DATA AS COMPILED BY DANIEL W. CORY SURVEYOR, INC. ACCURACY OF THESE FIELD LOCATED ITEMS IS NOT GUARANTEED.
13. THE CONTRACTOR SHALL PRESERVE AND MAINTAIN ALL UTILITIES WITHIN THE CONSTRUCTION AREA.
14. CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS AND PAY ALL COSTS FOR THE RELOCATION OF ANY EXISTING ELECTRIC OR TELEPHONE FACILITY (BURIED CABLE, POLES, ANCHORS, PEDESTALS, ETC.) WHICH ARE SHOWN ON THE PLANS TO BE RELOCATED OR WHICH CANNOT BE ADEQUATELY PROTECTED DURING CONSTRUCTION OF THE PIPELINE FACILITIES.
15. CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE RELOCATION OF ALL EXISTING UTILITIES THAT FALL WITHIN THE LIMITS OF EXCAVATION FOR THE PIPELINE AND PAY ALL COSTS CONNECTED THEREWITH.
16. ALL ROAD CROSSINGS ARE TO BE OPEN CUT EXCEPT WHERE OTHERWISE SHOWN ON THE DRAWINGS. MAINTAIN AT LEAST ONE LANE OF TRAFFIC OPEN AT ALL TIMES WITH FLAGMEN FOR TRAFFIC CONTROL.
17. CONTRACTOR SHALL AVOID ENCROACHMENT ONTO PRIVATE PROPERTY AND MAINTAIN CONSTRUCTION WITHIN LIMITS OF CONSTRUCTION.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORATION OF DISTURBED MATERIAL (INCLUDING DRIVEWAYS, SIDEWALKS, MAILBOXES, VEGETATION AND SIGNAGE) TO EQUAL OR BETTER CONDITION AS PRIOR TO CONSTRUCTION.
19. WHEN USING SCALED DATA, CONSIDER THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE DURING REPRODUCTION.



LOCATION MAP
N.T.S.



KEY MAP

SCALE: 1" = 200'

AS-BUILT DRAWING

RECORD DRAWING

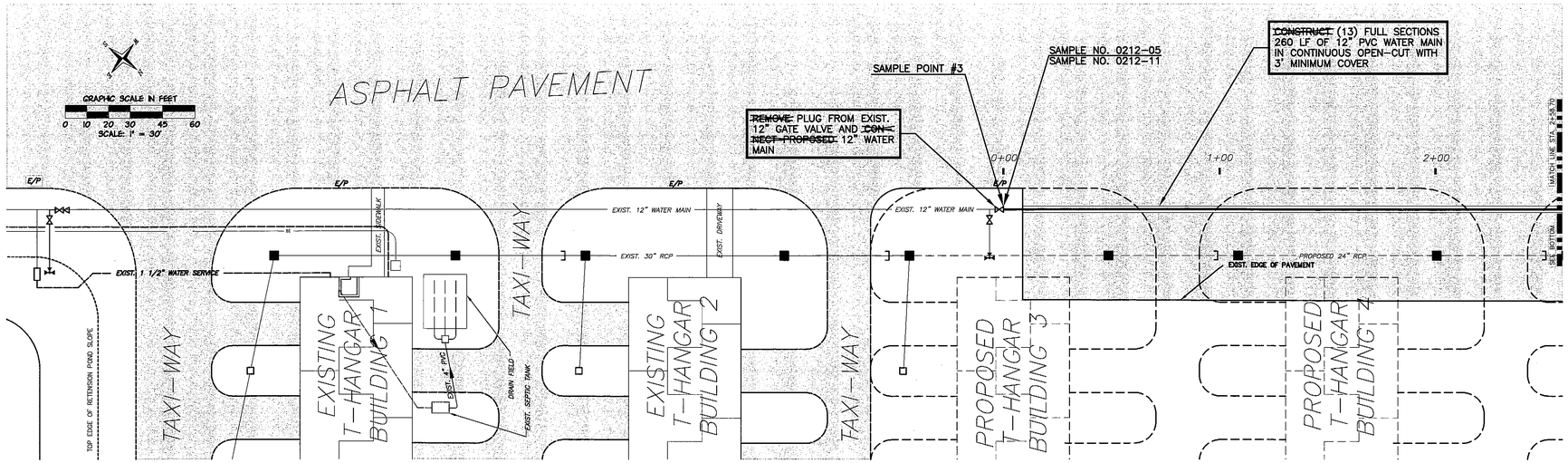
ENRIQUE A. TORRENS, P.E. #33379
NOT VALID FOR CONSTRUCTION UNLESS ORIGINALLY SIGNED AND SEALED

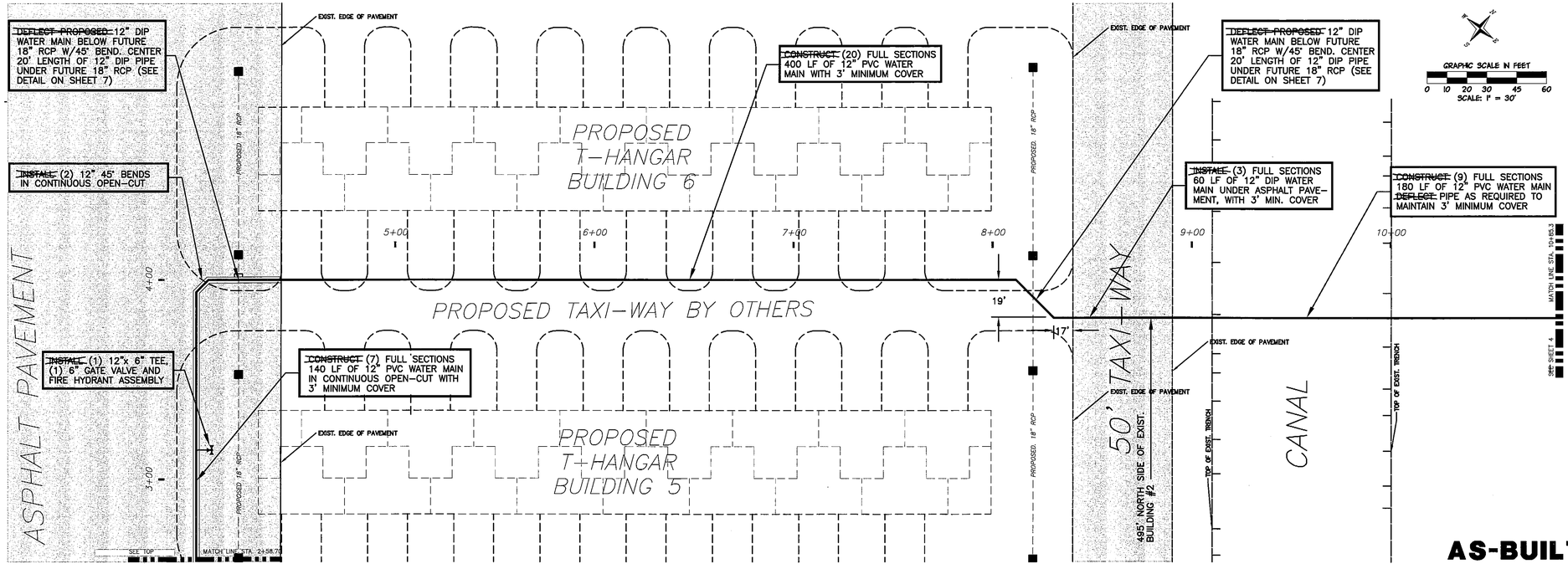
REVISIONS		
REV: Δ	DATE:	BY:

UTILITIES COMMISSION
CITY OF
NEW SMYRNA BEACH, FLORIDA

NSB COMMERCIAL HANGER
12" WATER MAIN EXTENSION
LOCATION MAP & GENERAL NOTES

DWN: T. SAXON	SCALE: AS NOTED	SHEET 2 OF 7
CKD: E. TORRENS	DATE: 5/10/02	
APP: E. TORRENS	REF:	U.C. PROJECT NO. 01752-05
CAD FILE: 01110102	ISSUED:	





AS-BUILT DRAWING

RECORD DRAWING

12" DI WM
3" PLS GAS
8" PVC SAN
Ø PP
TELE
SB
MAIL

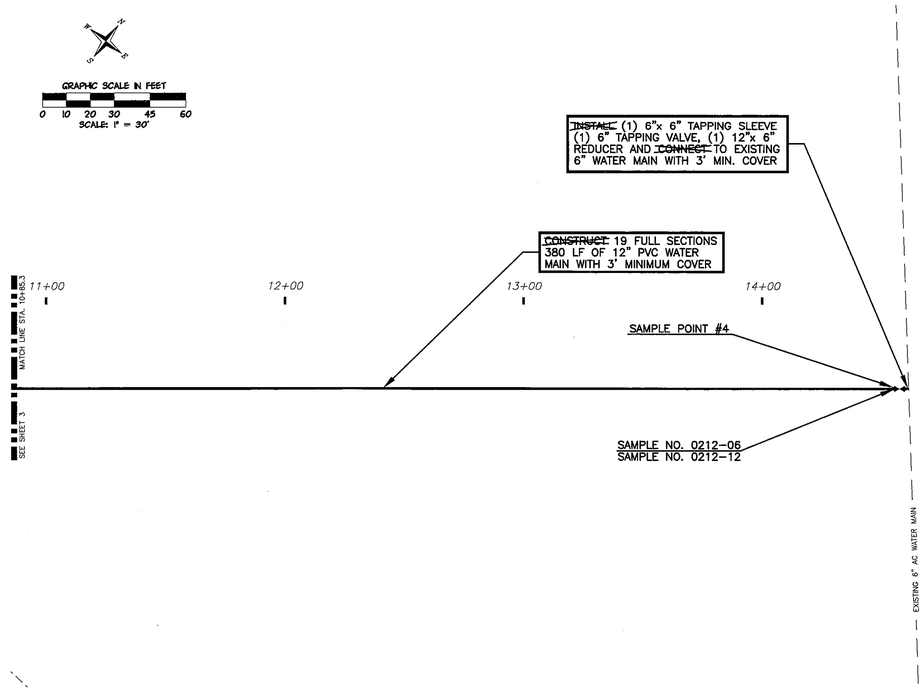
ENRIQUE A. TORRENS, P.E. #33379
NOT VALID FOR CONSTRUCTION UNLESS ORIGINALLY SIGNED AND SEALED

REVISIONS	REV.	DATE:	BY:

UTILITIES COMMISSION
CITY OF
NEW SMYRNA BEACH, FLORIDA

NSB COMMERCIAL HANGER
12" WATER MAIN EXTENSION
WATER MAIN PLAN

DWN: T. SAXON	SCALE: 1"=30'	SHEET 3 OF 7
CKD: E. TORRENS	DATE: 5/17/02	
APP: E. TORRENS	REF:	U.C. PROJECT NO. 01752-05
CAD FILE: 01110103	ISSUED:	



12" DI WM
3" PLS GAS
8" PVC SAN
Ø PP
TELE
+SB
MAIL

ENRIQUE A. TORRENS, P.E. #33379
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AS-BUILT DRAWING

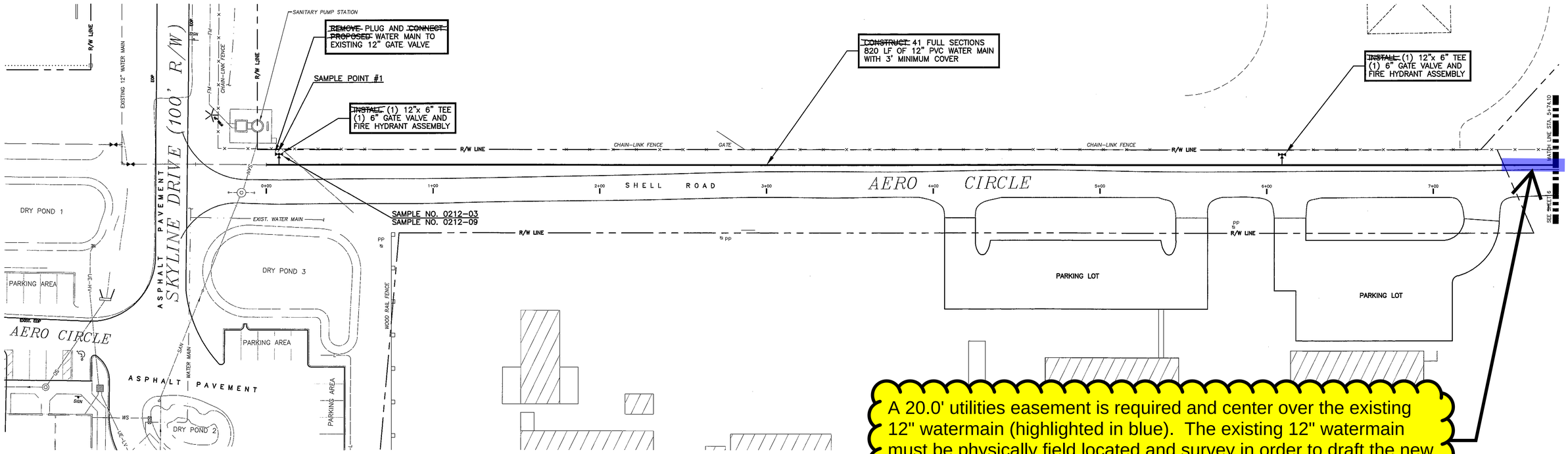
RECORD DRAWING

REVISIONS		
REV.	DATE:	BY:

UTILITIES COMMISSION
CITY OF
NEW SMYRNA BEACH, FLORIDA

NSB COMMERCIAL HANGER
12" WATER MAIN EXTENSION
WATER MAIN PLAN

DWN: T. SAXON	SCALE: 1"=30'	SHEET 4 OF 7
CKD: E. TORRENS	DATE: 5/17/02	U.C. PROJECT NO. 01752-05
APP: E. TORRENS	REF:	
CAD FILE: 01110103	ISSUED:	



A 20.0' utilities easement is required and center over the existing 12" watermain (highlighted in blue). The existing 12" watermain must be physically field located and survey in order to draft the new utilities easement legal description and sketch. KHO

12" DI WM
3" PLS GAS
8" PVC SAN
Ø PP
TELE
*SB
MAIL

ENRIQUE A. TORRENS, P.E. #33379
NOT VALID FOR CONSTRUCTION UNLESS ORIGINALLY SIGNED AND SEALED

AS-BUILT DRAWING

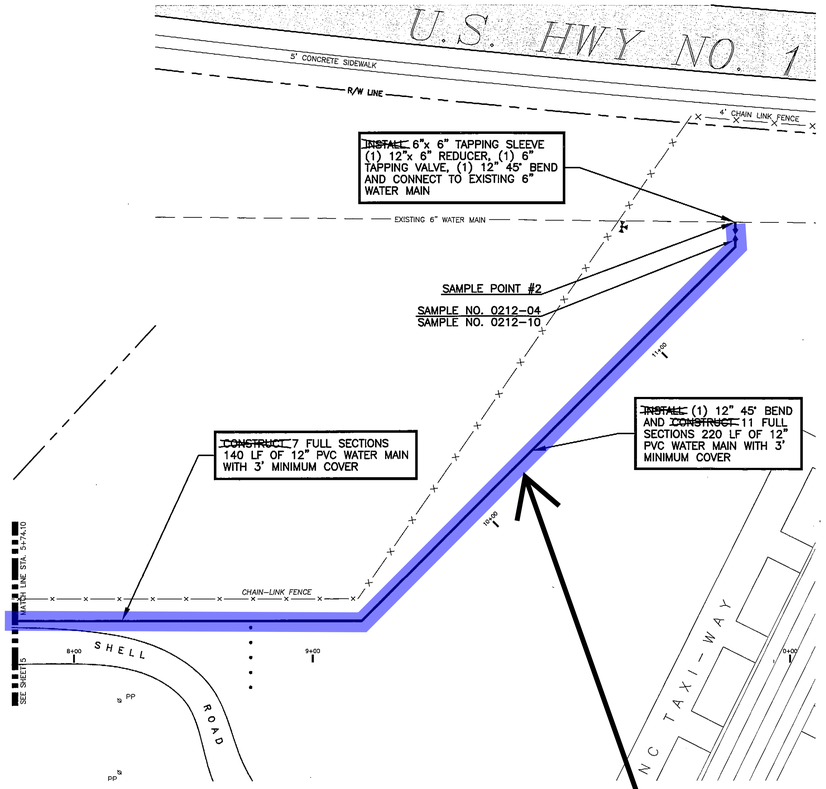
RECORD DRAWING

REV.	DATE:	BY:	REVISIONS

UTILITIES COMMISSION
CITY OF
NEW SMYRNA BEACH, FLORIDA

NSB COMMERCIAL HANGER
12" WATER MAIN EXTENSION
WATER MAIN PLAN

DWN: T. SAXON	SCALE: 1"=30'	SHEET 5 OF 7
CKD: E. TORRENS	DATE: 5/17/02	
APP: E. TORRENS	REF:	U.C. PROJECT NO. 01752-05
CAD FILE: 01110103	ISSUED:	



A 20.0' utilities easement is required and center over the existing 12" watermain (highlighted in blue). The existing 12" watermain must be physically field located and survey in order to draft the new utilities easement legal description and sketch. KHO

12" DI WM
3" PLS GAS
8" PVC SAN
Ø PP
TELE
SB
MAIL

AS-BUILT DRAWING

RECORD DRAWING

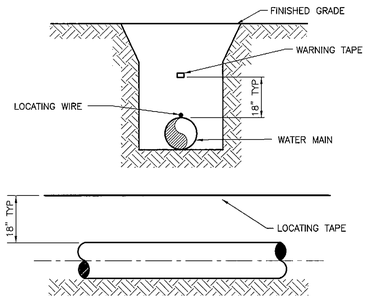
ENRIQUE A. TORRENS, P.E. #33379
NOT VALID FOR CONSTRUCTION UNLESS ORIGINALLY SIGNED AND SEALED

REVISIONS	REV.	DATE:	BY:

UTILITIES COMMISSION
CITY OF
NEW SMYRNA BEACH, FLORIDA

NSB COMMERCIAL HANGER
12" WATER MAIN EXTENSION
WATER MAIN PLAN

DWN: T. SAXON	SCALE: 1"=30'	SHEET 6 OF 7
CKD: E. TORRENS	DATE: 5/17/02	
APP: E. TORRENS	REF:	U.C. PROJECT NO. 01752-05
CAD FILE: 01110103	ISSUED:	

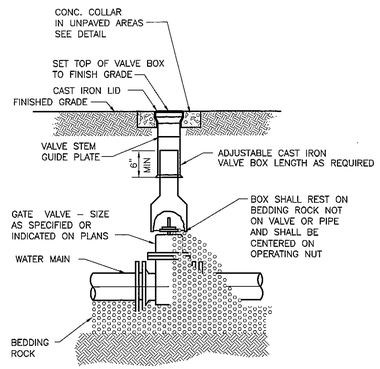


NOTES:

1. ALL PIPE SHALL REQUIRE LOCATING WIRE CAPABLE OF DETECTION BY A CABLE LOCATOR AND SHALL BE BURIED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE.

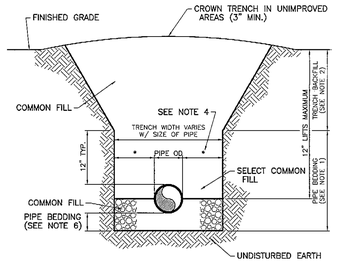
PIPE LOCATING TAPE DETAIL

N.T.S. 11/25/02



DETAIL GATE VALVE AND BOX

NTS

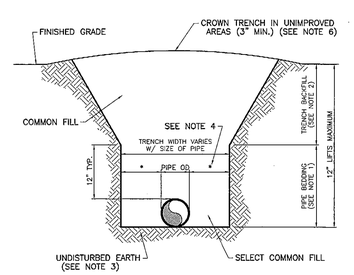


NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. USE OF TYPE A BEDDING TO BE DETERMINED IN THE FIELD, AS DIRECTED BY THE ENGINEER.
4. (*): 15" MAXIMUM FOR PIPE DIAMETER LESS THAN 24", AND 24" MAXIMUM FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN TRENCH DURING CONSTRUCTION.
6. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. THE ENGINEER SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.
7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH APPLICABLE REGULATION OF GOVERNING AGENCIES AND THESE DRAWINGS.
8. REFER TO SPECIFICATIONS FOR SHEETING AND BRACING REQUIREMENTS.

TYPE A BEDDING & TRENCHING DETAIL

N.T.S.



NOTES:

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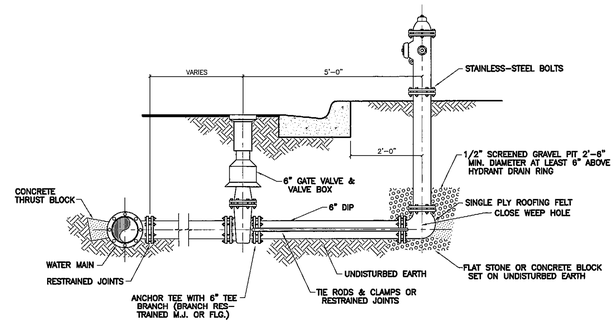
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING DETAIL MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER.
4. (*): 15" MAXIMUM FOR PIPE DIAMETER LESS THAN 24", AND 24" MAXIMUM FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN TRENCH DURING CONSTRUCTION.
6. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH APPLICABLE REGULATION OF GOVERNING AGENCIES AND THESE DRAWINGS.
7. REFER TO SPECIFICATIONS FOR SHEETING AND BRACING REQUIREMENTS.

TYPE B BEDDING & TRENCHING DETAIL

N.T.S.

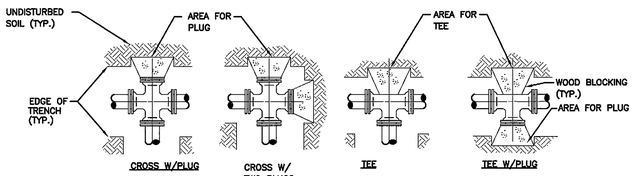


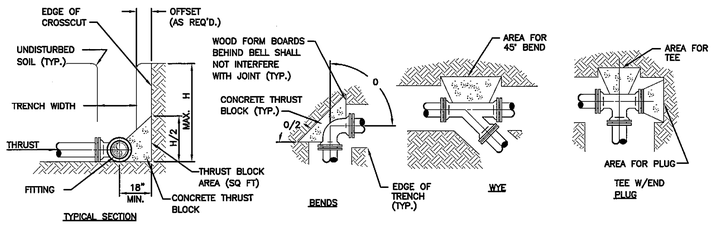
NOTE:

HYDRANT WILL BE "MUELLER SUPER CENTURION 200" WITH 5 1/4" BARREL, TRAFFIC TYPE (BREAKAWAY)

FIRE HYDRANT ASSEMBLY DETAIL

N.T.S.





THRUST BLOCK NOTES

1. THRUST BLOCKS MAY BE USED FOR PIPE AND FITTINGS EQUAL TO AND SMALLER THAN 12".
2. THRUST BLOCK BEARING AREAS SHALL BE POURED AGAINST UNDISTURBED MATERIAL. WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE ALL LOOSE MATERIAL AND EXTEND TO UNDISTURBED MATERIAL.
3. EXTEND THRUST BLOCK FULL LENGTH OF FITTINGS. PUT BOARD IN FRONT OF PLUG BEFORE POURING CONCRETE. JOINT SHALL NOT BE COVERED BY THRUST BLOCK. FITTINGS SHALL BE PROTECTED BY POLYETHYLENE FILM (8MIL) PRIOR TO PLACING CONCRETE THRUST BLOCK.
4. ROUGH BLOCKING FORMS SHALL BE USED ALONG SIDES OF THRUST BLOCKS, AS REQUIRED
5. THRUST BLOCKS SHALL BE USED IN COMBINATION, AS REQUIRED, TO SUIT THE SPECIFIC FITTING ARRANGEMENT.
6. ALTERNATE DESIGNED RESTRAINING SYSTEMS SHALL BE PROVIDED WHERE STANDARD THRUST BLOCKING IS NOT SUITABLE AND/OR SOIL RESISTANCE BEARING IS LESS THAN 2000 PSF. THESE TABLES SHOW MINIMUM SIZE THRUST BLOCKS FOR GOOD SOIL WITH A 2000 PSF SOIL BEARING (A-1 THROUGH A-3 CLEAN SAND AND GRAVELS).
7. POOR SOIL (A-4 THROUGH A-8, SILTY SOILS, CLAYS, MUCK, AND PEAT) WILL REQUIRE LARGER THRUST BLOCKS.
8. ALL WOOD BLOCKING SHALL BE PRESSURE TREATED WITH PRESERVATIVE
9. BEARING AREA OF THRUST BLOCK SHALL BE A MINIMUM OF 2 SQ. FT. OR AS DETERMINED BY T/2000, WHICHEVER IS GREATER.
10. ALL WOOD BLOCKING SHALL BE PRESSURE TREATED WITH PRESERVATIVE
11. THRUST BLOCKS SHALL HAVE A MINIMUM DIMENSION OF 18" TO UNDISTURBED SOIL.

SCHEDULE FOR THRUST BLOCK AREAS						
PIPE SIZE (INCHES)	90 BEND (SQ FT)	45 BEND (SQ FT)	22-1/2 BEND (SQ FT)	11-1/4 BEND (SQ FT)	TEE & PLUG (SQ FT)	DESIGN PRESS (PSI)
4	2.0	2.0	2.0	2.0	2.0	150
6	3.0	2.0	2.0	2.0	2.1	150
8	5.3	2.9	2.0	2.0	3.8	150
10	8.3	4.5	2.3	2.0	5.9	150
12	12.0	6.5	3.3	2.0	8.5	150

NOTE: THRUST BLOCK AREAS COMPUTED ON BASIS OF 2000 LBS. PER SQ FT SOIL RESISTANT BEARING. SEE NOTE 6

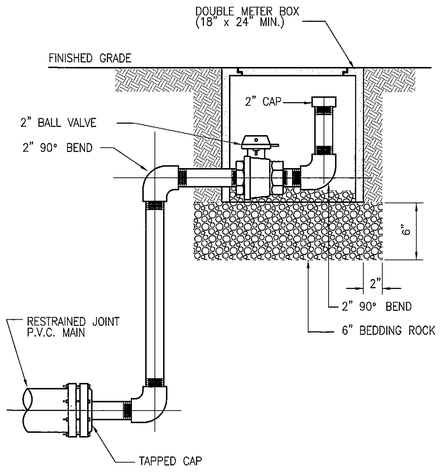
SCHEDULE FOR THRUST BLOCK VOLUMES						
PIPE SIZE (INCHES)	90 BEND (CU YD)	45 BEND (CU YD)	22-1/2 BEND (CU YD)	11-1/4 BEND (CU YD)	TEE & PLUG (CU YD)	DESIGN PRESS (PSI)
4	0.11	0.11	0.11	0.11	0.11	150
6	0.17	0.11	0.11	0.11	0.12	150
8	0.29	0.16	0.11	0.11	0.21	150
10	0.46	0.25	0.13	0.11	0.33	150
12	0.67	0.36	0.18	0.11	0.47	150

RESTRAINED JOINT NOTES

1. RESTRAINED JOINTS ARE REQUIRED FOR PIPE AND FITTINGS LARGER THAN 12". RESTRAINED JOINTS MAY BE USED FOR PIPE AND FITTINGS EQUAL TO AND SMALLER THAN 12" AT THE CONTRACTORS OPTION AND FOR NO ADDITIONAL COMPENSATION.
2. WHERE TWO OR MORE FITTINGS ARE TOGETHER, USE FITTING WHICH YIELDS GREATEST LENGTH OF RESTRAINED PIPE.
3. IN LINE VALVES AND THROUGH RUN OF TEES OUTSIDE LIMITS OF RESTRAINED JOINTS FROM OTHER FITTINGS NEED NOT BE RESTRAINED UNLESS OTHERWISE INDICATED
4. LENGTHS SHOWN IN THE TABLE HAVE BEEN CALCULATED IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" 2ND ED., 1989 AS PUBLISHED BY DIPRA, WITH THE FOLLOWING ASSUMPTIONS.

WORKING PRESSURE	150 P.S.I.
SOIL DESIGNATION	SAND-SILT
LAYING CONDITION	TYPE 4
MINIMUM DEPTH	2.5 FEET

   IF CONDITIONS ARE ENCOUNTERED WHICH DIFFER FROM THE ABOVE, THE CONTRACTOR MUST SUBMIT THRUST RESTRAINT CALCULATIONS TO THE ENGINEER FOR APPROVAL.
5. INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO GREATER THAN SHOWN IN THE TABLE
6. ALL EXPOSED TIE RODS SHALL HAVE (2) COATS OF KOPPERS 505 TNEMEC 46-450 OR EQUAL, 15 MILS EACH COAT.



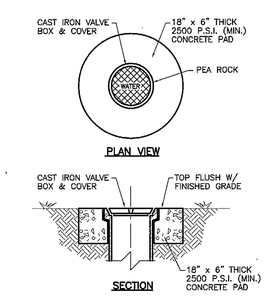
NOTE:
ALL 2" PIPE AND FITTINGS SHALL BE SCHEDULE 40 GALVANIZED STEEL OR BRASS WITH THREADED (NPT) JOINTS.

SECTION BLOWOFF VALVE

SCALE: 1/2"=1'-0"

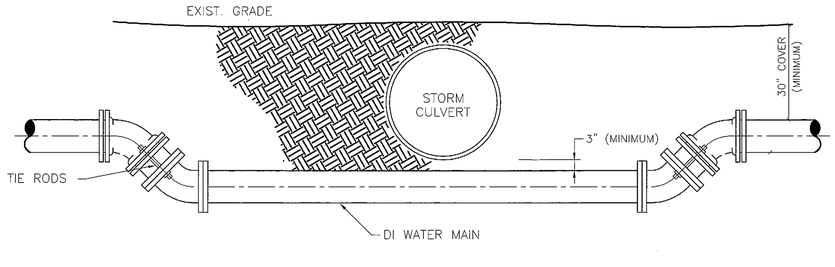
RESTRAINED JOINTS											
PIPE SIZE (INCHES)	LENGTH (FT) TO BE RESTRAINED								TIE ROD DATA ***		
	11-1/4°		22-1/2°		45°		90°		BOLTS- STUDS	SIZE	
	BARE *	POLY **	BARE *	POLY **	BARE *	POLY **	BARE *	POLY **			
4	2	2	4	4	8	9	20	22	TWO RODS	3/4	
6	3	3	6	6	11	13	28	31	TWO RODS	3/4	
8	3	4	7	8	15	17	35	40	TWO RODS	3/4	
10	4	5	8	10	18	20	42	48	TWO RODS	3/4	
12	5	5	10	11	20	23	49	55	THREE RODS	3/4	
14	5	6	11	12	23	26	55	63	THREE RODS	3/4	
16	6	7	12	14	25	29	62	70	THREE RODS	3/4	
18	7	7	13	15	28	32	67	76	FOUR RODS	3/4	
20	7	8	15	16	30	34	73	82	FIVE RODS	3/4	
24	8	9	17	19	35	39	83	94	SIX RODS	3/4	
30	10	11	19	22	40	45	97	110	SIX RODS	1	

* APPLICABLE TO BARE OR DUCTILE IRON PIPE
** APPLICABLE TO PVC OR POLYWRAPPED PIPE
*** APPLICABLE TO DUCTILE IRON, FOR PVC USE UNIFLANGE
**** NOTE: IN-LINE VALVES, TEES, (BRANCH), AND DEAD ENDS SHALL BE RESTRAINED SAME AS A 90° BEND



DETAIL-VALVE COLLAR

N.T.S.

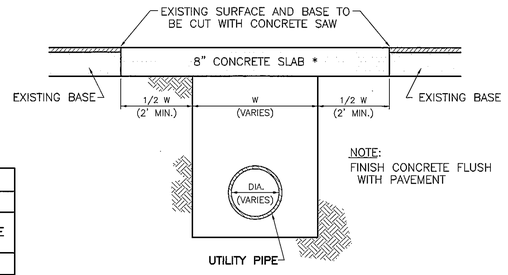


BELOW CULVERT CROSSING

N.T.S.

NOTE:

THRUST BLOCKS - PROVIDE RESTRAINED JOINT FITTINGS.



BACKFILL TRENCH WITH SUITABLE MATERIAL AND TAMP MATERIAL IN LAYERS NOT TO EXCEED 8" IN ACCORDANCE WITH STATE ROAD DEPARTMENT STANDARD SPEC-IFICATIONS

* 3500 LB/SQ. IN. CONCRETE, BY USE OF HIGH EARLY STRENGTH CEMENT, TO BE USED FOR REPLACEMENT

NOTE:
FINISH CONCRETE FLUSH WITH PAVEMENT

OPEN CUT ROAD PATCH

N.T.S.

- TABLE FOR 150 PSI PIPE - REDUCERS - REQUIRED LENGTH OF RESTRAINED PIPE AT LARGE SIDE (FT)*														
DIAMETER	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"	42"	48"	54"
4"		44	79	108	134	159									
6"			46	81	113	141	166								
8"				44	82	115	144	171	196						
10"					45	84	117	147	175	226					
12"						45	84	118	149	204	274				
14"							45	84	118	179	254				
16"								44	83	151	232				
18"									44	119	207				
20"										83	180	258	324		
24"											115	207	281	345	
30"												114	204	280	349
36"													110	201	282
42"														108	203
48"															112

* A MINIMUM OF ONE LENGTH OF PIPE SHALL BE RESTRAINED ON THE SMALL SIDE.

RESTRAINED JOINTS FOR REDUCERS

RECORD DRAWING

AS-BUILT DRAWING

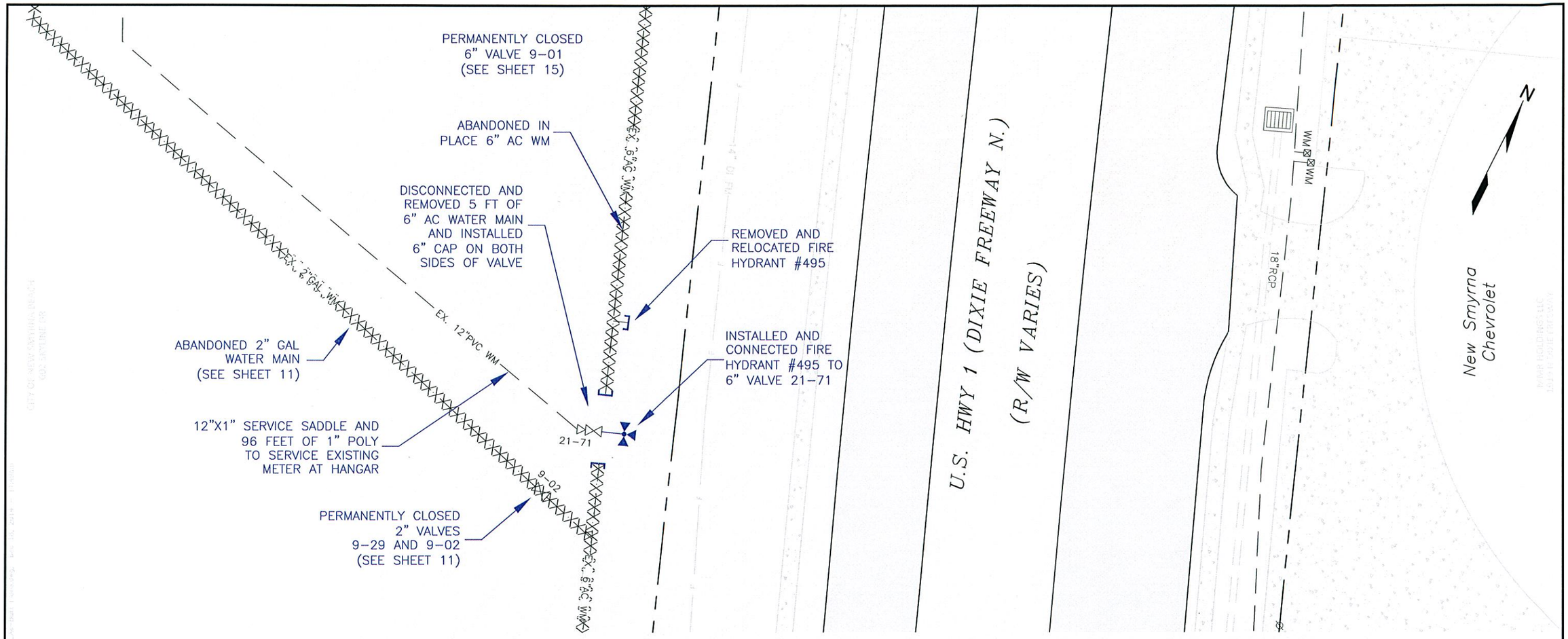
ENRIQUE A. TORRENS, P.E. #33379
NOT VALID FOR CONSTRUCTION UNLESS ORIGINALLY SIGNED AND SEALED

REV.	DATE:	BY:	REASONS
4			

UTILITIES COMMISSION
CITY OF
NEW SMYRNA BEACH, FLORIDA

NSB COMMERCIAL HANGER
12" WATER MAIN EXTENSION
STANDARD DETAILS

DWN: T. SAXON	SCALE: AS NOTED	SHEET 7 OF 7
CKD: E. TORRENS	DATE: 5/10/02	U.C. PROJECT NO. 01752-05
APP: E. TORRENS	REF:	
CAD FILE: 01110104	ISSUED:	



AS-BUILT
12/18/2014

GRAPHIC SCALE IN FEET

0 10 20 30 45 60

SCALE: 1" = 30'

D. Hale
12/18/2014
DANA N. HALE
DATE

ENGINEERING INFORMATION

ENGINEER OF RECORD: DANA N. HALE
LICENSE NUMBER: 69973
NAME AND ADDRESS OF BUSINESS:
UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH
200 CANAL STREET
NEW SMYRNA BEACH, FLORIDA 32168
CERTIFICATE OF AUTHORIZATION NUMBER: N/A

UTILITIES COMMISSION
CITY OF
NEW SMYRNA BEACH, FLORIDA

SECTION F
NORTH LOOP WATER MAIN IMPROVEMENTS
U.S. 1

DWN: J. SCHWADRON	SCALE: 1"=30'	SHEET 14 OF 18
CKD: D. HALE	DATE: 02/21/2014	
APP: D. WAINSCOTT	REF:	
CAD FILE: 12110315	ISSUED:	

10" 12" 16" WATER LINE
6" " "
2" " "

FIRE HYDRANT

VALVE

REVISIONS		
REV.	DATE	BY
1	7-6-82	TJS

UTILITIES COMMISSION
CITY OF NEW SMYRNA BEACH, FL.

SYSTEM WATER LINE MAPS

SECTION 9

DWN. RLW	SCALE 1"= 200	REV. 0	SH. 12 OF 40
CKD.	REF.		WC-100
APP.			
DATE 1-14-82			

1" 200' 200 scale 0 200 400 feet

Scale 1" = 200'

500' R/W

WATERWAY

INTRACOASTAL

CUNNINGHAM DRIVE

INLET SHORES DRIVE

MB 23 - P56

MARSH

MARSH

AIRPORT

AIRPORT

U.S. HIGHWAY NO. 1

ACCESS STREET

AIRPORT BLVD.

COMMERCIAL SUBDIVISION

MB 25 P63

POLICE STATION

PUBLIC WORKS

INDUSTRIAL PARK AVENUE

HOWARD MB 11 - P150

SMYRNA ESTATES MB11 - P106

PART OF LOT 5

PART OF LOT 6

LOT 3

LOT 4

PAT AVE.

PONCE STREET

OLIVER

SANDY LANE

MB 8 - P245

SMYRNA ESTATES

LANDIS STREET

MATCH LINE

TURNBULL STREET

L.S. No. 16

907 906 905 904 903 928 927 926 925 924 923 922 921 920 908 909 910 911 912 913 914 915 916 917 918 919

22 23 24 25 26 27 28 29 30 32 33 340 471 274 113 317 21

(13) (10)

412

To whom it may concern,

The access roads established decades ago on the east side business park of the New Smyrna Beach Airport are currently hindering growth and development. The highlighted areas are roads that are not included in the future development plans approved by the Federal Aviation Administration (FAA). Vacating these roads would allow our staff to open up land for development, thereby enhancing the $241 million economic impact that the airport provides. This development will also meet the public need for quality space to accommodate corporate aircraft owned by local residents and businesses.

V/R

Jacob Cosat, MBA
New Smyrna Beach Airport
602 Skyline Drive
New Smyrna Beach, FL 32168
P: (386)410-2680
www.nsbairport.com
www.cityofnsb.com

THE CITY OF NEW SMYRNA BEACH - PLANNING DEPARTMENT

A-0008-2025: REVIEW AND GIVE A RECOMMENDATION TO THE CITY COMMISSION ON AN OVERALL ANNEXATION APPLICATION FOR 824 INGHAM ROAD.

September 8, 2025

Background:

Applicants: Matt Stolz and Sydney Kendrick, 10192 Dowden Road, Orlando, Florida 32832.

Property Owner: SOWA Properties, LLC, 208 Canova Road, New Smyrna Beach, Florida 32169.

Request: Voluntary annexation, *Comprehensive Plan* amendment, and rezoning:

- **From:** Volusia County Future Land Use (FLU) category of Urban Low Intensity, and Volusia County zoning designation of MPUDA, Mixed Use Planned Unit Development with an "A" attached for Airport Height Notification Zone.

- **To:** City Future Land Use category of Low Density Residential and City zoning designation of R-2, Single Family Residential with an "A" attached for Airport Height Notification Zone.

Site Information:

- **Size:** 12.88 ± acres

- **Location:** West side of Ingham Road, south of Mission Drive.

Tax I.D. Number: 7419-23-00-0361

Findings:

On April 23, 2013, the City Commission adopted an Interlocal Service Boundary Agreement (ISBA). The ISBA, which is permitted under Chapter 171, Part II, Florida Statutes, allows the City of New Smyrna Beach to annex any parcels that are within the designated annexation area, even if they are not contiguous to the current municipal boundaries. The agreement, which is between the County of Volusia and the City, was also approved by the County on May 2, 2013. A new agreement was approved on May 2,

2022.

The subject property is within the annexation area designated in the ISBA. The subject property at 824 Ingham Road contains a primary structure with accessary structures. A location map is attached as **Exhibit A** and an aerial map is attached as **Exhibit B**.

The existing Volusia County Future Land Use (FLU) category and zoning designation of the subject property is shown on the following maps as **Exhibits C and D**. The text description of the existing Future Land Use category for the subject property is attached as **Exhibit E**. The associated current zoning text description for the subject property is attached as **Exhibit F**. Existing land uses are shown on the map attached as **Exhibit G.**

The established City Commission policy is that when properties are annexed into the City, the City will assign future land use categories and zoning designations that would be as similar as possible to existing County categories and designations. As discussed above, the existing County FLU category is Urban Low Intensity. The existing County zoning designation is MPUDA, Mixed Use Planned Unit Development. The proposed City FLU category is Low Density Residential. The proposed City zoning designation is R-2, Single Family Residential. A text description of the proposed City Low Density Residential Future Land Use category is attached as **Exhibit H,** with a map of this proposed change also attached as **Exhibit I**. A text description of the proposed City R-2, Single Family Residential zoning designation, and a map of the proposed changes are similarly attached as **Exhibits J** and **K**.

This annexation request is within the City's annexation area and within the City's water and sewer service area **(Exhibit L).** The parcel at 824 Ingham Road has an 8-inch PVC water line in the Ingham Road right-of-way, but central sewer and reclaim services would have to be extended. A map of the soil limitations for septic systems is attached as **Exhibit M**.

The *Land Development Regulations* requires any proposed development to conform to the Concurrency Management System. That system includes traffic, parks and recreation, potable water, wastewater treatment, solid waste collection, storm-water management, and public-school facilities. The subject property at 824 Ingham Road is developed with a primary structure and accessary structures no increased allowable density proposed for this property. Therefore, staff did not prepare a concurrency analysis table for this case.

There are numerous *Comprehensive Plan* maps that must be amended to incorporate the subject property into the *Comprehensive Plan* (see **Exhibits N through Z)**. A map showing the subject properties incorporated into Commission Zone 1 is attached as **Exhibit AA**. The ISBA map is attached as **Exhibit BB**. The legal description and Warranty Deed are

attached as **Exhibits CC** and **DD**.

Recommendation:

The Planning Department recommends that the Planning and Zoning Board to give a positive recommendation to the City Commission to **approve** the requested annexation, Small-Scale *Comprehensive Plan* amendment amending the Future Land Use to City Low Density Residential and rezoning to City R-2, Single Family Residential with an "A" attached for Airport Height Notification Zone.

Fiscal Analysis:
N/A

Strategic Plan Item:
Yes

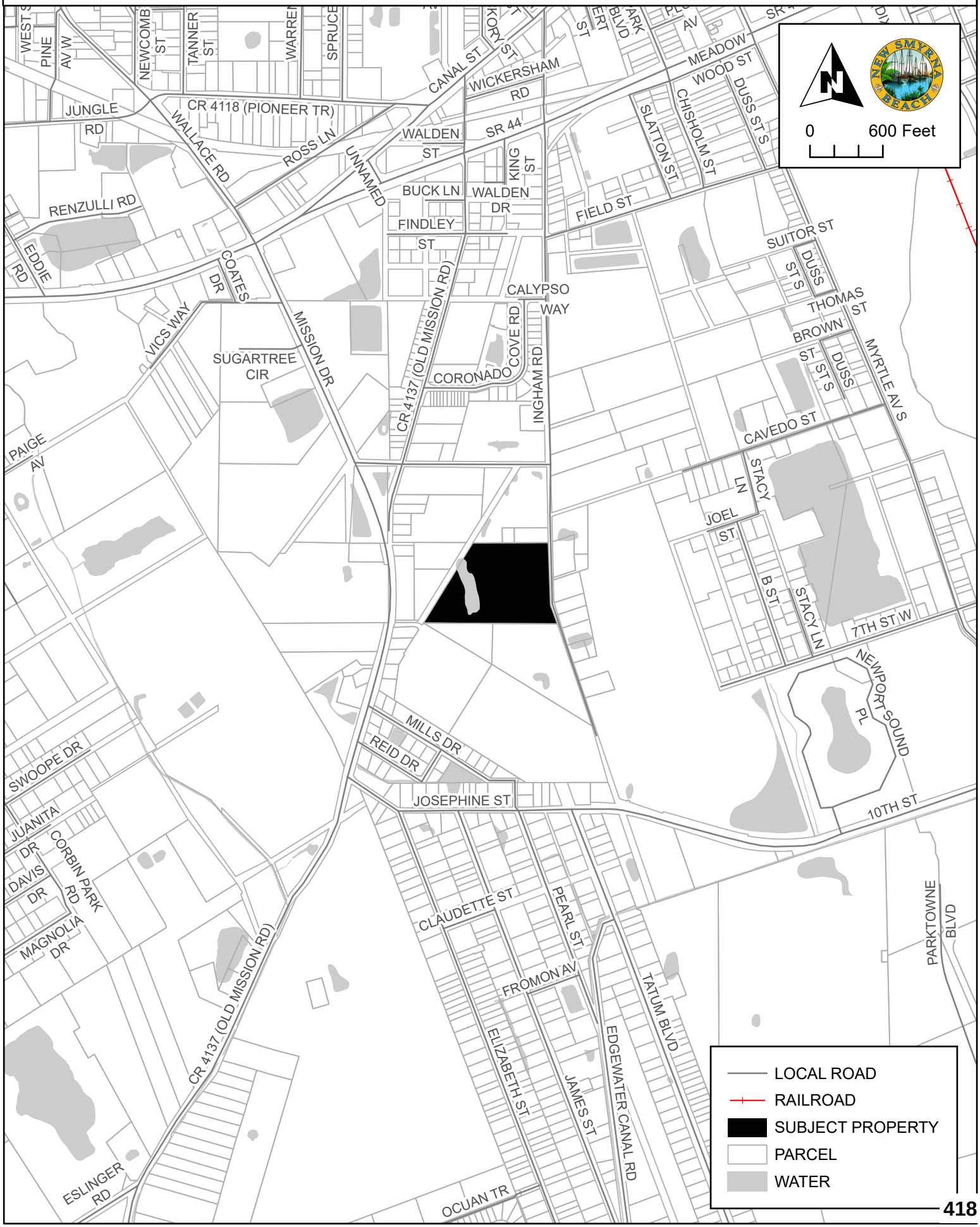
Staff Report Created By: Robert Mathen - Senior Planner

Attachments:

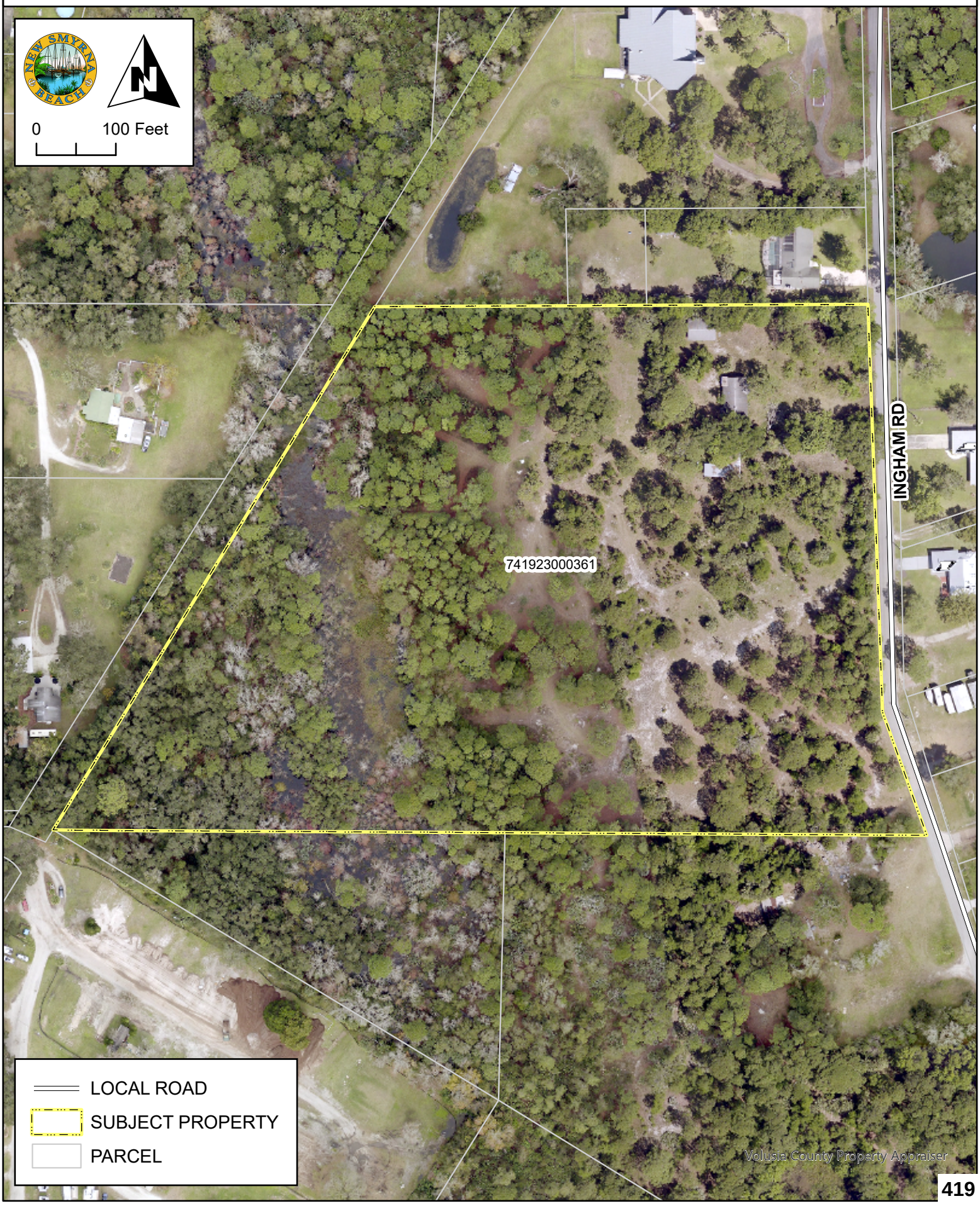
Exhibit A Location Map.pdf
Exhibit B Aerial Map.pdf
Exhibit C Existing FLU Map.pdf
Exhibit D Existing Zoning Map.pdf
Exhibit E County Urban Low Intensity FLU Text.pdf
Exhibit F MPUD Zoning.pdf
Exhibit G Existing Land Use Map.pdf
Exhibit H City Low-Density Residential FLU Text.pdf
Exhibit I Proposed FLU Map.pdf
Exhibit J City R-2 Zoning Text.pdf
Exhibit K Proposed Zoning Map.pdf
Exhibit L Water and Sewer Service Area.pdf
Exhibit M Soil Limitation for Septic Systems.pdf
Exhibit N Airport Runway Protection Zones.pdf
Exhibit O Bicycle and Pedestrian Facilities.pdf
Exhibit P Boat Slip Siting.pdf
Exhibit Q City Parks.pdf
Exhibit R Coastal High Hazard Areas.pdf
Exhibit S Evacuation Routes.pdf
Exhibit T Existing Traffic Lanes - 2009.pdf
Exhibit U Number of Traffic Lanes - 2025.pdf
Exhibit V Existing Level of Service - 2009.pdf
Exhibit W Level of Service - 2025.pdf
Exhibit X Flood Prone Areas.pdf

Exhibit Y Neighborhood Map.pdf
Exhibit Z Public Transit Routes.pdf
Exhibit AA Commission Zones Map.pdf
Exhibit BB Interlocal Service Boundary Agreement Map.pdf
Exhibit CC Legal Description.pdf
Exhibit DD Warranty Deed.pdf

A-8-25: 824 INGHAM ROAD
PARCEL: 7419-23-00-0361 LOCATION MAP

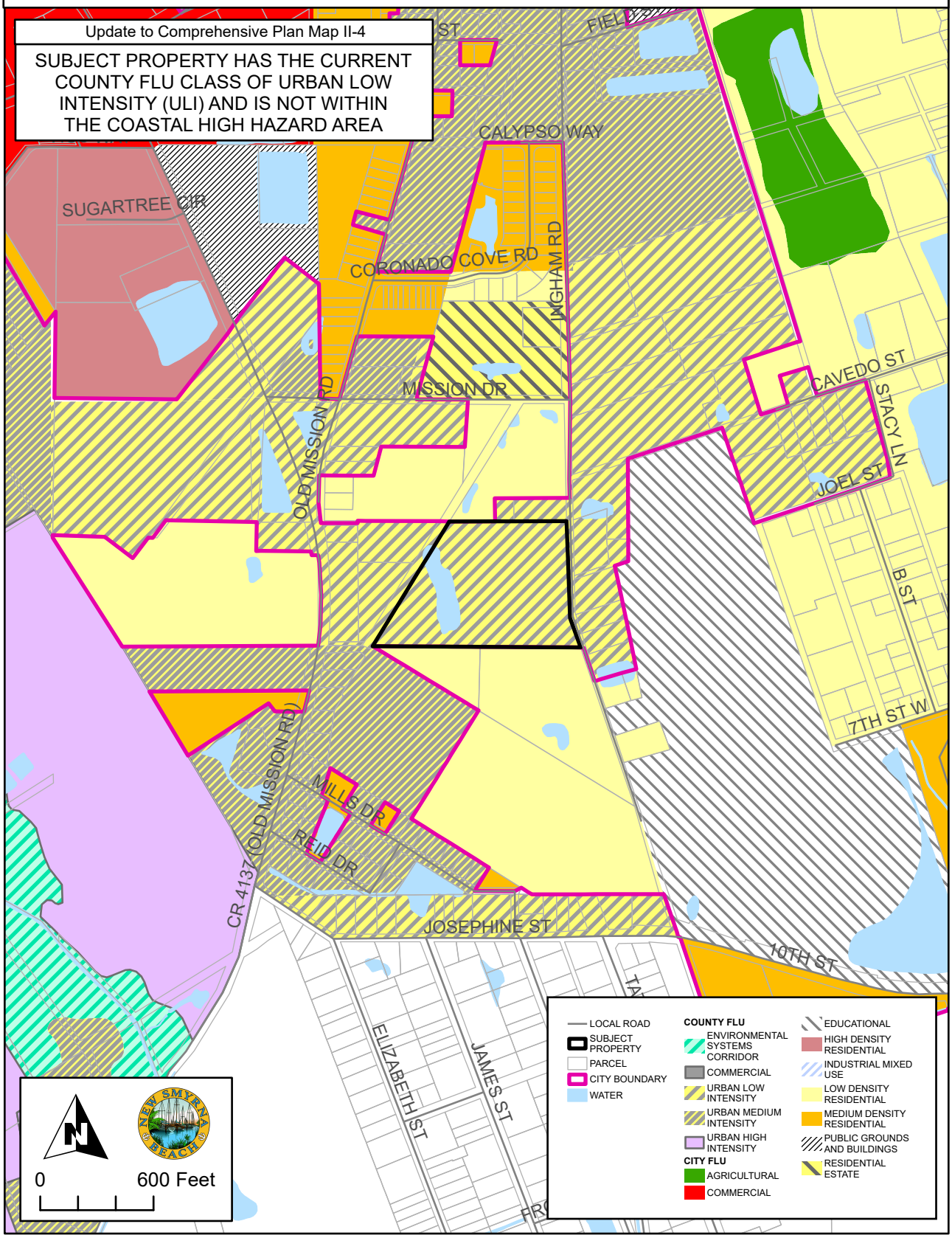


A-8-25: 824 INGHAM ROAD
PARCEL: 7419-23-00-0361 AERIAL MAP



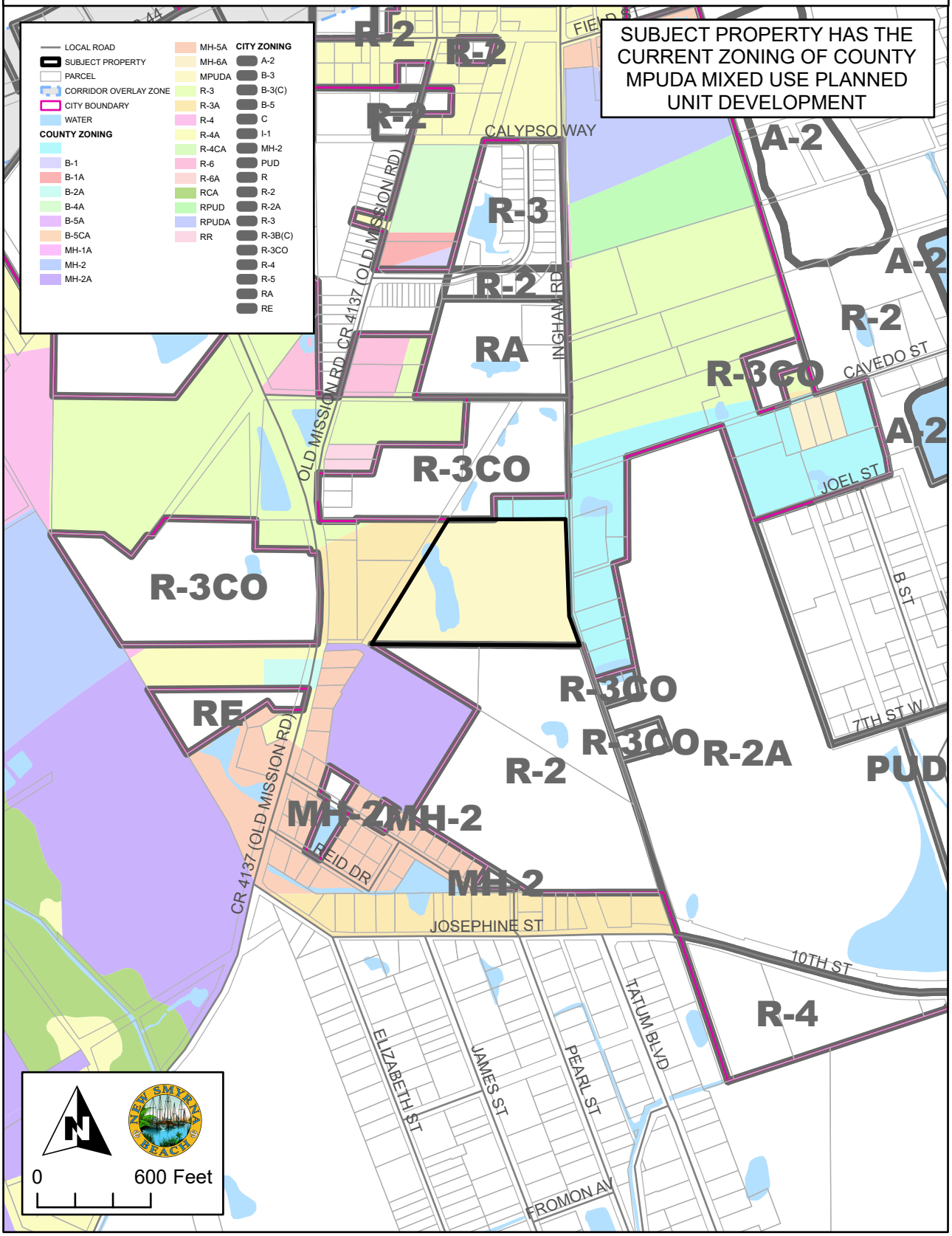
EXISTING FUTURE LAND USE DESIGNATIONS

A-8-25



EXISTING ZONING

A-8-25



Urban Low Intensity (ULI) – Areas for low density residential dwelling units of up to four (4) dwelling units per acre. In reviewing rezoning requests, the specific density will depend on locational factors, particularly compatibility with adjacent uses and availability of public facilities. This residential designation is generally characterized by single family type housing, e.g., single family detached and attached, cluster and zero lot line. This designation will allow existing agricultural zoning and uses to continue.

The ULI designation is primarily a residential designation but may also allow neighborhood convenience uses (see Shopping Center definition in Chapter 20) and individual office buildings as transitional uses that meet the Comprehensive Plan's location criteria. The commercial intensity shall be limited to no more than a fifty percent Floor Area Ratio (0.50 FAR) and in a manner to be compatible with the allowable residential density. In order to be considered compatible, the commercial development should be oriented to serve adjacent neighborhoods, reflect comparable traffic generation, similar traffic patterns, building scale, landscaping and open space and buffers. Due to the nature of some of the commercial uses, additional landscaping and visual screening shall be provided through the BPUD process when adjacent to low density residential in order to preserve the character of the neighborhood. More intensive neighborhood commercial use shall be reserved to areas designated for Commercial.

All requests for nonresidential uses within one-quarter (¼) mile of another jurisdiction shall require notification to that jurisdiction.

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Instrument# 2010-118631 # 1
Book: 6490
Page: 4979

IN THE COUNTY COUNCIL OF THE COUNTY OF VOLUSIA, FLORIDA
IN RE: Application of (PUD-08-034)

FLORIDA BAPTIST CHILDREN'S HOMES, INC.

RESOLUTION # 2008-124
ORDER AND RESOLUTION
GRANTING A REQUEST FOR CHANGE OF ZONING From
R-4
To:
FLORIDA BAPTIST CHILDREN'S HOMES
MIXED USE PLANNED UNIT DEVELOPMENT {MPUD}

The application of FLORIDA BAPTIST CHILDREN'S HOMES, INC. for rezoning was heard by and before the Volusia County Council, Volusia County, Florida, on July 17, 2008. Based upon the verified Application and other supporting documents, maps, charts, overlays, other evidence and instruments; the advice I report, and recommendations of the Growth & Resource Management, Legal Department, and other departments and agencies of Volusia County and the testimony adduced and evidence received at the Public Hearing on this Application by the Planning and Land Development Regulation Commission on June 10, 2008, and otherwise being fully advised, the Volusia County Council does hereby find and determine as follows:

GENERAL FINDINGS

A. That the application of FLORIDA BAPTIST CHILDREN'S HOMES, INC. was duly and properly filed herein on March 28, 2008 as required by law.

B. That all fees and costs which are by law, regulation or Ordinance required to be borne and paid by the applicant have been
paid.

C. That the applicant is the owner of a ±12.7 acre parcel of land which is situated in Volusia County. This parcel of land is described more particularly in the survey and legal description, a true copy of which is attached hereto as Exhibit "A".

D. That the Applicant has held a pre-application meeting as required by the Volusia County Zoning Ordinance No. 80-8, as amended.

E. That the Applicant has complied with the "Due Public Notice" requirements of the Volusia County Zoning Ordinance No. 80-8, as amended.

F. That the owner of the property, FLORIDA BAPTIST CHILDREN'S HOMES, INC., agrees with the provisions of the Development Agreement.

FINDINGS REGARDING REZONING

A. That the Applicant has applied for a change of zoning from the present zoning classification of the parcel described in Exhibit "A" from R-4 to Mixed Use Planned Unit Development (MPUD).

B. That the said rezoning to a MPUD is consistent with both the Volusia County Comprehensive Plan, Ordinance No. 90-10, as amended, and the intent and purpose of the Volusia County Zoning ordinance No. 80-8, as amended, and does promote the public health, safety, morals, general welfare and orderly growth of the area affected by the rezoning request.

NOW, THEREFORE, BE IT RESOLVED AND ORDERED BY THE COUNTY COUNCIL OF VOLUSIA COUNTY, FLORIDA, IN OPEN MEETING DULY ASSEMBLED IN THE THOMAS C. KELLY ADMINISTRATION CENTER, COUNTY COUNCIL MEETING ROOM, DELAND, FLORIDA, THIS 17TH DAY OF JULY, A.D., 2008, AS FOLLOWS:

A. That the Application for FLORIDA BAPTIST CHILDREN'S HOMES, INC. for the rezoning of the subject parcel is hereby granted.

B. That the zoning classification of the subject parcel described in Exhibit "A" attached hereto is hereby amended from R-4 to MPUD as described in Article VII of the Volusia County Zoning Ordinance No. 80-8, as amended.

C. That the Official Zoning Map of Volusia County is hereby amended to show the rezoning of said parcel to FLORIDA BAPTIST CHILDREN'S HOMES, INC. MPUD.

D. That Volusia County Zoning Ordinance No. 80-8, as amended, is consistent with the provisions of the "Development Agreement" as hereinafter set forth in this Order and Resolution and with respect to any conflict between Ordinance No. 80-8, as amended, and the "Development Agreement", the provisions of the "Development Agreement", shall govern. Ordinance No. 80-8, as amended, shall govern with respect to any matter not covered by the "Development Agreement". The Volusia County zoning Enforcement Official will ensure overall compliance with this Order and Resolution.

E. Unless otherwise provided for herein, Article VIII, Supplementary Regulations of Volusia County Zoning Ordinance No. 80-8, as amended, shall apply to the MPUD in the same manner as the R-4 zoning classification.

F. Nothing in this Order and Resolution shall abridge the requirements of any Volusia County Ordinance other than Zoning Ordinance 80-8, as amended. Timing and review procedures contained in this Order and Resolution may be modified to comply with the Volusia County Land Development Code, Ordinance No. 88-3, as amended. Further, nothing in the Development Agreement is intended to abridge the requirements of Ordinance No. 88-3, as amended, and any other County Ordinances.

DEVELOPMENT AGREEMENT

A. **Development Concept.** The property shall be developed as a Group home MPUD with three (3) residential units subject to Final Site Plan review. The Master Development Plan shall govern the development of the property as an MPUD and shall regulate the future land use of this parcel.

1. **Master Development Plan.** The Master Development Plan shall consist of the Preliminary plan prepared by Daniel Johns, P.E. dated May 18, 2009 and this development agreement. The Preliminary Plan is hereby approved and incorporated in this Order and Resolution by reference as Exhibit "B". The Master Development Plan shall be filed and retained for public inspection in the Growth & Resource Management Department and it shall constitute a supplement to the Official Zoning Map of Volusia County.

2. **Amendments.** All amendments of the Master Development Plan, other than those deemed by the Zoning Enforcement Official to be minor amendments as set out by Section 813.06 of Ordinance No. 80- 8, as amended, shall require the review and recommendation of the Planning and Land Development Regulation Commission and action by the Volusia County Council in the same manner as a rezoning of the parcel.

3. **Final Site Plan Approval.** After the Master Development Plan is recorded, and prior to issuance of any permits for new construction, including clearing and landfill, a Final Site plan shall be prepared and submitted for review and approval in the manner required by Article III of the Volusia County Land Development Code, Ordinance No. 88-3, as amended. Subject property shall be maintained as a single unified parcel.

B. **Unified Ownership.** The Applicant or his successors shall maintain unified ownership of the subject parcel until after issuance of the Final Site Plan Development Order.

C. **Phases of Development.** The phasing of development is as set forth on Exhibit B under the "SITE DATA". The project will be developed in four (4) phases. The timing of each phase will be finalized during the development review stage.

D. **Land Uses Within the MPUD.** All new development on the parcel shall be consistent with the uses prescribed for each area within the proposed MPUD. The location and size of said land use areas are shown on the Preliminary Plan, Exhibit "B". The following land uses shall be allowed as permitted principal uses and structures along with their customary accessory uses and structures:

Children's Home campus to include a service center with office space for administration, development and counseling, and indoor recreation, three (3) group homes accommodating no more than ten (10) children and two (2) house parents in each house, outdoor recreation facilities to include horse boarding and stables for residents only.

E. **Development Standards.**

1) Parking areas shall be screened from Ingham Road and meet the requirements of Section 810.00, of the Zoning Ordinance 80-8, as amended, and Article IV of the Land Development Code. Parking area for the proposed service center will be located behind this building to screen it from Ingham Road.

2) Perimeter Landscape Buffer shall be a minimum of fifteen (15) feet in width and include the following:

(a) A minimum of six (6) understory trees planted every one hundred (100) linear feet or fraction thereof. The understory trees may be planted at regular intervals to provide a visual/noise screen for adjacent properties.

(b) The landscape buffer must have sufficient plants and must be of sufficient density to provide one hundred percent (100%) opacity to a height of six (6) feet within three (3) years.

(c) If a decorative wall or fence is used for screening, it shall be six (6) feet high. When a masonry or wood wall is used, at lease one (1) shrub or vine shall be planted abutting the wall for each ten (10) feet but not necessarily evenly spaced ten (10) feet apart.

(d) Landscape buffer along sides and rear property line shall consist of existing natural vegetation and be maintained in compliance with Section 808.06 of the Zoning Ordinance 80-8, as amended.

(e) Any existing native vegetation on the property along the perimeter shall not be removed or cleared.

3) Minimum Building Setbacks. (Existing accessory garage building shall be treated as conforming, but shall not be permitted to encroach into setbacks any further than they presently do).

Front Yard setback:

Ingham Road: 50'

Side Yard setback: 50'

Rear Yard Setback: 50'

Outdoor recreational facilities shall not be lighted with stadium lighting unless located 100 feet or more from any perimeter boundary line or open public road. Lighting for parking and security is permitted but limited to a height of 15 ft. and shall be shielded to deflect lights away from adjacent properties. The conversion of single family dwellings into other uses (i.e. group home) will require site plan review, approval and building permits. The Children's Homes will obtain the necessary building permits for the change of use for the structure.

F. **Signage.** One wall signs on each building which may state the name of the building, not to exceed 8 sq. ft. One ground monument sign 8 feet in height (including base) and not more than 16 square feet of copy area will be allowed.

G. **Offstreet Parking.** Except for overflow parking, shall comply with Sections 808.03 through 808.08 and 810.00 of the Zoning Ordinance and Article IV of the Land Development Code.

H. **Environmental Considerations.** The minimum requirements of the Land Development Code Ordinance No. 88-3, as amended shall be met for new construction. No wetlands are proposed to be impacted. Wetlands will be located prior to any

construction in the vicinity. A minimum 3.8 acre tree preservation area shall be set aside in the southwesterly portion ad shown on Exhibit "B". the wetland and tree preservation areas shall be encumbered with a conservation easement.

I. **Sewage Disposal and Potable Water.** For all new construction, provision for sewage disposal and potable water needs of the MPUD will be provided in accordance with the Comprehensive Plan, Ordinance No. 90-10, as amended, the Land Development Code Ordinance No. 88-3, as amended, and State of Florida Administrative Code 64-6E and 64-8E. Sewage disposal is presently provided by a septic tank and the potable water needs are provided by The Utilities Commission of New Smyrna Beach. Applicant shall connect to full central utilities when they are determined available by the Health Department or the Utilities Commission.

J. **Stormwater Drainage.** As to any new construction, provision for stormwater retention shall be in accordance with the Land Development Code, Article VIII, Ordinance No. 88-3, as amended.

K. **All New Access and Transportation System Improvements.** All new access and transportation system improvements shall be provided in accordance with the Land Development Code, as amended. The parcel shall be developed in substantial accordance with the following access and transportation system improvements:

1. Access. As shown on Exhibit B will be from Ingham Road.

2. Transportation System Improvements. In conjunction with new development on-site, road improvements required as a result of the new development shall comply with the Land Development Code 88-3, as amended.

L. **Internal Roadways.** It is not contemplated that any part of the internal roadway system will be dedicated to the County, but that they shall remain private.

M. **Other.**

1. The applicant shall protect any historic trees on the subject site in compliance with the Land Development Code.

N. **Binding Effect of Plans; Recording; and Effective Date.** The Master Development Plan, including any and all Supplementary orders and resolutions, and the Preliminary Plan shall bind and inure to the benefit of the Applicant and his successor in title or interest. The MPUD zoning, provisions of the "Development Agreement," and all approved plans shall run with the land and shall be administered in a manner consistent with Article IX of the Volusia County Zoning Ordinance No. 80-8, as amended. This Order and Resolution and all subsequent Orders and Resolutions shall be filed with the Clerk of the Court and recorded within ninety (90) days following execution of the document by the Volusia County Council, in the Official Records of Volusia County, Florida. One copy of the document, bearing the book and page number of the Official Record in which the document was recorded, shall be submitted to the Growth Management Services Group. The date of receipt of this document by the Growth Management Services Group shall constitute the effective date of the MPUD or its subsequent amendments. The applicant shall pay all filing costs for recording documents.

O. **Conceptual Approval.** The parties hereto acknowledge that reductions in density and/or intensity may and do occur; and that minor changes to roadway design, location and size of structures, actual location of parking spaces, specific locations for land uses, and locations and design of stormwater storage, landscape buffers and upland buffers may result to comply with the Volusia County Land Development Code Ordinance No. 88-3, as amended. Upon determination of the Zoning Enforcement Official, these revisions may be processed as minor amendments as set forth in Section 813.06 of the Volusia County Zoning Ordinance No. 80-8, as amended. The Applicant agrees to revise and record the Revised Preliminary Plan which reflects any such changes with the Clerk of the Court immediately following the expiration of the 30 day period for appealing Development Review Committee (DRC) decisions to the County Council. A copy of the Revised Preliminary Plan, bearing the book and Page number of the Official Record in

which the document was recorded, shall be submitted to the Growth Management Services Group.

P. **Expiration of PUD.** Within five (5) years from the effective date of this Order and Resolution, the applicant shall have submitted a final site plan as described in Section A, 3. of this "Development Agreement". In the event that the final site plan is not submitted on or before the date indicated, this agreement shall expire unless the Zoning Enforcement Official, for good cause shown, shall approve a minor amendment to extend the time period indicated in this paragraph.

DONE and ORDERED by the County Council of Volusia County, Florida this 17TH day of JULY, 2008.

ATTEST:

James T. Dinneen
County Manager/Clerk

VOLUSIA COUNTY COUNCIL

Frank T. Bruno, Jr.
County Chair

STATE OF FLORIDA
COUNTY OF VOLUSIA

The foregoing instrument was acknowledged before me this 22 day of MARCH 2010 (mo/yr), by James T. Dinneen and Frank T. Bruno, Jr, as County Manager and County Chair, Volusia County Council, respectively, on behalf of the County of Volusia, and who are personally known to me.

NOTARY PUBLIC, STATE OF FLORIDA
Type or Print Name:

MARCY A. ZIMMERMAN
Notary Public - State of Florida
My Comm. Expires Feb 9, 2014
Commission # DD 946952
Bonded Through National Notary Assn.

Commission No.:

My Commission Expires:

WITNESSES:

6-29-10

~~Dr Jerry HAAG, Pres~~ ~~Doug Mason~~
Florida Baptist Children's Homes, Inc.

The foregoing instrument was acknowledged before me this 29 day of June, 2010 (mo/yr), by Dr. Jerry Haag, _____, who is personally known ~~to me~~ ~~or who has produced~~ N/A as identification.

Tracey Greene
NOTARY PUBLIC, STATE OF FLORIDA
Type or Print Name:
Tracey Greene
Commission No.: DD962157
My Commission Expires: May 8, 2014

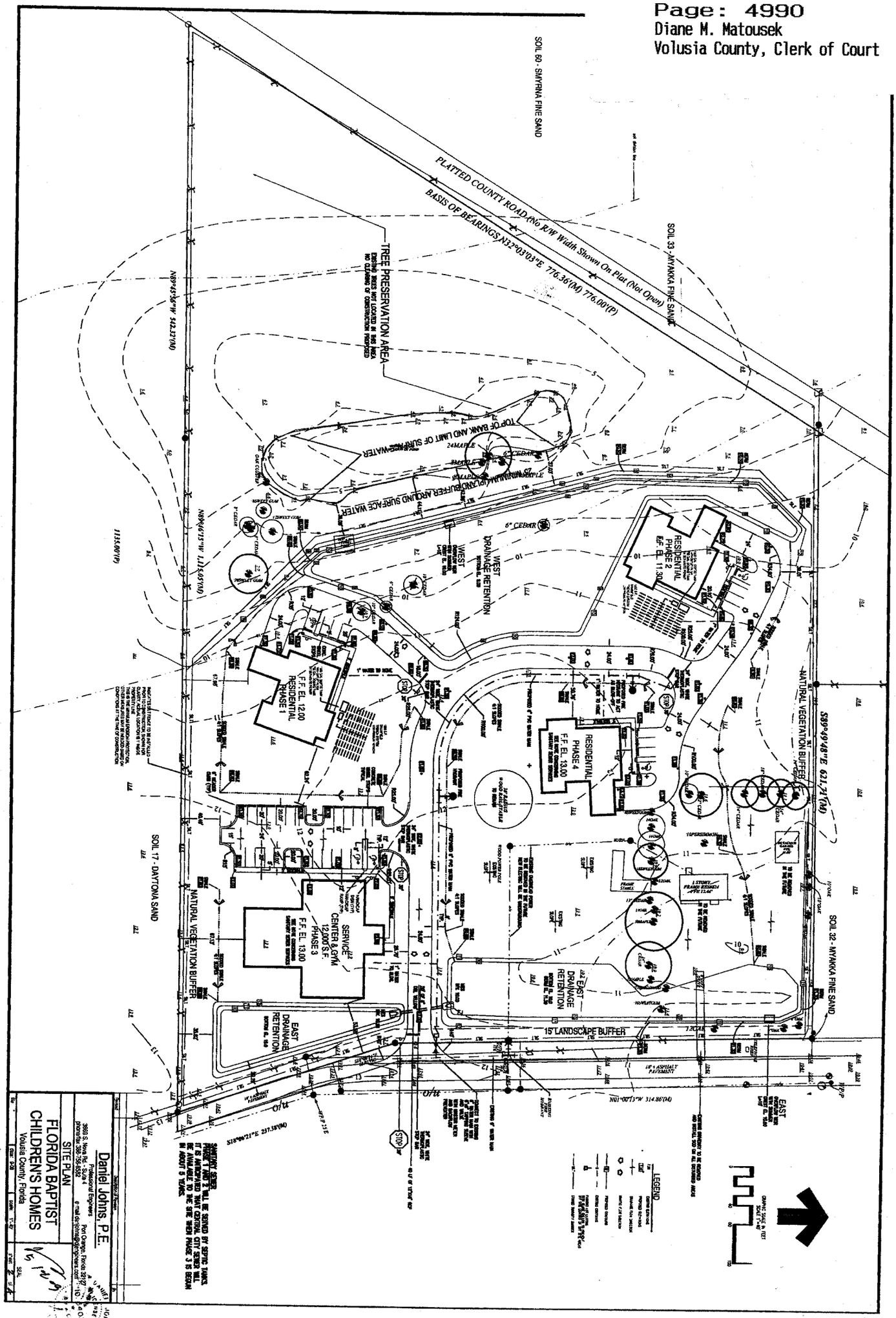
NOTARY PUBLIC STATE OF FLORIDA
TRACEY GREENE
MY COMMISSION # DD 962157
EXPIRES: May 8, 2014
Bonded Thru Budget Notary Services

Instrument# 2010-118631 # 11
Book: 6490
Page: 4989

Exhibit A

LEGAL DESCRIPTION: PARCEL 1:
Lot 36, MODEL LAND COMPANY SUBDIVISION, according to the map or plat thereof as recorded in Plat Book 4, Page(s) 9, Public Records of Volusia County, Florida, LESS AND EXCEPT the following:
Begin at the intersection of the North line of said Lot 36, with the West line of Ingham Road; thence Southerly and along the West line of Ingham Road, 165 feet; thence Westerly and parallel to said North line of said Lot 36, a distance of 264 feet; thence Northerly and parallel to the aforesaid road, 165 feet to the North line of said Lot 36; thence Easterly along said North line, 264 feet to the Point of Beginning.
PARCEL 2: A parcel of land in Lot 36, MODEL LAND COMPANY SUBDIVISION, according to the map or plat thereof as recorded in Plat Book 4, Page(s) 9, Public Records of Volusia County, Florida, described as follows: Begin at the intersection of the North line of said Lot 36, with the West line of Ingham Road; thence Southerly and along the West line of Ingham Road, 165 feet; thence Westerly and parallel to said North line of said Lot 36, a distance of 264 feet; thence Northerly and parallel to the aforesaid road, 165 feet to the North line of said Lot 36; thence Easterly along said North line, 264 feet to the Point of Beginning.

Instrument# 2010-118631 # 12
Book: 6490
Page: 4990
Diane M. Matousek
Volusia County, Clerk of Court



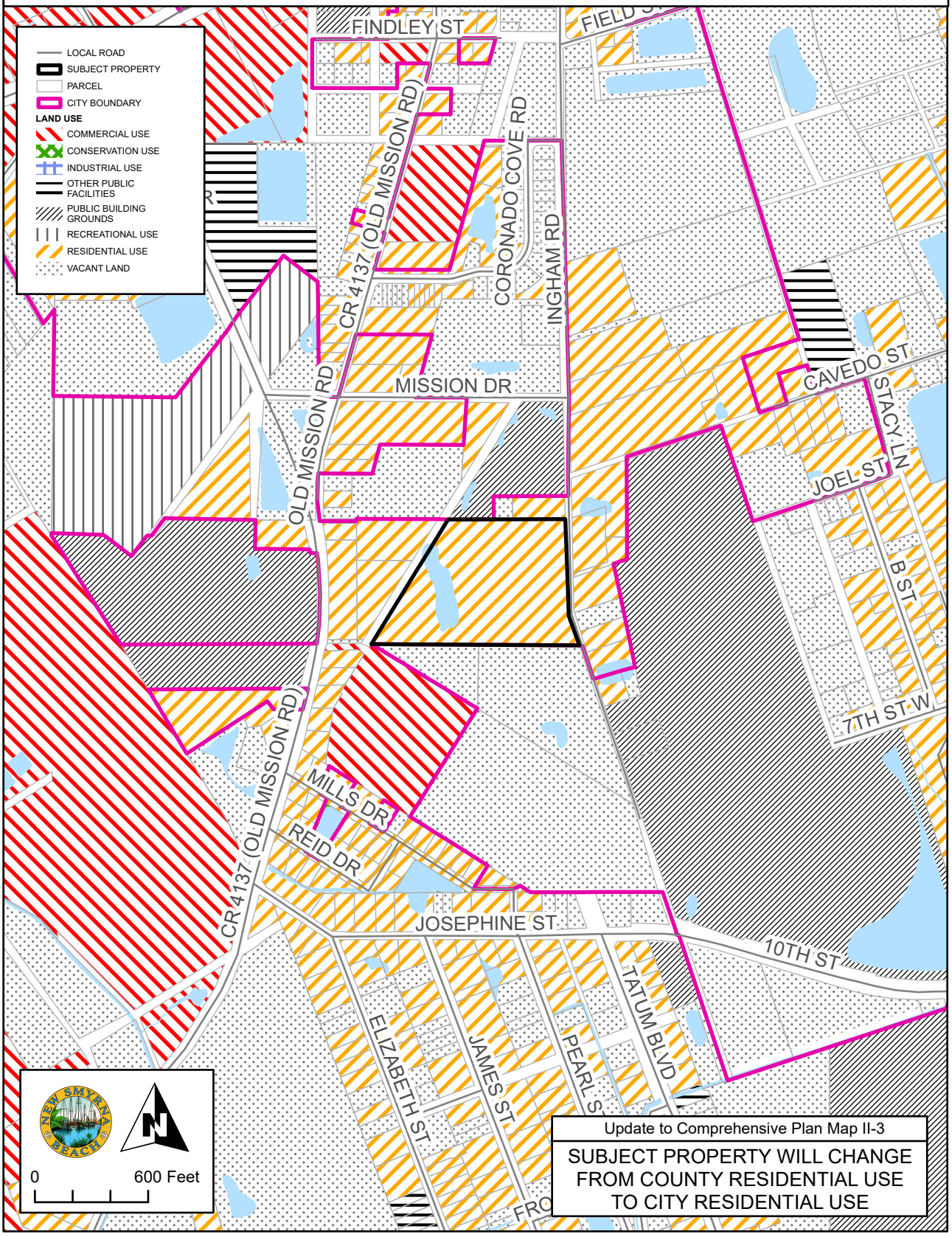
SANITARY SEWER
PHASE 1 AND 2 WILL BE SERVED BY SEPTIC TANKS.
IT IS ANTICIPATED THAT CENTRAL CITY SEWER WILL BE AVAILABLE TO THE SITE WHEN PHASE 3 IS BEGUN IN ABOUT 5 YEARS.

Daniel Johns, P.E.
Professional Engineers
3693 S. Nova Rd. - Suite 4
Port Orange, Florida 32127
phone/fax 386-756-5552
e-mail drjohns@drjengineers.com

SITE PLAN
FLORIDA BAPTIST CHILDREN'S HOMES
Volusia County, Florida

EXISTING LAND USE DESIGNATIONS

A-8-25



FUTURE LAND USE

LOW-DENSITY RESIDENTIAL

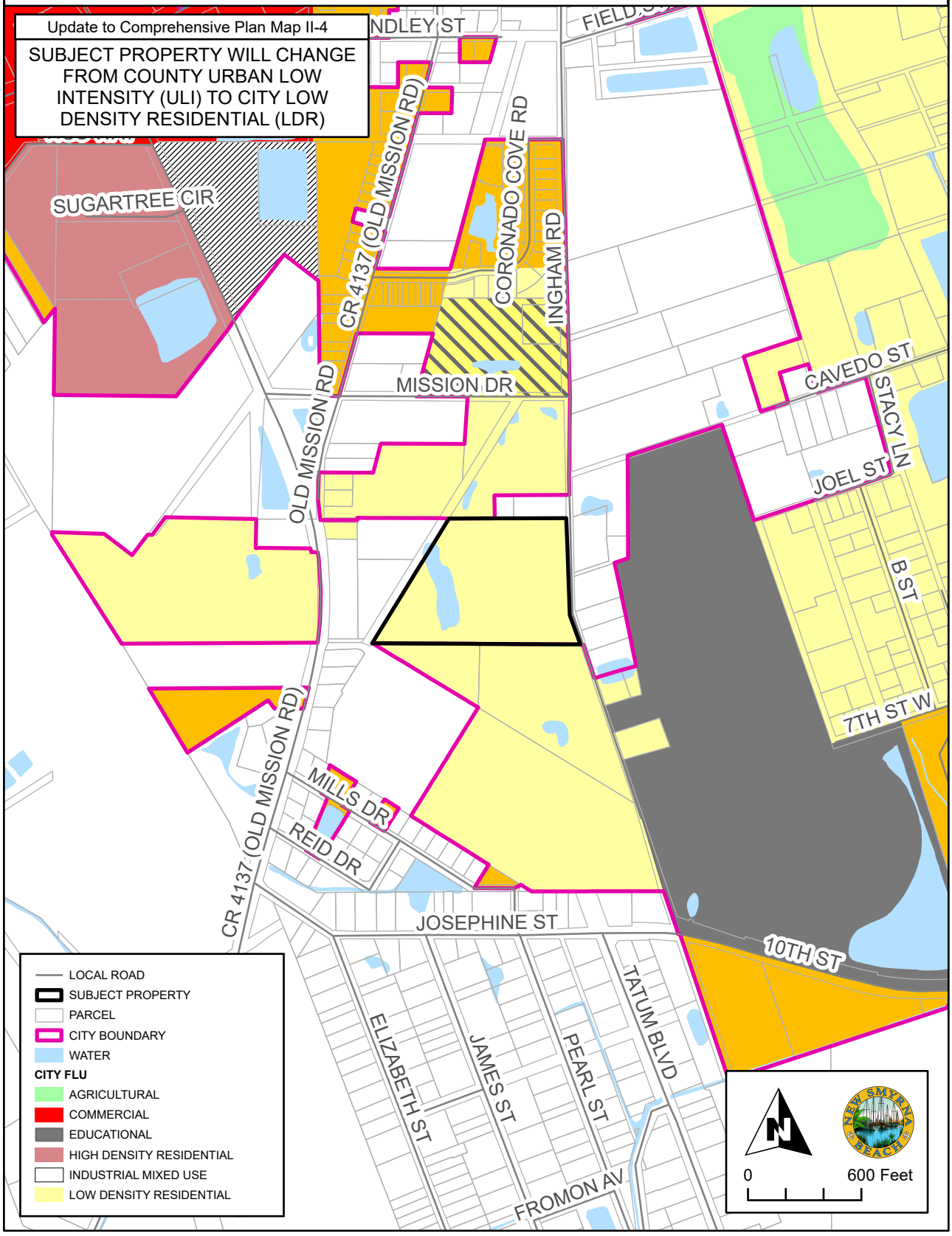
Maximum allowed density: Up to five [5] dwelling units per acre

Non-residential development permitted by special exception shall be at a maximum Floor Area Ratio (FAR) of 0.5.

Intent:
This use is appropriate where a more suburban development pattern exists or is desired and where urban services are to be kept to a minimum.

PROPOSED FUTURE LAND USE DESIGNATIONS

A-8-25



R-2 SINGLE FAMILY RESIDENTIAL DISTRICT

Intent:

The R-2 district is intended to be a single-family residential district for low population densities. Existing development and usage has resulted which is being preserved in order to stabilize the neighborhood. The nature of the residential use of the property throughout the district will enhance the prospects for orderly future residential development.

Permitted Uses:

Playfields
Playgrounds
Public Parks
Recreation Buildings and Complexes for exclusive use by residents and guests in a residential development
Single Family Dwelling Units

Permitted Accessory Uses:

Garages
Gazebos
Incidental Uses
Permitted Home Occupations
Storage Sheds
Swimming pools, private, provided a principal structure exists and the pool is located behind the front plane of the principal structure. Corner lots will be considered to have two front planes, one on each street. If a structure is not constructed squarely on a parcel, the swimming pool must be located at or behind the most restrictive front plane of the principal structure. **Ord. #30-10**
Open Front Porches, up to 10 feet into the front yard setback, subject to the following conditions:
Open Front Porch shall not be enclosed in any manner,
Open Front Porch must be open wall construction without screen,
Open Front Porch shall have a similar roofing material as the primary structure,
Open Front Porch front building line shall be measured from the vertical support column. **Ord. #75-16**

Uses customarily associated with the permitted principal uses

Special Exceptions:

Child day care on a house of worship property, subject to the following additional conditions:

1. The house of worship property shall be located on and be accessible by an arterial or collector roadway.

2. Play areas shall be fenced and landscaped. The landscaping shall have a vegetative hedge that will reach six feet in height within two years that is planted a minimum of three feet on center.

3. Play areas shall be located within all applicable setback dimensions.

4. The house of worship property shall have a vehicular drop off and pickup area with a minimum 100 feet of drive lane outside of the public right-of-way, or sufficient parking area to provide enough space to fit the required parking and provided space for drop off and pick up. **Ord. #04-00**

Facilities owned and/or operated by federal, state, county or municipal government except country clubs and golf courses

Schools and or a house of worship provided all structures are located at least thirty-five (35) feet from all side or rear property lines and off-street parking areas abutting residential property are screened by a buffer meeting the requirements of this LDR. **[Revised 3/27/00]**

Dimensional Requirements:

Minimum Lot Size:

Area	8,625 square feet
Depth	115 feet
Width	75 feet

Minimum Yard Size:

Front yard	30 feet or as required per Section 504.01(M) of this LDR
Rear yard	7.5 feet
Side yard	7.5 feet

Maximum Building Coverage:

The total area covered with buildings on any lot shall not exceed 40% of the total lot area. **Ord. #78-98**

Screen Enclosures:

As an exception to the maximum building coverage provision any parcel may be allowed an additional ten percent (10%) building coverage for only a screen pool enclosure if the following conditions are met:

1. A screen pool enclosure shall only cover the swimming pool and surrounding pool deck and shall have a roof and walls consisting entirely of screening; and
2. There shall be no variances granted to exceed the maximum building coverage or additional coverage allowed for screen enclosures.

Ord. #05-09

Maximum Impervious Lot Coverage:

The total area of the lot that may be covered with impervious material is sixty (60) percent.

Maximum Principal Building Height:

Thirty-five (35) feet.
Three (3) stories.

Minimum Floor Area Requirements:

750 square feet of livable area for one and two-bedroom dwelling units; 1200 square feet of livable area for a three-bedroom dwelling unit; and 1300 square feet livable area for a four-bedroom dwelling unit. **[Revised 7-1-03]**

Corner Lots:

(1) Parcels which front on two streets shall provide a thirty (30) foot front yard on one street frontage and a 15 foot half depth front yard on the other street, or as required per Section 504.01(M) of this LDR.

(2) Parcels fronting on three streets shall provide two thirty (30) foot front yards and a 15 foot half depth front yard on the remaining street or as required per Section 504.01(M) of this LDR. **Ord. #23-00**

Driveway Access

The minimum driveway length shall be 20 feet (excluding portion of a driveway within the public right-of-way). **Ord. #23-00**

Through Lots:

Through lots shall provide a 30-foot front yard on each street, or as required per Section 504.01(M) of this LDR.

Atypical Lots:

Visibility triangles shall be established at the rear corners of an atypical lot. The visibility triangles shall be those areas formed by a line connecting the points 30 feet from the intersection of the side and rear lot line along the side lot line and 30 feet from the intersection of the side and rear lot line along the rear lot line; no principal or accessory

structure having a height over 4 feet, except for incidental uses, shall protrude into the area of a visibility triangle.

Building Projections:

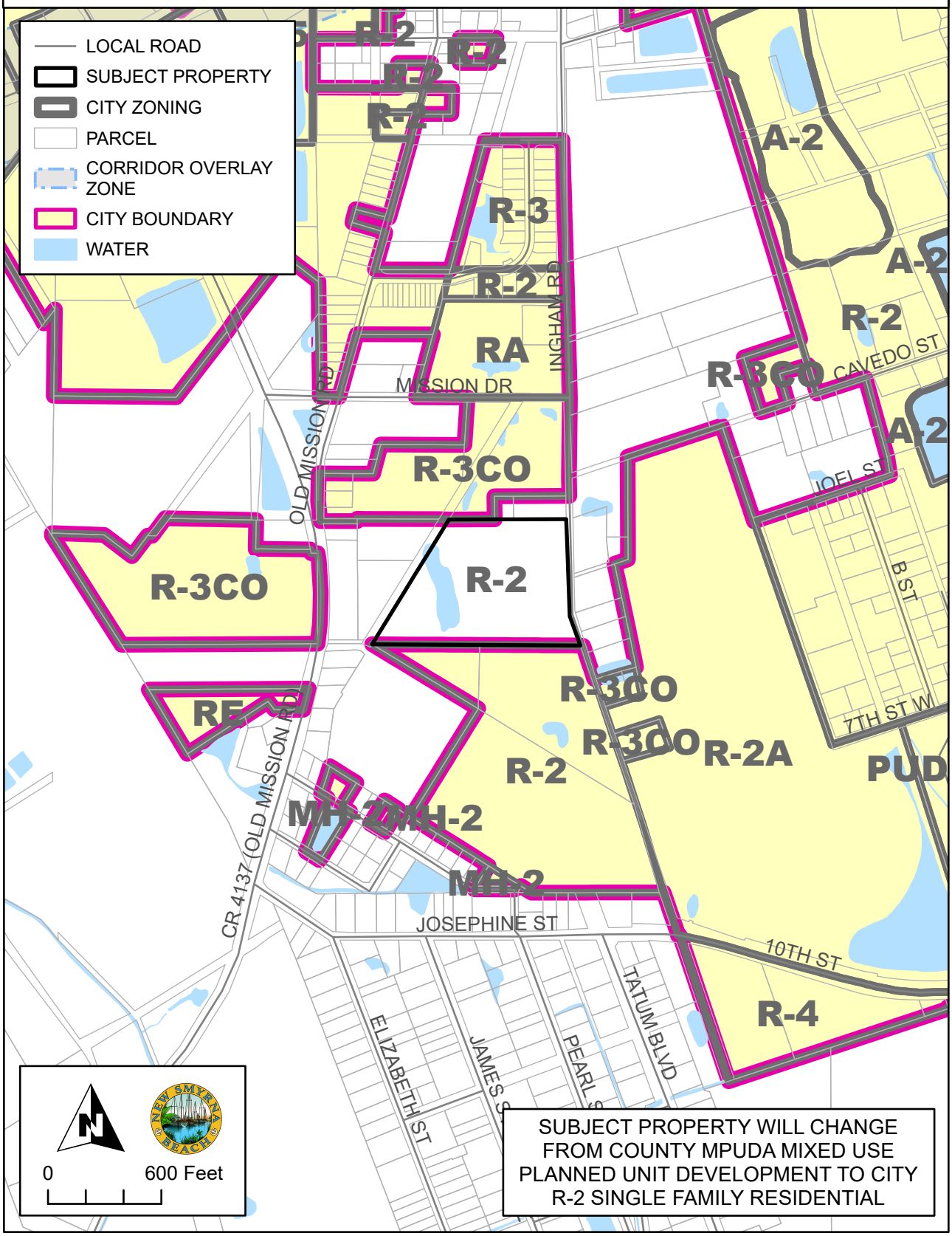
There shall be no building projections into any required yard except for eaves with a maximum projection of 42 inches, but no closer than 5 feet to a property line; and those structures allowed in Section 804.03.

Visibility at Intersections:

Visibility at intersections shall be provided as required in this LDR. **[Revised 12-18-92]**

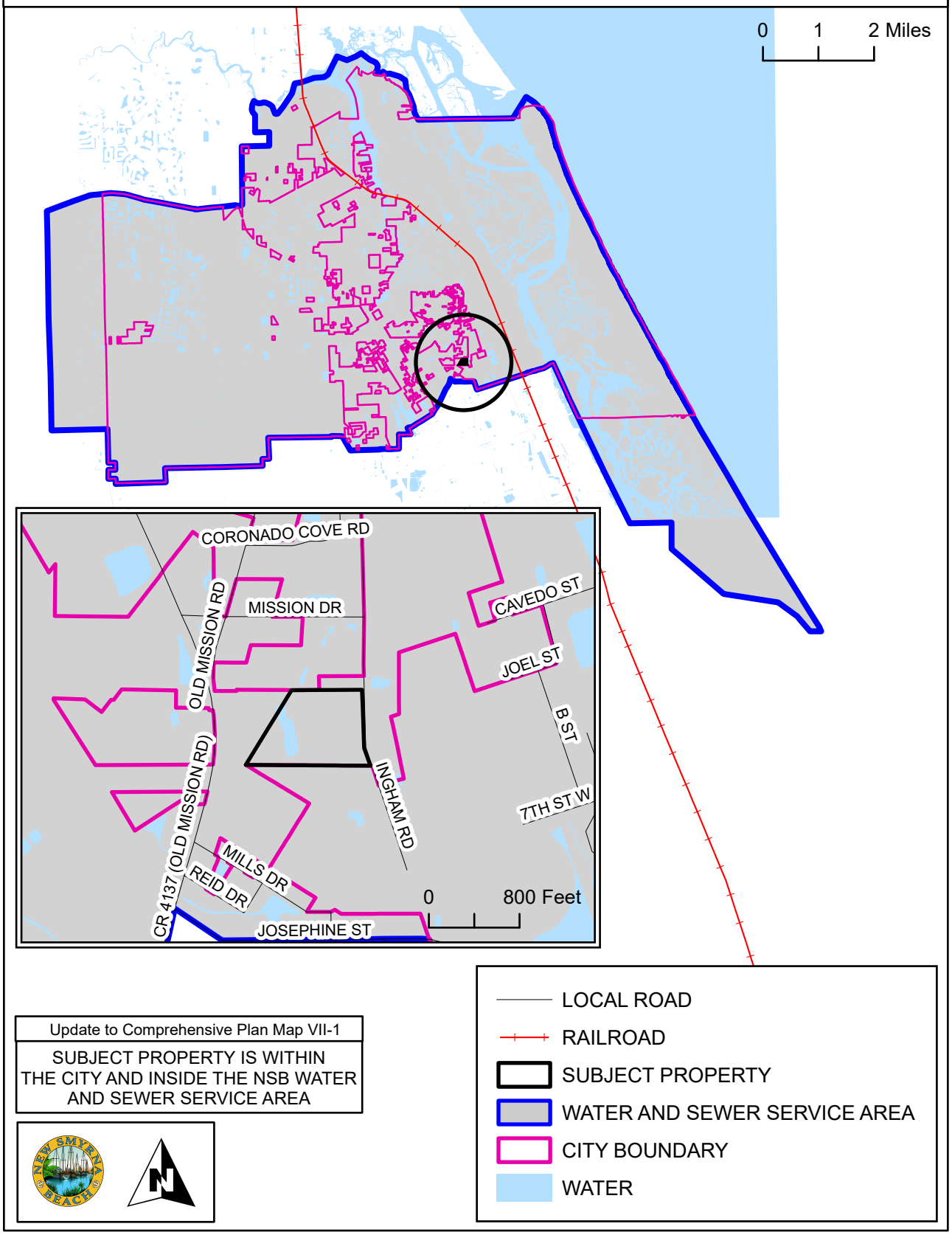
PROPOSED ZONING

A-8-25



WATER AND SEWER SERVICE AREA

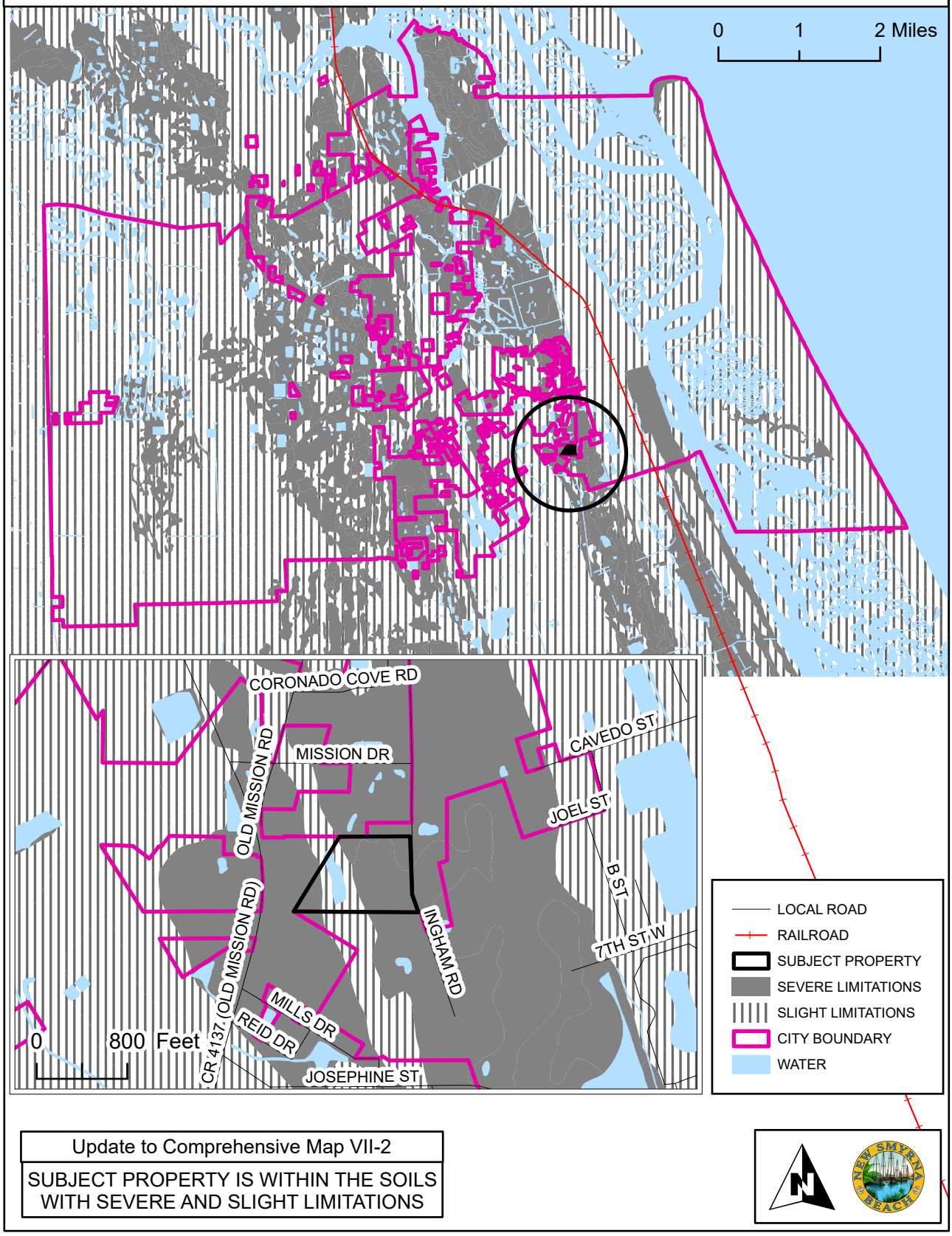
A-8-25



Update to Comprehensive Plan Map VII-1
SUBJECT PROPERTY IS WITHIN THE CITY AND INSIDE THE NSB WATER AND SEWER SERVICE AREA

SOIL LIMITATION FOR SEPTIC SYSTEMS

A-8-25

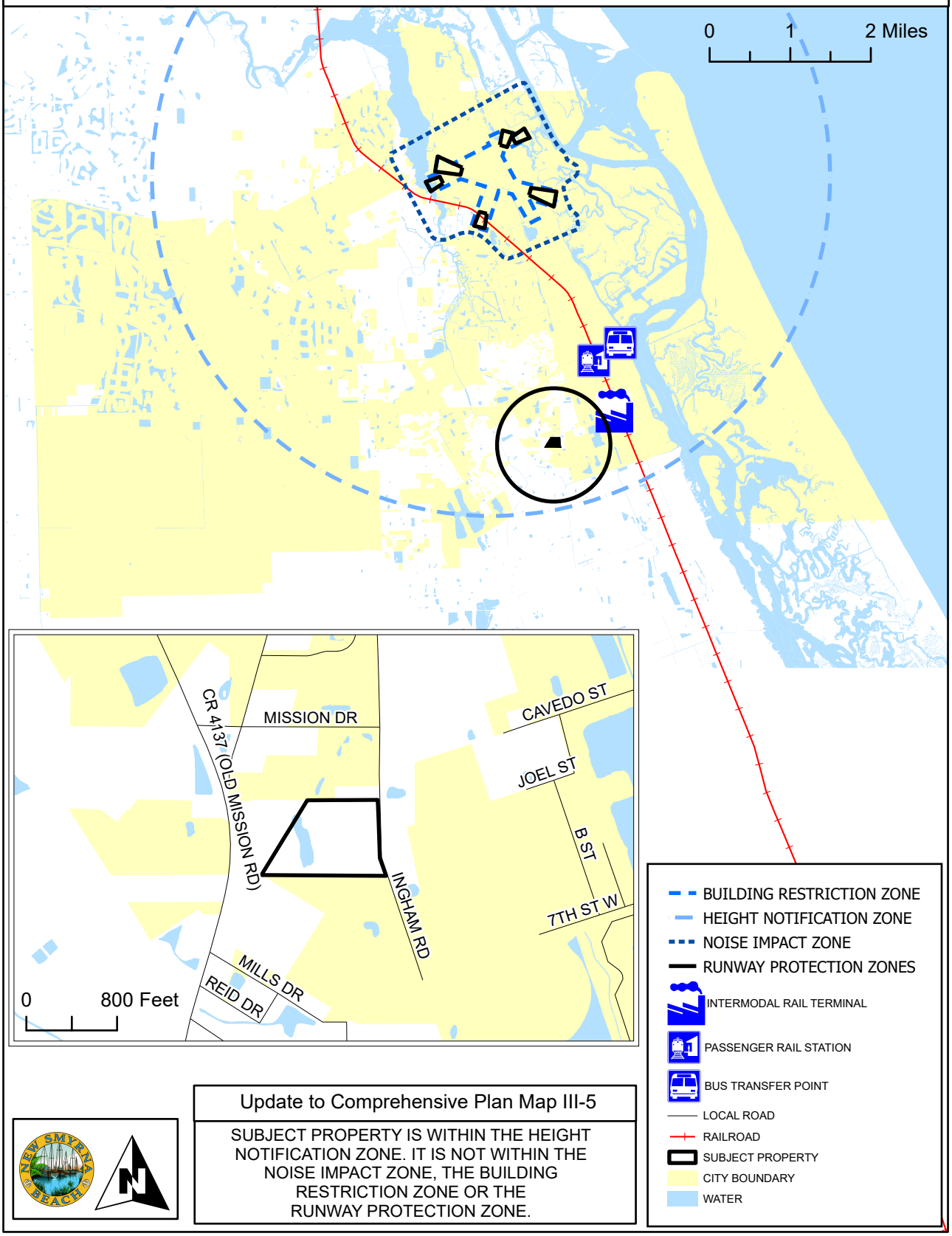


Update to Comprehensive Map VII-2

SUBJECT PROPERTY IS WITHIN THE SOILS WITH SEVERE AND SLIGHT LIMITATIONS

AIRPORT RUNWAY PROTECTION ZONES

A-8-25

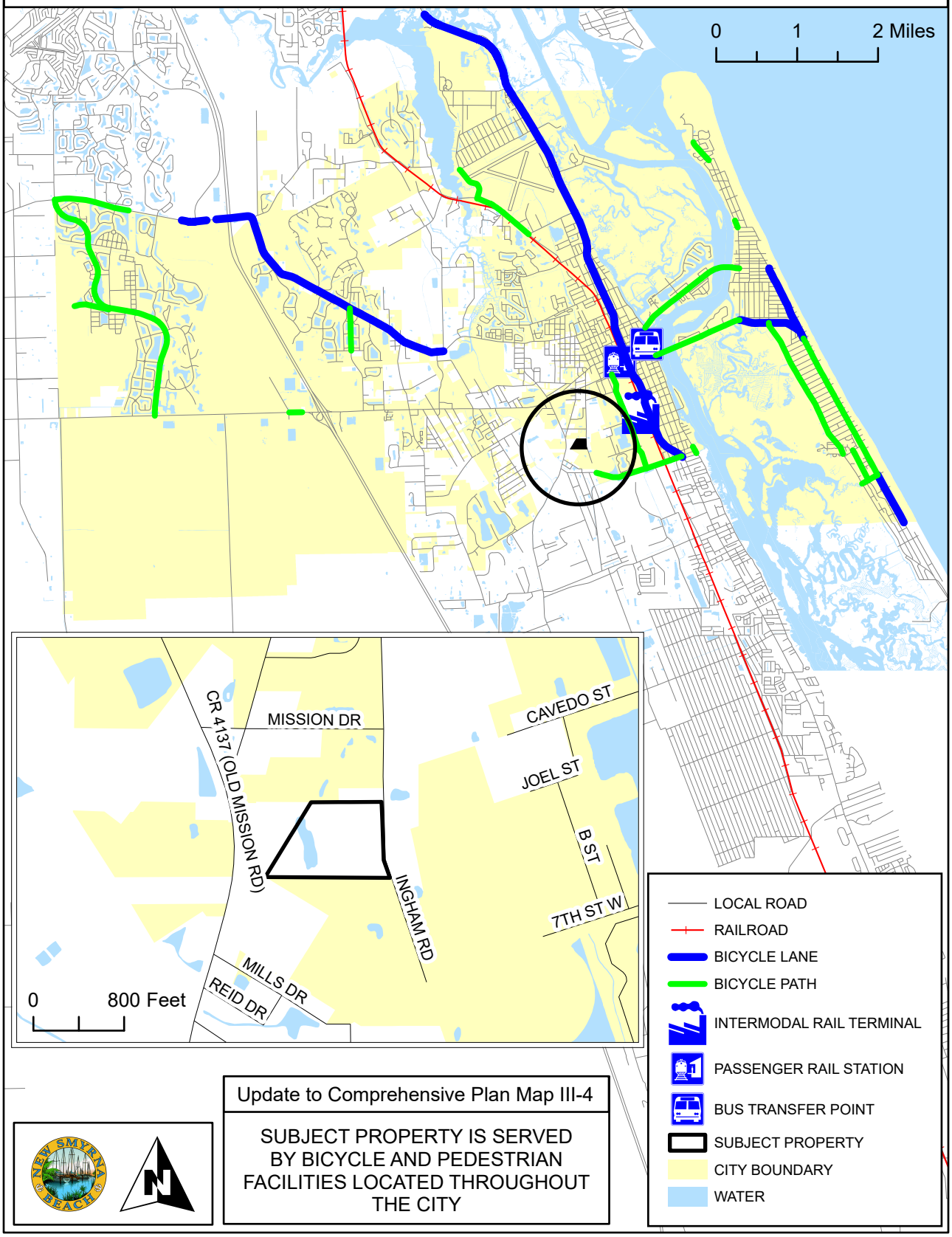


Update to Comprehensive Plan Map III-5

SUBJECT PROPERTY IS WITHIN THE HEIGHT NOTIFICATION ZONE. IT IS NOT WITHIN THE NOISE IMPACT ZONE, THE BUILDING RESTRICTION ZONE OR THE RUNWAY PROTECTION ZONE.

BICYCLE AND PEDESTRIAN FACILITIES

A-8-25

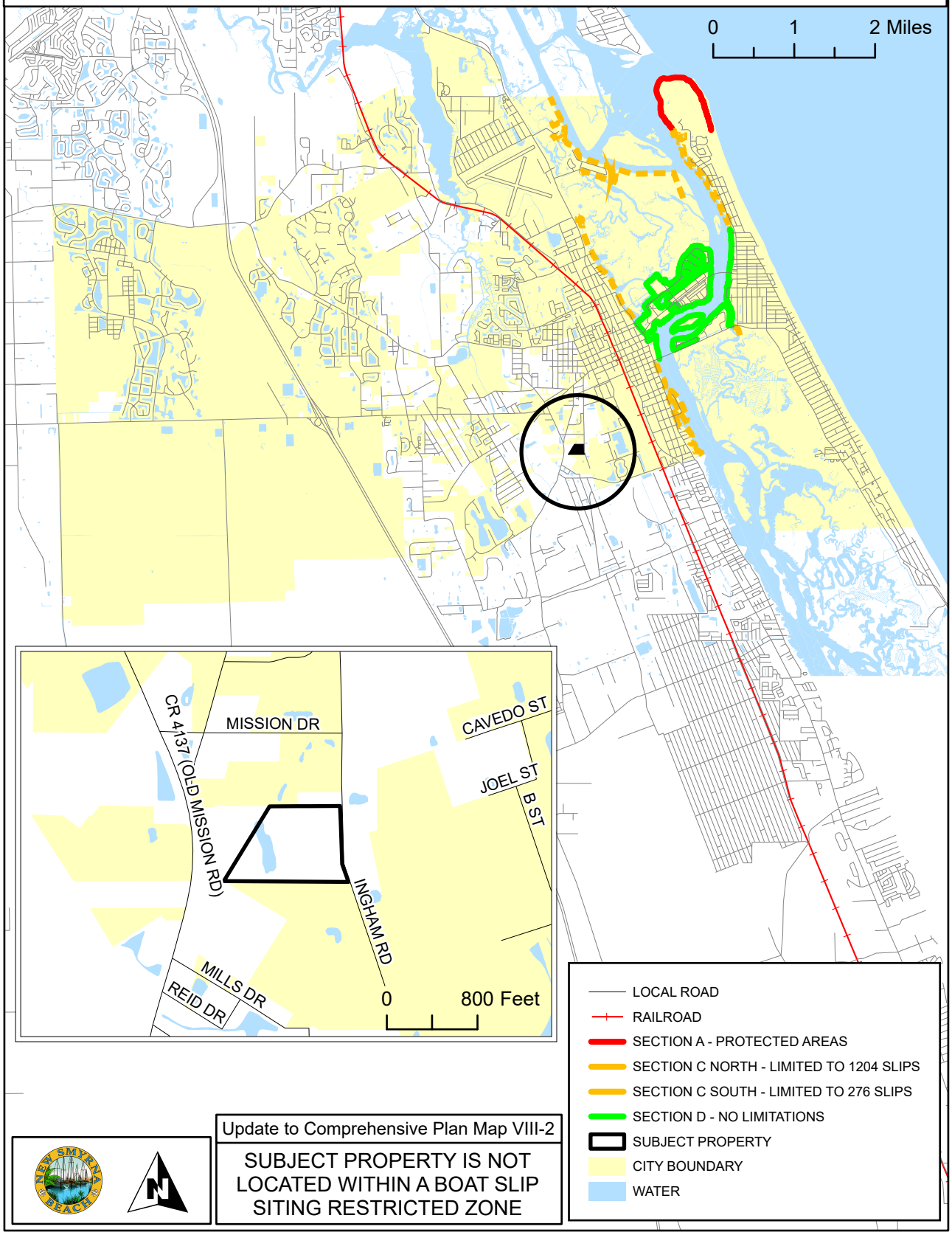


Update to Comprehensive Plan Map III-4

SUBJECT PROPERTY IS SERVED BY BICYCLE AND PEDESTRIAN FACILITIES LOCATED THROUGHOUT THE CITY

BOAT SLIP SITING

A-8-25

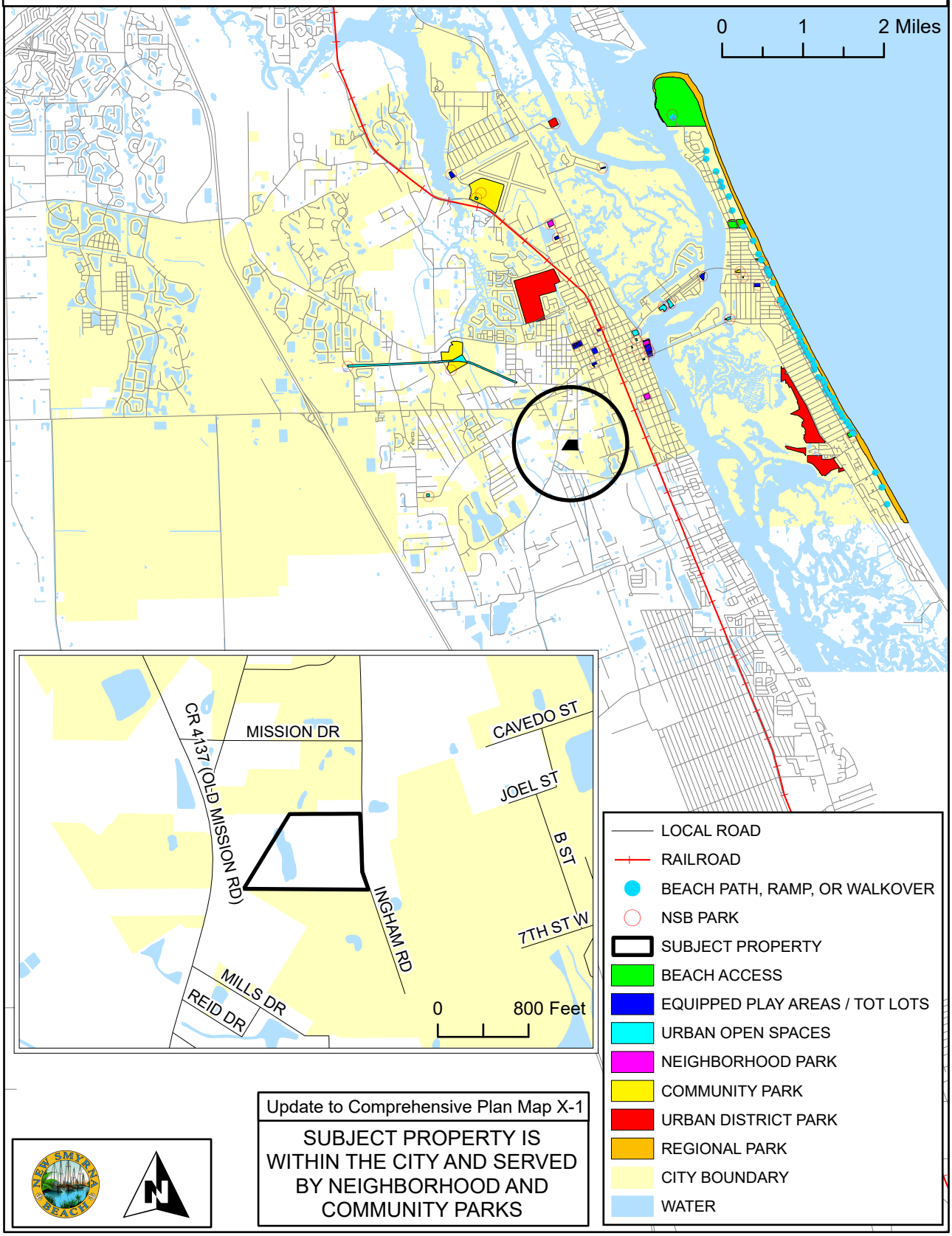


Update to Comprehensive Plan Map VIII-2

SUBJECT PROPERTY IS NOT LOCATED WITHIN A BOAT SLIP SITING RESTRICTED ZONE

CITY PARKS

A-8-25

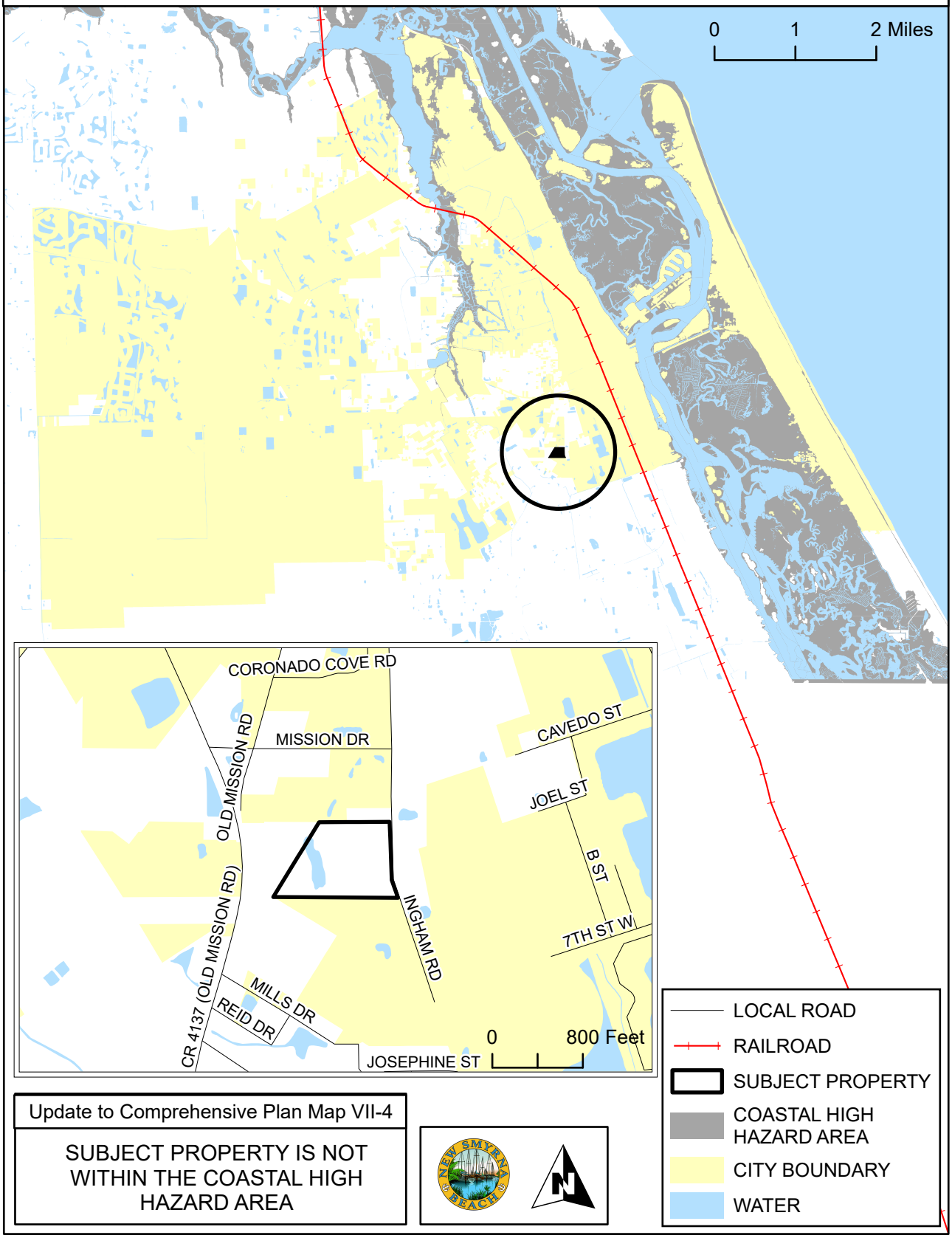


Update to Comprehensive Plan Map X-1

SUBJECT PROPERTY IS WITHIN THE CITY AND SERVED BY NEIGHBORHOOD AND COMMUNITY PARKS

COASTAL HIGH HAZARD AREAS

A-8-25

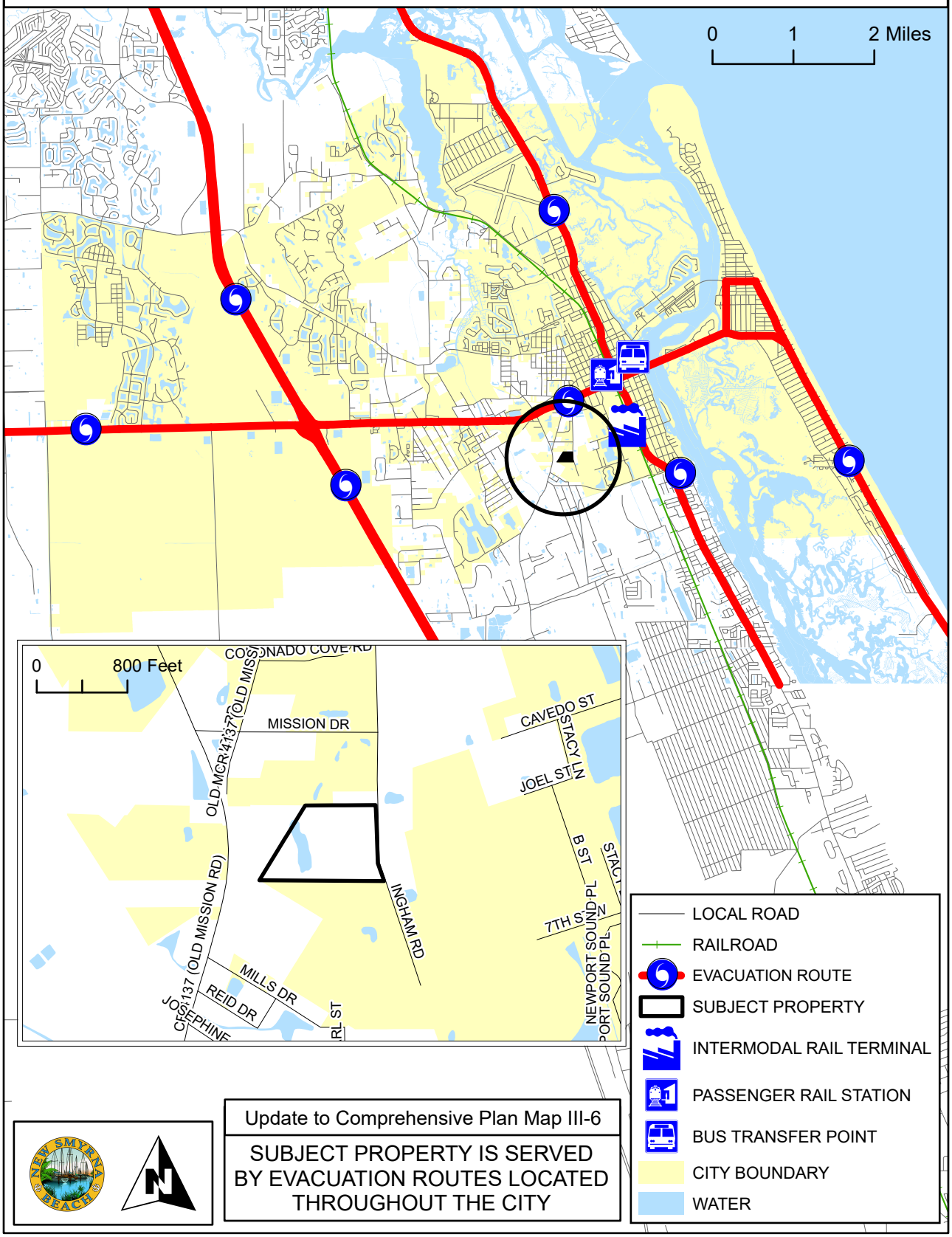


Update to Comprehensive Plan Map VII-4

SUBJECT PROPERTY IS NOT WITHIN THE COASTAL HIGH HAZARD AREA

EVACUATION ROUTES

A-8-25

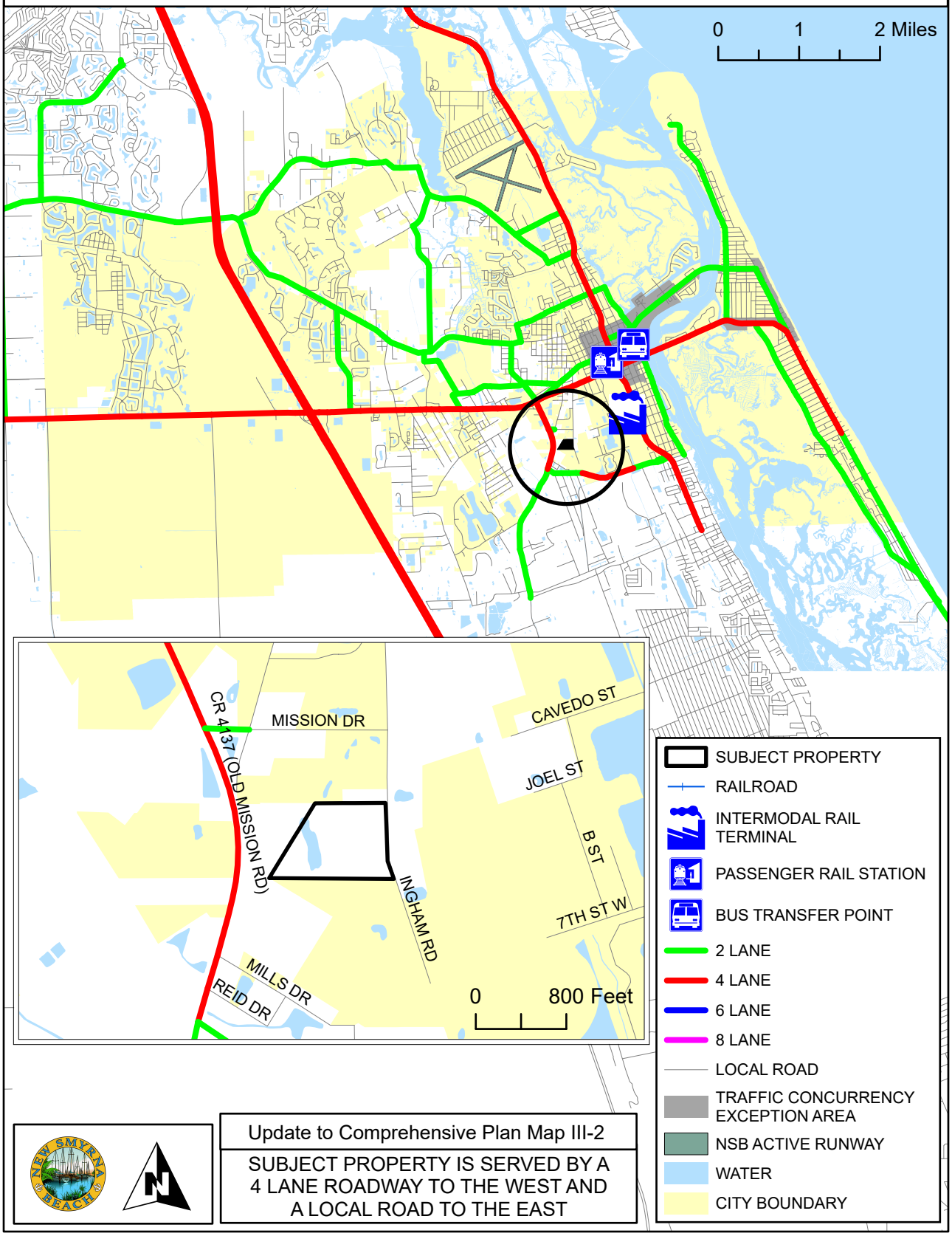


Update to Comprehensive Plan Map III-6

SUBJECT PROPERTY IS SERVED BY EVACUATION ROUTES LOCATED THROUGHOUT THE CITY

EXISTING TRAFFIC LANES - 2009

A-8-25

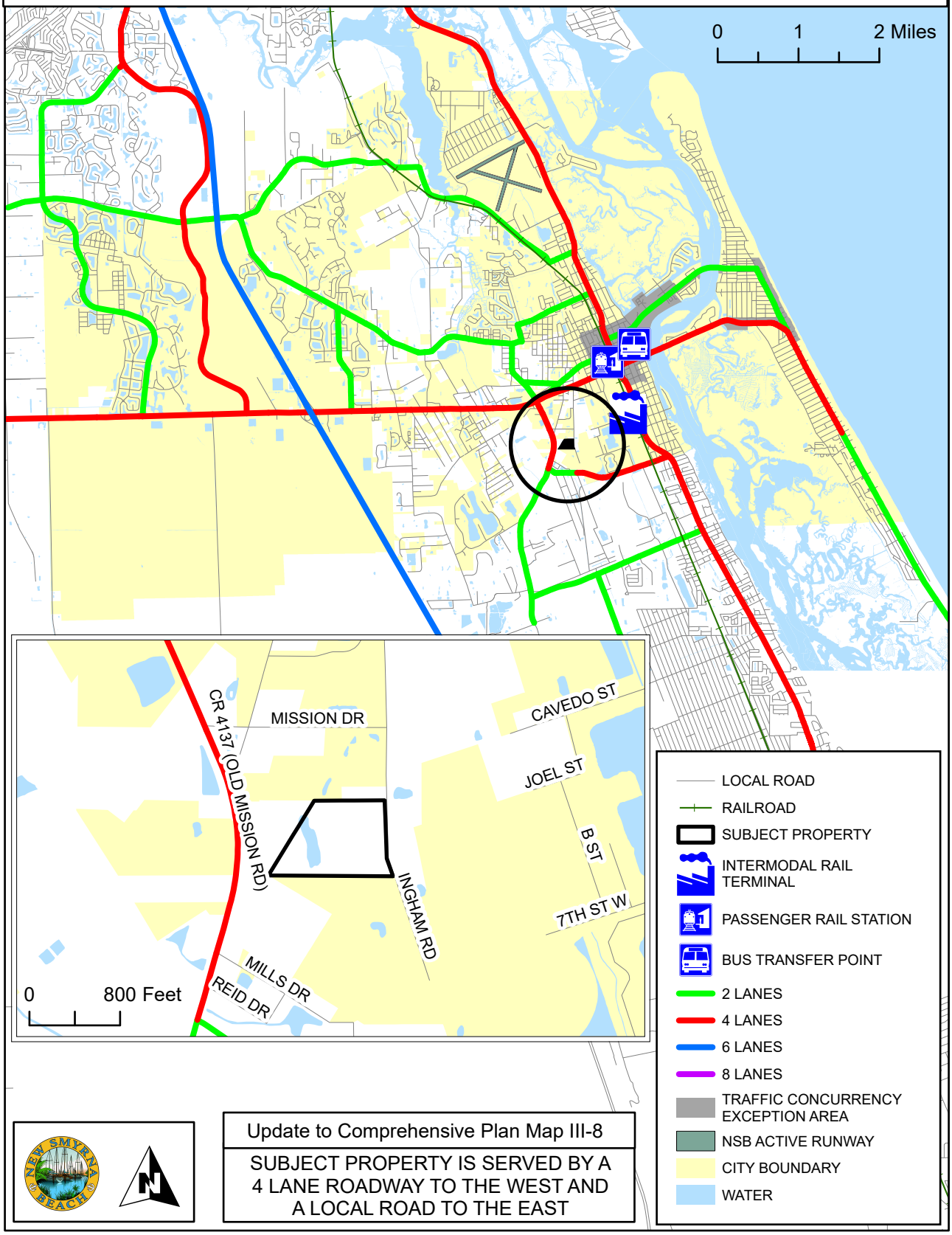


Update to Comprehensive Plan Map III-2

SUBJECT PROPERTY IS SERVED BY A 4 LANE ROADWAY TO THE WEST AND A LOCAL ROAD TO THE EAST

NUMBER OF TRAFFIC LANES - 2025

A-8-25

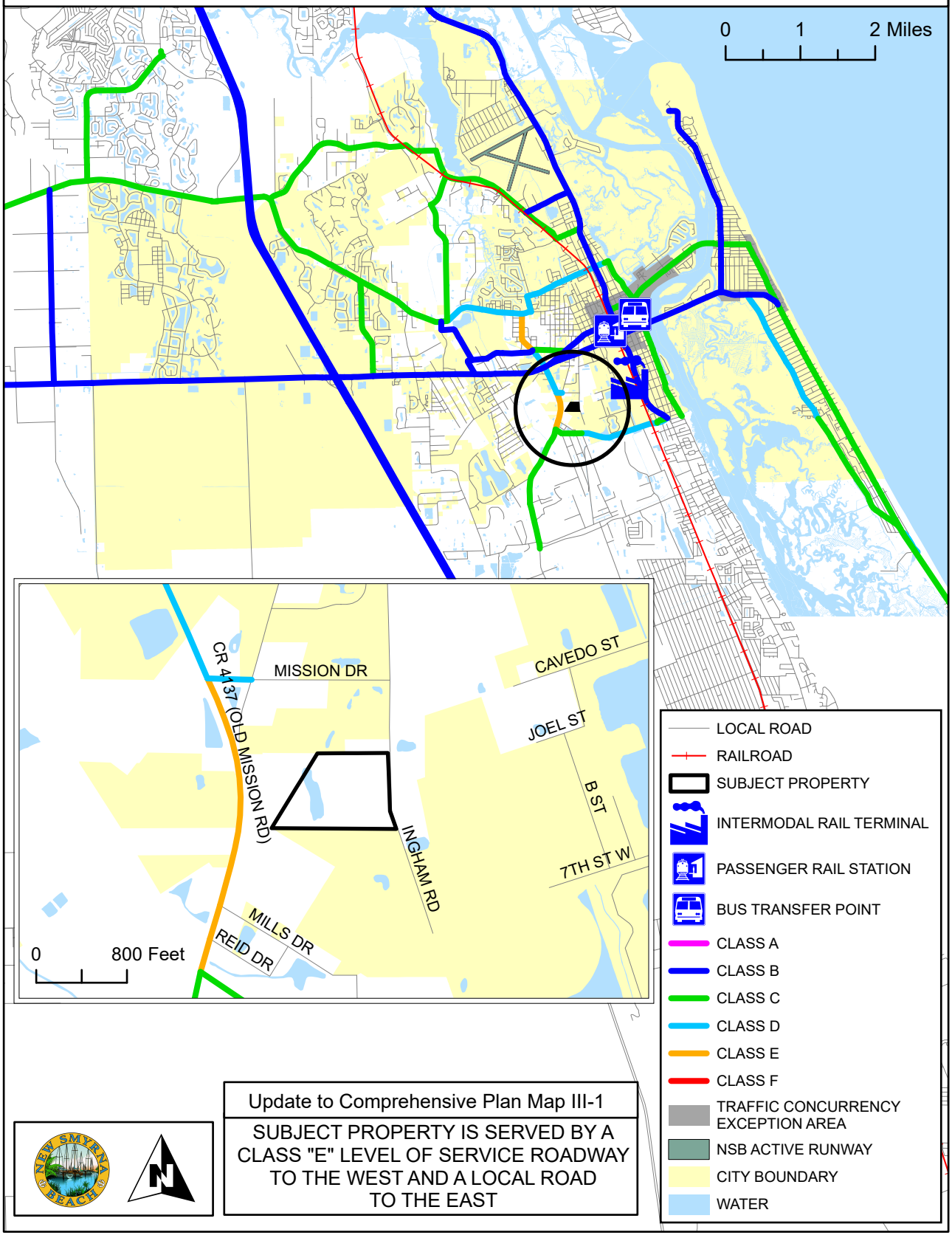


Update to Comprehensive Plan Map III-8

SUBJECT PROPERTY IS SERVED BY A 4 LANE ROADWAY TO THE WEST AND A LOCAL ROAD TO THE EAST

EXISTING LEVEL OF SERVICE - 2009

A-8-25

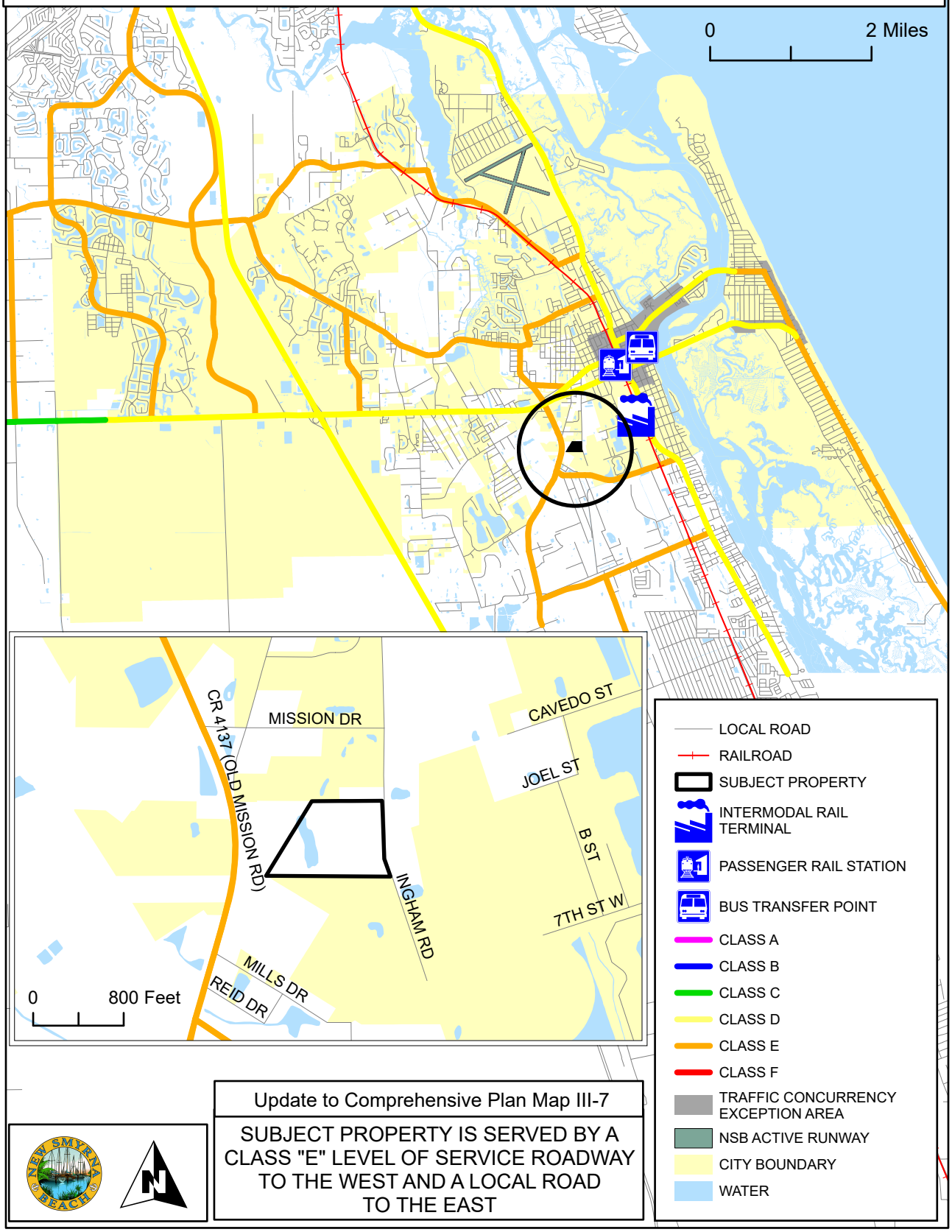


Update to Comprehensive Plan Map III-1

SUBJECT PROPERTY IS SERVED BY A CLASS "E" LEVEL OF SERVICE ROADWAY TO THE WEST AND A LOCAL ROAD TO THE EAST

LEVEL OF SERVICE - 2025

A-8-25

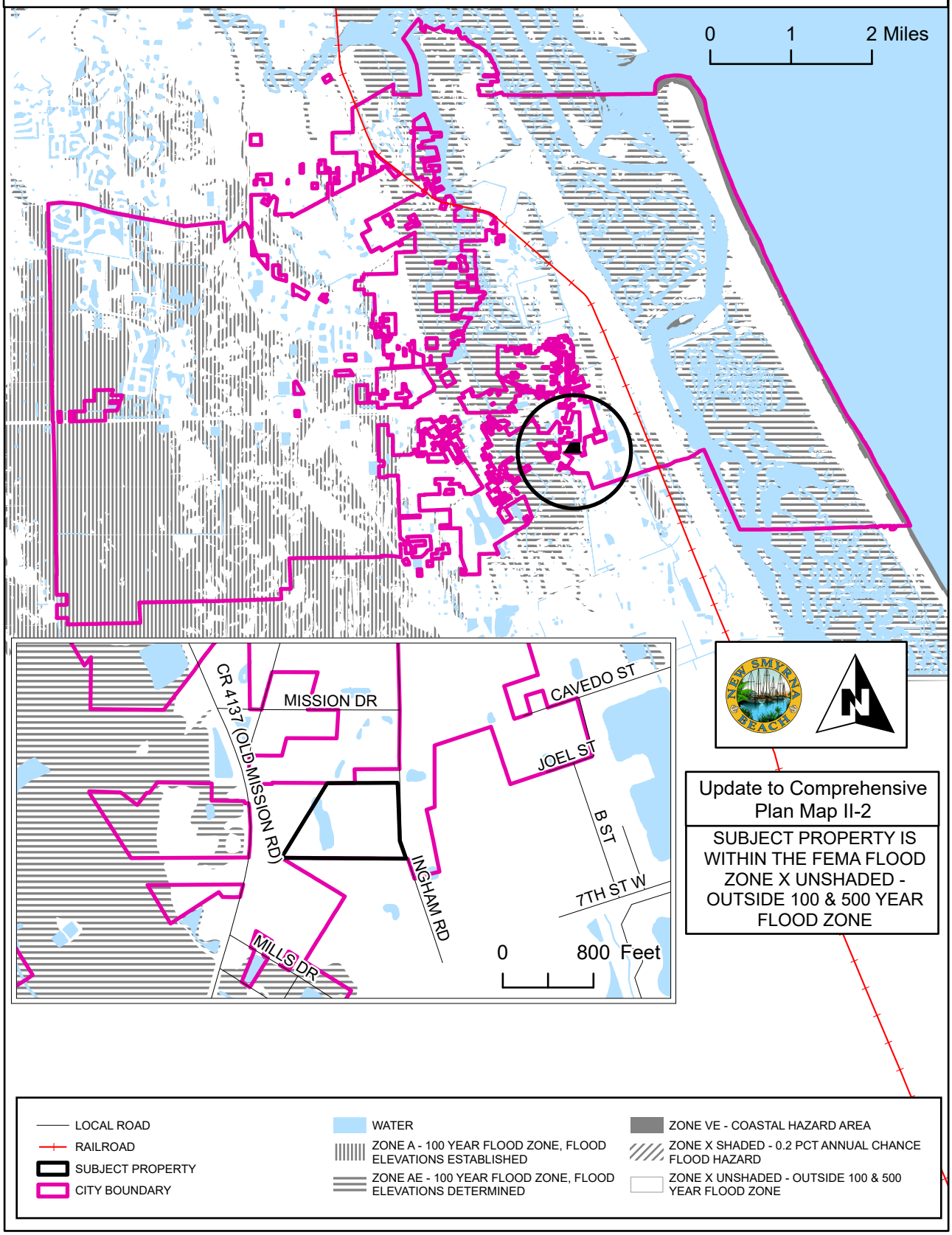


Update to Comprehensive Plan Map III-7

SUBJECT PROPERTY IS SERVED BY A CLASS "E" LEVEL OF SERVICE ROADWAY TO THE WEST AND A LOCAL ROAD TO THE EAST

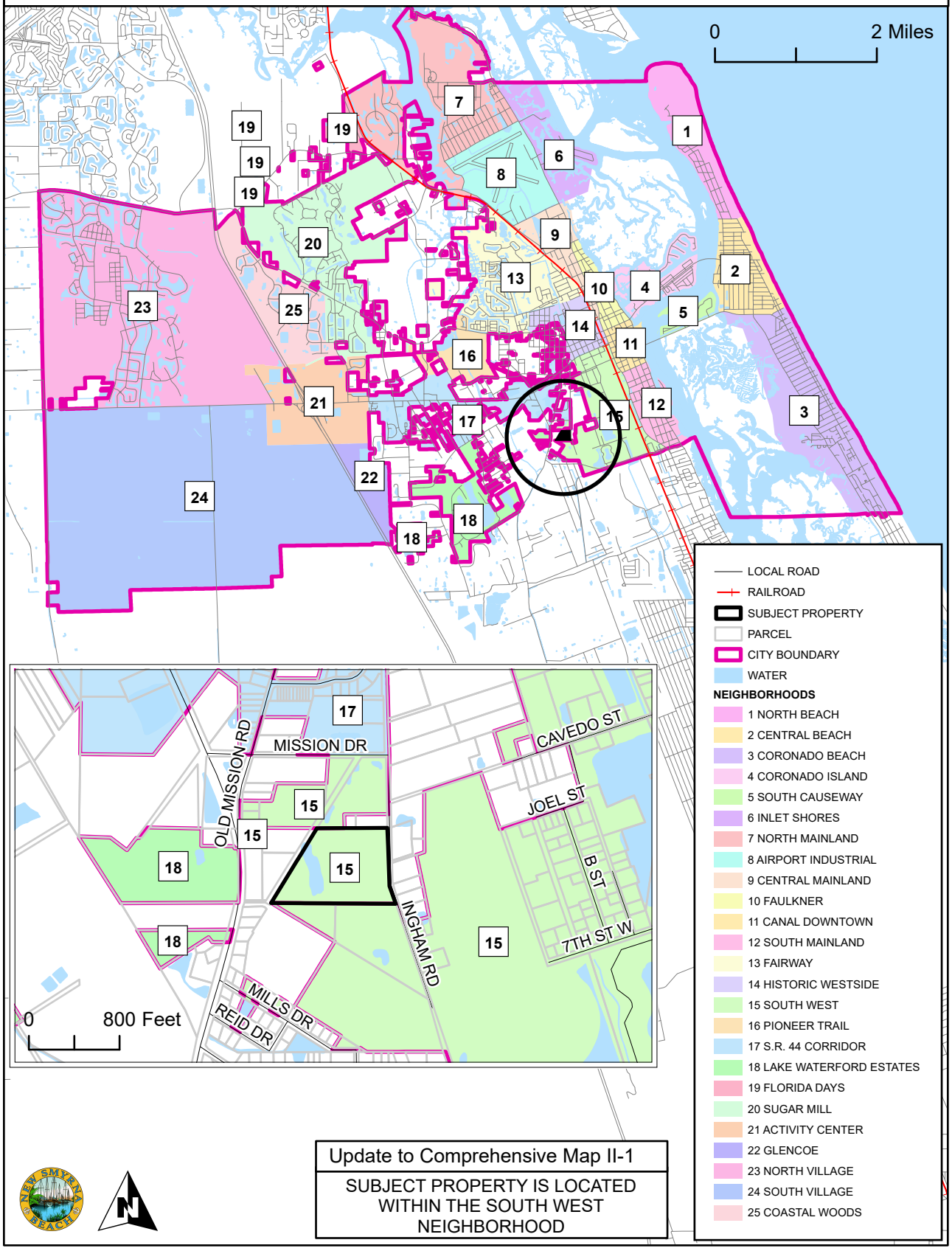
FLOOD PRONE AREAS

A-8-25



NEIGHBORHOODS

A-8-25

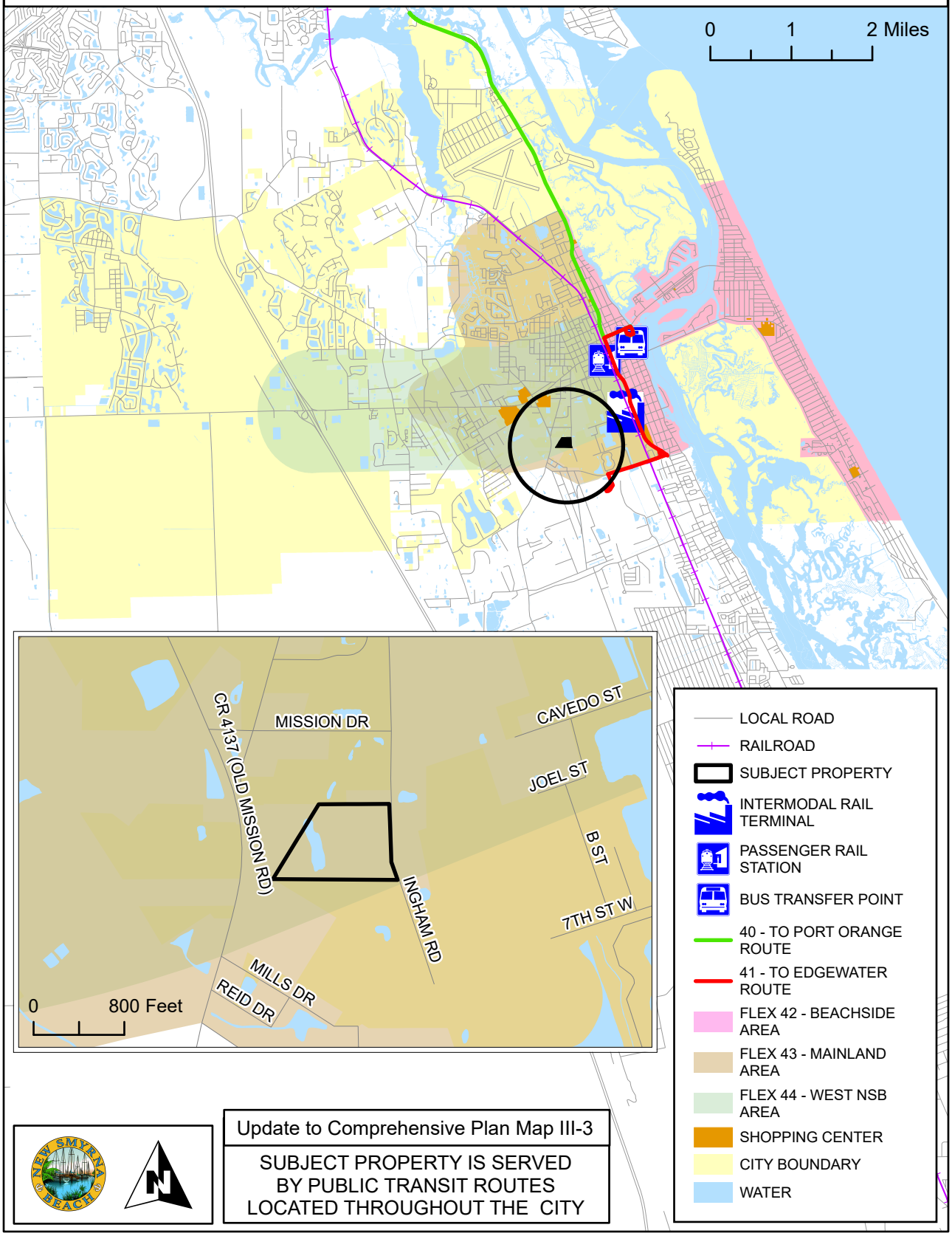


Update to Comprehensive Map II-1

SUBJECT PROPERTY IS LOCATED WITHIN THE SOUTH WEST NEIGHBORHOOD

PUBLIC TRANSIT ROUTES

A-8-25

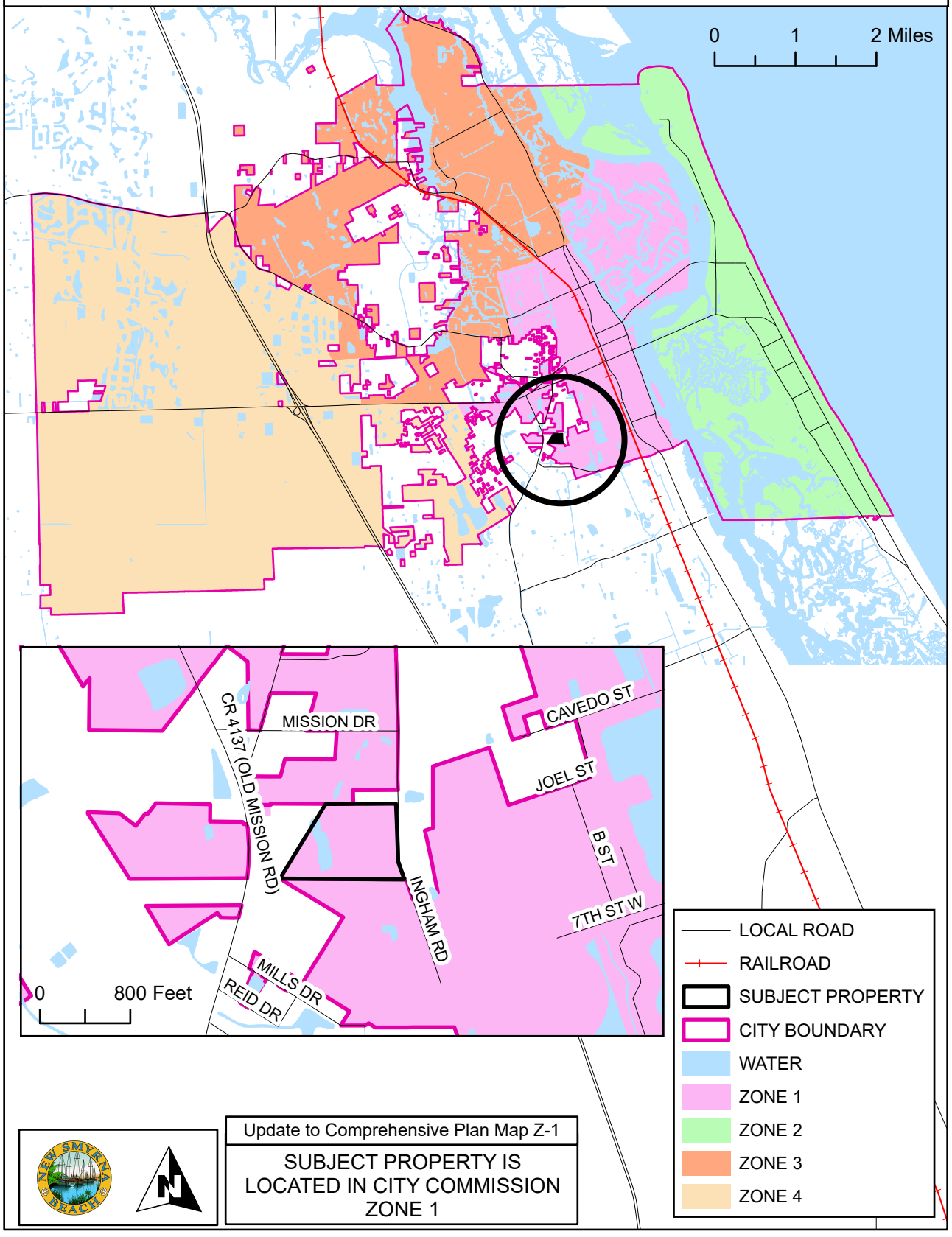


Update to Comprehensive Plan Map III-3

SUBJECT PROPERTY IS SERVED BY PUBLIC TRANSIT ROUTES LOCATED THROUGHOUT THE CITY

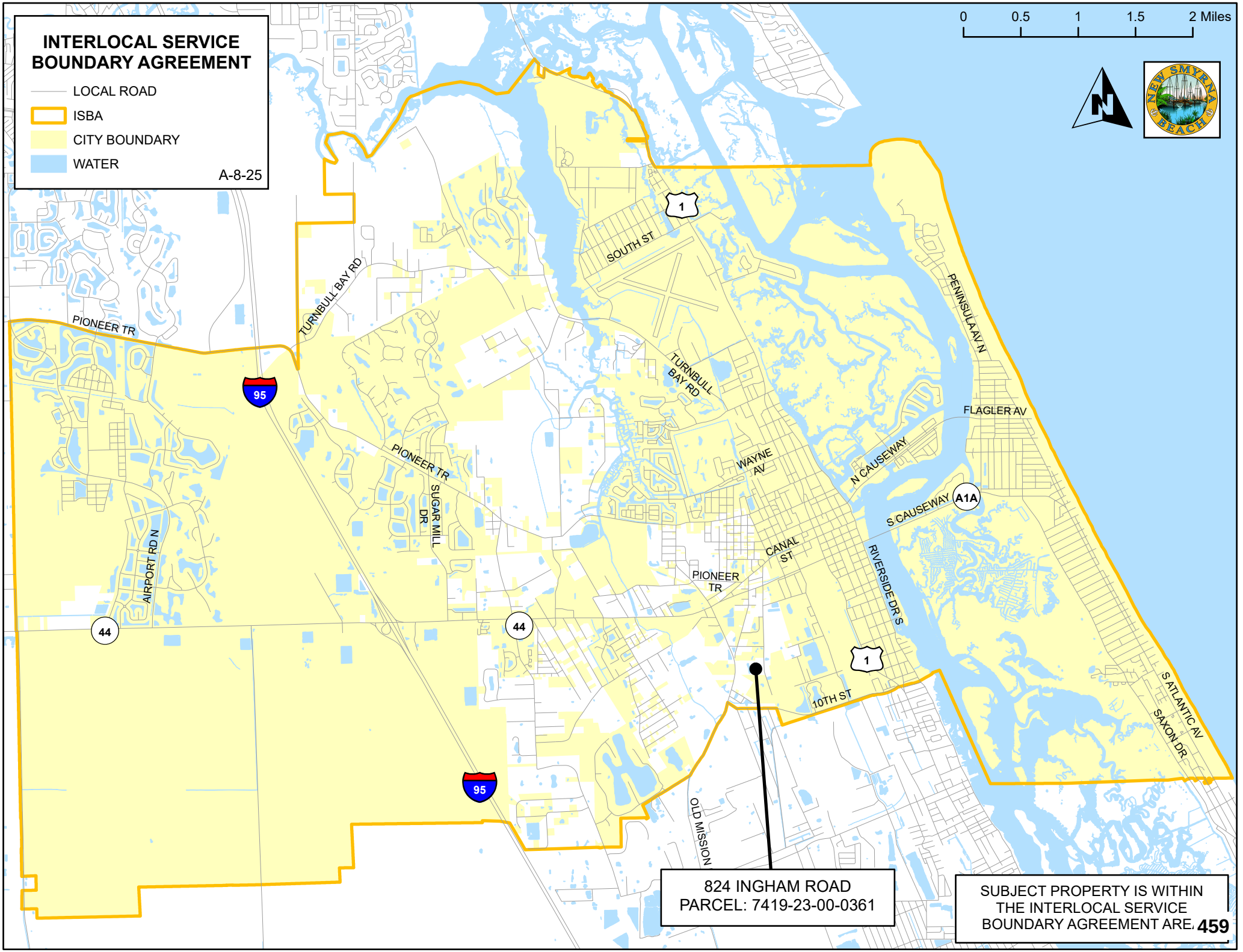
COMMISSION ZONES

A-8-25



Update to Comprehensive Plan Map Z-1

SUBJECT PROPERTY IS LOCATED IN CITY COMMISSION ZONE 1


INTERLOCAL SERVICE BOUNDARY AGREEMENT
LOCAL ROAD
ISBA
CITY BOUNDARY
WATER
A-8-25
0
0.5
1
1.5
2 Miles
NEW SMYRNA BEACH
PIONEER TR
TURNBULL BAY RD
SOUTH ST
PENINSULA AV N
FLAGLER AV
WAYNE AV
N CAUSEWAY
S CAUSEWAY
A1A
SUGAR MILL DR
AIRPORT RD N
CANAL ST
RIVERSIDE DR S
10TH ST
S ATLANTIC AV
SAXON DR
OLD MISSION
95
44
1
824 INGHAM ROAD
PARCEL: 7419-23-00-0361
SUBJECT PROPERTY IS WITHIN THE INTERLOCAL SERVICE BOUNDARY AGREEMENT ARE.
459

LEGAL DESCRIPTION

Address:
824 Ingham Road, New Smyrna Beach, Florida 32168

Parcel Number
7419-23-00-0361

AltKey Number:
3813308

Metes and Bounds by William D. Donley, Land Surveyor

LOT 36, THE MODEL LAND CO. AT NEW SMYRNA, ACCORDING TO THE PLAT THEREOF AS RECORDED IN MAP BOOK 4, PAGE 9, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

Prepared by:
Jolene Roy
HomePartners Title Services, LLC
150 S. Pine Island Road Suite 430
Plantation, FL 33324

Return to:
HomePartners Title Services, LLC
Jolene Roy
150 S. Pine Island Road Suite 430
Plantation, FL 33324

Incident to the issuance of a title insurance commitment.

Tax ID: 741923000361

File Number: 186-28500

Consideration: $525,000.00

(Space Above This Line For Recording Data)

Warranty Deed

This Warranty Deed made this 22 **day of August, 2023**, between

FBCH Land Holdings, Inc., a Florida not-for Profit Corporation
whose post office address is **1015 Sikes Boulevard, Lakeland, FL 33815**, grantor,

and

Sowa Properties, LLC, A Florida Limited Liability Company
whose post office address is **208 Canova Drive, New Smyrna Beach, FL 32168**, grantee:

(Whenever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, trusts and trustees)

Witnesseth, that said grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in the **Volusia County, Florida**, to-wit:

Lot 36, THE MODEL LAND CO. AT NEW SMYRNA, according to the plat thereof as recorded in Map Book 4, Page 9, Public Records of Volusia County, Florida.

formerly described as:

Lot 36, MODEL LAND COMPANY SUBDIVISION, according to map or plat thereof as recorded in Plat Book 4, Page 9, Public Records of Volusia County, Florida, less and except the following: Begin at the intersection of the North line of said Lot 36, with the West line of Ingham Road; Thence Southerly and along the West line of Ingham Road, 165 feet; Thence Westerly and parallel to said North line of said Lot 36, a distance of 264 feet; Thence Northerly and parallel to the aforesaid road 165 feet to the North line of said Lot 36; Thence Easterly along said North line 264 feet to the Point of Beginning.

and

A parcel of land in Lot 36, MODEL LAND COMPANY SUBDIVISION, according to map or plat thereof as recorded in Plat Book 4, Page 9, Public Records of Volusia County, Florida described as follows: Begin at the

intersection of the North line of said Lot 36, with the West line of Ingham Road; Thence Southerly and along the West line of Ingham Road, 165 feet; Thence Westerly and parallel to said North line of said Lot 36, a distance of 264 feet; Thence Northerly and parallel to the aforesaid road 165 feet to the North line of said Lot 36; Thence Easterly along said North line 264 feet to the Point of Beginning.

Parcel Identification Number: 741923000361

Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

To Have and to Hold, the same in fee simple forever.

And the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes for the year of closing and subsequent years, restrictions, reservations, covenants and easements of record, if any.

In Witness Whereof, grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

Witness Signature
Printed Name: Makeila Harrell

Witness Signature
Printed Name: Ian M French

FBCH Land Holdings, Inc., a Florida not-for Profit Corporation

By: _____
David Whitman, Vice President

By: _____
Kimberly W. Bedwell, Vice President

State of Florida

County of Polk

The foregoing instrument was acknowledged before me by means of ☑ physical presence or ☐ online notarization, this 22 day of August, 2023, by **David Whiteman and Kimberly W. Bedwell, as Vice Presidents of FBCH Land Holdings, Inc., a Florida not-for Profit Corporation**, who are personally known to me or (✓) have produced Driver License as identification.

NOTARY PUBLIC (SEAL)

Printed Name: Ian M French

My Commission Expires: 1/13/2027

IAN M FRENCH
Notary Public - State of Florida
Commission # HH 345471
My Comm. Expires Jan 13, 2027
Bonded through National Notary Assn.

THE CITY OF NEW SMYRNA BEACH - PLANNING DEPARTMENT

A-0009-2025: REVIEW AND GIVE A RECOMMENDATION TO THE CITY COMMISSION ON AN OVERALL ANNEXATION APPLICATION FOR 736 LOUELLA STREET.

September 8, 2025

Background:

Applicants and Property Owners: Nicole and Ryan Shuler, 736 Louella Street, New Smyrna Beach, Florida 32168.

Request: Voluntary annexation, *Comprehensive Plan* amendment, and rezoning:

- **From:** Volusia County Future Land Use (FLU) category of Rural, and Volusia County zoning designation of A-3, Transitional Agriculture with an "A" attached for Airport Height Notification Zone.

- **To:** City Future Land Use category of Rural and City zoning designation of A-3, Transitional Agriculture with an "A" attached for Airport Height Notification Zone.

Site Information:

- **Size:** 2.66 ± acres

- **Location:** North side of Louella Street, between Alberta Street and Pioneer Trail.

Tax I.D. Number: 7314-00-00-0235

Findings:

On April 23, 2013, the City Commission adopted an Interlocal Service Boundary Agreement (ISBA). The ISBA, which is permitted under Chapter 171, Part II, Florida Statutes, allows the City of New Smyrna Beach to annex any parcels that are within the designated annexation area, even if they are not contiguous to the current municipal boundaries. The agreement, which is between the County of Volusia and the City, was also approved by the County on May 2, 2013. A new agreement was approved on May 2, 2022.

The subject property is within the annexation area designated in the ISBA. The subject property at 736 Louella Street contains a single-family house with accessary structures. A

location map is attached as **Exhibit A** and an aerial map is attached as **Exhibit B**.

The existing Volusia County Future Land Use (FLU) category and zoning designation of the subject property is shown on the following maps as **Exhibits C and D**. The text description of the existing Future Land Use category for the subject property is attached as **Exhibit E**. The associated current zoning text description for the subject property is attached as **Exhibit F**. Existing land uses are shown on the map attached as **Exhibit G**.

The established City Commission policy is that when properties are annexed into the City, the City will assign future land use categories and zoning designations that would be as similar as possible to existing County categories and designations. As discussed above, the existing County FLU category is Rural. The existing County zoning designation is A-3, Transitional Agriculture. The proposed City FLU category is Rural. The proposed City zoning designation is A-3, Transitional Agriculture. A text description of the proposed City Rural Future Land Use category is attached as **Exhibit H,** with a map of this proposed change also attached as **Exhibit I**. A text description of the proposed City A-3, Transitional Agriculture zoning designation, and a map of the proposed changes are similarly attached as **Exhibits J** and **K**.

This annexation request is within the City's annexation area and within the City's water and sewer service area **(Exhibit L).** The parcel at 736 Louella Street has a 6-inch PVC water line in the Louella Street, but central sewer and reclaim services would have to be extended. A map of the soil limitations for septic systems is attached as **Exhibit M**.

The *Land Development Regulations* requires any proposed development to conform to the Concurrency Management System. That system includes traffic, parks and recreation, potable water, wastewater treatment, solid waste collection, storm-water management, and public-school facilities. The subject property at 736 Louella Street is developed with a single-family house and accessary structures with no increased allowable density proposed for this property. Therefore, staff did not prepare a concurrency analysis table for this case.

There are numerous *Comprehensive Plan* maps that must be amended to incorporate the subject property into the *Comprehensive Plan* (see **Exhibits N through Z)**. A map showing the subject properties incorporated into Commission Zone 3 is attached as **Exhibit AA**. The ISBA map is attached as **Exhibit BB**. The legal description and Warranty Deed are attached as **Exhibits CC** and **DD**.

Recommendation:

The Planning Department recommends that the Planning and Zoning Board to give a

positive recommendation to the City Commission to **approve** the requested annexation, Small-Scale *Comprehensive Plan* amendment amending the Future Land Use to City Rural and rezoning to City A-3, Transitional Agriculture with an "A" attached for Airport Height Notification Zone.

Fiscal Analysis:
N/A

Strategic Plan Item:
Yes

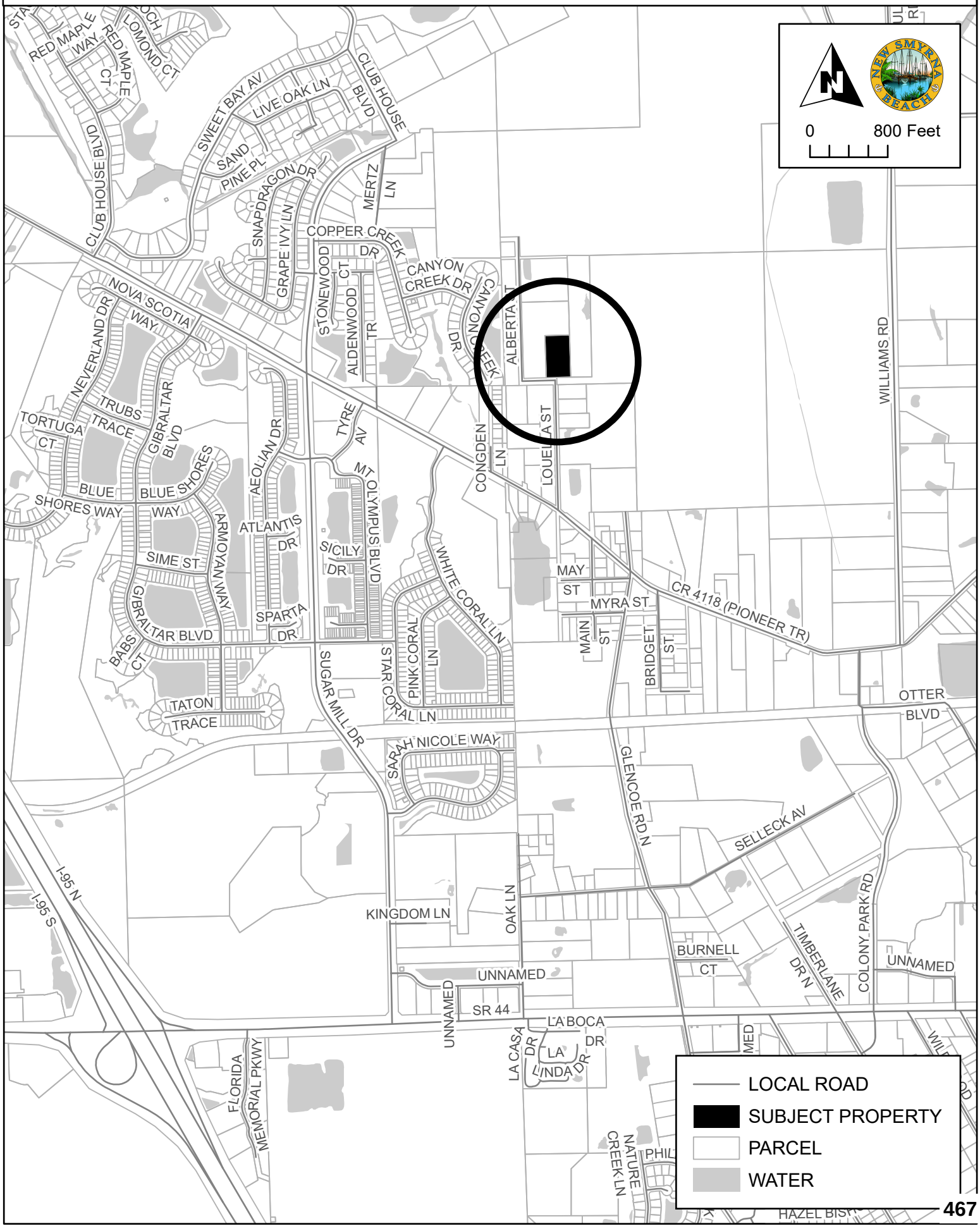
Staff Report Created By: Robert Mathen - Senior Planner

Attachments:

Exhibit A Location Map.pdf
Exhibit B Aerial Map.pdf
Exhibit C Existing FLU Map.pdf
Exhibit D Existing Zoning Map.pdf
Exhibit E County Rural Text.pdf
Exhibit F County A-3 Zoning Text.pdf
Exhibit G Existing Land Use Map.pdf
Exhibit H City Rural FLU Text.pdf
Exhibit I Proposed FLU Map.pdf
Exhibit J City A-3 Zoning Text.pdf
Exhibit K Proposed Zoning Map.pdf
Exhibit L Water and Sewer Service Area.pdf
Exhibit M Soil Limitation for Septic Systems.pdf
Exhibit N Airport Runway Protection Zones.pdf
Exhibit O Bicycle and Pedestrian Facilities.pdf
Exhibit P Boat Slip Siting.pdf
Exhibit Q City Parks.pdf
Exhibit R Coastal High Hazard Areas.pdf
Exhibit S Evacuation Routes.pdf
Exhibit T Existing Traffic Lanes - 2009.pdf
Exhibit U Number of Traffic Lanes - 2025.pdf
Exhibit V Existing Level of Service - 2009.pdf
Exhibit W Level of Service - 2025.pdf
Exhibit X Flood Prone Areas.pdf
Exhibit Y Neighborhood Map.pdf
Exhibit Z Public Transit Routes.pdf
Exhibit AA Commission Zones Map.pdf
Exhibit BB Interlocal Service Boundary Agreement Map.pdf
Exhibit CC Legal Description.pdf

Exhibit DD Warranty Deed.pdf

A-9-25: 736 LOUELLA STREET
PARCEL: 7314-00-00-0235 LOCATION MAP

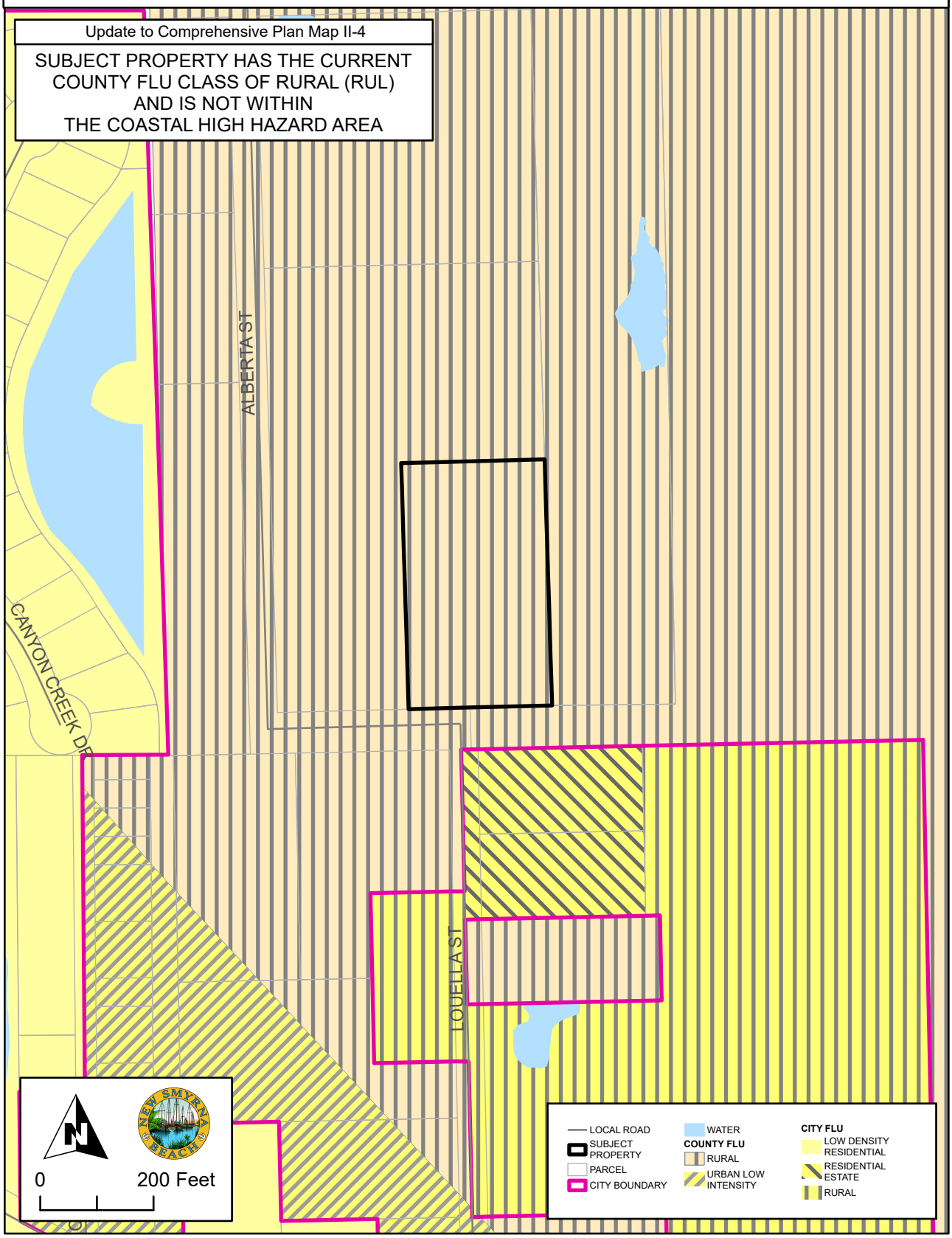


A-9-25: 736 LOUELLA STREET
PARCEL: 7314-00-00-0235 AERIAL MAP



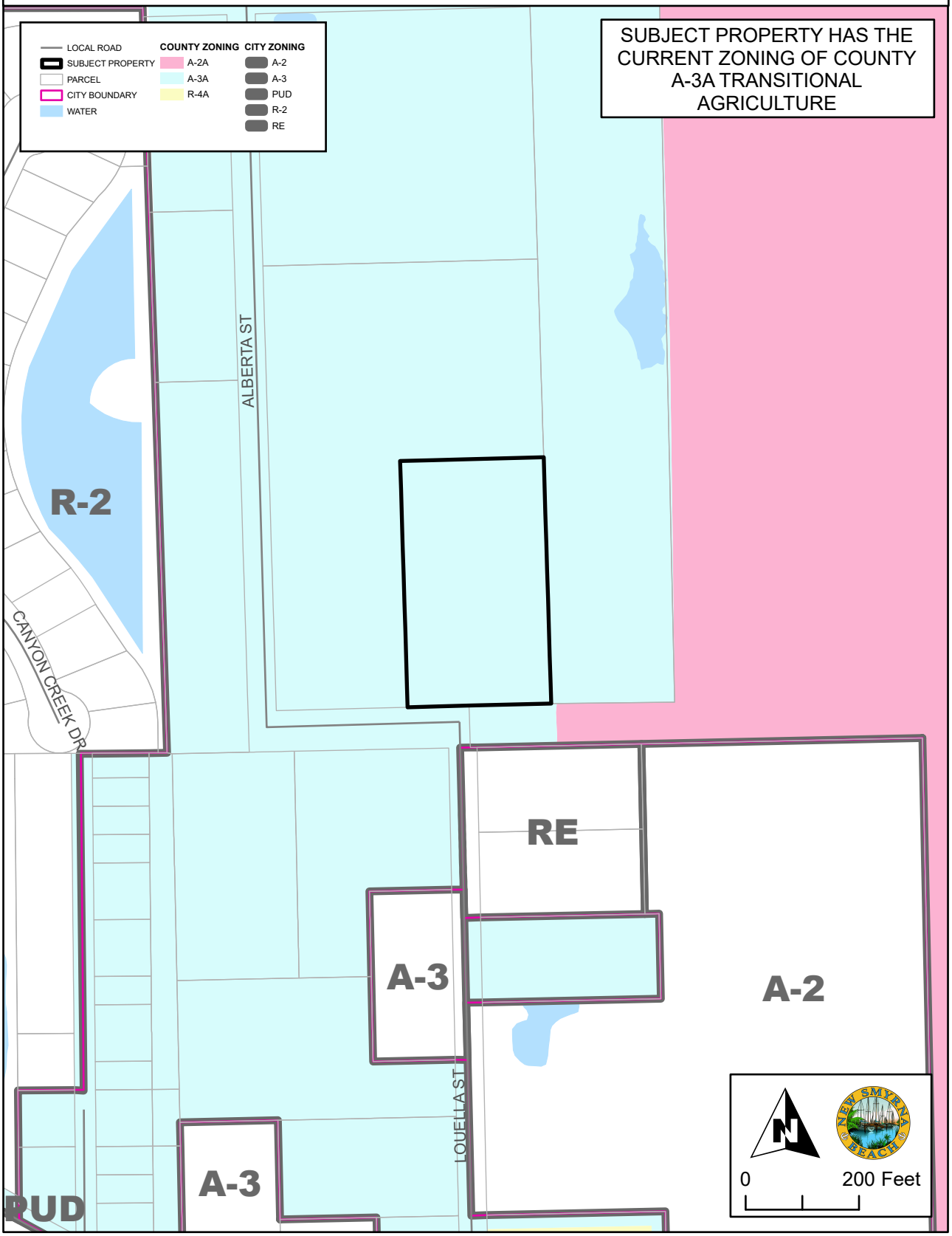
EXISTING FUTURE LAND USE DESIGNATIONS

A-9-25



EXISTING ZONING

A-9-25



Rural (R)

This designation consists of areas which are a mixture of agriculture and low density residential development. Rural areas provide two functions, the first being a transitional use between the agricultural and urban uses and the second would be a rural community which serves as the economic focal point of a small region. Rural areas should be developed in a manner consistent with the retention of agriculture and the protection of environmentally sensitive areas. Strict limitation of development in rural areas contributes to the efficient growth and operation of public services and facilities, thus ensuring the most effective use of public resources. The natural features and constraints will be the primary determinants in deciding whether or not an area is suitable for rural type development.

(1) Lands designated as rural shall be developed at a density of one (1) dwelling unit per five (5) acres. This density allowance may be increased under specific conditions as follows:

(a) The subject parcel is within six-hundred-and-sixty feet (660') of an existing subdivision with a density less than one (1) dwelling unit per five (5) acres. In this case the rural land may be developed at a similar density not to exceed one (1) dwelling unit per one (1) acre and with lot sizes similar and compatible with said qualifying subdivision.
(b) The subject parcel is adjacent to an urban land use. In this case the rural land may develop at a similar density not to exceed one (1) dwelling unit per one (1) acre, or intensity not to exceed a maximum Floor Area Ratio of twenty-five percent (0.25 FAR).
(c) In addition to the above conditions, the appropriateness of allowing densities less than one (1) dwelling unit per five (5) acres will also be subject to the following:

i. Compatibility of the proposed development in the context of existing uses, including the proximity of agricultural uses;
ii. Public facility capacity in the area, including the availability of paved public roads;
iii. Suitability for wells and septic tank usage (i.e. existence of hydric soils);
iv. The natural features of the subject parcel such as soils, vegetation, wildlife habitat and flood plain; and,
v. If applicable, consistency with Local Plans associated with this Element.

(2) There are two subcategories of the rural designation that address past development decisions. These subcategories are Rural Community and Rural Recreation. They are identified on the Special Rural Areas Map Series, presented in Appendix 1. These areas of intense or potentially intense development provide the mixed use concept to the rural areas. They help limit urban sprawl by providing services not necessarily found in remote rural areas thus reducing the number of trips out of these rural areas. Also allowing some limited urban type of development may help promote economic growth in the

rural areas as well. In designated Rural Communities and Rural Recreation areas where densities are greater than one (1) unit per acre, existing platted lots, undeveloped subdivisions, or other pre-existing developments shall be permitted subject to zoning requirements. However, any new development or subdivision of land shall have to comply with current County regulations.

(a) Rural Community - A rural community is characterized by a concentration of a permanent population, sometimes reaching over one-thousand (1,000) persons. These communities serve as the focal point for a specific neighborhood and generally contain existing lots less than one (1) acre in size. There may be commercial uses at a level to serve the immediate population. Commercial, retail and personal services may be allowed within the lower end of the range of what is can commonly be referred to as a neighborhood business (30,000 to 50,000 sq. ft. of gross leasable area) and shall not exceed a thirty-five percent Floor Area Ratio (0.35 FAR). The community commonly extends between one-half (½) to one (1) mile from the focal point which is usually the intersection of two rural roads. A rural community may retain the zoning classifications that exist at the time of adoption of the Comprehensive Plan. A change in zoning must be consistent with the overlying land use designation, however, if existing zoning is more intense than the land use designation, a change to a similar intensity zoning classification may be permitted (e.g., small lot single family residential to small lot mobile home). Existing agricultural operations shall be allowed even if currently zoned for nonagricultural uses.

The following areas are considered Rural Communities:

i Seville
ii Barberville
iii Volusia
iv Cassadaga
v DeLeon Springs
vi Emporia

(b) Rural Recreation - Limited areas of intense use located in remote rural areas along the St. Johns River. These areas are used for launching and/or storing boats with areas available for camping (RV sites are included). These areas may also contain single and multi-family dwelling units, hotels, bait shops, restaurants, and gas stations. Many of them are commonly referred to as fish camps. This designation is intended to be treated in a similar manner as the Rural Community in that the existing zoning (at the time of the effective date of the Comprehensive Plan) may remain and be developed consistent with current land development regulations. New requests for zoning changes must be consistent with the Comprehensive Plan, as stated under Rural Community.

The following areas are considered Rural Recreation areas:

i Pine Island
ii Shell Harbor Estates
iii Volusia Bar
iv South Moon
v Paramore
vi Highland Park
vii Daisy Lake
viii Crows Bluff
ix St. Johns River Acres
x Lemon Bluff
xi Baxter Point
xii Lakeview
xiii St. Johns Gardens

A-3 TRANSITIONAL AGRICULTURE CLASSIFICATION

Purpose and intent: The purpose and intent of the A-3 Transitional Agriculture Classification is to preserve and protect small farms for personal and limited agricultural production or to provide a transitional agricultural zone between more intensive agricultural use areas and residential areas. It is intended that this classification be applied to properties which are within a designated rural community, to preserve existing agricultural uses in urban areas as depicted by the comprehensive plan, or to properties so as to coincide with the existing character of an area in a manner consistent with the comprehensive plan.

In order to ensure the long-term vitality of agricultural uses and natural resources, all agricultural uses are encouraged to utilize the natural resource conservation service (formerly the soil conservation service) best management techniques and other agricultural best management practices.

Permitted principal uses and structures: In the A-3 Transitional Agriculture Classification, no premises shall be used except for the following uses and their customary accessory uses or structures:

Except for those permitted special exceptions listed hereunder, all agricultural pursuits, including the processing, packaging, storage and sale of agriculture products which are raised on the premises.

Apiaries.

Aquaculture operations in which there are no associated excavations.

Aviaries.

Communication towers not exceeding 70 feet in height above ground level.

Essential utility services.

Exempt excavations (refer to subsection 72-293(15)) and/or those which comply with division 8 of the Land Development Code of Volusia County [article III] and/or final site plan review procedures of this article.

Exempt landfills (refer to subsection 72-293(16)).

Fire stations.

Hobby breeder.

Home occupations, class A (refer to section 72-283).

Houses of worship.

Parks and recreation areas accessory to residential developments.

Public schools.

Publicly owned parks and recreational areas.

Publicly owned or regulated water supply wells.

Silvicultural operations which follow the most up to date state-prescribed best management practices.

Single-family standard or manufactured modular dwelling.

Tailwater recovery systems.

Worm raising.

Permitted special exceptions: Additional regulations/requirements governing permitted special exceptions are located in sections 72-293 and 72-415 of this article.

Animal shelters.

Aquaculture operations in which there are nonexempt excavations (refer to subsection 72-293(15)).

Bed and breakfast (refer to subsection 72-293(19)).

Cemeteries (refer to subsection 72-293(4)).

Communication towers exceeding 70 feet in height above ground level.

Dairies and dairy products (minimum parcel size requirement of five acres).

Day care centers (refer to subsection 72-293(6)).

Dogs and cats boarded as personal pets exceeding the number permitted in subsection 72-306(a).

Equestrian/livestock event facility.

Excavations only for stormwater retention ponds for which a permit is required by this article.

Garage apartments.

Group home (refer to subsection 72-293(12)).

Hog farms (minimum parcel size requirement of 2.5 acres).

Home occupations, class B (refer to section 72-283).

Kennels.

Livestock feed lots (minimum parcel size requirement of five acres).

Off-street parking areas (refer to subsection 72-293(14)).

Poultry farms (minimum parcel size requirement of 2.5 acres).

Processing, packaging, storage, retail or wholesale sales of agricultural products not raised on the premises.

Public uses not listed as a permitted principal use.

Public utility uses and structures (refer to subsection 72-293(1)).

Recreational areas (refer to subsection 72-293(3)).

Riding stables.

Schools, parochial and private (refer to subsection 72-293(4)).

Single-family mobile home dwelling with a minimum floor area of 480 square feet as a temporary residence while building a standard or manufactured dwelling (maximum duration of 18 months).

Temporary campsites for three days before, during and three days after any regularly scheduled racing event at the Daytona Beach International Speedway for Speedweeks, Biketoberfest, the Pepsi 400, and Bike Week, on condition that security, portable toilets, garbage disposal and potable water facilities sufficient to accommodate all occupants and other relevant conditions are provided. Related special events and sales are allowed, if approved as part of the special exception.

Wholesale or retail fertilizer sales.

Dimensional requirements:

Minimum lot size:

Area: One acre.

Width: 150 feet.

Minimum yard size:

Front yard: 40 feet.

Rear yard: 40 feet.

Side yard: 25 feet.

Waterfront yard: 40 feet.

Maximum building height: 55 feet.

Maximum lot coverage: The total lot area covered with principal and accessory buildings shall not exceed 35 percent.

Minimum floor area: 1,000 square feet.

Off-street parking and loading requirement: Off-street parking and loading areas meeting the requirements of sections 72-286 and 72-287 shall be constructed.

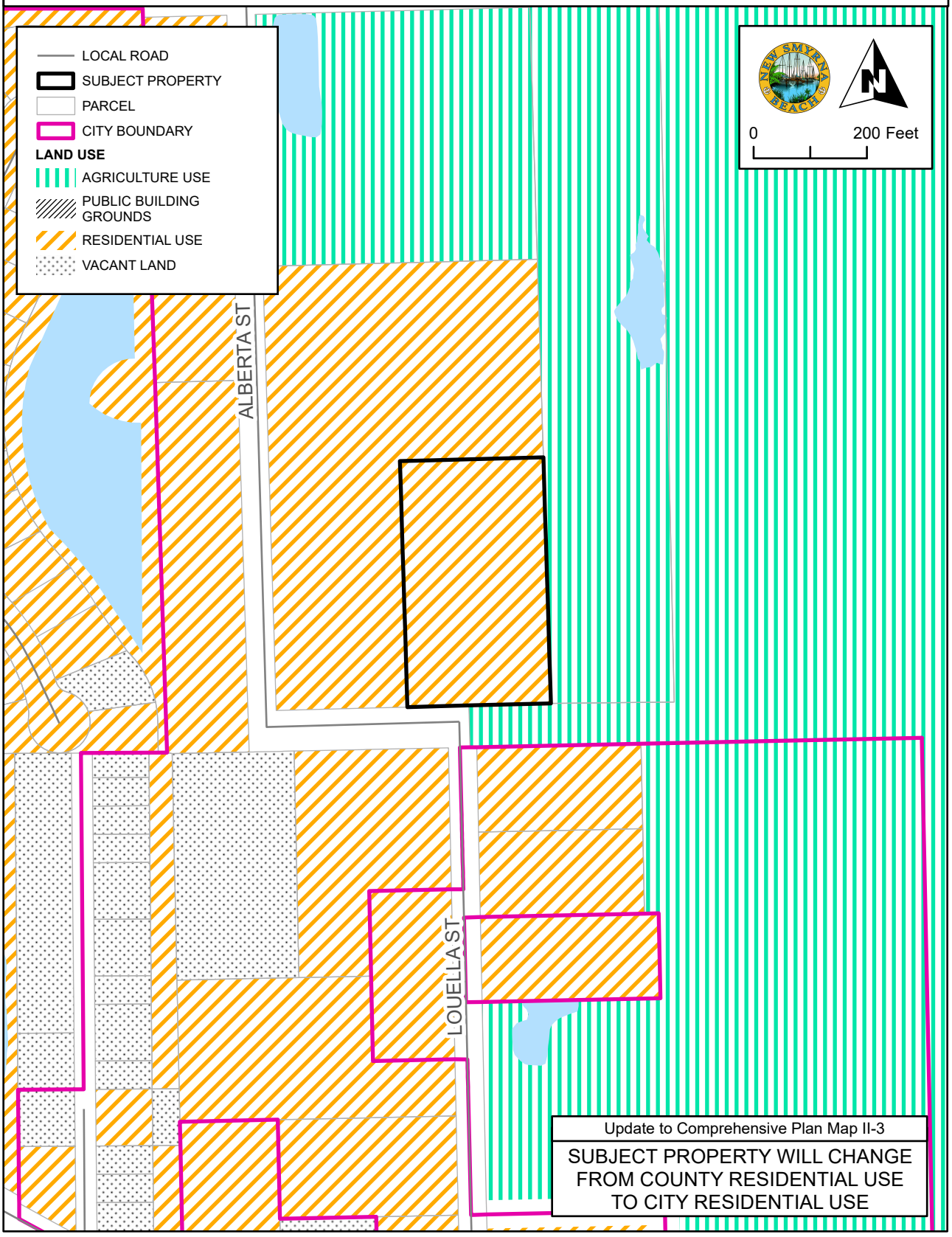
Skirting requirement for mobile home dwelling: The area between the ground and floor of the mobile home dwelling shall be enclosed with skirting.

(Ord. No. 81-39, §§ VII, VIII, 11-19-81; Ord. No. 82-20, §§ V, XIII, 12-9-82; Ord. No. 84-1, §§ I, III, VI, 3-8-84; Ord. No. 84-25, § IV, 10-10-84; Ord. No. 87-14, § II, 6-18-87; Ord. No. 89-20, §§ VI, VII, IX, 6-20-89; Ord. No. 90-34, § 11, 9-27-90; Ord. No. 92-6, § XIII, 6-4-92; Ord. No. 94-4, § XV, 5-5-94; Ord. No. 97-19, §

II, 8-7-97; Ord. No. 98-25, § VII, 12-17-98; Ord. No. 2004-20, § V, 12-16-04; Ord. No. 2009-17, § III, 5-21-09)

EXISTING LAND USE DESIGNATIONS

A-9-25



RURAL

(Up to one [1] dwelling unit per five [5] acres or up to one [1] dwelling unit per acre) This category includes areas that may consist of agriculture land, undeveloped rural land, and large parcels of developed residential land. Areas designated with a Rural FLU category should be developed in a manner consistent with the retention of agriculture and rural lands, low-density residential and the protection of environmentally sensitive areas. Strict limitation of development in rural areas contributes to the efficient growth and operation of public services and facilities, thus ensuring the most effective use of Future Land Use Element public resources. The natural features and constraints will be the primary determinants in deciding whether or not an area is suitable for rural type development.

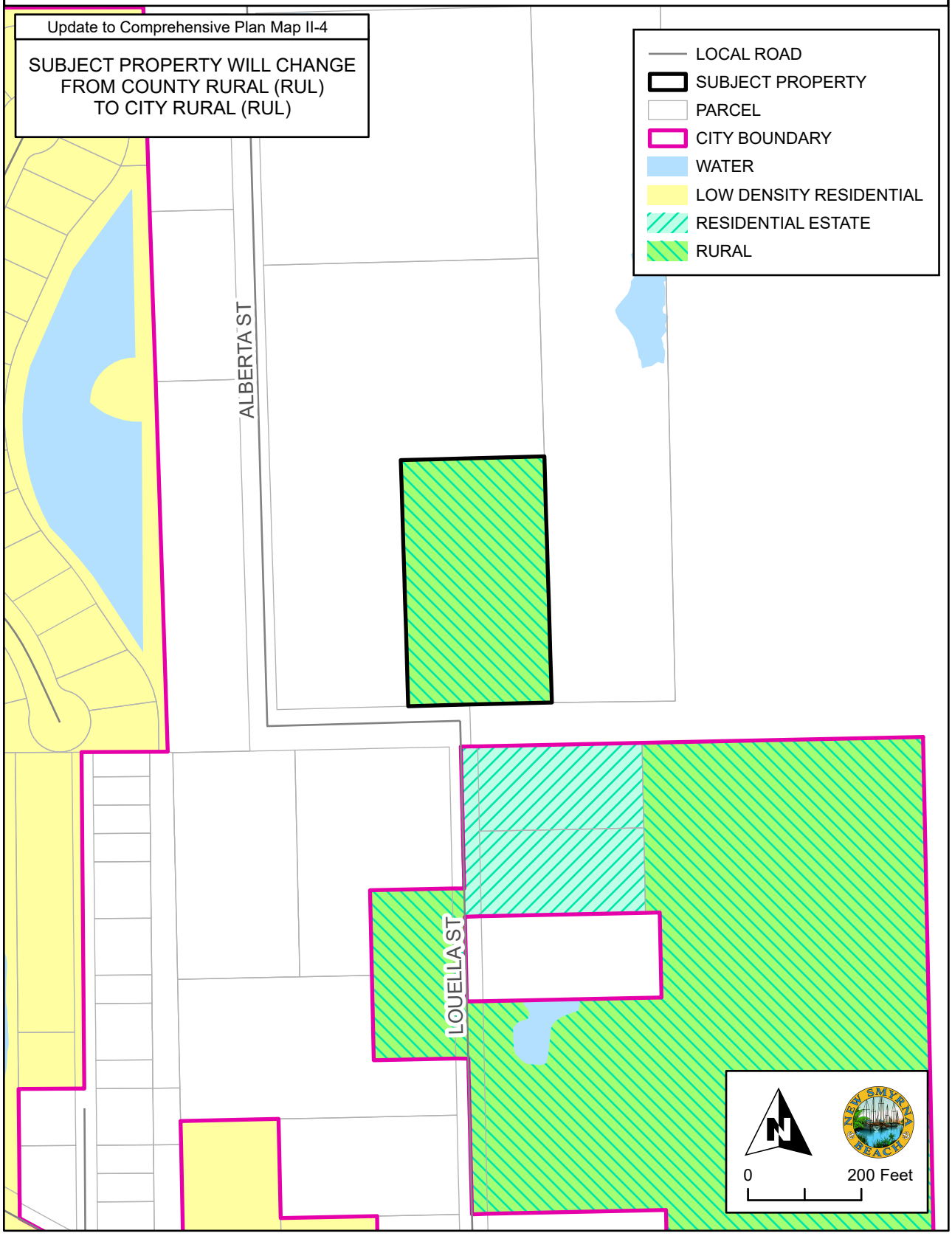
The Rural FLU designation may allow smaller lot sizes in clusters to protect environmentally sensitive land and upland buffers but shall not allow increase in density. Smaller cluster lots shall be allowed provided the clusters have large perimeter buffers to give the appearance of rural land from adjacent parcels and there is legal assurance that the property not included in the fee simple cluster lots are owned in common by the fee simple lot owners and will not be subsequently developed.

The density shall be determined as follows: Vacant parcels of land in the vicinity of existing exempt or approved platted subdivisions on or before April 3, 1990, with lot sizes from 1 unit per acre to 1 unit per 5 acres or vacant parcels of land immediately adjacent to an urban FLU category may be developed with similar density or lot sizes but not less than one (1) unit per acre. Only that portion of a parcel(s) that is within 660 feet from the above described existing exempt or approved subdivision or urban FLU category boundary, as of the adoption date of the Rural FLU category, is considered “in the vicinity.” Note: If a parcel that is “in the vicinity” is covered by more than fifty percent (50%) of the 660 feet extension, then the remaining portion of that parcel which is 10 acres or less is eligible for increased density.

Although the adjacency to the conditions described above allows for the potential of subdivisions with lots less than 5 acres in size, the actual lot size will be dependent upon the following: Compatibility of the proposed development will be viewed within the context of existing uses, public facility capacity in the area, suitability for wells and septic tank usage, and the natural features of the parcel in question, such as soils, vegetation, and floodplain. Vacant parcels or tracts of land that do not meet the preceding criteria or are in areas which have not been previously platted with lots less than 5 acres in size shall only be developed with lot sizes that are 5 acres or greater or in cluster developments at a density of no greater than one (1) unit per five (5) acres.

PROPOSED FUTURE LAND USE DESIGNATIONS

A-9-25



A-3 TRANSITIONAL AGRICULTURE CLASSIFICATION

Purpose and intent: The purpose and intent of the A-3 Transitional Agriculture Classification is to preserve and protect small farms for personal and limited agricultural production or to provide a transitional agricultural zone between more intensive agricultural use areas and residential areas. It is intended that this classification be applied to properties which are within a designated rural community, to preserve existing agricultural uses in urban areas as depicted by the comprehensive plan, or to properties so as to coincide with the existing character of an area in a manner consistent with the comprehensive plan.

In order to ensure the long-term vitality of agricultural uses and natural resources, all agricultural uses are encouraged to utilize the natural resource conservation service (formerly the soil conservation service) best management techniques and other agricultural best management practices.

Permitted principal uses and structures: In the A-3 Transitional Agriculture Classification, no premises shall be used except for the following uses and their customary accessory uses or structures:

Except for those permitted special exceptions listed hereunder, all agricultural pursuits, including the processing, packaging, storage and sale of agriculture products which are raised on the premises.

Apiaries.
Aquaculture operations in which there are no associated excavations.
Aviaries.
Communication towers not exceeding 70 feet in height above ground level.
Essential utility services.
Exempt excavations.
Exempt landfills.
Fire stations.
Hobby breeder.

Parks and recreation areas accessory to residential developments.
Public schools.
Publicly owned parks and recreational areas.
Publicly owned or regulated water supply wells.
Silvicultural operations which follow the most up to date state-prescribed best management practices.
Single-family standard or manufactured modular dwelling.
Tailwater recovery systems.
Worm raising.

Permitted special exceptions:

Animal shelters.
Aquaculture operations in which there are nonexempt excavations.
Cemeteries.
Communication towers exceeding 70 feet in height above ground level.
Dairies and dairy products (minimum parcel size requirement of five acres).
Day care centers.
Equestrian/livestock event facility.
Excavations only for stormwater retention ponds for which a permit is required by this article.
Garage apartments.
Group home.
Hog farms (minimum parcel size requirement of 2.5 acres).
Houses of worship.
Kennels.
Livestock feed lots (minimum parcel size requirement of five acres).
Off-street parking areas.
Poultry farms (minimum parcel size requirement of 2.5 acres).
Processing, packaging, storage, retail or wholesale sales of agricultural products not raised on the premises.
Public uses not listed as a permitted principal use.
Public utility uses and structures.
Recreational areas.
Riding stables.
Schools, parochial and private.
Single-family mobile home dwelling with a minimum floor area of 480 square feet as a temporary residence while building a standard or manufactured dwelling (maximum duration of 18 months).
Temporary campsites for three days before, during and three days after any regularly scheduled racing event at the Daytona Beach International Speedway for Speedweeks, Biketoberfest, the Pepsi 400, and Bike Week, on condition that security, portable toilets, garbage disposal and potable water facilities sufficient to accommodate all occupants and other relevant conditions are provided. Related special events and sales are allowed, if approved as part of the special exception.
Wholesale or retail fertilizer sales.

Dimensional requirements:
Minimum lot size:
Area: One acre.
Width: 150 feet.

Minimum yard size:
Front yard: 40 feet.
Rear yard: 40 feet.
Side yard: 25 feet.
Waterfront yard: 40 feet.

Maximum building height: 55 feet.

Maximum lot coverage: The total lot area covered with principal and accessory buildings shall not exceed 35 percent.

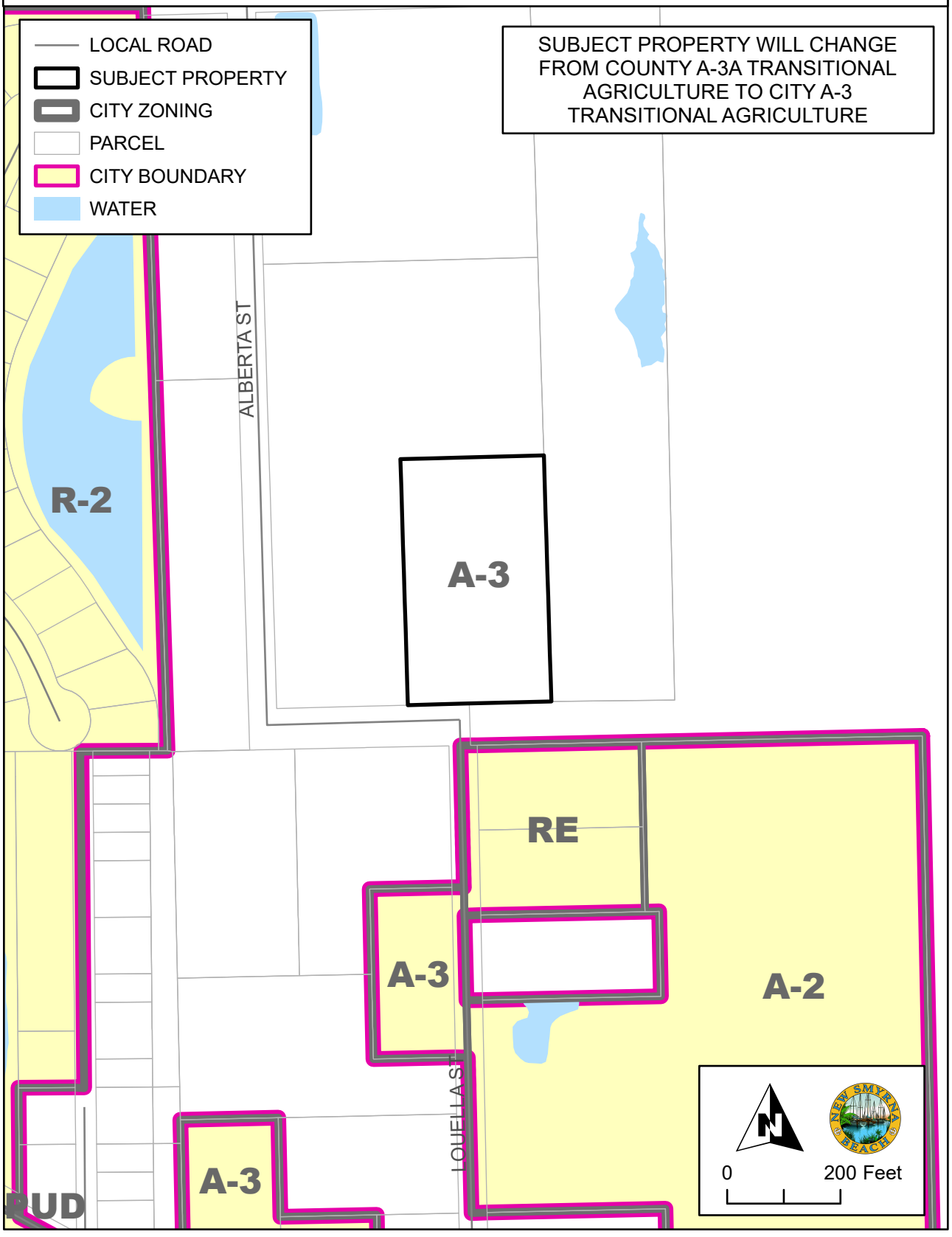
Minimum floor area: 1,000 square feet.

Off-street parking and loading requirement: Off-street parking and loading areas meeting the requirements of this LDR shall be constructed.

Skirting requirement for mobile home dwelling: The area between the ground and floor of the mobile home dwelling shall be enclosed with skirting.

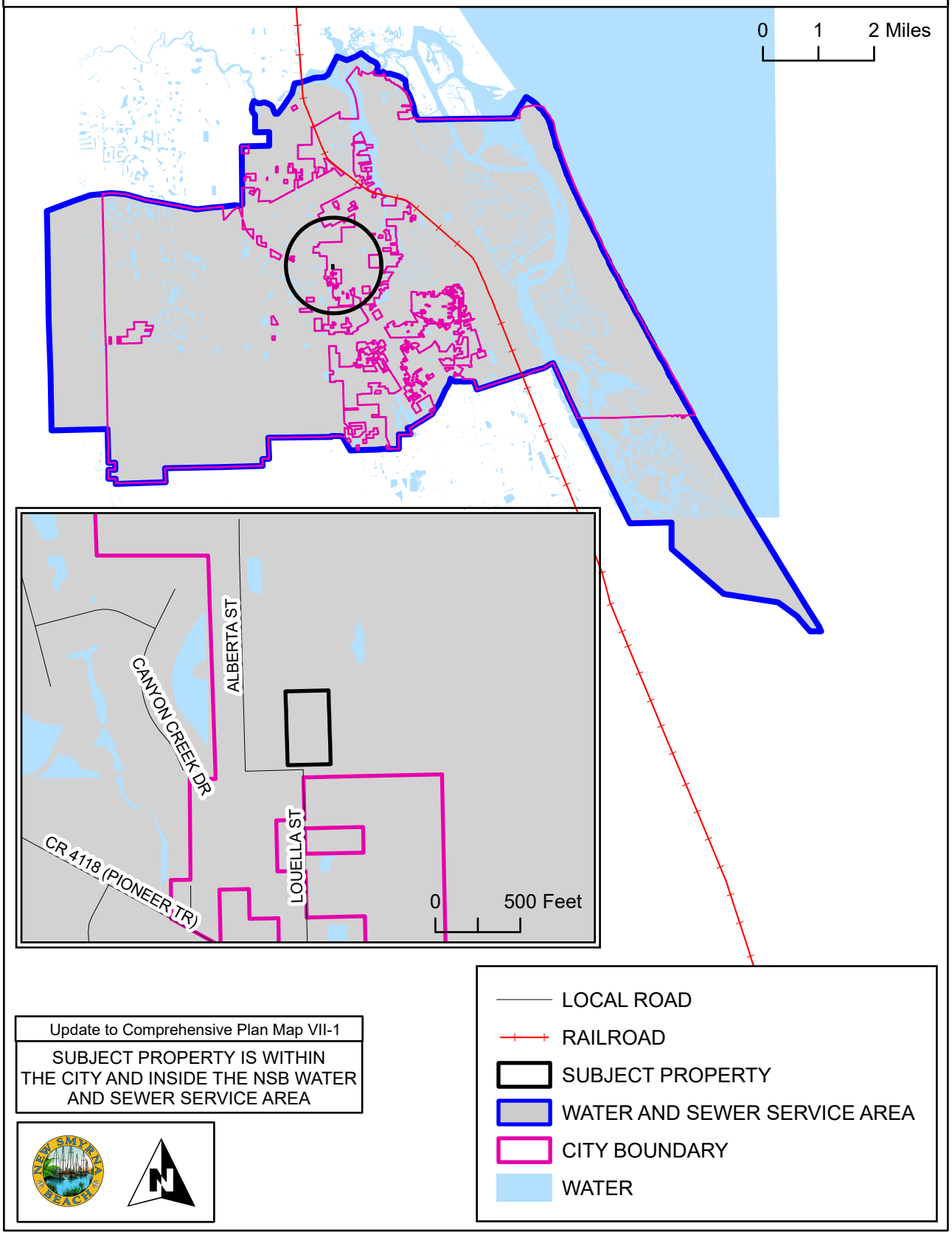
PROPOSED ZONING

A-9-25



WATER AND SEWER SERVICE AREA

A-9-25

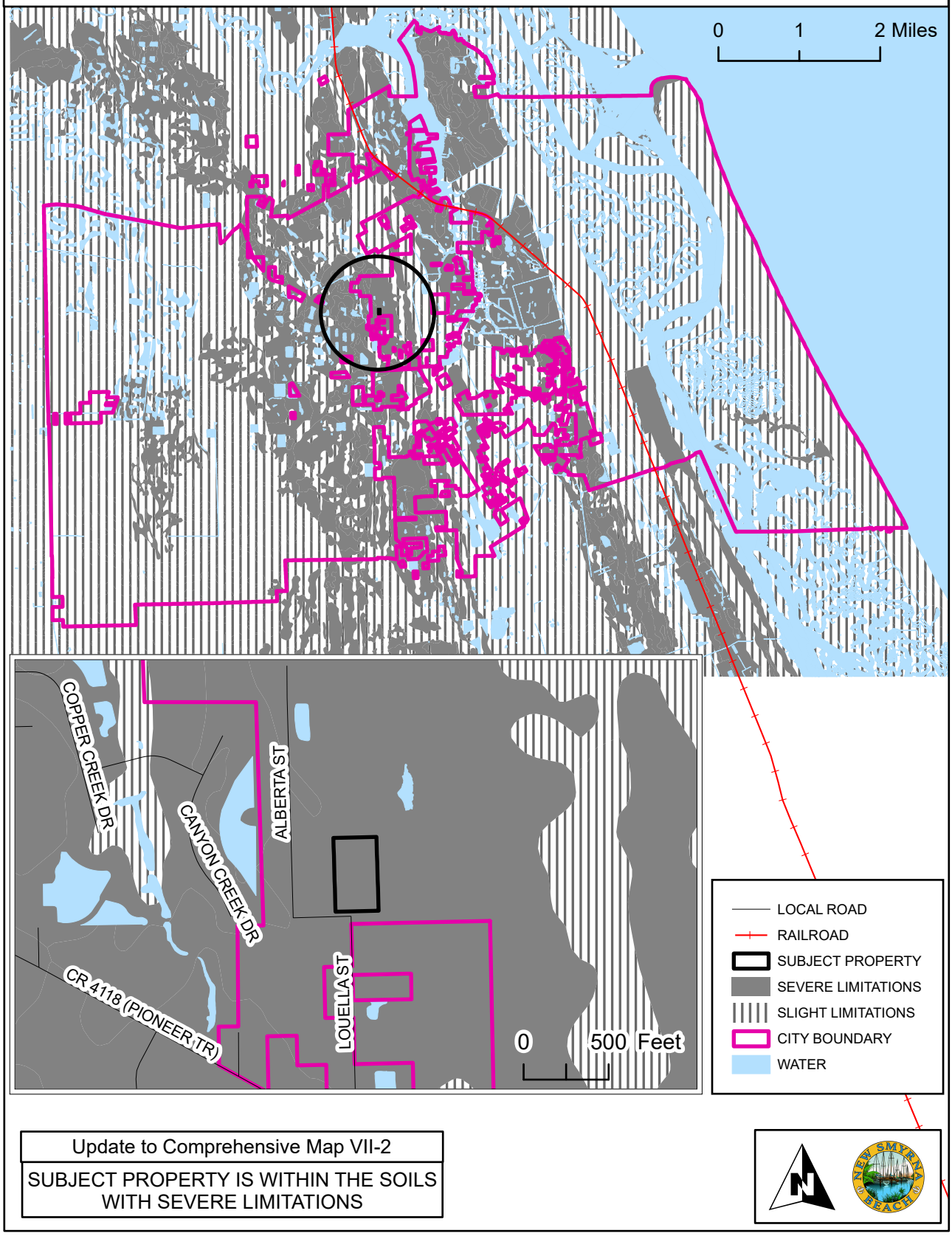


Update to Comprehensive Plan Map VII-1

SUBJECT PROPERTY IS WITHIN THE CITY AND INSIDE THE NSB WATER AND SEWER SERVICE AREA

SOIL LIMITATION FOR SEPTIC SYSTEMS

A-9-25

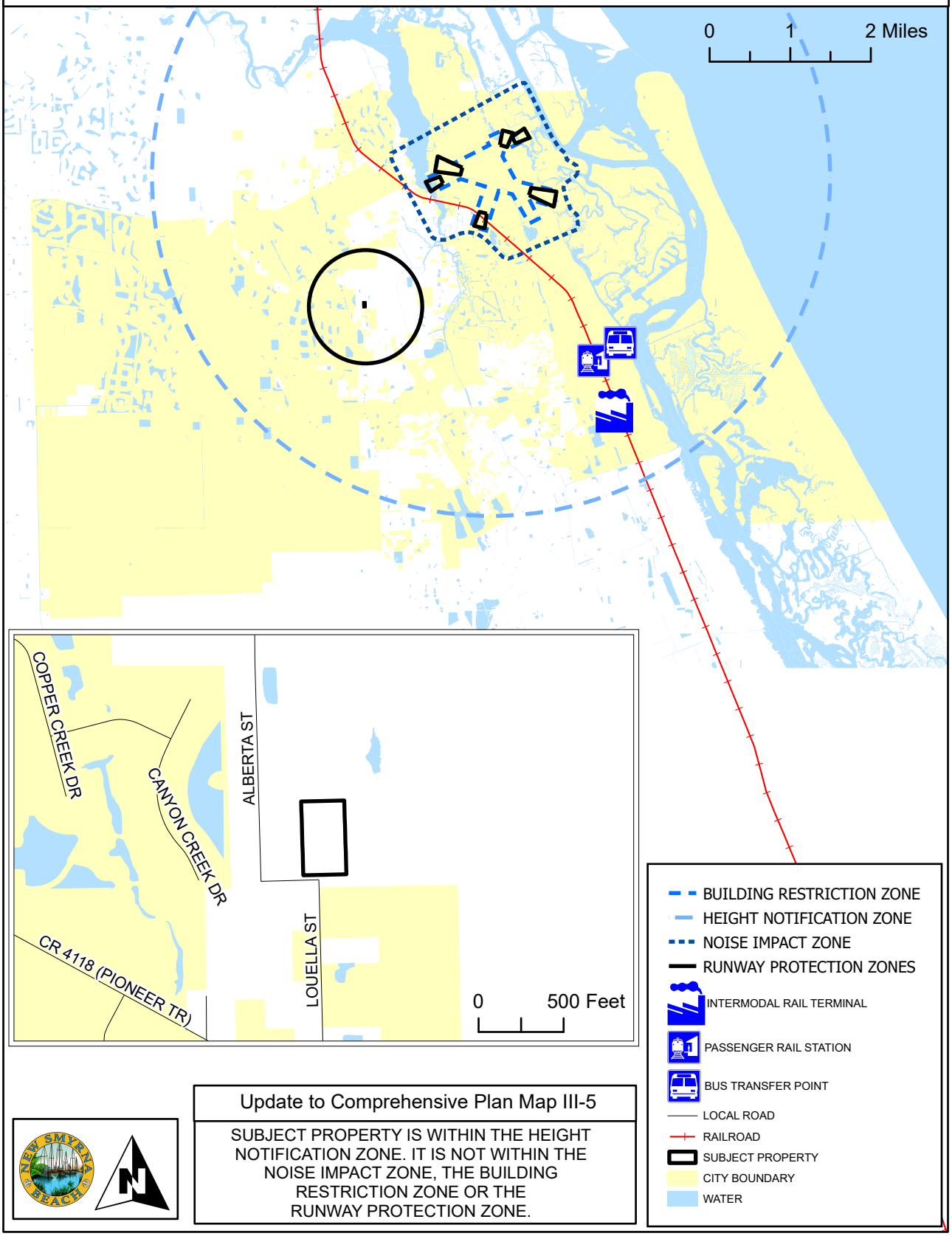


Update to Comprehensive Map VII-2

SUBJECT PROPERTY IS WITHIN THE SOILS WITH SEVERE LIMITATIONS

AIRPORT RUNWAY PROTECTION ZONES

A-9-25

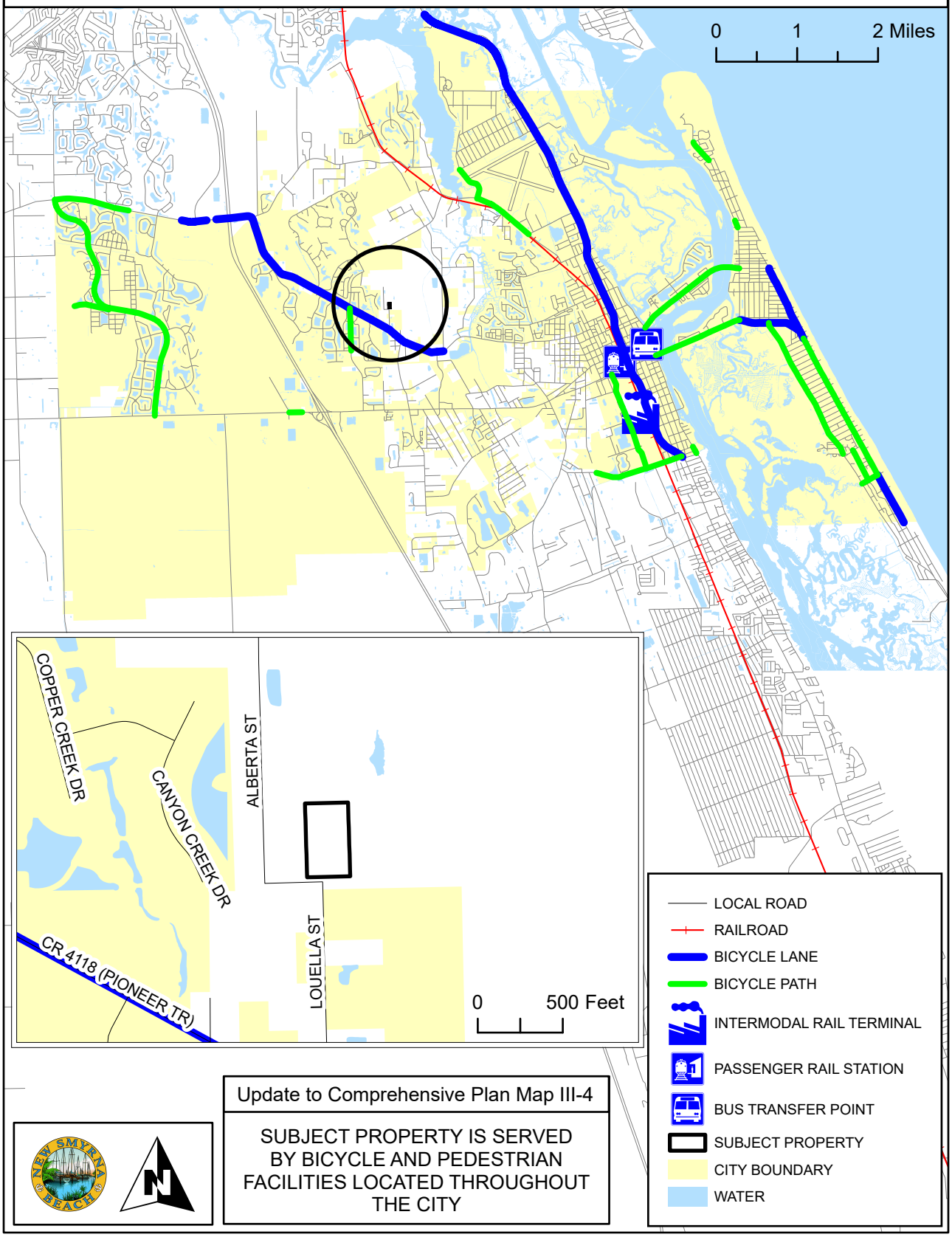


Update to Comprehensive Plan Map III-5

SUBJECT PROPERTY IS WITHIN THE HEIGHT NOTIFICATION ZONE. IT IS NOT WITHIN THE NOISE IMPACT ZONE, THE BUILDING RESTRICTION ZONE OR THE RUNWAY PROTECTION ZONE.

BICYCLE AND PEDESTRIAN FACILITIES

A-9-25

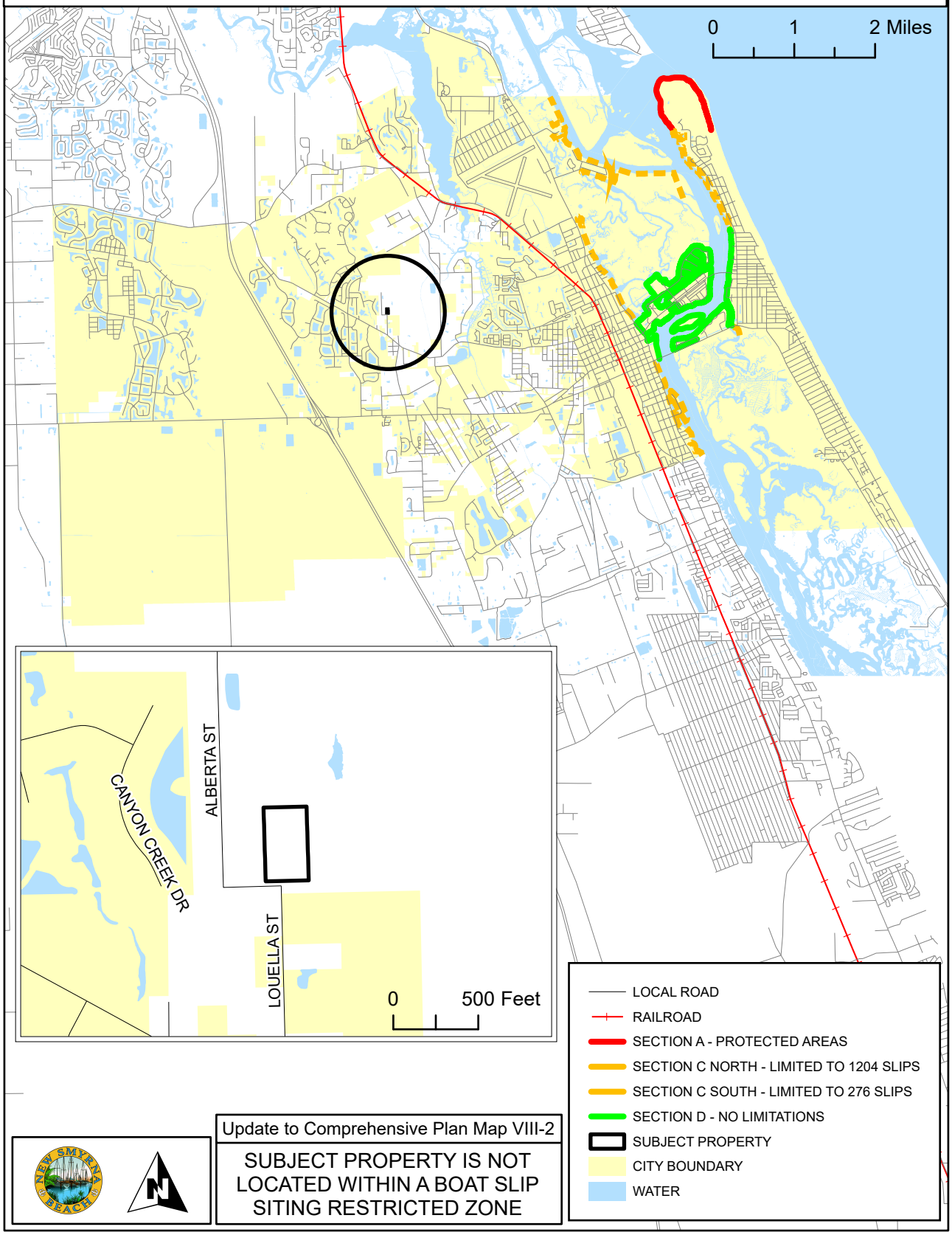


Update to Comprehensive Plan Map III-4

SUBJECT PROPERTY IS SERVED BY BICYCLE AND PEDESTRIAN FACILITIES LOCATED THROUGHOUT THE CITY

BOAT SLIP SITING

A-9-25

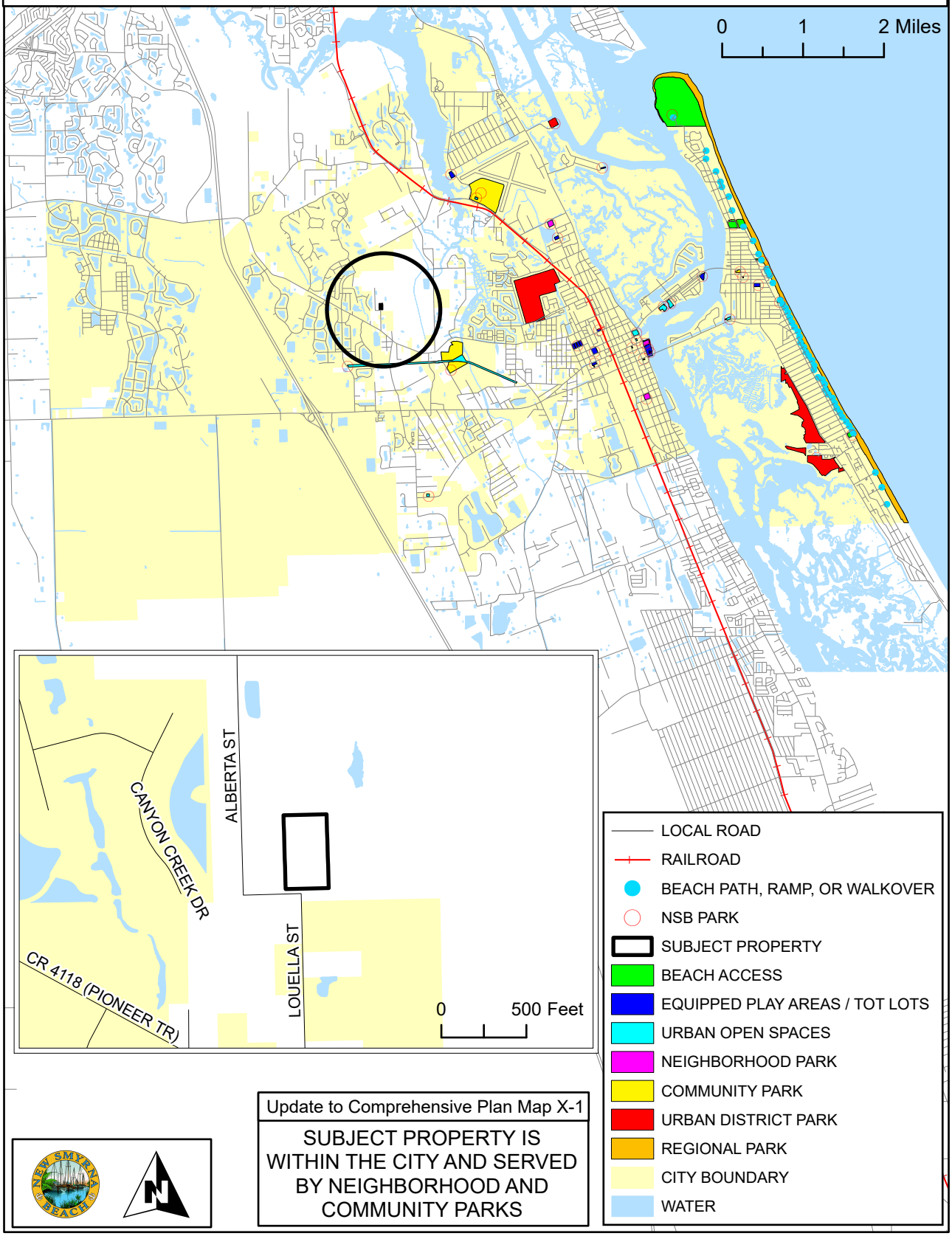


Update to Comprehensive Plan Map VIII-2

SUBJECT PROPERTY IS NOT LOCATED WITHIN A BOAT SLIP SITING RESTRICTED ZONE

CITY PARKS

A-9-25

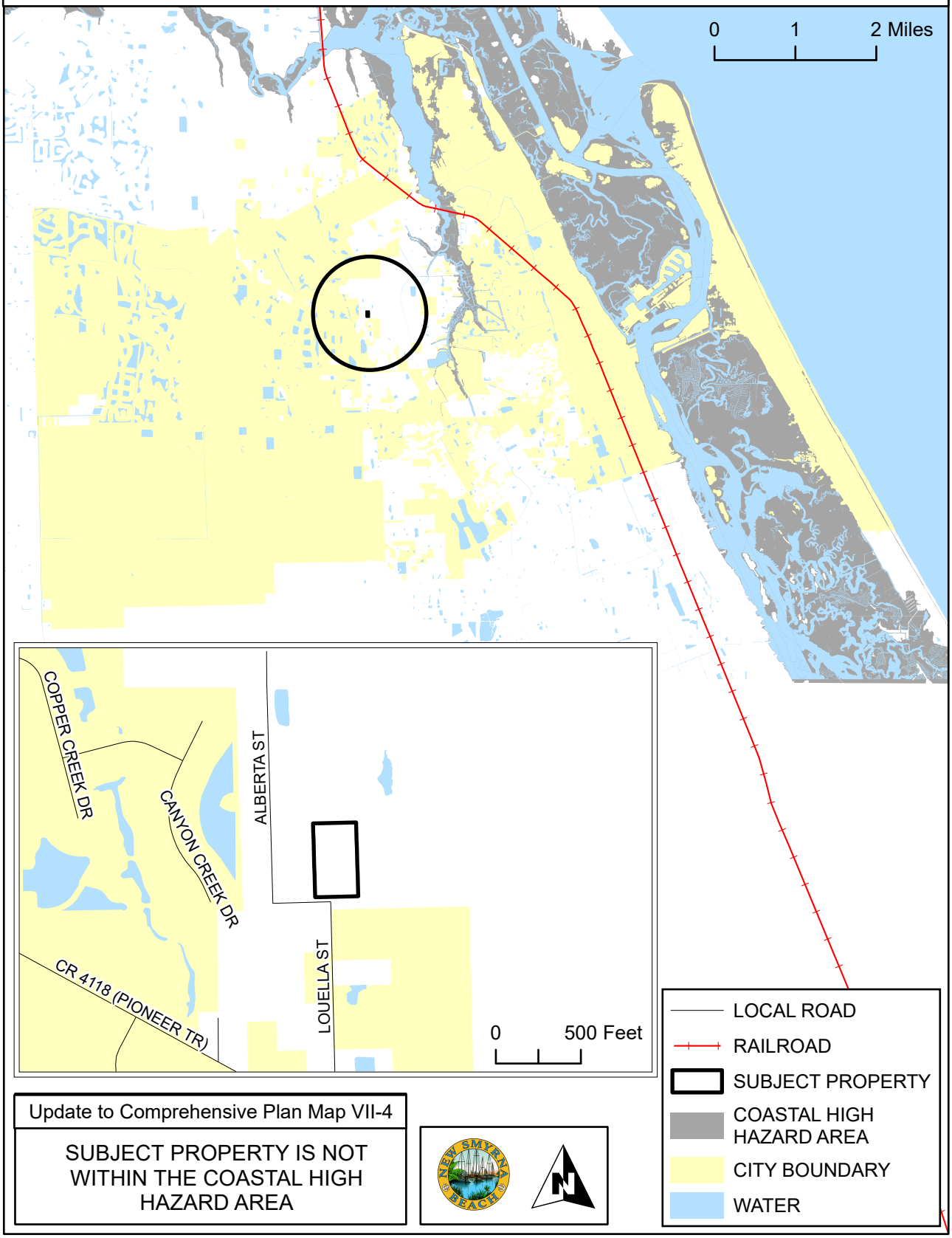


Update to Comprehensive Plan Map X-1

SUBJECT PROPERTY IS WITHIN THE CITY AND SERVED BY NEIGHBORHOOD AND COMMUNITY PARKS

COASTAL HIGH HAZARD AREAS

A-9-25

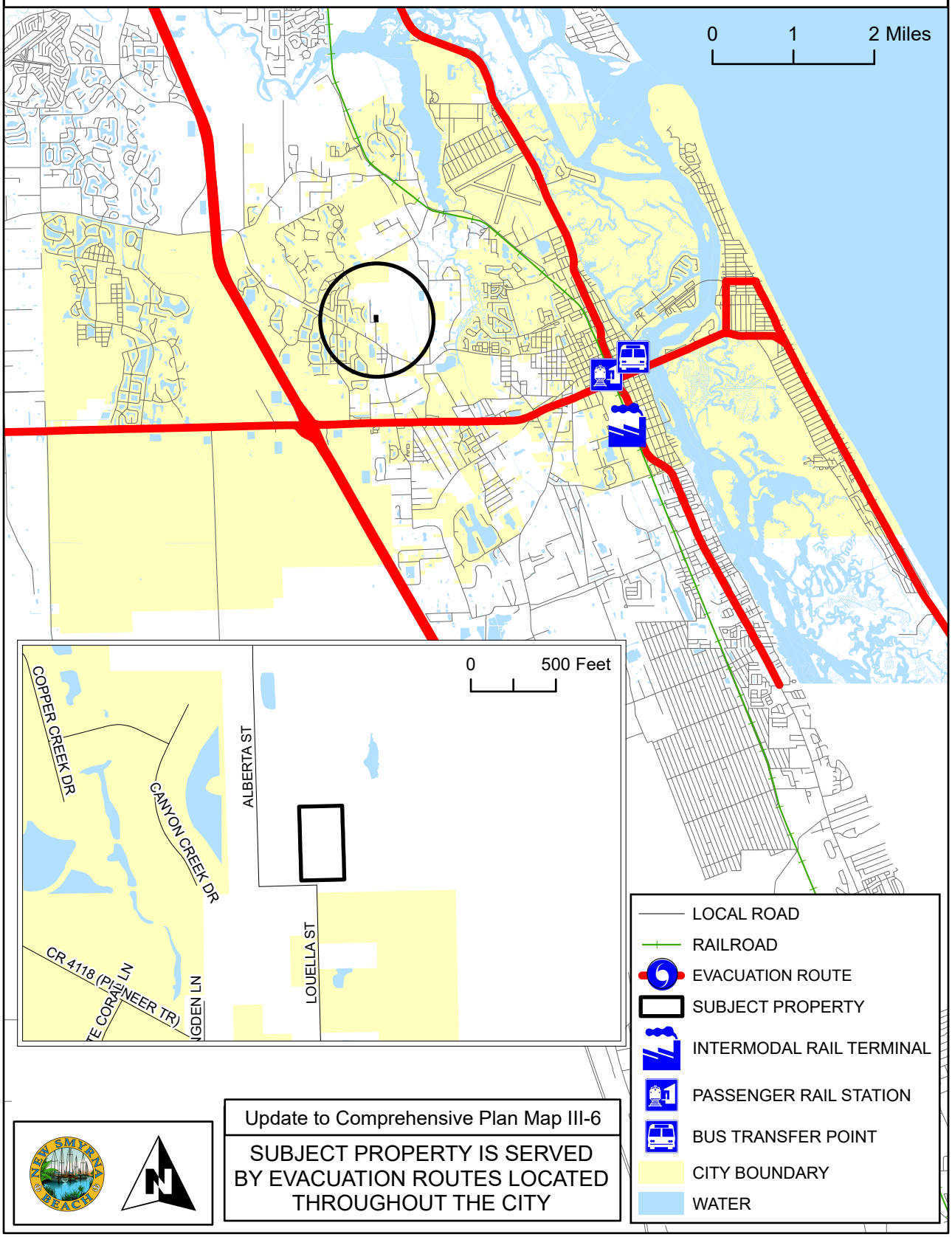


Update to Comprehensive Plan Map VII-4

SUBJECT PROPERTY IS NOT WITHIN THE COASTAL HIGH HAZARD AREA

EVACUATION ROUTES

A-9-25

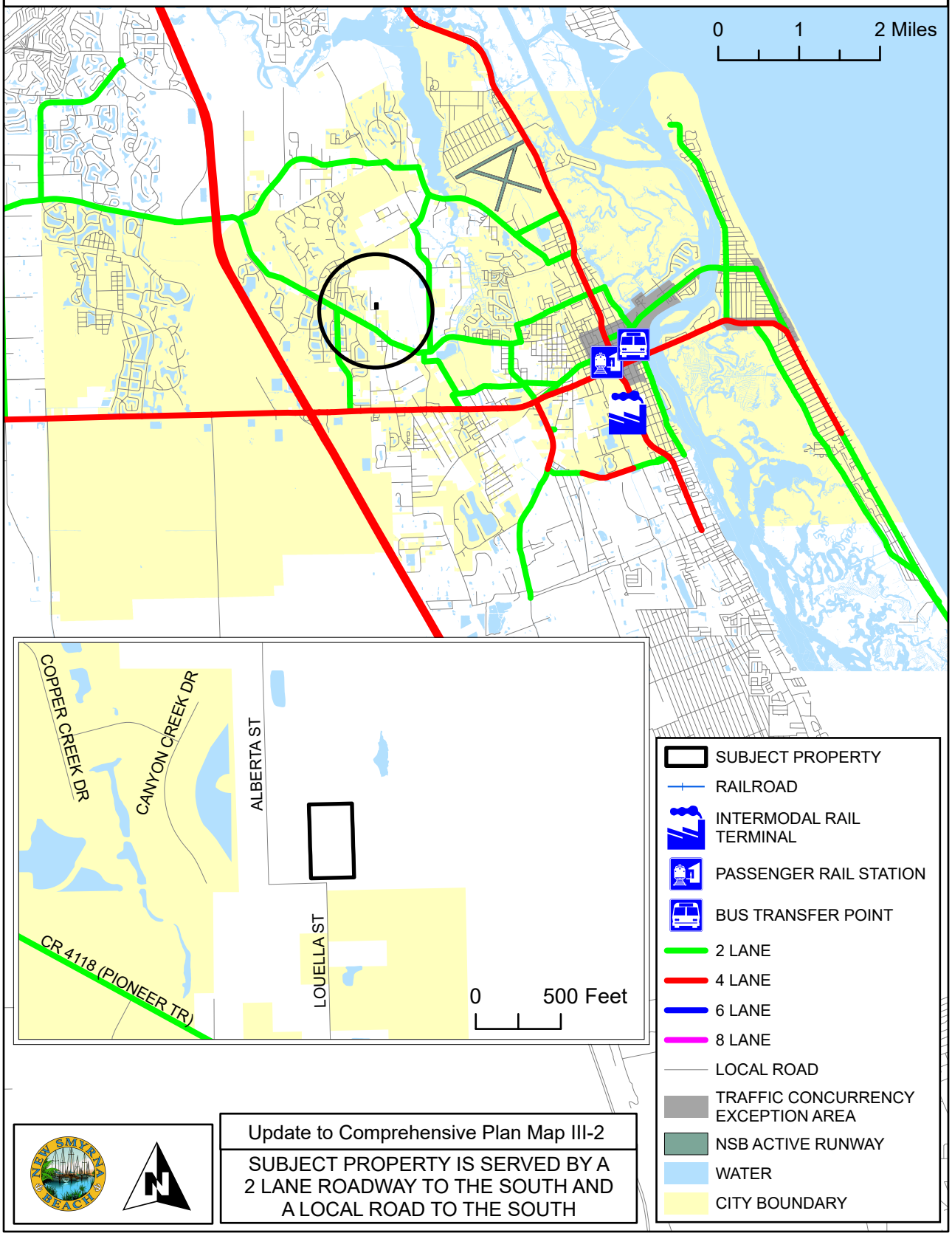


Update to Comprehensive Plan Map III-6

SUBJECT PROPERTY IS SERVED BY EVACUATION ROUTES LOCATED THROUGHOUT THE CITY

EXISTING TRAFFIC LANES - 2009

A-9-25

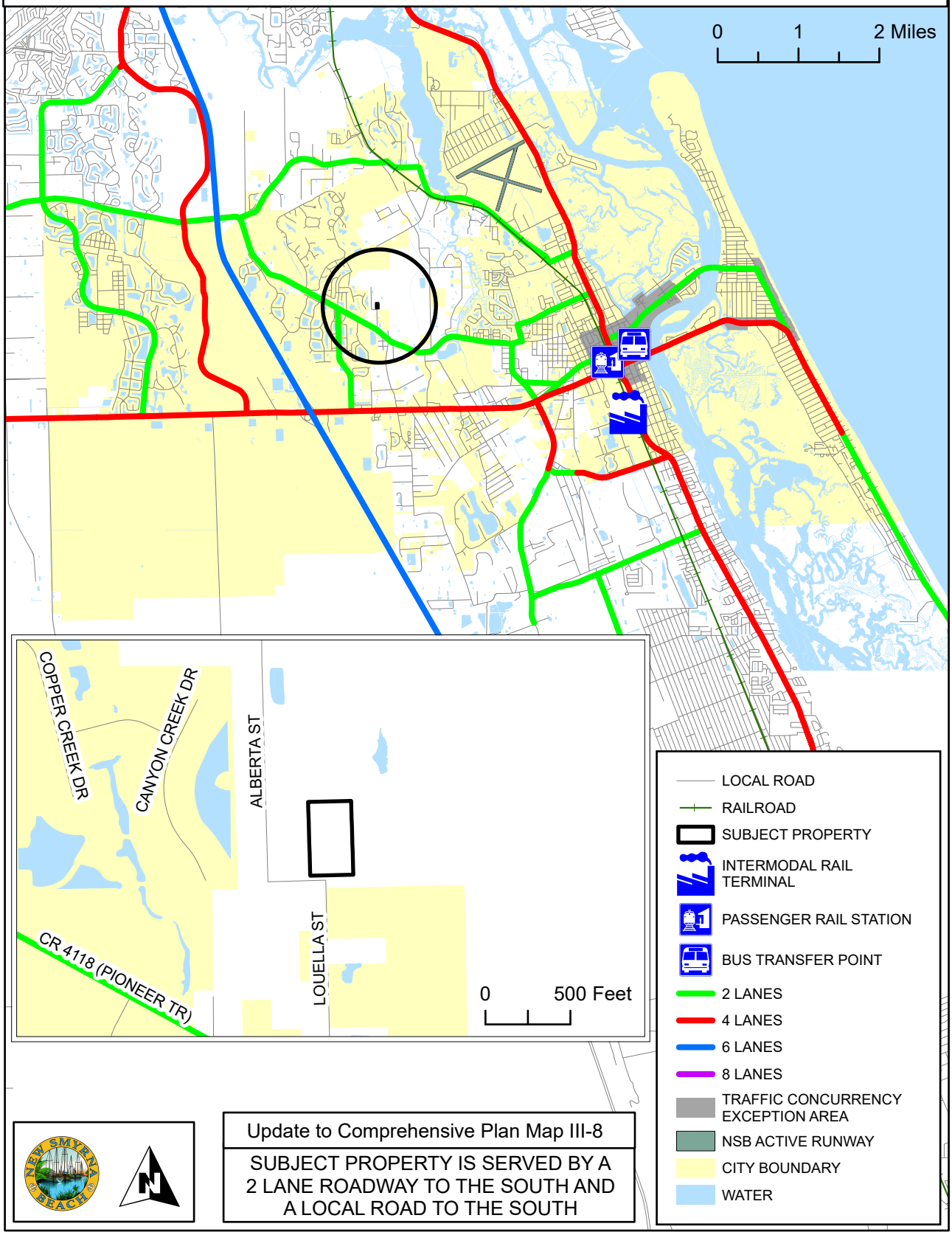


Update to Comprehensive Plan Map III-2

SUBJECT PROPERTY IS SERVED BY A 2 LANE ROADWAY TO THE SOUTH AND A LOCAL ROAD TO THE SOUTH

NUMBER OF TRAFFIC LANES - 2025

A-9-25

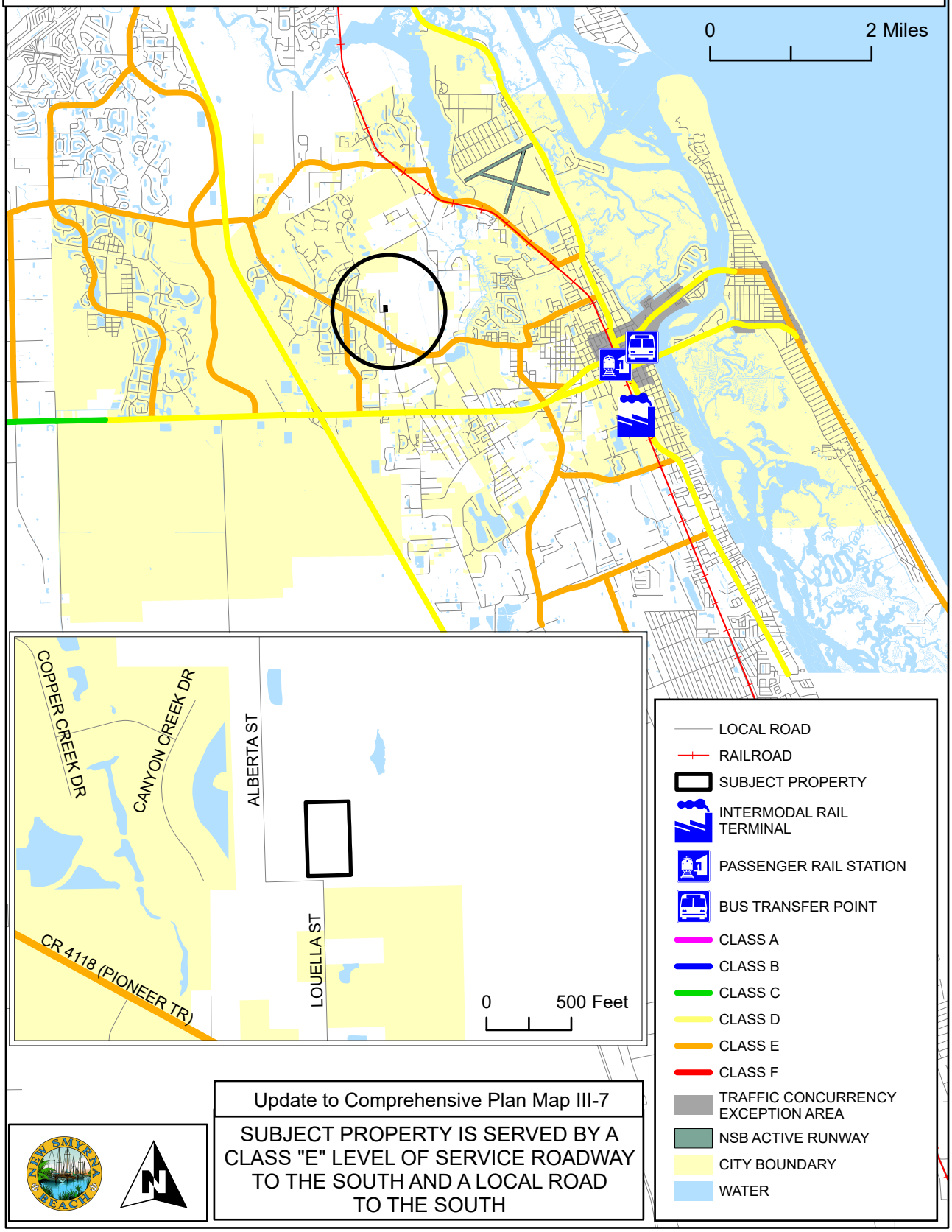


Update to Comprehensive Plan Map III-8

SUBJECT PROPERTY IS SERVED BY A 2 LANE ROADWAY TO THE SOUTH AND A LOCAL ROAD TO THE SOUTH

LEVEL OF SERVICE - 2025

A-9-25

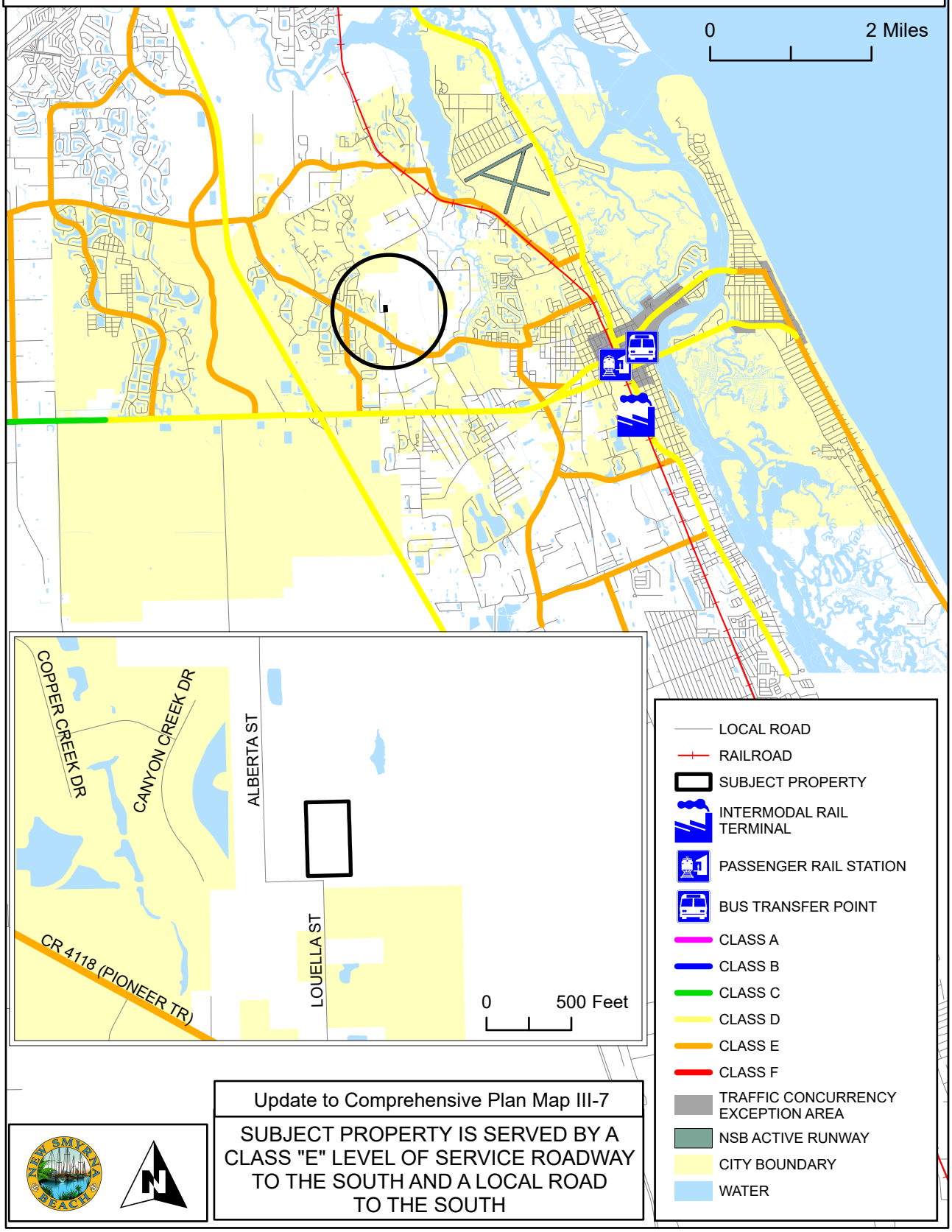


Update to Comprehensive Plan Map III-7

SUBJECT PROPERTY IS SERVED BY A CLASS "E" LEVEL OF SERVICE ROADWAY TO THE SOUTH AND A LOCAL ROAD TO THE SOUTH

LEVEL OF SERVICE - 2025

A-9-25

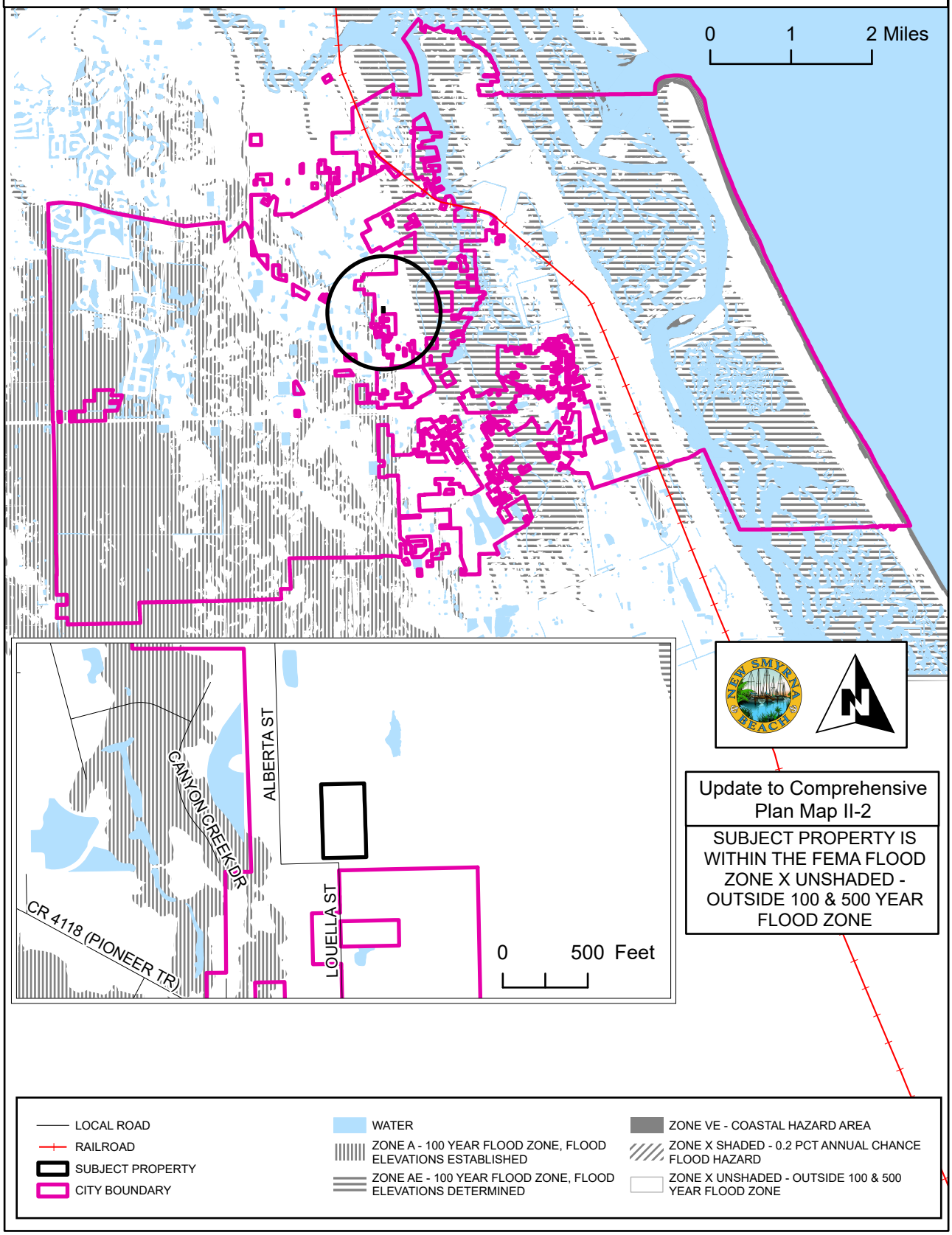


Update to Comprehensive Plan Map III-7

SUBJECT PROPERTY IS SERVED BY A CLASS "E" LEVEL OF SERVICE ROADWAY TO THE SOUTH AND A LOCAL ROAD TO THE SOUTH

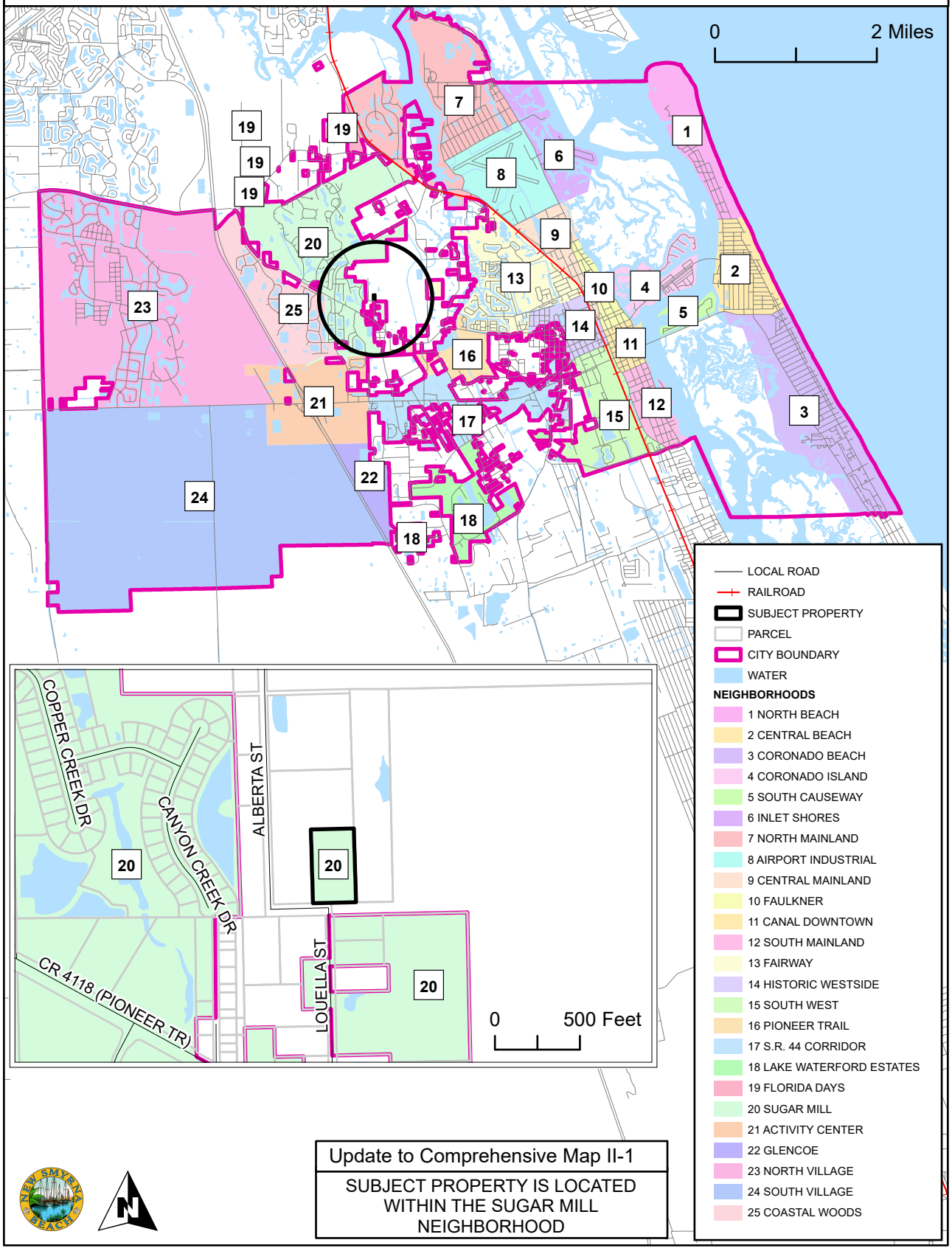
FLOOD PRONE AREAS

A-9-25



NEIGHBORHOODS

A-9-25

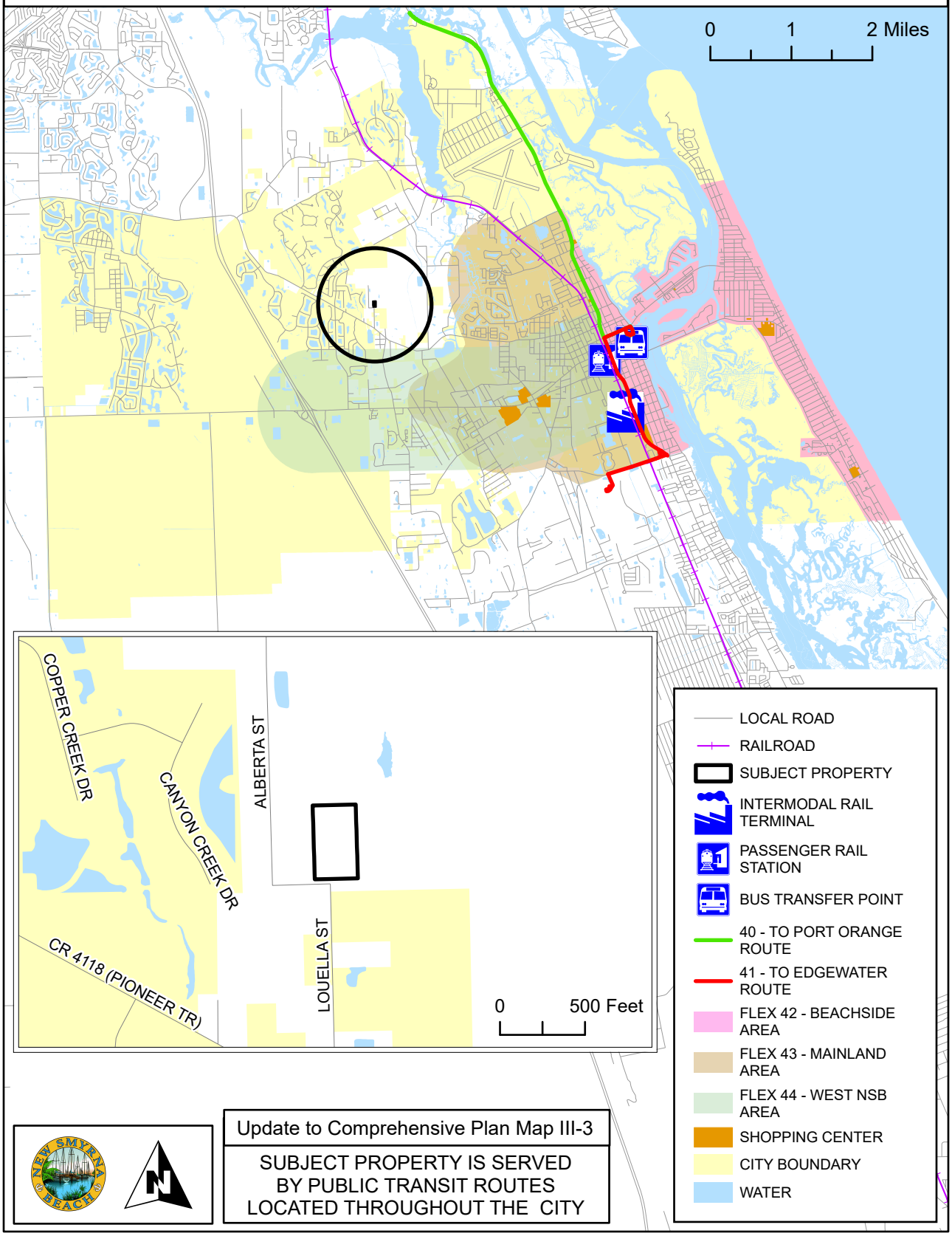


Update to Comprehensive Map II-1

SUBJECT PROPERTY IS LOCATED WITHIN THE SUGAR MILL NEIGHBORHOOD

PUBLIC TRANSIT ROUTES

A-9-25

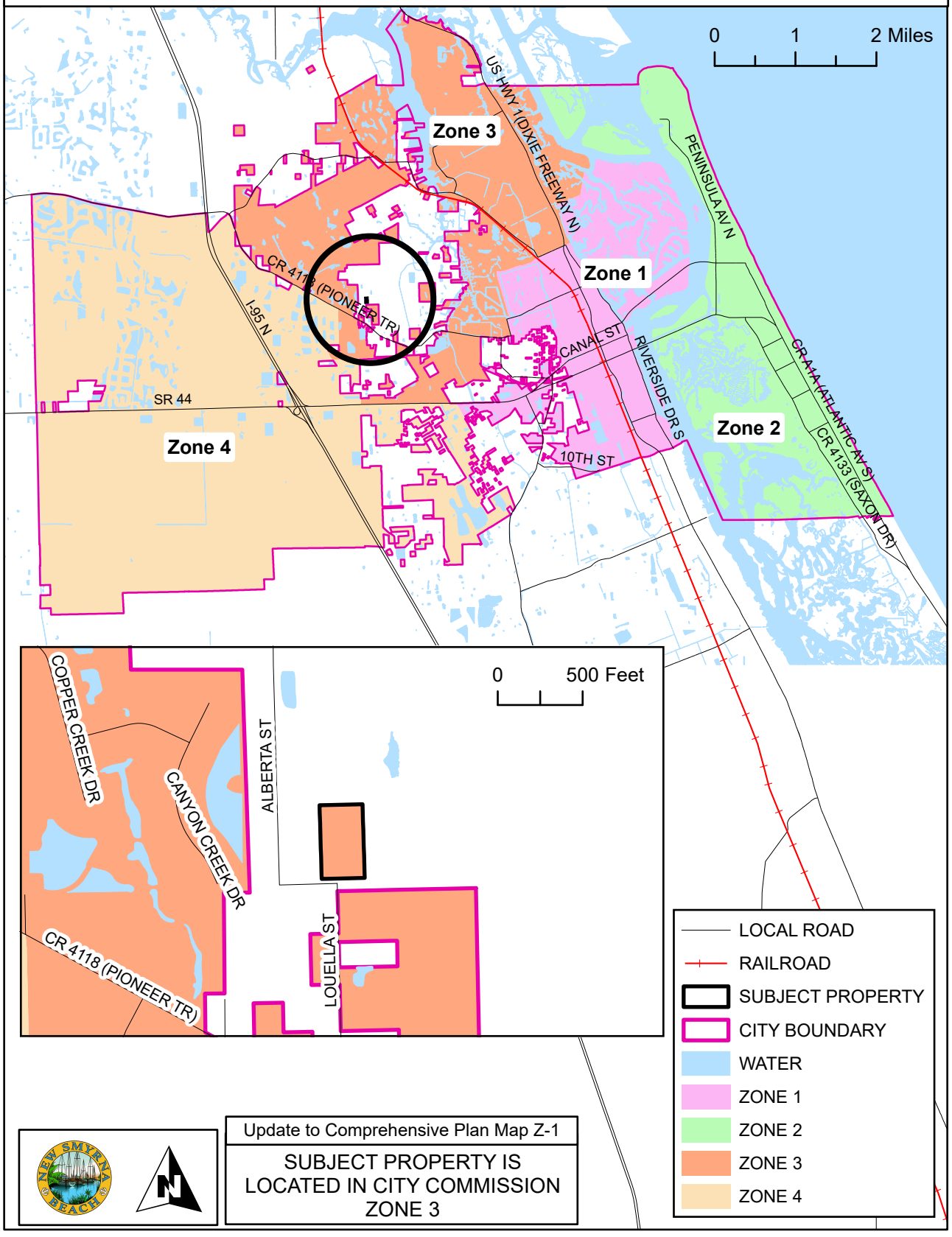


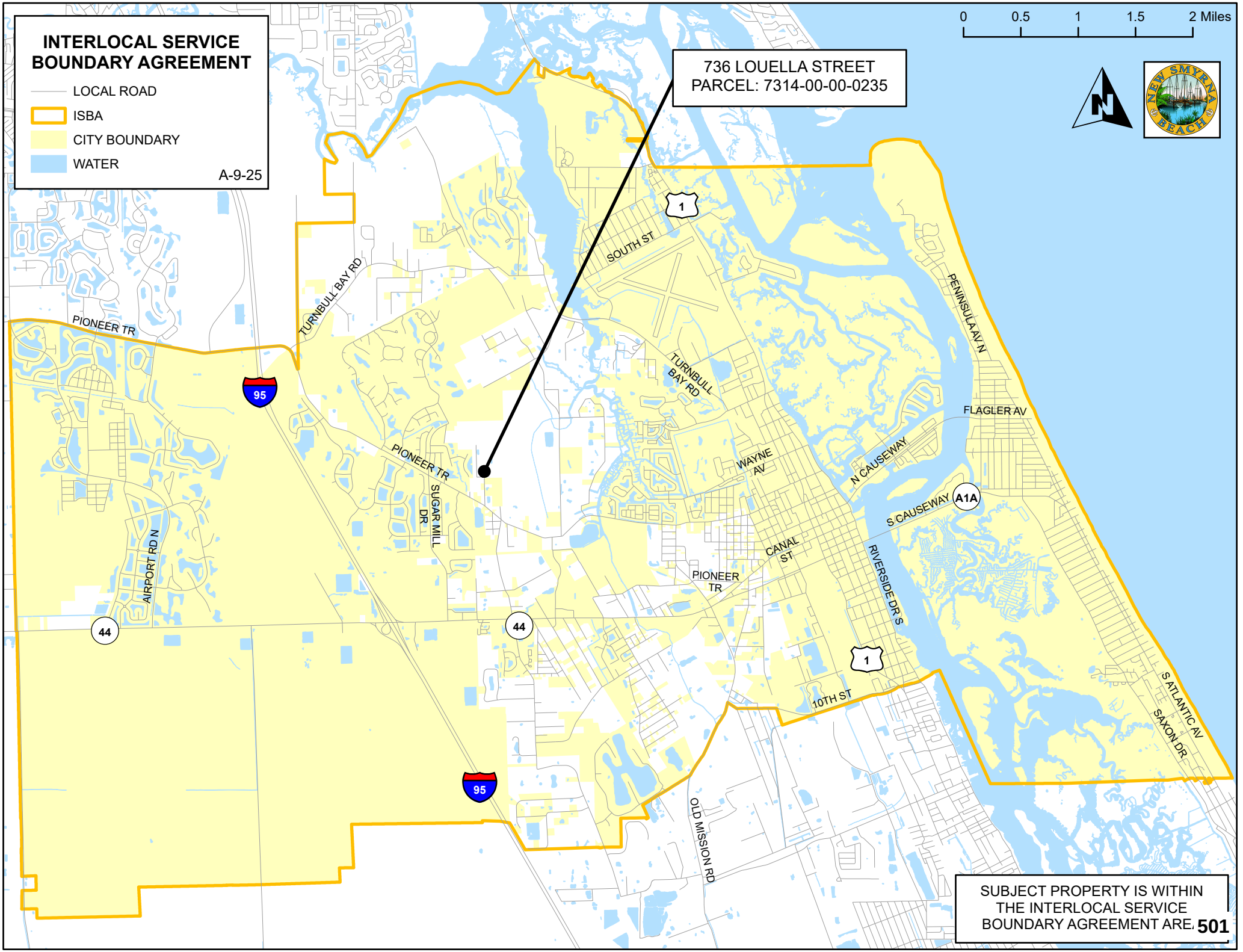
Update to Comprehensive Plan Map III-3

SUBJECT PROPERTY IS SERVED BY PUBLIC TRANSIT ROUTES LOCATED THROUGHOUT THE CITY

COMMISSION ZONES

A-9-25




INTERLOCAL SERVICE BOUNDARY AGREEMENT
LOCAL ROAD
ISBA
CITY BOUNDARY
WATER
A-9-25
736 LOUELLA STREET
PARCEL: 7314-00-00-0235
0 0.5 1 1.5 2 Miles
N
NEW SMYRNA BEACH
PIONEER TR
TURNBULL BAY RD
SOUTH ST
PENINSULA AV N
FLAGLER AV
WAYNE AV
N CAUSEWAY
S CAUSEWAY
A1A
CANAL ST
RIVERSIDE DR S
10TH ST
S ATLANTIC AV
SAXON DR
SUGAR MILL DR
AIRPORT RD N
OLD MISSION RD
95
44
1
SUBJECT PROPERTY IS WITHIN THE INTERLOCAL SERVICE BOUNDARY AGREEMENT ARE.
501

LEGAL DESCRIPTION

Address:
736 Louella Street, New Smyrna Beach, Florida 32168

Parcel Number
7314-00-00-0235

AltKey Number:
6677484

Metes and Bounds by Homepartners Title Services, LLC

A PORTION OF THE NW ONE-QUARTER (1/4), OF THE NW ONE QUARTER (1/4), SECTION 14, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER, (CERTIFIED CORNER RECORD DOCUMENT #0004157), SECTION 14, TOWNSHIP 17 SOUTH, RANGE 33 EAST, VOLUSIA COUNTY, FLORIDA; THENCE RUN SOUTH ALONG THE ,WESTERLY LINE OF SAID SECTION 14, ASSUMING A BASIS OF BEARINGS OF SOUTH 00 00'00" EAST, A DISTANCE OF 1319.43 FEET TO A POINT BEING A 5 INCH CAST IRON PIPE AND IRON ROD, CERTIFIED CORNER RECORD DOCUMENT #0004425, SAID POINT BEING THE SOUTHWEST CORNER OF THE NORTHWEST ONE-QUARTER (1/4), OF THE NORTHWEST ONE-QUARTER (1/4) OF SAID SECTION 14, THENCE ALONG THE SOUTHERLY LINE OF THE AFOREMENTIONED NORTHWEST ONE-QUARTER (1/4), OF THE NORTHWEST ONE-QUARTER (1/4), SECTION 14, RUN SOUTH 89° 55’ 33" EAST, A DISTANCE OF 899.70 FEET; THENCE NORTH 00° 00' 29” EAST A DISTANCE OF 65.73 FEET; THENCE RUN NORTH 89° 54' 10" WEST A DISTANCE OF 231.00 FEET FOR A POINT OF BEGINNING; THENCE CONTINUE NORTH 89° 54' 10" WEST A DISTANCE OF 253.31 FEET; THENCE NORTH 00° 00' 29” EAST A DISTANCE OF 458.00 FEET; THENCE SOUTH 89° 54' 10" EAST A DISTANCE OF 253.31 FEET; THENCE SOUTH 00° 00' 29" WEST A DISTANCE OR 458.00 FEET TO THE POINT OF BEGINNING.

TOGETHER WITH AN EASEMENT FOR INGRESS AND EGRESS DESCRIBED IN OFFICIAL RECORDS BOOK 1349, PAGE 369, PUBLIC RECORDS OF SAID COUNTY.

8/29/2023 9:40:25 AM Instrument #2023177390 #1 Book:8452 Page:4816
Doc Stamps $1,890.00 Transfer Amt $270,000.00

Prepared by:
Jolene Roy
HomePartners Title Services, LLC
150 S. Pine Island Road Suite 430
Plantation, FL 33324

Return to:
HomePartners Title Services, LLC
Jolene Roy
150 S. Pine Island Road Suite 430
Plantation, FL 33324

Incident to the issuance of a title insurance commitment.

Tax ID: 731400000235

File Number: 186-27510V

Consideration: $270,000.00

(Space Above This Line For Recording Data)

Warranty Deed

This Warranty Deed made this **21st day of August, 2023**, between

Judith Ann Johns, a single woman
whose post office address is **122 Hazelwood River Road, Edgwater, FL 32141**, grantor,

and

Nicole A. Shuler and Ryan E. Shuler, wife and husband
whose post office address is **3202 Stonebridge Trail, Valrico, FL 33596**, grantee:

(Whenever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, trusts and trustees)

Witnesseth, that said grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in the **Volusia County, Florida**, to-wit:

A Portion of The NW one-quarter (1/4), of the NW one quarter (1/4), Section 14, Township 17 South, Range 33 East, Volusia County, Florida and being more particularly described as follows:

Commence at the Northwest Corner, (Certified Corner Record Document #0004157), Section 14, Township 17 South, Range 33 East, Volusia County, Florida; thence run South along the Westerly line of said Section 14, assuming a basis of bearings of South 00 00' 00" East, a distance of 1319.43 feet to a point being a 5 inch cast iron pipe and iron rod, Certified Corner Record Document #0004425, said point being the Southwest corner of the Northwest one-quarter (1/4), of the Northwest one-quarter (1/4) of said Section 14, thence along the Southerly line of the aforementioned Northwest one-quarter (1/4), of the Northwest one-quarter (1/4), Section 14, run South 89° 55' 33" East, a distance of 899.70 feet; thence North 00° 00' 29" East a distance of 65.73 feet; thence run North 89° 54' 10" West a distance of 231.00 feet for a point of beginning; thence continue North 89° 54' 10" West a distance of 253.31 feet; thence North 00° 00' 29" East a distance of 458.00 feet; thence South 89° 54' 10" East a distance of 253.31 feet; thence South 00° 00' 29" West a distance of 458.00 feet to the point of beginning.

Together with an easement for ingress and egress described in Official Records Book 1349, Page 369, Public

Records of said County.

Parcel Identification Number: 731400000235

Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

To Have and to Hold, the same in fee simple forever.

And the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes for the year of closing and subsequent years, restrictions, reservations, covenants and easements of record, if any.

In Witness Whereof, grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

Witness Signature
Printed Name: Travoss Dever

Witness Signature
Printed Name: Patricia A Howe

Judith Ann Johns

State of Florida

County of Volusia

The foregoing instrument was acknowledged before me by means of [X] physical presence or [ ] online notarization, this 29 day of Aug 2023, by **Judith Ann Johns, a single woman**, who is personally known to me or ( ) has produced _____ as identification.

NOTARY PUBLIC
Printed Name: Patricia A. Howe
My Commission Expires: _____

(SEAL)

PATRICIA A. HOWE
MY COMMISSION # HH 350814
EXPIRES: March 29, 2027

THE CITY OF NEW SMYRNA BEACH - PLANNING DEPARTMENT

ZT-5-25: REVIEW A REQUEST TO ADD A CONDITIONAL USE OF "AUTOMOTIVE WHOLESALE USED", TO THE I-3 INDUSTRIAL PARK ZONING DISTRICT.

September 8, 2025

Background:

Applicant: Denise Mattar for Robert W. Higginbotham, 1521 Airway Circle, New Smyrna Beach, Florida 32168.

Request: To add the definition and a conditional use of Automotive Wholesale Used, to the I-3 industrial Park zoning district.

Exhibits used in this report:

Exhibit A: Applicant Request Letter
Exhibit B: Applicant Provided Information and Photos
Exhibit C: Proposed Text
Exhibit D: I-3 Zoning Map

Findings:

Mr. Higginbotham has been in the automotive industry for many years including here in New Smyrna Beach. When the applicant sells a dealership, sometimes the new purchaser may not want some the used inventory and Mr. Higginbotham has to wholesale those vehicles to other dealers. He needs a place to store these vehicles while finding a buyer.

Mr. Higginbotham does own a parcel near the airport that is zoned I-3, Industrial Park. He has used this building in the past to store personal vehicles. He also needs office space for his employees that were relocated from a recent property sale here in New Smyrna Beach. So, since he owns a building locally here in New Smyrna Beach, he would like to use that building to house his employees and inventory that needs to be wholesaled out to other dealers. See **Exhibits A** and **B**.

The property at 1521 Airway Circle is zoned I-3, Industrial Park and the use of wholesale car sales is not listed as a permitted use, conditional use, or a special exception use. This application has proposed to put the wholesale sales of automotives as a conditional use with conditions. See **Exhibit C**.

Since this proposed conditional use would affect all properties with in the I-3, Industrial Park, the Planning Department has provided a map showing the I-3 zoned properties within the city. See **Exhibit D**.

Recommendation:

The Planning Department recommends that the Planning and Zoning Board give a positive recommendation to the City Commission to add the definition of Automotive Wholesale Used and the conditional use of Automotive Wholesale - Used Only, in the I-3 Industrial Park zoning district limiting to the Airport Industrial Park only, (See **Exhibit E**), and not including the municipal airport property.

Fiscal Analysis:
N/A

Strategic Plan Item:
No

Staff Report Created By: Robert Mathen - Senior Planner

Attachments:

Exhibit A Applicant Request Letter.pdf
Exhibit B Applicant Provided Information and Photos.pdf
Exhibit C Proposed Amendment 2.pdf
Exhibit D City I-3 Zoning Map.pdf
Exhibit E City I-3 Zoning.pdf

HIGGINBOTHAM MANAGEMENT COMPANY

Exhibit A

June 3, 2025

City of New Smyrna Beach
214 Sams Avenue
New Smyrna Beach, FL 32168

Ref: 1521 Airway Circle
New Smyrna Beach, FL 32168

Dear City Planners;

As a follow up to our Pre-Application Zoom meeting done on May 21st at 2:00 pm, our company Higginbotham Management Company, is trying to acquire a Florida Dealer License for our new LLC, Higginbotham Autos. In order to get the Florida dealer licensing required to wholesale used cars out of our building above, we need to ask for the zoning in your industrial park, to expand permissions for us to do so.

This will be primarily an indoor wholesale operation and will not be open to the public. The building itself is already equipped for this type of operation and we are willing to comply to whatever else the City may want. We do not intend this to be run like a used car lot and actually prefer it to be a very low-key operation.

I have included the land description, survey sheet, and several pictures of the building, and surrounding area.

We genuinely want to stay in compliance with the State of Florida and the City of New Smyrna. Please feel free to reach out to me with anything else the City may require.

Sincerely,

Denise Mattar
Executive Assistant/Manager

Enc.

Exhibit B

LEGAL DESCRIPTION

A portion of Lots 5 and 6, Block A, AIRPORT INDUSTRIAL PARK unrecorded subdivision, being a parcel of land in Sections 1 and 12, Township 17 South, Range 33 East described as follows: Commence at the intersection of the Southerly line of Government Lot 2, Section 12, Township 17 South, Range 33 East and the Easterly R/W line of the FEC Railway; thence N 88° 18' 30" E along the said Southerly line of Lot 2, a distance of 147.34 feet to the Easterly line of Turnbull Bay Road a 100 foot R/W as now laid out; thence N 48° 57' 00" W along the said Easterly R/W line, a distance of 2418.25 feet; thence N 16° 31' 00" E, a distance of 951.06 feet; thence S 73° 29' 00" E a distance of 25.00 feet for the Point of Beginning; thence N 16° 31' 00" E, a distance of 300.00 feet; thence N 73° 29' 00" E, a distance of 300 feet; thence S 73° 29' 00" E, a distance of 425 feet to the Northerly R/W line of Airway Circle, 100' R/W per MB 38, p 194, thence S 16° 31' 00" W, a distance of 300 feet along said R/W line; thence N 73° 29' 00" W, a distance of 425 feet to the Point of Beginning. All lying and being a part of Sections 1 and 12, Township 17 South, Range 33 East and containing 2.93 acres more or less.

Legal
Descript
Airway Cir.

EXHIBIT

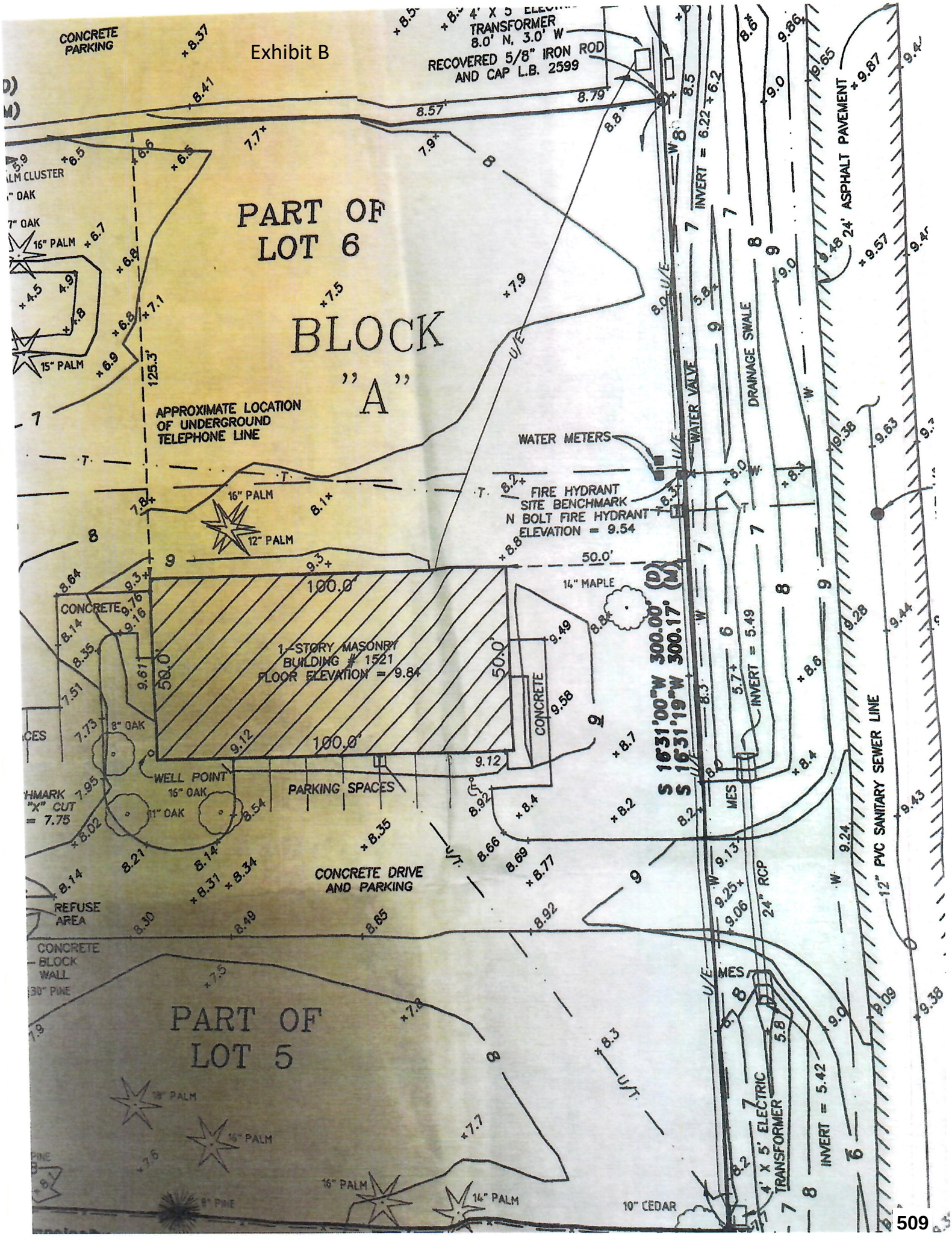
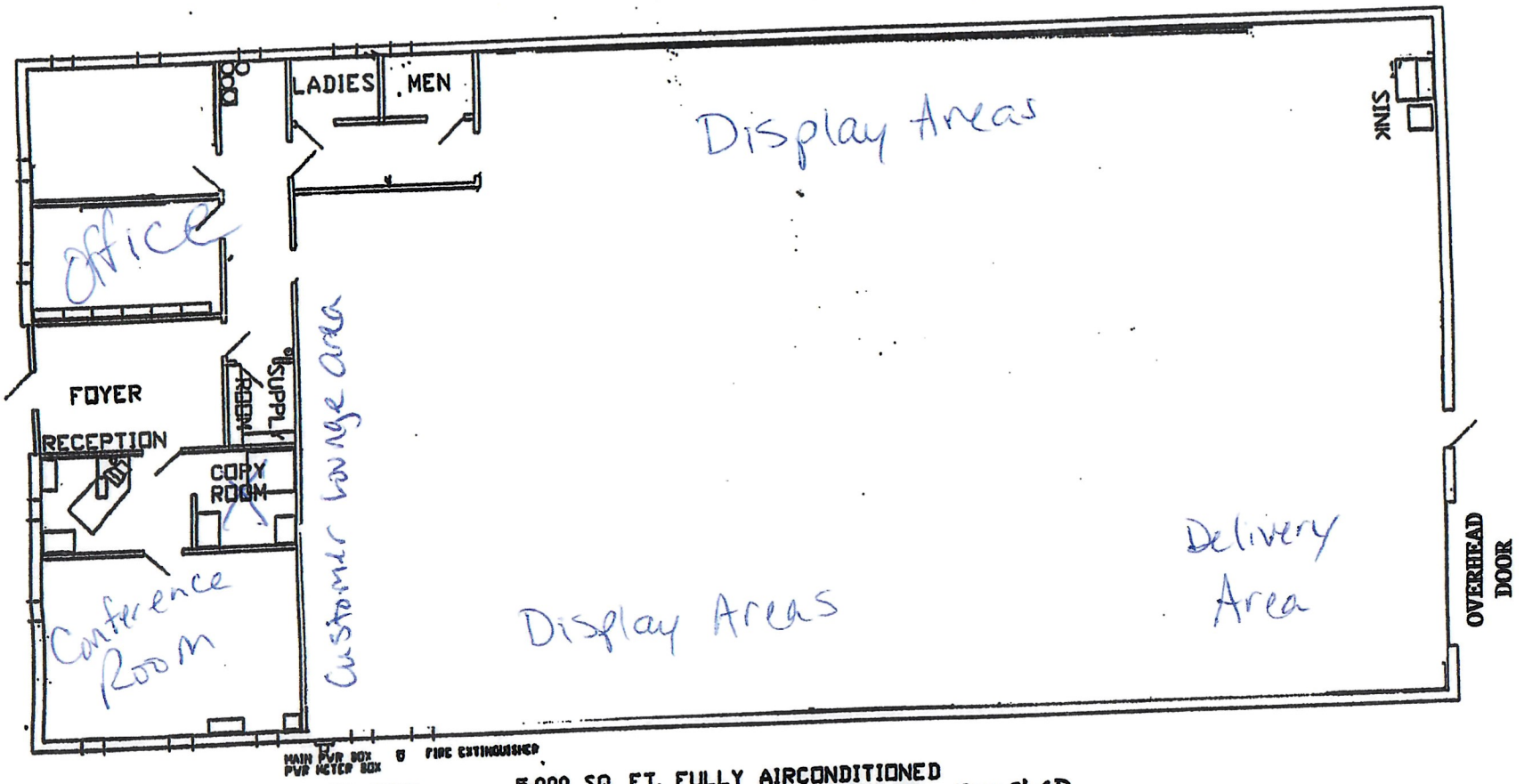


Exhibit B
CONCRETE PARKING
TRANSFORMER
8.0' N, 3.0' W
RECOVERED 5/8" IRON ROD
AND CAP L.B. 2599
PART OF
LOT 6
BLOCK
"A"
APPROXIMATE LOCATION
OF UNDERGROUND
TELEPHONE LINE
WATER METERS
WATER VALVE
DRAINAGE SWALE
INVERT = 6.22
24' ASPHALT PAVEMENT
FIRE HYDRANT
SITE BENCHMARK
N BOLT FIRE HYDRANT
ELEVATION = 9.54
16" PALM
12" PALM
14" MAPLE
50.0'
100.0'
1-STORY MASONRY
BUILDING # 1521
FLOOR ELEVATION = 9.84
CONCRETE
INVERT = 5.49
S 16°31'00"W 300.00' (D)
S 16°31'19"W 300.17' (M)
8" OAK
WELL POINT
15" OAK
11" OAK
PARKING SPACES
CONCRETE DRIVE
AND PARKING
REFUSE
AREA
CONCRETE
BLOCK
WALL
12" PVC SANITARY SEWER LINE
24" RCP
MES
PART OF
LOT 5
18" PALM
16" PALM
16" PALM
14" PALM
10" CEDAR
4' X 5' ELECTRIC
TRANSFORMER
INVERT = 5.42

Exhibit B



EXISTING BUILDING:

1521 AIRWAY CIRCLE
NEW SMYRNA BEACH, FLORIDA 32168

5,000 SQ. FT. FULLY AIRCONDITIONED
8' FINISHED CEILINGS /0 FT. UN-FINISHED
CINDER BLOCK, REINFORCED COLUMNS EVERY 25'
POURED CONCRETE LENTIL ALL AROUND TOP OF BUILDING
MONOLYTHIC SLAB FLOOR
CITY WATER, CITY SEWERS
BUILT-UP ROOF WITH ALUMINUM ROOF-OVER

SCALE:
1 FOOT
5 FEET
10 FEET
25FEET

Up to 10 cars maximum
to Wholesale out - No retail

Exhibit B



Office front(new landscaping)

Exhibit B



parking lot area

Exhibit B



back of building w/security camera

Exhibit B



other side of building

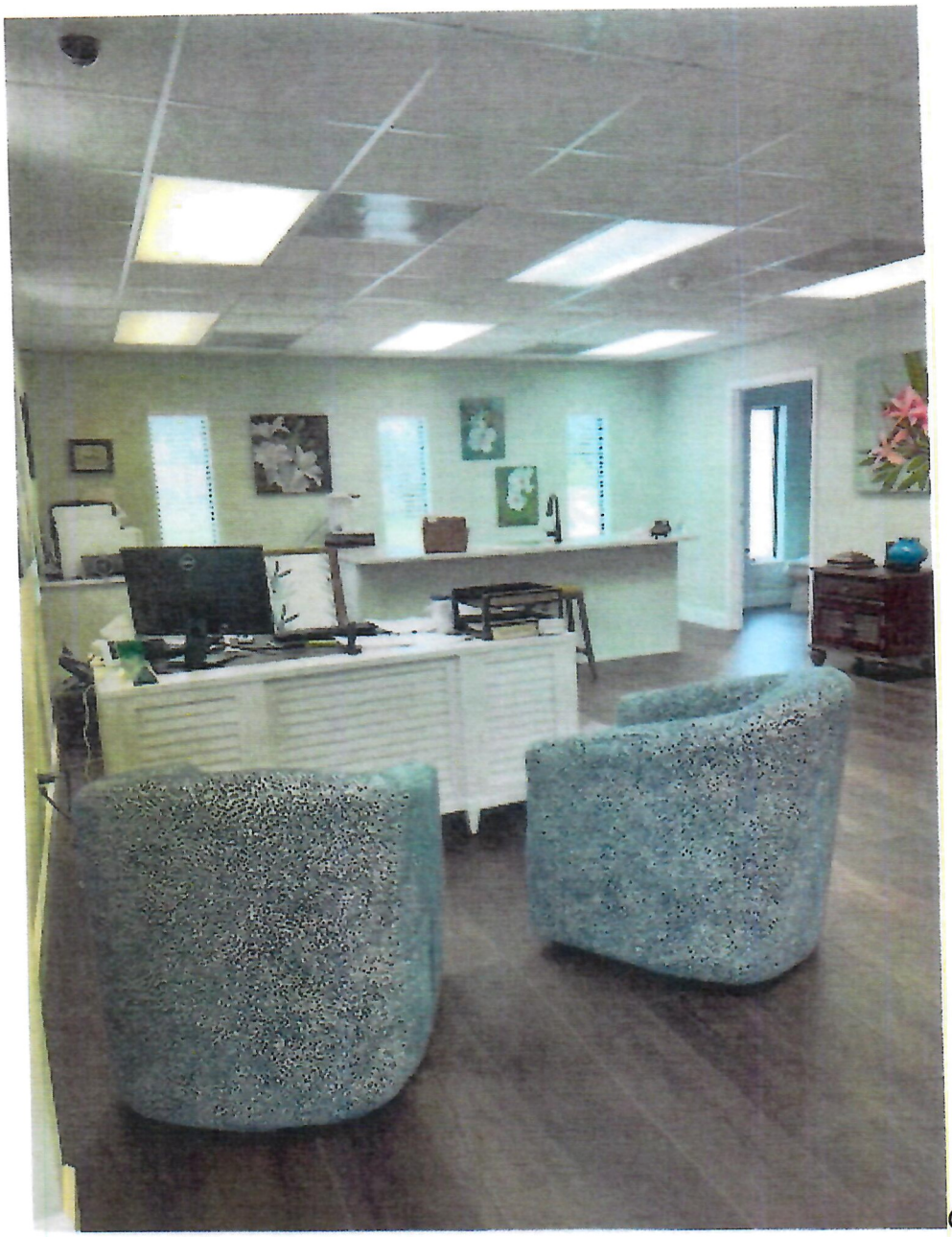
Denise Mattar

Exhibit B



Office entrance

Exhibit B



Office

Exhibit B



Conference room

Exhibit B



Display area

Exhibit B



Display areas

Exhibit B



Delivery bay

Exhibit B



Service area

Exhibit B



Customer lounge area

Exhibit B



Storage area

201.00 General Definitions

The following definitions shall apply to these regulations in general unless superseded by a definition pertaining to a specific Article as indicated in Sections 202.00 through 207.00 of these regulations.

~~Automobile Wrecking: The dismantling or disassembling of used motor vehicles or travel trailers or the storage, sale, or dumping of dismantled, partially dismantled, obsolete or wrecked vehicles or travel trailers.~~

Automotive Sales: The sale of New and or Used motor vehicles that includes all vehicles that are two or more wheels, Trailer Sales, and Recreation Vehicle Sales.

Automobile Sales Area: An area used for display, sale or the rental of new or used motor vehicles and any vehicles with two or more wheels, Trailers, and Recreation Vehicles in operable condition, and where no repair work is done. Automotive Sales Area cannot be located in the public right-of-way or required landscape buffer.

Automotive Wholesale Used: The business of buying and selling used vehicles to or from other dealers or auctions.

Automobile Wrecking: The dismantling or disassembling of used motor vehicles or travel trailers or the storage, sale, or dumping of dismantled, partially dismantled, obsolete or wrecked vehicles or travel trailers.

Ballpark: A field with or without spectator seats or player seats in which baseball, softball, football, soccer, rugby, lacrosse, polo, field hockey, or any other field sport is played.

504.02 Specific Regulations by District

I-3, INDUSTRIAL PARK DISTRICT

Intent. This district is intended to provide attractive sites for planned manufacturing developments. Manufacturing assembly, processing, repairing, research, retailing of permitted uses and closely related supportive industries are permitted where all operations are performed within enclosed buildings or in open storage areas. Uses permitted in this district are subject to performance standards applying specifically to industrial park and airport operations and performance standards imposed by all other applicable governmental agencies. Open storage areas are screened to minimize adverse visual impact to other industrial park and airport operations and/or the community.

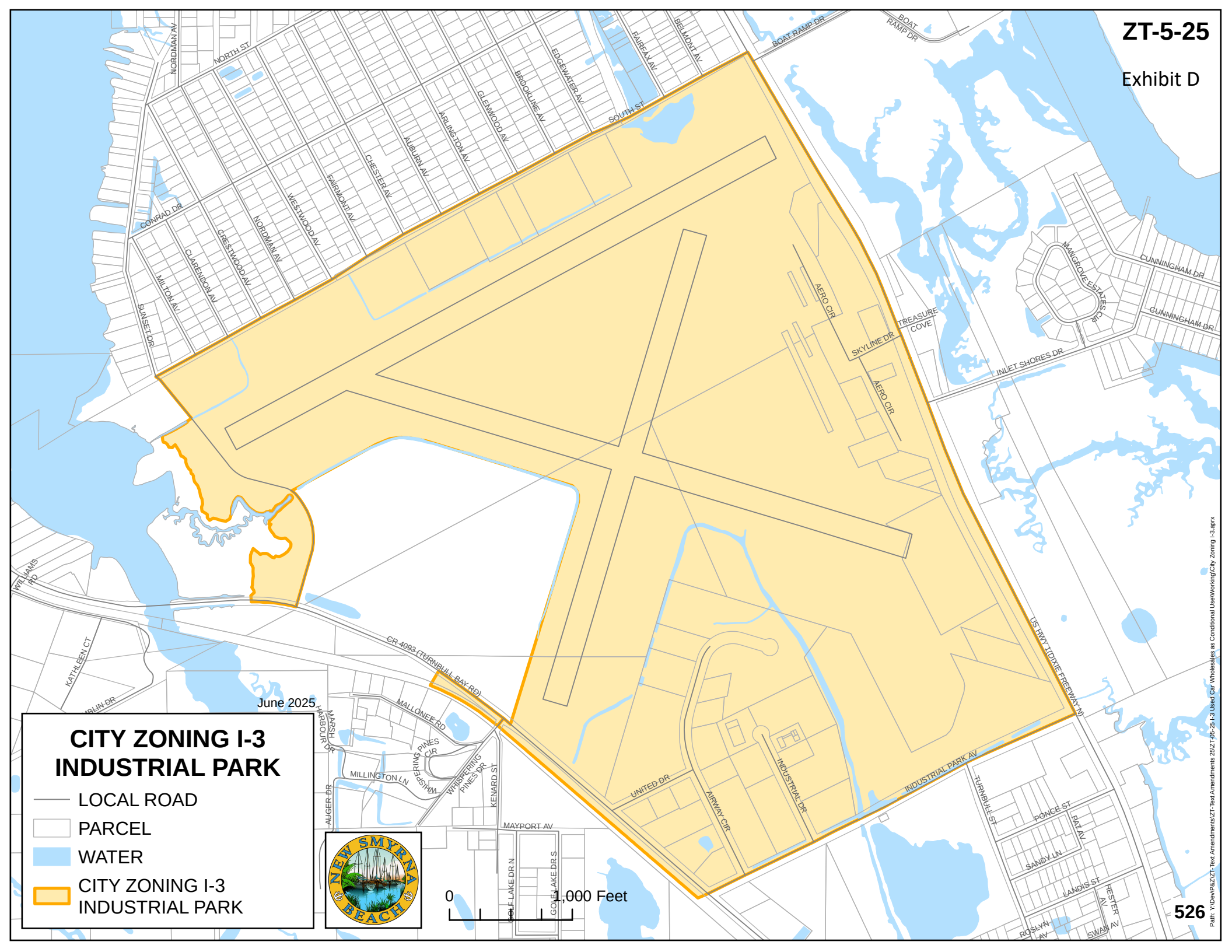
Accessory uses.

Conditional Uses.

Automotive Wholesale Used Only, with the following required conditions:

1. No boats, trailers, or Recreational Vehicles.
2. Only Cars, trucks 1 ton and under, and motorcycles.
3. Maximum number of inventory – 50 vehicles.
4. 50% of inventory must be stored inside an enclosed building.
5. Vehicles stored outside must be within a 6-foot-tall solid fence.
6. Site plan shall be submitted per Article XI of the City Land Development Regulations to the Planning Department for review.
7. Must meet landscaping, storm water retention, utility, and parking as required in the City Land Development Regulations.
8. Only located within the Airport Industrial Park and not the Municipal Airport.

Special exceptions.



Path: Y:\Dev\P&Z\ZT- Text Amendments\ZT- Text Amendments 25\ZT-05-25- I-3 Used Car Wholesales as Conditional Use\Working\City Zoning I-3.aprx

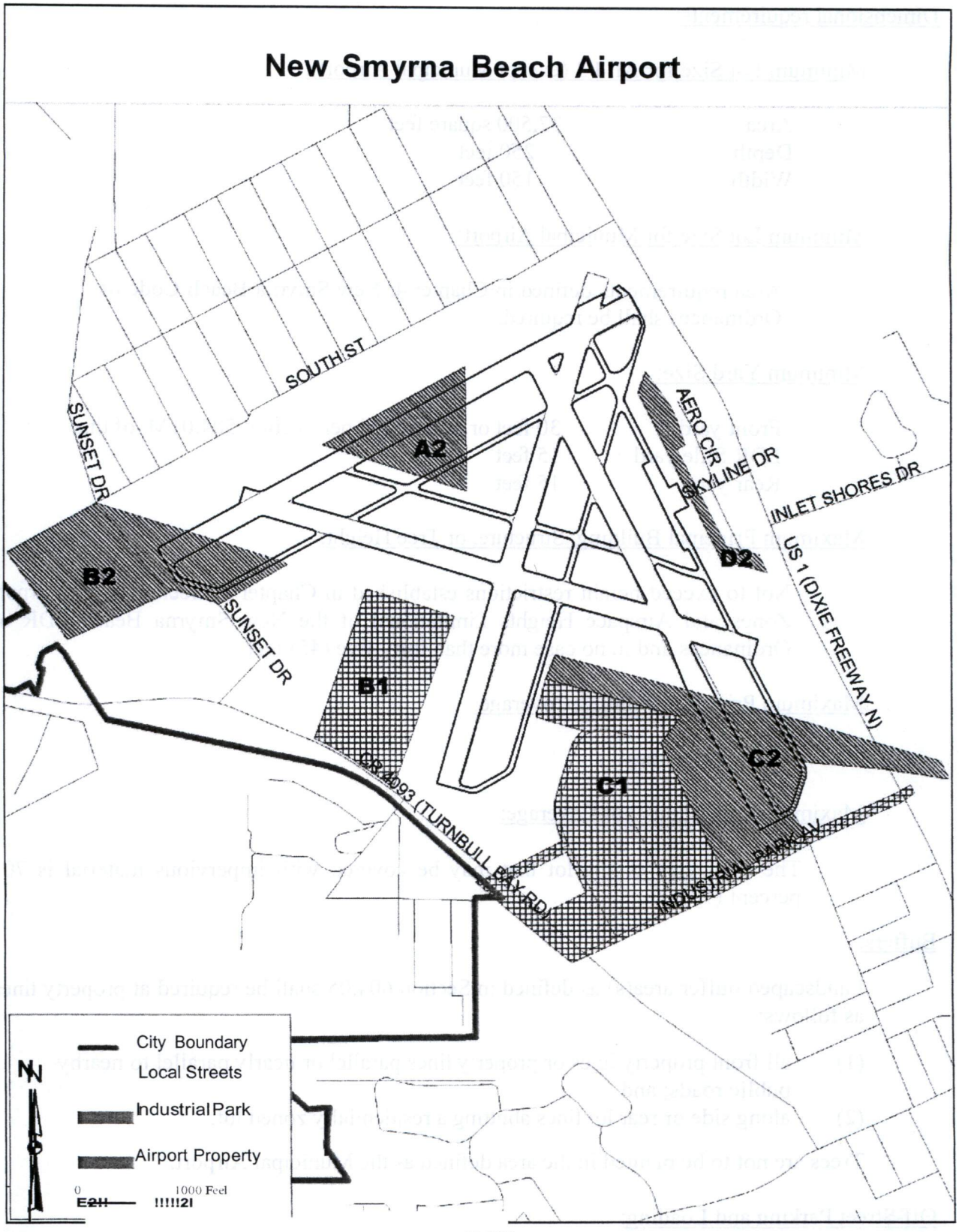
The area hereinafter referred to as the "Municipal Airport" shall be defined as that certain area depicted on the Airport Property Map defined as Exhibit A under ADAP project No. 01 and 02, and any subsequently approved Airport Property Maps, and, that certain area being identified on said map as Parcels A2, B2, C2, D2, and all runway, taxiway, and other adjoining setback areas otherwise not identified by cross hatching on said map.

The area hereinafter referred to as the "Airport Industrial Park" shall be defined as that certain area depicted on the Airport Property Map as aforesaid and being identified as portions of Parcels C1 and B1 as follows:

(1) that portion of Parcel C1 as shown on that certain subdivision plat described as "Airport Industrial Park II" approved by the Planning and Zoning Board of the City of New Smyrna Beach on March 7, 1983; and

(2) the easterly 800 feet of Parcel B1 lying north of Turnbull Bay Road consisting of approximately 30 acres more or less.

The I-3, Industrial Park District includes additional real properties which are not included in the Municipal Airport nor the Airport Industrial Park as defined herein. These additional real properties shall hereinafter be referred to as "Other I-3 Properties".


New Smyrna Beach Airport
SOUTH ST
SUNSET DR
A2
AERO CIR
SKYLINE DR
INLET SHORES DR
B2
D2
US 1 (DIXIE FREEWAY N)
SUNSET DR
B1
C2
C1
CR 4093 (TURNBULL BAY RD)
INDUSTRIAL PARKWAY
City Boundary
Local Streets
Industrial Park
Airport Property
N
0
1000 Feet

V-148

THE CITY OF NEW SMYRNA BEACH - PLANNING DEPARTMENT

SV-1-25, A RIGHT-OF-WAY VACATION OF PLATTED BIRCH STREET, BETWEEN SLATTON STREET AND CHISHOLM STREET.

September 8, 2025

Background:

A. **Applicant:** Aubrey Cummings, Jr. 1925 NW 84th, Miami, FL 33147
B. **Request:** Vacation of a platted segment of Birch Street right-of-way (ROW), between Slatton Street (platted as Slaton Street) and Chisholm Street, a 40'-wide by 260'-long unopened platted street right-of-way, within the COTTON SHED SUBDIVISION (MB 6, PG 180).

Exhibits:

Exhibit A: Location Map

Exhibit B: Aerial Map

Exhibit C: Depiction of ROW to be vacated

Exhibit D: Surveys (2) with Legal Descriptions

Exhibit E: Recorded Plats

Exhibit F: Non-Objection Letters from New Smyrna Beach Utilities

Exhibit G: Engineering Letter of Non-Objection
Exhibit H: Letter from applicant/owner

Findings:

A. The proposed street vacation is shown on the surveys attached as **Exhibit D**. The applicant requests vacation of a section of Birch Street, between Chisholm Street and Slatton Street.

B. As can be seen in the survey, the house at the northeast corner of platted Birch Steet, 210 Chisholm Street, is considerably in the ROW. The vacation would eliminate an encroachment into the ROW, and it would now meet what would become the side yard setback. Per the Appraiser's page, the house was built in 1955.

C. Section 305.03 of the City's Land Development Regulations (LDR) requires the following items for a street vacation (Responses in **bold**):

1. Completed application form **Received.**

2. Receipt of application fee payment **Received.**
3. Plat of survey, including legal description and acreage of street or alley proposed to be vacated **Included as Exhibit D.**
4. list of all abutting property owners **Received.**

Letter from Utilities Commission (NSBU) indicating:
a. No objection to the vacation; **Received.**
b. No utilities are within the right-of-way proposed to be vacated; or **None.**
c. If utilities exist with right-of-way then a letter must indicate what utilities are located in the right-of-way, **None.**
d. If utilities exist in right-of-way, then letter must indicate easements required, **None.**
e. Letter from applicant explaining how the vacation is in the interest of the public good **Included as Exhibit H.**

D. In regard to how this action would be in the interest of the public good, vacating this currently unopened and unused platted right-of-way would allow for the adjacent property Owners to receive a section of right-of-way that the City has no plans to open and the neighboring property owners wish not to be opened. By adding this existing public right-of-way to the adjacent property owners, this would allow for this public property to be placed on the tax roll.

RECOMMENDATION:

Staff recommends the Planning and Zoning Board give a positive recommendation to the City Commission to **approve** the proposed street vacation of platted Birch Street, between Chisholm Street and Slatton Street.

Fiscal Analysis:
N/A

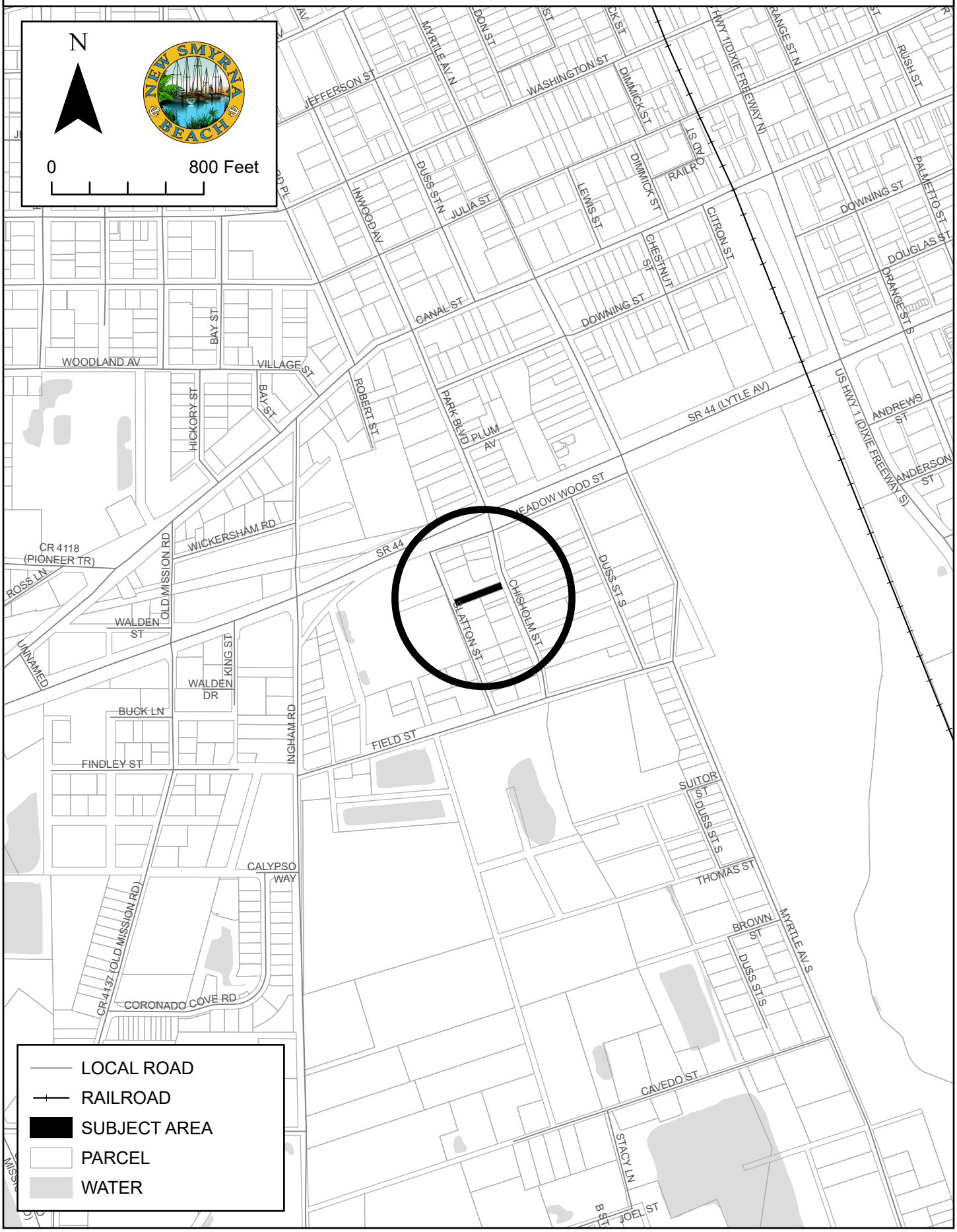
Strategic Plan Item:
No

Staff Report Created By: Jake Baker - Senior Planner

Attachments:

Exhibit A Location Map.pdf
Exhibit B Aerial Map.pdf
Exhibit C Depiction of ROW to be vacated.pdf
Exhibit D Survey w legal description.pdf
Exhibit E Cotton Shed Plat.pdf
Exhibit F Non Objection Letter from NSBU.pdf
Exhibit G Engineering Letter on Non-Objection.pdf
Exhibit H Letter from Applicant.pdf

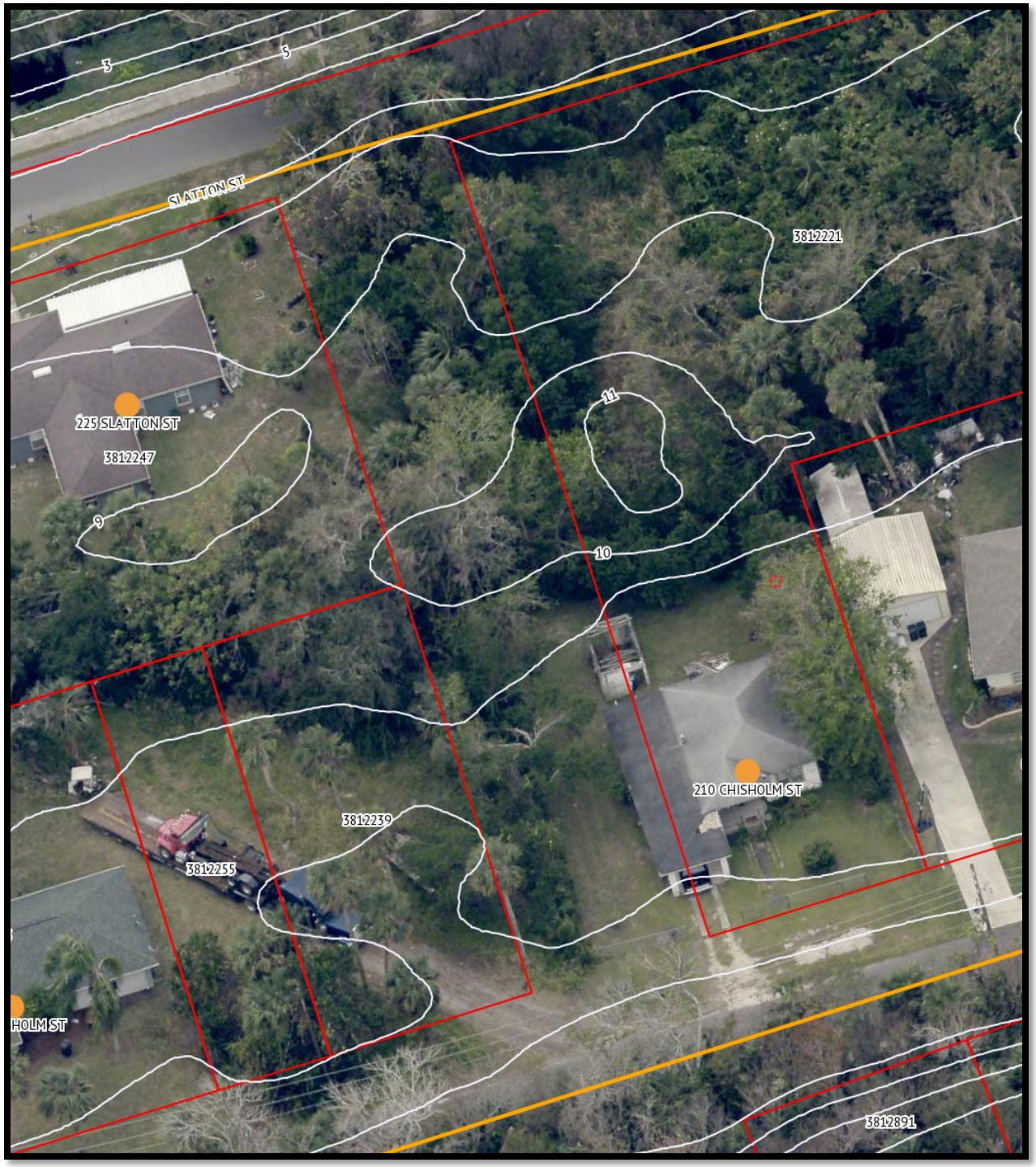
SV-01-25: LOCATION MAP

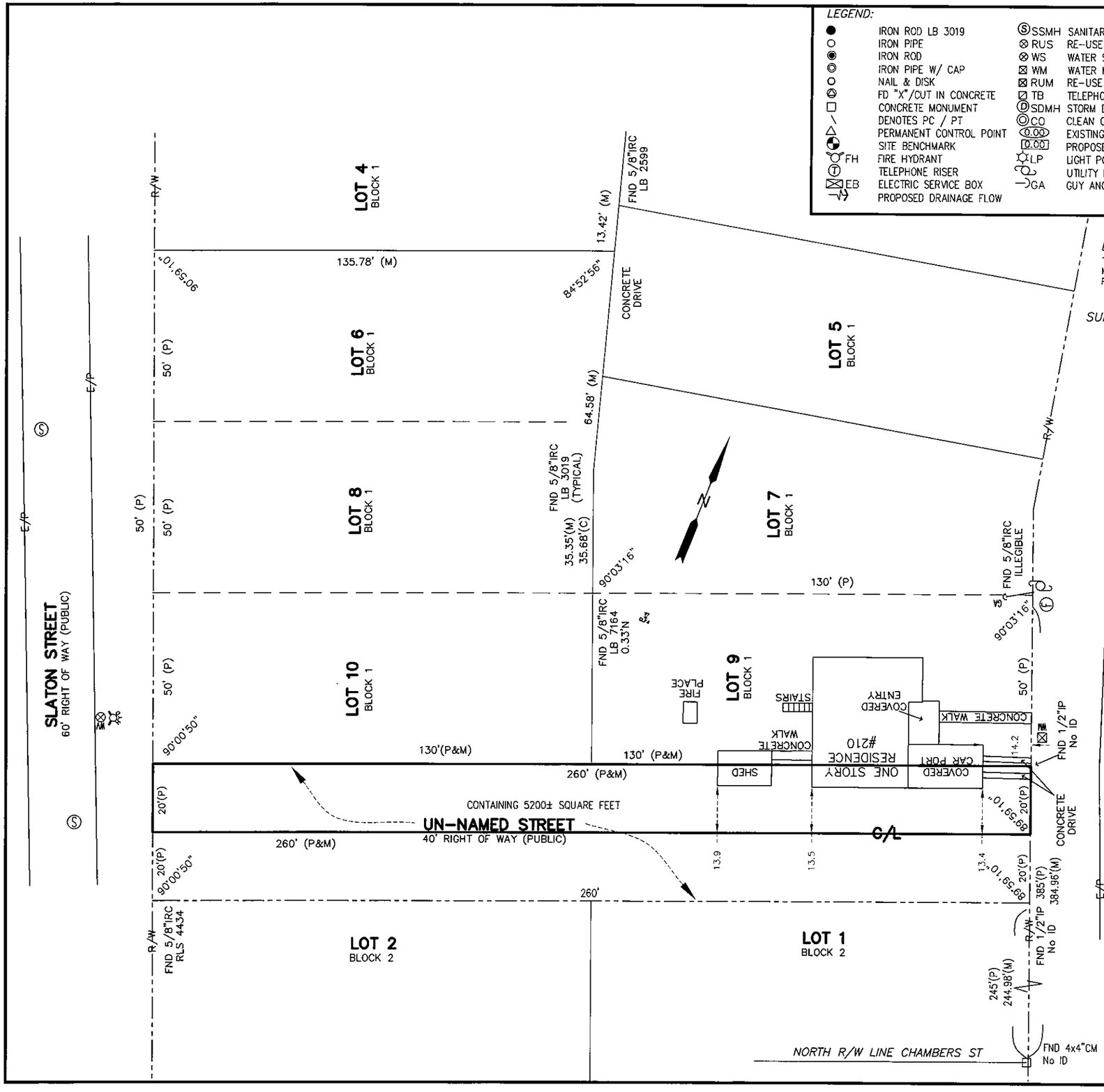


SV-01-25: AERIAL MAP



Exhibit C


3
5
SLATTON ST
3812221
225 SLATTON ST
3812247
11
9
10
210 CHISHOLM ST
3812239
3812255
HOLM ST
3812891



LEGEND:

●	IRON ROD LB 3019	Ⓢ SSMH	SANITARY SEWER MANHOLE
○	IRON PIPE	⊗ RUS	RE-USE SERVICE
◉	IRON ROD	⊗ WS	WATER SERVICE
◎	IRON PIPE W/ CAP	⊠ WM	WATER METER
⊙	NAIL & DISK	⊠ RUM	RE-USE METER
⊛	FD "X"/CUT IN CONCRETE	☒ TB	TELEPHONE BOX
□	CONCRETE MONUMENT	Ⓓ SDMH	STORM DRAIN MANHOLE
/	DENOTES PC / PT	ⓒ CO	CLEAN OUT
▷	PERMANENT CONTROL POINT	0.00	EXISTING ELEVATION
◔	SITE BENCHMARK	[0.00]	PROPOSED ELEVATION
FH	FIRE HYDRANT	LP	LIGHT POLE
Ⓣ	TELEPHONE RISER		UTILITY POLE
EB	ELECTRIC SERVICE BOX	GA	GUY ANCHOR
	PROPOSED DRAINAGE FLOW		

ABBREVIATIONS:

W/	WITH	MB	MAP BOOK
IRC	IRON ROD & CAP	PG	PAGE
IR	IRON ROD (NO CAP)	ORB	OFFICIAL RECORDS BOOK
IPC	IRON PIPE & CAP	(P)	PLATTED DIMENSION
IP	IRON PIPE (NO CAP)	(D)	DEED DIMENSION
CM	CONCRETE MONUMENT	(M)	MEASURED DIMENSION
N&D	NAIL & DISK	(R)	RADIAL
FND	FOUND	(NR)	NON RADIAL
ID	IDENTIFICATION	STA	STATION
(TYP)	TYPICAL	EL	ELEVATION
R/W	RIGHT OF WAY	INV	INVERT
CHLK	CHAINLINK	℄	CENTERLINE
RGE	RANGE	A/C	AIR CONDITIONER
LB	LICENSED BUSINESS	PC	POINT OF CURVATURE
		E/P	EDGE of PAVEMENT

LEGAL DESCRIPTION:

THE NORTH HALF OF THE UN-NAMED STREET, LYING BETWEEN BLOCKS 1 AND 2, MAP OF THE COTTON SHED ADDITION, MAP BOOK 21, PAGE 31, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

SURVEY NOTES:

1. DESCRIPTION FURNISHED BY CLIENT. NO TITLE WORK PROVIDED.
2. NO OVERHEAD/UNDERGROUND IMPROVEMENTS OR UTILITIES ARE LOCATED, UNLESS SHOWN.
3. NO BEARINGS ARE SHOWN ON PLAT OF RECORD.
4. DIMENSION CATEGORY IS SHOWN IN PARENTHESIS ( ), WHEN THEY DIFFER FROM RECORD DIMENSIONS. MONUMENTS THAT FALL WITHIN THE SUBURBAN CLOSURE OF 1:7500 [AS PER 5J-17.051(3)15BII] ARE NOT DIFFERENTIATED.
5. FLOOD ZONE X, MAP & PANEL NO. 12127C 0543 J, 9/29/2017. AS BEST ASCERTAINED FROM THE FLOOD INSURANCE RATE MAP.
6. ELEVATIONS (IF SHOWN) ARE BASED ON THE N.A.V.D. OF 1988. ELEVATIONS ON NATURAL GROUND HAVE ±0.1' TOLERANCE C/L ELEVATIONS SHALL MEET REQUIREMENT 5J-17.052(3)(C)

CERTIFIED TO:

AUBREY CUMMINGS

NOTICE:

THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OR A VALID ELECTRONIC SIGNATURE OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

SURVEYOR'S CERTIFICATION:

I HEREBY CERTIFY THAT THIS SURVEY MEETS THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

Anthony C Sanzone

Digitally signed by Anthony C Sanzone
Date: 2025.06.30 09:41:43 -04'00'

ANTHONY C.M. SANZONE
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA LICENSE NUMBER 6309

SLIGER & ASSOCIATES, INC.
PROFESSIONAL LAND SURVEYORS
3921 NOVA ROAD
(386) 761-5385
PORT ORANGE, FL. 32127
LICENSED BUSINESS
CERTIFICATION NUMBER 3019
www.sligerassociates.com

REVISION:	DATE:	JOB NO.	P.C.	DRW.	CHECKED BY
SKETCH OF DESCRIPTION	02/18/2025	25-0124	JS	AA	ACS
BOUNDARY SURVEY					
TOPOGRAPHIC SURVEY					
FOUNDATION LOCATED					
FINAL IMPROVEMENTS					
RECERTIFICATION					
PROPOSED HOUSE LOCATION					

BOUNDARY SURVEY

210 CHISHOLM STREET
NEW SMYRNA BEACH, FLORIDA

FIELD BOOK: N/A PAGE: N/A

PROJECT: 05956
JOB: 25-0124
SCALE: 1"=30'
SHEET: 1

FILE: K:\25\250124 210 CHISHOLM STREET\250124.DWG

LEGEND:

●	IRON ROD LB 3019	Ⓢ SSMH	SANITARY SEWER MANHOLE
○	IRON PIPE	⊗ RUS	RE-USE SERVICE
◉	IRON ROD	⊗ WS	WATER SERVICE
◎	IRON PIPE W/ CAP	⊠ WM	WATER METER
⊙	NAIL & DISK	⊠ RUM	RE-USE METER
⊘	FD "X"/CUT IN CONCRETE	⊠ TB	TELEPHONE BOX
□	CONCRETE MONUMENT	Ⓓ SDMH	STORM DRAIN MANHOLE
▷	DENOTES PC / PT	◎ CO	CLEAN OUT
◁	PERMANENT CONTROL POINT	0.00	EXISTING ELEVATION
◔	SITE BENCHMARK	[0.00]	PROPOSED ELEVATION
FH	FIRE HYDRANT	LP	LIGHT POLE
T	TELEPHONE RISER		UTILITY POLE
EB	ELECTRIC SERVICE BOX	GA	GUY ANCHOR
	PROPOSED DRAINAGE FLOW		

ABBREVIATIONS:

W/	WITH	MB	MAP BOOK
IRC	IRON ROD & CAP	PG	PAGE
IR	IRON ROD (NO CAP)	ORB	OFFICIAL RECORDS BOOK
IPC	IRON PIPE & CAP	(P)	PLATTED DIMENSION
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LEGAL DESCRIPTION:

THE SOUTH HALF OF THE UN-NAMED STREET, LYING BETWEEN BLOCKS 1 AND 2, MAP OF THE COTTON SHED ADDITION, MAP BOOK 21, PAGE 31, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

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Anthony C Sanzone

Digitally signed by Anthony C Sanzone
Date: 2025.06.30 09:42:26 -04'00'

ANTHONY C.M. SANZONE
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA LICENSE NUMBER 6309

REVISION:	DATE:	JOB NO.	P.C.	DRW.	CHECKED BY
SKETCH OF DESCRIPTION					
BOUNDARY SURVEY	02/18/2025	25-0124	JS	AA	ACS
TOPOGRAPHIC SURVEY					
FOUNDATION LOCATED					
FINAL IMPROVEMENTS					
RECERTIFICATION					
PROPOSED HOUSE LOCATION					

BOUNDARY SURVEY

210 CHISHOLM STREET
NEW SMYRNA BEACH, FLORIDA

FIELD BOOK: N/A PAGE: N/A

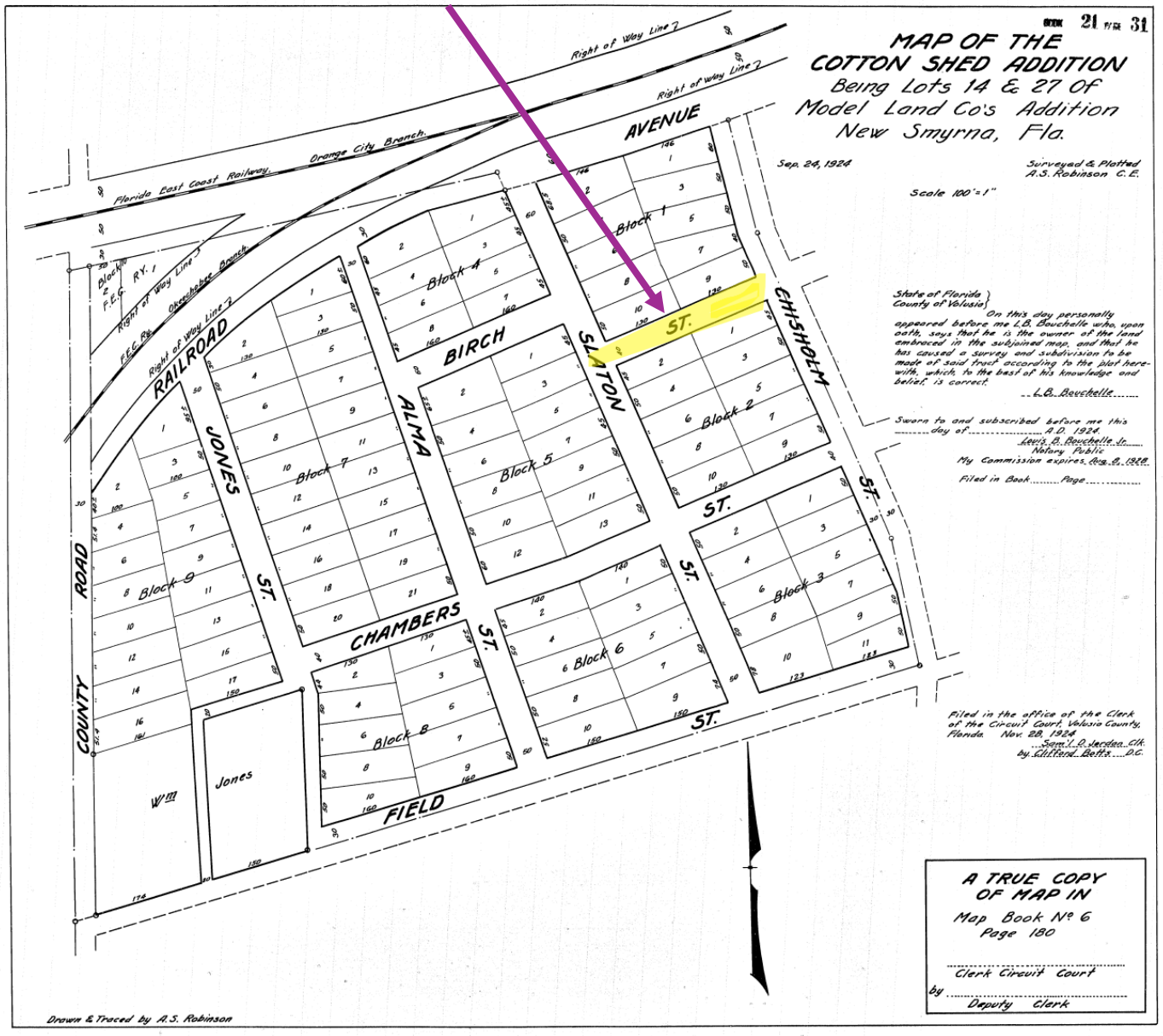
PROJECT: 05956

JOB: 25-0124

SCALE: 1"=30'

SHEET: 1

FILE: K:\25\250124 210 CHISHOLM STREET\250124.DWG


MAP OF THE
COTTON SHED ADDITION
Being Lots 14 & 27 Of
Model Land Co's Addition
New Smyrna, Fla.
Sep. 24, 1924
Surveyed & Platted
A.S. Robinson C.E.
Scale 100'=1"
Florida East Coast Railway
Orange City Branch
Right of Way Line
F.E.C. Ry.
Okeechobee Branch
RAILROAD
AVENUE
BIRCH
ALMA
SLATON
CHISHOLM
ST.
JONES
ST.
COUNTY
ROAD
CHAMBERS
ST.
FIELD
ST.
Block 1
Block 2
Block 3
Block 4
Block 5
Block 6
Block 7
Block 8
Block 9
Jones
Wm
State of Florida }
County of Volusia }
On this day personally appeared before me L.B. Bouchelle who, upon oath, says that he is the owner of the land embraced in the subjoined map, and that he has caused a survey and subdivision to be made of said tract according to the plat herewith, which, to the best of his knowledge and belief, is correct.
L.B. Bouchelle
Sworn to and subscribed before me this ..... day of ..... A.D. 1924.
Lewis B. Bouchelle Jr.
Notary Public
My Commission expires Dec 2, 1928
Filed in Book ..... Page .....
Filed in the office of the Clerk of the Circuit Court Volusia County, Florida. Nov. 28, 1924
Sam'l O. Jordan Clk.
by Clifford Betts D.C.
A TRUE COPY
OF MAP IN
Map Book No 6
Page 180
Clerk Circuit Court
by
Deputy Clerk
Drawn & Traced by A.S. Robinson

New Smyrna Beach
• • • UTILITIES • • •

February 4, 2025

Mr. Willie Cummings
210 Chisholm St.
New Smyrna Beach, FL 32168

SUBJECT: **Proposed Vacation of Highlighted Platted Right-of-Way "ST."**
South of Parcel ID 741919010060, Public Records of Volusia County

Dear Mr. Cummings:

New Smyrna Beach Utilities has no objection to the proposed vacation of the platted Right-of-Way as depicted in your letter dated January 16, 2025 (attached).

New Smyrna Beach Utilities has no electric, water, reclaim or sanitary sewer mains in the right-of-way to be vacated.

Please do not hesitate to call me if you have any questions or require additional information.

Sincerely,

Kristin Greene

Kristin Greene
New Business Service Coordinator
Office: 386-424-3008

Kristin Greene

From: Kenny Ho
Sent: Tuesday, January 14, 2025 3:24 PM
To: Kristin Greene
Subject: FW: 210 Chisholm Street-- Street Vacation
Attachments: 2024 Street Name Change Application.pdf; 2025 Vacation - Alley-Street Application.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Kristin:
Please review this City street (ROW) vacation request. Thanks

KHO

From: Baker, Jake <jbaker@cityofnsb.com>
Sent: Tuesday, January 14, 2025 1:47 PM
To: Aubrey Cummings <cummings.aubrey3@gmail.com>; Doster, Stephanie <SDoster@cityofnsb.com>; Mathen, Robert <rmathen@cityofnsb.com>
Cc: Lynn Murrison <lmurrison@nsbufl.com>; Kenny Ho <kho@nsbufl.com>; Meyers, Jesse <jmeyers@cityofnsb.com>
Subject: 210 Chisholm Street-- Street Vacation

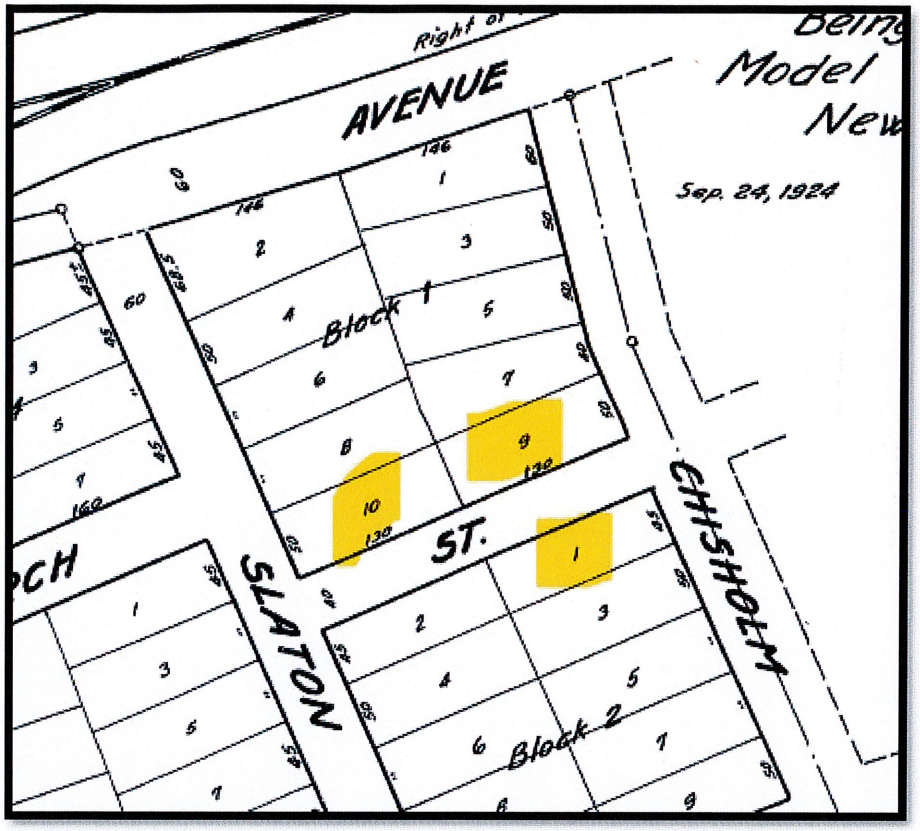
CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Aubrey,

I attached the Street vacation application, as well as the street name change application, if you choose to try to rename Chisholm Street.

Everyone else on this email, Aubrey proposes to vacate the "ST." between lots 1, 9, 10 and 11. His family owns 1, 9 and 10.

This was to be our 10 o'clock call tomorrow morning, but we have a bit of a scheduling conflict, so I contacted him today to see what he wanted to discuss.



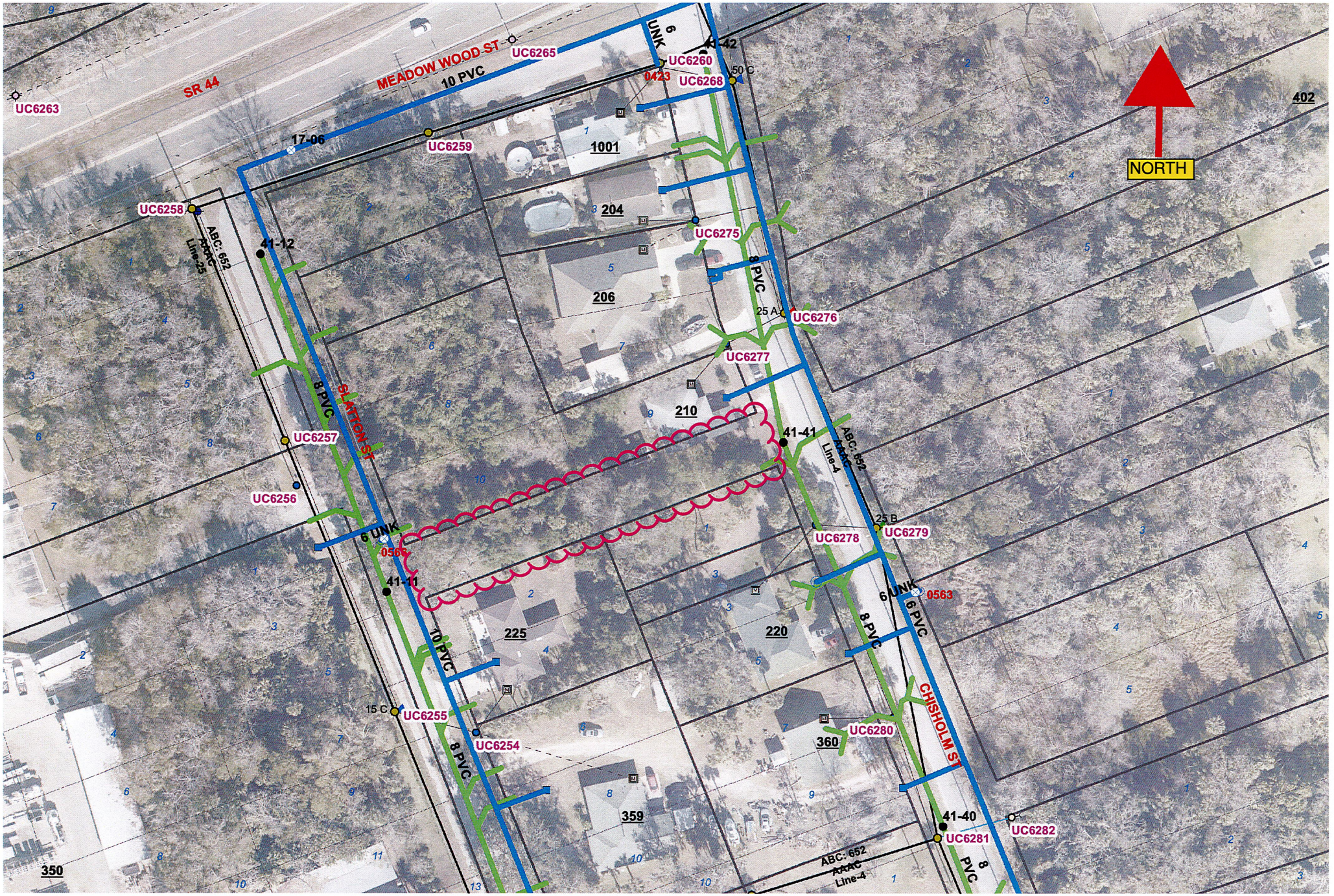
Best Regards,

Jake Baker, AICP
Senior Planner
City of New Smyrna Beach
214 Sams Avenue
New Smyrna Beach, FL 32168
Office (386) 410-2837
Cell (386) 279-5291
jbaker@cityofnsb.com
www.cityofnsb.com

PLEASE NOTE: Florida has a very broad public records law. E-mail communications to or from City of New Smyrna Beach officials and employees are public records and are available upon request. If you have received this message in error, please notify us immediately by replying to this message and delete it from your computer. Transmission of sensitive information such as but not limited to social security numbers, credit card information, medical records and criminal justice information (outlined in the FBI_CJIS_Policy) via email is prohibited.

** Please consider the negative environmental impacts associated with printing email **

VISIT OUR WEBSITE FOR MORE INFORMATION ABOUT THE CITY OF NEW SMYRNA BEACH FLORIDA
www.cityofnsb.com


SR 44
MEADOW WOOD ST
10 PVC
6 UNK
UC6263
UC6265
UC6259
UC6260
UC6268
0423
50 C
41-42
17-06
1001
204
206
210
225
220
360
359
350
402
NORTH
UC6258
41-12
ABC: 652 RPAC Line-25
8 PVC
SLATTON ST
UC6257
UC6256
6 UNK
0566
41-11
10 PVC
15 C
UC6255
UC6254
8 PVC
UC6275
8 PVC
25 A
UC6276
UC6277
41-41
ABC: 652 AAAC Line-4
25 B
UC6278
UC6279
6 UNK
0563
6 PVC
8 PVC
CHISHOLM ST
UC6280
41-40
UC6281
UC6282
ABC: 652 AAAC Line-4
8 PVC

01/16/2025

TO VACATE STREET

To whom this may concern,

I, Willie Cummings, am requesting a vacation of the street attached to lots 9 and 10 of the property 210 Chisholm St. I offer no objection and have no existing use or utilities on the street.

Below is what is required from the NSB utilities commission from the city to move forward with the street vacation.

Letter from the Utilities indicating the following:

1. No objection to the proposed vacation,
2. No utilities are within the right-of-way proposed to be vacated
    a. If utilities exist within the right-of-way, the letter must indicate what utilities are located in the right-of-way
3. If utilities exist in the right of way, the letter must indicate what easements, if any would be required if the right of way is vacated.

BOOK 21 PAGE 31

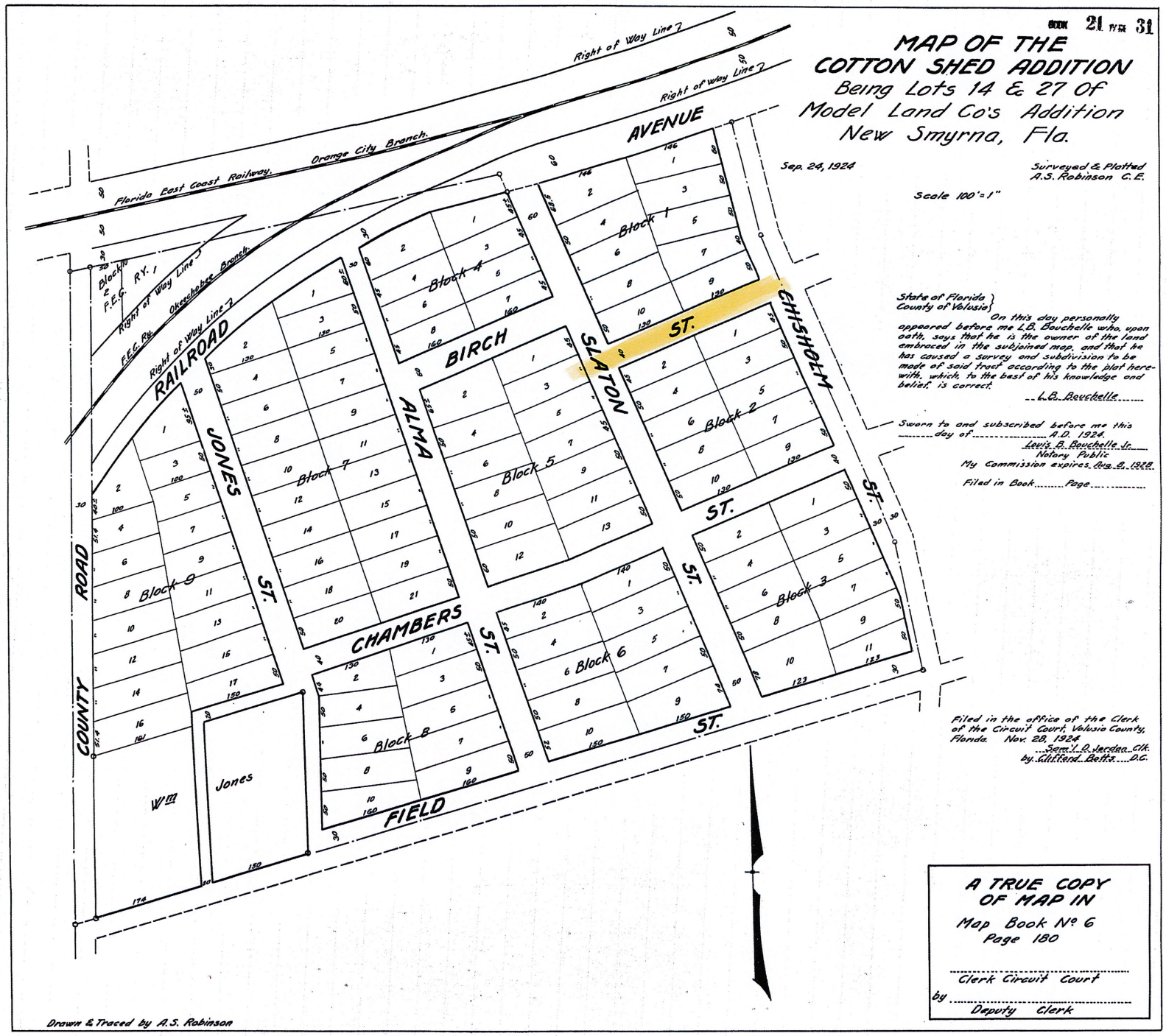
MAP OF THE COTTON SHED ADDITION

Being Lots 14 & 27 Of Model Land Co's Addition New Smyrna, Fla.

Sep. 24, 1924

Surveyed & Platted
A.S. Robinson C.E.

Scale 100'=1"



State of Florida }
County of Volusia }

On this day personally appeared before me L.B. Bouchelle who, upon oath, says that he is the owner of the land embraced in the subjoined map, and that he has caused a survey and subdivision to be made of said tract according to the plat herewith, which to the best of his knowledge and belief, is correct.

L.B. Bouchelle

Sworn to and subscribed before me this ____ day of ____ A.D. 1924.

Lewis B. Bouchelle Jr.
Notary Public
My Commission expires Aug 8, 1928

Filed in Book ____ Page ____

Filed in the office of the Clerk of the Circuit Court, Volusia County, Florida. Nov. 28, 1924

Sam'l O. Jordan Clk.
by Clifford Bell Jr. D.C.

A TRUE COPY OF MAP IN
Map Book No 6
Page 180

Clerk Circuit Court
by Deputy Clerk

Drawn & Traced by A.S. Robinson

City of New Smyrna Beach

July 22, 2025

RE: SV-1-25 Un-named Street bisecting Chisholm Street and Slaton Street

The Engineering Department has reviewed the request for right of way vacation as depicted on the Sliger & Associates survey, dated 6/30/2025, and finds no objection to the request.

Sincerely,

Jesse Meyers, P.E.
Civil Engineer

210 Sams Avenue, New Smyrna Beach, FL 32168
Phone: (386) 410-2811 Fax: (386) 410-2804
www.cityofnsb.com

To whom this may concern,

This proposed vacation of the unnamed street will serve as a correction to city records. Once a land property of eminent domain, however, due to lack of records this street vacation was never recorded. This street provides no benefits to the abutting neighbors and is our wish to collectively return the street to the citizens.

Respectfully,

Aubrey Cummings

THE CITY OF NEW SMYRNA BEACH - PLANNING DEPARTMENT

ZT-9-25: CONDUCT A REVIEW AND GIVE A RECOMMENDATION FOR A NEW PROPOSED REGULATION FOR OUTDOOR DOG DINING BASED ON FLORIDA STATUE 509.233.

September 8, 2025

Background:

Applicant: Ryan Shank, 2822 Westwood Avenue, New Smyrna Beach, Florida 32168.

Request: Create a new regulation, based on Florida Statue 509.233, that would establish outdoor dog dining within the City of New Smyrna Beach.

Exhibits Used in this report:

Exhibit A: Florida Statue 509.233
Exhibit B: Volusia County Regulation 72-308
Exhibit C: Proposed regulation 801.33

Findings:

The applicant has requested that the City of New Smyrna Beach adopt an ordinance that would allow the city to provide a permit process to allow for restaurants to have dogs in an outdoor seating area.

Under Florida Statue 509.233, the State of Florida will allow for a local government to create an exemption to certain provisions of the Food and Drug Administration Food Code. This exemption procedure would allow patrons' dogs within certain designated outdoor portions of public food service establishments. See **Exhibit A**.

Florida Statue 509.233(b), requires the minimum information for an exemption application. The following minimum information would be:

1. The name, location, and mailing address of the public food service establishment.

2. The name, mailing address, and telephone contact information of the permit applicant.

3. A diagram and description of the outdoor area to be designated as available to patrons’ dogs, including dimensions of the designated area; a depiction of the number

and placement of tables, chairs, and restaurant equipment, if any; the entryways and exits to the designated outdoor area; the boundaries of the designated area and of other areas of outdoor dining not available for patrons' dogs; any fences or other barriers; surrounding property lines and public rights-of-way, including sidewalks and common pathways; and such other information reasonably required by the permitting authority. The diagram or plan shall be accurate and to scale but need not be prepared by a licensed design professional.

4. A description of the days of the week and hours of operation that patrons' dogs will be permitted in the designated outdoor area.

Florida Statue 509.233(c), to protect the health, safety, and general welfare of the public, the following would be the minimum requirements:

1. All public food service establishment employees shall wash their hands promptly after touching, petting, or otherwise handling dogs. Employees shall be prohibited from touching, petting, or otherwise handling dogs while serving food or beverages or handling tableware or before entering other parts of the public food service establishment.

2. Patrons in a designated outdoor area shall be advised that they should wash their hands before eating. Waterless hand sanitizer shall be provided at all tables in the designated outdoor area.

3. Employees and patrons shall be instructed that they shall not allow dogs to come into contact with serving dishes, utensils, tableware, linens, paper products, or any other items involved in food service operations.

4. Patrons shall keep their dogs on a leash at all times and shall keep their dogs under reasonable control.

5. Dogs shall not be allowed on chairs, tables, or other furnishings.

6. All table and chair surfaces shall be cleaned and sanitized with an approved product between seating of patrons. Spilled food and drink shall be removed from the floor or ground between seating of patrons.

7. Accidents involving dog waste shall be cleaned immediately and the area sanitized with an approved product. A kit with the appropriate materials for this purpose shall be kept near the designated outdoor area.

8. A sign or signs reminding employees of the applicable rules shall be posted on premises in a manner and place as determined by the local permitting authority.

9. A sign or signs reminding patrons of the applicable rules shall be posted on premises in a manner and place as determined by the local permitting authority.

10. A sign or signs shall be posted in a manner and place as determined by the local permitting authority that places the public on notice that the designated outdoor area is available for the use of patrons and patrons' dogs.

11. Dogs shall not be permitted to travel through indoor or non designated outdoor portions of the public food service establishment, and ingress and egress to the designated outdoor portions of the public food service establishment must not require entrance into or passage through any indoor area of the food establishment.

Volusia County has adopted an ordinance to allow for outdoor dog dining under Section 72-308 of the Volusia County Land Development Code. See **Exhibit B**.

The applicant has proposed a new regulation under Section 801.33 of the Land Development Regulation, based on Florida Stature 509.233 and the current Volusia County code under Section 72-308 a regulation to allow for the process of a conditional use approval for any restaurant within the city that wishes to have an outdoor seating area. The Planning Department would suggest an application fee of $100.00 to cover administrative costs associated with the review of an application.

Recommendation:

The Planning Department recommends the Planning and Zoning Board give a positive recommendation to the City Commission to approve the proposed regulation of Outdoor Dog Dining.

Fiscal Analysis:
N/A

Strategic Plan Item:
No

Staff Report Created By: Robert Mathen - Senior Planner

Attachments:

Exhibit A Florida Statue 509.233.pdf
Exhibit B Volusia County Section 72-308 Outdoor dog dining.pdf

Exhibit C Proposed Regulation 2.pdf

509.233 Public food service establishment requirements; local exemption for dogs in designated outdoor portions.—

(1) LOCAL EXEMPTION AUTHORIZED.—Notwithstanding s. 509.032(7), the governing body of a local government may establish, by ordinance, a local exemption procedure to certain provisions of the Food and Drug Administration Food Code, as currently adopted by the division, in order to allow patrons' dogs within certain designated outdoor portions of public food service establishments.

(2) LOCAL DISCRETION; CODIFICATION.—

(a) The adoption of the local exemption procedure shall be at the sole discretion of the governing body of a participating local government. Nothing in this section shall be construed to require or compel a local governing body to adopt an ordinance pursuant to this section.

(b) Any ordinance adopted pursuant to this section shall provide for codification within the land development code of a participating local government.

(3) LIMITATIONS ON EXEMPTION; PERMIT REQUIREMENTS.—

(a) Any local exemption procedure adopted pursuant to this section shall only provide a variance to those portions of the currently adopted Food and Drug Administration Food Code in order to allow patrons' dogs within certain designated outdoor portions of public food service establishments.

(b) In order to protect the health, safety, and general welfare of the public, the local exemption procedure shall require participating public food service establishments to apply for and receive a permit from the governing body of the local government before allowing patrons' dogs on their premises. The local government shall require from the applicant such information as the local government deems reasonably necessary to enforce the provisions of this section, but shall require, at a minimum, the following information:

1. The name, location, and mailing address of the public food service establishment.

2. The name, mailing address, and telephone contact information of the permit applicant.

3. A diagram and description of the outdoor area to be designated as available to patrons' dogs, including dimensions of the designated area; a depiction of the number and placement of tables, chairs, and restaurant equipment, if any; the entryways and exits to the designated outdoor area; the boundaries of the designated area and of other areas of outdoor dining not available for patrons' dogs; any fences or other barriers; surrounding property lines and public rights-of-way, including sidewalks and common pathways; and such other information reasonably required by the permitting authority. The diagram or plan shall be accurate and to scale but need not be prepared by a licensed design professional.

4. A description of the days of the week and hours of operation that patrons' dogs will be permitted in the designated outdoor area.

(c) In order to protect the health, safety, and general welfare of the public, the local exemption ordinance shall include such regulations and limitations as deemed necessary by the participating local government and shall include, but not be limited to, the following requirements:

1. All public food service establishment employees shall wash their hands promptly after touching, petting, or otherwise handling dogs. Employees shall be prohibited from touching, petting, or otherwise handling dogs while serving food or beverages or handling tableware or before entering other parts of the public food service establishment.

2. Patrons in a designated outdoor area shall be advised that they should wash their hands before eating. Waterless hand sanitizer shall be provided at all tables in the designated outdoor area.

3. Employees and patrons shall be instructed that they shall not allow dogs to come into contact with serving dishes, utensils, tableware, linens, paper products, or any other items involved in food service operations.

4. Patrons shall keep their dogs on a leash at all times and shall keep their dogs under reasonable control.

5. Dogs shall not be allowed on chairs, tables, or other furnishings.

6. All table and chair surfaces shall be cleaned and sanitized with an approved product between seating of patrons. Spilled food and drink shall be removed from the floor or ground between seating of patrons.

7. Accidents involving dog waste shall be cleaned immediately and the area sanitized with an approved product. A kit with the appropriate materials for this purpose shall be kept near the designated outdoor area.

8. A sign or signs reminding employees of the applicable rules shall be posted on premises in a manner and place as determined by the local permitting authority.

9. A sign or signs reminding patrons of the applicable rules shall be posted on premises in a manner and place as determined by the local permitting authority.

10. A sign or signs shall be posted in a manner and place as determined by the local permitting authority that places the public on notice that the designated outdoor area is available for the use of patrons and patrons' dogs.

11. Dogs shall not be permitted to travel through indoor or nondesignated outdoor portions of the public food service establishment, and ingress and egress to the designated outdoor portions of the public food service establishment must not require entrance into or passage through any indoor area of the food establishment.

(d) A permit issued pursuant to this section shall not be transferred to a subsequent owner upon the sale of a public food service establishment but shall expire automatically upon the sale of

the establishment. The subsequent owner shall be required to reapply for a permit pursuant to this section if the subsequent owner wishes to continue to accommodate patrons' dogs.

(4) POWERS; ENFORCEMENT.—Participating local governments shall have such powers as are reasonably necessary to regulate and enforce the provisions of this section.

(5) STATE AND LOCAL COOPERATION.—The division shall provide reasonable assistance to participating local governments in the development of enforcement procedures and regulations, and participating local governments shall monitor permitholders for compliance in cooperation with the division. At a minimum, participating local governments shall establish a procedure to accept, document, and respond to complaints and to timely report to the division all such complaints and the participating local governments' enforcement responses to such complaints. A participating local government shall provide the division with a copy of all approved applications and permits issued, and the participating local government shall require that all applications, permits, and other related materials contain the appropriate division-issued license number for each public food service establishment.

History.—s. 3, ch. 2006-72; s. 127, ch. 2007-5; s. 46, ch. 2009-195.

Sec. 72-308. Outdoor dog dining.

(a) *Purpose*. F.S. § 509.233 grants the county the authority to provide exemptions from section 6-501.115, 2001 Food and Drug Administration Food Code, as adopted and incorporated by the division of hotels and restaurants ("division") in Rule 61C-4.010(6), Florida Administrative Code ("Food Code"). The purpose of this section is to allow patrons' dogs within certain outdoor portions of restaurants. The procedure adopted pursuant to this section provides an exemption for those restaurants which have applied for and received a conditional use permit to those sections of the Food Code that prohibit dogs in restaurants.

(b) *Conditional use permit required*. No dog shall be allowed in a restaurant unless allowed by state law or the restaurant has received and maintains an unexpired conditional use permit issued by the county pursuant to this section. Dogs shall only be authorized in a designated outdoor dining area. It shall be unlawful to fail to comply with any of the requirements of this section.

(c) *Application requirements*. An application for a conditional use permit, as well as applications for renewal of conditional use permit, shall be on a form supplied by the growth and resource management department, together with any applicable fees. In addition to those requirements of sub-section 72-341(i), the application shall include the following:

(1) Name, location, mailing address and division issued license number of the restaurant.

(2) Name, mailing address, and telephone contact information of the permit applicant. Name, mailing address, and telephone contact information of the owner of the restaurant shall be provided if the owner is not the permit applicant.

(3) A diagram and description of the outdoor area which is requested to be designated as available to patrons' dogs, including dimensions of the designated area; a depiction of the number and placement of tables, chairs, and restaurant equipment, if any; the entryways and exists to the designated outdoor area; the boundaries of the designated area and of the other outdoor dining area; the boundaries of the designated area and of the other outdoor dining areas not available for patrons' dogs; any fences or other barriers; surrounding property lines and public rights-of-way, including sidewalks and common pathways; and such other information as is deemed necessary by the county.

(4) The diagram shall be accurate and to scale but need not be prepared by a licensed design professional. A copy of the approved diagram shall be attached to the permit.

(5) A description of the days of the week and hours of operation that patrons' dogs will be permitted in the designated outdoor area.

(d) *Regulations*. Restaurants that receive a conditional use permit for a designated outdoor area pursuant to this section shall require that:

(1) All restaurant employees shall wash their hands promptly after touching, petting, or otherwise handling dogs. Employees shall be prohibited from touching, petting, or otherwise handling dogs while serving food or beverages or handling tableware or before entering other parts of the restaurant.

(2) Patrons in a designated outdoor area shall be advised that they should wash their hands before eating. Waterless hand sanitizer shall be provided at all tables in the designated outdoor area.

(3) Employees and patrons shall be instructed that they shall not allow dogs to come into contact with serving dishes, utensils, tableware, linens, paper products, or any other items involved in food service operations.

(4) Patrons shall keep their dogs on a leash at all times and shall keep their dogs under reasonable control.

(5) Dogs shall not be allowed on chairs, tables, or other furnishings. Dogs must remain on the floor/ground level and shall not be permitted in the lap of the patron.

(6) All table and chair surfaces shall be cleaned and sanitized with an approved product pursuant to the U.S. Department of Health and Human Services Food Code between seating of patrons. Employees shall remove all dropped food and spilled drink from the floor and ground as soon as possible but in no event less frequently than between seating of patrons at the nearest table.

(7) Employees or patrons shall remove all dog waste immediately and the floor or ground shall be immediately cleaned and sanitized with an approved product. Employees shall keep a kit with the appropriate materials for this purpose in the designated outdoor area.

(8) A sign or signs informing employees of these requirements shall be posted on the premises in a conspicuous manner that places the employees on notice.

(9) A sign or signs informing patrons of these requirements shall be posted on the premises in a conspicuous manner that places the patrons on notice.

(10) A sign or signs notifying the public that the designated outdoor area is available for the use of patrons and patrons' dogs shall be posted in a conspicuous manner that places the public on notice.

(11) Employees and patrons shall not permit dogs to be in, or to travel through indoor or nondesignated outdoor portions of the restaurant, and ingress and egress to the designated outdoor portions of the restaurant must not require entrance into or passage through any indoor area of the restaurant.

(12) Employees and patrons shall not allow any dog to be in the designated outdoor areas of the restaurant if the restaurant is in violation of any of the requirements of this section, or if they do not possess a valid conditional use permit.

(13) Permits shall be conspicuously displayed in the designated outdoor area.

(e) *Expiration, revocation, and appeals.*

(1) A conditional use permit issued pursuant to this section shall expire automatically upon the sale of the restaurant and cannot be transferred to a subsequent owner. The subsequent owner may apply for a conditional use permit pursuant to this section if the subsequent owner wishes to continue to allow patrons' dogs in a designated outdoor area of the restaurant.

(2) A conditional use permit may be revoked by the county if, after notice and reasonable time in which the grounds for revocation may be corrected, the restaurant fails to comply with any condition of approval, fails to comply with the approved diagram, fails to maintain any required state or local license, or is found to be in violation of any provision of this section. If the ground for revocation is a failure to maintain any required state or local license, the revocation may take effect immediately upon giving notice of revocation to the permit holder.

(3) If a restaurant's conditional use permit is revoked, no new conditional use permit may be approved for the restaurant until all issues identified within the revocation have been satisfied. This includes any outstanding fees.

(f) *Complaints and reporting.*

(1) Complaints may be made to code enforcement who shall accept, document, and respond to all complaints and shall timely report to the Division all complaints and the response to such complaints.

(2) The county shall provide the division with a copy of all approved applications and permits issued.

(3) All applications, permits, and other related materials shall contain the Division issued license number for the food service establishment.

(Ord. No. 2019-11, § I, 8-20-19)

801.33 Outdoor dog dining.

(a) *Purpose*. F.S. § 509.233 grants the city the authority to provide exemptions from section 6-501.115, 2001 Food and Drug Administration Food Code, as adopted and incorporated by the division of hotels and restaurants ("division") in Rule 61C-4.010(6), Florida Administrative Code ("Food Code"). The purpose of this section is to allow patrons' dogs within certain outdoor portions of restaurants. The procedure adopted pursuant to this section provides an exemption for those restaurants which have applied for and received a conditional use permit to those sections of the Food Code that prohibit dogs in restaurants.

(b) *Conditional use approval required*. No dog shall be allowed in a restaurant unless allowed by state law or the restaurant has received and maintains an unexpired conditional use approval issued by the city pursuant to this section. Dogs shall only be authorized in a designated outdoor dining area. It shall be unlawful to fail to comply with any of the requirements of this section.

(c) *Application requirements*. An application for a conditional use approval shall be on a form supplied by the city of New Smyrna Beach, together with any applicable fees. All approved applications would require obtaining a Business Tax Receipt and that Business Tax Receipt can be renewed each year. In addition to those requirements of Code of Ordinance section 74-146 through 74-170, the application shall include the following:

(1) Name, location, mailing address and division issued license number of the restaurant.

(2) Name, mailing address, and telephone contact information of the permit applicant. Name, mailing address, and telephone contact information of the owner of the restaurant shall be provided if the owner is not the permit applicant.

(3) A diagram and description of the outdoor area which is requested to be designated as available to patrons' dogs, including dimensions of the designated area; a depiction of the number and placement of tables, chairs, and restaurant equipment, if any; the entryways and exists to the designated outdoor area; the boundaries of the designated area and of the other outdoor dining area; the boundaries of the designated area and of the other outdoor dining areas not available for patrons' dogs; any

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fences or other barriers; surrounding property lines and public rights-of-way, including sidewalks and common pathways; and such other information as is deemed necessary by the city.

(4) The diagram shall be accurate and to scale but need not be prepared by a licensed design professional. A copy of the approved diagram shall be attached to the application.

(5) A description of the days of the week and hours of operation that patrons' dogs will be permitted in the designated outdoor area.

(d) *Regulations*. Restaurants that receive a conditional use permit for a designated outdoor area pursuant to this section shall require that:

(1) All restaurant employees shall wash their hands promptly after touching, petting, or otherwise handling dogs. Employees shall be prohibited from touching, petting, or otherwise handling dogs while serving food or beverages or handling tableware or before entering other parts of the restaurant.

(2) Patrons in a designated outdoor area shall be advised that they should wash their hands before eating. Waterless hand sanitizer shall be provided at all tables in the designated outdoor area.

(3) Employees and patrons shall be instructed that they shall not allow dogs to come into contact with serving dishes, utensils, tableware, linens, paper products, or any other items involved in food service operations.

(4) Patrons shall keep their dogs on a leash at all times and shall keep their dogs under reasonable control.

(5) Dogs shall not be allowed on chairs, tables, or other furnishings. Dogs must remain on the floor/ground level and shall not be permitted in the lap of the patron.

(6) All table and chair surfaces shall be cleaned and sanitized with an approved product pursuant to the U.S. Department of Health and Human Services Food Code between seating of patrons. Employees shall remove all dropped food and spilled drink from the floor and ground as soon as possible but in no event less frequently than between seating of patrons at the nearest table.

(7) Employees or patrons shall remove all dog waste immediately and the floor or ground shall be immediately cleaned and sanitized with

an approved product. Employees shall keep a kit with the appropriate materials for this purpose in the designated outdoor area.

(8) A sign or signs informing employees of these requirements shall be posted on the premises in a conspicuous manner that places the employees on notice.

(9) A sign or signs informing patrons of these requirements shall be posted on the premises in a conspicuous manner that places the patrons on notice.

(10) A sign or signs notifying the public that the designated outdoor area is available for the use of patrons and patrons' dogs shall be posted in a conspicuous manner that places the public on notice.

(11) Employees and patrons shall not permit dogs to be in, or to travel through indoor or non-designated outdoor portions of the restaurant, and ingress and egress to the designated outdoor portions of the restaurant must not require entrance into or passage through any indoor area of the restaurant.

(12) Employees and patrons shall not allow any dog to be in the designated outdoor areas of the restaurant if the restaurant is in violation of any of the requirements of this section, or if they do not possess a valid conditional use permit.

(13) A Business Tax Receipt shall be conspicuously displayed in the designated outdoor area.

(e) *Expiration, revocation, and appeals.*

(1) A conditional use approval issued pursuant to this section shall expire automatically upon the sale of the restaurant and cannot be transferred to a subsequent owner. The subsequent owner may apply for a conditional use approval pursuant to this section if the subsequent owner wishes to continue to allow patrons' dogs in a designated outdoor area of the restaurant.

(2) A conditional use approval may be revoked by the city if, after notice and reasonable time in which the grounds for revocation may be corrected, the restaurant fails to comply with any condition of approval, fails to comply with the approved diagram, fails to maintain any required state or local license, or is found to be in violation of any provision of this

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section. If the ground for revocation is a failure to maintain any required state or local license, the revocation may take effect immediately upon giving notice of revocation to the permit holder.

(3) If a restaurant's conditional use approval is revoked, no new conditional use permit may be approved for the restaurant until all issues identified within the revocation have been satisfied. This includes any outstanding fees.

(f) *Complaints and reporting.*

(1) Complaints may be made to code compliance department who shall accept, document, and respond to all complaints and shall timely report to the planning department all complaints and the response to such complaints.

(2) The city shall provide the code compliance department with a copy of all approved applications and approvals issued.

(3) All applications, approvals, and other related materials shall contain the State issued license number for the food service establishment.

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THE CITY OF NEW SMYRNA BEACH - PLANNING DEPARTMENT

ZT-7-2025: CONDUCT A REVIEW AND GIVE A RECOMMENDATION TO THE CITY COMMISSION ON A PROPOSED AMENDMENT TO SECTION 502.02, R-2 SINGLE-FAMILY RESIDENTIAL, SPECIAL EXCEPTION USE OF SCHOOL AND OR A HOUSE OF WORSHIP.

September 8, 2025

Background:

Applicant: Peter Thomson, of the Thomson Law Offices, 105 North Cooper Street, New Smyrna Beach, Florida 32169.

Property Owner: New Smyrna Beachside Baptist Church Inc, 629 South Pine Street, New Smyrna Beach, Florida 32169.

Request: A text amendment to the City Land Development Regulation to reduce the required side and rear yard building setbacks from 35 feet to 10 feet, or to be no closer than existing buildings under the Special Exception Use of House of Worship or School.

Exhibits used in this report:

Exhibit A: Proposed Special Exception Text
Exhibit B: Possible effected R-2 zoned properties

Findings:

The R-2, Single-Family Residential zoning district lists the use of a House of Worship or a School as a Special Exception Use with the following condition.

- All structures are located at least thirty-five (35) feet from all side or rear property lines and off-street parking areas abutting residential property are screened by a buffer meeting the requirements of these Land Development Regulations.

The applicant is seeking to amend the existing Special Exception Use condition to reduce the required 35-foot side and rear yard building setbacks to 10-foot or no closer than any existing building on a R-2 zoned property that has an existing house of worship or school.

Under Land Development Section 504.02, R-2 Single-Family Residential Zoning District, Special Exception Use of a House of Worship or School: “Schools and or a House of Worship provided all structures are located at least thirty-five (35) feet from all side and

rear property lines and off-street parking aeras abutting residential property are screened by a buffer meeting the requirements of this LDR."

The applicant has proposed modifying the LDR with the following text:

- Schools or a house of worship provided all structures are located at least thirty-five (35) feet from all side or rear property lines. For existing schools or an existing house of worship, additions, improvements or additional buildings may be reduced to a minimum of 10-foot side and rear building setback, or no closer than the existing structures on the property. New additions, new buildings, and off-street parking areas abutting residential property must be screened by a 7-foot landscape buffer or a six-foot tall solid perimeter fence meeting the requirements of this LDR.

Other structures that would be allowed as a special exception use would only have to meet a 7 1/2-foot side and rear yard building setback and not the required 35-foot side and rear building setback. By reducing the requirement of an existing house of worship or existing school to have building setbacks of new structures or additions to be reduced to 10-feet or no closer than existing structures may be considered a reasonable building setback from a residential property line.

The property owner has mailed out notices to the neighboring properties to educate them on the proposed amendment to the Land Development Regulations. Our office has received a few calls inquiring about the application.

Recommendation:

The Planning Department is seeking a positive recommendation from the Planning and Zoning Board to the City Commission to **approve** the requested text amendment.

Fiscal Analysis:
N/A

Strategic Plan Item:
No

Staff Report Created By: Robert Mathen - Senior Planner

Attachments:

Exhibit A Proposed House of Worship 2 (7.15.25).pdf
Exhibit B Churches, Schools in R-2 Map.pdf

504.02 Specific Regulations by District

R-2, SINGLE-FAMILY RESIDENTIAL DISTRICT

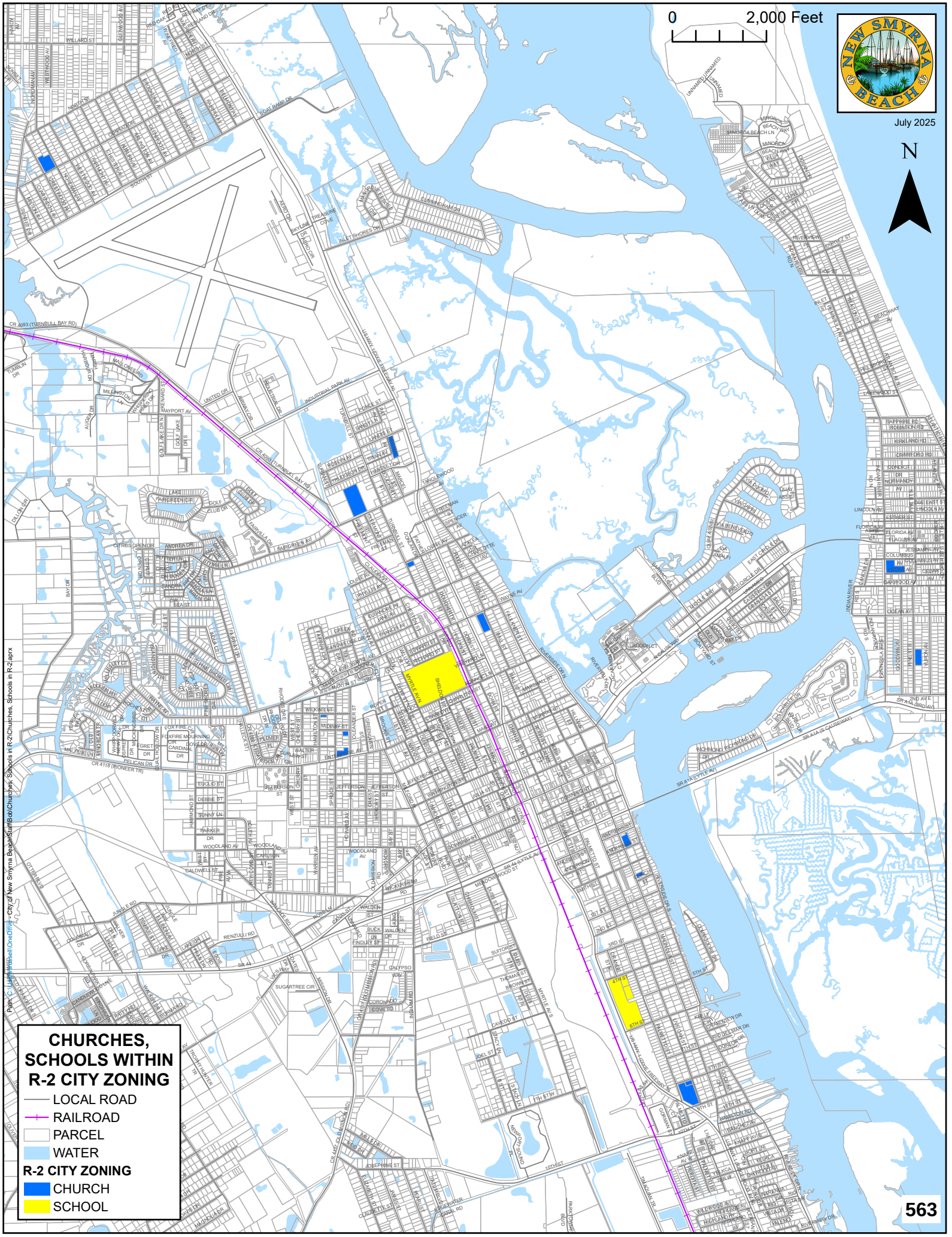
Intent. The R-2, Single-Family Residential District is intended to be a single-family residential district for low population densities. Existing development and usage has resulted which is being preserved in order to stabilize the neighborhood. The nature of the residential use of the property throughout the district will enhance the prospects for orderly future residential development.

Special exceptions.

Facilities owned and/or operated by federal, state, county or municipal government except country clubs and golf courses

Schools and or a house of worship provided all structures are located at least thirty-five (35) feet from all side or rear property lines. For existing schools or an existing house of worship; additions, improvements or additional buildings may be reduced to a minimum of 10-foot side and rear building setback, or no closer than the existing structures on the property. ~~and~~ New additions, new buildings, and off-street parking areas abutting residential property are screened by a 7-foot landscape buffer or a six-foot tall solid perimeter fence meeting the requirements of this LDR.

Child day care on a house of worship property, subject to the following additional conditions: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CHURCHES, SCHOOLS WITHIN R-2 CITY ZONING
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RAILROAD
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WATER
R-2 CITY ZONING
CHURCH
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THE CITY OF NEW SMYRNA BEACH - PLANNING DEPARTMENT

A-0007-2025: REVIEW AND GIVE A RECOMMENDATION TO THE CITY COMMISSION ON AN OVERALL ANNEXATION APPLICATION FOR 125 JUNGLE ROAD.

September 8, 2025

Background:

Applicant: Roy B. Parsons, 300 Low Tide Lane, Daytona Beach, Florida 32124.

Property Owners: Roy B. Parsons and Ingrid Reilly, 300 Low Tide Lane, Daytona Beach, Florida 32124.

Request: Voluntary annexation, *Comprehensive Plan* amendment, and rezoning:

- **From:** Volusia County Future Land Use (FLU) category of Urban Medium Intensity, and Volusia County zoning designation of R-4, Urban Single Family Residential with an "A" attached for Airport Height Notification Zone.

- **To:** City Future Land Use category of Medium Density Residential and City zoning designation of R-2, Single Family Residential with an "A" attached for Airport Height Notification Zone.

Site Information:

- **Size:** 0.45 ± acres

- **Location:** South and east side of Jungle Road between Otter Boulevard and State Road 44.

Tax I.D. Number: 7343-06-00-0321

Findings:

On April 23, 2013, the City Commission adopted an Interlocal Service Boundary Agreement (ISBA). The ISBA, which is permitted under Chapter 171, Part II, Florida Statutes, allows the City to annex any parcels that are within the designated annexation area, even if they are not contiguous to the current municipal boundaries. The agreement, which is between the County of Volusia and the City, was also approved by the County on May 2, 2013. A new agreement was approved on May 2, 2022.

The subject property is within the annexation area designated in the ISBA. The subject property at 125 Jungle Road is undeveloped. A location map is attached as **Exhibit A** and an aerial map is attached as **Exhibit B**.

The existing Volusia County Future Land Use (FLU) category and zoning designation of the subject property is shown on the following maps as **Exhibits C and D**. The text description of the existing Future Land Use category for the subject property is attached as **Exhibit E**. The associated current zoning text description for the subject property is attached as **Exhibit F**. Existing land uses are shown on the map attached as **Exhibit G.**

The established City Commission policy is that when properties are annexed into the City, the City will assign future land use categories and zoning designations that would be as similar as possible to existing County categories and designations. As discussed above, the existing County FLU category is Urban Medium Intensity. The existing County zoning designation is R-4, Urban Single Family Residential. The proposed City FLU category is Medium Density Residential. The proposed City zoning designation is R-2, Single Family Residential. A text description of the proposed City Medium Density Residential Future Land Use category is attached as **Exhibit H,** with a map of this proposed change also attached as **Exhibit I**. A text description of the proposed City R-2, Single Family Residential zoning designation, and a map of the proposed changes are similarly attached as **Exhibits J** and **K**.

This annexation request is within the City's annexation area and within the City's water and sewer service area **(Exhibit L).** The parcel at 125 Jungle Road has an 8-inch PVC water line in the Jungle Road right-of-way, but central sewer and reclaim services are not available. A map of the soil limitations for septic systems is attached as **Exhibit M**.

The *Land Development Regulations* requires any proposed development to conform to the Concurrency Management System. That system includes traffic, parks and recreation, potable water, wastewater treatment, solid waste collection, storm-water management, and public-school facilities. The subject property at 125 Jungle Road is undeveloped with no increased density proposed for this property. Therefore, staff did not prepare a concurrency analysis table for this case.

There are numerous *Comprehensive Plan* maps that must be amended to incorporate the subject property into the *Comprehensive Plan* (see **Exhibits N through Z)**. A map showing the subject properties incorporated into Commission Zone 3 is attached as **Exhibit AA**. The ISBA map is attached as **Exhibit BB**. The legal description and Warranty Deed are attached as **Exhibits CC** and **DD**.

Recommendation:

The Planning Department recommends that the Planning and Zoning Board to give a positive recommendation to the City Commission to **approve** the requested annexation, *Comprehensive Plan* amendment amending the Future Land Use to City Medium Density Residential and rezoning to City R-2, Single Family Residential with an "A" attached for Airport Height Notification Zone.

Fiscal Analysis:
N/A

Strategic Plan Item:
Yes

Staff Report Created By: Robert Mathen - Senior Planner

Attachments:

Exhibit A Location Map.pdf
Exhibit B Aerial Map.pdf
Exhibit C Existing FLU Map.pdf
Exhibit D Existing Zoning Map.pdf
Exhibit E County Urban Medium Intensity Text.pdf
Exhibit F County R-4 Zoning.pdf
Exhibit G Existing Land Use Map.pdf
Exhibit H City Medium Density Residential FLU.pdf
Exhibit I Proposed FLU Map.pdf
Exhibit J City R-2 Zoning Text.pdf
Exhibit K Proposed Zoning Map.pdf
Exhibit L Water and Sewer Service Area.pdf
Exhibit M Soil Limitation for Septic Systems.pdf
Exhibit N Airport Runway Protection Zones.pdf
Exhibit O Bicycle and Pedestrian Facilities.pdf
Exhibit P Boat Slip Siting.pdf
Exhibit Q City Parks.pdf
Exhibit R Coastal High Hazard Areas.pdf
Exhibit S Evacuation Routes.pdf
Exhibit T Existing Traffic Lanes - 2009.pdf
Exhibit U Number of Traffic Lanes - 2025.pdf
Exhibit V Existing Level of Service - 2009.pdf
Exhibit W Level of Service - 2025.pdf
Exhibit X Flood Prone Areas.pdf
Exhibit Y Neighborhood Map.pdf
Exhibit Z Public Transit Routes.pdf

Exhibit AA Commission Zones Map.pdf
Exhibit BB Interlocal Service Boundary Agreement Map.pdf
Exhibit CC Legal Description.pdf
Exhibit DD Warranty Deed.pdf

A-7-25: 125 JUNGLE ROAD
PARCEL: 7343-06-00-0321 LOCATION MAP

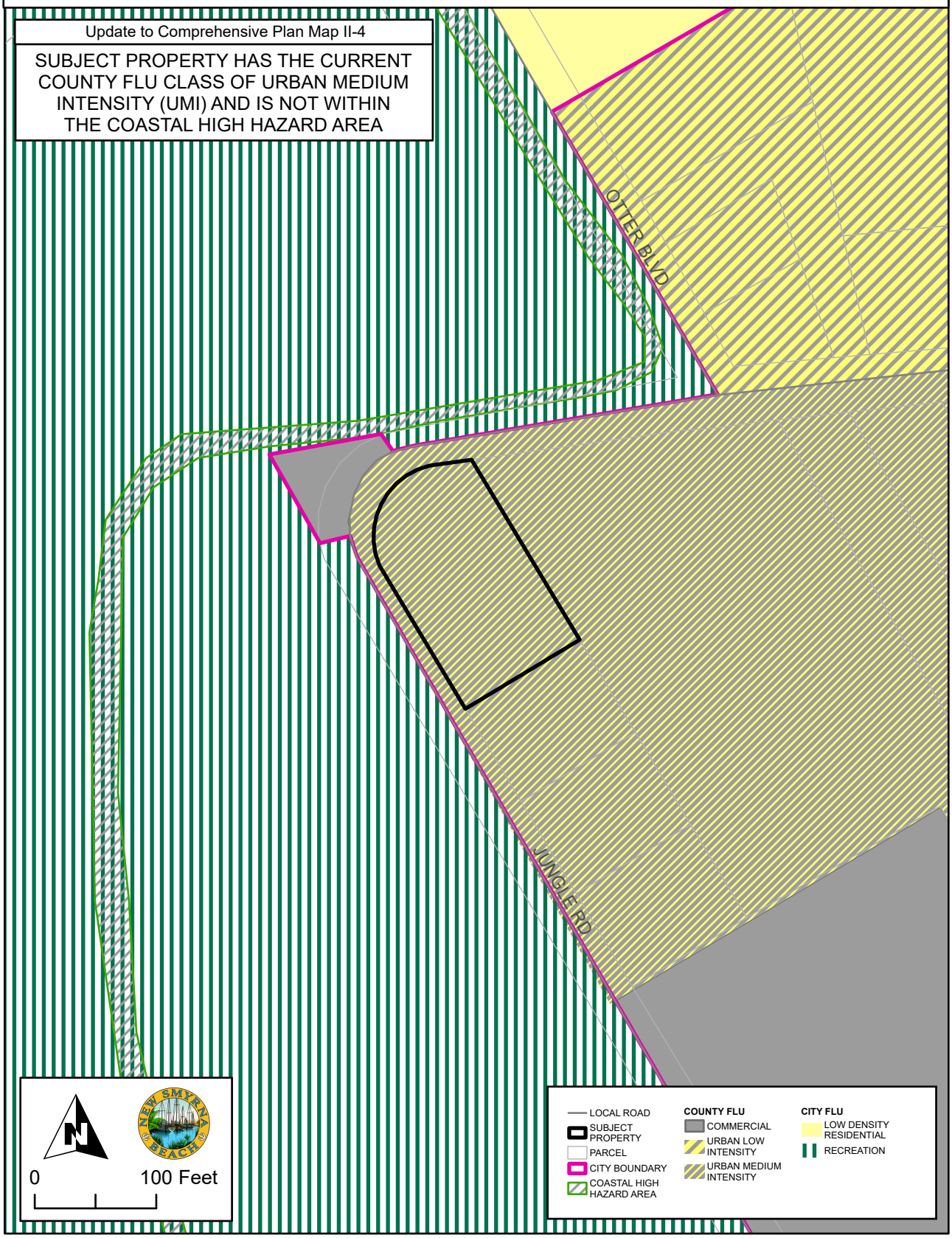


A-7-25: 125 JUNGLE ROAD
PARCEL: 7343-06-00-0321 AERIAL MAP



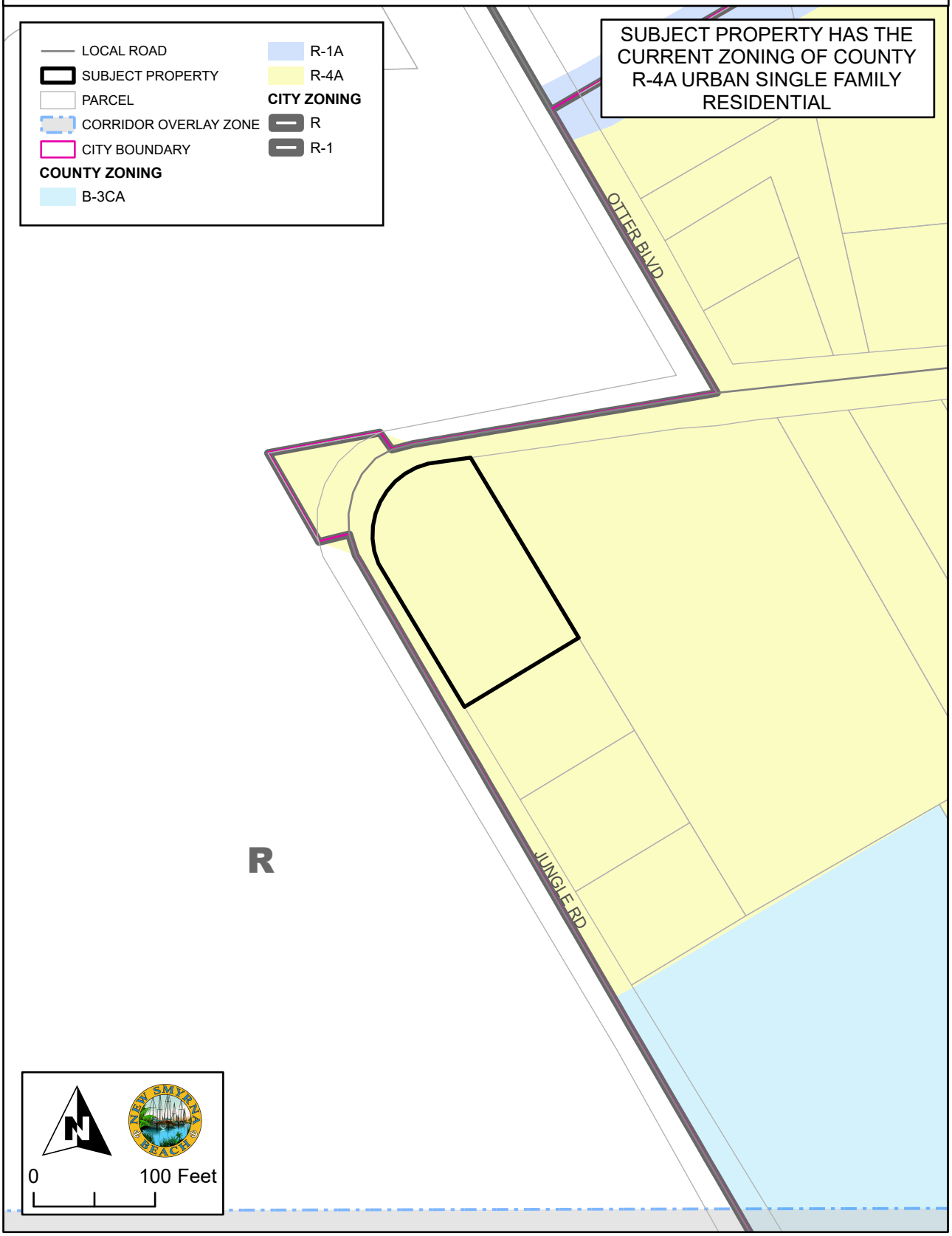
EXISTING FUTURE LAND USE DESIGNATIONS

A-7-25



EXISTING ZONING

A-7-25



Urban Medium Intensity (UMI) –

Areas that contain residential development at a range of greater than four (4) to eight (8) dwelling units per acre. The types of housing typically found in areas designated urban medium intensity include single family homes, townhouses and low-rise apartments.

The UMI designation is primarily a residential designation but may allow neighborhood business areas (see Shopping Center definition in Chapter 20) and office development that meet the Comprehensive Plan's location criteria. The commercial intensity shall be no more than a fifty percent Floor Area Ratio (0.50 FAR) and shall be limited in a manner to be compatible with the allowable residential density. In order to be considered compatible, the commercial development should reflect similar traffic patterns, traffic generation, building scale, landscaping and open space, and buffers. More intensive commercial use, other than neighborhood business areas, shall be reserved to areas designated for Commercial.

All requests for nonresidential uses within one- quarter (¼) mile of another jurisdiction shall require notification to that jurisdiction.

R-4 URBAN SINGLE-FAMILY RESIDENTIAL CLASSIFICATION

Purpose and intent: The purpose and intent of the R-4 Urban Single-Family Residential Classification is to provide medium-density residential developments, preserving the character of existing or proposed residential neighborhoods.

Permitted principal uses and structures: In the R-4 Urban Single-Family Residential Classification, no premises shall be used except for the following uses and their customary accessory uses or structures:

Cluster and zero lot line subdivisions (refer to subsection 72-304).
Communication towers not exceeding 70 feet in height above ground level.
Essential utility services.
Exempt excavations (refer to subsection 72-293(15)) and/or those which comply with division 8 of the Land Development Code of Volusia County [article III] and/or final site plan review procedures of this article.
Exempt landfills (refer to subsection 72-293(16)).
Fire stations.
Home occupations, class A (refer to section 72-283).
Houses of worship.
Parks and recreational areas accessory to residential developments.
Public schools.
Publicly owned parks and recreational areas.
Publicly owned or regulated water supply wells.
Single-family standard or manufactured modular dwelling.

Permitted special exceptions: Additional regulations/requirements governing permitted special exceptions are located in sections 72-293 and 72-415 of this article.

Bed and breakfast (refer to subsection 72-293(19)).
Cemeteries (refer to subsection 72-293(4)).
Communication towers exceeding 70 feet in height above ground level.
Day care centers (refer to subsection 72-293(6)).
Dogs and cats boarded as personal pets exceeding the number permitted in subsection 72-306(a).
Excavations only for stormwater retention ponds for which a permit is required by this article.
Garage apartments.
Off-street parking areas (refer to subsection 72-293(14)).
Public uses not listed as a permitted principal use.
Public utility uses and structures (refer to subsection 72-293(1)).
Recreational areas (refer to subsection 72-293(3)).
Schools, parochial or private (refer to subsection 72-293(4)).

Dimensional requirements:
Minimum lot size:
Area: 7,500 square feet.
Width: 75 feet.

Minimum yard size:
Front yard: 25 feet.
Rear yard: 20 feet.
Side yard: 20 feet combined, minimum of eight feet on any one side.
Waterfront yard: 25 feet.

Maximum building height: 35 feet.

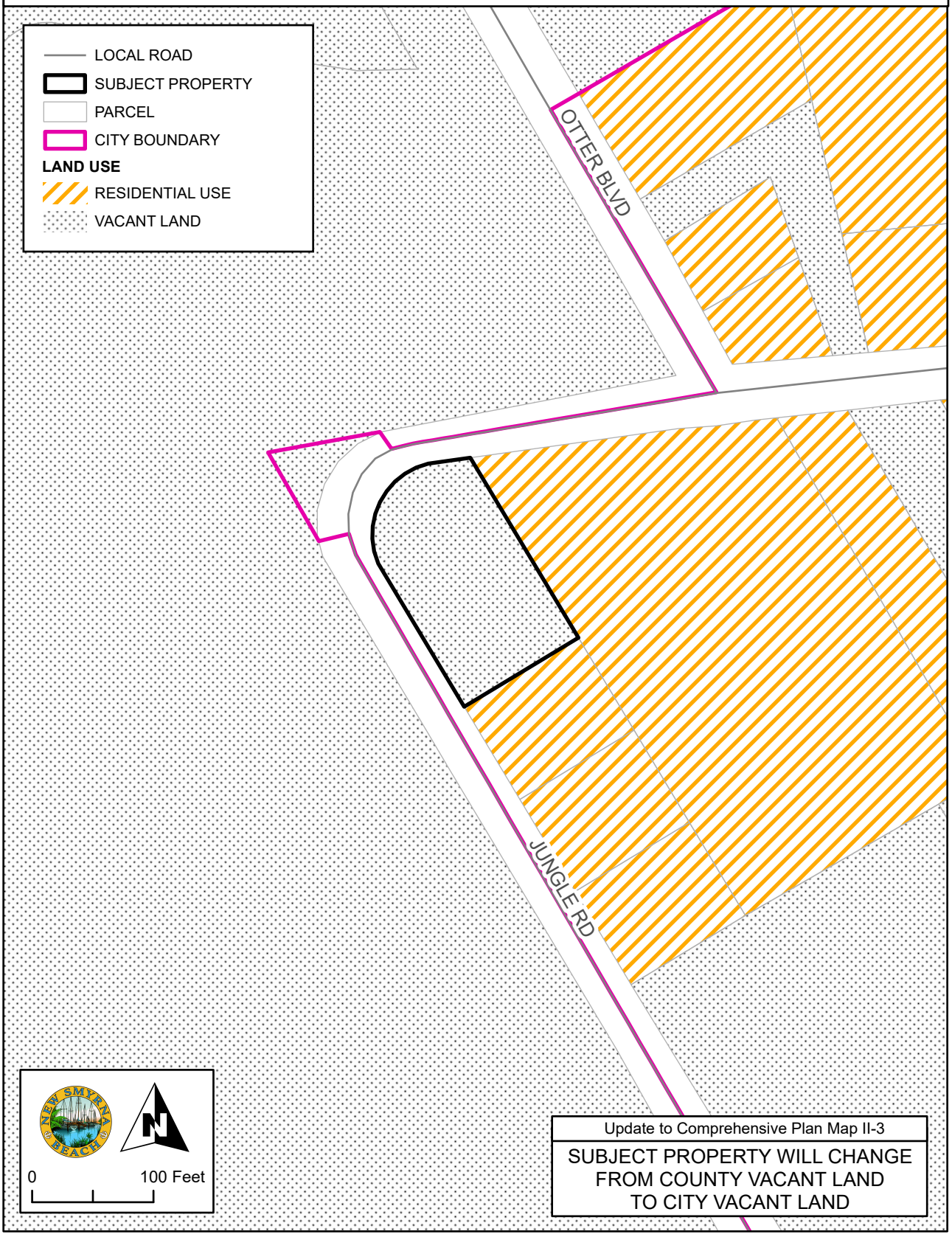
Maximum lot coverage: The total lot area covered with principal and accessory buildings shall not exceed 35 percent.

Minimum floor area: 850 square feet.

Off-street parking and loading requirements: Off-street parking and loading areas meeting the requirements of sections 72-286 and 72-287 shall be constructed.

EXISTING LAND USE DESIGNATIONS

A-7-25



MEDIUM-DENSITY RESIDENTIAL

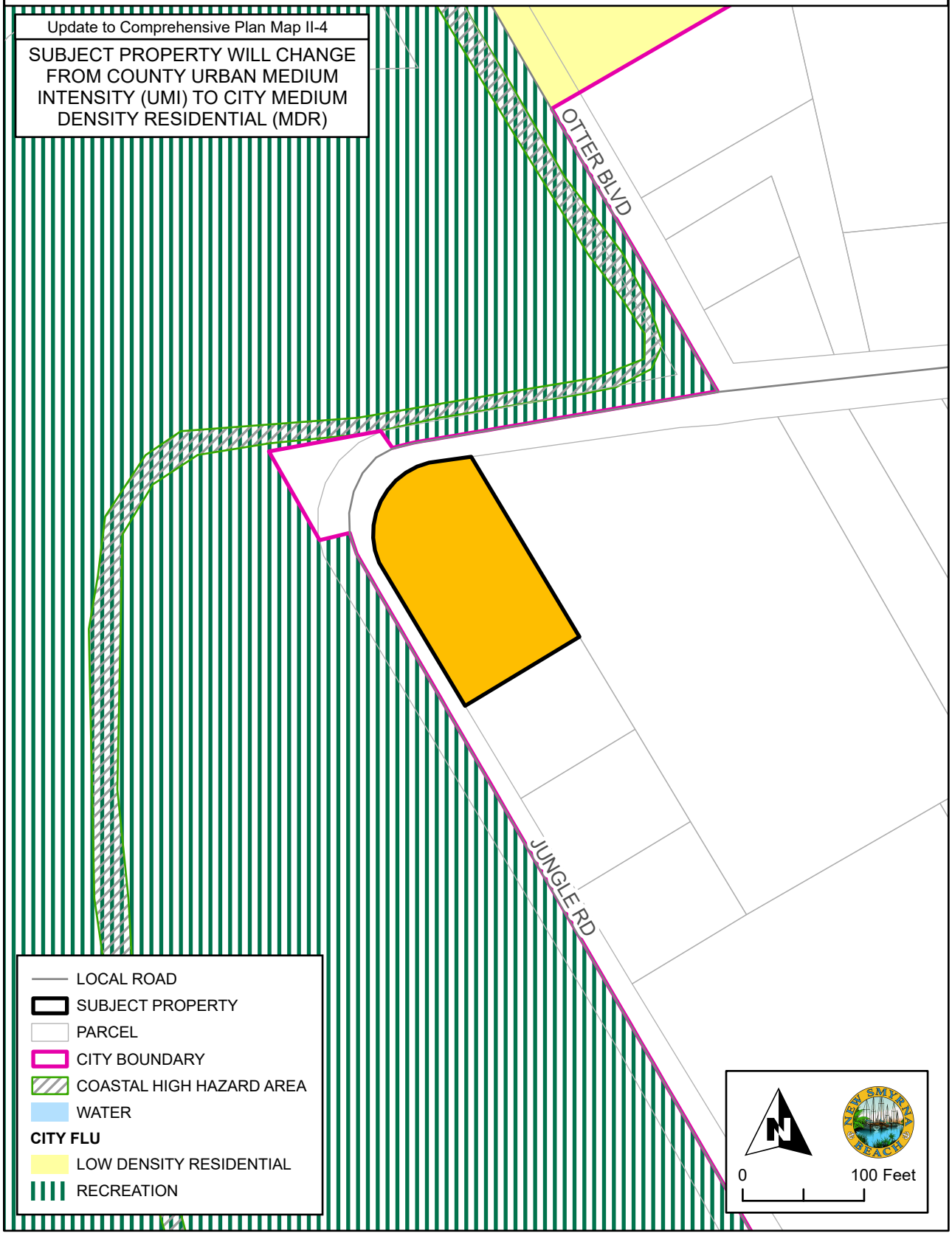
Maximum allowed density: 5.01 to eight [8] dwelling units per acre

Non-residential development permitted by special exception shall be at a maximum Floor Area Ration (FAR) of 0.5.

Intent: This use is intended to provide a buffer between low-density residential uses and more intense uses, such as a high-density residential or commercial. It is also suitable at major intersections when adequate buffering from highway can be provided.

PROPOSED FUTURE LAND USE DESIGNATIONS

A-7-25



R-2 SINGLE FAMILY RESIDENTIAL DISTRICT

Intent:

The R-2 district is intended to be a single-family residential district for low population densities. Existing development and usage has resulted which is being preserved in order to stabilize the neighborhood. The nature of the residential use of the property throughout the district will enhance the prospects for orderly future residential development.

Permitted Uses:

Playfields
Playgrounds
Public Parks
Recreation Buildings and Complexes for exclusive use by residents and guests in a residential development
Single Family Dwelling Units

Permitted Accessory Uses:

Garages
Gazebos
Incidental Uses
Permitted Home Occupations
Storage Sheds
Swimming pools, private, provided a principal structure exists and the pool is located behind the front plane of the principal structure. Corner lots will be considered to have two front planes, one on each street. If a structure is not constructed squarely on a parcel, the swimming pool must be located at or behind the most restrictive front plane of the principal structure. **Ord. #30-10**
Open Front Porches, up to 10 feet into the front yard setback, subject to the following conditions:
Open Front Porch shall not be enclosed in any manner,
Open Front Porch must be open wall construction without screen,
Open Front Porch shall have a similar roofing material as the primary structure,
Open Front Porch front building line shall be measured from the vertical support column. **Ord. #75-16**

Uses customarily associated with the permitted principal uses

Special Exceptions:

Child day care on a house of worship property, subject to the following additional conditions:

1. The house of worship property shall be located on and be accessible by an arterial or collector roadway.

2. Play areas shall be fenced and landscaped. The landscaping shall have a vegetative hedge that will reach six feet in height within two years that is planted a minimum of three feet on center.

3. Play areas shall be located within all applicable setback dimensions.

4. The house of worship property shall have a vehicular drop off and pickup area with a minimum 100 feet of drive lane outside of the public right-of-way, or sufficient parking area to provide enough space to fit the required parking and provided space for drop off and pick up. **Ord. #04-00**

Facilities owned and/or operated by federal, state, county or municipal government except country clubs and golf courses

Schools and or a house of worship provided all structures are located at least thirty-five (35) feet from all side or rear property lines and off-street parking areas abutting residential property are screened by a buffer meeting the requirements of this LDR. **[Revised 3/27/00]**

Dimensional Requirements:

Minimum Lot Size:

Area	8,625 square feet
Depth	115 feet
Width	75 feet

Minimum Yard Size:

Front yard	30 feet or as required per Section 504.01(M) of this LDR
Rear yard	7.5 feet
Side yard	7.5 feet

Maximum Building Coverage:

The total area covered with buildings on any lot shall not exceed 40% of the total lot area. **Ord. #78-98**

Screen Enclosures:

As an exception to the maximum building coverage provision any parcel may be allowed an additional ten percent (10%) building coverage for only a screen pool enclosure if the following conditions are met:

1. A screen pool enclosure shall only cover the swimming pool and surrounding pool deck and shall have a roof and walls consisting entirely of screening; and
2. There shall be no variances granted to exceed the maximum building coverage or additional coverage allowed for screen enclosures.

Ord. #05-09

Maximum Impervious Lot Coverage:

The total area of the lot that may be covered with impervious material is sixty (60) percent.

Maximum Principal Building Height:

Thirty-five (35) feet.
Three (3) stories.

Minimum Floor Area Requirements:

750 square feet of livable area for one and two-bedroom dwelling units; 1200 square feet of livable area for a three-bedroom dwelling unit; and 1300 square feet livable area for a four-bedroom dwelling unit. **[Revised 7-1-03]**

Corner Lots:

(1) Parcels which front on two streets shall provide a thirty (30) foot front yard on one street frontage and a 15 foot half depth front yard on the other street, or as required per Section 504.01(M) of this LDR.

(2) Parcels fronting on three streets shall provide two thirty (30) foot front yards and a 15 foot half depth front yard on the remaining street or as required per Section 504.01(M) of this LDR. **Ord. #23-00**

Driveway Access

The minimum driveway length shall be 20 feet (excluding portion of a driveway within the public right-of-way). **Ord. #23-00**

Through Lots:

Through lots shall provide a 30-foot front yard on each street, or as required per Section 504.01(M) of this LDR.

Atypical Lots:

Visibility triangles shall be established at the rear corners of an atypical lot. The visibility triangles shall be those areas formed by a line connecting the points 30 feet from the intersection of the side and rear lot line along the side lot line and 30 feet from the intersection of the side and rear lot line along the rear lot line; no principal or accessory

structure having a height over 4 feet, except for incidental uses, shall protrude into the area of a visibility triangle.

Building Projections:

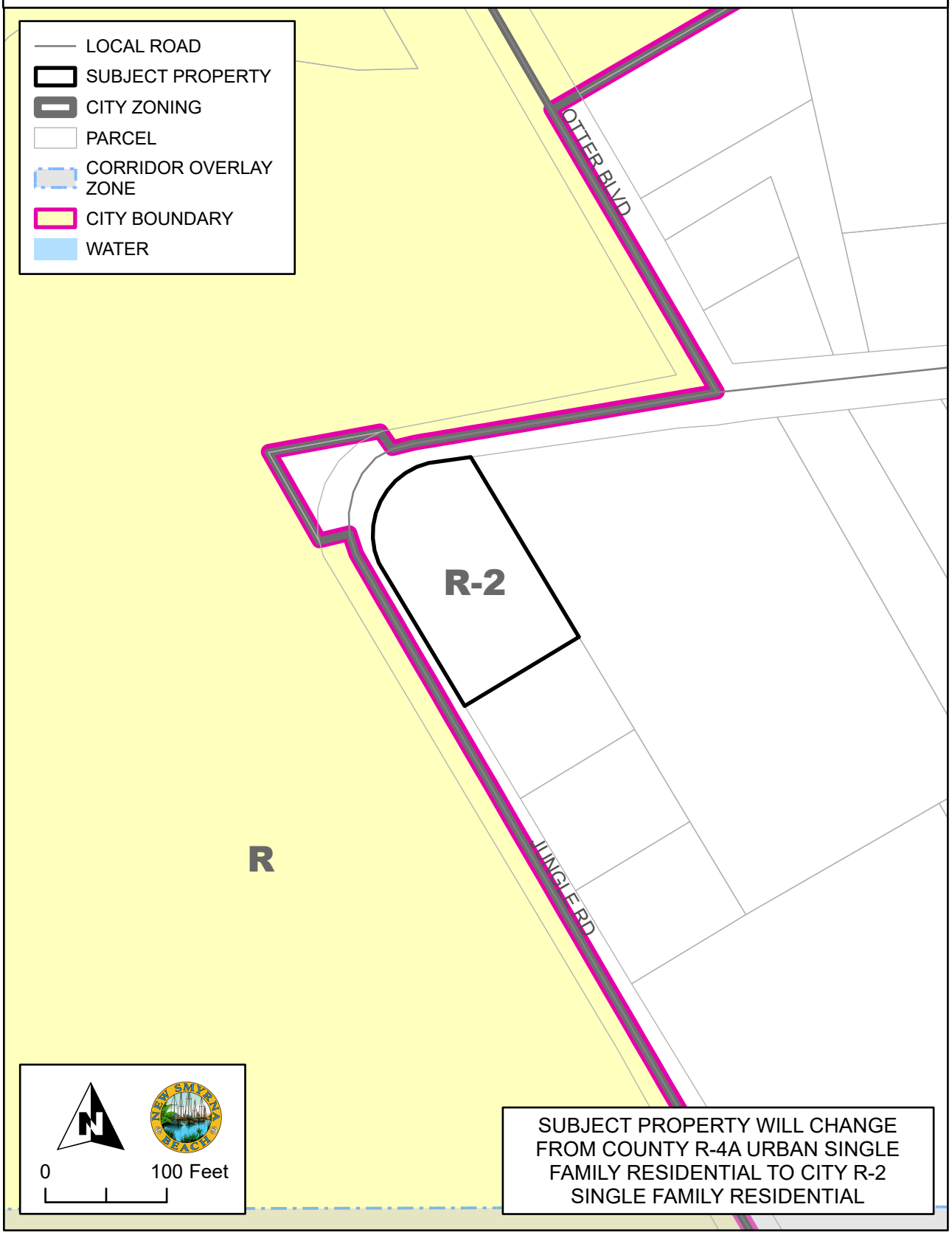
There shall be no building projections into any required yard except for eaves with a maximum projection of 42 inches, but no closer than 5 feet to a property line; and those structures allowed in Section 804.03.

Visibility at Intersections:

Visibility at intersections shall be provided as required in this LDR. **[Revised 12-18-92]**

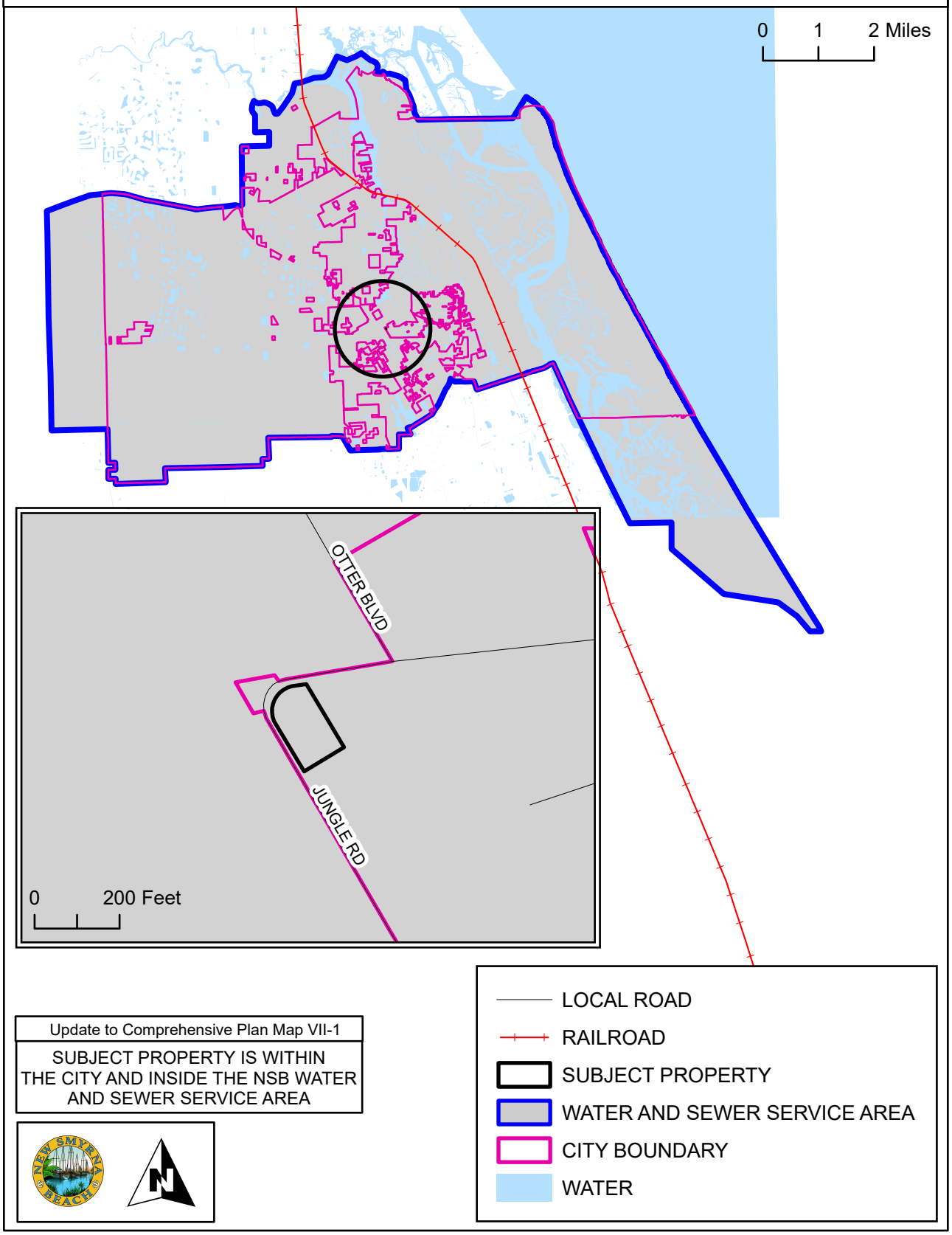
PROPOSED ZONING

A-7-25



WATER AND SEWER SERVICE AREA

A-7-25

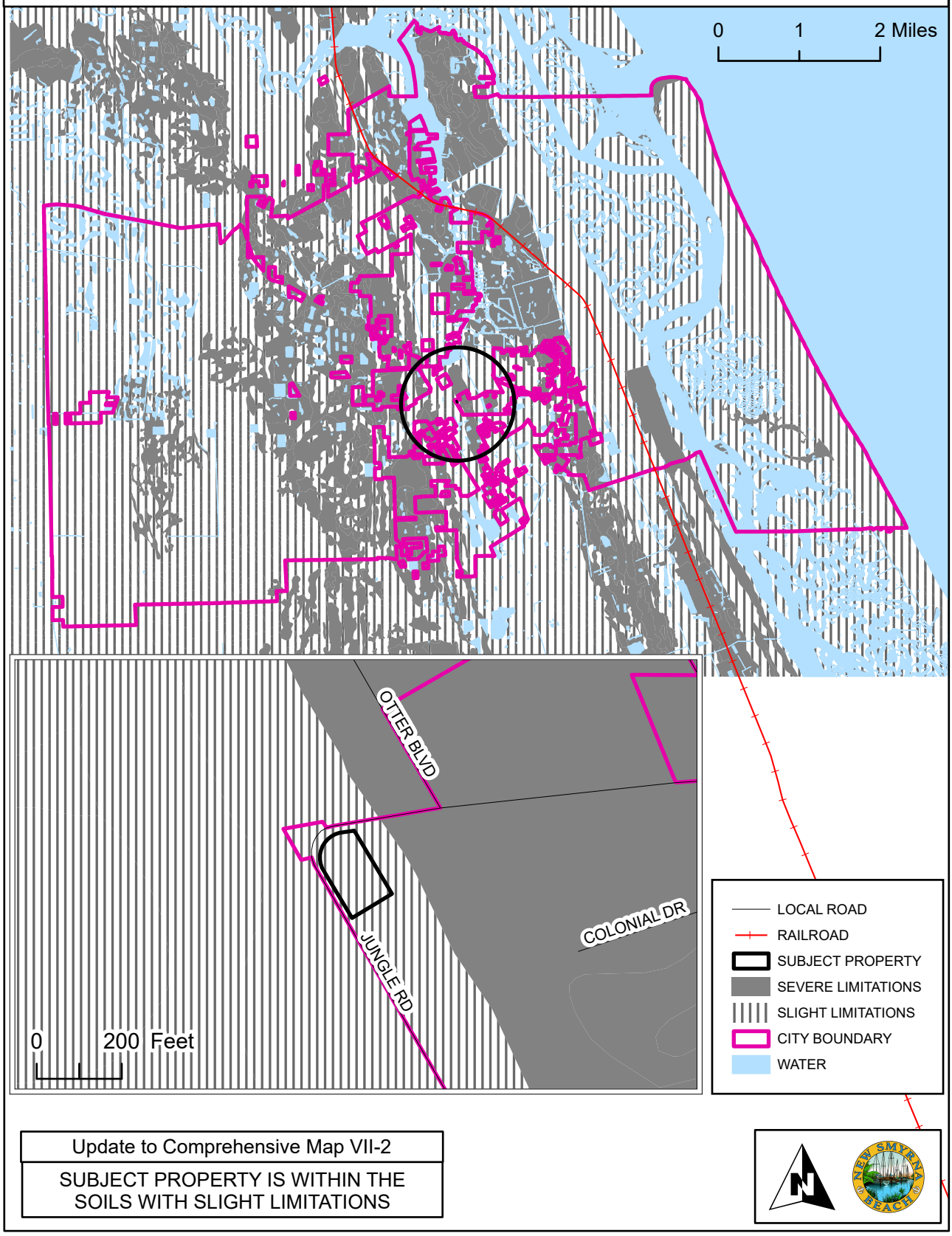


Update to Comprehensive Plan Map VII-1

SUBJECT PROPERTY IS WITHIN THE CITY AND INSIDE THE NSB WATER AND SEWER SERVICE AREA

SOIL LIMITATION FOR SEPTIC SYSTEMS

A-7-25

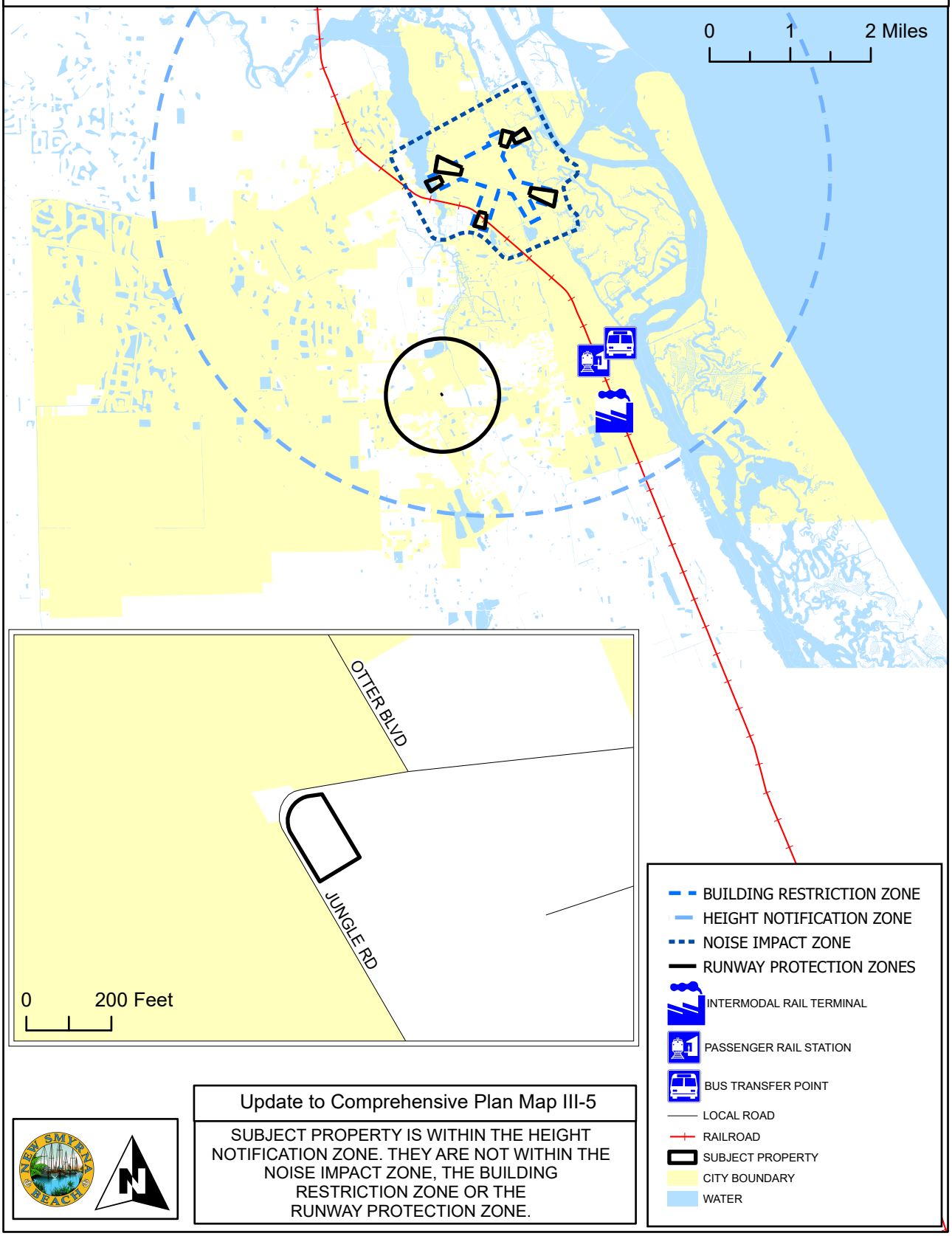


Update to Comprehensive Map VII-2

SUBJECT PROPERTY IS WITHIN THE SOILS WITH SLIGHT LIMITATIONS

AIRPORT RUNWAY PROTECTION ZONES

A-7-25

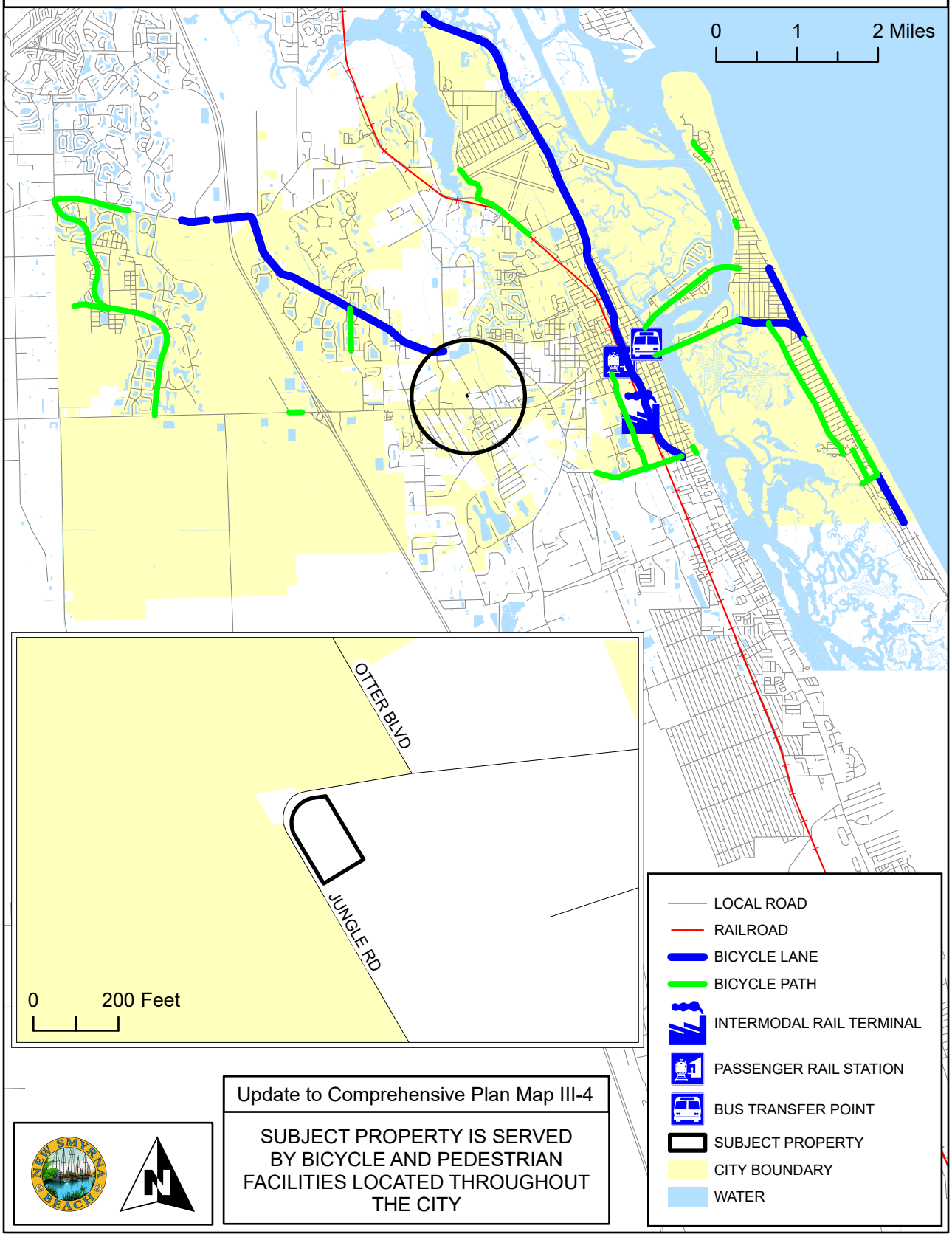


Update to Comprehensive Plan Map III-5

SUBJECT PROPERTY IS WITHIN THE HEIGHT NOTIFICATION ZONE. THEY ARE NOT WITHIN THE NOISE IMPACT ZONE, THE BUILDING RESTRICTION ZONE OR THE RUNWAY PROTECTION ZONE.

BICYCLE AND PEDESTRIAN FACILITIES

A-7-25

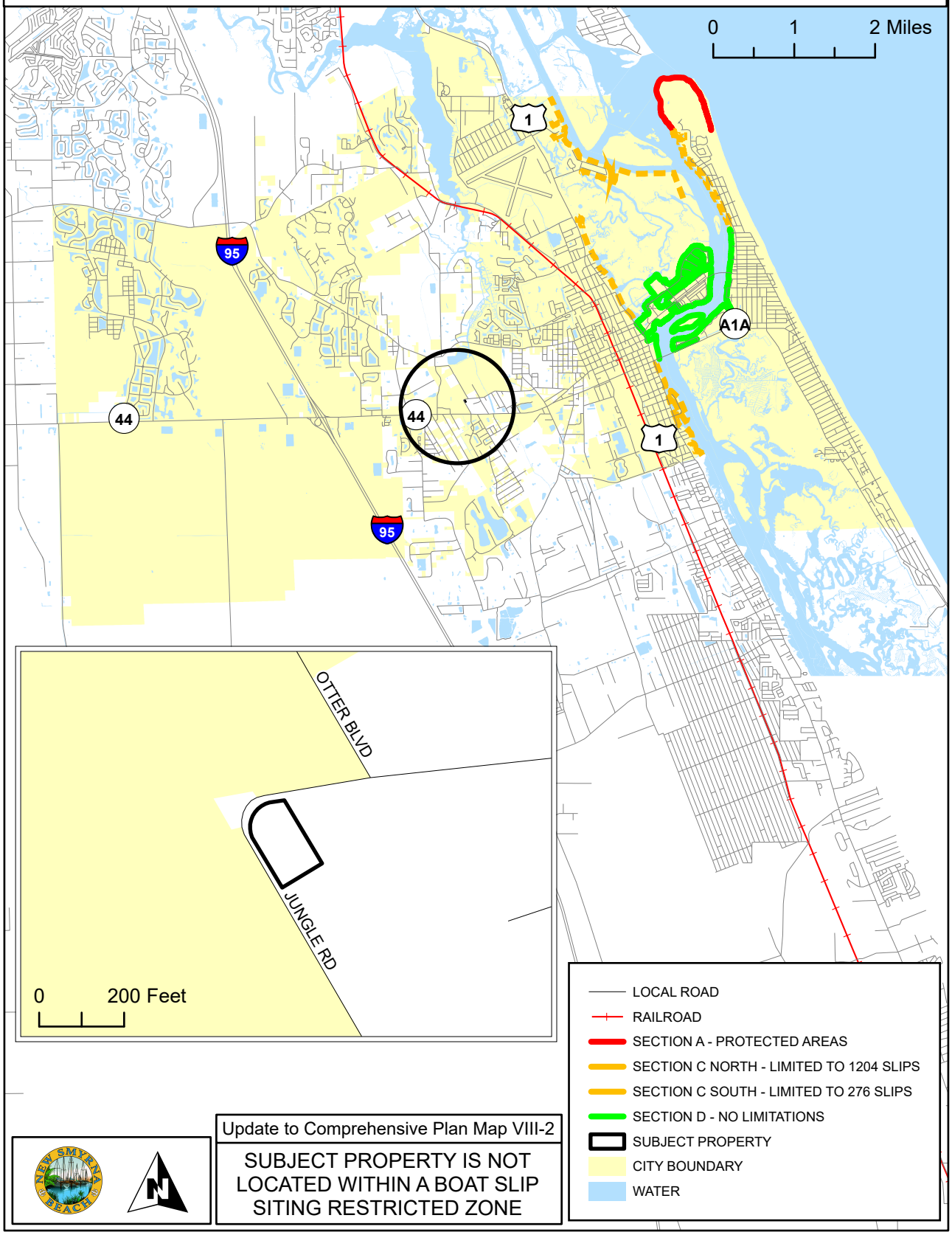


Update to Comprehensive Plan Map III-4

SUBJECT PROPERTY IS SERVED BY BICYCLE AND PEDESTRIAN FACILITIES LOCATED THROUGHOUT THE CITY

BOAT SLIP SITING

A-7-25

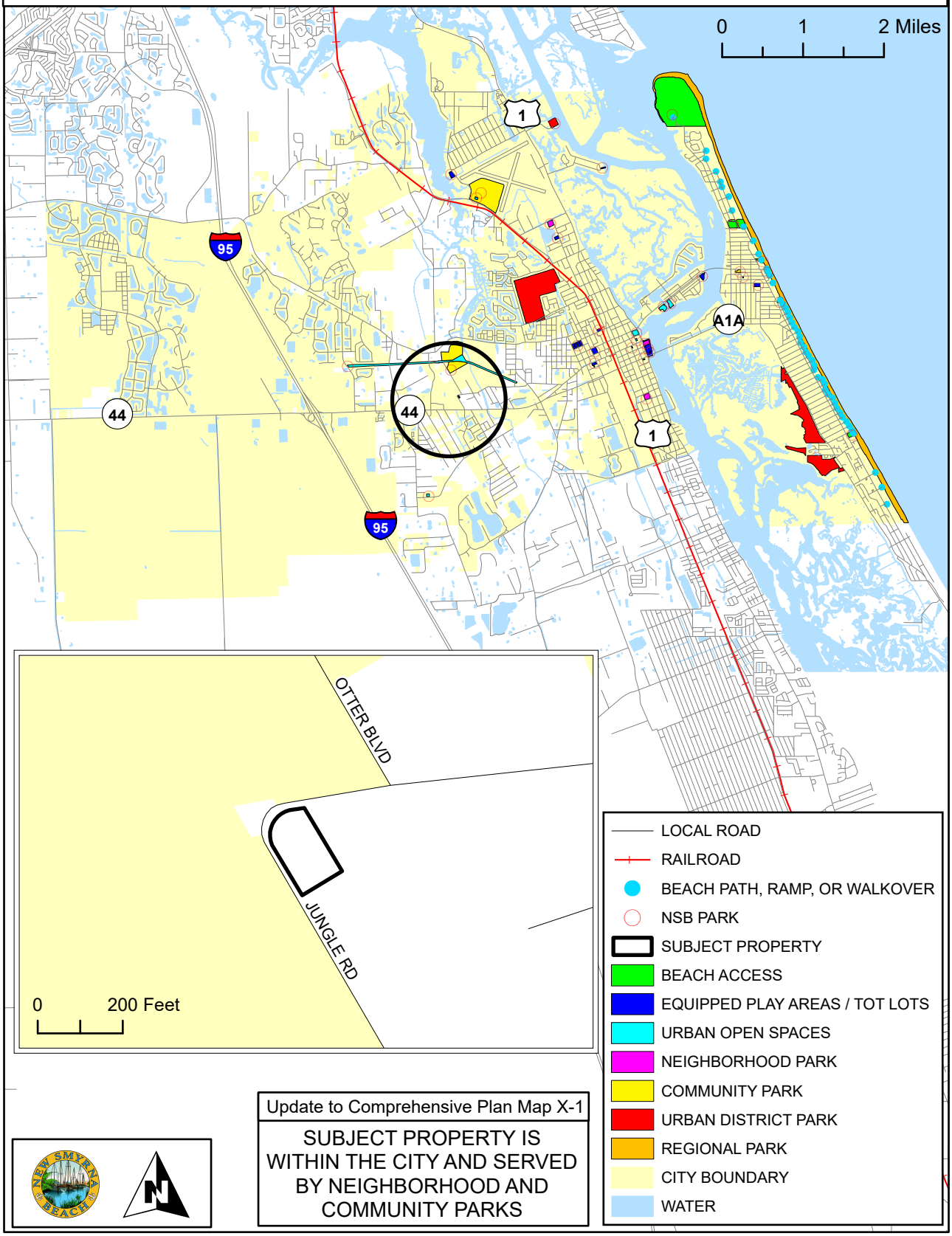


Update to Comprehensive Plan Map VIII-2

SUBJECT PROPERTY IS NOT LOCATED WITHIN A BOAT SLIP SITING RESTRICTED ZONE

CITY PARKS

A-7-25

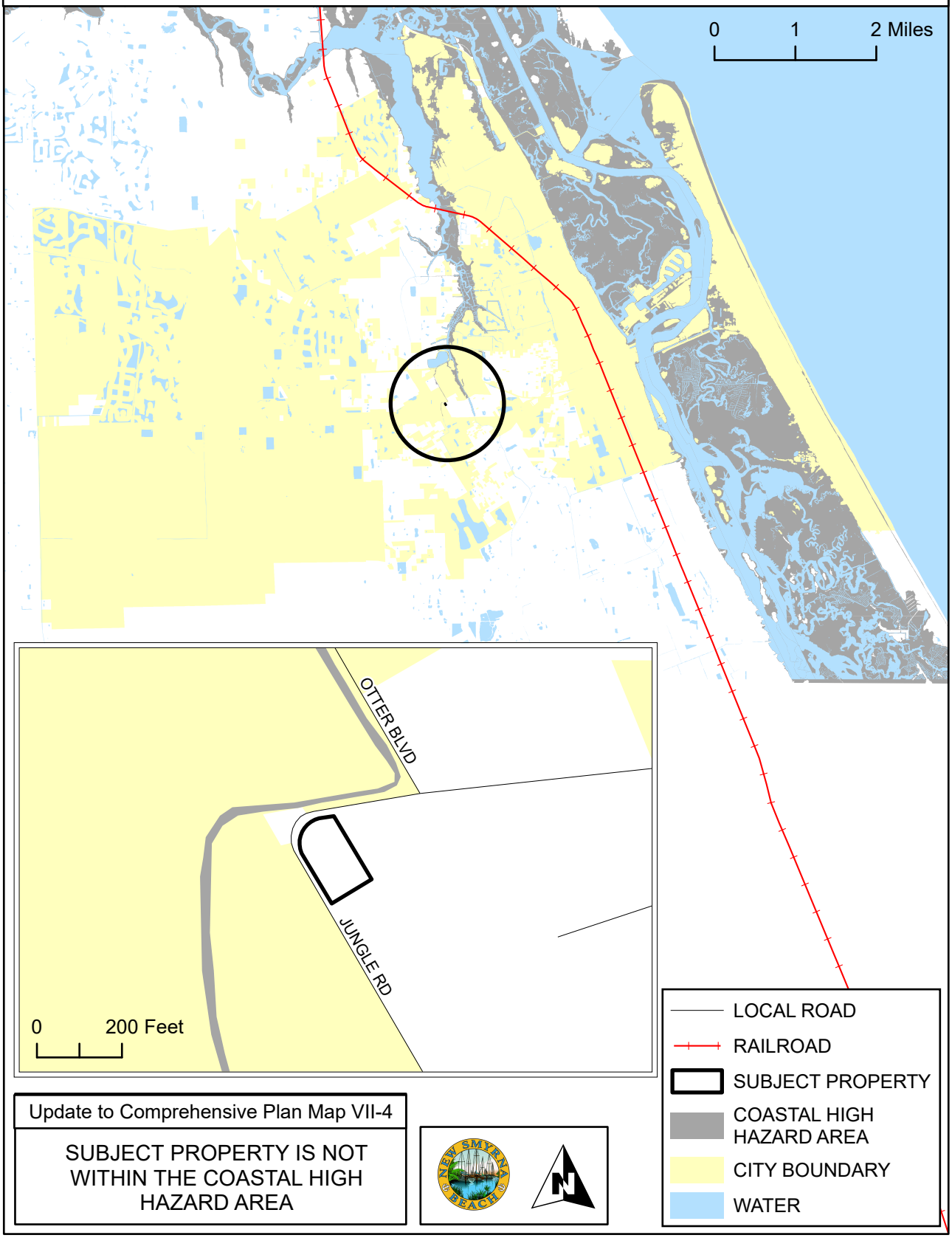


Update to Comprehensive Plan Map X-1

SUBJECT PROPERTY IS WITHIN THE CITY AND SERVED BY NEIGHBORHOOD AND COMMUNITY PARKS

COASTAL HIGH HAZARD AREAS

A-7-25

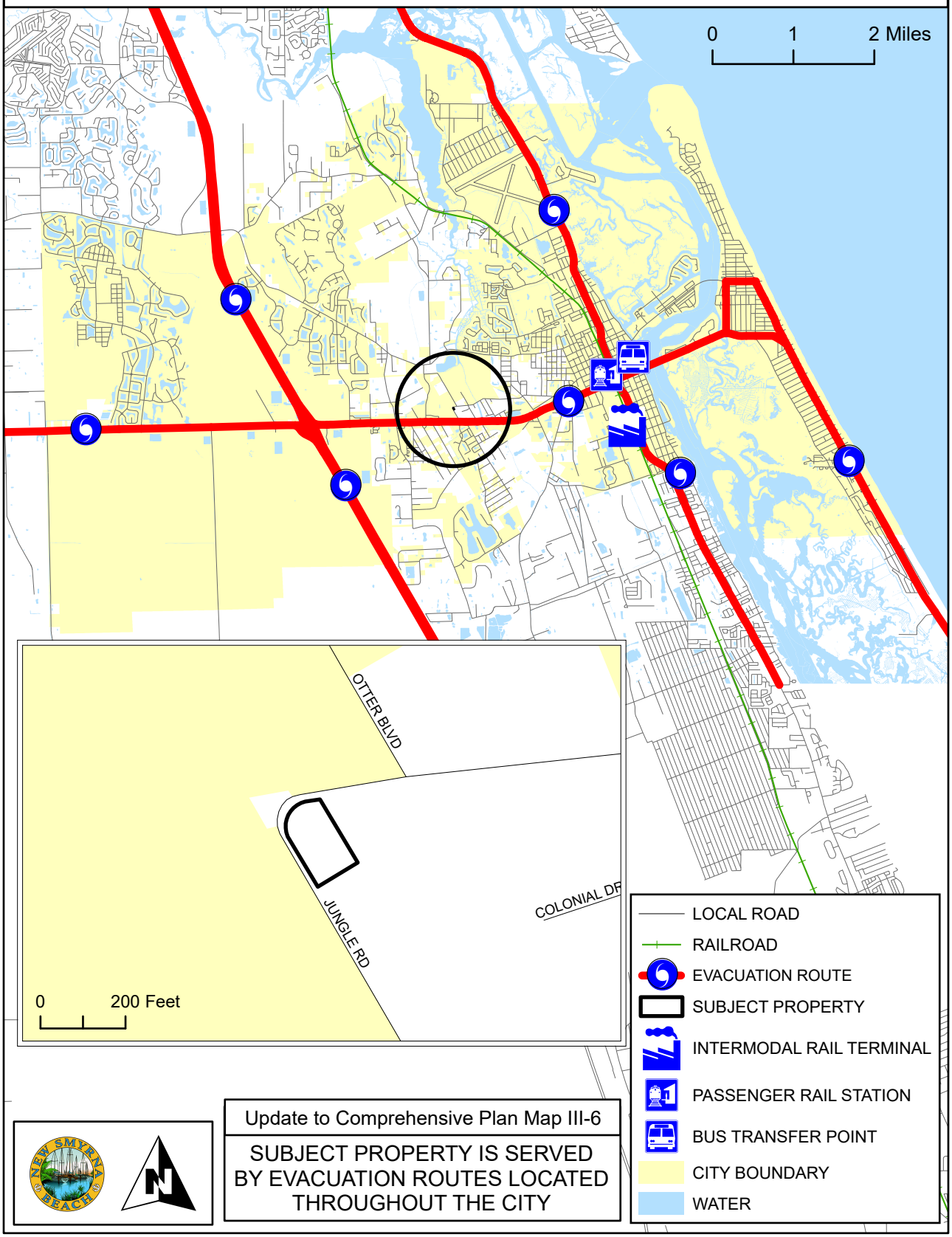


Update to Comprehensive Plan Map VII-4

SUBJECT PROPERTY IS NOT WITHIN THE COASTAL HIGH HAZARD AREA

EVACUATION ROUTES

A-7-25

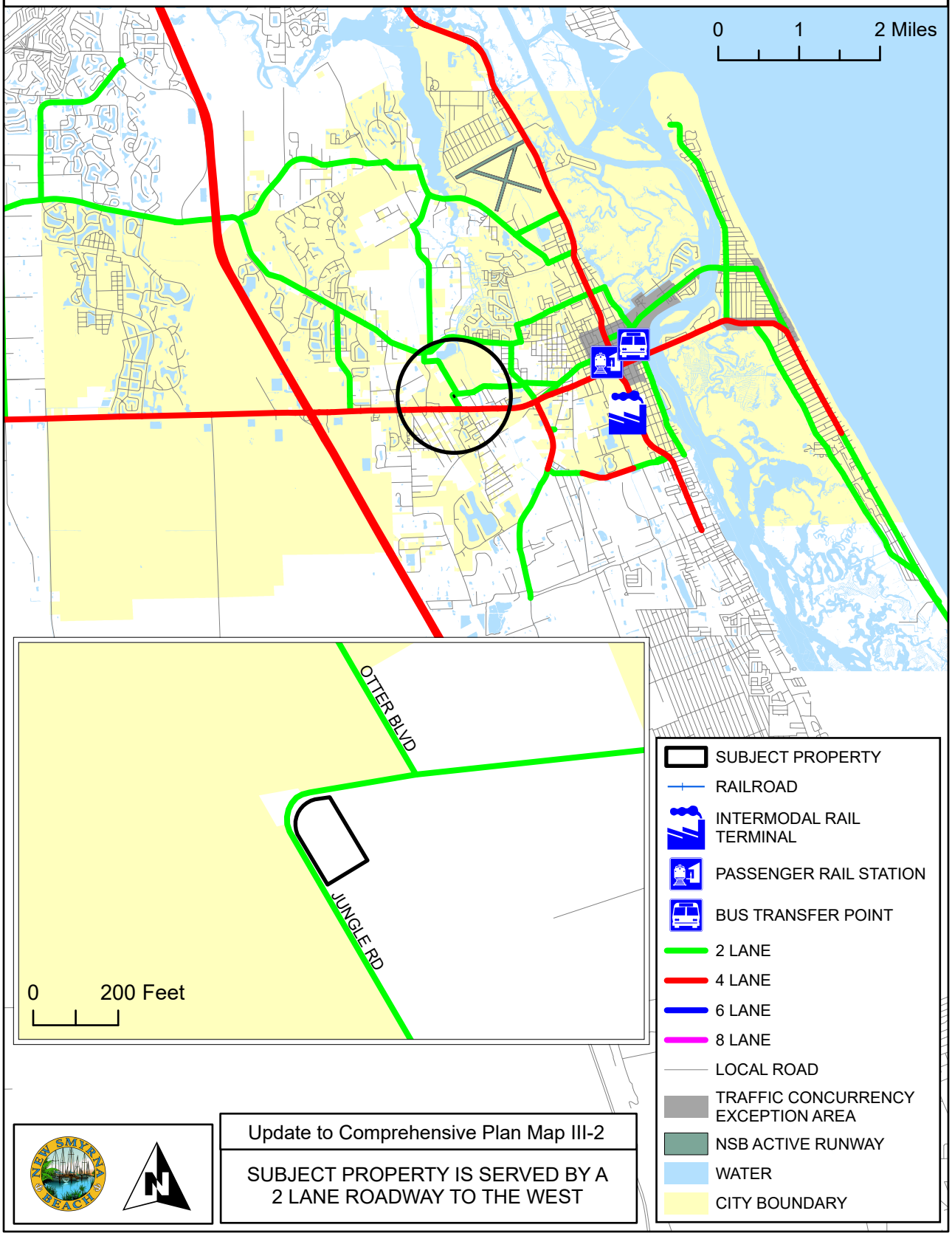


Update to Comprehensive Plan Map III-6

SUBJECT PROPERTY IS SERVED BY EVACUATION ROUTES LOCATED THROUGHOUT THE CITY

EXISTING TRAFFIC LANES - 2009

A-7-25

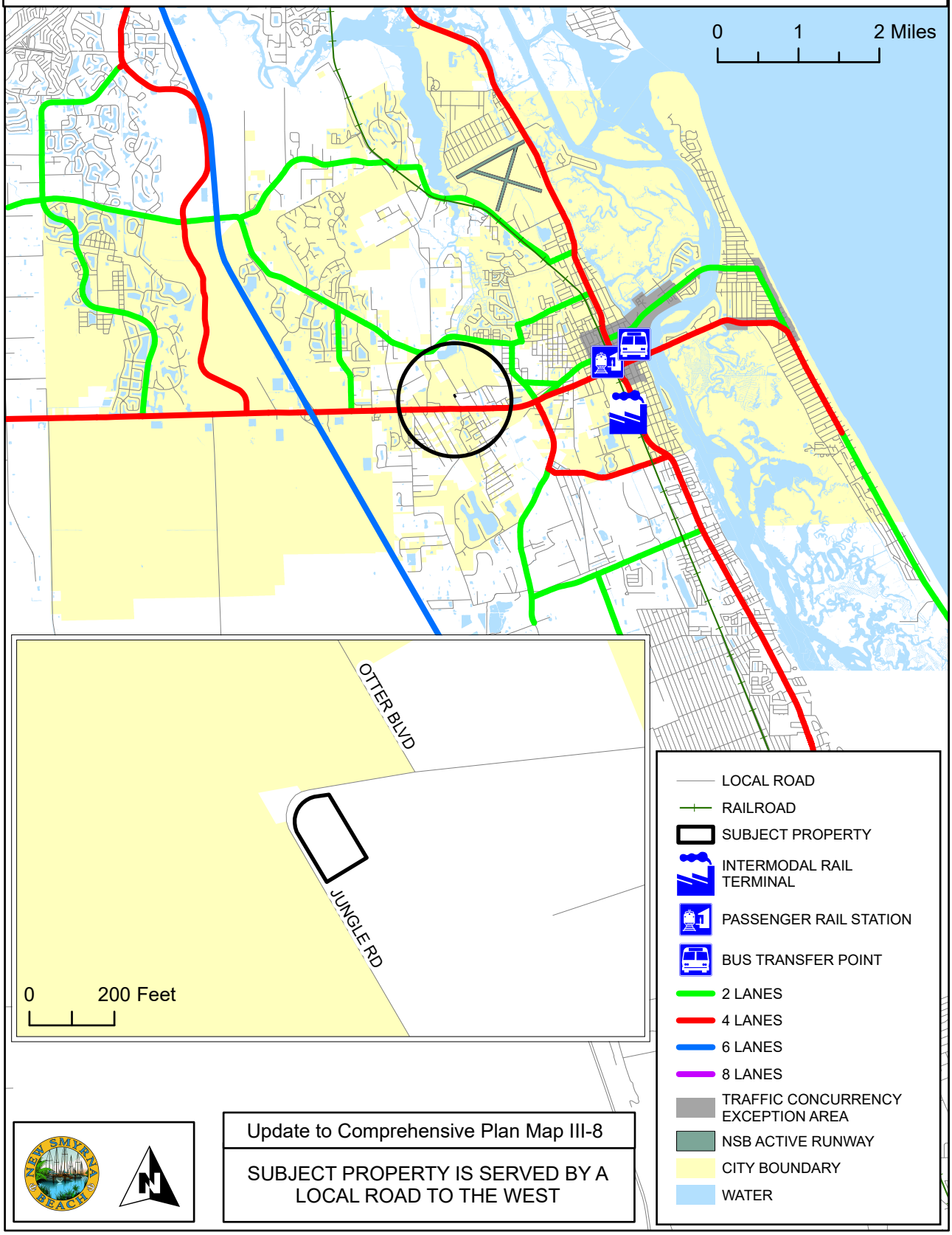


Update to Comprehensive Plan Map III-2

SUBJECT PROPERTY IS SERVED BY A 2 LANE ROADWAY TO THE WEST

NUMBER OF TRAFFIC LANES - 2025

A-7-25

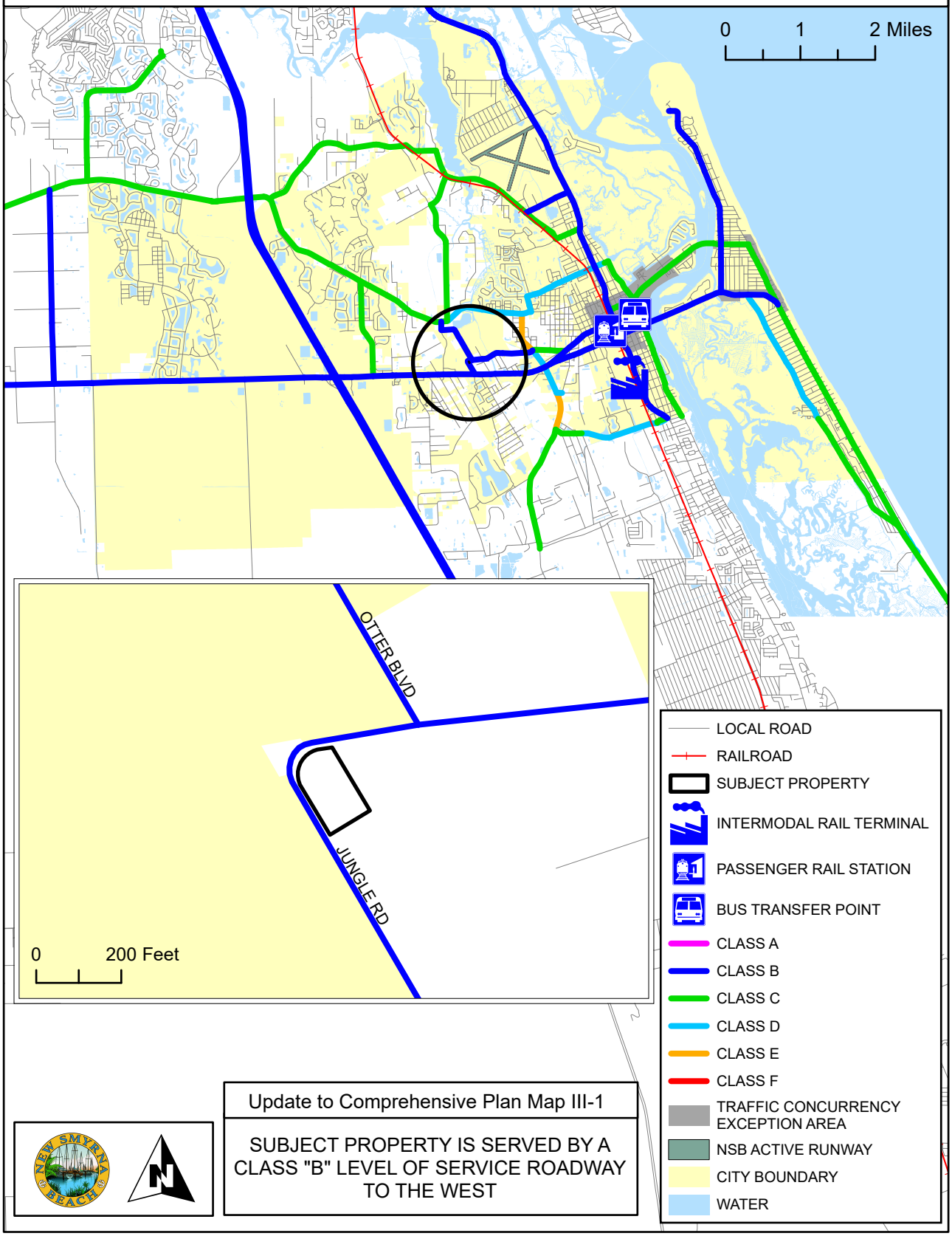


Update to Comprehensive Plan Map III-8

SUBJECT PROPERTY IS SERVED BY A LOCAL ROAD TO THE WEST

EXISTING LEVEL OF SERVICE - 2009

A-7-25

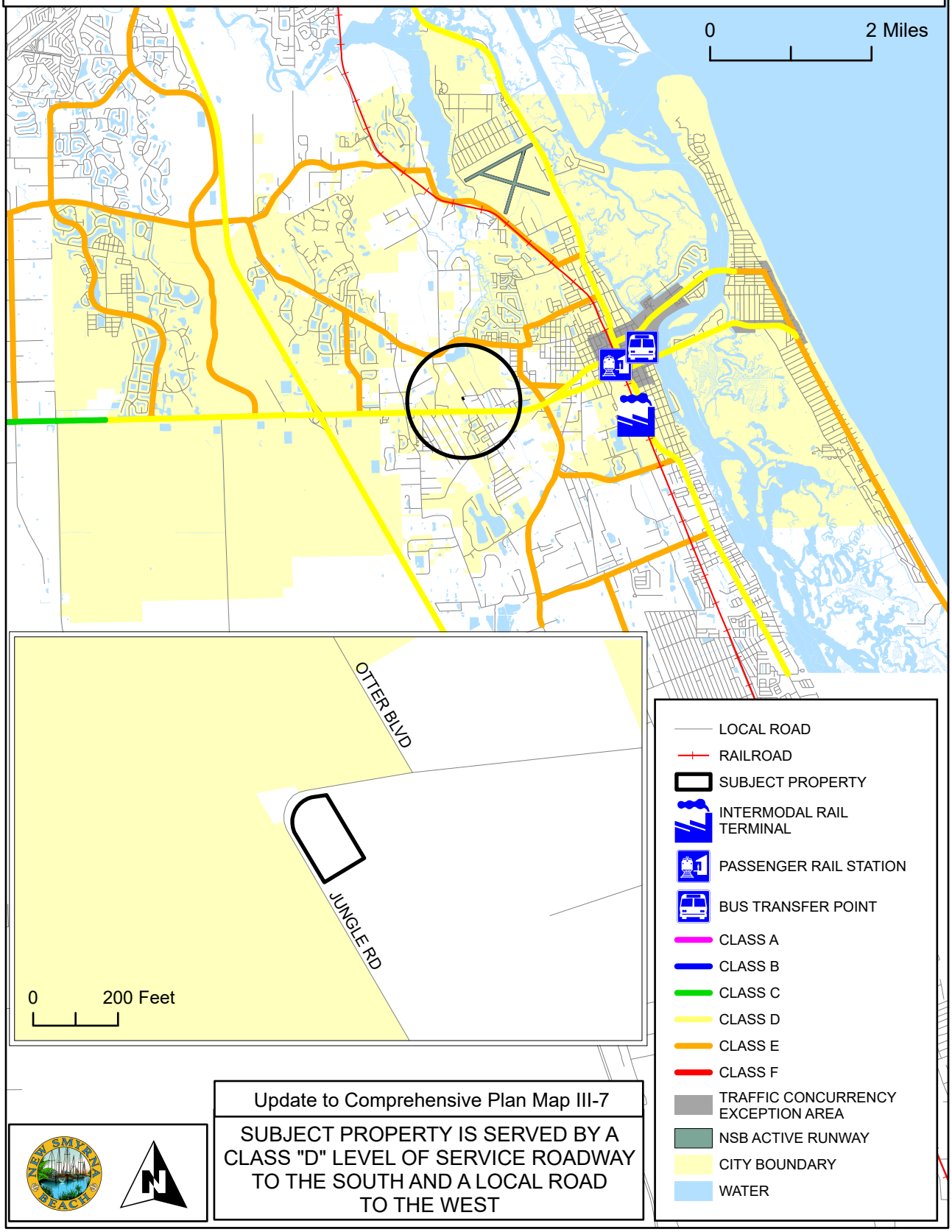


Update to Comprehensive Plan Map III-1

SUBJECT PROPERTY IS SERVED BY A CLASS "B" LEVEL OF SERVICE ROADWAY TO THE WEST

LEVEL OF SERVICE - 2025

A-7-25

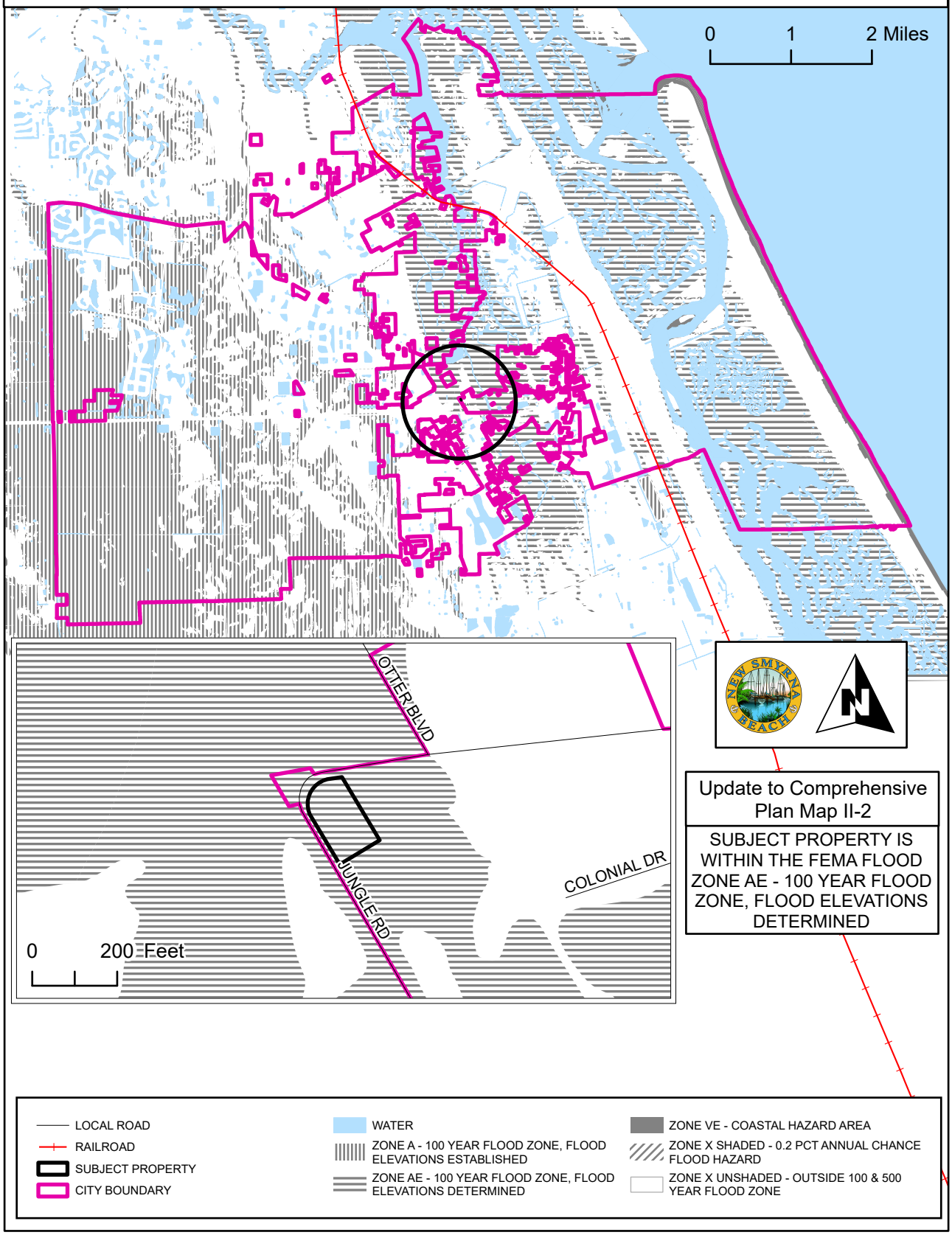


Update to Comprehensive Plan Map III-7

SUBJECT PROPERTY IS SERVED BY A CLASS "D" LEVEL OF SERVICE ROADWAY TO THE SOUTH AND A LOCAL ROAD TO THE WEST

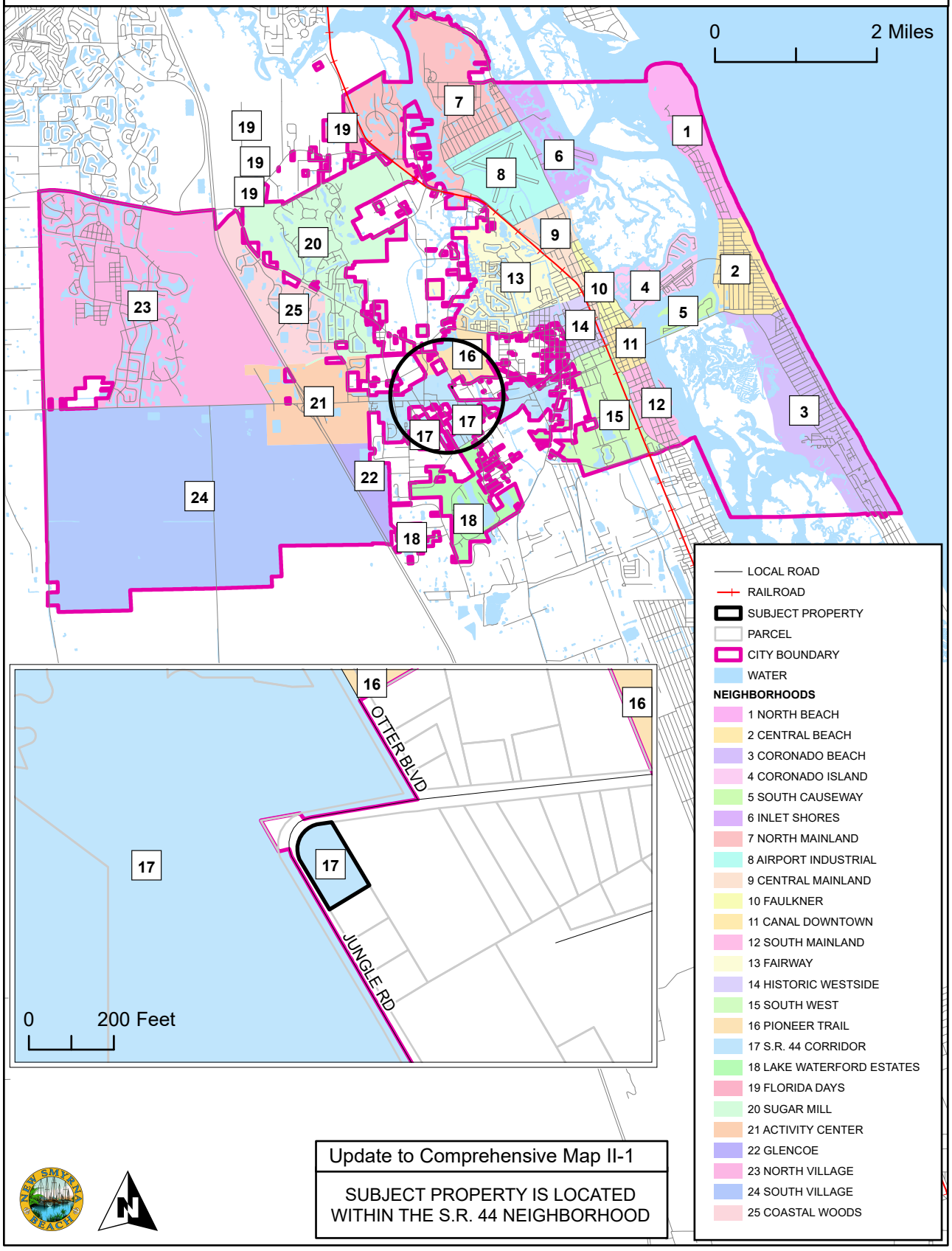
FLOOD PRONE AREAS

A-7-25



NEIGHBORHOODS

A-7-25

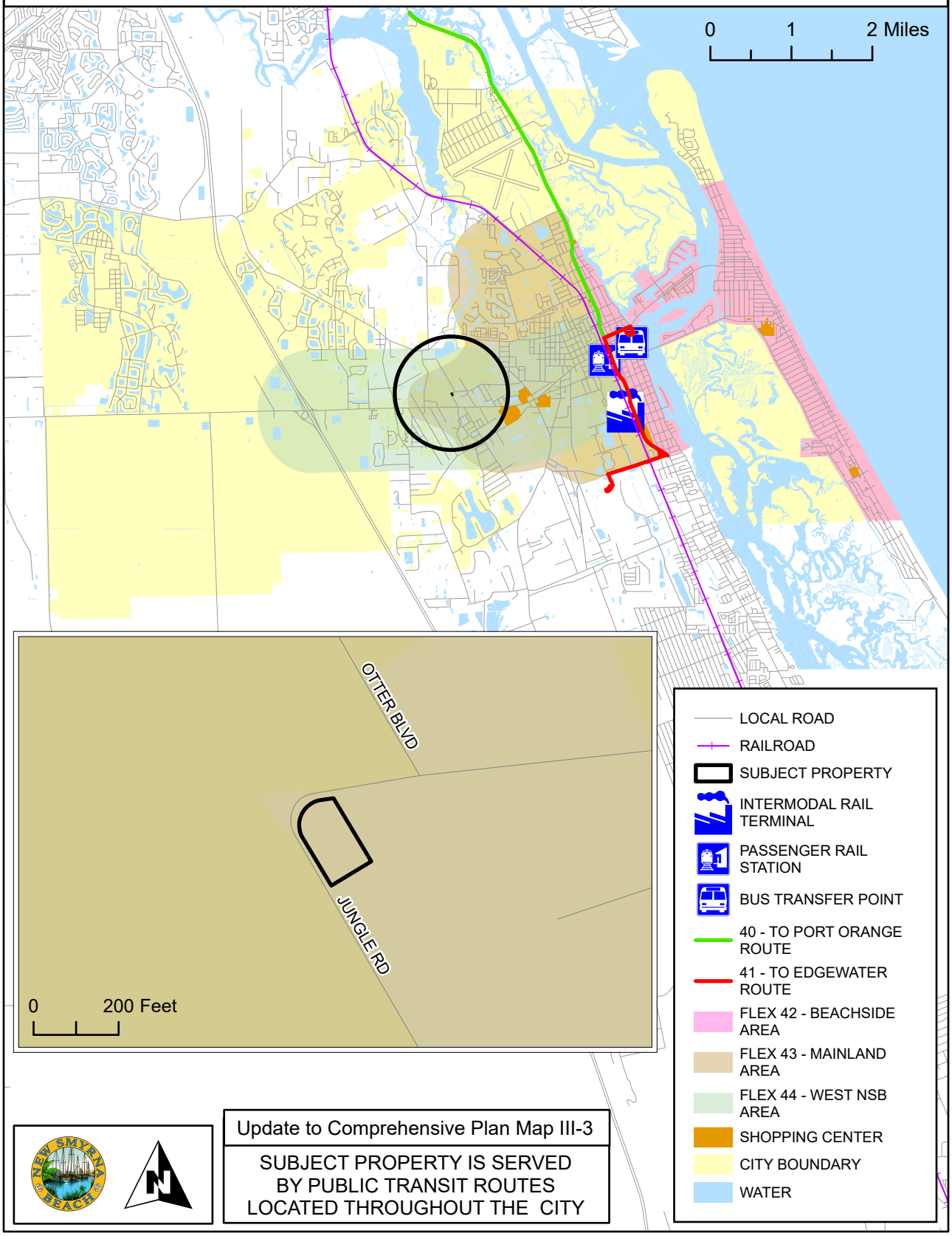


Update to Comprehensive Map II-1

SUBJECT PROPERTY IS LOCATED WITHIN THE S.R. 44 NEIGHBORHOOD

PUBLIC TRANSIT ROUTES

A-7-25

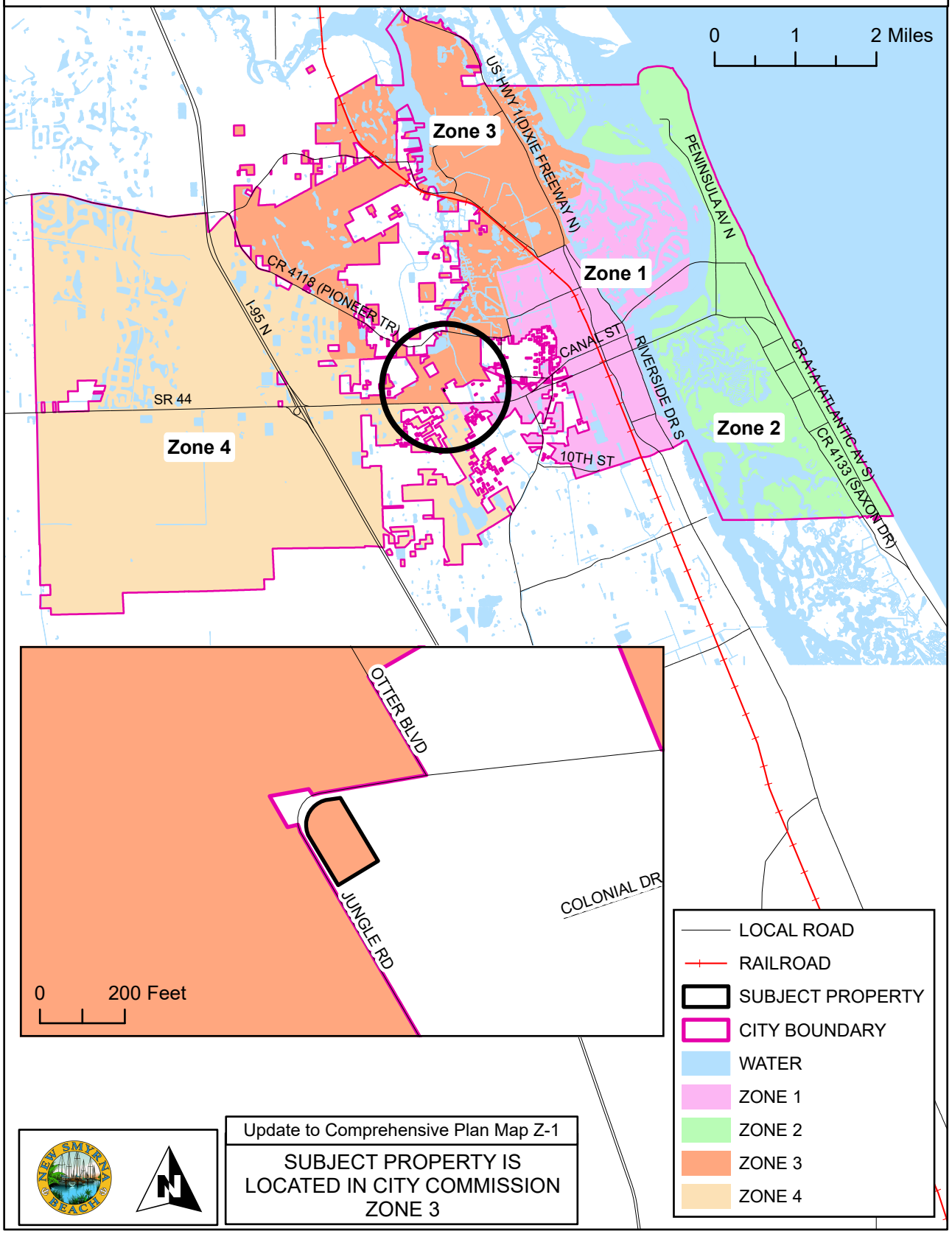


Update to Comprehensive Plan Map III-3

SUBJECT PROPERTY IS SERVED BY PUBLIC TRANSIT ROUTES LOCATED THROUGHOUT THE CITY

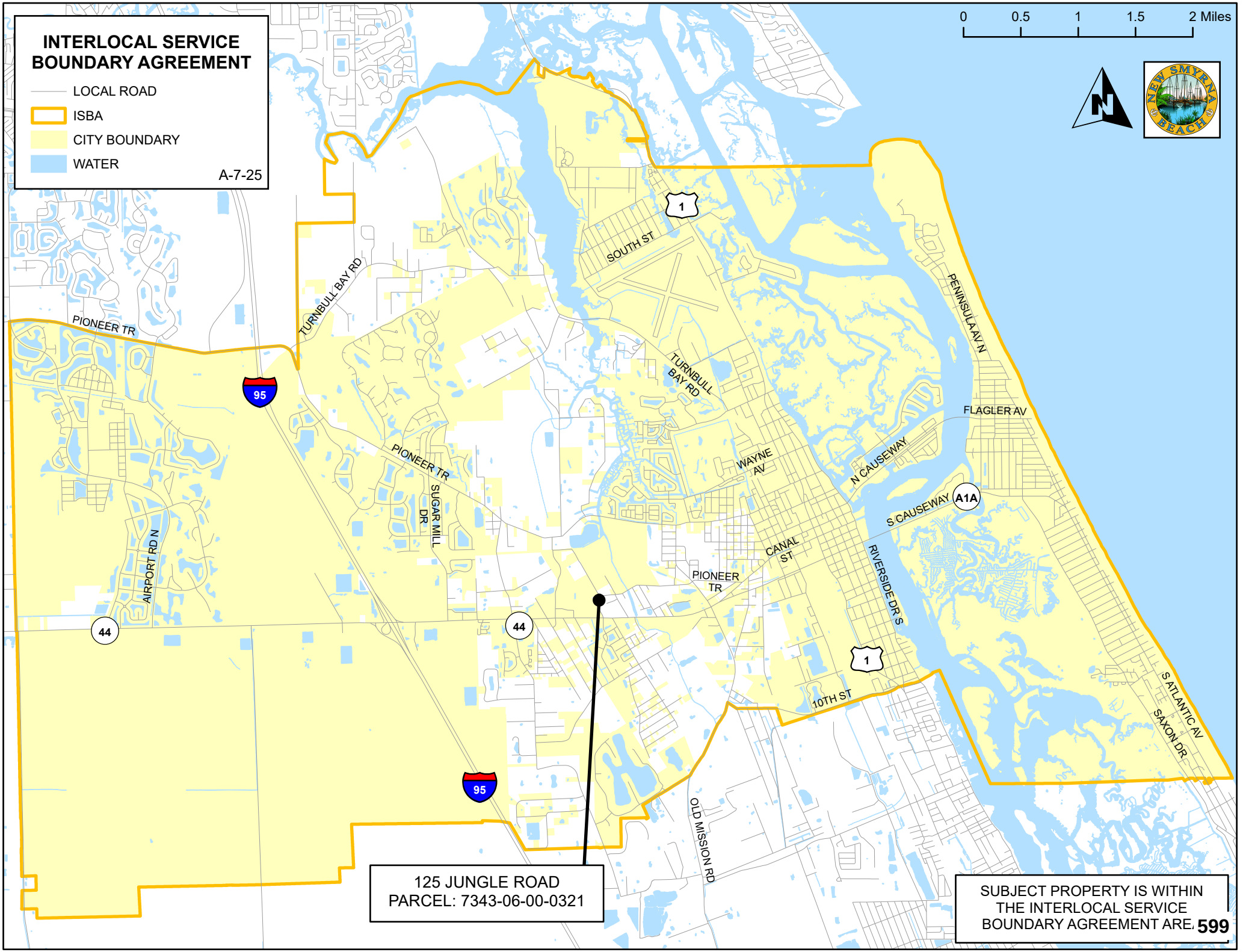
COMMISSION ZONES

A-7-25



Update to Comprehensive Plan Map Z-1

SUBJECT PROPERTY IS LOCATED IN CITY COMMISSION ZONE 3


INTERLOCAL SERVICE BOUNDARY AGREEMENT
LOCAL ROAD
ISBA
CITY BOUNDARY
WATER
A-7-25
0
0.5
1
1.5
2 Miles
NEW SMYRNA BEACH
PIONEER TR
TURNBULL BAY RD
SOUTH ST
PENINSULA AV N
FLAGLER AV
WAYNE AV
N CAUSEWAY
S CAUSEWAY
A1A
SUGAR MILL DR
AIRPORT RD N
CANAL ST
RIVERSIDE DR S
10TH ST
S ATLANTIC AV
SAXON DR
OLD MISSION RD
95
44
1
125 JUNGLE ROAD
PARCEL: 7343-06-00-0321
SUBJECT PROPERTY IS WITHIN THE INTERLOCAL SERVICE BOUNDARY AGREEMENT ARE.

LEGAL DESCRIPTION

Address:
125 Jungle Road, New Smyrna Beach, Florida 32168

Parcel Number
7343-06-00-0321

AltKey Number:
3730925

Metes and Bounds by Professional Title Agency

THE EASTERLY ½ OF LOT 32, SOUTH OF JUNGLE ROAD, A 50-FOOT RIGHT OF WAY AS NOW LAID OUT, EXCEPT THE SOUTHERLY 267 FEET AND EXCEPT THE EASDTERLY 220 FEET, SUBDIVISION OF THE NAPIER GRANT AND THE NORTH PART OF THE HULL GRANT IN SECTION 43 AND 44, TOWNSHIP 17 SOUTH, RANGE 33 AND 34 EAST, AS SHOWN ON MAP RECORDED IN MAP BOOK 2, PAGE 42, ABD DEED BOOK M, PAGE 688, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

Prepared by and Return To:
Teresa Prompovitch
Professional Title Agency, a division of LandCastle Title Group, LLC
313 Julia Street
New Smyrna Beach, FL 32168

Order No.: NS932506003

APN/Parcel ID(s): 734306000321

WARRANTY DEED

THIS WARRANTY DEED dated July 16, 2025, by Hope Susan Pawlak, a single women, individually and as Surviving Trustee of Pawlak Revocable Living Trust dated January 9, 2009, hereinafter called the grantor, to Roy Burlew Parsons, an unmarried man and Ingrid Reilly, a married woman, as joint tenants with full rights of survivorship, whose post office address is 300 Low Tide Lane, Daytona Beach, FL 32124, hereinafter called the grantee:

(Wherever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations)

WITNESSETH: That the grantor, for and in consideration of the sum of Ten And No/100 Dollars ($10.00) and other valuable consideration, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys, and confirms unto the grantee, all the certain land situated in the County of Volusia, State of Florida, to wit:

The Easterly 1/2 of Lot 32, South of Jungle Road, a 50 foot right of way as now laid out, Except the Southerly 267 feet and except the Easterly 220 feet, Subdivision of the Napier Grant and the North part of the Hull Grant in Section 43 and 44, Township 17 South, Range 33 and 34 East, as shown on map recorded in Map Book 2, Page 42, and Deed Book M, Page 688, of the Public Records of Volusia County, Florida.

Subject to easements, restrictions, reservations and limitations of record, if any.

TOGETHER with all the tenements, hereditaments and appurtenances thereto belonging or in any wise appertaining.

TO HAVE AND TO HOLD the same in Fee Simple forever.

AND the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accruing subsequent to December 31, 2024.

WARRANTY DEED
(continued)

IN WITNESS WHEREOF, the undersigned have executed this document on the date(s) set forth below.

Signed, Sealed and Delivered in the presence of:

Witness Signature

Teresa A. Prompovitch
Print Name

Address: 313 Julia Street
New Smyrna Beach, FL 32168

Marcia E. Barnett
Witness Signature

Marcia E. Barnett
Print Name

Address: 124 Flamingo Rd.
Edgewater FL
32141

Hope Susan Pawlak, a single woman, individually and as Surviving Trustee of Pawlak Revocable Living Trust dated January 9, 2009

BY: Hope Susan Pawlak, JND surviving Trustee
Hope Susan Pawlak, a single woman
Individually and as Surviving Trustee

Address: 2232 Queen Palm Drive
Edgewater, FL 32141

State of Florida
County of Volusia

The foregoing instrument was acknowledged before me by means of [x] physical presence or [ ] online notarization, this 16th day of July, 2025, by Hope Susan Pawlak, a single woman, individually and as Surviving Trustee of Pawlak Revocable Living Trust dated January 9, 2009, to me known to be the person(s) described in or who has/have produced Driver's License as identification and who executed the foregoing instrument and he/she/they acknowledged that he/she/they executed the same.

NOTARY PUBLIC
My Commission Expires:

TERESA A. PROMPOVITCH
Notary Public - State of Florida
Commission # HH 221861
My Comm. Expires Mar 21, 2026
Bonded through National Notary Assn.

THE CITY OF NEW SMYRNA BEACH - DEVELOPMENTAL SERVICES

DEVELOPMENT ACTIVITY

September 8, 2025

Background:

Please go to the City of New Smyrna Beach website (cityofnsb.com) to view the current Development Activity. Please click on “Maps” and “Development Activity”.

Fiscal Analysis:
N/A

Strategic Plan Item:
No

Staff Report Created By: Stephanie Ferrara - Development Services Coordinator