



**Wake Forest Board of Commissioners
Meeting Agenda
December 16, 2025 – at 6:00 PM
All items listed are for discussion and possible action.**

Notice

In accordance with the requirements of Title II of the Americans with Disabilities Act of 1990 (ADA), the Town of Wake Forest will not discriminate against qualified individuals with disabilities on the basis of disability in its services, programs, or activities. For individuals with impaired hearing, special equipment is available for use during meetings in the Town Hall board chambers. Anyone who requires an auxiliary aid or service for effective communication, or a modification of policies or procedures to participate in a program, service, or activity of Town of Wake Forest should contact the office of ADA Coordinator [Mickey Rochelle](#) at 919-435-9455 or Town Clerk [Evelyn Wright](#) at 919-435-9432 as soon as possible, but no later than 48 hours before the scheduled event.

Cable & Online Broadcast of Board of Commissioners Meetings

All Board of Commissioners meetings are broadcast live on [WFTV 10](#) beginning at 6 p.m. Meetings are also aired online on the [Public Meetings Portal](#) on the [Town of Wake Forest website](#). Archived meeting videos are also provided and available for one year after the original air date.

Meeting Agendas

The [Board of Commissioners](#) meeting agenda is available to be viewed and downloaded by noon on the Friday prior to the third Tuesday of each month. Citizens may request copies of the agenda or submit questions concerning agenda items by calling the Deputy Town Clerk's office at 919-435-9432. Citizens may also receive a copy of each month's agenda via email by enrolling in the free [E-Notifier](#) subscription service.

Public Hearings

When an agenda item is denoted as a [Public Hearing](#), persons attending shall be permitted to address the Board of Commissioners regarding the item under consideration with those speaking in favor first and those against speaking second. Proponents and opponents shall each be given three minutes of time to speak and may choose to allow one speaker to utilize the time. In the event either proponent(s) or opponent(s) have not designated a speaker to represent the view, each speaker will be allowed three minutes each to express his/her comments, ideas, concerns, expressions, and desires. Only comments on a Public Hearing will be allowed during this time.

Public Comment

During the Public Comment period, anyone wishing to address the Board of Commissioners concerning an issue or topic that is not a public hearing item or an agenda item should complete and submit the Board of Commissioner Public Comment Form on the [Town website](#). Then, during the Public Comment portion of the meeting, Mayor Jones will recognize you and invite you to the podium at which time you will have three minutes to speak. Thank you for your cooperation.

Call to Order

Pledge of Allegiance

1. Approval of Agenda

2. Approval of Minutes

- 2.A November 6, 2025 BOC Work Session Minutes and November 18, 2025 BOC Regular Meeting Minutes
[DRAFT BOCWSMinutes_November20256.pdf](#)
[DraftBOCMinutes_November202518.pdf](#)

3. Presentations

- 3.A PROCLAMATION World Meditation Day
[PROCLAMATION World Meditation Day.pdf](#)

4. Public hearings / Public Comment

- 4.A Public Hearing to receive public comment on the five (5) year Capital Improvements Plan (CIP) for FY 2026-2031
[Public Hearing on Proposed CIP Update_Summary.pdf](#)
- 4.B Public Hearing to receive public input for the FY 2026-2027 Annual Operating Budget
[FY 26-27 Budget Public Hearing 1 Summary.pdf](#)
[FY 26-27 Budget Public Hearing 1 Tentative Schedule.pdf](#)
- 4.C Public Comment: If anyone would like to address the Board of Commissioners on an item other than a public hearing item during the time of public comment, please sign up with the Town Clerk prior to the meeting. Each speaker is asked to limit comments to 3 minutes. Please provide the clerk with copies of any handouts you have for the Board. Although the Board is interested in hearing your concerns, speakers should not expect Board action or deliberation on subject matter brought up during the Public Comment segment. Topics requiring further investigation will be referred to the appropriate Town Staff and may be scheduled for a future agenda. Thank you for your consideration of the Board of Commissioners, staff and other speakers.

5. Consent Agenda

(A Consent Agenda is a group of items passed with a single motion and vote. These matters are of a generally routine nature. No debate is allowable on any item included on the Consent Agenda. If a Commissioner or any citizen of Wake Forest or its ETJ wants separate consideration of any item, it may be removed from the Consent Agenda by request.)

- 5.A Approval of Appointment to Citizen Advisory Boards
[RESOLUTION2026-XXX_Adv_Board_Appts-BOA .pdf](#)
[RESOLUTION2026-XXX_Adv_Board_Appts-PB_MM Moore.pdf](#)

[RESOLUTION2026-XXX_Adv_Board_Appts-TAB .pdf](#)
[RESOLUTION2026-XXX_Adv_Board_Appts-PRCR.pdf](#)
[RESOLUTION2026-XXX_Adv_Board_Appts-HRC .pdf](#)
[RESOLUTION2026-XXX_Adv_Board_Appts-PAC.pdf](#)
[RESOLUTION2026-XXX_Adv_Board_Appts-HPC.pdf](#)
[HPC Waiver Statement_Elizabeth Miller_Dec2025.pdf](#)

- 5.B Approve Resolution to Accept Streets into the Town of Wake Forest Street System for Maintenance.

[Attachment_A_summary_12.2025_Accept_Streets.docx](#)
[Attachment_B_Resolution__Accept_Streets.docx](#)

- 5.C Approval of the 2026 Street Resurfacing Contract

[Summary_Street_Resurfacing_Contract.docx](#)
[Attachment_A_Resolution_Resurfacing_Contract.docx](#)
[Attachment_B_Street_Resurfacing_Bid_0001-2025.pdf](#)
[Attachment_C_Bid Tab.pdf](#)

- 5.D Approval of Budget Ordinance Amendment # 3 - FY 2025-2026

[Budget Ordinance Amendment_summary.pdf](#)
[Budget Ordinance Amendment # 3 FY 2025-2026.pdf](#)

- 5.E Consideration of an Interlocal Agreement with Wake County for an EMPA Program

[Executive MPA Program Summary.pdf](#)
[Updated Municipality ILA Draft - Dec 2025\[2\].pdf](#)
[Exhibit 1 - AG-Bondi-Memo-Guidance-for-Recipients-of-Federal-Funding-Regarding-Unlawful-Discrimination_0.pdf](#)
[Exhibit 2 - Semester Payment Schedule \(DRAFT\) - Nov 2025.pdf](#)

6. Legislative Items

7. Planning Items

8. Administration and Financial Items

9. Public Services Items

10.Parks and Recreation Items

11.Public Safety Items

12.Other Business

- 12.A Department Monthly Reports

[November 2025 Monthly Report.pdf](#)

- 12.B December Tax Report

[WAKE FOREST-TXREP-DEC-2025-BOC-MTG.pdf](#)

- 12.C Resolution of Appreciation for Outgoing Commissioner
[RESOLUTION2025-XX-Nicolas_Sliwinski-appreciation-Dec2025.pdf](#)
- 12.D Resolution of Appreciation for Outgoing Mayor
[RESOLUTION2025-XX-Mayor Jones-appreciation-Dec2025.pdf](#)
- 12.E Oath of Office for Commissioner-elect
[OathOfOffice-CommissionerShackleford_2025Dec.pdf](#)
[OathOfOffice-CommissionerFatmi_2025Dec.docx](#)
- 12.F Oath of Office for Mayor-elect
[OathOfOffice-MayorClapsaddle_2025Dec.pdf](#)
- 12.G Commissioner Reports

13. Adjournment



BOARD OF COMMISSIONERS AGENDA ITEM REPORT

Agenda Item No.: 2025-692-
Submitted by: Evelyn Wright
Submitting Department:
Meeting Date: December 16, 2025

Subject

November 6, 2025 BOC Work Session Minutes and November 18, 2025 BOC Regular Meeting Minutes

Recommendation:

item Summary:

ATTACHMENTS:

- [DRAFT BOCWSMinutes_November20256.pdf](#)
- [DraftBOCMinutes_November202518.pdf](#)



**DRAFT Wake Forest Board of Commissioners
Work Session Meeting Minutes**

The Wake Forest Board of Commissioners met on **Thursday, November 6, 2025, at 6:00 p.m.** in the Board Room at Wake Forest Town Hall, 301 S Brooks Street.

Mayor Jones called the meeting to order at 6:00 p.m.

Commissioners Present: Mayor Vivian A. Jones, Commissioner Keith Shackelford, Commissioner Ben Clapsaddle, Commissioner Adam Wright and Commissioner Nick Sliwinski.

Commissioners Absent: Commissioner Faith Cross

Staff Members Present:

Town Manager Kip Padgett
Assistant Town Manager Candace Davis
Assistant Town Manager Allison Snyder
Town Attorney Nathan McKinney
Fire Chief Ron Early
Police Captain Brandon High

Police Lieutenant Patrick Misko
Finance Director Samantha Sanchez
Planning Director Jennifer Currin
Development Services Manager Patrick Reidy

Mayor Jones advised that a closed session needs to be added to the agenda and requested a motion to be made to approve the agenda with the change.

ACTION:

Mover: Commissioner Wright moved to approve the agenda with the added closed session.

Seconder: Commissioner Sliwinski

Vote: Motion carried 4-0

Presentations

1.1 Proclamation Celebrating the 100th Birthday of Mary M. Williams

2. Discussion of Monthly Financial Report

2.1 Discussion of September Financial Summaries

Monthly Financial Report Received.

Mayor Jones asked if there were any questions or comments. No questions were heard.

3. Review of Draft Agenda for Upcoming Regular Meeting

3.1 Draft Agenda for BOC Regular Meeting November 18, 2025

Mayor Jones asked if there were any questions or comments. No questions were heard.

4. Other Business

4.1 Public Hearing of LEGISLATIVE CASE RZ-24-07, Star Road Condos, a rezoning filed by SJP Raleigh-Durham LLC to rezone 14.12 acres located at 0 Star Road, being Wake County Tax PIN 1739659784 from Highway Business (HB) to General Residential 10-Conditional District (GR10-CD).

Development Services Manager Patrick Reidy gave an update as the item was continued from the September agenda due to a requested study conducted on the backage road. Mr. Reidy advised that WSP analyzed if the CTP backage road is needed. The analysis determined that the backage road is not needed and a recommendation will be made to remove the backage road from the next CTP update. Mr. Reidy advised the staff's recommendation to deny the rezoning remains as it is inconsistent with the Comprehensive Plan and not in the public interest.

Mayor Jones inquired if the new UDO included multifamily zoning. Mr. Reidy deferred to Planning Director Jennifer Currin. Ms. Currin advised the intent is that upper story residential use be permitted to allow for commercial use corridor/highway business zoning district to get the desired commercial use/nonresidential activity on the ground level.

Commissioner Clapsaddle inquired if any of the 108 units have been designated for senior housing or workforce housing. Mr. Reidy advised there has not been a

designation for senior housing or workforce housing of the units. Commissioner Clapsaddle inquired about disregarding the CAMPO note regarding the CTP backage road. Mr. Reidy advised it has not gone back to CAMPO/US 1 Council Planning Board and the recommendation is driven by the Town's CTP. Commissioner Clapsaddle inquired about the original building plan including an indoor firing range and whether that is still being included in the plan and distance between the range and 108 residential units. Mr. Reidy advised there have been no plans received for the permitting of that use; however, he will consult with the applicant to determine if the range is still being considered.

Mayor Jones opened the floor for public comments.

Public Comment:

Janice Davis – 1009 Lightfoot Court – Wake Forest, NC 27587

Margaret Watkins – 407 Belmellen Court – Wake Forest, NC 27587

Mayor Jones declared the public hearing closed.

Town Clerk Evelyn Wright read the comment of Commissioner Faith Cross into the record in her absence as follows:

“-The back road that is on the map behind the proposed development will be removed from the CTP

-Topography was not taken into account when that road was plotted

-Topographical changes are significant on that sight

-It is not ideal for business

-Connect to the Hawthorne at the existing road makes the most sense

-I would like to see sidewalks or multi-use paths that match between the communities.

-Newest traffic study confirm no need for that backroad.

-It will be the best and highest use of that site to build the developers proposed housing, and it matches what is directly next to it.”

4.2 Consideration of LEGISLATIVE CASE RZ-24-07, Star Road Condos, a rezoning filed by SJP Raleigh-Durham LLC to rezone 14.12 acres located at 0 Star Road, being Wake County Tax PIN 1739659784 from Highway Business (HB) to General Residential 10-Conditional District (GR10-CD).

Commissioner Wright advised that this is the best use of the land and trusts the applicant will make the best use of the land.

ACTION:

Mover: Commissioner Wright moved to approve with the consistency statement.

Seconder: Commissioner Sliwinski

Vote: Motion carried 3-1

Commissioner Clapsaddle opposed the motion.

Commissioner Clapsaddle advised that Commissioner Cross made good points regarding the backage road. Commissioner Clapsaddle voiced agreement with the citizen's comment regarding inconsistent TIAs and has concerns about the ramification of cost, the lack of designation for senior and workforce housing, and compliance with the Town's infrastructure.

5. Commissioner Reports

5.1 Commissioner Wright congratulated the candidates for their hard-fought victories during the election. Commissioner Wright commended the Tri-Area Ministry Food Pantry for their contribution to the community as they had a line for blocks in response to the suspension of SNAP benefits. Commissioner Wright acknowledged citizens for their donations, including Jean Scott Nelson for her husband's 57th B-Day donation to the pantry. Commissioner Wright encouraged all who can to donate to the Tri-Area Ministry Food Pantry. Mayor Jones advised that 200 citizens were served at Hope House on Monday night.

Commissioner Shackelford advised no report.

Commissioner Clapsaddle extended appreciation to the staff for all that they do. Commissioner Clapsaddle advised of all the great upcoming community events that staff members have volunteered their time to: Wake Forest Cares Holiday Kick-off, "Shop with a Cop," Calls with Santa, and turkey giveaways.

Commissioner Sliwinski advised he attended the Seminary Preservation Workshop at Olive Branch Church and expressed appreciation for the grant received as the ground penetrating radar uncovered over 200 potential unmarked grave sites. Commissioner Sliwinski advised, after discussing with Michele Michael, Senior Planner- Historic Preservation, the information will be used to assist the church with their records and identify the remains. Commissioner Sliwinski advised he attended the Diwali

Celebration and it was amazing. Commissioner Sliwinski advised there was a group of young ladies from UNC Chapel Hill at the celebration collecting donations for women undergoing chemotherapy treatment. Commissioner Sliwinski advised that Wake Forest Cares on November 16th is a fantastic event and invited everyone to attend. Commissioner Sliwinski advised he provided a packet to the Board regarding the delegation trip with Wake Forest Area Chamber to Washington D.C. Commissioner Sliwinski advised he had discussions with Senator Budd's staff and Senator Tillis and Representative Knott's staff that proved to be productive. Commissioner Sliwinski advised they were also able to speak with the Transportation and Infrastructure Committee and was able to further Wake Forest's cause but also regionally making note of the delay of Capital Boulevard and what further delays would mean to the region. Commissioner Sliwinski presented the Board with a draft resolution in support of a letter to the federal delegation in support of continued efforts to ensure US-1 is built by North Carolina's Department of Transportation (DOT). Commissioner Sliwinski conferred with Town Attorney Nathan McKinney if there can be a vote. Mr. McKinney advised that a motion needs to be made to add the action to the agenda.

ACTION:

Mover: Commissioner Sliwinski moved to have a vote to pass the resolution.

Seconder: Commissioner Wright

Vote: Motion carried 4-0

ACTION:

Mover: Commissioner Sliwinski moved to approve the resolution of support for Capital Boulevard to become a statewide priority.

Seconder: Commissioner Wright

Vote: Motion carried 4-0

Mayor Jones advised she attended the Diwali Celebration and it was a wonderful event. Mayor Jones advised she attended the JROTC Activation Ceremony and during the review of the troops the Charlie Company presented her with a beautiful bracelet that has "C Co." on it for the Charlie Company. Mayor Jones advised she attended the Occoneechee Council of Friends of Scouting Celebration at the Raleigh Convention Center and extended appreciation to Jim Crawford for the work he does with the scouts in the area. Mayor Jones was honored to be invited to the celebration. Mayor Jones advised she attended the Business Advisory Reception at Envision Science Academy where they have great opportunities for students. Also, Mayor Jones advised she visited

the Endeavor Charter School, which does a great job teaching the students, and she met with the second-grade students. Mayor Jones advised the Scouts visited Town Hall and she gave the group a tour of her office. Mayor Jones advised CAMPO/Triangle West MPO had a joint meeting to discuss the MTP Planning process and she received an email that the public comments section of the Long Range MTP is now open. Mayor Jones advised the Plan is called "Destination 2055" and the two MPOs are working together to develop the plan. The public comments section is open until November 18th. Mayor Jones advised the draft plan is posted and encourage all to go to destination2055@publicinput.com to provide feedback. Mayor Jones advised she had a meeting with Wake County Commissioner Sophia Jackson as she is interested in learning about all of the communities in Wake County. Mayor Jones advised the Comic Book Toy Expo was well attended and an enjoyable event. Mayor Jones advised she and Commissioner Sliwinski enjoyed attending the Cimarron Neighborhood Costume Contest where they were judges. Mayor Jones also attended the Costume Parade at Heritage High School and had a great time. Mayor Jones advised she attended the B.W. Wells Annual Meeting, which continues to lobby the Wake County Commissioners to take over the park as a County Park to make it more accessible. Mayor Jones encouraged anyone that hears about it to consider supporting the effort. Alos, Mayor Jones advised a bench was dedicated to former Mayor Jimmy Ray. Mayor Jones advised she attended a GoTriangle Special Board meeting last week and advised WRX, a GoTriangle bus, will change the schedule on November 9th to all day hourly service with additional stops. Mayor Jones advise she and Commissioner Cross had a meeting with members from WFCAA to address complaints received called "The Mayor's Roundtable." They will continue to meet to discuss survey feedback. Mayor Jones advised all enjoyed having the Moldovan Delegation visit at Town Hall. Mayor Jones advised she received letters of appreciation and an interest to form a partnership with the Town from one Moldovan Delegate, Mayor Nicolai.

ACTION:

Mover: Commissioner Wright moved to go into closed session with N.C.G.S 143-318.11 Article 3 and N.C.G.S. 143-318.11 Article 5.

Secunder: Commissioner Sliwinski

Vote: Motion carried 4-0 at 6:34 p.m.

Reconvened at 6:50 p.m.

6. Adjournment

The Board of Commissioners adjourned the meeting at 6:51 p.m.

Duly approved in open session this 16th day of December 2025.

(ATTEST)

Vivian A. Jones, Mayor

Evelyn Wright, Town Clerk



DRAFT Wake Forest Board of Commissioners Meeting Minutes

The Wake Forest Board of Commissioners met on **Tuesday, November 18, 2025**, at **6:00** p.m. in the Board Room at Wake Forest Town Hall, 301 S Brooks Street.

Mayor Jones called the meeting to order at 6:00 p.m.

Mayor Jones led everyone in the Pledge of Allegiance.

Commissioner Members Present: Mayor Vivian A. Jones, Commissioner Ben Clapsaddle, Commissioner Faith Cross, Commissioner Keith Shackelford, Commissioner Nick Sliwinski, and Commissioner Adam Wright.

Commissioner Members Absent: None.

Staff Members Present

Town Manager Kip Padgett
Assistant Town Manager Candace Davis
Assistant Town Manager Aileen Staples
Town Attorney Nathan McKinney
Town Clerk Evelyn Wright
Engineering Director Tim Watson
Deputy Town Clerk Ella Dowtin
Police Captain David Zick
Planning Director Jennifer Currin
Fire Chief Ron Early
Police Chief Julius Jefferson
Captain Daniel Gregory

Senior Planner Michelle Michael
Planner I Paige Regna
Human Resources Director Angela McCray
Police Captain Brandon High
Development Services Manager Patrick Reidy
Downtown Development Director Jennifer Herbert
Facilities Maintenance Supervisor Joseph Pennington

1. Approval of Agenda

ACTION:

Mover: Commissioner Wright moved to approve the agenda.

Seconded: Commissioner Sliwinski

Vote: Motion carried 5-0

2. Approval of Minutes

2.A. Draft BOC Minutes

- October 7, 2025, Work Session
- October 21, 2025, Regular Meeting

ACTION:

Mover: Commissioner Wright moved to approve the minutes as presented.

Seconded: Commissioner Cross

Vote: Motion carried 5-0

3. Presentations

3.A. Wake Forest Social District Review

Downtown Development Director Jennifer Herbert gave a six-month update on the Social District, which was effective June 5, 2025. A designated email was created to receive citizen questions or concerns. Ms. Herbert advised that, to date, there have been no complaints or emails received regarding questions or concerns. Ms. Herbert also advised, after consulting with Public Safety, that there have been no specific issues regarding the Social District. Ms. Herbert advised there are nine businesses in the Social District serving alcohol, 30 businesses allowing alcohol, and three businesses that sell alcohol but prohibit outside alcohol. Ms. Herbert advised that the Social District webpage has received 1,660 unique visitors to the site. Ms. Herbert advised that the Solid Waste-Street Department initially reported an increase in trash, however, the increase has since tapered off and there is no need for additional staff resources. Ms. Herbert advised additional trash receptacles have been placed downtown and there has not been any littering because of the Social District. Ms. Herbert shared the results of the 1-month, 3-month, and 5-month surveys sent to downtown business owners. Additionally, Ms. Herbert shared the results of surveys from patrons of the Social District. Both business and patron surveys captured the economic impact of the Social District. Ms. Herbert advised that the next step will be exploring the expansion of days, hours, and footprint of the Social District.

Mayor Jones inquired if a new business that comes into the footprint will be able to join

the Social District. Ms. Herbert confirmed the business would be able to opt into the Social District footprint. Mayor Jones clarified that the expansion pertains to the footprint and not the businesses opting into the Social District. Ms. Herbert confirmed the expansion means the footprint of the Social District. Mayor Jones inquired about survey feedback and requested clarity on what citizens and patrons wanted most. Ms. Herbert advised she has received varied feedback on the method of expansion.

Commissioner Cross clarified that the survey went out to all businesses and not only businesses that participate in the Social District. Ms. Herbert confirmed that all businesses received the survey.

3.B. Proclamation Recognizing Friday, November 28, 2025, as Plaid Friday and Saturday, November 29, 2025, as Small Business Saturday.

Proclaiming Friday, November 28, 2025, as Plaid Friday

And Saturday, November 29, 2025, as Small Business Saturday

WHEREAS, purchasing holiday gifts and shopping year-round with locally owned and independent businesses supports the economic health and resilience of the community; and

WHEREAS, shopping locally supports our neighbors, friends, and family members employed by local businesses; and

WHEREAS, when we support small business, jobs are created, and local communities preserve their unique culture; and

WHEREAS, just like the individual, the individual threads are weak on their own but are strong together, so is our community. Together supporting one another while celebrating our uniqueness we are interwoven and strong; and

WHEREAS, Plaid Friday is a fun and enjoyable alternative to the big box store “Black Friday” consumer frenzy where everyone is encouraged to wear plaid and shop local and independent; and

WHEREAS, Small Business Saturday is a nationwide campaign to cultivate business for small merchants on the Saturday after Thanksgiving; and

WHEREAS, Plaid Friday and Small Business Saturday celebrate and support small businesses and all they do for Wake Forest.

WHEREAS, we encourage citizens to consider shopping our small merchants on Plaid Friday and Small Business Saturday as a way to boost the local economy and strengthen our small business community.

WHEREAS, the Town of Wake Forest, North Carolina supports and joins in this national effort to help America's small businesses do what they do best – grow their business, create jobs, and ensure that our communities remain as vibrant tomorrow as they are today.

NOW THEREFORE, I, Vivian Jones, Mayor of the Town of Wake Forest, in the State of North Carolina, do hereby proclaim **November 28, 2025, as Plaid Friday and November 29, 2025, as Small Business Saturday**

and encourage our residents to recognize and support small businesses within our community by shopping these establishments on the Friday and Saturday following Thanksgiving.



Vivian A. Jones, Mayor

4. Public hearings / Public Comment

- 4.A. Public Hearing for a request by Elizabeth B. and Robert N. Ford to designate their property, the William Royall Powell House at 546 N. Main Street, as a Wake Forest Local Historic Landmark. HPC Case Number LL 25-01.

Mayor Jones opened the floor for public comments. None were heard.

Mayor Jones declared the public hearing closed.

- 4.B. Public Comment: If anyone would like to address the Board of Commissioners on an item other than a public hearing item during the time of public comment, please sign up with the Town Clerk prior to the meeting. Each speaker is asked to limit comments to 3 minutes. Please provide the clerk with copies of any handouts you have for the Board. Although the Board is interested in hearing your concerns, speakers should not expect Board action or deliberation on subject matter brought up during the Public Comment segment. Topics requiring further investigation will be referred to the appropriate Town Staff and may be scheduled for a future agenda. Thank you for your consideration of the Board of Commissioners, staff, and other speakers.

Mayor Jones opened the floor for general comments.

Public Comment:

Libby Lightner-Kemp – 842 Wait Avenue – Wake Forest, NC 27587
Will Arterburn – 825 Averette Rd. – Wake Forest, NC 27587
Tripp Black – 520 South Main Street – Wake Forest, NC 27587
Abby Black – 520 South Main Street – Wake Forest, NC 27587
Jasmine Zavala – 983 Kintail Ct. – Wake Forest, NC 27587

Mayor Jones declared the public comments closed.

5. Consent Agenda

(A Consent Agenda is a group of items passed with a single motion and vote. These matters are of a generally routine nature. No debate is allowable on any item included on the Consent Agenda. If a commissioner or any citizen of Wake Forest or its ETJ wants separate consideration of any item, it may be removed from the Consent Agenda by request.)

5.A Waiver of the Code of Ordinances Sec. 20-2. Public Consumption, Possession, etc., of Alcohol for Friday Night on White for the 2026 Series dates from 5 PM to 9 PM. The FNOW 2026 series dates are April 10, May 8, June 12, July 10, August 14, and September 11.

5.B Approval of the 2026 Board of Commissioners Meeting Schedule

5.C. Approval of Appointment to Planning Board

ACTION:

Mover: Commissioner Wright moved to approve the Consent Agenda.

Seconder: Commissioner Sliwinski

Vote: Motion carried 5-0

6. Legislative Items

6.A. Consideration of Appointment of Candidates for the Planning Board

Ballots were distributed for the Planning Board Candidates:

Brian Weiner

Bryant Pernel

Cesar Palacio

Jeffrey Frounfelker

Kelli Jones

Mark Moore

Missy Catlow

Robert Sherman

Wesley Harris
William Talbot

ACTION:

Mover: Commissioner Shackelford moved to appoint Mark Moore.

Second: Commissioner Wright

Vote: Motion carried 5-0

7. Planning Items

7.A Consideration of a Request by Elizabeth B. and Robert N. Ford to Designate their Building and Lot, known as the William Royall Powell House, 546 N. Main Street, Wake Forest, NC, as a Wake Forest Local Historic Landmark, HPC Case Number LL 25-01

Mayor Jones advised this is a lovely house and the Town is proud to have it as a Local Historic Landmark. Commissioner Cross echoed Mayor Jones' sentiments.

ACTION:

Mover: Commissioner Wright moved to approve.

Second: Commissioner Shackelford

Vote: Motion carried 5-0

8. Administration and Financial Items

8.A Approval of the Amended Personnel Policies & Procedures.

Human Resources Director Angela McCray gave an overview of a new law, effective October 1st, requiring fingerprinting of any employee that will be working with children. Ms. McCray advised the Town has implemented a formal process for submitting fingerprints to SBI and the process has been added to the Policies and Procedures. Ms. McCray has requested that the Board approve the amended Policies and Procedures.

Commissioner Clapsaddle inquired if the fingerprinting can be done at the Wake Forest Police Department. Ms. McCray has advised that the Police Department has designated Thursday as the day employee fingerprints can be done.

ACTION:

Mover: Commissioner Shackelford moved to approve the Amended Personnel Policies and Procedures.

Second: Commissioner Wright

Vote: Motion carried 5-0

9. Public Services Items

No Public Service Items presented.

10. Parks and Recreation Items

No Parks and Recreation Items presented.

11. Public Safety Items

No Public Safety Items presented.

12. Other Business

12.A. Department Monthly Reports
Received.

12.B. November Tax Report
Received.

12.C. Capital Improvement Plan Quarterly Update

12.D. Commissioner Reports

Commissioner Wright advised he attended the Wake Forest Cares Holiday Kick-off event. Commissioner Wright echoed Commissioner Clapsaddle requesting that everyone donate to the food pantry and wished all a Happy Thanksgiving.

Commissioner Shackleford advised of no report.

Commissioner Cross advised she attended the Wake Forest Cares Holiday Kick-off and was one of the judges for the ice carving event. Commissioner Cross advised that she has been working with Mayor Jones on the "Mayor's Roundtable" at the Wake Forest Center for Active Aging as the staff continues to work through the transition. Commissioner Cross wished everyone a Happy Thanksgiving.

Commissioner Clapsaddle extended appreciation to the Town staff, acknowledging Community Outreach Assistant Kiel Ortiz and various Guest Services volunteers, and advised he was stopped by a citizen to commend Hope Wright for being a part of what makes this Town great. Commissioner Clapsaddle wished everyone a Happy Thanksgiving and encouraged all to support food banks and those that are food insecure.

Commissioner Sliwinski advised he made it to the Wake Forest Cares Holiday Kick-off on Saturday and encourage all who are able to donate to any of the causes.

Mayor Jones thanked Michelle Daniels and the Budget team for the Distinguished Budget Award for the twelfth consecutive year. Mayor Jones advised there will be a vote on the MTP and the TIP at CAMPO on Wednesday and they are asking that they remove all language concerning toll options on US-1 be removed from the document. Mayor Jones advised this will allow the North Carolina Department of Transportation to start the purchasing of right of way for section A and B in January 2026 and attempt to bump up right of way purchase for section C. The expected completion of the project is 2037. Mayor Jones advised that she attended Wake Forest Cares Kick-off and the ice carving was great. Mayor Jones extended appreciation to the Wake Forest Guild of Artists for bringing "Paint the Forest" Plein Air Event to Wake Forest where 25 artists painted over 50 paintings. All paintings were displayed at the Makery Wake Forest on Sunday afternoon. Mayor Jones encouraged all to go see the painting and consider purchasing as they will be on display throughout January. Mayor Jones advised they had a great Veteran's Day program with a large turnout at Veteran's Memorial where The Quilters gave away quilts to veterans. Mayor Jones advised she and Town Manager Kip Padgett were invited to be on the panel at Central Pines to discuss the merger of the water and sewer systems with Raleigh. This was an informational session for small towns considering merging water systems together with larger communities. Mayor Jones advised she attended a Young People's Alliance at Wake Forest High School, which is a group of young people interested in learning about municipal government and how to get involved in municipal government. Finally, Mayor Jones advised she had a student from Bailey's College come to interview her for a documentary on Wake Forest.

Town Manager Kip Padgett advised the Wake Forest Police Department is nationally accredited by CALEA and acknowledged the assessor for the Police Department, Chief Tim Potts of Purdue University Fort Wayne. Mr. Padgett thanked Mr. Potts for checking the Town's accreditation statistics.

13. Adjournment

Mayor Jones adjourned the meeting at 7:04 pm.

Duly approved in open session this 16th day of December 2025.

(ATTEST)

Vivian A. Jones, Mayor

Evelyn Wright, Town Clerk



BOARD OF COMMISSIONERS AGENDA ITEM REPORT

Agenda Item No.: 2025-691-
Submitted by: Evelyn Wright
Submitting Department:
Meeting Date: December 16, 2025

Subject

PROCLAMATION World Meditation Day

Recommendation:

item Summary:

ATTACHMENTS:

- [PROCLAMATION World Meditation Day.pdf](#)



PROCLAMATION
RECOGNIZING "WORLD MEDITATION" DAY
IN THE TOWN OF WAKE FOREST

WHEREAS, mental health and inner peace are essential foundations for a thriving, resilient, and compassionate community; and

WHEREAS, the United Nations General Assembly has officially designated December 21st as World Meditation Day, recognizing the transformative power of meditation to reduce stress, improve health, and foster global harmony; and

WHEREAS, for over four decades, Gurudev Sri Sri Ravi Shankar and the Art of Living Foundation have served millions across 180 countries through humanitarian initiatives promoting stress-free living; and

WHEREAS, on Sunday, December 21, 2025, Wake Forest will join 10 million participants in a "Global Moment" of stillness, synchronized with a live meditation led by Gurudev Sri Sri Ravi Shankar at 9:30 AM ET; and

WHEREAS, this initiative invites all residents of Wake Forest, regardless of background or belief, to pause, breathe, and connect, creating harmony between communities, thereby strengthening the bonds of our local community and creating a ripple effect of peace across the globe; and

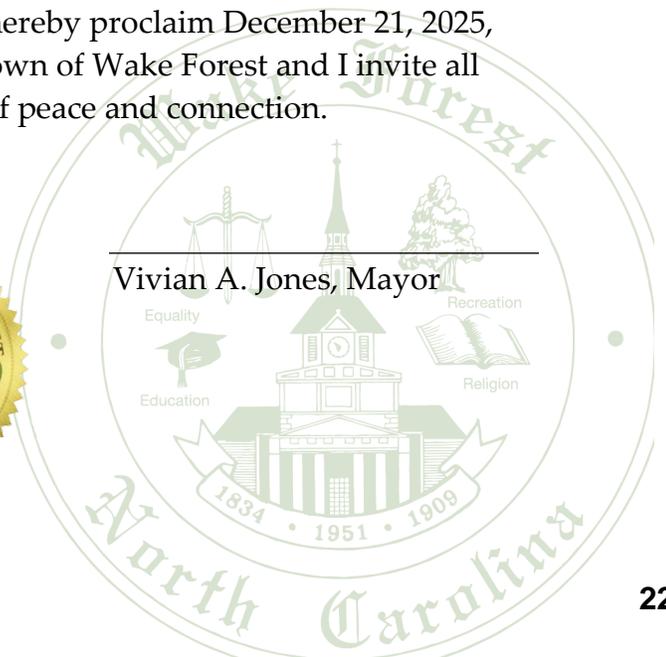
WHEREAS, the Town of Wake Forest is committed to the holistic well-being of its residents and supports inclusive events that bring neighbors together in a spirit of unity and mindfulness.

NOW, THEREFORE, I, Vivian A. Jones, Mayor of the Town of Wake Forest on behalf of the Board of Commissioners, do hereby proclaim December 21, 2025, "WORLD MEDITATION DAY" in the Town of Wake Forest and I invite all residents to join in this global observance of peace and connection.

This the 16th day of December 2025

ATTEST:

Evelyn Wright, Town Clerk



Vivian A. Jones, Mayor



BOARD OF COMMISSIONERS AGENDA ITEM REPORT

Agenda Item No.: 2025-635-

Submitted by: Michelle Daniels, Administration

Submitting Department: Administration

Meeting Date: December 16, 2025

Subject

Public Hearing to receive public comment on the five (5) year Capital Improvements Plan (CIP) for FY 2026-2031

Recommendation:

item Summary:

ATTACHMENTS:

- [Public Hearing on Proposed CIP Update_Summary.pdf](#)

Public Hearing to receive public comment on the five (5) year Capital Improvements Plan (CIP) for FY 2026 - 2031

Summary:

The public hearing is to receive comments on the proposed FY 2026 -2031 CIP Update.

The Board and staff will discuss the updated CIP document at the January 6 work session with approval at the January 20 regular meeting.



BOARD OF COMMISSIONERS AGENDA ITEM REPORT

Agenda Item No.: 2025-649-

Submitted by: Michelle Daniels, Administration

Submitting Department: Administration

Meeting Date: December 16, 2025

Subject

Public Hearing to receive public input for the FY 2026-2027 Annual Operating Budget

Recommendation:

Receive public comments

item Summary:

ATTACHMENTS:

- [FY 26-27 Budget Public Hearing 1 Summary.pdf](#)
- [FY 26-27 Budget Public Hearing 1 Tentative Schedule.pdf](#)

Public Hearing to receive public input for the FY 2026-2027 Annual Operating Budget

Staff will be preparing the proposed FY 2026-2027 Budget over the next several months. The purpose of the hearing is to receive public comments for the upcoming fiscal year beginning July 1, 2026. The budget preparation schedule is attached; the Proposed Budget is scheduled to be presented to the Board of Commissioners at the work session on May 5, 2026, and the next Public Hearing is scheduled for May 19, 2026.

Town of Wake Forest
FY 2026-2027 BUDGET PREPARATION SCHEDULE
Fiscal Year Ending June 30, 2027

DATE	ACTIVITY
December 16, 2025	Initial Public Hearing to receive input on budget needs
January 16, 2026	Board Retreat
January 27, 2026	Budget Kick-off Meeting - Distribute materials and instructions to Directors
March 9, 2026	Complete and return budget requests to ATM/CFO
Late March	Meet with Directors to review budget requests
April	Finalize Proposed Budget
May 5, 2026	Present Proposed Budget to Board of Commissioners
May 19, 2026	Public Hearing on Proposed Budget
June 2, 2026	Budget work session with Board of Commissioners
June 16, 2026	Adopt Budget Ordinance



BOARD OF COMMISSIONERS AGENDA ITEM REPORT

Agenda Item No.: 2025-681-
Submitted by: Evelyn Wright
Submitting Department:
Meeting Date: December 16, 2025

Subject

Public Comment: If anyone would like to address the Board of Commissioners on an item other than a public hearing item during the time of public comment, please sign up with the Town Clerk prior to the meeting. Each speaker is asked to limit comments to 3 minutes. Please provide the clerk with copies of any handouts you have for the Board. Although the Board is interested in hearing your concerns, speakers should not expect Board action or deliberation on subject matter brought up during the Public Comment segment. Topics requiring further investigation will be referred to the appropriate Town Staff and may be scheduled for a future agenda. Thank you for your consideration of the Board of Commissioners, staff and other speakers.

Recommendation:

item Summary:

ATTACHMENTS:



BOARD OF COMMISSIONERS AGENDA ITEM REPORT

Agenda Item No.: 2025-638-
Submitted by: Evelyn Wright
Submitting Department:
Meeting Date: December 16, 2025

Subject

Approval of Appointment to Citizen Advisory Boards

Recommendation:

item Summary:

ATTACHMENTS:

- [RESOLUTION2026-XXX_Adv_Board_Appts-BOA .pdf](#)
- [RESOLUTION2026-XXX_Adv_Board_Appts-PB_MM Moore.pdf](#)
- [RESOLUTION2026-XXX_Adv_Board_Appts-TAB .pdf](#)
- [RESOLUTION2026-XXX_Adv_Board_Appts-PRCR.pdf](#)
- [RESOLUTION2026-XXX_Adv_Board_Appts-HRC .pdf](#)
- [RESOLUTION2026-XXX_Adv_Board_Appts-PAC.pdf](#)
- [RESOLUTION2026-XXX_Adv_Board_Appts-HPC.pdf](#)
- [HPC Waiver Statement_Elizabeth Miller_Dec2025.pdf](#)

RESOLUTION 2025-64

ADVISORY BOARD/COMMISSION APPOINTMENTS
FOR THE TOWN OF WAKE FOREST, NORTH CAROLINA

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners of the Town of Wake Forest, North Carolina, that the following persons be appointed to the following citizen advisory boards:

Board of Adjustment

Ken Christie

(January 1, 2026 – December 31, 2028)

Rick Porter

(January 1, 2026 – December 31, 2028)

William Hedrick

(January 1, 2026 – December 31, 2028)

Duly resolved this 16th day of December 2025.

ATTEST:

Vivian A. Jones
Mayor

Evelyn Wright
Town Clerk

RESOLUTION 2025 - XXX

ADVISORY BOARD/COMMISSION APPOINTMENTS
FOR THE TOWN OF WAKE FOREST, NORTH CAROLINA

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners of the Town of Wake Forest, North Carolina, that the following persons be appointed to the following citizen advisory boards:

Planning Board

Mark Moore

(January 1, 2026 – December 31, 2027)

Duly resolved this 16th day of December 2025.

ATTEST:

Vivian A. Jones
Mayor

Evelyn Wright
Town Clerk

RESOLUTION 2025 - 68

**ADVISORY BOARD/COUNCIL APPOINTMENTS
FOR THE TOWN OF WAKE FOREST, NORTH CAROLINA**

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners of the Town of Wake Forest, North Carolina, that the following persons be appointed to the following citizen advisory boards:

Technology Advisory Board

Adrian Martin

(January 1, 2026 – December 31, 2028)

Nicholas Gray

(January 1, 2026 – December 31, 2028)

Alexander Scholz

(January 1, 2026 – December 31, 2028)

Colton Alexander (Youth Member)

(January 1, 2026 – December 31, 2028)

Duly resolved this 16th day of December 2025.

ATTEST:

Vivian A. Jones
Mayor

Evelyn Wright
Town Clerk

RESOLUTION 2025 - 67

ADVISORY BOARD/COMMISSION APPOINTMENTS
FOR THE TOWN OF WAKE FOREST, NORTH CAROLINA

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners of the Town of Wake Forest, North Carolina, that the following persons be appointed to the following citizen advisory boards:

Parks, Recreation & Cultural Resources

Felicia Roberts

(January 1, 2026 – December 31, 2028)

Janet Lowe

(January 1, 2026 – December 31, 2028)

Dennis Beemer

(January 1, 2026 – December 31, 2028)

Melissa Gray

(January 1, 2026 – December 31, 2028)

Morgan Dixon (Youth Member)

(January 1, 2026 – December 31, 2028)

Duly resolved this 16th day of December 2025.

ATTEST:

Vivian A. Jones
Mayor

Evelyn Wright
Town Clerk

RESOLUTION 2025 - 66

ADVISORY BOARD/COUNCIL APPOINTMENTS
FOR THE TOWN OF WAKE FOREST, NORTH CAROLINA

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners of the Town of Wake Forest, North Carolina, that the following persons be appointed to the following citizen advisory boards:

Human Relations Council

Angela Milton

(January 1, 2026 – December 31, 2028)

James Cowie

(January 1, 2026 – December 31, 2028)

Valeria Santolo

(January 1, 2026 – December 31, 2028)

Naomi Berhanu (Youth Member)

(January 1, 2026 – December 31, 2028)

Matteo Botti (Youth Member)

(January 1, 2026 – December 31, 2028)

Duly resolved this 16th day of December 2025.

ATTEST:

Vivian A. Jones
Mayor

Evelyn Wright
Town Clerk

RESOLUTION 2025 - 69

ADVISORY BOARD/COMMISSION APPOINTMENTS
FOR THE TOWN OF WAKE FOREST, NORTH CAROLINA

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners of the Town of Wake Forest, North Carolina, that the following persons be appointed to the following citizen advisory boards:

Public Art Commission

Mary Petretich

(January 1, 2026 – December 31, 2028)

Barbett Ramsey

(January 1, 2026 – December 31, 2028)

Duly resolved this 16th day of December 2025.

ATTEST:

Vivian A. Jones

Mayor

Evelyn Wright

Town Clerk

RESOLUTION 2025 - 65

ADVISORY BOARD/COMMISSION APPOINTMENTS
FOR THE TOWN OF WAKE FOREST, NORTH CAROLINA

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners of the Town of Wake Forest, North Carolina, that the following persons be appointed to the following citizen advisory boards:

Historic Preservation Commission

Elizabeth Miller

(January 1, 2026 – December 31, 2028)

Jason Moberaten

(January 1, 2026 – December 31, 2028)

Cooper Bolton

(January 1, 2026 – December 31, 2028)

Duly resolved this 16th day of December 2025.

ATTEST:

Vivian A. Jones
Mayor

Evelyn Wright
Town Clerk

Elizabeth Miller
403 Lakeview Ave
Wake Forest, NC 27587

To: Wake Forest Board of Commissioners

I'm writing to express my interest in serving another term on the Wake Forest Historic Preservation Commission. My first full term expires at the end of this year; I previously completed another year on the HPC filling a mid-term vacancy. I am currently serving as the Chairperson of the HPC.

In addition to supporting the HPC's main role of approving work requests in the Local Historic District, I've been active in the committee's outreach and educational efforts. This includes guiding Walking Tours of the Local Historic District and the Downtown Historic District, supporting education workshops, representing the HPC at events such as Juneteenth and Good Neighbor Day, and attending the Preservation NC conference.

Wake Forest is a wonderful place to live and one with a history to be proud of. I hope you will permit me to continue serving on the HPC so I can do my part in preserving and promoting our history.

Sincerely,

Elizabeth Miller



BOARD OF COMMISSIONERS AGENDA ITEM REPORT

Agenda Item No.: 2025-653-

Submitted by: Elisabeth Palermo, Engineering

Submitting Department: Engineering

Meeting Date: December 16, 2025

Subject

Approve Resolution to Accept Streets into the Town of Wake Forest Street System for Maintenance.

Recommendation:

Approve Resolution to Accept Streets into the Town of Wake Forest Street System for Maintenance.

item Summary:

ATTACHMENTS:

- [Attachment_A_summary_12.2025_Accept_Streets.docx](#)
- [Attachment_B_Resolution__Accept_Streets.docx](#)

Agenda Item: Resolution to Accept Streets into the Town of Wake Forest Street System for Maintenance.

Summary: New streets are required to be designed and built to Town of Wake Forest standards and specifications. The Board accepts streets into the Town of Wake Forest Street System quarterly. The streets on this resolution will be added to the Powell Bill submission for additional maintenance funds annually. The Powell Bill map is updated annually in June. These additions will be reflected on the 2026 Powell Bill Map. This resolution list the additions that have been approved and by Engineering Staff since June of 2025.

In addition to the streets that were accepted in the typical way, an omission in the spreadsheet was identified resulting in additional length of Friendship Chapel Rd. being added to the Powell Bill in this resolution. While staff were checking the stations for a new development, it was found that the beginning and ending descriptions were unclear for Friendship Chapel Rd. in the Powell Bill Spreadsheet. This led staff to verify the accepted length using GIS. It was determined from this check that the portion of Friendship Chapel Rd between S. Main St. and the Public Works eastern most driveway has previously been shown as accepted on the Town's Powell Bill map (at least since 2013) but was not accounted for in the Powell Bill spreadsheet. To clarify, the Public Works is maintaining this section of Friendship Chapel Rd., but the Town is *not* receiving funds from the state for the maintenance of 0.25 miles of Friendship Chapel Rd. The Cloverleaf Drive segment was also an omission error. The line items for Friendship Chapel and Cloverleaf Drive in this resolution will allow us to collect Powell Bill funds for these street segments moving forward from the June Powell Bill submission to NCDOT.

Attachments: Attachment_A_summary_12.2025_Accept_Streets

Attachment_B_Resolution_Accept_Streets

RESOLUTION 2025-XX

RESOLUTION TO ACCEPT STREETS INTO THE TOWN OF WAKE FOREST STREET SYSTEM FOR MAINTENANCE

WHEREAS, streets are required to be designed and built according to our Manual of Standards, Specifications and Design; and

WHEREAS, Engineers and Construction Inspectors approved the street segments for acceptance accordingly as described in the table below;

WHEREAS, approval by the Town of Wake Forest Board of Commissioners is necessary for eligibility for receiving funding from the NCDOT's Powell Bill Program;

<u>SUBDIVISION</u>	<u>STREET NAME</u>	<u>BEG DESCRIPTION</u>	<u>END DESCRIPTION</u>	<u>LENGTH</u>
	FRIENDSHIP CHAPEL ROAD	SOUTH MAIN ST.	PUBLIC WORKS DW EAST	0.25
BRIDGEPORT	PENFIELD STREET	ROGERS BRANCH RD.	WOODSTAFF AVE.	0.29
BRIDGEPORT	SIMWOOD AVENUE	WOODSTAFF AVE.	END	0.31
BRIDGEPORT	WOODSTAFF AVENUE	FORESTVILLE RD.	END	0.31
BRIDGEPORT	VESTAL STREET	WOODSTAFF AVE.	SIMWOOD AVE.	0.15
BRIDGEPORT	SANDY CAMP STREET	SIMWOOD AVE.	END	0.03
BRIDGEPORT	SAWTOOTH AVENUE	SIMWOOD AVE.	END	0.03
BRIDGEPORT	REMNICK AVENUE	PENFIELD ST.	END	0.03
BRIDGEPORT	TISE AVENUE	PENFIELD ST.	SIMWOOD AVE.	0.13
ROSEDALE - PHASE 2B	CANYON SPRING TRAIL	BEGIN PH 2B	PH 6	0.24
ROSEDALE - PHASE 2B	WINTER JASMINE LANE	PH 2A	CANYON SPRING TRL.	0.13
ROSEDALE - PHASE 2B	MILL DAM ROAD	WINTER JASMINE LN	CANYON SPRING TRL.	0.13
ROSEDALE - PHASE 2B	WHITE ROSE LANE	PH 2A	CANYON SPRING TRL.	0.10
	CLOVERLEAF DRIVE	DURHAM RD	SE CORNER OF 12109 CLOVERLEAF DR	0.13
			Total	2.26

BE IT RESOLVED that the Board of Commissioners of the Town of Wake Forest accept this list of streets into the Town of Wake Forest Street System.

Duly adopted this 16th day of December 2025.

Vivian A. Jones,
Mayor

ATTEST:

Evelyn Wright
Town Clerk



BOARD OF COMMISSIONERS AGENDA ITEM REPORT

Agenda Item No.: 2025-671-
Submitted by: Timothy Watson, Engineering
Submitting Department: Engineering
Meeting Date: December 16, 2025

Subject

Approval of the 2026 Street Resurfacing Contract

Recommendation:

Request Approval from the Board

item Summary:

ATTACHMENTS:

- [Summary_Street_Resurfacing_Contract.docx](#)
- [Attachment_A_Resolution_Resurfacing_Contract.docx](#)
- [Attachment_B_Street_Resurfacing_Bid_0001-2025.pdf](#)
- [Attachment_C_Bid Tab.pdf](#)

ITEM TITLE: Approval for the Streets Resurfacing Contract for 2026 construction.

ITEM SUMMARY: The Engineering Department put together a scope of work for the Street Resurfacing Project. The scope was advertised on September 22, 2025, and the bid opening was on October 13, 2025. The December 16th Board Meeting will include the resolution to authorize the Town Manager to award the bid.

ATTACHMENTS:

Attachment_A_2025-xx_Resolution

Attachment_B_Street Resurfacing Bid_0001-2025

Attachment_C_Bid Tab

SPECIFIC ACTION REQUESTED: Recommend approval.

RESOLUTION 2025-XX

RESOLUTION AUTHORIZING THE TOWN MANAGER TO EXECUTE ON BEHALF OF THE TOWN OF WAKE FOREST, THE CONTRACT FOR THE STREET RESURFACING PROJECT, BID #0001-2025

WHEREAS, the Engineering Department posted a call for bids for a street resurfacing project as an opportunity to collect competitive bids for construction services as specified in the bid documents; and

WHEREAS, consistent with the Town’s purchasing policy, on September 22nd, the Town published a Notice to Bidders inviting interested and qualified contractors to submit; and

WHEREAS, on October 13th at 11:00am the bid opening was closed, and Town had received a total of 6 submissions; and

WHEREAS, a bid tabulation was completed, and all bids were reviewed to confirm receipt of required bid documentation; and

WHEREAS, the lowest bidder was selected as the contractor to perform the street resurfacing with a total of \$ 6,569,054.25; and

NOW, THEREFORE, BE IT RESOLVED by the governing body of the Town of Wake Forest hereby authorizes the Town Manager to execute a contract with Carolina Sunrock for the Bid #0001-2025 Street Resurfacing Project.

This the 16th day of December 2025.

Vivian A. Jones
Mayor

ATTEST:

Evelyn Wright
Town Clerk



TOWN *of*
WAKE FOREST

Engineering Department

301 S. Brooks Street | Wake Forest, NC 27587

NAME OF BIDDER: _____

Address _____

N.C. License No. _____

BID DOCUMENT AND SPECIFICATION FOR

STREET RESURFACING PROJECT

BID # 0001-2025

DATE OF ADVERTISING

September 22th, 2025

DATE OF BID OPENING

October 13th, 2025

at 11:00am

TABLE OF CONTENTS

ADVERTISEMENT-----	BD-1
PROPOSAL FORM	
BIDDER’S CERTIFICATION	
BID BOND	
INSTRUCTIONS TO CONTRACTORS	
CONTRACT	
E-VERIFY AFFIDAVIT	
MWBE DOCUMENTATION FORMS	
PERFORMANCE BOND	
PAYMENT BOND	
PROCEDURE FOR REPORTING SALES TAX	
FINAL PAYMENT AFFIDAVIT-----	BD-24
SCHEDULE OF PRICES-----	SOP-1-2
GENERAL INFORMATION SHEET-----	GIS-1-7
STREET ESTIMATE TOTAL SHEET-----	SET-1-9
GENERAL CONDITIONS-----	GC-1-23
STANDARD GENERAL PROVISIONS-----	SGP-1-4
PROJECT SPECIAL PROVISIONS-----	PSP-1-34
GIS STREET MAPS-----	GSM-1-65
STANDARD DETAILS-----	PSP-1-93
NO PARKING SIGN, NOTIFICATION LETTER, & SAMPLE STREET GROUP MAP	



TOWN *of*
WAKE FOREST

REQUESTS FOR BIDS

Street Resurfacing Project

BID # 0001-2025

Sealed Bids to be received until

Monday, October 13, 2025, at 11:00 a.m.

NOTICE TO BIDDERS

Sealed bids will be received by the Town of Wake Forest, North Carolina, at the Town of Wake Forest Purchasing Department, 234 Friendship Chapel Road, Wake Forest, NC 27587 until 10:00 a.m. Afterward, they will be received at the Wake Forest Town Hall Meeting Rooms A & B, Wake Forest, NC 27587 from 10:00 a.m. until 11:00 a.m. on Monday, October 13, 2025, where the bids will be publicly opened and read aloud for the following:

Bid # 0001-2025

STREET RESURFACING PROJECT

Bidding Documents may be obtained in printed or digital form from Duncan Parnell's bid room at <https://www.dpibidroom.com/View/Default.aspx> for the non-refundable price as listed on their website. All payments are to be made to Duncan Parnell, via their bid room. Prospective bidders must purchase Bidding Documents directly through Duncan Parnell to be considered an official plan holder. Neither Owner nor Engineer will be responsible for full or partial sets of Bidding Documents, including any Addenda, obtained from any other source. All payments are to be made to Duncan Parnell, via their bid room at <http://www.dpibidroom.com>. If you need any assistance ordering or getting registered, please email raleigh@Duncan-Parnell.com.

The Town of Wake Forest reserves the right to reject any or all bids and to make the award as deemed in the best interest of the Town of Wake Forest.

Instructions to Bidders

1. SUBMITTAL

All bids must be submitted by **October 13, 2025 @ 11:00 a.m.** Bids may be submitted until 10:00 a.m. to Town of Wake Forest Purchasing Department, 234 Friendship Chapel Road Wake Forest, NC 27587 Attn: Randy Driver, Purchasing Manager or submitted at the bid opening location at Wake Forest Town Hall, Meeting Rooms A-B, 301 S. Brooks Street from 10:00 a.m. until bid closing at 11:00 a.m. All bids must be submitted in a sealed envelope marked: **Bid # 0001-2025 – STREET RESURFACING PROJECT.**

2. USE OF CONTRACT DOCUMENTS

These Bidding Documents are to be used only for the purpose of understanding this bid and consideration toward submitting a proposal. They may not be used for any other purpose.

3. SPECIFICATIONS

The Specifications are intended to describe the complete project including all materials, processes, equipment, etc. Bidders are expected to carefully examine the Contract Documents, visit the site of the proposed construction, and determine the availability of materials and method required, in order to become thoroughly familiar with the project, the requirements, and to include the cost thereof in the proposal. Bidders shall contact the Project Coordinator at least five (5) days prior to the bid date for clarification of any item not fully understood.

4. BIDDER'S QUALIFICATIONS

For projects exceeding \$40,000, consideration will be given only to Contractors who submit evidence that they are properly licensed as required by Chapter 87 of the North Carolina General Statutes to bid and perform the work described herein as the general contractor. In addition, the Owner may make such other investigations as he deems necessary to determine the ability of the Bidder to perform the work, and the Bidder shall furnish the Owner all such information and data for this purpose as the Owner may request.

The Owner reserves the right to consider as unqualified to do the work of general construction any Bidder who does not habitually perform with his own forces a minimum of ten percent (10%) of the work involved in construction of the improvements embraced in this contract.

Awarded contractor shall be authorized to conduct business in the state of North Carolina as found by checking the Secretary of State records and/or Register of Deeds office, indicating proper registration and active status. This is a condition of executing the contract.

5. FAMILIARITY WITH LAWS

It is assumed that the Bidders are familiar with local, state, and federal laws, rules, ordinances, and regulations that may in any manner affect those engaged or employed in the work, or the materials or equipment used in or upon the work, or in any way affects the conduct of the work. No plea for misunderstanding or ignorance on the part of the Contractor will in any way serve to modify the provisions of this contract.

The Contractor agrees that in carrying out this contract he will comply with all applicable Federal, state, and local laws, specifically including, without limitation, the Occupational Safety and Health Act of 1970 and Section 1324A, the Immigration Reform and Control Act.

6. AMERICAN WITH DISABILITIES ACT (ADA)

The Contractor shall comply with the provisions of the Americans with Disabilities Act (ADA) (www.ADA.gov) as amended from time to time and all rules and regulations promulgated thereunder. The contractor hereby agrees to indemnify the Owner from and against all claims, suits, damages, costs, losses and expenses in any manner arising out of or connected with the failure of the contractor, its subcontractors, agents, successors, assigns, officers or employees to comply with the provisions of the ADA or rules and regulations promulgated thereunder.

7. MINORITY PARTICIPATION

The Town of Wake Forest's minority participation goal is **10%** of the bid amount.

8. ADDENDA

No oral interpretation will be made to any Bidder as to the meaning of the Bidding Documents. Questions and requests for such interpretation should be made in writing to the Project Coordinator Listed. Any Addenda will be provided to known interested parties, but it shall be the Bidder's responsibility to make inquiry as to any Addenda issued. All such Addenda shall become part of the Contract and all Bidders shall be bound by such Addenda whether or not received or acknowledged. **All addendums will be posted by 2:00 p.m. on Friday, October 3rd, 2025.**

9. UNBALANCED BIDS

The Contractor shall not submit a bid containing any unbalanced bid prices. Any unit or lump sum bid price that does not reflect reasonable actual costs that the Contractor anticipates for the performance of the item(s) in question along with a reasonable proportional share of the Contractor's anticipated profit, overhead cost, and other indirect costs is an unbalanced bid price. Any bid containing unbalanced bid prices may be deemed non-responsive and rejected.

10. COLLUSIVE AGREEMENTS

Each bidder submitting a bid shall execute and attach the Non-Collusion Affidavit of Prime Bidder affidavit attesting that he has not entered into a collusive agreement with any other person, firm or corporation in regard to any bid submitted.

11. BID Bond

5% of bid amount. Bid Bond must be included with the bid submittal.

12. PERFORMANCE AND PAYMENT BOND

100% of bid amount.

13. PREPARATION OF BID

The Town's bid forms must be used when provided – submit one original. Bidders shall label their bid proposal with business name, bid name and bid date, then seal their bid proposal inside an envelope. If mailing a bid proposal, provide a sealed envelope within the postal envelope.

14. ITEMS REQUIRED TO BE SUBMITTED WITH THE BID

Failure to submit the following with the bid is considered a non-responsive bid and the bid will not be considered:

- Bid Form with bid price(s) written or typed

- Signatures on Forms and notarized where noted
- Non-Collusion Affidavit of Prime Bidder
- Addendums (if issued)
- Minority Participation forms
- 5% Bid Bond
- E-589 CI Form

15. RECEIPT AND OPENING OF BIDS

Each Bid is to be submitted in a sealed envelope and plainly marked with the project name, bid number, and bid opening time. If mailed, the sealed envelope containing the Bid is to be enclosed in another envelope to avoid it being opened before the advertised time. Bids received prior to the advertised bid opening will be securely kept as sealed. Bids received after the advertised bid opening time will be returned to the Bidder unopened.

16. WITHDRAWAL OF BIDS

Bids may be withdrawn by written request prior to or within seventy-two hours (72) after the opening of bids by contacting the bidding officer. To withdraw an opened bid, proof must be given of a mathematical error or omission as opposed to judgment or interpretation error.

17. MINIMUM NUMBER OF BIDS (FORMAL CONTRACTS ONLY)

North Carolina General Statute 143-129 and 143-132 prohibits the awarding of a formal contract unless at least three (3) competitive bids are received from reputable and qualified contractors. Therefore, if fewer than three (3) such bids are received, they will not be opened but returned to the contractors; and the project may be re advertised. The Town's formal contract limit is \$500,000.

18. ALTERNATIVE BIDS

No alternative bids will be considered unless alternative bids are specifically requested.

19. AWARD OF CONTRACT; REJECTION OF BIDS

The Town reserves the right to hold bids for a period of sixty (60) days for the purpose of reviewing the bids and investigating the qualifications of the Bidders. The Town reserves the right to reject any or all bids, for any reason. The Town intends to award a contract to the lowest responsive, responsible bidder, complying with the conditions of the bidding documents. The Town reserves the right to award a contract that is deemed in its best interest.

20. BID PROTEST PROCEDURE

Prospective bidders or suppliers who feel disadvantaged by the solicitation must submit a written protest within five (5) calendar days prior to the opening of proposals. Actual bidders or subcontractors who are aggrieved by the award of a contract must submit a written protest within five (5) days of the Town announcing its intent to award. The protest must be addressed to the Purchasing Manager, Town of Wake Forest, who will make the final determination after consulting with counsel.

21. EXECUTION OF AGREEMENT

The successful Bidder is required to execute a Contract within ten days (10) days after notice of award. Failure to do so constitutes a default and the Owner may elect to award to the next lowest bidder or re- advertise the bid.

22. LIQUIDATED DAMAGES

\$1500 per day after scheduled completion date of project. Any exceptions must be issued in writing by the Town of Wake Forest.

23. INSURANCE REQUIRMENTS

- A. Workers' Compensation: Insurance covering all employees meeting Statutory limits in compliance with the applicable state and federal laws. The coverage must include employer's liability with a minimum limit of \$1,000,000 for each accident.
- B. Commercial General Liability: Coverage shall have minimum limits of \$1,000,000 per occurrence, general aggregate, products/completed operations aggregate, personal and advertising injury. This shall include premises and operations, independent contractors, products and completed operations, broad form property damage, XCU coverage and contractual liability. The coverage shall be written on an occurrence basis. This limit should apply on a per project or per location aggregate basis. **The Town of Wake Forest shall be listed as an additional insured, under this coverage.**
- C. Business Auto Liability: Coverage shall have a minimum limit of \$500,000 per occurrence, combined single limit for bodily injury liability and property damage liability. This shall include owned vehicles, hired vehicles and non-owned vehicles.
- D. Umbrella/Excess Liability: At the option of the contractor, the limits of the primary general liability, auto liability and employers' liability may be less than stipulated herein, with an excess policy providing the additional limits needed. This form of coverage must be approved by the municipality and will only be acceptable when both the primary and excess policies include the coverage and endorsements required herein.
- E. Professional Liability: Coverage shall have a minimum limit of \$1,000,000 per occurrence, unless a higher limit is required by the Town. This coverage is only required for contracts that include professional services.
- F. Special Requirements
 - 1. Current, valid insurance policies meeting the requirements herein identified shall be maintained to be considered an "eligible contractor". Renewal certificates shall be sent to the Town 30 days prior to any expiration date. There shall also be a 30-day notification to the Town in the event of cancellation or modification of any stipulated insurance coverage. Certificates of insurance meeting the required insurance provisions shall be forwarded to the Town of Wake Forest. Wording on the certificate, which states that no liability shall be imposed upon the company for failure to provide such notice, is not acceptable.
 - 2. It shall be the responsibility of the contractor to ensure that all subcontractors comply with the same insurance requirements that he is required to meet.

3. The Town of Wake Forest shall be listed as certificate holder on the certificate of insurance.

24. INDEMNIFICATION

To the extent permitted by law, the Contractor agrees to defend, pay on behalf of, indemnify, and hold harmless the Town of Wake Forest, its elected and appointed officials, employees, agents, and volunteers against any and all claims, demands, suits or losses, including all costs connected therewith, for any damages which may be asserted, claimed or recovered against or from the Town of Wake Forest, its elected or appointed officials, employees, agents, and volunteers by reason of personal injury, including bodily injury or death and/or property damage, including loss of use thereof resulting from the negligence of the Contractor.

25. MATERIALS

The name of a certain brand, make, manufacturer or definite specification is to denote the quality standard of the article desired and not to restrict competitive bidding. It is set forth and conveyed to prospective bidders the general style, type, character and quality of the article desired. Bidders, however, may submit to the Project Coordinator evidence that proposed substitutions are fully up to standards specified and obtain his approval before placing orders.

26. ERRORS, OMISSIONS, AND DEVIATIONS

The Contractor is responsible for all errors, omissions, and deviations from the Contract requirements.

27. OSHA COMPLIANCE PLAN/POLICY

Contractor hereby acknowledges that it has reviewed and agrees to abide by all OSHA safety regulations and Town of Wake Forest safety regulations. Contractor may be required to submit a copy of the company's current written OSHA Compliance Plan/Policy within 48 hours of request. If requested, no field work shall take place until the plan has been submitted and reviewed by the Town's Safety Officer.

28. NON-COLLUSION and ANTI-DISCRIMINATION

Bidder certifies that this proposal is made in good faith and without collusion or in connection with any other person bidding on the same work, nor will any official or employee of the Town of Wake Forest be admitted to share any part of this contract should an award be made to the undersigned. Bidder further certifies that in connection with the performance of this contract not to discriminate against any employee or applicant for employment because of race, creed, color, religion, national origin, gender, age, political affiliation or handicap.

29. TAXES

FEDERAL: The Town of Wake Forest is exempt from and will not pay Federal Excise or Transportation taxes.
STATE: Applicable North Carolina Sales and Use Taxes shall not be shown on bids, but shall be added to invoices as a separate item. The Town is not tax exempt.

NORTH CAROLINA SALES TAX

The Owner may apply for a refund of all sales and/or use taxes paid in North Carolina by the Contractor on purchases of items which are annexed to, affixed to, or in some manner become a part of any building or structure being erected, altered or repaired under Contract with the Owner; and these taxes shall not be

included in the bid amounts or the Contract sum. The Contractor shall include and pay all other taxes imposed by governmental authorities, which are applicable to the work.

The Contractor will be reimbursed for applicable sales and/or use taxes he has paid in North Carolina based on the following. **The Contractor should apply for reimbursement by itemizing and completing a notarized sales and use tax report form and submitting it with each pay request. Failure to submit this form will result in the invoice not being paid.** The contractor will be required to complete a sales and use tax report affidavit in order to receive the last payment of the project.

A Sales Tax Affidavit must be completed and submitted for this project before final payment will be released.

30. PAYMENT

N.C.G.S. 143-134.1 prohibits retainage on public projects that cost less than \$100,000.00 in total. Prior to final payment, the Contractor will be required to submit any forms, warranties, etc. that the Owner requires. The payment of the final amount due the Contractor shall release the Owner from any and all claims or liabilities on account of the work performed and the materials furnished upon the work. The payment terms shall be Net 30 days.

31. ETHICS POLICY / CODE OF CONDUCT

The Town of Wake Forest has established guidelines for ethical standards of conduct in that Town *representatives should maintain high standards of personal integrity, truthfulness, honesty, and fairness* in carrying out public duties; avoid any improprieties in their roles as public servants including the appearance of impropriety; and never use their position or power for improper gain. In establishing an ethics policy, the Town of Wake Forest desires to protect the public against decisions that are affected by undue influence, conflicts of interest, or any other violation of these policies as well as promote and strengthen the confidence of the public in their governing body.

32. E-VERIFY

Contractor shall comply with the requirements of Article 2 of Chapter 64 of the NC General Statutes. Further, if Contractor utilizes a subcontractor, Contractor shall require the subcontractor to comply with the requirements of Article 2 of Chapter 64 of the NC General Statutes.

33. HUBSCO REPORTING

All **building** construction and repair projects (\$30,000 & Over) require a E-Verify. Contractor shall comply with the requirements of Article 2 of Chapter 64 of the NC General Statutes. Further, if Contractor utilizes a subcontractor, Contractor shall require the subcontractor to comply with the requirements of Article 2 of Chapter 64 of the NC General Statutes. If a minority participation report is required to be submitted to the State of NC Department of Administration HUB Office, any information that is requested from the contractor must be provided before the last invoice will be paid.

34. IRAN DIVESTMENT ACT.

Contractor certifies that; (i) it is not identified on the Final Divestment List or any other list of prohibited investments created by the NC State Treasurer pursuant to N.C.G.S. 143-6A-4; (ii) it will not take any action causing it to appear on any such list during the term of this Purchase Order, and

(iii) it will not utilize any subcontractor to provide goods or services hereunder that is identified on any list.

35. DIVESTMENT FROM COMPANIES THAT BOYCOTT ISRAEL.

Contractor represents, covenants, and certifies that it is not listed on the list of restricted companies developed and published by the North Carolina State Treasurer as required by N.C.G.S. 147-86.81.

36. DISPUTE RESOLUTION

Any construction related disputes resulting from this bid shall be resolved using the procedures set for by the State Building Commission pursuant to NCGS 143-128(g) 143-135.26(11). These procedures may be viewed at: <https://www.nccourts.gov/assets/inline-files/Rules-of-the-Dispute-Resolution-Commission-Codified-1-May-2023.pdf?VersionId=YmqtK7BJomYKhbLUzNR.fyHAMv7Sev4X>

37. STANDARD TERMS AND CONDITIONS

The Town of Wake Forest’s Standard Terms and Conditions listed at:

https://www.wakeforestnc.gov/sites/default/files/uploads/purchasing/2023/9-27-23_towf_standard_terms_and_conditions.pdf will govern all matters related to the goods and/or services provided by you or your company (the “Vendor”) to the Town of Wake Forest (the “Town”) under a Town purchase order. Additional Terms and Conditions stated on the face of a Town purchase order shall take precedence over any conflicting Standard Terms and Conditions stated. Any Terms and Conditions not stated, but incorporated by reference therein, shall be binding only if provided or signed by the Town and attached hereto. In the event that a binding written contract signed by both the Vendor and the Town exists, the Terms and Conditions of that contract shall supersede any conflicting Standard Terms and Conditions.

38. PROJECT COORDINATOR / CONTACT

Htun, Min – mhtun@wakeforestnc.gov

39. QUESTIONS AND CLARIFICATIONS

Any questions regarding this bid must be submitted ***by email*** to the Project Coordinator. All questions may be submitted ***starting on Tuesday September 23th 2025 to Thursday October 2nd 2025 @ 2:00pm***

All questions will be answered individually and then combined and posted in an addendum.

40. REFERENCES

All bidders must submit a minimum of three references for similar public projects. Please submit the name of the project, the city/town the project was for and contact information for the person that was responsible for the project for the client.

PROPOSAL FORM
STREET RESURFACING PROJECT
BID # 0001-2025

The undersigned bidder affirms and declares that he has carefully examined all bidding documents and Instructions to Bidders which are acknowledged to be a part of this proposal, and agrees to provide all labor, materials, equipment, supervision, permits; abide by all local, state and federal laws, rules, regulations, and ordinances applicable to perform the work listed in the specifications and scope of work for the following sum to wit:

TOTAL BASE BID – Lump Sum

_____ Dollars \$_____

Construction Duration from NTP _____, this construction duration shall not exceed 250 Calendar days.

Address technical questions about the project to the Project Engineer: **Tim Watson / Min Htun.**

Tim Watson, PE
Engineering Director
twatson@wakeforestnc.gov

Min Htun
Senior Civil Engineer
mhtun@wakeforestnc.gov

ITEM 1- Scope of Project

Town’s various streets will be resurfaced.

ITEM 2- Addendums

All addendums must be acknowledged in order for the proposal to be considered.

Addendum #1 _____

Addendum #2 _____

Addendum#3 _____

The Town of Wake Forest intends to award a contract to the overall lowest responsible, responsive bidder taking into consideration quality, performance, and the time specified in this bid. The Town of Wake Forest reserves the right to reject or all proposals and to make the award as deemed in the best interest of the Town of Wake Forest.

All bidders MUST complete and submit with their bid the enclosed Non-Collusion Affidavit of Prime Bidder.

SIGNATURE PAGE

The undersigned certifies that they have read and understood all the provided bidding documents, the project specifications, and agree to the terms and conditions stated herein.

This bid must be signed by a responsible official of the bidding organization and notarized.

	(SEAL)
Date	
Company	
Authorized Signature	Federal Identification #
Printed Name and Title	Email Address
Street Mailing Address	City, State, Zip Code
Contactor's NC License No.	Telephone Number

On this day of _____, 20____, before me _____ (name) appeared and, being duly sworn, did execute the foregoing proposal, and did so state that he/she was properly authorized by _____ (name of company) to execute the proposal and did so on his/her free act and deed.

Notary Public _____ My Commission Expires _____ (SEAL)

NON-COLLUSION AFFIDAVIT OF PRIME BIDDER

attach to bid (required)

State of _____)

County of _____)

Project: Bid # 0001-2025-Street Resurfacing Project

_____, being first duly sworn, deposes and says that:

1. He is (owner, partner, officer, representative or agent) of _____,
the Bidder that has submitted the attached Bid;

2. He is fully informed respecting the preparation and contents of the attached bid and of all pertinent
circumstances respecting such Bid;

3. Such Bid is genuine and is not a collusive or sham Bid;

4. Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees or
parties in interest, including this Affiant, has in any way colluded, conspired, connived or agreed, directly or
indirectly, with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract
for which the attached Bid has been submitted or to refrain from bidding in connection with such contract, or
has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with
any other Bidder, firm or person to fix the price or prices in the attached Bids of any other Bidder, or to fix any
overhead, profit or cost element of the Bid price or the Bid price of any other Bidder, or to secure through any
collusion, conspiracy, connivance or unlawful agreement any advantage against the Town of Wake Forest or any
person interested in the proposed Contract; and

5. The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion,
conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives,
owners, employees or parties in interest, including this Affiant.

Name Title

Subscribed and Sworn to before me this _____ Day of _____, 20_____

Notary Public: _____ (Seal)

My Commission Expires: _____

Identification of Minority Business Participation

I, _____,

(Name of Bidder)

do hereby certify that on this project, we will use the following HUB Certified/ minority business as construction subcontractors, vendors, suppliers or providers of professional services. The Town of Wake Forest will accept both NC HUB and NC DOT certified minority vendors, unless otherwise stated in the bid documents.

Firm Name, Address and Phone #	Work Type	Minority Category	NC HUB NC DOT Certified	\$ Amount
			(Y/N)	

*Minority categories: Black, African American (B), Hispanic (H), Asian American (A)

American Indian (I), Female (F) Socially and Economically

Disadvantaged (D)

** HUB Certification with the state HUB Office required to be counted toward state participation goals.

The total value of minority business contracting will be (\$)

±

The total percentage of minority business contracting will be (%)

±

Town of Wake Forest -AFFIDAVIT A – Listing of Good Faith Efforts

County of _____

(Name of Bidder)

Affidavit of _____

I have made a good faith effort to comply under the following areas checked:

Bidders must earn at least 50 points from the good faith efforts listed for their bid to be considered responsive. (1 NC Administrative Code 30 I.0101)

- 1 – (10 pts)** Contacted minority businesses that reasonably could have been expected to submit a quote and that were known to the contractor, or available on State or local government maintained lists, at least 10 days before the bid date and notified them of the nature and scope of the work to be performed.
- 2 --(10 pts)** Made the construction plans, specifications and requirements available for review by prospective minority businesses or providing these documents to them at least 10 days before the bids are due.
- 3 – (15 pts)** Broken down or combined elements of work into economically feasible units to facilitate minority participation.
- 4 – (10 pts)** Worked with minority trade, community, or contractor organizations identified by the Office of Historically Underutilized Businesses and included in the bid documents that provide assistance in recruitment of minority businesses.
- 5 – (10 pts)** Attended Prebid meetings scheduled by the public owner.
- 6 – (20 pts)** Provided assistance in getting required bonding or insurance or provided alternatives to bonding or insurance for subcontractors.
- 7 – (15 pts)** Negotiated in good faith with interested minority businesses and did not reject them as unqualified without sound reasons based on their capabilities. Any rejection of a minority business based on lack of qualification should have the reasons documented in writing.
- 8 – (25 pts)** Provided assistance to an otherwise qualified minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letters of credit, including waiving credit that is ordinarily required. Assisted minority businesses in obtaining the same unit pricing with the bidder's suppliers in order to help minority businesses in establishing credit.
- 9 – (20 pts)** Negotiated joint venture and partnership arrangements with minority businesses in order to increase opportunities for minority business participation on a public construction or repair project when possible.
- 10 - (20 pts)** Provided quick pay agreements and policies to enable minority contractors and suppliers to meet cash-flow demands.

The undersigned, if apparent low bidder, will enter into a formal agreement with the firms listed in the Identification of Minority Business Participation schedule conditional upon scope of contract to be executed with the Owner. Substitution of contractors must be in accordance with GS143-128.2(d) Failure to abide by this statutory provision will constitute a breach of the contract.

The undersigned hereby certifies that he or she has read the terms of the minority business commitment and is authorized to bind the bidder to the commitment herein set forth.

Date: _____ Name of Authorized Officer: _____



Signature: _____

Title: _____

State of _____, *County of* _____

Subscribed and sworn to before me this _____ *day of* _____ *20* _____

Notary Public _____

My commission expires _____

Town of Wake Forest --AFFIDAVIT B-- Intent to Perform Contract With Own Workforce

County of _____

Affidavit of _____
(Name of Bidder)

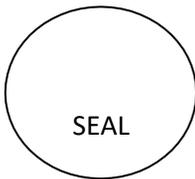
I hereby certify that it is our intent to perform 100% of the work required for the _____
_____ contract.
(Name of Project)

In making this certification, the Bidder states that the Bidder does not customarily subcontract elements of this type project, and normally performs and has the capability to perform and will perform all elements of the work on this project with his/her own current work forces; and

The Bidder agrees to provide any additional information or documentation requested by the owner in support of the above statement. The Bidder agrees to make a Good Faith Effort to utilize minority suppliers where possible.

The undersigned hereby certifies that he or she has read this certification and is authorized to bind the Bidder to the commitments herein contained.

Date: _____ Name of Authorized Officer: _____



Signature: _____

Title: _____

State of _____, County of _____ Subscribed and sworn to before me

this _____ day of _____ 20____ Notary Public _____

My commission expires. _____.

STATE OF NORTH CAROLINA

TOWN OF WAKE FOREST

AFFIDAVIT

I, _____ (the individual attesting below), being duly authorized by and on behalf of _____ (the entity bidding on project hereinafter "Employer") after first being duly sworn hereby swears or affirms as follows:

- 1. Employer understands that E-Verify is the federal E-Verify program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program used to verify the work authorization of newly hired employees pursuant to federal law in accordance with NCGS §64-25(5).
2. Employer understands that Employers Must Use E-Verify. Each employer, after hiring an employee to work in the United States, shall verify the work authorization of the employee through E-Verify in accordance with NCGS§64-26(a).
3. Employer is a person, business entity, or other organization that transacts business in this State and that employs 25 or more employees in this State. (Mark Yes or No)
a) YES _____, or
b) NO _____
4. Employer's subcontractors comply with E-Verify, and if Employer is the winning bidder on this project Employer will ensure compliance with E-Verify by any subcontractors subsequently hired by Employer.

This _____ day of _____, 20_____.

Signature of Affiant _____

Print or Type Name: _____

State of _____ County of _____ (Affix Seal)

Signed and sworn to (or affirmed) before me, this the _____

day of _____, 20_____.

My Commission Expires:

Notary Public

_____ BD - 18



TOWN of
WAKE FOREST

301 S. Brooks Street
Wake Forest, NC 27587
t 919.435.9400
www.wakeforestnc.gov

[Organization Name] [Address]
[City, State Zip] [Date]

Dear [Vendor Name],

We would like to thank you for your work on the [project name]. Below you will find the sales tax verification to be completed for the project. Prior to the official closeout and the issuance of the final payment, the Town of Wake Forest must receive a copy of this document with a notarized signature of an authorized official of your organization.

Sales Tax Affidavit

The Town of Wake Forest will not accept any transfer of liability for taxes due on admissions that the lessee has failed to charge and remit to the State of North Carolina or other taxing jurisdictions.

All users of facilities are solely responsible for collecting and remitting any and all applicable sales and use taxes to the North Carolina Department of Revenue and that the Town of Wake Forest assumes no obligation or responsibility for said taxes.

Authorized Official Name: _____

Authorized Official Signature: _____

Date: _____

Subscribed and sworn before me this _____ day of _____, _____.

Notary Public: _____

My Commission Expires: _____

Affidavit of Capital Improvement Instructions

Form E-589CI, Affidavit of Capital Improvement, may be issued to substantiate that a contract, or a portion of work performed to fulfill a contract, is a capital improvement to real property and subject to sales and use tax as a real property contract. Generally, services to real property are retail sales of or the gross receipts derived from repair, maintenance, and installation services, unless a person substantiates that a transaction is subject to tax as a real property contract, subject to tax as a mixed transaction contract, or the transaction is not subject to sales and use tax. A “real property contract” is a contract between a real property contractor and another person to perform a capital improvement to real property.

A mixed transaction contract is a contract that includes both a real property contract for a capital improvement and repair, maintenance, and installation services for real property that are not related to the capital improvement. For a mixed transaction contract, if the allocated sales price of the taxable repair, maintenance, and installation services included in the contract is less than or equal to twenty-five percent (25%) of the contract price, then the repair, maintenance, and installation services portion of the contract, and the tangible personal property, digital property, or service used to perform those services, are taxable as a real property contract for sales and use tax purposes.

- A person that issues Form E-589CI is liable for any additional tax due on the transaction in excess of tax paid on purchases pursuant to N.C. Gen. Stat. § 105- 164.4H(a), if it is determined that the transaction is not a capital improvement, but rather the transaction is subject to tax as a retail sale.
- A person who receives Form E-589CI from another person, absent fraud or other egregious activities, is not liable for any additional tax on the gross receipts from the transaction if it is determined that the transaction is not a capital improvement.
- Form E-589CI **is not an affidavit of tax paid** on tangible personal property, or digital property purchased or used to fulfill a real property contract.
- Form E-589CI may not be used to purchase tangible personal property, or digital property exempt from sales and use tax.

Exceptions from the Issuance of Form E-589CI to Establish a Transaction is to be Taxed as a Real Property Contract

In lieu of issuing an affidavit of capital improvement, a person may substantiate by other records that a transaction is a real property contract or a mixed transaction contract subject to tax as a real property contract, as discussed above, for a capital improvement to real property. However, where subcontractors are involved, it may be in the best interest of all parties to use Form E-589CI to ensure proper application of the sales and use tax laws.

Section I. Single Use Instructions

A person may complete “Section I - Single Use” for a one time use to substantiate that a transaction is a real property contract for a single capital improvement to real property and subject to sales and use tax as a real property contract. When a real property contractor hires a subcontractor to perform a portion of the overall real property contract and there is not a recurring business relationship between the two parties (when a period of no more than twelve months elapse between transactions between two parties), “Section I – Single Use” may be completed and the form issued to the subcontractor as notice that the transaction is subject to sales and use tax as a real property contract.

The following scenarios are for reference to assist a person to complete and issue Form E-589CI. The scenarios presented are not intended to cover all possible uses of the form.

A property owner oversees the entire activity to real property that is a real property contract for a capital improvement to real property. The property owner hires various subcontractors to complete the real property contract or portions thereof:

- **Box A - Owner, Lessee/Tenant or Real Property Contractor:** Enter property owner's name and address.
- **Box B - Real Property Contractor (General Contractor or Subcontractor):** Enter a single subcontractor's name and address.
- Owner listed in Box A must describe the real property contract activity to be performed.
- Owner listed in Box A must enter the project address (if different than the address entered in Box A).
- Authorized Person (owner) signs, enters title (owner), enters the date, and issues to the person listed in Box B.

A property owner hires a general contractor to oversee the entire activity to real property that is a real property contract for a capital improvement to real property. The general contractor hires a subcontractor to perform the real property contract, or portion thereof:

- **Box A - Owner, Lessee/Tenant or Real Property Contractor:** Enter general contractor's name and address.
- **Box B - Real Property Contractor (General Contractor or Subcontractor):** Enter subcontractor's name and address.
- General contractor listed in Box A must describe the real property contract activity to be performed.
- General contractor listed in Box A must enter the project address.
- Authorized Person (general contractor) signs, enters title (general contractor), enters the date, and issues to the person listed in Box B.

A lessee/tenant hires a general contractor for the installation of equipment that is to be attached to real property and will be depreciated under the Internal Revenue Code:

- **Box A - Owner, Lessee/Tenant or Real Property Contractor:** Enter lessee/tenant's name and address.
- **Box B - Real Property Contractor (General Contractor or Subcontractor):** Enter general contractor's name and address.
- Lessee or tenant listed in Box A must describe the capital improvement to be performed and indicate the equipment will be depreciated under the Internal Revenue Code.
- Authorized Person (typically lessee or tenant) signs, enters title (lessee or tenant), enters the date, and issues to the person listed in Box B.

Section II. Blanket Use Instructions

A real property contractor may complete "Section II – Blanket Use" and issue the form to another real property contractor (subcontractor) who is used exclusively to perform part, or all, of real property contracts with respect to capital improvements to real properties, where the parties have a recurring business relationship (when a period of no more than twelve months elapse between transactions between two parties). A blanket use affidavit continues in force so long as the real property contractor named in "Box C" and the real property contractor (subcontractor) named in "Box D" maintain a recurring business relationship or until the affidavit is withdrawn or otherwise notified by the issuer of the form.

The blanket use will generally apply for the following: (1) a builder who hires the same contractor(s) only for new construction; (2) a real property contractor who hires the same subcontractor(s) only for reconstruction; (3) a real property contractor who hires the same subcontractor(s) for remodeling or renovation and the activities performed by the subcontractor(s) for the other party are never repair, maintenance, and installation services for real property based on the contract or agreement between the parties; and (4) a real property contractor who exclusively hires the same subcontractor(s) to perform part, or all, of its real property contracts for capital improvements to real properties.

A general contractor or subcontractor hires a subcontractor that will replace the complete electrical wiring in all renovated homes:

- **Box C - Real Property Contractor:** Enter the hiring real property contractor's name and address.
- **Box D - Real Property Contractor (General Contractor or Subcontractor):** Enter the hired subcontractor's name and address.
- Authorized person listed in Box C signs, enters title, enters the date, and issues to the person listed in Box D.

**TOWN OF WAKE FOREST
2025 STREET RESURFACING PROJECT
SCHEDULE OF PRICES**

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT BID PRICE	BID AMOUNT
RESURFACING					
1	ASPHALT CONCRETE SURFACE MIX S9.5B	0	TON		\$ -
2	ASPHALT CONCRETE SURFACE MIX S9.5C	27,136	TON		\$ -
3	ASPHALT BINDER	1,627	TON		\$ -
4	MICRO SURFACING SINGLE COURSE, TYPE II	26,465	SYD		\$ -
RESURFACING SECTION SUBTOTAL					\$ -
UTILITY ADJUSTMENTS					
5	MANHOLE ADJUSTMENT (RAISE ONLY)	0	EA		\$ -
6	WATER VALVE BOX ADJUSTMENT (RAISE ONLY)	0	EA		\$ -
7	MANHOLE ADJUSTMENT (LOWER/RAISE)	335	EA		\$ -
8	WATER VALVE BOX ADJUSTMENT (LOWER/RAISE)	371	EA		\$ -
9	MILLING / CHIPPING AROUND UTILITY NOT ADJUSTED	0	EA		\$ -
10	MANHOLE ADJUSTMENT - OVERSIZE (LOWER/RAISE)	0	EA		\$ -
11	PROVIDE AND INSTALL MANHOLE RISER	0	EA		\$ -
12	PROVIDE AND INSTALL WATER VALVE RISER	0	EA		\$ -
13	PROVIDE NEW 7.5" MANHOLE FRAME & COVER	0	EA		\$ -
14	PROVIDE NEW 4" MANHOLE FRAME & COVER	0	EA		\$ -
UTILITY ADJUSTMENTS SECTION SUBTOTAL					\$ -
SIDEWALK IMPROVEMENTS					
15	SIDEWALK REMOVAL	0	SY		\$ -
16	4" SIDEWALK REPLACEMENT	882.5	SY		\$ -
17	6" SIDEWALK REPLACEMENT	57	SY		\$ -
18	6" CONCRETE DRIVEWAY	1,015	SY		\$ -
19	SAWCUT & REMOVAL OF CONCRETE CURB	0	LF		\$ -
20	SAWCUT & REMOVAL OF GRANITE CURB	0	LF		\$ -
21	CURB & GUTTER REMOVAL / REPLACEMENT	8,965	LF		\$ -
22	INSTALL NEW CURB & GUTTER	230	LF		\$ -
23	CONCRETE SIDEWALK ACCESS RAMPS WITH DETECTABLE WARNING SURFACE	265	EA		\$ -
24	CONCRETE SIDEWALK ACCESS RAMP REMOVAL	32	EA		\$ -
25	5" CONCRETE MONOLITHIC ISLAND	0	SY		\$ -
SIDEWALK IMPROVEMENTS SECTION SUBTOTAL					\$ -
MILLING					
26	MILLING (0-2") EDGE	215	SY		\$ -
27	MILLING (0-2") FULL WIDTH	39,930	SY		\$ -
28	MILLING (0-3") MILL & FILL	132,540	SY		\$ -
29	INCIDENTAL MILLING	8,634	SY		\$ -
MILLING SECTION SUBTOTAL					\$ -

	PAVEMENT PATCHING				
30	PAVEMENT PATCHING	324	TN		\$ -
	PAVEMENT PATCHING SECTION SUBTOTAL				\$ -
	PAVEMENT MARKINGS				
31	THERMOPLASTIC PAVEMENT MARKINGS - 4", 90 MILS	5,475	LF		\$ -
32	THERMOPLASTIC PAVEMENT MARKINGS - 8", 90 MILS	5,549	LF		\$ -
33	THERMOPLASTIC PAVEMENT MARKINGS - 24", 90 MILS	4,070	LF		\$ -
34	THERMOPLASTIC SYMBOLS - 90 MILS	15	EA		\$ -
35	THERMOPLASTIC CHARACTERS - 90 MILS	2	EA		\$ -
36	SPEED HUMP SYMBOL - 90 MILS	0	EA		\$ -
37	BIKE LANE ARROW - 90 MILS	0	EA		\$ -
38	BIKE SYMBOL - 90 MILS	0	EA		\$ -
39	BIKE SHARROW - 90 MILS	0	EA		\$ -
40	GREEN PAINT, 24"	0	LF		\$ -
41	SHARK TEETH SYMBOL, 24"	40	EA		\$ -
42	TEMPORARY PAINT, 4"	450	LF		\$ -
43	TEMPORARY PAINT, 8"	120	LF		\$ -
44	TEMPORARY PAINT, 24"	40	LF		\$ -
45	TEMPORARY PAINT SYMBOLS	4	EA		\$ -
46	TEMPORARY PAINT CHARACTERS	0	EA		\$ -
47	THERMOPLASTIC ERADICATION, LINES (4-24")	1,114	LF		\$ -
48	THERMOPLASTIC ERADICATION, SYMBOLS	0	EA		\$ -
49	THERMOPLASTIC ERADICATION, CHARACTERS	0	EA		\$ -
50	FLEXIBLE DELINEATORS	0	EA		\$ -
	PAVEMENT MARKINGS SECTION SUBTOTAL				\$ -
	SIGNALS & INTELLIGENT TRANSPORTATION SYSTEMS				
51	INDUCTIVE LOOP SAWCUT	360	LF		\$ -
52	BIKE COUNT LOOP SAWCUT	0	LF		\$ -
53	DETECTOR CARD (2070)	0	EA		\$ -
54	JUNCTION BOX, STANDARD	0	EA		\$ -
	SIGNALS & INTELLIGENT TRANS SYSTEMS SECTION SUBTOTAL				\$ -
	SPEED HUMPS				
55	REMOVE SPEED HUMP	14	EA		\$ -
56	INSTALL SPEED HUMP	14	EA		\$ -
	SPEED HUMPS SECTION SUBTOTAL				\$ -
	MISCELLANEOUS				
57	TEMPORARY TRAFFIC CONTROL	1	LS		\$ -
58	LAW ENFORCEMENT	0	LS		\$ -
59	PORTABLE LIGHTING, IF USED	0	LS		\$ -
60	SHALLOW UNDERCUT	50	CY		\$ -
61	FABRIC FOR SOIL STABILIZATION	0	SY		\$ -
62	GEOGRID FOR SOIL STABILIZATION	0	SY		\$ -
63	CLASS IV STONE FOR SOIL STABILIZATION	0	TN		\$ -
64	MASONRY DRAINAGE STRUCTURES	9	EA		\$ -
65	INCIDENTAL STONE BASE	240	TN		\$ -
66	OBJECT MARKERS (Adjacent to Roadway)	6	EA		\$ -
67	MOBILIZATION	1	LS		\$ -
	MISCELLANEOUS SECTION SUBTOTAL				\$ -

**TOWN OF WAKE FOREST
RESURFACING CONTRACT
GENERAL INFORMATION SHEET**

BID # 0001-2025

STREET	FROM	TO	MAP NO.	LENGTH (ft)	LENGTH (mi)	AREA (SY)	MILLING TYPE	REHABILITATION TREATMENT	OVERLAY DEPTH	TRAFFIC MARKS	SIGNAL LOOPS	ASPHALT IN/ABOVE GUTTER
AGNEW CT	LAKEVIEW AVE	CDS	1	353	0.07	1255	Full width	Mill 1.5" and replace with 2.0"	2.0 inch	no	no	no
ANDOVERSFORD CT	LINSLADE WAY	CDS	2	274	0.052	1110	Full width	Mill 1.5" and replace with 2.0"	1.5 inch	no	no	no
AUSTIN VIEW BLVD	WAIT AVE	TRAFFIC CIRCLE	3	3850	0.73	9290	Full width	Mill 1.5" and replace with 2.0"	2.0	yes	no	no
BATTERY CREST LN	WATERFORD RIDGE LN	CDS	4	759	0.144	2240	N/A	Seal & Patch then Microsurface Existing Pavement	MICRO	no	no	no
BEST ST	N ALLEN RD	7TH ST	5	415	0.08	980	Full width To Stone	Mill 1.5" and replace with 2.0"	2.0 inch	yes	no	no
BINKLEY CHAPEL CT	BREWER JACKSON CT	CDS	6	355	0.067	1200	Full width To Stone	Mill 2.5" and replace with 3.0"	3.0 inch	no	no	no
BREWER JACKSON CT	HIDDEN JEWEL LN	CDS	7	1108	0.14	3200	Full width	Mill 1.5" and replace with 2.0"	2.0 inch	no	no	no

BID # 0001-2025

BROYHILL HALL CT	BREWER JACKSON CT	CDS	8	315	0.06	1110	Full width To Stone	Mill 2.75" and replace with 3.0"	3.0 inch	no	no	no
CLATTER AVE	FAN OUT NW OF DAIRY HOUSE CT	CDS	9	1787	0.339	5900	N/A	Seal & Patch then Microsurface Existing Pavement	MICRO	yes	no	no
COCHRAN CT	BATT AVE	CDS	10	369	0.070	1320	Full width To Stone	Mill 2.75" and replace with 3.0"	3.0 inch	no	no	no
CORNWELL DR	LINSLADE WAY	DEAD END	11	3796	0.719	9290	Full width To Stone	Mill 3.0" and replace with 3.0"	3.0 inch	yes	no	no
DUNN MAPLE DR	MARSHALL FARM ST	HERITAGE LINKS DR	12	930	0.176	2360	Full width To Stone	Mill 2.25" and replace with 2.25"	2.25 inch	no	no	no
E PERRY AVE	N WHITE ST	JUBILEE CT	13	1700	0.33	5500	N/A	Seal & Patch then Microsurface Existing Pavement	MICRO	yes	no	no
E PINE AVE	N FRANKLIN ST	N ALLEN RD	14	1218	.231	3275	N/A	Seal & Patch then Microsurface Existing Pavement	MICRO	yes	no	no
EATON SQUARE CT	DARGAN HILLS DR	CDS	15	107	0.020	650	Full width	Mill 1.5" and replace with 2.0"	2.0 inch	no	no	no
FOREST LAKE CT	CDS	CDS	16	840	0.16	2610	Full width To Stone	Mill 2.5" and replace with 3.0"	3.0 inch	no	no	no
FOXBRIDGE CT	N TAYLOR ST	CDS	17	167	0.032	780	Full width To Stone	Mill 2.5" and replace with 3.0"	3.0 inch	no	no	no

BID # 0001-2025

HERITAGE CLUB AVE	SKY HILL PL	CHALK RD	18	3249	0.615	12130	Full width	Mill 3.0" and replace with 3.5"	3.5 inch	yes	no	no
HIDDEN JEWEL LN	HERITAGE CLUB AVE	CDS	19	2143	0.406	6400	Full width To Stone	Mill 2.75" and replace with 3.0"	3.0 inch	yes	no	no
JUBILEE CT	E JUNIPER AVE	CDS	20	993	0.188	3200	Full width To Stone	Mill 0.75" and replace with 3.0"	3.0 inch	no	no	no
KAPLAN WOODS WAY	CREEK MOSS AVE	CDS	21	326	0.062	1250	Full width To Stone	Mill 2.75" and replace with 3.0"	3.0 inch	yes	no	no
LAKEVIEW AVE	S WINGATE ST	CDS	22	3285	0.622	9520	Full width	Mill 3.0" and replace with 3.0"	3.0 inch	yes	no	no
LINDENBERG SQ	SONG SPARROW DR WEST	SONG SPARROW DR EAST	23	1869	0.354	5010	Full width To Stone	Mill 2.75" and replace with 3.0"	3.0 inch	yes	no	no
LITTLE TALL WAY	LAKEVIEW AVE	CDS	24	194	0.037	960	Full width	Mill 2.0" and replace with 2.0"	2.0 inch	no	no	no
LOGHOUSE ST	FEDERAL HOUSE AVE	CDS	25	1650	0.312	4970	Full width	Mill 2.25" and replace with 3.0"	3.0 inch	yes	no	no
LORING LAKE DR	AT CONSTRUCTION JOINT (NEAR 2632 LORING LAKE DR)	FAIRLAKE DR	26	753	0.143	2200	N/A	Seal & Patch then Overlay 2" Existing Pavement	2.0 inch	no	no	no
LUMBERMILL PT	LOGHOUSE ST	CDS	27	144	0.027	800	Full width	1.5" taper mill 4' to 5' from gutter, 1.5" overlay	1.5 inch	no	no	no

BID # 0001-2025

MARSHALL FARM ST	AT CONSTRUCTION JOINT (NEAR 1205 MARSHALL FARM ST)	OLD COLLEGE CIR (North Side)	28	930	0.176	3910	Full width	Mill 2.0" and replace with 2.0"	2.0 inch	yes	yes	no
MARTIN BENCH CT	QUATREFOIL ST	CDS	29	400	0.076	1590	Full width To Stone	Mill 2.25" and replace with 3.0"	3.0 inch	yes	no	no
MATHERLY DR	AT CONSTRUCTION JOINT (NEAR 7740 MATHERLY DR)	FAIRLAKE DR	30	301	0.057	750	Full width To Stone	Mill 2.0" and replace with 3.0"	3.0 inch	yes	no	no
MURDOCK CIR	BRATT AVE	CDS	31	134	0.025	710	Full width To Stone	Mill 3.0" and replace with 3.0"	3.0 inch	no	no	no
N FRANKLIN ST	E PINE AVE	E NELSON AVE	32	287	0.054	740	Full width To Stone	Mill 1.5" and replace with 3.0"	3.0 inch	no	no	no
N TAYLOR ST Section (1 of 3)	E PERRY AVE	GROVETON TRL	33	1298	.246	3070	Full width	Mill 2.5" and replace with 3.0"	3.0 inch	no	no	no
N TAYLOR ST Section (2 of 3)	E CEDAR AVE	E PERRY AVE	34	1111	0.21	3890	Full width	Mill 2.0" and replace with 2.0"	2.0 inch	no	no	no
N TAYLOR ST Section (3 of 3)	E SPRING ST	E CEDAR AVE	35	2716	0.514	5945	Full width	Mill 2.0" and replace with 2.0"	2.0 inch	yes	no	no
NELSON AVE	7TH ST	N ALLEN RD	36	233	0.044	1220	Full width To Stone	Mill 1.25" and replace with 1.75"	1.75 inch	no	no	no
OLD COLLEGE CIR	MARSHALL FARM ST (South Side)	MARSHALL FARM ST (North Side)	37	1241	0.235	2950	Full width	Mill 2.0" and replace with 3.0"	3.0 inch	yes	no	no

BID # 0001-2025

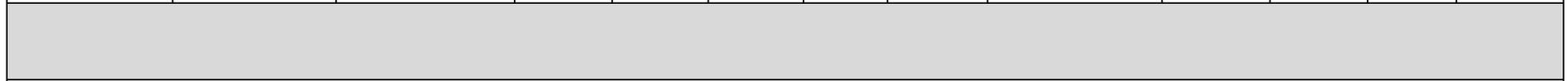
PARLANGE WOODS LN	DARGAN HILLS DR	CREEK MOSS AVE	38	607	0.115	1630	Full width	Mill 2.0" and replace with 3.0"	3.0 inch	no	no	no
PLIMOTH HILL DR	DARGAN HILLS DR	CREEK MOSS AVE	39	831	.157	2230	Full width	Mill 2.0" and replace with 3.0"	3.0 inch	no	no	no
PLUM CREEK LN	FOREST LAKE CT	PURNELL RD	40	477	0.090	1060	Full width	Mill 2.0" and replace with 3.0"	3.0 in	yes	no	no
PLUMMER CT	QUATREFOIL ST	CDS	41	352	0.067	1530	Full width	Mill 2.25" and replace with 3.0"	3.0 in	yes	no	no
QUATREFOIL ST	FEDERAL HOUSE AVE	DURHAM RD	42	575	0.109	2330	Full width	Mill 2.25" and replace with 3.0"	3.0 inch	yes	no	no
RODNEY BAY CRSG	LAKEVIEW AVE	CDS	43	1202	0.228	3710	Full width	Mill 2.5" and replace with 3.0"	3.0 inch	no	no	no
ROWSBY CT	SELSEY DR	CDS	44	100	0.019	895	Full width	Mill 2.25" and replace with 3.0"	3.0 inch	no	no	no
S COLLEGE ST (South Section)	W VERNON AVE	W SYCAMORE AVE	45	776	0.147	1810	Full width To Stone	Mill 2.25" and replace with 3.0"	3.0 inch	yes	no	no
S COLLEGE ST (North Section)	W OWEN AVE	W SOUTH AVE	46	589	0.112	1790	Full width To Stone	Mill 1.75" and replace with 2.5"	2.5 inch	yes	no	no
S WINGATE ST	PINE RIDGE CT	DEAD END	47	870	0.165	2235	Full width	Mill 2.0" and replace with 2.0"	2.0 inch	no	no	no

BID # 0001-2025

SAWNWORK CT	LOGHOUSE ST	CDS	48	248	0.047	1050	Full width To Stone	Mill 2.75" and replace with 3.0"	3.0 inch	no	no	no
SELSEY DR	S MAIN ST	STONE MOMUMENT DR	49	1284	0.243	3300	Full width	Mill 2.5" and replace with 3.0"	3.0 inch	yes	no	no
SONG SPARROW DR	3521 SONG SPARROW DR	FORESTVILLE RD	50	4658	0.882	15900	Full width	Mill 3.0" and replace with 3.0"	3.0 inch	yes	yes	no
SEVENTH ST	BEST ST	CONSTRUCTION JOINT	51	955	0.279	2405	Full width To Stone	Mill 1.5" and replace with 2.0"	2.0 inch	no	no	no
STONE BRIDGE CT	GROSS AVE	CDS	52	111	0.021	650	Full width To Stone	Mill 3.0" and replace with 3.0"	3.0 inch	no	no	no
STONE MONUMENT DR	428 STONE MONUMENT DR (CONSTRUCTION JOINT)	FORBES RD	53	1945	0.368	5350	Full width To Stone	Mill 2.25" and replace with 3.0"	3.0 inch	no	no	no
STONINGHAM PL	RICHLAND RIDGE DR	CDS	54	455	0.086	1770	Full width To Stone	Mill 2.5" and replace with 3.0"	3.0 inch	yes	no	no
TILGATE CT	SELSEY DR	CDS	55	176	0.033	870	Full width To Stone	Mill 2.5" and replace with 3.0"	3.0 inch	yes	no	no
TYLER RUN DR	W HOLDING AVE	DURHAM RD	56	2009	0.380	5820	Full width To Stone	Mill 2.75" and replace with 3.0"	3.0 inch	yes	no	no
VENFLOR CT	SELSEY DR	CDS	57	127	0.024	700	Full width	Mill 2.0" and replace with 2.0"	2.0 inch	no	no	no

BID # 0001-2025

W OWEN AVE	SOUTH COLLEGE ST	S MAIN ST	58	553	0.105	1650	Full width To Stone	Mill 2.75" and replace with 3.0"	3.0 inch	yes	no	no
W SYCAMORE AVE	S WINGATE ST	S MAIN ST	59	1090	0.207	2700	Full width To Stone	Mill 1.75" and replace with 2.5"	2.50 inch	yes	no	no
WARMOVEN ST (PART 1 OF 2)	ASPHALT JOINT (Near Hotel Entrance)	RETAIL DR	60	350	0.067	1400	Full width	Mill 1.5" and replace with 1.5"	1.5 inch	yes	no	no
WARMOVEN ST (PART 2 OF 2)	CLATTER AVE	ASPHALT JOINT (Near Hotel Entrance)	61	890	0.17	3200	N/A	Seal & Patch then Microsurface Existing Pavement	MICRO	yes	no	no
WATERFORD RIDGE LN	LIGON MILL RD	DEAD END	62	400	0.076	1375	Full width	Mill 2.0" and replace with 2.0"	2.0 inch	no	no	no
WINDSOR DR	S MAIN ST	FORESTVILLE RD	63	1200	0.23	2950	Full width To Stone	Mill 2.25" and replace with 4.0"	4.0 inch	yes	no	no
WOODLAND DR	TYLER RUN DR	S WINGATE ST	64	1865	0.353	6350	N/A	Seal & Patch then Microsurface Existing Pavement	MICRO	yes	no	no
WOOTEN CT	DUNN MAPLE DR	DEAD END	65	340	0.064	830	Full width To Stone	Mill 2.25" and replace with 2.25"	2.25 inch	no	no	no



Notes:

1. For Edge Mill streets, depth indicated is final depth of milling and asphalt at the edge of pavement.
2. For Full Mill streets, depth indicates specific depth below curb at edge of pavement. For example, if an existing full mill street has existing asphalt 1.5" above the curb & gutter or paved into the gutter, existing asphalt shall be "full milled" a total depth of 1.5" plus depth indicated for the street to achieve the desired final pavement elevation.
3. For mill & fill streets, the pavement shall be milled to stone and paved back in a period to satisfy ICT No.1-No.4.
4. All AC Adjustments shall be based upon NCDOT FOB Base Price Index of \$569.38 effective August 2025.
5. Taper paving to be flush with the gutter.
6. Field adjustments to the milling treatment and overlay may be required, depending on the performance of the existing pavement structure during construction.

2025 Resurfacing Street Estimate Totals Sheet									
Line Item	Description	Unit	AGNEW CT	ANDOVERSFORD CT	AUSTIN VIEW BLYVD	BATTERY CREST LN	BEST ST	BINKLEY CHAPEL CT	BREWER JACKSON CT
1	Asphalt Concrete Surface Course, Type S9.5B	TN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	Asphalt Concrete Surface Course, Type S9.5C	TN	140.0	125.0	1025.0	0.0	110.0	200.0	355.0
3	Asphalt Binder for Plant Mix, Type PG64-22	TN	9.0	8.0	61.0	0.0	7.0	12.0	21.0
4	Micro Surfacing Single Course, Type II	SY	0.0	0.0	0.0	2240.0	0.0	0.0	0.0
5	Manhole Adjustment (Raise Only)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	Water Valve Box Adjustment (Raise Only)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	Manhole Adjustment (Lower/Raise)	EA	1.0	2.0	8.0	5.0	2.0	2.0	6.0
8	Water Valve Box Adjustment (Lower/Raise)	EA	2.0	1.0	11.0	4.0	2.0	2.0	6.0
9	Milling/Chipping - Manhole/Valve Box	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	Manhole Adjustment - Oversize - (Lower/Raise)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	Provide and Install Manhole Riser	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	Provide and Install Water Valve Box Riser	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	Provide New 7.5" Manhole Frame and Cover	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	Provide New 4.0" Manhole Frame and Cover	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	Sidewalk Removal	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	4" Sidewalk	SY	0.0	0.0	20.0	5.0	0.0	0.0	10.0
17	6" Sidewalk	SY	0.0	0.0	0.0	0.0	12.0	0.0	0.0
18	6" Concrete Driveway	SY	17.0	0.0	0.0	0.0	0.0	5.0	0.0
19	Sawcut and Removal of Concrete Curb	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	Sawcut and Removal of Granite Curb	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	Curb & Gutter Removal and Replacement	LF	200.0	25.0	25.0	25.0	190.0	50.0	30.0
22	Install New Curb & Gutter	LF	0.0	0.0	0.0	0.0	40.0	0.0	0.0
23	Concrete Sidewalk Access Ramp w/Warning Surface	EA	0.0	0.0	19.0	4.0	0.0	0.0	2.0
24	Concrete Sidewalk Access Ramp Removal	EA	0.0	1.0	0.0	0.0	0.0	0.0	0.0
25	Concrete Monolithic Island	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	Milling Asphalt Pavement, Edge Milling (0-2")	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	Milling Asphalt Pavement, Full Mill (0-2")	SY	1255.0	1110.0	9290.0	0.0	0.0	0.0	3200.0
28	Milling Asphalt Pavement, Mill & Fill (0-3")	SY	0.0	0.0	0.0	0.0	980.0	1200.0	0.0
29	Incidental Milling	SY	62.8	55.5	464.5	0.0	49.0	60.0	160.0
30	Pavement Patching	TN	3	3	21	10	0	0	7
31	Thermoplastic Lines, 4" 90mils	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	Thermoplastic Lines, 8" 90mils	LF	0.0	0.0	1080.0	0.0	0.0	0.0	0.0
33	Thermoplastic Lines, 24" 90mils	LF	0.0	0.0	0.0	0.0	14.0	50.0	0.0
34	Thermoplastic Symbols, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	Thermoplastic Characters, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	Speed Hump Symbols, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	Bike Lane Arrow, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	Bike Lane Symbol, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	Bike Sharrow, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	Green Thermoplastic, 24" 90mils	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	Shark Teeth Symbols, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	Temporary Paint, 4"	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	Temporary Paint, 8"	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	Temporary Paint, 24"	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	Temporary Paint Symbols	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	Temporary Paint Characters	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	Thermoplastic Eradication, Lines (4-24")	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	Thermoplastic Eradication, Symbols	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	Thermoplastic Eradication, Characters	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	Flexible Delimiters	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	Inductive Loop Sawcut	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52	Bike Count Loop Sawcut	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	Detector Card (Type 2070)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	Junction Box, Std.	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	Remove Speed Hump	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	Install Speed Hump	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	Temporary Traffic Control	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	Law Enforcement	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	Portable Lighting	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	Shallow Undercut	CY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	Fabric For Soil Stabilization	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	GeoGrid for Soil Stabilization	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	Class IV Stone for Soil Stabilization	TN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	MASONRY DRAINAGE STRUCTURES	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	INCIDENTAL STONE BASE	TN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66	OBJECT MARKERS (Adjacent to Roadway)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2025 Resurfacing Street Estimate Totals Sheet										
Line Item	Description	Unit	BROYHILL HALL CT	CLATTER AVE	COCHRAN CT	CORNWELL DR	DUNN MAPLE DR	EPERRY AVE	EPINE AVE	EATON SQUARE CT
1	Asphalt Concrete Surface Course, Type S9.5B	TN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	Asphalt Concrete Surface Course, Type S9.5C	TN	185.0	0.0	220.0	1550.0	300.0	0.0	0.0	80.0
3	Asphalt Binder for Plant Mix, Type PG64-22	TN	11.0	0.0	13.0	92.0	18.0	0.0	0.0	5.0
4	Micro Surfacing Single Course, Type II	SY	0.0	5900.0	0.0	0.0	0.0	5500.0	3275.0	0.0
5	Manhole Adjustment (Raise Only)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	Water Valve Box Adjustment (Raise Only)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	Manhole Adjustment (Lower/Raise)	EA	2.0	14.0	1.0	18.0	3.0	8.0	6.0	1.0
8	Water Valve Box Adjustment (Lower/Raise)	EA	2.0	13.0	1.0	25.0	7.0	13.0	4.0	1.0
9	Milling/Chipping - Manhole/Valve Box	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	Manhole Adjustment - Oversize - (Lower/Raise)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	Provide and Install Manhole Riser	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	Provide and Install Water Valve Box Riser	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	Provide New 7.5" Manhole Frame and Cover	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	Provide New 4.0" Manhole Frame and Cover	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	Sidewalk Removal	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	4" Sidewalk	SY	0.0	50.0	5.0	20.0	0.0	10.0	5.0	0.0
17	6" Sidewalk	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	6" Concrete Driveway	SY	0.0	25.0	0.0	10.0	0.0	10.0	12.0	5.0
19	Sawcut and Removal of Concrete Curb	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	Sawcut and Removal of Granite Curb	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	Curb & Gutter Removal and Replacement	LF	30.0	85.0	25.0	75.0	20.0	25.0	180.0	25.0
22	Install New Curb & Gutter	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	Concrete Sidewalk Access Ramp w/Warning Surface	EA	0.0	11.0	2.0	20.0	2.0	5.0	2.0	0.0
24	Concrete Sidewalk Access Ramp Removal	EA	0.0	6.0	0.0	1.0	0.0	0.0	0.0	0.0
25	Concrete Monolithic Island	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	Milling Asphalt Pavement, Edge Milling (0-2")	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	Milling Asphalt Pavement, Full Mill (0-2")	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	650.0
28	Milling Asphalt Pavement, Mill & Fill (0-3")	SY	1110.0	0.0	1320.0	9290.0	2360.0	0.0	0.0	0.0
29	Incidental Milling	SY	55.5	0.0	66.0	464.5	118.0	0.0	0.0	32.5
30	Pavement Patching	TN	0	10	0	0	0	20	20	4
31	Thermoplastic Lines, 4" 90mils	LF	0.0	0.0	0.0	0.0	0.0	40.0	20.0	0.0
32	Thermoplastic Lines, 8" 90mils	LF	0.0	195.0	0.0	300.0	0.0	130.0	0.0	0.0
33	Thermoplastic Lines, 24" 90mils	LF	0.0	50.0	0.0	240.0	30.0	50.0	165.0	0.0
34	Thermoplastic Symbols, 90mils	EA	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0
35	Thermoplastic Characters, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	Speed Hump Symbols, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	Bike Lane Arrow, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	Bike Lane Symbol, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	Bike Sharrow, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	Green Thermoplastic, 24" 90mils	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	Shark Teeth Symbols, 90mils	EA	0.0	0.0	0.0	16.0	0.0	0.0	0.0	0.0
42	Temporary Paint, 4"	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	Temporary Paint, 8"	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	Temporary Paint, 24"	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	Temporary Paint Symbols	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	Temporary Paint Characters	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	Thermoplastic Eradication, Lines (4-24")	LF	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0
48	Thermoplastic Eradication, Symbols	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	Thermoplastic Eradication, Characters	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	Flexible Delimiters	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	Inductive Loop Sawcut	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52	Bike Count Loop Sawcut	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	Detector Card (Type 2070)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	Junction Box, Std.	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	Remove Speed Hump	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	Install Speed Hump	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	Temporary Traffic Control	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	Law Enforcement	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	Portable Lighting	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	Shallow Undercut	CY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	Fabric For Soil Stabilization	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	GeoGrid for Soil Stabilization	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	Class IV Stone for Soil Stabilization	TN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	MASONRY DRAINAGE STRUCTURES	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	INCIDENTAL STONE BASE	TN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66	OBJECT MARKERS (Adjacent to Roadway)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2025 Resurfacing Street Estimate Totals Sheet									
Line Item	Description	Unit	FOREST LAKE CT	FOXBRIDGE CT	HERITAGE CLUB AVE	HIDDEN JEWELL LN	JUBILEE CT	KAPLAN WOODS WAY	LAKEVIEW AVE
1	Asphalt Concrete Surface Course, Type S9.5B	TN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	Asphalt Concrete Surface Course, Type S9.5C	TN	435.0	135.0	2350.0	1100.0	530.0	210.0	1575.0
3	Asphalt Binder for Plant Mix, Type PG64-22	TN	26.0	8.0	139.0	65.0	32.0	13.0	93.0
4	Micro Surfacing Single Course, Type II	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Manhole Adjustment (Raise Only)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	Water Valve Box Adjustment (Raise Only)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	Manhole Adjustment (Lower/Raise)	EA	4.0	1.0	14.0	10.0	6.0	3.0	24.0
8	Water Valve Box Adjustment (Lower/Raise)	EA	2.0	6.0	23.0	14.0	8.0	2.0	20.0
9	Milling/Chipping - Manhole/Valve Box	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	Manhole Adjustment - Oversize - (Lower/Raise)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	Provide and Install Manhole Riser	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	Provide and Install Water Valve Box Riser	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	Provide New 7.5" Manhole Frame and Cover	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	Provide New 4.0" Manhole Frame and Cover	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	Sidewalk Removal	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	4" Sidewalk	SY	0.0	25.0	94.0	20.0	10.0	2.0	20.0
17	6" Sidewalk	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	6" Concrete Driveway	SY	0.0	0.0	8.5	0.0	60.0	6.0	60.0
19	Sawcut and Removal of Concrete Curb	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	Sawcut and Removal of Granite Curb	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	Curb & Gutter Removal and Replacement	LF	0.0	25.0	325.0	75.0	130.0	25.0	2700.0
22	Install New Curb & Gutter	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	Concrete Sidewalk Access Ramp w/Warning Surface	EA	0.0	2.0	23.0	2.0	2.0	1.0	13.0
24	Concrete Sidewalk Access Ramp Removal	EA	0.0	0.0	1.0	0.0	0.0	0.0	5.0
25	Concrete Monolithic Island	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	Milling Asphalt Pavement, Edge Milling (0-2")	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	Milling Asphalt Pavement, Full Mill (0-2")	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	Milling Asphalt Pavement, Mill & Fill (0-3")	SY	2610.0	780.0	12130.0	6400.0	3200.0	1250.0	9520.0
29	Incidental Milling	SY	130.5	39.0	606.5	320.0	160.0	62.5	476.0
30	Pavement Patching	TN	0	0	10		0	0	15
31	Thermoplastic Lines, 4" 90mils	LF	0.0	0.0	770.0	0.0	0.0	0.0	0.0
32	Thermoplastic Lines, 8" 90mils	LF	0.0	0.0	240.0	120.0	0.0	60.0	60.0
33	Thermoplastic Lines, 24" 90mils	LF	0.0	0.0	450.0	80.0	30.0	12.0	110.0
34	Thermoplastic Symbols, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	Thermoplastic Characters, 90mils	EA	0.0	0.0	0.0	2.0	0.0	0.0	0.0
36	Speed Hump Symbols, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	Bike Lane Arrow, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	Bike Lane Symbol, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	Bike Sharrow, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	Green Thermoplastic, 24" 90mils	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	Shark Teeth Symbols, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	8.0
42	Temporary Paint, 4"	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	Temporary Paint, 8"	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	Temporary Paint, 24"	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	Temporary Paint Symbols	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	Temporary Paint Characters	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	Thermoplastic Eradication, Lines (4-24")	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	Thermoplastic Eradication, Symbols	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	Thermoplastic Eradication, Characters	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	Flexible Delinators	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	Inductive Loop Sawcut	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52	Bike Count Loop Sawcut	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	Detector Card (Type 2070)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	Junction Box, Std.	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	Remove Speed Hump	EA	0.0	0.0	6.0	1.0	0.0	0.0	0.0
56	Install Speed Hump	EA	0.0	0.0	6.0	1.0	0.0	0.0	0.0
57	Temporary Traffic Control	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	Law Enforcement	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	Portable Lighting	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	Shallow Undercut	CY	0.0	0.0	0.0	0.0	30.0	0.0	0.0
61	Fabric For Soil Stabilization	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	GeoGrid for Soil Stabilization	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	Class IV Stone for Soil Stabilization	TN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	MASONRY DRAINAGE STRUCTURES	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	INCIDENTAL STONE BASE	TN	5.0	0.0	0.0	0.0	10.0	0.0	0.0
66	OBJECT MARKERS (Adjacent to Roadway)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2025 Resurfacing Street Estimate Totals Sheet

Line Item	Description	Unit	LINDENBERG SQ	LITTLE TALL WAY	LOCHOUSE ST	LORING LAKE DR	LUMBERMILL PT	MARSHALL FARM ST	MARTIN BENCH CT
1	Asphalt Concrete Surface Course, Type S9.5B	TN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	Asphalt Concrete Surface Course, Type S9.5C	TN	830.0	110.0	825.0	250.0	70.0	435.0	265.0
3	Asphalt Binder for Plant Mix, Type PG64-22	TN	49.0	7.0	49.0	15.0	5.0	26.0	16.0
4	Micro Surfacing Single Course, Type II	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Manhole Adjustment (Raise Only)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	Water Valve Box Adjustment (Raise Only)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	Manhole Adjustment (Lower/Raise)	EA	8.0	2.0	13.0	2.0	1.0	4.0	2.0
8	Water Valve Box Adjustment (Lower/Raise)	EA	9.0	1.0	13.0	0.0	1.0	6.0	3.0
9	Milling/Chipping - Manhole/Valve Box	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	Manhole Adjustment - Oversize - (Lower/Raise)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	Provide and Install Manhole Riser	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	Provide and Install Water Valve Box Riser	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	Provide New 7.5" Manhole Frame and Cover	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	Provide New 4.0" Manhole Frame and Cover	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	Sidewalk Removal	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	4" Sidewalk	SY	20.0	0.0	6.0	0.0	0.0	2.0	0.0
17	6" Sidewalk	SY	0.0	0.0	0.0	0.0	0.0	15.0	0.0
18	6" Concrete Driveway	SY	4.0	0.0	15.0	0.0	0.0	6.0	12.5
19	Sawcut and Removal of Concrete Curb	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	Sawcut and Removal of Granite Curb	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	Curb & Gutter Removal and Replacement	LF	75.0	25.0	35.0	0.0	25.0	100.0	25.0
22	Install New Curb & Gutter	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	Concrete Sidewalk Access Ramp w/Warning Surface	EA	8.0	0.0	6.0	0.0	0.0	12.0	0.0
24	Concrete Sidewalk Access Ramp Removal	EA	0.0	0.0	2.0	0.0	0.0	1.0	0.0
25	Concrete Monolithic Island	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	Milling Asphalt Pavement, Edge Milling (0-2")	SY	0.0	0.0	0.0	0.0	215.0	0.0	0.0
27	Milling Asphalt Pavement, Full Mill (0-2")	SY	0.0	960.0	0.0	0.0	0.0	3910.0	0.0
28	Milling Asphalt Pavement, Mill & Fill (0-3")	SY	5010.0	0.0	4970.0	0.0	0.0	0.0	1590.0
29	Incidental Milling	SY	250.5	48.0	248.5	0.0	10.8	195.5	79.5
30	Pavement Patching	TN	0	2	17	25	1	9	0
31	Thermoplastic Lines, 4" 90mils	LF	0.0	0.0	0.0	0.0	0.0	450.0	0.0
32	Thermoplastic Lines, 8" 90mils	LF	120.0	0.0	120.0	0.0	0.0	120.0	0.0
33	Thermoplastic Lines, 24" 90mils	LF	30.0	0.0	36.0	0.0	0.0	40.0	12.0
34	Thermoplastic Symbols, 90mils	EA	0.0	0.0	0.0	0.0	0.0	4.0	0.0
35	Thermoplastic Characters, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	Speed Hump Symbols, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	Bike Lane Arrow, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	Bike Lane Symbol, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	Bike Sharrow, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	Green Thermoplastic, 24" 90mils	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	Shark Teeth Symbols, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	Temporary Paint, 4"	LF	0.0	0.0	0.0	0.0	0.0	450.0	0.0
43	Temporary Paint, 8"	LF	0.0	0.0	0.0	0.0	0.0	120.0	0.0
44	Temporary Paint, 24"	LF	0.0	0.0	0.0	0.0	0.0	40.0	0.0
45	Temporary Paint Symbols	EA	0.0	0.0	0.0	0.0	0.0	4.0	0.0
46	Temporary Paint Characters	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	Thermoplastic Eradication, Lines (4-24")	LF	0.0	0.0	0.0	630.0	0.0	0.0	0.0
48	Thermoplastic Eradication, Symbols	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	Thermoplastic Eradication, Characters	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	Flexible Delinators	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	Inductive Loop Sawcut	LF	0.0	0.0	0.0	0.0	0.0	360.0	0.0
52	Bike Count Loop Sawcut	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	Detector Card (Type 2070)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	Junction Box, Std.	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	Remove Speed Hump	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	Install Speed Hump	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	Temporary Traffic Control	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	Law Enforcement	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	Portable Lighting	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	Shallow Undercut	CY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	Fabric For Soil Stabilization	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	GeoGrid for Soil Stabilization	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	Class IV Stone for Soil Stabilization	TN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	MASONRY DRAINAGE STRUCTURES	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	INCIDENTAL STONE BASE	TN	0.0	0.0	0.0	10.0	0.0	0.0	0.0
66	OBJECT MARKERS (Adjacent to Roadway)	EA	0.0	0.0	0.0	10.0	0.0	0.0	0.0

2024 Resurfacing Street Estimate Totals Sheet									
Line Item	Description	Unit	MATHERLY DR	MURDOCK CIR	N FRANKLIN ST	N TAYLOR ST Section (1 of 3)	N TAYLOR ST Section (2 of 3)	N TAYLOR ST Section (3 of 3)	NELSON AVE
1	Asphalt Concrete Surface Course, Type S9.5B	TN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	Asphalt Concrete Surface Course, Type S9.5C	TN	125.0	120.0	125.0	510.0	430.0	660.0	126.0
3	Asphalt Binder for Plant Mix, Type PG64-22	TN	8.0	8.0	8.0	31.0	26.0	39.0	8.0
4	Micro Surfacing Single Course, Type II	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Manhole Adjustment (Raise Only)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	Water Valve Box Adjustment (Raise Only)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	Manhole Adjustment (Lower/Raise)	EA	2.0	1.0	1.0	5.0	4.0	11.0	2.0
8	Water Valve Box Adjustment (Lower/Raise)	EA	0.0	1.0	1.0	7.0	10.0	15.0	0.0
9	Milling/Chipping - Manhole/Valve Box	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	Manhole Adjustment - Oversize - (Lower/Raise)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	Provide and Install Manhole Riser	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	Provide and Install Water Valve Box Riser	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	Provide New 7.5" Manhole Frame and Cover	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	Provide New 4.0" Manhole Frame and Cover	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	Sidewalk Removal	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	4" Sidewalk	SY	0.0	6.0	0.0	20.0	80.0	80.0	5.0
17	6" Sidewalk	SY	0.0	0.0	0.0	0.0	0.0	15.0	0.0
18	6" Concrete Driveway	SY	0.0	0.0	25.0	60.0	60.0	60.0	25.0
19	Sawcut and Removal of Concrete Curb	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	Sawcut and Removal of Granite Curb	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	Curb & Gutter Removal and Replacement	LF	0.0	25.0	50.0	100.0	250.0	250.0	180.0
22	Install New Curb & Gutter	LF	0.0	0.0	0.0	50.0	0.0	0.0	100.0
23	Concrete Sidewalk Access Ramp w/Warning Surface	EA	0.0	2.0	0.0	4.0	6.0	14.0	2.0
24	Concrete Sidewalk Access Ramp Removal	EA	0.0	0.0	0.0	0.0	0.0	3.0	0.0
25	Concrete Monolithic Island	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	Milling Asphalt Pavement, Edge Milling (0-2")	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	Milling Asphalt Pavement, Full Mill (0-2")	SY	0.0	0.0	0.0	0.0	3890.0	5945.0	0.0
28	Milling Asphalt Pavement, Mill & Fill (0-3")	SY	750.0	710.0	740.0	3070.0	0.0	0.0	1220.0
29	Incidental Milling	SY	37.5	35.5	37.0	153.5	194.5	297.3	61.0
30	Pavement Patching	TN	0	0	0	10	9	13	0
31	Thermoplastic Lines, 4" 90mils	LF	0.0	0.0	0.0	36.0	0.0	195.0	0.0
32	Thermoplastic Lines, 8" 90mils	LF	0.0	0.0	0.0	0.0	0.0	60.0	0.0
33	Thermoplastic Lines, 24" 90mils	LF	12.0	12.0	12.0	0.0	0.0	330.0	12.0
34	Thermoplastic Symbols, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	Thermoplastic Characters, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	Speed Hump Symbols, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	Bike Lane Arrow, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	Bike Lane Symbol, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	Bike Sharrow, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	Green Thermoplastic, 24" 90mils	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	Shark Teeth Symbols, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	Temporary Paint, 4"	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	Temporary Paint, 8"	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	Temporary Paint, 24"	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	Temporary Paint Symbols	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	Temporary Paint Characters	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	Thermoplastic Eradication, Lines (4-24")	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	Thermoplastic Eradication, Symbols	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	Thermoplastic Eradication, Characters	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	Flexible Delinators	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	Inductive Loop Sawcut	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52	Bike Count Loop Sawcut	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	Detector Card (Type 2070)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	Junction Box, Std.	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	Remove Speed Hump	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	Install Speed Hump	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	Temporary Traffic Control	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	Law Enforcement	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	Portable Lighting	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	Shallow Undercut	CY	0.0	0.0	0.0	20.0	0.0	0.0	0.0
61	Fabric For Soil Stabilization	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	GeoGrid for Soil Stabilization	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	Class IV Stone for Soil Stabilization	TN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	MASONRY DRAINAGE STRUCTURES	EA	0.0	0.0	0.0	0.0	0.0	4.0	0.0
65	INCIDENTAL STONE BASE	TN	10.0	0.0	0.0	40.0	0.0	40.0	5.0
66	OBJECT MARKERS (Adjacent to Roadway)	EA	0.0	0.0	0.0	3.0	0.0	3.0	0.0

2025 Resurfacing Street Estimate Totals Sheet

Line Item	Description	Unit	OLD COLLEGE CUR	PARLANGE WOODS LN	PLIMOTH HILL DR	PLUM CREEK LN	PLUMMER CT	QUATREFOIL ST	RODNEY BAY CRSG
1	Asphalt Concrete Surface Course, Type S9.5B	TN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	Asphalt Concrete Surface Course, Type S9.5C	TN	490.0	270.0	370.0	180.0	255.0	390.0	620.0
3	Asphalt Binder for Plant Mix, Type PG64-22	TN	29.0	16.0	22.0	11.0	16.0	24.0	37.0
4	Micro Surfacing Single Course, Type II	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Manhole Adjustment (Raise Only)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	Water Valve Box Adjustment (Raise Only)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	Manhole Adjustment (Lower/Raise)	EA	4.0	2.0	3.0	1.0	2.0	2.0	9.0
8	Water Valve Box Adjustment (Lower/Raise)	EA	5.0	2.0	3.0	3.0	2.0	4.0	7.0
9	Milling/Chipping - Manhole/Valve Box	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	Manhole Adjustment - Oversize - (Lower/Raise)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	Provide and Install Manhole Riser	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	Provide and Install Water Valve Box Riser	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	Provide New 7.5" Manhole Frame and Cover	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	Provide New 4.0" Manhole Frame and Cover	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	Sidewalk Removal	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	4" Sidewalk	SY	5.0	5.0	5.0	0.0	12.0	10.0	0.0
17	6" Sidewalk	SY	0.0	0.0	0.0	0.0	0.0	15.0	0.0
18	6" Concrete Driveway	SY	5.0	0.0	0.0	0.0	10.0	0.0	10.0
19	Sawcut and Removal of Concrete Curb	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	Sawcut and Removal of Granite Curb	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	Curb & Gutter Removal and Replacement	LF	25.0	50.0	50.0	0.0	40.0	55.0	50.0
22	Install New Curb & Gutter	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	Concrete Sidewalk Access Ramp w/Warning Surface	EA	1.0	4.0	4.0	0.0	2.0	2.0	0.0
24	Concrete Sidewalk Access Ramp Removal	EA	0.0	0.0	1.0	0.0	0.0	0.0	0.0
25	Concrete Monolithic Island	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	Milling Asphalt Pavement, Edge Milling (0-2")	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	Milling Asphalt Pavement, Full Mill (0-2")	SY	2950.0	0.0	0.0	1060.0	0.0	0.0	0.0
28	Milling Asphalt Pavement, Mill & Fill (0-3")	SY	0.0	1630.0	2230.0	0.0	1530.0	2330.0	3710.0
29	Incidental Milling	SY	147.5	81.5	111.5	53.0	76.5	116.5	185.5
30	Pavement Patching	TN	10	0	0	4	0	0	0
31	Thermoplastic Lines, 4" 90mils	LF	0.0	0.0	0.0	24.0	0.0	0.0	0.0
32	Thermoplastic Lines, 8" 90mils	LF	0.0	120.0	0.0	0.0	60.0	160.0	0.0
33	Thermoplastic Lines, 24" 90mils	LF	24.0	24.0	0.0	15.0	15.0	140.0	45.0
34	Thermoplastic Symbols, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	Thermoplastic Characters, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	Speed Hump Symbols, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	Bike Lane Arrow, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	Bike Lane Symbol, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	Bike Sharrow, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	Green Thermoplastic, 24" 90mils	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	Shark Teeth Symbols, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	Temporary Paint, 4"	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	Temporary Paint, 8"	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	Temporary Paint, 24"	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	Temporary Paint Symbols	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	Temporary Paint Characters	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	Thermoplastic Eradication, Lines (4-24")	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	Thermoplastic Eradication, Symbols	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	Thermoplastic Eradication, Characters	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	Flexible Delinators	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	Inductive Loop Sawcut	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52	Bike Count Loop Sawcut	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	Detector Card (Type 2070)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	Junction Box, Std.	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	Remove Speed Hump	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	Install Speed Hump	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	Temporary Traffic Control	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	Law Enforcement	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	Portable Lighting	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	Shallow Undercut	CY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	Fabric For Soil Stabilization	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	GeoGrid for Soil Stabilization	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	Class IV Stone for Soil Stabilization	TN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	MASONRY DRAINAGE STRUCTURES	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	INCIDENTAL STONE BASE	TN	0.0	0.0	0.0	10.0	0.0	0.0	0.0
66	OBJECT MARKERS (Adjacent to Roadway)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2025 Resurfacing Street Estimate Totals Sheet									
Line Item	Description	Unit	ROWSBY CT	S COLLEGE ST (South Section)	S COLLEGE ST (North Section)	S WINGATE ST	SAWNWORK CT	SELSEY DR	SONG SPARROW DR
1	Asphalt Concrete Surface Course, Type S9.5B	TN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	Asphalt Concrete Surface Course, Type S9.5C	TN	150.0	300.0	250.0	250.0	180.0	550.0	2650.0
3	Asphalt Binder for Plant Mix, Type PG64-22	TN	9.0	18.0	15.0	15.0	11.0	33.0	157.0
4	Micro Surfacing Single Course, Type II	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Manhole Adjustment (Raise Only)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	Water Valve Box Adjustment (Raise Only)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	Manhole Adjustment (Lower/Raise)	EA	1.0	3.0	2.0	3.0	2.0	8.0	30.0
8	Water Valve Box Adjustment (Lower/Raise)	EA	2.0	2.0	2.0	5.0	1.0	9.0	36.0
9	Milling/Chipping - Manhole/Valve Box	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	Manhole Adjustment - Oversize - (Lower/Raise)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	Provide and Install Manhole Riser	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	Provide and Install Water Valve Box Riser	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	Provide New 7.5" Manhole Frame and Cover	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	Provide New 4.0" Manhole Frame and Cover	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	Sidewalk Removal	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	4" Sidewalk	SY	0.0	10.0	10.0	0.0	0.0	15.0	150.0
17	6" Sidewalk	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	6" Concrete Driveway	SY	0.0	0.0	20.0	20.0	5.0	30.0	150.0
19	Sawcut and Removal of Concrete Curb	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	Sawcut and Removal of Granite Curb	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	Curb & Gutter Removal and Replacement	LF	25.0	25.0	50.0	465.0	25.0	55.0	50.0
22	Install New Curb & Gutter	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	Concrete Sidewalk Access Ramp w/Warning Surface	EA	0.0	3.0	0.0	0.0	0.0	5.0	38.0
24	Concrete Sidewalk Access Ramp Removal	EA	0.0	0.0	0.0	0.0	0.0	4.0	2.0
25	Concrete Monolithic Island	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	Milling Asphalt Pavement, Edge Milling (0-2")	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	Milling Asphalt Pavement, Full Mill (0-2")	SY	0.0	0.0	0.0	2235.0	0.0	0.0	0.0
28	Milling Asphalt Pavement, Mill & Fill (0-3")	SY	895.0	1810.0	1790.0	0.0	1050.0	3300.0	15900.0
29	Incidental Milling	SY	44.8	90.5	89.5	111.8	52.5	165.0	795.0
30	Pavement Patching	TN	0	0	0	5	0	0	10
31	Thermoplastic Lines, 4" 90mils	LF	0.0	0.0	880.0	0.0	0.0	0.0	120.0
32	Thermoplastic Lines, 8" 90mils	LF	0.0	60.0	60.0	0.0	60.0	160.0	720.0
33	Thermoplastic Lines, 24" 90mils	LF	0.0	15.0	15.0	15.0	15.0	75.0	825.0
34	Thermoplastic Symbols, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	5.0
35	Thermoplastic Characters, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	Speed Hump Symbols, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	Bike Lane Arrow, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	Bike Lane Symbol, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	Bike Sharrow, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	Green Thermoplastic, 24" 90mils	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	Shark Teeth Symbols, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	16.0
42	Temporary Paint, 4"	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	Temporary Paint, 8"	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	Temporary Paint, 24"	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	Temporary Paint Symbols	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	Temporary Paint Characters	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	Thermoplastic Eradication, Lines (4-24")	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	Thermoplastic Eradication, Symbols	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	Thermoplastic Eradication, Characters	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	Flexible Delinators	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	Inductive Loop Sawcut	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52	Bike Count Loop Sawcut	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	Detector Card (Type 2070)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	Junction Box, Std.	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	Remove Speed Hump	EA	0.0	0.0	0.0	0.0	0.0	1.0	0.0
56	Install Speed Hump	EA	0.0	0.0	0.0	0.0	0.0	1.0	0.0
57	Temporary Traffic Control	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	Law Enforcement	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	Portable Lighting	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	Shallow Undercut	CY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	Fabric For Soil Stabilization	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	GeoGrid for Soil Stabilization	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	Class IV Stone for Soil Stabilization	TN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	MASONRY DRAINAGE STRUCTURES	EA	0.0	0.0	2.0	0.0	0.0	0.0	0.0
65	INCIDENTAL STONE BASE	TN	0.0	0.0	50.0	0.0	0.0	0.0	0.0
66	OBJECT MARKERS (Adjacent to Roadway)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2025 Resurfacing Street Estimate Totals Sheet									
Line Item	Description	Unit	SEVENTH ST	STONEBRIDGE CT	STONE MONUMENT DR	STONINGHAM PL	TILGATE CT	TYLER RUN DR	VENFLORET
1	Asphalt Concrete Surface Course, Type S9.5B	TN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	Asphalt Concrete Surface Course, Type S9.5C	TN	215.0	110.0	890.0	295.0	150.0	970.0	80.0
3	Asphalt Binder for Plant Mix, Type PG64-22	TN	13.0	7.0	53.0	18.0	9.0	58.0	5.0
4	Micro Surfacing Single Course, Type II	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Manhole Adjustment (Raise Only)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	Water Valve Box Adjustment (Raise Only)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	Manhole Adjustment (Lower/Raise)	EA	7.0	1.0	12.0	3.0	1.0	8.0	1.0
8	Water Valve Box Adjustment (Lower/Raise)	EA	6.0	1.0	8.0	1.0	1.0	9.0	1.0
9	Milling/Chipping - Manhole/Valve Box	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	Manhole Adjustment - Oversize - (Lower/Raise)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	Provide and Install Manhole Riser	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	Provide and Install Water Valve Box Riser	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	Provide New 7.5" Manhole Frame and Cover	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	Provide New 4.0" Manhole Frame and Cover	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	Sidewalk Removal	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	4" Sidewalk	SY	16.0	10.0	40.0	5.0	0.0	30.0	0.0
17	6" Sidewalk	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	6" Concrete Driveway	SY	150.0	0.0	0.0	20.0	8.0	15.0	6.0
19	Sawcut and Removal of Concrete Curb	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	Sawcut and Removal of Granite Curb	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	Curb & Gutter Removal and Replacement	LF	625.0	60.0	110.0	40.0	50.0	350.0	50.0
22	Install New Curb & Gutter	LF	40.0	0.0	0.0	0.0	0.0	0.0	0.0
23	Concrete Sidewalk Access Ramp w/Warning Surface	EA	2.0	2.0	9.0	2.0	0.0	7.0	0.0
24	Concrete Sidewalk Access Ramp Removal	EA	0.0	0.0	1.0	0.0	0.0	2.0	0.0
25	Concrete Monolithic Island	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	Milling Asphalt Pavement, Edge Milling (0-2")	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	Milling Asphalt Pavement, Full Mill (0-2")	SY	0.0	0.0	0.0	0.0	0.0	0.0	700.0
28	Milling Asphalt Pavement, Mill & Fill (0-3")	SY	2405.0	1810.0	5350.0	1770.0	870.0	5820.0	35.0
29	Incidental Milling	SY	120.3	90.5	267.5	88.5	43.5	291.0	0.0
30	Pavement Patching	TN	0	0	0	0	0	0	2
31	Thermoplastic Lines, 4" 90mils	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	Thermoplastic Lines, 8" 90mils	LF	0.0	0.0	120.0	60.0	60.0	500.0	0.0
33	Thermoplastic Lines, 24" 90mils	LF	0.0	0.0	165.0	15.0	15.0	105.0	0.0
34	Thermoplastic Symbols, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	Thermoplastic Characters, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	Speed Hump Symbols, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	Bike Lane Arrow, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	Bike Lane Symbol, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	Bike Sharrow, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	Green Thermoplastic, 24" 90mils	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	Shark Teeth Symbols, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	Temporary Paint, 4"	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	Temporary Paint, 8"	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	Temporary Paint, 24"	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	Temporary Paint Symbols	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	Temporary Paint Characters	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	Thermoplastic Eradication, Lines (4-24")	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	Thermoplastic Eradication, Symbols	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	Thermoplastic Eradication, Characters	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	Flexible Delinators	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	Inductive Loop Sawcut	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52	Bike Count Loop Sawcut	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	Detector Card (Type 2070)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	Junction Box, Std.	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	Remove Speed Hump	EA	0.0	0.0	0.0	0.0	0.0	3.0	0.0
56	Install Speed Hump	EA	0.0	0.0	0.0	0.0	0.0	3.0	0.0
57	Temporary Traffic Control	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	Law Enforcement	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	Portable Lighting	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	Shallow Undercut	CY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	Fabric For Soil Stabilization	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	GeoGrid for Soil Stabilization	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	Class IV Stone for Soil Stabilization	TN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	MASONRY DRAINAGE STRUCTURES	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	INCIDENTAL STONE BASE	TN	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66	OBJECT MARKERS (Adjacent to Roadway)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2025 Resurfacing Street Estimate Totals Sheet											
Line Item	Description	Unit	W OWEN AVE	W SYCAMORE AVE	WARMOVEN ST (PART 1 OF 2)	WARMOVEN ST (PART 2 OF 2)	WATERFORD RIDGE LN	WINDSOR DR	WOODLAND DR	WOOTEN CT	
1	Asphalt Concrete Surface Course, Type S9.5B	TN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	Asphalt Concrete Surface Course, Type S9.5C	TN	280.0	380.0	120.0	0.0	160.0	970.0	0.0	105.0	
3	Asphalt Binder for Plant Mix, Type PG64-22	TN	17.0	23.0	8.0	0.0	10.0	58.0	0.0	7.0	
4	Micro Surfacing Single Course, Type II	SY	0.0	0.0	0.0	3200.0	0.0	0.0	6350.0	0.0	
5	Manhole Adjustment (Raise Only)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	Water Valve Box Adjustment (Raise Only)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	Manhole Adjustment (Lower/Raise)	EA	4.0	3.0	1.0	6.0	3.0	2.0	11.0	1.0	
8	Water Valve Box Adjustment (Lower/Raise)	EA	2.0	5.0	1.0	5.0	5.0	1.0	5.0	1.0	
9	Milling/Chipping - Manhole/Valve Box	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	Manhole Adjustment - Oversize - (Lower/Raise)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	Provide and Install Manhole Riser	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	Provide and Install Water Valve Box Riser	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	Provide New 7.5" Manhole Frame and Cover	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	Provide New 4.0" Manhole Frame and Cover	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	Sidewalk Removal	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	4" Sidewalk	SY	8.5	22.0	5.0	5.0	4.0	0.0	0.0	0.0	
17	6" Sidewalk	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	6" Concrete Driveway	SY	30.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	
19	Sawcut and Removal of Concrete Curb	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	Sawcut and Removal of Granite Curb	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	Curb & Gutter Removal and Replacement	LF	115.0	285.0	25.0	25.0	55.0	30.0	750.0	0.0	
22	Install New Curb & Gutter	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	Concrete Sidewalk Access Ramp w/Warning Surface	EA	2.0	6.0	4.0	4.0	3.0	0.0	1.0	0.0	
24	Concrete Sidewalk Access Ramp Removal	EA	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	
25	Concrete Monolithic Island	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	Milling Asphalt Pavement, Edge Milling (0-2")	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	Milling Asphalt Pavement, Full Mill (0-2")	SY	0.0	0.0	1400.0	0.0	1375.0	0.0	0.0	0.0	
28	Milling Asphalt Pavement, Mill & Fill (0-3")	SY	1650.0	2700.0	0.0	0.0	0.0	2950.0	0.0	830.0	
29	Incidental Milling	SY	82.5	135.0	70.0	0.0	68.8	147.5	0.0	41.5	
30	Pavement Patching	TN	0	0	2	30	3	0	50	0	
31	Thermoplastic Lines, 4" 90mils	LF	1760.0	1160.0	0.0	0.0	0.0	20.0	0.0	0.0	
32	Thermoplastic Lines, 8" 90mils	LF	60.0	0.0	60.0	240.0	60.0	0.0	384.0	0.0	
33	Thermoplastic Lines, 24" 90mils	LF	60.0	465.0	15.0	75.0	20.0	45.0	90.0	0.0	
34	Thermoplastic Symbols, 90mils	EA	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
35	Thermoplastic Characters, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
36	Speed Hump Symbols, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
37	Bike Lane Arrow, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
38	Bike Lane Symbol, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
39	Bike Sharrow, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
40	Green Thermoplastic, 24" 90mils	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
41	Shark Teeth Symbols, 90mils	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
42	Temporary Paint, 4"	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
43	Temporary Paint, 8"	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
44	Temporary Paint, 24"	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
45	Temporary Paint Symbols	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
46	Temporary Paint Characters	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
47	Thermoplastic Eradication, Lines (4-24")	LF	0.0	0.0	0.0	0.0	0.0	0.0	384.0	0.0	
48	Thermoplastic Eradication, Symbols	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
49	Thermoplastic Eradication, Characters	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
50	Flexible Delimiters	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
51	Inductive Loop Sawcut	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
52	Bike Count Loop Sawcut	LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
53	Detector Card (Type 2070)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
54	Junction Box, Std.	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
55	Remove Speed Hump	EA	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	
56	Install Speed Hump	EA	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	
57	Temporary Traffic Control	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
58	Law Enforcement	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
59	Portable Lighting	LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
60	Shallow Undercut	CY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
61	Fabric For Soil Stabilization	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
62	GeoGrid for Soil Stabilization	SY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
63	Class IV Stone for Soil Stabilization	TN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
64	MASONRY DRAINAGE STRUCTURES	EA	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	
65	INCIDENTAL STONE BASE	TN	0.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	
66	OBJECT MARKERS (Adjacent to Roadway)	EA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

GENERAL CONDITIONS

1. Definitions:

- a) The Contract documents shall consist of the Contract, the accepted Proposal, the General Conditions of the Contract, and the Drawings and Specifications, including all modifications thereof incorporated in the documents before their execution.
- b) Whenever the term "Contractor" is used, it shall be understood as referring to the General Contractor, subcontractor, and all other contractors or their duly authorized agent to whom the work here described is awarded by Contract.
- c) Whenever the term "Resurface" or "Resurfacing" is used, it shall be understood to mean all work associated with the Contract, including but not limited to utility adjustments, milling, patching, and asphalt overlay.
- d) Whenever the term "Director of Engineering" is mentioned, it is understood to mean the Director of Engineering, Town of Wake Forest, North Carolina, his assistant or duly authorized agent. The Director of Engineering or his authorized agent shall make all necessary explanations as to the meaning and intent of the Specifications, Plans, Special Provisions, or Contract and may correct any errors or omissions in same which is necessary for the proper fulfillment of its intentions. The term "Director of Engineering" or his authorized agent shall be synonymous or equivalent with the term "Engineer" and shall have full authority over the work as specified in Section 105-1 of the "North Carolina Department of Transportation Standard Specifications for Roads and Structures" latest edition.
- e) Whenever the term "Town" is used, it is to mean the Town of Wake Forest, North Carolina.
- f) The term "Work" of the Contractor or subcontractor includes labor or materials, or both, equipment, transportation, or other facilities necessary to complete the Contract.
- g) The "North Carolina Department of Transportation Standard Specifications for Roads and Structures", latest edition shall be considered a part of these specifications in to.
- h) The "North Carolina Department of Transportation Policies Procedures", for 2002 accommodating utilities on highway right of way shall be considered a part of these specifications in instances to which they are referred.
- i) The terms "Supplemental Agreement" and "Town Change Order" shall be understood to be synonymous.

2. Intent of Documents:

The intention of the documents is to include all labor and materials, equipment, and transportation necessary for the proper execution of the work. It is not intended, however, that materials or work not covered by or properly inferable from any heading, branch, class, or trade of the Specifications shall be supplied unless distinctly so noted on the drawings. Materials or work described in words which so applied have a well-known technical or trade meaning shall be held to refer to such recognized standards.

3. Detail Drawings and Instructions:

The Director of Engineering shall furnish with reasonable promptness, additional instructions, by means of drawings or otherwise, necessary for the proper execution of the work. All such drawings and instructions shall be consistent with the Contract documents, true developments thereof, and reasonably inferable therefrom.

4. Progress Schedule:

The Contractor shall prepare and submit for review and approval a schedule of proposed working progress. This schedule shall be submitted on forms supplied by the Engineer or in a format that is approved by the Engineer. A detailed Critical Path Method (CPM) schedule shall not be submitted to replace the progress schedule details required below.

The proposed progress schedule shall be submitted no later than 7 calendar days before the date of the project preconstruction conference and shall be approved before any payments will be processed for the project. In addition to the progress schedule, the contractor shall submit a two-week lookahead during construction if activities scheduled deviate from the most recently submitted progress schedule.

When the Engineer has extended the completion date or if the project overrun is anticipated to exceed 5%, the Contractor may submit a revised progress schedule to the Engineer for review and approval. If plan revisions are anticipated to change the sequence of operations in such a manner as will affect the progress but not the completion date, then the Contractor may submit a revised progress schedule for review and approval, but the completion date shall remain unchanged.

The proposed progress schedule shall contain the following items:

1. A time scale diagram with major work activities and milestones clearly labeled.
 - a. For purposes of composing the progress schedule, major work activities are defined as components comprising more than 5% of the total project cost or occupying more than 10% of total contract time and shall include, if applicable, the following
 - i. Asphalt Patching
 - ii. Utility Adjustments
 - iii. Other Incidental Concrete
 - iv. Milling Asphalt Pavement
 - v. Asphalt Resurfacing
 - vi. Pavement Markings
 - vii. Mircosurfacing
 - b. For purposes of composing the progress schedule, major milestones are derived from the project construction phasing and shall include, if applicable, the following:
 - i. Start of Work (May change based on NTP)
 - ii. Project ICTs

- iii. Map Completion Dates
- iv. Project Completion Date

2. A cash curve & Gantt Chart corresponding to the milestones of work and activities established in Part 1 above.

A written narrative that explains the sequence of work, the controlling operations, ICT completion dates, milestones, project phasing, anticipated work schedule and estimated resources. In addition, explain how any permit requirements, submittal tracking, and coordination with subcontractors, utility companies and other entities will be performed.

Failure to Maintain Satisfactory Progress

The Director of Engineer will check the Contractor's progress at the time each partial pay estimate is prepared.

The Town shall follow guidelines set forth in the NCDOT Standard Specifications, Latest Edition using the Article(s) referenced below.

The Contractor's progress may be considered as unsatisfactory as follows:

- (A) The Contractor's progress is found to be less than that described in either count below:
 - (1) The dollar value of the work completed, excluding material payments allowed by Article 109-5, is less than the dollar value of the work that should have been completed, on the basis of the Contractor's approved progress schedule, by more than 10% of the current contract amount. The dollar value of the work completed will be the total estimate to date shown in the latest partial pay estimate, excluding material payments allowed by Article 109-5. The current contract amount will be the total amount bid plus accumulated overruns less accumulated underruns shown in the latest partial pay estimate.
 - (2) The percentage of the work completed is less than the percentage of contract time elapsed on the work by more than 10%. The percentage of work completed will be the dollar value of the work completed as defined above, divided by the current contract amount as defined above. The percentage of contract time elapsed will be the number of calendar days elapsed as shown in the latest partial pay estimate divided by the total contract time in calendar days.
- (B) The Contractor fails to begin and pursue the work in accordance with Article 108-1 before the expiration of 5% of the original contract time after the date work was scheduled to begin based upon the approved progress schedule.
- (C) The Director of Engineer anticipates the Contractor will not complete the work described in the contract by the intermediate contract time or the contract completion date. When the Contractor's progress is found to be unsatisfactory as described in Sub-articles 108-8(A), 108-8(B) and 108-8(C) above, the Director of Engineer may make written demand of the Contractor to state in writing the reason for the unsatisfactory progress and produce such supporting data as the Town may require or the Contractor may desire to submit. The Director of Engineer will consider the justifications submitted by the Contractor and extensions of the completion date have or may be allowed in accordance with Subarticle 108-10(B).

6. Contractor's Understanding:

It is understood and agreed that the Contractor has, by careful examination satisfied himself as to the nature and location of the work, the conformation of the ground, the character, quality, and quantity of materials to be encountered, the character of equipment and facilities needed preliminary to and during the prosecution of the work, the general and local conditions, and all other matters which can in any way affect the work under this Contract. No verbal agreement or conversation with any officer, agent, or employee of the Town, either before or after the execution of the Contract shall affect or modify any terms or obligations herein contained.

7. Superintendence by Contractor:

Except where the Contractor is an individual and gives his personal superintendence to the work, the Contractor shall provide a competent superintendent, satisfactory to the Town of Wake Forest on the work at all times during working hours with full authority to act for him. The Contractor shall also provide an adequate staff for the proper coordination and prosecution of the work.

8. Materials, Appliances, Employees:

Unless otherwise specified, the Contractor shall provide and pay for all materials, labor, water, tools, equipment, light, power, transportation, and other facilities necessary for the execution and completion of the work.

Unless otherwise specified, all materials shall be new and both workmanship and materials shall be of good quality. The Contractor shall, if required, furnish satisfactory evidence as to the kind and quality of materials.

The Contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the work any unfit person or anyone not skilled in the work assigned to him.

9. Technical Specifications and Drawings:

Anything mentioned in the Technical Specifications and not shown on the Drawings or shown on the Drawings and not mentioned in the Technical Specifications shall be of like effect as if shown on or mentioned in both. In case of difference between Drawings and Technical Specifications, the Technical Specifications shall govern. In case of any discrepancy in Drawings, or Technical Specifications, the matter shall be immediately submitted to the Town of Wake Forest without whose decision, said discrepancy shall not be adjusted by the Contractor, save only at his own risk and expense.

10. Royalties and Patents:

The Contractor shall pay all royalties and patent fees. He shall defend all suits or claims for infringement of any patent rights and shall save the Town harmless from loss on account thereof, except that the town shall be responsible for such loss when a particular process or the product of a particular manufacturer or manufacturers is specified, but if the Contractor has information that the process or article specified is an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information to the Director of Engineering.

11. Permits:

Permits and licenses of a temporary nature necessary for the prosecution of the work shall be secured and paid for by the Contractor unless otherwise stipulated.

Permits, licenses and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the Town unless otherwise stipulated.

12. Protection of Work and Property:

The Contractor shall continuously maintain adequate protection of all his work from damage and shall protect the Town's and private property from injury or loss arising in connection with this Contract. He shall make good any such damages, injury, or loss, except such as may directly be due to errors in the Contract documents or caused by agents or employees of the Town.

13. Cooperation with Utility Owners:

Prior to the beginning of construction, the Town will notify all utility owners known to have facilities affected by the construction of the project. The Contractor shall coordinate the schedule with the utility owners for the necessary adjustments of all affected public or private utility facilities. The utility adjustments may be made either before or after the beginning of construction of the project. The adjustments will be made by the utility owner or his representative or by the Contractor when such adjustments are part of the work covered by his Contract.

The Contractor shall use special care in working around and near all existing utilities that are encountered during construction, protecting them where necessary so that they will give uninterrupted service. The Contractor shall call the agency concerned for location of all utilities and shall be responsible for any damage to existing utilities and structures resulting from his work around these utilities or structures.

The Contractor shall cooperate with the utility owner, and/or the owner's representative in the adjustment or placement of utility facilities when such adjustment or placement is made necessary by the construction of the project or has been authorized by the Town.

In the event that utility services are interrupted by the Contractor, the Contractor shall promptly notify the owners and shall cooperate with the owners and/or the owner's representative in the restoration of service in the shortest time possible.

Existing fire hydrants shall be kept accessible to fire department personnel at all times.

Prior to submitting his bid, the Contractor shall make his own determination as to the nature and extent of the utility facilities, including proposed adjustments, new facilities, or temporary work to be performed by the utility owner or his representative; and as to whether or not any utility work is planned by the owner in conjunction with the project construction. The Contractor shall consider in his bid all of the permanent and temporary utility facilities in their present or relocated positions, whether or not specifically shown on the plans or covered in the project special provisions. It will be the Contractor's responsibility to anticipate any additional costs to him resulting from such utility work and to reflect these costs in his bid for the various items in the Contract.

Where changes to utility facilities are to be made solely for the convenience of the Contractor, it shall be the Contractor's responsibility to arrange for such changes and the Contractor shall bear all costs of such changes.

14. Inspection of Work:

The Director of Engineering and his representatives shall at all times have access to the work wherever it is in preparation or progress and the Contractor shall provide facilities for such access and for inspection.

If the specifications, the Director of Engineering's instructions, laws, or ordinances or any public authority require any work to be specially tested or approved, the Contractor shall give the Director of Engineering timely notice of its readiness for inspection. Inspections by the Director of Engineering shall be promptly made, and where practicable at the source of supply. If any work should be covered up without approval or consent of the Director of Engineering, it must, if required by the Director of Engineering, be uncovered for examination at the Contractor's expense.

The presence of the Engineer, Director of Engineering or Inspector at the work site shall in no way lessen the Contractor's responsibility for conformity with the contract. Should the Engineer, Director of Engineering, or Inspector, at any time before final acceptance or during the contractual warranty period, fail to point out or reject materials or work that does not conform to the contract, whether from lack of discovery or for any other reason, it shall in no way prevent later rejection or corrections to the unsatisfactory materials or work when discovered. The contractor shall have no claim for losses suffered due to any necessary removals or repairs resulting from the unsatisfactory work.

15. Changes in Work:

The Town of Wake Forest, the Engineering Department, without invalidating the Contract, may direct additional work, extra work or make changes by altering, adding or deducting from the work, the Contract sum being adjusted accordingly. In case the method of construction or character of any part of the work is not covered by the plans, specifications, or contract documents, these provisions shall apply. The Town reserves the right to add or delete resurfacing maps to or from the contract.

The Contractor shall perform all work in accordance with the plans, specifications, standard drawings, and contract documents or that may be modified by written orders and shall do such additional, extra, and incidental work as may be considered necessary to complete the work to the full intent of the plans, specifications and contract provisions. Unless otherwise provided in the contract, the Contractor shall furnish all implements, machinery, tools, materials, supplies, transportation and labor necessary for the prosecution and completion of the work.

When it is necessary to make amendments to the contract to satisfactorily complete the proposed construction or to provide authorized time extensions, the Director of Engineering or his agent shall have the authority to enter into a Town Change Order (TCO) covering such amendments.

Town Change Orders (TCO's) shall become a part of the contract when executed by the Director of Engineering or his agent and an authorized representative of the Contractor.

Additional Work

Additional Work or alterations of the plans or details of construction shall be governed by NCDOT Specifications for Roads and Structures (Latest Edition) – Section 104-3

Overruns and Underruns in Contract Quantities

Overruns and Underruns in contract quantities shall be governed by NCDOT Specifications for Roads and Structures (Latest Edition) – Section 104-5

Eliminated Contract Items

Eliminated Contract Items shall be governed by NCDOT Specifications for Roads and Structures (Latest Edition)– Section 104-6

Extra Work

Extra Work Items shall be governed by NCDOT Specifications for Roads and Structures (Latest Edition) – Section 104-7

Compensation and Record Keeping

Compensation and Record Keeping for items of work in this section shall be governed by the NCDOT Specifications for Roads and Structures (Latest Edition) – Section 104-8.

The following items shall be governed by section 104-8:

1. Compensation for Additional Work or Extra work.
2. Claims for additional compensation.
3. Claims for additional compensation for suspension of work or alleged suspension of work.

Final Determination will be made by the Director of Engineering on all claims for additional compensation before payment of the final project invoice.

Claims for Time Extension

All claims for time extension shall be governed by the NCDOT Specifications for Roads and Structures (Latest Edition) – 108-10

16. Conformity with Plans and Specifications:

All work performed, and all materials furnished shall be in reasonably close conformity with the lines, grades, cross sections, dimensions, and material requirements, including tolerances, shown on the plans, or indicated in the specifications.

In the event the Director of Engineering finds the materials or the finished product in which the materials are used not within reasonably close conformity with the plans and specifications, but that reasonably acceptable work has been produced, he will then make a determination if the work is to be accepted and remain in place. If the Director of Engineering agrees that the work is to be accepted, he will have the authority to make such adjustment in Contract price as he deems warranted based upon sound engineering judgment and the final estimate will be paid accordingly.

In the event the Director of Engineering finds the materials or the finished product in which the materials are used, or the work performed are not in reasonably close conformity with the plans and specifications and have resulted in an inferior or unsatisfactory product, the work or materials shall be removed and replaced or otherwise corrected by the Contractor at no cost to the Town.

17. Liquidated Damages and Delays:

a) Liquidated Damages. If the work cannot be completed within the time stipulated in the Contract, including any extensions of time for excusable delays as herein provided, the Contractor shall pay to the Town of Wake Forest, a fixed and agreed amount, as liquidated damages for each calendar day of delay, until the work is completed, the amount as set forth in the Contract and the Contractor and his sureties shall be liable to the Town of Wake Forest for the amount thereof. Liquidated Damages will not be waived during completion of the final project punchlist, unless the contract time has been extended as allowed by the contract provisions.

b) Excusable Delays. The right of the Contractor to proceed shall not be terminated nor shall the Contractor be charged with liquidated damages for any delays in the completion of the work due to:

- i. Any act or omission of the Town outside the scope of the Contract, including extra work; acts of God; unusually severe and abnormal weather conditions; acts of any other contractor in the performance of work for the Town; or other conditions, events, or circumstances beyond the control and without the fault or negligence of the Contractor, which the Contractor could not have reasonably anticipated; or
- ii. Any delay of any Subcontractor occasioned by any of the causes specified in subparagraph (1) above. Provided, however, the Contractor shall provide written notice to the Director of Engineering within ten (10) days from the occurrence, condition, event, or other cause which is claimed to have delayed the completion of the work. Such notice shall state what effect, if any, such occurrence, condition, event, or other cause is claimed to have upon the time for completing the Contract work, and shall state in what respects, if any, the Contract completion deadline should be revised, and the reasons, therefore. No claim by the Contractor for an extension of time for completion shall be considered unless notice of such delay claim is given the Town in accordance with the provisions of this subparagraph.

c) No Damages for Delays. The Town shall not be obligated or liable to the Contractor for, and the Contractor hereby expressly waives any claims against the Town for, any damages, costs, or expenses of any nature occasioned by delays, work disruptions or interference, changes in work sequence, work suspension or rescheduling arising from any act or omission of the Town outside the scope of the Contract, acts of God, unusually severe and abnormal weather conditions, or other causes beyond the Contractor's control, it being understood and agreed that the Contractor's sole and exclusive remedy in the event of his inability to achieve completion by the Contract deadline due to claimed delays shall be an extension of the Contract schedule, but only if a claim for such extension is properly made in accordance with the provisions of subparagraph (b) above.

18. Opening Sections of Project to Traffic:

The Town of Wake Forest, at its election, may give notice to the Contractor and place in use those sections of the improvements which have been completed, inspected, and can be accepted as complying with the technical specifications; and if, in its opinion, each such section is reasonably safe, fit, and convenient for the use and accommodations for which it was intended. On such sections which are open, the Contractor shall conduct the remainder of his operations to cause the least obstruction to traffic. The Contractor shall not be relieved of his liability or responsibility, shall not receive any additional compensation due to the added cost of the work, nor shall he receive any extension of the completion date, by reason of such openings.

The Contractor shall not be responsible for any maintenance cost due directly to the use of such sections. The period of guarantee stipulated in Section 51 – Guarantee of Work, shall not begin to run until the date "of release of final inspection punch list items" for all work which the Contractor is required to construct under this Contract.

19. Town's Right to Do Work:

If the Contractor should neglect to prosecute the work promptly or fail to perform any provisions of the Contract, the Town, after 24 hours written notice to the Contractor, may without prejudice to any other remedy he may have, make good such deficiencies, and may deduct the cost thereof from the payment then or thereafter due the Contractor.

20. Correction of Work Before Final Payment:

Before issuing final payment, the Contractor shall promptly remove from the premises all materials condemned by the Director of Engineering as failing to conform with the Contract, whether incorporated in the work or not, and the Contractor shall promptly replace and re execute his own work in accordance with the Contract and without expense to the Town and shall bear the expense of making good all work of other Contractors destroyed or damaged by such removal or replacement.

21. Final Inspection, Clean Up and Project Final Acceptance:

a) Final Inspection

- i. When the improvements contained in this Contract are fully completed, the Contractor shall notify the Director of Engineering in writing that the work will be ready for final inspection on a definite date which shall be stated in the notice. The notice shall be given at least ten (10) days prior to the date stated for final inspection and bear the signed concurrence of the representative of the Director of Engineering having charge of the inspection. If the Director of Engineering determines that the status of the improvements is accurately represented, the Director of Engineering will make the arrangements necessary to have the final inspection on the date stated in the notice, or soon thereafter as is practicable. The Final Inspection Team will include the Director of Engineering's representatives and the Contractor. The Final Inspection Team may also include representatives of each department of the Town of Wake Forest as well as a representative of the North Carolina Department of Transportation.

- ii. The Final Inspection Team, on the date agreed upon in 21.01(a), shall make a thorough visual inspection to ensure that the project is fully completed according to the plans and specifications of the Contract and that all clean-up work is complete.
- iii. The Final Inspection Team, following the final inspection, shall prepare a written list of the deficient items and clean-up work that needs to be corrected before the issuance of the Final Acceptance Document.

b) Clean Up Work

Clean up work shall include removal of resurfacing materials and debris, and trash in the medians, rights of way, and driveways of the project and intersecting streets.

c) Project Final Acceptance

The Contractor, after finishing all clean-up work and correction of all deficient items, shall notify the appropriate party on the Inspection Team to make a final inspection of the project. If the Final Inspection Team, during its inspection finds that the deficient items and clean-up work have been fully completed according to the terms of this Article and the contract specifications, then the Final Inspection Team recommends to the Director of Engineering's Representative to issue the Final Acceptance Document.

22. Payments to Contractor and Retainage:

a) Partial Payments

- i. Partial payment will be based upon progress estimates prepared by the Director of Engineering once each month on the date established by the Director of Engineering.
- ii. Monthly or partial payments made by the Town of Wake Forest to the Contractor are monies advanced for the purpose of assisting the Contractor to expedite the work of construction. The Contractor shall be responsible for the care and protection of all materials and work upon which payments have been made until final acceptance of such work and materials by the Town of Wake Forest. Such payments shall not constitute a waiver of the right of the Town of Wake Forest to require the fulfillment of all terms of the contract and the delivery of all improvements embraced in this contract complete and satisfactory to the Town of Wake Forest in all details.

b) Pay Application

The Pay Application must be submitted promptly and accurately reflecting both the work completed during the billing period and the line items completed per street. Additionally, the contractor must keep accurate records of line items completed for each street and pay period. These records shall be provided upon request by the Director of Engineering or their representative during the review of the submitted Pay Application for the relevant period.

c) Retainage

Retainage will be deducted in accordance with Section 30 of the Contract documents.

d) Final Payment

- i. After final inspection and acceptance by the Town of Wake Forest and Director of Engineering all work under the contract, the Contractor shall prepare his requisition for final payment which shall be the sum of the Bid Unit Prices multiplied by the quantities actually issued or this sum adjusted by approved change orders less prior payments. Final payment request must be accompanied by the Final Payment Affidavit.
- ii. The Town of Wake Forest before paying the final estimate may require the Contractor to furnish releases or receipts from all subcontractors having performed any work and all persons having supplied materials, equipment, and services to the Contractor, if the Town of Wake Forest deems the same necessary in order to protect its interest. The Town of Wake Forest, however, may, if it deems such action advisable, make payment in part or in full to the Contractor without requiring the furnishing of such releases or receipts and any payments so made shall in no way impair the obligations of any surety or sureties furnished under the contract.
- iii. Withholding of any amount due the Town of Wake Forest as "Liquidated Damages", shall be deducted from payments due to the Contractor. The Town may withhold on account of subsequently discovered evidence, nullify whole or part of any certificate to such extent as may be necessary to project itself from loss on account of:
 - Defective work not remedied.
 - Claims filed or reasonable evidence indicating probable filing of claims.
 - Failure of the Contractor to make payments properly to Subcontractor or for materials or labor.
 - A reasonable doubt that the Contract can be completed for the balance unpaid.
 - Damage to another Contractor.

When the above items have been cleared to the satisfaction of the Director of Engineering, payment shall be made for amounts withheld because of them.

23. Town's Right to Terminate Contract:

If the Contractor should be adjudged as bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of insolvency, or if he should persistently or repeatedly refuse or should fail, except in cases for which extension of time is provided, to supply enough properly skilled workmen or proper materials, or if he should fail to make prompt payment to Subcontractors or for material or labor, or persistently discharged laws, ordinances or the instructions of the Director of Engineering, or otherwise be guilty of a substantial violation of any provision of the contract, then the Town, upon the certificate of the Director of Engineering that sufficient cause exists to justify such action, may without prejudice to any other

right or remedy and after giving the Contractor seven days written notice, terminate the employment of the Contractor and take possession of the premises and of all materials, tools, appliances, there and finish the work by whatever method it may deem expedient. In such case, the Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the contract price shall exceed the expense of finishing the work, including compensation for additional managerial and administrative services, such excess shall be paid to the Contractor. If such expense shall exceed the unpaid balance, the Contractor shall pay the difference to the Town. The expense incurred by the owner as herein provided, and the damage incurred through the Contractor's default, shall be certified by the Director of Engineering.

24. Contractor's Right to Stop Work or Terminate Contract:

If the work should be stopped under an order of any Court, or other public authority, for a period of three months, through no act or fault of the Contractor or of anyone employed by him, then the Contractor may, upon seven days written notice to the Director of Engineering, stop work or terminate this contract and recover from the Town payment for all work executed and loss sustained upon any plant or materials and reasonable profit and damages.

25. Liability Insurance:

The Contractor shall maintain such insurance as will protect him from claims under workman's compensation acts and such other insurance as will protect him and the Town from any other claims for damages for property damage and personal injury, including death, which may arise from operations under this contract whether such operations be by himself, or by any subcontractor or anyone directly or indirectly employed by either of them. Certificates of insurance shall be filed with the Director of Engineering, if he so requires, and shall be subject to his approval for adequacy of protection. Policies of insurance coverage for personal liability and property damage shall be submitted.

26. Care of Work:

a) The Contractor shall be responsible for all damages to person or property that occur as a result of his fault or negligence in connection with the prosecution of the work and shall be responsible for protection of all materials delivered and work performed until completion and final acceptance, whether or not the same has been covered in whole or in part by payments made by the Town of Wake Forest.

b) In an emergency affecting the safety of life or property, including adjoining property, the Contractor, without special instructions or authorization is authorized to act at his discretion to prevent such threatened loss or injury and he shall so act. He shall likewise act if instructed to do so by the Town of Wake Forest. Any compensation claimed by the Contractor on account of such emergency work will be determined by the Town of Wake Forest as provided in Section 15 "CHANGES IN WORK" under GENERAL CONDITIONS.

c) The Contractor shall avoid damage as a result of his operations to existing sidewalks, streets, curbs, pavements, utilities (except those which are to be replaced or removed), adjoining property, etc., and he shall at his own expense completely repair any damage thereto caused by his operations.

d) The Contractor shall shore up, brace, underpin, secure, and protect as may be necessary, all foundations and other parts of existing structures adjacent to, adjoining, and in the vicinity of

the site, which may be in any way affected by the excavations or other operations connected with the construction of the improvements embraced in this contract. The Contractor shall be responsible for the giving of any and all required notices to any adjoining or adjacent property owner or other party before the commencement of any work. The Contractor shall indemnify and save harmless the Town of Wake Forest from any damages on account of settlements or the loss of lateral support of adjoining property and from all loss or expense and all damages for which the Town of Wake Forest may become liable in consequence of such injury or damage to adjoining and adjacent structures and their premises. Any claim for damage arising under this contract shall be made in writing to the party liable within reasonable time of the first observance of such damage.

27. Safety and Accident Prevention:

a) General

The Contractor shall exercise proper precautions at all times for the protection of persons and property and shall be responsible for all damages to persons or property, either on or off the site, which occur as a result of his prosecution of the work. The Contractor shall abide by all applicable safety standards and regulations contained in the Occupational Safety and Health Act, for the construction industry and any other applicable Laws.

- i. All excavation and trenching work shall conform to OSHA requirements under 29 CFR Part 1926 Subpart P and any other applicable requirements.
- ii. The Contractor shall have an employee who is a designated competent person as described under OSHA regulations, 29 CFR Part 1926 Subpart P. The person shall be capable of identifying existing or predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.
- iii. The Contractor shall provide and maintain safety equipment as outlined under OSHA 29 CFR Part 1926 Subpart P and other applicable safety provisions, which include trench boxes, ladders, shoring, barricades, warning vests, gas monitors, meter for hazardous atmospheres and other necessary safety equipment to protect the employees and the job site.

b) Records

The Contractor shall maintain an accurate record of all cases of death, occupational diseases, and injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under the contract. The Contractor shall promptly furnish the Town of Wake Forest with reports concerning these matters.

c) Indemnity

The Contractor shall indemnify and save harmless the Town of Wake Forest from any claims for damages resulting from personal injury and/or death suffered or alleged to have been suffered by any person as a result of any work conducted under this contract.

29. Sanitary Facilities:

The Contractor shall furnish, install, and maintain ample sanitary facilities for the workers. As the needs arise, a sufficient number of enclosed temporary toilets shall be conveniently placed as

required by the sanitary codes of the State and Town of Wake Forest. Drinking water shall be provided from an approved source, so piped or transported as to keep it safe and fresh and served from single service containers or satisfactory types of sanitary drinking stands or fountains. All such facilities and services shall be furnished in strict accordance with existing and governing health regulations.

30. Use of Premises:

a) The Contractor shall confine his equipment, storage of materials, and construction operations to the contract limits as shown on the Drawings or if no contract limits are shown, to the right of way shown and as prescribed by ordinances or permits or as may be directed by the Town of Wake Forest and shall not unreasonably encumber the site or public rights of way with his materials and construction equipment.

b) The Contractor shall comply with all reasonable instructions of the Town of Wake Forest and the ordinances and codes of the Town of Wake Forest, regarding signs, advertising, traffic, fires, explosives, danger signals, and barricades.

31. Liens:

Neither the final payment nor any part of the retained percentage shall become due until the Contractor, shall deliver to the Town a complete release of all liens arising out of the contract, or receipts in full in lieu thereof and, if required in either case, an affidavit that so far as he has knowledge or information the releases and receipts include all labor and materials for which a lien could be filed but the Contractor may, if any subcontractor refuses to furnish a release or receipt in full, furnish a bond satisfactory to the Director of Engineering, to indemnify the Town against any lien. If any lien remains unsatisfied after all payments are made, the Contractor, shall refund to the Town all monies that the latter may be compelled to pay in discharging such a lien, including all costs and a reasonable attorney's fee.

A copy of the Affidavit is included with the Payment Bond Contract and shall be submitted with the Contractor's request for final payment.

32. Working Time Restrictions:

Intermediate Contract Time No. 1

No work on or street obstruction shall occur during the peak traffic hours of 6:30 a.m.-8:30 a.m. or 5:00 p.m.- 7:00 p.m., Monday through Friday, on the following streets.

a) Any street within the Town having a marked centerline or having marked lanes.

b) All streets with five (5) or more traffic lanes at the point of work, all streets with two (2) traffic lanes in each direction divided by a median, and all streets within the business area and district.

Work adjacent to traffic lanes may occur during these hours if proper signage and safety precautions are in effect as described in latest edition of the Manual on Uniform Traffic Control Devices.

The Contractor shall have monies withheld due to public inconvenience, obstruction and delay to traffic, safety, and other considerations, for any work performed on time restricted streets during

7:00 a.m. to 9:00 a.m. or 4:00 p.m. to 6:00 p.m., Monday-Friday at the rate of \$500.00 for every 15 minutes of violation or fraction thereof.

All town noise ordinances shall be observed, and Contractors are required to satisfy Town's ordinances Article III, Section 14-70.

No traffic lane closure (through or turn lane) shall occur on Red Alert Days. Red Alert Days are determined by North Carolina Ozone Forecast Center, Division of Air Quality.

The Contractor shall notify the Director of Engineering 72 hours in advance of any work scheduled on weekends.

No work on or street obstruction shall occur near heavy traffic generating venues during events such as, but not limited to amphitheatres, churches (Sunday), stadiums, etc. as directed by the Town. Such events shall include, but are not limited to, concerts, road races, parades, festivals, etc.

Intermediate Contract Time No.2

Night work shall be performed between the hours of 7:00 p.m. to 6:00 a.m. unless otherwise specified. Night shift work pay quantities shall be recorded on the day the shift begins. Patching, milling, and resurfacing operations shall be performed at night on the following streets:
High traffic streets, commercial roads, non-residential, and any street as determined by the engineer.

At the Town's election, concrete work, and utility adjustments may be allowed during daytime operations on the above maps. At no time will final milling and paving be allowed during daytime hours.

Message Boards will be required three (3) days in advance of work beginning for traffic notification.

The Contractor shall have monies withheld due to public inconvenience, obstruction and delay to traffic, safety, and other considerations, for any work performed on night work restricted streets during 6:00 a.m. until 7:00p.m. Monday-Friday at the rate of \$500.00 for every 15 minutes of violation or fraction thereof.

Intermediate Contract Time No. 3

Streets within school zones shall be resurfaced when schools are not in session. All other work may be performed during hours which do not impact school vehicular and pedestrian traffic.

The last day of school on the traditional calendar is June 12, 2024, and the first day is August 28, 2024.

Additionally, no resurfacing work shall not take place during hours of 7am-9am and 3pm-5pm Monday through Friday on streets adjacent to daycares.

The Contractor shall have monies withheld due to public inconvenience, obstruction and delay to traffic, safety, and other considerations, for any work performed on these streets during times that impact school traffic at a rate of \$500.00 for every 15 minutes of violation or fraction thereof.

Intermediate Contract Time No. 4

For all streets that have milling recommendations as Full Mill (0"-2") or Mill & Fill (0"-3") at any depth, shall be paved back within 72 hours of initial milling activities for the street. Streets which also fall under ICT No.1 or No.2 shall be paved back to the same station and elevation the same workday that they are milled.

The Contractor shall have monies withheld due to public inconvenience, obstruction and delay to traffic, safety, and other considerations, for any work performed on these streets during at a rate of \$500.00 for every calendar day past either the 72-hour requirement or same working day requirement, whichever one applies for the individual street.

34. Holiday Time Restrictions

The Contractor shall not narrow or close a lane of traffic on any road, detain and /or alter the traffic flow, and/or perform any work on or during holiday weekends, special events, or any other time when traffic is unusually heavy, including the following schedules without first obtaining approval from the Town of Wake Forest project representative:

- a) For unexpected occurrence that creates unusually high traffic volumes, as directed by the Engineer.
- b) For New Year's Day, between the hours of 6:00 P.M. December 31st and 7:00 A.M. January 2nd. If New Year's Day is on a Friday, Saturday, Sunday, or Monday, then until 7:00 A.M. the following Tuesday.
- c) For Easter, between the hours of 6:00 P.M. Thursday and 7:00 A.M. Monday.
- d) For Memorial Day, between the hours of 6:00 P.M. Friday and 7:00 A.M. Tuesday.
- e) For Independence Day, between the hours of 6:00 P.M. the day before Independence Day and 7:00 A.M. the day after Independence Day. If Independence Day is on a Friday, Saturday, Sunday, or Monday, then between the hours of 6:00 P.M. the Thursday before Independence Day and 7:00 A.M. the Tuesday after Independence Day.
- f) For Labor Day, between the hours of 6:00 P.M. Friday and 7:00 A.M. Tuesday.
- g) For Veteran's Day, between the hours of 6:00 PM November 10th and 7:00 AM November 12th.
- h) For Thanksgiving Day, between the hours of 6:00 P.M. Tuesday and 7:00 A.M. Monday.
- i) For Christmas, between the hours of 6:00 P.M. the Friday before the week of Christmas Day and 7:00 A.M. the following Tuesday after the week of Christmas Day.

Holidays and holiday weekends shall include New Year's, Easter, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas. The Contractor shall schedule his work so that lane closures are not required during these periods, unless otherwise directed by the Engineer.

The time of availability for this intermediate contract work shall be the time the Contractor begins to install all traffic control devices for lane closures according to the time restrictions listed herein.

The completion time for this intermediate contract work shall be the time the Contractor is required to complete the removal of all traffic control devices for lane closures according to the time restrictions stated herein and place traffic in the existing traffic pattern.

The Contractor shall have monies withheld due to public inconvenience, obstruction and delay to traffic, safety, and other considerations, for any work performed during Holiday Time Restrictions at the rate of \$500.00 for every 15 minutes of violation or fraction thereof.

35. Assignment:

Neither party to the contract shall assign the contract or sublet it as a whole without the written consent of the other, nor shall the Contractor assign any monies due or to become due to him hereunder, without previous written consent of the Board of Commissioners of the Town of Wake Forest.

36. Citizen Notification:

The contractor shall be responsible for notifying, in writing, all property owners/residents directly affected by this project just prior to beginning construction. A copy of this notification shall be submitted and approved by the Director of Engineering or his duly appointed representative prior to its issuance to the residents. This also includes all businesses whether owned, leased or rented by the property owner of record.

Notices are to be mailed and delivered. Hand delivered notices shall be door-hanger type printed on card stock.

The contractor shall distribute Notice of Schedule to resurface or Notice of Work a minimum of 1-MONTH in advance of when resurfacing is planned. Notice of Schedule sent to residents should consist of no more streets than the streets proposed for resurfacing for a 1-week period.

The contractor shall distribute Notice of Work and signs to be performed a minimum of 72-HOURS but no more than 2-WEEKS prior to performing such work. In the event resurfacing is scheduled for a weekend or holiday, the Notice of Work and signs shall be distributed a minimum of 72-HOURS but no more than 120-HOURS prior to the resurfacing.

The contractor shall post "Temporary No Parking" signs at least 3 feet above ground in conspicuous places facing traffic a minimum of 72-HOURS prior to actual resurfacing with a maximum spacing of 100 ft. required. A closer spacing may be required as directed by the Town of Wake Forest. Parking shall not be restricted for more than 7 days unless approved by the Town. The expected date and duration of resurfacing shall be posted on the "Temporary No Parking" sign. The duration for temporarily prohibiting parking shall not exceed 7 days. It shall be the contractor's responsibility to update the "Temporary No Parking" signs and work dates with any changes to the project schedule. Updates to the signs must be documented. Pictures with time stamps are the preferred documentation. Other forms of documentation need approval from the Town's engineer. It is the contractor's responsibility to keep this record and provide it if requested. The cost of towing and vehicle storage will be the responsibility of the contractor if proof of posted signs and notices cannot be provided.

The time of day that "Temporary No Parking" signs and Notices of Work are posted should be recorded along with the license numbers of cars parked on the street at that time and a copy made

available for the Director of Engineering and the POLICE DEPARTMENT if towing is necessary. The document is to be electronic and searchable.

If towing is necessary, the Director of Engineering or his designee will make the final decision if the vehicles are to be towed. The time and location in which the "Temporary No Parking" signs were posted, and the Notices of Work were distributed will be a considering factor for the towing of vehicles.

On the day of actual work, any towing necessary shall be the responsibility of the Contractor, in accordance with Town of Wake Forest Codes, Section 30-3 and Section 30-53, and Section 30-164. Police contact number is 919-554-6150.

Special permission may be required by agencies performing work within the street right-of-way under the following conditions. This permit may be required when:

- (a) When the traveled portion of the roadway is obstructed between the hours of 7 a.m. to 9 a.m. and 4 p.m. to 6 p.m. if the street involved is marked with either painted center lines or lane lines.
- (b) Any street which is totally closed to through traffic.
- (c) Any streets within the business area.

contractor shall notify the Town during distribution of citizen notifications if the street meets the above criteria. Any needed permits shall be coordinated through the Engineering Department in advance. The Director of Engineering has the authority to approve or deny issuance of any permit.

37. Separate Contracts:

The Town reserves the right to let other contracts in connection with this work. The Contractor shall afford other Contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work and shall properly connect and coordinate his work with others.

38. Subcontracted Work and Subcontractors:

- a) The Contractor shall, as soon as practicable after the signing of the contract, notify the Director of Engineering in writing of the names of subcontractors proposed for the work and shall not employ any subcontractors that the Director of Engineering may within a reasonable time object to as incompetent or unfit. The Contractor agrees that he is as fully responsible to the Town for the acts and omissions of his subcontractor and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him. Nothing in the Contract Documents shall create any contractual relation between any subcontractor and the Town.
- b) The Contractor shall obtain approval of subcontractors as well as any change in subcontractors during the work on the contract from the Director of Engineering. A period of seven (7) days minimum is required for the approval of a subcontractor.

39. Points and Instructions:

The Contractor shall provide reasonable and necessary opportunities and facilities for setting points and making measurements. He shall not proceed until he has made timely demand upon the Director of Engineering for, and has received from him, such points and instructions as may be

necessary as the work progresses. The work shall be done in strict conformity with such points and instructions.

The Contractor shall carefully preserve benchmarks, reference points, markings and stakes, and in case of willful or careless destruction, he shall be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.

40. Status of Director of Engineering:

The Director of Engineering shall have general supervision and direction of the work. He has authority to stop the work wherever such stoppage may be necessary to insure proper execution of the contract. He shall also have authority to reject all work and materials which do not conform to the contract, to direct the application of force to any portion of the work, as in his judgment is required, and to order the force increased or diminished, and to decide questions which arise in the execution of the work.

41. Director of Engineering's Decision:

The Director of Engineering shall, within a reasonable time after their presentation to him, make decisions in writing on all claims of the Town or the Contractor and on all other matters relating to the execution and progress of the work or the interpretation of the contract documents. All such decisions of the Director of Engineering shall be final.

42. Lands for Work:

The Town shall provide the lands upon which the work under this contract is to be done, except that the Contractor shall provide land required for the erection of temporary construction facilities and storage of his materials, together with right of access to same.

43. Cleaning Up:

The Contractor shall, as directed by the Director of Engineering, remove from the Town's property and from all other public and private property, at his own expense, all temporary structures, rubbish, and waste materials resulting from his own operations.

44. Access to Property:

The Contractor shall, where necessary, provide and maintain access to and from all properties along the line of his work.

45. Safeguards:

The Contractor shall provide, erect, and maintain adequate barricades, warning signs, and lights at all excavations, closures, detours, and points of danger.

46. Survey Construction Stakes:

- a) The Town shall furnish all surveys unless otherwise specified.
- b) The Director of Engineering will set sufficient points to establish alignment and grade. The Contractor shall be responsible for preserving all stakes and marks.

47. Materials Sampling and Testing:

All tests of material shall be made by a recognized and approved testing laboratory designated by the Director of Engineering. The expense of such tests shall be borne by the Town unless otherwise specified.

The Engineer shall have the option to reject request for testing due to the Contractor's inadequate preparation of material or other reasonable causes determined by the Engineer as necessary for the delay of testing. The Contractor shall notify the Director of Engineering 48 hours ahead of time for the needed test.

48. Tools, Plant and Equipment:

If at any time before the commencement or during the work, tools, plant, or equipment appear to the Director of Engineering to be insufficient, inefficient, or inappropriate to secure the quality of the work required or the proper rate of progress, the Director of Engineering may order the Contractor to increase their efficiency, to improve their character, to augment their number, or to substitute new tools, plant or equipment as the case may be, and the Contractor must conform to such order; but the failure of the Director of Engineering to give such an order shall not relieve the Contractor to secure the quality of work and the rate of progress necessary to complete the work within the time required.

49. Measurement of Quantities:

The quantities of work performed will be computed by the Director of Engineering on the basis of measurements taken by him or his assistants, and these measurements shall be final and binding. The specifications shall designate the manner in which the measurements of the various types of work shall be measured.

50. Working Day Defined:

A day shall be counted as a working day in the opinion of the Director of Engineering, whether conditions would permit the Contractor to do six (6) hours of work within daylight hours. Days of delay due to acts of GOD, strikes, court orders, and things of like nature causing delay of the work shall not be counted a working day. The Director of Engineering shall keep a daily record of working conditions and when requested to do so, he/she shall furnish the Contractor within a reasonable time the number of working days that have elapsed.

Unless crews are on site prior to 1:00 p.m. of any workday, the Director of Engineering has the right to refuse any work that the Contractor may do. To start work after 1:00 p.m. on a workday, the Contractor must have prior permission from the Director of Engineering. Should this occur, it will be counted as a working day that the Contractor should have worked. It will not be counted as a day of delay. When work is to resume, one (1) day prior notice must be given to the Director of Engineering. That work will begin the next There are specific streets that need to be paved on weekends (Saturday and Sunday). Where possible, streets that can be identified, will be marked, streets not marked on Contract, as weekend work, may be added by the Transportation Director. Advance notice must be given to Contractor, and a date mutually set to pave on that weekend.

51. Project Time Defined:

Project time shall consist of all calendar days, including weekends and holidays, from the contract notice to proceed date through the specified number of days allowed for the completion of the

project in the contract document. The Contractor has been given a project time inclusive of an anticipated amount of bad weather, be it due to the winter months or abnormal rainfall during the remainder of the calendar year.

52. Guarantee of Work:

The Contractor shall guarantee his work performed under his contract against failures or trouble due to faulty workmanship or materials for a period of twelve (12) months from the date of acceptance of the work.

53. Force Account Work:

Force account work shall be performed when pricing associated with changes in work in Item 15 cannot be agreed upon by the Town and Contractor.

No work shall begin without the express approval of the Director of Engineering or his authorized agent.

All information shall be submitted and approved along with recordkeeping performed in accordance with the North Carolina Department of Transportation Standard Specifications Article 109-3.

54. Disposal of Waste Materials from Street and any Other Types of Construction:

Disposal of all waste material from construction sites shall be made in strict accordance with all Town ordinances pertaining to disposal of construction waste. It shall be the responsibility of the Contractor to secure the necessary permits and provide all information required to secure said permits. The Contractor shall designate the disposal site prior to beginning construction and in the event waste material is to be disposed of on private property a letter from the property owner shall be furnished the Director of Engineering granting the Contractor or his agent such permission and listing the requirements made by the property owner or the Contractor, if any.

55. Contractor License:

All invited bidders and contractors shall be advised that those who submit formal bids on this project must be licensed in the State of North Carolina whether he (they) is/are a resident or nonresident of this State, in accordance with GS 87 10 and shall be advised that they must show evidence of a license issued by the North Carolina Licensing Board for General Contractors before the bid is considered. The bidders are advised that Article 37 Subcontractors, of the General Conditions shall be strictly adhered to during the term of this contract.

56. Emergency Work Crew:

The Contractor and/or the Contractor's subcontractors shall provide an emergency repair crew with adequate trucks and other equipment available when needed to make repairs, clean up, signing and other work required in connection with this contract. This repair crew shall be on call during non-working hours and during weekends and holidays. The name, address, and phone number of at least two responsible members of this crew shall be provided the Director of Engineering or his representatives prior to beginning any work. The members of this crew shall be based, reside, live, or stay in Wake County during the periods that they are on call. Should this "emergency" crew be unavailable for any reason when needed, the Town shall have the right have the required work

performed by the quickest means available and the Contractor shall be back charged at a rate of two (2) times the total cost to the Town.

57. Construction Water:

- a) Contractors are responsible for securing adequate construction water for their job sites.
- b) All construction water usage must be metered and will be billed to the Contractor. The Contractor must contact the Public Utilities Department, Meter Services Division (919-250-2737) to make the applicable arrangements for billing the water usage. The Contractor may provide his own meter or if available upon advance notice to the Public Utilities Department, a number changed to meter will be provided. If the Contractor provides his own meter it must meet City of Raleigh standards for the meter and include a backflow device.
- c) Construction water for all Town contract projects shall be billed by the City of Raleigh, Public Utilities Department.
- d) Contractors must furnish the following information for water usage.
 - i. Meter location and project name.
 - ii. Address where applicable and responsible party name.
 - iii. Duration of use and frequency of meter reading.
- e) Contractors observed using unmetered water will be fined by the City of Raleigh, Public Utilities Department in accordance with City of Raleigh Code provisions.
- f) Contractors are to reference the Public Utilities Handbook, Part 10, entitled Construction Specifications for Water and Sewer Mains, for additional regulations applicable to construction water usage.

58. Dust Control:

The Contractor shall, as directed by the Director of Engineering provide adequate equipment and use other available means to control the dust during the term of this contract. Failure on the part of the Contractor to correct dust control problems as directed will result in the Director of Engineering notifying the Contractor to comply with the contract provisions. In the event that the Contractor fails to begin such remedial action within 24 hours after receipt of such notice, the Director of Engineering may proceed to have the work performed with other forces. The actual cost of the work so performed along with a 20% administrative fee will be deducted from monies due to the Contractor on his contract. Under adverse conditions, the Director of Engineering may choose to suspend the Contractor's operations on the project until all dust control problems have been completed to his satisfaction. Such suspension will not justify an extension of contract time.

59. Traffic Control:

All traffic control shall be performed in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD) and NCDOT Standard Drawings.

The contractor shall provide all traffic control devices and signs including Portable Changeable Message Signs (PCMS) in accordance with MUTCD to warn the traveling public. PCMS are

required on all streets with four (4) or more marked lanes. PCMS shall be installed at least three (3) days in advance of work and maintained throughout the duration of the work.

Two-way traffic shall be maintained at all times unless otherwise approved by the traffic control plan. Total road closures shall not be allowed.

Any work performed without traffic control per MUTCD, will not be paid for by the Owner.

60. Clearing Tree Limbs and Vegetation:

It shall be the responsibility of the Contractor to remove vegetation and tree limbs less than 6” diameter from the street right-of-way that present an obstruction to performing street maintenance on the streets listed in the Contract. No separate payment will be made for clearing tree limbs and vegetation as such work will be incidental to resurfacing.

The Contractor shall notify the Town at least 30 days in advance of the scheduled work of any tree limbs 6” diameter or greater for the Town to have removed.

The Contractor shall notify the Town at least 30 days in advance of the scheduled work of any shrubs or ornamental trees on private property that overhang into the right-of-way and present an obstruction. The Town will arrange for the obstruction to be removed.

The remainder of this page is left blank intentionally.

STANDARD GENERAL PROVISIONS

All construction shall conform to pertinent OSHA requirements, City of Raleigh Standards and Specifications, Town of Wake Forest Standards and Specifications, and NCDOT Standard Specifications for Roads and Structures. Editions in effect at the time of the bid date shall govern.

1. Construction Progress Schedule and Bi-Weekly Meetings

The Contractor shall provide, at the pre-construction conference, a completed Town of Wake Forest progress schedule. The schedule shall be kept up to date and presented with each month's billing information and shall be made available at the bi-weekly progress meetings and at other times as may be deemed necessary by the Director of Engineering or his representative. The Contractor will be represented at bi-weekly progress meetings during the construction of this project. The meetings will be held at the project site or in the Town offices as determined by the Town.

2. Contract Completion and Progress Schedule Liquidated Damages

- 1) If this Contract is awarded, the bidder must, upon completion of this Contract, or at any other time requested, furnish to the Town of Wake Forest an accurate itemized statement of North Carolina Sales Tax paid on materials, supplies, equipment, and any other items charged to this Contract, and otherwise fully comply with the "Procedure for Reporting North Carolina Sales Tax Expenditures", attached.
- 2) The bidder further agrees to begin work within 10 calendar days from date of Contract Notice to Proceed.
- 3) The bidder represents and agrees to complete resurfacing work by September 30, 2026, and all other work by October 15, 2026.

Failure to complete the work within the contract time will result in damages due to public inconvenience, obstruction and delay to traffic, safety, and other considerations. For each consecutive calendar day in excess of the contract time specified, the Contractor shall pay, or have withheld monies due, a sum of ONE THOUSAND DOLLARS (\$1,500.00) per day.

3. Unit Bid Price

The unit bid price on the items in this contract shall include all materials, labor, equipment, and incidentals necessary to satisfactorily install said items completely in place and accepted unless otherwise mentioned in this contract document. A unit price shall be submitted for all line items listed for this bid.

4. Point of Contact

The Contractor upon start of construction shall provide the Engineer with names, addresses, and telephone numbers of two people to be contacted after office hours in case of emergency.

5. Material Tickets

The Contractor shall turn in all material tickets for the purpose of payment to the Project Inspector on a daily basis.

6. Trenches

All trenches shall be backfilled and made safe at the end of each workday. Payment for installation of utility and drainage lines that requires open cut to existing pavement shall include the cost of pavement for repairs (including pavement saw cut and removal) as incidental to the installation of the utility. No separate payment will be made for this work unless otherwise specifically mentioned in this contract.

7. Subsurface Investigation

The Contractor shall make his/her own subsurface investigations. Any information obtained by the Town as a result of its own subsurface investigations will be made available upon request. This information is provided for informational purposes only and shall not relieve the Contractor of responsibility for making his own investigations.

8. Grading, Shoulders and Slopes

Shoulders and slopes shall be free of all stone and clods that exceed one inch in diameter. Fine grading (raking) shall take place just before seeding and mulching. No separate payment will be made for shoulder construction or material for shoulder construction as all work necessary to complete the work will be considered incidental to other items in the contract unless otherwise provided in the contract.

9. Traffic Control

The Contractor shall provide all traffic control devices and signs to warn the traveling public in accordance with the latest Manual on Uniform Traffic Control Devices (MUTCD) and NCDOT Standard Drawings. Two-way traffic shall be maintained at all times, unless otherwise required by the traffic control plan.

10. Materials and Equipment Storage and Parking

When vehicles, equipment, and materials are not being actively used they shall be moved at least 30 feet away from the edge of any travel way open to traffic (or as directed by the Engineer). All debris shall be immediately moved to a location at least 30 feet from the edge of any travel way open to traffic. If vehicles, equipment, materials, and debris are protected by guardrail or barrier, a 5-foot minimum offset from the rail shall be used.

11. Personnel Parking

All personnel involved with construction operations shall not park their personal vehicles within the right of way of the project limits for the duration of the construction project. The Contractor shall furnish a parking area that is located off the project limits. The Contractor shall be responsible for daily transportation of all employees to and from the provided parking area and the project site.

There will be no direct payment for the work cover by this provision. Payment at the contract unit prices for the various items in the contract will be full compensation for all work covered by this provision.

12. Sidewalk, Driveway, Curb & Gutter Removal and Replacement

Care should be taken during construction to avoid damaging the existing sidewalk, curb & gutter, and pavement outside the immediate construction area. If damaged, it shall be replaced in accordance with the NCDOT Standard Specifications for Roads and Structures, Town of Wake Forest Standards, as determined by the Engineer, without extra cost to the Town. Prior to construction, the Contractor shall inspect the site and report to the Engineer any damages existing before construction.

The Contractor shall be advised that when a portion of any area of concrete driveways, curb and gutter and pavement must be removed, all areas to be removed shall be defined by a machine-sawed joint, prior to removal. Saw cut of concrete driveway, curb & gutter and pavement are considered incidental to removal unless otherwise provided in the contract.

13. Maintenance of Mailboxes, Signs, Miscellaneous Appurtenances

The Contractor shall be required to maintain mailboxes, signs and all miscellaneous appurtenances impacted by construction activities in working order for the duration of construction as directed by the Engineer. Work on the same items shall be done in a timely manner. No separate payment for work on these items will be made as the work will be considered incidental to other items in the contract unless otherwise mentioned in the contract document.

14. Project Completion

When the project is nearing completion, the Town will obtain comments from the impacted property owners concerning items that are outstanding, yet to be completed. The Engineer will determine which items have sufficient justification to be included in the final punch-list, and the Contractor will be required to complete these items with no additional payment and in a timely fashion.

15. Videotape of Project Site

The Contractor will videotape the project site in its entirety before construction begins, with emphasis on properties adjoining the project, drives, trees, appurtenances, and other distinguishing features. Appropriate narration will include location and description of property and physical features. The Contractor will provide two copies of the project tape in USB or Electronic format to the Town. No separate payment will be made for this work, and all associated costs will be considered incidental to other items in the contract.

16. Coordination with Utility Companies

(See Article 13 of General Conditions)

Utilities as shown on the plans are intended to represent general locations only. It shall be the responsibility of the Contractor, prior to construction, to contact appropriate utility owners and precisely locate utilities that could be affected by the proposed construction. If the utility belongs to the Town of Wake Forest or the City of Raleigh, the Contractor shall dig sample holes to uncover the utility. The digging of sample holes shall be coordinated with the Engineer who will determine the number of such holes and will schedule the Town of Wake Forest or the City of Raleigh to locate utility vertical and horizontal locations. There is no line item to pay for digging work. Work is considered incidental to other pay items.

The Contractor shall be responsible for repair of any damage to the utility as well as any other damage may be caused due to the disturbance of the utility. The Contractor will not be permitted to submit any claims for delays caused by utility relocation and proposed utility construction.

The Town has coordinated designs of utility relocation with private utility owner representatives. Existing utility, design and conflict resolution plans are included as a part of the contract.

The Contractor shall be responsible for coordinating concurrent construction directly with utility owner representatives. Coordination efforts and concurrent construction conflicts will be addressed and discussed during the pre-construction meeting. The Town, at the time of pre-construction conference, will provide names, addresses and telephone numbers of private utility owner representatives.

All underground utilities may not have been identified. The Contractor shall call North Carolina One Call to identify underground utilities before starting any digging and/or excavation operation.

The Contractor shall be responsible for field verifying heights and locations of power lines and will be required to maintain the distance from the power lines in accordance with local, State and Federal Safety regulations.

17. Protection of Existing Plants

The work under this item shall consist of the protection of selected trees, shrubs, or other woody plants.

The plants protective fencing shall meet the requirements of Town of Wake Forest. Fencing shall encompass the plants to the dripline. Deviations from this must be approved by the Engineer.

Plant protective fencing shall be installed prior to beginning any construction on this project. Plant protective fencing shall be constructed at the locations as directed by the Engineer and in accordance with Town specification. The fencing shall be maintained in place until all construction operations in that particular area are complete. At completion, only light grading equipment such as small agricultural tractors shall be allowed on the plants' roots. Fill dirt no deeper than two inches shall be allowed under the limb spread of any plant.

No building materials, dirt, or equipment shall be stored inside the protective fencing. Plants that die as a result of the Contractor's negligence shall be removed and replaced as directed by the Engineer at the Contractor's expenses. The new plant shall be guaranteed for a year, planted in the proper season, and planted with approved arboricultural specifications.

The Contractor will be required to cooperate with other contractors, utility companies and others needing access to the project site as (approved by the engineer) to complete the work.

The remainder of this page is left blank intentionally.

PROJECT SPECIAL PROVISIONS

SECTION 1: MOBILIZATION

Description

This work consists of preparatory work and operations to mobilize personnel, materials, and equipment to the project site.

Measurement and Payment

Mobilization will be paid as the contract lump sum price when the Contractor initially mobilizes. Contractor may elect to either draw fractions of the lump sum throughout project or the whole lump sum once.

SECTION 2: RESURFACING

Trackless Tack

Description

Trackless tack shall be used as the tack coat material. In the event that trackless tack is unavailable, standard tack coat material that meets NCDOT Standard Specifications shall be used. Standard tack material shall be incidental to the asphalt surface course. Asphalt tack coat shall be in accordance with the latest version of NCDOT Standard Specifications for Roads and Structures section 605. There will be no direct payment for work covered by this section. Payment at the contract unit prices for the various mix items covered by section 610, 650 and 654 will be full compensation for all work covered by this section.

Weather Limitations

Apply tack coat material to existing asphalt or concrete surfaces in accordance with NCDOT Specifications. Apply tack coat only when the surface to be treated is sufficiently dry and when the atmospheric temperature in the shade away from artificial heat is 35 degrees F or above. Do not apply tack coat when the weather is foggy or rainy.

Surface Preparation

Ensure that the existing asphalt or concrete surface is free of all dust and foreign material before applying the tack coat. Remove grass, dirt, and other materials from the edge of the existing pavement before the placement of tack coat.

Application Rates and Temperatures

Apply tack coat uniformly across existing surface at target application rates shown in Table 605-1.

TABLE 605-1 APPLICATION RATES FOR TACK COAT	
Existing Surface	Target Rate (gal/sy)
	Emulsified Asphalt
New Asphalt	0.04 ± 0.01
Oxidized or Milled Asphalt	0.06 ± 0.01
Concrete	0.08 ± 0.01

Apply tack coat at a temperature within the ranges shown in Table 605-2. Tack coat shall not be overheated during storage, transport, or at application.

TABLE 605-2 APPLICATION TEMPERATURE FOR TACK COAT	
Asphalt Material	Temperature Range
Asphalt Binder, Grade PG 58-28 or PG 64-22	350 - 400°F
Emulsified Asphalt, Grade RS-1H	130 - 160°F
Emulsified Asphalt, Grade CRS-1	130 - 160°F
Emulsified Asphalt, Grade CRS-1H	130 - 160°F
Emulsified Asphalt, Grade HFMS-1	130 - 160°F
Emulsified Asphalt, Grade CRS-2	130 - 160°F

Application of Tack Coat

If public traffic is being maintained, cover the tack coat in the same day's operation. Provide safe traffic conditions. If needed, apply suitable granular material so it bonds to the tack coat. In addition, the Engineer may limit the application of tack coat in advance of the paving operation depending on traffic conditions, project location, proximity to business or residential areas or other reasons.

Take necessary precautions to limit the tracking or accumulation of tack coat on either existing or newly constructed pavements. Excessive accumulation of tack coat requires corrective measures.

Apply tack coat with a distributor spray bar that can be adjusted to uniformly coat the entire surface at the directed rate. Use a hand hose attachment only on irregular areas and areas inaccessible to the spray bar. Cover these areas uniformly and completely.

Apply tack coat as directed by and in the presence of the Engineer. Do not place any asphalt mixture until the tack coat has sufficiently cured.

Apply tack coat to all exposed transverse and longitudinal edges of each course before mixture is placed adjacent to such surfaces. Apply tack coat to contact surfaces of headers, curbs, gutters, manholes and vertical faces of old pavements.

Sand, screenings, or other environmentally safe products may be required to prevent tracking the tack coat onto adjacent streets, when directed by the Director of Engineering. The sand screenings shall be minimum

length in order for a haul truck tire to make one full rotation and remain in contact with the screenings. The width shall be the same as the existing roadway. The Contractor shall remove screening materials placed to eliminate tracking upon completion of paving operations each day.

Tack coat material will not be tolerated on the exposed face of curb and gutters. If this occurs, the tack shall be removed as soon as practicable. Special attention shall be utilized while paving in areas with existing granite curb and gutter.

Asphalt Concrete Plant Mix Pavements

Description

Perform the work covered by this section including, but not limited to, the construction of one or more courses of asphalt mixture placed on a prepared surface in accordance with these Specifications and in reasonably close conformity with the lines, grades, thickness and typical sections shown on the plans. This work includes producing, weighing, transporting, placing and compacting the plant mix; furnishing aggregate, asphalt binder, anti-strip additive and all other materials for the plant mix; furnishing scales; maintaining the course until final acceptance of the project; making any repairs or corrections to the course that may become necessary; providing and conducting QC as specified in Section 609 of the NCDOT; and surface testing of the completed pavement.

Perform all activities in accordance with the NCDOT Asphalt Quality Management System (QMS) Manual in effect on the date of contract advertisement.

Asphalt Concrete Surface Course Type S9.5B or S9.5C, as directed by the Engineer, shall be used. It shall be in accordance with Section 610 of the NCDOT Standard Specifications for Roads and Structures.

Asphalt Leveling Course

Asphalt paving consisting of a leveling course may be required on specific streets. This shall be performed as determined by the Director of Engineering and at the same unit price as noted in the Contract. In the event a leveling course is required, this shall be performed prior to the installation of any surface treatment applications if applicable.

Mill & Fill Operations

Streets designated as Mill & Fill shall have their lanes milled, cleaned, and paved. Utility adjustments and patching, as necessary, shall be performed prior to the Mill & Fill process. Mill & Fill operations shall be performed within 1 week after patching on such streets is completed.

Cleaning Streets

It shall be the responsibility of the Contractor to thoroughly clean the street before resurfacing. Any leaves, vegetative material, and debris shall be removed from the Public Right of Way. Depositing any debris or other material behind the curb will not be permitted. If large piles of leaves or other debris exist that in the opinion of the Director of Engineering are in excess of that which is required for the Contractor to remove, they shall be removed by the Director of Engineering provided adequate notice is given for this purpose.

The Contractor shall clean each street of waste materials resulting from his own operations no more than 2 days after the final overlay is complete. Should this period of time be exceeded, all resurfacing operations shall be suspended until streets are clean.

Infrastructure Damage

The Contractor shall be responsible for repairing any damage to the Town of Wake Forest's infrastructure. This includes damage to curb & gutter and pavement. Tack will not be tolerated on the exposed face of curbs and/or gutters. If this occurs, the tack shall be removed immediately. Special attention shall be utilized while paving in areas with existing granite curbs and gutter.

Resident Notification

The Contractor's attention is directed to Article 45, SAFEGUARDS of the General Conditions. In addition to the above, it shall be the responsibility of the Contractor for notification of residents before commencement of work in accordance with the Town Code. A copy of the notification will be provided to the Contractor by the Director of Engineering.

Paving Lift Requirements and Time Limitations

For milling and paving lifts of 3.0 inches or less, bring all newly resurfaced lanes to the same station and elevation within 72 hours. If not brought up to the same station and elevation within 72 hours, the Contractor shall place portable "Uneven Pavement" signs in advance of the uneven pavement and spaced every ½ mile along the section of uneven pavement. Once mitigated, all portable "Uneven Pavement" signs shall be removed. No additional compensation will be made for these signs or any other type of portable warning signs as these are included in the Temporary Traffic Control pay item.

For milling and paving lifts greater than 3 inches, bring all newly resurfaced lanes to the same station and elevation by the end of each workday unless the Contractor utilizes the notched wedge paving methods. Longitudinal joints 2" or greater in difference of elevation shall not be permitted within a travel lane.

ICT No.1- No.4 shall still apply during pave back period after milling activities end.

AC Adjustment

When it is determined that the monthly selling price of asphalt binder on the first business day of the calendar month during which the last day of the partial payment period occurs varies either upward or downward from the base price index, the contract unit price for asphalt binder for plant mix will be adjusted. The adjusted contract unit price will be determined by adding the difference between the selling price and the base price index to the contract unit bid price for asphalt binder.

The adjusted contract unit price will then be applied to the theoretical quantity of asphalt binder authorized for use in the plant mix placed during the partial payment period involved, except that where recycled plant mix is used, the adjusted unit price will be applied only to the theoretical number of tons of additional asphalt binder materials required by the Job Mixed Formula (JMF).

Adjusted contract unit prices for all grades of asphalt binder, including additional asphalt binder materials in recycled mixtures, will be based on the average selling price and base price index for asphalt binder, grade PG 64- 22, regardless of the actual grade required by the JMF.

In determining the adjusted contract unit price for any material specified in this section the following formula will be used:

$$A = B + (D - C)$$

Where:

- A** = Adjusted Contract Unit Price
- B** = Contract Unit Price
- C** = Base Price Index
- D** = Monthly Average Terminal F.O.B. Selling Price

In the event the Department is unable to secure and F.O.B. selling price from at least 4 terminals in a given month, payment will be at the contract unit price for each ton of asphalt binder used in the work during that month.

Measurement and Payment

Asphalt Concrete Surface Course, Type 9.5B and Asphalt Concrete Surface Course, Type 9.5C will be measured and paid as the actual number of tons of each type of hot mix asphalt pavement incorporated into the completed and accepted work in accordance with NCDOT Standard Specifications for Roads and Structures, Article 106-7.

Trackless Tack to be paid by the ton of Asphalt Concrete Surface Course, Type S9.5B & S9.5C placed. If standard tack is used, it shall be incidental to the placement of Asphalt Concrete Surface Course, Type S9.5B & S9.5C.

Asphalt Binder, Type PG 64-22 will be measured and paid as the theoretical number of tons required by the applicable JMF based on the actual number of tons of plant mix completed and accepted on the job.

There will be no direct payment for anti-strip additive. Payment at the contract unit prices for the various asphalt plant mix items will be full compensation for the work.

SECTION 3: UTILITY ADJUSTMENTS

Description

The work covered in this section consists of the adjustment of manholes, water valve boxes, and other utilities in the roadway. The Contractor shall complete the work in strict accordance with Town of Wake Forest Standards and Specifications, City of Raleigh Standards and Specifications, NCDOT Standard Specifications for Roads and Structures, and ACI Specifications.

Standards for Manhole and Valve Box Adjustments

Manholes in Streets

All manhole covers installed within streets, parking lots, and other paved areas shall have only one (1) one-inch hole, which shall be off center, unless seal-down manholes are required. All covers must be domestically cast and so indicated by manufacturer name and "USA" in castings. Covers shall have

“DANGER PERMIT REQUIRED – CONFINED SPACE DO NOT ENTER” cast onto the face as shown in Details W-20 and S-29.

Manhole rings and covers shall be manufactured to the dimensions shown on City of Raleigh Details S-25, W-20 and shall be made from Class 30 gray iron, meeting the requirements of ASTM A48-94ae1. Covers shall have the appropriate facility name cast onto the face as shown in Details S-25, W-20, WATER and Town of Wake Forest Stormwater Manhole Standard Details 2.60 and 2.61

The Contractor shall provide new manhole covers that are approved by the City of Raleigh Public Utilities Department. The unit rate shall include the cost of purchase and installation.

All existing manholes on full-mill streets shall be removed and replaced with new manhole rings and covers. Existing manholes on all other streets that have been determined by the Director of Engineering to be damaged shall be replaced by the Contractor.

Water Valve Boxes

Adjustable water valve boxes shall be Class 35 gray cast iron and manufactured in accordance with ASTM A48 and be of the dimensions specified in Detail W-17 of these specifications. Lids shall have the word “WATER” cast into the lid. See Detail W-18. All castings must be domestically cast and so indicated by the manufacturers name and “USA” cast into all sections of the valve box. All castings must meet or exceed AASHTO H-20 load rating.

The Contractor shall provide new valve boxes and lids that are approved by the City of Raleigh Public Utilities Department. The unit rate shall include the cost of purchase and installation.

Sewer Test Station Boxes

Adjustable water valve boxes shall be Class 35 gray cast iron and manufactured in accordance with ASTM A48 and be of the dimensions specified in Detail S-20A of these specifications. Lids shall have the word “TS” cast into the lid. All castings must be domestically cast and so indicated by the manufacturers name and “USA” cast into all sections of the valve box. All castings must meet or exceed AASHTO H-20 load rating.

Adjustment of Sewer Test Stations shall be compensated as a Water Valve Box Adjustment.

Construction Methods

Adjustments on all manhole and valve boxes will not exceed a tolerance of more than ¼ inch from finished grade as measured with an 8-foot straightedge.

Manholes and valve boxes will be centered and aligned for proper access to manhole or operating nut on valves. Necessary precautions will be taken to prevent debris from falling into these structures and interfering with proper operation of said utility.

For valve boxes make a circular cut 1’ from the outside edge of the valve box. Top section of each valve box shall be completely removed to allow proper tamping of materials before final adjustment is made. All material around manholes and valve boxes shall be tamped to a minimum of 95 percent compaction before the applying tack coat and placing of minimum 4-inch of new asphalt surface course. The final compaction on asphalt shall be mechanical tamping. The asphalt shall be left low enough to accommodate the final resurfacing lift.

Floor the inside of the manhole with some material to catch any debris that may fall inside the manholes during construction.

For manholes, make a circular cut 2' from the outside edge of the manhole. With pick and shovel remove the broken debris down to a depth in accordance with City of Raleigh Standard Manhole Frame and Cover Detail Within Paved Surfaces.

Remove the ring and cover and set it off to one side. Do not try to raise or adjust the manhole with the ring in place.

Mix the mortar. Mortar shall be composed of one (1) part Portland Cement (and may contain no more than 10 percent lime, based on the volume of cement) and two (2) parts clean sand. Mortar will be mixed in a clean, tight mortar box or mechanical mixer and will be used within 45 minutes after mixing. It will be a fairly stiff mixture so it can be shaped.

Starting on a solid foundation, raise the top of the manhole with a level, solid layer of mortar or mortar and bricks. If bricks are used, they must be laid solid leaving no voids or empty spaces. The final product must be a smooth, level area so that the entire width of the flange on the bottom of the manhole ring will be sitting on a solid, uniform bearing surface.

After the manhole has been properly brought up to the desired level, set the ring back in place and fill the hole around the outside of the casting for a minimum depth of 8" with 3000 PSI ready-mix concrete having no more than a 4-inch slump.

Set the concrete before the applying the tack coat and placing a minimum 2-inch layer of new asphalt surface course. The final compaction on asphalt shall be mechanical tamping. Install a reflectorized barricade equipped with a functioning flashing warning light over the utility until such time required for the concrete and asphalt to set/harden to a point where traffic will not damage the utility.

Raised utility castings shall be painted with reflectorized fluorescent paint to warn the traveling public of this condition.

Any utility raised more than one (1) inch above the existing grade shall have asphalt or NCDOT approved manhole safety ramp placed as a wedge around such utility.

All utilities that are removed for milling shall have a steel plate of sufficient thickness to support vehicle traffic placed in the bottom of the excavation. The excavation shall be backfilled with compacted hot mix asphalt. Any debris that falls into the utility shall be removed immediately.

All utility work areas shall be maintained in satisfactory condition until the final pavement layer is placed. Final paving layer shall be placed at least 72 hours after the placement of concrete around utilities.

Utility Risers

If the decision is made by the Engineer to selectively utilize NCDOT approved risers, the Contractor shall provide and install manhole and water valve box risers immediately prior to resurfacing. No cast iron risers will be allowed for the adjustment of manholes.

Raised Utilities

No manholes or valve boxes shall be raised and left for a period of time greater than 14 days before the street is resurfaced. Should this period of time be exceeded, utility adjustments shall be suspended until the resurfacing of such streets has been completed.

Utility Adjustments for Milling

The Contractor shall be required to adjust the manhole and water valve boxes prior to milling in accordance with Construction Methods.

If the decision is made by the Engineer not to adjust (lower and raise) utilities on selected streets, asphalt shall be milled and/or chipped from around existing utilities to a depth equal to the new asphalt depth.

Chipping around utilities shall only be performed by hand operated pneumatic tools or by pick and shovel. At no time shall heavy or mini track/wheel equipment be used to chip around utilities. As an alternative, small milling heads on backhoes, track loaders, or mini excavators may be used to chip the bulk of the material, with final cleanup around the utility done by hand tools.

Utilities removed for milling shall not be removed for more than 14 days. Should this period of time be exceeded, utility adjustments and milling on all other streets shall be suspended until utilities are raised on such streets.

Manhole frames and lids removed for milling and designated for reuse shall be paired together. This may be done by labeling, numbering or other means that clearly identifies the frame and lid go together. Any manhole frames and lids returned for reuse that are not labeled will be replaced with new frames and lids at the Contractor's expense.

Measurement and Payment

Manhole Adjustment (Raise Only) shall be paid by the number of manholes raised by adjustment.

Water Valve Box Adjustment (Raise Only) shall be paid by the number of water valves or test stations raised by adjustment. Payment shall include new water valve boxes and lids.

Manhole Adjustment (Lower/Raise), Manhole Adjustment Oversize (Lower/Raise) shall be paid by the number of utilities when the final raise adjustment has been completed.

Water Valve Box Adjustment (Lower/Raise) shall be paid by the number of water valves and test stations when the final raise adjustment has been completed. Payment shall include new water valve boxes and lids.

Milling / Chipping Around Utility Not Adjusted shall be paid by the number of utilities that have been left in place and milled/chipped around. Utilities on mill and fill streets shall be considered under this pay item except in cases where the utility is adjusted prior to mill and fill operations.

Provide and Install Manhole Risers and Provide and Install Water Valve Risers shall be paid by the number of utilities that have been left at existing grade and the Engineer has approved the use of NCDOT approved risers.

Provide New Manhole Frame and Cover shall be paid by the number of new manhole frames and covers typically on full mill streets and as directed by the Engineer.

**SECTION 4: SIDEWALK ACCESS RAMPS, CURB AND GUTTER, AND DRIVEWAY APRON
CONSTRUCTION**

Description

The Contractor shall complete the work in this section in strict accordance with Town of Wake Forest Standard Details Curb Ramps and ACI Specifications. The project consists of constructing or reconstructing identified intersections with sidewalk access ramps. The location of each facility may vary due to existing catch basins, fire hydrants, poles, or other constraints. Prior to beginning any construction, each work site shall be examined by the Contractor and the Director of Engineering, at which time the Director of Engineering will give specific direction as to the concrete removal limits and location of the new facility.

Sidewalk Access Ramps Construction

North Carolina General Statute 136-44.14 requires that all street curbs being constructed or reconstructed for maintenance procedures, traffic operations, repairs, corrections of utilities, or altered for any reason after September 1, 1973 shall provide sidewalk access ramps for the physically handicapped at all intersections where both curb and gutter and sidewalks are provided and at the other points of pedestrian flow. In accordance with the MUTCD, an accessible detour shall be provided for pedestrian traffic during construction of sidewalk and/or sidewalk access ramps.

In addition, Section 228 of the 1973 Federal Aid Highway Safety Act requires provision of curb ramps on any curb construction after July 1, 1976, whether a sidewalk is proposed initially or is planned for a future date.

The Americans with Disabilities Act (ADA) of 1990 extends to individuals with disabilities comprehensive civil rights protections similar to those provided to persons on the basis of race, sex, national origin, and religion under the civil rights act of 1964. The adopted curb ramps have been designed to comply with Title III of the ADA that became effective on January 26, 1992.

Town of Wake Forest standard curb ramps shall comply with the Americans with Disabilities Act (ADA) and Public Right of Way Access Guidelines.

Sidewalk access ramps shall be provided at locations as shown on the plans or as directed by the Director of Engineering. Sidewalk access ramps shall be located as indicated in these details; however, the location may be adjusted as directed by the Director of Engineering where existing light poles, fire hydrants, drop inlets, or other constraints affect placement.

Sidewalk access ramps shall be constructed in accordance with Town of Wake Forest Standard Details which are incorporated into the contract documents. Sidewalk access ramps shall generally be Single Type N-1A or R-1 and Double Type N-2, N-3, N-3A, or R-3 at the majority of locations. Some locations may require a shared ramp as shown in Town of Wake Forest's Standard Detail 9.13. A shared ramp shall serve both street crossings. Pay limits are identified on the details the shaded curb and gutter shall be incidental to the ramp. The detectable warning surface width may vary and is included as part of ramp pay limits. The detectable warning surface shall be yellow in color, cast-in-place and approved by the North Carolina Department of Transportation. Sidewalk removal and replacement within the pay limits shall be included in the concrete sidewalk access ramp unit rate. Sidewalk removal and replacement outside the pay limits will be paid at the appropriate contract unit rate.

The Contractor shall at no time remove any street sign without prior approval from the Director of Engineering.

Subgrade Preparation: The subgrade for sidewalks and access ramps shall be formed by excavating to the required depth, shaped to the proper cross-section, and shall be thoroughly compacted by rolling or tamping before placing any concrete.

Forms: Forms used in constructing sidewalks shall be of wood or metal, of the full depth of the concrete, straight, free from warp, and of sufficient strength, and/or of a flexible material pre-approved before construction by the Director of Engineering as to allow for narrowing, mounding, and curving of walks. They shall be staked securely enough to resist the pressure of the concrete without springing. If it is of wood, they shall be of two (2) inch surfaced plank be and be deep enough to prevent concrete spilling out when poured. All forms shall be subject to the approval of the Director of Engineering. All wood forms shall be thoroughly wetted, and metal forms oiled before placing concrete. All forms shall be thoroughly cleaned before re-use.

Placing Concrete: Concrete shall be NCDOT approved Class “A” concrete at a minimum strength of 3000 psi. No concrete shall be placed until the forms and subgrades have been approved by the Director of Engineering. The subgrade shall be thoroughly wetted, and the concrete shall be placed thereon in one course to the required depth. The concrete shall be consolidated and struck off with a template to the required grade and cross section. Refer to SECTION 1000 in the NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.

Joints: Contraction joints shall be provided uniformly to separate the slab and shall be cut in a straight line to a depth equal to at least one-third (1/3) of the total slab thickness. The joint shall be not less than one-eighth (1/8) inch no more than one-fourth (1/4) inch in width. Joints shall be sealed in accordance with NCDOT specifications.

Finishing: After the freshly poured concrete has been brought to at the established grade, it shall be floated to produce a surface free from irregularities. The final surface shall be obtained by troweling with a steel trowel or hand float and brushing lightly with a lightweight brush in a transverse direction so as to produce a uniform gritty surface of the proper texture. All edges and joints shall be rounded to one-fourth (1/4) of an inch.

Cold Weather Pouring: Concreting operations shall not be undertaken or continued when the surrounding air temperature is below 40°F or the local weather reports indicate the possibility of temperatures of 32°F or lower within the ensuing 24 hours unless provisions are made to insulate or heat the concrete in a manner satisfactory to the Transportation Director. In any event, the Contractor shall plan and protect his/her work in a manner which will assure satisfactory results. Any concrete damaged by freezing shall be removed and replaced by the Contractor at his/her own expense.

Concrete, when deposited in the forms, shall have a temperature of not less than 50°F or more than 90°F. The concrete shall be maintained at a temperature of not less than 50°F for a period of at least 72 hours in the case of normal concrete or 24 hours when high early cement is used. Concrete shall not be deposited on a frozen subgrade. The North Carolina Department of Transportation Standard Specifications for Roads and Structures, Latest Edition Section 420-7 “Placing Concrete in Cold Weather” (A), (B), and (C) will be strictly adhered to for this alternate, unless directed by the Transportation Director.

Hot Weather Concreting: The maximum allowable concrete temperature shall be limited to 95°F. Deliver and discharge concrete within 1-1/2 hours or before the truck-mixer has revolved 300 revolutions, whichever comes first.

Removal of Forms and Backfilling: After the concrete has set sufficiently the forms shall be removed and the spaces on both sides shall be immediately backfilled with suitable earth uniformly spread and compacted. The areas between the curb and sidewalk and immediately back of the sidewalk shall be left in a smooth, neat, and workmanlike condition. When necessary, the backfill material will be sloped further to account for change in slope or grade as directed by the Director of Engineering.

Special attention shall be given in the seeding and mulching in the established areas. Lawn quality care shall be taken, and appropriate seed used to match existing lawn types on a lot per lot basis. Seeding, mulching, and seedbed preparation shall be approved by the Director of Engineering prior to acceptance and payment. Backfilling, seeding, and mulching is considered incidental to the completion of the sidewalk access ramp and as such no separate pay item is included.

Sidewalk access ramps shall be backfilled, landscaped, and completed no more than 3 days after construction. Should this period of time be exceeded, all sidewalk ramp construction shall be suspended until such ramps are completed.

Removal of Defective/Damaged Work: The Director of Engineering shall have the authority to and shall require the removal of any sidewalk laid under these specifications which does not conform to the requirements as set forth herein or existing sidewalk damaged by the Contractor. Upon notification by the Director of Engineering, the Contractor shall take immediate action to correct the faulty work, or damaged work, at the Contractor's own expense.

Construction Water:

- 1) Contractors are responsible for securing adequate construction water for their job sites.
- 2) All construction water usage must be metered and will be billed to the Contractor. The Contractor must contact the Public Utilities Department of City of Raleigh, Meter Services Division (919-996-2742) to make the applicable arrangements for billing the water usage. The Contractor may not provide his/her own meter. Upon advance notice to the Public Utilities Department, a meter equipped with a backflow device can be rented at the expense of the Contractor.
- 3) Construction water for all Town contract projects shall be billed by the City of Raleigh, Public Utilities Department.
- 4) Contractors must furnish the following information for water usage.
 - i. Meter location and project name.
 - ii. Address where applicable and responsible party name.
 - iii. Duration of use and frequency of meter reading.

Sidewalk and Access Ramp Removal

The Contractor shall be advised that when a portion of any area of concrete sidewalk or access ramp must be removed, all areas to be removed shall be defined by a machine sawed joint before removal. Any sidewalk or access ramp that is removed and not replaced shall be backfilled using suitable material free of large lumps, wood, or other undesirable material. Brick pavers within existing sidewalk ramp locations being reconstructed shall be retained and neatly stacked for pickup by Town of Wake Forest staff.

Disposal of all waste material from construction sites shall be made in strict accordance with all Town ordinances pertaining to disposal of construction waste. It shall be the responsibility of the Contractor to

secure the necessary permits and provide all information required to secure said permits. The Contractor shall designate the disposal site prior to beginning construction, and in the event waste material is to be disposed of on private property, a letter from the property owner shall be furnished to the Director of Engineering granting the Contractor or their agent such permission and listing the requirements made by the property owner or the Contractor, if any.

The Contractor shall not use the right-of-way for storage of equipment or materials, etc.

Curb and Gutter Construction

Curb and gutter shall be constructed in accordance with Town of Wake Forest Standard Details for Curb Ramps and Curb and Gutter Standard Detail 9.13. Curb and gutter removal and replacement in areas other than access ramps shall be of the same type as adjacent curb and gutter.

Payment for this item shall include removal, disposal and replacement of new curb and gutter in accordance with the specified slopes, dimensions, subgrade preparation & clearing of organic material and all items incidental to curb & gutter construction etc.

Curb depressions for sidewalk access ramps may be accomplished, when applicable, by the use of a machine sawed cut, utilizing equipment which has been specifically designed for this purpose and approved by the Director of Engineering. A smooth transition shall be provided between the gutter section and the curb section. All sharp edges, which were created by the cutting operations, shall be beveled. Grinding if required shall be utilized to accomplish these items. Concrete debris shall be immediately removed from the job site. If any asphalt patching is needed due to damage during construction, the Contractor shall be responsible for repair of these items using hot plant mixed asphalt. If pavement patching is necessary, it shall be incidental to the work and not a pay item.

Subcontractors

The Contractors (bidders) are advised that Subcontractors will be limited to a maximum of 50 percent (50%) of this contract. The successful bidder shall abide by the requirements set forth in Article 37 Subcontractors of the General Conditions.

Traffic Control

In addition to items set forth in the General Conditions, Articles 44 and 59, the Contractor shall provide adequate reflectorized barrels, barricades and traffic cones as directed by the Director of Engineering, to protect the traveling public as well as pedestrian traffic. In addition, the Contractor shall utilize Sidewalk Closed signs at every location in which the construction activity may interfere with pedestrian traffic. Sidewalk detour signs shall be placed at designated crosswalk locations.

Granite Curb

The Contractor shall reshape the granite curb, in place, to the grade required by the detail drawings. This work will involve sawing, and or grinding to achieve the desired grade and a texture consistent with the original granite curb.

Driveway Apron Construction

Driveway aprons shall be constructed in accordance with Town of Wake Forest Standard Details for Driveway and Sidewalk Standard Detail 9.08, 9.11, 9.12, and 9.13. Driveway aprons shall match existing widths, joints, and grades to provide for positive drainage towards stormwater drainage basins.

Measurement and Payment

Sidewalk Removal will be measured and paid in square yards, measured along the surface of the actual sidewalk removed. Such price includes, but is not limited to, sawing the existing sidewalk, excavating, removal, disposal, backfilling, seeding, and mulching.

4" Sidewalk Replacement will be measured and paid in square yards, measured along the surface of the completed and accepted work. Such price includes, but is not limited to, forming, furnishing, and placing concrete, finishing, constructing, and sealing joints, backfilling, seeding, and mulching.

6" Sidewalk Replacement will be measured and paid in square yards, measured along the surface of the completed and accepted work. Such price includes, but is not limited to, forming, furnishing, and placing concrete, finishing, constructing, and sealing joints, backfilling, seeding, and mulching.

Sawcut and Removal of Concrete Curb will be measured and paid in linear feet, measured along the surface of the top of the concrete curb. Such price includes sawing the existing curb, removal of debris, and beveling or grinding sharp edges.

Sawcut and Removal of Granite Curb will be measured and paid in linear feet, measured along the surface of the top of the granite curb. Such price includes sawing the existing curb, removal of debris, and beveling or grinding sharp edges.

Curb and Gutter Removal/Replacement will be measured and paid in linear feet, accepted in place. Measurement will be made along the surface of the top of the curb. Such price includes sawing the existing curb and gutter, removal of debris, forming, furnishing, and placing concrete, finishing, constructing, and sealing joints, backfilling, seeding, and mulching.

Concrete Sidewalk Access Ramps will be measured and paid in units of each. Ramps shall be constructed in accordance with the Standard Details. Pay limits are identified on the Standard Details and in Provision 2 of this Section. Curb and gutter removal/replacement within the ramp pay limits shall be incidental to the ramp construction. Single ramps shall be paid as 1-unit, double ramps as 2 units, and shared ramps as 2 units. Such price includes, but is not limited to, sawing the existing sidewalk or driveway, removal, and disposal of sidewalk, excavating, forming, furnishing, and placing concrete, constructing, and sealing joints, backfilling, seeding, and mulching. Furnishing and installing the detectable warning surface shall be included as part of the ramp.

Concrete Sidewalk Access Ramp Removal will be measured and paid in units of each. Pay limits are identified on the Standard Details and in Provision 2 of this Section. Curb and gutter removal/replacement within the ramp pay limits shall be incidental to the ramp removal and reharmonization. Single ramps shall be paid as 1-unit, double ramps as 2 units, and shared ramps as 2 units. Such price includes, but is not limited to, sawing the existing sidewalk or driveway, removal, and disposal of sidewalk, excavating, forming, furnishing, and placing of incidental concrete, constructing, and sealing joints, backfilling, seeding, and mulching.

6" Concrete Driveway (Remove and Replace) will be measured and paid as the actual number of each driveway apron removed and replaced. No additional payment will be made for curb and gutter removal and replacement within the apron radii.

SECTION 5: MILLING / PAVEMENT REHABILITATION

Description

Perform the work covered by this section including, but not limited to, milling and re-milling the pavement at locations, depths, widths and typical sections indicated in the contract; cleaning the milled surface; loading, hauling and stockpiling the milled material for use in recycled asphalt mixtures; and disposal of any excess milled material in areas provided by the Contractor in accordance with Town Ordinances pertaining to disposal of construction waste.

Construction Methods

Prior to construction, the Contractor shall carefully examine each signalized intersection for vehicle sensors. When encountered, the Contractor shall contact the Town of Wake Forest's Director of Engineering, and NCDOT's Transportation Operations Division, Traffic Signal Shop for coordination of construction and sensors relocation.

The Contractor shall work with the Town Inspections staff to identify drainage issues and assist in determining a course of action to resolve.

If milled areas are not paved back within 72 hours, the Contractor is to furnish and install portable signs to warn drivers of the conditions. These are to include, but not limited to "Rough Road" (W8-8), "Uneven Lanes" (W8-11) with Motorcycle Plaque mounted below. These are to be dual indicated on Multi-Lane Roadways with speed limits 45 mph and greater. These portable signs are incidental to the other items of work included in the temporary traffic control pay item. In addition, ICTs No.1-No.4 shall continue to apply.

The existing pavement shall be milled in a manner which will restore the pavement surface to a uniform longitudinal profile and cross section at the locations as indicated in the schedule of provisions or at locations as directed by the Engineer where indicated the asphalt removal shall be to a specified depth and shall produce a specific cross slope. The Contractor shall mill intersections and other irregular areas as indicated in the schedule of provisions or as directed by the Engineer. The milling shall extend from curb to curb, with excess asphalt material being removed to expose the existing face of curb and gutter.

The milling equipment shall be operated in such a manner as to prevent damages to the underlying pavement structure, utilities, drainage facilities, curb and gutter, paved surfaces outside the milled area, and any other appurtenances. Any damages to the above stated areas shall be replaced or repaired at no cost to the Town. The milled pavement surface shall be reasonably smooth and free of excessive scarification marks, gouges, ridges, continuous grooves, or the damage as determined by the Director of Engineering. All butt joints shall be straight and true. Any leveling or patching required as a result of negligence by the Contractor shall be repaired with hot bituminous plant mix at no cost to the Town of Wake Forest and in a manner acceptable

to the Engineer. The Contractor shall coordinate the adjustment of manholes, meter boxes, and valve boxes and resurfacing with the milling operation.

Catch basins and drop inlets shall be protected from milling debris by use of filter materials or other means that will prevent debris from entering the Town stormwater system. Any debris that enters catch basins and drop inlets shall be removed by the Contractor.

Wash water from milling machines shall be filtered by use of stormwater filter devices for catch basins and drop inlets. Stormwater filter devices shall be submitted for approval prior to work starting. Failure to use stormwater filter devices shall be considered an “illicit discharge” as defined in Code of Ordinances and State law references: G.S. Chapter 113A Article 4 (Pollution Control Act); G.S. Chapter 143 Article 21 (Water and Air Resources); Emission of pollutants and contaminants, G.S. 160A-185; Town of Wake Forest’s Code of Ordinances, Article VI – ILLICIT STORMWATER DISCHARGE.

All milled pavement surfaces shall be thoroughly cleaned of all loose aggregate particles, dust, and other objectionable material within 24 hours, by the use of an approved street sweeper. Street sweepers to be utilized shall be of the Vacuum or Regenerative Air Sweeper type with a minimum six (6) cubic yard capacity. No mechanical sweepers will be allowed, except to assist the above noted approved sweeper types. The Contractor can also utilize additional equipment as necessary for this removal. This debris shall not be allowed to accumulate on the Right-of-Way, private property, sidewalks, or driveways. If this occurs, it shall be cleaned off immediately.

Edge & Double Edge Milling

Edge milling shall be at least 4’ in width. Butt joints may be required at intersecting streets. Butt joints will be paid at the Edge Milling rate. Double edge mill shall overlap 1-2’ but shall not exceed 7’ in width. Resurfacing shall be performed within 7 days after patching is completed on such streets.

Full Mill Operations

Streets designated as Full Mill shall have lanes milled to a depth of 0” – 4” depending on existing road cross section milling recommendations. Utilities shall be lowered prior to milling operations and final adjustments performed after milling is complete. Milling and replacement shall be performed within 1 week after the patching is completed on such streets.

Temporary pavement markings on milled surfaces shall be installed as soon as milling operations allow. The milled pavement surface shall be thoroughly cleaned of all loose aggregate particles, dust, and other objectionable material before temporary markings are installed.

Mill & Fill Operations

Streets designated as Mill & Fill shall have lanes milled to a depth of 0” – 3” or to stone, cleaned, and paved back by within 72 hours or at the end of the workday, whichever ever one applies to the specific street to satisfy ICT No.1-No.4. Traffic is to be kept at a minimum to ride on the milled surface. Utility adjustments and patching, as needed, shall be performed prior to the Mill & Fill operation. Mill & Fill operations shall be performed within 7 days after patching is completed on such streets. Any utilities damaged during milling shall be repaired or replaced as soon as possible at no cost to the Town. The Mill & Fill unit rate will be used for streets designated as such. This rate is not in addition to any other milling rate.

Temporary pavement markings shall be installed as directed in the Pavement Markings portion of this contract. The pavement markings shall be installed as soon as the milling operations will allow. The milled

pavement surface shall be thoroughly cleaned of all loose aggregate particles, dust, and other objectionable material before temporary pavement markings are installed.

Equipment

Equipment shall include a self-propelled unit capable of removing the existing bituminous pavement to the depths, widths, and typical sections as indicated in the schedule or provisions or as directed by the Engineer. The equipment shall have been designed and built exclusively for pavement milling operations and shall have sufficient power, traction, and stability to accurately maintain depth of cut and slope. The milling machine shall be equipped with a grade control system, which will automatically control the longitudinal profile and cross slope of the pavement surface. The machine shall be capable of leaving a uniform surface suitable for handling traffic without excessive damage to the underlying pavement structure.

Additional equipment necessary to satisfactorily remove the pavement in the area of curb and gutter, and other obstructions shall be provided. The milling equipment shall be equipped with a means of effectively limiting the amount of dust escaping from the removal operations in accordance with local, state, and federal air pollution control laws and regulations.

Patching

The Contractor shall be responsible for pavement patching on all streets which have been milled. Milled pavement areas, in which exposed subgrade materials are present after the milling has been completed, shall be patched no later than the end of the workday.

Measurement and Payment

Milling (0-2'') Edge, Milling (0-2'') Double Edge, Milling (0-2'') Full Width, and Milling (0-3'') Mill and Fill to be paid for will be the actual number of square yards of pavement surface which has been milled in accordance with the requirements of this section. In measuring this quantity, the length will be the actual length milled, measured along the pavement surface. The width will be the actual width milled measured along the pavement surface, including any incidental areas which require removing, i.e., small areas adjacent to curb and gutter, etc.

Incidental milling to be paid will be the actual number of square yards of surface milled where the Contractor is required to mill butt joints, irregular areas and intersections milled as a separate operation from mainline milling and re-mill areas that are not due to the Contractor's negligence whose length is less than 100 feet. In measuring this quantity, the length will be the actual length milled, measured along the pavement surface. The width will be the width required by the plans or directed, measured along the pavement surface. Areas to be paid under these items include radius areas, butt joints and irregular areas as desired to complete the work or correct a pavement running/cross slope issue. Where the Contractor elects to make multiple cuts to achieve the final depth, no additional measurement will be made. Compensation will be made at the contract unit price per square yard for Incidental Milling. Pavement Patching will be paid as the actual number of tons of asphalt plant mix, complete in place, used to make completed and accepted repairs, including skim patching on exposed subgrade, except for those repairs made necessary by the Contractor's negligence. The asphalt plant mix material will be measured by weighed in trucks on platform scales or other certified weighing devices.

SECTION 6: SHALLOW UNDERCUT

The published volume entitled "North Carolina Department of Transportation, Standard Specifications for Roads and Structures", Latest Edition, with all amendments and supplements thereto, is by reference incorporated into and made part of this contract; that, except as herein modified, all the construction and work included in this contract is to be performed in accordance with the specifications contained in said volume, and amendments and supplements thereto, under the direction of the Director of Engineering.

Description

All work in this section shall consist of elements to complete shallow undercut on specified sections of Town streets which exhibit unsuitable soils.

Construction Methods

When shallow undercut is required to construct aggregate subgrades, undercut 12" to 24" as shown on the plans or as directed. Perform undercut excavation in accordance with Section 225. Install geotextile for soil stabilization in accordance with NCDOT Standard Specifications for Roads and Structures Article 270-3. Place Class IV subgrade stabilization (standard size no. ABC) by end dumping ABC on geotextiles. Do not operate heavy equipment on geotextiles until geotextiles are covered with Class IV subgrade stabilization. Compact ABC to 92% of AASHTO T 180 as modified by the Department or to the highest density that can be reasonably obtained. Maintain Class IV subgrade stabilization in an acceptable condition and minimize the use of heavy equipment on ABC in order to avoid damaging aggregate subgrades. Provide and maintain drainage ditches and drains as required to prevent entrapping water in aggregate subgrades.

Placement of Geotextile and Geogrid

Geotextile and Geogrid materials shall conform to Section 1056 of NCDOT Standard Specifications. Following the shallow undercut operation, geotextile material shall be placed in the work area covering the full width and length of the excavation. Geotextile shall be overlapped a minimum of 12 inches in cases where multiple pieces or rolls are used. Geotextile shall be pinned to the subgrade.

One layer of geogrid shall be placed on top of the geotextile material prior to back filling with Class IV stone. In cases where geogrid is overlapped, follow manufacturer's recommendations.

Backfill and compact the excavation with Class IV Stone for Stabilization to within 6" of the finish pavement elevation grade. Complete the patch using the prescribed pavement detail of I19.0C and S9.5C placed in 2 lifts.

Payment for Shallow Undercut, Geotextile / Geogrid and Class IV Stone shall be considered full payment for, but not limited to, all labor, materials, equipment, incidentals, overhead and profit associated with the work.

Measurement and Payment

Shallow Undercut will be measured and paid in cubic yards. The contract unit price for Shallow Undercut will be full compensation for excavating, hauling, and disposing of materials to construct aggregate subgrades.

Fabric for Soil Stabilization will be measured and paid in square yards. The contract unit price for Fabric for Soil Stabilization will be full compensation for providing and installing the fabric.

Geogrid for Soil Stabilization will be measured and paid in square yards. The contract unit price for Geogrid for Soil Stabilization will be full compensation for furnishing and installing the geogrid.

Class IV Stone for Soil Stabilization will be measured and paid in tons. Class IV soil stabilization will be measured by weighing material in trucks in accordance with NCDOT Standard Specifications for Roads and Structures article 106-7. The contract unit price for Class IV Stone for Soil Stabilization will be full compensation for furnishing, hauling, handling, placing, compacting, and maintaining ABC.

SECTION 7: PAVEMENT PATCHING

Description

Perform the work covered by this section including, but not limited to, repairing of existing pavement with asphalt plant mix in order to provide a safe, passable, and convenient condition for traffic.

Perform the work by cutting the existing pavement to a neat vertical joint and uniform line; removing and disposing of pavement, base, and subgrade material as approved or directed; coating the area to be repaired with a tack coat; furnishing, placing, and compacting asphalt plant mix; and replacing of the removed material with asphalt plant mix.

Materials

Where a pavement repair detail is not shown in the plans, use an Asphalt Concrete Intermediate Course, Type I19.0C. Where a pavement repair detail is shown in the plans, the type of plant mix shall be in accordance with the pavement repair detail except where the Specifications permit the substitution of another type of plant mix or where approved.

Patching on all streets shall generally consist of milling and placing 2.5" - 4" of Asphalt Concrete Intermediate Course, Type I19.0C. In some cases, the Town may elect to use B25.0C as directed. For permanent repairs associated with Raleigh Water pavement patching, Contractor may be required to pave full lane width and match existing depths and mix types to meet NCDOT requirements. Patching on Mill & Fill streets shall be paid at the patching unit rate.

The Contractor will be responsible for providing, installing, and maintaining all temporary traffic control during pavement patching operations.

Construction Methods

The Contractor shall excavate in areas as directed by the Engineer to the depth directed. Excavation shall be neatly squared with clean vertical sides. All loose material shall be removed from the excavated area. If the subgrade materials are disturbed, the Director of Engineering may require the subgrade materials to be recompacted utilizing compaction equipment suitable for this purpose. Existing pavement areas shall be tacked, and bituminous material shall be placed in even, uniform lifts. Bituminous material shall be compacted using steel wheeled mechanical compaction equipment, in accordance with current NCDOT standards.

The finished surface shall be smoothed and shaped to provide a final compacted surface grade consistent with the adjacent existing pavement grades. The final surface grade of the patch shall be within one-eighth inch ($1/8'' \pm$) of the adjacent existing pavement and grade. Any patch areas more than one-eighth inch ($1/8'' \pm$) above adjacent existing pavement shall be milled to proper grade at Contractor's expense.

All pavement patching areas shall be maintained in satisfactory condition until resurfacing occurs.

A minimum depth of 2 inches of patching material shall be utilized. Additional areas shall be patched as directed by the Engineer. All patching shall be performed as per the special provision section as outlined in the Pavement Patching portion of this Contract.

Measurement and Payment

Pavement Patching will be paid as the actual number of tons of asphalt plant mix, complete in place, used to make completed and accepted repairs, including skim patching on exposed subgrade, except for those repairs made necessary by the Contractor's negligence. The asphalt plant mix material will be measured by weighed in trucks on platform scales or other certified weighing devices.

Any requirement included in the contract that provide for adjustments in compensation for to variations in the price of asphalt cement will not be applicable to payment for the work covered by this section.

SECTION 8: THERMOPLASTIC PAVEMENT MARKINGS

The project will include the furnishing and placement of Thermoplastic Alkyd/Maleic Retroreflective Pavement Markings in the form of lines and symbols of the type specified herein. The work shall be performed in strict accordance with NCDOT Standard Specifications for Roads and Structures (Latest Edition) Section 1205.

Revise the 2018 Standard Specifications as follows: Page 12-6, Sub article 1205-4(A)(1) General, lines 5-8, delete the second sentence and replace with the following:

Use application equipment that provides multiple width settings ranging from 4 inches to 12 inches and multiple thickness settings to achieve a minimum pavement marking thickness of 0.090 inch above the surface of the pavement.

Page 12-7, Table 1205-3, THICKNESS REQUIREMENTS FOR THERMOPLASTIC, replace with the following:

Table 1205-3 Minimum Thickness Requirements for Thermoplastic	
Thickness	Location
240 mils	In-lane and shoulder-transverse pavement markings (rumble strips). May be placed in 2 passes
90 mils	Center lines, skip lines, transverse bands, mini-skip lines, characters, bike lane symbols, crosswalk lines, edge lines, gore lines, diagonals, and arrow symbols

Pavement markings shall be applied within **24 hours** of resurfacing. If pavement markings are not installed within the 24-hour period, additional resurfacing shall not be permitted.

Temporary pavement markings on milled surfaces shall be installed as soon as milling operations allow. The milled pavement surface shall be thoroughly cleaned of all loose aggregate particles, dust, and other objectionable material before temporary markings are installed.

Interim marking paint shall be covered with thermoplastic pavement marking within 30 calendar days of placement. Should this period of time be exceeded, all resurfacing operations shall be suspended until thermoplastic pavement marking material is applied and completed on such streets.

If the pavement marking plans and NCDOT standards conflict, the Transportation Director shall be notified prior to the installation of such work.

No payment will be made for final thermoplastic pavement markings until all markings have been completed on the entire street.

The Contractor shall submit Thermoplastic Pavement Marking quantities for verification in spreadsheet format identifying pavement markings on a street-by-street basis.

Removal of Pavement Markings

This work includes the removal of all types of pavement marking lines, symbols and characters including removal for long life marking preparation. This work does not include removal of removable tape pavement markings.

Remove pavement marking lines, characters and symbols by acceptable methods to the Engineer that will not materially or structurally damage the surface or the texture of the pavement. Leave the pavement surface in a condition that will not mislead or misdirect the motorist.

Where existing pavement markings are to be removed and replaced by other pavement markings, do not begin removal until adequate provisions have been made to complete the installation of the replacement markings. Remove pavement markings such that the surface is in proper condition for adequate bonding of the new markings. Promptly remove any material deposited on the pavement as a result of removing pavement markings as the work progresses by acceptable methods. Provide the equipment necessary to control dust and the accumulation of debris resulting from the removal process. The removal equipment shall provide dust control and the capture of the removed material shall be done using a separate vacuum equipped vehicle or other approved system. Perform the recovery process within the same operation as the removal. Do not let traffic use the lane where the removal is taking place until the recovery system is finished. Should the recovery system fail, cease removal operations until the recovery system is properly operating. The Contractor is responsible for all cleanup and proper disposal of all removed debris from the project site. When using a grinding method for pavement marking removal, the equipment shall have multiple heads working in tandem or have a removal head with operator dialed controls to result in a planed surface and provide adequate preparation of the surface to accept the new marking material.

Application of polyurea over existing pavement marking materials will require at least 95% of the existing pavement marking material to be removed; however, if one 15 mil application of paint was placed on asphalt pavement less than 6 months old, do not remove the existing paint pavement markings.

Thermoplastic may be installed over existing thermoplastic on asphalt. Application over existing pavement marking materials other than thermoplastic will require the existing pavement marking material to be removed so that at least 85% of the existing pavement marking surface is removed. Before applying thermoplastic pavement markings over the existing thermoplastic pavement markings, remove at least 25% of the oxidized existing thermoplastic. On newly installed failed thermoplastic that is to be removed and replaced, remove a minimum of 85% of the existing thermoplastic. However, if one 15 mil application of paint was placed on asphalt pavement less than 6 months old, do not remove the existing paint pavement markings.

Use black color #37038 in paint or tape, as determined by Contractor, to cover any remaining conflicting pavement marking after removal from asphalt pavement surfaces. Do not use black paint or tape on concrete pavement surfaces. The black paint will not have a defined shape or edges with a width not exceeding double of the existing lines.

Measurement and Payment

Thermoplastic Pavement Markings 4", Thermoplastic Pavement Markings – 8", Thermoplastic Pavement Markings – 24", Green Thermoplastic, 24" will be measured and paid as the actual number of linear feet of placement marking lines satisfactorily placed and accepted by the Engineer. The quantity of solid lines will be the summation of the linear feet of solid line measured end-to-end of the line. The quantity of skip or broken lines will be the summation of the linear feet derived by multiplying the nominal length of a line by the number of marking lines satisfactorily placed.

Thermoplastic Symbol, Thermoplastic Character, Thermoplastic Roundabout Symbol, Speed Hump Symbol, Bike Lane Arrow, Bike Sharrow, Bike Lane Symbol, and Shark Teeth Symbol will be measured and paid as the actual number of pavement marking symbols and characters satisfactorily placed and accepted by the engineer. A character is considered to be one letter or one number of a word message.

Temporary Paint, 4", Temporary Paint, 8", and Temporary Paint, 24" will be measured and paid as the actual number of linear feet of placement marking lines satisfactorily placed and accepted by the Engineer.

Temporary Paint Symbols and Temporary Paint Characters will be measured and paid as the actual number of pavement marking symbols and characters satisfactorily placed and accepted by the engineer

Thermoplastic Eradication, Lines will be measured and paid as the actual number of linear feet of pavement markings satisfactorily removed and accepted by the Engineer. The quantity of solid lines will be the summation of the linear feet of solid line measured end-to-end of the line. The quantity of skip or broken lines will be the summation of the linear feet derived by multiplying the nominal length of a line by the number of marking lines satisfactorily removed. No payment will be made for the removal of removable pavement marking tape.

Thermoplastic Eradication, Symbol and Thermoplastic Eradication, Character will be measured and paid as the actual number of pavement markings symbols and characters satisfactorily removed and accepted by the Engineer.

Flexible Delineator will be measured and paid as the actual number of each delineator post installed.

SECTION 9: SIGNALS AND INTELLIGENT TRANSPORTATION SYSTEMS

All work associated with signals and intelligent transportation systems shall be installed in strict accordance with NCDOT Standard Specifications for Roads and Structures (Latest Edition) Division 17.

Street locations for inductive detection loops and associated work are indicated on the Pavement Markings List.

The Contractor shall notify the Town of Wake Forest, Engineering Department at least 48 hours before milling an intersection with signal detection loops. After signal detection loops are installed, the Contractor shall notify the Engineering Department for inspection at least 48 hours before resurfacing occurs. Notify Engineer one week before installing inductive detection loops.

Coordinate saw-cutting and loop placement with pavement markings. For new construction or resurfacing, install inductive detection loops before placing final lay of surface course. On unmarked pavement, pre-mark locations of stop lines and lane lines before locating inductive detection loops.

Measurement and Payment

Inductive Loop Sawcut and Bike Count Loop Sawcut will be measured and paid as the actual linear feet of inductive loop sawcut installed and accepted.

Detector Cards and Junction Boxes will be measured and paid as the actual number of detector cards and junction boxes installed and accepted.

SECTION 10: SPEED HUMPS

Speed Hump Removal

Break up, remove, and satisfactorily dispose of asphalt components of an existing structure and repair pavement to match existing adjacent pavement surface.

Measurement and Payment

Speed Hump Removal will be measured and paid for per each speed hump removed. A speed hump will be counted as full width of road. No direct payment will be made for the following: milling, hot mix asphalt, asphalt binder, and pavement markings associated with speed hump removal.

SECTION 11: WORK ZONE TRAFFIC CONTROL

Description

Maintain traffic through work zones in accordance with these Specification, the MUTCD, NCDOT Roadway Standard Drawings, 23 CFR 630 Subparts J and K and any additional Transportation Management Plans.

Temporary Lane Closures

Operate all equipment and personnel within the designated work area during lane closures. Do not impede or stop traffic for the purpose of performing construction related work on the traffic side of the lane closure.

Install lane closures with traffic flow, beginning with devices on the upstream side of traffic. Remove lane closures against the traffic flow, beginning with devices on the downstream side of traffic.

When construction proceeds through an intersection, provide flaggers and all other necessary traffic control as required to direct the traffic through the intersection. When an intersection is signalized, place the signal in flash mode and provide law enforcement or other adequate traffic control measures to direct traffic through the intersection before beginning work in the intersection.

Traffic Control Supervision

Provide the service of at least one qualified work zone supervisor. The work zone supervisor shall have the overall responsibility for the proper implementation of the TMP and ensure all employees working inside

the NCDOT right of way have received the proper training appropriate to the job decisions each individual is required to make.

The work zone supervisor is not required to be on site at all times but shall be available to address concerns of the Engineer. The name and contact information of the work zone supervisor shall be provided to the Engineer prior to or at the preconstruction conference.

Qualification of work zone supervisors shall be done by an NCDOT approved training agency or other approved training provider. For a complete listing of these, see the Work Zone Traffic Control's webpage. Coordinate with and cooperate with work zone supervisors of adjacent or overlapping construction projects to ensure safe and adequate traffic control is maintained throughout the projects at all times including periods of construction inactivity in accordance with Article 105-7.

Vehicular Access

Maintain Continuous and safe vehicular access, including but not limited to, all residences businesses, schools, police and fire stations, hydrants, other emergency services, hospitals and mailboxes. Conduction operations so as to limit the inconvenience to property owners.

Pedestrian Access

Maintain pedestrian access at all times. When existing pedestrian facilities are disrupted, closed or relocated, provide temporary facilities that are detectable and include accessibility features consistent with the features present in the existing pedestrian facility. The work zone supervisor is responsible for the implementation of all traffic control plans, and installation and maintenance of the pedestrian devices. The work zone shall be inspected weekly or as directed by the Engineer. When pedestrian movement through or around a work zone is necessary, provide a separate usable footpath. If the previous pedestrian facility was accessible to pedestrians with disabilities, provide a footpath during temporary traffic control that is comparable. Do not have any abrupt changes in grade or terrain that could cause a tripping hazard or could be a barrier to wheelchair use. Provide channelizing devices that are detectable to pedestrians who have visual disabilities. Provide temporary pedestrian facilities that are made of concrete, asphalt or other suitable material as approved by the Engineer, at all locations where the existing sidewalks have been removed for construction operations.

Do not sever or move pedestrian facilities for non-construction activities such as parking for vehicles and equipment. Separate pedestrian movements from both work zone activity and vehicular traffic.

Temporary Traffic Control Devices

Furnish, install, maintain, relocate, and remove temporary traffic control devices. All temporary traffic control devices furnished by the Contractor shall remain the property of the Contractor, unless otherwise specified in the contract.

Ensure all temporary traffic control devices are inspected and approved before using them on the project. Install temporary traffic control devices before construction operations begin and during the proper phase of construction. Maintain and relocate temporary traffic control devices during the time they are in use. Keep these devices in place as long as they are needed and immediately remove thereafter. When operations are performed in stages, install only those devices that apply to the present conditions.

Perform continuous maintenance and daily scheduled inspections of temporary traffic control devices. Review and maintain all traffic handling measures to ensure that adequate provisions are in place for public and workers' safety. Maintenance activities include cleaning, repair, or replacement, and prompt disposal of temporary traffic control devices that are damaged, torn, crushed, discolored, displaced or deteriorated beyond effectiveness. Replace work zone traffic control devices deemed unacceptable according to the guidelines set forth in the American Traffic Safety Service Association's (ATSSA) Quality Guidelines for Work Zone Traffic Control Devices.

Failure to maintain acceptable traffic control measures or temporary traffic control devices may result in formal notification of noncompliance. Implement remedial action immediately for imminent danger situations as directed by the Engineer. Implement remedial action within 48 hours after notification of a safety issue that is not an imminent danger.

Failure to comply may result in having the work performed with available forces and equipment. In cases of willful disregard for the safety of the public, the Engineer may proceed immediately to implement the measures necessary to provide the appropriate level of traffic control to ensure that the safety of all concerned parties is maintained.

Measurement and Payment

Temporary Traffic Control will be paid as a lump sum unit cost. The contract unit price for shallow undercut will be full compensation for all traffic control materials and labor required by these Specifications.

SECTION 12: TRAFFIC ISLANDS AND MEDIANS

Description

Construct traffic islands and medians of the type required by the plans. Perform the work in accordance with the contract.

Construction Methods

Construct curb and gutter in accordance with Section 4.

Uniformly grade and compact the earth or base course under any island or median to the same requirements as the surrounding material. Concrete islands shall be constructed after milling has occurred and before final resurfacing.

Construct concrete in accordance with Section 4 and give a sidewalk finish, except as otherwise provided herein. Broom concrete surfaces in medians transverse to the direction of traffic unless otherwise directed. Locate joints in island and median covers to line up with the joints in the curb and curb and gutter wherever possible. Locate joints in monolithic concrete islands and medians constructed adjacent to concrete pavement to line up with the joints in the concrete pavement wherever possible. Seal all joints. Form openings in the island or island cover to accommodate signposts.

Measurement and Payment

5" Monolithic Concrete Islands/Medians will be measured and paid in square yards of concrete island that has been placed and accepted. Measurement will be made parallel to the bottom surface of the island or median. This work includes, but is not limited to, excavation and backfilling, constructing base, furnishing and placing concrete, forming holes for signposts and constructing and sealing joints.

SECTION 13: MICRO SURFACING

Description

This provision covers the micro surfacing materials, equipment, construction and application procedures for surfacing, leveling or rut filling of existing paved surfaces in accordance with the contract. The micro surfacing system shall be a mixture of cationic latex modified asphalt emulsion, mineral aggregate, mineral filler, water and other additives, properly proportioned, mixed and spread on the paved surface in accordance with this provision and as directed by the Engineer.

Materials

(A) Latex Modified Emulsified Asphalt

The emulsified asphalt shall be a cationic type CQS-1hLM and shall conform to AASHTO M 208 or ASTM D2397. In general, 3% polymer solids, based on asphalt weight, is considered minimum. The ring and ball softening point of the residue shall be a minimum of 135°F. It shall show no separation after mixing. The cement mixing test is waived for the latex modified CQS-1hLM.

(B) Mineral Aggregate

The mineral aggregate used shall be compatible with the latex modified emulsified asphalt and can produce a good skid resistant surface. The aggregate shall meet requirements in Article 1012-1 of the Standard Specifications.

(C) Mineral Filler

Mineral filler shall be any recognized brand of non-air entrained Portland cement that is free of lumps or hydrated lime meeting the requirements of ASTM D242. It may be accepted upon visual inspection.

(D) Water

The water shall be potable and shall be free of harmful soluble salts in accordance with Article 1024-4 of the Standard Specifications.

(E) Latex Modifier

A latex based modifier, certified from an approved source, along with special emulsifiers shall be milled into the asphalt emulsion by an approved emulsion manufacturer.

(F) Other Additives

The additives are any other materials that are added to the emulsion mix or to any of the component materials to provide the specified properties. The additives shall be supplied by the emulsion manufacturer to provide control of the set time in the field.

Mix Design

The Contractor is required to design the asphalt mix and to obtain an approved Job Mix Formula (JMF) issued by the Department. A mix design and proposed JMF targets for each required mix type and combination of aggregates must be submitted in electronic format to the Materials and Tests Unit for review and approval at least 10 days prior to start of asphalt mix production. The mix design shall conform to the International Slurry Surfacing Association's ISSA A143,

Section 5.2.

Compatibility of the aggregate test results and a certificate of analysis (COA) for the latex modified CQS-1hlm shall be submitted with the mix design.

Aggregate used in the job mix formula shall be of the material proposed by the Contractor for use on the project.

The gradation of the aggregate shall be in accordance with the following:

Screen Size	Type II (% passing)	Type III (% passing)	Stockpile Tolerance (%)
3/8"	100	100	
#4	90 - 100	70 - 90	± 5
#8	65 - 90	45 - 70	± 5
#16	45 - 70	28 - 50	± 5
#30	30 - 50	19 - 34	± 5
#50	18 - 30	12 - 25	± 4
#100	10 - 21	7 - 18	± 3
#200	5 - 15	5 - 15	± 2

The gradation of the aggregate stockpile shall not vary by more than the stockpile tolerance from the mix design gradation (indicated in the table above) while also remaining within the specification gradation band. The percentage of aggregate passing any 2 successive sieves shall not change from one end of the specified range to the other end. (The #200 sieve material shall not vary by more than ± 2 of the JMF value.)

The aggregate will be accepted at the job location or stockpile based on 2 gradation tests sampled according to AASHTO T 2. If the average of the 2 tests is within the stockpile tolerance from the mix design gradation, the material will be accepted. If the average of those test results is out of specification or tolerance, the Contractor will be given the choice to either remove the material or blend additional aggregate with the stockpile material to bring it into compliance. Materials used in blending shall meet the required aggregate quality test specifications in Section 1012 of the Standard Specifications before blending and shall be blended in a manner to produce a consistent gradation. Aggregate blending may require a new mix design. Screening shall be required at the stockpile if there are any problems created by oversized materials in the mix.

The mineral aggregate shall be weighed by means of scale approved by the Engineer before delivery to the job site. Emulsified asphalt shall be weighed by means of approved scales or be measured by volume.

Precautions shall be taken to ensure that stockpiles do not become contaminated.

Samples for gradation will be taken from aggregate stockpiles designated by the Contractor for use. Samples for asphalt content shall be taken from the completed mix. Samples of aggregate and filler will be taken at the job site. The frequency of sampling and testing will be established by the Engineer based upon the Department's current acceptance program. The asphalt content will be determined by AASHTO T 308 modified.

Equipment

Use equipment that meets ISSA A143 Section 6.

Each mixing unit to be used in performance of the work shall be calibrated in the presence of the Engineer before beginning the work. Submit calibration documentation to the Engineer. Any equipment replacement affecting material proportioning requires that the machine be recalibrated. No machine will be allowed to work on the project until the calibration has been accepted by the Engineer.

Construction Methods

(A) Weather

Place material only when the surface is dry and the atmospheric and surface temperature is at least 50°F and rising and there is no chance of temperatures below 32°F within 24 hours from the time the material is applied. Do not place the material when the atmospheric temperature is 50°F and falling or if rain is imminent.

(B) Surface Preparation

Immediately prior to applying the paving mixture the surface shall be thoroughly cleaned of all vegetation, loose materials, dirt, mud, and other deleterious materials. Protect and cover all manholes, valve boxes, drop inlets and other service entrances prior to installation of the micro surfacing. Remove all thermoplastic lines, symbols and characters in accordance with Subarticle 1205-3(I) of the Standard Specifications.

Remove raised pavement markers and snowplowable delineation and prepare the surface for micro surfacing as directed by the Engineer. Snowplowable delineation treatments include but are not limited to polycarbonate H-shaped markers, inlaid raised pavement markers, 10' rumble skips, inlaid cradle markers and 10' inlaid pavement markings. As directed by the Engineer remove any other additional pavement markings prior to micro surfacing in accordance with Subarticle 1205-3(I) of the Standard Specifications.

(C) Tack Coat for Micro Surfacing

The tack coat used should conform to the manufacturer's recommendation for the micro surfacing product being applied. The emulsified asphalt used for tack coat shall be CSS, CQS or the micro surfacing emulsion diluted to one-part emulsified asphalt to 2 or 3 parts water, as approved by the Engineer. Consult with the micro surfacing emulsion supplier to determine dilution stability. The distributor shall be capable of applying the diluted tack coat evenly at a rate of 0.05 to 0.10 gallons per square yard as required by the Engineer. Cure the tack coat sufficiently before the application of micro surfacing.

(D) Application

Always carry sufficient micro surfacing material to all parts of the spreader box so that complete coverage is obtained. Water in very limited quantity may be sprayed into the spreader box to prevent build-up on the blades to facilitate spreading without harming the mix. No lumping, balling, or unmixed aggregate shall be permitted in the finished surface. Screen any oversized aggregate or foreign materials from the aggregate prior to delivery to the mixing machine.

In restricted areas where hand spreading is necessary, slight adjustments to the mix formula may be required to slow setting time. Pour the paving mixture into a small windrow along one edge of the surface to be covered. Spread the mixture uniformly by a hand squeegee.

The seam where two passes join shall be neat in appearance and uniform.

All excess material shall be removed from ends of each run immediately on surface course.

(1) Single Course

Micro surfacing, as a single course application, for the final surface course shall be placed at a dry aggregate weight of 18 to 22 pounds per square yard for Type II and 20 to 24 pounds per square yard for Type III.

(2) Scratch or Leveling Course

Apply a full width scratch or leveling course with the spreader box using a stiff rubber strike-off. Spread the mixture to fill minor cracks, minor surface irregularities, and shallow potholes and leave a uniform high-skid resistant application of aggregate and asphalt on the surface. Use squeegees to hand spread the mixture in areas inaccessible to the spreader box or as directed by the Engineer. In a Type II/Type II double course application, apply the leveling course at a dry aggregate minimum weight of 16 pounds per square yard. Apply the surface course at 16 to 20 pounds per square yard. The combined dry aggregate minimum weight shall be 32 pounds per square yard.

In a Type III/Type II double course application, apply the Type III leveling course at a dry aggregate minimum weight of 20 pounds per square yard. Apply the Type II surface course at a dry aggregate weight of 16 to 20 pounds per square yard. The combined dry aggregate minimum weight shall be 36 pounds per square yard.

In a Type III/Type III double course application, apply the leveling course at a dry aggregate minimum weight of 20 pounds per square yard. Apply the surface course at a dry aggregate weight of 20 to 24 pounds per square yard. The combined dry aggregate minimum weight shall be 40 pounds per square yard.

(3) Rut Fill Course

Use Type III micro surfacing for rut filling. The rut fill box shall be 5 to 6 feet in width and have a dual chamber with an inner “V” configuration of augers to channel the large aggregate to the center of the rut and the fines to the edges of the rut fill pass. Equip the box with dual steel strike-off to control both the width and depth of the rut fill.

(E) Curing

Curing of micro surfacing shall be allowed to take place without traffic interruption for 45 – 90 minutes. The Contractor shall determine the appropriate curing time of the micro surfacing before it is opened up to traffic. Adequate means shall be provided to protect the micro surfacing from damage by traffic until the mixture has cured sufficiently so that it will not adhere to or be picked up by the tire of vehicles. Adjust mixture properties according to humidity and temperature conditions if curing is not occurring within 90

minutes. Stopping and starting traffic may require additional curing time. Cure all rut-filling and leveling courses under traffic for at least 8 hours before additional material is placed. During the curing time, the temperature cannot drop below 32°F, this time does not count towards the curing requirements.

Any damage done by traffic to the micro surfacing shall be repaired by the Contractor.

(F) Test Strip

A test strip shall be placed with job site materials and approved by the Engineer. The test strip shall be a minimum of 500 feet and constructed at the beginning of the first day of production and after, as directed by the Engineer. The weather and time of day, day or night, during the test strip shall be similar to expected conditions during construction. If approved by the Engineer, the test section will be incorporated into the production section.

Workmanship

Immediately take corrective action if micro surfacing material is exhibiting evidence of poor workmanship, delayed opening to traffic, or surface irregularities, including excessive scratch marks, drag marks, tears, streaks, raveling, delamination and segregation. After immediately contacting the NCDOT Pavement Preservation Engineer in the Materials and Tests Unit, the Engineer may allow placement to continue for no more than 1 day of production while the Contractor takes corrective action and/or takes corrective action as directed by the Engineer. If workmanship issues persist after the 1-day period, the Engineer will suspend paving until corrective action is taken to the satisfaction of the Engineer.

(A) Finished Surface

Provide a finished surface with a uniform texture free from excessive scratch marks, tears, or other surface irregularities. Marks, tears, or irregularities are considered excessive if:

- (1) More than 1 irregularity is at least 1/4 inch wide and at least 10 feet long in any 100 foot pull
- (2) More than 3 irregularities are at least 1/2 inch wide and more than 6 feet long in any 100 foot pull
- (3) Any are 1 inch wide or wider and more than 4 inch in length

(B) Construction Joints

Place mixture so that longitudinal joints on the surface course coincide with lane lines, or as directed by the Engineer. Provide longitudinal and transverse joints that are uniform and neat in appearance. Provide

construction joints that have limited buildup and no gaps between applications. Joints with buildup will be considered acceptable if:

- (1) No more than 1/2 inch vertical space exists between the pavement surface and a 4 foot straightedge placed perpendicular to the longitudinal joint and
- (2) No more than 1/4 inch vertical space exists between the pavement surface and a 4 foot straightedge placed perpendicular to the transverse joint.

(C) Edges

Provide an edge along the roadway centerline, lane lines, shoulder, edge of pavement, or curb line that is uniform and neat in appearance. The edge is considered acceptable

when:

- (1) It varies no more than 3 inches from a 100 foot straight line on a tangent section and
- (2) It varies no more than 3 inches from a 100 foot arc on a curved section.

(D) Miscellaneous Areas

Use a single-batch-type-lay-down machine or approved method to place materials on ramps or other short sections. Apply tack coat uniformly at the rate as shown in the contract, unless otherwise directed by the Engineer. Provide uniform coverage of appearance and comparable to that produced by the spreader box.

(D) Miscellaneous Areas

Use a single-batch-type-lay-down machine or approved method to place materials on ramps or other short sections. Apply tack coat uniformly at the rate as shown in the contract, unless otherwise directed by the Engineer. Provide uniform coverage of appearance and comparable to that produced by the spreader box.

Measurement and Payment

(A) When a surface or leveling course is applied, measurement and payment is as follows.

Micro Surfacing Single Course, Type ___ and Micro Surfacing Double Course, Type ___/Type ___ will be measured along the top surface of the completed work, placed and accepted as specified herein. Payment will be made at the contract unit price per square yard for the type or types specified, which price will be

full compensation for all materials including modifiers and additives, emulsion, aggregate, tack coat, labor, tools, equipment, and all other incidentals necessary to complete the work.

Removal of Pavement Marking Lines, ___" and Removal of Pavement Marking Symbols & Characters will be measured and paid for in accordance with Article 1205-10.

Removal of Raised Pavement Markers will be measured and paid in units of each. Such price includes but is not limited to removing the raised pavement markers, preparing the surface for micro surfacing and other incidentals necessary to complete the work.

Removal of Snowplowable Delineation will be measured and paid in units of each. Such price includes but is not limited to removing the snowplowable delineation treatment, preparing the surface for micro surfacing and other incidentals necessary to complete the work.

(B) When a rut filling course is applied, measurement and payment is as follows.

Micro Surfacing Rut Fill Course will be measured along the top surface of the completed work, placed and accepted as specified herein. Payment will be made at the contract unit price per ton, which price will be full compensation for all materials including modifiers and additives, emulsion, aggregate, tack coat, labor, tools, equipment, and all other incidentals necessary to complete the work.

Removal of Pavement Marking Lines, ___" and Removal of Pavement Marking Symbols & Characters will be measured and paid for in accordance with Article 1205-10.

Removal of Raised Pavement Markers will be measured and paid in units of each. Such price includes but is not limited to removing the raised pavement markers, preparing the surface for micro surfacing and other incidentals necessary to complete the work.

Removal of Snowplowable Delineation will be measured and paid in units of each. Such price includes but is not limited to removing the snowplowable delineation treatment, preparing the surface for micro surfacing and other incidentals necessary to complete the work.

Micro surfacing will be measured and paid by either (A) or (B) as described herein.

Payment will be made under:

Pay Item	Pay Unit
Micro Surfacing Single Course, Type ____	Square Yard
Micro Surfacing Double Course, Type ____/Type ____	Square Yard
Micro Surfacing Rut Fill Course	Ton
Removal of Raised Pavement Markers	Each
Removal of Snowplowable Delineation	Each

SECTION 14: Masonry Drainage Structures

Refer directly to Section 840 Minor Drainage Structures from the North Carolina Department of Transportation Standard Specifications for Roads and Structures (January 2024).

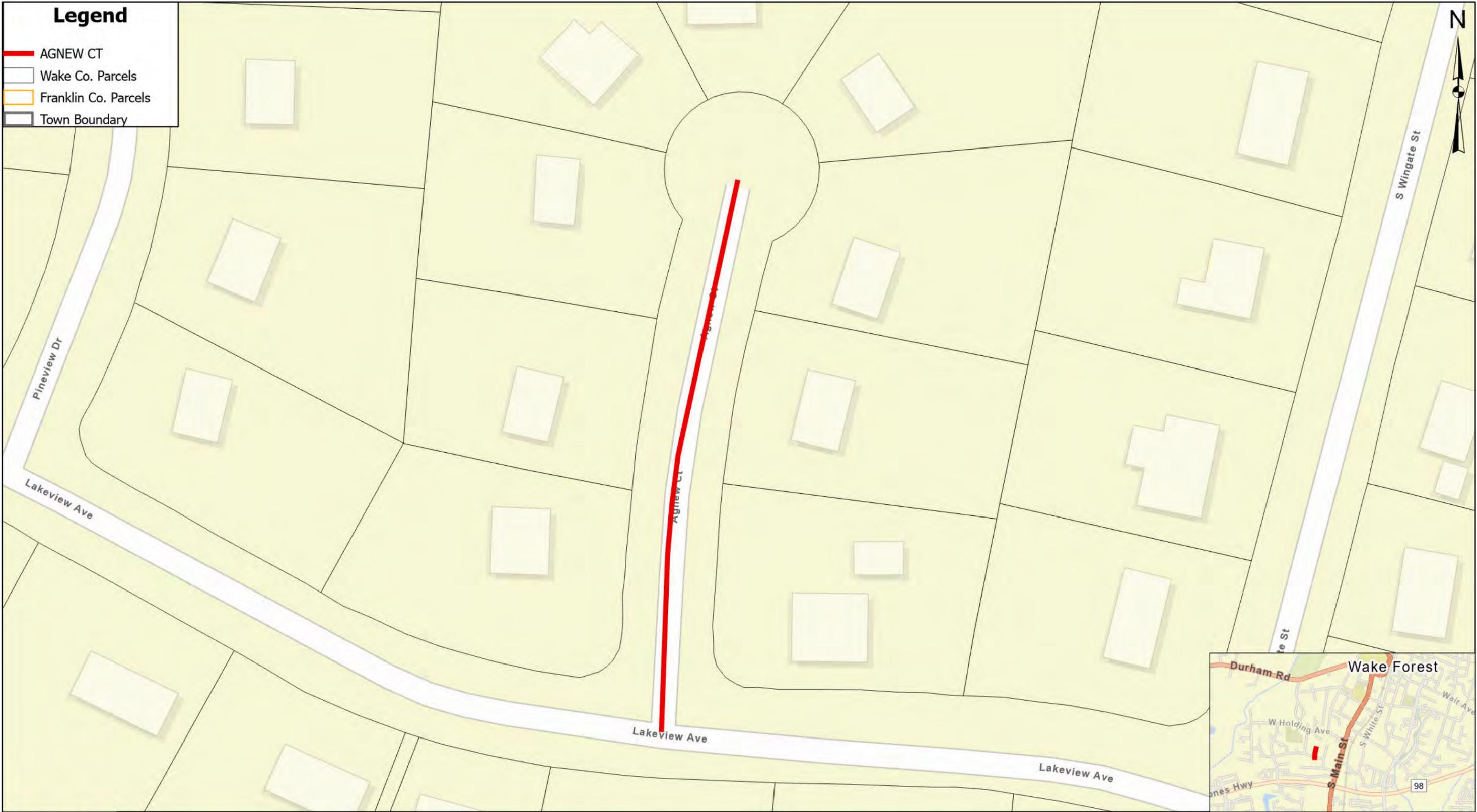
SECTION 15: Supplemental Specifications

If specifications are not found in the project special provision for line items described in this contract, the North Carolina Department of Transportation Standard Specifications for Roads and Structures & Town of Wake Forest Standards shall apply as determined by the Engineer.

This page has been left blank intentionally.

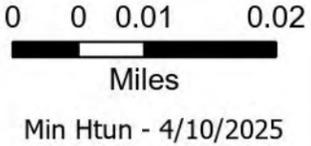
Legend

-  AGNEW CT
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



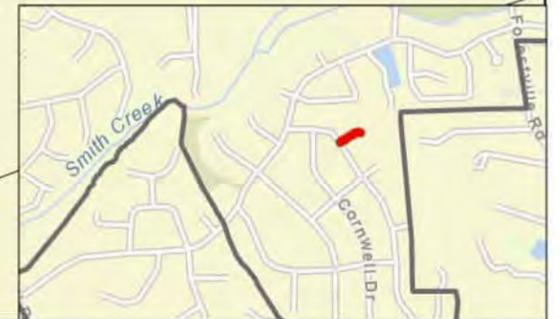
Map 1

AGNEW CT



Legend

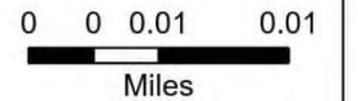
-  ANDOVERSFORD CT
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



TOWN of
WAKE FOREST

Map 2

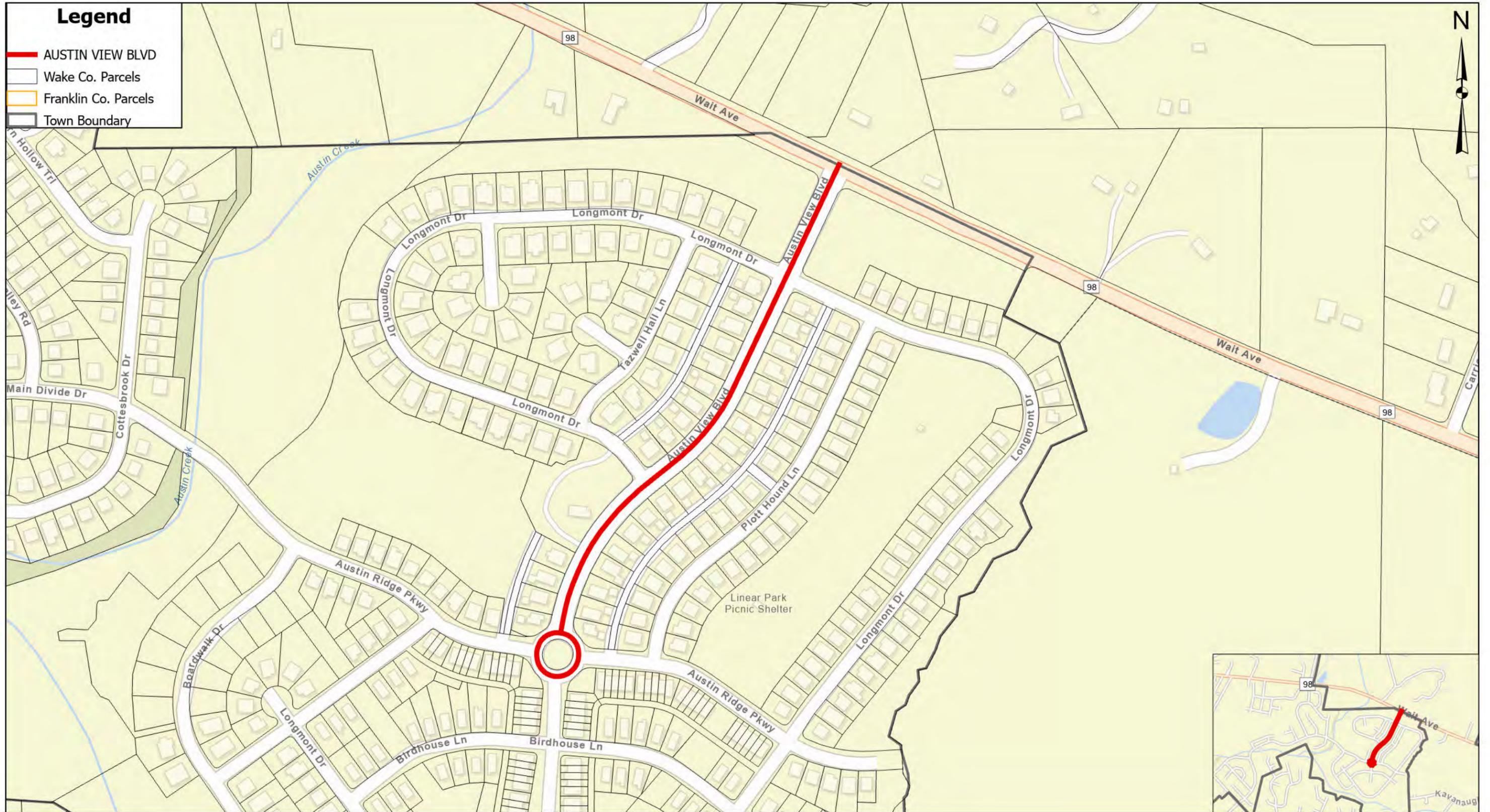
ANDOVERSFORD CT



Elizabeth Worner -11/14/2024

Legend

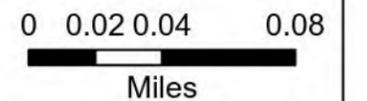
-  AUSTIN VIEW BLVD
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



TOWN of
WAKE FOREST

Map 3

AUSTIN VIEW BLVD



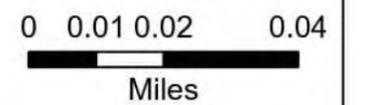
Min Htun - 6/11/2025



TOWN of
WAKE FOREST

Map 4

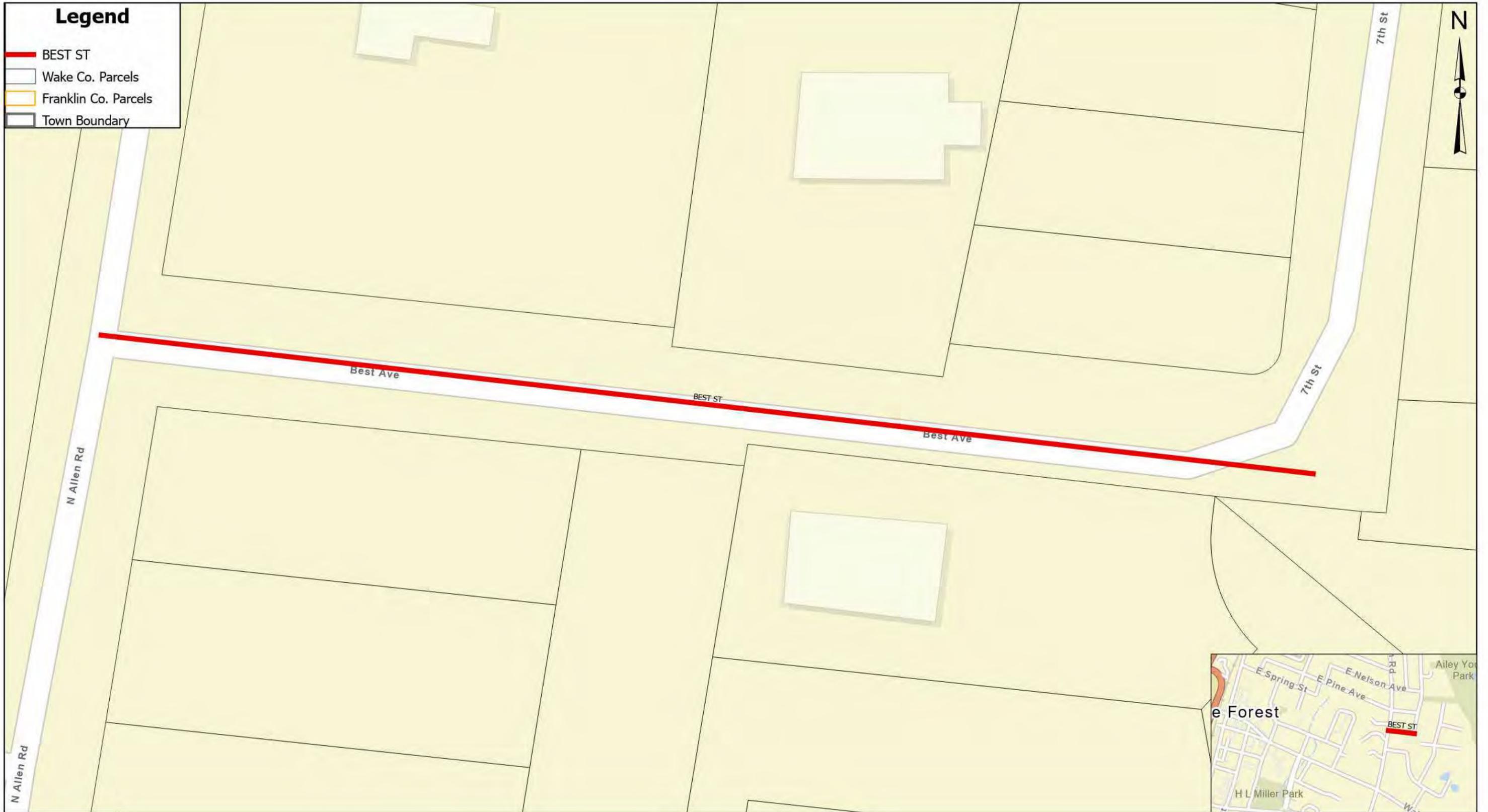
BATTERY CREST LN



Min Htun - 12/18/2024

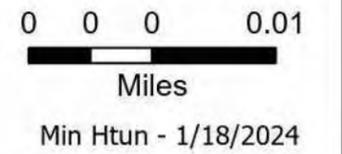
Legend

-  BEST ST
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



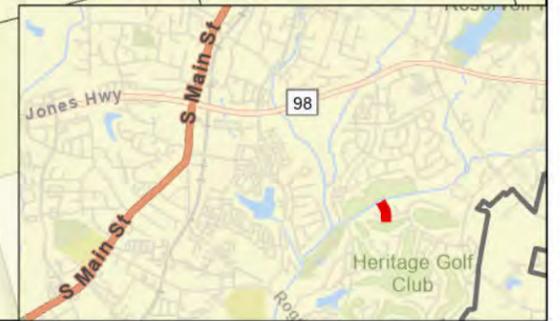
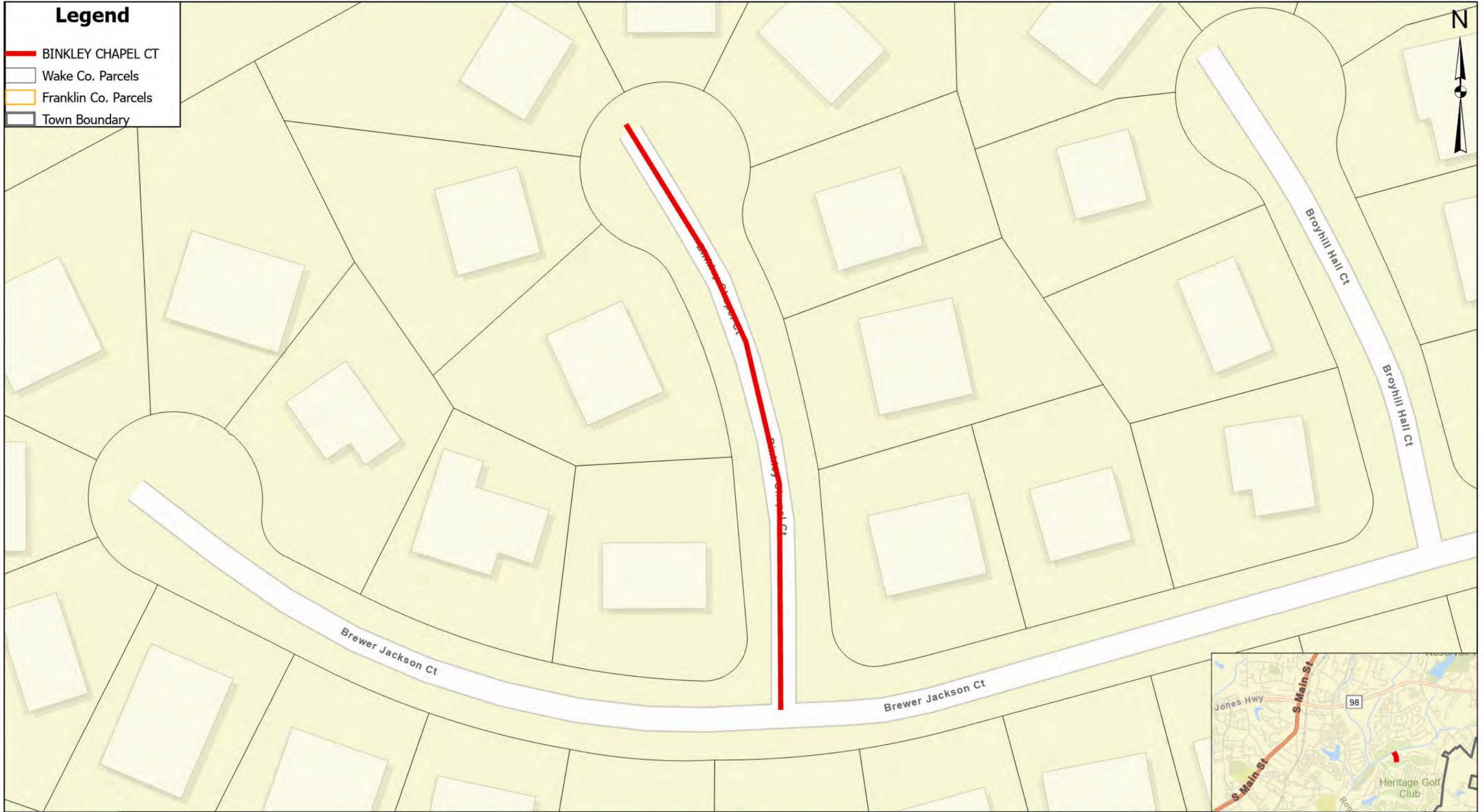
Map 5

BEST ST



Legend

-  BINKLEY CHAPEL CT
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



Map 6

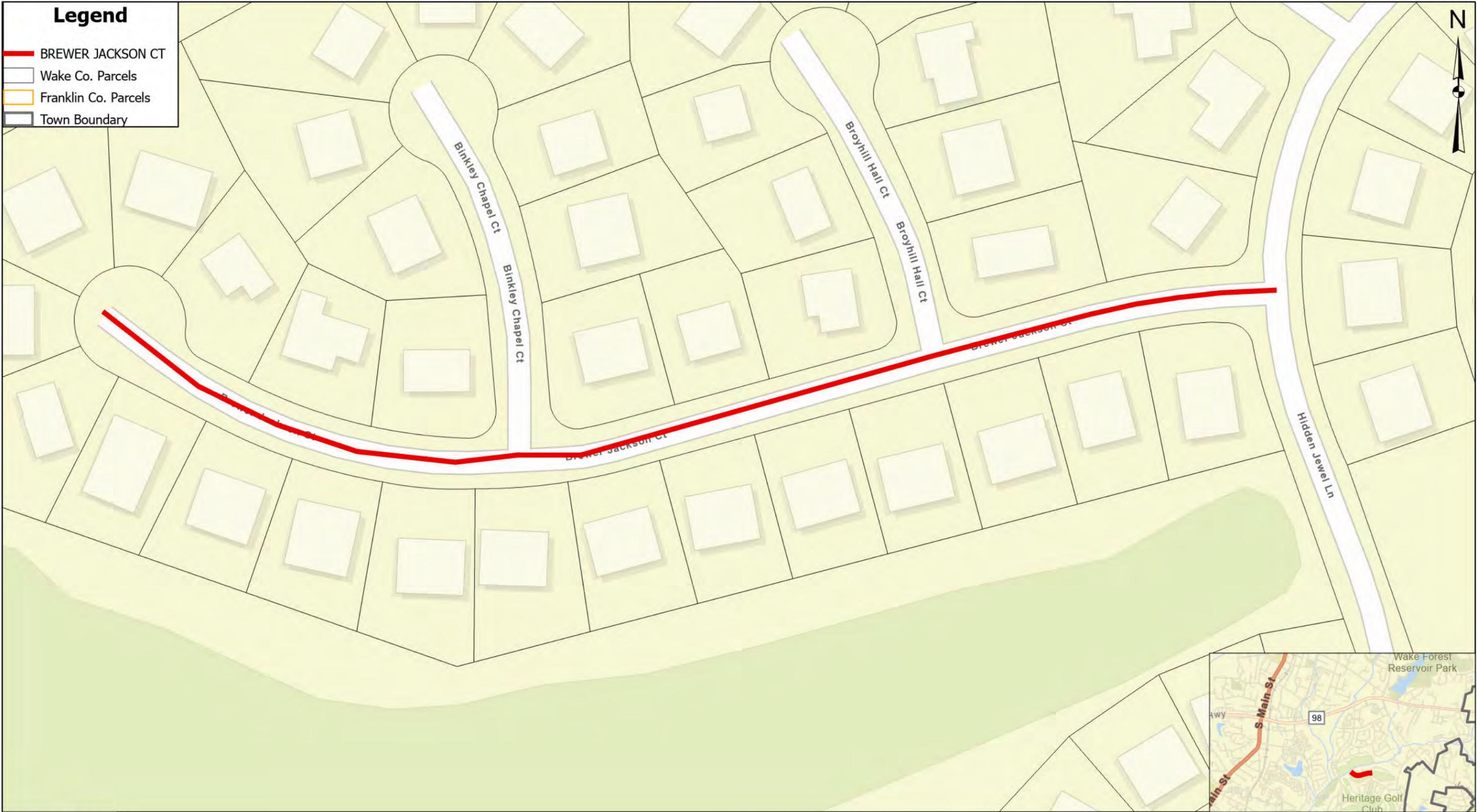
BINKLEY CHAPEL CT



Min Htun - 4/10/2025

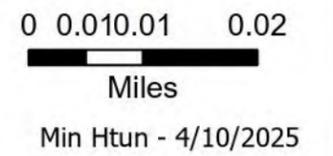
Legend

-  BREWER JACKSON CT
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



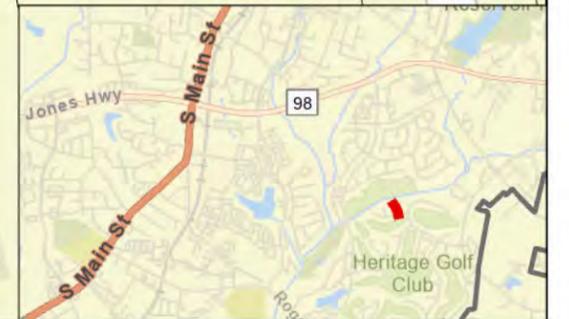
Map 7

BREWER JACKSON CT



Legend

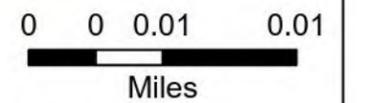
-  BROYHILL ALL CT
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



TOWN of
WAKE FOREST

Map 8

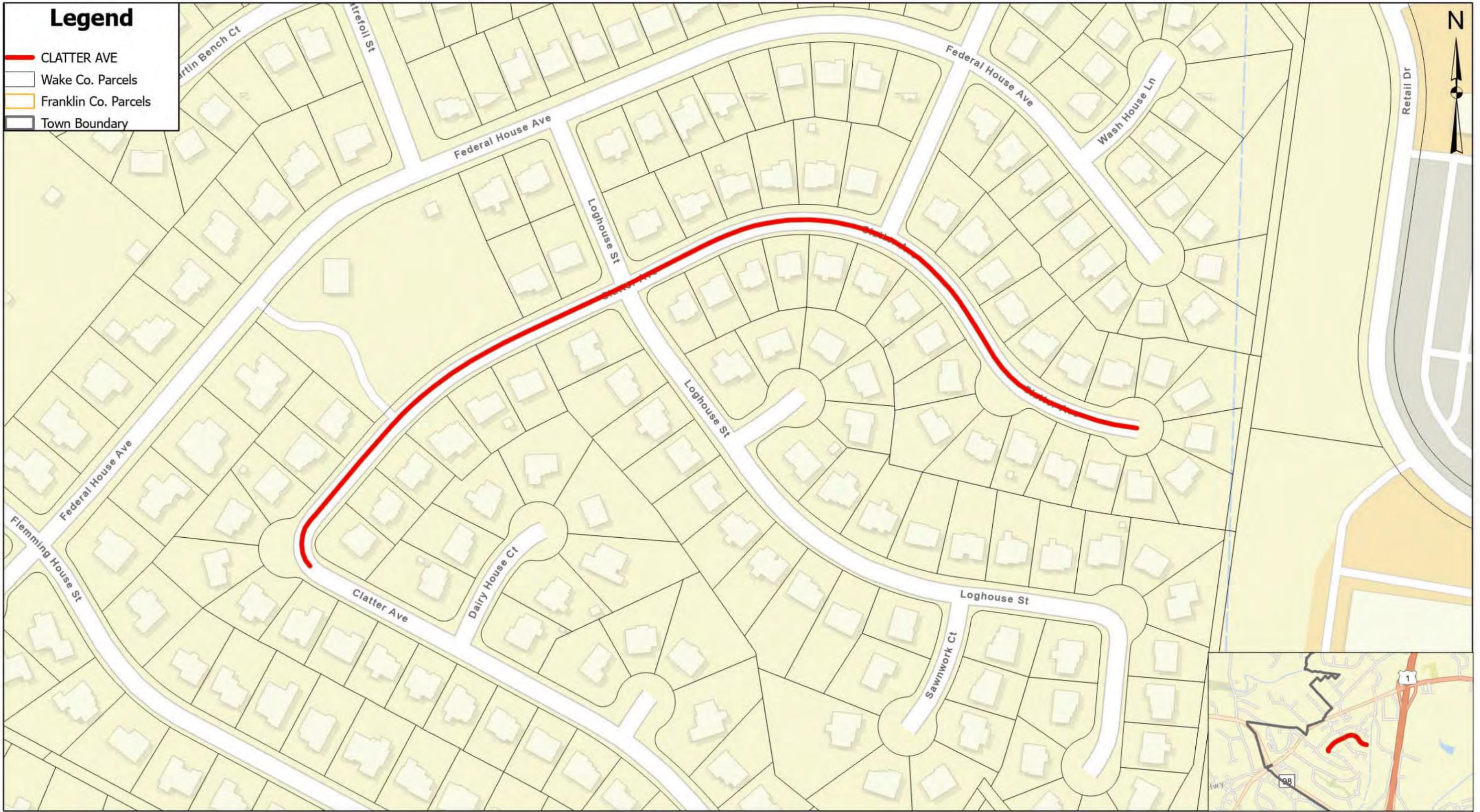
BROYHILL HALL CT



Min Htun - 4/10/2025

Legend

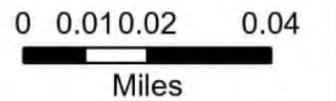
-  CLATTER AVE
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



TOWN of
WAKE FOREST

Map 9

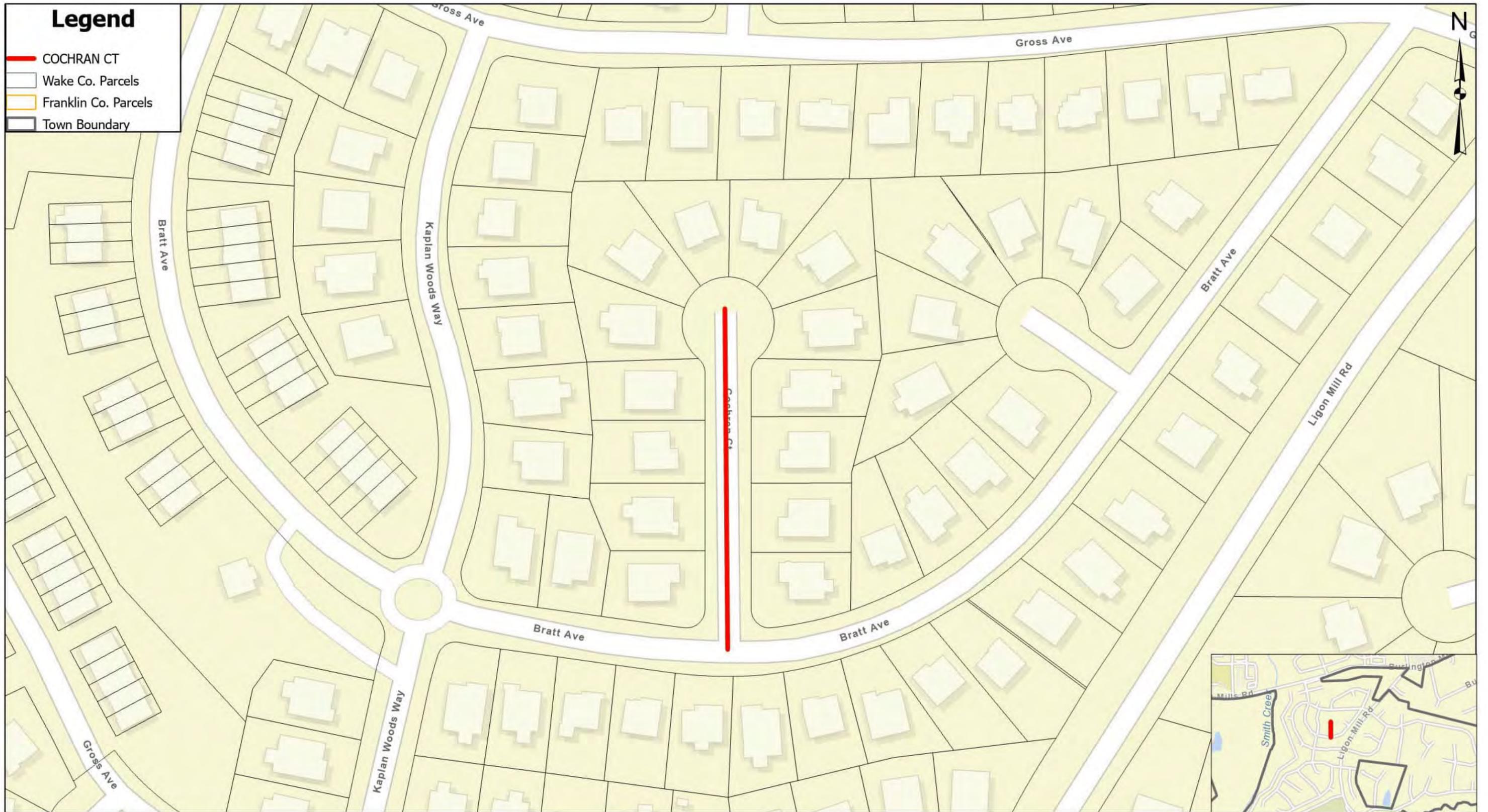
CLATTER AVE



Elizabeth Worner -11/14/2024

Legend

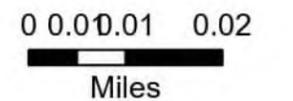
-  COCHRAN CT
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



TOWN of
WAKE FOREST

Map 10

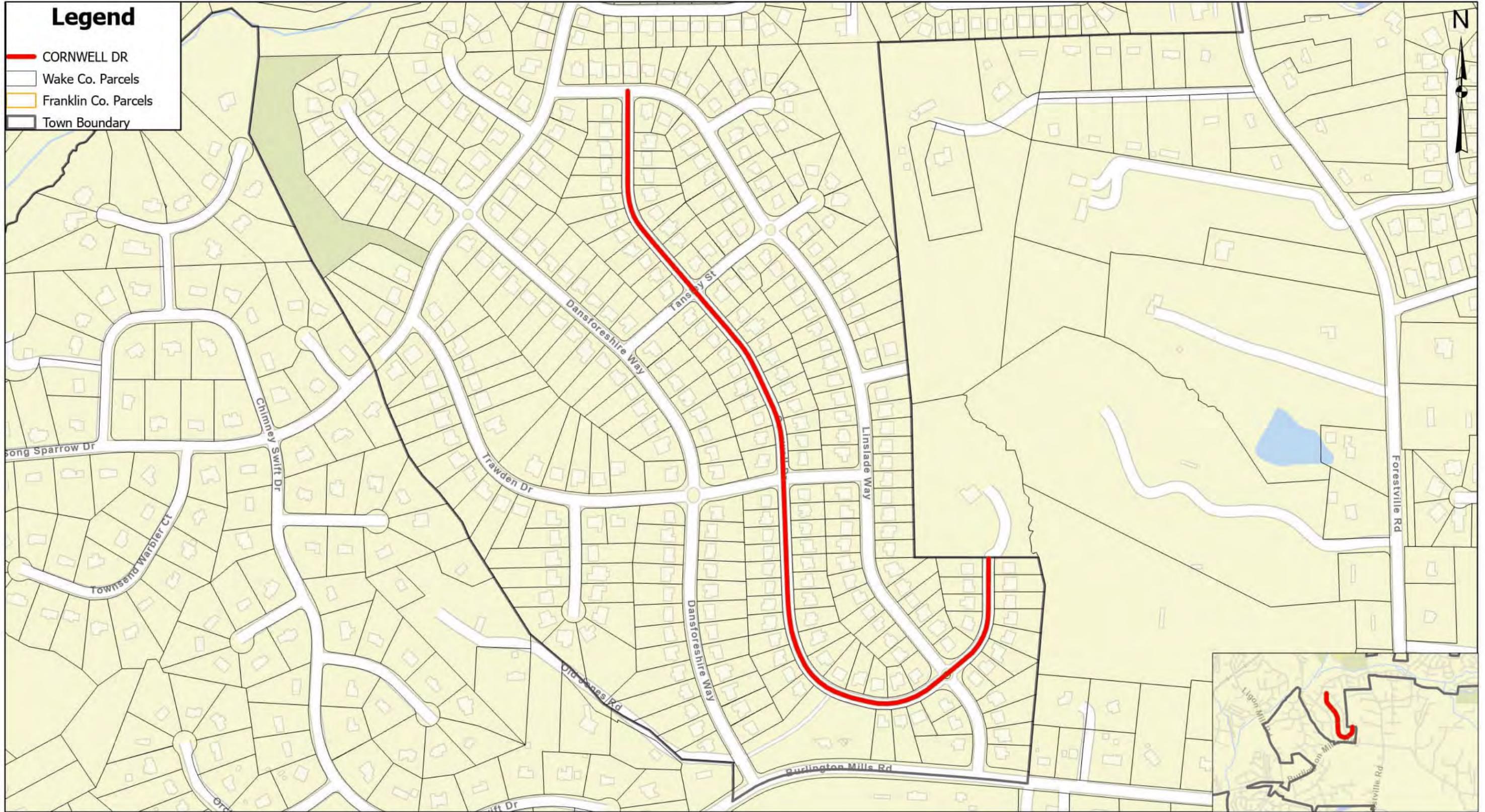
COCHRAN CT



Elizabeth Worner -11/14/2024

Legend

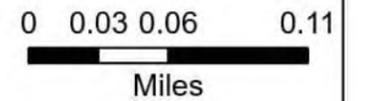
-  CORNWELL DR
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



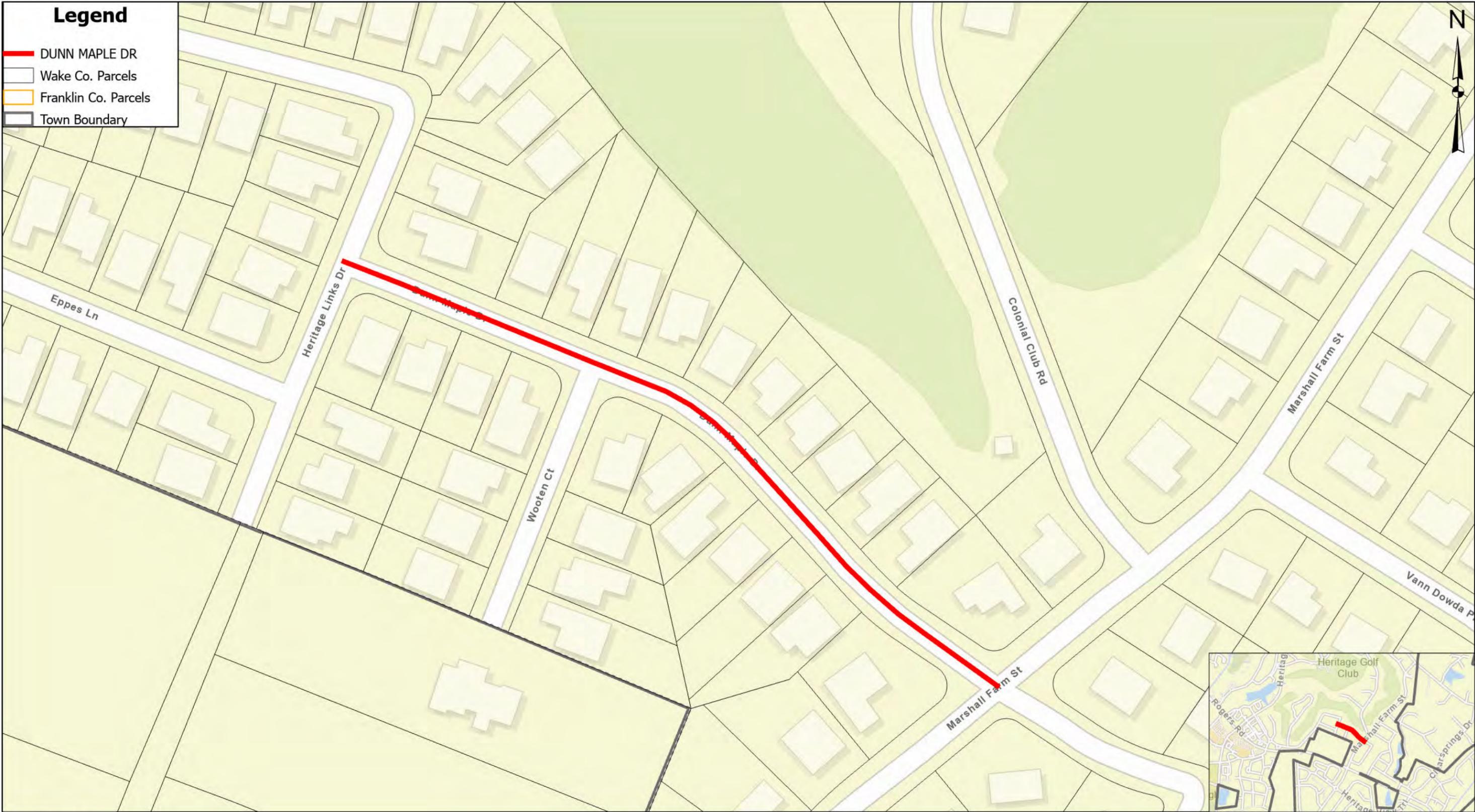
TOWN of
WAKE FOREST

Map 11

CORNWELL DR

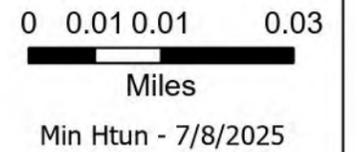


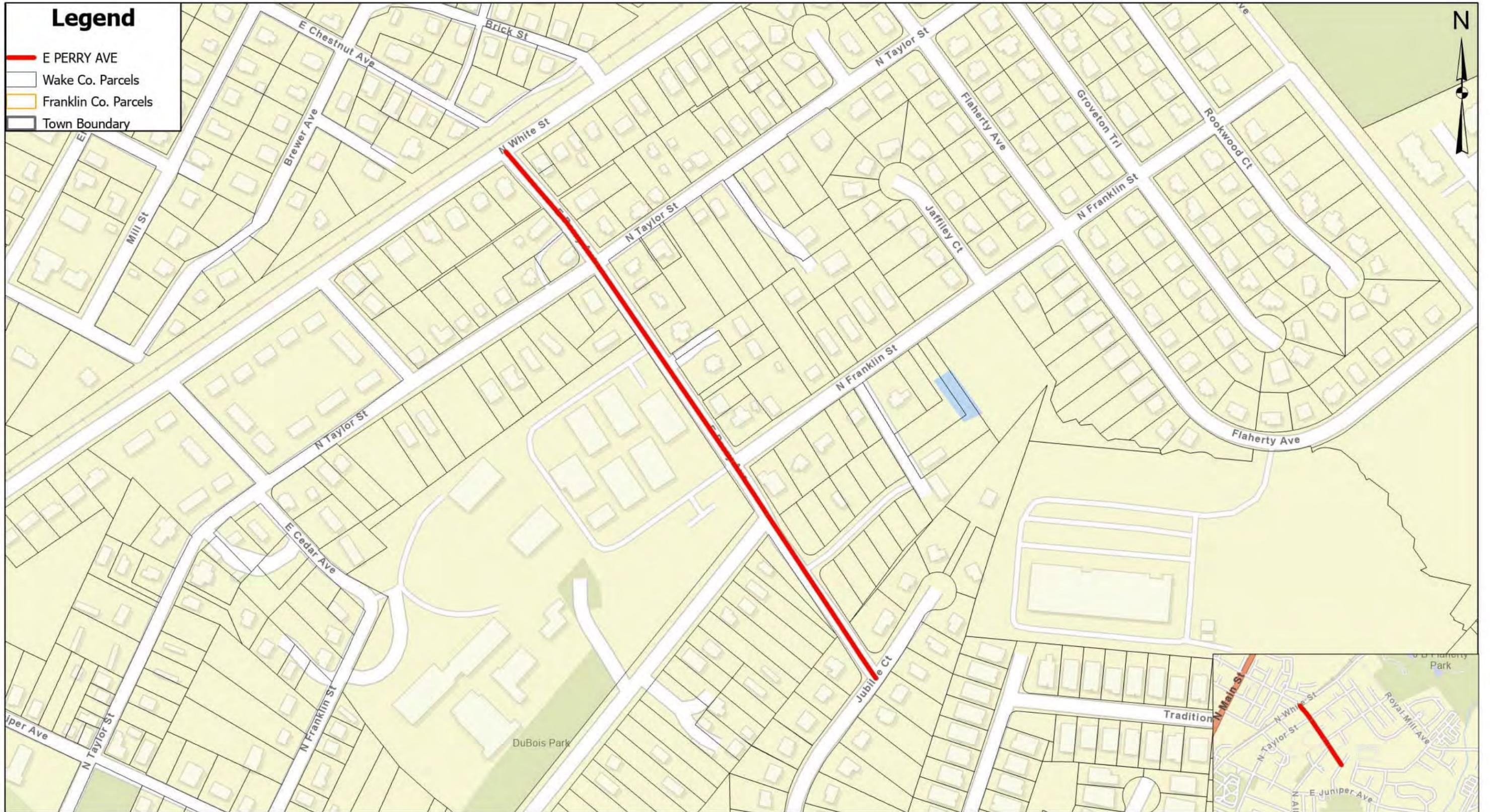
Elizabeth Worner -11/14/2024



Map 12

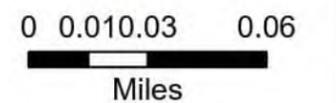
DUNN MAPLE DR





Map 13

E PERRY AVE



Elizabeth Worner -11/14/2024

Legend

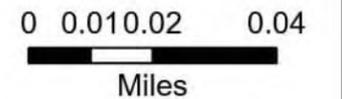
-  E PINE AVE
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



TOWN of
WAKE FOREST

Map 14

E PINE AVE



Elizabeth Worner -11/14/2024

Legend

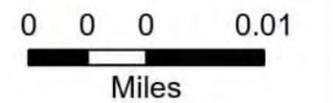
- EATON SQUARE CT
- Wake Co. Parcels
- Franklin Co. Parcels
- Town Boundary



TOWN of
WAKE FOREST

Map 15

EATON SQUARE CT



Min Htun - 1/28/2025

Legend

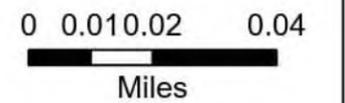
- FOREST LAKE CT
- Wake Co. Parcels
- Franklin Co. Parcels
- Town Boundary



TOWN of
WAKE FOREST

Map 16

FOREST LAKE CT



Elizabeth Worner -11/14/2024

Legend

- FOXBRIDGE CT
- Wake Co. Parcels
- Franklin Co. Parcels
- Town Boundary



TOWN of
WAKE FOREST

Map 17

FOXBRIDGE CT



Elizabeth Worner - 11/14/2024

Legend

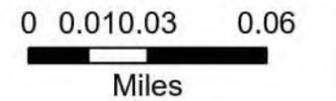
- HERITAGE CLUB AVE
- Wake Co. Parcels
- Franklin Co. Parcels
- Town Boundary



TOWN of
WAKE FOREST

Map 18

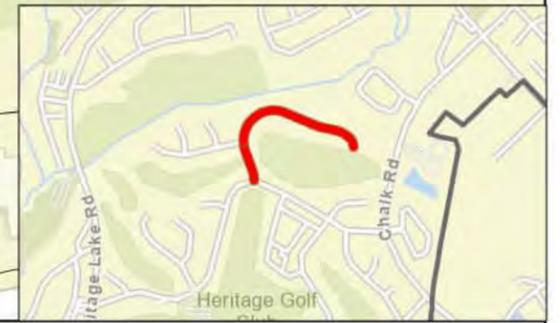
HERITAGE CLUB AVE



Elizabeth Worner - 11/14/2024

Legend

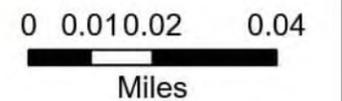
-  HIDDEN JEWEL LN
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



TOWN of
WAKE FOREST

Map 19

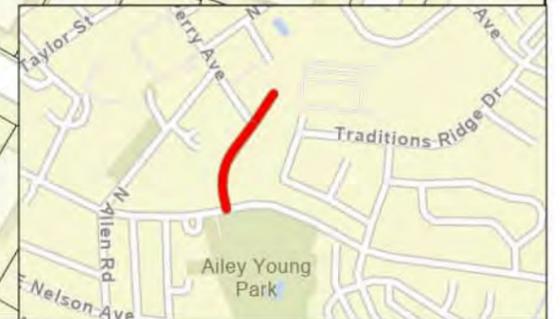
HIDDEN JEWEL LN



Elizabeth Worner - 11/14/2024

Legend

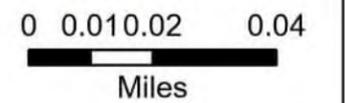
- JUBILEE CT
- Wake Co. Parcels
- Franklin Co. Parcels
- Town Boundary



TOWN of
WAKE FOREST

Map 20

JUBILEE CT



Elizabeth Worner - 11/14/2024

Legend

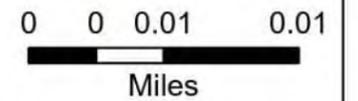
-  KAPLAN WOODS WAY
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



TOWN of
WAKE FOREST

Map 21

KAPLAN WOODS WAY



Min Htun - 1/28/2025

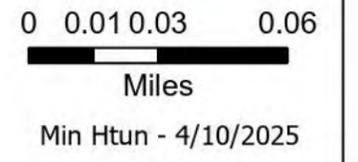
Legend

-  LAKEVIEW AVE
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



Map 22

LAKEVIEW AVE



Legend

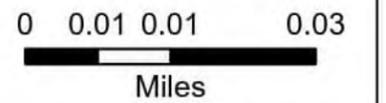
-  LINDENBERG SQ
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



TOWN of
WAKE FOREST

Map 23

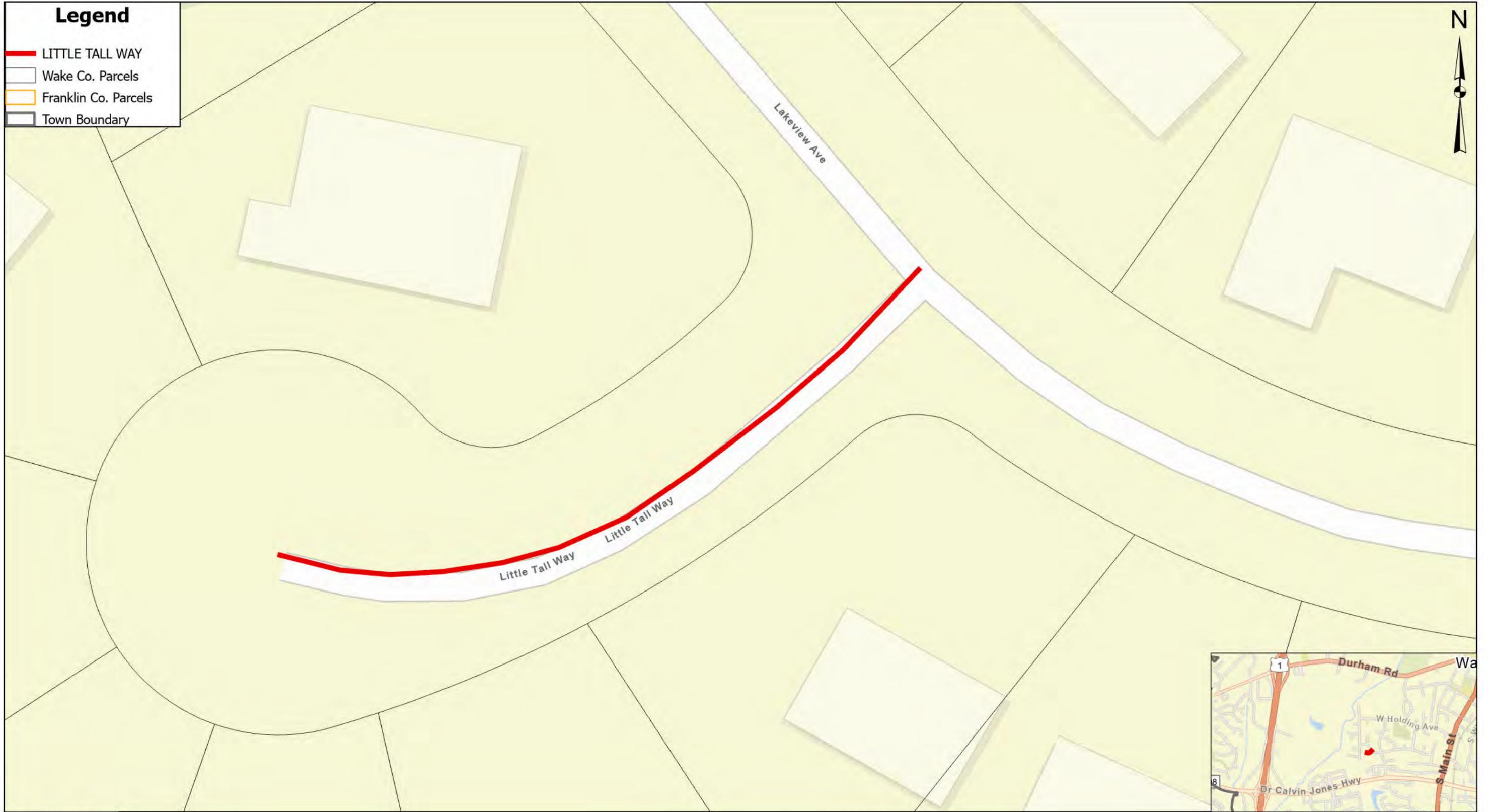
LINDENBERG SQ



Elizabeth Worner - 11/14/2024

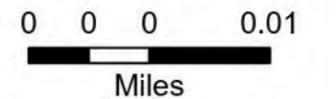
Legend

-  LITTLE TALL WAY
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



Map 24

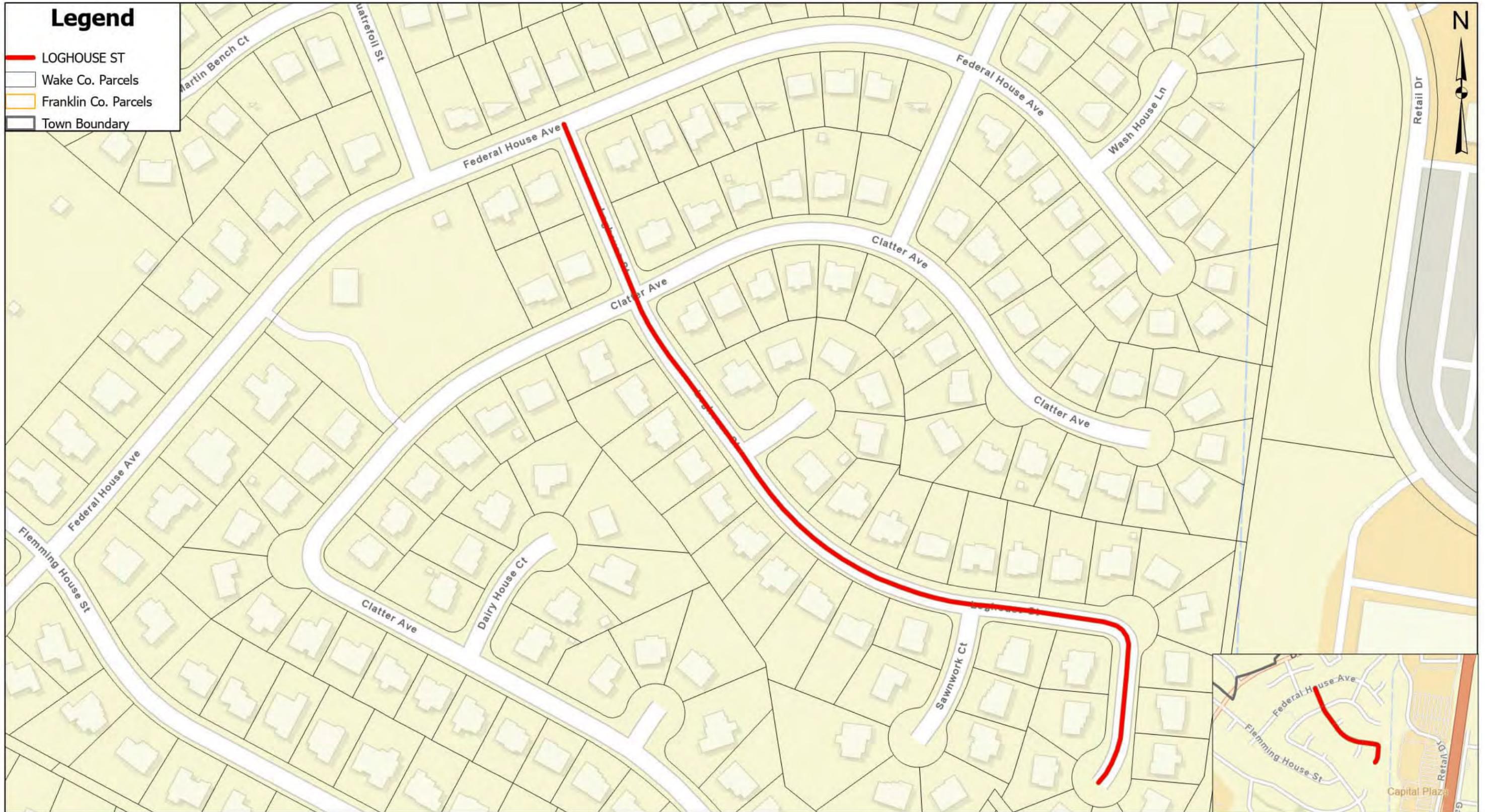
LITTLE TALL WAY



Min Htun - 4/10/2025

Legend

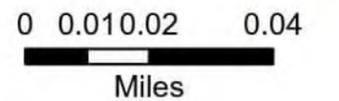
- LOGHOUSE ST
- Wake Co. Parcels
- Franklin Co. Parcels
- Town Boundary



TOWN of
WAKE FOREST

Map 25

LOGHOUSE ST



Elizabeth Worner - 11/14/2024

Legend

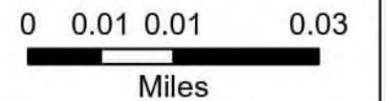
-  LORING LAKE DR
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



TOWN of
WAKE FOREST

Map 26

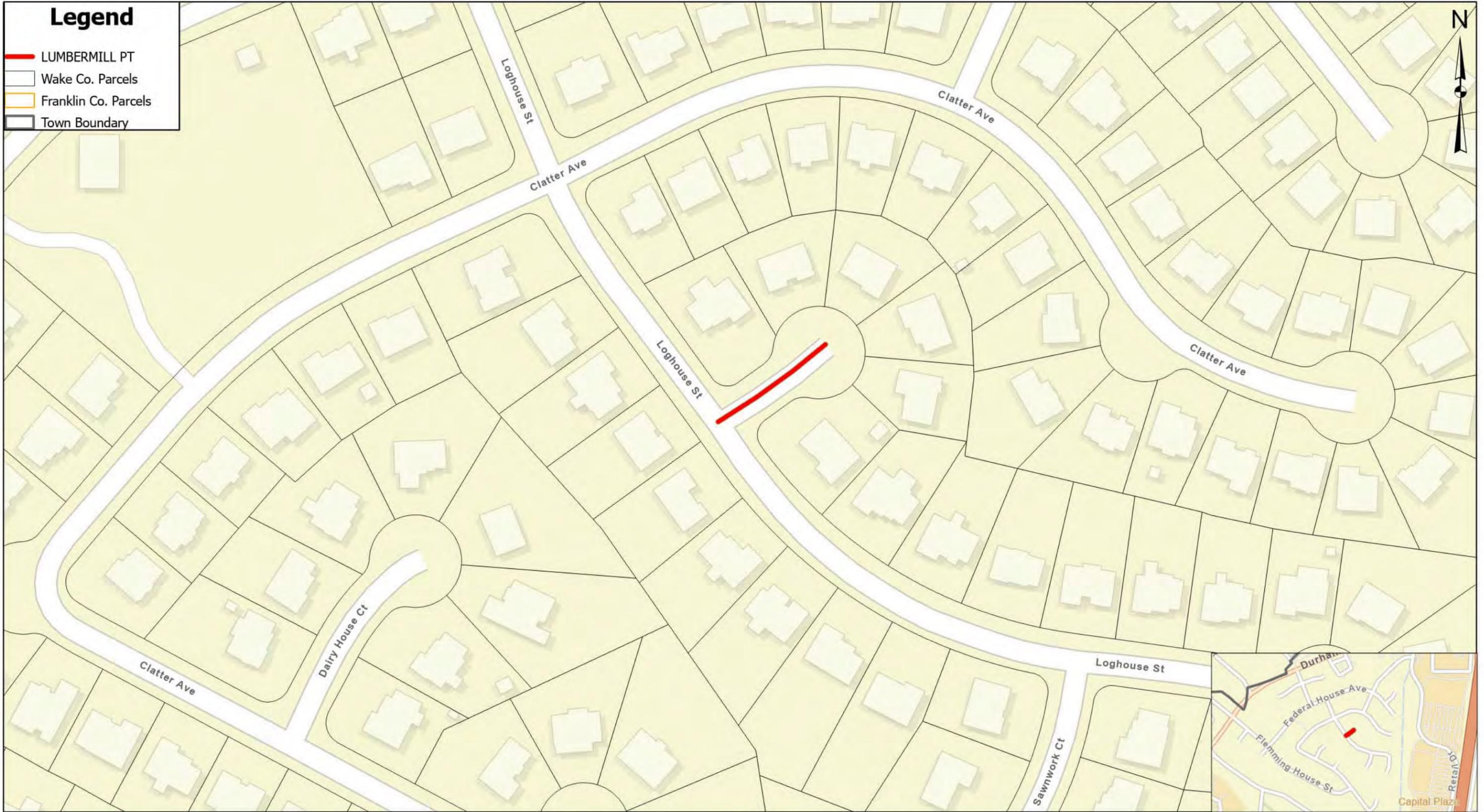
LORING LAKE DR



Elizabeth Worner - 11/14/2024

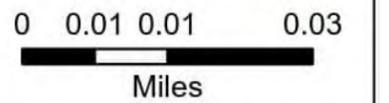
Legend

-  LUMBERMILL PT
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



Map 27

LUMBERMILL PT



Elizabeth Warner - 11/14/2024

Legend

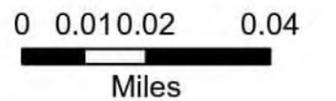
-  MARSHALL FARM ST
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



TOWN of
WAKE FOREST

Map 28

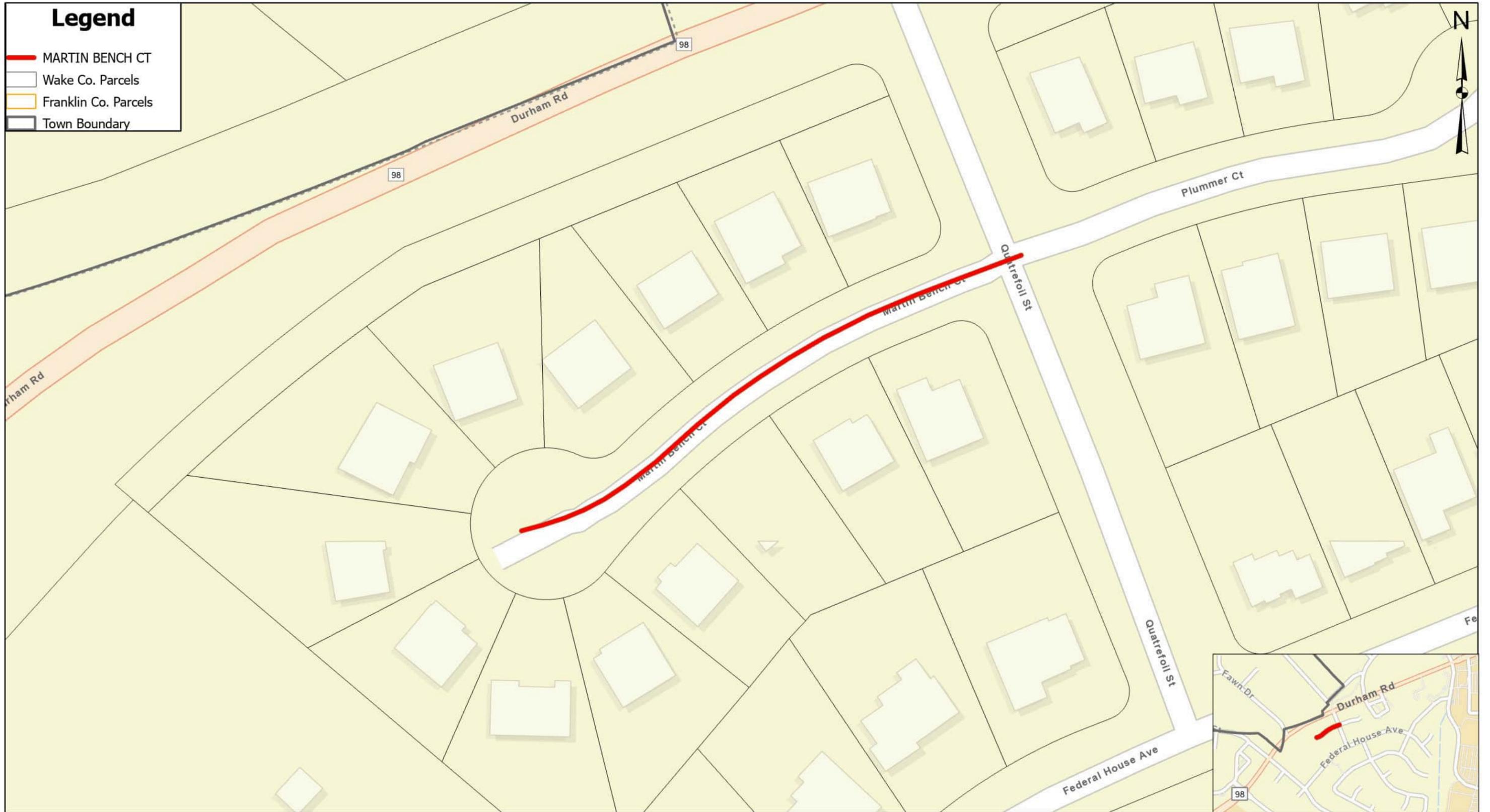
MARSHALL FARM ST



Elizabeth Worner - 11/14/2024

Legend

- MARTIN BENCH CT
- Wake Co. Parcels
- Franklin Co. Parcels
- Town Boundary



TOWN of
WAKE FOREST

Map 29

MARTIN BENCH CT



Elizabeth Worner - 11/14/2024

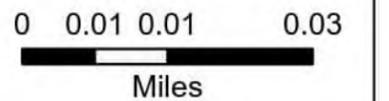
Legend

- MATHERLY DR
- Wake Co. Parcels
- Franklin Co. Parcels
- Town Boundary



Map 30

MATHERLY DR



Elizabeth Worner - 11/14/2024

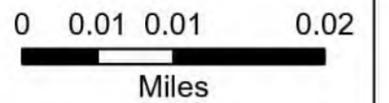
Legend

- MURDOCK CIR
- Wake Co. Parcels
- Franklin Co. Parcels
- Town Boundary



Map 31

MURDOCK CIR



Elizabeth Worner - 11/15/2024

Legend

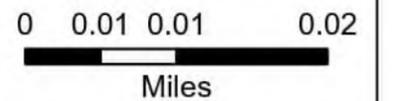
-  N FRANKLIN ST
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



TOWN of
WAKE FOREST

Map 32

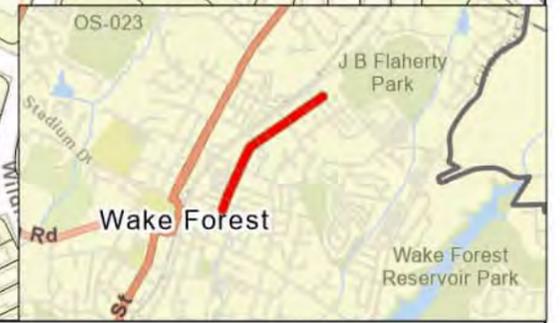
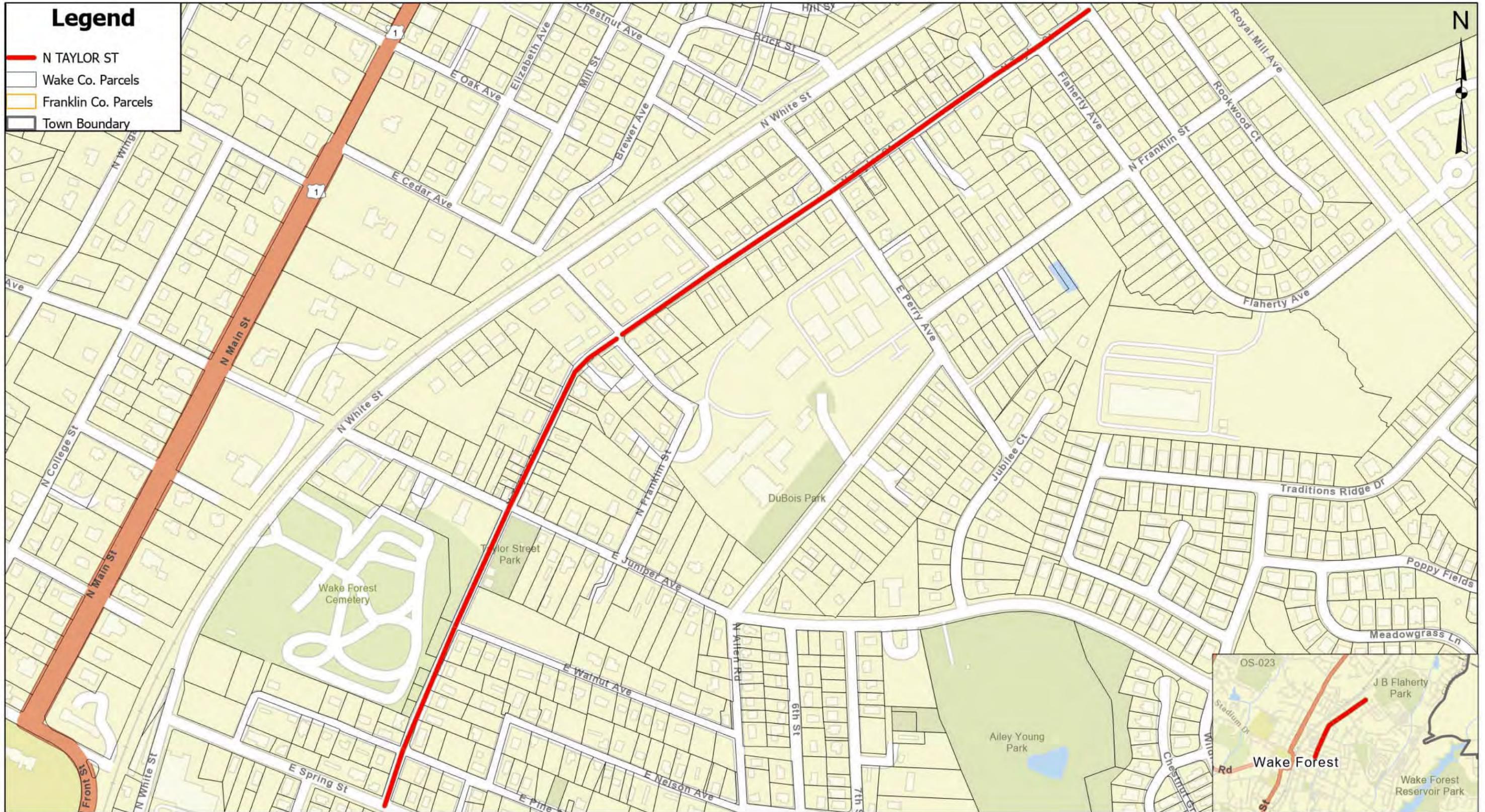
N FRANKLIN ST



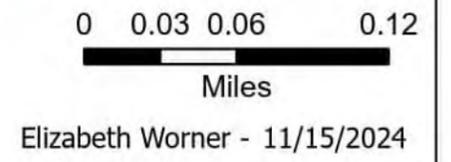
Elizabeth Worner - 11/15/2024

Legend

-  N TAYLOR ST
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



Map 33, 34, & 35 N TAYLOR ST



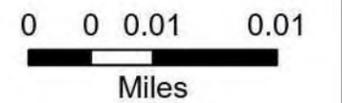
Legend

-  NELSON AVE
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



Map 36

NELSON AVE



Min Htun - 2/19/2024

Legend

-  OLD COLLEGE CIR
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



TOWN of
WAKE FOREST

Map 37

OLD COLLEGE CIR

0 0.01 0.02 0.04
Miles

Elizabeth Worner - 11/15/2024

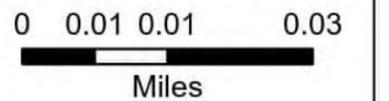
Legend

- PARLANGE WOODS LN
- Wake Co. Parcels
- Franklin Co. Parcels
- Town Boundary



Map 38

PARLANGE WOODS LN



Elizabeth Worner - 11/15/2024

Legend

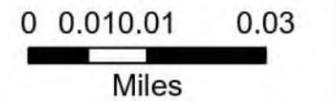
- PLIMOTH HILL DR
- Wake Co. Parcels
- Franklin Co. Parcels
- Town Boundary



TOWN of
WAKE FOREST

Map 39

PLIMOTH HILL DR



Min Htun - 1/28/2025

Legend

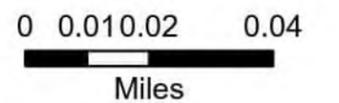
- PLUM CREEK LN
- Wake Co. Parcels
- Franklin Co. Parcels
- Town Boundary



TOWN of
WAKE FOREST

Map 40

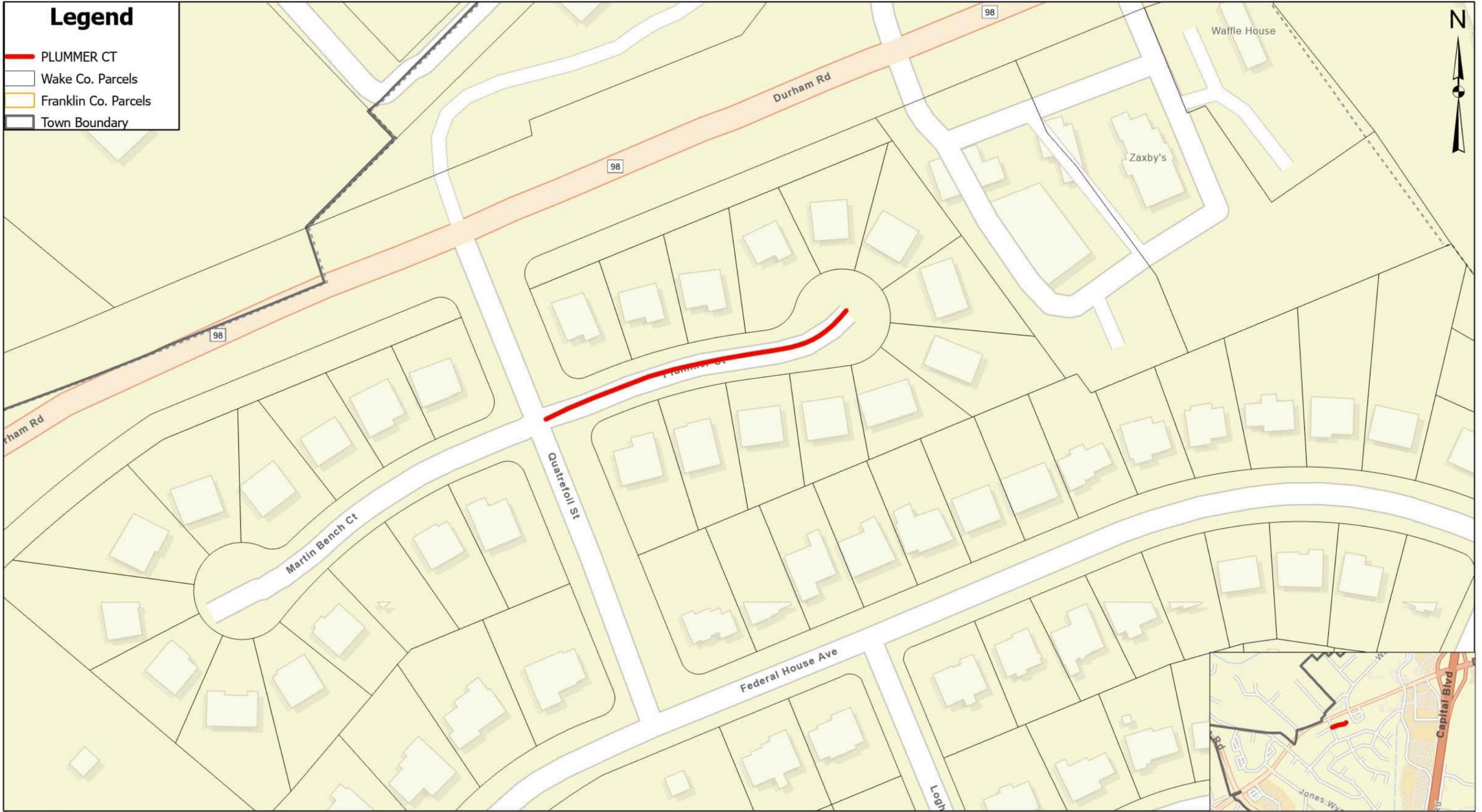
PLUM CREEK LN



Elizabeth Worner - 11/15/2024

Legend

- PLUMMER CT
- Wake Co. Parcels
- Franklin Co. Parcels
- Town Boundary



TOWN of
WAKE FOREST

Map 41

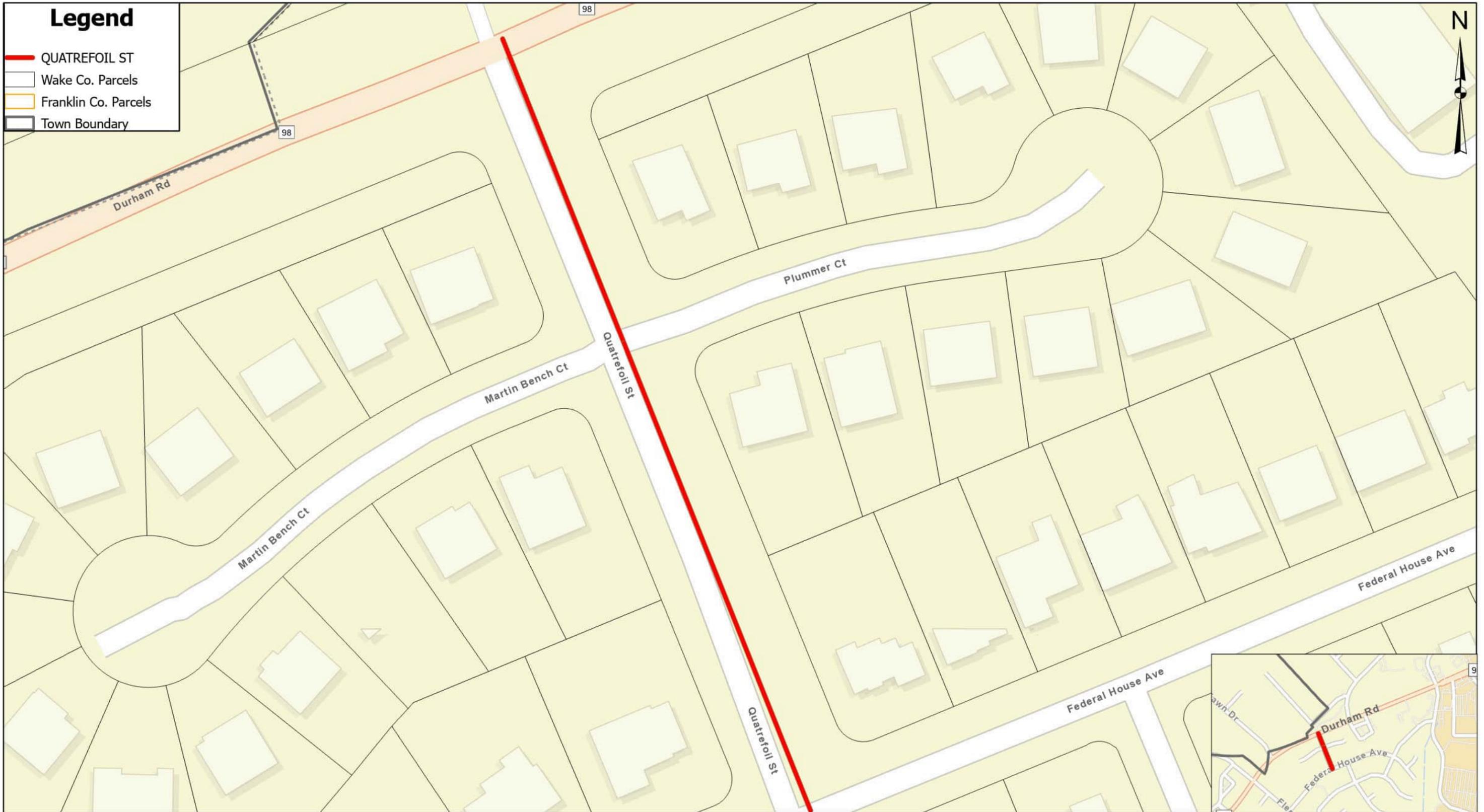
PLUMMER CT



Elizabeth Worner - 11/15/2024

Legend

- QUATREFOIL ST
- Wake Co. Parcels
- Franklin Co. Parcels
- Town Boundary



Map 42

QUATREFOIL ST



Elizabeth Worner - 11/15/2024

Legend

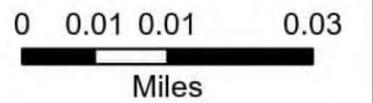
-  RODNEY BAY CRSG
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



TOWN of
WAKE FOREST

Map 43

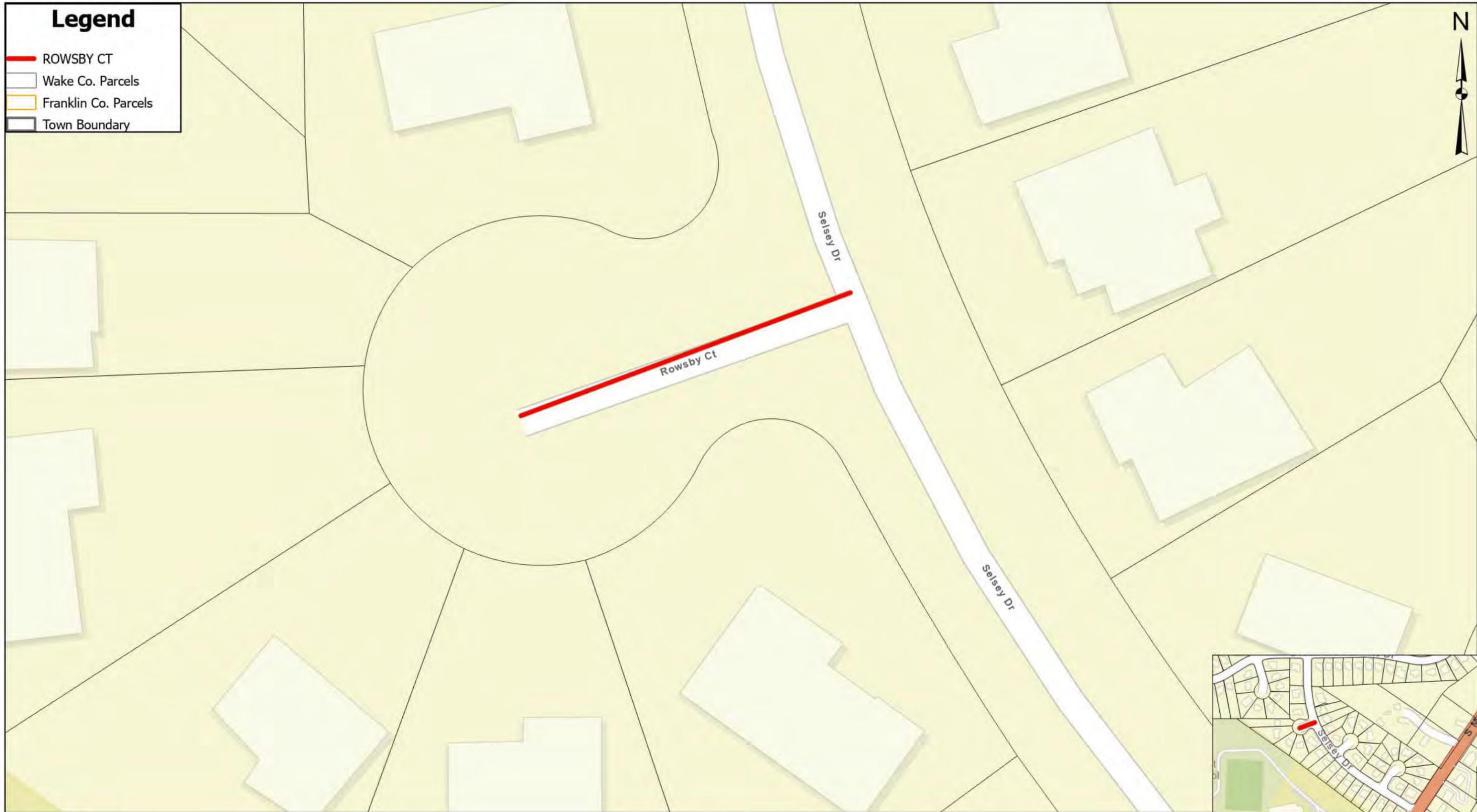
RODNEY BAY CRSG



Elizabeth Worner - 11/22/2024

Legend

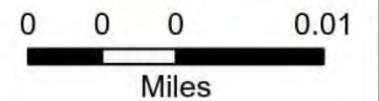
-  ROWSBY CT
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



TOWN of
WAKE FOREST

Map 44

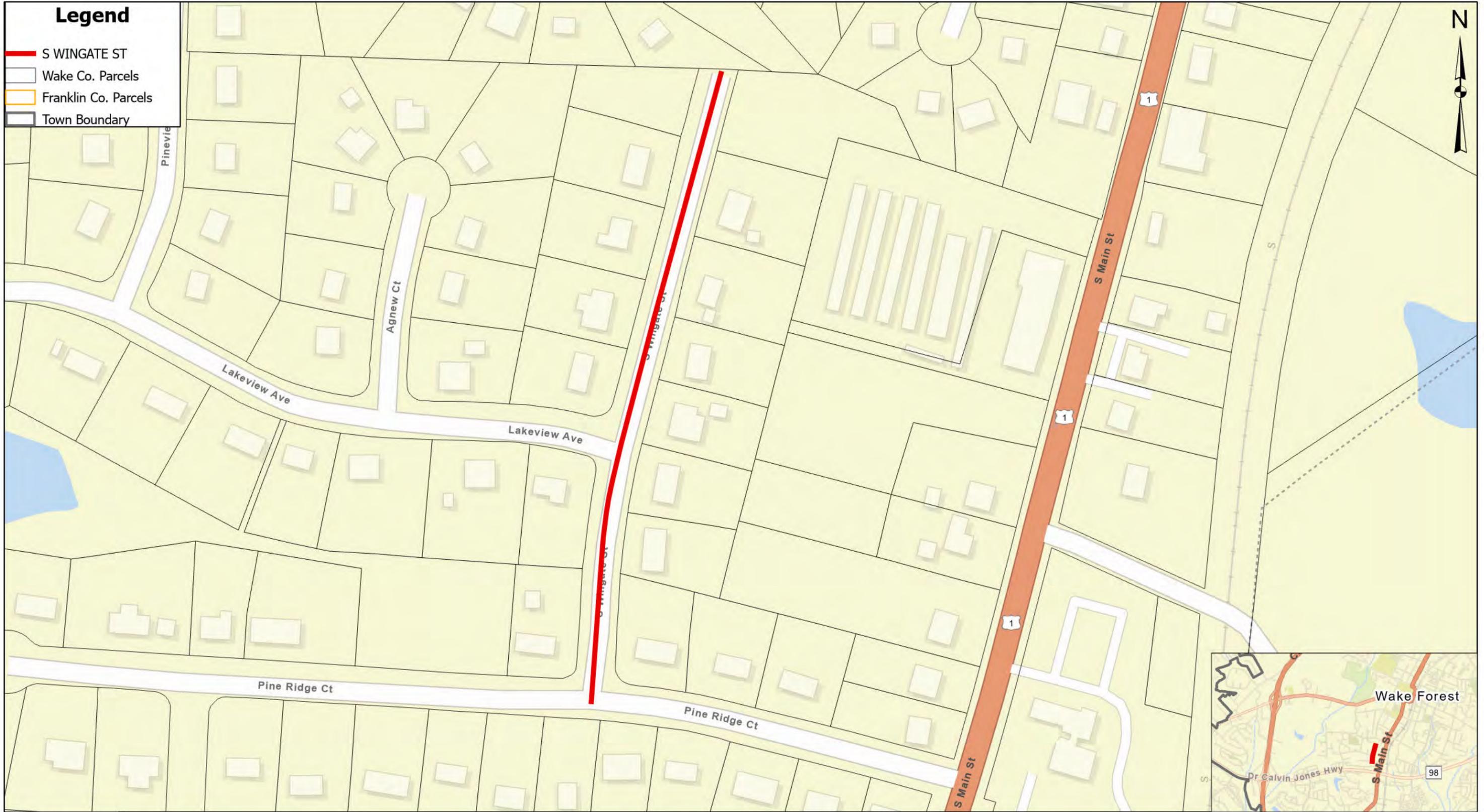
ROWSBY CT



Elizabeth Worner - 11/22/2024

Legend

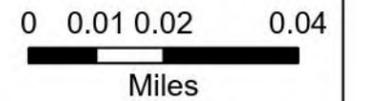
-  S WINGATE ST
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



TOWN of
WAKE FOREST

Map 47

S WINGATE ST



Min Htun - 4/10/2025

Legend

- SAWNWORK CT
- Wake Co. Parcels
- Franklin Co. Parcels
- Town Boundary



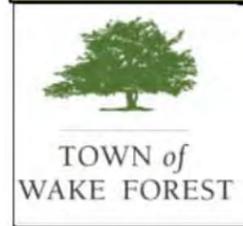
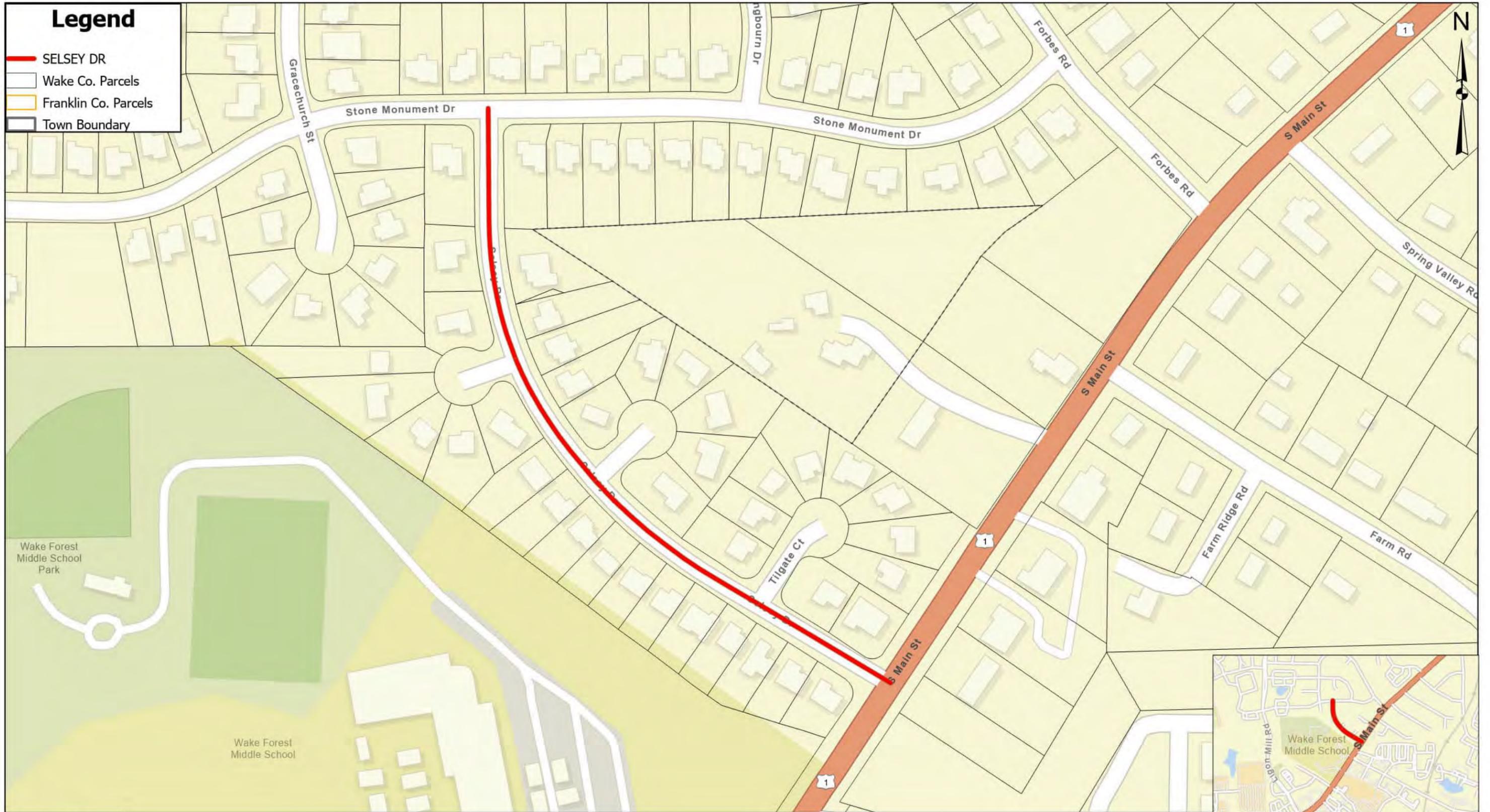
TOWN of
WAKE FOREST

Map 48

SAWNWORK CT

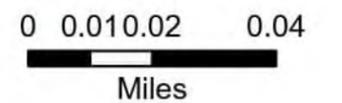


Elizabeth Worner - 11/22/2024



Map 49

SELSEY DR



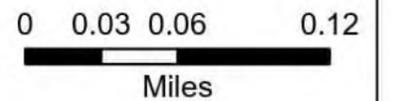
Elizabeth Worner - 11/22/2024



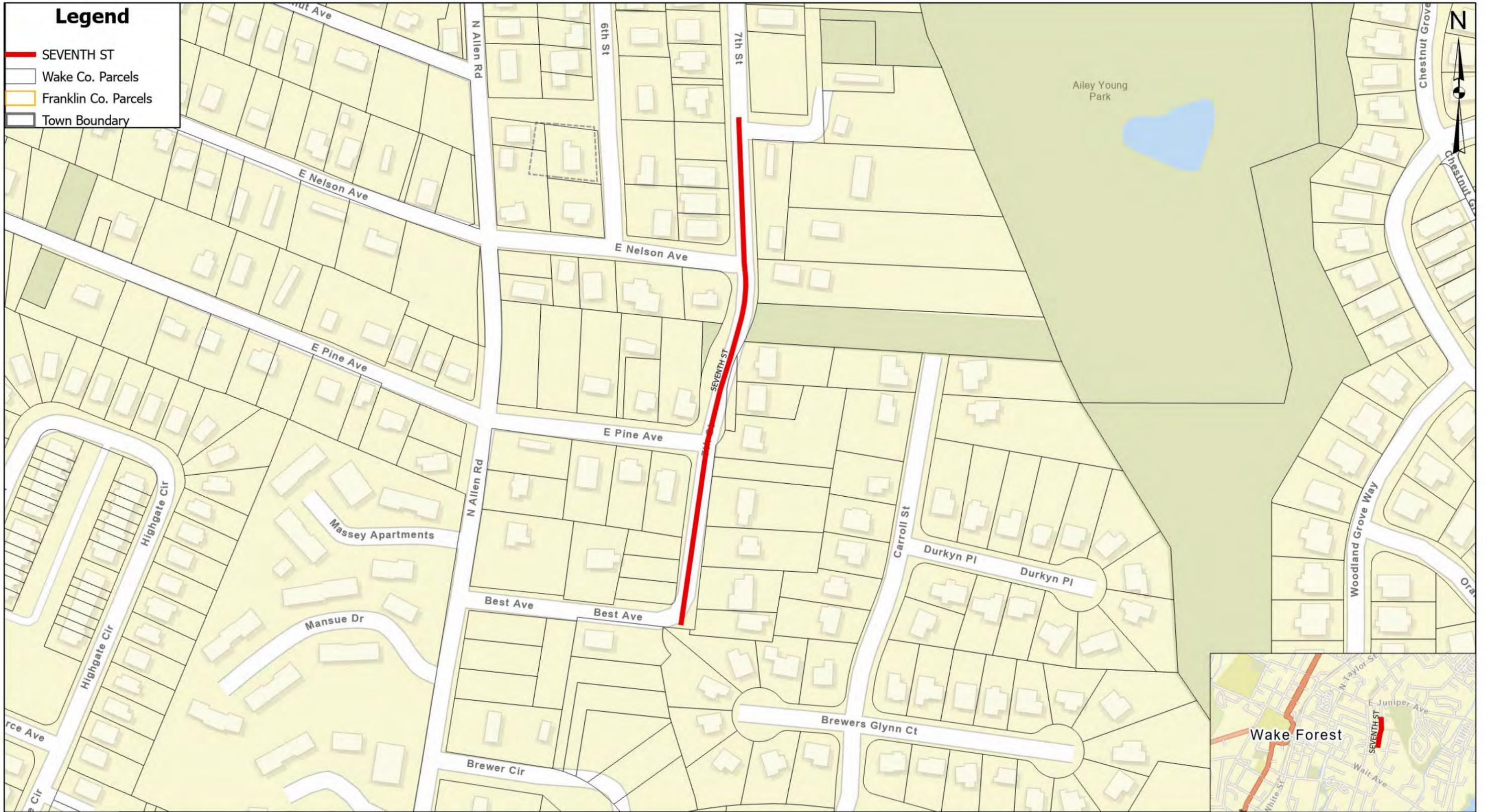
TOWN of
WAKE FOREST

Map 50

SONG SPARROW DR

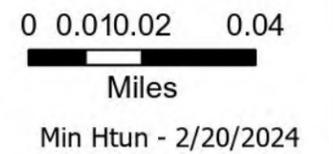


Elizabeth Worner - 11/22/2024



Map 51

SEVENTH ST



Legend

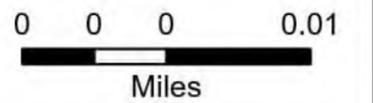
- STONE BRIDGE CT
- Wake Co. Parcels
- Franklin Co. Parcels
- Town Boundary



TOWN of
WAKE FOREST

Map 52

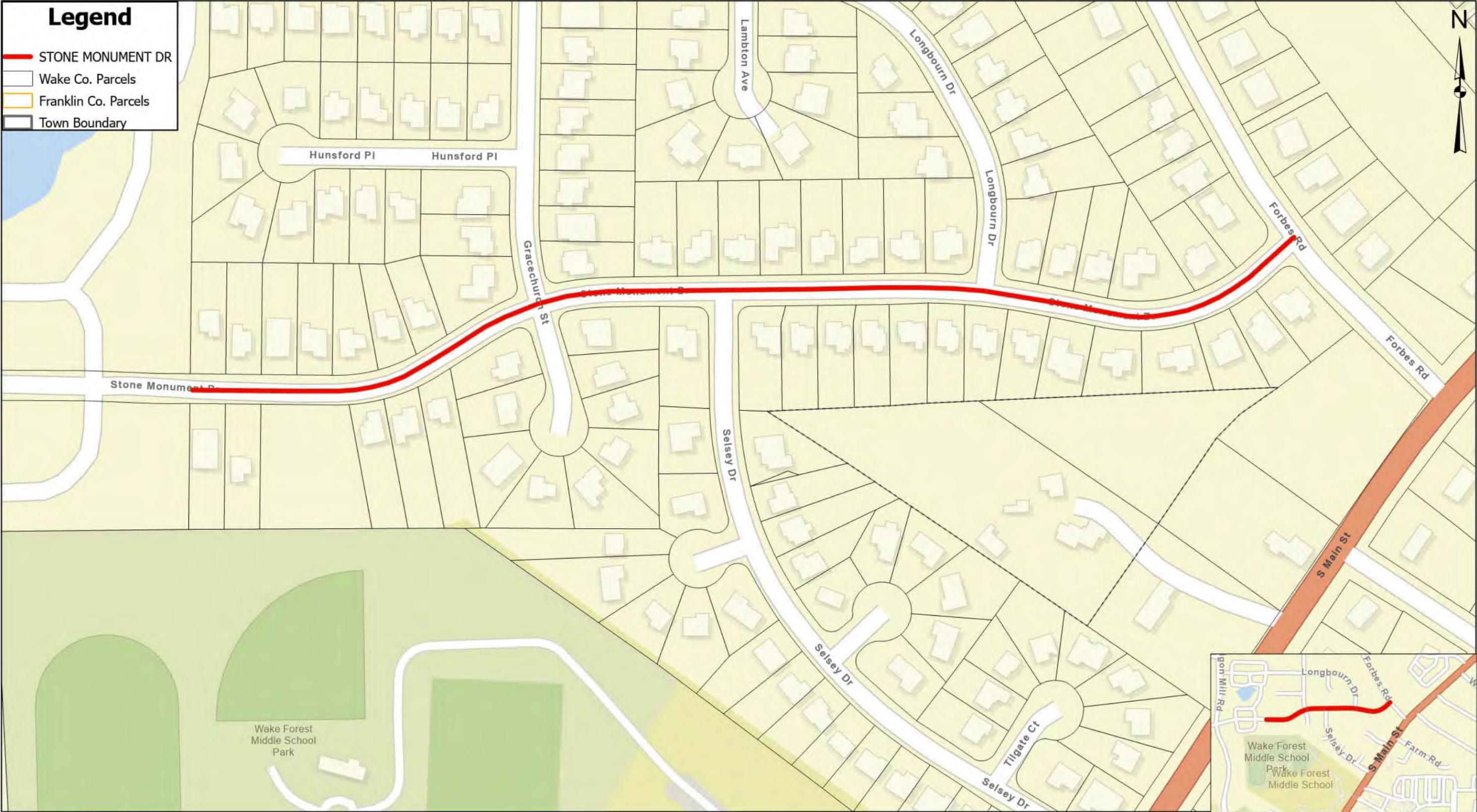
STONE BRIDGE CT



Elizabeth Worner - 11/22/2024

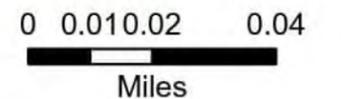
Legend

- STONE MONUMENT DR
- Wake Co. Parcels
- Franklin Co. Parcels
- Town Boundary



Map 53

STONE MONUMENT DR



Elizabeth Worner - 11/22/2024

Legend

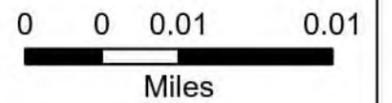
-  STONINGHAM PL
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



TOWN of
WAKE FOREST

Map 54

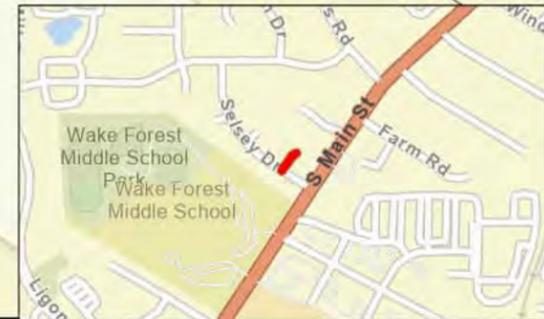
STONINGHAM PL



Elizabeth Worner - 11/22/2024

Legend

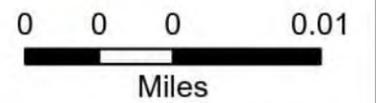
- TILGATE CT
- Wake Co. Parcels
- Franklin Co. Parcels
- Town Boundary



TOWN of
WAKE FOREST

Map 55

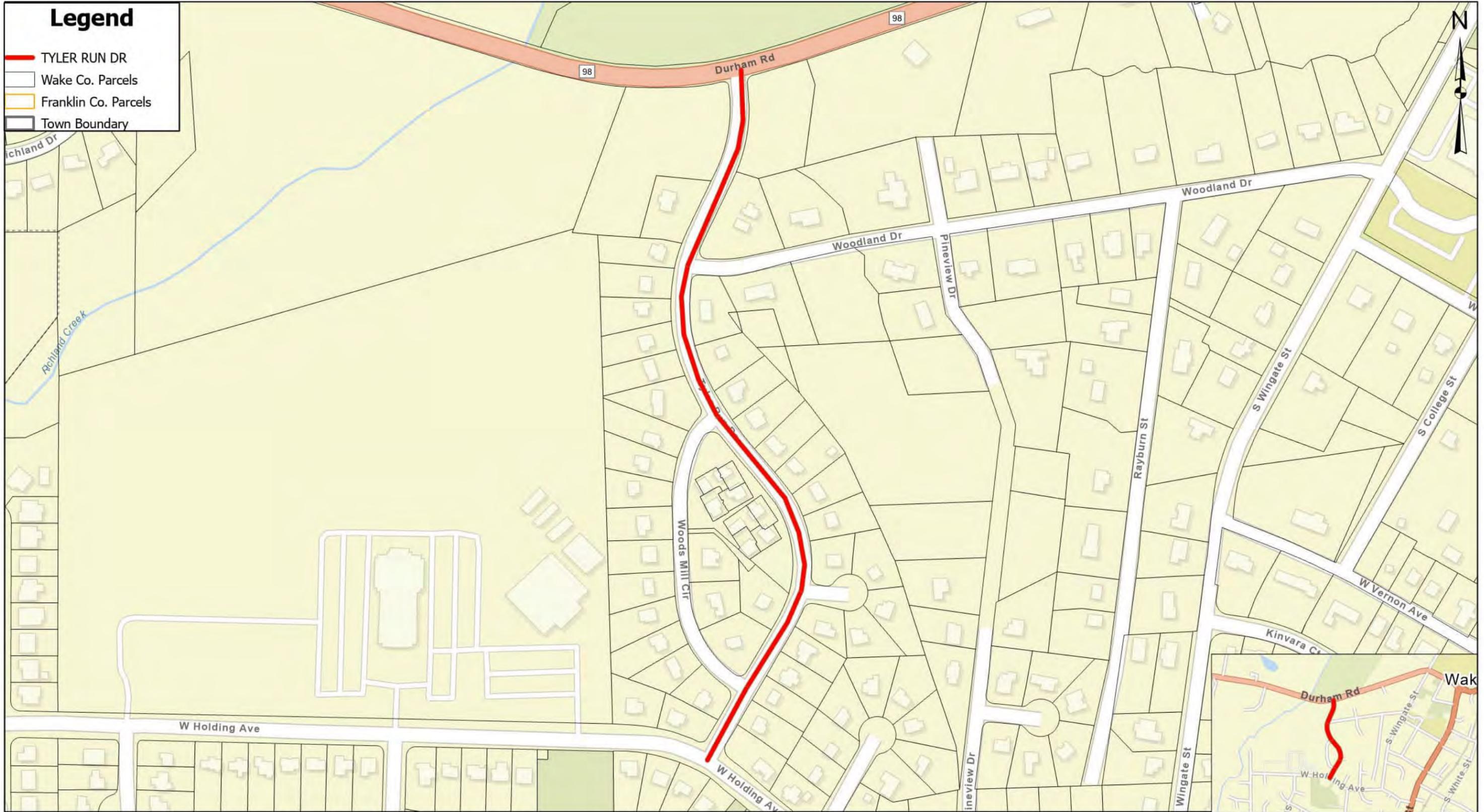
TILGATE CT



Elizabeth Worner - 11/22/2024

Legend

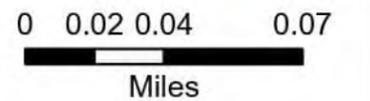
-  TYLER RUN DR
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



TOWN of
WAKE FOREST

Map 56

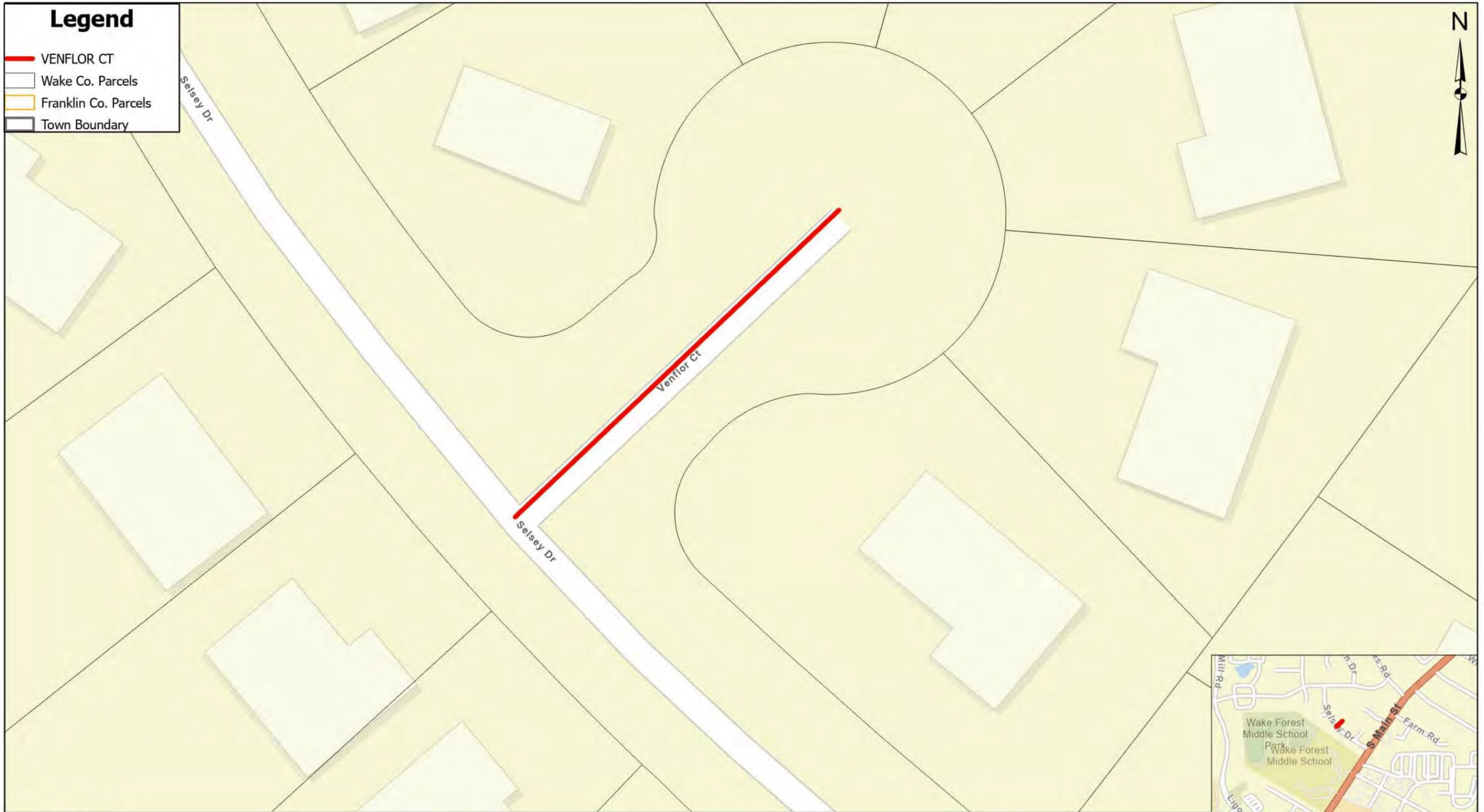
TYLER RUN DR



Elizabeth Worner - 11/22/2024

Legend

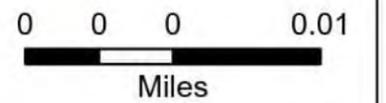
- VENFLOR CT
- Wake Co. Parcels
- Franklin Co. Parcels
- Town Boundary



TOWN of
WAKE FOREST

Map 57

VENFLOR CT



Elizabeth Worner - 11/22/2024

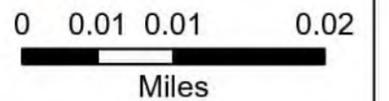
Legend

- W OWEN AVE
- Wake Co. Parcels
- Franklin Co. Parcels
- Town Boundary



Map 58

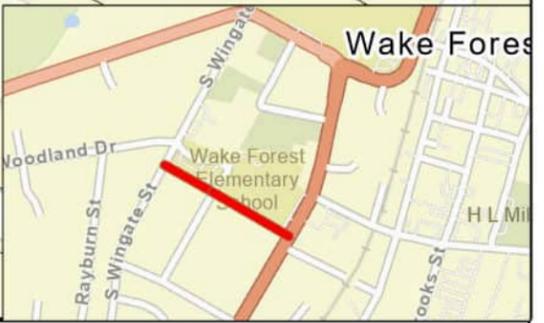
W OWEN AVE



Elizabeth Worner - 11/22/2024

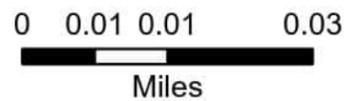
Legend

- W SYCAMORE AVE
- Wake Co. Parcels
- Franklin Co. Parcels
- Town Boundary



Map 59

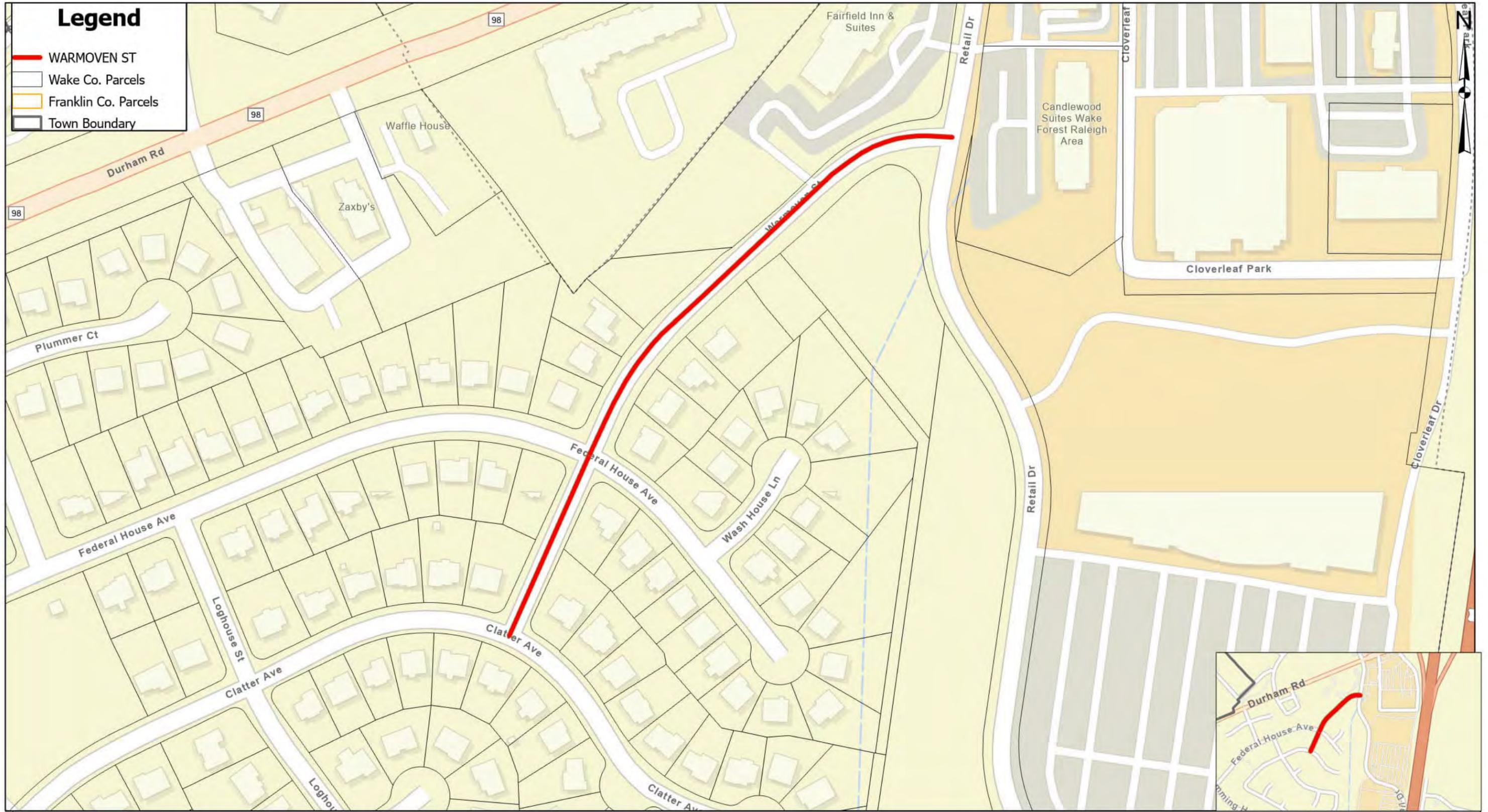
W SYCAMORE AVE



Elizabeth Worner - 11/22/2024

Legend

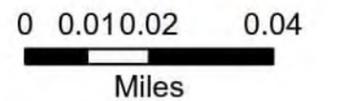
-  WARMOVEN ST
-  Wake Co. Parcels
-  Franklin Co. Parcels
-  Town Boundary



TOWN of
WAKE FOREST

Map 60 & 61

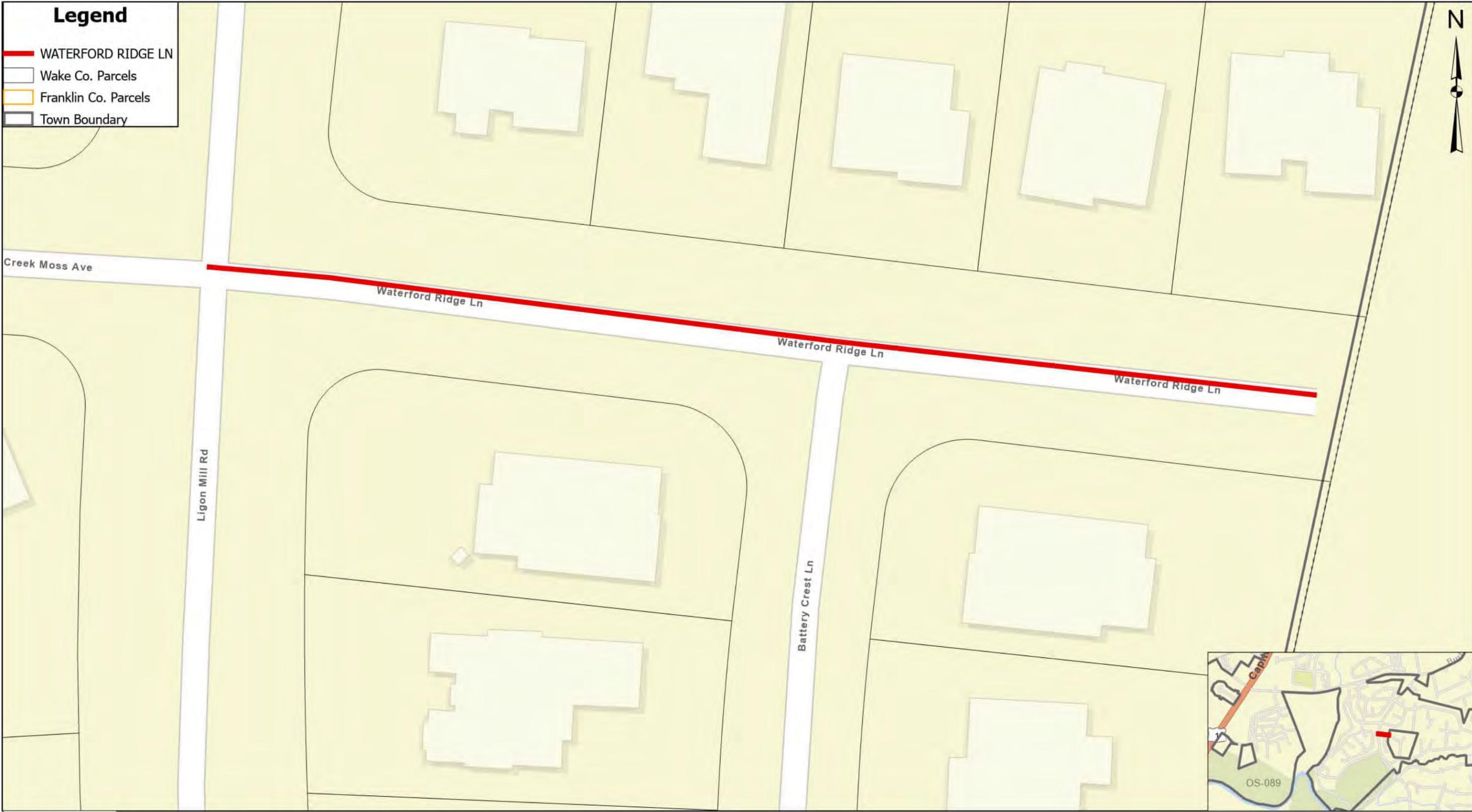
WARMOVEN ST



Elizabeth Worner - 11/22/2024

Legend

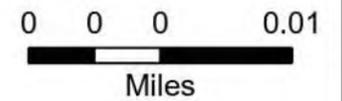
- WATERFORD RIDGE LN
- Wake Co. Parcels
- Franklin Co. Parcels
- Town Boundary



TOWN of
WAKE FOREST

Map 62

WATERFORD RIDGE LN



Min Htun - 12/18/2024



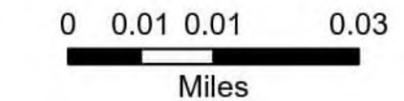
Legend

- WINDSOR DR
- Wake Co. Parcels
- Franklin Co. Parcels
- Town Boundary



Map 63

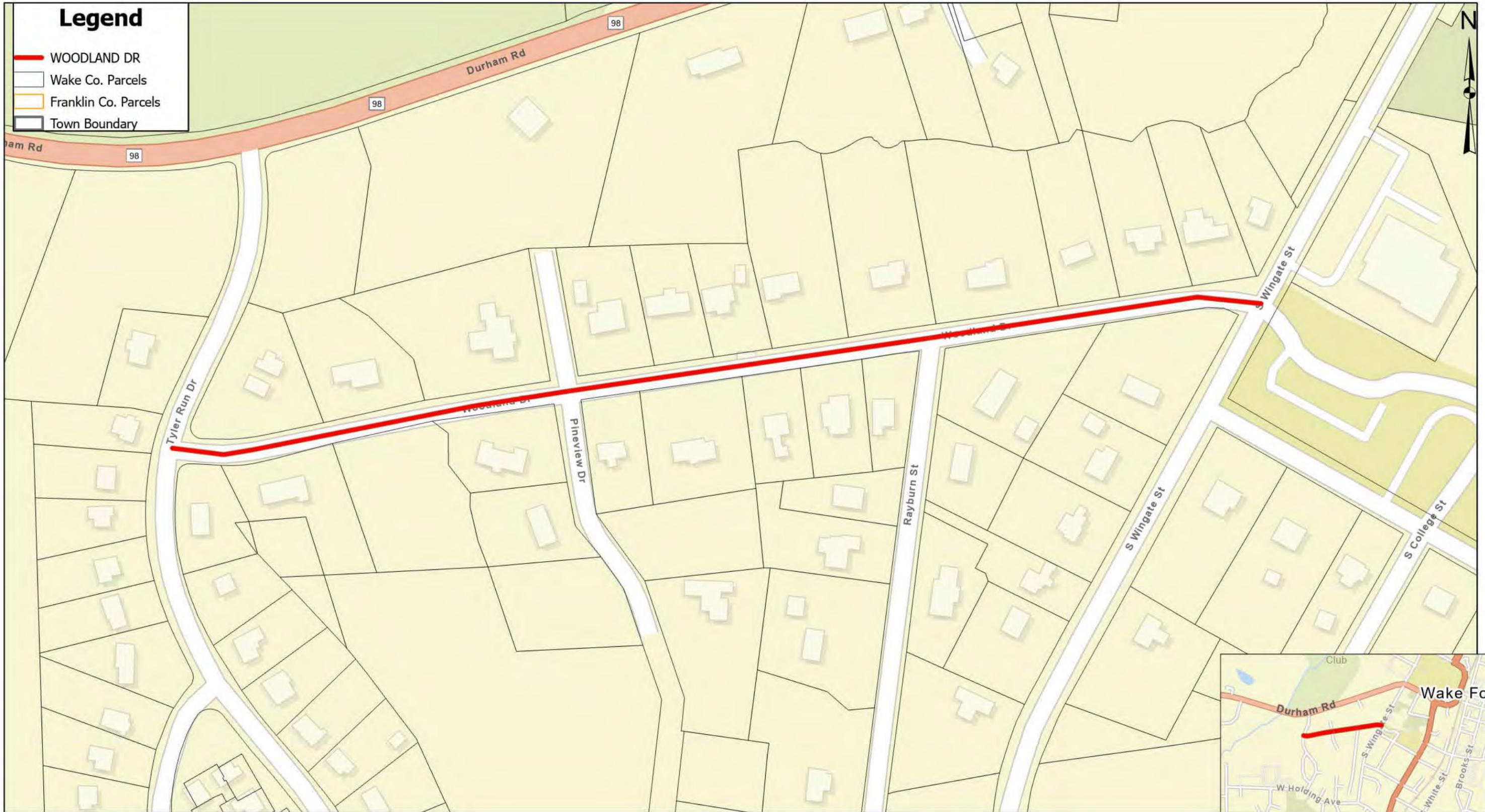
WINDSOR DR



Elizabeth Worner - 11/22/2024

Legend

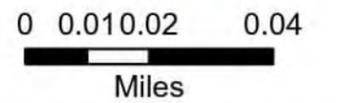
- WOODLAND DR
- Wake Co. Parcels
- Franklin Co. Parcels
- Town Boundary



TOWN of
WAKE FOREST

Map 64

WOODLAND DR



Elizabeth Worner - 11/25/2024

Legend

- WOOTEN CT
- Wake Co. Parcels
- Franklin Co. Parcels
- Town Boundary



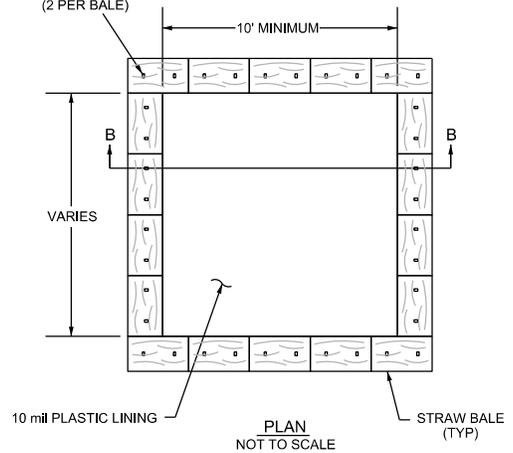
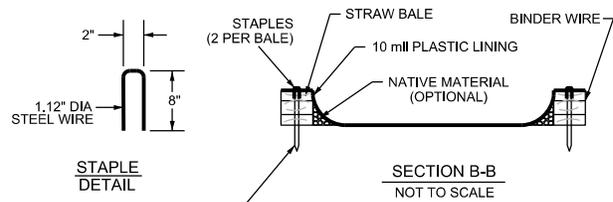
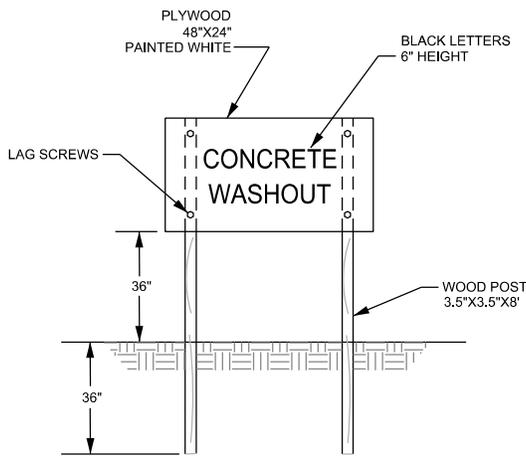
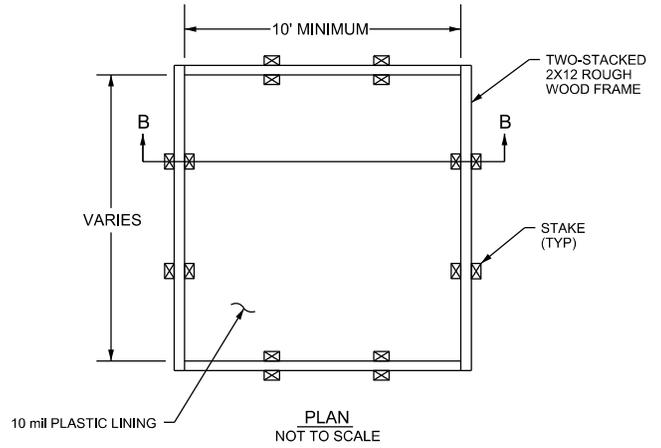
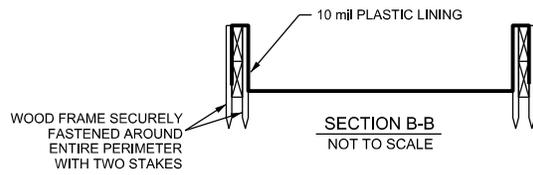
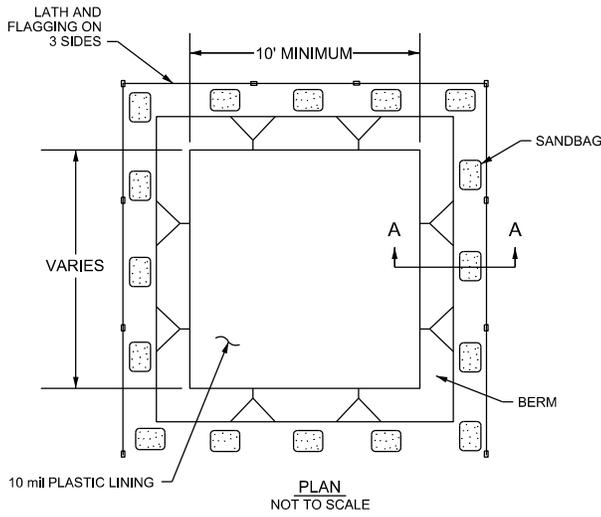
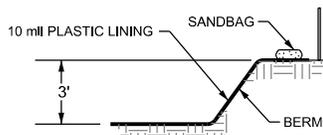
TOWN of
WAKE FOREST

Map 65

WOOTEN CT



Min Htun - 7/8/2025



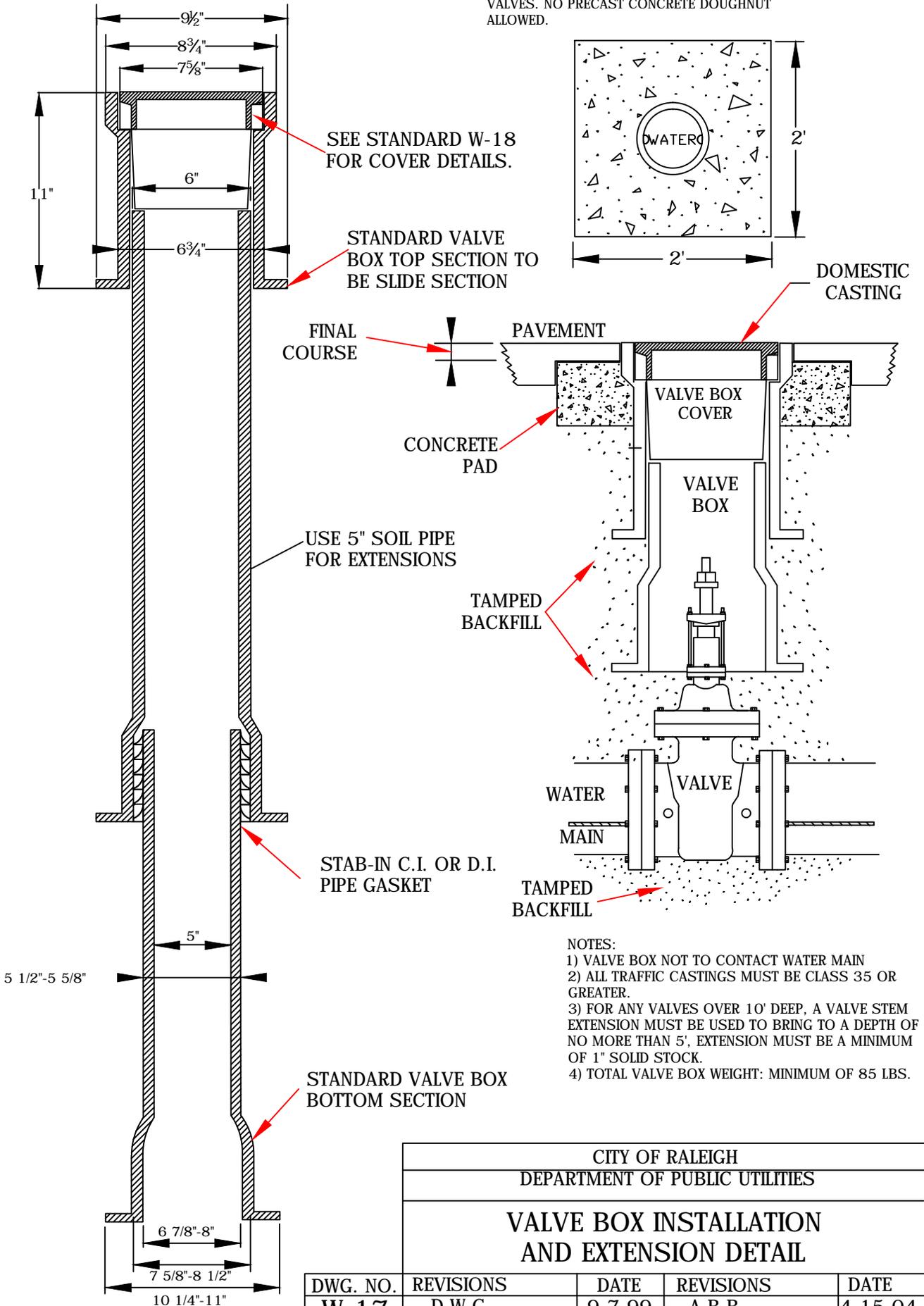
NOTES:

1. ACTUAL LAYOUT TO BE DETERMINED IN THE FIELD.
2. A CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF OR RECYCLED.
4. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED, REPAIRED, AND STABILIZED TO PREVENT EROSION.
5. MUST BE LOCATED >50 FT AWAY FROM INLETS/WATERWAYS UNLESS THERE IS NO OTHER PRACTICAL ALTERNATIVE.

CITY OF RALEIGH STANDARD DETAIL		
REVISIONS	DATE: 8/2020	NOT TO SCALE
		CONCRETE WASHOUT
		SW-20.25

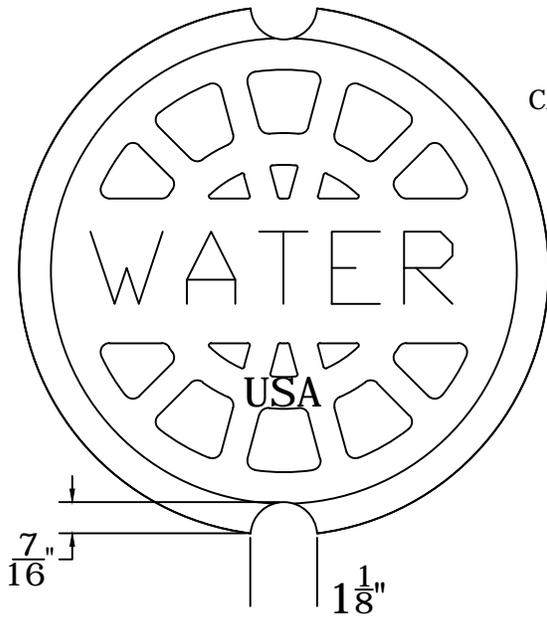
APPROVED METHOD FOR EXTENSION OF VALVE BOX

NOTE: 2'x 2'x 6" CONCRETE PAD REQUIRED ON ALL VALVES. NO PRECAST CONCRETE DOUGHNUT ALLOWED.



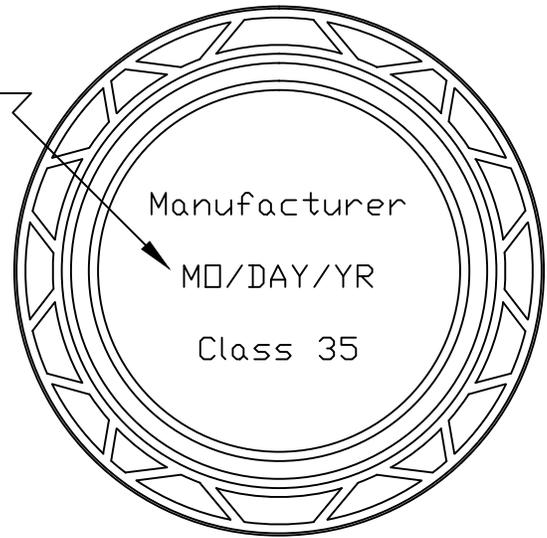
- NOTES:
- 1) VALVE BOX NOT TO CONTACT WATER MAIN
 - 2) ALL TRAFFIC CASTINGS MUST BE CLASS 35 OR GREATER.
 - 3) FOR ANY VALVES OVER 10' DEEP, A VALVE STEM EXTENSION MUST BE USED TO BRING TO A DEPTH OF NO MORE THAN 5', EXTENSION MUST BE A MINIMUM OF 1" SOLID STOCK.
 - 4) TOTAL VALVE BOX WEIGHT: MINIMUM OF 85 LBS.

CITY OF RALEIGH				
DEPARTMENT OF PUBLIC UTILITIES				
VALVE BOX INSTALLATION AND EXTENSION DETAIL				
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-17	D.W.C.	9-7-99	A.B.B.	4-15-04
	RRH	3-31-00	DHL	8-16-07

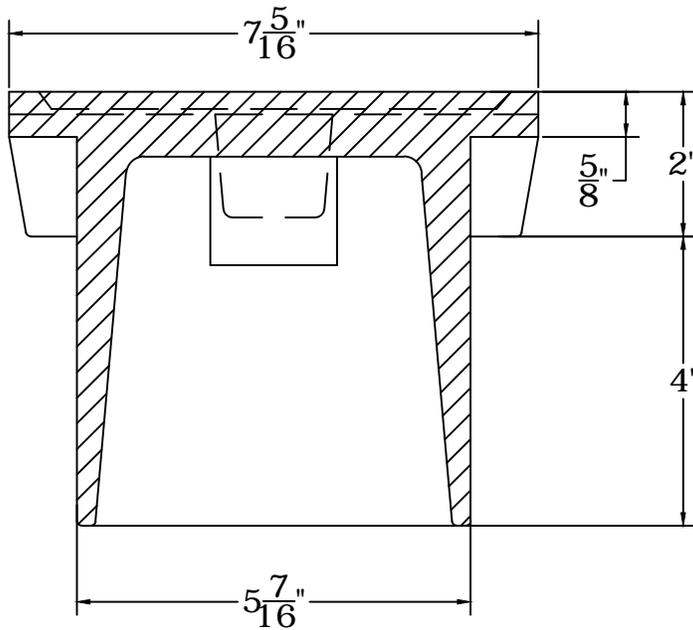


PLAN VIEW

CAST DATE



BOTTOM VIEW



SECTION VIEW

- NOTE 1 - "WATER" LETTERING MUST BE 1" RAISED (RECESSED FLUSH)
- NOTE 2 - VALVE COVER SHALL BE DOMESTICALLY CAST.
- NOTE 3 - COVER MUST HAVE A MINIMUM WEIGHT OF 25 POUNDS.
- NOTE 4 - COVER MUST BE CLASS 35 OR GREATER.
- NOTE 5 - COVER MUST MEET OR EXCEED AASHTO H-20 LOAD REQUIREMENTS.

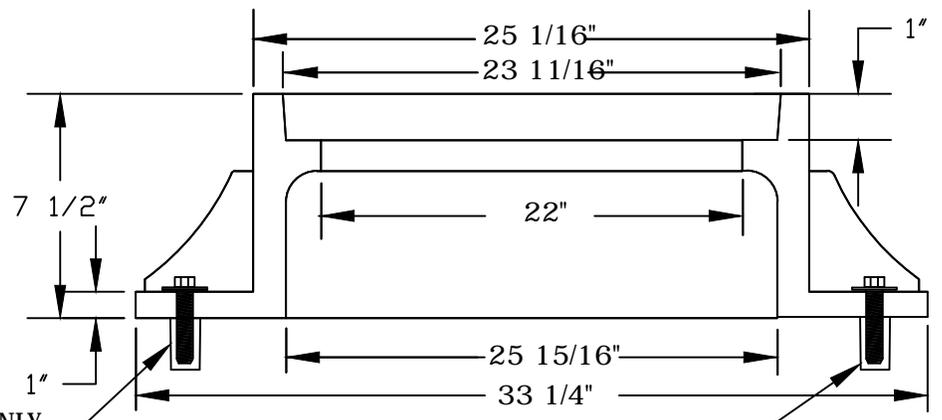
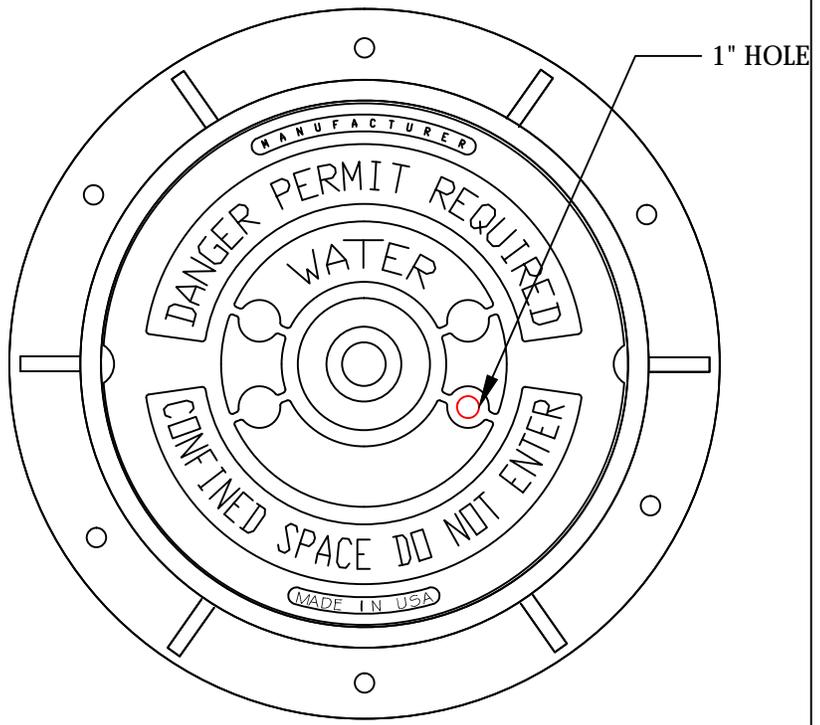
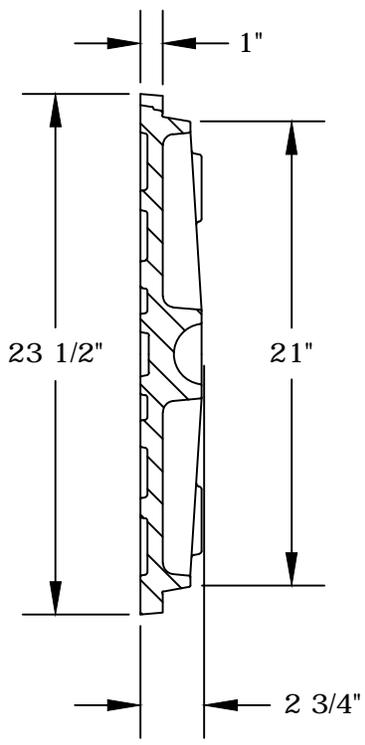
CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES

5 1/4" VALVE BOX DROP LID
WITH 4" SKIRT

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-18				

MANHOLE FRAME AND COVER

COVER 120 LBS. MINIMUM



LAGSHIELDS MAY ONLY BE USED IN ROADWAY APPLICATIONS.

5/8"X3" LAGSHIELD IN HOLE DRILLED INTO CONE OR RING WITH ANCHOR SUNK TO DEPTH RECOMMENDED BY MANUFACTURER, AND 3/8"X3" HOT DIPPED GALVANIZED LAG BOLT AND WASHER.

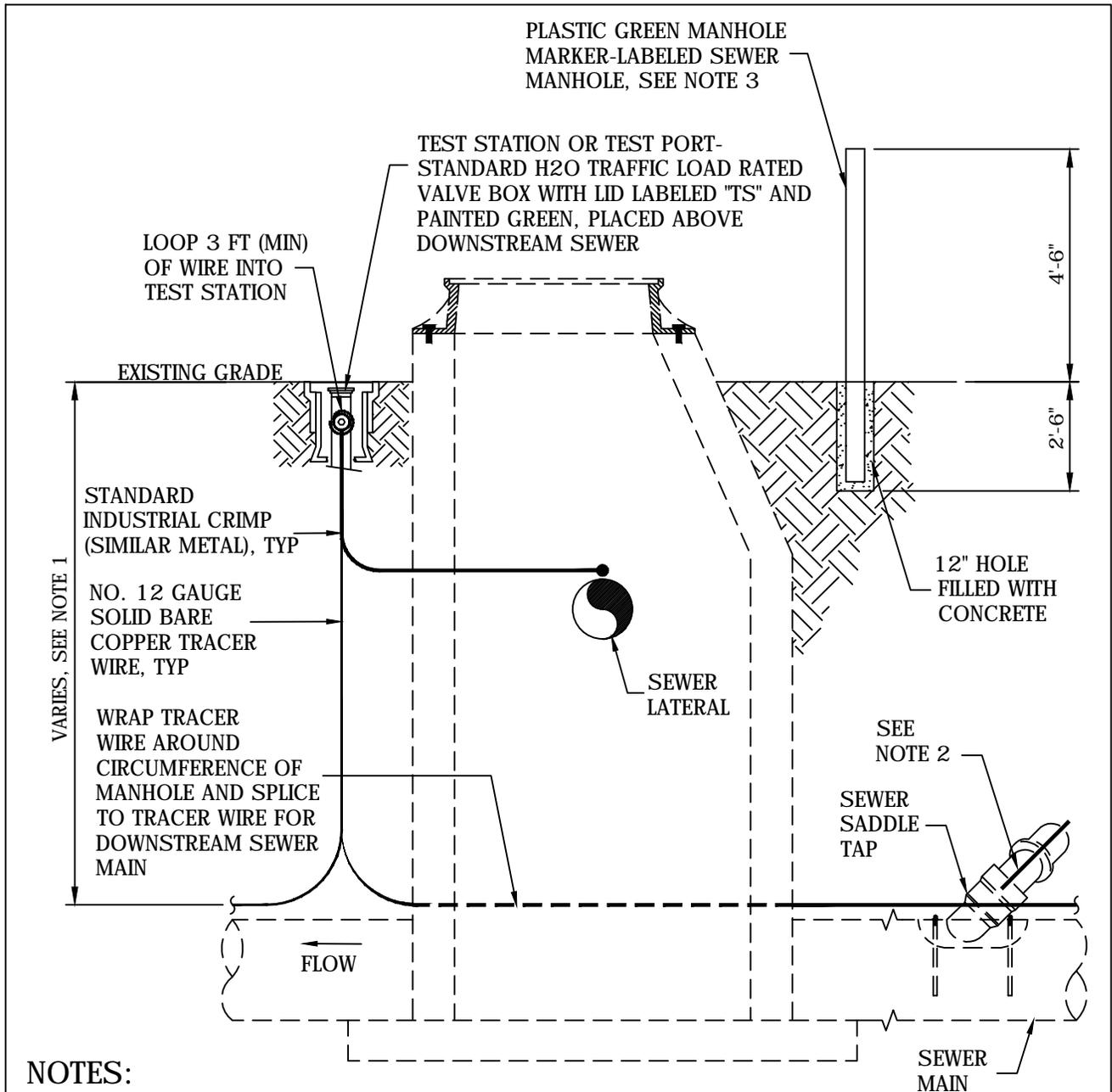
NOTES:

- 1) ALL MANHOLE FRAMES SHALL BE BE DOMESTICALLY CAST
- 2) FRAME SHALL BE A MINIMUM WEIGHT OF 182 LBS.
- 3) COVER SHALL WEIGH A MIN. OF 120 LBS.
- 4) MANHOLES WITHIN PAVED SURFACES SHALL BE CONSTRUCTED IN ACCORDANCE WITH S-29.

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES

STANDARD MANHOLE COVER

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-20	A.B.B.	4-8-04		
	D.H.L.	6-18-08		



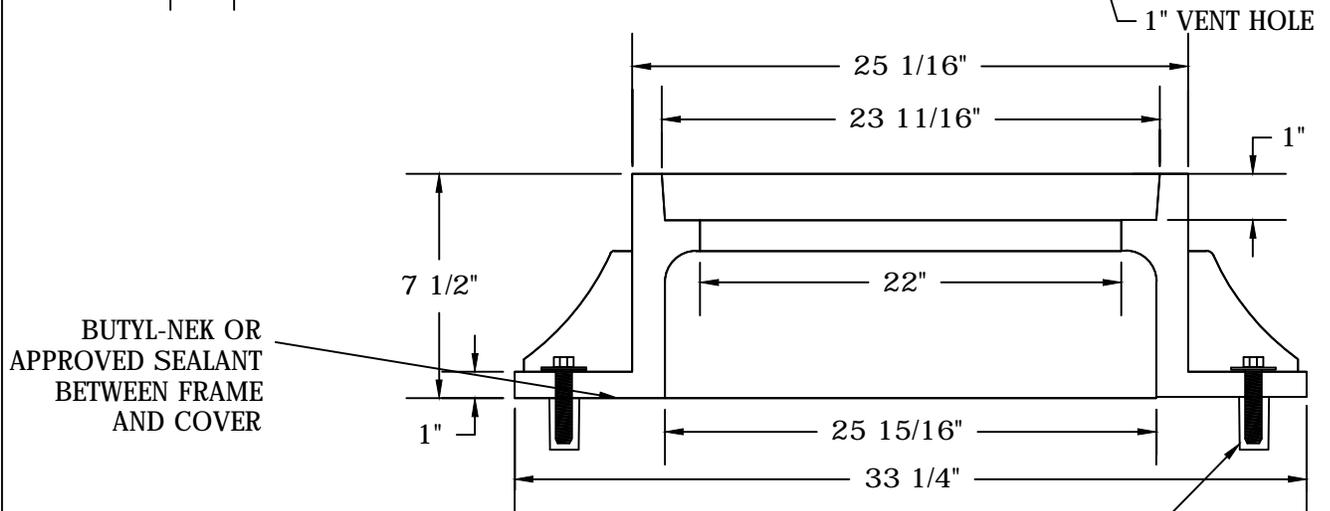
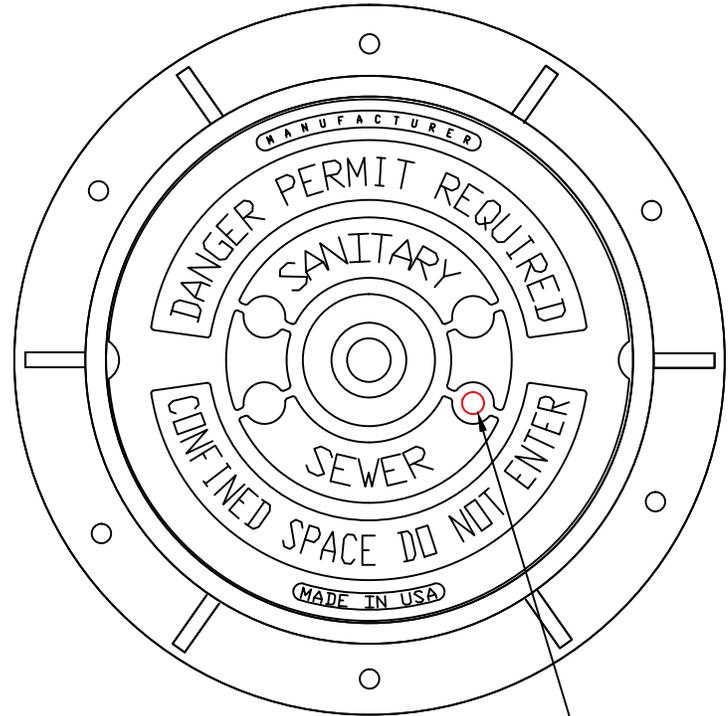
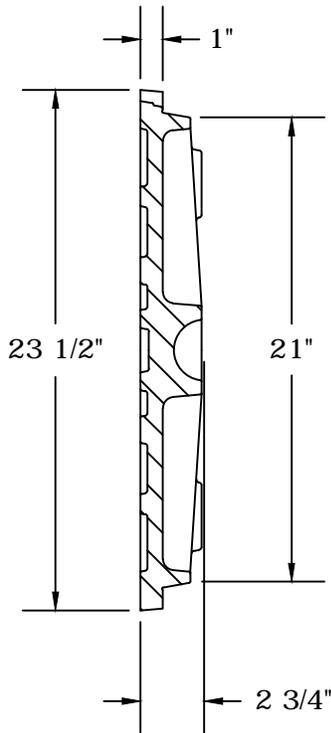
NOTES:

1. THE TRACER WIRE SHALL BE CONTINUOUS TO THE GREATEST EXTENT POSSIBLE. FOR GRAVITY MAIN AND OR LATERAL INSTALLATIONS LESS THAN 8 FT, THE TRACING WIRE SHALL BE ATTACHED TO THE PIPE. TRACER WIRE SHALL BE LAID FLAT AND SECURELY AFFIXED TO THE PIPE AT 10 FOOT INTERVALS. FOR GRAVITY MAIN AND OR LATERAL INSTALLATION DEEPER THAN 8 FT, THE TRACING WIRE SHALL BE INSTALLED AT A DEPTH OF 7-8 FT. THE WIRE SHALL BE PROTECTED FROM DAMAGE DURING THE EXECUTION OF THE WORK. NO BREAKS OF CUTS IN THE TRACER WIRE SHALL BE PERMITTED.
2. WHERE LATERAL TAPS ARE MADE BY SERVICE SADDLES, THE TRACER WIRE SHALL NOT BE ALLOWED TO TO BE PLACED BETWEEN THE SADDLE AND MAIN.
3. MANHOLE MARKERS SHALL BE PLACED ADJACENT TO MANHOLES AT THE DISCRETION OF OWNER OR OWNER'S REPRESENTATIVE.

CITY OF RALEIGH				
DEPARTMENT OF PUBLIC UTILITIES				
GRAVITY SEWER MAIN TRACER WIRE AND MANHOLE MARKER				
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
S-20A	WKD	09-14		

COVER 120 LBS. MINIMUM

MANHOLE FRAME AND COVER



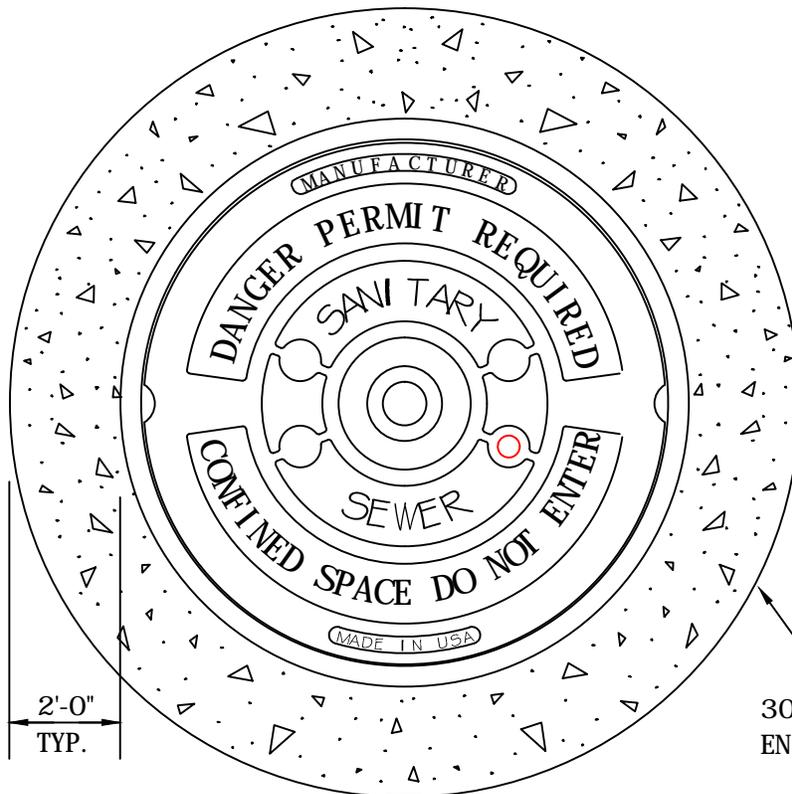
NOTES:

- 1) ALL MANHOLE FRAMES SHALL BE DOMESTICALLY CAST.
- 2) FRAME SHALL BE A MINIMUM WEIGHT OF 182 LBS. WITHIN PUBLIC ROW AND 160 LBS. WITHIN EASEMENTS.
- 3) COVER SHALL WEIGH A MIN. OF 120 LBS.
- 4) ALL MANHOLE FRAMES OUTSIDE OF PAVED SURFACES SHALL BE BOLTED TO THE CONE SECTION OR RING WITH A MINIMUM OF 4 BOLTS PER FRAME.

5/8"X3" LAGSHIELD IN HOLE DRILLED INTO CONE OR RING WITH ANCHOR SUNK TO DESIGN DEPTH, AND 3/8"X3" HOT DIPPED GALVANIZED LAG BOLT AND WASHER.

CITY OF RALEIGH				
DEPARTMENT OF PUBLIC UTILITIES				
STANDARD MANHOLE COVER				

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
S-25	3-1-87	3-1-87	A.B.B.	2-9-05
	RRH	3-30-00	D.H.L.	6-18-01

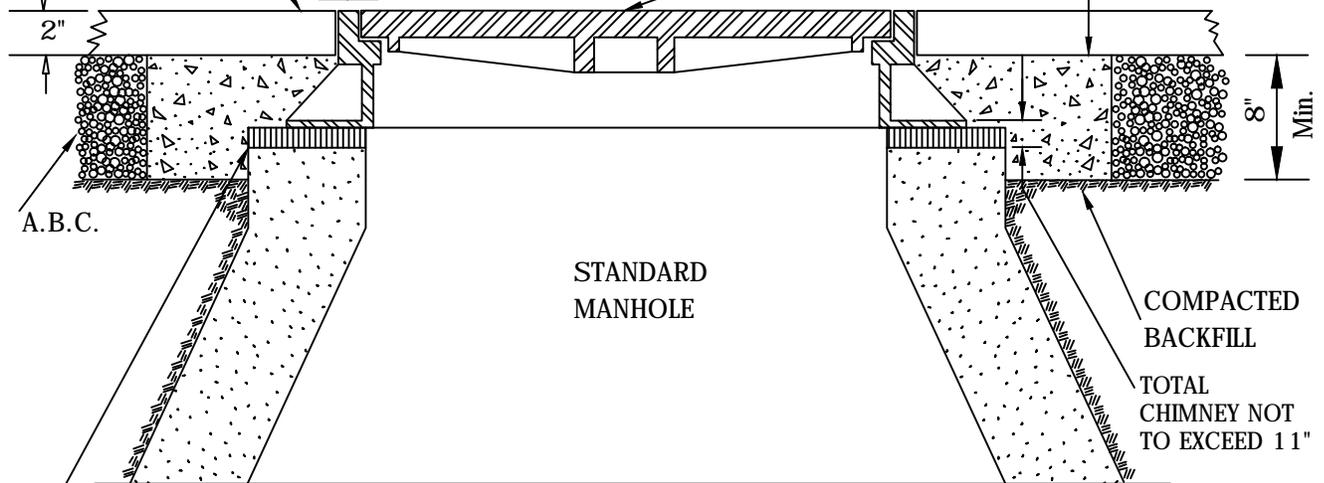


3000 P.S.I. CONCRETE
ENCASEMENT

PLAN

ADJUST FLUSH
WITH FINAL GRADE

STANDARD MANHOLE
FRAME AND COVER



SECTION

A.B.C.

8"
Min.

COMPACTED
BACKFILL

STANDARD
MANHOLE

TOTAL
CHIMNEY NOT
TO EXCEED 11"

PRECAST CONCRETE SPACER
(DONUT RINGS) IN TRAFFIC
AREAS ONLY. DONUT RINGS
NOT ALLOWED IN
EASEMENTS.

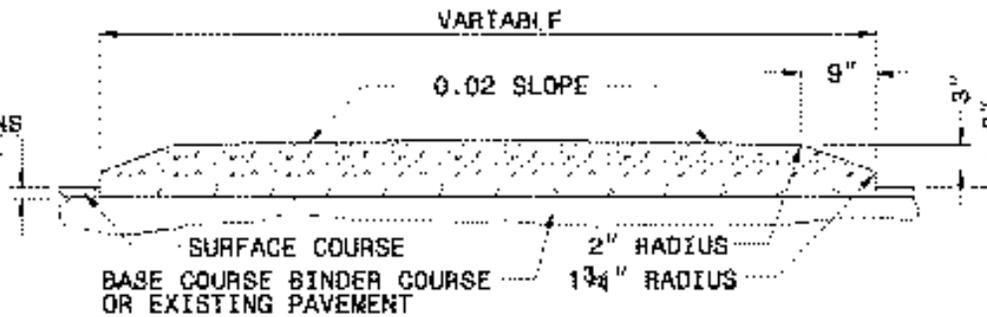
CITY OF RALEIGH

DEPARTMENT OF PUBLIC UTILITIES

**STANDARD MANHOLE FRAME AND COVER
DETAIL WITHIN PAVED SURFACES**

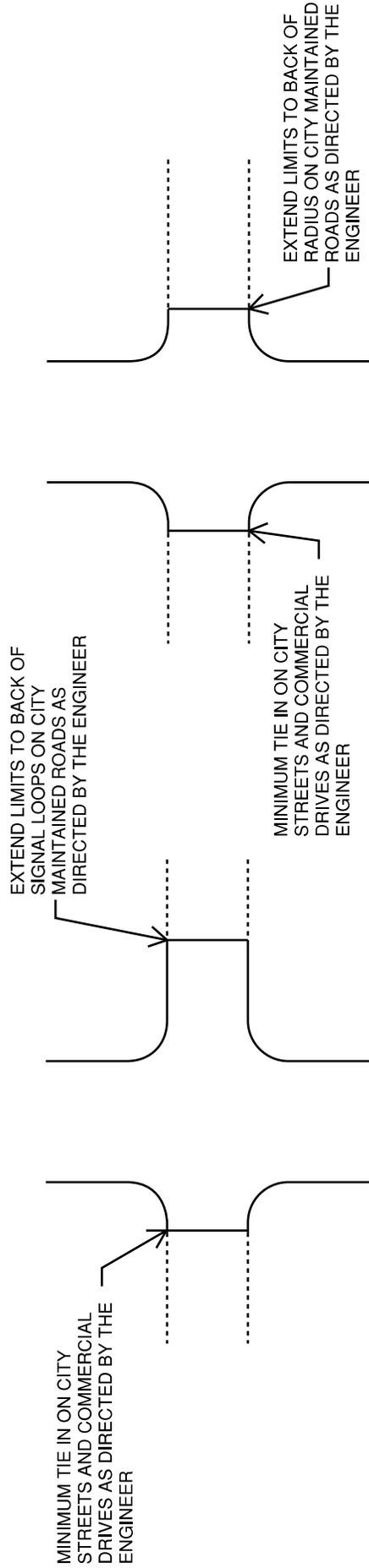
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
S-29	Y.C.A.	12-31-91	ABB	9-20-04
	RRH	3-30-00	DHL	11-29-07

SEE TYPICAL SECTIONS
FOR PAVEMENT DEPTH.
KEY IN ON THE
LAST LAYER OF
PAVEMENT SURFACE
COURSE



5" MONOLITHIC CONCRETE ISLAND (KEYED IN)
ON ASPHALT CONCRETE PAVEMENT
(USE ON ISLAND LESS THAN 4' WIDE)

STANDARD DETAIL FOR
CONCRETE ISLANDS

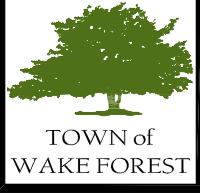
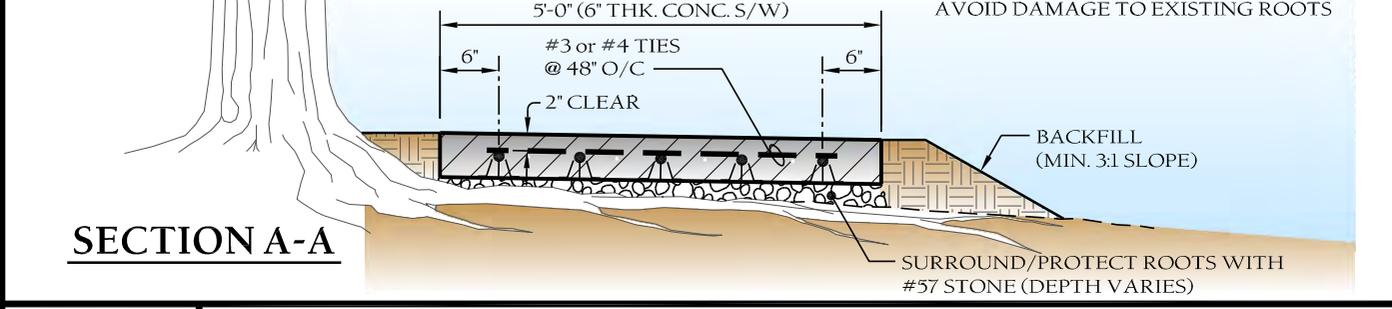
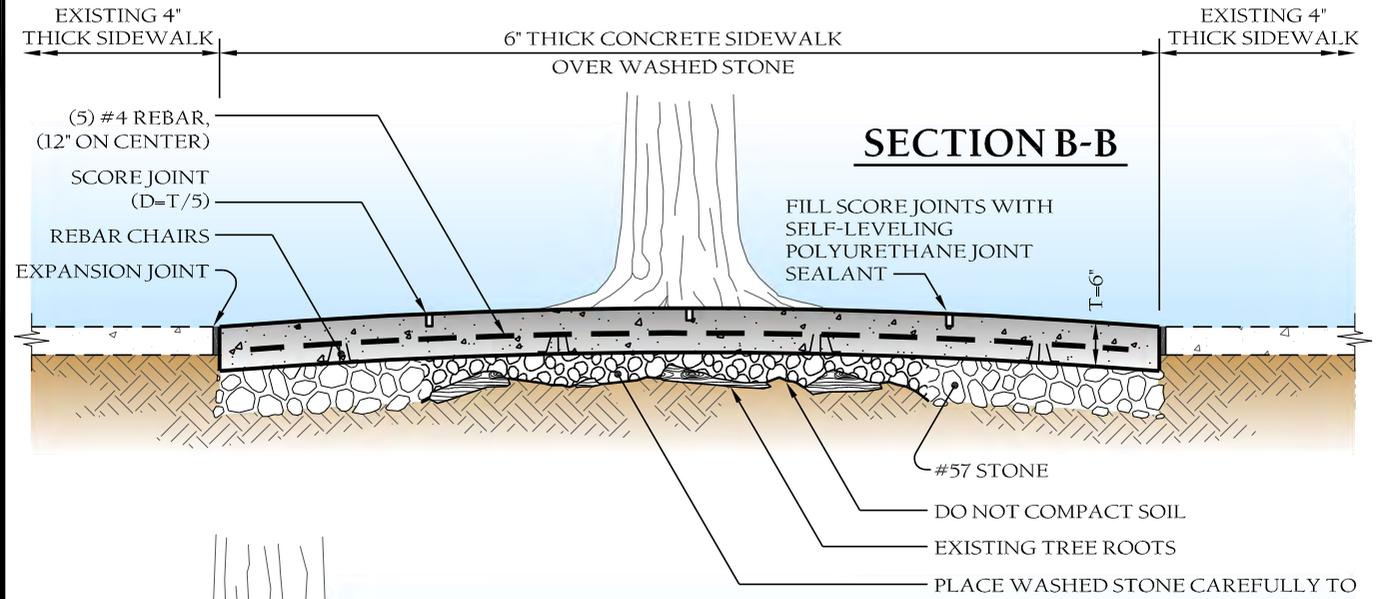
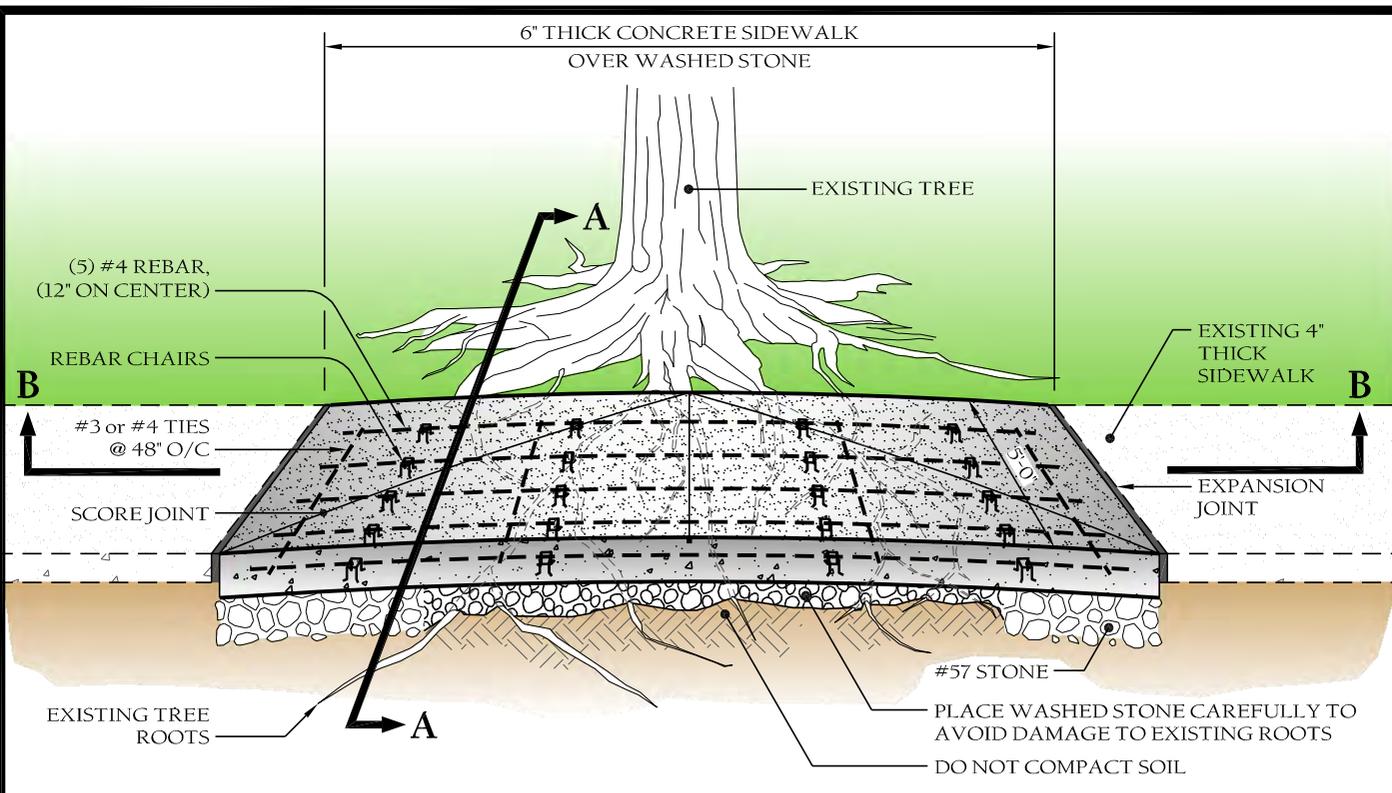


DETAIL OF PROJECT LIMITS AT SIGNALIZED Y LINES

DETAIL OF PROJECT LIMITS AT UNSIGNALIZED Y LINES

NOTES:
 1. Y-LINE STREETS SHALL NOT BE PULLED AS PART OF THE MAIN-LINE STREET RESURFACING OPERATION. ALL Y-LINE STREETS SHALL BE RESURFACED AFTER THE MAIN STREET.

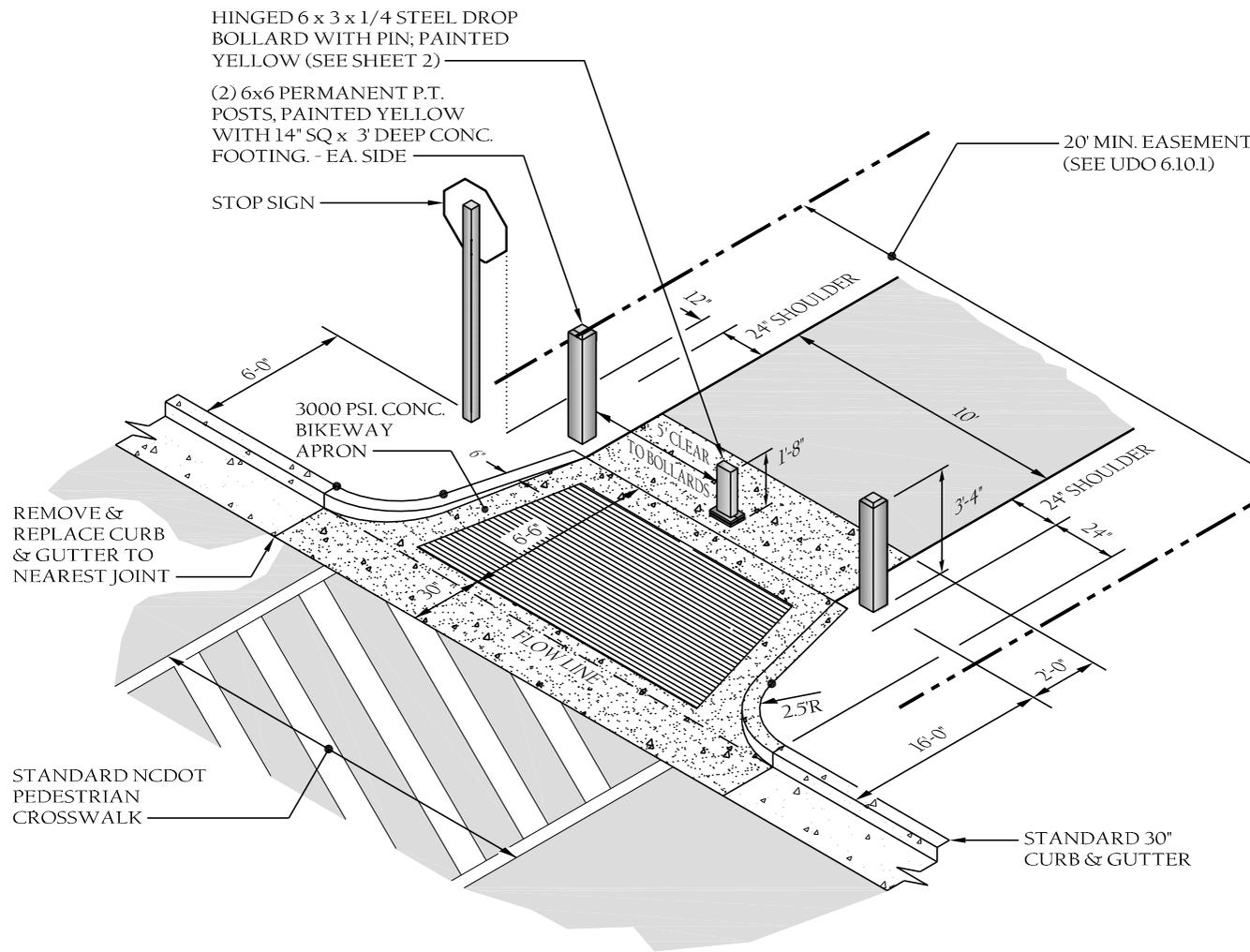
RESURFACING LIMITS AT Y-LINES AND COMMERCIAL DRIVES



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

**REINFORCED CONCRETE SIDEWALK
(BRIDGING TREE ROOTS)**

Scale: Not To Scale	Detail #: 8.07
Revision Date: Feb., 2015	: 224



NOTES:

1. Steel drop bollard may be constructed as shown on sheet 2 or a Traffic Guard Low Profile Heavy Duty Hinged Bollard may be used (Model LPHDHB) installed per manufacturer's directions.



TOWN of WAKE FOREST

TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

MULTI-USE PATH DETAIL
STREET TIE-IN

Scale:
Not To Scale

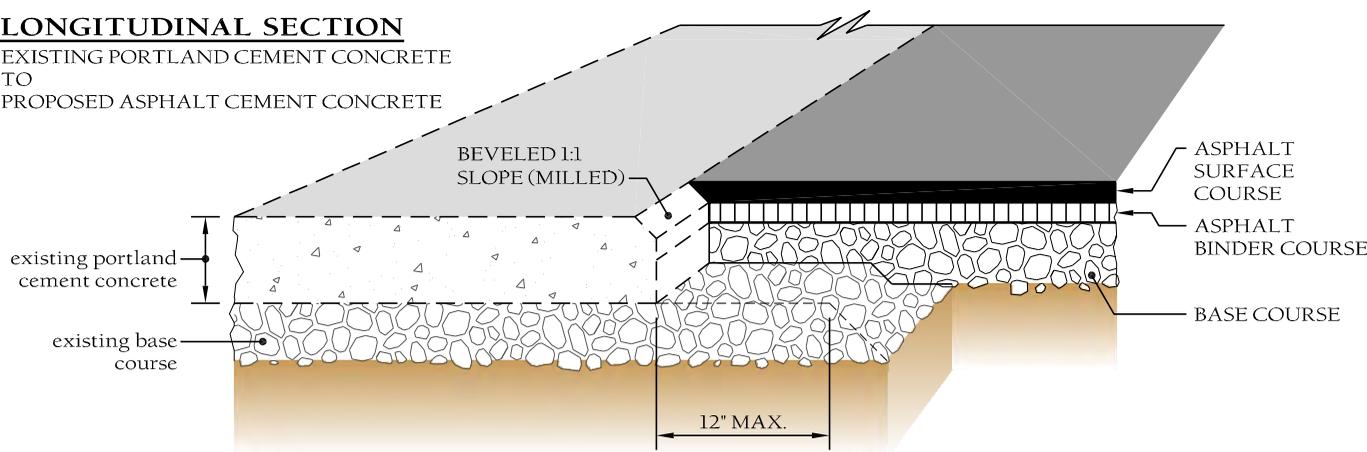
Detail #:
8.08

Revision Date:
Feb., 2015

225

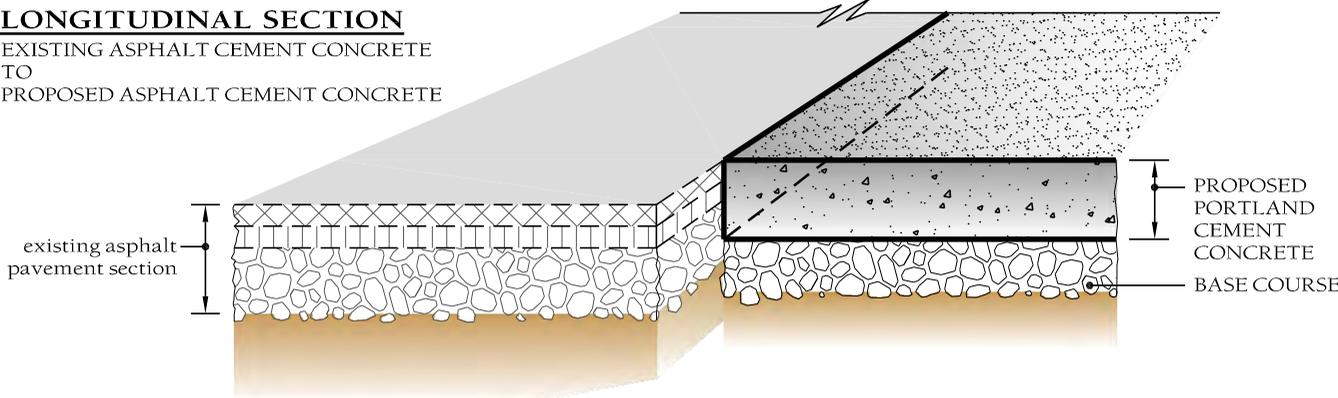
LONGITUDINAL SECTION

EXISTING PORTLAND CEMENT CONCRETE TO PROPOSED ASPHALT CEMENT CONCRETE



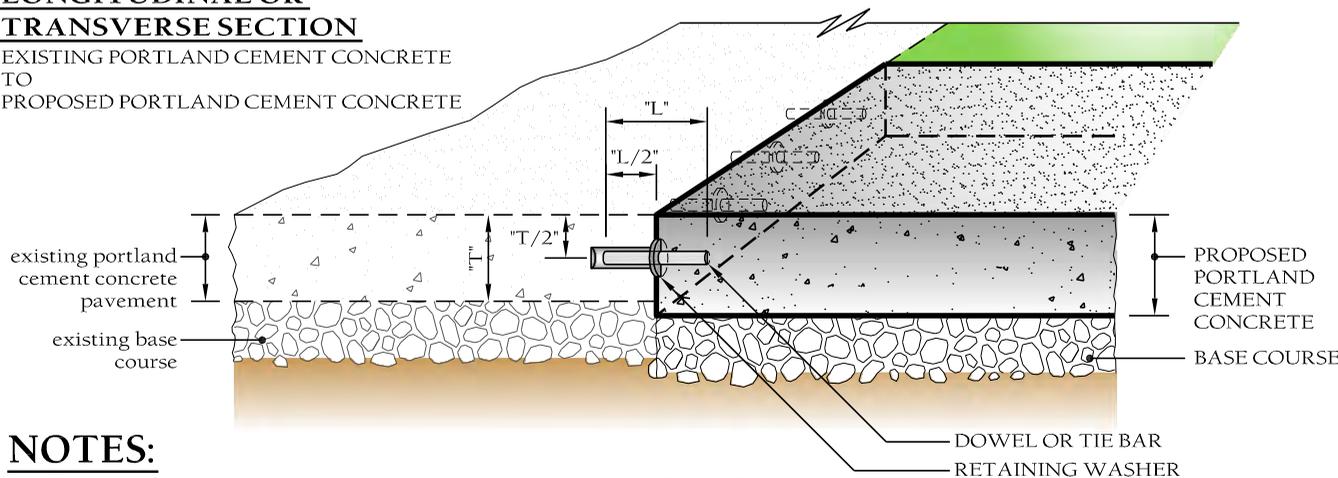
LONGITUDINAL SECTION

EXISTING ASPHALT CEMENT CONCRETE TO PROPOSED ASPHALT CEMENT CONCRETE



LONGITUDINAL OR TRANSVERSE SECTION

EXISTING PORTLAND CEMENT CONCRETE TO PROPOSED PORTLAND CEMENT CONCRETE



NOTES:

1. Joint pavements as shown on this detail or as directed by the Town's Engineer.
2. Place tie bars (deformed steel bars) along the longitudinal joints at 30" on center. Place dowel bars (smooth steel bars) along the traverse joints at 12" on center. The placement and/or spacing of tie or dowel bars may be modified by the plans of the Town's Engineer. Measure the holes, to accept these bars, the O.D. of the bar plus 1/8" in diameter and 1/2 the length of the bar plus 1" unless otherwise specified by the manufacturer of the adhesive. Use retaining washers (nylon, plastic or composite) on all bars to hold the adhesive material in place. The retaining washers shall be: I.D. = bar O.D., O.D. = hole I.D. + 1/4" min., thickness = 1/16" min. See NCDOT standard drawing 700.01 for bar sizes and other joint related information. Provide adhesive bonding material specified by Section 1081 of the 2012 NCDOT Standard Specifications for Type 3 or 3A adhesives.
3. See typical sections for pavement composition and for other specific information.



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

TYING PROPOSED PAVEMENT TO EXISTING PAVEMENT

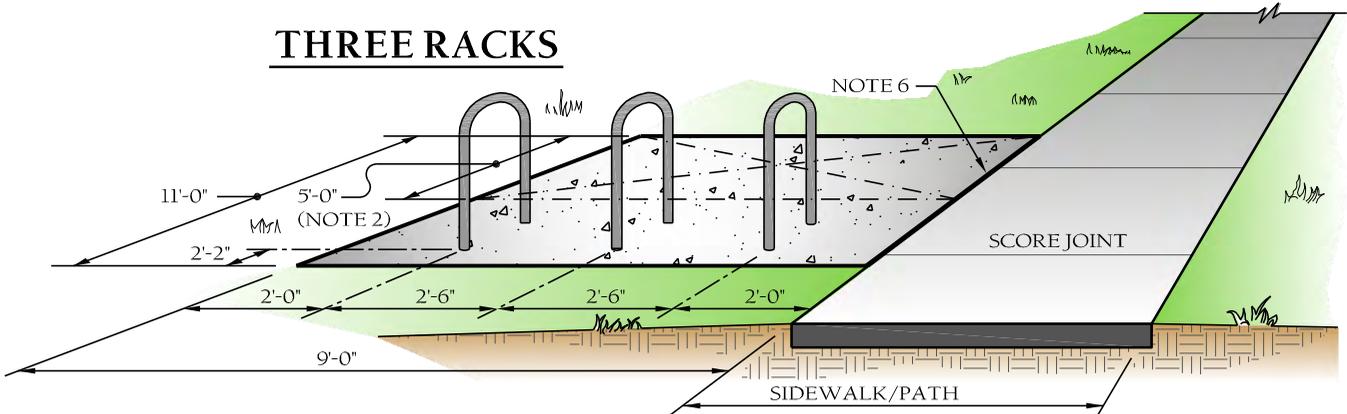
Scale: Not To Scale

Detail #: 8.09

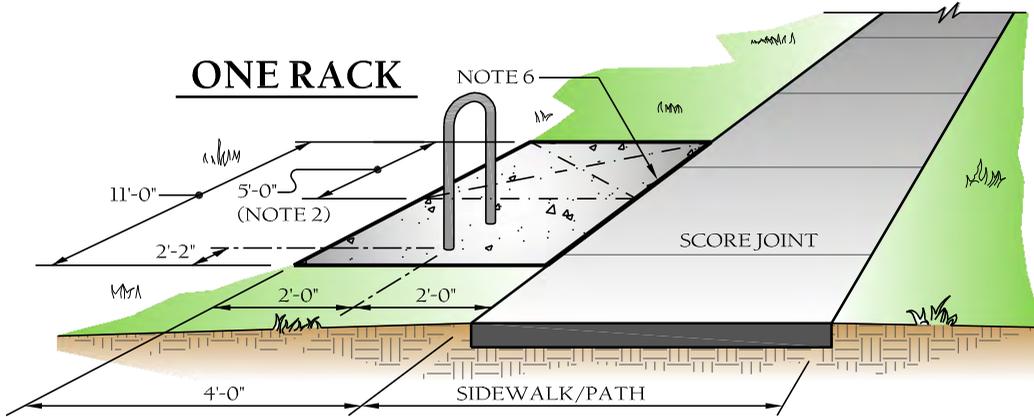
Revision Date: Feb., 2015

226

THREE RACKS



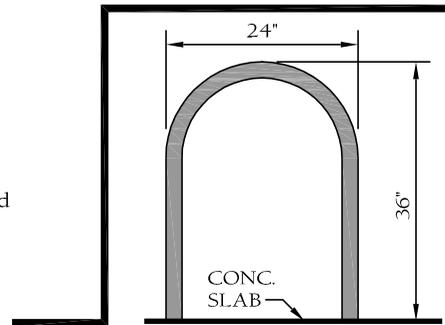
ONE RACK



OPTION 1:
PARALLEL TO SIDEWALK
 (PREFERRED)

NOTES:

1. Parking pad to be min. 6" thick, 3,000 psi concrete. Size as shown. (Pad to be min. 4X6 for single rack and 2'-6" additional width per rack, with racks spaced 2'-6" o/c if more than one.)
2. A 5'-0" wide unobstructed maneuvering area is required behind racks when orientated parallel to a sidewalk as shown; requires a min. 4'-0" x 11'-0" pad.
3. Racks shall be flange mounted and shall have black polyester powder coat. Other placements shall meet minimum size requirements.
4. Bicycle parking shall not encroach on accessible paths.
5. Designated placement within parking lots may also be acceptable.
6. Provide expansion joint where concrete pad abuts concrete sidewalk, pad or pathway.
7. Other bike rack designs will be considered upon approval of the Town of Wake Forest Planning Department.



INVERTED "U" RACKS



TOWN of WAKE FOREST

TOWN of WAKE FOREST, NC

Manual of Specifications, Standards and Design

BICYCLE PARKING PARALLEL TO SIDEWALK

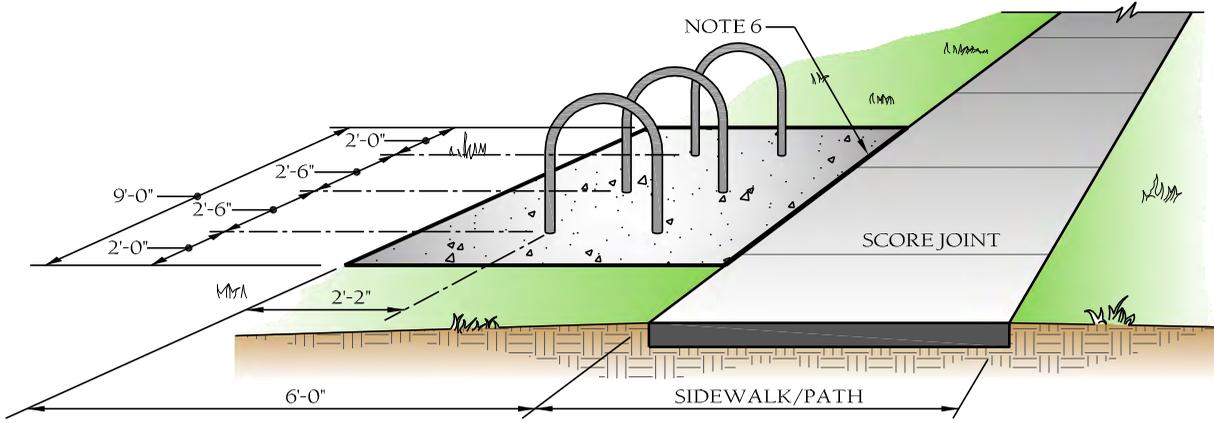
Scale:
Not To Scale

Detail #:
8.16

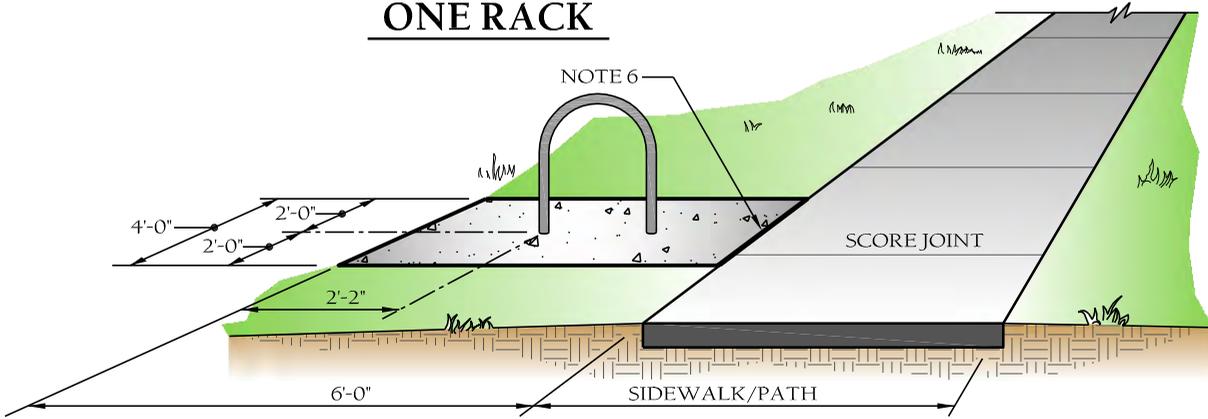
Revision Date:
Feb., 2015

:
227

THREE RACKS



ONE RACK



OPTION 2:
PERPENDICULAR TO SIDEWALK
 (OPTIONAL)



TOWN of
 WAKE FOREST

TOWN of WAKE FOREST, NC

Manual of Specifications, Standards and Design

BICYCLE PARKING

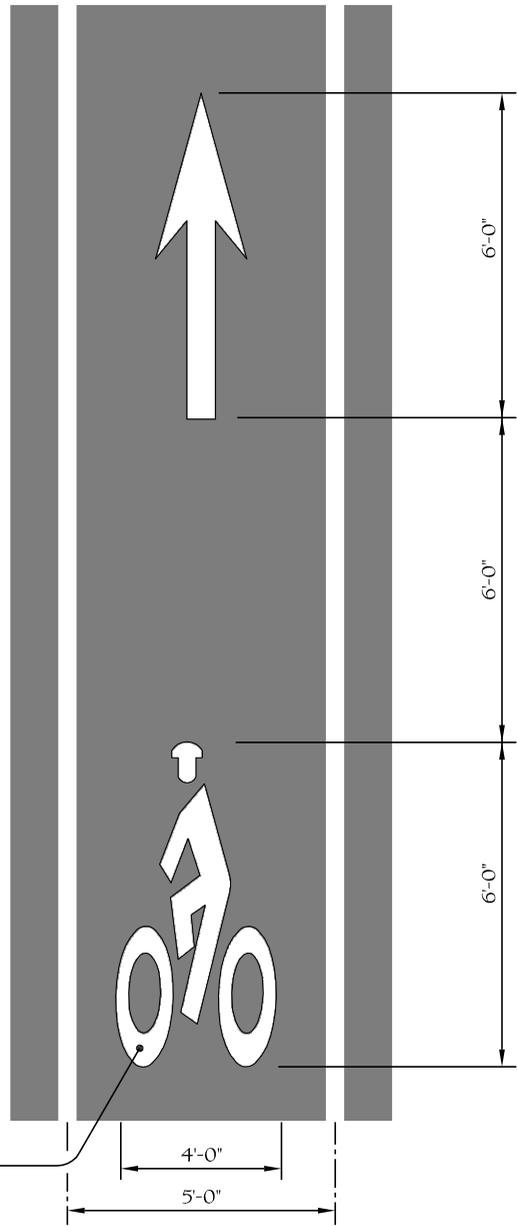
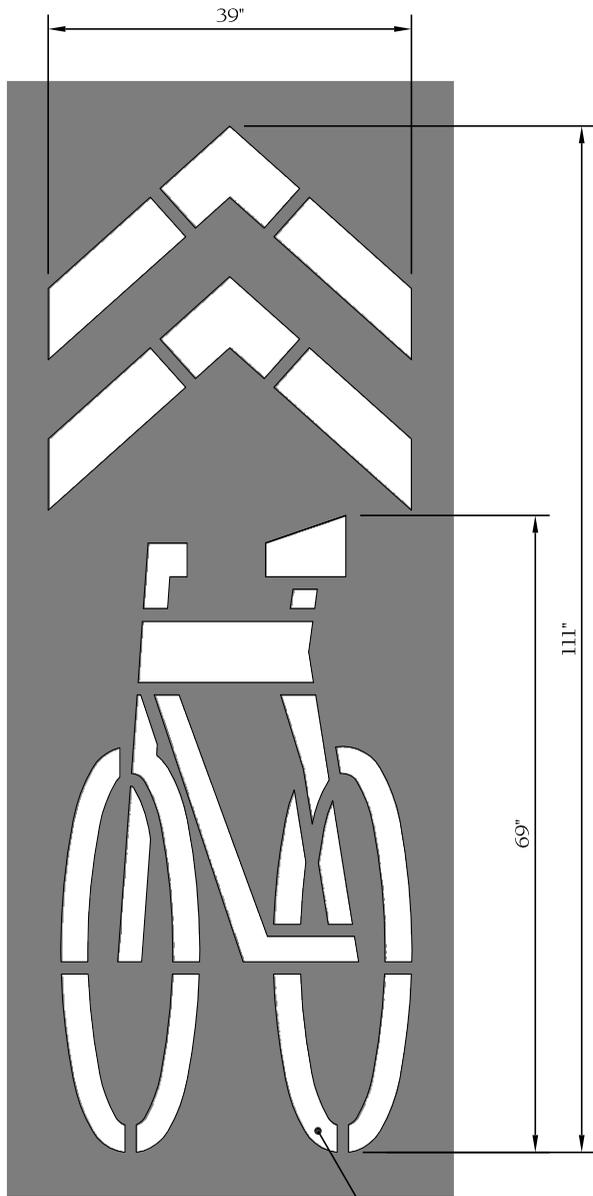
PERPENDICULAR TO SIDEWALK

Scale:
 Not To Scale

Detail #:
8.16

Revision Date:
 Feb., 2015

2
228



WHITE REFLECTORIZED
PAINT OR THERMOPLASTIC
MARKINGS

SHARED BIKE LANE
MARKINGS
"SHARROW"

BIKE LANE SYMBOL
MARKINGS



TOWN of
WAKE FOREST

TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

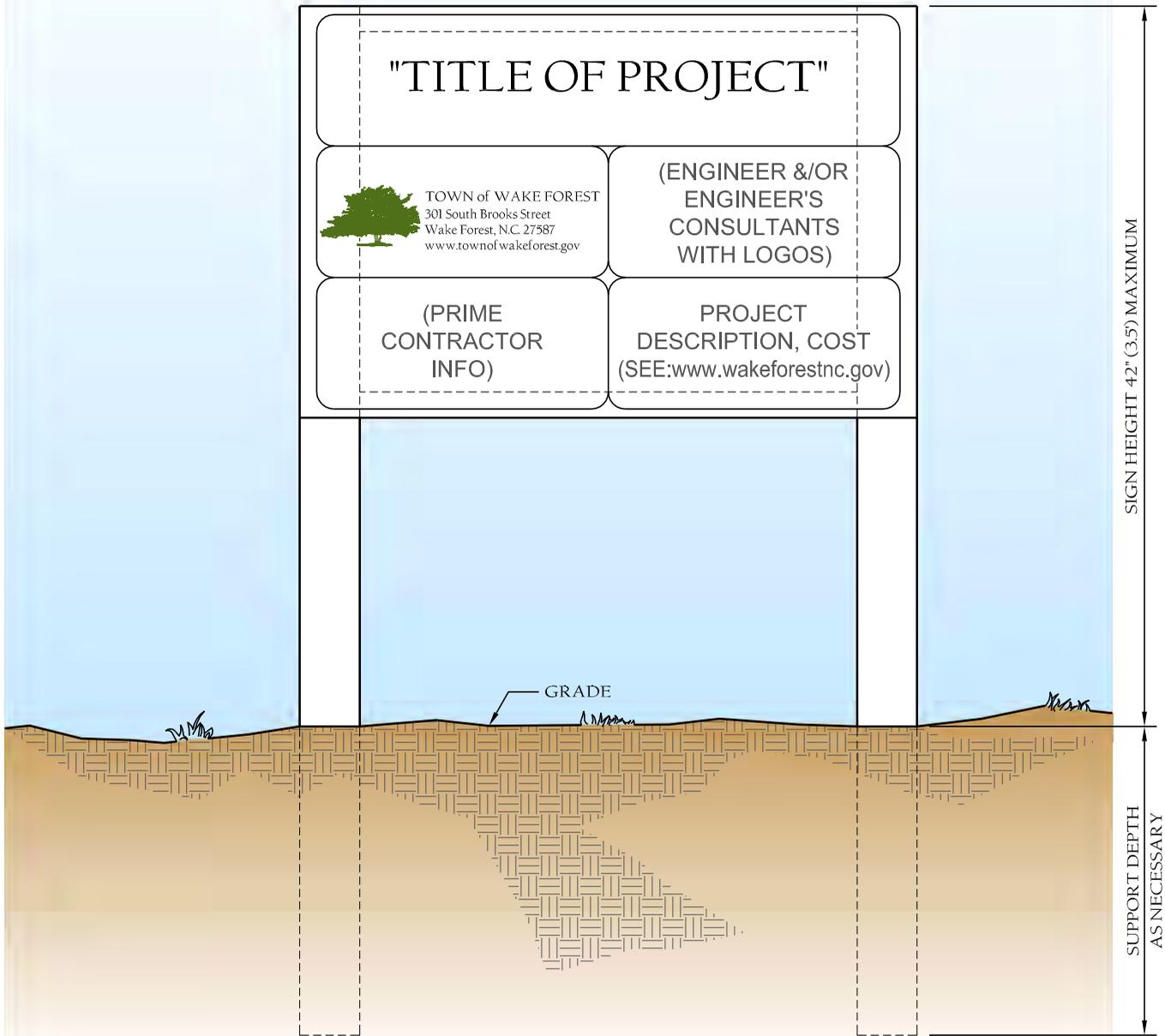
BIKE LANE
SYMBOL MARKINGS

Scale:
Not To Scale

Detail #:
8.17

Revision Date:
Feb., 2015

229



NOTES:

1. Total sign area = 32 S.F. per side (Maximum).



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

PROJECT IDENTIFICATION SIGN
for TOWN FUNDED CAPITAL PROJECTS

Scale:
Not To Scale

Detail #:
8.18

Revision Date:
Feb., 2015

230

PAVEMENT SECTION MATRIX

UDO Street Type <small>(See UDO paragraph 6.7.2 "Town Street Classifications" for R/W & street cross-section requirements)</small>	ADT <small>(vpd)</small>	Minimum Pavement Section					
		SuperPave Asphalt Thickness			Aggregate Base <small>(ABC)</small>	Geogrid ¹	Curb & Gutter ²
		Riding Surface <small>(S-9.5B)</small>	Intermediate Course <small>(I-19.0B)</small>	Base Course <small>(B-25.0)</small>			
Urban Boulevard <small>(UDO 6.7.2B)</small>	25k to 55k	As Designed	As Designed	As Designed	8	Note 1	Type 3
Avenue <small>(UDO 6.7.2C)</small>	15k to 30k	As Designed	As Designed	As Designed	5	-	Type 2
Commercial Street <small>(UDO 6.7.2D)</small>	10k to 18k	2	-	4	5	-	Type 1
Large Residential Street <small>(UDO 6.7.2E)</small>	2.5k to 15k	2	-	4	5	-	Type 2 or 4
Residential Yield Street <small>(UDO 6.7.2F)</small>	0 to 1k	2	-	-	8	Note 1	Type 2 or 4
Lane <small>(UDO 6.7.2G)</small>	0 to 3k	2	-	-	8	Note 1	Type 1 or 5
Alley <small>(UDO 6.7.2H)</small>	N/A	2	-	-	6	-	N/A
Industrial Access ³	N/A	As Designed	As Designed	As Designed	8	Note 1	Type 3

1. For all street classifications within the street right-of-way, the aggregate base thickness may be reduced by 2 inches if an approved Geogrid is installed between the compacted subgrade and the aggregate base. Geogrid to be *Tensor BX1100 (SS-2)*, an approved equal, or as otherwise specified by a NC Licensed PE (Geotechnical Engineer).
2. **Curb & Gutter Types (see Standard Detail 9.02):**
 - Type 1- 30-inch Standard Curb & Gutter.
 - Type 2- 30-inch Standard Curb & Gutter or approved alternate.
 - Type 3- 30-inch Standard Curb & Gutter with 5 inches of ABC below curb and extending a minimum of 6 inches beyond the back of the curb or approved alternate.
 - Type 4- 30-inch Valley Curb.
 - Type 5- LID or Swale.
3. Right-of-way and street section to be as required by Town Engineer.
4. Street pavement sections must be designed using the procedures outlined in the UDO, Section 3, Street and Subdivision Design, paragraph 3.3 Pavement Design Methods except that individual elements shall not be less than shown in the above table.
5. See UDO Section 6, Infrastructure Standards, paragraphs 6.5.3 Pedestrian/Bicycle Connections, 6.7.2 Town Street Classification, 6.8 Sidewalk and Other Pedestrian Facilities and 6.9 Bikeway Facilities for sidewalk and bikeway requirements.



TOWN of WAKE FOREST, NC

Manual of Specifications, Standards and Design

PAVEMENTS SECTION MATRIX

Scale: Not To Scale	Detail #: 9.01
Revision Date: Feb., 2015	Sheet #: 1 - of 2

Notes:

1. Sidewalk and curb to be 3000 psi at 28 days air entrained concrete. Sidewalk to be scored every 5 ft with 1/2" expansion joints at 30 ft intervals. Provide non-slip finish. Concrete sidewalks to be 4" except thickness to increase to 6" at all driveway crossings and for a distance 5' either side of the driveway. Place 1/2" expansion joints at junction of 4" and 6" sidewalks.
2. Maximum grades and "K" valves for streets shall follow NCDOT guidelines for the Piedmont area (rolling topography). See Table 9.03.
3. All pavement thickness' shall generally be confirmed by a geotechnical investigation and report. However, if a developer wishes, he may design residential streets using a subgrade CBR one standard deviation to the left of the average of all CBR's determined by geotechnical reports thus far. If, in the opinion of the Town's representative, soils appear weaker or have inherent problems such as a high mica content, the services of a geotechnical engineer shall be required in any case for the design of pavements.
4. Electric service will not go in until street section is graded at final and approved.
5. The Town Engineer shall require a 1" overlay over any segment of street in which there are 3 or more trench failures, utility cuts, egregious imperfections or patches per 800 foot of street. If final surface is already placed, it must be milled down so as not to encroach into the gutter pan. A trench failure shall be defined as a depression of 1/2" or greater at the deepest point over a trench width. Extent of length of resurfacing shall be as determined by the Town's Engineer.
6. Time limits for completion of improvement: Refer to UDO Section 6.38.



TOWN of
WAKE FOREST

TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

PAVEMENTS SECTION
MATRIX

Scale:
Not To Scale

Detail #:
9.01

Revision Date:
Feb., 2015

Sheet #:
2 - of 2

Concrete Testing Requirements:

Initial Test

The initial test (from first ready-mix truck) is to be taken after the second yard is dispatched from the mixer and is to consist of the following:

1. One slump test
2. Pull, prepare and store 3 cylinders on-site for 24 hours.
3. Temperature

Subsequent Tests

After the above tests are pulled from the initial truck, every 5th truck thereafter is to be tested in the same manner as noted above.

Asphalt Testing Requirements:

Compaction: Testing for asphalt density is to follow NCDOT "Standard Specifications for Roads and Structures", Section 609-7 "Field Compaction Quality Control" and Section 609-9, "Quality Assurance" latest revision.

Thickness: The minimum frequency of coring for thickness testing shall be on the basis of test sections consisting of not more than 1500 linear feet of lay down width, exclusive of intersections and irregular areas. The test sample is to be a 6-inch cored sample. The sample is to be numbered and logged for identification purposes.

Contractor's Quality Control System:

Follow NCDOT "Standard Specifications for Roads and Structures", Section 609-4 "Contractor's Quality Control Personnel Requirements" and Section 609-5, "Contractor's Quality Control Field Laboratory Requirements," latest revision.

Mixture and Job Mix Formula Adjustments:

Follow NCDOT "Standard Specifications for Roads and Structures", Section 609-3, "Field Verification of Mixture and Job Mix Formula Adjustments", latest revision.

General:

All other applicable sections of Section 609 of the NCDOT "Standard Specifications for Roads and Structures" shall apply relating to Quality Control Plan, mix design, control limits, corrective action, equipment and measurement.

Testing Cost:

Project Owner is responsible for cost of testing.



TOWN of
WAKE FOREST

TOWN of WAKE FOREST, NC

Manual of Specifications, Standards and Design

PAVEMENTS SECTION

MATRIX

Scale:

Not To Scale

Detail #:

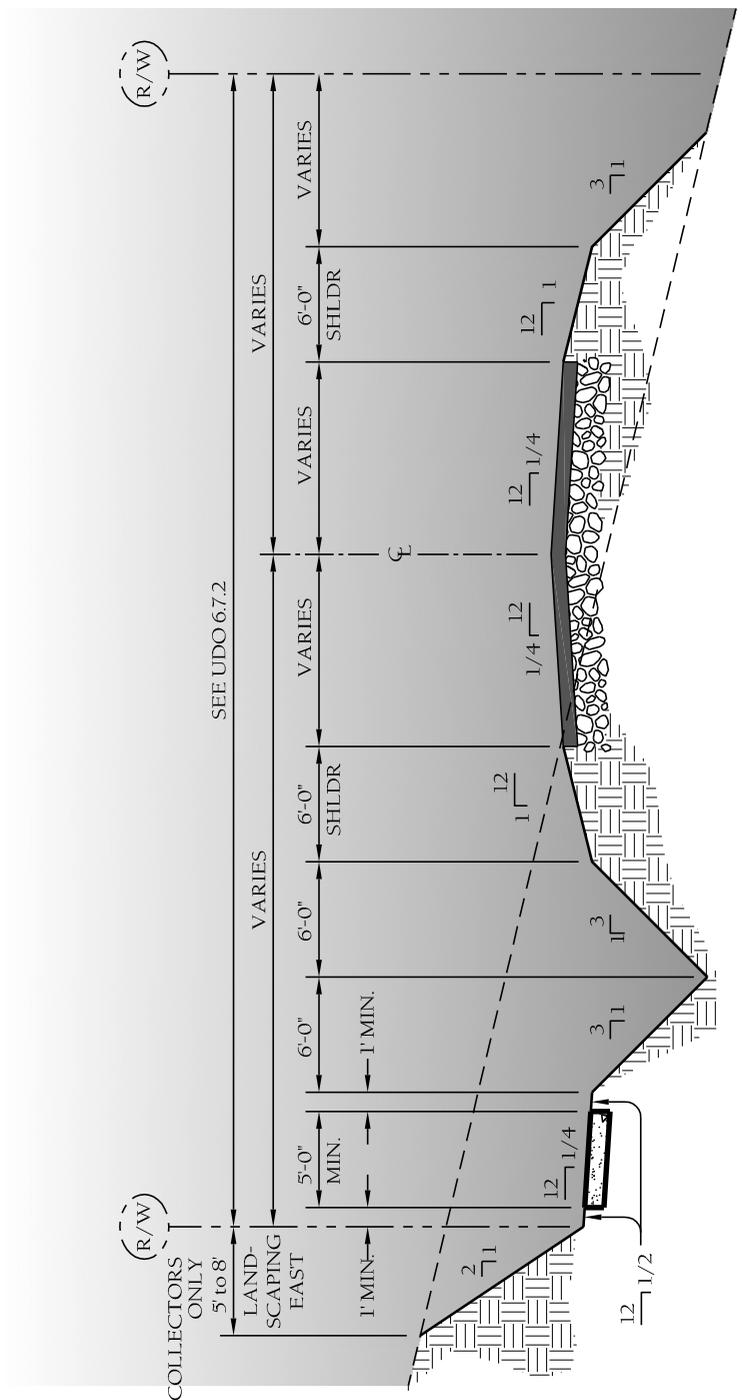
9.01

Revision Date:

Feb., 2015

Sheet #:

2 - of 2



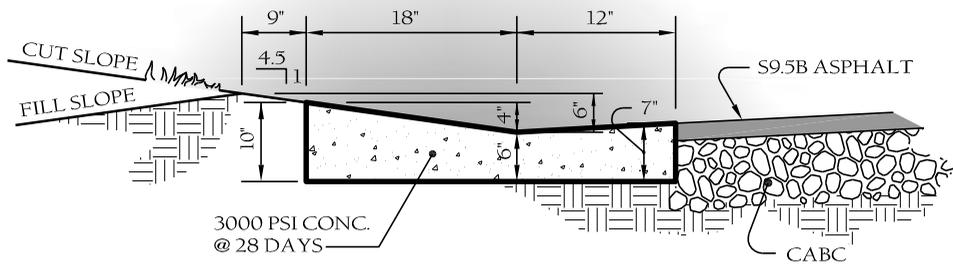
APPLIES TO STREET WHERE SIDE WALK IS REQUIRED



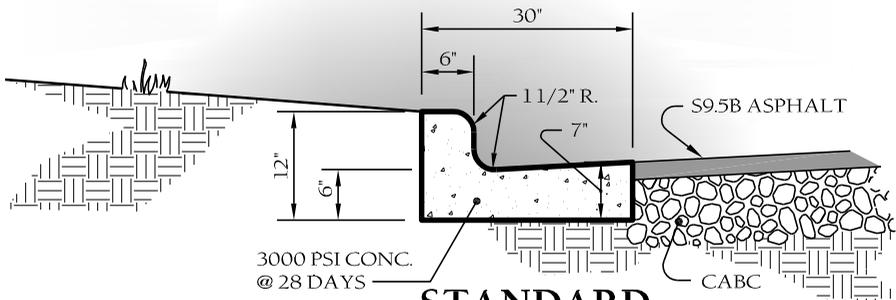
TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

TYPICAL ASYMETRIC X-SECTION WITH SIDEWALK (ON CUT SLOPE)

Scale: Not To Scale	Detail #: 9.01A
Revision Date: Feb., 2015	Sheet #: 1 - of 2



30" VALLEY - STANDARD



STANDARD

NOTES:

1. Score curb / valley gutter at 15' O.C.
2. Provide 1/2" expansion joints at 90' O.C.
3. For transition of curb to curb opening inlet, see standard detail 9.50



TOWN of
WAKE FOREST

TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

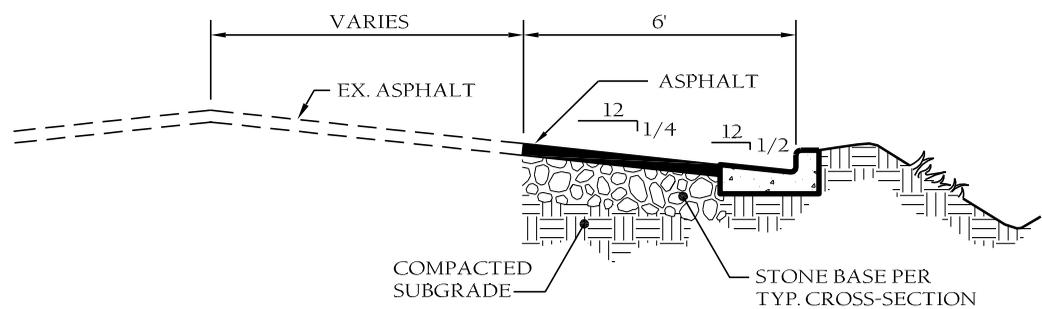
**STD. CURB & GUTTER &
VALLEY GUTTER DETAIL**

Scale:
Not To Scale

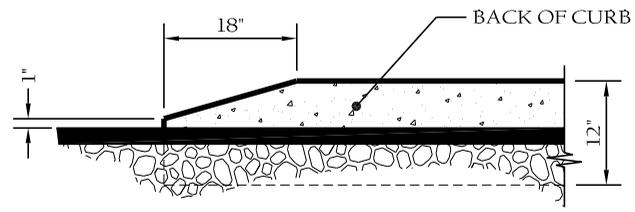
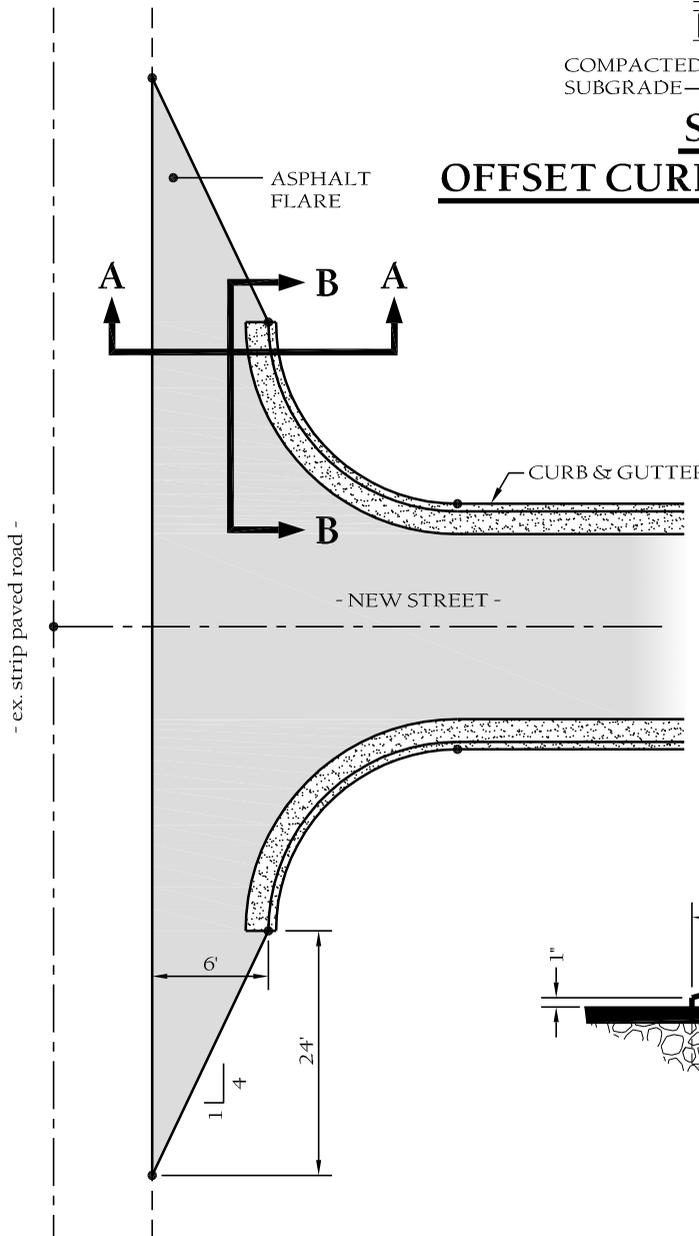
Detail #:
9.02

Revision Date:
Feb., 2015

Sheet #:
1 - of 1



SECTION A-A
OFFSET CURB PAVEMENT WIDENING



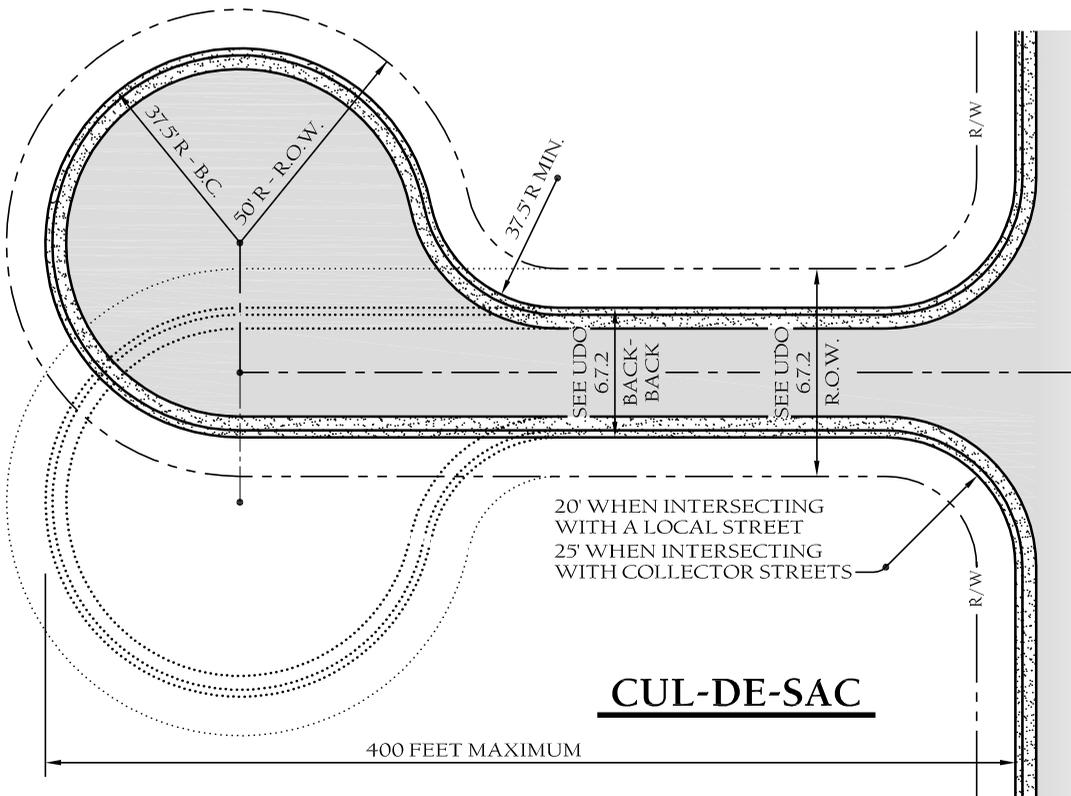
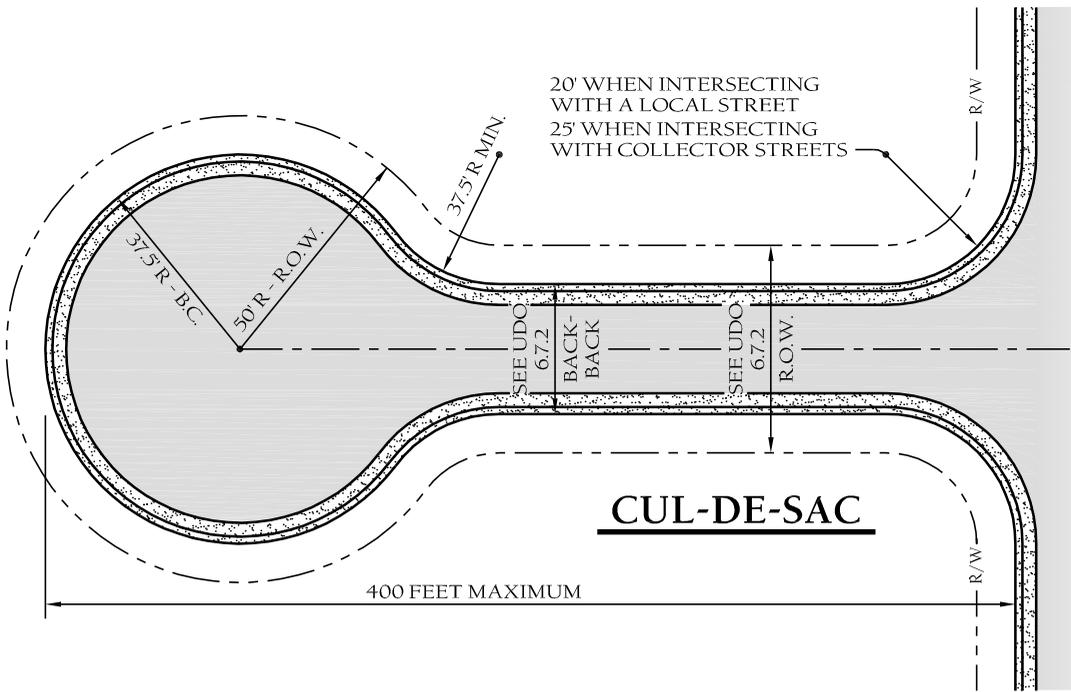
SECTION B-B
CURB END TAPER



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

TERMINAL END OF CURB
at SHOULDER SECTIONS

Scale: Not To Scale	Detail #: 9.03
Revision Date: Feb., 2015	Sheet #: 1 - of 1



NOTES:

1. See UDO 6.7.2 for pavement and right-of-way dimensions.



TOWN of WAKE FOREST

TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

CUL-DE-SAC DIMENSIONS

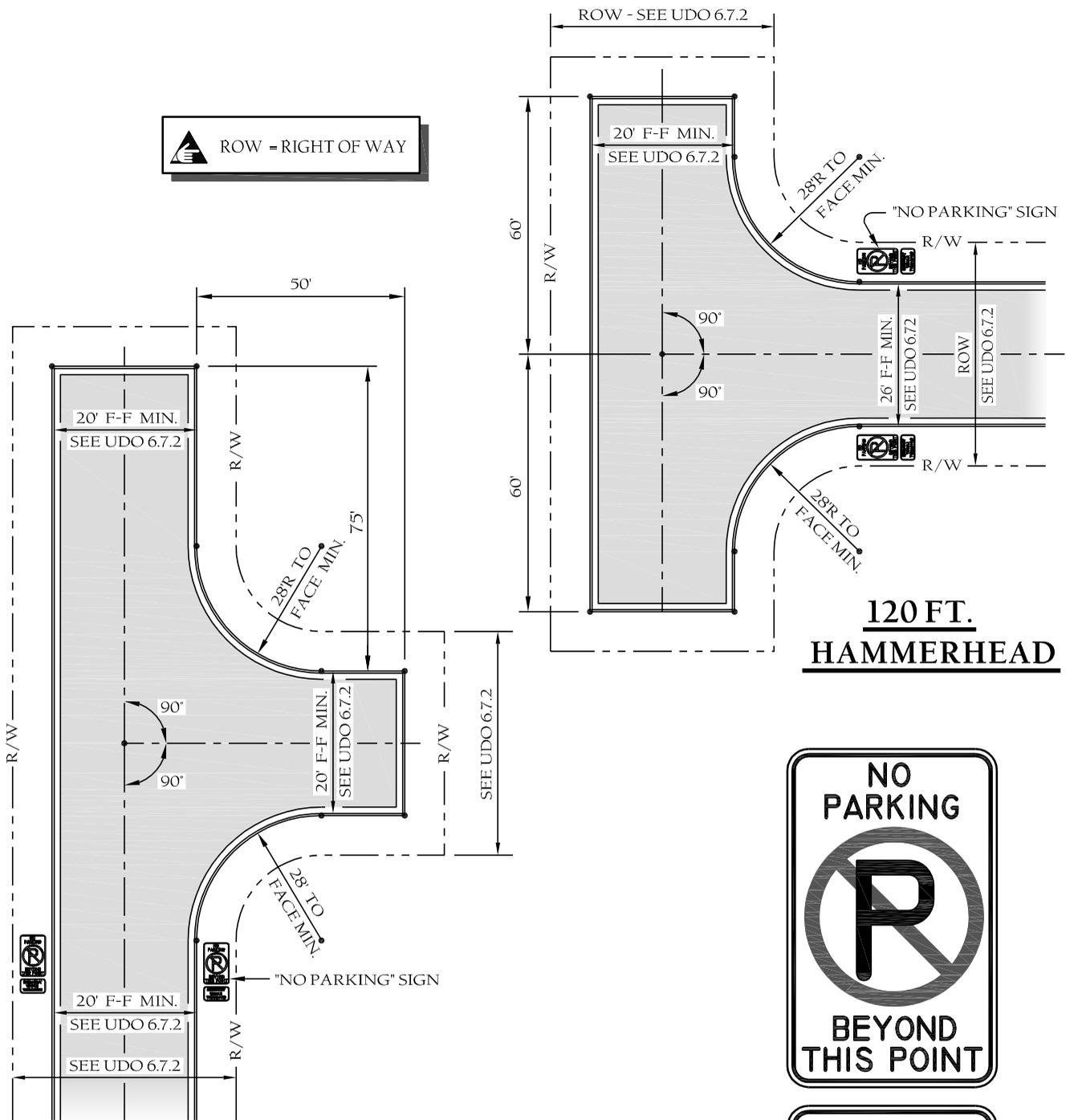
Scale:
Not To Scale

Detail #:
9.04

Revision Date:
Feb., 2015

Sheet #:
1 - of 2

 ROW = RIGHT OF WAY



120 FT. HAMMERHEAD

ALTERNATE TO 120 FT. HAMMERHEAD



NO PARKING SIGN

NOTES:

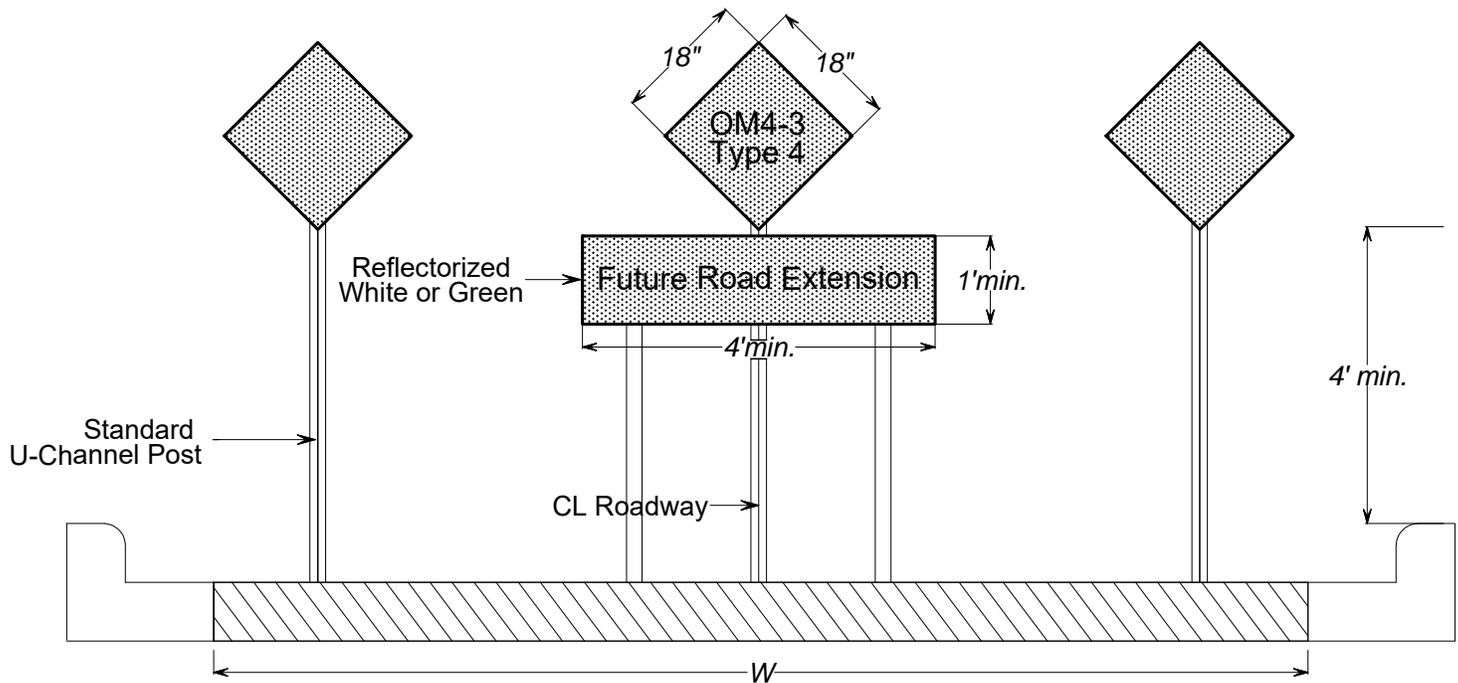
1. See UDO 6.7.2 for pavement and right-of-way dimensions.
2. Ref: N.C. Fire Code Appendix B.



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

CUL-DE-SAC DIMENSIONS

Scale: Not To Scale	Detail #: 9.04
Revision Date: Feb., 2015	Sheet #: 2 of 2



Notes:

1. OM4-3 signs should be evenly spaced between curb and gutter.
2. Spacing shall be adjusted for wider roadways. Additional signage may be required.
3. Advance warning sign W14-1 (Dead End) shall be placed after last intersection.
4. If subdivision has no additional exits, advance signage shall be placed at entrance(s).



TOWN of
WAKE FOREST

TOWN OF WAKE FOREST, NC
Manual of Specifications, Standards and Design

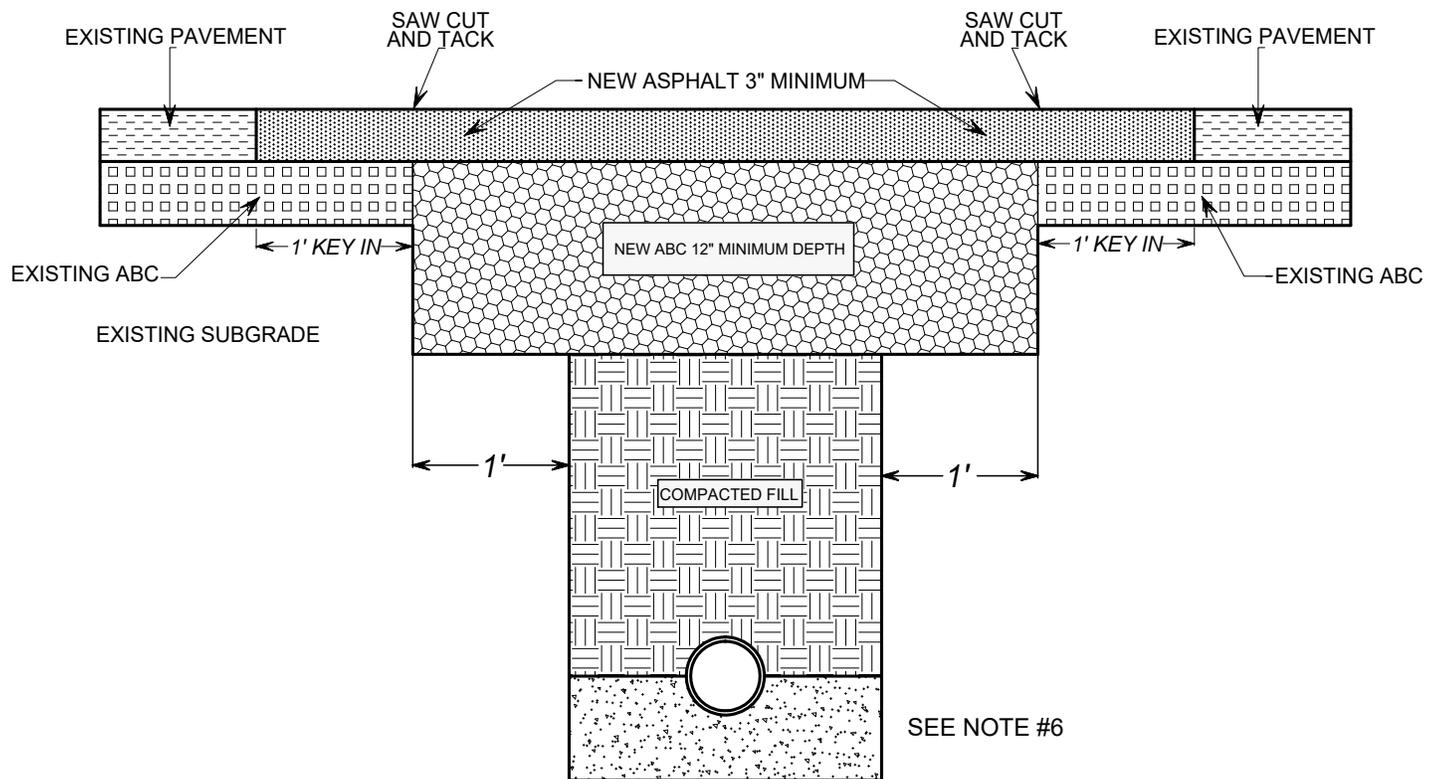
END OF ROAD SIGNAGE

Scale
Not To Scale

Detail # 9.05

Revision Date
Dec. 2019

Sheet # **240**
1 of 1



Notes:

1. Trench is to be backfilled in 6" lifts with suitable material and compacted to a density of at least 95% as determined by AASHTO test method T-99.
2. The final 1' of fill shall consist of ABC material compacted to a density equal to 100% as determined by AASHTO test method T-80. Bituminous base or binder may be supplemented with the approval of the Transportation Engineer.
3. The entire existing depth of pavement shall be sawcut, clean of any debris, and tacked prior to paving.
4. The same depth of pavement material shall be reinstalled to match what exists. In no case shall the asphalt be less than 3" thick.
5. Patch shall be installed and compacted to provide a smooth and even transition.
6. For RCP 36" or greater, #57 washed stone shall be installed to the spring line prior to backfill.
7. All density tests may be required to be performed in the presence of a Town Construction Inspector.
8. For small, non-compactable holes, flowable fill may be required



TOWN of
WAKE FOREST

TOWN OF WAKE FOREST, NC

Manual of Specifications, Standards and Design

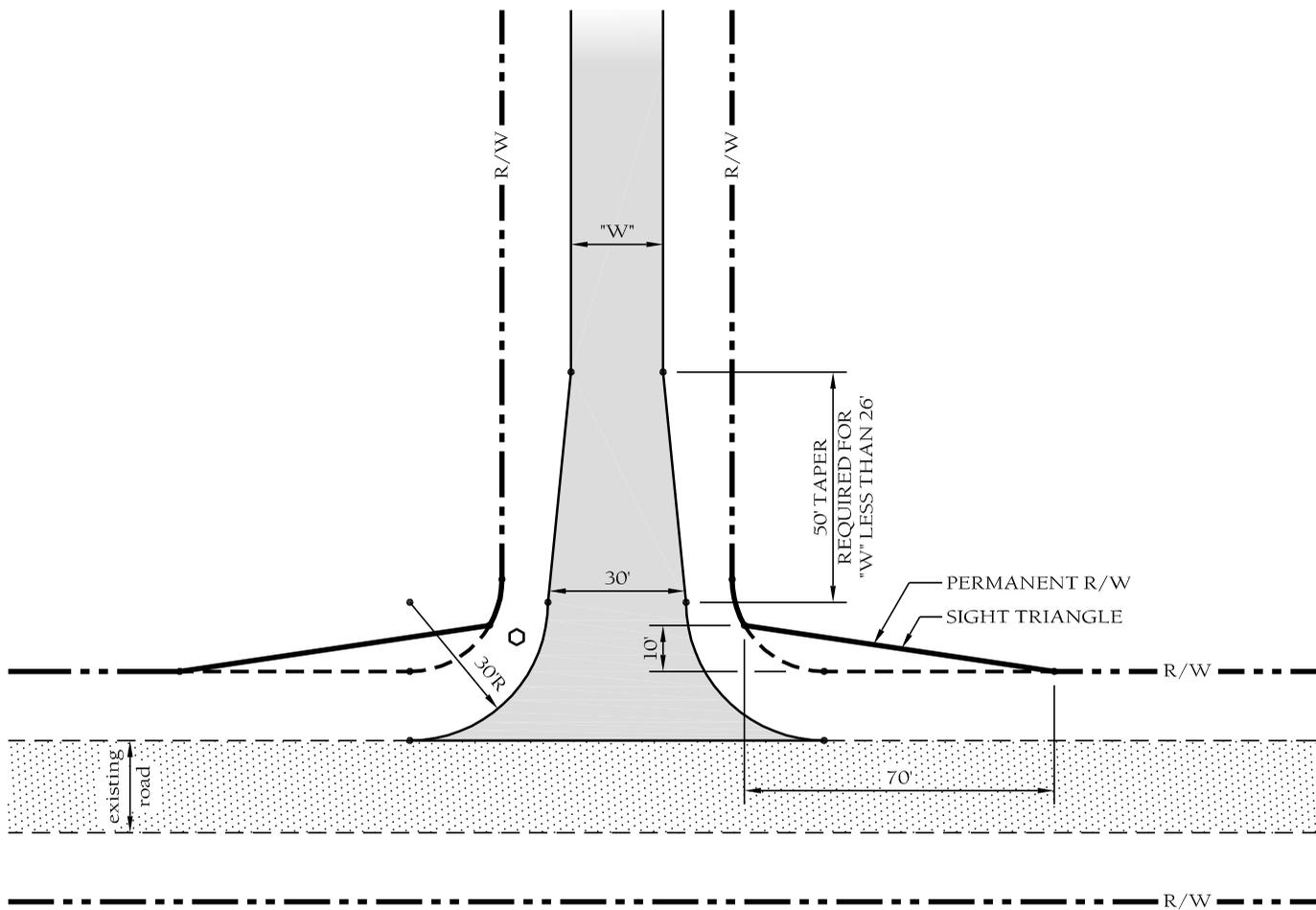
Full Depth Asphalt Repair
Detail For Utility Cuts

Scale
Not To Scale

Revision Date
Dec. 2019

Detail # 9.06

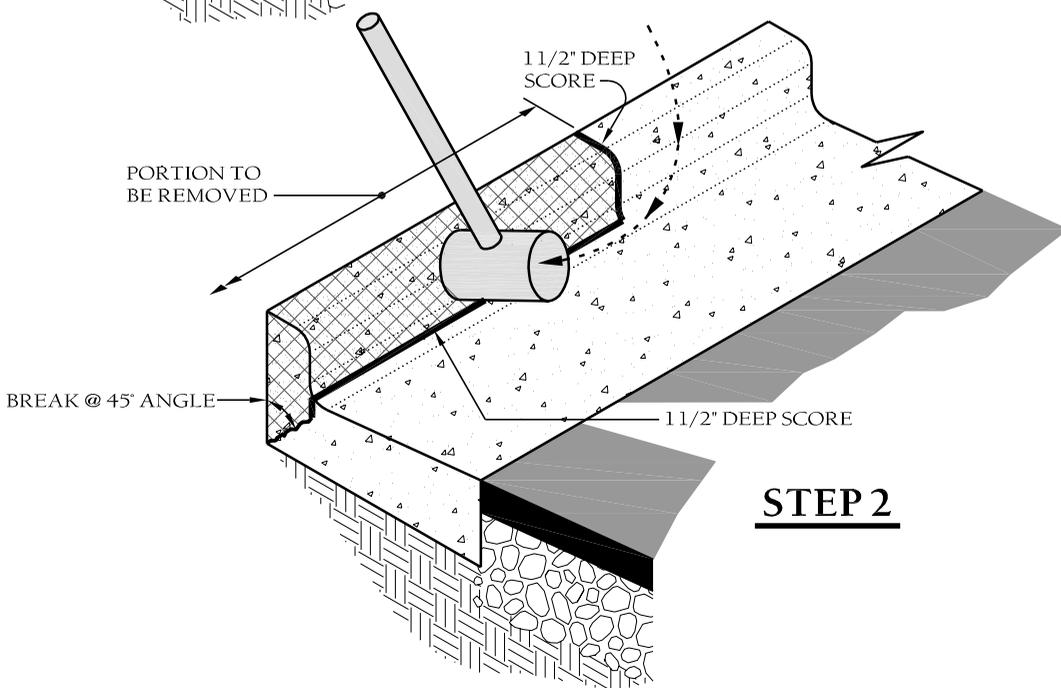
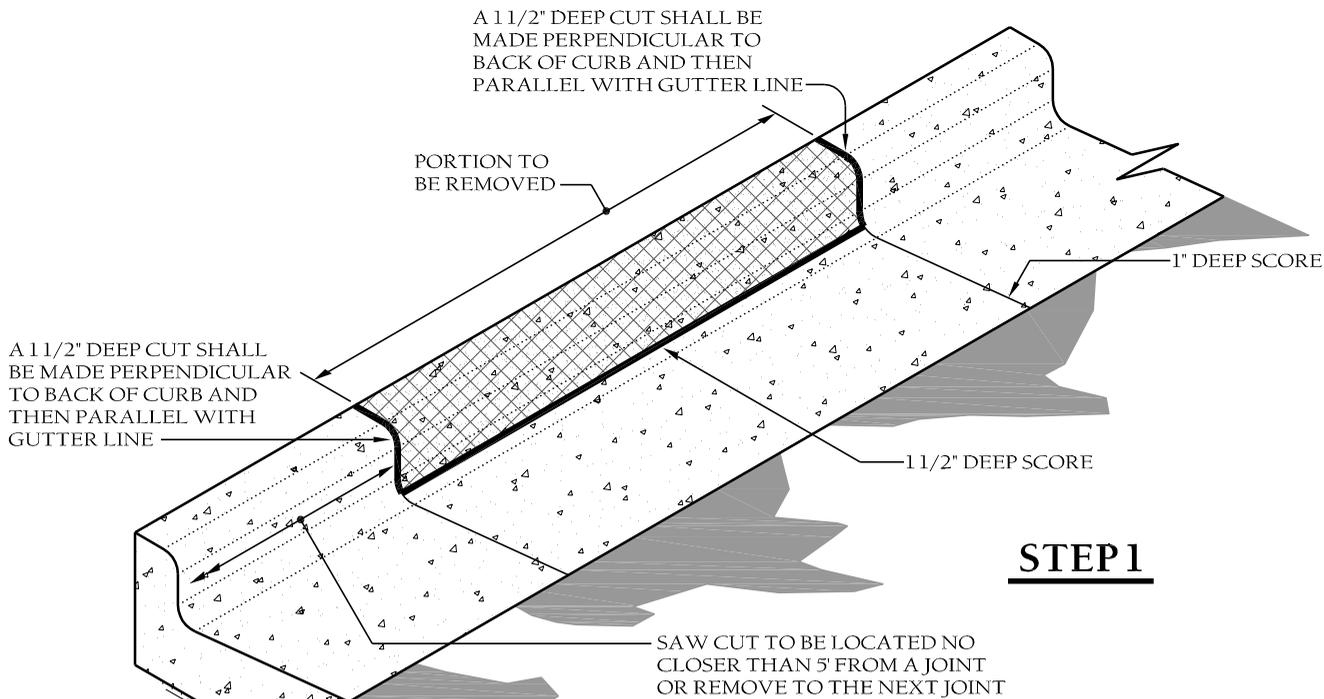
Sheet #
1 of 1



TOWN of WAKE FOREST, NC
 Manual of Specifications, Standards and Design

**TIE-IN OF STREETS at DOT
 SHOULDER ROADS - STREETS**

Scale: Not To Scale	Detail #: 9.07
Revision Date: Feb., 2015	Sheet #: 1 of 1



TOWN of
WAKE FOREST

TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

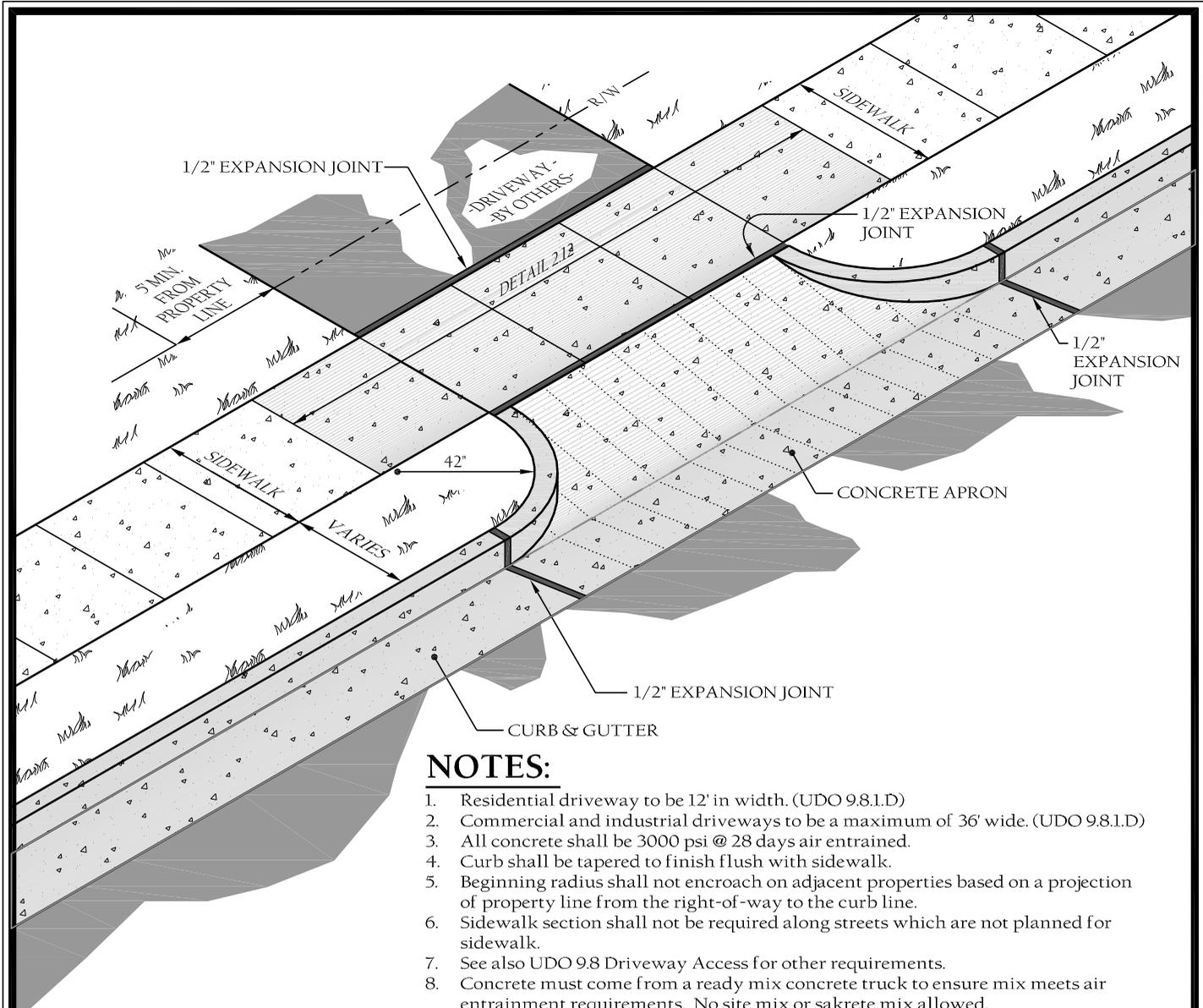
**STREET CURB CUT FOR
DRIVEWAYS ON C&G STREETS**

Scale:
Not To Scale

Detail #:
9.08

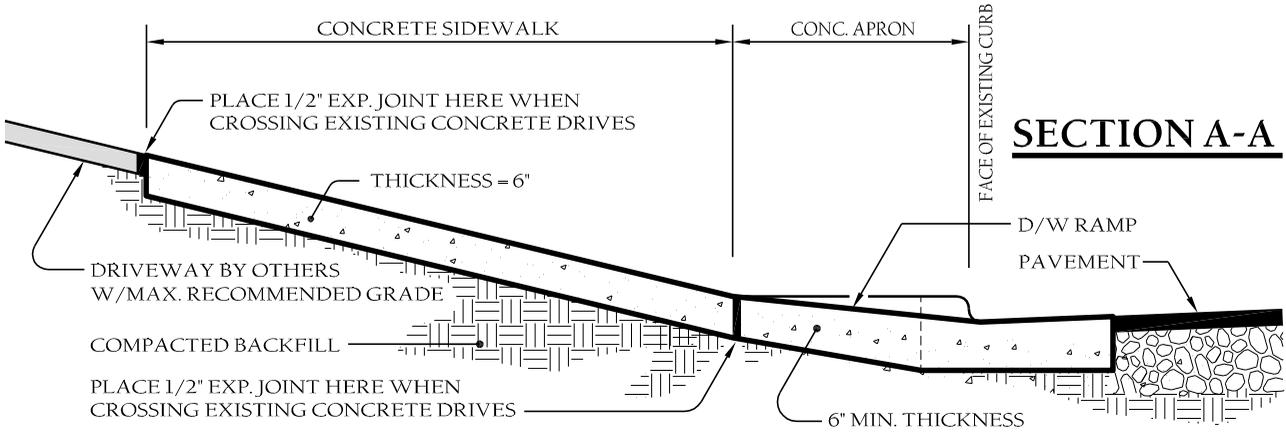
Revision Date:
Feb., 2015

Sheet #:
1 - of 2



NOTES:

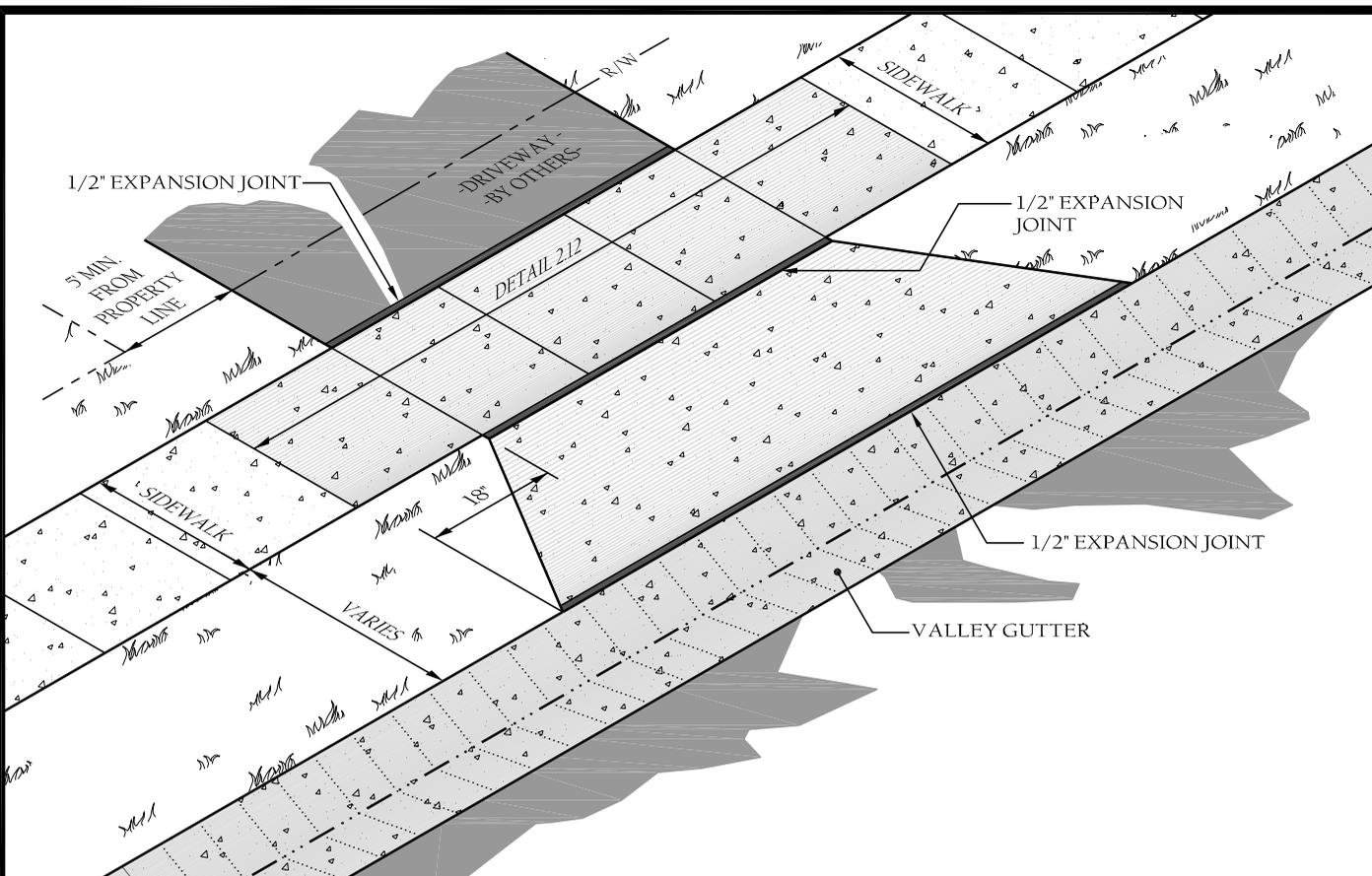
1. Residential driveway to be 12' in width. (UDO 9.8.1.D)
2. Commercial and industrial driveways to be a maximum of 36' wide. (UDO 9.8.1.D)
3. All concrete shall be 3000 psi @ 28 days air entrained.
4. Curb shall be tapered to finish flush with sidewalk.
5. Beginning radius shall not encroach on adjacent properties based on a projection of property line from the right-of-way to the curb line.
6. Sidewalk section shall not be required along streets which are not planned for sidewalk.
7. See also UDO 9.8 Driveway Access for other requirements.
8. Concrete must come from a ready mix concrete truck to ensure mix meets air entrainment requirements. No site mix or sakrete mix allowed.



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

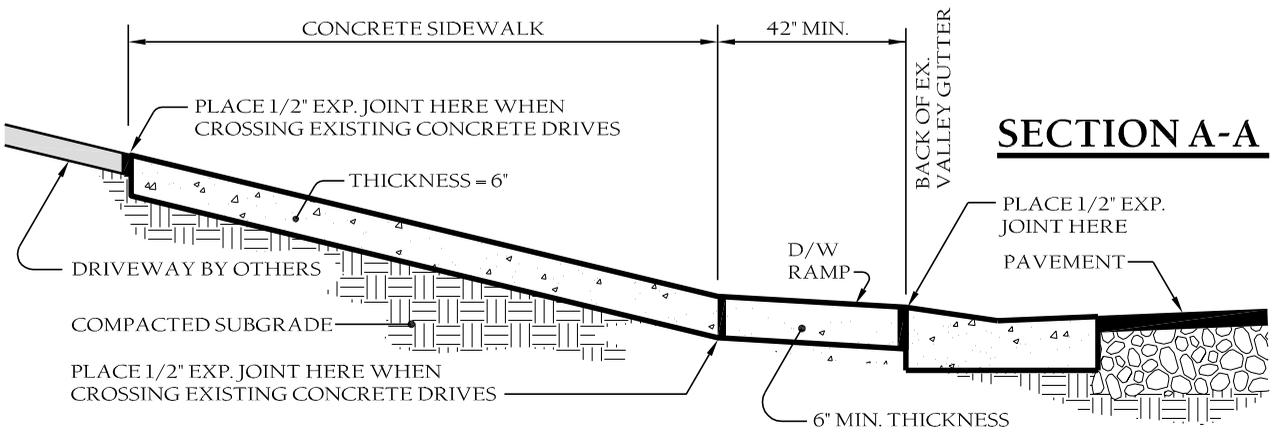
**STREET CURB CUT FOR
DRIVEWAYS ON C&G STREETS**

Scale: Not To Scale	Detail #: 9.08
Revision Date: Feb., 2015	Sheet #: 2 of 3



NOTES:

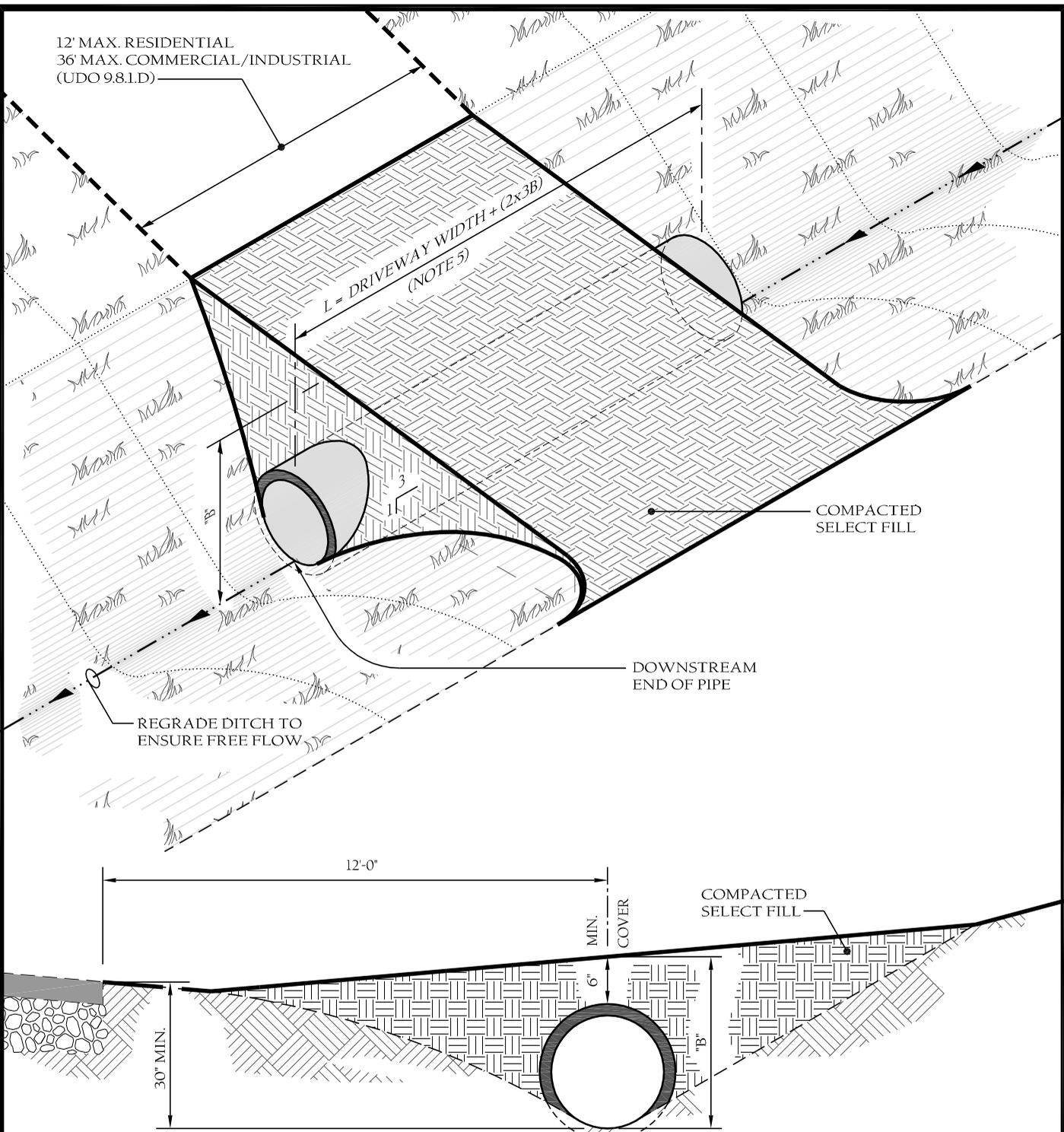
1. Residential driveway to be 12' in width. (UDO 9.8.1.D)
2. Commercial and industrial driveways to be a maximum of 36' wide. (UDO 9.8.1.D)
3. All concrete shall be 3000 psi @ 28 days air entrained.
4. Curb shall be tapered to finish flush with sidewalk.
5. Beginning radius shall not encroach on adjacent properties based on a projection of property line from the right-of-way to the curb line.
6. Sidewalk section shall not be required along streets which are not planned for sidewalk.
7. See also UDO 9.8 Driveway Access for other requirements.
8. Concrete must come from a ready mix concrete truck to ensure mix meets air entrainment requirements. No site mix or sakrete mix allowed.



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

**FLARED DRIVEWAY ENTRANCE
TO VALLEY GUTTER**

Scale: Not To Scale	Detail #: 9.08
Revision Date: Feb., 2015	Sheet #: 2 - of 2



NOTES:

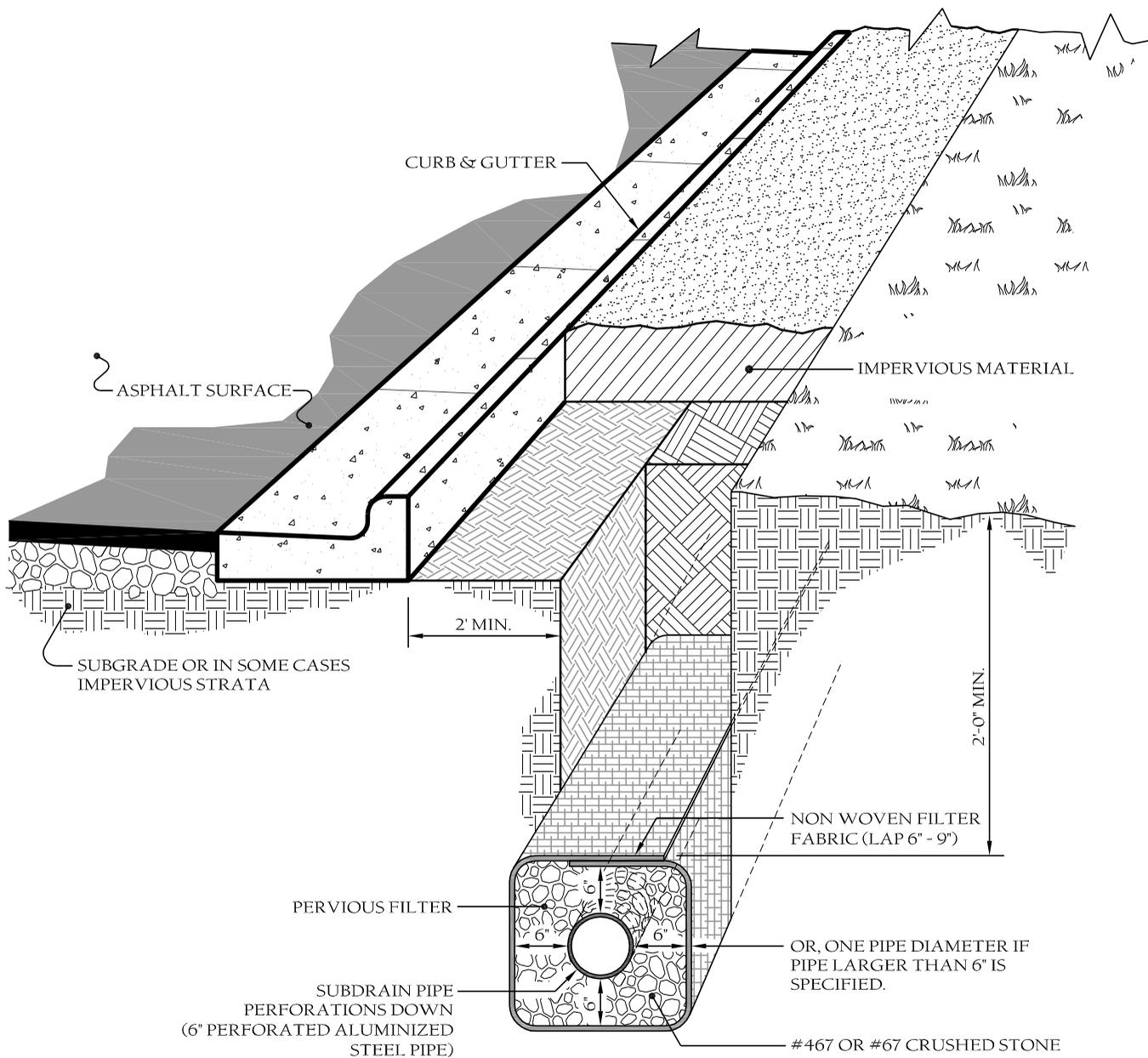
1. D/w pipe 18" and above to have flared end sections.
2. Minimum diameter pipe to be 15" class III "C" wall.
3. D/W pipe to be staked by N.C. licensed surveyor.
4. Driveway pipe shall be concrete pipe only.
5. "L" to be rounded up to next 4' increment.
6. Decorative headwalls may be allowed at discretion of Town's Engineer. An encroachment agreement will be required.



TOWN of WAKE FOREST, NC
 Manual of Specifications, Standards and Design

**INSTALLATION OF D/W
 PIPE IN STREET SECTION**

Scale: Not To Scale	Detail #: 9.09
Revision Date: Feb., 2015	Sheet #: 1 - of 1



NOTES:

1. Subdrains shall tie or empty into catch basin only. No ties or connections will be allowed on a pipe culvert of any kind.

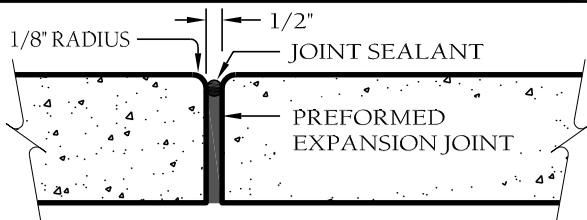


TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

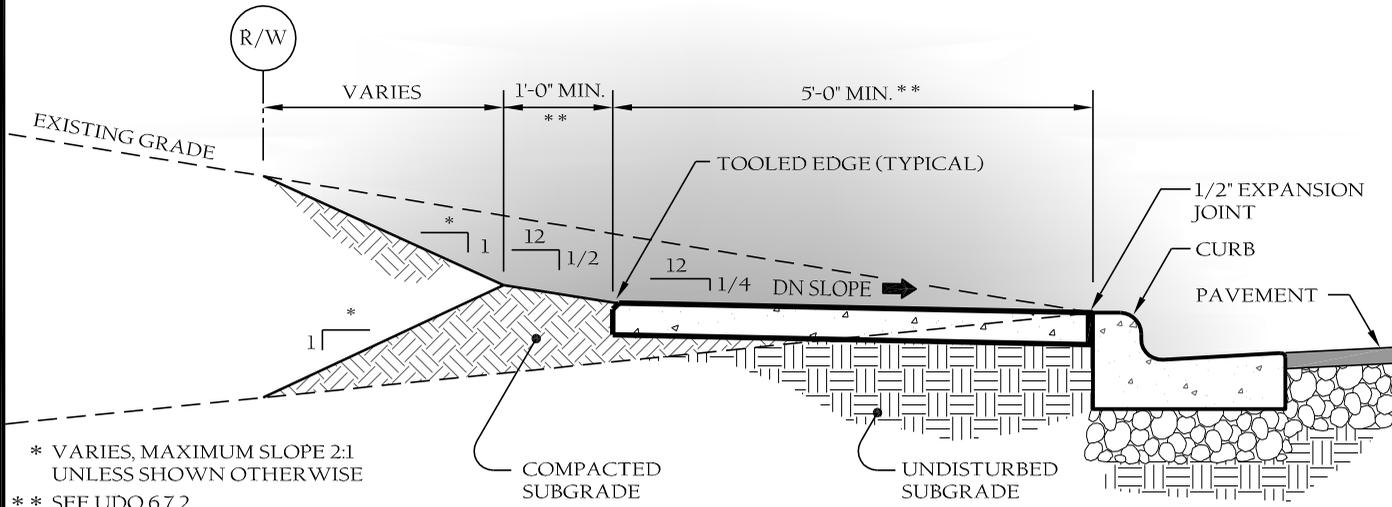
**STANDARD SUBDRAIN
BEHIND CURB & GUTTER**

Scale:
Not To Scale
Revision Date:
Feb., 2015

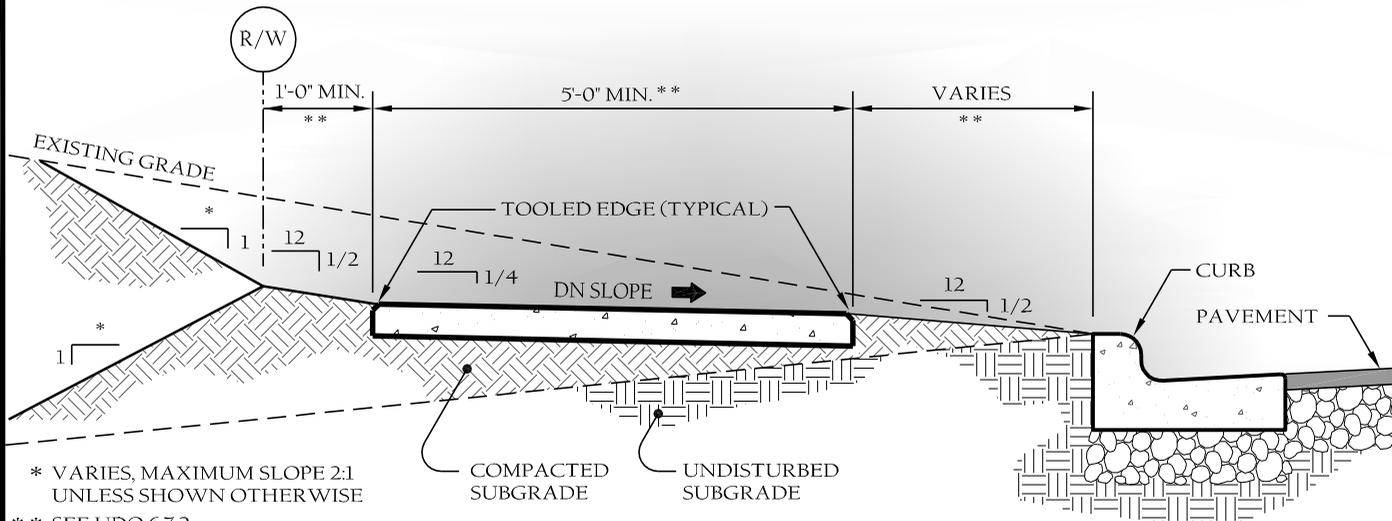
Detail #:
9.10
Sheet #:
1 of 1



TYPICAL EXPANSION JOINT DETAIL



SIDEWALK WITHOUT UTILITY STRIP



SIDEWALK WITH UTILITY STRIP

NOTES:

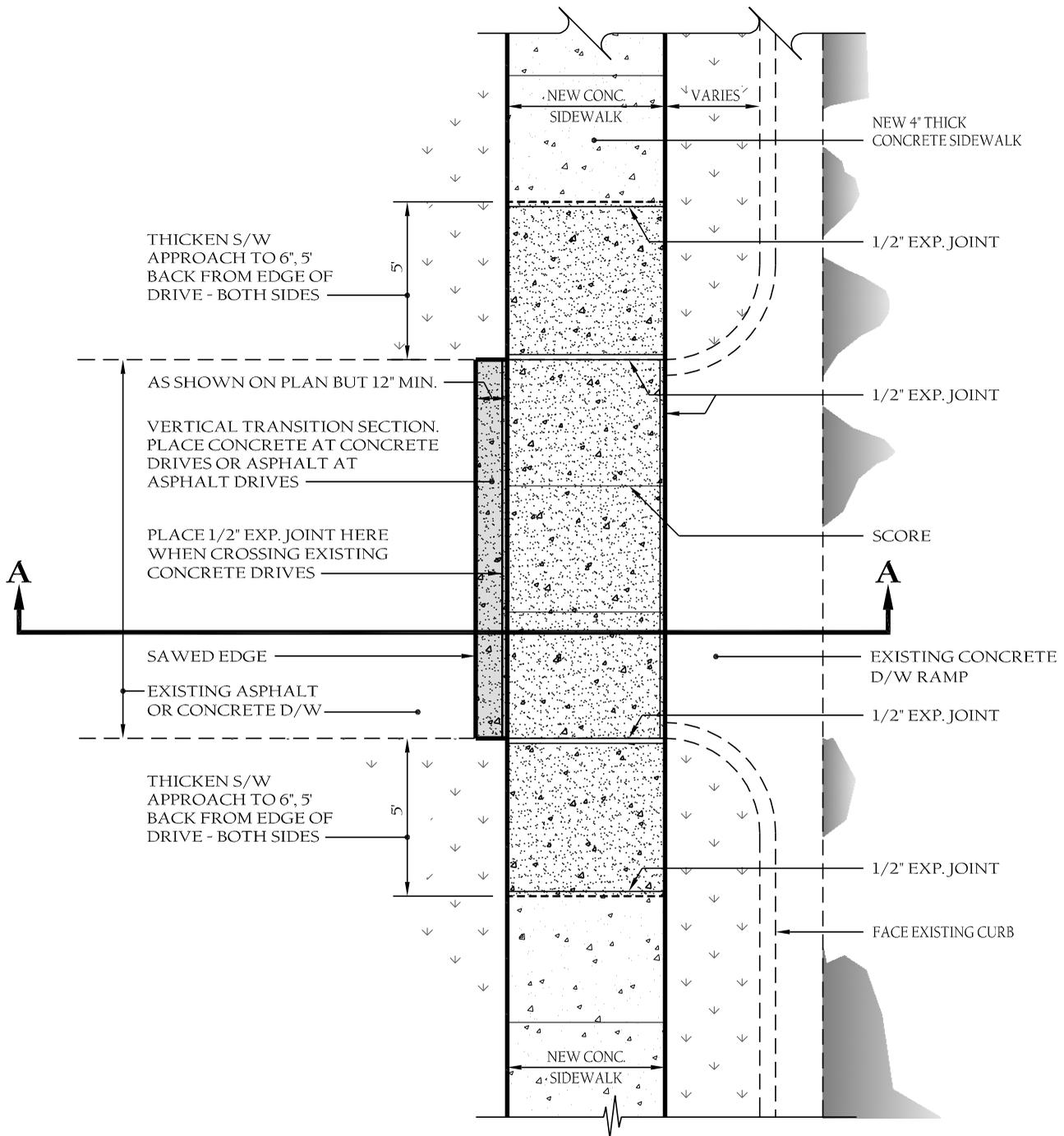
1. Provide 3/4" deep tooled score at 5'-0" O.C.
2. Expansion joints to be placed 30'-0" O.C. longitudinally, adjacent to curbs, and when butting existing structures, concrete, or buildings.
3. Concrete to be 3,000 P.S.I. at 28 days, air-entrained.
4. Subgrade should not contain organic matter or plastic clays. When found, refer to specs or contact engineer for directions.
5. Areas of fill are to be compacted to 95% standard proctor using NCDOT Class III borrow or better. Remove topsoil before placing borrow.
8. Concrete must come from a ready mix concrete truck to ensure mix meets air entrainment requirements. No site mix or sakrete mix allowed.
9. See Specification 02400, paragraph 2.1.3 & 2.1.4 for expansion joint & joint sealer specs.



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

TYP SIDEWALK in
CUT or FILL SECTIONS

Scale: Not To Scale	Detail #: 9.11
Revision Date: Feb., 2015	Sheet #: 1 - of 1



NOTES:

1. Concrete must come from a ready mix concrete truck to ensure mix meets air entrainment requirements. No site mix or sakrete mix allowed.



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

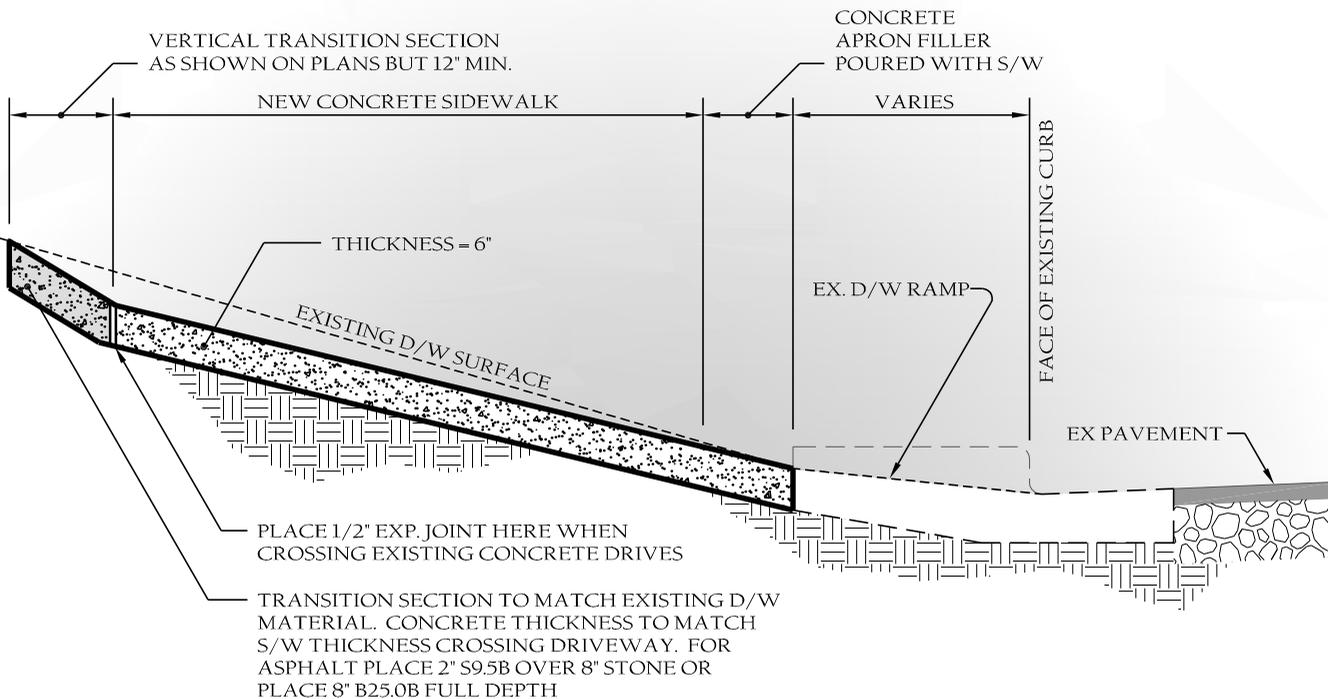
SIDEWALK DETAIL X-ING EX. DRIVEWAYS

Scale:
Not To Scale

Detail #:
9.12

Revision Date:
Feb., 2015

Sheet #:
1 - of 2



SECTION A-A



TOWN of WAKE FOREST, NC
 Manual of Specifications, Standards and Design

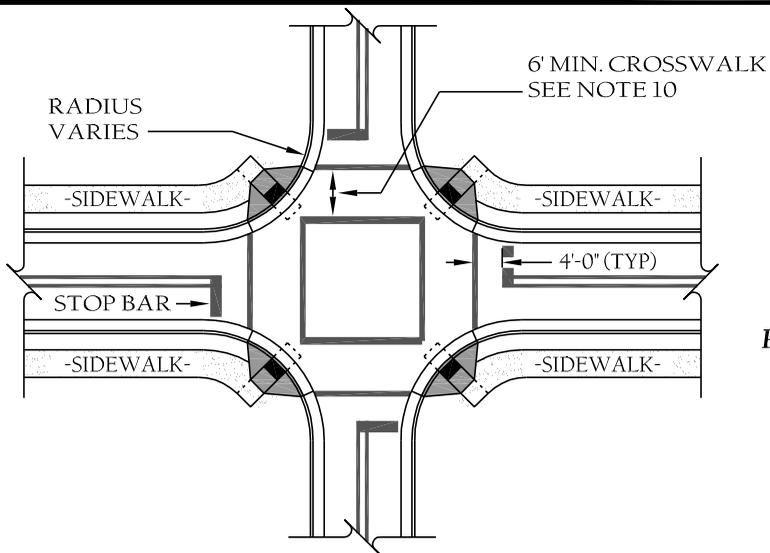
**SIDEWALK DETAIL X-ING
 EX. DRIVEWAYS**

Scale:
 Not To Scale

Detail #:
9.12

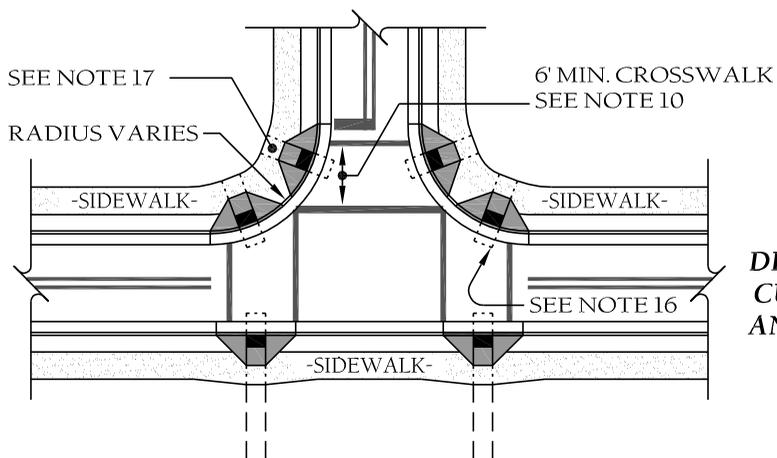
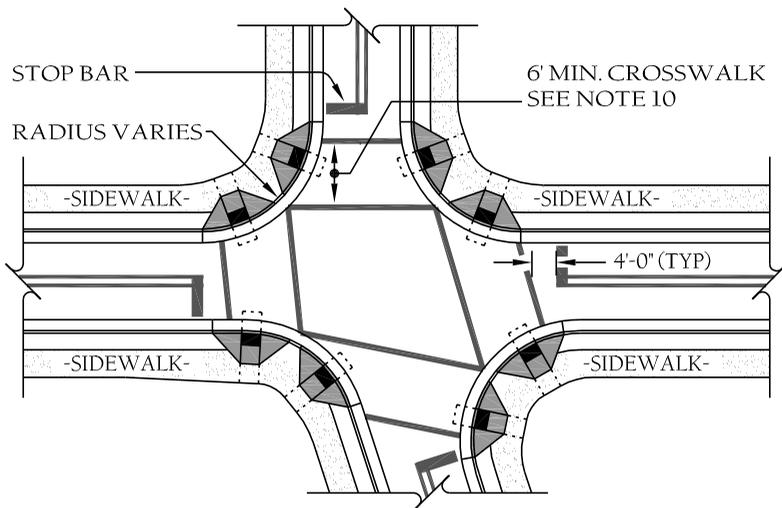
Revision Date:
 Feb., 2015

Sheet #:
 2 of 2



FOR CROSSING INTERSECTIONS
 DETAIL SHOWING TYPICAL LOCATION OF SINGLE CURB RAMPS, PEDESTRIAN CROSSWALKS AND STOP LINES FOR TEE INTERSECTIONS

FOR CROSSING INTERSECTIONS
 DETAIL SHOWING TYPICAL LOCATION OF DUAL CURB RAMPS, PEDESTRIAN CROSSWALKS AND STOP LINES FOR TEE INTERSECTIONS



FOR TEE INTERSECTIONS
 DETAIL SHOWING TYPICAL LOCATION OF CURB RAMPS, PEDESTRIAN CROSSWALKS AND STOP LINES FOR TEE INTERSECTIONS

	PROPOSED CURB RAMP
	PROPOSED OR FUTURE SIDEWALK



TOWN of WAKE FOREST, NC
 Manual of Specifications, Standards and Design

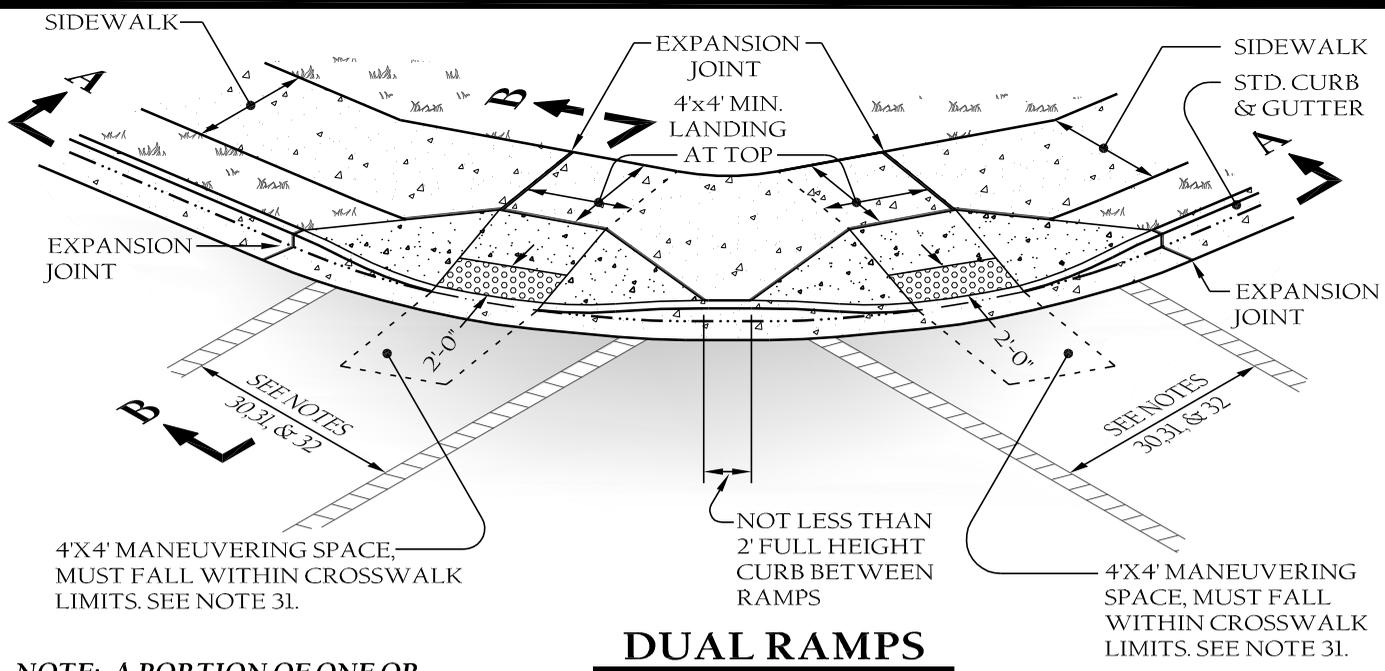
**STANDARD CURB RAMP
 PLACEMENT DETAIL**

Scale:
 Not To Scale

Detail #:
9.13

Revision Date:
 Feb., 2015

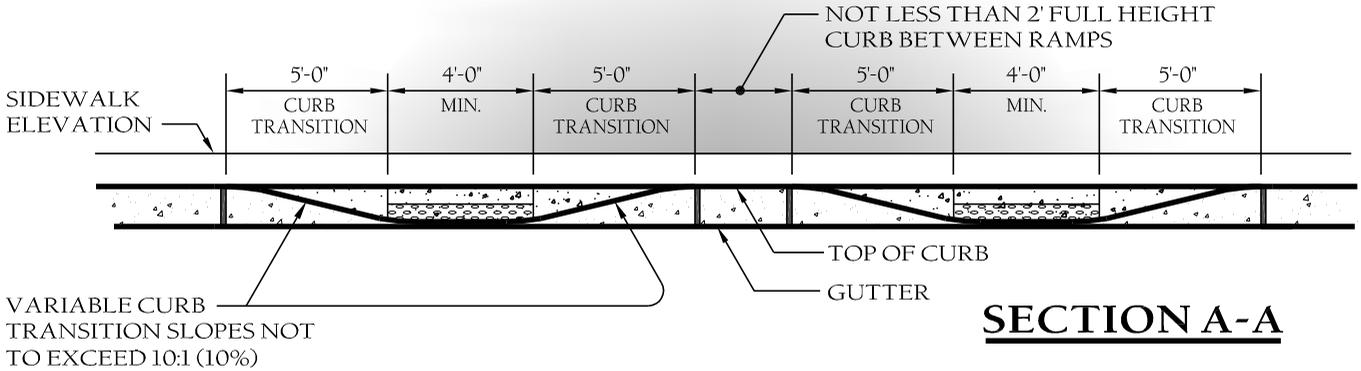
Sheet #:
 1 - of 15



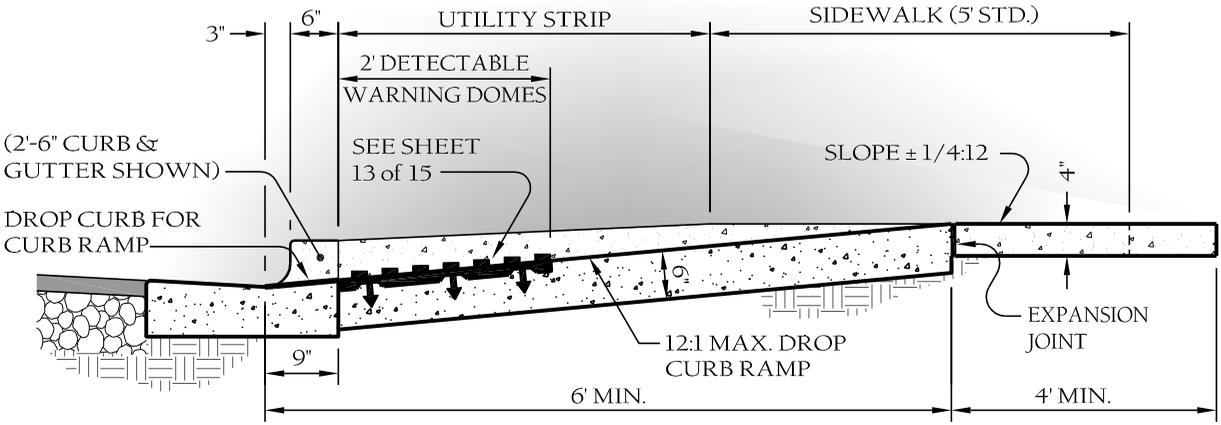
DUAL RAMPS

ANY RADII

NOTE: A PORTION OF ONE OR BOTH RAMPS MAY EXTEND OUTSIDE THE RETURNS



SECTION A-A



SECTION B-B



TOWN of WAKE FOREST, NC

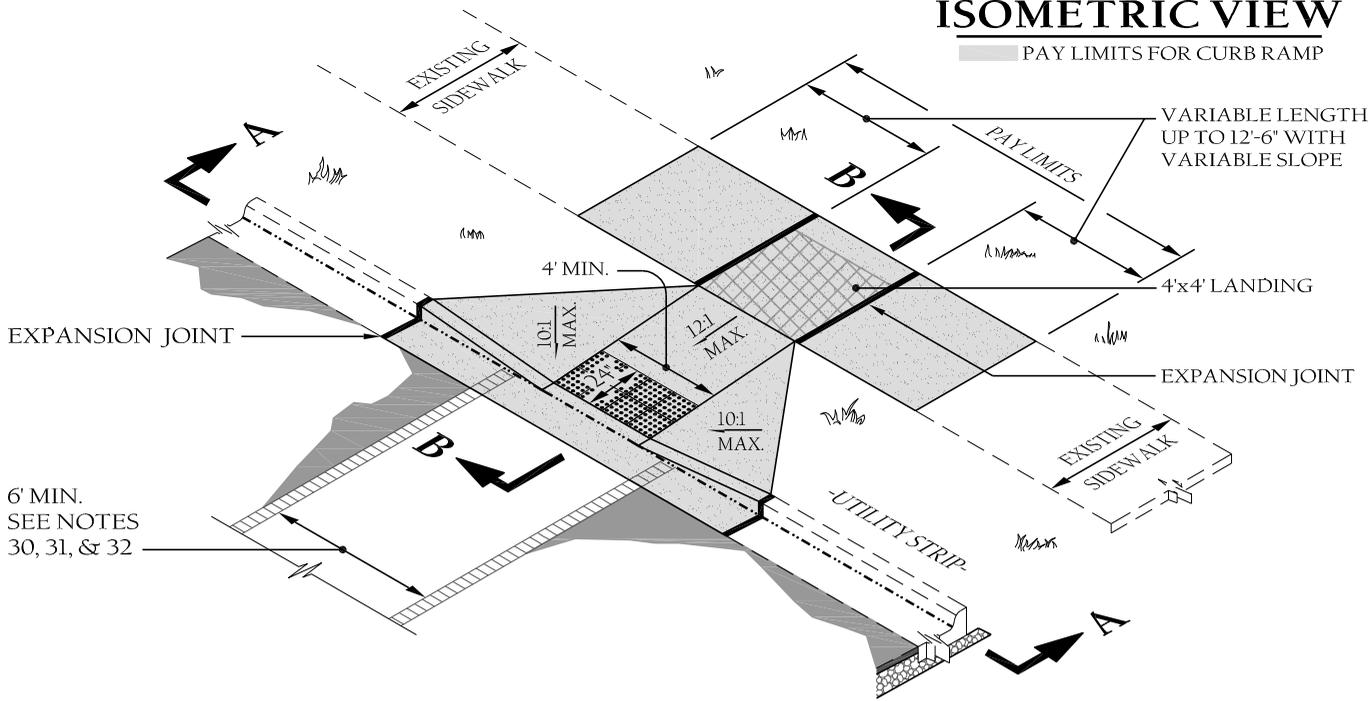
Manual of Specifications, Standards and Design

STANDARD CURB RAMP DETAILS

Scale: Not To Scale	Detail #: 9.13
Revision Date: Feb., 2015	Sheet #: 2 of 15

ISOMETRIC VIEW

PAY LIMITS FOR CURB RAMP



VARIABLE LENGTH UP TO 12'-6" WITH VARIABLE SLOPE

4'x4' LANDING

EXPANSION JOINT

EXISTING SIDEWALK

UTILITY STRIP

EXPANSION JOINT

6' MIN. SEE NOTES 30, 31, & 32

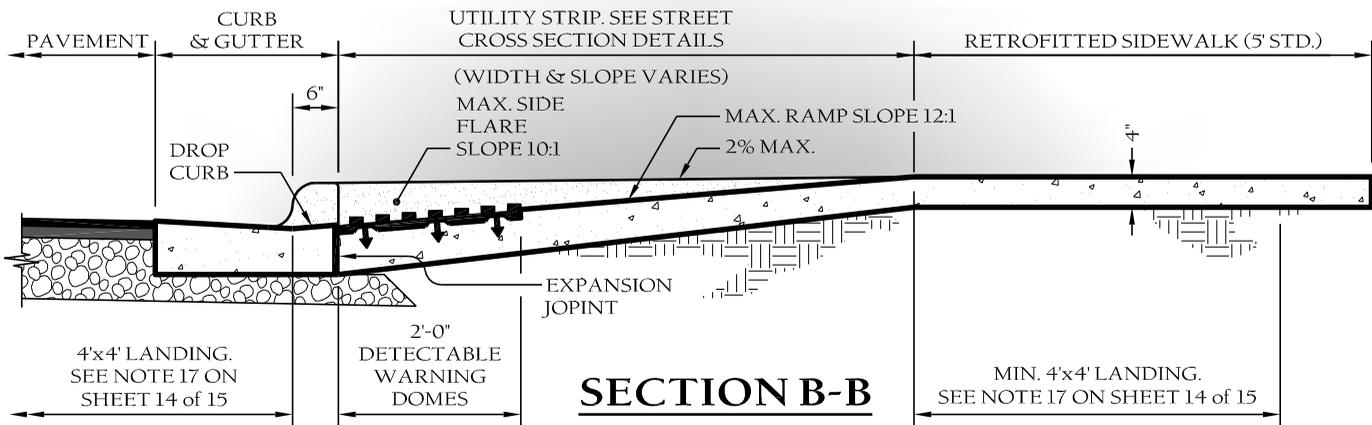
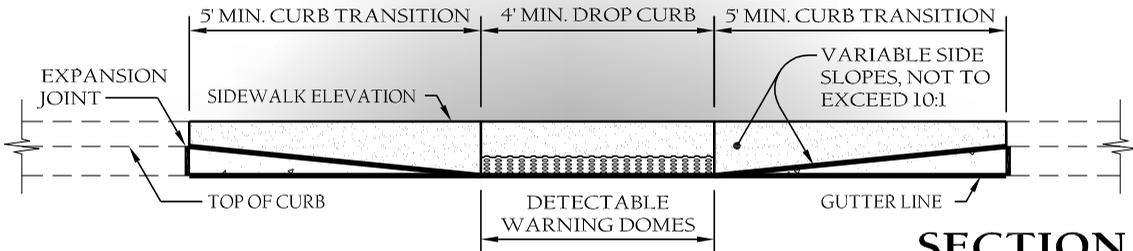
4' MIN.

10:1 MAX.

12:1 MAX.

10:1 MAX.

SECTION A-A



SECTION B-B

NOTES:

1. Detectable warning domes will cover 2'-0" length and full width of the ramp floor as shown on sheet 13 of 15.



TOWN of WAKE FOREST, NC

Manual of Specifications, Standards and Design

SINGLE CURB RAMP WITH EXISTING CURB & GUTTER

Scale: Not To Scale

Detail #: 9.13

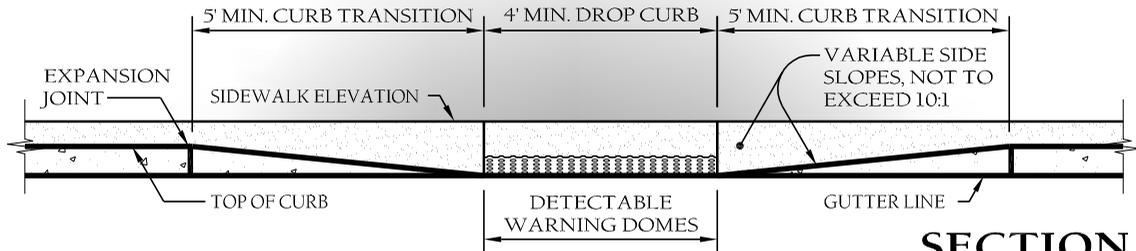
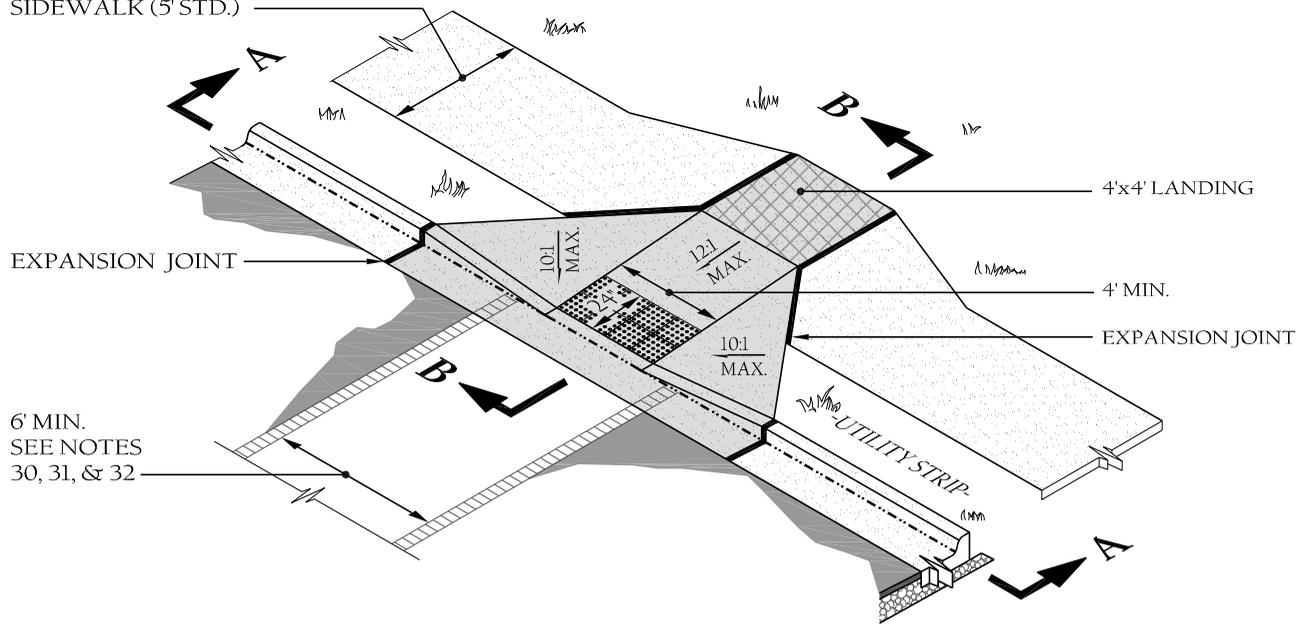
Revision Date: Feb., 2015

Sheet #: 3 of 15

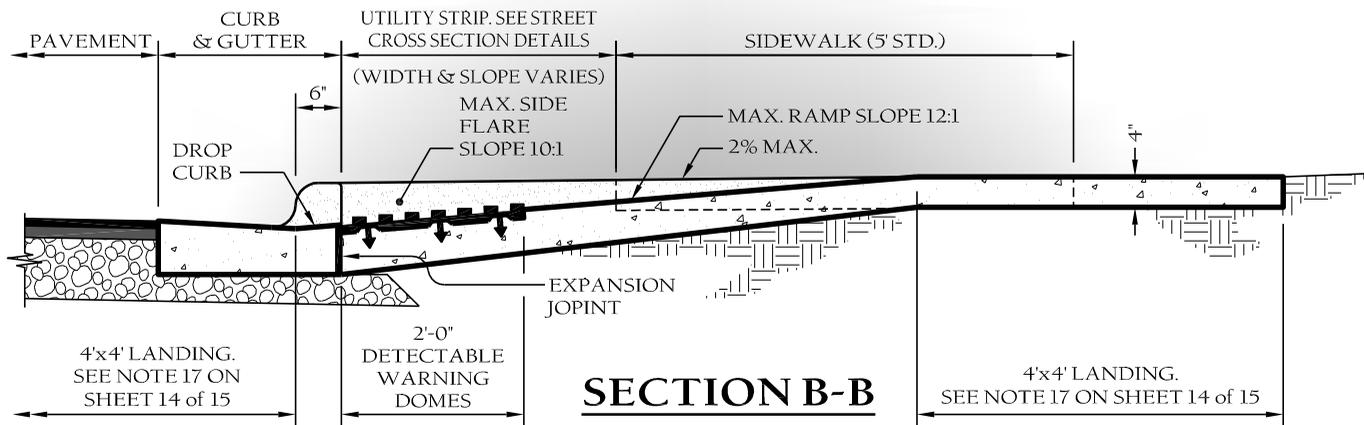
ISOMETRIC VIEW

PAY LIMITS FOR CURB RAMP

"W" PROPOSED OR FUTURE SIDEWALK (5' STD.)



SECTION A-A



SECTION B-B

NOTES:

1. Detectable warning domes will cover 2'-0" length and full width of the ramp floor as shown on sheet 13 of 15.



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

SINGLE CURB RAMP WITH PROPOSED CURB & GUTTER

Scale: Not To Scale	Detail #: 9.13
Revision Date: Feb., 2015	Sheet #: 4 of 15

ISOMETRIC VIEW

PAY LIMITS FOR CURB RAMP

DETECTABLE WARNING SURFACE. SEE SHEET 13 of 15

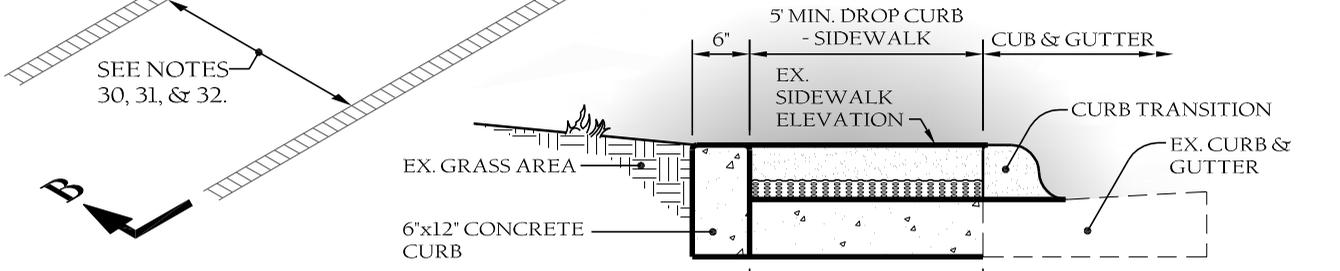
6"x12" CONCRETE CURB

NON-WALK SURFACE

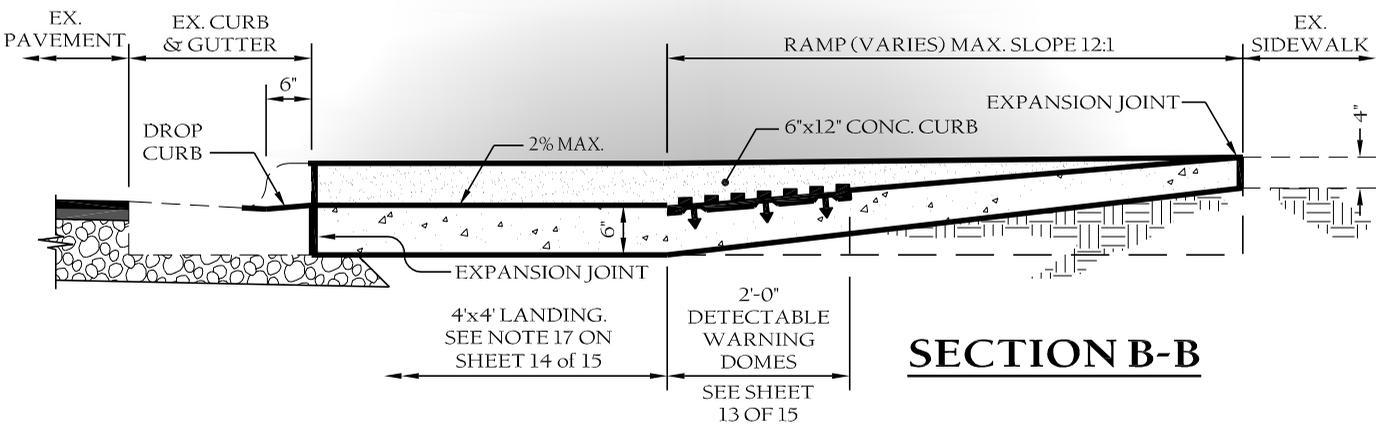
EXPANSION JOINT WHERE NEW CONC ABUTS EX. CONCRETE (TYPICAL)

EX. CURB & GUTTER

4'x4' LANDING. SEE NOTE 3 ON THIS SHEET



SECTION A-A



SECTION B-B

NOTES:

1. Maximum curb ramp slope 8.33% (12:1)
2. Maximum cross slope 2.00%
3. Curb ramps require a (4'-0") minimum landing with a maximum cross slope and longitudinal slope of 2.00% where pedestrians perform turning maneuvers. Slope to drain to curb.
4. Detectable warning domes will cover 2'-0" length and full width of the ramp floor as shown on sheet 13 of 15.
5. Refer to sheet 14 & 15 of 15 for all ramp notes. Adopted from NCDOT Alternate Curb Ramp Details.

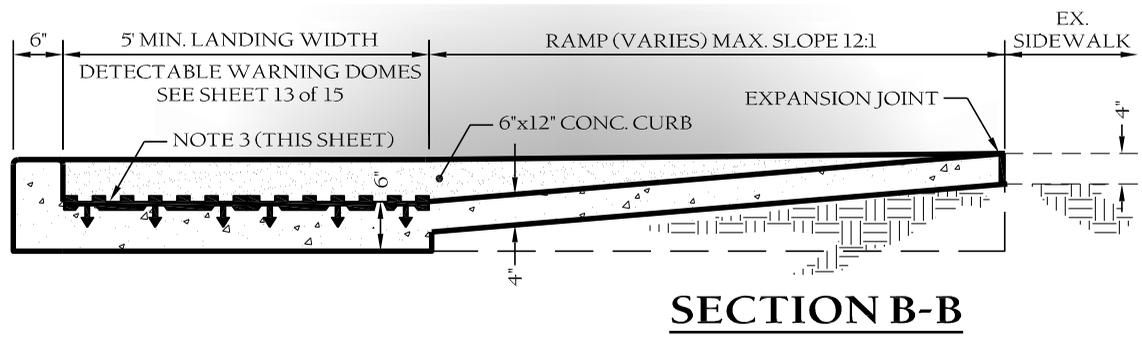
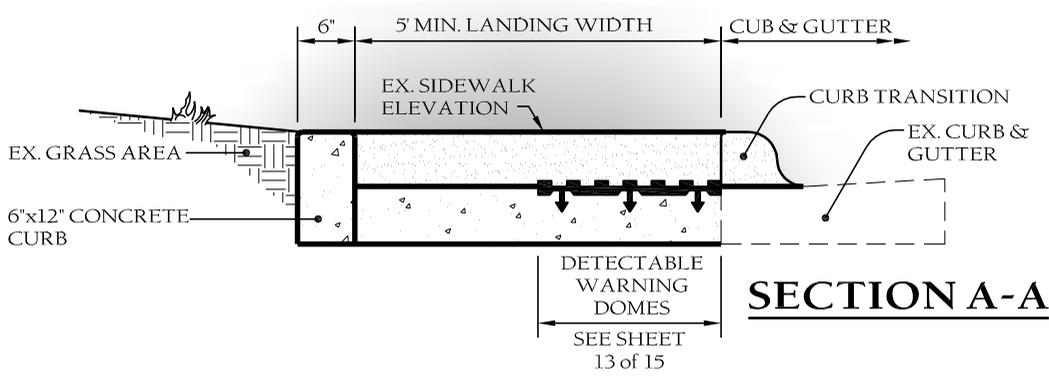
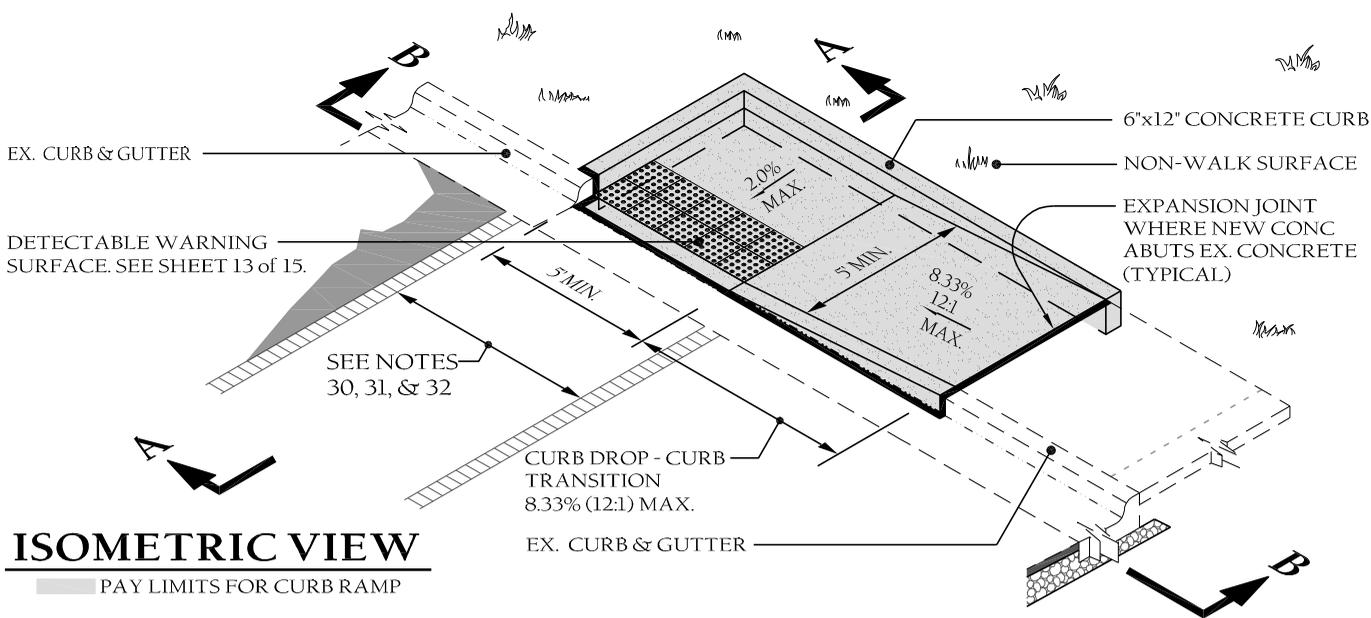


TOWN of WAKE FOREST, NC

Manual of Specifications, Standards and Design

CURB RAMPS - DIRECTIONAL TYPE 1

Scale: Not To Scale	Detail #: 9.13
Revision Date: Feb., 2015	Sheet #: 5 of 15



NOTES:

1. Maximum curb ramp slope 8.33% (12:1)
2. Maximum cross slope 2.00%
3. Curb ramps require a (4'-0") minimum landing with a maximum cross slope and longitudinal slope of 2.00% where pedestrians perform turning maneuvers. Slope to drain to curb.
4. Detectable warning domes will cover 2'-0" length and full width of the ramp floor as shown on sheet 13 of 15.
5. Refer to sheet 14 & 15 of 15 for all ramp notes. Adopted from NCDOT Alternate Curb Ramp Details.



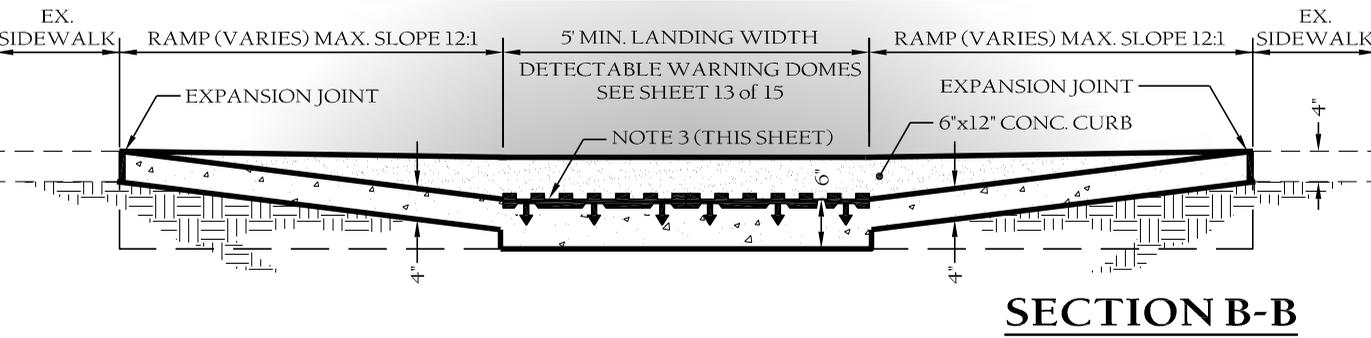
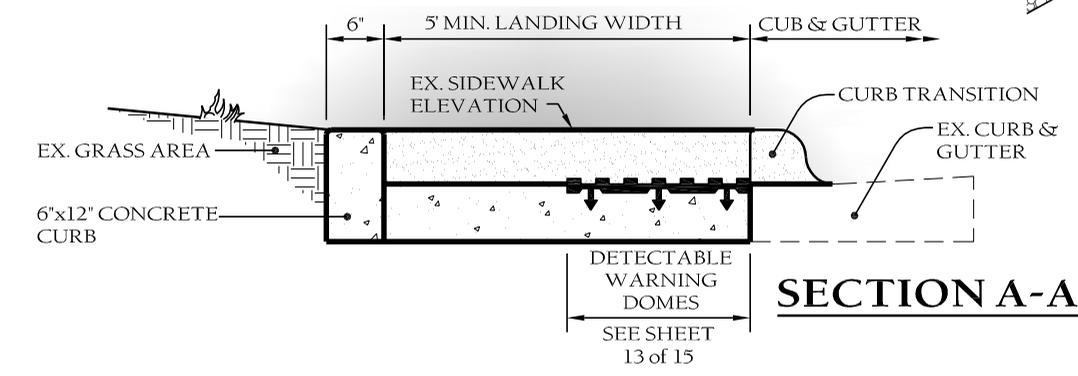
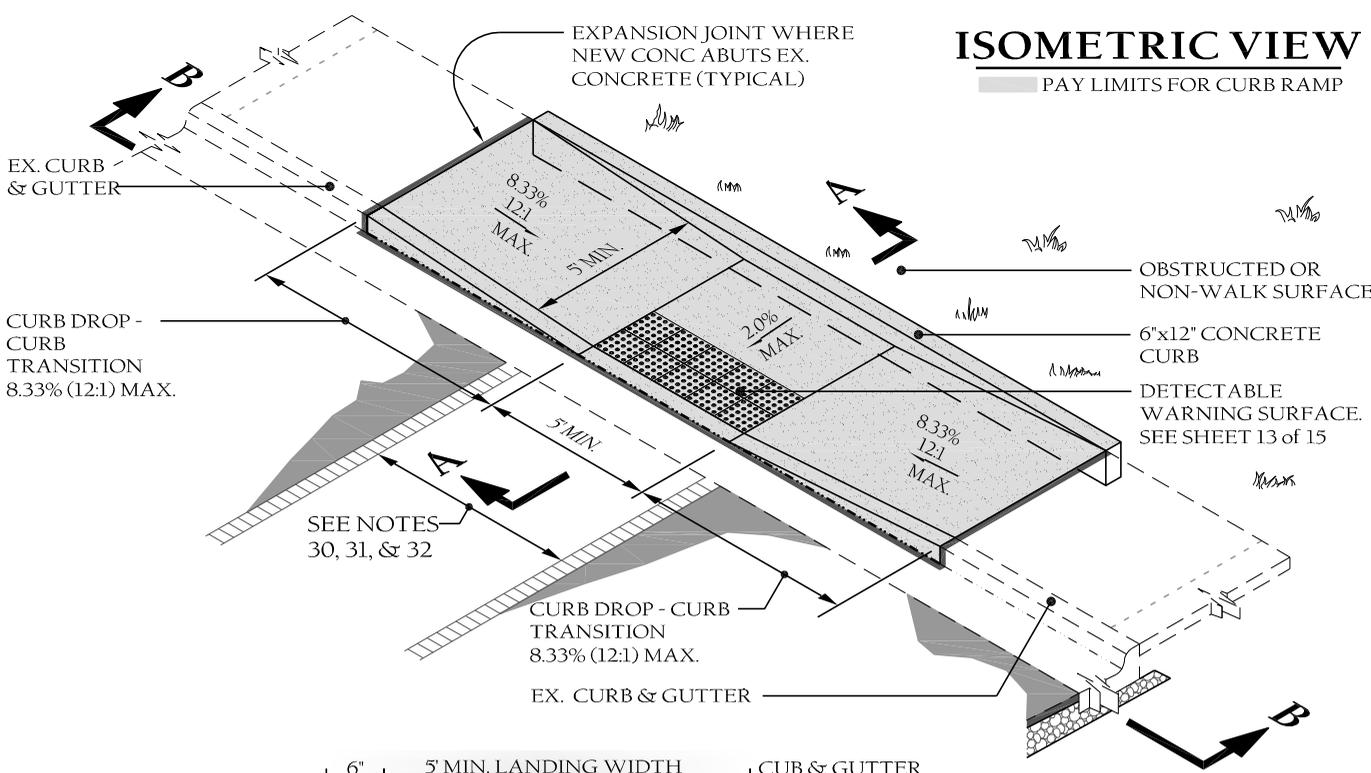
TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

CURB RAMPS - DIRECTIONAL TYPE IA

Scale: Not To Scale	Detail #: 9.13
Revision Date: Feb., 2015	Sheet #: 6 of 15

ISOMETRIC VIEW

PAY LIMITS FOR CURB RAMP



NOTES:

1. Maximum curb ramp slope 8.33% (12:1)
2. Maximum cross slope 2.00%
3. Curb ramps require a (4'-0") minimum landing with a maximum cross slope and longitudinal slope of 2.00% where pedestrians perform turning maneuvers. Slope to drain to curb.
4. Detectable warning domes will cover 2'-0" length and full width of the ramp floor as shown on sheet 13 of 15.
5. Refer to sheet 14 & 15 of 15 for all ramp notes. Adopted from NCDOT Alternate Curb Ramp Details.

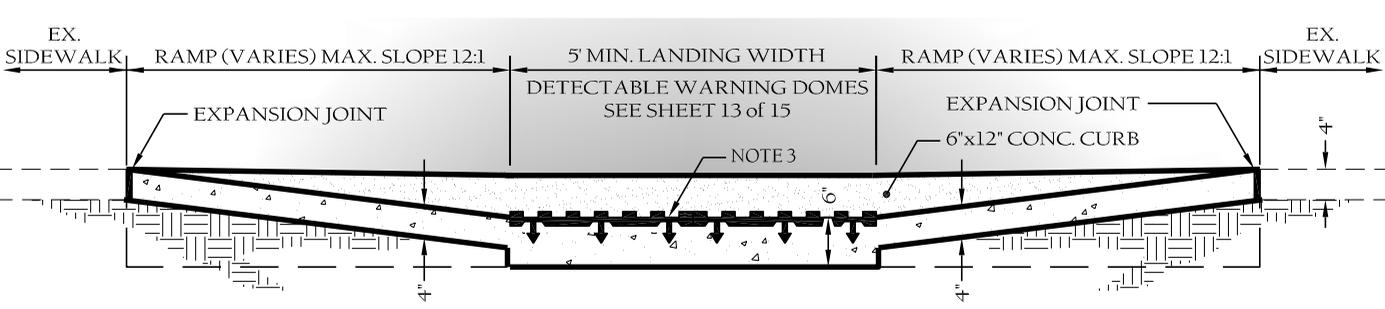
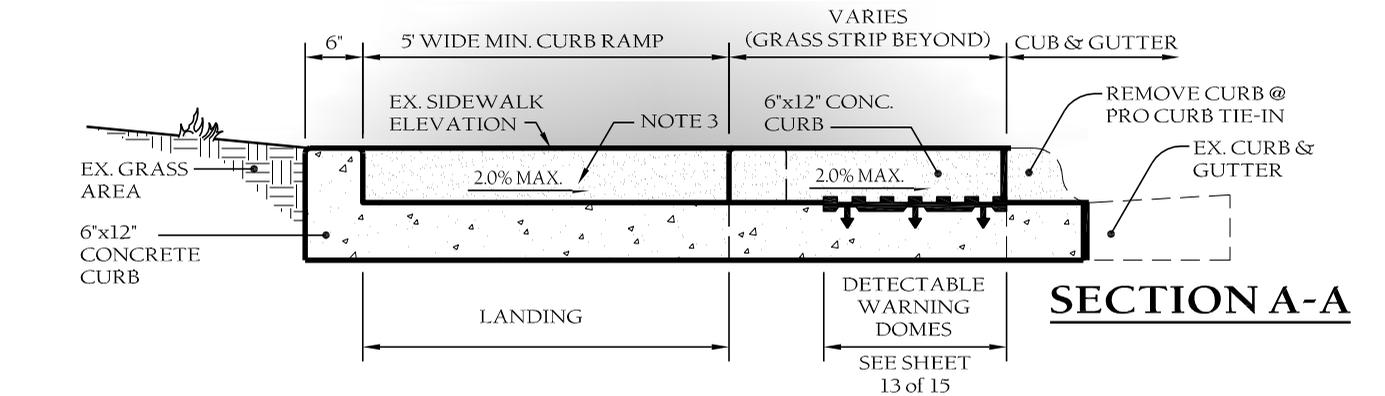
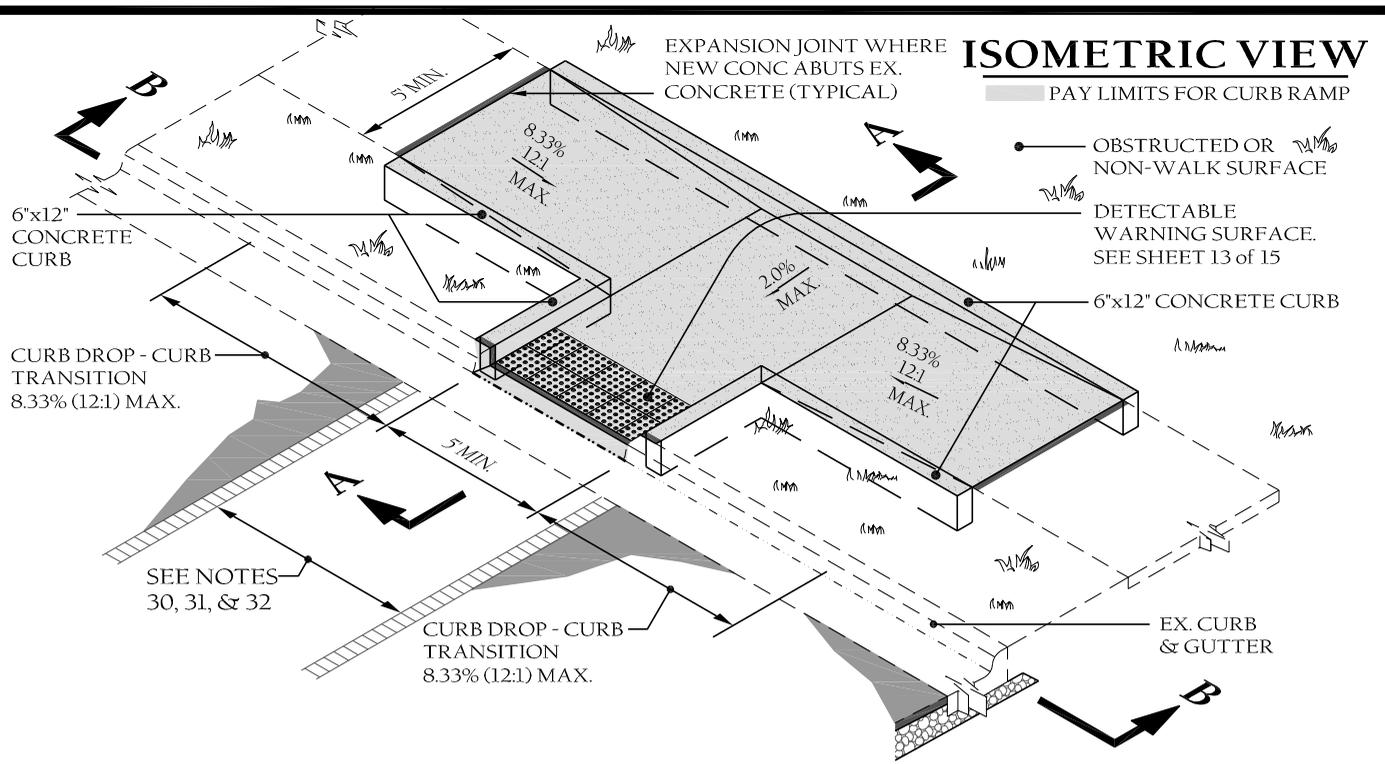


TOWN of WAKE FOREST, NC

Manual of Specifications, Standards and Design

CURB RAMPS - DIRECTIONAL TYPE 2

Scale: Not To Scale	Detail #: 9.13
Revision Date: Feb., 2015	Sheet #: 7 of 15



NOTES:

1. Maximum curb ramp slope 8.33% (12:1)
2. Maximum cross slope 2.00%
3. Curb ramps require a (4'-0") minimum landing with a maximum cross slope and longitudinal slope of 2.00% where pedestrians perform turning maneuvers. Slope to drain to curb.
4. Detectable warning domes will cover 2'-0" length and full width of the ramp floor as shown on sheet 13 of 15.
5. Refer to sheet 14 & 15 of 15 for all ramp notes. Adopted from NCDOT Alternate Curb Ramp Details.

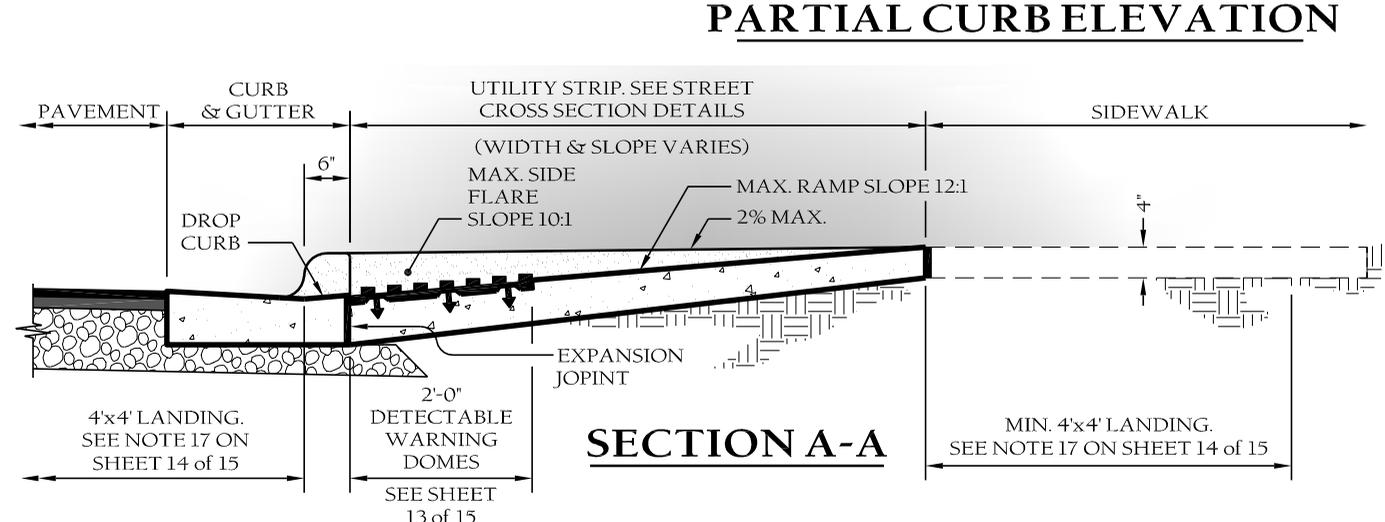
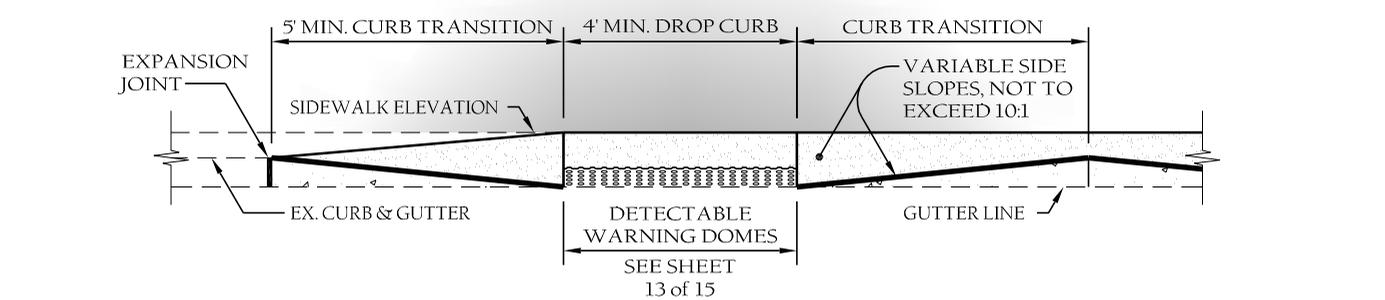
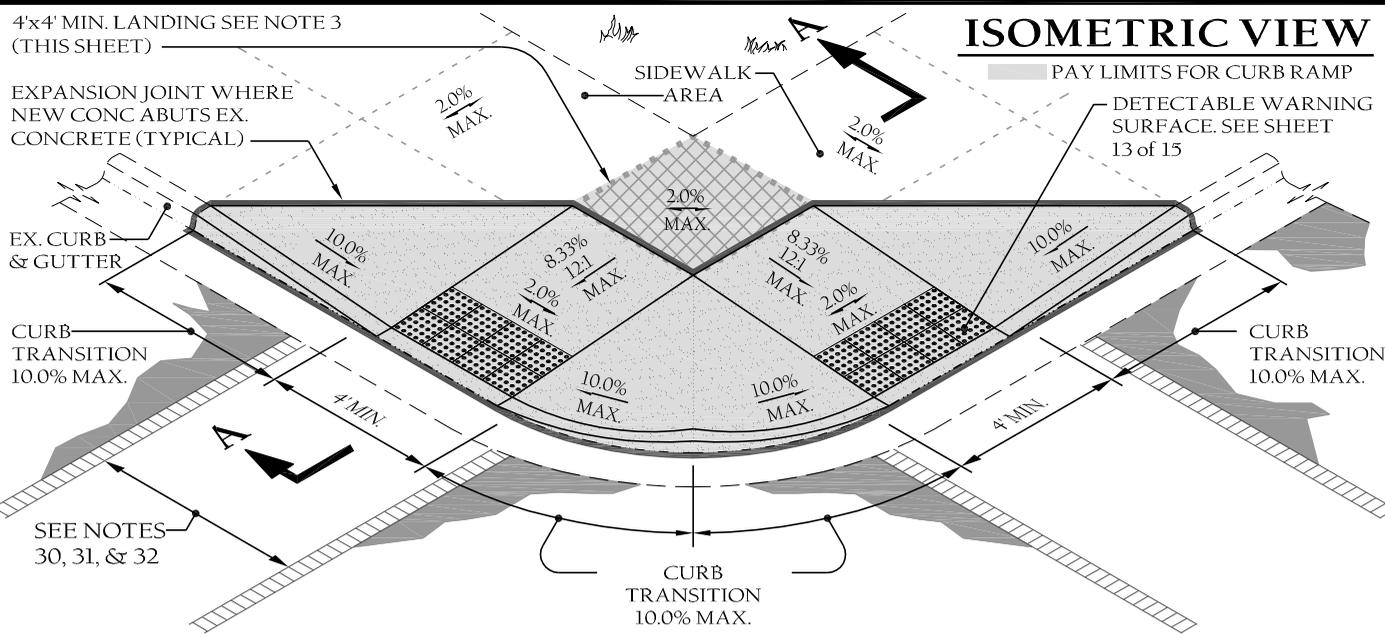


TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

CURB RAMPS - DIRECTIONAL
TYPE 3

Scale: Not To Scale	Detail #: 9.13
Revision Date: Feb., 2015	Sheet #: 8 of 15

258



NOTES:

1. Maximum curb ramp slope 8.33% (12:1)
2. Maximum cross slope 2.00%
3. Curb ramps require a (4'-0") minimum landing with a maximum cross slope and longitudinal slope of 2.00% where pedestrians perform turning maneuvers. Slope to drain to curb.
4. Detectable warning domes will cover 2'-0" length and full width of the ramp floor as shown on sheet 13 of 15.
5. Refer to sheet 14 & 15 of 15 for all ramp notes. Adopted from NCDOT Alternate Curb Ramp Details.

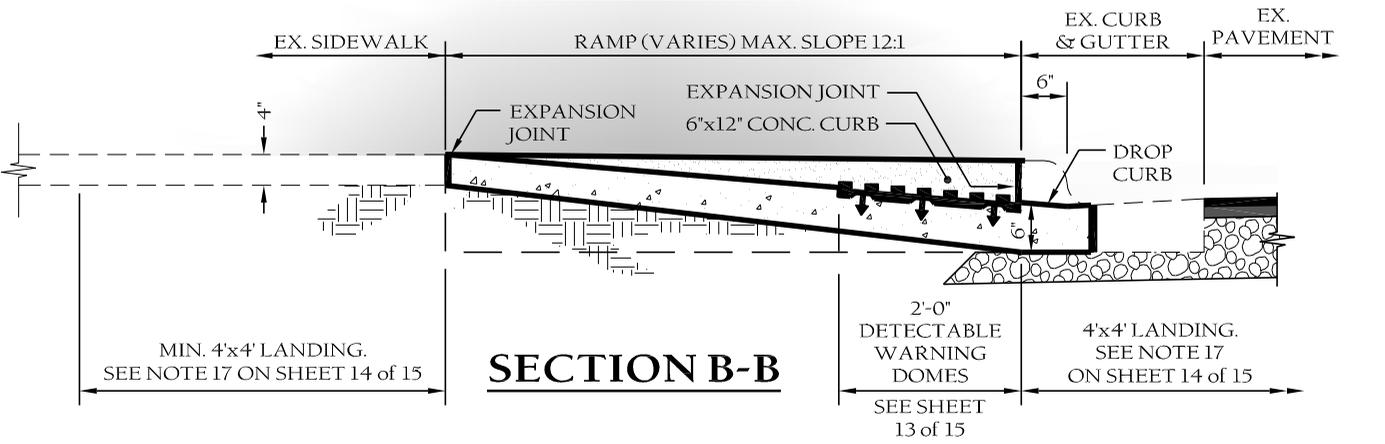
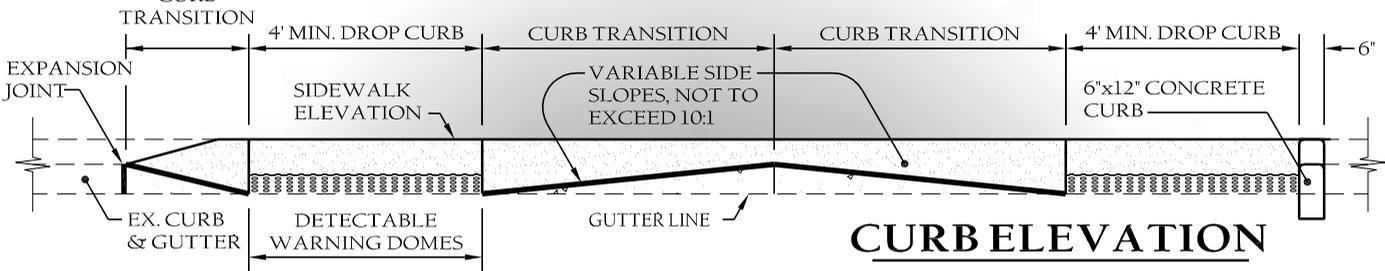
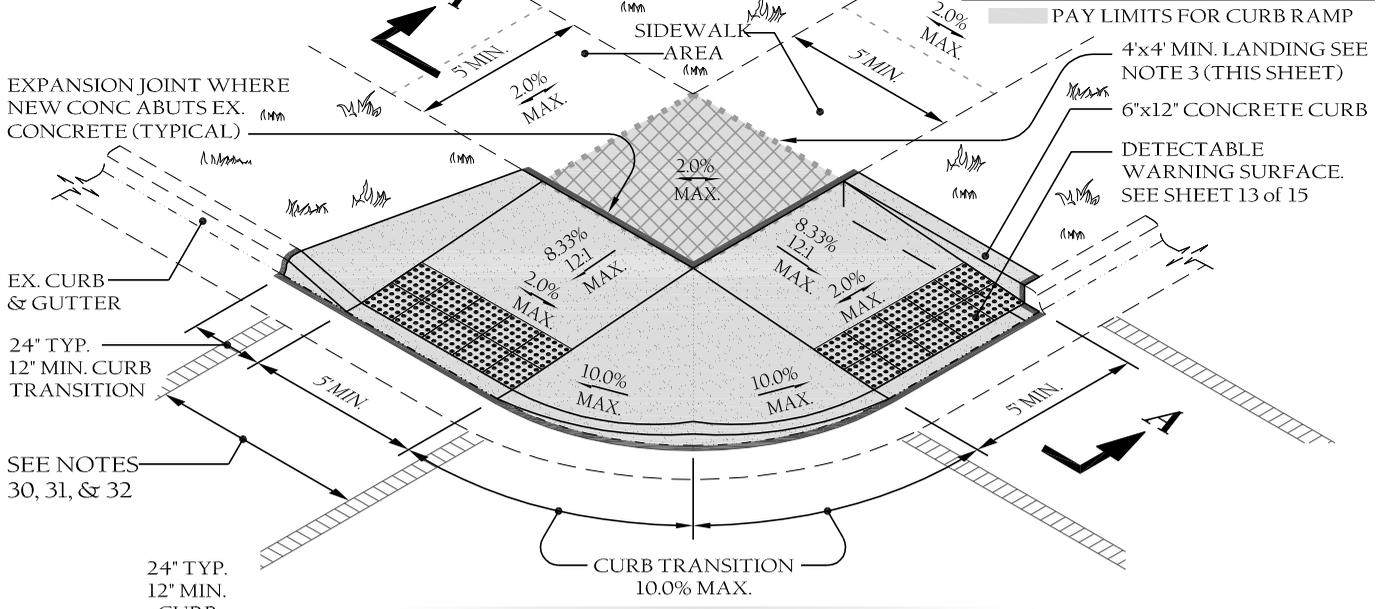


TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

CURB RAMPS - SHARED LANDING
TYPE 4

Scale: Not To Scale	Detail #: 9.13
Revision Date: Feb., 2015	Sheet #: 9 of 15

ISOMETRIC VIEW



NOTES:

1. Maximum curb ramp slope 8.33% (12:1)
2. Maximum cross slope 2.00%
3. Curb ramps require a (4'-0") minimum landing with a maximum cross slope and longitudinal slope of 2.00% where pedestrians perform turning maneuvers. Slope to drain to curb.
4. Detectable warning domes will cover 2'-0" length and full width of the ramp floor as shown on sheet 13 of 15.
5. Refer to sheet 14 & 15 of 15 for all ramp notes. Adopted from NCDOT Alternate Curb Ramp Details.



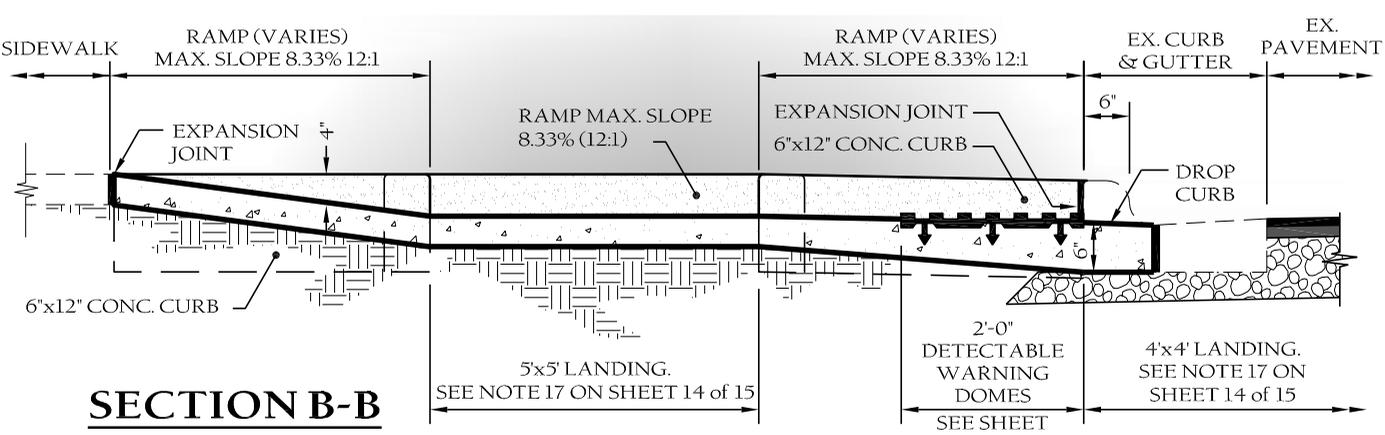
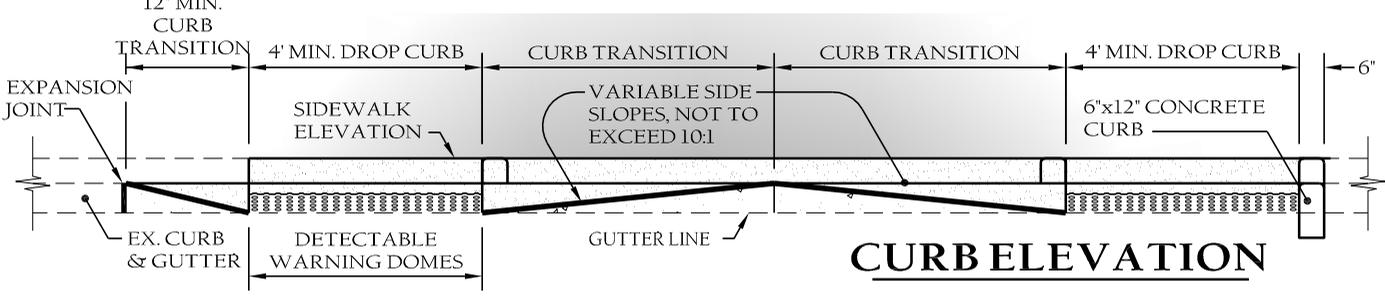
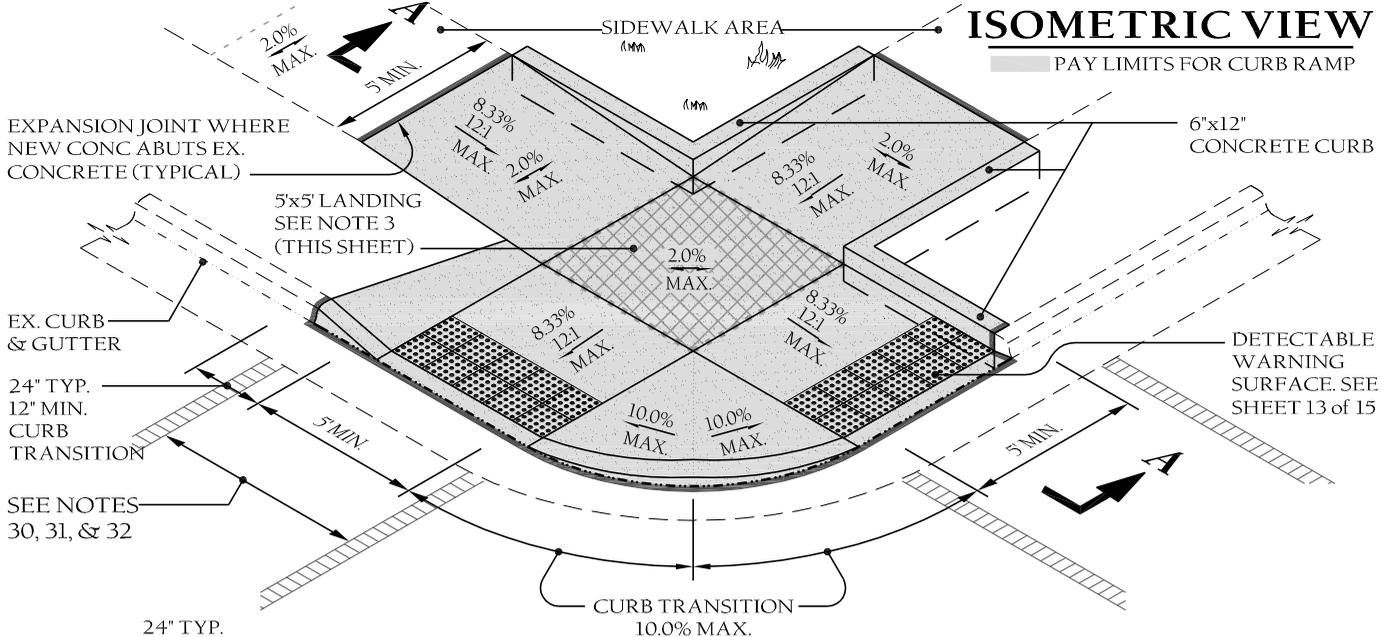
TOWN of WAKE FOREST, NC

Manual of Specifications, Standards and Design

CURB RAMPS - SHARED LANDING

TYPE 4A

Scale: Not To Scale	Detail #: 9.13
Revision Date: Feb., 2015	Sheet #: 1C of 15



NOTES:

1. Maximum curb ramp slope 8.33% (12:1)
2. Maximum cross slope 2.00%
3. Curb ramps require a (4'-0") minimum landing with a maximum cross slope and longitudinal slope of 2.00% where pedestrians perform turning maneuvers. Slope to drain to curb.
4. Detectable warning domes will cover 2'-0" length and full width of the ramp floor as shown on sheet 13 of 15.
5. Refer to sheet 14 & 15 of 15 for all ramp notes. Adopted from NCDOT Alternate Curb Ramp Details.



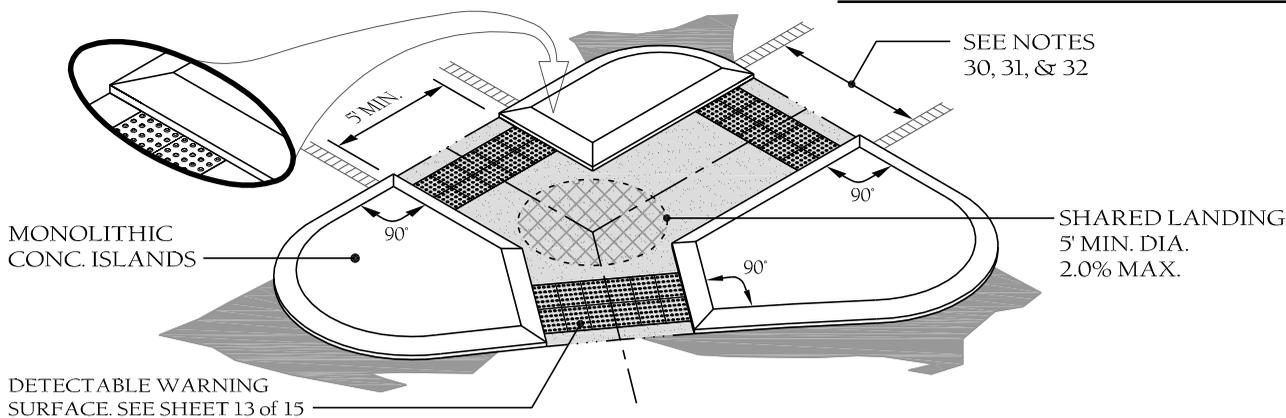
TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

CURB RAMPS - SHARED LANDING
TYPE 5

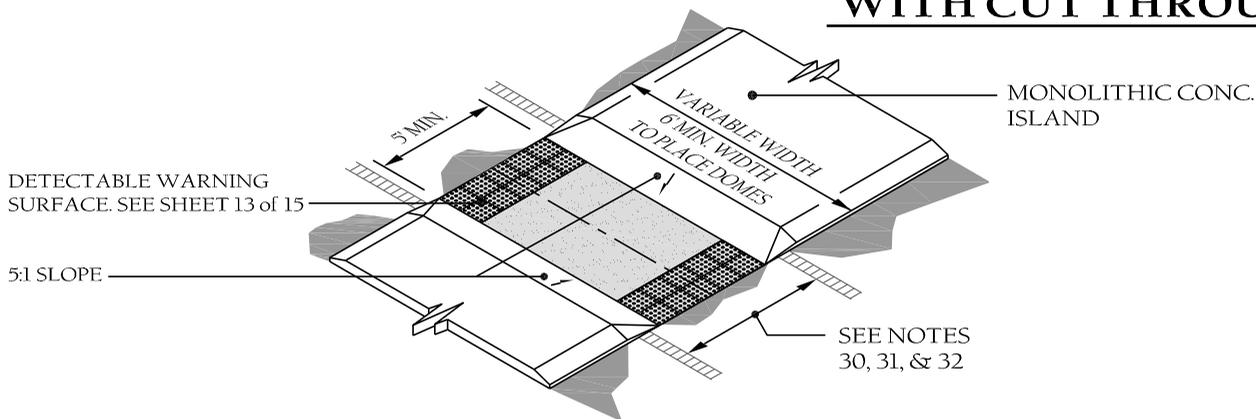
Scale: Not To Scale	Detail #: 9.13
Revision Date: Feb., 2015	Sheet #: 11 of 15

PAY LIMITS FOR CURB RAMP

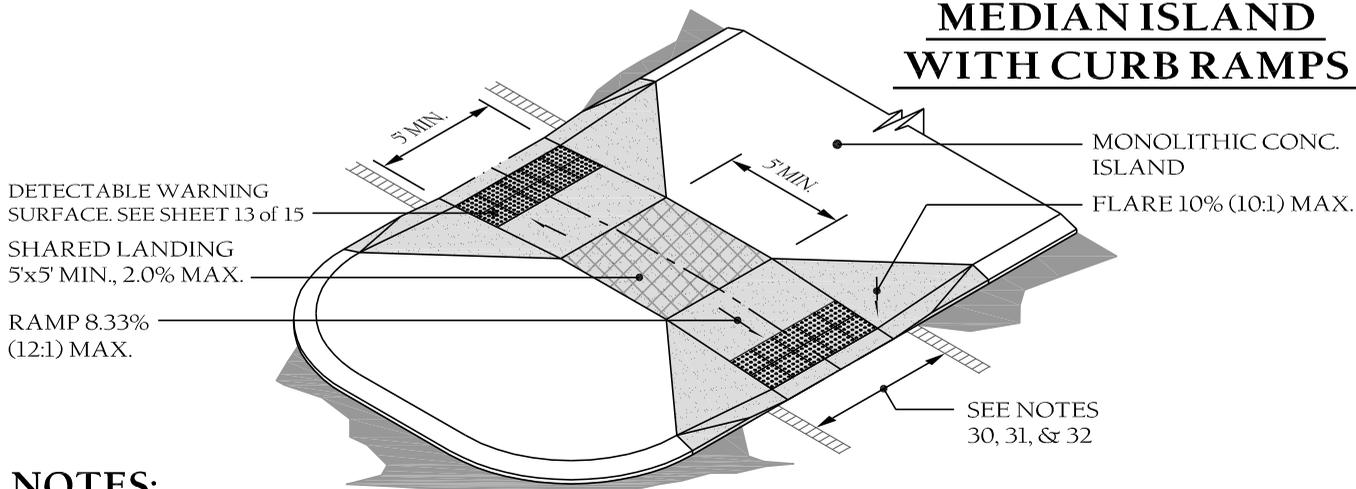
TRIANGULAR ISLAND WITH CUT THROUGH



MEDIAN ISLAND WITH CUT THROUGH



MEDIAN ISLAND WITH CURB RAMPS



NOTES:

1. Maximum curb ramp slope 8.33% (12:1)
2. Maximum cross slope 2.00%
3. Detectable warning domes will cover 2'-0" length and full width of the ramp floor as shown on sheet 13 of 15.
4. See NCDOT Roadway Std. Drawing 852.01 for concrete island dimensions.



TOWN of WAKE FOREST

TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

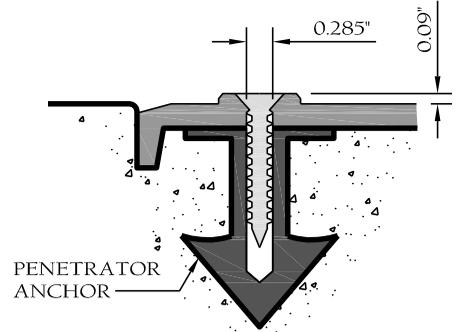
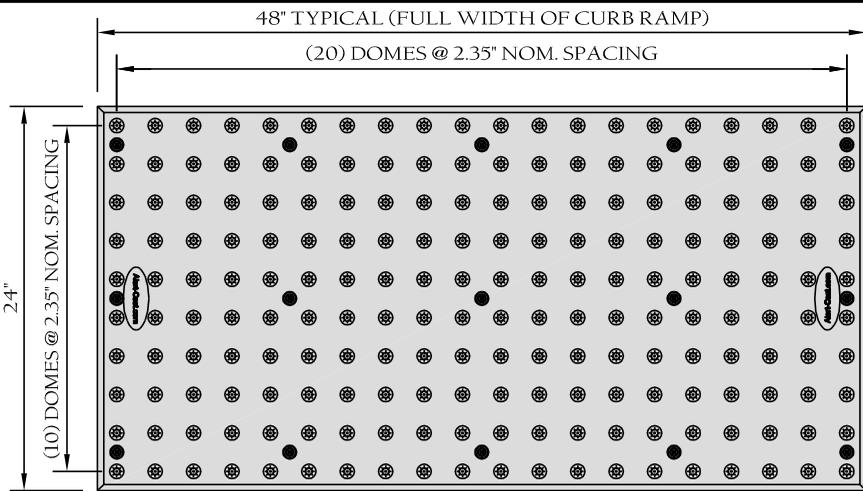
CURB RAMPS
MEDIAN ISLANDS

Scale:
Not To Scale

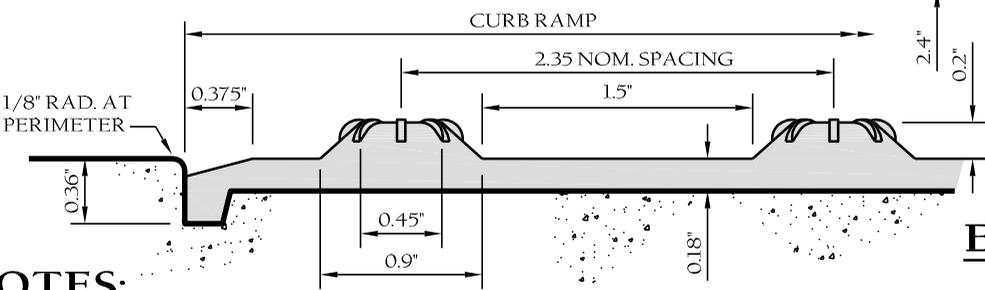
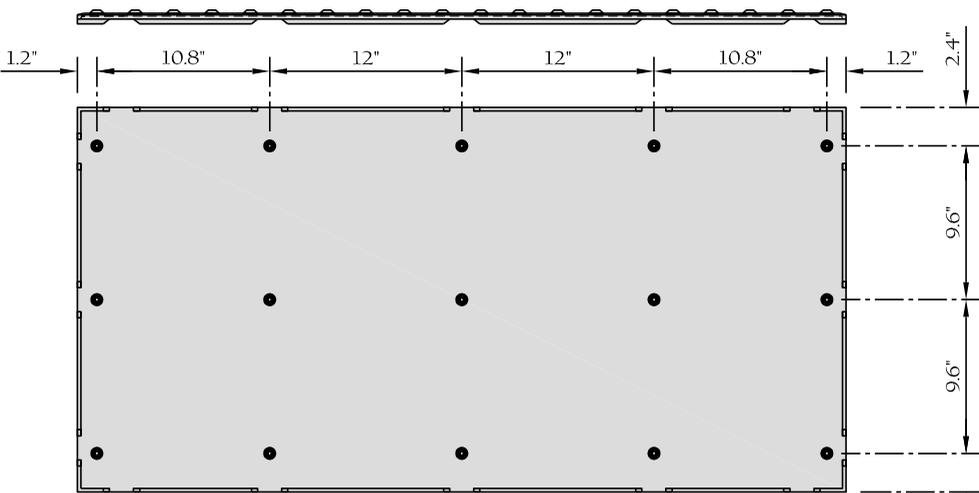
Detail #:
9.13

Revision Date:
Feb., 2015

Sheet #:
12 of 15



PENETRATOR SECTION



END SECTION

NOTES:

1. Detectable warning System. Cast in place with Penetrator anchors. See pre-approved products list.
2. Other sizes available to meet site specific requirements. Verify with Town.
3. Truncated domes in a detectable warning surface shall have a base diameter of 0.9 inch minimum to 1.4 inches maximum, a top diameter of 50% of the base diameter minimum to 65% of the base diameter maximum, and a height of 0.2 inches.
4. Truncated domes in a detectable warning surface shall have a center-to-center spacing of 1.6 inches minimum and 2.4 inches maximum, and a base-to-base spacing of 0.65 inches minimum, measured between the most adjacent domes on square grid.
5. Detectable warning surfaces shall extend 24 inches minimum in the direction of travel and the full width of the curb ramp, landing, or blended transition. The edge nearest the curb line shall be a minimum of 6 inches and a maximum of 8 inches from curb (ICC/ANSI A117.1 Fig C406.13.2). See notes 21 & 22.
6. See note 23, sheet 5.
7. Any NCDOT street must conform to DOT standard/ADA Curb Ramp detail 848.05 sheet 1-4.



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

STANDARD DETECTABLE WARNING SYSTEM

Scale: Not To Scale	Detail #: 9.13
Revision Date: Feb., 2015	Sheet #: 12 of 15

STANDARD NOTES:

1. North Carolina General Statute 136-44.14 requires that all street curbs being constructed or reconstructed for maintenance procedures, traffic operations, repairs, correction of utilities or altered for any reason after September 1, 1973 shall provide curb ramps for the physically disabled at all intersections where both curb and gutter and sidewalks are provided and at other points of pedestrian flow.
In addition, section 228 of the 1973 Federal Aid Highway Safety Act requires provision of curb ramps on any curb construction after July 1, 1976 whether a sidewalk is proposed initially or is planned for a future date.
The Americans with Disability Act (ADA) of 1990 extends to individuals with disabilities. Comprehensive civil rights protections similar to those provided to persons on the basis of race, sex, national origin and religion under the Civil Rights Act of 1964. These curb ramps have been designed to comply with the current ADA standards (2010 ADA Standards for Accessible Design, dated September 15, 2010 & effective March 15, 2012).
2. Curb ramps are required when streets are altered for resurfacing (spanning one intersection to another and includes overlay of additional material to the road surface with or without milling), reconstructed, rehabilitated or widened. Maintenance activities on streets, such as crack filling sealing, pavement markings, surface sealing and pavement patching, are not alterations. However, if there is no block-to-block resurfacing but resurfacing is occurring at a crosswalk itself, partial resurfacing (curb-to-curb resurfacing of a crosswalk) requires the provision of curb ramps at that crosswalk.
Curb ramps are not required in the absence of a pedestrian walkway with a prepared surface nor are curb ramps required in the absence of curb, elevation or other barrier between the street and the walkway. [USDOJ July 8, 2013]
3. Curb ramps are required at all curb returns.
4. Detectable warning domes are required for curb ramps.
5. Single curb ramp at the center of the return are not permitted.
6. Dimensions assume 90° centerline intersection of streets.
7. Construct the ramp surface to be stable, firm and slip resistant. Located and construct the curb ramp type as shown in these details.
8. Curb ramps shall be constructed perpendicular to the roadway travel lane.
9. Coordinate the curb ramp and pedestrian crosswalk markings so a 4'x4' clear space at the base of the curb ramp will fall within the pedestrian crosswalk lines.
10. Set back distance from inside corner of an intersection crosswalk marking to nearest edge of travel lane is 4 feet minimum.
11. Terminate parking a minimum of 20 feet back of a pedestrian crosswalk.
12. Construct a curb ramps a minimum of 4 feet wide. Width may exceed 48".
13. Construct the running slope of the ramp at a maximum of 8.33% (1 : 12).
14. Allowable cross slope on sidewalks and ramps to be a maximum of 2%.
15. Construct the side flare slope to a maximum of 10% measured along the curb line;
16. Construct the counter-slope of the gutter or street at the base of the curb ramp at a maximum of 5% and maintain a smooth transition.
17. Construct landings for sidewalk at a minimum of 4'x4' with a maximum slope of 2% in any direction. Construct landings for median islands a minimum of 5'x5' with a maximum slope of 2% in any direction.
18. To use a median island as a pedestrian refuge area, median islands will be a minimum of 6 feet wide. Construct median islands to provide passage over or through the island.
19. Small channelization islands that cannot provide a 5'x5' landing at the top of a curb ramp, will be cut through level with the surface of the street.
20. Curb ramps with returned side curbs may be used only where pedestrians would not normally walk across the ramp such as where there the adjacent surface is plantings, other non-walking surface, or the side approach is substantially obstructed.
21. The typical 2'x4' truncated dome pad shall be placed with the short dimension perpendicular to the curb. See curb ramp typical details. Truncated dome pads shall abutt the back of the curb (ICC/ANSI A117.1 Fig C406.13.2).
22. Curved truncated dome pads are permitted when ramp width is greater than 4 feet.
23. Color contrast required only when detectable warning plates are employed. (ADA Standards for Accessible Design, section 705, Latest Edition). Recommended Min. light reflectance contrast is 70% (American National Standard ICC/ANSI A117.1 - Standard & Commentary Section 705.3, Latest Edition). Painted surface will not be acceptable. (See note 4).
24. Place a 1/2-inch expansion joint where the concrete curb ramp joins/abuts the curb.
25. Curb ramps through median islands, single ramps at dual crosswalks or limited right-of-way situations will be handled by special details. Consult with the Town Engineer.
26. When construction is on a NCDOT Right-of-Way, construction shall conform to the latest edition of the NCDOT Roadway Standard drawings.
27. Construction of curb ramps shall conform to the latest edition of the ICC/ANSI A117, Chapter 4 Accessible Routes.



TOWN of WAKE FOREST, NC Manual of Specifications, Standards and Design

STANDARD NOTES FOR CURB RAMPS

Scale: Not To Scale	Detail #: 9.13
Revision Date: Feb., 2015	Sheet #: 1 of 15

STANDARD NOTES (continued):

28. Curb ramps shall be provided at locations as shown on these plans or as directed by the engineer. Curb ramps shall be located as indicated in these details; however, the location may be adjusted as directed by the engineer where existing light poles, fire hydrants, drop inlets, etc. Affect placement. At these locations, not less than 2 feet of full height curb shall be placed between adjacent ramps.
29. Use air entrained 3000 psi concrete with a sidewalk finish in order to obtain a rough non-skid type surface.
30. Crosswalk widths and configuration vary but must conform to traffic design standards.
31. Place the inside pedestrian crosswalk lines no closer in the intersection than would be established by bisecting the intersection radii, with an allowance of a 4'x4' maneuvering space (2003 ICC/ANSI a117 Commentary, Fig. C406.6 & 406.10) in the vehicular travel way when one ramp is installed.
32. Place all pavement markings in accordance with the latest edition of the Manual of Uniform Traffic Control Devices (MUTCD) published by the Federal Highway Administration and the North Carolina Supplement to the MUTCD.
33. For asphalt greenways transition greenway to concrete to enable truncated dome placement.
34. Concrete must come from a ready mix concrete truck to ensure mix meets air entrainment requirements. No site mix or sakrete mix allowed.



TOWN of
WAKE FOREST

TOWN of WAKE FOREST, NC Manual of Specifications, Standards and Design

STANDARD NOTES FOR CURB RAMPS

Scale:
Not To Scale

Detail #:
9.13

Revision Date:
Feb., 2015

Sheet #:
15 of 15



TOWN of
WAKE FOREST

TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

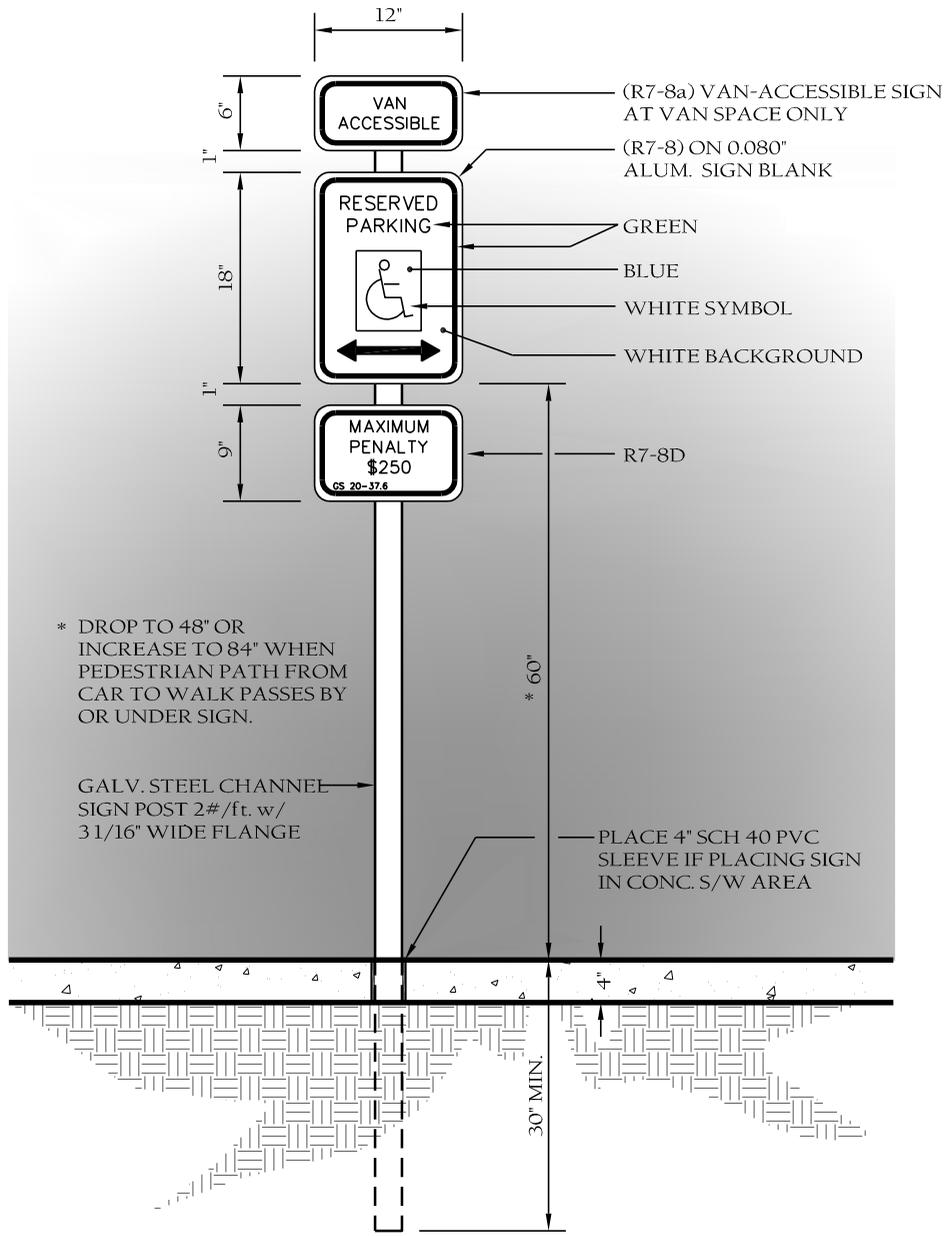
**RESERVED
FUTURE DETAIL**

Scale:
Not To Scale

Detail #:
9.14

Revision Date:
Feb., 2015

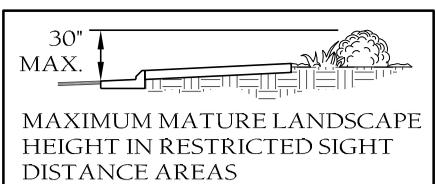
Sheet #:
1 - of 1



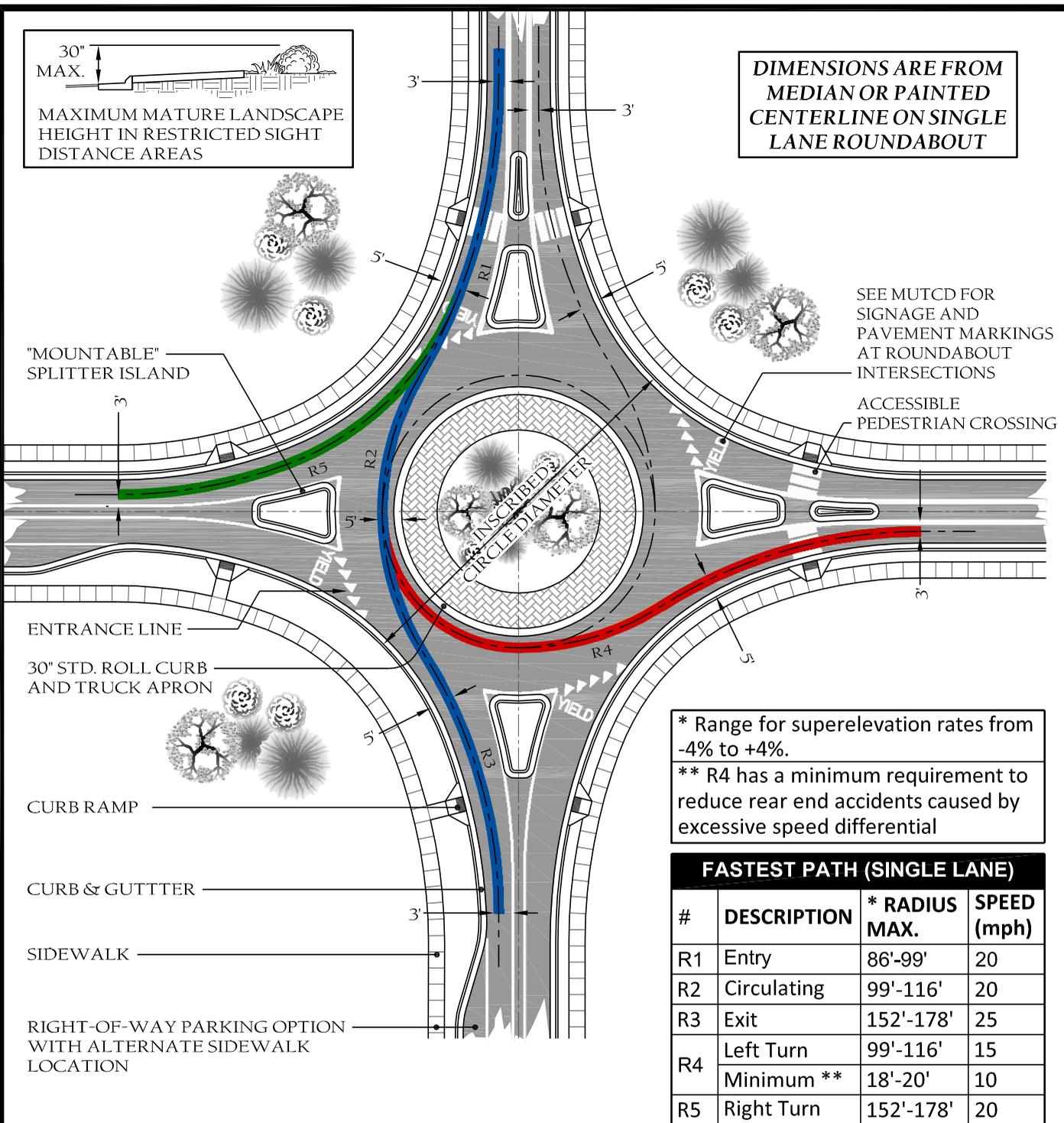
TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

R7-8 HANDICAP SIGN DETAIL

Scale: Not To Scale	Detail #: 9.15
Revision Date: Feb., 2015	Sheet #: 1 - of 1



DIMENSIONS ARE FROM MEDIAN OR PAINTED CENTERLINE ON SINGLE LANE ROUNDABOUT



* Range for superelevation rates from -4% to +4%.
** R4 has a minimum requirement to reduce rear end accidents caused by excessive speed differential

FASTEST PATH (SINGLE LANE)			
#	DESCRIPTION	* RADIUS MAX.	SPEED (mph)
R1	Entry	86'-99'	20
R2	Circulating	99'-116'	20
R3	Exit	152'-178'	25
R4	Left Turn	99'-116'	15
	Minimum **	18'-20'	10
R5	Right Turn	152'-178'	20

NOTES:

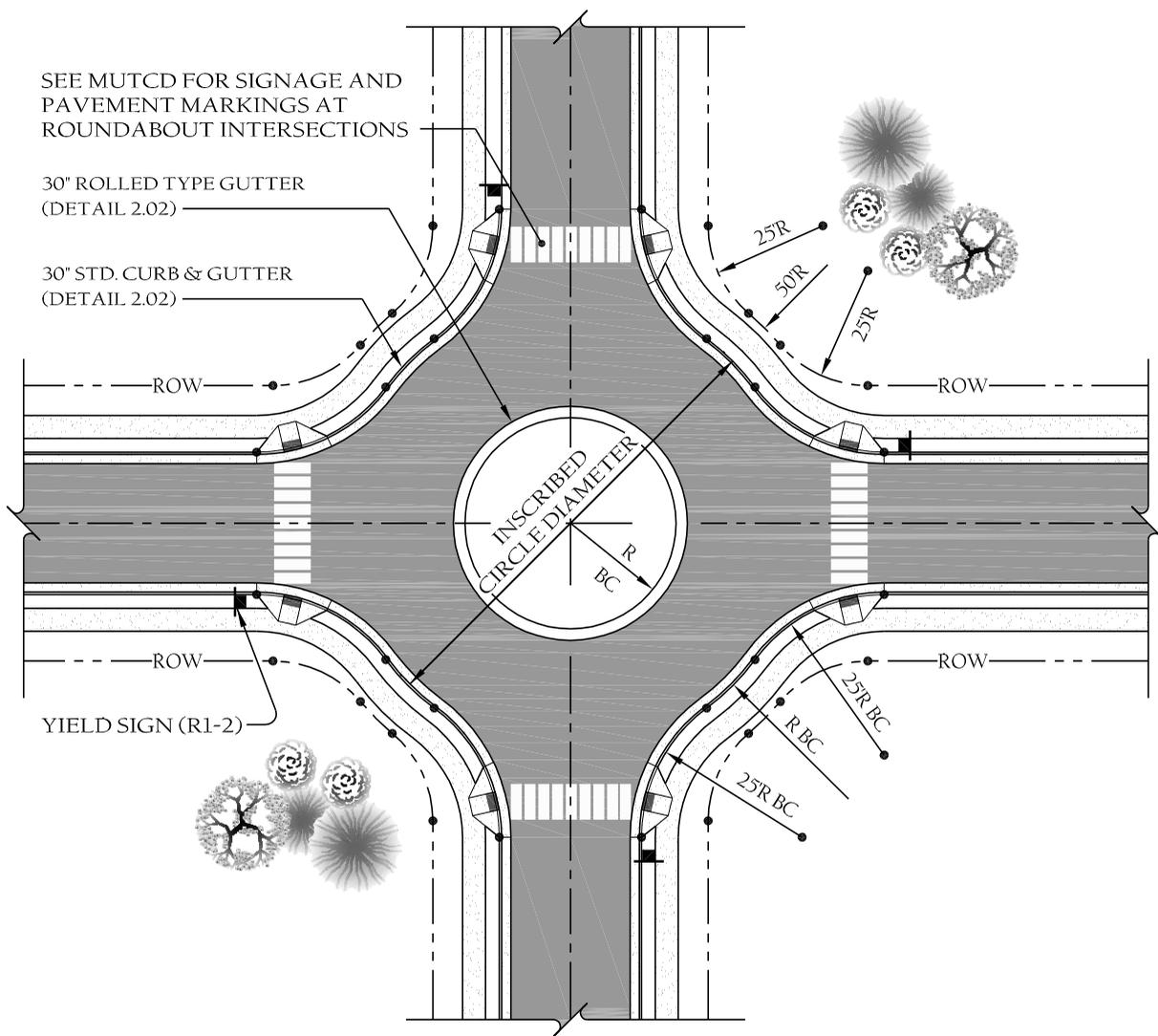
1. Decision Sight Distance (DSD) and Stopping Sight Distance (SSD) must be checked for horizontal and vertical alignment. DSD & SSD are measured along vehicle path.
2. SSD for pedestrians measured to point 6' behind curb.
3. Refer to the FHWA Technical Summary on Roundabouts for considerations in the design section & implementation of Roundabouts (FHWA-SA-10-006, latest revision).



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

ROUNDABOUT
STANDARD DETAIL

Scale: Not To Scale	Detail #: 9.16
Revision Date: Feb., 2015	Sheet #: 1 of 2



NOTES:

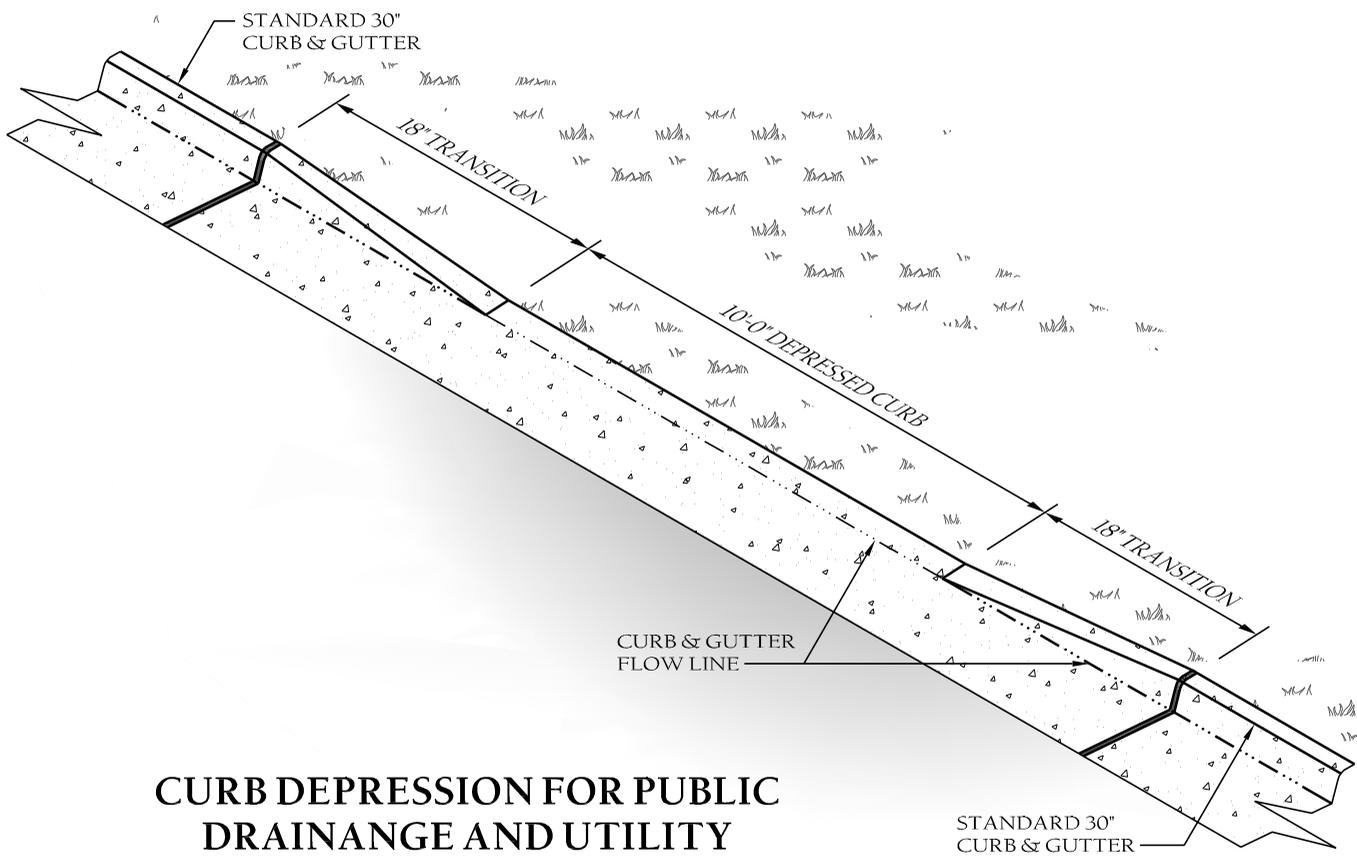
1. Decision Sight Distance (DSD) and Stopping Sight Distance (SSD) must be checked for horizontal and vertical alignment. DSD & SSD are measured along vehicle path.
2. SSD for pedestrians measured to point 6' behind curb.
3. Refer to the FHWA Technical Summary on Roundabouts for considerations in the design section & implementation of Neighborhood Traffic Circles (FHWA-SA-10-006, latest revision).
4. Dimensions shown are minimum and to be verified with a traffic design. Coordinate design with Town Engineer.
5. RI-2 is a MUTCD sign designations (Manual on Uniform Traffic Control Devices.)



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

**ROUNDABOUT
STANDARD DETAIL**

Scale: Not To Scale	Detail #: 9.16
Revision Date: Feb., 2015	Sheet #: 2 of 2



**CURB DEPRESSION FOR PUBLIC
DRAINAGE AND UTILITY
EASEMENT ACCESS**

STANDARD 30°
CURB & GUTTER



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

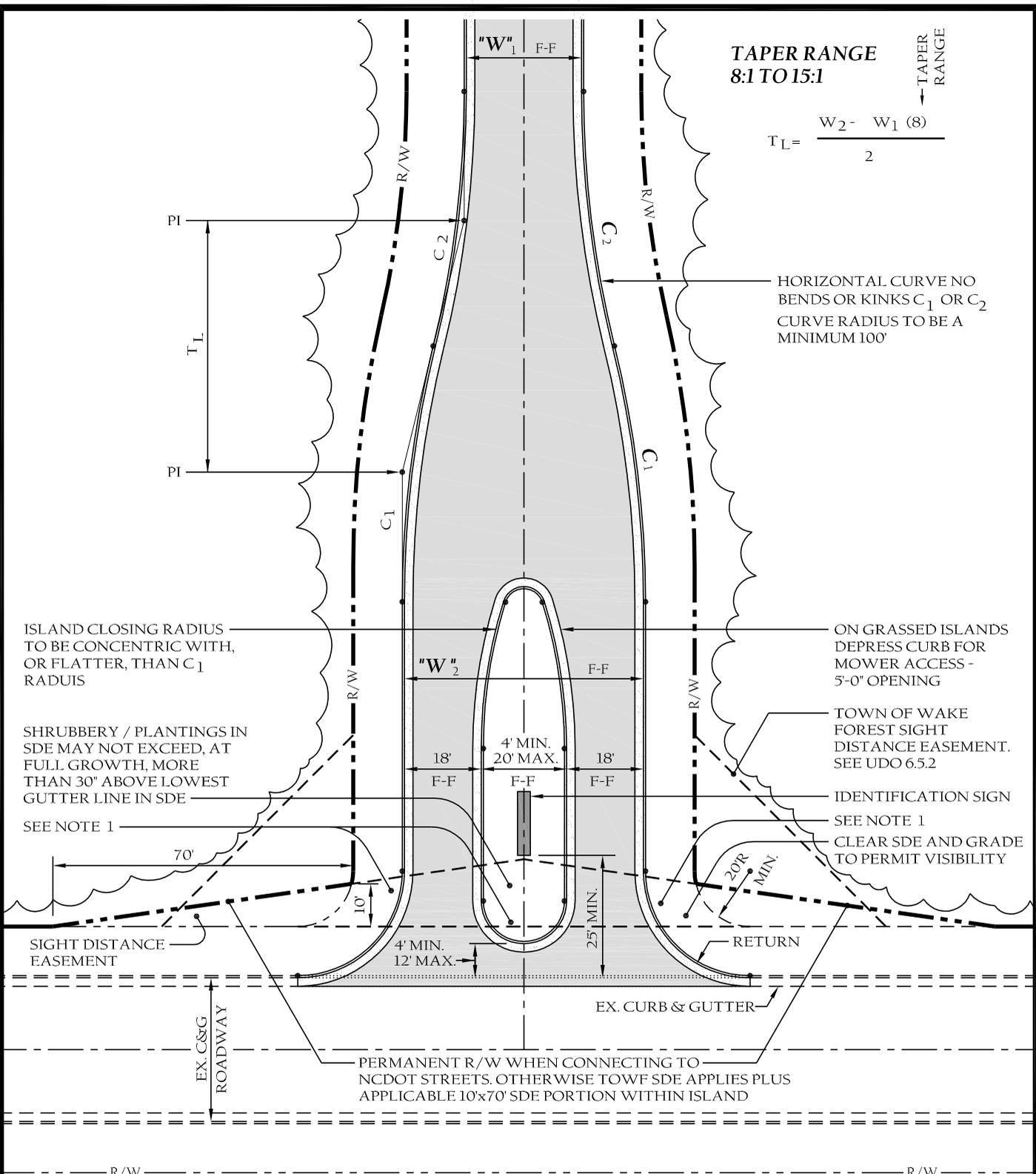
**10' CURB
DEPRESSION**

Scale:
Not To Scale

Detail #:
9.18

Revision Date:
Feb., 2015

Sheet #:
1 - of 1



NOTES:

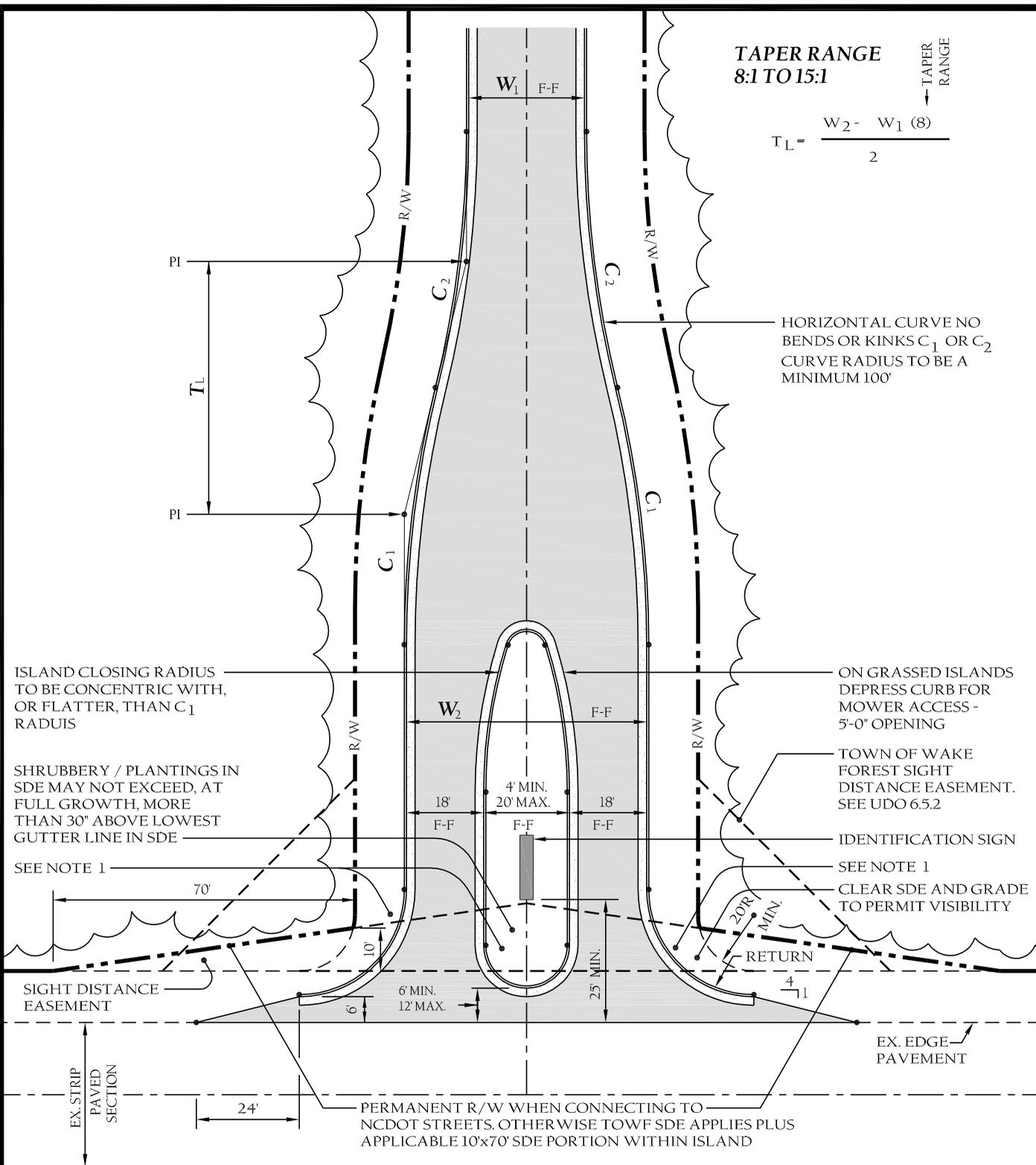
- 1. Refer to curb ramp details for requirements where sidewalks are required



TOWN of WAKE FOREST, NC
 Manual of Specifications, Standards and Design

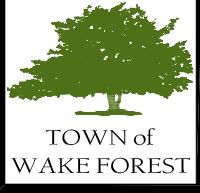
**ISLAND ENTRANCE TO
 EXISTING CURB & GUTTER**

Scale: Not To Scale	Detail #: 9.19
Revision Date: Feb., 2015	Sheet #: 1 of 2

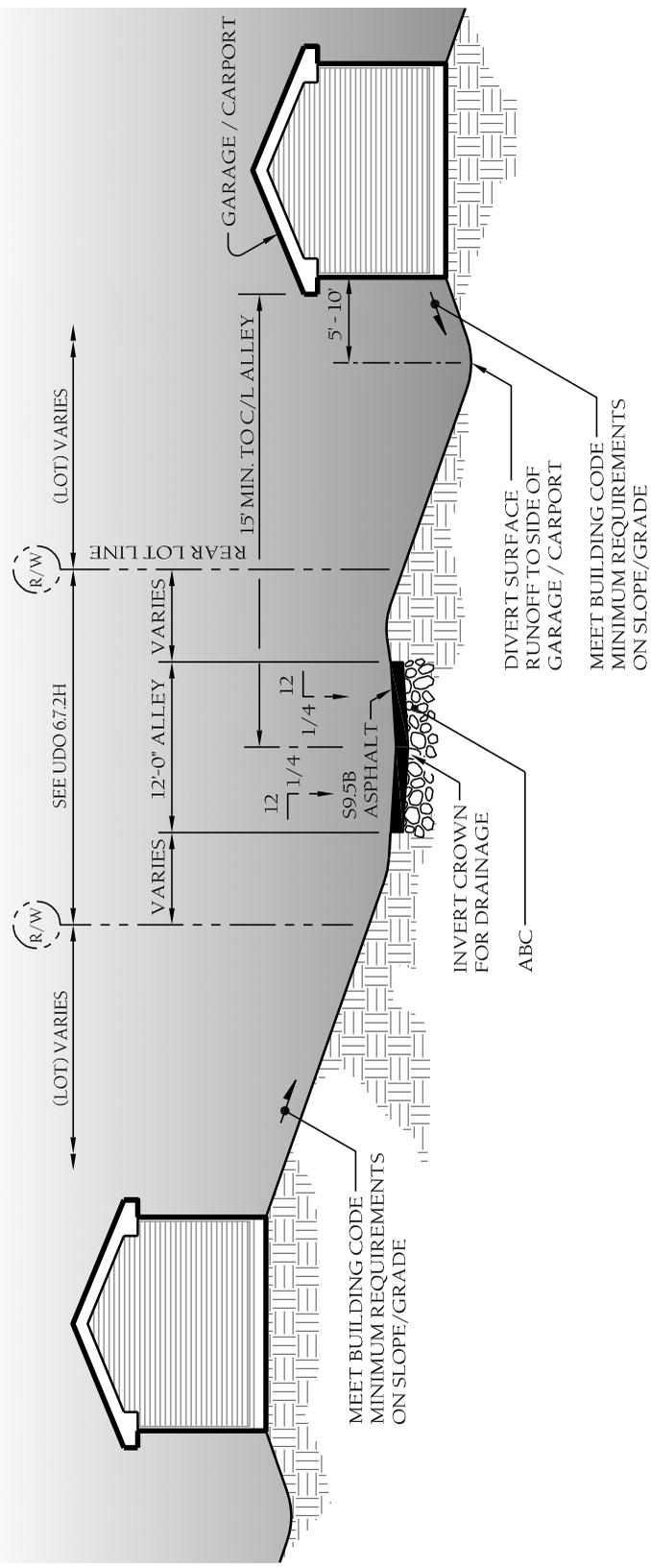


NOTES:

1. Refer to curb ramp details for requirements where sidewalks are required



TOWN of WAKE FOREST, NC	
Manual of Specifications, Standards and Design	
ISLAND ENTRANCE TO EXISTING STRIP PAVED	
Scale: Not To Scale	Detail #: 9.19
Revision Date: Feb., 2015	Sheet #: 2 of 2



NOTES:

- When so required or proposed by the subdivider, alleys shall conform to the following:
1. Property line radius at intersections.....20 ft.
 2. Minimum radius to centerline when deflection angle of more than 10 degrees occurs.....35 ft.
 3. Pavement radius at intersecting street.....20 ft.
 4. See UDO 6.7.2 for other requirements.

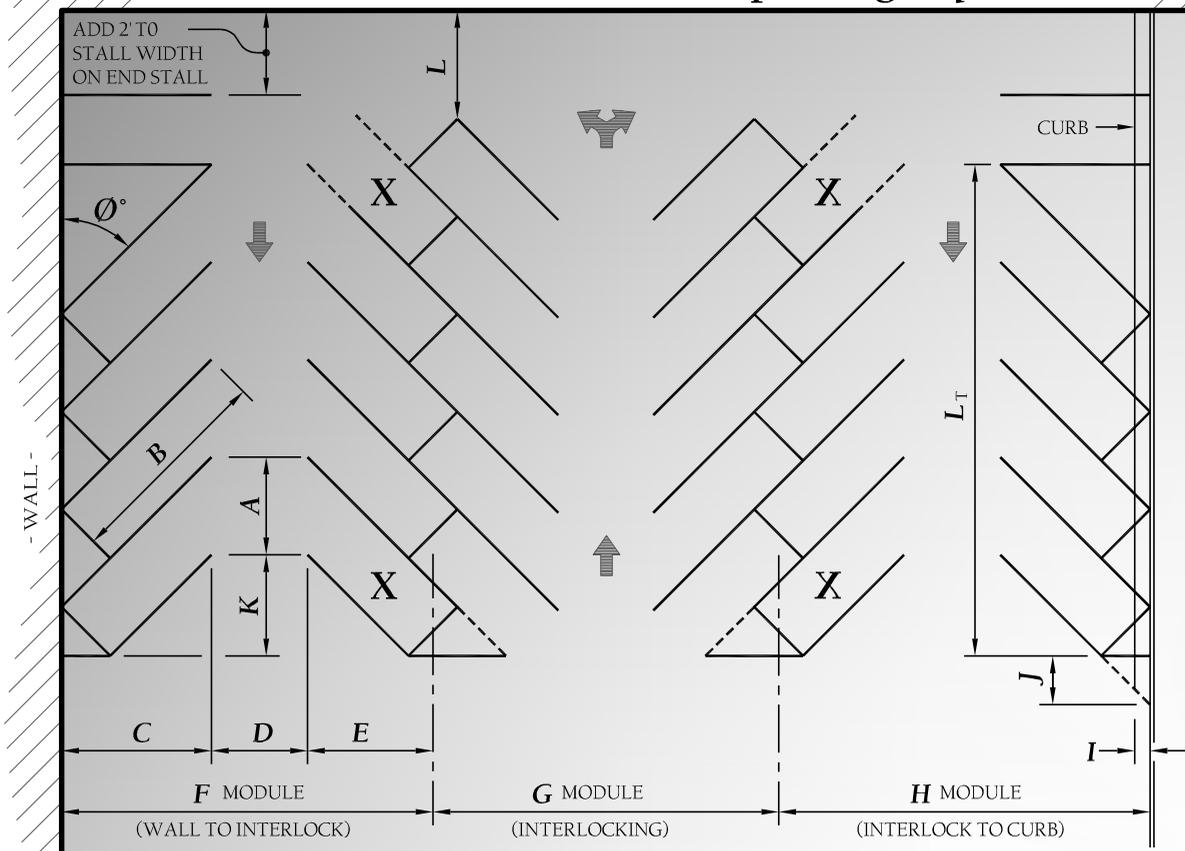


TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

TYPICAL SERVICE ALLEY DETAIL

Scale: Not To Scale	Detail #: 9.20
Revision Date: Feb., 2015	Sheet #: 1 - of 1

Note: See UDO 9.4 & 9.5 for other parking requirements.



NOTES:

$L_T =$ TOTAL LENGTH AVAILABLE

$\frac{L_T - K}{A} =$ # SPACES PER ROW

X - STALL NOT ACCESSIBLE IN CERTAIN LAYOUTS
90° MUST HAVE 2 WAY ISLES
STALL LAYOUT ELEMENTS. SOURCE:
BASED ON PARKING PRINCIPLES, SPECIAL REPORT
NO. 125, HIGHWAY RESEARCH BOARD, WASHINGTON,
D.C., 1971, P99.

PARKING LAYOUT DIMENSIONS at VARIOUS ANGLES
 (DIMENSION IN FEET)

Dimension	On Diagram	STANDARD CARS (9x18.5 STALLS)				COMPACT CARS (8x16 STALLS)			
		ANGLE θ°				ANGLE θ°			
		45°	60°	75°	90°	45°	60°	75°	90°
Stall width, parallel to aisle	A	12.7	10.4	9.3	9.0	11.3	9.2	8.3	8
Stall length of line	B	27.5	23.7	20.9	18.5	24.0	20.6	18.1	16
Stall depth to wall	C	19.5	20.5	20.0	18.5	17.0	17.9	17.5	16
Aisle width between stall lines	D	12.0	16.0	23.0	26.0	12.0	16.0	20.0	22
Stall depth, interlock	E	16.5	18.5	19.0	18.5	14.2	15.9	16.5	16
Module, wall to interlock	F	48.0	55.0	62.0	63.0	43.2	49.8	54.0	54
Module, interlocking	G	45.0	53.0	61.0	63.0	39.3	47.3	53.0	52
Module, interlock to curb face	H	46.0	52.5	59.5	60.5	40.7	48.0	52.0	50
Bumper overhang (typical)	I	2.0	2.3	2.5	2.5	1.5	1.8	2.0	2
Offset	J	6.4	2.6	0.6	0.0	5.7	2.3	0.6	0
Setback	K	13.1	9.3	4.8	0.0	11.3	8.0	4.1	0
Cross aisle, one-way	L	14.0	14.0	14.0	14.0	13.0	13.0	13.0	13
Cross aisle, two-way	-	24.0	24.0	24.0	24.0	20.0	20.0	20.0	20



TOWN of WAKE FOREST, NC
 Manual of Specifications, Standards and Design

PARKING STALL LAYOUT

Scale: Not To Scale

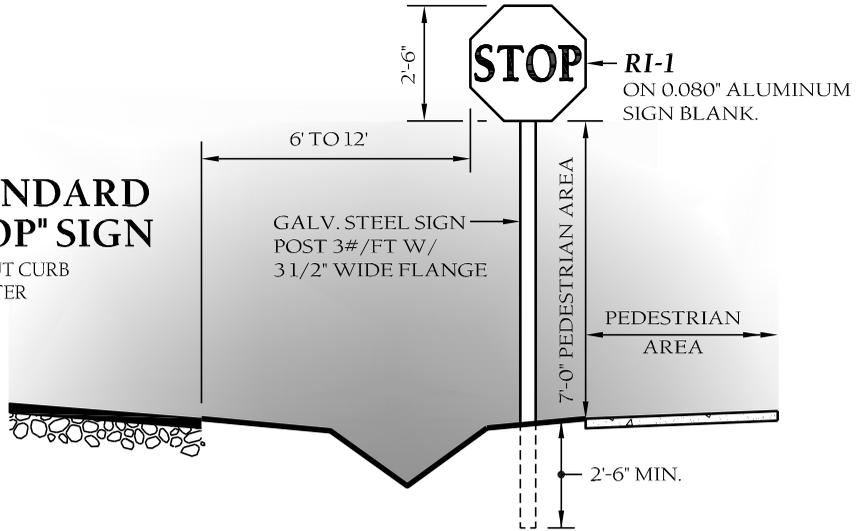
Detail #: 9.21

Revision Date: Feb., 2015

Sheet #: 1 of 1

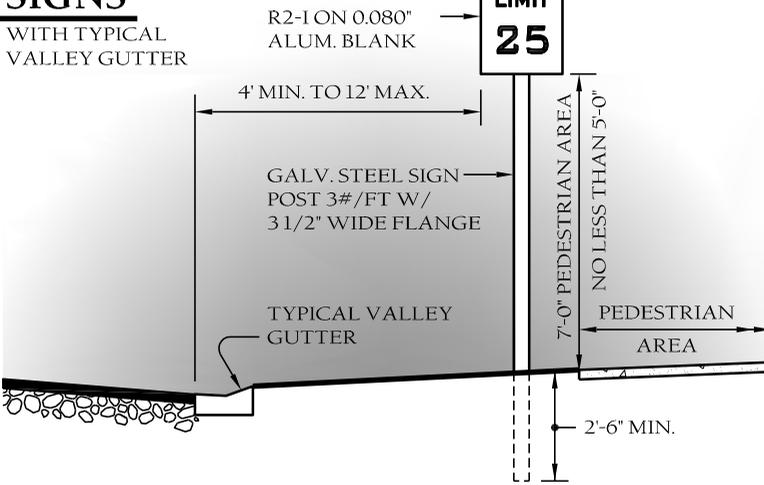
STANDARD "STOP" SIGN

WITHOUT CURB OR GUTTER



OTHER REGULATORY SIGNS

WITH TYPICAL VALLEY GUTTER

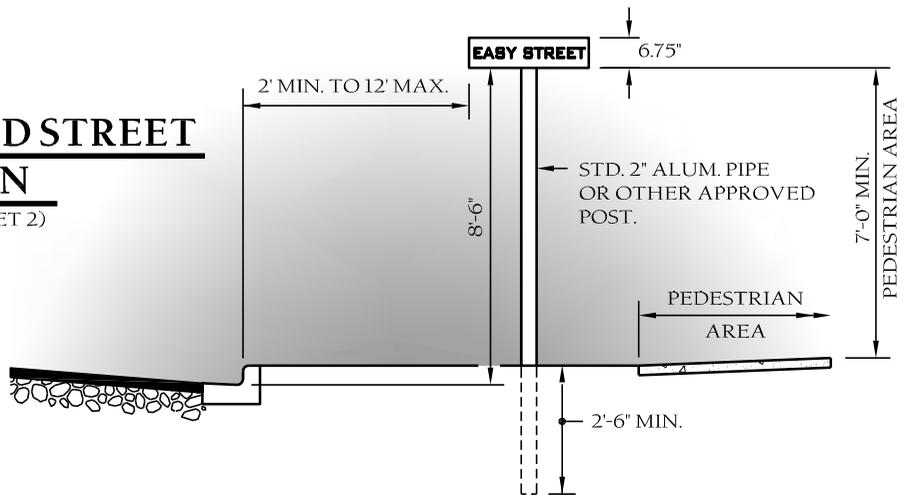


NOTES:

1. Street name signs shall be a minimum of extruded aluminum blades. See sheet 2.
2. All reflective signs shall be made of engineering grade or high intensity grade reflective sheeting or approved equivalent.
3. All signs placed in right-of-way will be approved by town's engineer.
4. Erect street signs plumb.
5. Developer shall be responsible for furnishing & erecting all street name & regulatory signs.

STANDARD STREET NAME SIGN

(SEE NOTES & SHEET 2)
WITH CONCRETE CURB & GUTTER



TOWN of WAKE FOREST, NC

Manual of Specifications, Standards and Design

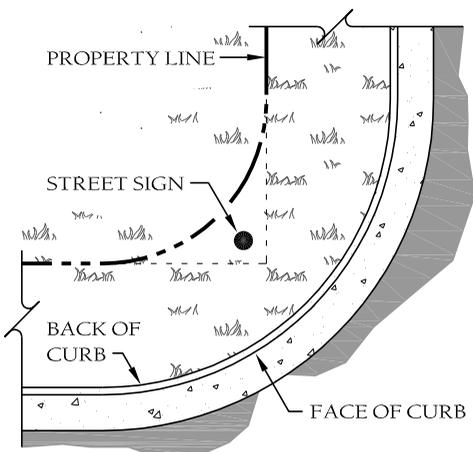
STANDARD SIGN INSTALLATION DETAIL

Scale:
Not To Scale

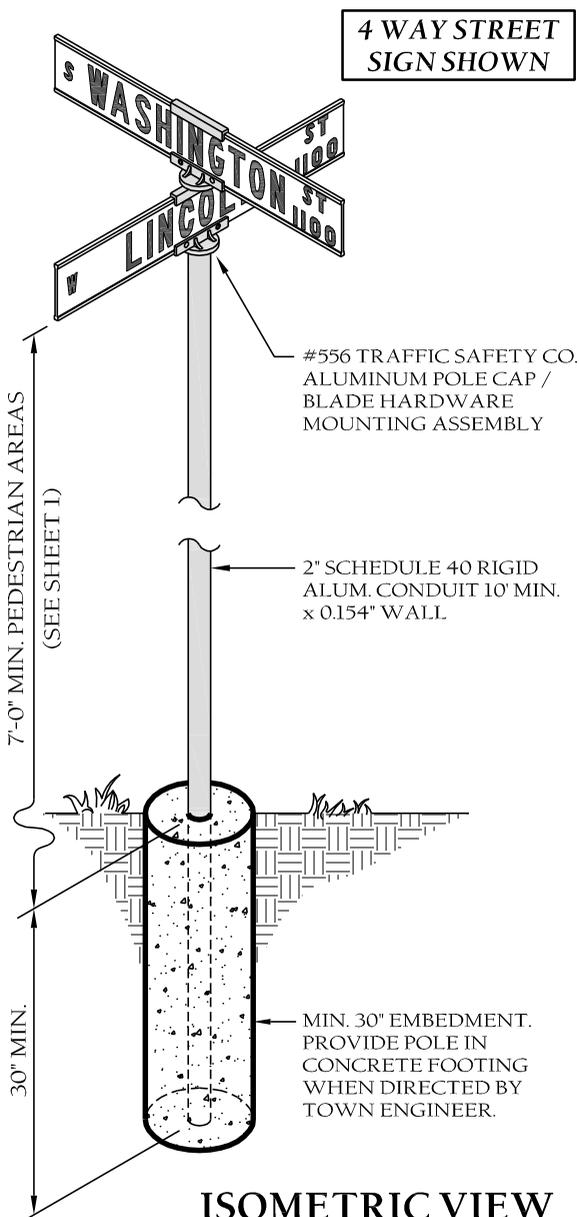
Detail #:
9.22

Revision Date:
Feb., 2015

Sheet #:
1 of 2



PLAN VIEW



ISOMETRIC VIEW

NOTES:

1. 4" letters to be series "C" (FHWA)
2. 2" letters to be series "C" (FHWA)
All letters and background materials to be "Scotchlite" or an approved equal and meet I.T.E. Specifications on reflectivity.
3. Sign appearance shall be green background with white letters.
4. Fabricate sign as follows: Base sheeting shall be 3-M 3930 Hi-Intensity Prismatic (or equal). Overlay letter mask using 3-M I177-C translucent EC green film. (Note: 3-M DG3 material acceptable alternative)
5. Aluminum sign blank materials to be 0.080" thick with extruded aluminum blades.

RECOMMENDED INSTALLATION

1. Street name sign to be one-foot from property line if said lines were extended.
2. Sign blades not to extend past back of curb into road.
3. Sign location to be placed on low side of the town engineer.
4. Any exceptions to be approved by the Town Engineer.
5. Developer responsible for installation of all street signs.



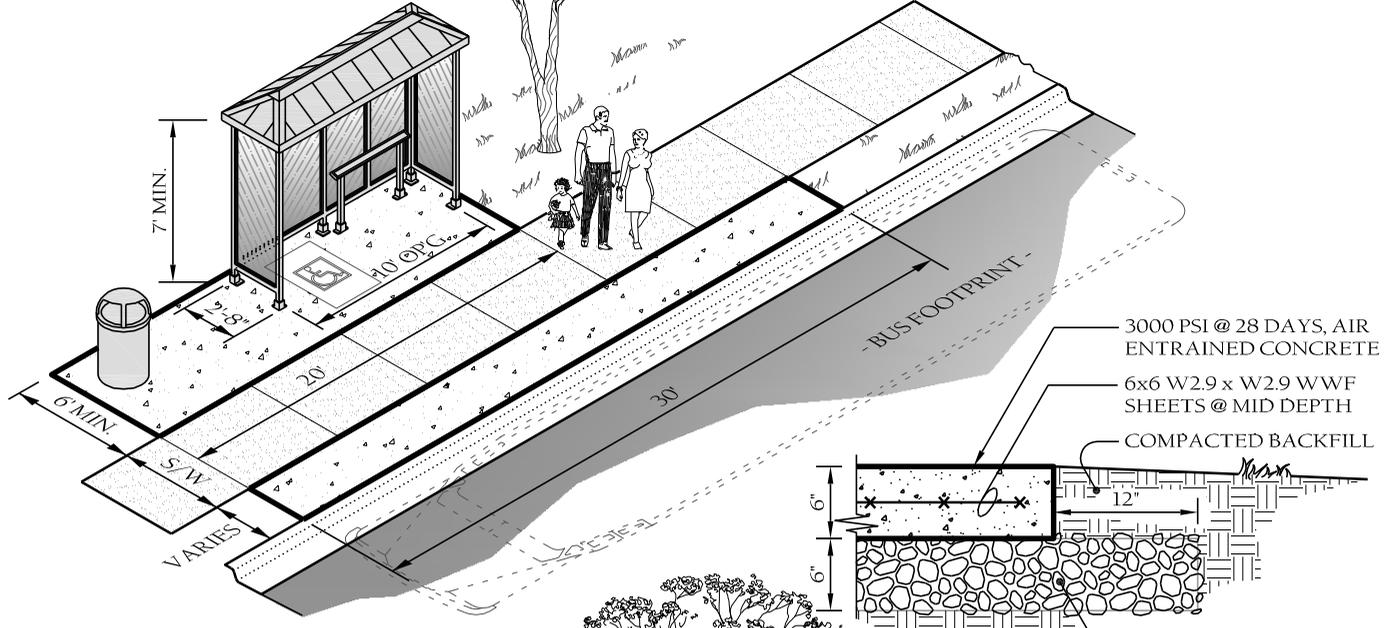
TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

RESIDENTIAL STREET NAME SIGNS
6 3/4" SIGN HEIGHT

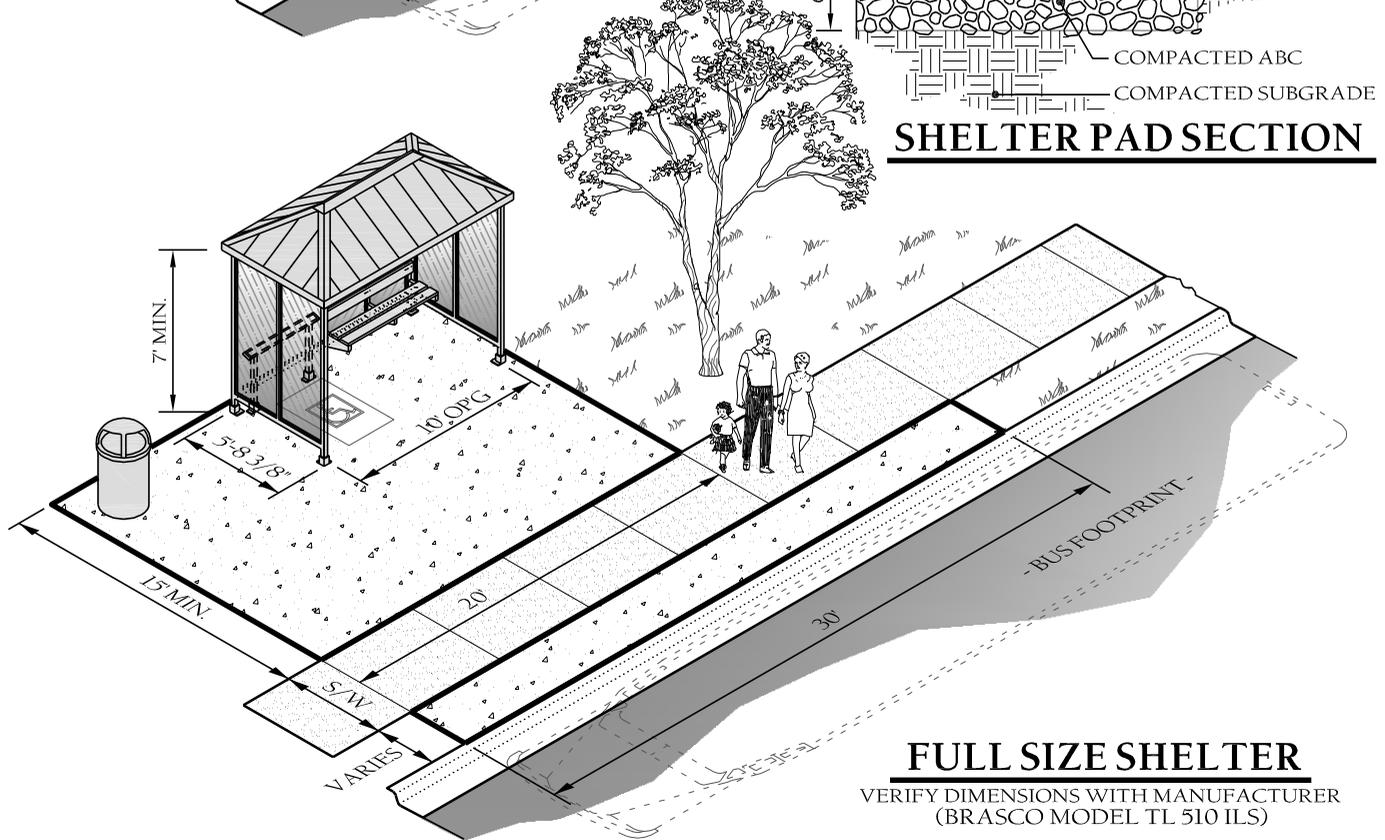
Scale: Not To Scale	Detail #: 9.22
Revision Date: Feb., 2015	Sheet #: 2 - of 2

SLIMLINE SHELTER

VERIFY DIMENSIONS WITH MANUFACTURER
(BRASCO MODEL TL 510 C)



SHELTER PAD SECTION



FULL SIZE SHELTER

VERIFY DIMENSIONS WITH MANUFACTURER
(BRASCO MODEL TL 510 ILS)

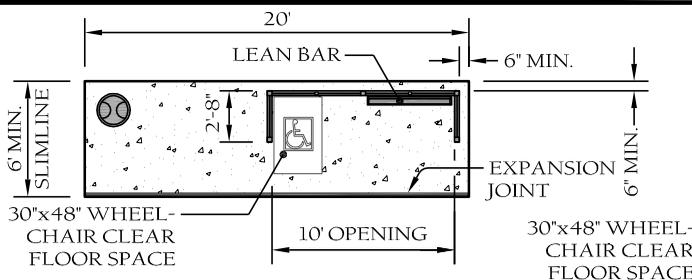


TOWN of WAKE FOREST, NC

Manual of Specifications, Standards and Design

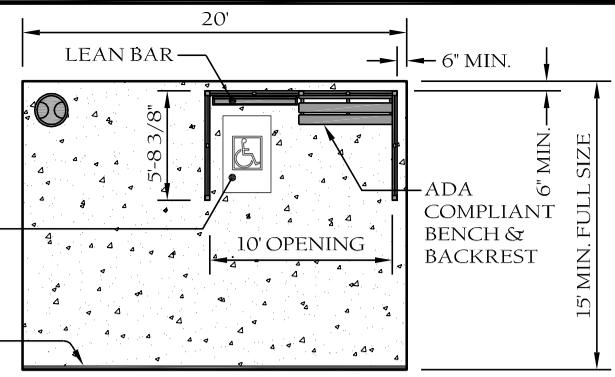
BUS SHELTER DETAILS

Scale: Not To Scale	Detail #: 9.25
Revision Date: Feb., 2015	Sheet #: 1 of 3



SLIMLINE SHELTER

VERIFY DIMENSIONS WITH MANUFACTURER



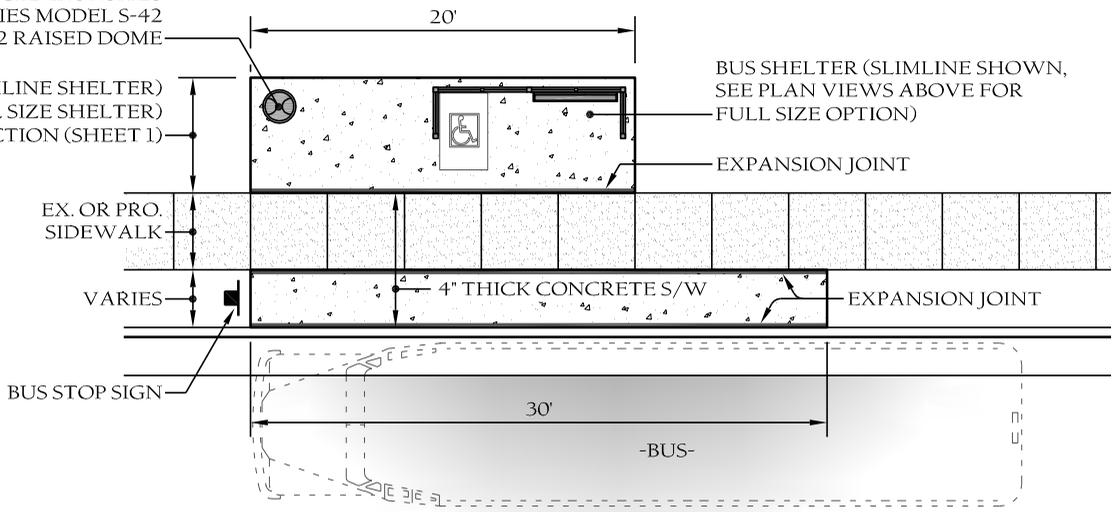
FULL SIZE SHELTER

VERIFY DIMENSIONS WITH MANUFACTURER

TRASH RECEPTACLE. IRONSITES BETHESDA R SERIES MODEL S-42 WITH S-2 RAISED DOME

6" MIN. (SLIMLINE SHELTER)
15" MIN. (FULL SIZE SHELTER)
SEE CONC. PAD SECTION (SHEET 1)

BUS SHELTER (SLIMLINE SHOWN, SEE PLAN VIEWS ABOVE FOR FULL SIZE OPTION)



SHELTER LAYOUT WITH EXISTING SIDEWALK

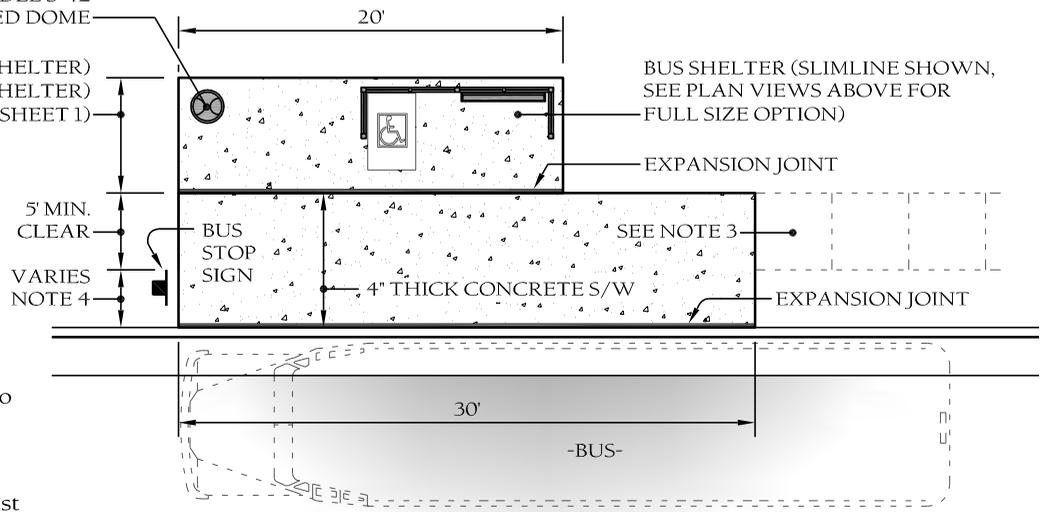
TRASH RECEPTACLE. IRONSITES BETHESDA R SERIES MODEL S-42 WITH S-2 RAISED DOME

6" MIN. (SLIMLINE SHELTER)
15" MIN. (FULL SIZE SHELTER)
SEE CONC. PAD SECTION (SHEET 1)

BUS SHELTER (SLIMLINE SHOWN, SEE PLAN VIEWS ABOVE FOR FULL SIZE OPTION)

NOTES:

1. Install column base(s) 6" from edge of concrete pad, typical unless otherwise specified.
2. Install bench on opposite side of lean bar.
3. If no sidewalk currently exists, provide sidewalk to nearest ADA accessible intersection or driveway with appropriate ramps.
4. Bus stop / shelter pad must be clear of utility poles, fire hydrants & other similar obstacles.
5. See UDO 6.7.2.



SHELTER LAYOUT WITHOUT EXISTING SIDEWALK

TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

BUS SHELTER
DETAILS



TOWN of WAKE FOREST

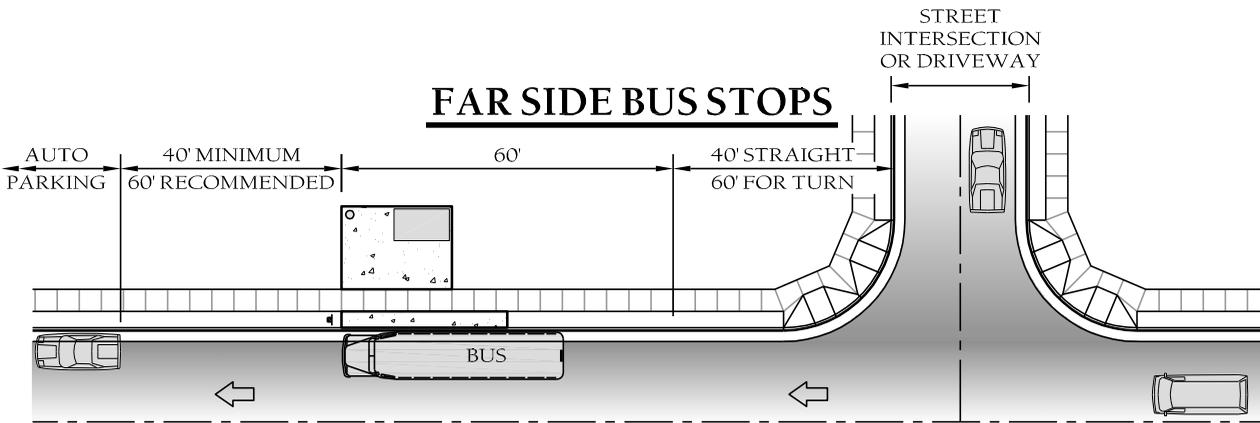
Scale:
Not To Scale

Detail #:
9.25

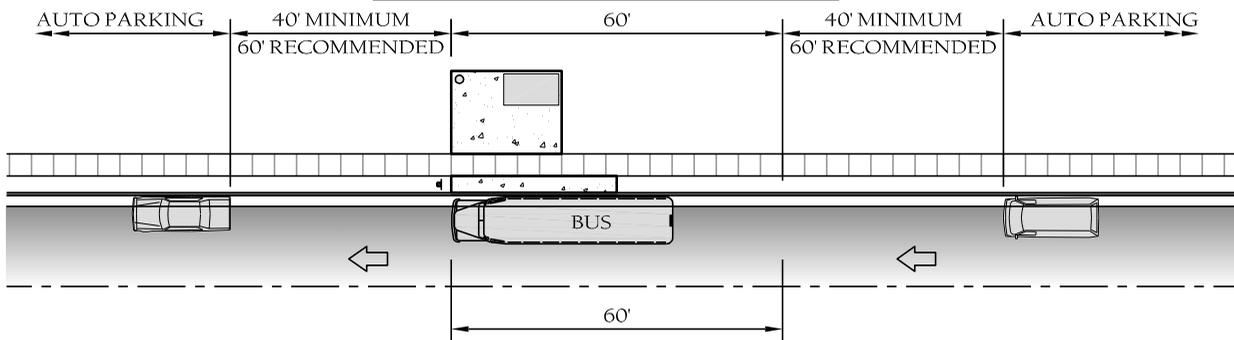
Revision Date:
Feb., 2015

Sheet #:
2 of 2

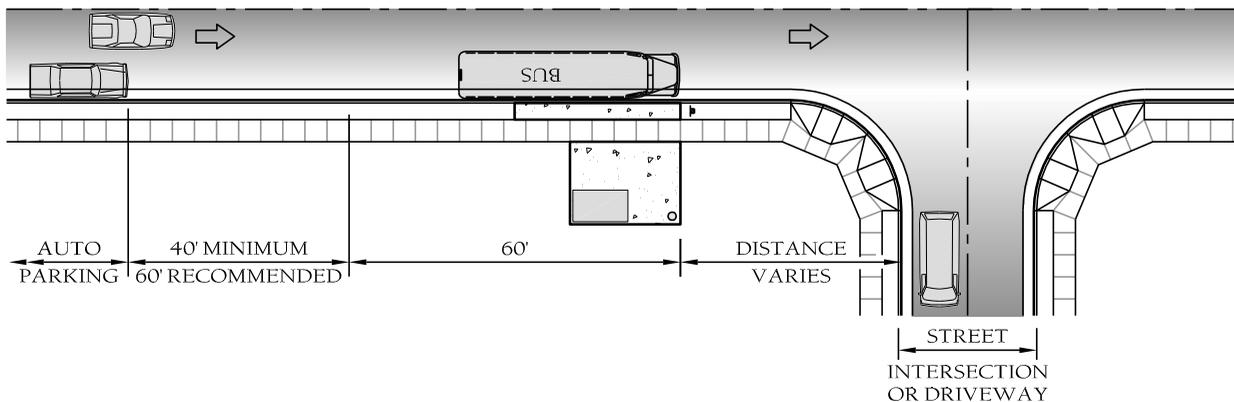
FAR SIDE BUS STOPS



MID BLOCK BUS STOPS



NEAR SIDE BUS STOPS



TOWN of WAKE FOREST

TOWN of WAKE FOREST, NC

Manual of Specifications, Standards and Design

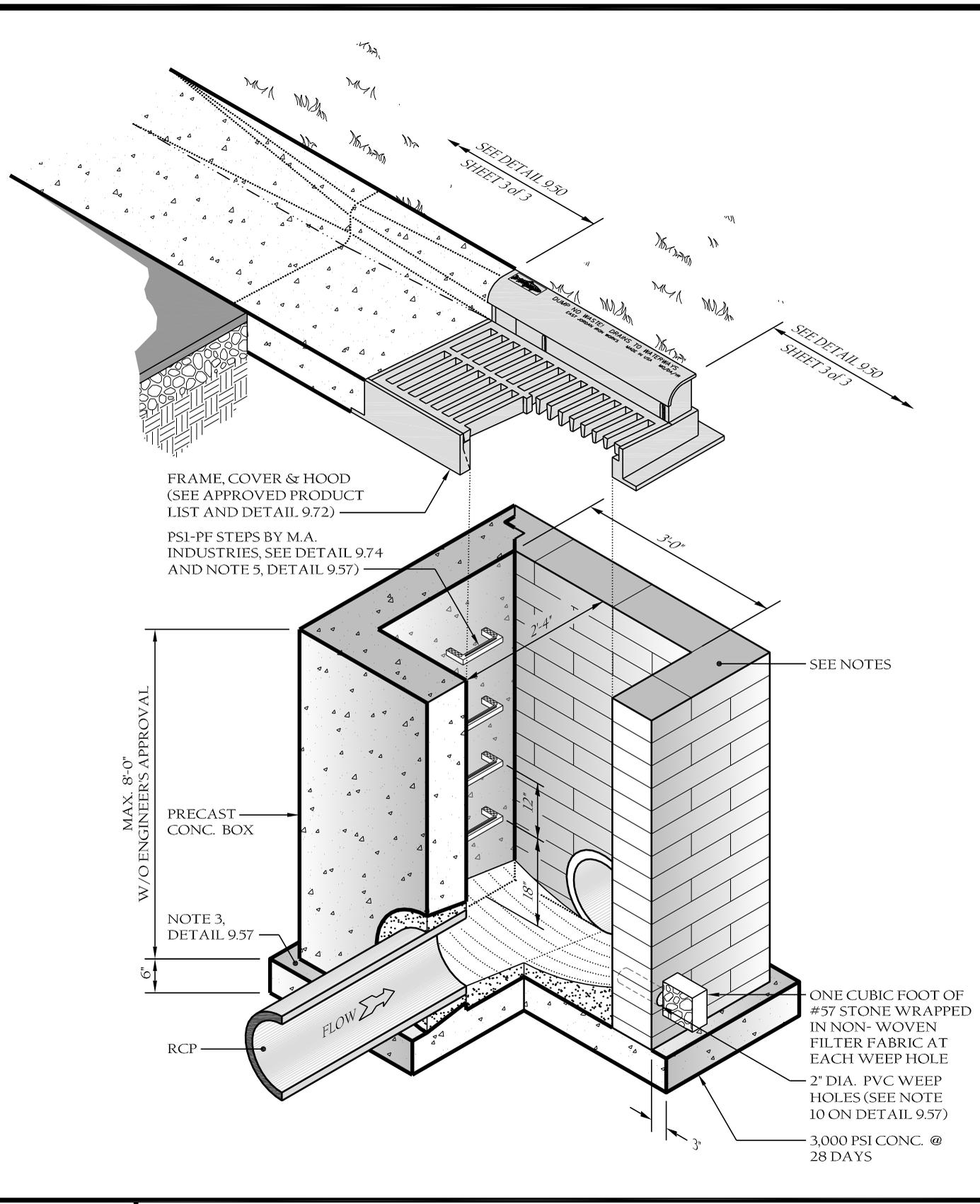
BUS SHELTER DETAILS

Scale:
Not To Scale

Detail #:
9.25

Revision Date:
Feb., 2015

Sheet #:
2 - of 2

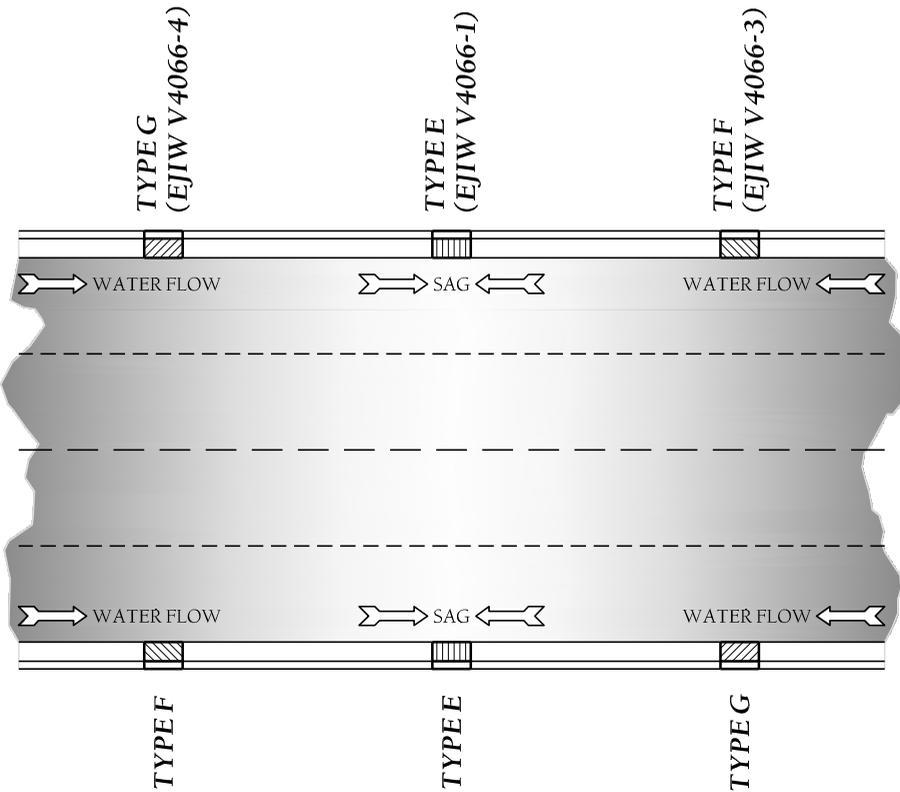
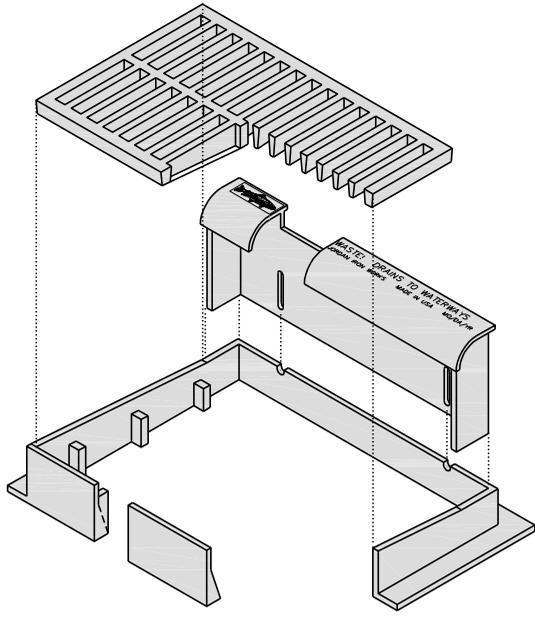


TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

STD. C&G INLET W/HOOD
DETAIL

Scale: Not To Scale	Detail #: 9.50
Revision Date: Feb., 2015	Sheet #: 1 - of 2

- SEE DETAIL 9.72 AND PRE-APPROVED PRODUCT LIST. (NCDOT DETAIL 840.03 - SHOWN WITH TYPE "E" GRATE) HEAVY DUTY FRAME, COVER & HOOD
- BIKE-FRIENDLY GRATES ARE REQUIRED AT BIKE/PEDESTRIAN CORRIDORS.



DETAIL SHOWING TYPES OF GRATES TO BE USED ACCORDING TO WATER FLOW

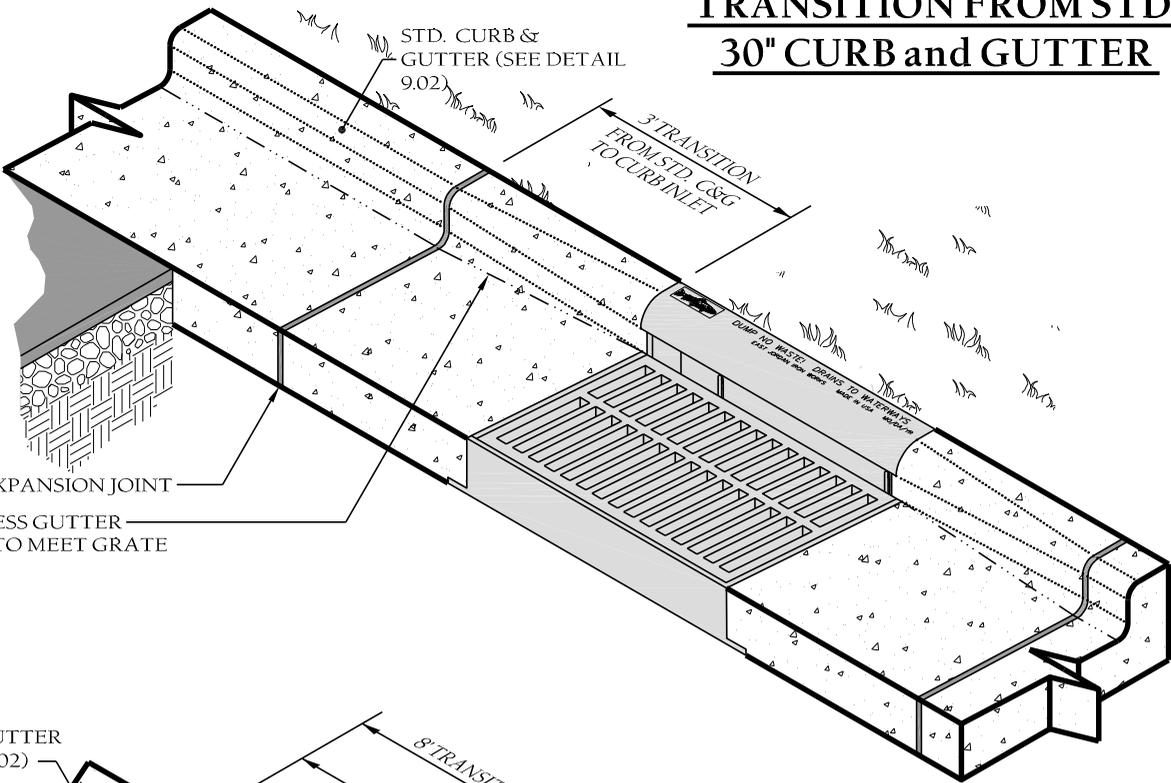


TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

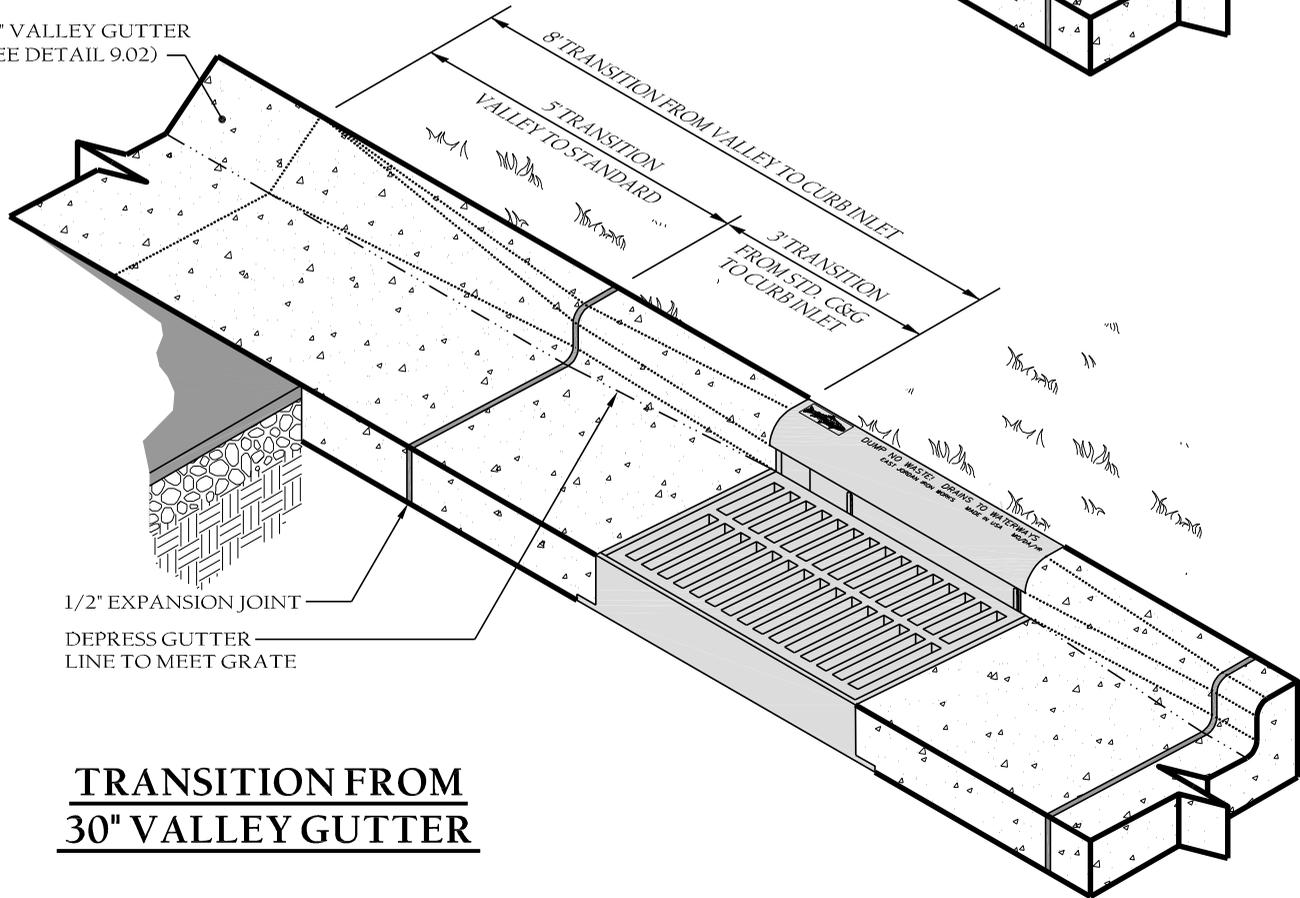
STD. C&G INLET W/HOOD
DETAIL

Scale: Not To Scale	Detail #: 9.50
Revision Date: Feb., 2015	Sheet #: 2 of 2

**TRANSITION FROM STD.
30" CURB and GUTTER**



30" VALLEY GUTTER
(SEE DETAIL 9.02)



**TRANSITION FROM
30" VALLEY GUTTER**



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

**STD. C&G INLET W/HOOD
DETAIL**

Scale:
Not To Scale

Detail #:
9.50

Revision Date:
Feb., 2015

Sheet #:
? - f ?

2x3 DROP INLET
SEE PRE-APPROVED PRODUCTS LIST
AND DETAIL 9.71 FOR GRATE AND
FRAME ASSEMBLY

MORTAR COLLAR

PSI-PF STEPS BY M.A.
INDUSTRIES, SEE DETAIL 9.74
AND NOTE 5, DETAIL 9.57)

ONE CUBIC FOOT OF
#57 STONE WRAPPED
IN NON- WOVEN
FILTER FABRIC AT
EACH WEEP HOLE

2" DIA. PVC WEEP
HOLES (SEE NOTE
10 ON DETAIL 9.57)

SPRINGLINE
3'-10"

FORMED
INVERT

RCP

FLOW

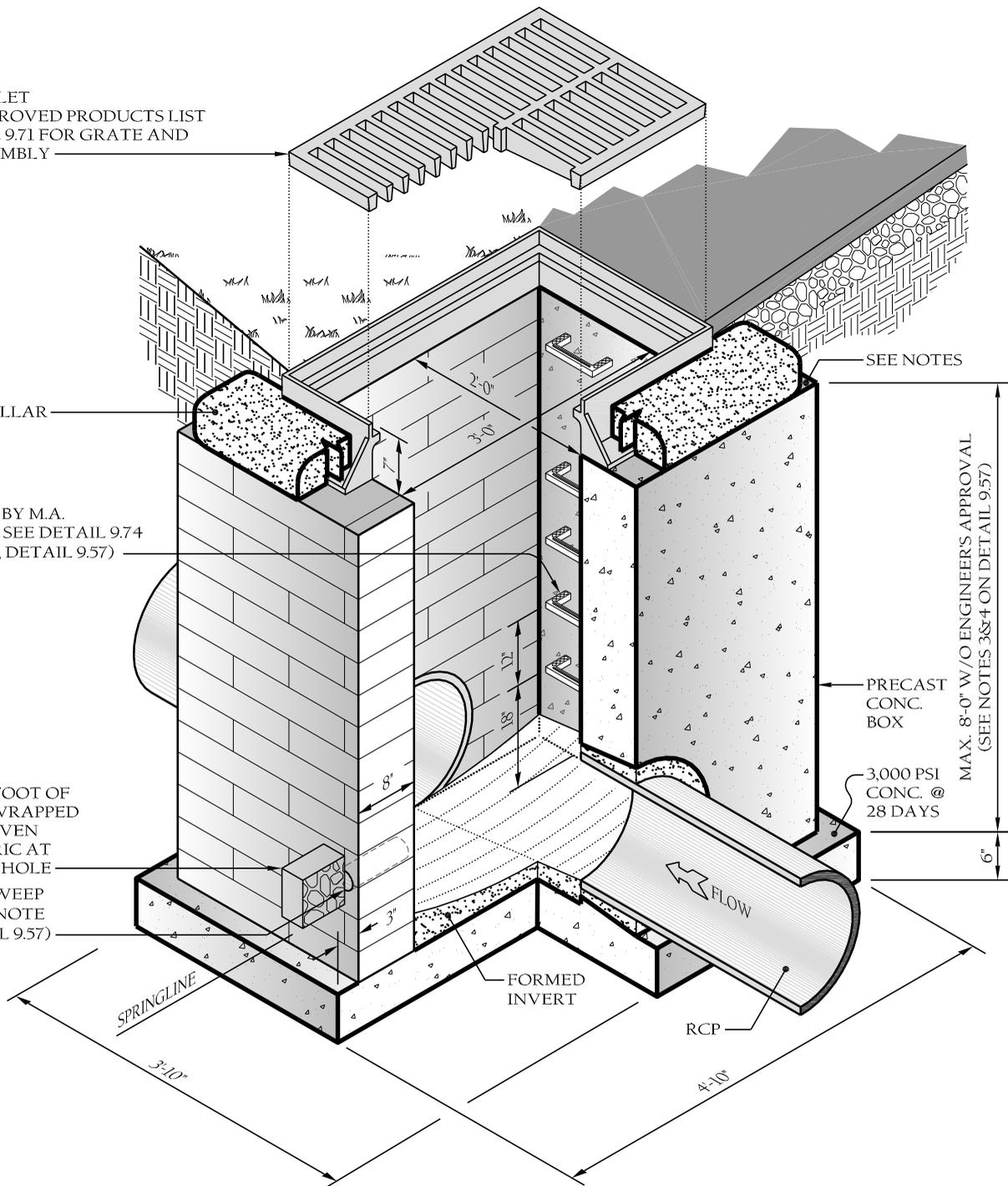
SEE NOTES

PRECAST
CONC.
BOX

3,000 PSI
CONC. @
28 DAYS

MAX. 8'-0" W/O ENGINEER'S APPROVAL
(SEE NOTES 3&4 ON DETAIL 9.57)

6"



TOWN of
WAKE FOREST

TOWN of WAKE FOREST, NC

Manual of Specifications, Standards and Design

STANDARD 2x3 CATCH BASIN

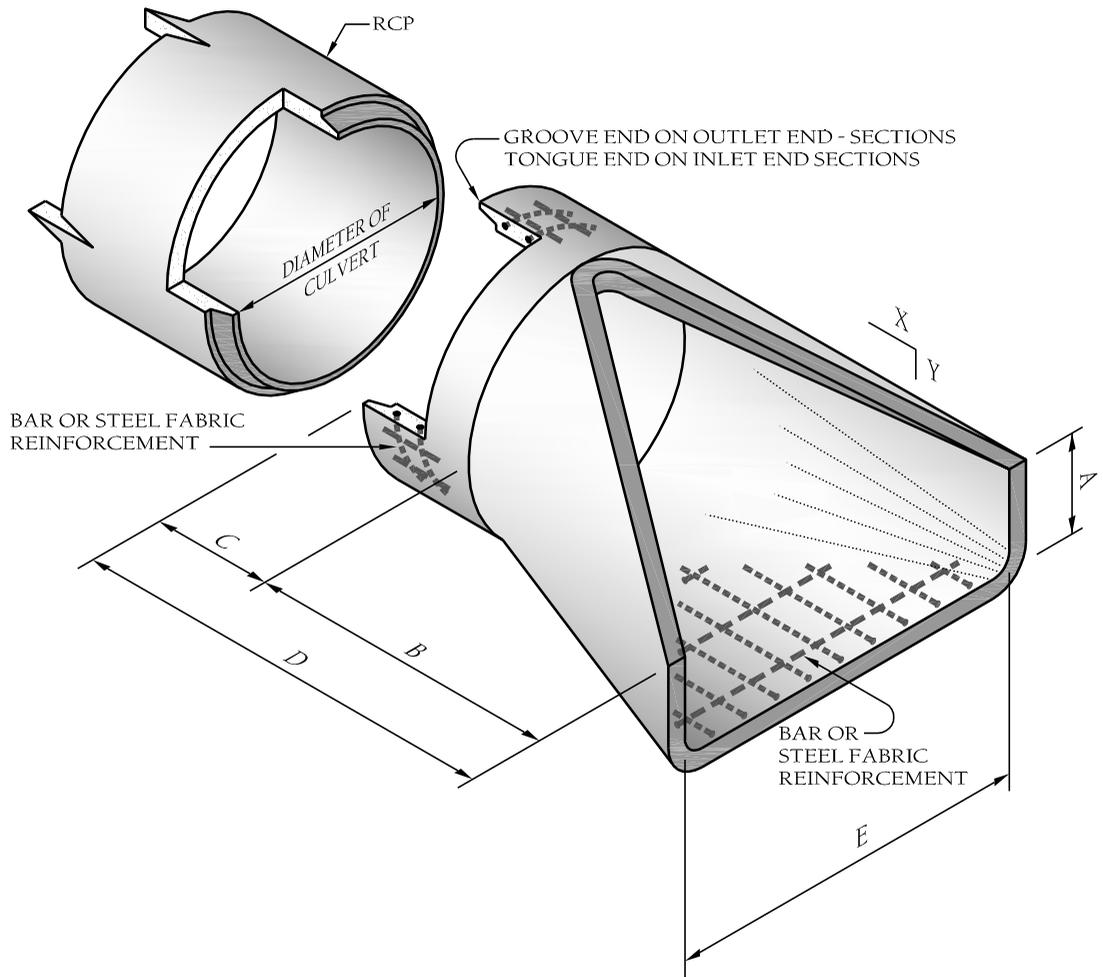
Scale:
Not To Scale

Detail #:
9.51

Revision Date:
Feb., 2015

Sheet #:
1 - of 1

END SECTION DIMENSIONS						
DIA.	A	B	C	D	E	X:Y
15"	6"	2'-3"	3'-10"	6'-1"	2'-8"	2.4:1
18"	9"	2'-3"	3'-10"	6'-1"	3'-0"	2.4:1
24"	10"	3'-8"	2'-6"	6'-2"	4'-0"	2.3:1
30"	1'-0"	4'-6"	1'-8"	6'-2"	5'-0"	2.5:1
36"	1'-3"	5'-3"	2'-11"	8'-2"	6'-0"	2.5:1
42"	1'-9"	5'-3"	2'-11"	8'-2"	6'-6"	2.5:1



NOTES:

1. Design Of End-section Shall Conform To Standard Reinforced Sectional Concrete Culvert Pipe.
2. Any Twin Barrel System Greater Than 42" Rcp Requires a headwall.
3. Any System Of More Than 2 Pipes Requires a headwall.
4. See NCDOT "Roadway Standard Drawings" for headwall construction details.
5. See Erosion & Sedimentation Manual for dissipation pad design requirements.



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

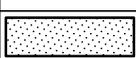
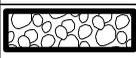
STD. FLARED END SECTIONS
DESIGN AID DETAIL

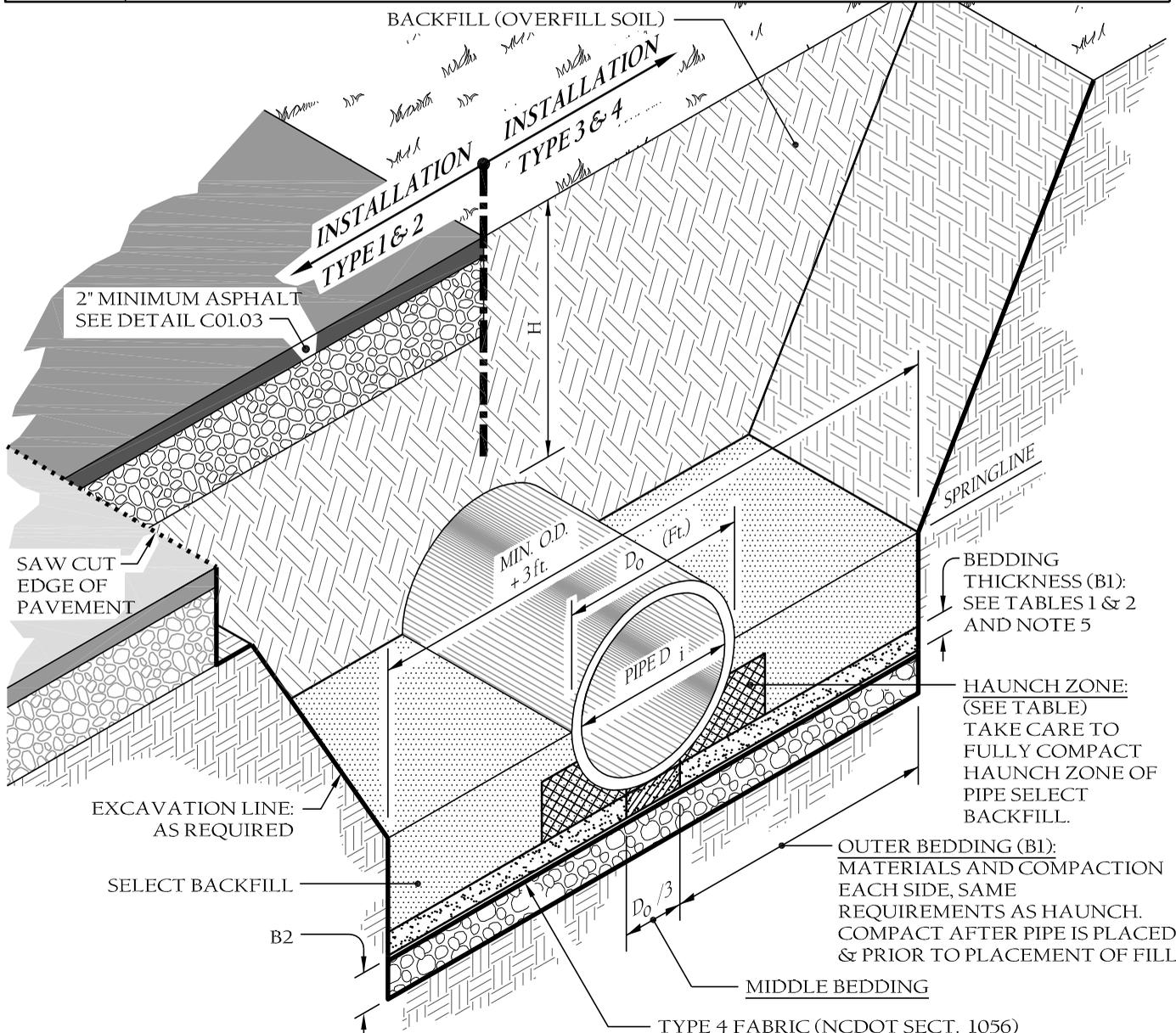
Scale:
Not To Scale

Detail #:
9.52

Revision Date:
Feb., 2015

Sheet #:
1 - f 1

H=	The fill height measured vertically at any point along the pipe from the top of the pipe to the top of the embankment at that point. Do not operate heavy equipment over any pipe culvert until the pipe culvert has been properly backfilled and covered with at least 3 feet of approved material.
	Undisturbed earth material
	Bedding (Middle and Outer): Loosely placed select backfill material meeting NCDOT Class II, Type 1 (washed or unwashed crushed stone screenings) or Class III, Type 1 (NCDOT 2S or 2MS fine aggregate). Leave section directly beneath pipe uncompacted as pipe seating and backfill will accomplish compaction.
	Select Backfill (Below springline): Select backfill material meeting NCDOT Class II, Types 1 or 2 or NCDOT Class III, Types 1 or 2.
	Backfill: Approved suitable local compactable material above springline of pipe meeting Town of Wake Forest specifications.
	Rock Foundation or Unsuitable Material Foundation: Select material NCDOT Class V (#78M stone) or NCDOT Class VI (#57 stone) for foundation conditioning. Encapsulate with engineering fabric as directed by the Engineer; Type 4 soil stabilization fabric (NCDOT Table 1056-1). Overlap all transverse and longitudinal joints in fabric at least 18 inches. Maintain the pipe foundation in a dry condition.



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

**STORM DRAIN
PIPE INSTALLATION**

Scale: Not To Scale	Detail #: 9.53
Revision Date: Feb., 2015	Sheet #: 1 - of 2

Table 1 Equivalent USCS ^a and AASHTO Soil Classifications for SIDD ^b Soil Designations		
SIDD	USCS	NCDOT/AASHTO
Gravelly Sand (Category I)	SW, SP, GW, GP	- NCDOT Class II-Type I (crushed stone screenings), LL < 30; PI ≤ 6. - NCDOT Class III, Type 1 (2S or 2MS), LL < 30; PI ≤ 6.
Sandy Silt (Category II)	GM, SM, Also GC, SC with less than 20% passing #200 sieve	- NCDOT Class II Type 1 (crushed stone screenings) and Class II, Type 2 (AASHTO M145 for A-2-4 with maximum PI of 6, A-4 w/ max 45% passing No. 200 Sieve and a maximum PI of 6) - NCDOT Class III, Type 1 (2S or 2MS) or Class III, Type 2 (AASHTO M145 for soil classification A-1 or A-3)
Silty Clay (Category III)	CL, MH, GC, SC	A5, A6

^a Unified Soil Classification System

^b Standard Installations Direct Design

Table 2 Standard Installations Soils and Minimum Compaction Requirements				
Installation Type	Bedding Thickness	Outer Bedding (B1) Note 5 (% compaction/Category)	Haunch Zone & Select Backfill Area (% compaction/Category)	Location
Type 1	B1 = Di/6 (6" min) B2 = If Rock foundation or over unsuitable foundation, 1/2"/ft of 'H', 12" min/24" max	95% Category I	90% Category I, 95% Category II	Paved Areas with 2' or less bury
Type 2	B1 = Di/6 (6" min) B2 = If Rock foundation or over unsuitable foundation, 1/2"/ft of 'H', 12" min/24" max	90% Category I	85% Category I, 90% Category II	Paved Areas with greater than 2' of bury
Type 3	B1 = Di/6 (6" min) B2 = If Rock foundation or over unsuitable foundation, 1/2"/ft of 'H', 12" min/24" max	85% Category I 90% Category II	85% Category I, 90% Category II, or 95% Category III	In R/W outside of Pavement
Type 4	B1 = Di/6 (6" min) B2 = If Rock foundation or over unsuitable foundation, 1/2"/ft of 'H', 12" min/24" max	No Compaction required, except if Category III, use 85% Category III	No Compaction required, except if Category III, use 85% Category III	Natural Areas

NOTES:

1. Compaction and soil symbols - i.e. "95% Category I" - refers to Category I soil material with minimum standard Proctor compaction of 95%.
2. Soil in the outer bedding, haunch, and lower side zones, except under the middle 1/3 of the pipe, shall be compacted to at least the same compaction as the majority of the soil in the overfill (backfill) zone.
3. For trenches, the top elevation shall be no lower than 0.1H below finished grade or, for roadways, its top shall be no lower than an elevation of 1-foot below the bottom of the pavement base material.
4. For trenches, the width shall be wider than shown if required for adequate space to attain the specified compaction in the haunch and bedding zones.
5. Compact outer bedding after pipe is placed and prior to placement of select fill. Middle bedding is uncompacted.
6. Overfill (Backfill) soils to be placed per standard specification 02700 Storm Drainage for the applicable backfill type and bury limitations.
7. These two tables were excerpted from Design Data 9 and modified to generally conform to the NCDOT Standards as shown in Detail 300.01, Rigid Pipe in Trench Condition.

Reference Sources:

1. ACPA Design Data 9 [April, 2009] (formerly Design Data 40).
2. 2012 NCDOT Standard Specifications for Roads and Structures and NCDOT Standard Details 300.01 for Rigid Pipe, "Trench Condition."



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

**STORM DRAIN
PIPE INSTALLATION**

Scale: Not To Scale	Detail #: 9.53
Revision Date: Feb., 2015	Sheet #: 2 of 2

Fill Height Table ^a				
Inside Pipe Diameter D _i (inches)	Type 3 (Bedding) Installation (0.01 Inch Crack)		Type 4 (Bedding) Installation (0.01 Inch Crack)	
	Class III Pipe Maximum Bury H (feet)	Class IV Pipe Maximum Bury H (feet)	Class III Pipe Maximum Bury H (feet)	Class IV Pipe Maximum Bury H (feet)
15	2 min, 12 max	1 min, 20 max	3 min, 7 max	2 min, 12 max
18	2 min, 12 max	1 min, 20 max	3 min, 7 max	1 min, 13 max
24	1 min, 12 max	1 min, 20 max	2 min, 8 max	1 min, 13 max
30	1 min, 12 max	1 min, 20 max	1 min, 8 max	1 min, 13 max
36	1 min, 12 max	1 min, 20 max	1 min, 8 max	1 min, 13 max
42	1 min, 12 max	1 min, 20 max	1 min, 8 max	1 min, 13 max
48	1 min, 12 max	1 min, 19 max	1 min, 8 max	1 min, 13 max
54	1 min, 12 max	1 min, 19 max	1 min, 8 max	1 min, 13 max
60	1 min, 12 max	1 min, 19 max	1 min, 8 max	1 min, 13 max
72	1 min, 11 max	1 min, 19 max	1 min, 7 max	1 min, 13 max

Fill Height Tables Based On:

1. Y_s= 120 pcf (backfill load)
2. AASHTO HL-93 live load
3. Positive Projecting Embankment Condition (this gives conservative results in comparison to trench conditions).
4. Pipe = Reinforced Concrete Pipe meeting ASTM C76 (AASHTO M170), wall C thickness.
5. Concrete pipe should be installed in accordance with AASHTO LRFD Bridge Construction Specifications, Section 27 or ASTM C1479.

^aFill Height Tables, the portion excerpted here, was developed by the American Concrete Pipe Association (ACPA) using the indirect design method in accordance with Section 12.10.4.3 of the AASHTO LRFD Bridge Design Specification, 4th Edition, 2007 with 2008 Interim.

NOTES:

1. Greater bury depths than those shown above are achievable by either using Type 1 or 2 Installation, using Class V pipe, controlling backfill type, calculating depth using a trench condition, or by Special Design. See also Design Data 9 published by the ACPA for design methodology.
2. In lieu of calculating bury depth for other conditions, first see "LRFD Fill Height Tables for Concrete Pipe", last revised July 2009 (or later), prepared by the ACPA for other bury depth possibilities.



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

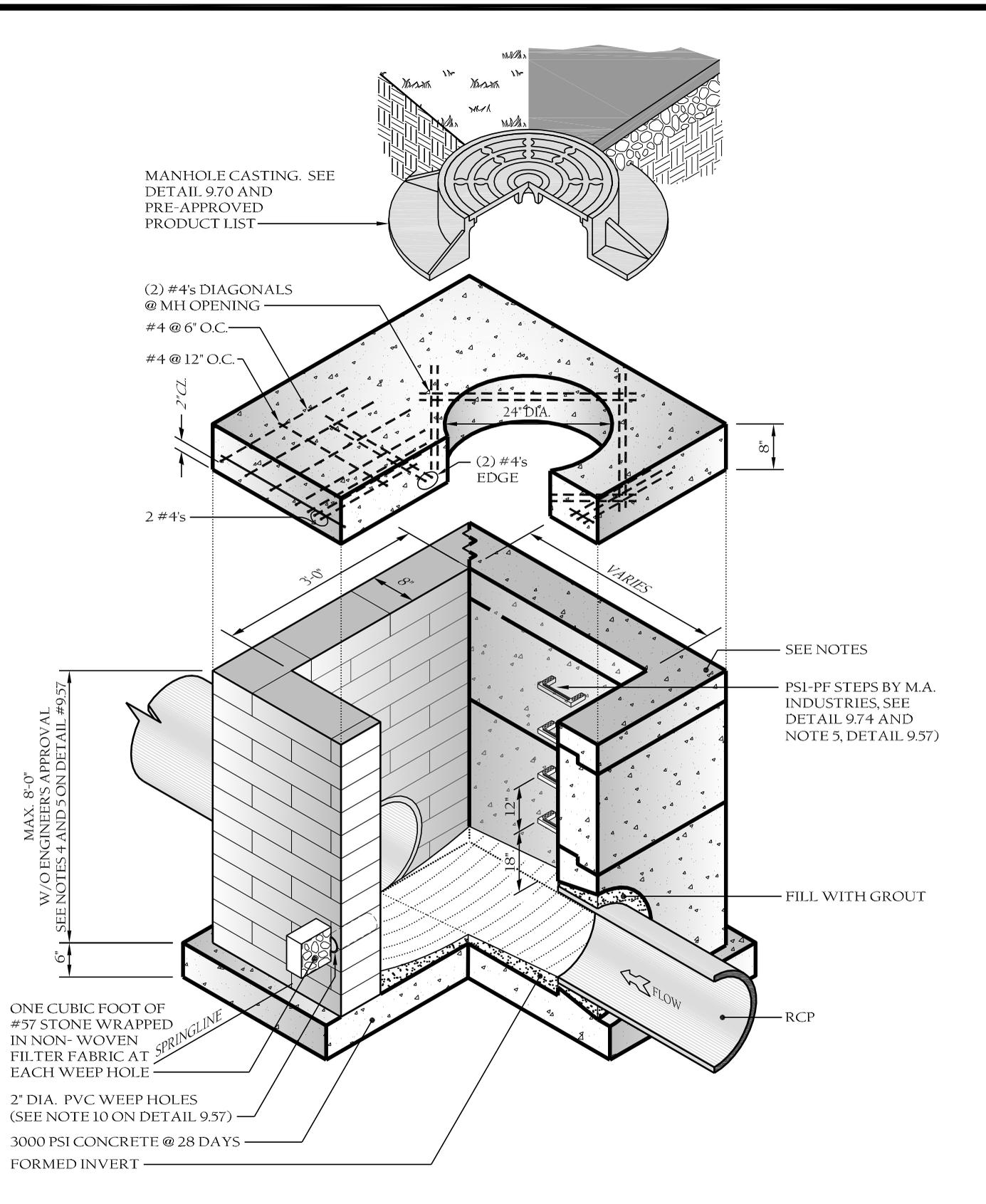
**STORM DRAIN
PIPE INSTALLATION**

Scale:
Not To Scale

Detail #:
9.53

Revision Date:
Feb., 2015

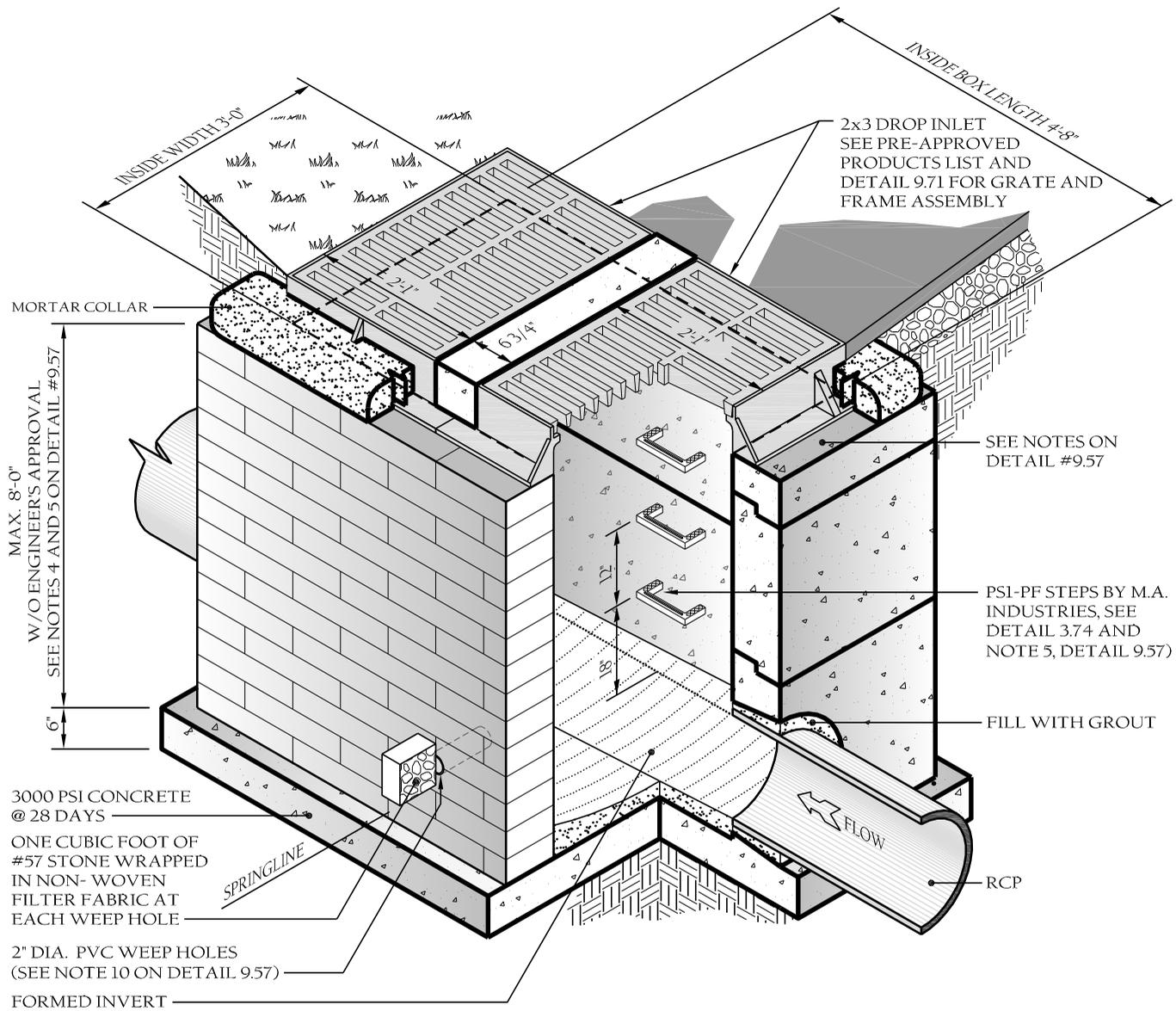
Sheet #:
2 of 2



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

STD. M.H. J.B.
VARIABLE LENGTH

Scale: Not To Scale	Detail #: 9.54
Revision Date: Feb., 2015	Sheet #: 1 - of 1



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

**STD. MULTIPLE 2' x 3'
CATCH BASIN DETAIL**

Scale: Not To Scale	Detail #: 9.55
Revision Date: Feb., 2015	Sheet #: 1 - of 1

2x3 DROP INLET
SEE PRE-APPROVED PRODUCTS LIST
AND DETAIL 9.71 FOR GRATE AND
FRAME ASSEMBLY

MORTAR COLLAR

#5 @ 6" O.C.

#5 @ 12" O.C.

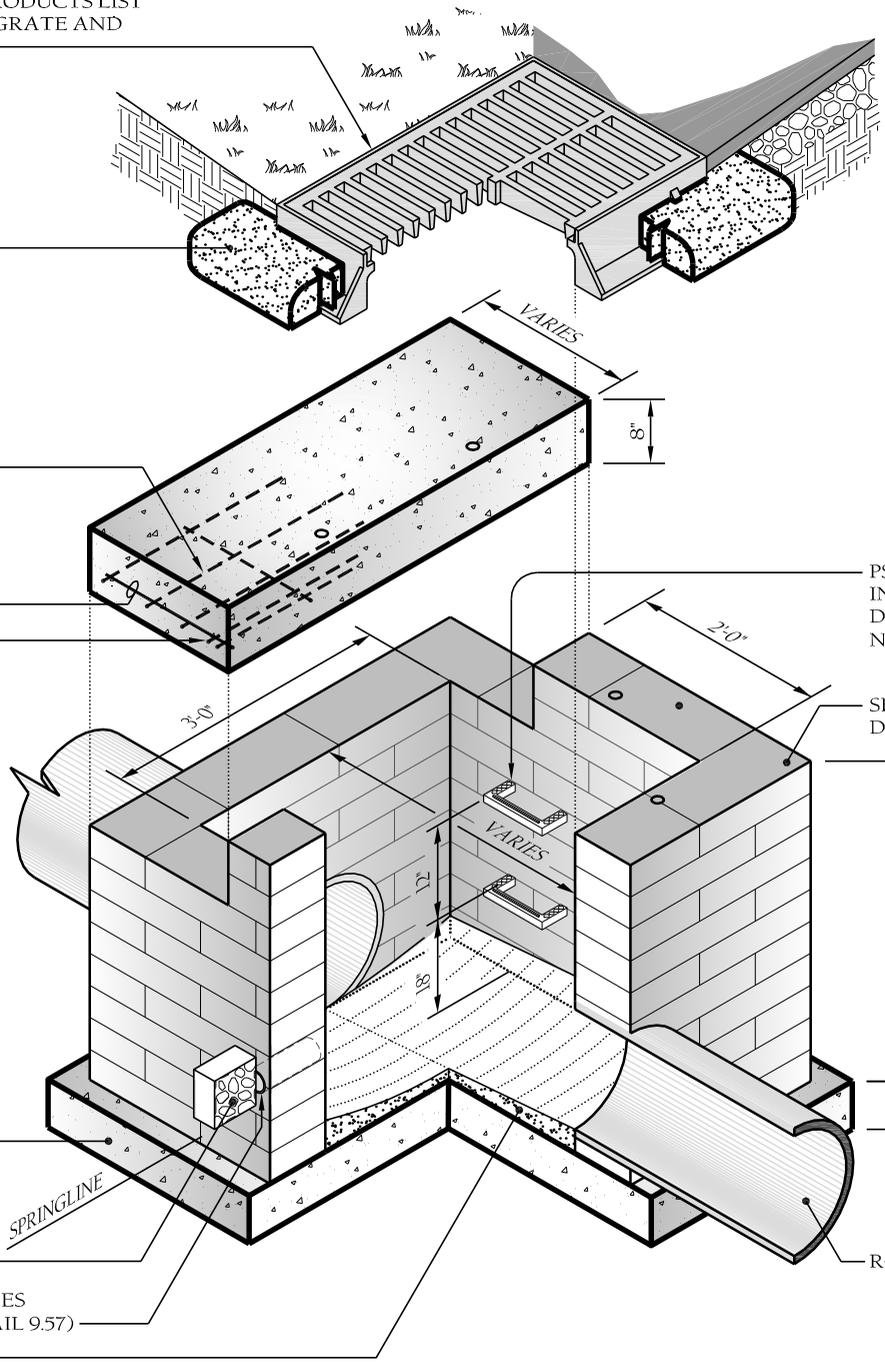
2 #5s EDGE

3000 PSI CONCRETE
@ 28 DAYS

ONE CUBIC FOOT OF
#57 STONE WRAPPED
IN NON- WOVEN
FILTER FABRIC AT
EACH WEEP HOLE

2" DIA. PVC WEEP HOLES
(SEE NOTE 10 ON DETAIL 9.57)

FORMED INVERT



PSI-PF STEPS BY M.A.
INDUSTRIES, SEE
DETAIL 9.74 AND
NOTE 5, DETAIL 9.57)

SEE NOTES ON
DETAIL #9.57

MAX. 8'-0"
W/O ENGINEER'S APPROVAL
SEE NOTES 4 AND 5
ON DETAIL #9.57

6"

RCP



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

**STD. 3' x VARIABLE LENGTH
BRICK BOX WITH 2' x 3' CATCH BASIN**

Scale:
Not To Scale

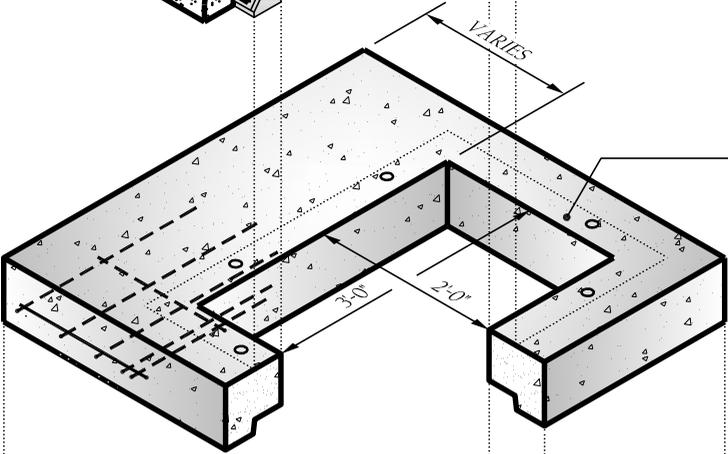
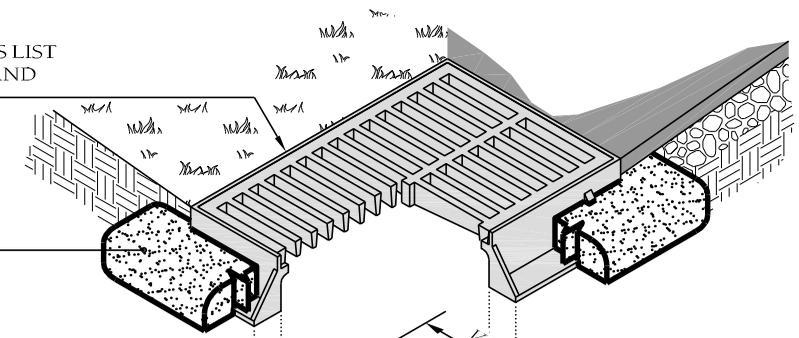
Detail #:
9.56

Revision Date:
Feb., 2015

Sheet #:
1 - of 2

2x3 DROP INLET
SEE PRE-APPROVED PRODUCTS LIST
AND DETAIL 9.71 FOR GRATE AND
FRAME ASSEMBLY

MORTAR COLLAR



NOTE II

NOTE II

PSI-PF STEPS BY M.A. INDUSTRIES, SEE DETAIL 9.74 AND NOTE 5, DETAIL 9.57

SEE NOTES ON DETAIL #9.57

NOTE II

PRECAST BOX

3000 PSI CONCRETE @ 28 DAYS

ONE CUBIC FOOT OF #57 STONE WRAPPED IN NON-WOVEN FILTER FABRIC AT EACH WEEP HOLE

2" DIA. PVC WEEP HOLES (SEE NOTE 10 ON DETAIL 9.57)

FORMED INVERT



SPRINGLINE



FLOW

MAX. 8'-0" W/O ENGINEER'S APPROVAL SEE NOTES 4 AND 5 ON DETAIL #9.57

NOTE II

NOTE II

TOWN of WAKE FOREST, NC

Manual of Specifications, Standards and Design

STD. 3' x VARIABLE LENGTH PRECAST BOX WITH 2' x 3' CATCH BASIN



Scale: Not To Scale

Detail #: 9.56

Revision Date: Feb., 2015

Sheet #: 2 of 2

Notes:

Drainage Structures Notes.

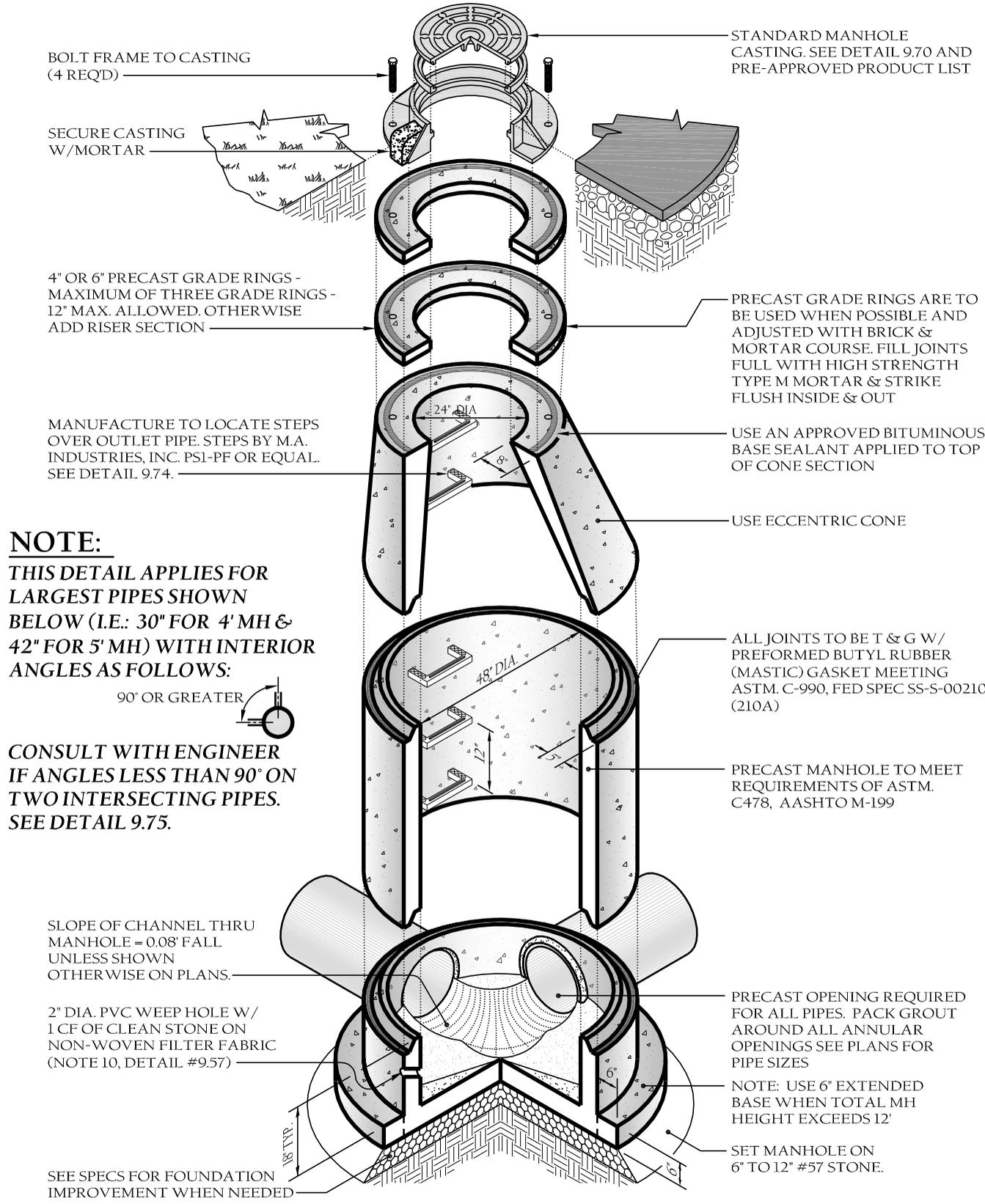
1. Boxes may be reinforced masonry, masonry, precast concrete or cast-in-place reinforced concrete.
2. Any non-standard box (non-standard meaning not shown in this manual), is to be designed by a NC Professional Engineer.
3. The maximum height of an unreinforced masonry drainage structure with 8" walls shall be limited to 8'-0" from invert of the outlet pipe to the top of the iron casting. Depths greater than 8'-0" shall have walls 12" thick. Basins over 12' in total depth shall be designed by a NC Professional Engineer. Four inch walls are not allowed on drainage structures. Bottom slab on structures shall be reinforced when box depth exceeds 8ft. The maximum horizontal span of an unreinforced brick/block box at 8' deep without engineering, = 5'-0" clear ($K_0=0.66$, $EFP=65$ psf silty/clayey sand).
4. Steps are to be provided on all basins deeper than 42".
5. Steps are to be PSI-PF as manufactured by M. A. Industries or an approved equal. Locate on non-pipe walls. See detail 9.74.
6. Mortar in masonry boxes is to be type M.
7. Clay brick structures are not allowed.
8. Concrete pipe is to be minimum class III.
9. Concrete building brick is to meet ASTM C-90 for Type II. Solid concrete block to be used in lieu of clay brick for minor drainage structure and manholes to meet ASTM C139.
10. Basin located in wet areas, or as otherwise required by the town engineer, shall have weep holes as shown on details.
11. All cast-in-place or precast concrete drainage structures located in paved areas accessible to truck loadings to be designed to meet AASHTO HS 20-44 loading. See manufacturers details for wall, top and bottom thickness.
12. Place minimum 6" #57 stone bedding beneath precast structures.



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

**DRAINAGE STRUCTURE
NOTES**

Scale: Not To Scale	Detail #: 9.57
Revision Date: Feb., 2015	Sheet #: 1 of 1



BOLT FRAME TO CASTING
(4 REQ'D)

SECURE CASTING
W/MORTAR

4" OR 6" PRECAST GRADE RINGS -
MAXIMUM OF THREE GRADE RINGS -
12" MAX. ALLOWED. OTHERWISE
ADD RISER SECTION

MANUFACTURE TO LOCATE STEPS
OVER OUTLET PIPE. STEPS BY M.A.
INDUSTRIES, INC. PSI-PF OR EQUAL.
SEE DETAIL 9.74.

STANDARD MANHOLE
CASTING. SEE DETAIL 9.70 AND
PRE-APPROVED PRODUCT LIST

PRECAST GRADE RINGS ARE TO
BE USED WHEN POSSIBLE AND
ADJUSTED WITH BRICK &
MORTAR COURSE. FILL JOINTS
FULL WITH HIGH STRENGTH
TYPE M MORTAR & STRIKE
FLUSH INSIDE & OUT

USE AN APPROVED BITUMINOUS
BASE SEALANT APPLIED TO TOP
OF CONE SECTION

USE ECCENTRIC CONE

ALL JOINTS TO BE T & G W/
PREFORMED BUTYL RUBBER
(MASTIC) GASKET MEETING
ASTM. C-990, FED SPEC SS-S-00210
(210A)

PRECAST MANHOLE TO MEET
REQUIREMENTS OF ASTM.
C478, AASHTO M-199

PRECAST OPENING REQUIRED
FOR ALL PIPES. PACK GROUT
AROUND ALL ANNULAR
OPENINGS SEE PLANS FOR
PIPE SIZES

NOTE: USE 6" EXTENDED
BASE WHEN TOTAL MH
HEIGHT EXCEEDS 12'

SET MANHOLE ON
6" TO 12" #57 STONE.

NOTE:

THIS DETAIL APPLIES FOR
LARGEST PIPES SHOWN
BELOW (I.E.: 30" FOR 4' MH &
42" FOR 5' MH) WITH INTERIOR
ANGLES AS FOLLOWS:



CONSULT WITH ENGINEER
IF ANGLES LESS THAN 90° ON
TWO INTERSECTING PIPES.
SEE DETAIL 9.75.

SLOPE OF CHANNEL THRU
MANHOLE = 0.08' FALL
UNLESS SHOWN
OTHERWISE ON PLANS.

2" DIA. PVC WEEP HOLE W/
1 CF OF CLEAN STONE ON
NON-WOVEN FILTER FABRIC.
(NOTE 10, DETAIL #9.57)

SEE SPECS FOR FOUNDATION
IMPROVEMENT WHEN NEEDED



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

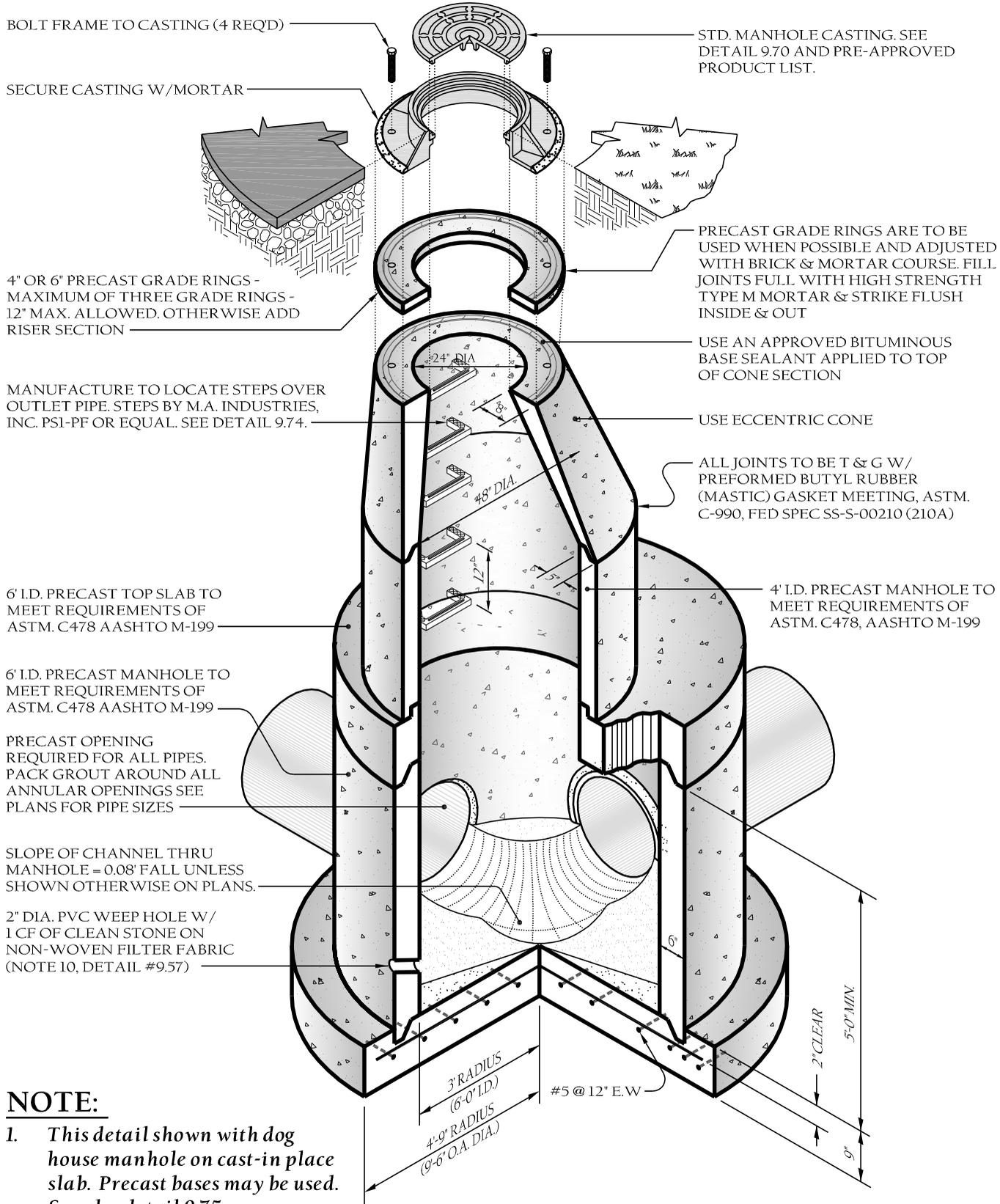
PRECAST CONCRETE
4' DIA. MH JB

Scale:
Not To Scale

Detail #:
9.60

Revision Date:
Feb., 2015

Sheet #:
1 - of 1



NOTE:

- 1. This detail shown with dog house manhole on cast-in place slab. Precast bases may be used. See also detail 9.75.



TOWN of WAKE FOREST, NC
 Manual of Specifications, Standards and Design

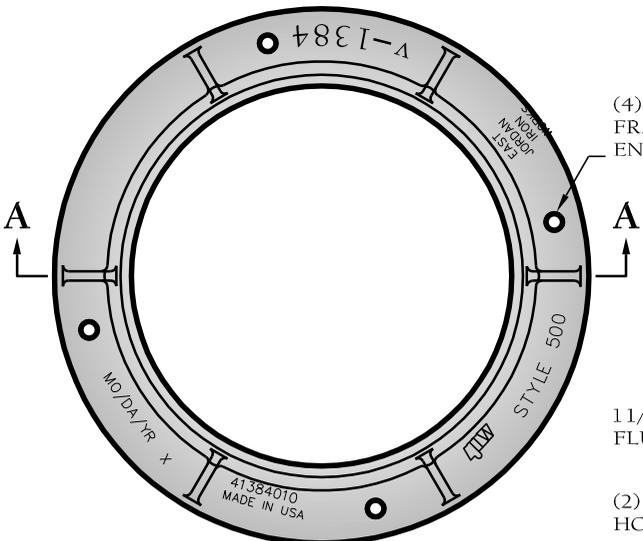
PRECAST CONCRETE
6' TO 4' DIA. MH JB

Scale:
Not To Scale

Detail #:
9.61

Revision Date:
Feb., 2015

Sheet #:
1 - of 1

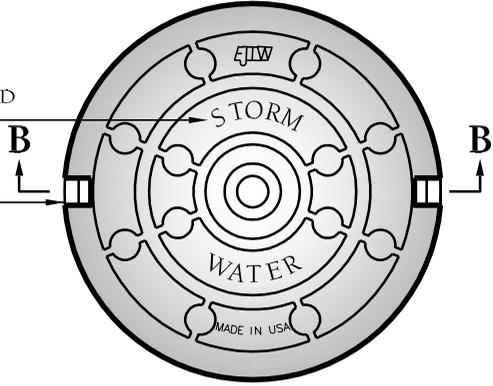


FRAME TOP

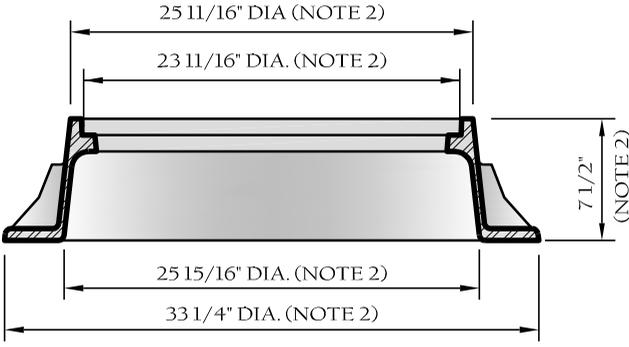
(4) 1" DIA. ANCHOR BOLT. HOLES EQUALLY SPACED. BOLT FRAME TO CONE SECTION WHEN ORDERED BY CITY ENGINEER OR WATER RESOURCES.

1 1/4" LETTERS (RECESSED FLUSH)

(2) CLOSED PICK HOLES



COVER FACE



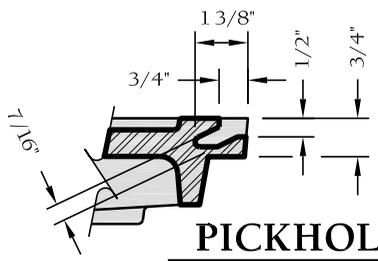
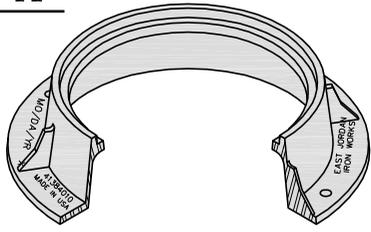
FRAME SECTION A-A



COVER SECTION B-B



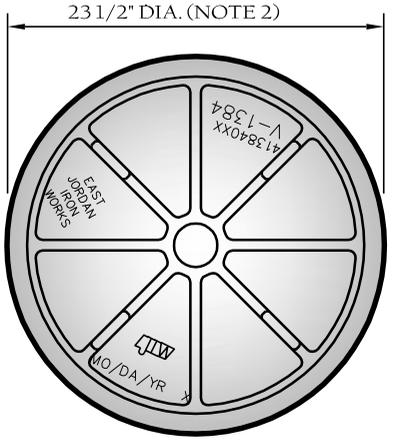
ISOMETRICS



PICKHOLE

APPROVED MODELS	EAST JORDON V-1384 *
COVER WEIGHT	128 Lbs.
FRAME WEIGHT	153 Lbs.
LOAD RATING	HEAVY DUTY
MATERIAL	ASTM A 48 CLASS 35B
FINISH	UN COATED

* EJIW OR APPROVED EQUAL SEE PRE-APPROVED PRODUCTS LIST



COVER BACK

NOTES:

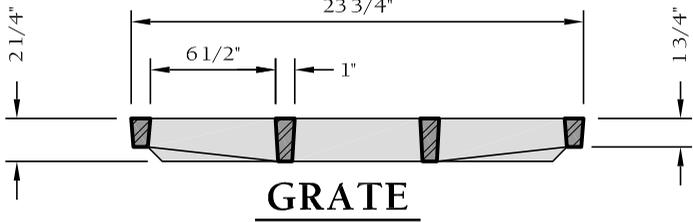
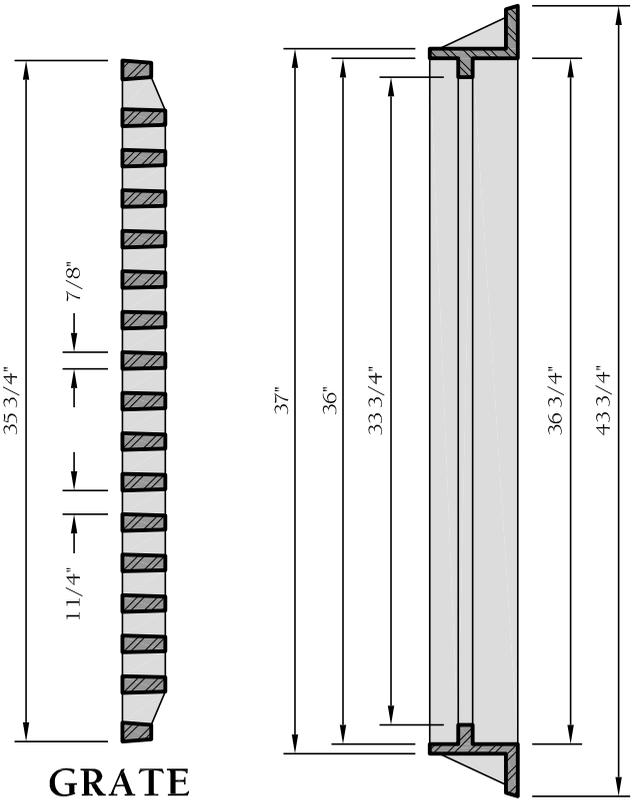
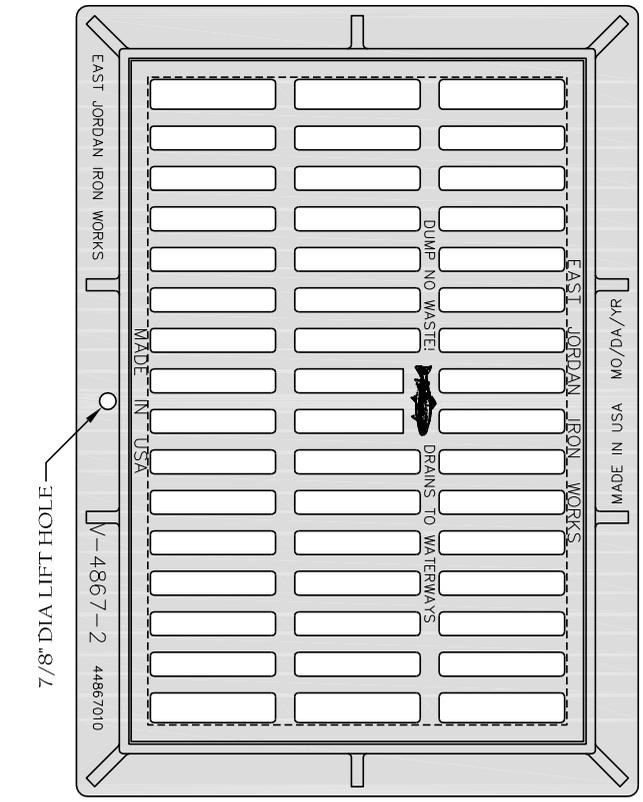
1. Frame & Cover weight may not deviate by more than -5.0%.
2. Iron casting to comply with AASHTO M306.



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

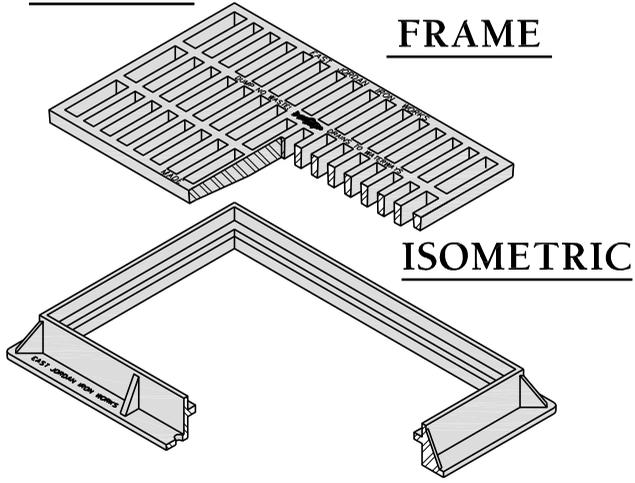
STANDARD MANHOLE CASTING
STORM DRAINAGE STRUCTURES

Scale: Not To Scale	Detail #: 9.70
Revision Date: Feb., 2015	Sheet #: 1 - of 1

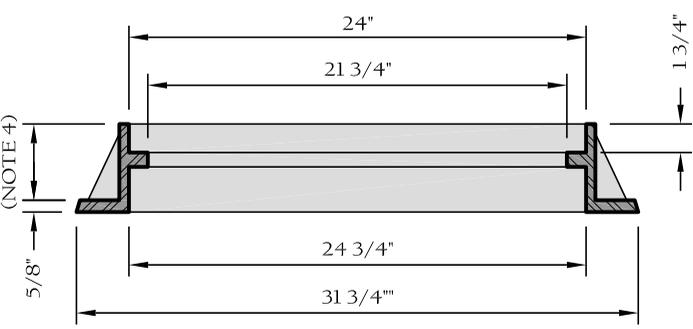


GRATE

FRAME



ISOMETRIC



FRAME

APPROVED MODELS	EAST JORDAN V-4867-2 *
GRATE WEIGHT	190 Lbs.
FRAME WEIGHT	159 Lbs.
LOAD RATING	HEAVY DUTY
MATERIAL	ASTM A 48 CLASS 35B
FINISH	UNDIPPED

NOTES:

1. Frame & Cover weight may not deviate by more than -5.0%.
2. Iron casting to comply with AASHTO M306.
3. Net open area - 390 Sq. In.
4. For a 4" high frame, Use EJIW V-5660 or approved equal.

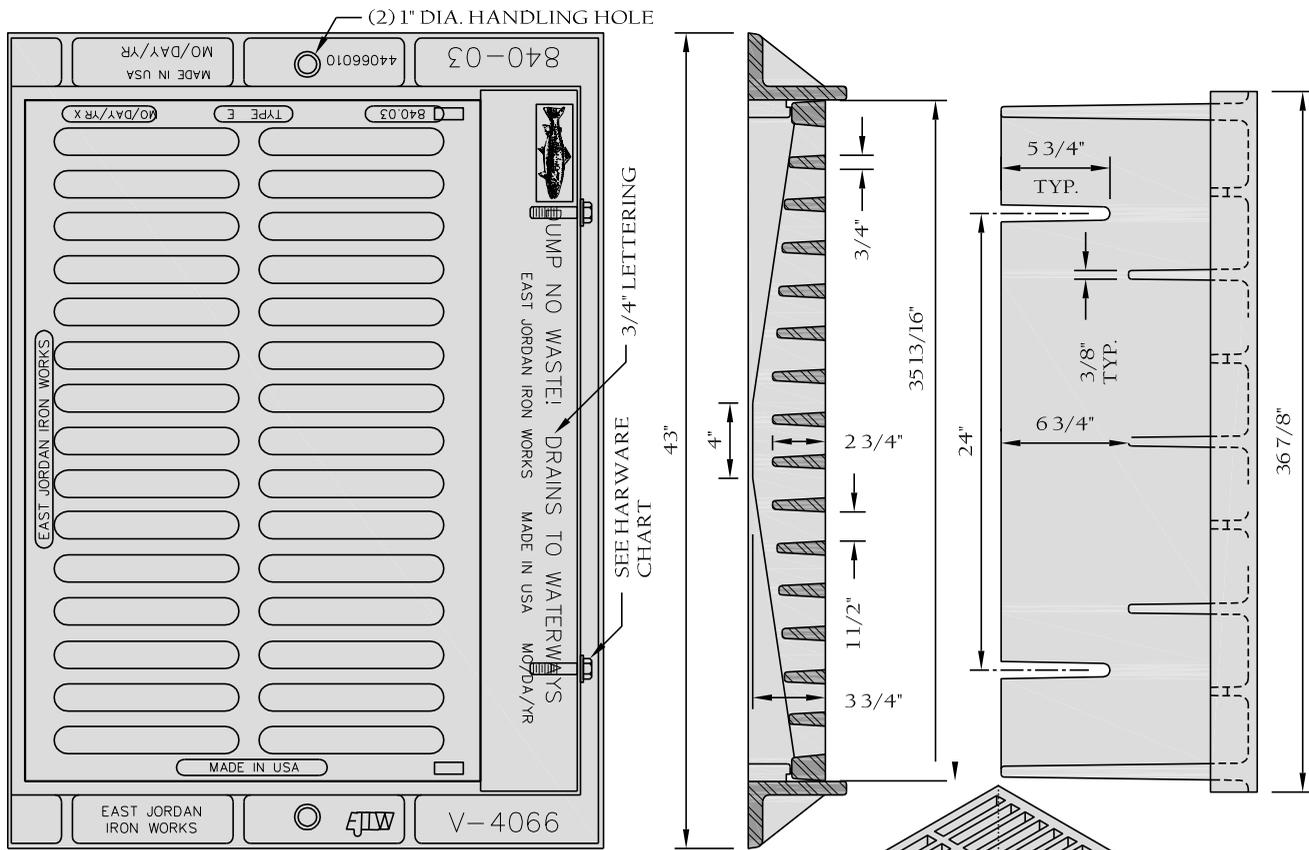
* EJIW OR APPROVED EQUAL. SEE PRE-APPROVED PRODUCT LIST



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

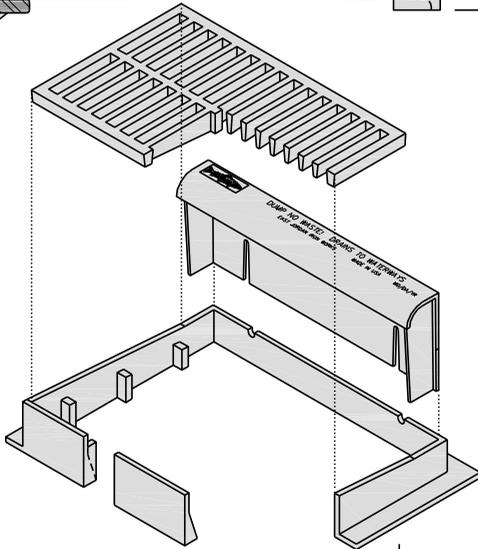
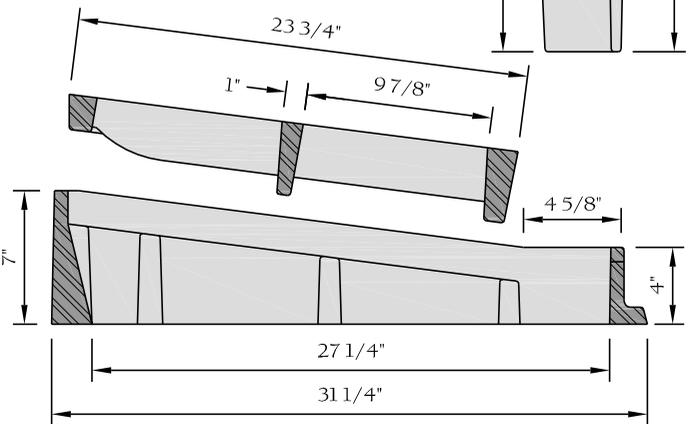
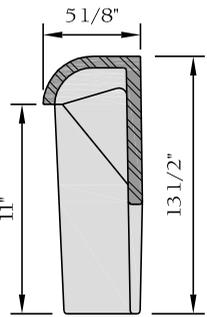
STANDARD CATCH BASIN ASSEMBLY FRAME & GRATE

Scale: Not To Scale	Detail #: 9.71
Revision Date: Feb., 2015	Sheet #: 1 - of 1



HARDWARE CHART:

(2) 00981234 BLT HX 5/8-11x2.5 ZN2
(2) 00981290 NUT HX 5/8-11 ZN
(4) 00981291 WSHR 5/8 ID 1.75 OD ZN



APPROVED MODELS	EAST JORDAN V-4066-1 *
GRATE WEIGHT	218 Lbs.
FRAME WEIGHT	215 Lbs.
BACK WEIGHT	140 Lbs.
LOAD RATING	HEAVY DUTY
MATERIAL	ASTM A 48 CLASS 35B
FINISH	UNDIPPED

NOTES:

1. Frame & Cover weight may not deviate by more than -5.0%.
2. Iron casting to comply with AASHTO M306.

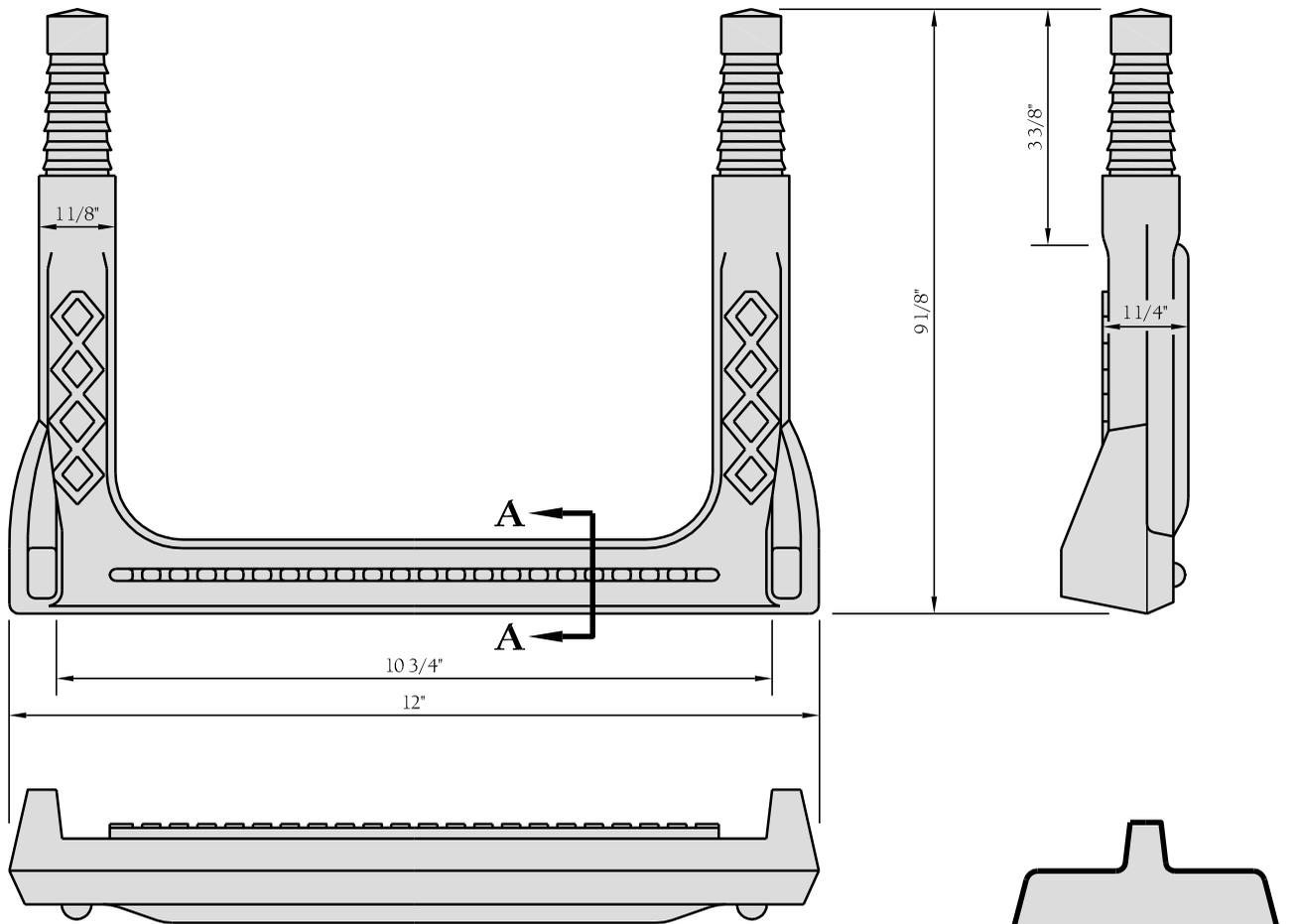
* EJW OR APPROVED EQUAL. SEE PRE-APPROVED PRODUCT LIST.



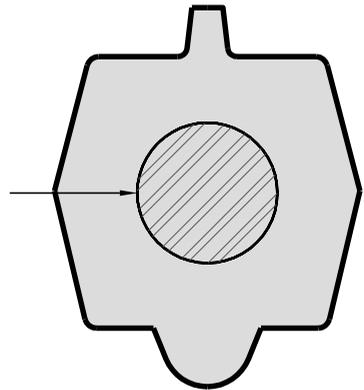
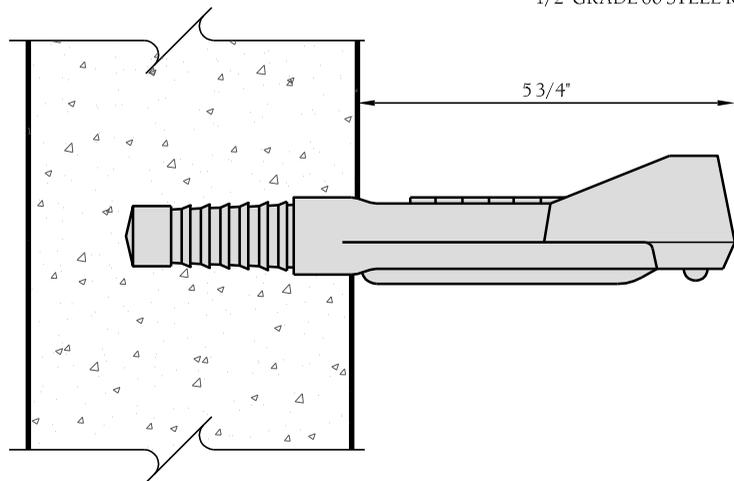
TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

STANDARD COMBINATION
FRAME, HOOD & GRATE (NCDOT 840.03)

Scale: Not To Scale	Detail #: 9.72
Revision Date: Feb., 2015	Sheet #: 1 - of 1



COPOLYMER POLYPROPYLENE PLASTIC
1/2" GRADE 60 STEEL REINFORCEMENT



SECTION A-A

NOTES:

1. Step shown is PS1-PF BY M.A. Industries Inc. Peachtree City, GA. Alternate may be used if approved by town.



TOWN of
WAKE FOREST

TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

**MANHOLE STEP
DETAIL**

Scale:
Not To Scale

Detail #:
9.74

Revision Date:
Feb., 2015

Sheet #:
1 - of 1

To calculate the closest possible distance between two holes (openings) on the same horizontal centerline, use the following formula:

- A = Distance between holes (in degrees)
- B = Angle between centerline of pipes
- C = Degrees for hole number one from chart below
- D = Degrees for hole number two from chart below

If A < 0, the openings are overlapping
 If A > 0, A = the distance between holes (in degrees)

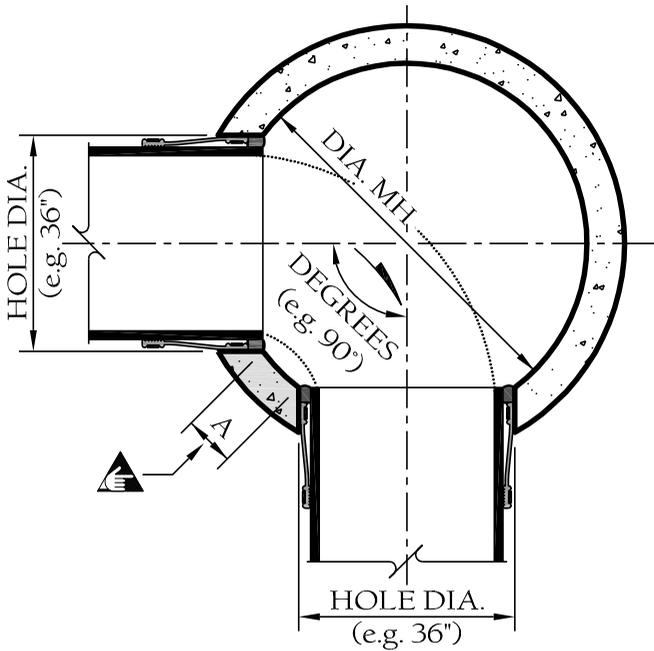
4' DIA:

$A = 90 - 1/2(95+95) = 90 - 95 = -5$, Holes too close

5' DIA:

$A = 90 - 1/2(75+75) = 90 - 75 = 15$, O.K. for 5' dia.

There are 15° of angle between holes which is 7 7/8".



4' Dia. MH	
Hole Dia.	Degrees
12"	28°
12"	28°
18"	45°
24"	60°
30"	76°
36"	95°

8' Dia. MH	
Hole Dia.	Degrees
12"	15°
18"	22°
24"	28°
36"	44°
40"	48°
42"	52°
48"	60°
55"	68°
60"	80°
70"	90°
78"	108°

5' Dia. MH	
Hole Dia.	Degrees
12"	22°
18"	35°
24"	48°
30"	62.6°
36"	75°
40"	82°
48"	108°

10' Dia. MH	
Hole Dia.	Degrees
12"	12°
18"	18°
24"	24°
36"	36°
40"	38°
48"	46°
55"	55°
62"	62°
70"	70°
78"	80°

6' Dia. MH	
Hole Dia.	Degrees
12"	20°
16"	25°
20"	32°
24"	38°
36"	60°
40"	65°
43"	70°
48"	84°
55"	98°
63"	125°



TOWN of WAKE FOREST, NC Manual of Specifications, Standards and Design

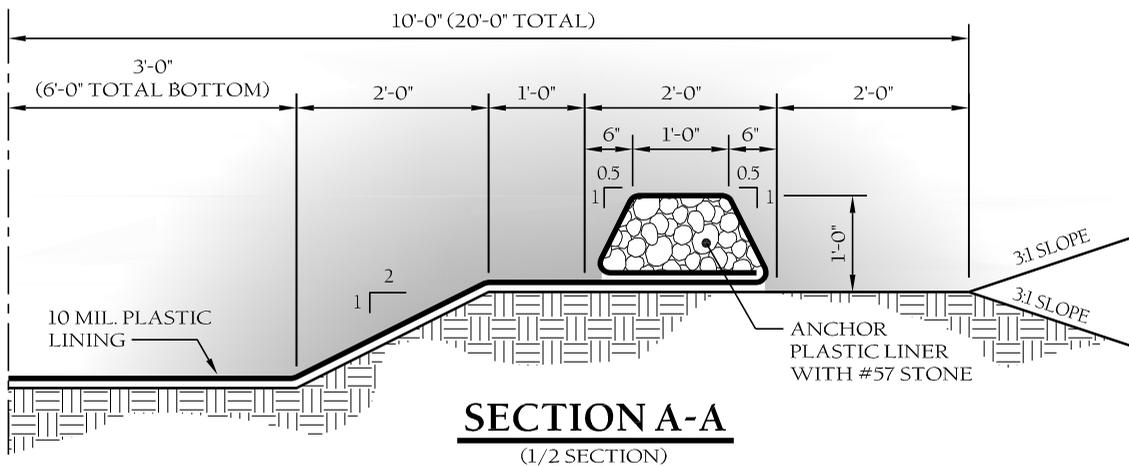
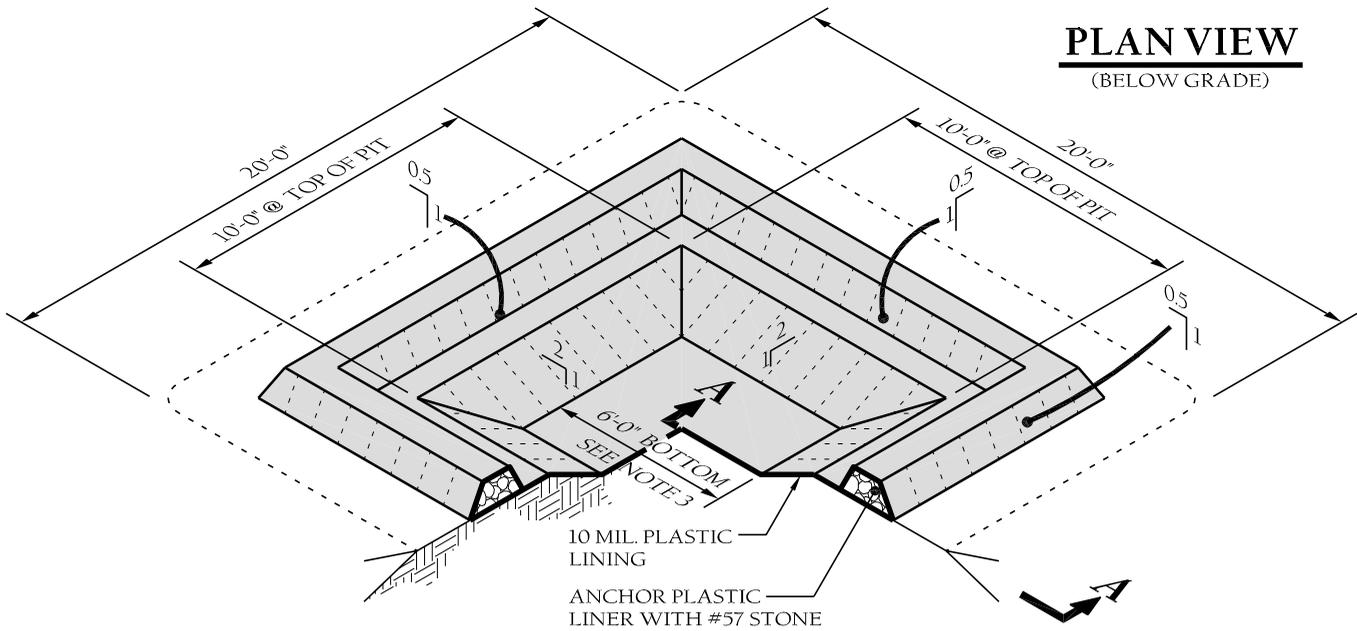
DISTANCE BETWEEN TWO HOLES (OPENINGS) FORMULA

Scale:
 Not To Scale

Revision Date:
 Feb., 2015

Detail #:
9.75

Sheet #:
 1 - of 1



EXCAVATED PIT WITH STONE SUPPORT

NOT TO SCALE

STONE SUPPORT NOTES:

1. Actual layout to be determined in field.
2. The "concrete washout" sign shall be installed within 30 ft of the temporary concrete washout facility.
3. Pit capacity is minimum of 6 cu ft per 10 cu yd of concrete.
4. Contractor to coordinate with usage contracting officer for proper disposal of concrete.



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

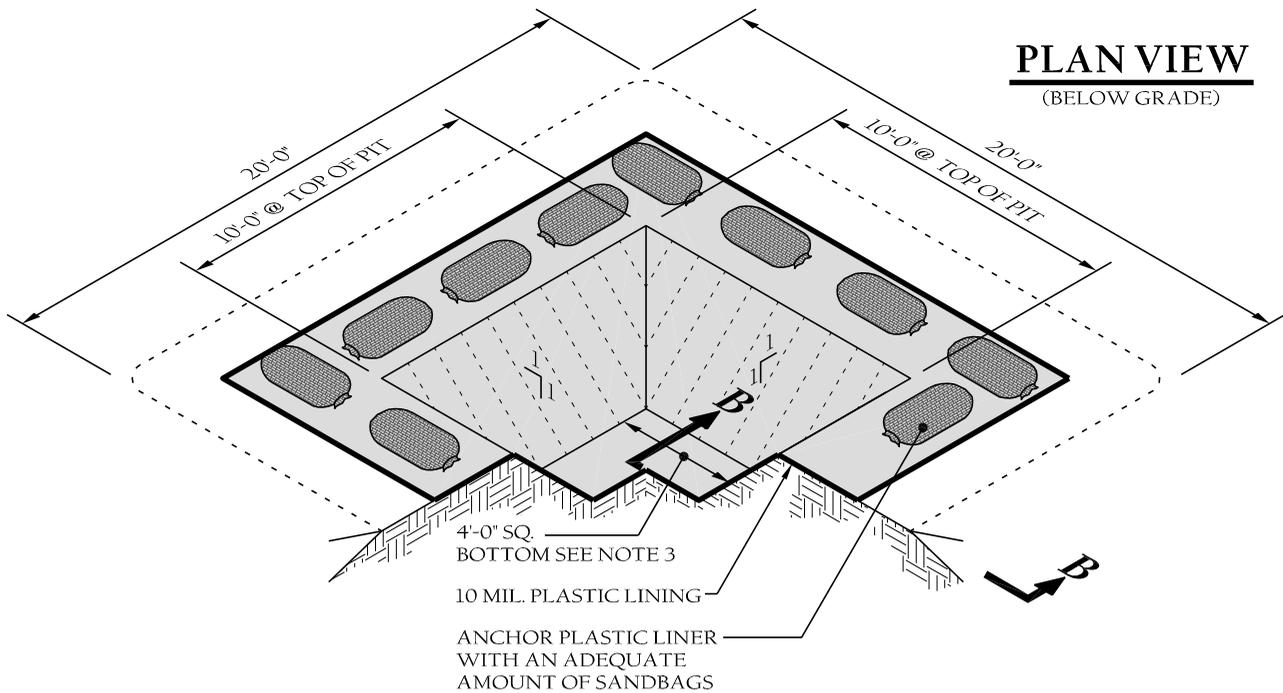
**CONCRETE WASHOUT
PIT DETAIL**

Scale:
Not To Scale

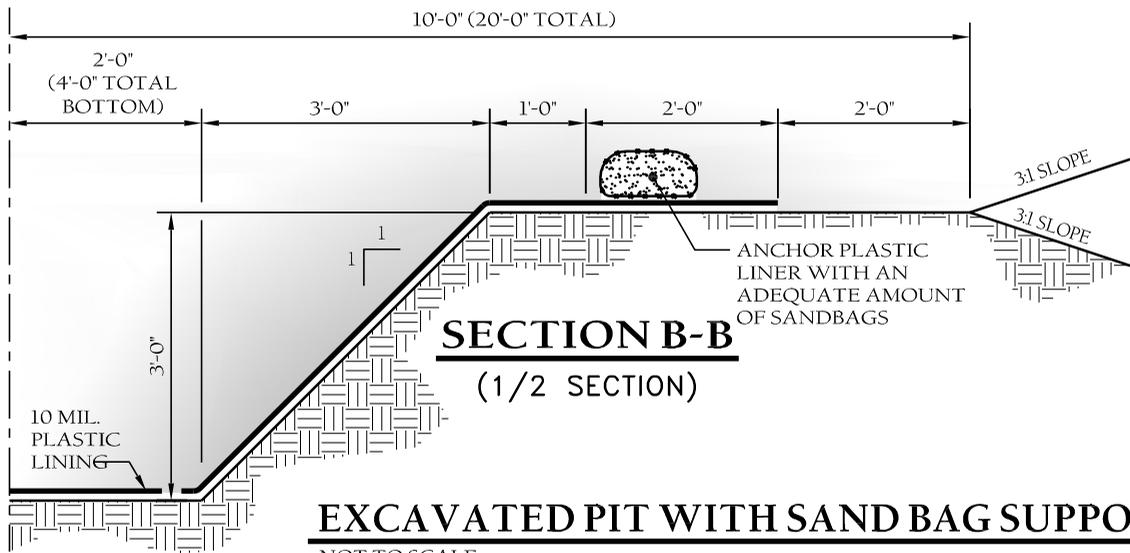
Detail #:
9.76

Revision Date:
Feb., 2015

Sheet #:
1 - of 4



PLAN VIEW
(BELOW GRADE)



SECTION B-B
(1/2 SECTION)

EXCAVATED PIT WITH SAND BAG SUPPORT

NOT TO SCALE

SAND BAG SUPPORT NOTES:

1. Actual layout to be determined in field.
2. The "concrete washout" sign shall be installed within 30 ft of the temporary concrete washout facility.
3. Pit capacity is minimum of 6 cu ft per 10 cu yd of concrete.
4. Contractor to coordinate with usage contracting officer for proper disposal of concrete.

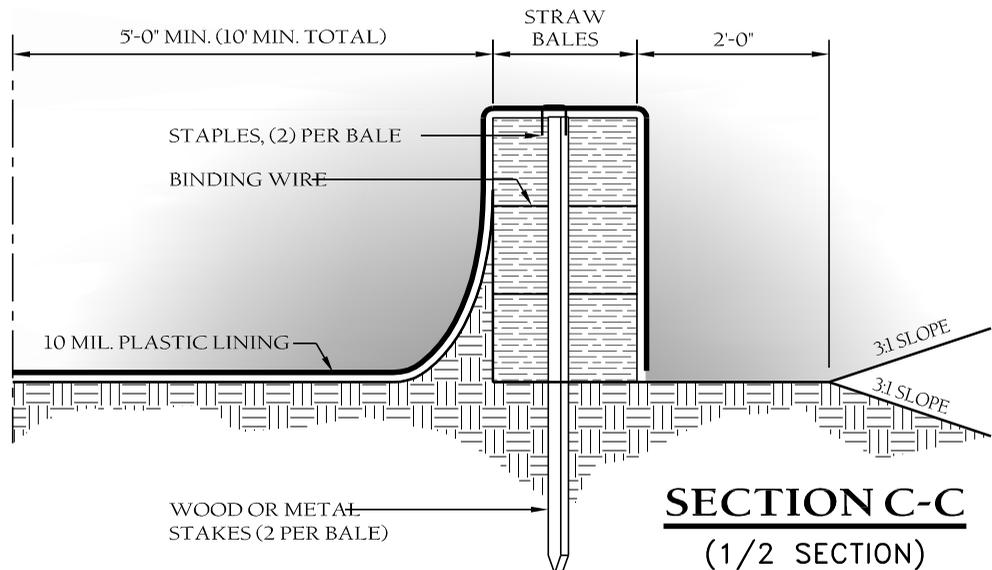
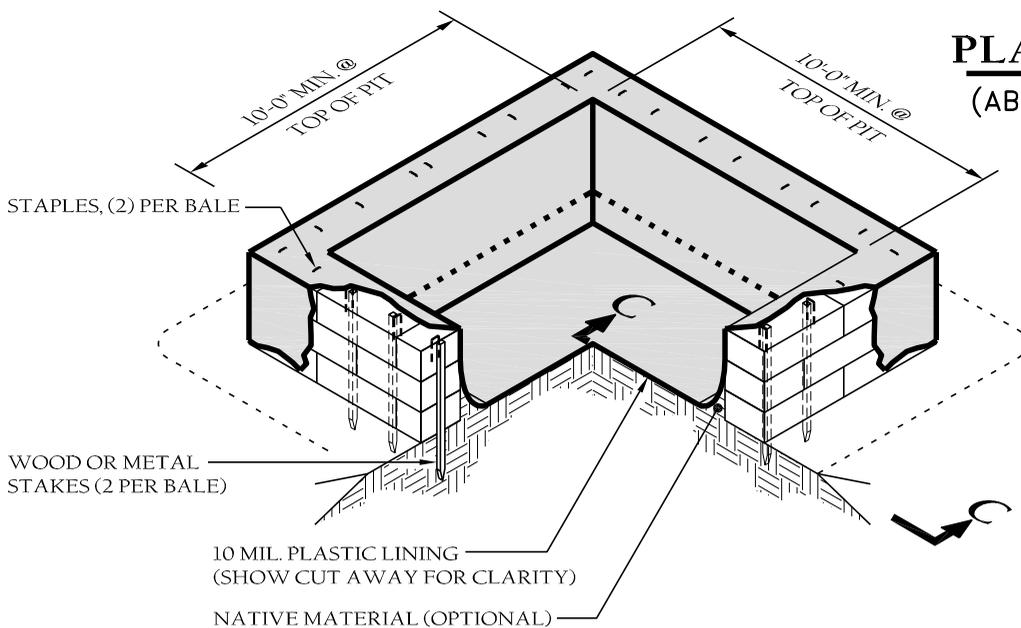


TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

**CONCRETE WASHOUT
PIT DETAIL**

Scale: Not To Scale	Detail #: 9.76
Revision Date: Feb., 2015	Sheet #: 2 of 4

PLAN VIEW
(ABOVE GRADE)



ELEVATED PIT WITH STRAW BALE DETENTION WALLS
NOT TO SCALE

STRAW BALE DETENTION NOTES:

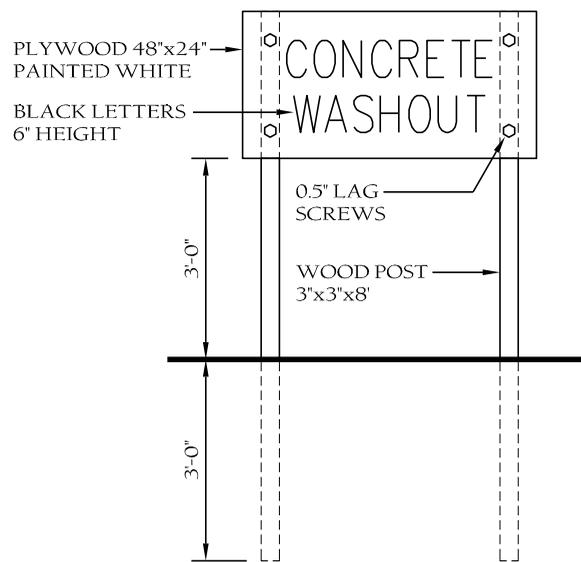
1. Actual layout to be determined in field.
2. The "concrete washout" sign shall be installed within 30 ft of the temporary concrete washout facility.
3. Pit capacity is minimum of 6 cu ft per 10 cu yd of concrete.
4. Contractor to coordinate with usage contracting officer for proper disposal of concrete.



TOWN of WAKE FOREST, NC
Manual of Specifications, Standards and Design

**CONCRETE WASHOUT
PIT DETAIL**

Scale: Not To Scale	Detail #: 9.76
Revision Date: Feb., 2015	Sheet #: 2 of 4



SIGN DETAIL
(OR EQUIVILANT)

CONCRETE WASHOUT DETAIL NOTES

Concrete washouts are used to contain concrete and liquids when the chutes of concrete mixers and hoppers of concrete pumps are rinsed out after delivery. The washout facilities consolidate solids for easier disposal and prevent runoff of liquids. The wash water is alkaline and contains high levels of chromium, which can leach into the ground and contaminate groundwater. It can also migrate to a storm drain, which can increase the pH of area waters and harm aquatic life. Revised NPDES and NC General Construction Permits require the use of concrete washout areas on all sites using concrete:

1. No concrete or cement slurry shall be discharged from the site.
2. Any hardened concrete residue shall be disposed of, or recycled on site, in accordance with local and state solid waste regulations.
3. Concrete washout area to be minimum 50' from storm drain inlets and surface waters (ie, detention pond, ditches, etc).
4. Prefabricated washout container or pit equal detail provided may be used if approved by Engineer.
5. Install concrete washout pit at all construction entrances used by concrete trucks.
6. Dimensions may be modified to fit topography. Provide minimum 100 Sf. of surface area level.
7. Locations shown on plans are for illustrative purposes only. Contractor shall determine final number of pits required, and their placement.
8. Inspection:
 - a. Contractor to check all concrete washout facilities daily to determine if they have been filled to 75% capacity, which is when materials need to be removed.
 - b. Both above- and below- ground self-installed washouts should be inspected daily to ensure that plastic linings are intact and sidewalls have not been damaged by construction activities. Contractor to repair plastic lining as needed.
 - c. Prefabricated washout containers should be inspected daily as well to ensure the container is not leaking or nearing 75 percent capacity.
 - d. Inspectors should also note whether the facilities are being used regularly.
6. Material Removal:
 - a. Concrete washouts are designed to promote evaporation where feasible. However, if stored liquids have not evaporated and the washout is nearing capacity, vacuum and dispose of them in an approved manner - check with the local sanitary sewer authority to determine if there are special disposal requirements for concrete wash water.
 - b. Remove liquids or cover the structures before predicted rainstorms to prevent overflows. Companies that offer prefabricated and watertight washout containers generally offer a vacuum service to remove the liquid material.
 - c. Contractor to remove hardened solids or reuse onsite or haul them away for recycling.
 - d. When removing materials from the concrete washout, building a new structure or, if the previous structure is still intact, Contractor is to inspect the structure for signs of weakening or damage and make any necessary repairs. Line the structure with new plastic that is free of holes or tears and replace signage if necessary. It is very important that new plastic is used after every cleaning because pumps and concrete removal equipment can damage the existing liner.
7. At completion of project, washout area to be backfilled and graded to be level with existing grade..
8. General Contractor is to educate concrete subcontractors, post signage indicating the location and designated use of these areas, and provide careful oversight to inspect for evidence of improper dumping of concrete waste and wash water. Contractor should include requirements in contracts with concrete delivery companies that drivers must use designated concrete washout facilities.



TOWN of
WAKE FOREST

TOWN of WAKE FOREST, NC

Manual of Specifications, Standards and Design

CONCRETE WASHOUT PIT DETAIL

Scale:
Not To Scale

Detail #:
9.76

Revision Date:
Feb., 2015

Sheet #:
A - f A

TEMPORARY

NO PARKING

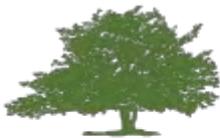
TIME

DATE

From

To

**CONSTRUCTION
ZONE**



TOWN of
WAKE FOREST

TOW-AWAY

www.wakeforestnc.gov

Tel: 919-435-9400

301 S. Brooks Street, Wake Forest, NC 27587



TOWN of
WAKE FOREST

301 S. Brooks Street
Wake Forest, NC 27587
t 919.435.9400
www.wakeforestnc.gov

Address Block

-----, 2026

REGARDING WORK IN YOUR AREA

Dear Resident:

The Town of Wake Forest plans to do street rehabilitation in your neighborhood. Construction is expected to begin in, -----, 2026 and be completed by -----, 2026, weather permitting.

The affected streets include:

The Town of Wake Forest maintains approximately 133 miles of paved roadways and we are committed to performing necessary maintenance and street rehabilitation to improve the longevity of these assets within the Town's limits. The street rehabilitation process requires maintenance and preservation practices to reduce and minimize the deterioration processes. For this reason, maintaining and rehabilitation of the pavement is a top priority for the Town, and it can be utilized to extend the pavement service life. The street rehabilitation project includes the milling and placement of new asphalt on the Town owned roadways. Your cooperation is greatly appreciated, and every effort will be made to minimize inconveniences to those adjacent to the work areas.

During the construction period, residents will have access to their driveways. No parking will be allowed along the street during the designated time of the construction. All vehicles will be towed, if necessary, to complete the work.

All work is expected to be conducted during weekdays from 7:00 a.m. to 7:00 p.m. Town employees and their contractor will work closely with residents and regulatory agencies to deliver a high-quality project on time, while minimizing disruptions to traffic and the environment. Noise and dust may cause temporary impacts to residents during the construction, and this will be limited to a few hours at a time. If the construction work must be rescheduled due to weather, personnel, or equipment, the residents will be notified the rescheduled construction dates.

Also please note that some trees may have to be pruned or removed to accommodate the work. For any tree removal, residents will be notified ahead of time.

If you have any questions about this project or need additional information, please contact me at (919-435-9439) or by e-mail at twatson@wakeforestnc.gov. However, if you experience a water or sewer emergency, please call **24-hr hotline** at **919-City of Raleigh**. For your convenience, you will find a map on the back of this letter showing the affected streets.

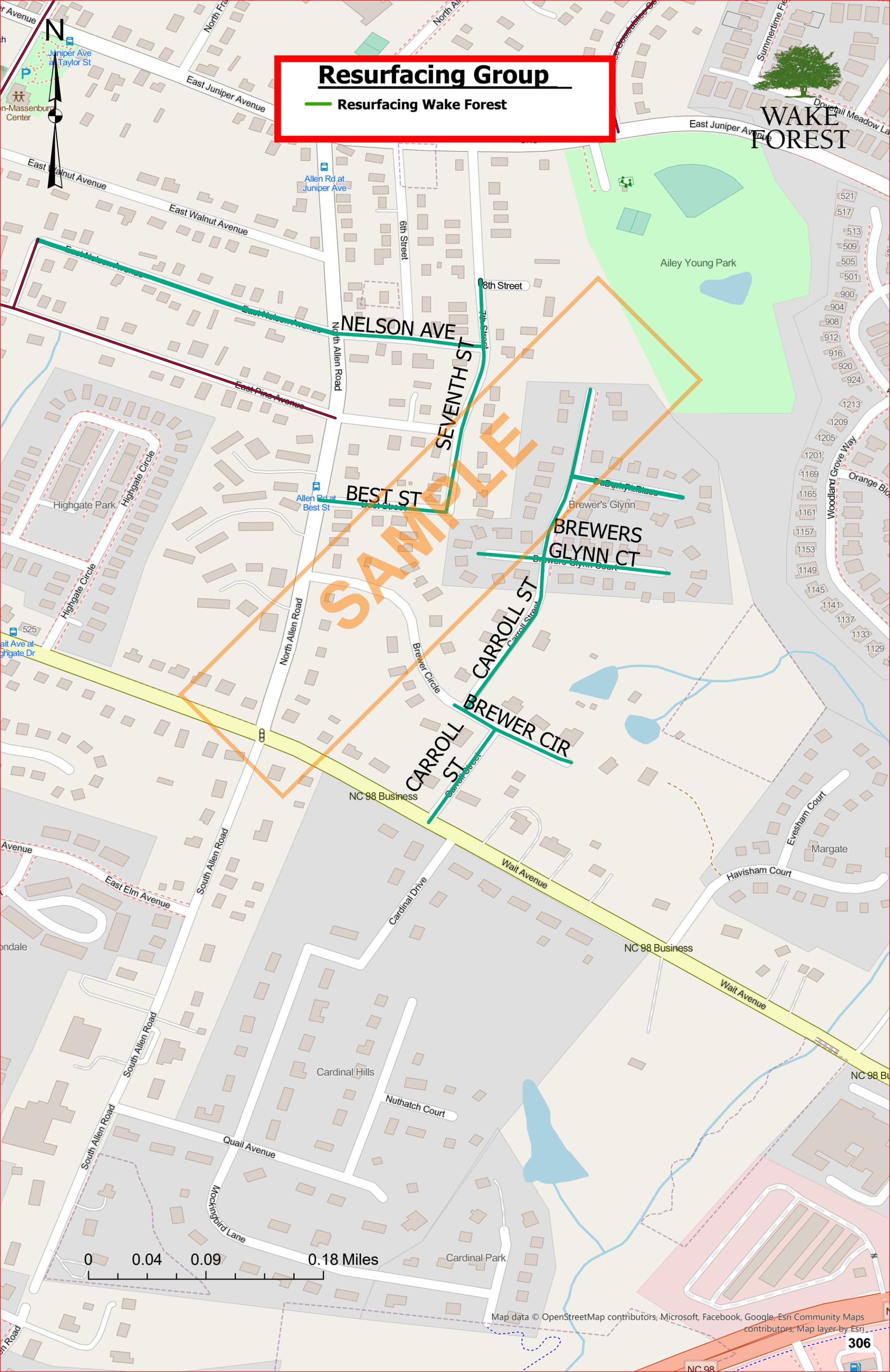
Sincerely,

Tim Watson, PE
Director of Engineering
ENGINEERING

Office: 919-435-9510 | Direct: 919-435-9439
301 S. Brooks Street | Wake Forest, NC 27587
wakeforestnc.gov

Resurfacing Group

Resurfacing Wake Forest



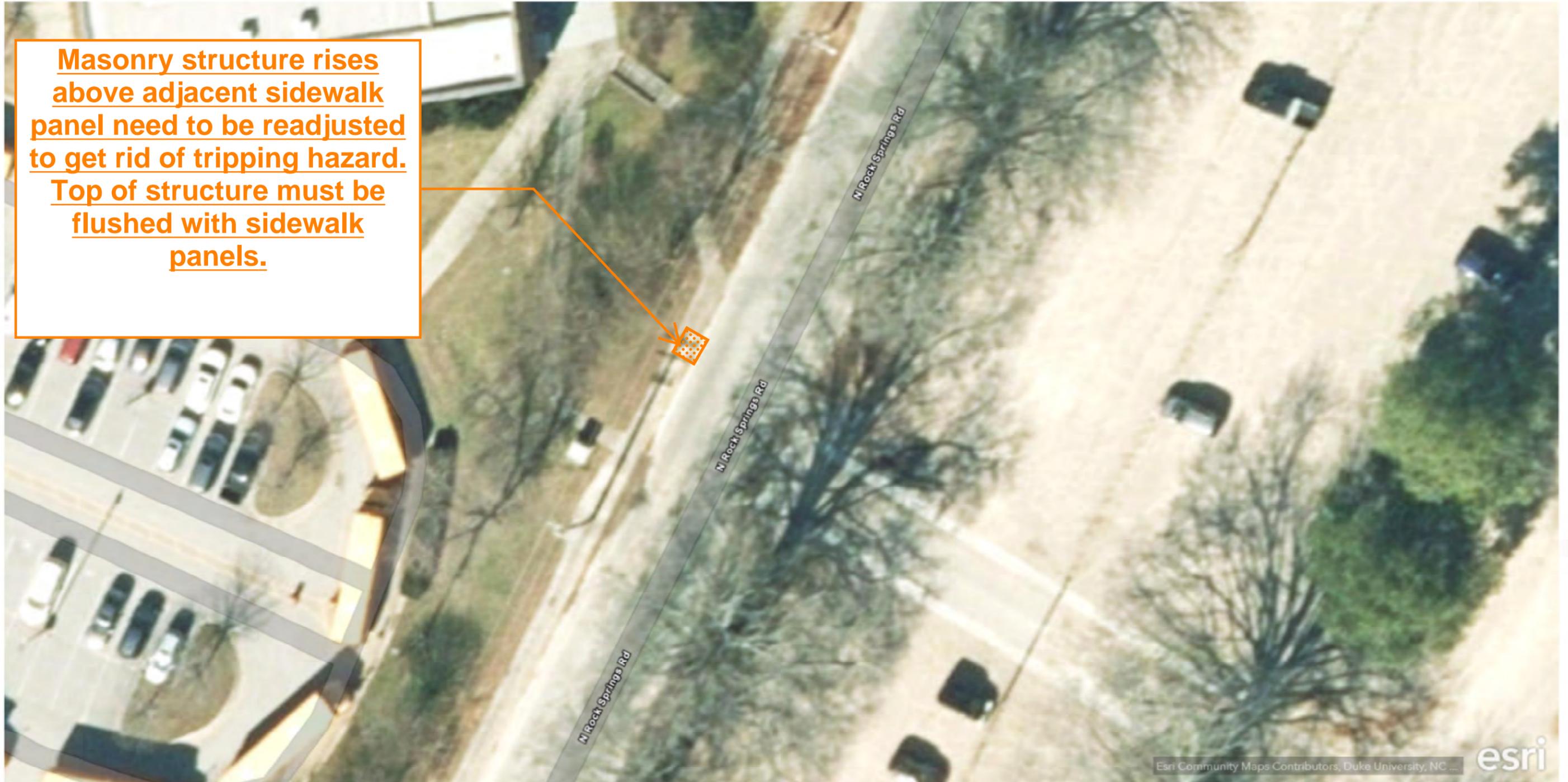


Rock Spring Rd Masonry Structure



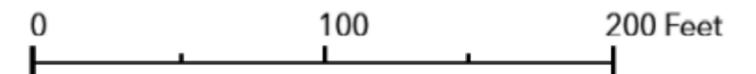
Masonry Structure Repair

Masonry structure rises above adjacent sidewalk panel need to be readjusted to get rid of tripping hazard. Top of structure must be flushed with sidewalk panels.



Date: Monday, September 15, 2025

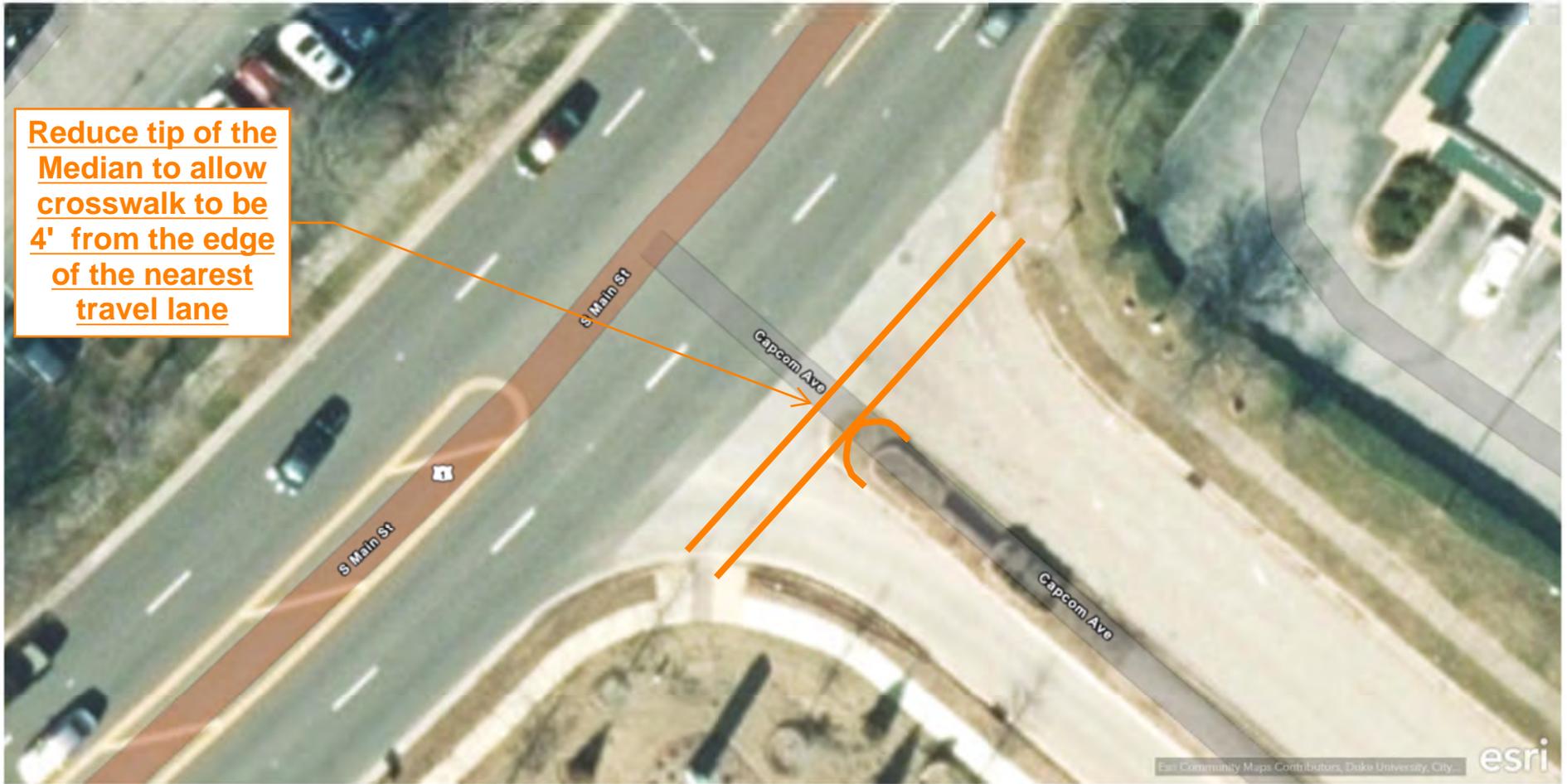
Map Units: Feet





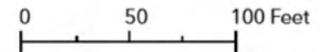
Capcom Ave Median Modification Cross Walk Re-alignment

Re-align Crosswalk b



Date: Monday, September 15, 2025

Map Units: Feet



Date: 10/13/2025 at 11:00 AM		2		1		3		7,746,576.77		7,230,699.35		7,798,921.50	
TOWN OF WAKE FOREST 2026 STREET RESURFACING PROJECT SCHEDULE OF PRICES		Blythe Construction 2911 North Graham Street Charlotte, NC 28206		Carolina Sunrock PO Box 509 Butner, NC 27509		Fred Smith Company 701 Corporate Center Dr., St.195 Raleigh, NC 27607		Turner Asphalt 5805 Lease Lane Raleigh, NC 27617		S.T. Wooten Corp PO Box 2408 Wilson, NC 27884		Triangle Grading & Paving 1521 Huffman Mill Road Burlington, NC 27215	
Line Item	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT BID PRICE	BID AMOUNT	UNIT BID PRICE	BID AMOUNT	UNIT BID PRICE	BID AMOUNT	UNIT BID PRICE	BID AMOUNT	UNIT BID PRICE	BID AMOUNT
Resurfacing													
1	Asphalt Concrete Surface Course, Type S9.5B	0.0	TN	\$ 100.00	\$ -	\$ 65.00	\$ -	\$ 200.00	\$ -	\$ 85.00	\$ -	\$ 250.00	\$ -
2	Asphalt Concrete Surface Course, Type S9.5C	27136.0	TN	\$ 67.00	\$ 1,818,112.00	\$ 65.00	\$ 1,763,840.00	\$ 70.00	\$ 1,899,520.00	\$ 85.00	\$ 2,306,560.00	\$ 85.00	\$ 2,306,560.00
3	Asphalt Binder for Plant Mix, Type PG64-22	1627.0	TN	\$ 610.00	\$ 992,470.00	\$ 515.00	\$ 837,905.00	\$ 600.00	\$ 976,200.00	\$ 568.00	\$ 924,136.00	\$ 400.00	\$ 650,800.00
4	Micro Surfacing Single Course, Type II	26465.0	SY	\$ 3.70	\$ 150,850.50	\$ 6.00	\$ 158,790.00	\$ 5.68	\$ 150,321.20	\$ 7.75	\$ 205,103.75	\$ 5.68	\$ 150,321.20
RESURFACING SECTION SUBTOTAL				\$	2,961,432.50	\$	2,760,535.00	\$	3,026,041.20	\$	3,435,799.75	\$	3,107,681.20
UTILITY ADJUSTMENTS													
5	Manhole Adjustment (Raise Only)	0.0	EA	\$ 600.00	\$ -	\$ 750.00	\$ -	\$ 1,000.00	\$ -	\$ 550.00	\$ -	\$ 600.00	\$ -
6	Water Valve Box Adjustment (Raise Only)	0.0	EA	\$ 725.00	\$ -	\$ 910.00	\$ -	\$ 1,000.00	\$ -	\$ 500.00	\$ -	\$ 725.00	\$ -
7	Manhole Adjustment (Lower/Raise)	335.0	EA	\$ 1,000.00	\$ 335,000.00	\$ 1,000.00	\$ 335,000.00	\$ 1,000.00	\$ 335,000.00	\$ 550.00	\$ 184,250.00	\$ 1,000.00	\$ 335,000.00
8	Water Valve Box Adjustment (Lower/Raise)	371.0	EA	\$ 1,000.00	\$ 371,000.00	\$ 1,000.00	\$ 371,000.00	\$ 1,000.00	\$ 371,000.00	\$ 500.00	\$ 185,500.00	\$ 1,000.00	\$ 371,000.00
9	Milling/Chipping - Manhole/Valve Box	0.0	EA	\$ 300.00	\$ -	\$ 375.00	\$ -	\$ 500.00	\$ -	\$ 150.00	\$ -	\$ 300.00	\$ -
10	Manhole Adjustment - Oversize - (Lower/Raise)	0.0	EA	\$ 900.00	\$ -	\$ 1,125.00	\$ -	\$ 3,000.00	\$ -	\$ 750.00	\$ -	\$ 900.00	\$ -
11	Provide and Install Manhole Riser	0.0	EA	\$ 485.00	\$ -	\$ 607.00	\$ -	\$ 750.00	\$ -	\$ 300.00	\$ -	\$ 485.00	\$ -
12	Provide and Install Water Valve Box Riser	0.0	EA	\$ 250.00	\$ -	\$ 313.00	\$ -	\$ 700.00	\$ -	\$ 250.00	\$ -	\$ 250.00	\$ -
13	Provide New 7.5" Manhole Frame and Cover	0.0	EA	\$ 525.00	\$ -	\$ 657.00	\$ -	\$ 1,000.00	\$ -	\$ 1,200.00	\$ -	\$ 525.00	\$ -
14	Provide New 4.0" Manhole Frame and Cover	0.0	EA	\$ 425.00	\$ -	\$ 532.00	\$ -	\$ 800.00	\$ -	\$ 1,100.00	\$ -	\$ 425.00	\$ -
UTILITY ADJUSTMENTS SECTION SUBTOTAL				\$	706,000.00	\$	706,000.00	\$	706,000.00	\$	369,750.00	\$	706,000.00
SIDEWALK IMPROVEMENTS													
15	Sidewalk Removal	0.0	SY	\$ 40.00	\$ -	\$ 50.00	\$ -	\$ 150.00	\$ -	\$ 48.00	\$ -	\$ 40.00	\$ -
16	4" Sidewalk	882.5	SY	\$ 80.00	\$ 70,600.00	\$ 80.00	\$ 70,600.00	\$ 80.00	\$ 70,600.00	\$ 84.00	\$ 74,130.00	\$ 80.00	\$ 70,600.00
17	6" Sidewalk	57.0	SY	\$ 100.00	\$ 5,700.00	\$ 100.00	\$ 5,700.00	\$ 100.00	\$ 5,700.00	\$ 92.00	\$ 5,244.00	\$ 100.00	\$ 5,700.00
18	6" Concrete Driveway	1015.0	SY	\$ 120.00	\$ 121,800.00	\$ 120.00	\$ 121,800.00	\$ 120.00	\$ 121,800.00	\$ 88.00	\$ 89,320.00	\$ 120.00	\$ 121,800.00
19	Sawcut and Removal of Concrete Curb	0.0	LF	\$ 30.00	\$ -	\$ 38.00	\$ -	\$ 100.00	\$ -	\$ 58.00	\$ -	\$ 30.00	\$ -
20	Sawcut and Removal of Granite Curb	0.0	LF	\$ 75.00	\$ -	\$ 94.00	\$ -	\$ 200.00	\$ -	\$ 92.00	\$ -	\$ 75.00	\$ -
21	Curb & Gutter Removal and Replacement	8965.0	LF	\$ 55.00	\$ 493,075.00	\$ 54.00	\$ 484,110.00	\$ 54.00	\$ 484,110.00	\$ 62.00	\$ 555,830.00	\$ 54.00	\$ 484,110.00
22	Install New Curb & Gutter	230.0	LF	\$ 30.00	\$ 6,900.00	\$ 30.00	\$ 6,900.00	\$ 30.00	\$ 6,900.00	\$ 62.00	\$ 14,260.00	\$ 30.00	\$ 6,900.00
23	Concrete Sidewalk Access Ramp w/Warning Surface	265.0	EA	\$ 2,100.00	\$ 556,500.00	\$ 2,100.00	\$ 556,500.00	\$ 2,100.00	\$ 556,500.00	\$ 5,800.00	\$ 1,537,000.00	\$ 2,100.00	\$ 556,500.00
24	Concrete Sidewalk Access Ramp Removal	32.0	EA	\$ 1,500.00	\$ 48,000.00	\$ 1,500.00	\$ 48,000.00	\$ 1,500.00	\$ 48,000.00	\$ 3,200.00	\$ 102,400.00	\$ 1,500.00	\$ 48,000.00
25	Concrete Monolithic Island	0.0	SY	\$ 200.00	\$ -	\$ 250.00	\$ -	\$ 300.00	\$ -	\$ 78.00	\$ -	\$ 200.00	\$ -
SIDEWALK IMPROVEMENTS SECTION SUBTOTAL				\$	1,302,575.00	\$	1,293,610.00	\$	1,293,610.00	\$	2,378,184.00	\$	1,293,610.00
MILLING													
26	Milling Asphalt Pavement, Edge Milling (0-2")	215.0	SY	\$ 28.95	\$ 6,224.25	\$ 24.50	\$ 5,267.50	\$ 34.00	\$ 7,310.00	\$ 4.10	\$ 891.50	\$ 30.00	\$ 6,450.00
27	Milling Asphalt Pavement, Full Mill (0-2")	39930.0	SY	\$ 8.50	\$ 339,405.00	\$ 4.30	\$ 171,699.00	\$ 5.25	\$ 209,632.50	\$ 5.20	\$ 207,636.00	\$ 5.00	\$ 199,650.00
28	Milling Asphalt Pavement, Mill & Fill (0-3")	132540.0	SY	\$ 4.85	\$ 642,819.00	\$ 4.40	\$ 583,176.00	\$ 5.50	\$ 728,970.00	\$ 5.40	\$ 715,716.00	\$ 5.00	\$ 662,700.00
29	Incidental Milling	8634.0	SY	\$ 5.25	\$ 45,328.50	\$ 12.50	\$ 107,925.00	\$ 6.75	\$ 58,279.50	\$ 11.20	\$ 96,700.00	\$ 7.00	\$ 60,438.00
MILLING SECTION SUBTOTAL				\$	1,033,776.75	\$	868,067.50	\$	1,004,192.00	\$	1,020,934.50	\$	929,238.00
30	Pavement Patching	324.0	TN	\$ 235.00	\$ 76,140.00	\$ 249.00	\$ 80,676.00	\$ 200.00	\$ 64,800.00	\$ 279.00	\$ 90,396.00	\$ 250.00	\$ 81,000.00
PAVEMENT PATCHING SECTION SUBTOTAL				\$	76,140.00	\$	80,676.00	\$	64,800.00	\$	90,396.00	\$	81,000.00
PAVEMENT MARKINGS													
31	Thermoplastic Lines, 4" 90mils	5475.0	LF	\$ 2.50	\$ 13,687.50	\$ 2.50	\$ 13,687.50	\$ 2.50	\$ 13,687.50	\$ 2.93	\$ 16,041.75	\$ 2.50	\$ 13,687.50
32	Thermoplastic Lines, 8" 90mils	5549.0	LF	\$ 3.25	\$ 18,034.25	\$ 3.25	\$ 18,034.25	\$ 3.25	\$ 18,034.25	\$ 3.79	\$ 21,030.71	\$ 3.25	\$ 18,034.25
33	Thermoplastic Lines, 24" 90mils	4070.0	LF	\$ 10.75	\$ 43,752.50	\$ 10.75	\$ 43,752.50	\$ 10.75	\$ 43,752.50	\$ 12.43	\$ 50,590.10	\$ 10.75	\$ 43,752.50
34	Thermoplastic Symbols, 90mils	15.0	EA	\$ 125.00	\$ 1,875.00	\$ 125.00	\$ 1,875.00	\$ 125.00	\$ 1,875.00	\$ 161.38	\$ 2,420.70	\$ 125.00	\$ 1,875.00
35	Thermoplastic Characters, 90mils	2.0	EA	\$ 125.00	\$ 250.00	\$ 125.00	\$ 250.00	\$ 125.00	\$ 250.00	\$ 276.00	\$ 552.00	\$ 125.00	\$ 250.00
36	Speed Hump Symbols, 90mils	0.0	EA	\$ 250.00	\$ -	\$ 313.00	\$ -	\$ 300.00	\$ -	\$ 552.00	\$ -	\$ 250.00	\$ -
37	Bike Lane Arrow, 90mils	0.0	EA	\$ 250.00	\$ -	\$ 313.00	\$ -	\$ 400.00	\$ -	\$ 552.00	\$ -	\$ 250.00	\$ -
38	Bike Lane Symbol, 90mils	0.0	EA	\$ 300.00	\$ -	\$ 375.00	\$ -	\$ 750.00	\$ -	\$ 609.50	\$ -	\$ 300.00	\$ -
39	Bike Sharrow, 90mils	0.0	EA	\$ 375.00	\$ -	\$ 470.00	\$ -	\$ 750.00	\$ -	\$ 695.75	\$ -	\$ 375.00	\$ -
40	Green Thermoplastic, 24" 90mils	0.0	LF	\$ 20.00	\$ -	\$ 25.00	\$ -	\$ 100.00	\$ -	\$ 287.50	\$ -	\$ 20.00	\$ -
41	Shark Teeth Symbols, 90mils	40.0	EA	\$ 45.00	\$ 1,800.00	\$ 45.00	\$ 1,800.00	\$ 45.00	\$ 1,800.00	\$ 58.36	\$ 2,334.40	\$ 45.00	\$ 1,800.00
42	Temporary Paint, 4"	450.0	LF	\$ 1.75	\$ 787.50	\$ 1.75	\$ 787.50	\$ 1.75	\$ 787.50	\$ 2.60	\$ 1,170.00	\$ 1.75	\$ 787.50
43	Temporary Paint, 8"	120.0	LF	\$ 2.00	\$ 240.00	\$ 2.00	\$ 240.00	\$ 2.00	\$ 240.00	\$ 4.50	\$ 540.00	\$ 2.00	\$ 240.00
44	Temporary Paint, 24"	40.0	LF	\$ 10.00	\$ 400.00	\$ 10.00	\$ 400.00	\$ 10.00	\$ 400.00	\$ 18.11	\$ 724.40	\$ 10.00	\$ 400.00
45	Temporary Paint Symbols	4.0	EA	\$ 75.00	\$ 300.00	\$ 75.00	\$ 300.00	\$ 75.00	\$ 300.00	\$ 152.38	\$ 609.52	\$ 75.00	\$ 300.00
46	Temporary Paint Characters	0.0	EA	\$ 75.00	\$ -	\$ 94.00	\$ -	\$ 100.00	\$ -	\$ 350.75	\$ -	\$ 75.00	\$ -
47	Thermoplastic Eradication, Lines (4-24")	1114.0	LF	\$ 4.50	\$ 5,013.00	\$ 4.50	\$ 5,013.00	\$ 4.50	\$ 5,013.00	\$ 5.41	\$ 6,026.74	\$ 4.50	\$ 5,013.00
48	Thermoplastic Eradication, Symbols	0.0	EA	\$ 120.00	\$ -	\$ 150.00	\$ -	\$ 250.00	\$ -	\$ 402.50	\$ -	\$ 120.00	\$ -
49	Thermoplastic Eradication, Characters	0.0	EA	\$ 120.00	\$ -	\$ 150.00	\$ -	\$ 250.00	\$ -	\$ 402.50	\$ -	\$ 120.00	\$ -
50	Flexible Delimiters	0.0	EA	\$ 200.00	\$ -	\$ 250.00	\$ -	\$ 400.00	\$ -	\$ 494.50	\$ -	\$ 200.00	\$ -
PAVEMENT MARKING SECTION SUBTOTAL				\$	86,139.75	\$	86,139.75	\$	86,139.75	\$	102,040.32	\$	86,139.75
SIGNALS & INTELLIGENT TRANSPORTATION SYSTEMS													
51	Inductive Loop Sawcut	360.0	LF	\$ 15.00	\$ 5,400.00	\$ 15.00	\$ 5,400.00	\$ 15.00	\$ 5,400.00	\$ 18.24	\$ 6,566.40	\$ 18.89	\$ 6,800.40
52	Bike Count Loop Sawcut	0.0	LF	\$ 15.00	\$ -	\$ 30.00	\$ -	\$ 30.00	\$ -	\$ 18.24	\$ -	\$ 15.00	\$ -
53	Detector Card (Type 2070)	0.0	EA	\$ 500.00	\$ -	\$ 563.00	\$ -	\$ 800.00	\$ -	\$ 1,616.60	\$ -	\$ 500.00	\$ -
54	Junction Box, Std.	0.0	EA	\$ 1,000.00	\$ -	\$ 1,188.00	\$ -	\$ 4,000.00	\$ -	\$ 2,116.00	\$ -	\$ 650.00	\$ -
SIGNALS & INTELLIGENT TRANS SYSTEMS SECTION SUBTOTAL				\$	5,400.00	\$	5,400.00	\$	5,400.00	\$	6,566.40	\$	6,800.40
SPEED HUMPS													
55	Remove Speed Hump	14.0	EA	\$ 795.00	\$ 11,130.00	\$ 1,615.00	\$ 22,610.00	\$ 920.00	\$ 12,880.00	\$ 2,800.00	\$ 39,200.00	\$ 795.00	\$ 11,130.00
56	Install Speed Hump	14.0	EA	\$ 3,200.00	\$ 44,800.00	\$ 11,110.00	\$ 155,540.00	\$ 7,000.00	\$ 98,000.00	\$ 2,800.00	\$ 39,200.00	\$ 5,500.00	\$ 77,000.00
SPEED HUMPS SECTION SUBTOTAL				\$	55,930.00	\$	178,150.00	\$	110,880.00	\$	78,400.00	\$	88,130.00
TRAFFIC CONTROL													
57	Temporary Traffic Control	1.0	LS	\$ 250,000.00	\$ 250,000.00	\$ 228,579.00	\$ 228,579.00	\$ 360,000.00	\$ 360,000.00	\$ 168,600.00	\$ 168,600.00	\$ 500,000.00	\$ 500,000.00
58	Law Enforcement	0.0	LS	\$ 10,000.00	\$ -	\$ 50.00	\$ -	\$ 69,000.00	\$ -	\$ 13,200.00	\$ -	\$ 150,000.00	\$ -
59	Portable Lighting	0.0	LS	\$ 10,000.00	\$ -	\$ 75.00	\$ -	\$ 124,000.00	\$ -	\$ 4,000.00	\$ -	\$ 150,000.00	\$ -
60	Shallow Undercut	50.0	CY	\$ 100.00	\$ 5,000.00	\$ 54.50	\$ 2,725.00	\$ 200.00	\$ 10,000.00	\$ 29.32	\$ 1,466.00	\$ 250.00	\$ 12,500.00
61	Fabric for Soil Stabilization	0.0	SY	\$ 10.00	\$ -	\$ 50.00	\$ -	\$ 12.00	\$ -	\$ 9.50	\$ -	\$ 1,500.00	\$ -
62	GeoGrid for Soil Stabilization	0.0	SY	\$ 10.00	\$ -	\$ 75.00	\$ -	\$ 30.00	\$ -	\$ 11.50	\$ -	\$ 1,500.00	\$ -
63	Class IV Stone for Soil Stabilization	0.0	TN	\$ 100.00	\$ -	\$ 100.00							



BOARD OF COMMISSIONERS AGENDA ITEM REPORT

Agenda Item No.: 2025-673-

Submitted by: Aileen J. Staples, Administration

Submitting Department: Administration

Meeting Date: December 16, 2025

Subject

Approval of Budget Ordinance Amendment # 3 - FY 2025-2026

Recommendation:

Approval as submitted

item Summary:

ATTACHMENTS:

- [Budget Ordinance Amendment_summary.pdf](#)
- [Budget Ordinance Amendment # 3 FY 2025-2026.pdf](#)

Agenda Item: Budget Ordinance Amendment # 3 – FY 2025-2026

Summary: North Carolina General Statutes 159-15 authorizes the governing board to amend the budget ordinance at any time after the ordinance is adopted. Amendments generally include additional revenues, appropriations from contingency for unforeseen events, transfers to/from capital reserve funds and/or fund balance and periodic modifications to capital projects funds.

Attachments: Summary worksheets

Budget Amendment # 3

**General Fund
Budget Amendment Worksheet
For the fiscal year ending June 30, 2026**

Estimated Revenues:	Dept.	Budget Adopted	Prior Budget Amendments	Current Budget Amendments	Amended Budget
General Fund revenues		\$ 87,246,150	125,810	135,000	87,506,960
Total Revenues		87,246,150	125,810	135,000	87,506,960
Appropriations:					
Board of Commissioners	410	409,250			409,250
Legal Services	412	489,630		4,500	494,130
Town Manager's Office	420	1,059,335			1,059,335
Town Clerk	421	299,600			299,600
Organizational Performance	422	745,350			745,350
Budget Management	423	491,600	16,000		507,600
Communications	425	1,450,765			1,450,765
Human Resources	430	1,290,105			1,290,105
Risk Management	431	1,205,650		45,000	1,250,650
Downtown Development	435	588,200			588,200
Financial Services	440	1,674,505			1,674,505
Information Technology	445	2,381,430			2,381,430
Inspections	480	2,367,660		37,850	2,405,510
Planning	490	5,544,775			5,544,775
Public Facilities	500	3,157,980	337,470	95,000	3,590,450
Public Safety: Police	510	19,363,325			19,363,325
Public Safety: Fire	520	13,950,725	14,000		13,964,725
Public Works:					
PW Administration	530	329,535			329,535
Urban Forestry	535	742,995	2,500		745,495
Fleet Maintenance	550	727,290			727,290
Streets	560	4,692,595			4,692,595
Solid Waste	580	6,875,705			6,875,705
Engineering	540	2,066,010			2,066,010
Parks, Recreation & Cultural Resources	620	6,940,425			6,940,425
Center for Active Aging	630	652,755	109,150	28,500	790,405
Transfers	999	14,478,305			14,478,305
Total Appropriations		93,975,500	479,120	210,850	94,665,470
Estimated revenues over total appropriations		\$ (6,729,350)	\$ (353,310)	\$ (75,850)	\$ (7,158,510)
Other financing sources (uses):					
Sale of assets		720,000			720,000
Installment note proceeds		2,329,000			2,329,000
Lease Financing					-
Operating transfers from other funds:					
Special Revenue Fund - DMSD		156,700			156,700
Special Revenue Fund - Police		68,500			68,500
Special Revenue Fund - Futures Fund					-
Housing Initiatives Fund		65,000			65,000
Rec Capital Reserve Fund - Rec Impact Fees		492,650			492,650
Gen Capital Reserve Fund - Fire Impact Fees		-			-
Proceeds from NCCHIP Reserve		375,000			375,000
Appropriated Fund Balance		2,522,500	353,310	75,850	2,951,660
Total other financing sources		6,729,350	353,310	75,850	7,158,510
Estimated revenues and other sources over appropriations and other uses		\$ -	\$ -	\$ -	\$ -

Budget Amendment #3
 Town of Wake Forest
 Budget Amendment Request
 For the fiscal year ending June 30, 2026
Parks and Recreation Capital Projects Fund (573)

Funds coming from:					
Fund	Dept	Account	Project	Account Description	Amount
573	000	4710	573TaylorStPark	Interfund Transfers (Police Spec Rev)	200,000
573	000	4715	573TaylorStPark	Transfer from Cap Reserve (Impact Fees)	500,000

700,000

Funds going to:					
Fund	Dept	Account	Project/Department	Account Description	Amount
573	638	5300	573TaylorStPark	Professional Services	30,000
573	638	5730	573TaylorStPark	Cap Outlay - Improvements	670,000

700,000

Explanation:
 Establishing budget for Taylor St Park improvements reflective of actual cost and using police funds along with recreation impact fees.



BOARD OF COMMISSIONERS AGENDA ITEM REPORT

Agenda Item No.: 2025-675-

Submitted by: Kip Padgett, Administration

Submitting Department: Administration

Meeting Date: December 16, 2025

Subject

Consideration of an Interlocal Agreement with Wake County for an EMPA Program

Recommendation:

item Summary:

ATTACHMENTS:

- [Executive MPA Program Summary.pdf](#)
- [Updated Municipality ILA Draft - Dec 2025\[2\].pdf](#)
- [Exhibit 1 - AG-Bondi-Memo-Guidance-for-Recipients-of-Federal-Funding-Regarding-Unlawful-Discrimination_0.pdf](#)
- [Exhibit 2 - Semester Payment Schedule \(DRAFT\) - Nov 2025.pdf](#)

Executive MPA Program

Wake County has entered into an agreement with East Carolina University (ECU) to offer a Master of Public Administration (MPA) degree program. As part of this initiative, the County reached out to local municipalities to determine interest in participating. Wake Forest, along with three other municipalities, has expressed interest in joining the program.

The cost for Wake Forest to enroll four employees in the MPA program will be \$7,320 per semester. Employees who participate will be required to sign an agreement committing to remain employed with the Town for three (3) years following the completion of their degree. If an employee leaves before fulfilling this obligation, they will be required to reimburse the Town on a prorated basis, depending on when their departure occurs. This requirement mirrors the existing reimbursement policy for Police Recruits who receive Town-funded Basic Law Enforcement Training.

Employees interested in the program were required to submit an application and provide documentation they met the eligibility requirements of ECU, Wake County, & Wake Forest.

INTERLOCAL AGREEMENT
BETWEEN WAKE COUNTY AND WAKE COUNTY MUNICIPAL PARTIES
FOR PARTICIPATION IN eMPA PROFESSIONAL DEGREE PROGRAM

This Interlocal Reimbursement Agreement (“Agreement”) is entered into by and between Wake County, a body corporate and politic of the State of North Carolina (“County”), and the undersigned Wake County Municipal Parties, municipal corporations organized under the laws of the State of North Carolina (“Municipality” or the “Municipal Parties”). This Agreement is entered into pursuant to N.C. Gen. Stat. § 160A-460 et seq.

RECITALS

WHEREAS, the County and the Municipal Parties are committed to enhancing public service and leadership development within local government, including cultivation of future leaders and networks within Wake County; and

WHEREAS, the County has identified the Executive Master of Public Administration (“eMPA”) degree program offered by East Carolina University (“ECU”) as a valuable resource for achieving this goal. The eMPA curriculum is designed to develop and enhance public governance skills, including management and leadership, public policy and problem-solving skills with a focus on public service perspective; and

WHEREAS, the County has agreed to execute a separate agreement with ECU (“ECU Agreement”), under which the County will pay the program costs, thereby facilitating the participation of qualified applicants from the County and the Municipal Parties; and

WHEREAS, the eMPA program will be a 36-credit hour program delivered online with periodic in-person cohort meetings and learning experiences launching in January 2026;

WHEREAS, the provision of benefits to employees of the County and Municipal parties is provided for by statute and any such undertaking or expense serves a public purpose;

NOW, THEREFORE, in consideration of the mutual covenants and agreements contained herein, the County and the undersigned Municipal Parties agree as follows:

1. Purpose, Program Description, and General Acknowledgements.
 - a. Purpose: The purpose of this Agreement is to establish the terms under which the Municipal Parties will participate in and reimburse the County for their share of costs associated with ECU eMPA program participation.
 - b. Program Description: The eMPA program is a 36-credit hour program to be delivered by ECU starting in January 2026 on a closed cohort basis. The Program shall consist of 12 courses, and it is anticipated that admitted students will register for two courses per semester for six semesters. The admitted class shall constitute a defined group of

students prescreened by the County and Municipal Parties that will progress through the program together, fostering collaboration and networking. Enrollment shall not be rolling, and substitutions or mid-cohort admissions will not be permitted.

- c. ECU retains final approval over the curriculum and course sequence to ensure compliance with applicable accreditation standards.
- d. ECU retains responsibility for the education of students enrolled in the program, including but not limited to evaluation for purpose of granting academic credit, grading, and discipline.
- e. Ownership of works created for or related to the program are governed by the *East Carolina University Copyright Regulation*. The parties acknowledge review of and acceptance of those terms.
- f. The participating Municipality acknowledges that it may receive or have access to education records, or information derived from education records, that are subject to the Family Educational Rights and Privacy Act (“FERPA”). The participating Municipality shall comply with all applicable FERPA requirements and shall use such information only for purposes consistent with this Agreement. The participating Municipality shall maintain the confidentiality of personally identifiable information and shall not disclose it without the prior written consent of the student. If the participating Municipality experiences a breach relating to this information or becomes aware that it or its employees have disclosed such information to a third party without the written consent of the student, the participating Municipality shall immediately notify the County.
- g. The Auditor of the State of North Carolina, the University’s internal auditor, and/or the Joint Legislative Commission on Governmental Operations (and legislative employees whose primary responsibility is to provide professional or administrative services to the Commission) shall have access to persons and records as a result of all agreements entered into by East Carolina University in accordance with N.C. Gen. Stat. § 147-64.7, § 143-49(9), and/or § 120-75.1.
- h. Independent Status. The Parties are independent governmental entities and nothing in this Agreement shall be construed to create a partnership, joint venture, agency, or employer-employee relationship.

2. County’s Role and Obligations.

- a. The County shall execute a separate agreement directly with ECU to establish terms and conditions of the eMPA program.
- b. The County shall pay the costs associated with the program for each semester upfront, as outlined in the ECU Agreement.

- c. The County shall submit the names of prescreened applicants to the University, as provided by the Municipal Parties.
- d. The County shall provide administrative oversight of the selection process as set forth in Section 4, including periodic reviews to verify that municipalities are meeting administrative and compliance obligations required under this Agreement.
- e. The County will coordinate with the University to identify elective courses to address workforce needs and challenges.
- f. Upon receiving notice that the University has suspended, dismissed, or expelled an enrolled student, the County will promptly notify the employing Municipality.
- g. If the University or the County determines that a Municipality has failed to comply with this Agreement, applicable law, or program requirements, the County shall provide written notice to the impacted Municipality. If the Municipality fails to cure within a reasonable period, or if the University requires suspension or removal based on participant noncompliance, the County may, in its sole discretion and to the extent consistent with University requirements, suspend or remove the Municipality from participation in the program.
- h. The County's authority to monitor compliance or enforce removal is administrative in nature and subject to and to be consistent with the University's program requirements. Such authority of the County shall not be construed as supervision or control over municipal operations or as an assumption of liability on behalf of any participating Municipality.

3. Municipality Role and Obligations.

- a. Each Municipality shall identify and recommend applicants to the County for admission into the eMPA program, including but not limited to verifying employee eligibility and compliance with all program requirements.
- b. Each Municipality shall maintain all employee records and supporting documentation required for participation.
- c. Each Municipality shall promptly comply with all requests from the County and the University for information regarding this Agreement or the eMPA program and comply with Sections 4 and 5 of this Agreement.
- d. Each Municipality will reimburse the County pursuant to terms set forth in Section 6.
- e. Each Municipality shall inform participants of program details and delivery.
- f. Each Municipality shall notify the County as soon as possible, but in no event more than three days after a participating employee is no longer employed by the Municipality.
- g. Each Municipality shall comply with all university and County requirements for program participation. Each Municipality agrees to accept and comply with all administrative and disciplinary decisions issued by the County or the University regarding program participation, including decisions concerning suspensions, removal, or other corrective actions required to maintain program integrity or compliance with university standards.
- h. Any disciplinary or employment-related action affecting individual municipal employees shall remain the sole responsibility of the Municipality. Nothing in this

Agreement authorizes the County to take or direct personnel action within the Municipality's workforce.

4. Selection Process Criteria Applicable to all Participating Parties.

- a. The County and participating Municipal Parties shall identify applicants for admission to the eMPA program. Such process shall include consideration of each potential applicant to assure they qualify for admission to the eMPA program by meeting the following criteria:
 - (i) Has at least five years of public administration-related career experience.
 - (ii) Has at least three years of experience managing people or processes; and
 - (iii) Has earned an undergraduate degree from a regionally-accredited educational institution with a minimum 2.7 GPA.
- b. The selection process shall be conducted in a manner consistent with applicable federal and state law, including constitutional requirements governing the prohibition of race-conscious admissions policies and practices. Each Municipality shall be solely responsible for ensuring that its employees, contractors, and program participants comply with all federal, state, and local law. The County's obligation to ensure compliance shall consist of verifying that participating Municipal Parties have adopted and implemented compliant policies or procedures and Municipal Parties shall provide those policies or procedures to the County before the commencement of the program; the County shall not be responsible for monitoring day-to-day conduct or employment actions of municipal personnel.
- c. The County and Municipal Parties will not discriminate on the basis of race/ethnicity, color, genetic information, national origin, religion, sex, sexual orientation, gender identity, age, disability, political affiliation or veteran status (including relationship or association with a protected veteran; or Active Duty or National Guard service) in the selection or recommendation of any applicant to the eMPA program. The County and Municipal Parties further agree to comply with the July 29, 2025 Guidance for Recipients of Federal Funding Regarding Unlawful Discrimination issued by U.S. Attorney General, Pam Bondi and any additional related guidance or legal precedent related to college and university admission practices for all phases related to the recruitment, application, and selection of applicants for the eMPA program.
- d. The County and Municipal Parties acknowledge that any list of recommended applicants for eMPA program admission is advisory only. Applicants shall apply for the eMPA through the ECU graduate school admissions process and shall be required to meet all admissions requirements established by ECU. Applicants will be responsible for paying the application fee and submitting all required materials to ECU. All final admissions decisions are in the sole discretion of ECU.
- e. The County and each Municipality agree to maintain the following documentation and provide access to the County and/or ECU upon request to identify potential

discriminatory practices in order to ensure ongoing compliance with this Agreement and applicable law:

- i. Program materials;
 - ii. Participant feedback; and
 - iii. Program outcomes.
- f. The County shall maintain regular communications with ECU to ensure that the oversight and auditing processes align with university requirements and expectations. Any changes to university requirements shall be promptly communicated to each Municipality to ensure continued compliance.

5. Cost, Reimbursement, and Indemnification.

The County shall pay the tuition and fees directly to the University on behalf of the Participant(s) accepted into the program in accordance with the program's billing schedule, the agreement between the University and the County, and applicable County procedures. The Municipality shall reimburse the County for the full amount of the tuition and fees paid within 30 days of receipt of an invoice from the County pursuant to the schedule set forth in Exhibit 1, which is incorporated by reference herein. - In the event any participant sponsored by a Municipality (i) withdraws or otherwise ceases participation in the program; (ii) fails to complete the program or does not meet academic or attendance requirements established by the University; (iii) violates the Program's rules, the County's administrative requirements, or the Municipality's own participation conditions; or (iv) becomes ineligible for County payment under the Program, the Municipality shall remain fully responsible for reimbursement to the County of all program costs paid on behalf of that participant. If the University cancels or defers the Program for any reason, Municipalities shall reimburse the County for all tuition and related fees paid on behalf of their Participants, to the extent such fees are non-refundable.

Each Municipality shall be solely responsible for determining appropriate tax treatment and benefit classification of any educational assistance or related payments made on behalf of employees under this Agreement. This includes, but is not limited to, determining whether such assistance constitutes taxable income to the employee under applicable federal, state, or local laws. The County shall have no responsibility or liability for any tax consequences or benefit determinations arising from program participation, and each Municipality agrees to communicate clearly with its participating employees regarding potential tax implications or benefit impacts.

Each Municipality shall be solely responsible for determining what constitutes compensable time under its own educational assistance or personnel policies and applicable laws.

6. Term and Termination.

This Agreement shall become effective January 1, 2026 shall remain in effect through the completion of the eMPA program, unless terminated earlier by mutual agreement in writing.

Either party may terminate this Agreement for cause upon written notice if the other party materially breaches any provision of this Agreement and fails to cure such breach within 30 days of receiving written notice. Termination shall not relieve any Municipality of its obligation to reimburse the County for tuition and fees paid for participants enrolled at the time of termination.

7. No Third-Party Beneficiaries.

Nothing in this Agreement shall be construed to create any third-party beneficiary rights in any person or entity not a party to this Agreement.

8. Governing Law.

This Agreement shall be governed by and construed in accordance with the laws of the State of North Carolina. Any claim, action, or proceeding arising from or related to this Agreement shall be brought in courts located in Wake County, North Carolina.

9. No Waiver of Sovereign Immunity.

The Parties agree that nothing in this Agreement shall be construed to mandate purchase of insurance by the County pursuant to N.C.G.S. 153A-435; or to be inconsistent with Wake County's "Resolution Regarding Limited Waiver of Sovereign Immunity" enacted October 6, 2003; or to in any other way waive any party's defense of sovereign or governmental immunity from any cause of action alleged or brought against the parties for any reason if otherwise available as a matter of law.

10. Entire Agreement.

This Agreement constitutes the entire agreement between the parties regarding the subject matter herein and supersedes any prior discussions or agreements, whether oral or written.

11. Notices.

Notice to any Municipal Party or to the County shall be sufficient if sent in writing; postage prepaid, registered or certified mail and email to the County Manager of Wake County or Manager of the Municipal Parties at the addresses below:

For the County:

Wake County Manager
Wake County Justice Center
301 S. McDowell St.
Raleigh, NC 27601
david.ellis@wake.gov

For the Municipalities:

Town of Wake Forest
Town Manager
301 S. Brooks St.

Wake Forest, NC 27587
kpadgett@wakeforestnc.gov

Town of Knightdale
Town Manager
950 Steeple Square Ct.
Knightdale, NC 27545
bill.summers@knightdalenc.gov

Town of Morrisville
Town Manager
100 Town Hall Dr.
Morrisville, NC 27560
bzuidema@morrisvillenc.gov

Town of Rolesville
Town Manager
502 Southtown Cir.
Rolesville, NC 27571
emarsh@rolesvillenc.gov

Town of Apex
Town Manager
73 Hunter St.
Apex, NC 27502
randy.vosburg@apexnc.org

IN WITNESS WHEREOF, the parties have executed this Agreement as of the dates indicated below.

WAKE COUNTY

ATTEST:

County Manager

County Clerk

This instrument has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act.

Chief Financial Officer (or designee)

TOWN OF WAKE FOREST

Town Manager

Town Clerk

This instrument has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act.

Chief Financial Officer (or designee)

TOWN OF KNIGHTDALE

Town Manager

Town Clerk

This instrument has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act.

Chief Financial Officer (or designee)

TOWN OF MORRISVILLE

Town Manager

Town Clerk

This instrument has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act.

Chief Financial Officer (or designee)

TOWN ROLESVILLE

Town Manager

Town Clerk

This instrument has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act.

Chief Financial Officer (or designee)

TOWN OF APEX

Town Manager

Town Clerk

This instrument has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act.

Chief Financial Officer (or designee)



Office of the Attorney General
Washington, D. C. 20530

July 29, 2025

MEMORANDUM FOR ALL FEDERAL AGENCIES

FROM: THE ATTORNEY GENERAL *[Signature]*

SUBJECT: GUIDANCE FOR RECIPIENTS OF FEDERAL FUNDING
REGARDING UNLAWFUL DISCRIMINATION

I. INTRODUCTION

One of our Nation’s bedrock principles is that all Americans must be treated equally. Not only is discrimination based on protected characteristics illegal under federal law, but it is also dangerous, demeaning, and immoral. Yet in recent years, the federal government has turned a blind eye toward, or even encouraged, various discriminatory practices, seemingly because of their purportedly benign labels, objectives, or intentions. No longer. Going forward, the federal government will not stand by while recipients of federal funds engage in discrimination.

This guidance clarifies the application of federal antidiscrimination laws to programs or initiatives that may involve discriminatory practices, including those labeled as Diversity, Equity, and Inclusion (“DEI”) programs.¹ Entities receiving federal funds, like all other entities subject to federal antidiscrimination laws, must ensure that their programs and activities comply with federal law and do not discriminate on the basis of race, color, national origin, sex, religion, or other protected characteristics—no matter the program’s labels, objectives, or intentions. In furtherance of that requirement, this guidance identifies “Best Practices” as non-binding suggestions to help entities comply with federal antidiscrimination laws and avoid legal pitfalls; these are not mandatory requirements but rather practical recommendations to minimize the risk of violations.

Entities that receive federal financial assistance or that are otherwise subject to federal anti-discrimination laws, including educational institutions, state and local governments, and public and private employers, should review this guidance carefully to ensure all programs comply with their legal obligations.

¹ DEI programs go by other names as well, such as Diversity, Equity, Inclusion, and Accessibility (“DEIA”) and Diversity, Equity, Inclusion, and Belonging (“DEIB”).

II. EXECUTIVE SUMMARY

This guidance emphasizes the significant legal risks of initiatives that involve discrimination based on protected characteristics and provides non-binding best practices to help entities avoid the risk of violations. Key points include:

- **Statutory nondiscrimination requirements:** Federal law prohibits discrimination based on protected characteristics like race, sex, color, national origin, or religion.
- **Legal pitfalls of DEI Programs:** The use of terms such as “DEI,” “Equity,” or other euphemistic terms does not excuse unlawful discrimination or absolve parties from scrutiny regarding potential violations.
- **Prohibition on Protected Characteristics as Criteria:** Using race, sex, or other protected characteristics for employment, program participation, resource allocation, or other similar activities, opportunities, or benefits, is unlawful, except in rare cases where such discrimination satisfies the relevant level of judicial scrutiny.
- **Importance of Sex-Separated Intimate Spaces and Athletic Competitions:** Compelling employees to share intimate spaces with the opposite sex or allowing men to compete in women’s athletic competitions would typically be unlawful.
- **Unlawful Proxy Discrimination:** Facially neutral criteria (e.g., “cultural competence,” “lived experience,” geographic targeting) that function as proxies for protected characteristics violate federal law if designed or applied with the intention of advantaging or disadvantaging individuals based on protected characteristics.
- **Scrutiny of Third-Party Funding:** Recipients of federal funds should ensure federal funds do not support third-party programs that discriminate.
- **Protection Against Retaliation:** Individuals who object to or refuse to participate in discriminatory programs, trainings, or policies are protected from adverse actions like termination or exclusion based on that individual’s opposition to those practices.²

III. KEY FEDERAL ANTIDISCRIMINATION PROVISIONS AND LAW

Federal antidiscrimination laws prohibit discrimination on the basis of protected characteristics, including race, color, religion, sex, and national origin. The U.S. Supreme Court has consistently held that policies or practices based upon protected characteristics are subject to

² Unlawful retaliation occurs when a federally funded entity takes adverse actions against employees, participants, or beneficiaries because they engage in protected activities related to opposing DEI practices they reasonably believe violate federal antidiscrimination laws.

rigorous judicial scrutiny. Race-based classifications are subject to strict scrutiny, requiring a compelling governmental interest and narrowly tailored means to achieve that interest.³ Sex-based classifications are subject to heightened scrutiny, requiring an exceedingly persuasive justification and substantial relation to an important governmental objective.⁴ Discrimination based on other protected characteristics, such as religion, is also evaluated under analogous standards.⁵ Entities receiving federal funds must comply with applicable civil rights laws, including:

- **Title VI of the Civil Rights Act of 1964:** Prohibits discrimination based on race, color, or national origin in any program or activity receiving federal financial assistance. This includes most educational institutions, healthcare providers, and state and local government agencies.
- **Title VII of the Civil Rights Act of 1964:** Prohibits employment discrimination based on, or motivated by, race, color, religion, sex, or national origin, in any terms, conditions, or privileges of employment, including hiring, promotion, demotion, termination, compensation, job transfers, training, or access to employment privileges and benefits.
- **Title IX of the Education Amendments of 1972:** Prohibits discrimination based on sex in education programs or activities receiving federal financial assistance. Title IX protections extend beyond athletics and include addressing sexual harassment, sex-based harassment, admissions policies, and equal access to resources and programs.

³ See, e.g., *Students for Fair Admissions, Inc. v. Harvard*, 600 U.S. 181, 214 (2023) (holding racial classifications by public institutions are subject to strict scrutiny and racial classifications by private institutions can serve as basis for revoking funding under Title VI); *Ricci v. DeStefano*, 557 U.S. 557, 579 (2009) (“[E]xpress, race-based decision-making violates Title VII’s command that employers cannot take adverse employment actions because of an individual’s race.”); see also *Vitolo v. Guzman*, 999 F.3d 353, 361 (6th Cir. 2021) (holding grant program with race and sex preferences is unlawful under Equal Protection Clause).

⁴ See, e.g., *United States v. Virginia*, 518 U.S. 515, 531 (1996).

⁵ See, e.g., *Espinoza v. Montana Dep’t of Revenue*, 591 U.S. 464, 479 (2020) (“The Free Exercise Clause, which applies to the States under the Fourteenth Amendment, protects religious observers against unequal treatment and against laws that impose special disabilities on the basis of religious status [S]trict scrutiny applies . . . because Montana’s no-aid provision discriminates based on religious status”); *Shapiro v. Thompson*, 394 U.S. 618, 631 (1969) (holding discriminating against individual for exercising fundamental constitutional rights is subject to heightened scrutiny), *overruled on other grounds by Edelman v. Jordan*, 415 U.S. 651 (1974); see also *Church of Lukumi Babalu Aye, Inc. v. City of Hialeah*, 508 U.S. 520, 540 (1993) (relying on Equal Protection principles in holding intentional discrimination against exercise of religion is subject to strict scrutiny).

- **Equal Protection Clause of the Fourteenth Amendment:** Prohibits States from denying any person the equal protection of the laws, relevant in the context of discrimination claims involving state or local government actions.

IV. UNLAWFUL DISCRIMINATORY POLICIES AND PRACTICES

The following is a non-exhaustive list of unlawful practices that could result in revocation of grant funding. Federal funding recipients may also be liable for discrimination if they knowingly fund the unlawful practices of contractors, grantees, and other third parties.

A. Granting Preferential Treatment Based on Protected Characteristics

1. What Constitutes Unlawful Preferential Treatment?

Preferential treatment occurs when a federally funded entity provides opportunities, benefits, or advantages to individuals or groups based on protected characteristics in a way that disadvantages other qualified persons, including such practices portrayed as “preferential” to certain groups. Such practices violate federal law unless they meet very narrow exceptions.

2. Examples of Unlawful Practices

Race-Based Scholarships or Programs: A university’s DEI program establishes a scholarship fund exclusively for students of a specific racial group (e.g., “Black Student Excellence Scholarship”) and excludes otherwise qualified applicants of other races, even if they meet academic or financial need criteria. This extends to any race-exclusive opportunities, such as internships, mentorship programs, or leadership initiatives that reserve spots for specific racial groups, regardless of intent to promote diversity. Such race-exclusive programs violate federal civil rights law by discriminating against individuals based solely on their race or treating people differently based on a protected characteristic without meeting the strict legal standards required for race-conscious programs.

Preferential Hiring or Promotion Practices: A federally funded entity’s DEI policy prioritizes candidates from “underrepresented groups” for admission, hiring, or promotion, bypassing qualified candidates who do not belong to those groups, where the preferred “underrepresented groups” are determined on the basis of a protected characteristic like race.

Access to Facilities or Resources Based on Race or Ethnicity: A university’s DEI initiative designates a “safe space” or lounge exclusively for students of a specific racial or ethnic group.

B. Prohibited Use of Proxies for Protected Characteristics

1. What Constitutes Unlawful Proxies?

Unlawful proxies occur when a federally funded entity intentionally uses ostensibly neutral criteria that function as substitutes for explicit consideration of race, sex, or other protected characteristics. While these criteria may appear facially neutral, they become legally problematic under any of the following circumstances:

- They are selected because they correlate with, replicate, or are used as substitutes for protected characteristics.
- They are implemented with the intent to advantage or disadvantage individuals based on protected characteristics.

2. Examples of Potentially Unlawful Proxies

“Cultural Competence” Requirements: A federally funded university requires job applicants to demonstrate “cultural competence,” “lived experience,” or “cross-cultural skills” in ways that effectively evaluate candidates’ racial or ethnic backgrounds rather than objective qualifications. This includes selection criteria that advantage candidates who have experiences the employer associates with certain racial groups. For instance, requiring faculty candidates to describe how their “cultural background informs their teaching” may function as a proxy if used to evaluate candidates based on race or ethnicity.

Geographic or Institutional Targeting: A federally funded organization implements recruitment strategies targeting specific geographic areas, institutions, or organizations chosen primarily because of their racial or ethnic composition rather than other legitimate factors.

“Overcoming Obstacles” Narratives or “Diversity Statements”: A federally funded program requires applicants to describe “obstacles they have overcome” or submit a “diversity statement” in a manner that advantages those who discuss experiences intrinsically tied to protected characteristics, using the narrative as a proxy for advantaging that protected characteristic in providing benefits.

C. Segregation Based on Protected Characteristics

1. What Constitutes Unlawful Segregation?

Segregation based on protected characteristics occurs when a federally funded entity organizes programs, activities, or resources—such as training sessions—in a way that separates or restricts access based on race, sex, or other protected characteristics. Such practices generally violate federal law by creating unequal treatment or reinforcing stereotypes, regardless of the stated goal (e.g., promoting inclusion or addressing historical inequities). Exceptions are narrow

and include only cases where federal law expressly permits race-based remedies for specific, documented acts of past discrimination by the institution itself, or in specialized contexts such as correctional facilities where courts have recognized compelling institutional interests.

While compelled segregation is generally impermissible, failing to maintain sex-separated athletic competitions and intimate spaces can also violate federal law. Federally funded institutions that allow males, including those self-identifying as “women,” to access single-sex spaces designed for females—such as bathrooms, showers, locker rooms, or dormitories—undermine the privacy, safety, and equal opportunity of women and girls. Likewise, permitting males to compete in women’s athletic events almost invariably denies women equal opportunity by eroding competitive fairness. These policies risk creating a hostile environment under Title VII, particularly where they compromise women’s privacy, safety, or professional standing, and can violate Title IX by denying women access to the full scope of sex-based protections in education. To ensure compliance with federal law and to safeguard the rights of women and girls, organizations should affirm sex-based boundaries rooted in biological differences.

2. Examples of Unlawful Practices

Race-Based Training Sessions: A federally funded university hosts a DEI training program that requires participants to separate into race-based groups (e.g., “Black Faculty Caucus” or “White Ally Group”) for discussions, prohibiting individuals of other races from participating in specific sessions. In contrast, a “Faculty Academic Support Network” open to all faculty interested in promoting student success avoids reliance on protected characteristics and complies with federal law.

Segregation in Facilities or Resources: A college receiving federal funds designates a “BIPOC-only study lounge,” facially discouraging access by students of other races. Even if access is technically open to all, the identity-based focus creates a perception of segregation and may foster a hostile environment. This extends to any resource allocation—such as study spaces, computer labs, or event venues—that segregates access based on protected characteristics, even if intended to create “safe spaces.” This does not apply to facilities that are single-sex based on biological sex to protect privacy or safety, such as restrooms, showers, locker rooms, or lodging.

Implicit Segregation Through Program Eligibility: A federally funded community organization hosts a DEI-focused workshop series that requires participants to identify with a specific racial or ethnic group (e.g., “for underrepresented minorities only”) or mandates sex-specific eligibility, effectively excluding others who meet objective program criteria. Use of Protected Characteristics in Candidate Selection

3. What Constitutes Unlawful Use of Protected Characteristics?

Unlawful use of protected characteristics occurs when a federally funded entity or program considers race, sex, or any other protected trait as a basis for selecting candidates for employment

(e.g., hiring, promotions), contracts (e.g., vendor agreements), or program participation (e.g., internships, admissions, scholarships, training). This includes policies that explicitly mandate representation of specific groups in candidate pools or implicitly prioritize protected characteristics through selection criteria, such as “diverse slate” requirements, diversity decision-making panels, or diversity-focused evaluations. It also includes requirements that contracting entities utilize a specific level of working hours from individuals of certain protected characteristics to complete the contract. Such practices violate federal law by creating unequal treatment or disadvantaging otherwise qualified candidates, regardless of any intent to advance diversity goals.

4. Examples of Unlawful Practices

Race-Based “Diverse Slate” Policies in Hiring: A federally funded research institute adopts a policy requiring that all interview slates for faculty positions include a minimum number of candidates from specific racial groups (e.g., at least two “underrepresented minority” candidates), rejecting otherwise qualified candidates who do not meet this racial criterion. This extends to any policy that sets racial benchmarks or mandates demographic representation in candidate pools, such as requiring a certain percentage of finalists to be from “diverse” backgrounds.

Sex-Based Selection for Contracts: A federally funded state agency implements a DEI policy that prioritizes awarding contracts to women-owned businesses, automatically advancing female vendors or minority-owned businesses over equally or more qualified businesses without preferred group status. This includes any contract selection process that uses sex or race as a tiebreaker or primary criterion, such as policies favoring “minority- or women-owned” businesses without satisfying the appropriate level of judicial scrutiny.

Race- or Sex-Based Program Participation: A federally funded university’s internship program requires that 50% of selected participants be from “underrepresented racial groups” or female students, rejecting equally or more qualified applicants who do not meet these demographic criteria. This extends to any program—such as scholarships, fellowships, or leadership initiatives—that uses race, sex, or any other protected characteristic as a selection criterion, even if framed as addressing underrepresentation.

D. Training Programs That Promote Discrimination or Hostile Environments

1. What Constitutes Unlawful DEI Training Programs?

Unlawful DEI training programs are those that—through their content, structure, or implementation—stereotype, exclude, or disadvantage individuals based on protected characteristics or create a hostile environment. This includes training that:

- Excludes or penalizes individuals based on protected characteristics.

- Creates an objectively hostile environment through severe or pervasive use of presentations, videos, and other workplace training materials that single out, demean, or stereotype individuals based on protected characteristics.

2. Examples of Unlawful Practices

Trainings That Promote Discrimination Based on Protected Characteristics: A federally funded school district requires teachers to complete a DEI training that includes statements stereotyping individuals based on protected characteristics—such as “all white people are inherently privileged,” “toxic masculinity,” etc. Such trainings may violate Title VI or Title VII if they create a hostile environment or impose penalties for dissent in ways that result in discriminatory treatment.⁶

E. Recommendations on Best Practices

Ensure Inclusive Access: All workplace programs, activities, and resources should be open to all qualified individuals, regardless of race, sex, or other protected characteristics. Avoid organizing groups or sessions that exclude participants based on protected traits. Some sex separation is necessary where biological differences implicate privacy, safety, or athletic opportunity.

Focus on Skills and Qualifications: Base selection decisions on specific, measurable skills and qualifications directly related to job performance or program participation. For example, rather than asking about “cultural competence,” assess specific skills such as language proficiency or relevant educational credentials. Criteria like socioeconomic status, first-generation status, or geographic diversity must not be used if selected to prioritize individuals based on racial, sex-based, or other protected characteristics.

Prohibit Demographic-Driven Criteria: Discontinue any program or policy designed to achieve discriminatory outcomes, even those using facially neutral means. Intent to influence demographic representation risks violating federal law. For example, a scholarship program must not target “underserved geographic areas” or “first-generation students” if the criteria are chosen to increase participation by specific racial or sex-based groups. Instead, use universally applicable criteria, such as academic merit or financial hardship, applied without regard to protected characteristics or demographic goals.

Document Legitimate Rationales: If using criteria in hiring, promotions, or selecting contracts that might correlate with protected characteristics, document clear, legitimate rationales unrelated to race, sex, or other protected characteristics. Ensure these rationales are consistently applied and are demonstrably related to legitimate, nondiscriminatory institutional objectives.

Scrutinize Neutral Criteria for Proxy Effects: Before implementing facially neutral criteria, rigorously evaluate and document whether they are proxies for race, sex, or other protected

⁶ Federal law allows for workplace harassment trainings that are focused on preventing unlawful workplace discrimination and that do not single out particular groups as inherently racist or sexist.

characteristics. For instance, a program targeting “low-income students” must be applied uniformly without targeting areas or populations to achieve racial or sex-based outcomes.

Eliminate Diversity Quotas: Focus solely on nondiscriminatory performance metrics, such as program participation rates or academic outcomes, without reference to race, sex, or other protected traits. And discontinue policies that mandate representation of specific racial, sex-based, or other protected groups in candidate pools, hiring panels, or final selections. For example, replace a policy requiring “at least one minority candidate per slate” with a process that evaluates all applicants based on merit.

Avoid Exclusionary Training Programs: Ensure trainings are open to all qualified participants, regardless of protected characteristics. Avoid segregating participants into groups based on race, sex, or other protected characteristics. Trainings should not require participants to affirm specific ideological positions or “confess” to personal biases or privileges based on a protected characteristic.

Include Nondiscrimination Clauses in Contracts to Third Parties and Monitor Compliance: Incorporate explicit nondiscrimination clauses in grant agreements, contracts, or partnership agreements, requiring third parties to comply with federal law, and specify that federal funds cannot be used for programs that discriminate based on protected characteristics. Monitor third parties that receive federal funds to ensure ongoing compliance, including reviewing program materials, participant feedback, and outcomes to identify potential discriminatory practices. Terminate funding for noncompliant programs.

Establish Clear Anti-Retaliation Procedures and Create Safe Reporting Mechanisms: Implement and communicate policies that prohibit retaliation against individuals who engage in protected activities, such as raising concerns, filing complaints, or refusing to participate in potentially discriminatory programs. Include these policies in employee handbooks, student codes of conduct, and program guidelines. Provide confidential, accessible channels for individuals to report concerns about unlawful practices.

V. CONCLUSION

Entities are urged to review all programs, policies, and partnerships to ensure compliance with federal law, and discontinue any practices that discriminate on the basis of a protected status. The recommended best practices provided in this guidance are non-binding suggestions to assist entities in avoiding legal pitfalls and upholding equal opportunity for all. By prioritizing nondiscrimination, entities can mitigate the legal, financial, and reputational risks associated with unlawful DEI practices and fulfill their civil rights obligations.

Exhibit 2

Municipality	# of Candidates	Spring, Year 1	Summer, Year 1	Fall, Year 1	Spring, Year 2	Summer, Year 2	Fall, Year 2	Total Municipal Cost
		PADM 6100 PADM 6101	PADM 6102 PADM6110	Elective Elective	PADM 6120 PADM 6161	PADM 6220 PADM 6990	Elective Elective	
Wake Forest	4	\$7,320	\$7,320	\$7,320	\$7,320	\$7,320	\$7,320	\$43,920
Apex	5	\$9,150	\$9,150	\$9,150	\$9,150	\$9,150	\$9,150	\$54,900
Knightdale	1	\$1,830	\$1,830	\$1,830	\$1,830	\$1,830	\$1,830	\$10,980
Morrisville	2	\$3,660	\$3,660	\$3,660	\$3,660	\$3,660	\$3,660	\$21,960
Rolesville	1	\$1,830	\$1,830	\$1,830	\$1,830	\$1,830	\$1,830	\$10,980
								TOTAL
								\$142,740

To Note:

- > The total cost outlined below excludes Wake County costs of participating in 6 semesters per candidate (5 candidates at \$54,900 each).
- > East Carolina University (ECU) will invoice Wake County on the 20th day following the start of each semester.
- > Wake County will invoice participating municipalities based on their proportional share after Wake County has remitted payment to ECU each semester.
- > The agreement will impact the following fiscal years: 2025–2026, 2026–2027, and 2027–2028.
- > Book costs are not included in the calculations.



BOARD OF COMMISSIONERS AGENDA ITEM REPORT

Agenda Item No.: 2025-655-

Submitted by: Ella Dowtin, Administration

Submitting Department: Administration

Meeting Date: December 16, 2025

Subject

Department Monthly Reports

Recommendation:

item Summary:

ATTACHMENTS:

- [November 2025 Monthly Report.pdf](#)

November 2025 | Department Monthly Report



Center for Active Aging

ACTIVITY		REVENUE COLLECTED	
Total Active Members	4,658	August Collections	Amount
New members this month	49	Classes	\$2,135
Number of Events Hosted	2	Donations	\$328
Number of Programs Hosted	373	Miscellaneous	\$1,250
Total Events Attendance	38		
Total Programs Attendance	4,315		

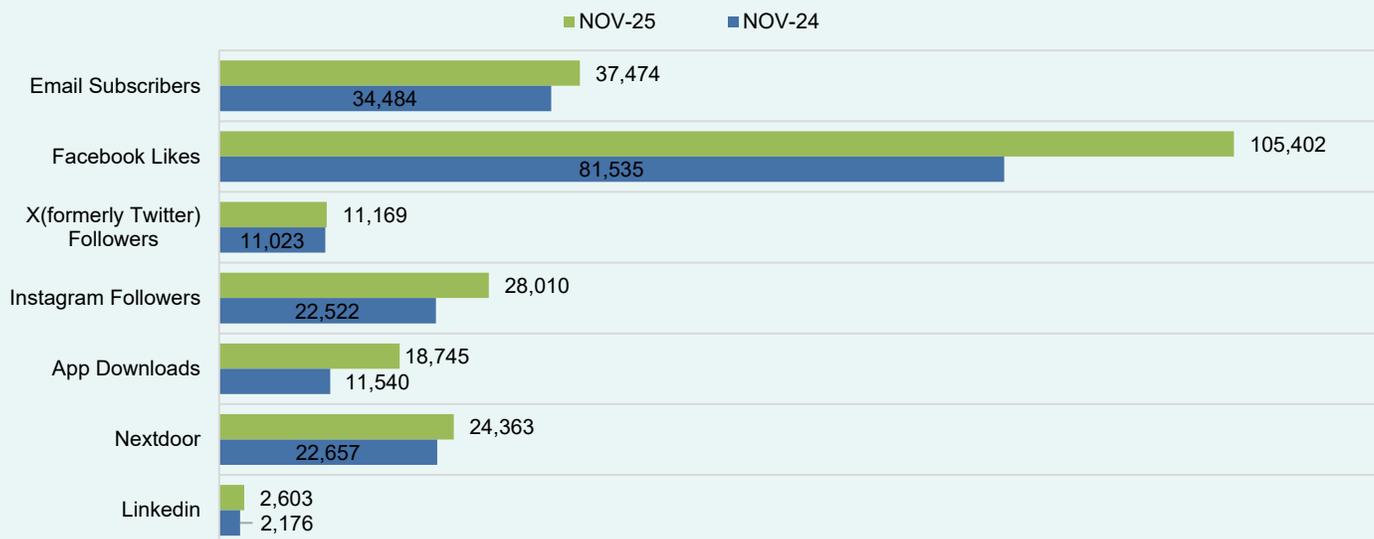
Updates: N/A

Communications

ANNOUNCEMENTS	
Media Releases	34
Email Announcements	21
Town-to-Resident Phone Calls	17

TOP 5 VIEWED PAGES ON WEBSITE		
RANK	PAGE	IEWS
1	Forms & Applications	7,397
2	Home	5,133
3	News	1,404
4	WF Cares Holiday Kick-Off	1,162
5	Jobs	1,459

SUBSCRIBERS



Downtown Development

OCCUPANCY

	OCT - DEC 2025	OCT - DEC 2024
Occupancy Rate in Percentage	92%	91%

NEW BUSINESSES

	NOVEMBER 2025	FISCAL YEAR-TO-DATE
Number of New Businesses	1	4
Number of Businesses Closed	0	0

UPDATES PROVIDED QUARTERLY

EVENTS

THIRD QUARTER EVENTS (OCT - DEC)	ATTENDANCE IN 2025	ATTENDANCE IN 2024
WF Cares Holiday Kickoff	5,000	6,500

Wake Forest Cares Holiday Kickoff was a success. This was the 5th annual event, and the event continues to grow with great community participation on the performance stage. We were also able to incorporate Wake Forest Cares' initiatives with the ice carving battles, which was a huge hit with the crowd.

Wake Forest Downtown, Inc. (WFD) held a Morning Merchant Mingle at White Story Café on 11.4.25 with 27 people in attendance and 13 different businesses represented.

WFD annual sponsorships are live and to date one new platinum sponsor, two new gold sponsors, and one new silver have been secured. This along with 5 renewals to date brings sponsor revenue to over \$17K for 2026.

New décor went up downtown to celebrate the holiday season, which includes snowflake lights and lighted garland on South White in the historic district and a present archway and new deer for the Depot parking lot.

With the opening of Lil Hombre (Smoked Taco Joint), the Atlas Stark development at 535 South White is complete.

Economic Development

WFBIP MONTHLY NEWSLETTER [VIEW](#)

WFBIP FOUNDERS NEWSLETTER [VIEW](#)

The Wake Forest Business & Industry Partnership Quarterly Report is updated at the end of each quarter.

Use Chrome, Firefox, Safari, or Edge to view the newsletter and/or the report.

BUSINESS RETENTION & EXPANSION

NAMES OF BUSINESSES VISITED THIS MONTH

CHA House

REQUESTS FOR INFORMATION (RFIs)

	NOVEMBER 2025	NOVEMBER 2024
Number of Responses to RFIs	1	0

Engineering

PROJECT UPDATES

Street Resurfacing	The contractor is working through the final items on the punch list. The bid opening for next year's contract was recently awarded.
S. Franklin Street	Substantial completion is anticipated in late winter with final completion in early spring. Lane closures are expected to continue throughout the project's duration.
HL Miller Park Stream Restoration & Greenway Improvements	Work on the boardwalk is progressing. Paving trails is almost complete. Planting of live stakes for the stream restoration is complete.
Dunn Creek Culvert Replacement – Juniper Avenue	The project is substantially complete, and the road is open to the public. Finalizing punch list items to wrap up this project.
Dunn Creek Greenway Phase III	Work along Wait Avenue with lane closures is anticipated through December. The project remains on schedule for completion in the Spring.
Dunn Creek Greenway Phase IV	Paving of trails is complete. The project remains on schedule for completion in the Spring.
Crenshaw Stream Restoration Site 5	Stream restoration is progressing, and work is anticipated to be completed in early fall.
Crenshaw Stream Restoration Site 6	Stream restoration is progressing, and work is anticipated to be completed in winter.

Finance

FINANCIAL TASKS COMPLETED

TAX RETURNS & REPORTS	COMPLETION DATE
NC Sales and Use Tax Form E500 and Payment	11-19-2025
ORBIT/LGERS Report – NC State Treasurer	11-05-2025
Utility Sales Tax Return – E500 E	11-19-2025
Food & Beverage Tax Report	11-10-2025
ACCOUNTING/FINANCE	AMOUNT
Number of Invoices Paid by Check	0
Number of Invoices Paid Electronically	0
Number of Invoices Paid with P-Card	0
Number of Active Grants	0

PURCHASING / WAREHOUSE

Purchase Orders Processed	49
New Vendors Set Up	5
Informal Quotes	22
\$ Received Surplus Items Sold	\$925
Number of Bids Placed	1
HUBSCO Reports	0

Fire

KEY STATS

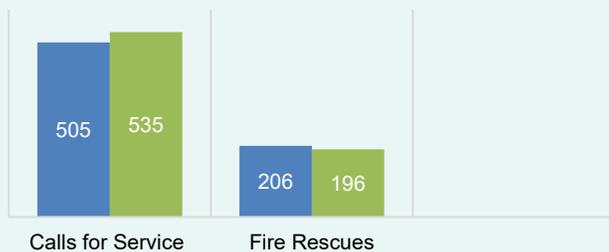
	NOVEMBER 2025	NOVEMBER 2024
Calls for Service	505	535
Average Response Time	4:14	4:33

TYPES OF CALLS

	NOVEMBER 2025	NOVEMBER 2024
Fire	206	196
Medical	276	302
Motor Vehicle Accidents (MV24A)	23	37

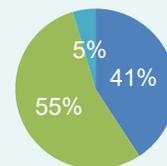
FIRE-KEY STATS

■ NOV-25 ■ NOV-24



TYPES OF CALLS

■ Fire ■ Medical ■ MVAs



Human Resources

EMPLOYMENT

	NOVEMBER 2025	NOVEMBER 2024
Positions filled	446	423
Vacancies	28	30
Total Authorized Positions FY 2023–2024	472	453

PROMOTIONS/TRANSFERS

NAME	DEPARTMENT	POSITION	DATE
Mitzi Franklin	Human Resources	Assistant Director, Human Resources	10-27-2025
Chandra Wright	Human Resources	Benefits & Compensation Manager	10-27-2025

Information Technology

SERVICE STATS

	NOVEMBER 2025	NOVEMBER 2024
Service Requests Completed	594	613
Network Uptime Percentage	100%	100%

Inspections & Public Facilities

RESIDENTIAL PERMITS

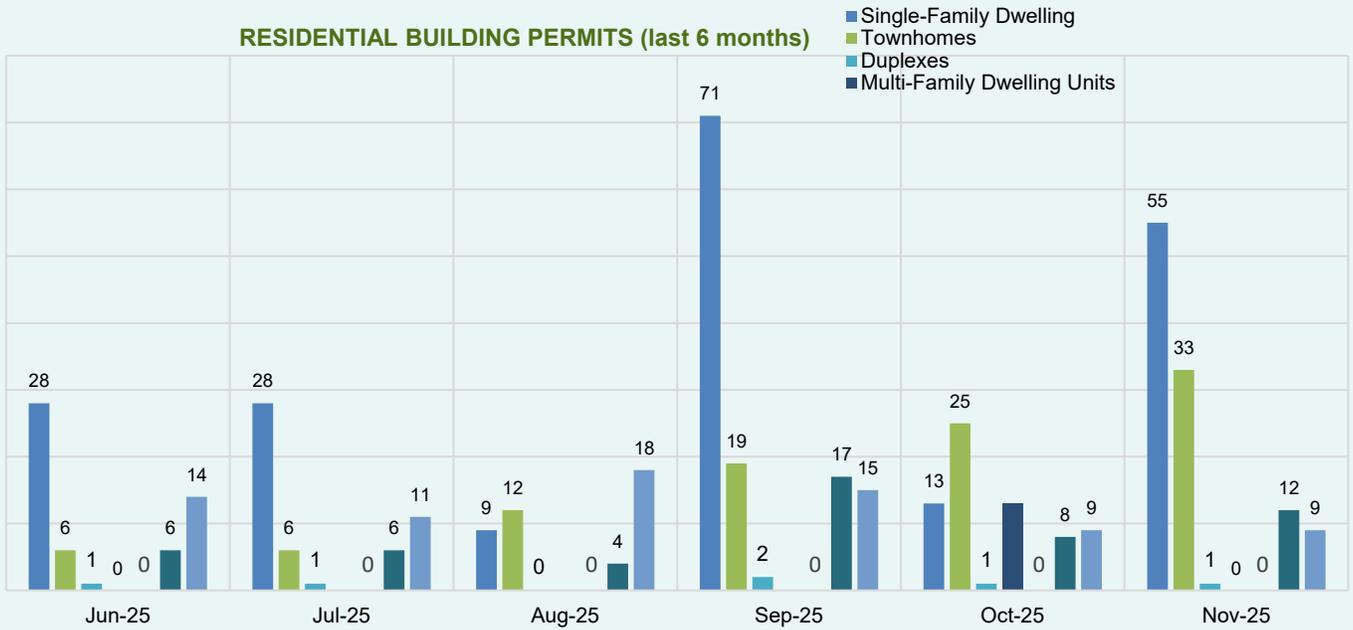
	NOVEMBER 2025	NOVEMBER 2024
Single-Family Dwelling	55	16
Townhomes	33	18
Duplexes	1	0
Multi-Family Dwelling Units	0	0
Other	125	111
Total	214	145

NON-RESIDENTIAL PERMITS

	NOVEMBER 2025	NOVEMBER 2024
New Commercial	0	0
Fit-Ups	2	1
Other	24	28
Total	26	29

Inspections & Public Facilities

RESIDENTIAL BUILDING PERMITS (last 6 months)



PUBLIC FACILITIES

	NOVEMBER 2025	NOVEMBER 2024
Preventative Maintenance Completed	682	674
Reactive Work Orders	99	115

DEPARTMENTAL PRODUCTIVITY



BUSINESSES

NEW COMMERCIAL BUSINESSES

None

FIT-UPS

Jimmy John's	2808 Rogers Rd 100
U-Haul	9701 Capital Blvd

PRE-OCCUPANCIES

CEDAR OAKS CLINIC PLLC	1748 Heritage Center Dr 202
SUPERIOR MECHANICAL INC	740 Merritt Capital Dr 107
CAPITALS BASKETBALL ACADEMY LLC	5101 Unicon Dr D
DOMINQUE LESINE STATE FARM AG	1756 Heritage Center Dr 201
WGK CONSTRUCTION LLC	1756 Heritage Center Dr 204
SURYA TECHNOLOGIES INC	745 Merritt Capital Dr 105
STROUD & PINER LLC	2811 Superior Dr

Organizational Performance

NORTHERN COMMUNITY FOOD SECURITY TEAM (NCFST)	
Staff Hours	26 hrs./week
Updates	Mobile Market - 2 visits, WF Community Table - 4 pickups, Mini Pantry - 8 visits TAM Donations - 2 pickups
Lunch & Learn	14 with Guest Speaker Luke Devores

GUEST SERVICES VOLUNTEER (GSV) PROGRAM	
Active	21
Inactive	1 (Health Issues)
Onboarding	N/A
Hours (November)	150

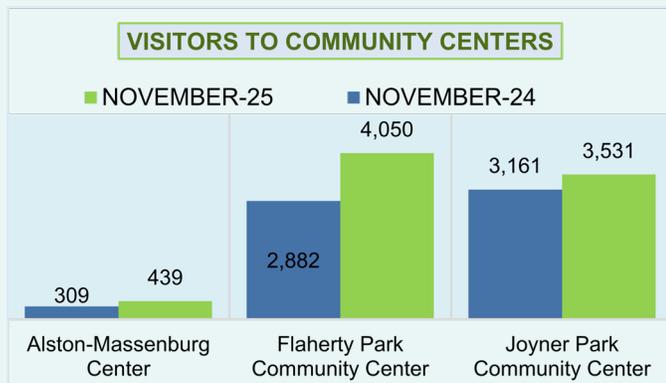
Parks, Recreation & Cultural Resources

ATHLETICS		
	NOVEMBER 2025	NOVEMBER 2024
Registrations Received – Youth	1	0
Registrations Received – Adult	0	0
Games Held	13	21
Revenue	\$75	\$0

[VIEW](#)

RECONNECT PROGRAM GUIDE

The program guide is updated twice per year in January and AUGUST.



PROGRAMS		
	NOVEMBER 2025	NOVEMBER 2024
Registrations Received – Youth	109	114
Registrations Received – Adult	151	145
Classes/Programs Held	25	29
Revenue	\$6,104	\$6,332

PARK MAINTENANCE	
TYPE OF MAINTENANCE	QUANTITY
Vandalism	2
Reactive Maintenance	3
PM Inspections & Services	72
Evening & Weekend Park Services	4

FACILITY RENTALS		
	NOVEMBER 2025	NOVEMBER 2024
Athletic Fields	7	2
Joyner Park Outdoor / Open Space	2	4
General Outdoor / Open Space	0	0
Picnic Shelters	0	0
Wake Forest Community House	7	7
Joyner Park Community Center	2	3
Flaherty Park Community Center	0	0
Alston-Massenburg Center	7	2

VISITORS TO AQUATIC CENTER & SPRAYGROUND		
	NOVEMBER 2025	NOVEMBER 2024
Aquatic Center	0	0
Taylor Street Sprayground	0	0

Planning

DEVELOPMENT SERVICES MONTHLY REPORT [VIEW](#)

ZONING VIOLATIONS DASHBOARD [VIEW](#)

Use Chrome, Firefox, Safari, or Edge to view the newsletter and/or the report.

CERTIFICATES OF APPROPRIATENESS		
	NOVEMBER 2025	NOVEMBER 2024
COAs Received	0	0
COAs Approved	0	0

Police

KEY STATS

	NOVEMBER 2025	NOVEMBER 2024
Calls for Service	4,239	4,732
Vehicle Crashes	174	207

Public Works

Streets: No-updates

Fleet: No-updates.

Solid Waste: - New employee started – Warren Mays – SW Equipment Operator - Loose Leaf season is wide open – we are heavy into leaf pickup working overtime and as much as possible. - Shred Event – Jeanette hosted another successful event on 11/17/25 - 98 Cleanup – Jeanette hosted another road clean up on 11/19/25

Urban Forestry: Planted 48 trees grind 64 stumps removed 108 trees

Admin: No-updates.

RECYCLING

	NOVEMBER 2025	NOVEMBER 2024
Volunteer Collected Litter	50	500
Volunteer Collected Recycling	0	400
Volunteer Hours	3	38
Volunteer Miles of Streets	1	6
Sections of Roads Cleaned (not miles)	0	1
Number of Creeks Cleaned	0	1
Number of Litter Kits Issued / Returned	1	10

SOLID WASTE

	NOVEMBER 2025	NOVEMBER 2024
New Construction Homes Added	17	68
New Cart Sets	17	68

CEMETERY

	NOVEMBER 2025	NOVEMBER 2024
Number of Plots Sold	0	0
Number of Niches Sold	0	1
Total Plots Available	0	0

Renaissance Centre for the Arts

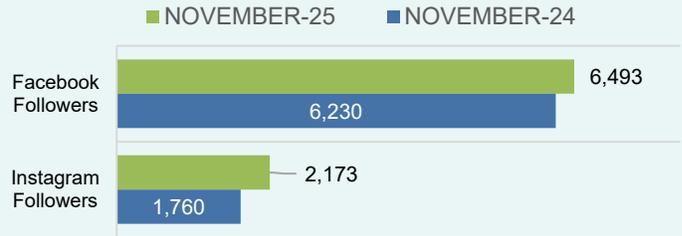
RENAISSANCE CENTRE BROCHURE

[VIEW](#)

EVENT & PROGRAM ATTENDANCE

	NOVEMBER 2025	NOVEMBER 2024
Monthly In-Person Attendance	783	1,433
Virtual Views	3,134	653
Ticketed Events Held	3	2
Free Events Held	3	1

SOCIAL ENGAGEMENT



Highlights for November 2025 for the Renaissance Centre

In early November, the WFRC team attended the NC Presenter's Consortium's Arts Market in Downtown Durham, where they enjoyed artist showcases, professional development sessions, and valuable networking opportunities that support small to mid-sized venues in bringing diverse entertainment to communities across the Southeast.

Then, on November 19 at 2pm and 7:30pm, the Centre welcomed The Malpass Brothers, a brother duo mentored by legends of country and bluegrass who continue to bring new traditional music to modern audiences.

Finally, the WFRC is proud to feature three military families—representing all branches—in its current art gallery exhibition and invites the community to see the pieces through November 26. The gallery is open Monday–Friday, 9am–12pm and 1pm–5pm.

Wake Forest Power

CUSTOMER SUMMARY

	NOVEMBER 2025	NOVEMBER 2024
Electric Meters/Customers	8,135	7,870
Pre-Pay Power Customers	366	439
H.O.P.E. Participants	42	42
N.C. GreenPower Participants	16	16

POWER OUTAGES

	NOVEMBER 2025	NOVEMBER 2024
Total Number of Customers Affected by Outages this Month	3	34
Average Number of Customers Affected per Outage	3	5

PAYMENTS RECEIVED

	NOVEMBER 2025	NOVEMBER 2024
eSuite Credit Card Payments	\$340,167	\$276,864
Authorize.net (Pre-Pay)	\$32,299	\$0
Paymentus CC Payments	\$1,238,626	\$1,156,355
Paymentus CC Payments (Pre-Pay)	\$12,766	\$51,556

NUMBER OF TRANSACTIONS

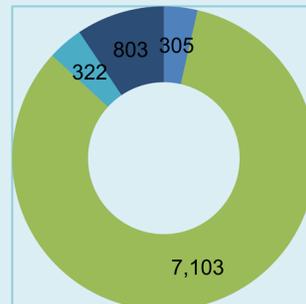
	NOVEMBER 2025	NOVEMBER 2024
eSuite Credit Card Payments	305	279
Paymentus CC Payments	7,103	6,712
Paymentus CC Payments (Pre-pay)	322	1,387
Authorized.net (Pre-Pay)	803	0

PAYMENTS RECEIVED NOVEMBER 2025



- eSuite Credit Card Payment
- Authorize.net (PrePay)
- Paymentus Credit Card Payment
- Paymentus Credit Card Payment (PrePay)

PAYMENTS RECEIVED NOVEMBER 2025



- eSuite Credit Card Payment
- Paymentus Credit Card Payment
- Paymentus Credit Card Payment (PrePay)
- Authorized.net

Advisory Boards

Historic Preservation Commission

MEETINGS

Most recent meeting held 11/19/2025

Number of members in attendance: 9 out of 9

The HPC thanked Andrea Radford for her service and presented her with an appreciation plaque. Staff provided training.

Human Relations Council

MEETINGS

Most recent meeting held 11/20/2025

Number of members in attendance: 7 out of 10

The HRC continues to plan for the upcoming Minority & Women Owned Business Expo scheduled for Saturday, February 28, 2026, at the Renaissance Centre from 1:00 PM to 4:00 PM.

Public Art Commission

MEETINGS

Most recent meeting held 11/27/2025

Number of members in attendance: 0 out of 11

No meeting held due to the holiday (Thanksgiving).

Parks, Recreation & Cultural Resources Advisory Board

MEETINGS

Most recent meeting held 11/24/2025

Number of members in attendance: 10 out of 12

Upcoming PCR Events: Calls from Santa – Dec. 4, Santa Breakfast and Cookie event December 7; Snowball Dance – Dec. 12; Board Planning Meeting - Feb. 7. No meeting in December. Next meeting January 26, 2026.

Technology Advisory

MEETINGS

Most recent meeting held 11/24/2025

Number of members in attendance: 7 out of 13

TAB discussed AI 311 systems, traffic management, and smart city initiatives.

Key points included evaluating AI for 311, exploring smart traffic solutions, and planning for the STEM event.

Action items were assigned for further research and follow-up.



BOARD OF COMMISSIONERS AGENDA ITEM REPORT

Agenda Item No.: 2025-663-
Submitted by: Evelyn Wright
Submitting Department:
Meeting Date: December 16, 2025

Subject

December Tax Report

Recommendation:

item Summary:

ATTACHMENTS:

- [WAKE FOREST-TXREP-DEC-2025-BOC-MTG.pdf](#)



Board of Commissioners
P.O. Box 550 • Raleigh, NC 27602

TEL 919 856 6180
FAX 919 856 5699

SUSAN P. EVANS, CHAIR
DON MIAL, VICE-CHAIR
VICKIE ADAMSON
SAFIYAH JACKSON
CHERYL STALLINGS
SHINICA THOMAS
TARA WATERS

December 2, 2025

Mr. Kip Padgett
Town Manager
Town of Wake Forest
301 S. Brooks Street
Wake Forest, North Carolina 27587

Dear Mr. Padgett:

The Wake County Board of Commissioners, in regular session on December 1, 2025, approved and accepted the enclosed tax report for the Town of Wake Forest.

The attached adopted actions are submitted for your review; no local board action is required.

Sincerely,

A handwritten signature in black ink that reads "Yvonne Gilyard".

Yvonne Gilyard
Clerk to the Board
Wake County Board of Commissioners

WAKE COUNTY TAX ADMINISTRATION

10/01/2025 - 10/31/2025

Rebate Detail Report

WAKE FOREST

DATE 11/17/2025
TIME 11:01:24 AM

REBATE NUM	PROPERTY	SPEC DIST	CITY TAG	LATE LIST	BILLED INTEREST	TOTAL REBATED	PROCESS DATE	ACCOUNT NUMBER	TAX YEAR	FOR YEAR	BILLING TYPE	OWNER
BUSINESS ACCOUNTS												
940377	34.59	0	0.00	3.46	0.00	38.05	10/29/2025	0006706884	2025	2025	000000	SWEERE PROPERTIES LLC
SUBTOTALS FOR BUSINESS ACCOUNTS	34.59	0.00	0.00	3.46	0.00	38.05	38.05		1	Properties	Rebated	
INDIVIDUAL REAL ESTATE ACCOUNTS												
937503	1,300.09	0	0.00	0.00	0.00	1,300.09	10/2/2025	0000282303	2025	2025	000000	SMITH, RONALD C
937495	189.00	0	0.00	0.00	0.00	189.00	10/2/2025	0000225738	2025	2025	000000	RESSEGIUE, BARBARA J
939564	94.50	0	0.00	0.00	0.00	94.50	10/17/2025	0000318229	2025	2025	000000	KARROUM, SUHA
SUBTOTALS FOR INDIVIDUAL REAL ESTATE ACCOUNTS	1,583.59	0.00	0.00	0.00	0.00	1,583.59			3	Properties	Rebated	
WILDLIFE BOAT ACCOUNTS												
938031	15.69	0	0.00	0.00	0.00	15.69	10/20/2025	0004221741	2025	2025	000000	KOBYLINSKI, KRZYSZTOF RAFAL
SUBTOTALS FOR WILDLIFE BOAT ACCOUNTS	15.69	0.00	0.00	0.00	0.00	15.69	15.69		1	Properties	Rebated	
TOTAL FOR WAKE FOREST												
	1,633.87	0.00	0.00	3.46	0.00	1,637.33	1,637.33		5	Properties	Rebated for the District City	
TOTAL FOR WAKE FOREST	1,633.87	0.00	0.00	3.46	0.00	1,637.33	1,637.33		5	Properties	Rebated for all Cities	
GRAND TOTAL	932,893.75	8,325.05	240.00	7,825.23	0.00	949,284.03	949,284.03		105	Properties	Rebated for all Cities	



BOARD OF COMMISSIONERS AGENDA ITEM REPORT

Agenda Item No.: 2025-660-
Submitted by: Evelyn Wright
Submitting Department:
Meeting Date: December 16, 2025

Subject

Resolution of Appreciation for Outgoing Commissioner

Recommendation:

item Summary:

ATTACHMENTS:

- [RESOLUTION2025-XX-Nicolas_Sliwinski-appreciation-Dec2025.pdf](#)

RESOLUTION 2025-XX
RESOLUTION OF APPRECIATION OF SERVICE OF
NICOLAS SLIWINSKI

WHEREAS, Nicolas Sliwinski has served the Town of Wake Forest and its citizens as Commissioner since November 2021; and

WHEREAS, the Town of Wake Forest has been fortunate to have had the services of Mr. Sliwinski who has provided principled leadership and rendered good judgment for the betterment of all the citizens of Wake Forest; and

WHEREAS, Mr. Sliwinski has served on numerous local and regional committees and served as the Parks, Recreation, and Cultural Resources Advisory Board Ex-Officio representing the Town of Wake Forest in an able and professional manner; and

WHEREAS, Mr. Sliwinski worked tirelessly to raise awareness about prevalent mental wellness issues and challenges culminating with the introduction of the annual Wake Forest Mental Wellness Fair; and

WHEREAS, Nicolas Sliwinski has served for the good of the Town of Wake Forest, making sacrifices in personal and family time; and

WHEREAS, the Town of Wake Forest, its employees and its citizens extend a sincere thanks to Mr. Sliwinski for the countless hours he has dedicated to governing with impartiality, and compassion; and

WHEREAS, it is the desire of the Mayor and Board of Commissioners of the Town of Wake Forest to recognize and honor Nicolas Sliwinski for his dedicated contributions to this community.

NOW, THEREFORE, BE IT HEREBY RESOLVED by the Board of Commissioners of the Town of Wake Forest that this Resolution of Appreciation be presented to Nicolas Sliwinski in acknowledgement of his service and his interest in good government in Wake Forest and in the State of North Carolina.

ADOPTED, this the 16th day of December 2025.

ATTEST:

R. Keith Shackelford, Mayor Pro Tem

Evelyn Wright, Town Clerk



BOARD OF COMMISSIONERS AGENDA ITEM REPORT

Agenda Item No.: 2025-683-
Submitted by: Evelyn Wright
Submitting Department:
Meeting Date: December 16, 2025

Subject

Resolution of Appreciation for Outgoing Mayor

Recommendation:

item Summary:

ATTACHMENTS:

- [RESOLUTION2025-XX-Mayor Jones-appreciation-Dec2025.pdf](#)

RESOLUTION 2025-
RESOLUTION OF APPRECIATION OF SERVICE OF
MAYOR VIVIAN A. JONES

WHEREAS, the Board of Commissioner of the Town of Wake Forest, North Carolina, wish to acknowledge and express their appreciation of Mayor Vivian A. Jones for her dedicated service to the citizens and community of Wake Forest; and

WHEREAS, Mayor Jones was a resident of Wake Forest, and she served both this community and the state of North Carolina with dignity, having been elected by the people, first as a Commissioner from 1996 to 2000, and then as Mayor from 2001, a position she held for six consecutive terms; and

WHEREAS, as Mayor of Wake Forest, she devoted her time, energy and talents to the Town, providing a wealth of experience and sound judgement, and serving with unfailing integrity, dignity and thoughtful reflection; and

WHEREAS, during her time on the Board, she reviewed and considered all matters, facts and proposals presented to the Board, and at all times ensured that our elected officials kept the public's interest as their first priority; and

WHEREAS, during her distinguished tenure, Mayor Jones presided over significant Town milestone openings, including the Renaissance Centre, E. Carroll Joyner Park, the Joyner Park Community Center, and the Holding Park Inclusive Playground, all of which enriched the quality of life for residents and strengthened Wake Forest's sense of community; and

WHEREAS, Mayor Jones championed and supported numerous beloved community events such as the annual State of the Town Address, Friday Night on White, Memorial Flag-Raising Ceremonies, Good Neighbor Day, and the Black History Month Walking Tours, each fostering a spirit of unity, remembrance, and celebration; and

WHEREAS, under her leadership, the Town achieved major organizational and programmatic milestones including earning a AAA Bond Rating; launching GO Wake Forest and expanding local bus service; advancing the creation of the Wireless Research Center; supporting the Northern Community Food Security Team; establishing the Communications Department; and promoting community pride through initiatives such as "Show Some Love, Keep Wake Forest Clean"; and

WHEREAS, Mayor Jones also presided over important commemorations that celebrated the Town's history and cultural identity, including the Wake Forest Centennial Celebration and the Renaissance Centre's 10-Year Anniversary, ensuring these moments were preserved and recognized for future generations; and

WHEREAS, Vivian A. Jones served as a strong supporter for the promotion and protection of the Town of Wake Forest's strengths and heritage, and sought to better the lives of both our employees and residents; and

WHEREAS, her legacy will serve as an inspiration to all who live, work, and visit in the Town of Wake Forest for generations to come; and

WHEREAS, the Board of Commissioners of the Town of Wake Forest is proud and honored to have Vivian A. Jones as one of our elected officials, and is unendingly grateful to her for all that she brought to our Town, both personally and professionally, during her years of service;

NOW, THEREFORE, BE IT RESOLVED that the Board of Commissioners of the Town of Wake Forest, in recognition of Vivian A. Jones's love for and dedication to the Town of Wake Forest does adopt this Resolution in honor of her many years of dedicated service to our community.

ADOPTED, this 16th day of December 2025.

R. Keith Shakleford
Mayor Pro Tem

Evelyn Wright
Town Clerk



BOARD OF COMMISSIONERS AGENDA ITEM REPORT

Agenda Item No.: 2025-661-
Submitted by: Evelyn Wright
Submitting Department:
Meeting Date: December 16, 2025

Subject

Oath of Office for Commissioner-elect

Recommendation:

item Summary:

ATTACHMENTS:

- [OathOfOffice-CommissionerShackleford_2025Dec.pdf](#)
- [OathOfOffice-CommissionerFatmi_2025Dec.docx](#)

**NORTH CAROLINA
WAKE COUNTY**

I, Richard Keith Shackelford, do solemnly and sincerely swear that I will support the Constitution of the United States; that I will be faithful and bear true allegiance to the State of North Carolina, and to the constitutional powers and authorities which are or may be established for the government thereof; and that I will endeavor to support, maintain and defend the Constitution of said State, not inconsistent with the Constitution of the United States, to the best of my knowledge and ability; and that I will faithfully and impartially discharge the duties as Commissioner for the Town of Wake Forest, North Carolina, so help me God.

Richard Keith Shackelford

Sworn to and subscribed before me this the 16th day of December 2025.

Honorable Craig Croom

**NORTH CAROLINA
WAKE COUNTY**

I, Haseeb Fatmi, do solemnly and sincerely swear that I will support the Constitution of the United States; that I will be faithful and bear true allegiance to the State of North Carolina, and to the constitutional powers and authorities which are or may be established for the government thereof; and that I will endeavor to support, maintain and defend the Constitution of said State, not inconsistent with the Constitution of the United States, to the best of my knowledge and ability; and that I will faithfully and impartially discharge the duties as Commissioner for the Town of Wake Forest, North Carolina, so help me God.

Haseeb Fatmi

Sworn to and subscribed before me this the 16th day of December 2025.

My Commission Expires: _____



BOARD OF COMMISSIONERS AGENDA ITEM REPORT

Agenda Item No.: 2025-662-
Submitted by: Evelyn Wright
Submitting Department:
Meeting Date: December 16, 2025

Subject

Oath of Office for Mayor-elect

Recommendation:

item Summary:

ATTACHMENTS:

- [OathOfOffice-MayorClapsaddle_2025Dec.pdf](#)

**NORTH CAROLINA
WAKE COUNTY**

I, Ben C. Clapsaddle, do solemnly and sincerely swear that I will support the Constitution of the United States; that I will be faithful and bear true allegiance to the State of North Carolina, and to the constitutional powers and authorities which are or may be established for the government thereof; and that I will endeavor to support, maintain and defend the Constitution of said State, not inconsistent with the Constitution of the United States, to the best of my knowledge and ability; and that I will faithfully and impartially discharge the duties as Mayor for the Town of Wake Forest, North Carolina, so help me, God.

Ben C. Clapsaddle

Sworn to and subscribed before me this the 16th day of December 2025.

Christopher Clapsaddle Cameron

My Commission Expires: _____

State of North Carolina

DEPARTMENT OF THE SECRETARY OF STATE

REPOSING SPECIAL TRUST AND CONFIDENCE IN YOUR INTEGRITY AND KNOWLEDGE, I DO BY THESE PRESENTS APPOINT

CHRISTOPHER CLAPSADDLE CAMERON
A NOTARY PUBLIC

IN AND FOR THE COUNTY OF WAKE AND STATE OF NORTH CAROLINA
FOR FIVE YEARS BEGINNING TUESDAY, SEPTEMBER 7, 2021 AND EXPIRING
AT MIDNIGHT ON SUNDAY, SEPTEMBER 6, 2026, AND

I DO HEREBY CONFER UPON YOU ALL THE RIGHTS, PRIVILEGES, AND POWERS USEFUL AND NECESSARY TO THE
JUST AND PROPER DISCHARGE OF THE DUTIES OF YOUR APPOINTMENT.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND AFFIXED MY
OFFICIAL SEAL. DONE IN OFFICE AT RALEIGH ON MONDAY, DECEMBER 8, 2025



Elaine F. Marshall

ELAINE F. MARSHALL
SECRETARY OF STATE



BOARD OF COMMISSIONERS AGENDA ITEM REPORT

Agenda Item No.: 2025-664-
Submitted by: Evelyn Wright
Submitting Department:
Meeting Date: December 16, 2025

Subject

Commissioner Reports

Recommendation:

item Summary:

ATTACHMENTS: