PLANNING COMMISSION

~ AGENDA ~

PLANNING COMMISSION

312 S. Mildred Street,
Ranson WV 25438
www.ransonwv.gov

April 1, 2024 | 7:00 P.M. | Council Chamber

ZOOM LINK: https://us02web.zoom.us/j/82786874866

I. CALL TO ORDER

II. APPROVAL OF MINUTES

1. Minutes - March 4, 202

III. OLD BUSINESS

IV. PLANNING COMMISSION BUSINESS

1. 23-60-SP-2024.03.13 Public hearing - Applicant Larson Design Group submitted application for Wawa Convenience Store
   Legal Notice forWawa 412024.docx
2. 23-60-SP-2024.03.13 -Consideration Applicant Larson Design Group submitted application for WaWa Site Plan
   23-60-SP-2024.03.13_-_wawa_ranson,_wv_site_plans_-_ss (1).pdf
3. 23-63-FP- Public Hearing - Applicant Christopher Consultants LLC- Sykle Knuppel submitted Application- Final plat proposal for Briar Run Phase VI-B Lots 1 thru 38 & out lots “A, B, & C” Briar Run Estates, accepting the bond for Briar Run Phase VI-B and entering a Development Agreement for Briar Run Phase VI-B.
   Legal Notice Briar Run VI-B Plat DA Bond 412024.docx
4. 23-63-FP- Applicant Christopher Consultants LLC- Sykle Knuppel submitted Application for Consideration - Final plat proposal of Briar Run Phase VI-B Lots 1 thru 38 & out lots “A, B, & C” Briar Run Estates, accepting the bond for Briar Run Phase VI-B and entering a Development Agreement for Briar Run Phase VI-B.
   Bond Estimate - Supplementary Sheet.xlsx
   Briar Run Phase VI Bond Estimate 2.xlsx
   2024-03-25 Brian Run Record Plat cmt rsp ltr.pdf
   Development Agreement Briar Run Phae VI-8.docx
   PC24-05 briar Run Phase VI-8 Development Agreement.docx
   23-63-FP-Briar Run Record Plat 2.20.24.pdf

V. ADJOURMENT

AGENDA ITEM II.1

Planning Commission Request for Action

TO:

FROM: Darla Armstrong, Community & Economic Development

ITEM TYPE: Approval of Minutes

AGENDA SECTION: APPROVAL OF MINUTES

SUBJECT:

ATTACHMENTS:

AGENDA ITEM IV.1

Planning Commission Request for Action

TO:

FROM: Darla Armstrong

ITEM TYPE: Presentation

AGENDA SECTION: PLANNING COMMISSION BUSINESS

SUBJECT:

Larson Design Group has submitted a site plan for a Wawa Convenience store to be located at the southwest corner of intersection of North Fairfax Blvd and Rt. 9.
This project will be for a 5,915 square foot commercial convenience store along with parking, fueling and other amenities plus stormwater for future lots.
This approval would be contingent on the right-of-way being recorded and access to the adjacent lots needs to be showed and recorded.

1. Open Public Hearing
2. Comments/questions from public
3. Close Public Hearing

ATTACHMENTS:

Legal Notice forWawa 412024.docx

LEGAL NOTICE
PUBLIC HEARING NOTICE
CITY OF RANSON

In accordance with W. Va. Code § 8A-7-9 et seq., and W. Va. Code § 8A-5-8 et seq., and Ranson Code § 19A-1.3 et seq. The Ranson Planning Commission will hold a public hearing on April 1, 2024, at 7:00 pm at Ranson City Hall, 312 S. Mildred Street, Ranson, WV. The purpose of the public hearing is to accept public comments on the proposed Site Plan for a Wawa Convenience Store to be located at southwest corner of intersection of North Fairfax Blvd and Rt. 9 (088000100040000 14.81 Acres). Copies of the proposed Site Plan are available for inspection during regular office hours of 8:00 am – 4:00 pm weekdays, excluding holidays at City Hall. All persons are invited to attend and make comments about the proposed Site Plan.

If you cannot attend but wish to comment, you may write, and it must be received at the following address prior to March 29, 2024: City of Ranson, Attn: Community Development Director, 312 S. Mildred Street, Ranson, WV 25438 or permits@ransonwv.us Written Comments received prior to March 29, 2024, will be provided to the Planning Commission and inserted into the official record.

Department of Community Development

AGENDA ITEM IV.2

Planning Commission Request for Action

TO:

FROM: Darla Armstrong, Community & Economic Development

ITEM TYPE: Presentation

AGENDA SECTION: PLANNING COMMISSION BUSINESS

SUBJECT:

Larson Design Group has submitted a site plan for a Wawa Convenience store to be located at the southwest corner of intersection of North Fairfax Blvd and Rt. 9.
This project will be for a 5,915 square foot commercial convenience store along with parking, fueling and other amenities plus stormwater for future lots.
This approval would be contingent on the right-of-way being recorded and access to the adjacent lots needs to be showed and recorded.
Engineering, planning, and utilities have all reviewed this plan and recommend the contingent approval.
1. Review supporting documents
2. Commission discussion/questions for staff
3. Vote

ATTACHMENTS:

23-60-SP-2024.03.13_-_wawa_ranson,_wv_site_plans_-_ss (1).pdf

SITE PLAN
FOR
WAWA CONVENIENCE STORE – RANSON
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

TOWN OF RANSON PLANNING DEPARTMENT APPROVAL

REVIEWED BY THE CITY OF RANSON PLANNING DEPARTMENT THIS _____ DAY OF _____ 20_____.

_____
AUTHORIZED SIGNATURE

ENGINEERING CERTIFICATION

I, CHRISTOPHER M. SHEAFFER, A DULY REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF WEST VIRGINIA, DO HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF THAT THIS PLAN HAS BEEN ACCURATELY PREPARED BASED ON SOUND ENGINEERING PRINCIPLES AND ON THE SURVEY OF CHRISTOPHER P. IACHINI, REGISTERED LAND SURVEYOR.

(SEAL)

CHRISTOPHER MICHAEL SHEAFFER REGISTERED 20340 STATE OF WEST VIRGINIA PROFESSIONAL ENGINEER 3/14/24

Christopher M. Sheaffer
DATE

3/14/24
SIGNATURE

1000 COMMERCE PARK DRIVE, SUITE 201
WILLIAMSPORT, PA 17701
ADDRESS

CHRISTOPHER M. SHEAFFER
PRINTED NAME

PROOF OF RECORDING

STATE OF WEST VIRGINIA }
COUNTY OF JEFFERSON }

RECORDED IN THE RECORDERS OFFICE OF THE COUNTY OF JEFFERSON, STATE OF WEST VIRGINIA, INSTRUMENT NUMBER _____.

GIVEN UNDER MY HAND AND SEAL THIS _____ DAY OF _____, 20_____.

_____
RECORDER

ACKNOWLEDGEMENT OF NOTARY PUBLIC

BEFORE ME, THE UNDERSIGNED NOTARY PUBLIC IN AND FOR THE STATE OF WEST VIRGINIA AND COUNTY OF JEFFERSON, PERSONALLY APPEARED THE ABOVE NAMED_____, AND ACKNOWLEDGED THE FOREGOING ADOPTION AND DEDICATION TO BE THEIR ACT.

WITNESS MY HAND AND NOTARIAL SEAL THIS_____ DAY OF _____, 20_____.

MY COMMISSION EXPIRES THE _____ DAY OF _____, 20_____.

(SEAL)

_____
NOTARY PUBLIC

The Ranson Planning Commission approves this _____ (Site Plan, Improvement Plan) on __/__/__with the following conditions:

1) _____

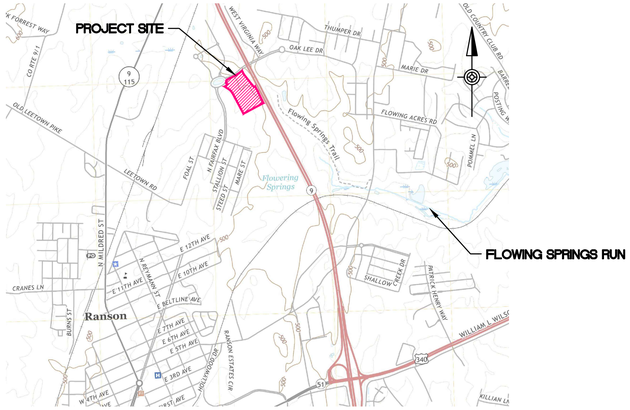
2) _____

3) _____

_____
Planning Commission President's Signature (Date)

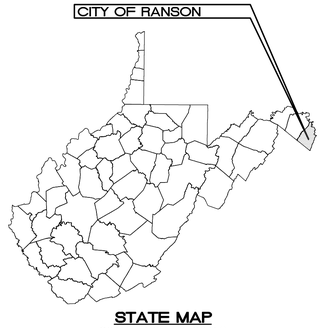
The owner of this property hereby affirms that these plans meet the requirements of the Ranson Zoning and Subdivision Ordinances and the above conditions of approval set forth by the Ranson Planning Commission.

_____
Owner's Signature (Date)



PROJECT LOCATION MAP
CHARLES TOWN USGS QUAD
SCALE: AS SHOWN

2000 0 2000 4000 FEET
SCALE



STATE MAP
SCALE: NOT TO SCALE

GENERAL NOTES

1. RESPONSIBLE PARTY:
   PTV 1132 LLC
   400 PENN CENTER BLVD, BLDG. 4 STE. 1000
   PITTSBURGH, PENNSYLVANIA 15235
2. SURVEYOR:
   LARSON DESIGN GROUP
   ATTN: CHRISTOPHER SHEAFFER, PE
   1000 COMMERCE PARK DRIVE, SUITE 201
   WILLIAMSPORT, PA 17701
   PHONE: 570.374.5700
   EMAIL: csheaffer@larsondesigngroup.com
3. COUNTY: JEFFERSON COUNTY
   MUNICIPALITY: CITY OF RANSON
   STATE: WEST VIRGINIA
4. PROJECT LOCATION:
   LOCATED ON THE SOUTHWEST CORNER OF THE INTERSECTION OF NORTH FAIRFAX BOULEVARD AND SR–9 IN RANSON, WV.
5. PROJECT NARRATIVE:
   THE PURPOSE OF THIS PROJECT IS TO CONSTRUCT A 5,915 SQUARE–FOOT COMMERCIAL CONVENIENCE STORE, ALONG WITH PARKING, FUELING AND OTHER AMENITIES. THE CONSTRUCTION PROCESS TAKING PLACE WILL INCLUDE GRADING, PAVEMENT INSTALLATIONS, LANDSCAPING, STORMWATER MANAGEMENT, AND MUNICIPAL CONSTRUCTION ACTIVITIES.
6. SOURCE OF TITLE:
   INSTRUMENT NUMBER 202000001346
   DEED BOOK 1235 PAGE 707
   TAX PARCEL:19–8–8–1–4
7. NO EXISTING WETLANDS HAVE BEEN IDENTIFIED BY WETLAND DELINEATION DATED JUNE 2023.
8. A PORTION OF THE SITE IS LOCATED WITHIN THE FLOOD ZONE AE WITH A BASE FLOOD ELEVATION (B.F.E.) OF 490' PER THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD MAPPING ACCORDING TO COMMUNITY PANEL NUMBER 54037C0130E (EFFECTIVE DATE DECEMBER 18, 2009). A PORTION OF THE SITE IS DETERMINED TO BE WITHIN THE 0.2% CHANCE OF ANNUAL FLOODING. A PORTION OF THE SITE IS ALSO AFFECTED BY LOMR 11–03–1484P EFFECTIVE MAY 23, 2012.
9. THE PROJECT WILL BE SERVED BY PUBLIC SANITARY SEWER AND PUBLIC WATER.
10. LIMIT OF DISTURBANCE = 15.50 AND PERMIT BOUNDARY = 16.20 ACRES

LIST OF DRAWINGS

C0.0	COVER SHEET
C1.0	GENERAL NOTES AND LEGEND
C2.0	EXISTING CONDITIONS/DEMOLITION PLAN – OVERALL
C2.1	EXISTING CONDITIONS/DEMOLITION PLAN – NORTH
C2.2	EXISTING CONDITIONS/DEMOLITION PLAN – SOUTH
C3.0	SITE PLAN LAYOUT – OVERALL
C3.1	SITE PLAN LAYOUT – NORTH
C3.2	SITE PLAN LAYOUT – SOUTH
C3.3	SITE PLAN LAYOUT – SIGNAGE AND STRIPPING PLAN
C4.0	GRADING/STORMWATER PLAN – OVERALL
C4.1	GRADING/STORMWATER PLAN – NORTH
C4.2	GRADING/STORMWATER PLAN – SOUTH
C4.3	GRADING/STORMWATER PLAN – DETAILED GRADING
C5.0	UTILITY PLAN – OVERALL
C6.0	PROFILES
C6.1	PROFILES
C6.2	PROFILES
C7.0	LANDSCAPING PLAN
C8.0	PHOTOMETRIC PLAN
D9.0	DETAILS
D9.1	DETAILS
D9.2	DETAILS
D9.3	DETAILS
D9.4	DETAILS
D9.5	DETAILS
D9.6	DETAILS
D9.7	DETAILS
D9.8	WEST VIRGINIA AMERICAN WATER DETAILS
ES1.0	EROSION AND SEDIMENT CONTROL PLAN – OVERALL
ES1.1	EROSION AND SEDIMENT CONTROL PLAN – NORTH
ES1.2	EROSION AND SEDIMENT CONTROL PLAN – SOUTH
ES2.0	EROSION AND SEDIMENT CONTROL PLAN NOTES
ES3.0	EROSION AND SEDIMENT CONTROL PLAN DETAILS
ES4.0	EROSION AND SEDIMENT CONTROL PLAN CROSS SECTION

It is a violation of the law for any person, unless acting under the direction of a licensed Architect, Engineer or Land Surveyor, to alter an item in any way. Plans, maps, specifications, studies, and reports not containing a red ink seal imprint on the cover sheet accompanied by an original signature by the licensed professional may have been fraudulently altered and shall not be considered an original copy. Copyright Protected 2024, Larson Design Group.

NO.	DATE	ISSUE / REVISIONS	BY	CHKD
4	03.13.2024	CITY OF RANSON RESUBMISSION	JWH	CMS
3	12.06.2023	CITY OF RANSON RESUBMISSION	JWH	CMS
2	10.02.2023	CITY OF RANSON ANAWEP RESUBMISSIONS	JWH	CMS
1	09.29.2023	PERMIT RESUBMISSION	JWH	CMS
0	07.19.2023	PERMIT SUBMISSION	JWH	CMS

COVER SHEET

WAWA – RANSON, WEST VIRGINIA
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

PTV 1132 LLC
400 PENN CENTER BLVD, BUILDING 4, SUITE 1000
PITTSBURGH, PA 15235
PHONE 724.420.5367

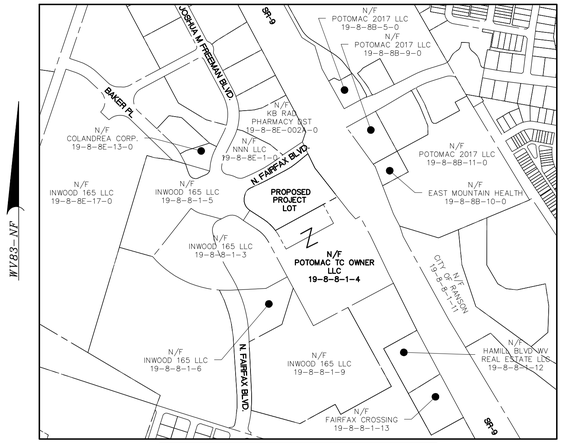
Larson Design Group • Architects Engineers Surveyors
1000 Commerce Park Drive • Suite 201
Williamsport, PA 17701
PHONE 570.323.6603 TOLL FREE 877.323.6603
FAX 570.323.9902 • www.larsondesigngroup.com

SHEET NO.: C0.0

PROJECT NO.: 11693–041

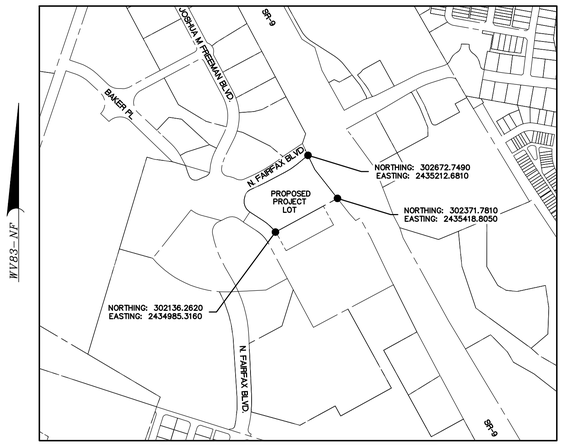
GENERAL NOTES

1. EXISTING FEATURES SHOWN ON THIS SITE PLAN WERE TAKEN FROM A SURVEY PREPARED BY LARSON DESIGN GROUP, DATED JANUARY 17 THROUGH 21, 2023.
   - HORIZONTAL CONTROL: WEST VIRGINIA NORTH ZONE STATE PLANE NAD83 NORTH AMERICAN DATUM 1983 (NAD83)
   - VERTICAL CONTROL: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
2. THERE IS A 20 FEET WIDE WATERLINE AND 15 FEET WIDE SANITARY SEWER EASEMENT ON THE PROJECT PROPERTY. BOTH OF THE EASEMENTS ARE BEING REVISED TO RELOCATE OR PROVIDE EASEMENTS FOR PROPOSED UTILITIES. THE HAMMILL BOULEVARD IS TO BE ABANDON AND RE-ALIGNED TO FOLLOW JEFFREY WAY.
3. THERE ARE NO NAVIGABLE STREAMS WITHIN THE PROJECT LIMITS.
4. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL PLAN AND ELEVATION DIMENSIONS OF THE VARIOUS WORK ITEMS ON THIS PROJECT.
5. ALL CONSTRUCTION SHALL CONFORM TO THE LARSON DESIGN GROUP PLANS AND SPECIFICATIONS INCLUDED IN THIS PLAN SET. ANYTHING NOT DIRECTLY COVERED WITHIN THE LARSON DESIGN GROUP PLANS AND TECHNICAL SPECIFICATIONS SHALL BE COVERED BY THE CONSTRUCTION SPECIFICATIONS BY THE CITY OF RANSON OR WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS STANDARD SPECIFICATIONS, ROADS AND BRIDGES, ADOPTED 2017, AMENDED BY THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS 2018 SUPPLEMENTAL SPECIFICATIONS. SHOULD THE CITY AND WVDOH REQUIREMENTS CONFLICT, THE CITY'S REQUIREMENTS SHALL TAKE PRECEDENCE ON THE PROJECT SITE AND WVDOH SHALL TAKE PRECEDENCE FOR ANY ITEMS IN THE RIGHT-OF-WAY. THE CONTRACT DOCUMENTS AND THE CONTRACT PLANS ARE THE GOVERNING PROVISIONS APPLICABLE TO THIS PROJECT. ALL WORK IN THE FUTURE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO WEST VIRGINIA DEPARTMENT OF HIGHWAY AND AASHTO REQUIREMENTS.
6. THE CONTRACTOR SHALL PROMPTLY NOTIFY THE OWNER, IN WRITING, OF ANY SUBSURFACE OR LATENT PHYSICAL CONDITIONS AT THE SITE DIFFERING MATERIALLY FROM THOSE INDICATED IN THE CONTRACT DOCUMENTS.
7. ALL SITE/CIVIL IMPROVEMENTS SHALL BE COORDINATED WITH OTHER PRIME CONTRACTOR WORK. SEE ARCHITECTURAL, STRUCTURAL, PLUMBING AND ELECTRICAL SHEETS FOR ADDITIONAL REQUIREMENTS.
8. THE CONTRACTOR, DURING THE PERFORMANCE OF ALL WORK ASSOCIATED WITH THE CONSTRUCTION OF THIS PROJECT, IS RESPONSIBLE FOR COMPLIANCE WITH ALL FEDERAL, STATE, AND LOCAL LAWS, CODES, AND REGULATIONS. THE CONTRACTOR SHALL TAKE ALL SAFETY PRECAUTIONS AS REQUIRED TO PROTECT EMPLOYEES AND OTHER PERSONS FROM INJURY.
9. THE CONTRACTOR IS NOTIFIED THAT OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) CLEARANCES MUST BE MAINTAINED TO OVERHEAD POWER LINES FROM ANY CONSTRUCTION EQUIPMENT. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF OSHA STANDARDS IN THIS REGARD.
10. THE LOCATION AND/OR ELEVATIONS OF ALL KNOWN UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON THE BEST AVAILABLE INFORMATION FROM EXISTING PLANS AND FIELD INVESTIGATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THE STATUS AND LOCATION OF EACH UTILITY WHERE PERFORMING WORK WHICH MAY AFFECT THESE FACILITIES, INCLUDING PROBING, EXCAVATION, OR ANY OTHER PRECAUTION REQUIRED TO CONFIRM LOCATION. THE CONTRACTOR SHOULD CONTACT "WV811" (800-245-4848) TO FIELD LOCATE ALL ABOVE AND BELOW GROUND UTILITIES IN THE AREA. THE CONTRACTOR SHALL TAKE ALL RESPONSIBLE PRECAUTIONS AGAINST DAMAGE TO EXISTING UTILITIES. HOWEVER IN THE EVENT OF DAMAGE OR DISRUPTION TO UTILITIES WHICH ARE ACTIVE AND ARE TO REMAIN IN SERVICE, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RESPONSIBLE OFFICIAL OF THE ORGANIZATION OPERATING THE UTILITY INTERRUPTED. THE CONTRACTOR SHALL IMMEDIATELY LEND ALL POSSIBLE ASSISTANCE IN RESTORING SERVICES AND SHALL ASSUME ALL COST, CHARGES, OR CLAIMS CONNECTED WITH THE INTERRUPTION AND REPAIR OF SUCH SERVICES.
11. IF ADJUSTMENTS TO EXISTING UTILITIES ARE REQUIRED, THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATION AND WORK WITH UTILITY OWNERS FOR THE ADJUSTMENT OR RELOCATION OF UTILITY SURFACE FEATURES, I.E., VALVE BOXES, UTILITY POLES, MANHOLES, ETC. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE RELOCATION OF CONFLICTING UTILITIES WHICH ARE A RESULT OF THESE IMPROVEMENTS.
12. EROSION AND SEDIMENT CONTROL MEASURES ESTABLISHED WITHIN THE PERMITTED LIMIT OF DISTURBANCE PRIOR TO THIS PROJECT SHALL BE MAINTAINED BY THIS CONTRACTOR DURING THE DURATION OF THIS PROJECT. WITHIN THE MODIFIED LIMIT OF DISTURBANCE, THE CONTRACTOR SHALL PROVIDE EROSION AND SEDIMENT CONTROL MEASURES AND OTHER ACTIONS AS REQUIRED BY LOCAL AND STATE REGULATIONS OR REQUESTED BY ENGINEER. CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING OR MODIFYING ALL EXISTING AND PROPOSED SEDIMENT CONTROL MEASURES DURING CONSTRUCTION IN ORDER TO PREVENT EROSION. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE TO EXISTING AND PROPOSED TRAPS AND BASINS THROUGHOUT CONSTRUCTION.
13. GRADING SHALL NOT BE DONE IN SUCH A WAY TO DIVERT WATER ONTO PROPERTY OF ANOTHER LAND OWNER OR ADJACENT DEVELOPMENT PAD, SLOPE, ROAD OR OTHER LOCATION. EXCAVATION OR FILL SHALL NOT ENDANGER ADJOINING PROPERTY.
14. ALL EXCAVATION AND FILL PLACEMENT SHALL BE TO THE LINES AND GRADES AS SHOWN ON THE DRAWINGS. CONTRACTOR WILL BE RESPONSIBLE FOR FIELD VERIFYING ALL LINES AND GRADES. EXACT CUT AND FILL LIMITS MAY NEED TO BE MODIFIED IN THE FIELD DURING CONSTRUCTION. THE ENGINEER WILL WORK CLOSELY WITH THE CONTRACTOR TO MAKE THESE MODIFICATIONS.
15. CONTRACTOR TO USE THE OWNER'S BORROW AREA, CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT THE BORROW SITE. BORROW SITE IS PERMITTED FOR THE CONTRACTOR'S USE AS PART OF THIS PLAN.
16. EACH LAYER OF FILL OR BACKFILL SHALL BE TESTED FOR COMPACTION TO DETERMINE COMPLIANCE WITH THE PROJECT SPECIFICATIONS. COMPACTION TESTING WILL BE PROVIDED BY THE OWNER.
17. ALL EXCAVATIONS, INCLUDING TRENCHES, SHALL BE KEPT DRY TO PROTECT THEIR INTEGRITY. IF PUMPING OF AN OPEN TRENCH IS NECESSARY DURING THE COURSE OF CONSTRUCTION, A SEDIMENT FILTER BAG OR OTHER FORM OF FILTERING IS REQUIRED BEFORE DISCHARGING INTO THE STORM SYSTEM.
18. ALL INLETS WITHIN THE PROJECT SITE SHALL BE EQUIPPED WITH STRUCTURAL STEEL BICYCLE SAFE GRATES, UNLESS SPECIFICALLY STATED OTHERWISE, AND BE SET FLUSH WITH THE ADJACENT WEARING COURSE OR FINISHED GRADE.
19. CONTRACTOR SHALL ENSURE THAT POSITIVE DRAINAGE ACROSS PAVEMENTS IS PROVIDED AND NO LOW SPOTS OR PUDDLING OCCUR WITHIN THE LIMITS OF WORK.
20. ALL TRENCHING SHALL OCCUR AS DESIGNATED IN THIS PLAN SET. THE CONTRACTOR SHALL USE EQUIPMENT APPROPRIATE TO MAINTAIN A MAXIMUM PAVEMENT OPENING. IF THE CONTRACTOR PROPOSES A REVISED TRENCHING METHOD OR ALIGNMENT, ENGINEER AND OWNER SHALL BE NOTIFIED IMMEDIATELY.
21. CONTRACTOR SHALL BACKFILL ALL CURBS AND PAVEMENTS FLUSH WITH TOPSOIL AND SEED/MULCH IN ACCORDANCE WITH TECHNICAL SPECIFICATIONS.
22. ALL DISTURBED AREAS WITHIN THE PROJECT AREA MUST BE SEEDED AND MULCHED AFTER CONSTRUCTION HAS BEEN COMPLETED IN ACCORDANCE WITH THE LANDSCAPE PLANS.
23. LANDSCAPE PLANS SUPERCEDE CIVIL WHEN CONFLICTS OCCUR WITH REGARDS TO SEEDING AND MULCHING, TOPSOIL, UNDERDRAINS, PLANTINGS, ETC.
24. FILL PLACEMENT IN SPOILS AREA SHALL BE PLACED AS ENGINEERED FILL IN ACCORDANCE WITH EARTHWORK SPECIFICATIONS.
25. ALL EXISTING PAVEMENT TO BE REMOVED SHALL BE SAW CUT ALONG LIMITS OF PROPOSED PAVEMENT REMOVAL BEFORE REMOVAL OPERATIONS BEGIN. THE CONTRACTOR IS RESPONSIBLE FOR THE OFF-SITE DISPOSAL OF REMOVED PAVEMENTS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
26. UTILITIES AND STORM WATER NETWORKS SHALL BE AS-BUILT AS THEY ARE INSTALLED. WITH EACH PAY APPLICATION, DATA TO BE PROVIDED TO THE OWNER IN A CAD FILE SHOWING SINGLE CENTERLINES WITH PERMANENT OBJECTS SHOWN WITH X,Y AND Z COORDINATES.
27. PRIOR TO PLACEMENT OF PROCEEDING COURSE OF ASPHALT, THE CONTRACTOR SHALL CLEAN AND PREPARE THE EXISTING SURFACE IN ACCORDANCE WITH WV DOH SPECIFICATIONS.
28. IN THE EVENT OF CONFLICTING INFORMATION CONTAINED WITHIN THESE PLANS, THE CONTRACTOR SHALL SEEK COUNCIL WITH THE ENGINEER AND/OR OWNER BEFORE PROCEEDING WITH CONSTRUCTION.
29. CONTRACTOR SHALL PROVIDE AS-BUILT DATA ON A WEEKLY BASIS IN AUTOCAD FORMAT FOR ALL ITEMS INSTALLED.
30. SITE CONTRACTOR SHALL MAINTAIN ACCESS FOR OWNER, BUILDING CONTRACTOR & SUBCONTRACTORS AS NEEDED.
31. CONTRACTOR MUST HAVE AT LEAST ONE CONCRETE WASHOUT AREA DESIGNATED AND OPERATIONAL AT ALL TIMES. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING WASHOUT PER DETAILS WITHIN THESE PLANS AND IN ACCORDANCE WITH WVDEP GUIDELINES.
32. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EXISTING EROSION AND SEDIMENT CONTROLS THROUGHOUT THE LIFE OF THE PROJECT. CONTRACTOR SHALL ENSURE THAT STORM RUNOFF DOES NOT EFFECT NEIGHBORING PROPERTIES. CONTRACTOR IS RESPONSIBLE IN ENSURING THAT ALL EROSION AND SEDIMENT CONTROLS ARE WITHIN WVDEP GUIDELINES. ADDITIONAL CONTROLS MAY BE INSTALLED AT THE APPROVAL OF THE OWNER AND/OR THE PROJECT ENGINEER. CONTRACTOR SHALL INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL DEVICES AS DIRECTED BY THE CITY AND WVDEP EROSION CONTROL INSPECTORS AT NO ADDITIONAL COST AND SHALL REMEDY ANY PERMIT VIOLATIONS WITHIN 48 HOURS OF THE INSPECTOR'S SITE VISIT.
33. CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT THE WORKMEN AND THE PUBLIC SHALL BE PROTECTED FROM INJURY AND ADJOINING PROPERTY PROTECTED FROM DAMAGE. CONTRACTOR SHALL KEEP THE WORK AREA FREE FROM THE ACCUMULATION OF WASTE MATERIAL OR RUBBISH CAUSED BY THEIR EMPLOYEES OR WORK. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REMOVE ALL RUBBISH FROM AND ABOUT THE PREMISES AND ALL TOOLS, EQUIPMENT, APPARATUS, AND SURPLUS MATERIAL. THE CONSTRUCTION SITE SHALL BE LEFT CLEAN TO THE OWNER'S SATISFACTION.
34. THE INFORMATION SHOWN ON THESE DRAWINGS MAY HAVE ALSO BEEN RELEASED IN A DIGITAL DRAWING FORMAT. ONCE A DRAWING IS RELEASED FROM LDG IN DIGITAL FORMAT, LDG HAS NO CONTROL OVER THE MANIPULATION OR MISUSE OF THAT DATA CONTAINED IN THAT FILE. THE VIEWER IS THEREFORE CAUTIONED AND SHOULD COMPARE ANY SUBSEQUENT REPRODUCTIONS OR MANIPULATIONS OF THIS DATA WITH THE ORIGINAL HARD COPY SEALED PLAN PROVIDED BY LDG. THE USER OF THE DIGITAL DATA IS ALSO CAUTIONED THAT ANY USE OF THE DATA CONTAINED IN THE DIGITAL FILE, WHICH IS NOT SHOWN ON THE HARD COPY DRAWINGS, IS AT THE SOLE RISK OF THE USER.
35. THE OWNER SHALL PREPARE AND EXECUTE NECESSARY UTILITY EASEMENTS FOR PROPOSED RELOCATED UTILITIES IN ACCORDANCE WITH THE UTILITY PROVIDER'S REQUIREMENTS.



TRACT MAP

SCALE: 1" = 500'
GIS PARCEL LINES AS SHOWN



NORTHING/EASTING MAP

SCALE: 1" = 500'

LEGEND

	EXISTING	PROPOSED
FEATURES TEXT	*Feature text*	FEATURES TEXT
PROPERTY LINE		
RIGHT-OF-WAY LINE		
EASEMENT LINE		
CONTOUR LINE	100	100
CENTER LINE OF ROAD		
BUILDING SETBACK		
BUILDING LINE		
FENCE LINE	x	X
EDGE OF PAVEMENT		
GRAVEL		
CONCRETE CURB		
CONCRETE/SIDEWALK		
SIGN		
BENCHMARK		
DITCH/SWALE		
DRAINAGE LINE, MANHOLE & CB	MH	D
SANITARY SEWER & MANHOLE	MH S	S
WATER MAIN & VALVE	WV W	WV W
SEWER FORCE MAIN	FM	FM
GAS MAIN & VALVE	GV G	GV G
UNDERGROUND ELECTRIC	UE	E
UNDERGROUND CABLE TV	CTV	
OVERHEAD UTILITIES & POLE	OH	OH
UNDERGROUND TELEPHONE	UT	T
GUIDE RAIL		
18" FILTER FABRIC FENCE		FF-18
30" FILTER FABRIC FENCE		FF-30
SUPER FILTER FABRIC FENCE		SFF
LIMIT OF DISTURBANCE		LD
NPDES PERMIT BOUNDARY		PERMIT
SOILS BOUNDARY		
SOIL TYPE		HhC2
DRAINAGE DIVIDES		
DRAINAGE SWALE		
ROCK CONSTRUCTION ENTRANCE		RCE
ROCK FILTER		RF
LEVEL SPREADER		LS
INLET PROTECTION		IP

ZONING REQUIREMENTS

ZONING DISTRICT – HIGHWAY COMMERCIAL DISTRICT (HC)
ALL OF THE FOLLOWING REQUIREMENTS HAVE BEEN OBTAINED FROM THE CITY OF RANSON ZONING ORDINANCE. (AMENDED DECEMBER 19, 2022)

MINIMUM LOT REQUIREMENTS	
MINIMUM LOT AREA	2500 SQ. FT.
MINIMUM LOT WIDTH	25 FT.
MAXIMUM IMPERVIOUS COVERAGE	NONE
BUILDING SETBACK REQUIREMENTS:	
FRONT YARD	NONE
SIDE YARD	4' IF PROVIDED
REAR YARD	NONE
MAXIMUM BUILDING HEIGHT:	80'

CHRISTOPHER MICHAEL MCAFEE — REGISTERED — 20340 — STATE OF WEST VIRGINIA — PROFESSIONAL ENGINEER — 3/14/24

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NO.	DATE	COMMENTS	BY	CHK'D
4	03.13.2024	CITY OF RANSON RESUBMISSION	JWH	CMS
3	10.06.2023	CITY OF RANSON RESUBMISSION	JWH	CMS
2	09.29.2023	CITY OF RANSON AND WVDEP RESUBMISSIONS	JWH	CMS
1	09.29.2023	PERMIT RESUBMISSION	JWH	CMS
0	07.19.2023	PERMIT SUBMISSION	JWH	CMS

ISSUE / REVISIONS

GENERAL NOTES AND LEGEND

WAWA – RANSON, WEST VIRGINIA
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

PTV 1132, LLC
400 PENN CENTER BLVD, BUILDING 4, SUITE 1000
PITTSBURGH, PA 15235
PHONE 724.420.5367

Larson Design Group • Architects Engineers Surveyors
1000 Commerce Park Drive • Suite 201
Williamsport, PA 17701
PHONE 570.323.6603 TOLL FREE 877.323.6603
FAX 570.323.9902 • www.larsondesigngroup.com

SHEET NO.: C1.0

PROJECT NO.: 11693-041

LEGEND

AREA OF REMOVAL

(TBR) TO BE REMOVED

N/F
NNN LLC
PARCEL ID 19-8-8E-1-0
D.B. 1190 PG 392

N/F
KB RAD PHARMACY DST
PARCEL ID
19-8-8E-002A-0
D.B. 1160 PG 480

N/F
INWOOD 165 LLC
PARCEL ID 19-8-8-1-5
D.B. 1235 PG 693

N. FAIRFAX BLVD.

50' RIGHT-OF-WAY WIDTH VARIES

PIPE 18" HDPE

20' WATERLINE EASEMENT

N/F
PTC DEVELOPER LLC
PARCEL NO. 19-8-8-1-4
DEED BOOK 1235 PAGE 707
4.1042 ACRES

TO BE CAPPED AND ABANDONED IN PLACE

15' SEWER EASEMENT

FLOWING SPRINGS RUN

FEMA FLOODPLAIN
ZONE AE (BASE FLOOD ELEVATION 490')

20' WATER EASEMENT

EXISTING 3 PHASE ELECTRICAL VAULT

SR-9

N/F
POTOMAC 2017 LLC
19-8-8B-19-0
D.B. 1192 PG 665

N/F
EAST MOUNTAIN HEALTH
19-8-8B-10-0
D.B. 1177 PG 410

80' LEGAL RIGHT-OF-WAY

N/F
INWOOD 165 LLC
PARCEL ID 19-8-8-1-3
D.B. 1235 PG 693

~TO BE REMOVED~

N/F
PTC DEVELOPER LLC
PARCEL NO. 19-8-8-1-4
DEED BOOK 1235 PAGE 707
1.3000 ACRES

MATCHLINE SEE SHEET C2.1
MATCHLINE SEE SHEET C2.2

15' SEWER EASEMENT

40' TEMPORARY INGRESS/EGRESS AND UTILITY EASEMENT (D.B. 22, PG 1)

N/F
INWOOD 165 LLC
PARCEL ID 19-8-8-1-6
D.B. 1235 PG 693

~TO BE REMOVED~

N/F
PTC DEVELOPER LLC
PARCEL NO. 19-8-8-1-4
DEED BOOK 1235 PAGE 707
1.9429 ACRES

~TO BE REMOVED~

N/F
INWOOD 165 LLC
PARCEL ID 19-8-8-1-9
D.B. 1235 PG 693

~TO BE REMOVED~

~TO BE REMOVED~

SR-9

60 0 60 120 FEET

SCALE

CHRISTOPHER MICHAEL MCAFEE
REGISTERED
20340
STATE OF
WEST VIRGINIA
PROFESSIONAL ENGINEER
3/14/24

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0	07.19.2023	PERMIT SUBMISSION	JWH	CMS

ISSUE / REVISIONS

LDG

EXISTING CONDITIONS/DEMOLITION PLAN - OVERALL

WAWA - RANSON, WEST VIRGINIA

CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

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FAX 570.323.9902 • www.larsondesigngroup.com

SHEET NO.: C2.0

PROJECT NO.: 11693-041

LEGEND

AREA OF REMOVAL

(TBR) TO BE REMOVED

N/F
NNN LLC
PARCEL ID 19-8-8E-1-0
D.B. 1190 PG 392

N/F
KB RAD PHARMACY DST
PARCEL ID
19-8-8E-002A-0
D.B. 1160 PG 480

N/F
INWOOD 165 LLC
PARCEL ID 19-8-8-1-3
D.B. 1235 PG

N/F
INWOOD 165 LLC
PARCEL ID 19-8-8-1-3
D.B. 1235 PG 693

N/F
PTC DEVELOPER LLC
PARCEL NO. 19-8-8-1-4
DEED BOOK 1235 PAGE 707
4.1042 ACRES

N/F
PTC DEVELOPER LLC
PARCEL NO. 19-8-8-1-4
DEED BOOK 1235 PAGE 707
1.3000 ACRES

N. FAIRFAX BLVD.

SR-9

"KEEP RIGHT"

"YIELD"

"ONE WAY"

"DIVIDED HIGHWAY"

"CHARLES TOWN"

ARC=67.30'
RAD=1050.00'
Δ=3° 40' 21"
CHRD=N63° 49' 42"E 67.29'

N65° 47' 52"E 58.99'

N62° 07' 32"E 144.95'

N50° 33' 16"E 95.87'

S25° 41' 26"E 109.72'

ARC=59.55'
RAD=68.00'
Δ=50° 10' 25"
CHRD=N40° 40' 20"E 57.66'

N15° 35' 13"E 15.01'

ARC=102.64'
RAD=500.00'
Δ=11° 45' 42"
CHRD=N56° 14' 41"E 102.46'

ARC=112.66'
RAD=89.00'
Δ=72° 31' 46"
CHRD=N20° 40' 33"W 105.29'

ARC=116.82'
RAD=339.95'
Δ=19° 41' 22"
CHRD=N46° 56' 22"W 116.25'

N56° 57' 05"W 111.72'

S61° 29' 34"W 493.37'

S35° 06' 56"E 256.91'

SAW-CUT
NEAT EDGE

LEGAL RIGHT-OF-WAY
WIDTH VARIES

LEGAL RIGHT-OF-WAY
80'

IRON PIN (TYP.)

IP

W.V.

8" MAPLE

12" MAPLE

16" PVC WATERMAIN

PIP 18I HDPE

2034096

SAN. MH
RIM ELEV.: 494.36'
(N) 10" PVC INV. IN: 486.91'
(S) 10" PVC INV. OUT: 487.01'

OUTLET STRUCTURE
48" RCP INV. OUT
491.51'

LIGHT STANDARD
(TYP.)

STORM INLET MH
RIM ELEV.: 503.49'
15" HDPE INV. OUT: 499.27'

STORM INLET MH (EX.I-5.3)
RIM ELEV.: 503.45'
(NW) 15" HDPE INV. IN: 497.62'
(E) 15" HDPE INV. OUT: 487.58'

STORM INLET MH
RIM ELEV.: 500.06'
15" HDPE INV. OUT: 495.67'

STORM INLET MH
RIM ELEV.: 499.56'
12" HDPE INV. OUT: 493.71'

8" HDPE
INV. OUT: 497.98'

8" HDPE
INV. OUT: 496.99'

8" HDPE
INV. OUT: 496.36'

SIGN (TYP.)

TRAFFIC
SIGNAL

SINGLE
YELLOW
LINE

SINGLE
WHITE LINE

TO BE REMOVED

15" HDPE
INV. OUT: 491.17'

TO BE REMOVED

INLET
STRUCTURE
INV. OUT:
487.37'

FLOWING
SPRINGS RUN

TO BE CAPPED AND
ABANDONED IN PLACE

15'
SEWER EASEMENT

20'
WATERLINE EASEMENT

20'
WATER EASEMENT

FENCING (TYP.)

OUTLET STRUCTURE
72" CMP
INV. IN: 486.51'

SAN. MH
RIM ELEV.: 497.76'
(N) 10" PVC INV. IN: 486.46'
(SE) 10" PVC INV. OUT: 486.41'

SAN. MH
RIM ELEV.: 496.00'
(NW) 10" PVC. INV. IN: 484.09'
(SE) 10" PVC INV. OUT: 483.90'

36" CMP
INV. OUT: 486.53'

36" HDPE
INV. OUT: 498.86'

FEMA FLOODPLAIN
ZONE AE (BASE FLOOD
ELEVATION 490')

STORM INLET MH
(EX.I-5.0)
RIM ELEV.: 510.07'
(NE) 15" HDPE
INV. IN: 505.15'
(SW) 18" HDPE
INV. IN: 505.15'
(NW) 18" HDPE
INV. OUT: 505.06'

STORM INLET MH
RIM ELEV.: 510.98'
15" HDPE INV. OUT: 506.03'

BOLLARD (TYP.)

~TO BE REMOVED~

~TO BE REMOVED~

~TO BE REMOVED~

MATCHLINE SEE SHEET C2.1

MATCHLINE SEE SHEET C2.2

30 0 30 60 FEET

SCALE

CHRISTOPHER MICHAEL MURPHY
REGISTERED
20340
STATE OF
WEST VIRGINIA
PROFESSIONAL ENGINEER
3/14/24

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0	07.19.2023	COMMENTS	JWH	CMS

EXISTING CONDITIONS/DEMOLITION PLAN – NORTH

WAWA – RANSON, WEST VIRGINIA

CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

PTV 1132, LLC
400 PENN CENTER BLVD, BUILDING 4, SUITE 1000
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Williamsport, PA 17701
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SHEET NO.:

C2.1

PROJECT NO.: 11693-041

LEGEND

AREA OF REMOVAL

(TBR) TO BE REMOVED

MATCHLINE SEE SHEET C2.1

EX. TEMPORARY PUBLIC STORM DRAINAGE EASEMENT (P.B. 22, PG 1)

TO BE REMOVED

IP

SAN. MH
RIM ELEV.: 497.03'
(N) 10" PVC INV. IN: 476.23'
(S) 10" PVC INV. IN: 476.22'
(E) 10" PVC INV. OUT: 476.13'

15' SEWER EASEMENT

SHENTEL TELE. MARKER

SAN. MH
RIM ELEV.: 490.99'
(E) 10" PVC INV. IN: 472.89'
(W) 10" PVC INV. OUT: 472.99'

72" CMP
INV. OUT: 478.84'

40' TEMPORARY INGRESS/EGRESS AND UTILITY EASEMENT (P.B. 22, PG 1)

36" HDPE
INV. IN: 500.91'

~TO BE REMOVED~

12" CMP
INV. IN: 500.34'

12" CMP
INV. OUT: 498.88'

N/F
PTC DEVELOPER LLC
PARCEL NO. 19-8-8-1-4
DEED BOOK 1235 PAGE 707
9.4129 ACRES

"NO LITTERING"

8" HDPE
INV. OUT: 490.58'

N/F
INWOOD 165 LLC
PARCEL ID 19-8-8-1-6
D.B. 1235 PG 693

SR-9

T-POST (TYP.)

EX. 50' UTILITY EASEMENT (P.B. 33, PG 1)

FENCING (TYP.)

IRON PIN (FND.)

POINT UNLESS NOTED (TYP.)

N/F
INWOOD 165 LLC
PARCEL ID 19-8-8-1-9
D.B. 1235 PG 693

N/F
INWOOD 165 LLC
PARCEL ID 19-8-8-1-6
D.B. 1235 Pg 693

30 0 30 60 FEET

SCALE

CHRISTOPHER MICHAEL MEAKEM
REGISTERED
20340
STATE OF
WEST VIRGINIA
PROFESSIONAL ENGINEER
3/14/24

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0	07.19.2023	PERMIT SUBMISSION	JWH	CMS

ISSUE / REVISIONS

LDG

EXISTING CONDITIONS/DEMOLITION PLAN - SOUTH

WAWA - RANSON, WEST VIRGINIA
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

PTV 1132, LLC
400 PENN CENTER BLVD, BUILDING 4, SUITE 1000
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FAX 570.323.9902 • www.larsondesigngroup.com

SHEET NO.: C2.2

PROJECT NO.: 11693-041

LEGEND

- STANDARD BITUMINOUS PAVEMENT
- HEAVY DUTY BITUMINOUS PAVEMENT
- REINFORCED CONCRETE PAVEMENT (TANK MAT,PARKING, CANOPY AND TRASH PAD)
- CONCRETE WALK

N.FAIRFAX BLVD.

NORTH FAIRFAX BLVD.

SR-9

JEFFREY LANE

FLOWING SPRINGS RUN

WATER QUALITY BIO-RETENTION

BASIN A

BORROW AREA (~13,650 CY)

20' WATER EASEMENT

15' SEWER EASEMENT

EXISTING 3 PHASE ELECTRICAL VAULT

FEMA FLOODPLAIN ZONE AE (BASE FLOOD ELEVATION 490')

PIP 18I HOPE

N/F NNN LLC PARCEL ID 19-8-8E-1-0 D.B. 1190 PG 392

N/F KB RAD PHARMACY DST PARCEL ID 19-8-8E-002A-0 D.B. 1160 PG 480

N/F INWOOD 165 LLC PARCEL ID 19-8-8-1-5 D.B. 1235 PG 693

N/F INWOOD 165 LLC PARCEL ID 19-8-8-1-3 D.B. 1235 PG 693

N/F PTC DEVELOPER LLC PARCEL NO. 19-8-8-1-4 DEED BOOK 1235 PAGE 707 1.3000 ACRES

N/F PTC DEVELOPER LLC PARCEL NO. 19-8-8-1-4 DEED BOOK 1235 PAGE 707 9.4129 ACRES

N/F INWOOD 165 LLC PARCEL ID 19-8-8-1-6 D.B. 1235 PG 693

N/F INWOOD 165 LLC PARCEL ID 19-8-8-1-9 D.B. 1235 PG 693

N/F POTOMAC 2017 LLC 19-8-8B-19-0 D.B. 1192 PG 665

N/F POTOMAC 2017 LLC 19-8-8B-11-0 D.B. 1192 PG 665

N/F EAST MOUNTAIN HEALTH 19-8-8B-10-0 D.B. 1177 PG 410

MATCHLINE SEE SHEET C3.1
MATCHLINE SEE SHEET C3.2

60 0 60 120 FEET
SCALE

CHRISTOPHER MICHAEL HEAPS
REGISTERED
20340
STATE OF
WEST VIRGINIA
PROFESSIONAL ENGINEER
3/14/24

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ISSUE / REVISIONS

SITE PLAN LAYOUT - OVERALL

WAWA - RANSON, WEST VIRGINIA

CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

PTV 1132, LLC
400 PENN CENTER BLVD, BUILDING 4, SUITE 1000
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SHEET NO.: C3.0

PROJECT NO.: 11693-041

LEGEND

- STANDARD BITUMINOUS PAVEMENT
- HEAVY DUTY BITUMINOUS PAVEMENT
- REINFORCED CONCRETE PAVEMENT (TANK MAT,PARKING, CANOPY AND TRASH PAD)
- CONCRETE WALK

NOTES:
1. ALL LINE STRIPING TO BE 4" YELLOW PAINT. SEE LINE STRIPPING PLAN.

N/F NNN LLC PARCEL ID 19-8-8E-1-0 D.B. 1190 PG 392

N/F KB RAD PHARMACY DST PARCEL ID 19-8-8E-002A-0 D.B. 1160 PG 480

N/F INWOOD 165 LLC PARCEL ID 19-8-8E-1-0 D.B. 1235 PG

N/F INWOOD 165 LLC PARCEL ID 19-8-8E-1-0 D.B. 1235 PG 69

N/F PTC DEVELOPER LLC PARCEL NO. 19-8-8-1-4 DEED BOOK 1235 PAGE 707 1.3000 ACRES

N. FAIRFAX BLVD.

"KEEP RIGHT"

"YIELD"

"DIVIDED HIGHWAY"

"ONE WAY"

"CHARLES TOWN"

FLOWING SPRINGS RUN

SR-9

SR-9

ARC=59.55
RAD=68.00'
Δ=50° 10' 25"
CHRD=N40° 40' 20"E 57.66'

N15° 35' 13"E 15.01'

3FT WIDE SIDEWALK EASEMENT

ARC=112.66
RAD=89.00'
Δ=72° 31' 46"
CHRD=N20° 40' 33"W 105.29'

PROPOSED "YIELD" SIGN

PROPOSED "JEFFREY LANE" STREET SIGN

ARC=67.30
RAD=1050.00'
Δ=3° 40' 21"
CHRD=N63° 49' 42"E 67.29'

PROPOSED "ONE-WAY" SIGN (R6-1)

HORIZONTAL SITE TRIANGLE

PROPOSED 5' CONCRETE SIDEWALK

N65° 47' 52"E 58.99'

HEAVY DUTY BITUMINOUS PAVEMENT

LIGHT POLE (TYP.)

158.00'

PROPOSED STOP SIGN (R1-1)

N62° 07' 32"E 144.95'

158.00' STOPPING SIGHT DISTANCE (25 MPH) (TYP.)

AIR PUMP STAND(S)

ARC=102.64
RAD=500.00'
Δ=11° 45' 42"
CHRD=N56° 14' 41"E 102.46'

N50° 33' 16"E 95.87'

PYLON SIGN
HEIGHT: 23.25'
AREA: 84.5 SF

S25° 41' 26"E 109.72'

TRASH ENCLOSURE

REINFORCED CONCRETE PAVEMENT

~STANDARD BITUMINOUS PAVEMENT~

MAIN ENTRANCE

Wawa

U59-FB PROTOTYPE 5,915 SF 74 SPACES

REAR ENTRANCE

ICE BOX

CONCRETE SIDEWALK

~REINFORCED CONCRETE UNDER THE CANOPY~

CURB AND GUTTER

REMOTE EMERGENCY PUMP SHUTOFF 204.50'

S38° 06' 56"E 256.91'

PROPANE CAGE

~REINFORCED CONCRETE~ LOADING AREA

TWELVE (12) POTENTIAL EV SPACES

~REINFORCED CONCRETE~

TANK VENT

WATER QUALITY BIO-RETENTION

CURB ALONG TANKS TO BE MONOLITIC WITH TANK MAT

S61° 29' 34"W 493.37'

N56° 57' 05"W 111.72'

JEFFREY LANE

PROPOSED 5' CONCRETE SIDEWALK WITH BUFFER

PROPOSED STOP SIGN (R1-1)

PROPOSED 5' LINE STRIPPED WALK

ARC=116.82
RAD=339.95'
Δ=19° 41' 22"
CHRD=N46° 56' 22"W 116.25'

~HEAVY DUTY BITUMINOUS PAVEMENT~

158.00' STOPPING SIGHT DISTANCE (25 MPH) (TYP.)

HORIZONTAL SITE TRIANGLE

BOLLARD (TYP.)

STORM INLET MH RIM ELEV.: 503.49' 15" HDPE INV. OUT: 499.27'

STORM INLET MH RIM ELEV.: 500.06' 15" HDPE INV. OUT: 495.67'

STORM INLET MH RIM ELEV.: 499.56' 12" HDPE INV. OUT: 493.71'

STORM INLET MH (EX.I-5.3) RIM ELEV.: 503.45' (NW) 15" HDPE INV. IN: 497.62' (E) 15" HDPE INV. OUT: 487.58'

STORM INLET MH (EX.I-5.0) RIM ELEV.: 510.07' (NE) 15" HDPE INV. IN: 505.15' (SW) 18" HDPE INV. IN: 505.15' (NW) 18" HDPE INV. OUT: 505.06'

SAN. MH RIM ELEV.: 494.36' (N) 10" PVC INV. IN: 486.91' (S) 10" PVC INV. OUT: 487.01'

SAN. MH RIM ELEV.: 496.00' (NW) 10" PVC INV. IN: 484.00' (SE) 10" PVC INV. OUT: 483.90'

INLET STRUCTURE INV. OUT: 487.37'

OUTLET STRUCTURE 72" CMP INV. IN: 486.51'

36" CMP INV. OUT: 486.53'

36" HDPE INV. OUT: 498.86'

8" HDPE INV. OUT: 497.98'

8" HDPE INV. OUT: 496.99'

8" HDPE INV. OUT: 496.36'

16" PVC WATERMAIN

FENCING (TYP.)

FEMA FLOODPLAIN ZONE AE (BASE FLOOD ELEVATION 490')

20' WATER EASEMENT

LEGAL RIGHT WIDTH

SINGLE YELLOW LINE

SINGLE WHITE LINE

TRAFFIC SIGNAL

IRON PIN (TYP.)

PIP 18" HDPE

W.V.

MATCHLINE SEE SHEET C3.1
MATCHLINE SEE SHEET C3.2

30 0 30 60 FEET
SCALE

CHRISTOPHER MICHAEL WEAVER REGISTERED 20340 STATE OF WEST VIRGINIA PROFESSIONAL ENGINEER 3/14/24

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0	07.19.2023	PERMIT SUBMISSION	JWH CWS

SITE LAYOUT PLAN – NORTH

WAWA – RANSON, WEST VIRGINIA
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

PTV 1132, LLC
400 PENN CENTER BLVD, BUILDING 4, SUITE 1000
PITTSBURGH, PA 15235
PHONE 724.420.5367

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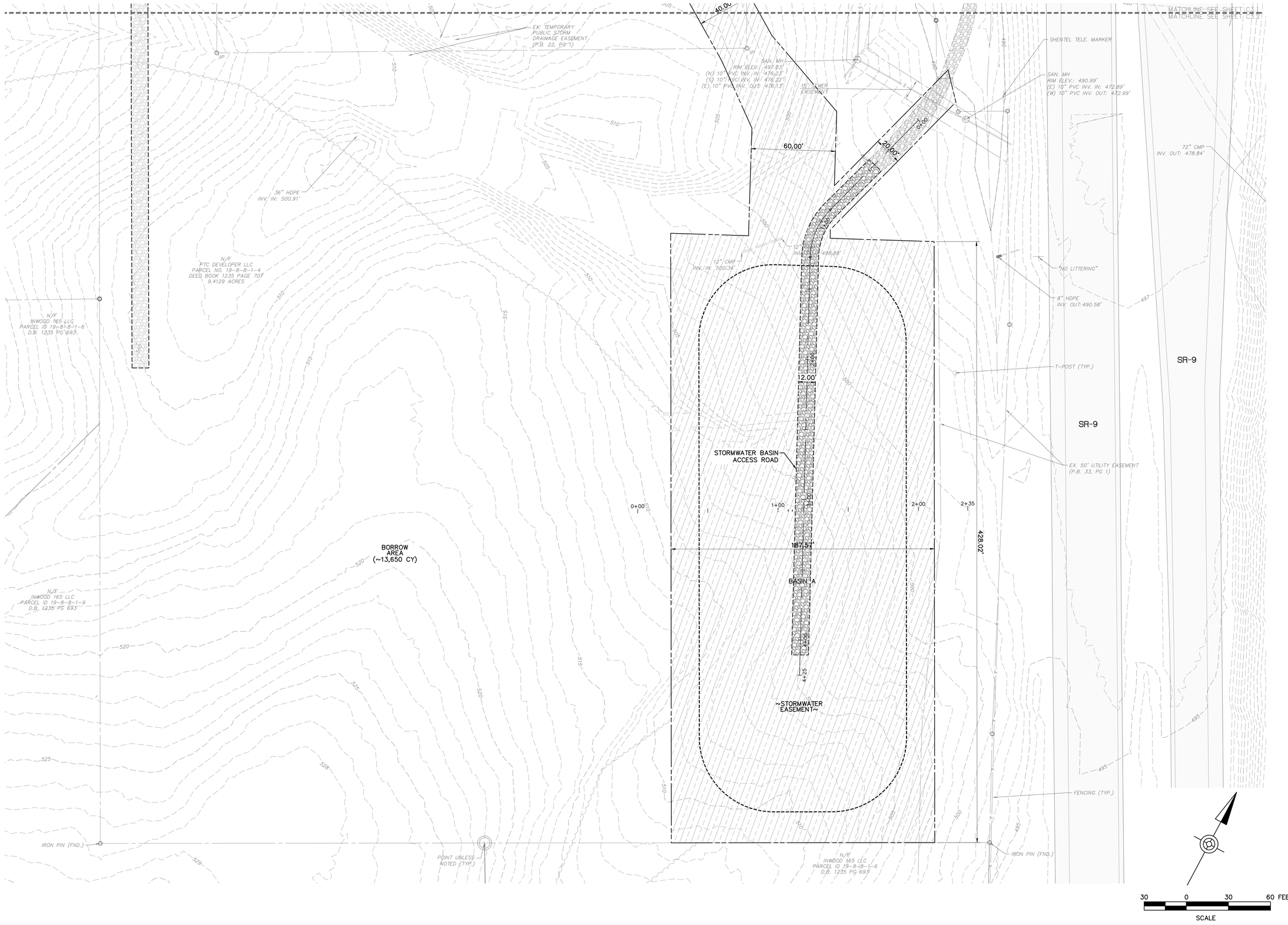
Williamsport, PA 17701
PHONE 570.323.6603 TOLL FREE 877.323.6603
FAX 570.323.9902 • www.larsondesigngroup.com

SHEET NO.: C3.1

PROJECT NO.: 11693-041



CHRISTOPHER MICHAEL MCKEEVER
REGISTERED
20340
STATE OF
WEST VIRGINIA
PROFESSIONAL ENGINEER
3/14/24

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NO.	DATE	COMMENTS	BY
4	03.13.2024	CITY OF RANSON RESUBMISSION	JWH CMS
3	12.06.2023	CITY OF RANSON RESUBMISSION	JWH CMS
2	09.29.2023	CITY OF RANSON WVDEP RESUBMISSIONS	JWH CMS
1	09.29.2023	PERMIT RESUBMISSION	JWH CMS
0	07.19.2023	PERMIT SUBMISSION	JWH CMS

ISSUE / REVISIONS

LDG

SITE LAYOUT PLAN - SOUTH

WAWA - RANSON, WEST VIRGINIA
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

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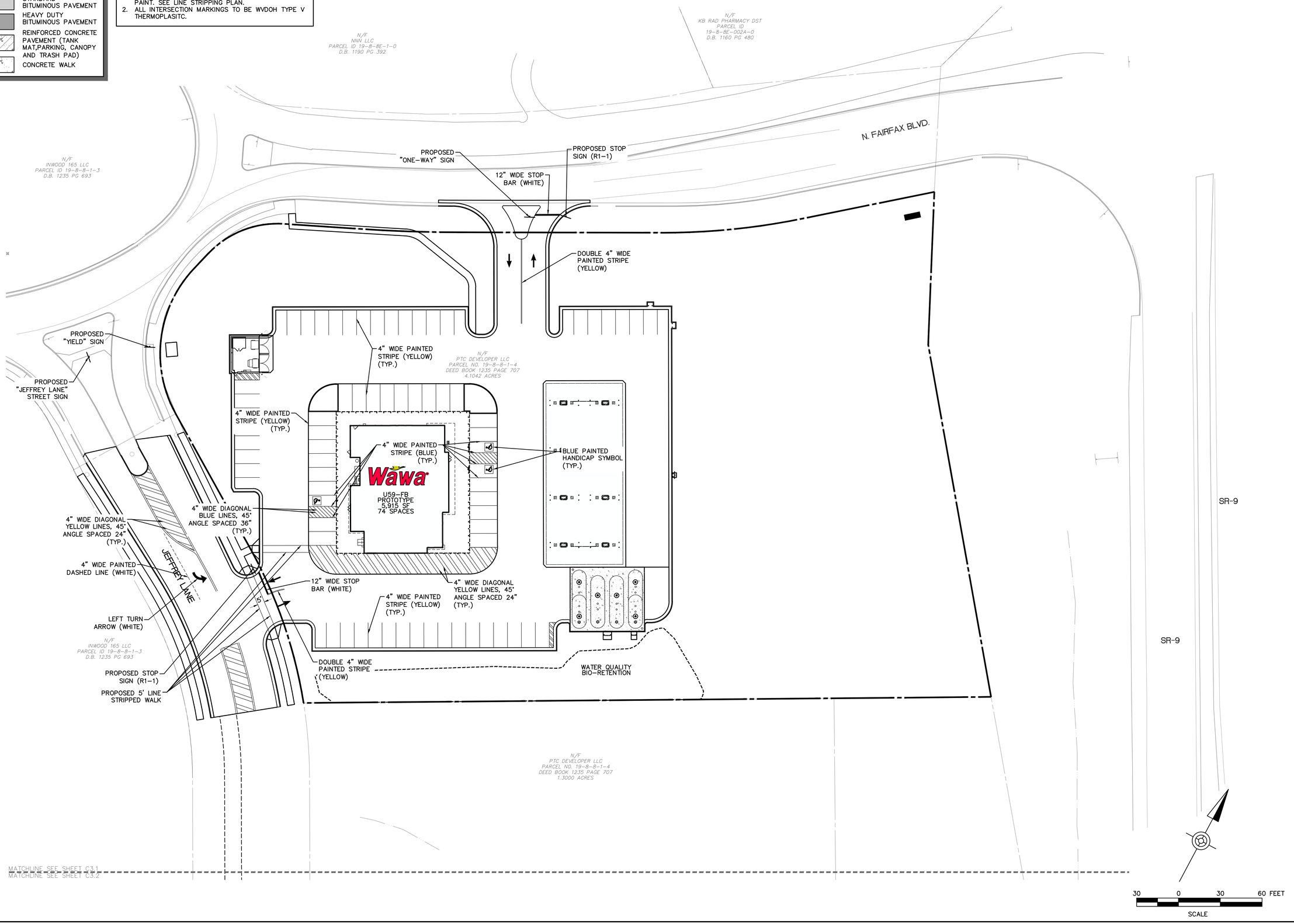
SHEET NO.: C3.2

PROJECT NO.: 11693-041

LEGEND

- STANDARD BITUMINOUS PAVEMENT
- HEAVY DUTY BITUMINOUS PAVEMENT
- REINFORCED CONCRETE PAVEMENT (TANK MAT,PARKING, CANOPY AND TRASH PAD)
- CONCRETE WALK

NOTES:
1. ALL PARKING STALL LINE STRIPING TO BE 4" YELLOW PAINT. SEE LINE STRIPPING PLAN.
2. ALL INTERSECTION MARKINGS TO BE WVDOH TYPE V THERMOPLASITC.



CHRISTOPHER MICHAEL MCARTOR
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PROFESSIONAL ENGINEER
3/4/24

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2	09.29.2023	CITY OF RANSON ARB/WVDEP RESUBMISSIONS	JWH	CMS
1	09.29.2023	PERMIT RESUBMISSION	JWH	CMS
0	07.19.2023	PERMIT SUBMISSION	JWH	CMS

LDG

SITE LAYOUT PLAN - SIGNAGE AND STRIPPING PLAN

WAWA - RANSON, WEST VIRGINIA
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

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SHEET NO.: C3.3

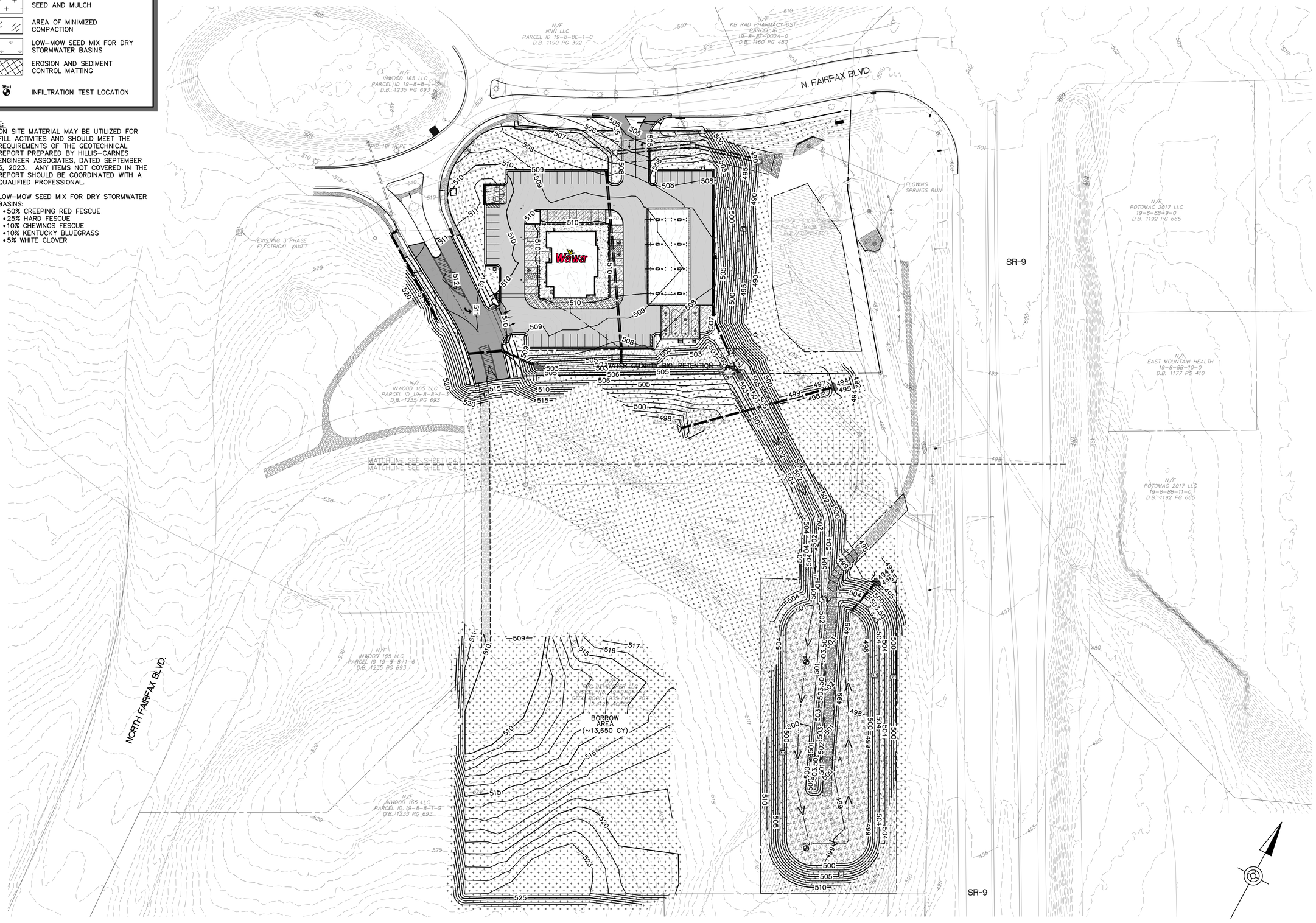
PROJECT NO.: 11693-041

LEGEND

- SEED AND MULCH
- AREA OF MINIMIZED COMPACTION
- LOW-MOW SEED MIX FOR DRY STORMWATER BASINS
- EROSION AND SEDIMENT CONTROL MATTING
- TP=1 INFILTRATION TEST LOCATION

NOTE:

1. ON SITE MATERIAL MAY BE UTILIZED FOR FILL ACTIVITES AND SHOULD MEET THE REQUIREMENTS OF THE GEOTECHNICAL REPORT PREPARED BY HILLIS-CARNES ENGINEER ASSOCIATES, DATED SEPTEMBER 5, 2023. ANY ITEMS NOT COVERED IN THE REPORT SHOULD BE COORDINATED WITH A QUALIFIED PROFESSIONAL.
2. LOW-MOW SEED MIX FOR DRY STORMWATER BASINS:
   - 50% CREEPING RED FESCUE
   - 25% HARD FESCUE
   - 10% CHEWINGS FESCUE
   - 10% KENTUCKY BLUEGRASS
   - 5% WHITE CLOVER



CHRISTOPHER MICHAEL MCKEEVER
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3/14/24

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1	09.29.2023	PERMIT RESUBMISSION	JWH	CMS
0	07.19.2023	PERMIT SUBMISSION	JWH	CMS

ISSUE / REVISIONS

GRADING/STORMWATER PLAN - OVERALL

WAWA - RANSON, WEST VIRGINIA

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SHEET NO.: C4.0

PROJECT NO.: 11693-041

LEGEND

- SEED AND MULCH
- AREA OF MINIMIZED COMPACTION
- EROSION AND SEDIMENT CONTROL MATTING
- TP-1 INFILTRATION TEST LOCATION

NOTE:
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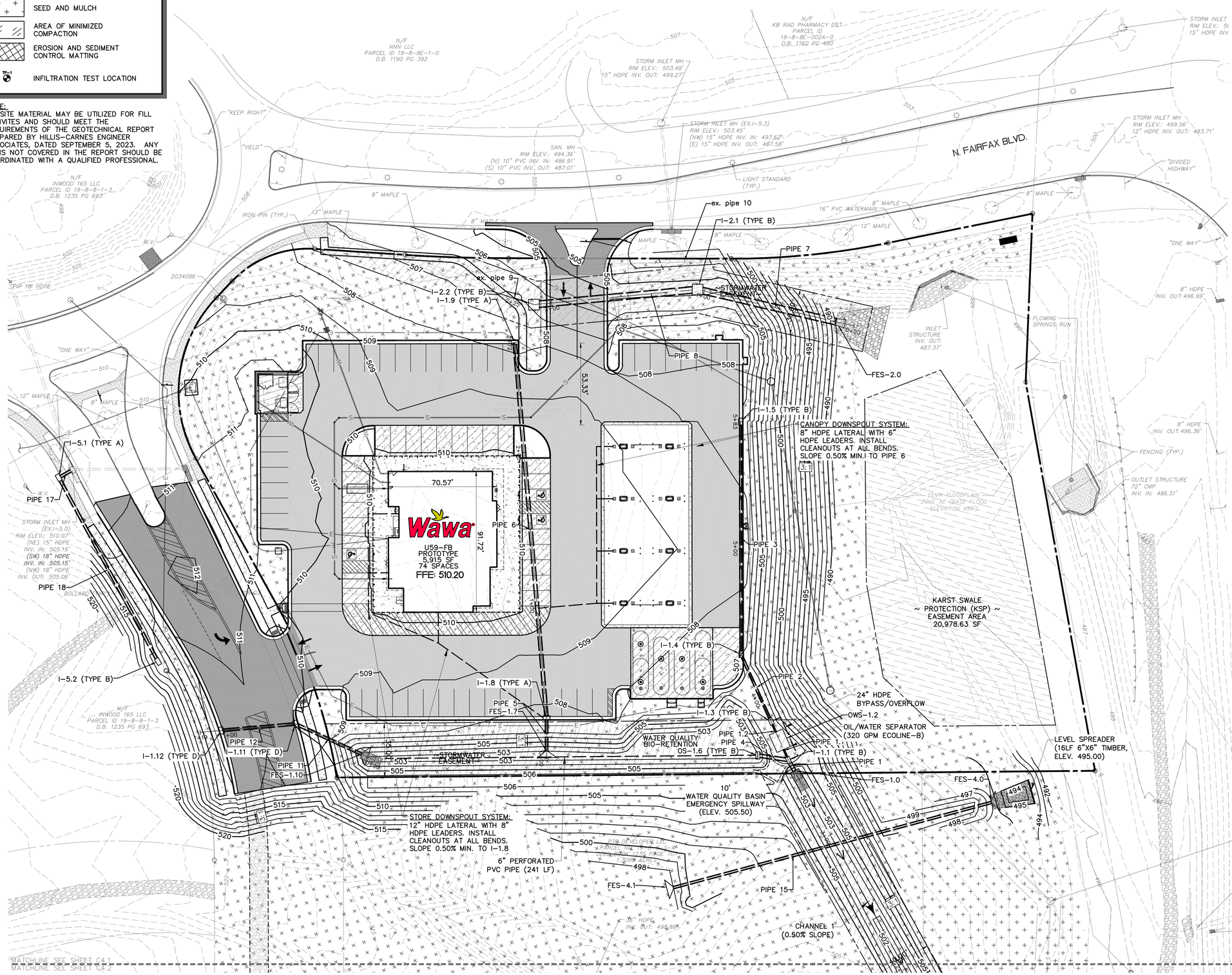

30 0 30 60 FEET
SCALE

STRUCTURE TABLE			
STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT
EX.I-5.0	RIM = 510.05 INV IN = 505.15 INV OUT = 505.06	PIPE 17, 18" 505.15	ex. pipe 16, 18" 505.06
FES-1.0	RIM = 504.75 INV IN = 502.59	PIPE 1, 24" 502.59	
FES-1.7	RIM = 504.65 INV IN = 503.00	PIPE 5, 18" 503.00	
FES-1.10	RIM = 504.65 INV IN = 503.00	PIPE 11, 18" 503.00	
FES-2.0	RIM = 492.52 INV IN = 488.32	PIPE 7, 48" 488.32	
FES-3.0	RIM = 497.16 INV IN = 495.00	PIPE 13, 18" 495.00	
FES-4.0	RIM = 496.48 INV OUT = 495.00		PIPE 15, 18" 495.00
FES-4.1	RIM = 499.48 INV IN = 498.00	PIPE 15, 18" 498.00	
I-1.1 (TYPE B)	RIM = 506.09 INV IN = 502.63 INV IN = 502.63 INV OUT = 502.63	PIPE 4, 24" 502.63 PIPE 11, 8" 502.63	PIPE 1, 24" 502.63
I-1.3 (TYPE B)	RIM = 506.35 INV IN = 503.00 INV OUT = 502.93	PIPE 2, 15" 503.00	PIPE 1.2, 8" 502.93
I-1.4 (TYPE B)	RIM = 507.01 INV IN = 503.10 INV OUT = 503.24	PIPE 3, 15" 503.10	PIPE 2, 15" 503.24
I-1.5 (TYPE B)	RIM = 507.24 INV OUT = 503.86		PIPE 3, 15" 503.86
I-1.8 (TYPE A)	RIM = 507.78 INV IN = 503.21 INV IN = 503.45 INV OUT = 503.11	PIPE 6, 24" 503.21 DOWNSPOUT, 12" 503.45	PIPE 5, 18" 503.11
I-1.9 (TYPE A)	RIM = 508.01 INV OUT = 504.43		PIPE 6, 24" 504.43
I-1.11 (TYPE D)	RIM = 509.97 INV IN = 504.24 INV OUT = 504.24	PIPE 12, 18" 504.24	PIPE 11, 18" 504.24
I-1.12 (TYPE D)	RIM = 510.33 INV OUT = 504.48		PIPE 12, 18" 504.48
I-2.1 (TYPE B)	RIM = 505.83 INV IN = 490.50 INV IN = 490.17 INV OUT = 490.40	PIPE 8, 48" 490.50 ex. pipe 10, 15" 490.17	PIPE 7, 48" 490.40
I-2.2 (TYPE B)	RIM = 506.39 INV IN = 490.77 INV OUT = 490.57	ex. pipe 9, 48" 490.77	PIPE 8, 48" 490.57
I-5.1 (TYPE A)	RIM = 510.40 INV IN = 505.54 INV OUT = 505.44	PIPE 18, 18" 505.54	PIPE 17, 18" 505.44
I-5.2 (TYPE A)	RIM = 512.68 INV OUT = 508.44		PIPE 18, 18" 508.44
OS-1.6 (TYPE B)	RIM = 505.02 INV OUT = 502.73		PIPE 4, 24" 502.73
OS-3.1 (TYPE B)	RIM = 503.25 INV OUT = 498.00		PIPE 13, 18" 498.00
OWS-1.2	RIM = 506.17 INV IN = 502.87 INV OUT = 502.70	PIPE 1.2, 8" 502.87	PIPE 1.1, 8" 502.70

PIPE TABLE				
NAME	SIZE	LENGTH	SLOPE	MATERIAL
PIPE 1	24"	8.00'	0.50%	24" HDPE
PIPE 1.1	8"	13.75'	0.50%	8" HDPE
PIPE 1.2	8"	13.75'	0.50%	8" HDPE
PIPE 2	15"	47.93'	0.50%	15" HDPE
PIPE 3	15"	151.36'	0.50%	15" HDPE
PIPE 4	24"	20.16'	0.50%	24" HDPE
PIPE 5	18"	21.80'	0.50%	18" HDPE
PIPE 6	24"	244.96'	0.50%	24" HDPE
PIPE 7	48"	92.33'	2.26%	48" HDPE
PIPE 8	48"	106.87'	1.00%	48" HDPE
ex. pipe 9	48"	13.50'	1.00%	48" RCP
ex. pipe 10	15"	41.50'	15.45%	15" HDPE
PIPE 11	18"	47.21'	2.62%	18" HDPE
PIPE 12	18"	48.30'	0.50%	18" HDPE
PIPE 13	18"	48.24'	2.07%	24" HDPE
PIPE 15	16"	214.19'	-1.40%	15" HDPE
PIPE 17	18"	10.26'	2.83%	18" HDPE
ex. pipe 16	18"	128.95'	2.11%	18" HDPE
PIPE 18	18"	135.98'	2.13%	18" HDPE

CHRISTOPHER MICHAEL MCKAY
REGISTERED
20340
STATE OF
PENNSYLVANIA
PROFESSIONAL ENGINEER
5/14/24

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2	09.29.2023	PERMIT RESUBMISSION	JWH	CMS
1	07.19.2023	PERMIT SUBMISSION	JWH	CMS
0	07.19.2023	COMMENTS	JWH	CMS

LDG

GRADING/STORMWATER PLAN - NORTH
WAWA - RANSON, WEST VIRGINIA
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

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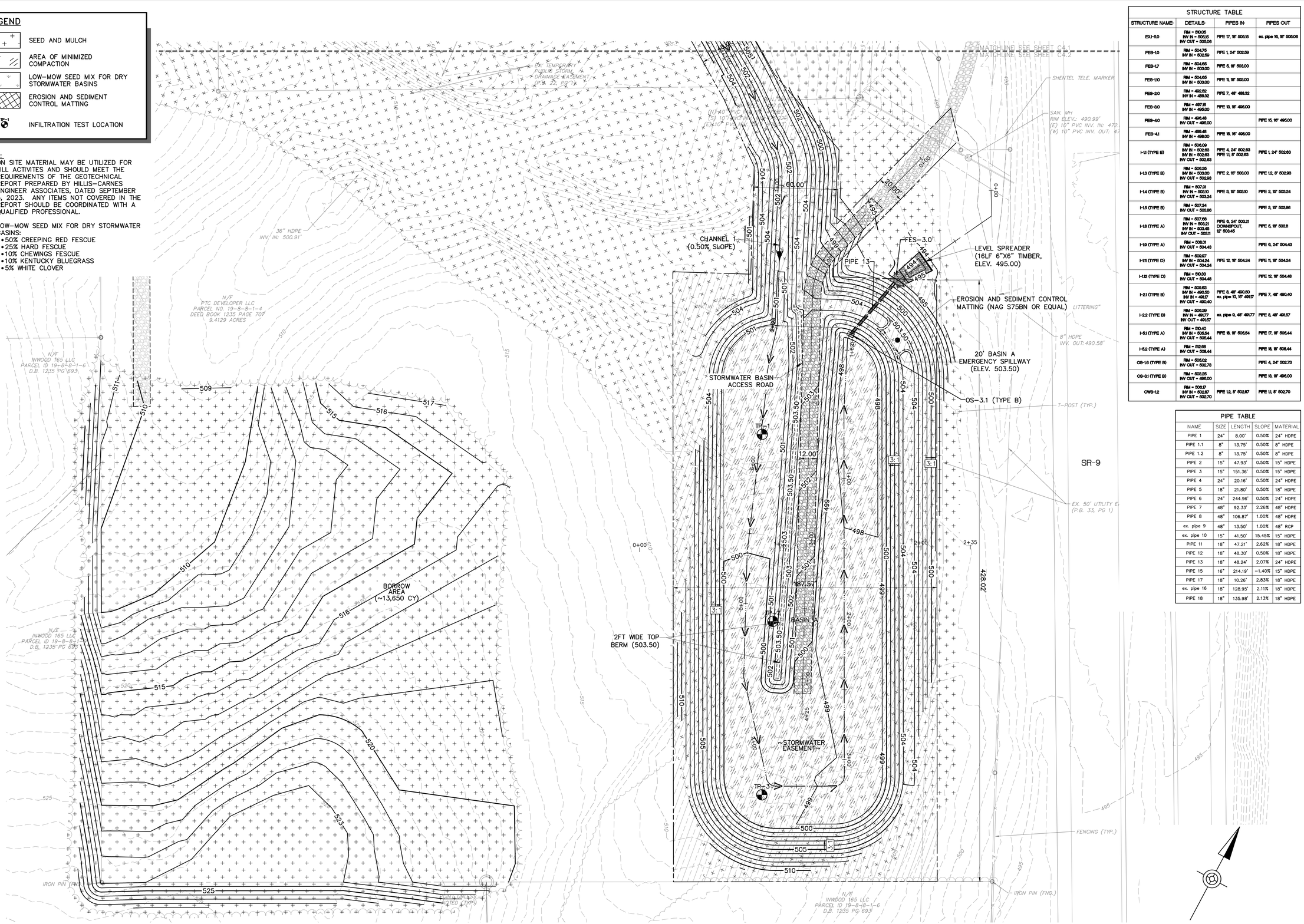
SHEET NO.: C4.1
PROJECT NO.: 11693-041

LEGEND

- SEED AND MULCH
- AREA OF MINIMIZED COMPACTION
- LOW-MOW SEED MIX FOR DRY STORMWATER BASINS
- EROSION AND SEDIMENT CONTROL MATTING
- TP-1 INFILTRATION TEST LOCATION

NOTE:
1. ON SITE MATERIAL MAY BE UTILIZED FOR FILL ACTIVITES AND SHOULD MEET THE REQUIREMENTS OF THE GEOTECHNICAL REPORT PREPARED BY HILLIS-CARNES ENGINEER ASSOCIATES, DATED SEPTEMBER 5, 2023. ANY ITEMS NOT COVERED IN THE REPORT SHOULD BE COORDINATED WITH A QUALIFIED PROFESSIONAL.
2. LOW-MOW SEED MIX FOR DRY STORMWATER BASINS:
   - 50% CREEPING RED FESCUE
   - 25% HARD FESCUE
   - 10% CHEWINGS FESCUE
   - 10% KENTUCKY BLUEGRASS
   - 5% WHITE CLOVER



STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT
EXI-5.0	RIM = 510.05 INV IN = 505.15 INV OUT = 505.06	PIPE 17, 18" 505.15	ex. pipe 16, 18" 505.06
FES-1.0	RIM = 504.75 INV IN = 502.59	PIPE 1, 24" 502.59	
FES-1.7	RIM = 504.65 INV IN = 503.00	PIPE 5, 18" 503.00	
FES-1.10	RIM = 504.65 INV IN = 503.00	PIPE 11, 18" 503.00	
FES-2.0	RIM = 492.52 INV IN = 488.32	PIPE 7, 48" 488.32	
FES-3.0	RIM = 497.18 INV IN = 495.00	PIPE 13, 18" 495.00	
FES-4.0	RIM = 496.48 INV OUT = 495.00		PIPE 15, 16" 495.00
FES-4.1	RIM = 499.48 INV IN = 498.00	PIPE 15, 16" 498.00	
I-1.1 (TYPE B)	RIM = 506.09 INV IN = 502.63 INV IN = 502.63 INV OUT = 502.63	PIPE 4, 24" 502.63 PIPE 11, 8" 502.63	PIPE 1, 24" 502.63
I-1.3 (TYPE B)	RIM = 506.35 INV IN = 503.00 INV OUT = 502.93	PIPE 2, 15" 503.00	PIPE 1.2, 8" 502.93
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I-1.5 (TYPE B)	RIM = 507.24 INV OUT = 503.86		PIPE 3, 15" 503.86
I-1.8 (TYPE A)	RIM = 507.18 INV IN = 503.21 INV IN = 503.45 INV OUT = 503.11	PIPE 6, 24" 503.21 DOWNSPOUT, 12" 503.45	PIPE 5, 18" 503.11
I-1.9 (TYPE A)	RIM = 508.01 INV OUT = 504.43		PIPE 6, 24" 504.43
I-1.11 (TYPE D)	RIM = 509.97 INV IN = 504.24 INV OUT = 504.24	PIPE 12, 18" 504.24	PIPE 11, 18" 504.24
I-1.12 (TYPE D)	RIM = 510.33 INV OUT = 504.48		PIPE 12, 18" 504.48
I-2.1 (TYPE B)	RIM = 505.83 INV IN = 490.50 INV IN = 491.7 INV OUT = 490.40	PIPE 8, 48" 490.50 ex. pipe 10, 15" 491.7	PIPE 7, 48" 490.40
I-2.2 (TYPE B)	RIM = 506.39 INV IN = 491.77 INV OUT = 491.57	ex. pipe 9, 48" 491.77	PIPE 8, 48" 491.57
I-5.1 (TYPE A)	RIM = 510.40 INV IN = 505.54 INV OUT = 505.44	PIPE 18, 18" 505.54	PIPE 17, 18" 505.44
I-5.2 (TYPE A)	RIM = 512.68 INV OUT = 508.44		PIPE 18, 18" 508.44
OS-1.6 (TYPE B)	RIM = 505.02 INV OUT = 502.73		PIPE 4, 24" 502.73
OS-3.1 (TYPE B)	RIM = 503.25 INV OUT = 498.00		PIPE 13, 18" 498.00
OWB-1.2	RIM = 506.17 INV IN = 502.87 INV OUT = 502.70	PIPE 1.2, 8" 502.87	PIPE 1.1, 8" 502.70

PIPE TABLE

NAME	SIZE	LENGTH	SLOPE	MATERIAL
PIPE 1	24"	8.00'	0.50%	24" HDPE
PIPE 1.1	8"	13.75'	0.50%	8" HDPE
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PIPE 2	15"	47.93'	0.50%	15" HDPE
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PIPE 4	24"	20.16'	0.50%	24" HDPE
PIPE 5	18"	21.80'	0.50%	18" HDPE
PIPE 6	24"	244.96'	0.50%	24" HDPE
PIPE 7	48"	92.33'	2.26%	48" HDPE
PIPE 8	48"	106.87'	1.00%	48" HDPE
ex. pipe 9	48"	13.50'	1.00%	48" RCP
ex. pipe 10	15"	41.50'	15.45%	15" HDPE
PIPE 11	18"	47.21'	2.62%	18" HDPE
PIPE 12	18"	48.30'	0.50%	18" HDPE
PIPE 13	18"	48.24'	2.07%	24" HDPE
PIPE 15	16"	214.19'	-1.40%	15" HDPE
PIPE 17	18"	10.26'	2.83%	18" HDPE
ex. pipe 16	18"	128.95'	2.11%	18" HDPE
PIPE 18	18"	135.98'	2.13%	18" HDPE

CHRISTOPHER MICHAEL MCKEEVER
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20340
STATE OF
WEST VIRGINIA
PROFESSIONAL ENGINEER
3/14/24

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0	07.19.2023	PERMIT SUBMISSION	JWH
		COMMENTS	CMS
			CHKD

GRADING/STORMWATER PLAN - SOUTH

WAWA - RANSON, WEST VIRGINIA
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

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SHEET NO.: C4.2

PROJECT NO.: 11693-041

LEGEND

- SEED AND MULCH
- AREA OF MINIMIZED COMPACTION
- EROSION AND SEDIMENT CONTROL MATTING
- TP-1 INFILTRATION TEST LOCATION

FFE: 510.20

STORE DOWNSPOUT SYSTEM:-
12" HDPE LATERAL WITH 8" HDPE LEADERS. INSTALL CLEANOUTS AT ALL BENDS. SLOPE 0.50% MIN. TO I-1.8

CANOPY DOWNSPOUT SYSTEM:
8" HDPE LATERAL WITH 6" HDPE LEADERS. INSTALL CLEANOUTS AT ALL BENDS. SLOPE 0.50% MIN. TO PIPE 6

PIPE 5
PIPE 6
PIPE 12
FES-1.7
I-1.8 (TYPE A)

10 0 10 20 FEET
SCALE

CHRISTOPHER MICHAEL MCARTHUR
REGISTERED
20340
STATE OF
PENNSYLVANIA
PROFESSIONAL ENGINEER
3/14/24

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0	07.19.2023	PERMIT SUBMISSION	JWH	CMS

GRADING/STORMWATER PLAN - DETAILED GRADING

WAWA - RANSON, WEST VIRGINIA
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

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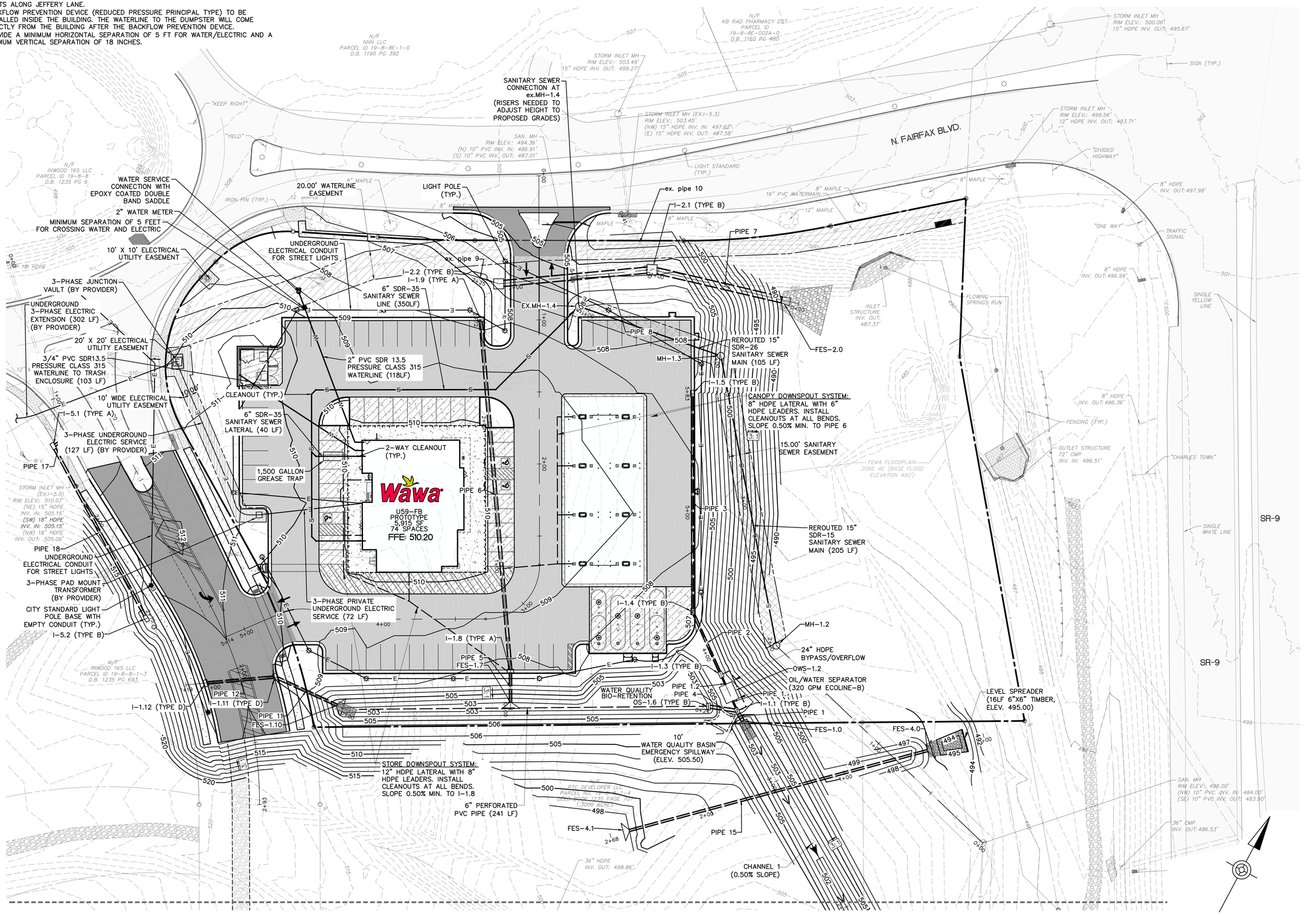
SHEET NO.: C4.3

PROJECT NO.: 11693-041

NOTE:
1. SEE SHEET C6.2 FOR SANITARY SEWER LATERAL PROFILE. INVERTS OF ALL BENDS ARE INDICATED ON PROFILE.
2. STREET LIGHT FOUNDATIONS AND EMPTY CONDUITS TO BE PROVIDED FOR STREET LIGHTS ALONG JEFFERY LANE.
3. BACKFLOW PREVENTION DEVICE (REDUCED PRESSURE PRINCIPAL TYPE) TO BE INSTALLED INSIDE THE BUILDING. THE WATERLINE TO THE DUMPSTER WILL COME DIRECTLY FROM THE BUILDING AFTER THE BACKFLOW PREVENTION DEVICE.
4. PROVIDE A MINIMUM HORIZONTAL SEPARATION OF 5 FT FOR WATER/ELECTRIC AND A MINIMUM VERTICAL SEPARATION OF 18 INCHES.



CHRISTOPHER MICHAEL HEARTSILL
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20340
STATE OF PENNSYLVANIA
PROFESSIONAL ENGINEER
3/14/24

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NO.	DATE	COMMENTS	BY
4	03.13.2024	CITY OF RANSON RESUBMISSION	CMS
3	12.06.2023	CITY OF RANSON RESUBMISSION	CMS
2	10.02.2023	CITY OF RANSON JEFFERSON RESUBMISSIONS	CMS
1	09.29.2023	PERMIT RESUBMISSION	CMS
0	07.19.2023	PERMIT SUBMISSION	CMS

ISSUE / REVISIONS

UTILITY PLAN - OVERALL

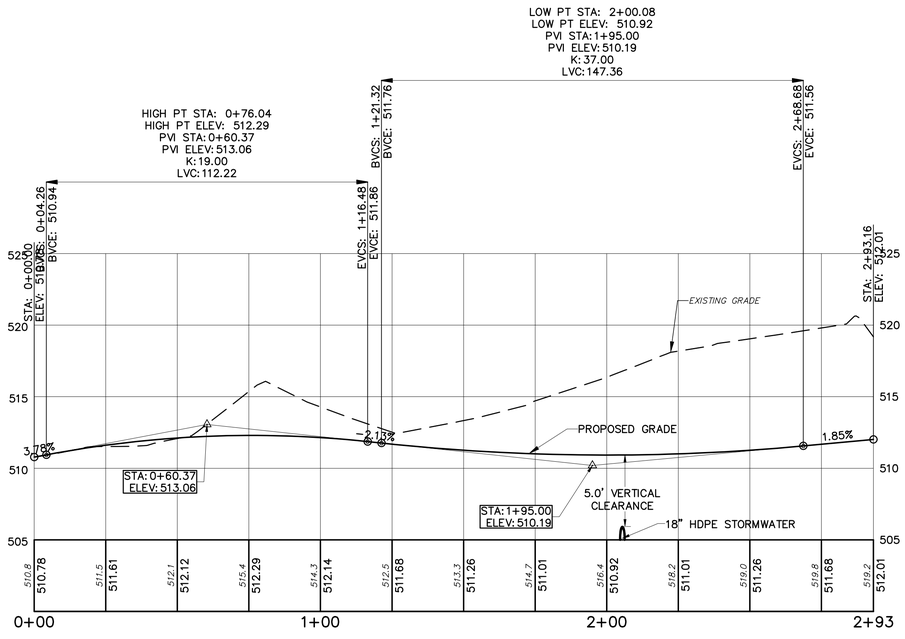
WAWA - RANSON, WEST VIRGINIA
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

PTV 1132, LLC
400 PENN CENTER BLVD, BUILDING 4, SUITE 1000
PITTSBURGH, PA 15235
PHONE 724.420.5367

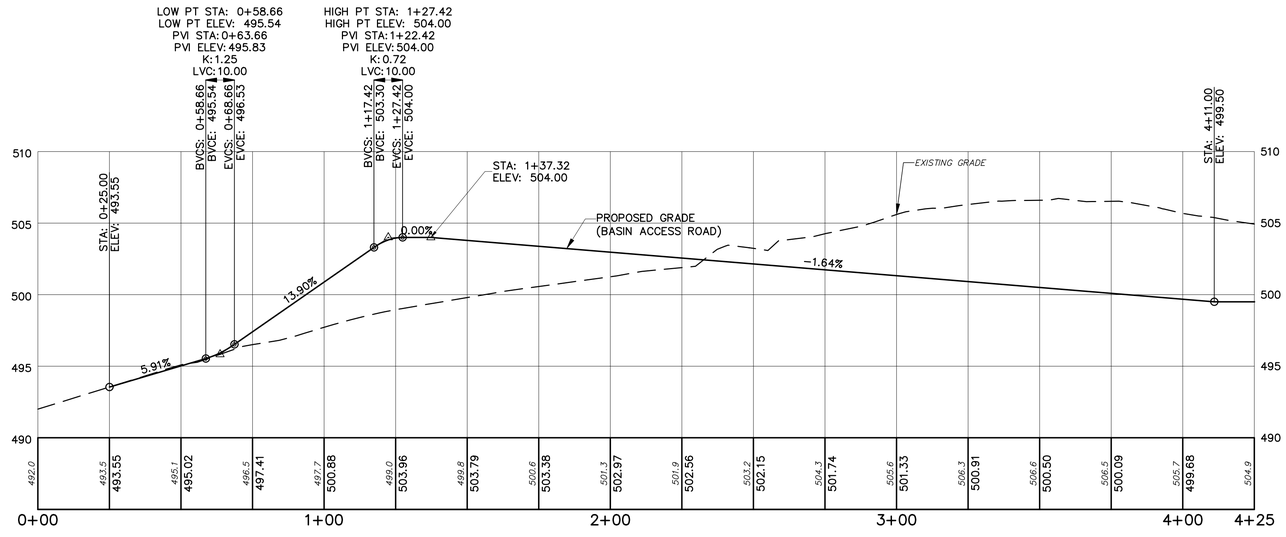
Larson Design Group • Architects Engineers Surveyors
1000 Commerce Park Drive • Suite 201
Williamsport, PA 17701
PHONE 570.323.6603 TOLL FREE 877.323.6603
FAX 570.323.9902 • www.larsondesigngroup.com

SHEET NO.: C5.0

PROJECT NO.: 11693-041



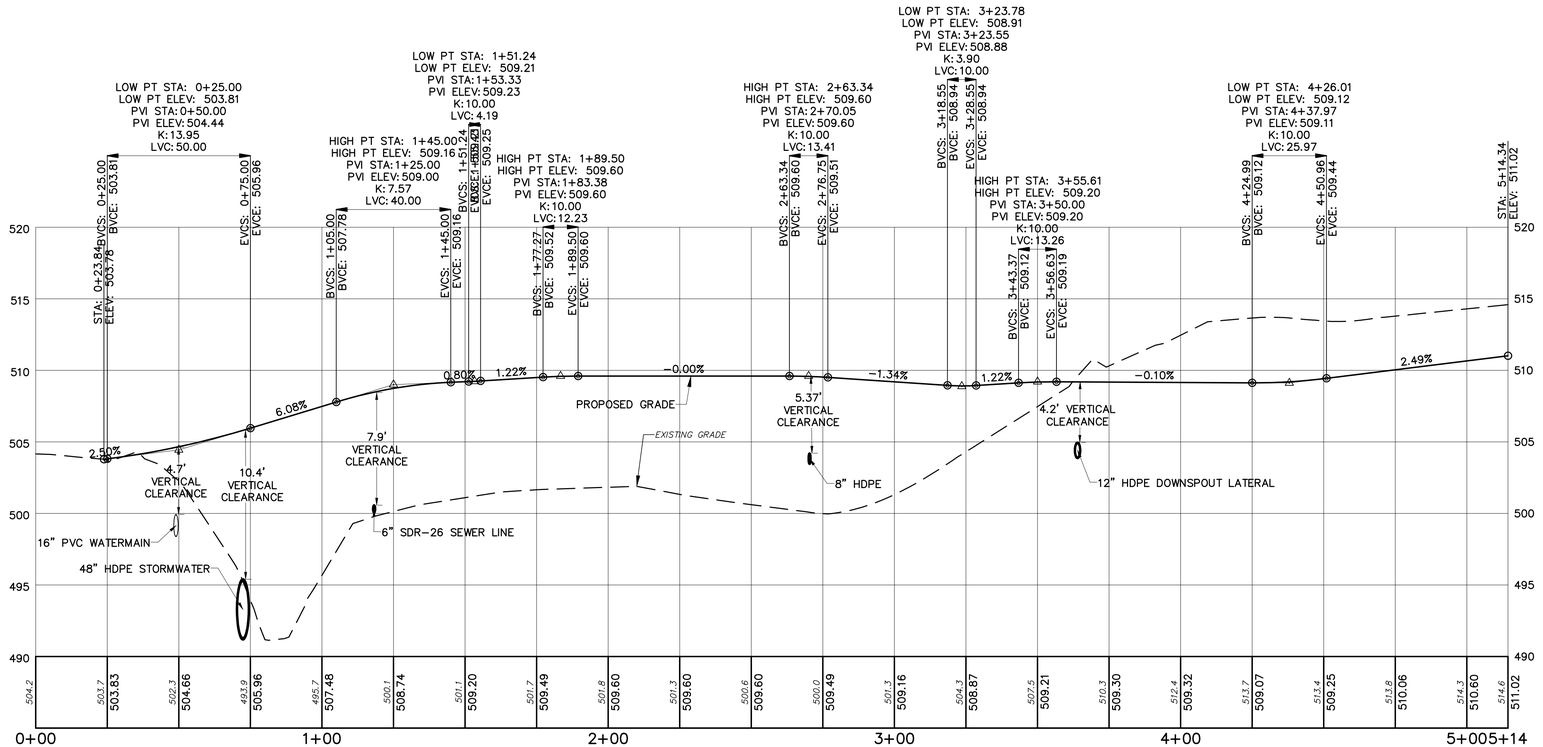
ROAD EXTENSION (JEFFREY ROAD) PROFILE



STORMWATER BASIN ACCESS ROAD PROFILE

25 0 25 50 FEET
HORIZONTAL SCALE

5 0 5 10 FEET
VERTICAL SCALE



25 0 25 50 FEET
HORIZONTAL SCALE

WAWA ENTRANCE-DRIVE AISLE PROFILE

HORIZONTAL SCALE

5 0 5 10 FEET
VERTICAL SCALE

LEGEND

- - - - - -	EXISTING GRADE
———	PROPOSED GRADE
HDPE	HIGH DENSITY POLYETHYLENE PLASTIC PIPE
PVC	POLYVINYL CHLORIDE PIPE

CHRISTOPHER MICHAEL MCARTHUR
REGISTERED
20340
STATE OF
WEST VIRGINIA
PROFESSIONAL ENGINEER
3/4/24

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1	09.29.2023	PERMIT RESUBMISSION	JWH	CMS
0	07.19.2023	PERMIT SUBMISSION	JWH	CMS

ISSUE / REVISIONS

PROFILES

WAWA - RANSON, WEST VIRGINIA
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

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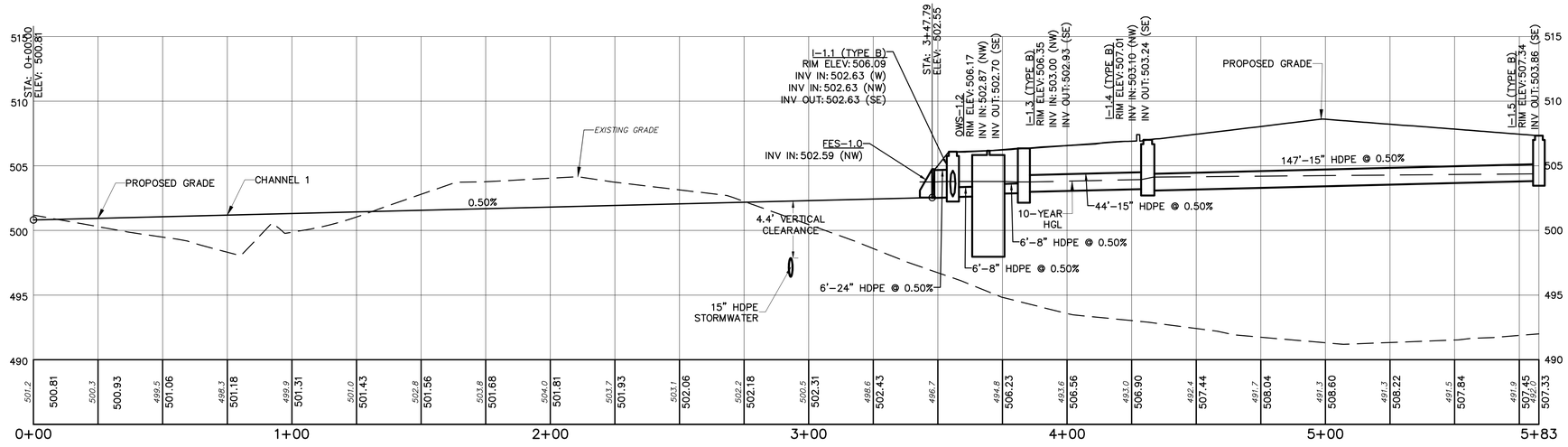
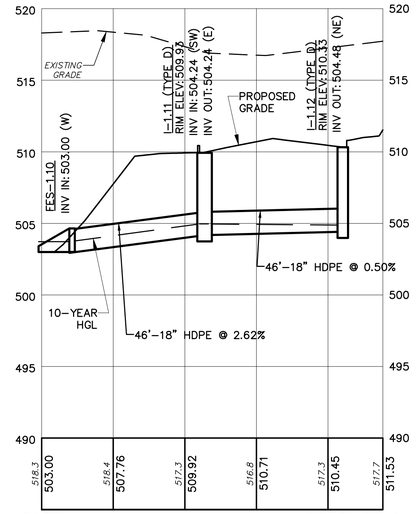
FAX 570.323.9902 • www.larsondesigngroup.com

SHEET NO.: C6.0

PROJECT NO.: 11693-041



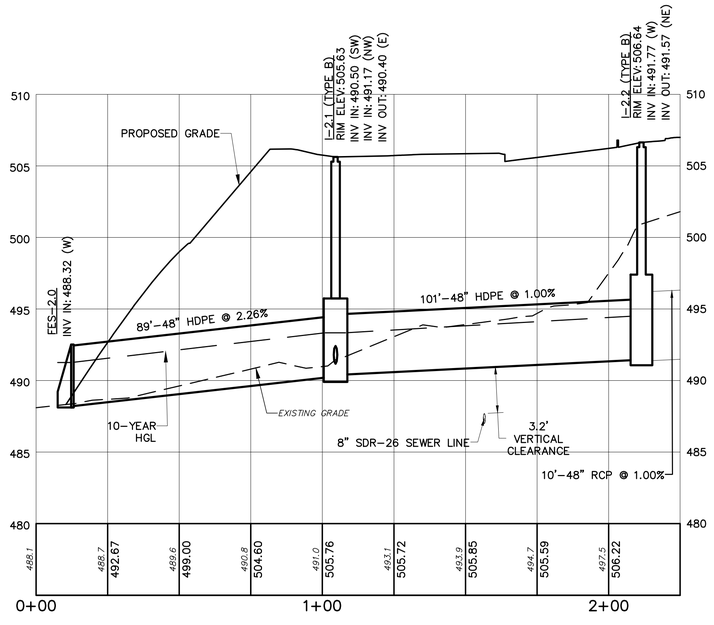
CHANNEL 1 TO I-1.5 PROFILE



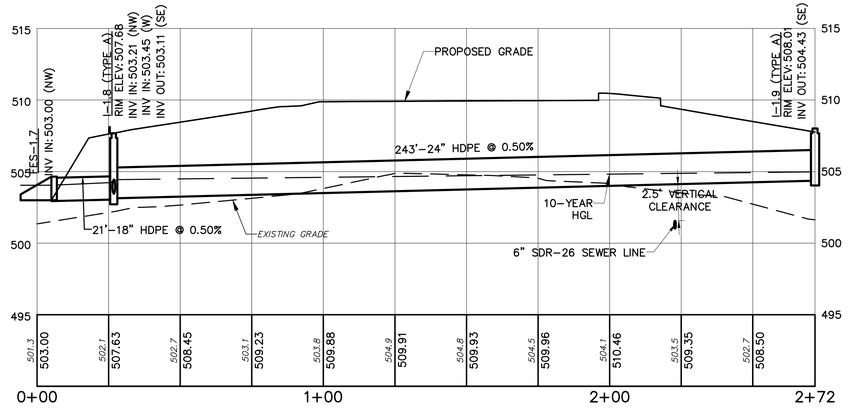
FES-1.10 TO I-1.12 PROFILE

25 0 25 50 FEET
HORIZONTAL SCALE

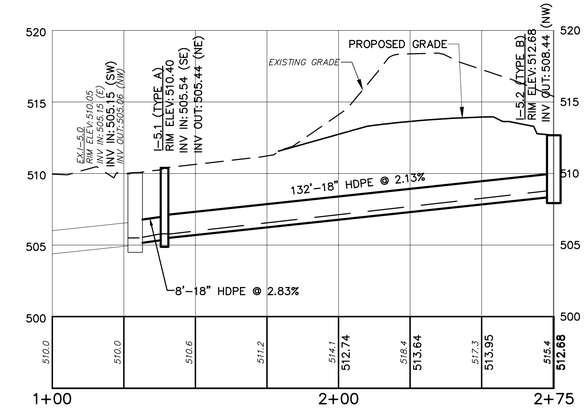
5 0 5 10 FEET
VERTICAL SCALE



REROUTED STORMWATER PROFILE



FES-1.7 TO I-1.9 PROFILE



EX.I-5.0 TO I-5.2 PROFILE

25 0 25 50 FEET
HORIZONTAL SCALE

5 0 5 10 FEET
VERTICAL SCALE

LEGEND

– – – – –	EXISTING GRADE
———	PROPOSED GRADE
HDPE	HIGH DENSITY POLYETHYLENE PLASTIC PIPE
PVC	POLYVINYL CHLORIDE PIPE
FES	FLARED END SECTION
I	INLET

CHRISTOPHER MICHAEL MCARTHUR
REGISTERED
20340
STATE OF VIRGINIA
PROFESSIONAL ENGINEER
3/4/24

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0	07.19.2023	PERMIT SUBMISSION	JWH	CMS

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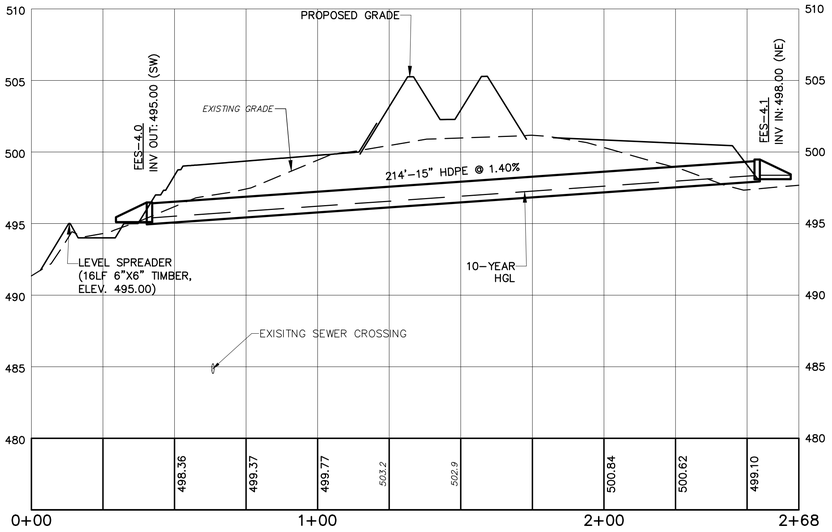
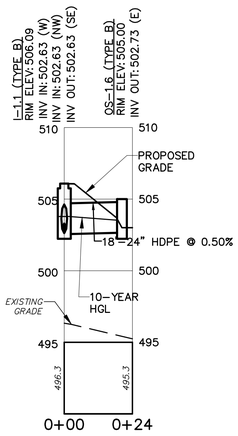
SHEET NO.: C6.1

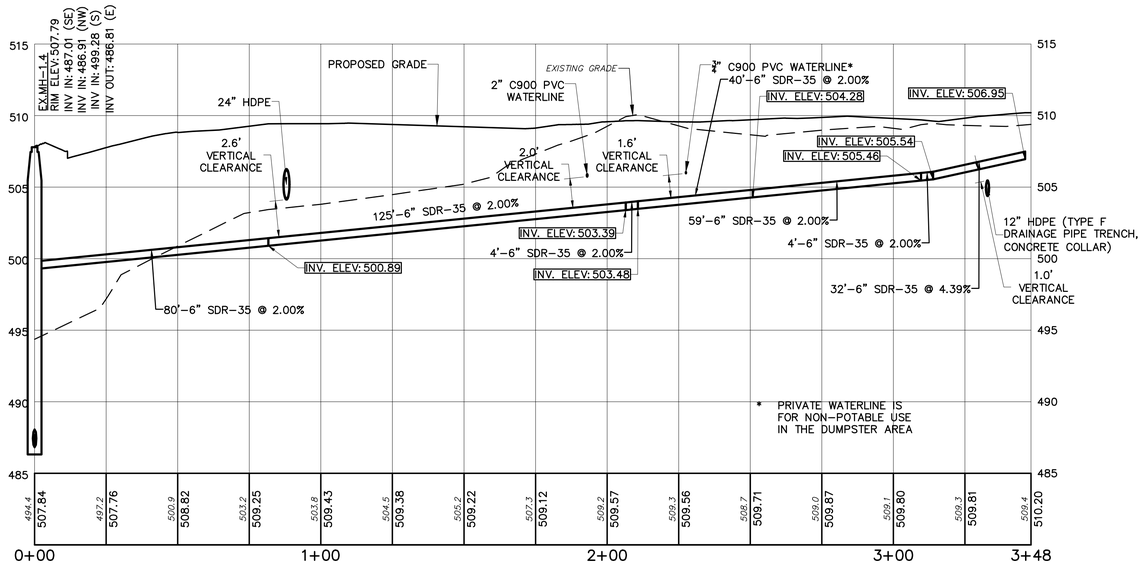
PROJECT NO.: 11693–041



FES-4.0 TO FES-4.1 (TEMPORARY BYPASS) PROFILE



OS-1.6 TO I-1.1 PROFILE



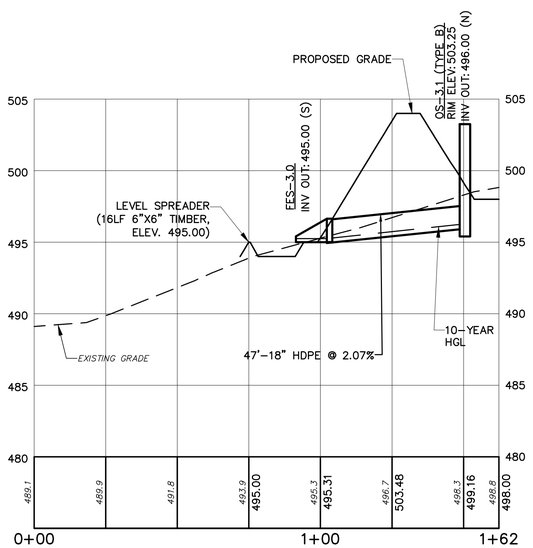
PROPOSED SANITARY SEWER SERVICE PROFILE

LEGEND

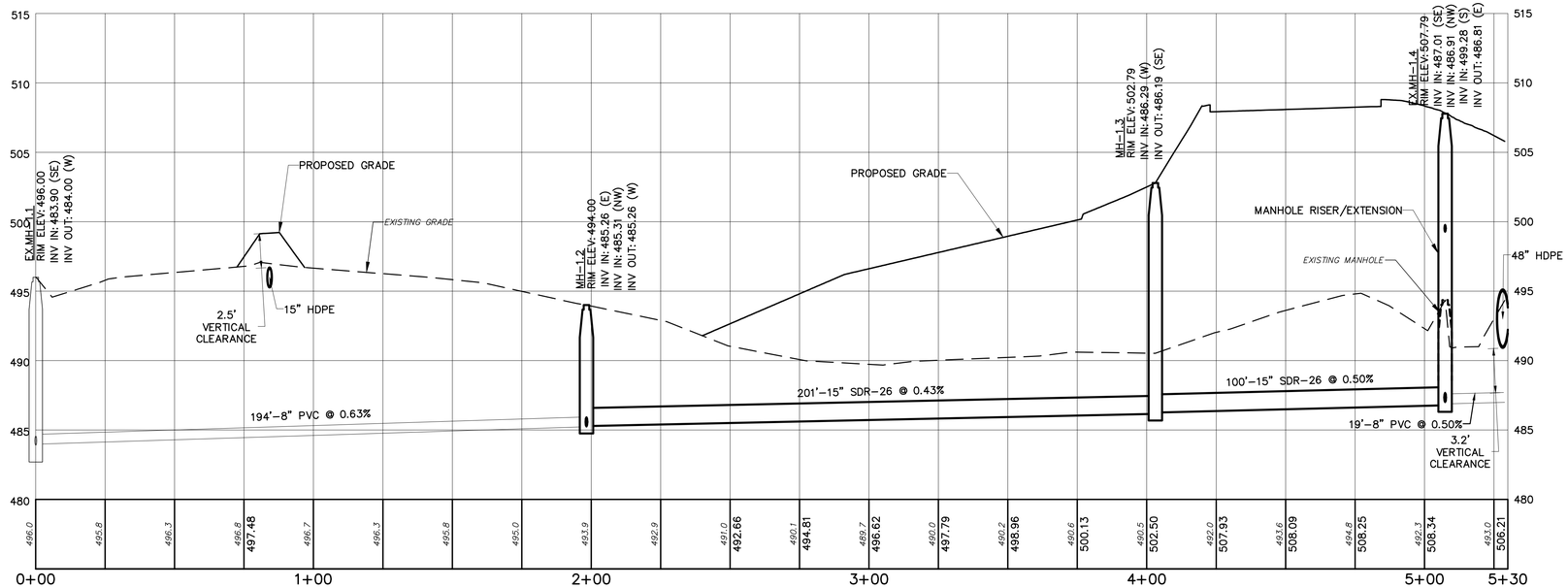
- - - - - -	EXISTING GRADE
———	PROPOSED GRADE
HDPE	HIGH DENSITY POLYETHYLENE PLASTIC PIPE
OS	OUTLET STRUCTURE
FES	FLARED END SECTION
I	INLET
EX.MH	EXISTING MANHOLE
MH	MANHOLE
PVC	POLYVINYL CHLORIDE PIPE

25 0 25 50 FEET
HORIZONTAL SCALE

5 0 5 10 FEET
VERTICAL SCALE



BASIN OUTLET STRUCTURE PROFILE



REROUTED SANITARY SEWER PROFILE

25 0 25 50 FEET
HORIZONTAL SCALE

5 0 5 10 FEET
VERTICAL SCALE

CHRISTOPHER MICHAEL MCARTHUR
REGISTERED
20340
STATE OF
PENNSYLVANIA
PROFESSIONAL ENGINEER
3/14/24

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0	07.19.2023	PERMIT SUBMISSION	JWH	CMS

ISSUE / REVISIONS

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SHEET NO.: C6.2

PROJECT NO.: 11693-041

PLANT SCHEDULE			
109	MP	myrica pennsylvanica BAYBERRY	2" HT. CONT.
6	AR	acer rubrum 'October Glory" OCTOBER GLORY MAPLE	1.5" CAL. B&B
10	SBB	monarda didyma SCARLET BEE BALM	1.5" CAL. B&B
10	LH	itea virginica 'LITTLE HENRY' (LITTLE HENRY SWEETSPIRE)	1.5" CAL. B&B
10	EBG	rudbeckia fulgida 'EARLY BIRD GOLD" BLACK-EYED SUSAN	1.5" CAL. B&B
10	PF	panicum virgatum 'PRARIE FIRE" RED SWITCHGRASS	1.5" CAL. B&B

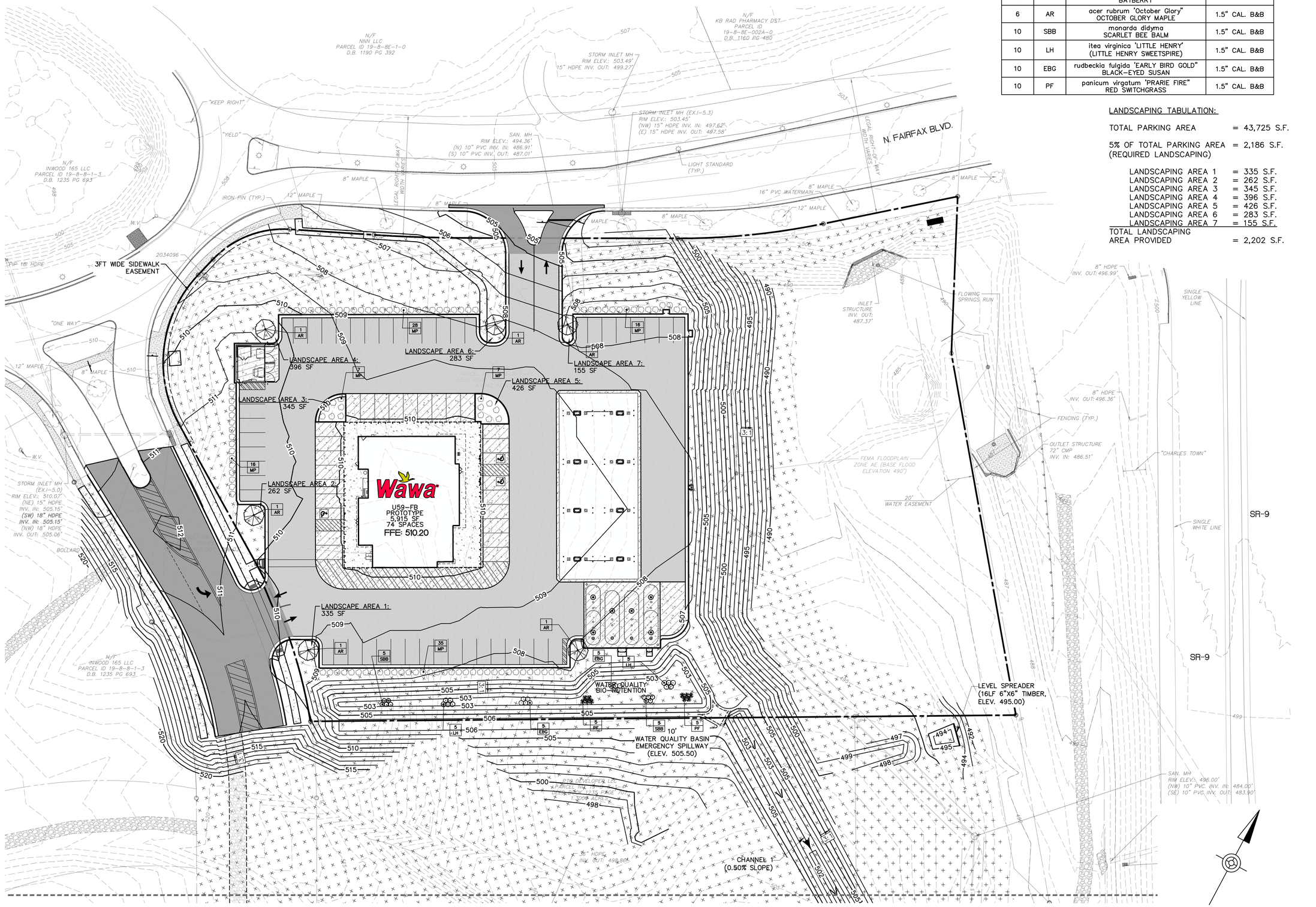
LANDSCAPING TABULATION:

TOTAL PARKING AREA = 43,725 S.F.

5% OF TOTAL PARKING AREA = 2,186 S.F.
(REQUIRED LANDSCAPING)

LANDSCAPING AREA 1	= 335 S.F.
LANDSCAPING AREA 2	= 262 S.F.
LANDSCAPING AREA 3	= 345 S.F.
LANDSCAPING AREA 4	= 396 S.F.
LANDSCAPING AREA 5	= 426 S.F.
LANDSCAPING AREA 6	= 283 S.F.
LANDSCAPING AREA 7	= 155 S.F.

TOTAL LANDSCAPING
AREA PROVIDED = 2,202 S.F.



CHRISTOPHER MICHAEL HEARTSILL
REGISTERED
20340
STATE OF
PENNSYLVANIA
PROFESSIONAL ENGINEER
3/14/24

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1	09.29.2023	PERMIT RESUBMISSION	JWH	CMS
0	07.19.2023	PERMIT SUBMISSION	JWH	CMS

LDG

LANDSCAPING PLAN

WAWA - RANSON, WEST VIRGINIA
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

PTV 1132 LLC
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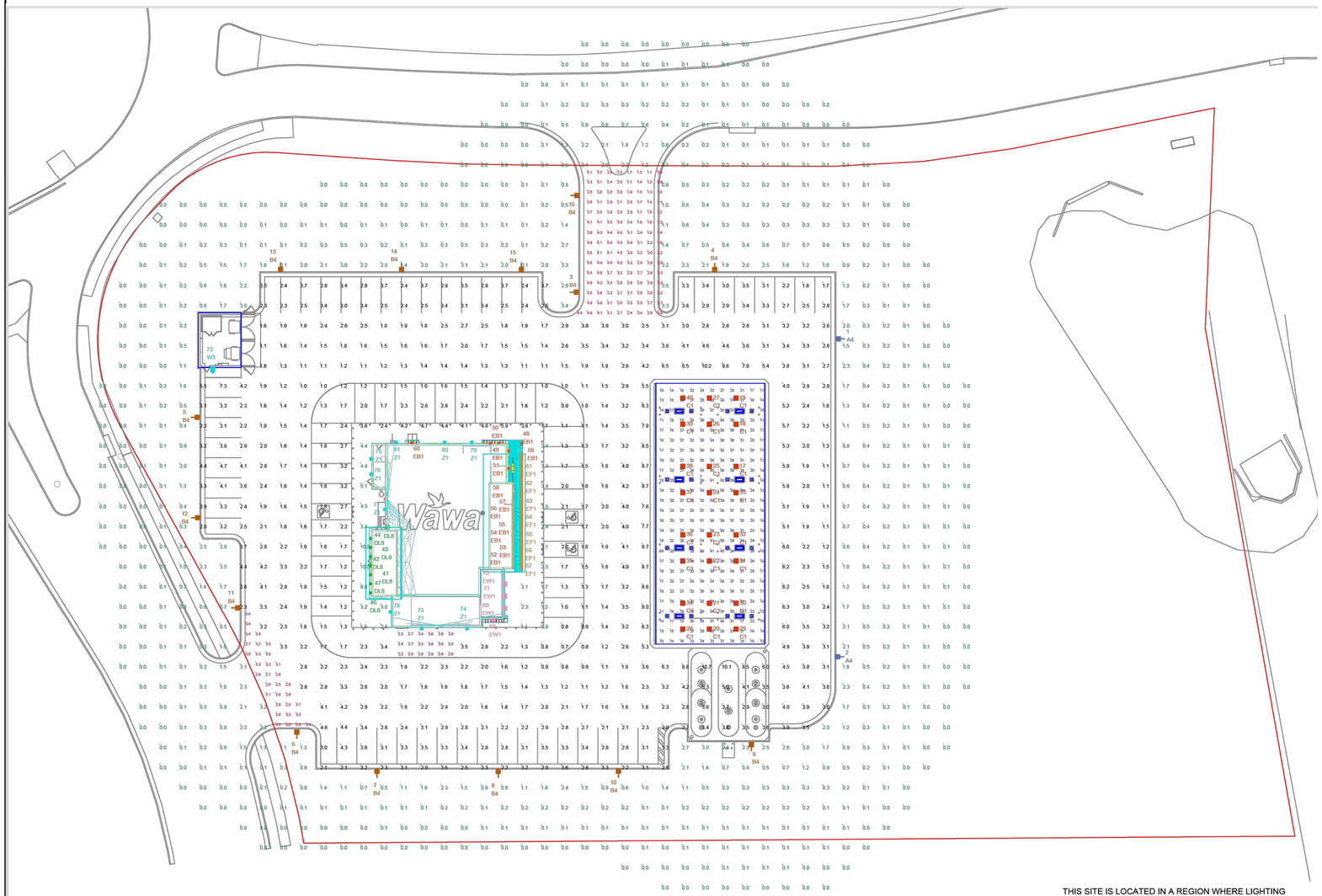
SHEET NO.: C7.0

PROJECT NO.: 11693-041



NOTES:
- ALL AREA LIGHTS ON 20 FT. POLES MOUNTED ON 6 IN. CONCRETE BASES
- ALL CONCRETE BASES TO BE LOCATED 5 FT. BEHIND CURB

LUMINAIRE LOCATION SUMMARY		
LUM NO.	LABEL	MTG. HT.
1	A4	20.5
2	A4	20.5
3	B4	20.5
4	B4	20.5
5	B4	20.5
6	B4	20.5
7	B4	20.5
8	B4	20.5
9	B4	20.5
10	B4	20.5
11	B4	20.5
12	B4	20.5
13	B4	20.5
14	B4	20.5
15	B4	20.5
16	B4	20.5
17	C1	17.11
18	C1	17.11
19	C1	17.11
20	C1	19.32
21	C1	19.32
22	C1	19.32
23	C1	19.32
24	C1	19.32
25	C1	19.32
26	C1	19.32
27	C1	19.32
28	C1	21.53
29	C1	17.11
30	C1	17.11
31	C1	17.11
32	C1	17.11
33	C1	17.11
34	C1	21.53
35	C1	21.53
36	C1	21.53
37	C1	21.53
38	C1	21.53
39	C1	21.53
40	C1	21.53

LUMINAIRE LOCATION SUMMARY		
LUM NO.	LABEL	MTG. HT.
41	DL8	11
42	DL8	11
43	DL8	11
44	DL8	11
45	DL8	11
46	DL8	11
47	DL8	11
48	EB1	11
49	EB1	11
50	EB1	11
51	EB1	11
52	EB1	10.5
53	EB1	10.5
54	EB1	10.5
55	EB1	10.5
56	EB1	10.5
57	EB1	10.5
58	EB1	10.5
59	EB1	10.5
60	EB1	14
61	EF1	11.833
62	EF1	11.833
63	EF1	11.833
64	EF1	11.833
65	EF1	11.833
66	EF1	11.833
67	EF1	11.833
68	EW1	14
69	EW1	14
70	EW1	14
71	EW1	14
72	W3	8
73	Z1	14
74	Z1	14
75	Z1	14
76	Z1	14
77	Z1	14
78	Z1	14
79	Z1	14
80	Z1	14
81	Z1	14

THIS SITE IS LOCATED IN A REGION WHERE LIGHTING IS REGULATED BY LOCAL ORDINANCES

FOOTCANDLE LEVELS CALCULATED AT GRADE USING INITIAL LUMEN VALUES					
LABEL	AVG	MAX	MIN	AVG/MIN	MAX/MIN
CANOPY	26.98	43	10	2.70	4.30
DELIVERY AREA	3.02	3.6	2.2	1.37	1.64
ENTRANCES & EXIT DRIVES	2.97	5.5	0.8	3.71	6.88
PARKING AREA & INTERIOR DRIVE AISLES	2.82	10.7	0.7	4.03	15.29
UNDEFINED	0.52	10.8	0.0	N.A.	N.A.

LUMINAIRE SCHEDULE									
SYMBOL	QTY	LABEL	ARRANGEMENT	LUMENS	LLF	BUG RATING	WATTS/LUMINAIRE	TOTAL WATTS	MANUFACTURER	CATALOG LOGIC
	2	A4	SINGLE	7220	1.030	B1-U0-G2	134	268	CREE, INC.	ARE-EDG-3MB-DA-06-E-UL-XX-700-30K
	14	B4	SINGLE	7755	1.030	B1-U0-G2	134	1876	CREE, INC.	ARE-EDG-4MB-DA-06-E-UL-XX-700-30K
	24	C1	SINGLE	10110	1.030	B3-U0-G1	130.2	3124.8	BETALED, A DIVISION OF RUUD LIGHTING	CAN-304-SL-RD-06-E-UL-XX-700-30K (3000K SPECIAL ORDER)
	7	DL8	Single	1121	1.000	B1-U0-G0	11.5	80.5	Juno Lighting	2LEDTG2C-830F-WWH w_ 2LEDDRVG2-10-120
	13	EB1	Single	1388	1.000	B1-U1-G0	19	247	WAC Lighting	WP-LED119-30
	7	EF1	SSL-4_1	992	1.000	B1-U1-G0	17.444	488.432	FC Lighting	CVLWET1.5-4-3K-80CRI-1040
	4	EW1	Single	500	1.000	B0-U0-G0	10.5	42	CARIBONI GROUP	WS-W2509-3000K-BZ
	1	W3	SINGLE	1453	1.030	B0-U0-G1	101	101	Cree Lighting	SC-EDG-3MB-WM-02-E-UL-XX-350-30K
	9	Z1	Single	2710	1.000	B0-U0-G1	25.31	227.79	COOPER LIGHTING SOLUTIONS	ISC-AF-450-LED-E1-SL4-WH (3000K)

REDLEONARD ASSOCIATES
1340 Kemper Meadow Dr, Forest Park, OH 45240
513-574-9500 | redleonard.com

REV.	BY	DATE	DESCRIPTION
R1	JSG	10/3/23	CHANGED ALL LIGHTING TO 3000K

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ANY SITE PLAN(S), FLOOR PLAN(S), RENDERING(S), LIGHTING LAYOUT(S) AND PHOTOMETRIC PLAN(S) INCLUDING BUT NOT LIMITED TO ANY PROJECT(S) CREATED/PRODUCED BY RED LEONARD ASSOCIATES INC., ARE ONLY INTENDED FOR ILLUSTRATION AND QUOTING PURPOSES ONLY. RED LEONARD ASSOCIATES HAS THE RIGHT TO USE THIRD PARTY LASERS, SCANNERS, AND CAMERAS BUT ACTUAL PROJECT CONDITIONS, DIMENSIONS, AND ACCURACY OF MEASUREMENTS MAY DIFFER FROM THESE OR ANY PARAMETERS. RED LEONARD ASSOCIATES INC. ASSUMES NO LIABILITY FOR WHAT IS CREATED/PRODUCED IN THESE RECREATIONS. THIS INCLUDES BUT IS NOT LIMITED TO THE USE OF, INSTALLATION OF AND/OR INTEGRITY OF EXISTING BUILDING(S), SURROUNDING AREA FOR PRODUCT(S) SUCH AS EXISTING POLE(S), ANCHOR BOLT(S), BASE(S), ARCHITECTURAL AND SIGNAGE STRUCTURE(S), LANDSCAPING PLANS(), LIGHTING PLANS(), FIXTURE SELECTION() AND PLACEMENT, MATERIAL(S), COLOR ACCURACY, TEXTURE(S), AND ANYTHING ATTRIBUTED TO PHOTO REALISM THAT IS CREATED. FURTHERMORE, RED LEONARD ASSOCIATES INC., DOES NOT ASSUME LIABILITY WHATSOEVER FOR ANY PURCHASES MADE BY CLIENT BEFORE, DURING, OR AT THE CONCLUSION OF THE PUBLISHED WORK. THE CUSTOMER, ITS RELATIVE AFFILIATES, AS WELL AS ANY OTHER PERSON(S) IN VIEWING OF THIS PRODUCT IS RESPONSIBLE FOR VERIFYING COMPLIANCE WITH ANY BUT NOT LIMITED TO ALL CODES, PERMITS, RESTRICTIONS, INSTRUCTIONS, PURCHASES, AND INSTALLATIONS OF OBJECTS VIEWED WITHIN THIS DOCUMENT(S) OR PROJECT(S). SYMBOLS ARE NOT DRAWN TO SCALE. SIZE IS FOR CLARITY PURPOSES ONLY. SIZES AND DIMENSIONS ARE APPROXIMATE, ACTUAL MEASUREMENTS MAY VARY. DRAWINGS ARE NOT INTENDED FOR ENGINEERING OR CONSTRUCTION USE. THIS DOCUMENT, ANY RED LEONARD DRAWING(S), OR PROJECT(S) IS NOT TO BE USED AND/OR INTENDED FOR ENGINEERING OR CONSTRUCTION PURPOSES, BUT FOR ILLUSTRATIVE PURPOSES ONLY. ANY LOCATIONS OF EMERGENCY LIGHTING SHOWN WERE PROVIDED BY OTHERS. RED LEONARD ASSOCIATES IS NOT RESPONSIBLE FOR INSUFFICIENT LIGHTING DURING AN EMERGENCY EVENT. ANY USE OF THIS DOCUMENTATION AND/OR OTHER ARTICLES PRODUCED BY RED LEONARD WITHOUT WRITTEN AUTHORIZATION FROM JAYME J. LEONARD IS STRICTLY PROHIBITED.

SCALE: 1" = 30'
LAYOUT BY: JAN
DWG SIZE: D
DATE: 07/14/23

PROJECT NAME:
WAWA #6901
RANSON, WV
DRAWING NUMBER:
RL-8999-S1-R1

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0	07.19.2023	PERMIT SUBMISSION	JWH	CMS

PHOTOMETRIC PLAN

WAWA – RANSON, WEST VIRGINIA
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

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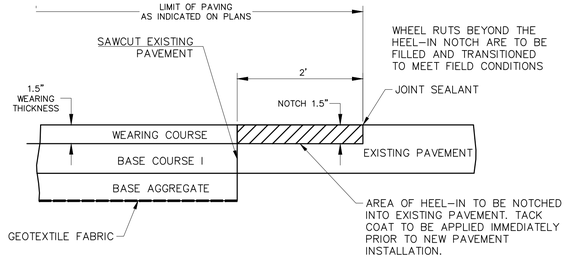
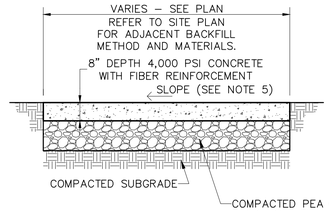
400 PENN CENTER BLVD, BUILDING 4, SUITE 1000
PITTSBURGH, PA 15235
PHONE 724.420.5367

SHEET NO.: C8.0
PROJECT NO.: 11693–041



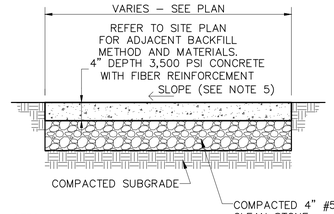
NOTES:
1. PAYMENT FOR HEEL-IN TO BE INCLUDED IN HMA WEARING, TYPE I.
2. THIS DETAIL TO BE USED AT ENTRANCE LOCATIONS FOR TIE-IN TO WVDOH ROAD.
3. CONTRACTOR SHALL REMOVE EXISTING PAVEMENT 2' WIDE ALONG ENTIRE LENGTH OF THE ENTRANCE.
4. PROPER TRAFFIC CONTROL SHALL BE IN PLACE DURING ALL OPERATIONS WITHIN THE WVDOH ROADWAY.

PAVEMENT HEEL-IN DETAIL AT ENTRANCE
SCALE: NOT TO SCALE



NOTES:
1. FORM 2" SMOOTH TOOLED BORDER AT ALL JOINTS AND EDGES WITH A 1/4" RADIUS EDGING TOOL.
2. PROVIDE SCORED JOINTS EVERY 5' AND EXPANSION JOINTS AT MAXIMUM 25' INTERVALS.
3. WHERE CONCRETE ABUTS RIGID OBJECTS INSTALL 1/4" PREMOLDED EXPANSION MATERIAL.
4. PROVIDE LIGHT BROOM FINISH PERPENDICULAR TO FOOT TRAFFIC.
5. CROSS SLOPE OF WALK TO BE 2.0% MAXIMUM AND LONGITUDINAL SLOPE OF 5.0% MAXIMUM, UNLESS OTHERWISE NOTED.

TANK MAT
SCALE: NOT TO SCALE



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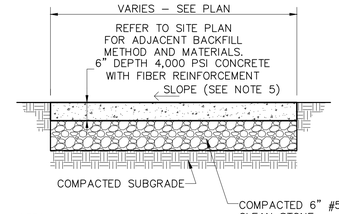
CONCRETE WALK
SCALE: NOT TO SCALE



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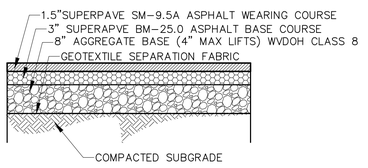
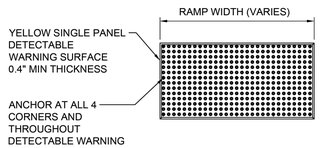
4. PROVIDE LIGHT BROOM FINISH PERPENDICULAR TO FOOT TRAFFIC.
5. CROSS SLOPE OF WALK TO BE 2.0% MAXIMUM AND LONGITUDINAL SLOPE OF 5.0% MAXIMUM, UNLESS OTHERWISE NOTED.

PARKING, CANOPY AND TRASH PAD
SCALE: NOT TO SCALE



STANDARD BITUMINOUS PAVEMENT
SCALE: NOT TO SCALE



PLAN

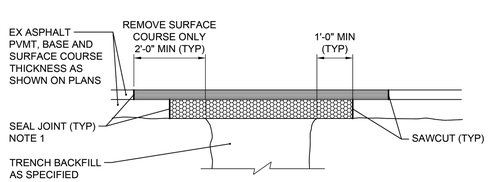


CAST-IN-PLACE ANCHOR DETAIL



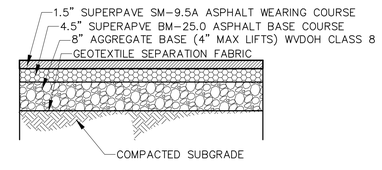
SURFACE ANCHOR DETAIL

NOTES:
1. PROPOSED DETECTABLE WARNING SURFACE AND PANEL ANCHORING PLAN SHALL BE SUBMITTED TO THE CITY FOR APPROVAL PRIOR TO INSTALLATION.
2. CAST-IN-PLACE DETECTABLE WARNING PANELS ARE PREFERRED FOR NEW CONSTRUCTION. SURFACE ANCHOR PANELS MAY BE USED WHEN RETROFITTING EXISTING CURB RAMPS.
3. INSTALL DETECTABLE WARNING SURFACE PER MANUFACTURER'S INSTRUCTIONS.
4. FOR NEW CONSTRUCTION, DEPRESS CONCRETE UNDER DETECTABLE WARNING PANEL SO PANEL IS FLUSH WITH SURROUNDING CONCRETE. FOR RETROFIT INSTALLATIONS, PROVIDE DETECTABLE WARNING SURFACE WITH BEVELED EDGES TO ENSURE SURFACE DISCONTINUITY IS LESS THAN 0.25"

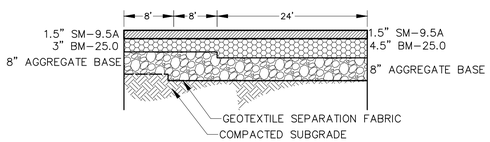


NOTES:
1. PAINT EDGE OF EX ASPHALT WITH TACK COAT PRIOR TO PAVING. CRACK SEAL SURFACE OF JOINT AFTER PAVING OPERATION HAS BEEN COMPLETED.

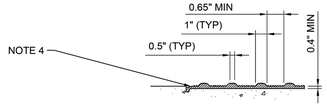
ASPHALT PAVEMENT RESTORATION
SCALE: NOT TO SCALE



HEAVY DUTY BITUMINOUS PAVEMENT
SCALE: NOT TO SCALE

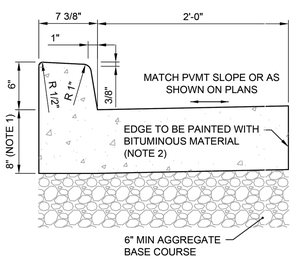


BITUMINOUS PAVEMENT TRANSITION
SCALE: NOT TO SCALE



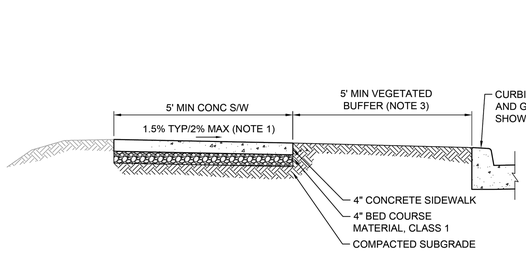
TYPICAL SECTION

DETECTABLE WARNING SURFACE
SCALE: NOT TO SCALE



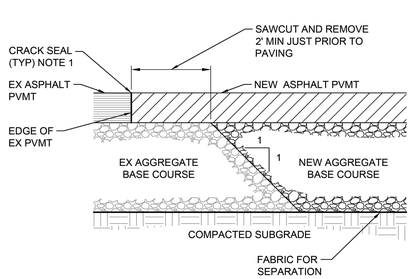
NOTES:
1. MATCH THICKNESS OF PAVEMENT WHEN ABUTTING CONCRETE PAVEMENT.
2. DOES NOT APPLY WHEN ABUTTING CONCRETE PAVEMENT. INSTEAD A LONGITUDINAL JOINT WITH TIE BARS OR TIE BOLT ASSEMBLIES SHALL BE CONSTRUCTED AT THIS LOCATION.
3. ALL CURB JOINTS SHALL BE MADE BY ACCEPTABLE FORMING METHODS.

COMBINATION CURB AND GUTTER
SCALE: NOT TO SCALE



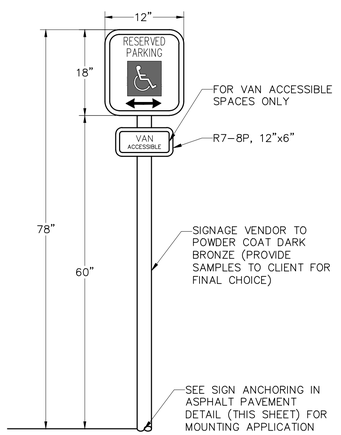
NOTES:
1. SIDEWALK CROSS SLOPE OF 2% IS ABSOLUTE MAX. THERE IS NO CONSTRUCTION TOLERANCE FOR INCREASED CROSS-SLOPE IN EXCESS OF 2%.
2. MAXIMUM ALLOWABLE LONGITUDINAL SLOPE IS 5% OR SLOPE OF ADJACENT ROADWAY, WHICHEVER IS GREATER.
3. SUBJECT TO APPROVAL BY THE CITY, VEGETATED BUFFER MAY BE OMITTED WHERE SIDEWALK IS ADJACENT TO A PARKING LANE OR A BIKE LANE.

CONCRETE SIDEWALK WITH BUFFER
SCALE: NOT TO SCALE



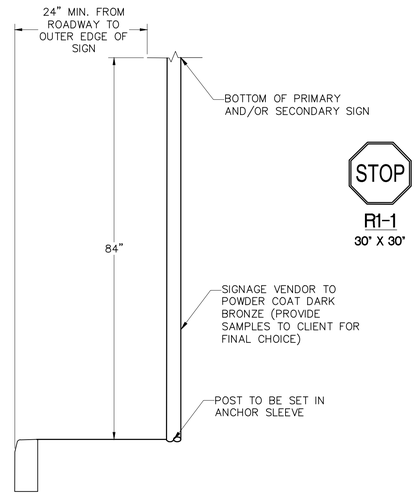
NOTES:
1. PAINT EDGE OF EX ASPHALT WITH TACK COAT PRIOR TO PAVING. CRACK SEAL JOINT AFTER PAVING OPERATION HAS BEEN COMPLETED.

ASPHALT PAVEMENT CONNECTION
SCALE: NOT TO SCALE



NOTES:
1. 2" X 2" SQUARE ALUMINUM POST TO BE POWDER COATED DARK BRONZE.
2. SIGN TO BE PLACED AS SHOWN ON PLANS.

ACCESSIBLE PARKING AND TENNANT ONLY PARKING SIGNS
SCALE: NOT TO SCALE



NOTES:
1. 2" X 2" SQUARE ALUMINUM POST TO BE POWDER COATED DARK BRONZE.
2. SIGN TO BE PLACED AS SHOWN ON PLANS.

STREET SIGNS
SCALE: NOT TO SCALE

CHRISTOPHER MICHAEL WEAVER
REGISTERED
20340
STATE OF
WEST VIRGINIA
PROFESSIONAL ENGINEER
5/14/24

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NO.	DATE	COMMENTS	BY	CHKD
4	03.13.2024	CITY OF RANSON RESUBMISSION	JWH	CWS
3	10.06.2023	CITY OF RANSON RESUBMISSION	JWH	CWS
2	09.29.2023	CITY OF RANSON WVDEP RESUBMISSIONS	JWH	CWS
1	07.19.2023	PERMIT RESUBMISSION	JWH	CWS
0	05.31.2023	PERMIT SUBMISSION	JWH	CWS

ISSUE / REVISIONS

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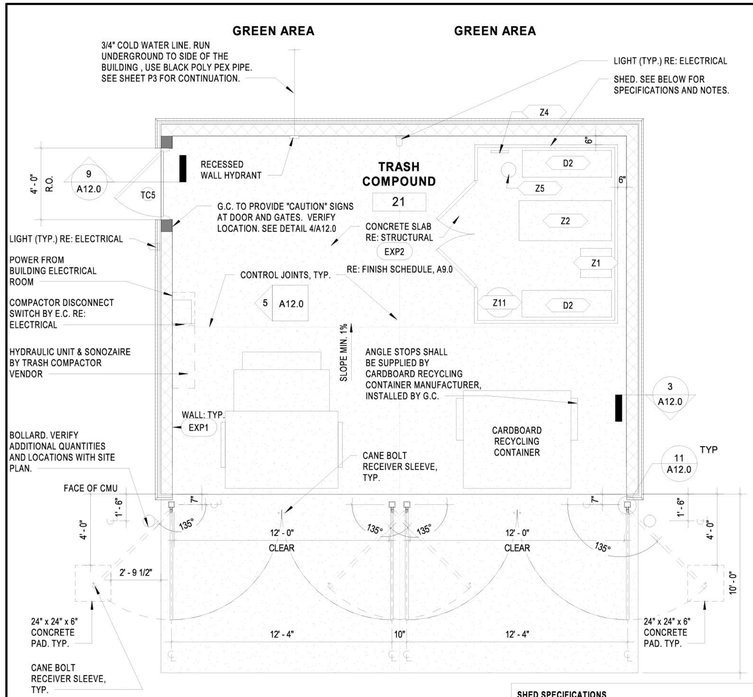


TRASH COMPOUND FLOOR PLAN

1/4" = 1'-0"

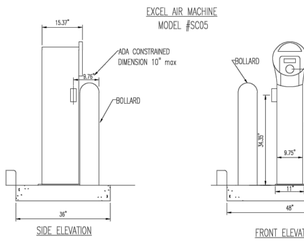
SHED SPECIFICATIONS

MFR: US LEISURE.

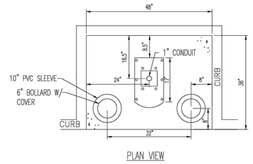
MODEL: #157479 STRONGHOLD 8' FT X 10' FT RESIN STORAGE SHED

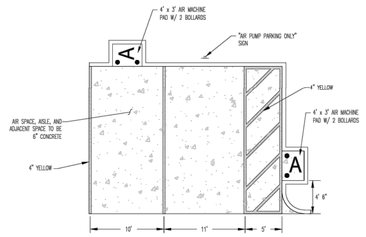
COLOR: WHITE

NOTES: FURNISHED AND INSTALLED BY G.C. UNDER SEPARATE PERMIT



WW A4 AIR PUMP STAND
SCALE: N.T.S. REV.:2014.03.05





WW T9 AIR PARKING SPACE DETAIL
SCALE: N.T.S. REV.:2014.03.05

DOOR SCHEDULE

DOOR FRAMES: ALL DOOR FRAMES, INTERIOR AND EXTERIOR TO BE FULLY WELDED. NO KNOCK-DOWN FRAMES.

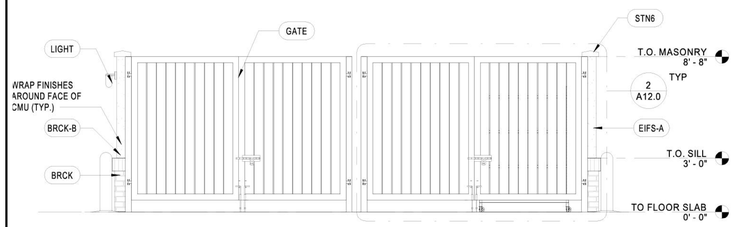
#	DOOR W	DOOR HT	DOOR TH	DOOR TYPE	DOOR MAT'L	FRAME TYPE	THR' D	HDW SET	REMARKS
TC5	3' - 8"	7' - 0"	1 3/4"	B	HM	HM	B	17.3	4" HEAD. SEE SHEET A1.0 FOR DOOR NOTES. REFER TO HARDWARE SCHEDULE IN SPECIFICATION MANUAL.

EQUIPMENT SCHEDULE

EQ#	DESCRIPTION	INSTALLED BY
D - BACK OF HOUSE		
D2	STORAGE SHELVING	WAWA
D5	MPT TRASH UNIT	WAWA
Z - EXTERIOR EQUIPMENT		
Z1	PORTABLE POWER WASH (FUTURE)	-
Z2	BILLY GOAT	-
Z4	SHOVEL	-
Z5	FUEL CAN	-
Z11	SPILL BUCKET	-

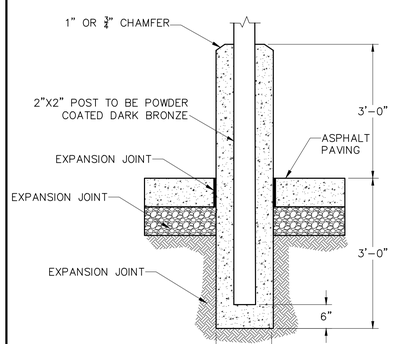
EXTERIOR FINISH SCHEDULE

SYMB	MATERIAL	MFR	COLOR	NOTES
BRCK	THIN BRICK	TAYLOR CLAY PRODUCTS	DOBINSHIRE, BLADE CUT (SIZE:ENGINEER)	MORTAR: LEHIGH LIMESTONE
BRCK-B	BRICK CAP	TAYLOR CLAY PRODUCTS	MATCH CAP	
ECJ	EIFS V-GROOVE			
EIFS-A	EIFS	DRYVIT	COLOR: SADDLESOAP	GC TO SUBMIT SAMPLE. DRYVIT ALLOWED AS ALTERNATE
EP2	PAINT	SHERWIN WILLIAMS	COLOR: TO MATCH SURROUNDING SIDING COLOR, FINISH: SEMI-GLOSS	FOR DOORS AND FRAMES
EXP1	EPOXY WALL FINISH	BENJAMIN MOORE	GLACIER WHITE #OC-37	TRASH COMPOUND, INTERIOR OF CMU WALL
EXP2	CONCRETE SEALER	BENJAMIN MOORE	POLYMID EPOXY CLEAR	TRASH COMPOUND, CONCRETE FLOOR
GATE	TUBE STEEL FRAME WITH 1X6 CPVC SMOOTH FINISH SLATS	GENERAL CONTRACTOR	WHITE	SEE A12.0 FOR DETAILS
LIGHT	EXTERIOR LIGHT FIXTURE	---	---	SEE ELECTRICAL DRAWINGS
STN6	PRE-CAST STONE CAP	ITALIAN CAST STONE	COLOR: WHITE	



FRONT ELEVATION

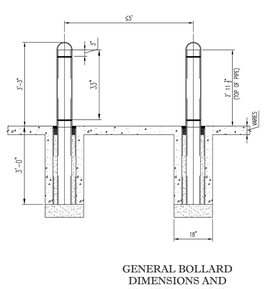
1/4" = 1'-0"



NOTES:
1. 2" X 2" SQUARE ALUMINUM POST TO BE POWDER COATED DARK BRONZE.
2. SIGN TO BE PLACED AS SHOWN ON PLANS.

SIGN ANCHORING IN ASPHALT PAVEMENT

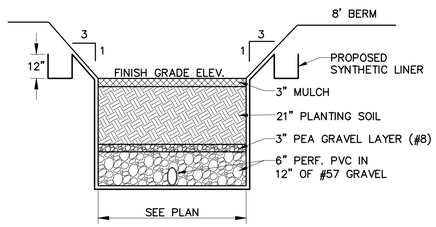
SCALE: NOT TO SCALE



GENERAL BOLLARD DIMENSIONS AND SPACING AROUND BUILDING

BOLLARD

SCALE: NOT TO SCALE



BIO-RETENTION POND

SCALE: NOT TO SCALE

Table 6. Required Groundwater Protection Liners for Ponds in Karst Terrain (WVDEP, 2006 and VA DCR, 1999)

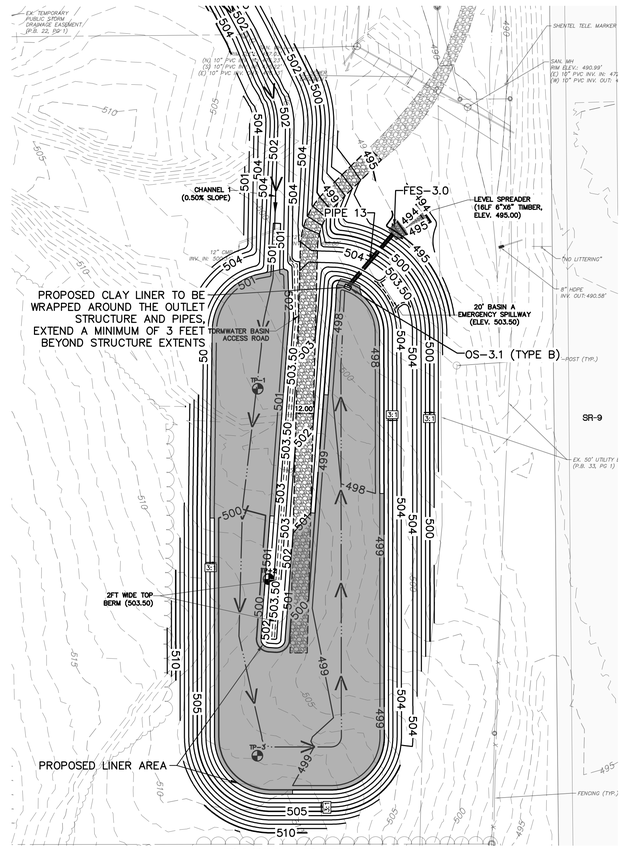
Pond Excavated at least Three Feet Above Bedrock	24 inches of soil with maximum hydraulic conductivity of 1 x 10^{-5} cm/sec
Pond Excavated within Three Feet of Bedrock	24 inches of clay[1] with maximum hydraulic conductivity of 1 x 10^{-6} cm/sec
Pond Excavated Near Bedrock within wellhead protection area, in recharge area for domestic well or spring, or in area with high fracture density or significant geophysical anomalies.	Synthetic liner with a minimum thickness of 60 ml.

[1] Clay properties as follows:
Plasticity Index of Clay: Not less than 15% (ASTM D-423/424)
Liquid Limit of Clay: Not less than 30% (ASTM D-2216)
Clay Particles Passing: Not less than 30% (ASTM D-422)
Clay Compaction: 95% of standard proctor density (ASTM D-2216)

SPECIFICATIONS FROM CSN TECHNICAL BULLETIN No. 1 – STORMWATER DESIGN GUIDELINES FOR KARST TERRAIN IN THE CHESAPEAKE BAY WATERSHED, VERSION 2.0, JUNE 2009, SECTION 6.3

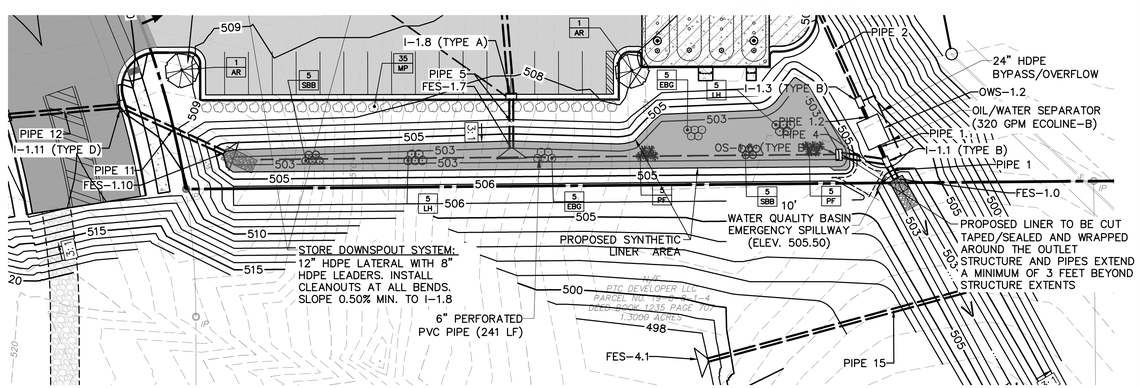
CLAY LINER SPECIFICATIONS

SCALE: NOT TO SCALE



BASIN A DETAIL

SCALE: 1 INCH = 50 FEET



BIO-RETENTION POND DETAIL

SCALE: 1 INCH = 30 FEET

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1	07.19.2023	PERMIT SUBMISSION	JWH	CMS
0		COMMENTS		

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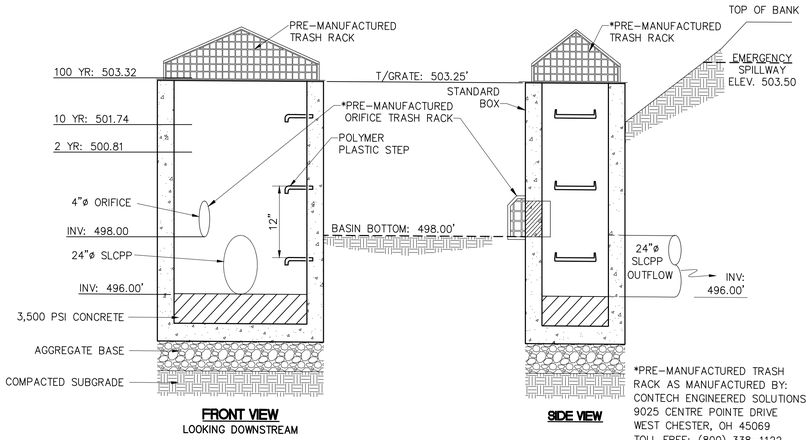
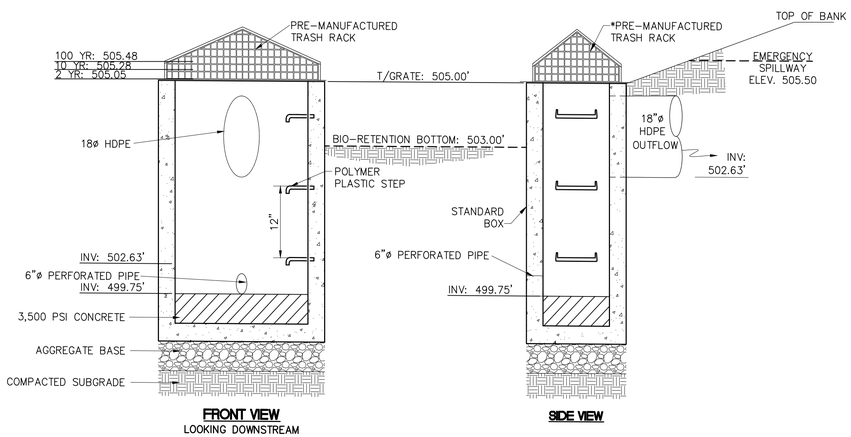
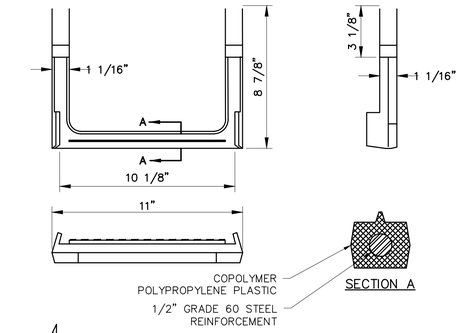


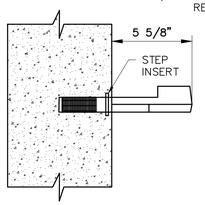
*PRE-MANUFACTURED TRASH RACK AS MANUFACTURED BY:
CONTECH ENGINEERED SOLUTIONS
9025 CENTRE POINTE DRIVE
WEST CHESTER, OH 45069
TOLL FREE: (800) 338-1122
WEB SITE: www.ContechES.com
OR PRE-APPROVED EQUAL

OUTLET STRUCTURE (OS-3.1)
SCALE: NOT TO SCALE



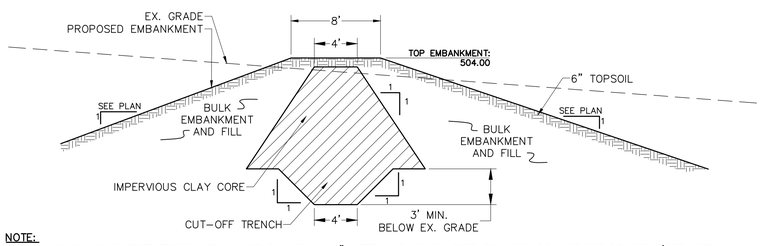
OUTLET STRUCTURE (OS-1.6)
SCALE: NOT TO SCALE





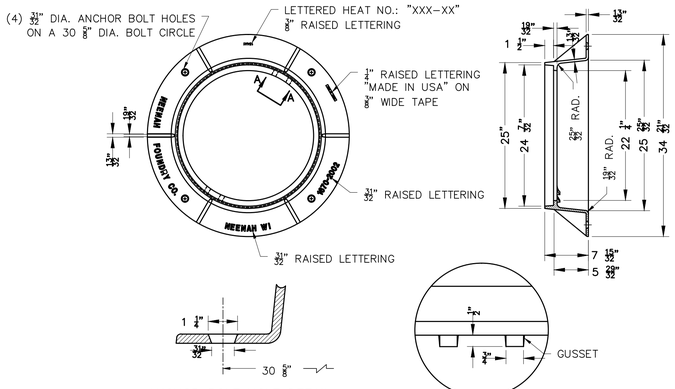
NOTES:
1. MANHOLE STEPS SHALL BE IMPACT RESISTANT CO-POLYMER POLYPROPYLENE PLASTIC MOLDED AROUND 1/2" DIAMETER GRADE 60 REINFORCED STEEL. STEPS SHALL BE STANDARD BLACK IN COLOR AND SHALL HAVE NON-SLIP TREAD ON BOTH SIDES.
2. TOP STEP SHALL NOT BE GREATER THAN 2'-0" FROM TOP OF MANHOLE.
3. LANDING TO BOTTOM STEP SHALL NOT BE GREATER THAN 2'-0".
4. STEPS MEET: ASTM C-478/ASTM D-4101/ASTM A-615/ AASHTO M-199.

MANHOLE STEP
SCALE: NOT TO SCALE

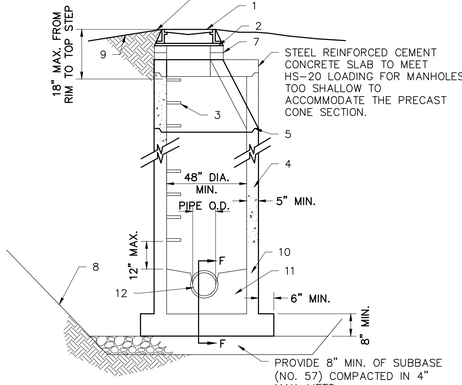


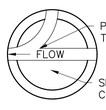
NOTE:
EMBANKMENT AND CUTOFF TRENCH SHALL BE PLACED IN 6" LIFTS AND COMPACTED TO 100% DRY WEIGHT DENSITY (PER ASTM D698). THE SOIL SHALL BE SCARIFIED BETWEEN LIFTS AND SHALL MEET AASHTO A-7-5 (UNIFIED SOIL CLASSIFICATION: GROUP "SC"-SANDY CLAY) OR BETTER AND BE FREE OF ORGANIC DEBRIS AND ROCK LARGER THAN SIX INCHES. THE CONTRACTOR SHALL OBTAIN AN INDEPENDENT SOIL TESTING LAB TO PERFORM SOIL COMPACTION TESTING. TEST REPORTS SHALL BE SUBMITTED TO THE OWNER WITHIN 5 DAYS, AND CORRECTIVE MEASURES SHALL BE PERFORMED IMMEDIATELY UPON UNSATISFACTORY RESULTS. PLACEMENT OF FILL EXCAVATION ON SLOPING NATIVE SOILS SHALL BE PERFORMED BY BENCHING EACH LIFT A MINIMUM OF 10' INTO THE EXISTING SLOPES AND OVERLAPPING THE PREVIOUS LAYER.

BASIN FILL EMBANKMENT
SCALE: NOT TO SCALE

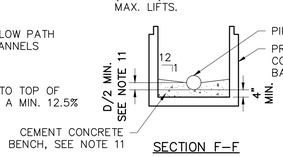


TYPE A MANHOLE FRAME
SCALE: NOT TO SCALE





PLAN VIEW CHANNEL



SECTION F-F

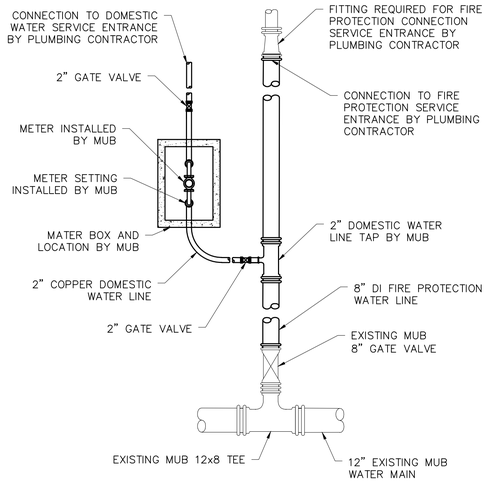
GENERAL NOTE:
- MANHOLE MANUFACTURER IS RESPONSIBLE FOR STRUCTURAL DESIGN OF MANHOLE SECTIONS AS SHOWN ON ALL MANHOLE DETAILS.

NUMBERED NOTES:
1. NEENAH R-1670-A CAST IRON FRAME. (FIELD VERIFY TOP OF CASTING ELEVATION)
2. PLACE TWO (2) ROWS 1" DIA. OF PREMIUM GRADE BUTYL SEALANT OR EQUAL BETWEEN FRAME AND GRADE RING OR RISER SECTION.
3. CAST IN PLACE POLYPROPYLENE MANHOLE STEPS TWELVE (12) INCHES ON CENTER. REFERENCE THE MANHOLE STEP DETAIL FOR OTHER DETAILS.
4. STANDARD REINFORCED CONCRETE RISER SECTIONS SHALL CONFORM TO ASTM C-478 OR CURRENT SPECIFICATIONS.
5. PLACE TWO (2) ROWS 1" DIA. OF PREMIUM GRADE BUTYL SEALANT OR EQUAL.
6. REMOVED
7. GRADE ADJUSTMENT RINGS: MAXIMUM TOTAL BUILD-UP OF TWELVE (12) INCHES FOR PRECAST CONCRETE RINGS. MAXIMUM TOTAL BUILDUP OF FOUR (4) INCHES FOR HDPE OR RECYCLED RUBBER RINGS.
8. ALL EXCAVATION SLOPES SHALL CONFORM TO OSHA STANDARDS.
9. FINISHED GRADE FOR TOPS OF MANHOLE FRAMES AND COVERS.
10. PRECAST MONOLITHIC MANHOLE BASE SHALL CONFORM TO ASTM C-478 SPECIFICATIONS OR CURRENT SPECIFICATIONS.
11. WVDOH CLASS B CEMENT CONCRETE MINIMUM FOR BENCH WORK IN THE FIELD. INVERTS SHALL BE TRUE TO LINE AND GRADE. SLOPE BENCHES TOWARD INVERT. PROVIDE A FULL DEPTH U-SHAPED CHANNEL WHEN SPECIFIED TO REDUCE ENERGY LOSSES.
12. PIPE SEAL; PRESS WEDGE, A-LOK, OR A FLEXIBLE GASKET

GENERAL SANITARY SEWER NOTES

1. THE STATION AT EACH MANHOLE IS THE STATION OF THE CENTERLINE OF SAID MANHOLE.
2. THE LINEAL FEET OF PIPE SHOWN ON THE PROFILE BETWEEN MANHOLES IS THE ACTUAL LENGTH OF PIPE TO BE INSTALLED AND NOT THE DISTANCE BETWEEN MANHOLE CENTERLINES.
3. TWO OR MORE INVERTS ARE TYPICALLY SHOWN FOR EACH MANHOLE. THEY ARE THE INFLOW AND OUTFLOW INVERTS AT THE FLOW CHANNEL. GRADES ARE COMPUTED BETWEEN THE OUTFLOW AND INFLOW INVERTS OF SUCCESSIVE MANHOLES.
4. MINIMUM HORIZONTAL SEPARATION BETWEEN WATER AND SEWER LINES SHALL BE TEN (10) FEET. A MINIMUM VERTICAL SEPARATION BETWEEN BOTTOM OF WATER LINE AND TOP OF SEWER LINE SHALL BE EIGHTEEN (18) INCHES. IF THIS IS NOT POSSIBLE, ENCASE THE SEWER IN CONCRETE FOR A MINIMUM DISTANCE OF TEN (10) FEET BOTH SIDES OF THE CROSSING OR UNTIL DISTANCE BETWEEN LINES IS GREATER THAN TEN (10) FEET.
5. PIPE SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH THE SANITARY AUTHORITY'S SPECIFICATIONS AND PROCEDURES FOR SEWER LINE INSTALLATION.
6. ALL RIM ELEVATIONS ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY ALL ELEVATIONS PRIOR TO ORDERING COMPONENTS. CONTRACTOR SHALL SET ELEVATION OF RIMS IN FIELD TO MATCH FINAL GRADES.

TYPE A MANHOLE
SCALE: NOT TO SCALE



NOTES FROM MORGANTOWN UTILITY BOARD (MUB):
1. THE BACKFLOW IS NOT ALLOWED TO BE INSTALLED IN A PIT AND SHOULD BE INSTALLED INSIDE THE BUILDING.
2. MUB WILL BE RESPONSIBLE FOR TAPPING THE CUSTOMER'S PRIVATE FIRE LINE. THE FIRE LINE SHALL EITHER BE C900 PVC OR DUCTILE IRON PIPE.
3. A VALVE (INSTALLED BY THE OWNER/CUSTOMER) SHALL BE INSTALLED JUST DOWNSTREAM OF DOMESTIC WATER SERVICE CONNECTION. THE VALVE WILL NOT BE LOCATED INSIDE OF MUB'S WATER METER PIT. THE VALVE MUST BE LOCATED OUTSIDE OF THE BUILDING.
4. MUB WILL BE RESPONSIBLE FOR INSTALLING THE WATER METER BOX, METER SETTING, AND METER.
5. THE METER BOX SHALL BE INSTALLED AT A LOCATION ACCEPTABLE TO MUB.

WATER SERVICE CONNECTION FOR FIRE AND DOMESTIC WATERLINES
SCALE: NOT TO SCALE

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PROFESSIONAL ENGINEER
3/4/24

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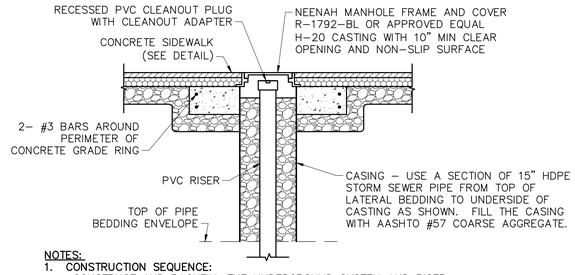
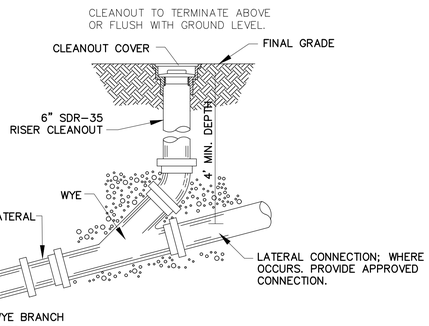
SHEET NO.: D9.2

PROJECT NO.: 11693-041



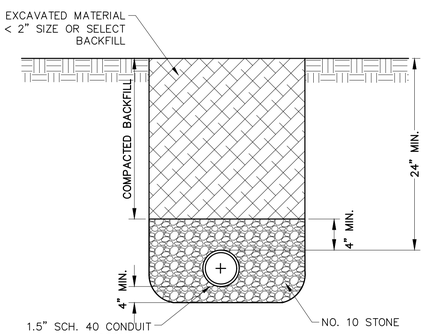
NOTES:
1. CONSTRUCTION SEQUENCE:
   a. CONSTRUCT AND BACKFILL THE UNDERGROUND SYSTEM AND RISER.
   b. SET THE STORM SEWER RISER CASING IN PLACE AND COMPLETE THE TRENCH BACKFILL IN ACCORDANCE WITH THE SANITARY/STORM SEWER TRENCH RESTORATION DETAIL. KEEP THE CASING CENTERED ON THE RISER PIPE AS BACKFILL IS PLACED.
   c. ONCE THE TRENCH BACKFILL IS COMPLETE CUT THE RISER PIPE TO FINAL ELEVATION, SECURE THE CLEANOUT ADAPTER AND CLEANOUT PLUG IN PLACE AND BACKFILL THE SPACE BETWEEN THE CASING AND RISER PIPE WITH AASHTO NO. 57 COARSE AGGREGATE. THE TOP ELEVATION OF THE CLEANOUT PLUG SHALL BE 3" BELOW THE BOTTOM OF THE MANHOLE COVER.
   d. CUT THE CASING TO FINAL ELEVATION, POUR A CONCRETE RING AROUND THE TOP OF CASING PIPE AS SHOWN, SET THE MANHOLE FRAME IN PLACE ON TOP OF THE CASING AND RING, AND COMPLETE THE PAVEMENT CONSTRUCTION.
2. PIPE MATERIALS: PVC SDR 35.
3. SEAL JOINT BETWEEN PAVEMENT AND RIM.

CLEANOUT COVER IN PAVEMENT
SCALE: NOT TO SCALE



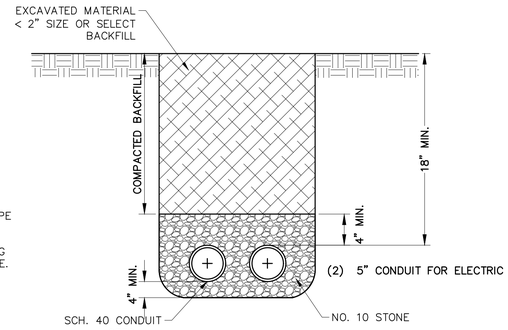
NOTES:
1. ALL LATERALS TO BE A MINIMUM OF 1.00% SLOPE UNLESS OTHERWISE DIRECTED.
2. PROVIDE LATERAL CLEANOUT AT CONNECTION POINT ADJACENT TO BUILDING LINE FOR ALL RAIN WATER CONNECTION POINTS.
3. PROVIDE LATERAL CLEANOUT AT LOCATIONS SHOWN ON PLAN FOR SANITARY SEWER PIPING.

LATERAL CONNECTION AND CLEANOUT
SCALE: NOT TO SCALE



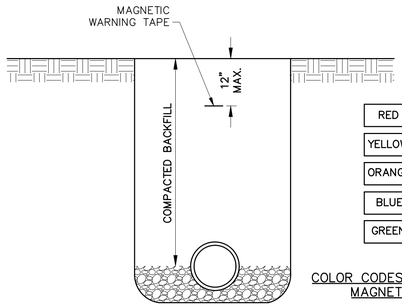
NOTES:
1. PROVIDE NYLON PULL STRINGS IN EACH CONDUIT

LIGHTING ELECTRICAL TRENCH SECTION
SCALE: NOT TO SCALE



NOTES:
1. PROVIDE NYLON PULL STRINGS IN EACH CONDUIT

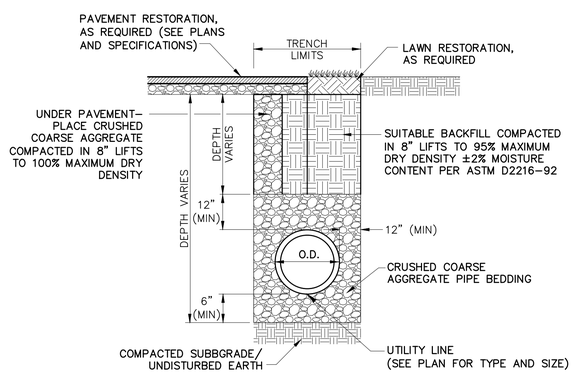
ELECTRICAL TRENCH SECTION
SCALE: NOT TO SCALE



RED	ELECTRIC
YELLOW	GAS-OIL
ORANGE	TELEPHONE
BLUE	WATER
GREEN	SEWER

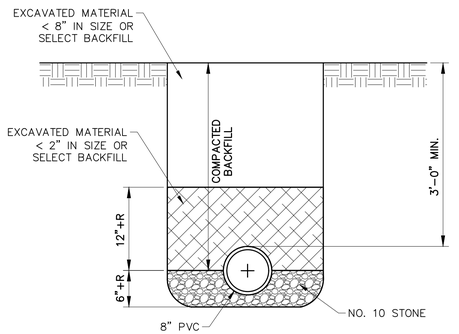
COLOR CODES FOR UTILITY LOCATING MAGNETIC WARNING TAPE

MAGNETIC WARNING TAPE DETAIL
SCALE: NOT TO SCALE

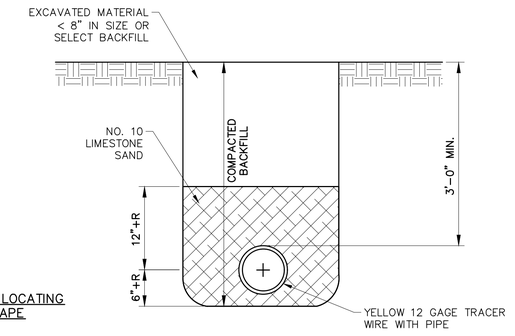


NOTES:
1. CONTRACTOR TO COORDINATE WITH THE OWNER AND ENGINEER REGARDING THE APPROPRIATE BACKFILL MATERIAL BASED ON EXISTING SITE CONDITIONS.

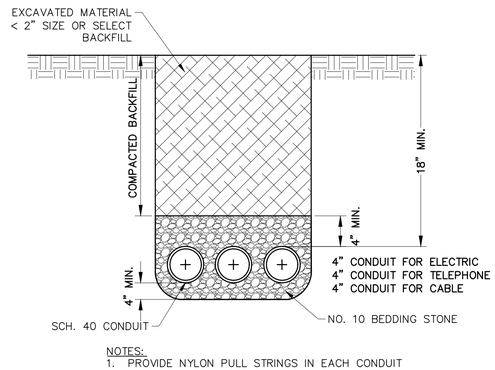
STORM/SANITARY PIPE TRENCH SECTION
SCALE: NOT TO SCALE



WATER TRENCH SECTION
SCALE: NOT TO SCALE



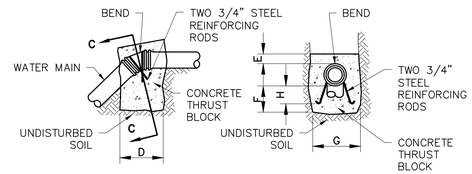
GAS LINE TRENCH SECTION
SCALE: NOT TO SCALE

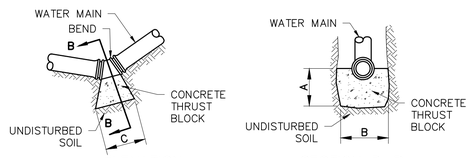


NOTES:
1. PROVIDE NYLON PULL STRINGS IN EACH CONDUIT

TELECOM TRENCH SECTION
SCALE: NOT TO SCALE

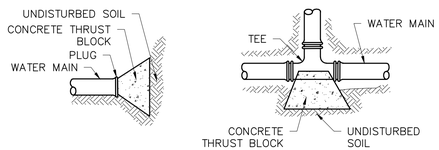
BEND		MIN VOLUME OF CONCRETE FOR BLOCK DIM. D, E, F, G	MINIMUM ALLOWABLE DIMENSIONS FOR VERTICAL THRUST BLOCKS (IN FEET)							
			A	B	C	D	E	F	G	ROD LENGTH (V)
8"	11.25°	0.5 CU.YD	1.0	2.5	1.5	2.0	1.0	1.5	2.0	1.0
8"	22.5°	0.7 CU.YD.	1.5	2.5	1.5	2.5	1.0	2.0	2.5	1.5
8"	45°	1.4 CU.YD	1.5	2.5	2.0	4.0	1.5	2.0	3.0	1.5
8"	90°	2.6 CU.YD.	2.0	2.5	2.0	4.0	2.0	3.0	3.5	2.5



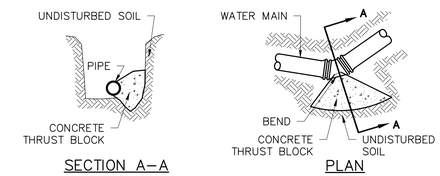


THRUST BLOCKS FOR VERTICAL BENDS

AREA OF BEARING FACE OF CONCRETE THRUST BLOCK IN SQ. FT. BLOCKS TO BE POURED AGAINST UNDISTURBED SOIL					
TYPE	A	B	C	D	E
PIPE SIZE	TEE/PLUG	90° BEND	45° BEND	22.5° BEND	11.25° BEND
8"	13	18	10	5	3



THRUST BLOCK FOR PLUG THRUST BLOCK FOR TEE



THRUST BLOCKS FOR HORIZONTAL BENDS

NOTE:
1. THRUST BLOCK DESIGN BASED ON A SOIL BEARING CAPACITY OF 1000 PSI, REFLECTING THE STRENGTH OF SOFT CLAY WITH A SAFETY FACTOR OF 2.0. ANY SPECIAL SOIL CONDITIONS REQUIRE SPECIAL ATTENTION.
2. THRUST BLOCKING DESIGN BASED ON A WORKING PRESSURE OF 100 PSI WITH A 25% ALLOWANCE FOR LEAKAGE TESTING.
3. PROVIDE ALTERNATE THRUST CONTROL ONLY WHEN APPROVED BY THE ENGINEER IN WRITING.
4. FORM ALL THRUST BLOCKS TO AVOID CONCRETE CONTACT WITH BOLT HEADS OR NUTS.

TYPICAL THRUST BLOCKS
SCALE: NOT TO SCALE

CHRISTOPHER MICHAEL MCARTHUR REGISTERED 20340 STATE OF VIRGINIA PROFESSIONAL ENGINEER 3/4/24

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SHEET NO.: D9.3

PROJECT NO.: 11693-041

OPERATION AND MAINTENANCE PROCEDURES

FOLLOW LONG–TERM OPERATION AND MAINTENANCE SCHEDULE, WHICH PROVIDES FOR INSPECTION OF PCSM BMPS, INCLUDING THE REPAIR, REPLACEMENT, OR OTHER ROUTINE MAINTENANCE TO ENSURE PROPER FUNCTION AND OPERATION.

COMPLETION OF A WRITTEN REPORT DOCUMENTING EACH INSPECTION AND ALL BMP REPAIR MAINTENANCE ACTIVITIES SHOULD CLEARLY IDENTIFY WHO THE RESPONSIBLE PARTY FOR LONG–TERM OPERATION AND MAINTENANCE.

THE FOLLOWING ARE SOME TYPICAL MAINTENANCE ITEMS:

CATCH BASINS, CULVERTS, AND OUTLET STRUCTURES

- ALL CATCH BASINS, CULVERTS, AND OUTLET STRUCTURES SHOULD BE INSPECTED AND CLEANED AT LEAST TWO TIMES PER YEAR AND IMMEDIATELY AFTER RUNOFF EVENTS.

VEGETATED AND LANDSCAPED AREAS

- REPAIR, RESEED AND REMULCH ANY AREAS OF UNIFORM VEGETATED COVER OR LANDSCAPING THAT ERODE DUE TO SUBSTANTIAL RAINFALL EVENTS.
- DEAD TREES AND SHRUBS WILL BE REMOVED AND REPLACED AS NECESSARY.

DETENTION BASINS

- CATCH BASINS AND INLETS (UPGRADIENT OF INFILTRATION BASIN) SHOULD BE INSPECTED AND CLEANED AT LEAST TWO TIMES PER YEAR AND AFTER RUNOFF EVENTS.
- THE VEGETATION ALONG THE SURFACE OF THE DETETION BASIN SHOULD BE MAINTAINED IN GOOD CONDITION, AND ANY BARE SPOTS REVEGETATED AS SOON AS POSSIBLE.
- INSPECT THE BASIN AFTER RUNOFF EVENTS AND MAKE SURE THAT RUNOFF DRAINS DOWN WITHIN 72 HOURS.
- MOSQUITO'S SHOULD NOT BE A PROBLEM IF THE WATER DRAINS IN 72 HOURS. MOSQUITOES REQUIRE A CONSIDERABLY LONG BREEDING PERIOD WITH RELATIVELY STATIC WATER LEVELS.
- ALSO INSPECT FOR ACCUMULATION OF SEDIMENT, DAMAGE TO OUTLET CONTROL STRUCTURES, EROSION CONTROL MEASURES, SIGNS OF WATER CONTAMINATION/SPILLS, AND SLOPE STABILITY IN THE BERMS.
- MOW ONLY AS APPROPRIATE FOR VEGETATIVE COVER SPECIES.
- REMOVE ACCUMULATED SEDIMENT FROM BASIN AS REQUIRED. RESTORE ORIGINAL CROSS SECTION AND INFILTRATION RATE. PROPERLY DISPOSE OF SEDIMENT.
- PROTECT INFILTRATION PCSM BMPS UNTIL DRAINAGE AREAS ARE COMPLETELY STABILIZED.

RIP–RAP APRON

- CLEAN SEDIMENT, REPLACE STONES THAT WASHED AWAY.

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20340
STATE OF
WEST VIRGINIA
PROFESSIONAL ENGINEER
3/14/24

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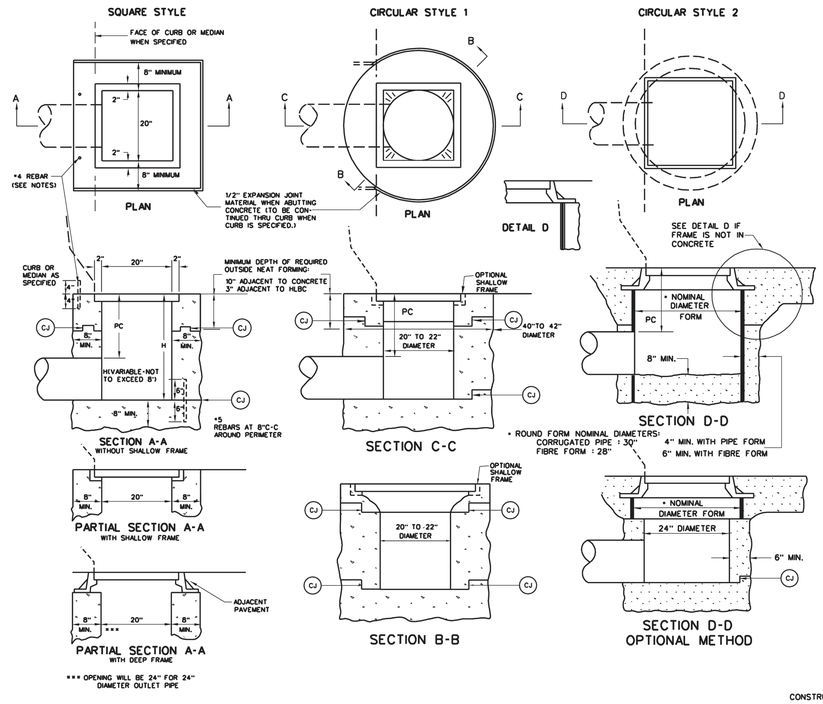


NOTES

UNLESS OTHERWISE SPECIFIED ON THE PLANS, TYPE B INLETS MAY BE CONSTRUCTED IN ANY OF THE SHAPES SHOWN WHEN THE OUTLET PIPE DIAMETERS IS 21" OR LESS AND THE ADJACENT PAVEMENT IS CONCRETE.

IF THE OUTLET PIPE DIAMETER IS 24" OR THE ADJACENT PAVEMENT IS HOT MIX ASPHALT, ONLY THE SQUARE STYLE WITH THE DEEP FRAME WILL BE USED. THE INSIDE OPENING OF THE INLET WILL BE ADJUSTED TO ACCOMODATE THE 24" PIPE.

CONSTRUCTION MAY BE CAST-IN-PLACE, PRECAST IN ONE OR MULTIPLE SECTIONS, OR ANY COMBINATION OF CAST-IN-PLACE AND PRECAST.

OPTIONAL CONSTRUCTION JOINTS LABELED "CJ" MAY BE ROUGHENED CONCRETE, KEYED OR DOWELED AS PER THE TYPICAL DETAILS SHOWN HEREIN, OR AS APPROVED BY THE ENGINEER. NON SHRINK GROUT MEETING THE REQUIREMENTS OF SUBSECTION 715.5 OF THE SPECIFICATIONS MAY BE USED TO A DEPTH OF ½" FOR LEVELING BETWEEN PRECAST SECTIONS. THICKER DEPTHS WILL BE ALLOWED AS PER THE MANUFACTURER'S RECOMMENDATIONS.

THE FINAL INSTALLED TOP SURFACE OF INLET AND GRATE SHALL BE FLUSH WITH ADJACENT FINISHED SURFACES SUCH AS PAVEMENT, GUTTERS, CURBS, AND SIDEWALKS. TOP OF GRATE ELEVATION, IF SHOWN ON THE PLANS, IS FOR INFORMATION ONLY.

REBARS ARE TO BE INSTALLED AT THE QUARTER POINTS TO CONNECT CURB TO INLET. REBARS ARE NOT REQUIRED IF CURB IS POURED MONOLITHICALLY WITH THE INLET OR IF TYPE V OR VI MEDIAN IS SPECIFIED ON THE PLANS.

FOR DETAILS OF GRATES AND FRAMES, SEE INLET CASTING STANDARD SHEET DR6-X.

THE CONTRACTOR MAY, AT HIS OPTION, OMIT USE OF THE SHALLOW FRAME BY FORMING A LEDGE IN THE CONCRETE. SPECIAL CARE SHALL BE EXERCISED IN FORMING THE 2" WIDE CONCRETE LEDGE TO PROVIDE A SMOOTH, EVEN SURFACE FOR SUPPORTING THE GRATE IF A FRAME IS NOT USED. NO PROJECTIONS SHALL EXIST ON THE GRATE AND THE GRATE SHALL SEAT ON THE LEDGE WITHOUT ROCKING.

FIBRE FORM SHALL BE REMOVED PRIOR TO COMPLETION OF THE PROJECT.

PC(MINIMUM PIPE COVER) SHALL BE 12" BELOW INLET TOP FOR PIPES PLACED UNDER SIDEWALK OR GRASSED AREA OR 24" BELOW INLET TOP FOR PIPES PLACED UNDER PAVEMENT OR SHOULDER.

CURB, IF SPECIFIED, MAY BE EITHER CONCRETE PLACED ON THE INLET BACKWALL AS DETAILED HEREIN OR AN APPROVED CURB BOX AS MANUFACTURED WITH THE GRATE AND FRAME. DIMENSIONS OF THE CURB BOX SHOULD REASONABLY CONFORM TO THE STANDARD CURB AS SPECIFIED ON THE PLANS. THE CURB WILL BE PAID FOR PER SECTION 610, IN EITHER CASE.

THIS INLET SHALL NOT BE PLACED IN A PEDESTRIAN CROSS WALK.

THE MINIMUM DISTANCE FROM THE TOP OF ANY PIPE OPENING TO ANY CONSTRUCTION JOINT ABOVE THE OPENING SHALL BE FOUR (4) INCHES.

THE NUMBER AND LOCATION OF PIPE OPENINGS SHALL BE AS SHOWN IN THE PLANS. THE CONTRACTOR AT NO ADDITIONAL COST, SHALL BE RESPONSIBLE FOR ANY TEMPORARY BRACING REQUIRED TO TRANSPORT PRECAST INLET SECTIONS DUE TO MUTIPLE OPENINGS.

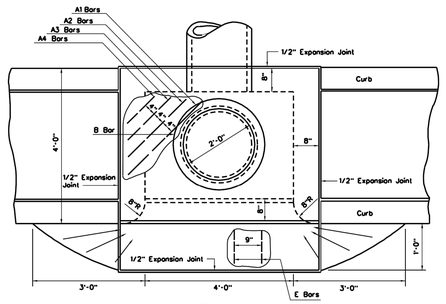
WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DETAIL

PREPARED 7-1-99

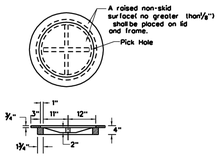
REVISION DATE

TYPE B INLET

STANDARD SHEET DR6-B



PLAN



DETAIL OF FRAME AND COVER CASTING (RING TYPE)

NOTES

Optional construction joints labeled "CJ" may be roughened concrete, keyed or doweled as per the typical details shown herein or as approved by the Engineer. Non shrink grout meeting the requirements of subsection 715.5 of the specifications may be used to a depth of ½" for leveling between precast sections. Thicker depths will be allowed if as per the manufacturer's recommendations.

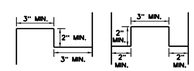
The covering for reinforcing steel shall be two inches, measured from the surface of the concrete to the face of the bar, unless otherwise shown. All reinforcing steel shall be epoxy coated and meet the requirements of section 602 of the specifications.

This inlet shall not be placed in a pedestrian cross walk.

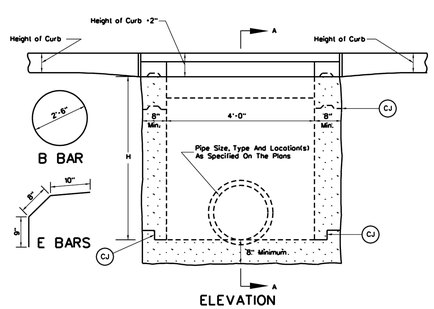
Construction may be cast-in-place, precast in one or multiple sections, or any combination of cast-in-place and precast.

The minimum distance from the top of any pipe opening to any construction joint above the opening shall be four (4) inches.

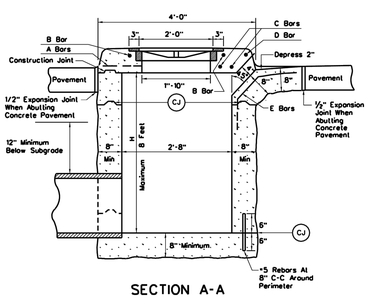
The number and location of pipe openings shall be as shown in the plans. The contractor at no additional cost, shall be responsible for any temporary bracing required to transport precast inlet sections due to multiple openings.



CONSTRUCTION JOINT DETAILS



ELEVATION



SECTION A-A

BILL OF STEEL

Mark	Size Bar	No.	Length	Weight
A1	*5	2	3'-11"	8 lbs.
A2	*5	2	3'-3"	7
A3	*5	2	2'-7"	5
A4	*5	2	1'-11"	6
B	*5	1	8'-0"	8
C	*8	2	5'-0"	27
D	*5	1	5'-0"	5
E	*5	6	2'-3"	14
			Total	80 lbs.

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DETAIL

PREPARED 7-1-99

REVISION DATE

TYPE D INLET

STANDARD SHEET DR6-D

NOTES

THIS INLET SHOULD ONLY BE SPECIFIED WHEN ABUTTING CONCRETE PAVEMENT

THE FINAL INSTALLED TOP SURFACE OF INLET AND GRATE SHALL BE FLUSH WITH ADJACENT FINISHED SURFACES SUCH AS PAVEMENT, GUTTERS, CURBS, AND SIDEWALKS. TOP OF GRATE ELEVATION, IF SHOWN ON THE PLANS, IS FOR INFORMATION ONLY.

CONSTRUCTION MAY BE CAST-IN-PLACE, PRECAST IN ONE OR MULTIPLE SECTIONS, OR ANY COMBINATION OF CAST-IN-PLACE AND PRECAST.

REBARS ARE TO BE INSTALLED AT THE THIRD POINTS TO CONNECT CURB TO INLET. REBARS ARE NOT REQUIRED IF CURB IS POURED MONOLITHICALLY WITH INLET OR IF TYPE V OR VI MEDIAN IS SPECIFIED ON THE PLANS.

FOR DETAILS OF GRATE SUPPORT BAR, SHALLOW FRAME, AND GRATES (TWO REQUIRED), SEE INLET CASTINGS STANDARD SHEET DR6-X. USE OF THE SHALLOW FRAME WILL BE LIMITED TO ROADWAYS CONSTRUCTED OF CONCRETE PAVEMENT. IF ADJACENT ROADWAY IS BUILT OF HOT MIX ASPHALT PAVEMENT, THE FRAME AS REQUIRED FOR A TYPE F INLET (STANDARD SHEET DR6F) WILL BE REQUIRED.

THE CONTRACTOR MAY, AT HIS OPTION, OMIT USE OF THE FRAME BY FORMING A LEDGE IN THE CONCRETE. SPECIAL CARE SHALL BE EXERCISED IN FORMING THE 2" WIDE CONCRETE LEDGE TO PROVIDE A SMOOTH, EVEN SURFACE FOR SUPPORTING THE GRATES IF THE SHALLOW FRAME IS NOT USED. NO PROJECTIONS SHALL EXIST ON THE BEARING SURFACES OF THE LEDGE OR THE GRATES, AND THE GRATES SHALL SEAT ON THE LEDGE WITHOUT ROCKING.

OPTIONAL CONSTRUCTION JOINTS LABELED "CJ" MAY BE ROUGHENED CONCRETE, KEYED OR DOWELED AS PER THE TYPICAL DETAILS SHOWN HEREIN OR AS APPROVED BY THE ENGINEER. NON SHRINK GROUT MEETING THE REQUIREMENTS OF SUBSECTION 715.5 OF THE SPECIFICATIONS MAY BE USED TO A DEPTH OF ½" FOR LEVELING BETWEEN PRECAST SECTIONS. THICKER DEPTHS WILL BE ALLOWED IF AS PER THE MANUFACTURER'S RECOMMENDATIONS.

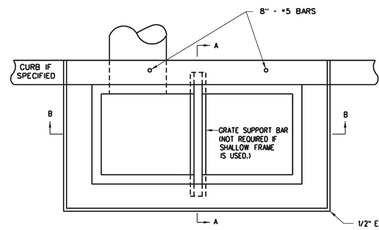
PC (MINIMUM PIPE COVER) SHALL BE 12" BELOW INLET TOP FOR PIPES PLACED UNDER SIDEWALK OR GRASSED AREA OR 24" BELOW INLET TOP FOR PIPES PLACED UNDER PAVEMENT OR SHOULDER.

CURB, IF SPECIFIED, MAY BE EITHER CONCRETE PLACED ON THE INLET BACKWALL AS DETAILED HEREIN OR AN APPROVED CURB BOX AS MANUFACTURED WITH THE GRATE AND FRAME. DIMENSIONS OF THE CURB BOX SHOULD REASONABLY CONFORM TO THE STANDARD CURB AS SPECIFIED ON THE PLANS. THE CURB WILL BE PAID FOR PER SECTION 610, IN EITHER CASE.

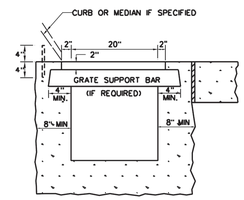
THIS INLET SHALL NOT BE PLACED IN A PEDESTRIAN CROSS WALK.

THE MINIMUM DISTANCE FROM THE TOP OF ANY PIPE OPENING TO ANY CONSTRUCTION JOINT ABOVE THE OPENING SHALL BE FOUR (4) INCHES.

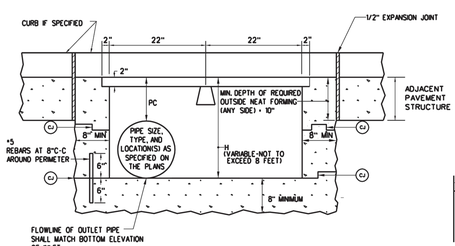
THE NUMBER AND LOCATION OF PIPE OPENINGS SHALL BE AS SHOWN IN THE PLANS. THE CONTRACTOR AT NO ADDITIONAL COST, SHALL BE RESPONSIBLE FOR ANY TEMPORARY BRACING REQUIRED TO TRANSPORT PRECAST INLET SECTIONS DUE TO MUTIPLE OPENINGS.



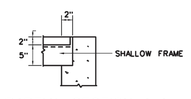
PLAN



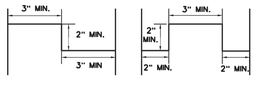
SECTION A-A



SECTION B-B



PARTIAL SECTION A-A
(WITH OPTIONAL SHALLOW FRAME)



CONSTRUCTION JOINT DETAILS

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DETAIL

PREPARED 7-1-99

REVISION DATE

TYPE A INLET

STANDARD SHEET DR6-A

CHRISTOPHER MICHAEL MCKENZIE
REGISTERED
20340
STATE OF
WEST VIRGINIA
PROFESSIONAL ENGINEER
3/14/24

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NO.	DATE	ISSUE / REVISIONS	BY	CHKD
4	03.13.2024	CITY OF RANSON RESUBMISSION	JWH	CMS
3	10.06.2023	CITY OF RANSON RESUBMISSION	JWH	CMS
2	09.29.2023	CITY OF RANSON RESUBMISSIONS	JWH	CMS
1	09.29.2023	PERMIT RESUBMISSION	JWH	CMS
0	07.19.2023	PERMIT SUBMISSION	JWH	CMS

COMMENTS

DETAILS

WAWA – RANSON, WEST VIRGINIA
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

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Williamsport, PA 17701
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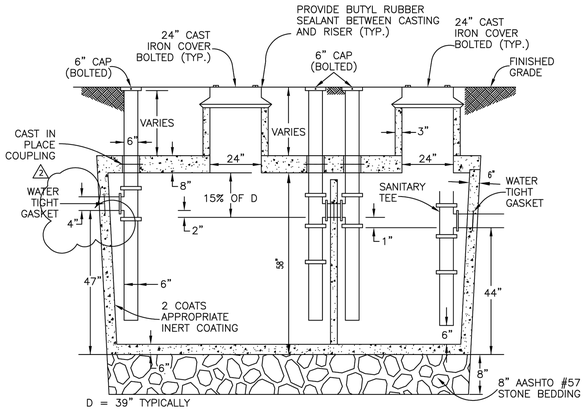
SHEET NO.: D9.5

PROJECT NO.: 11693–041



GREASE TRAP

1500 GALLON (2 COMPARTMENT) TANK

ALL INLET AND OUTLET PIPES SHALL BE INSTALLED NO MORE THAN 6" FROM THE BOTTOM OF THE GREASE TRAP.

TANK TAPERS TOP TO BOTTOM AND IS TRAPEZOIDAL IN CROSS SECTION.

TANK IS 5000 PSI CONCRETE-STEEL REINFORCED (@ 28 DAYS) CONCRETE CONFORMS TO ACI 318-16-4.5.1 AND 318-16-4.5.2, ASTM A615 AND A185

-DIMENSION: 151" INTERIOR/ 163" EXTERIOR LENGTH x 72" INTERIOR/ 84" EXTERIOR WIDTH

NOTES:

1) WHEN LOCATED IN DRIVEWAYS OR PAVED AREAS, GREASE TRAP TO BE DESIGNED FOR APPROPRIATE LOAD BEARING CONDITIONS. GREASE TRAP SHALL BE CAPABLE OF WITHSTANDING HS-20 LOADING.

2) ALL PIPE PENETRATIONS SHALL BE WATERTIGHT.

3) GREASE TRAP SHALL BE PROVIDED WITH GAS-TIGHT MANHOLE COVERS, IN ACCORDANCE WITH TOWNSHIP STANDARD SPECIFICATIONS.

4) PRECAST CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH 5000 PSI.

5) EXTERIOR CONCRETE SURFACES BELOW GRADE SHALL HAVE 2 COATS OF COAL TAR EPOXY.

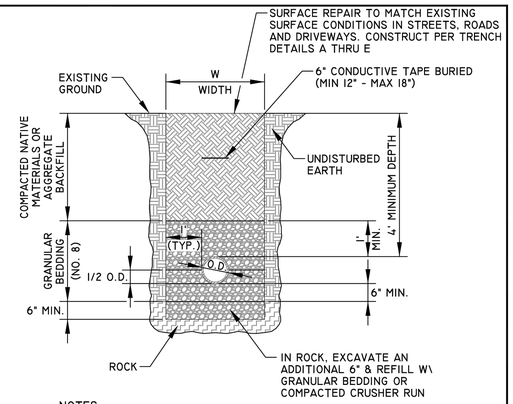
6) SPECIFIC SEALANT DETAIL AT CONCRETE RISER TO CONCRETE VAULT INTERFACE SHALL BE WATERTIGHT. AT A MINIMUM, THE JOINT SHALL BE SEALED WITH BUTYL RUBBER SEALANT (KENT SEAL #2 OR APPROVED EQUIVALENT) AND THE EXTERIOR OF THE JOINT SHALL BE SEALED WITH NON-SHRINK GROUT IN CONFORMANCE WITH THE TOWNSHIP STANDARD GREASE TRAP DETAIL.

7) TANK SHALL BE TESTED FOR WATER TIGHTNESS BY FILLING FOR 24 HRS. TO SOAK, THEN TOPPED OFF, AND THEN WATCHED FOR 24 HRS. NO DROP IN WATER IS ALLOWED.

8) CAST IRON SHALL BE BOLTED TO CONCRETE WITH MASTIC TAPE (KENT SEAL OR APPROVED EQUIVALENT) SEALANT.

9) MAXIMUM EARTH COVER=5.0', HS-20 LOADING.

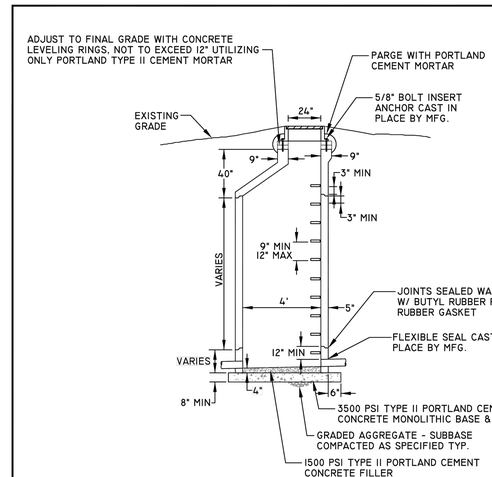
10) INLET AND OUTLET EQUIPPED WITH PIPE SEALS.



NOTES:

1. W = MAXIMUM PERMISSIBLE TRENCH WIDTH, BASED UPON, W = O.D. + 24", UNLESS APPROVED BY THE ENGINEER.
2. TRENCHES TO BE SHEETED AND BRACED AS REQUIRED.
3. PROVIDE BEARING FOR FULL LENGTH OF BARREL, DIG HOLES FOR THE BELL.
4. BACKFILL ON SIDES TO 1/2 O.D. OF PIPE TO HOLD PIPE IN PLACE PRIOR TO PLACING ADDITIONAL BEDDING.
5. BACKFILL TO BE COMPACTED IN 6" LAYERS TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE (+2%) IN ROADS AND STREETS. COMPACT TO MATCH EXISTING GROUND IN OTHER AREAS.
6. MAINTAIN MINIMUM OF 4' OF COVER TO THE TOP OF PIPE.
7. A CASING PIPE SHALL BE REQUIRED IN ROAD CROSSINGS WHERE SHOWN ON PLANS
8. ALL WATER LINES REQUIRE PERMIT FROM APPLICABLE REGULATORY ENTITIES. PERMIT REQUIREMENTS SUPERCEDE WHAT IS SHOWN ON THIS DETAIL.

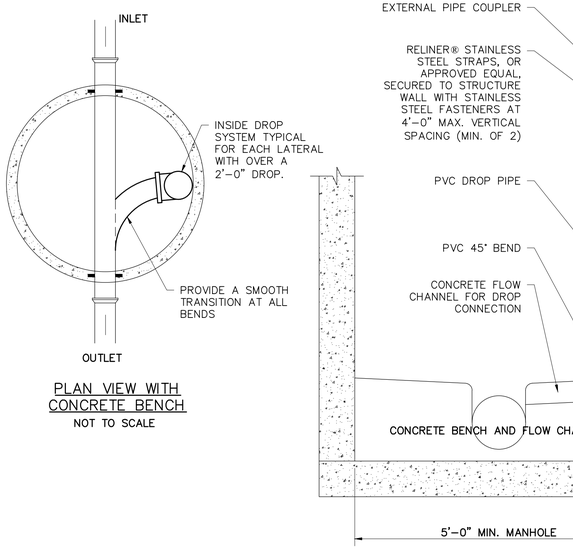
Charles Town Utility Board 832 S. George Street, P.O. Box 359, Charles Town, WV 25414 Phone: (304) 725-2316 •Fax: (304) 725-4313	SEWER LINE TRENCH DETAIL	Standard Detail No. S-1 NOT TO SCALE SEPTEMBER 2015



NOTES:

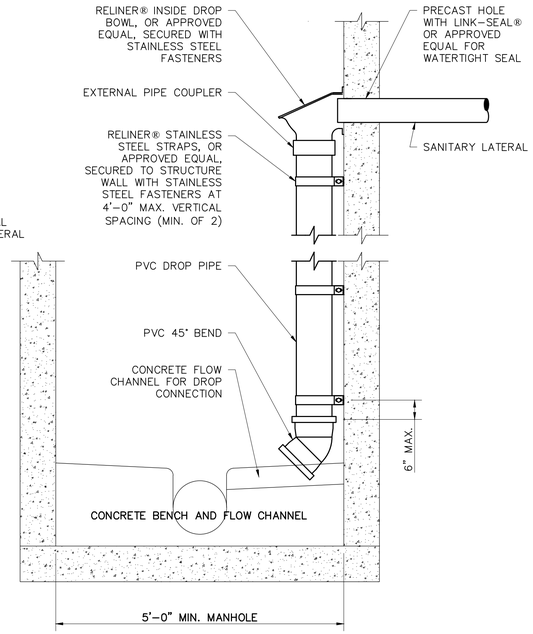
1. PRECAST MANHOLE SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM C 478 UTILIZING TYPE II PORTLAND CEMENT. 3500 PSI MIX MINIMUM.
2. 0.1' FALL TYPICAL INVERT IN TO INVERT OUT OR MATCH CROWNS FOR DIFFERING PIPE DIAMETERS.
3. COMPLETE MANHOLE SHALL PASS VACUUM TEST PRIOR TO ACCEPTANCE.

Charles Town Utility Board 832 S. George Street, P.O. Box 359, Charles Town, WV 25414 Phone: (304) 725-2316 •Fax: (304) 725-4313	PRECAST MANHOLE W/ ECCENTRIC TOP DETAIL	Standard Detail No. S-6 NOT TO SCALE SEPTEMBER 2015



PLAN VIEW WITH CONCRETE BENCH

NOT TO SCALE

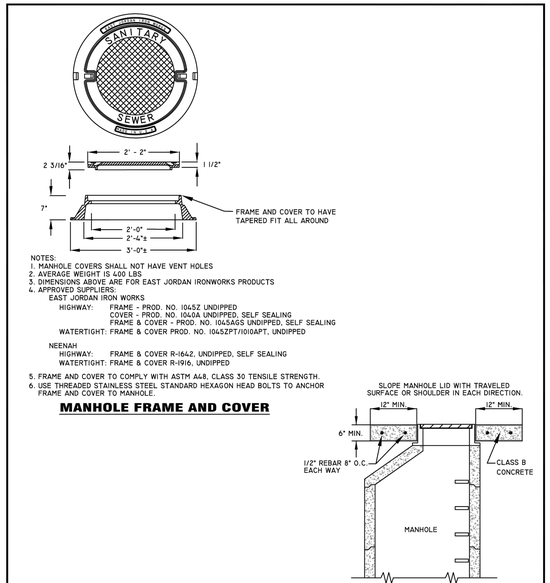


INSIDE DROP DETAIL

NOT TO SCALE

INSIDE MANHOLE DROP FOR SANITARY LATERALS

SCALE: NOT TO SCALE

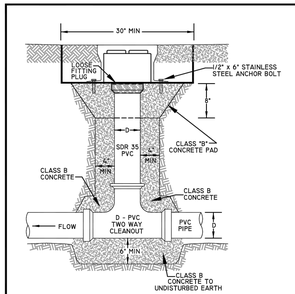


NOTES:
1. MANHOLE COVERS SHALL NOT HAVE VENT HOLES
2. AVERAGE WEIGHT IS 400 LBS
3. DIMENSIONS ABOVE ARE FOR EAST JORDAN IRONWORKS PRODUCTS
4. APPROVED SUPPLIERS:
   EAST JORDAN IRON WORKS
   HIGHWAY: FRAME - PROD. NO. 1045Z UNDIPPED
   COVER - PROD. NO. 1040A UNDIPPED, SELF SEALING
   FRAME & COVER - PROD. NO. 1045AGS UNDIPPED, SELF SEALING
   WATERTIGHT: FRAME & COVER PROD. NO. 1045ZPT/1010APT, UNDIPPED
   NEENAH
   HIGHWAY: FRAME & COVER R-1642, UNDIPPED, SELF SEALING
   WATERTIGHT: FRAME & COVER R-1916, UNDIPPED
5. FRAME AND COVER TO COMPLY WITH ASTM A48, CLASS 30 TENSILE STRENGTH.
6. USE THREADED STAINLESS STEEL STANDARD HEXAGON HEAD BOLTS TO ANCHOR FRAME AND COVER TO MANHOLE.

MANHOLE FRAME AND COVER

ANCHOR DETAIL FOR FRAME & COVER IN PAVED ROAD SURFACE AREAS AND SHOULDERS OF ROAD

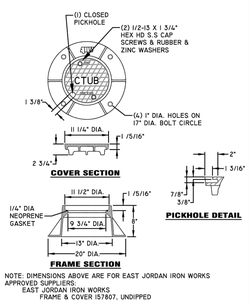
Charles Town Utility Board 832 S. George Street, P.O. Box 359, Charles Town, WV 25414 Phone: (304) 725-2316 •Fax: (304) 725-4313	MANHOLE FRAME & COVER ANCHOR FOR FRAME & COVER DETAIL	Standard Detail No. S-7 NOT TO SCALE SEPTEMBER 2015



MAIN LINE CLEANOUT

(FOR D ≤ 6")

NOTES:
1. CLEANOUT FRAME AND COVER SHALL BE INSTALLED SUCH THAT IT IS LEVEL TO 2" BELOW SURROUNDING SURFACE. CLEANOUTS PROJECTING ABOVE SURFACE ARE UNACCEPTABLE.
2. FOR CLEANOUTS SUBJECT TO VEHICULAR TRAVEL, CONSTRUCT 30"x30"x8" CLASS B CONCRETE PAD. REINFORCE WITH 4.4x 4.4 W4.0/4.0 WIRE MESH OR #3 REBAR @ 12" C-C EACH DIRECTION.
3. FOR NON-VEHICULAR TRAFFIC AREAS CONCRETE PAD CAN BE ELIMINATED AT DIRECTION OF ENGINEER. BACKFILL TO MATCH SURROUNDING AREA.
4. USE TEE AND PLUG FOR CLEANOUT AT END OF LINE.
5. FOR MAINLINE DIAMETER OF 8" OR GREATER, USE STRAIGHT TEE.



NOTE: DIMENSIONS ABOVE ARE FOR EAST JORDAN IRON WORKS APPROVED SUPPLIERS:
EAST JORDAN IRON WORKS
FRAME & COVER 157807, UNDIPPED

MAIN LINE CLEANOUT FRAME & COVER

Charles Town Utility Board 832 S. George Street, P.O. Box 359, Charles Town, WV 25414 Phone: (304) 725-2316 •Fax: (304) 725-4313	MAINLINE CLEANOUT & FRAME & COVER DETAIL	Standard Detail No. S-12 NOT TO SCALE SEPTEMBER 2015

CHRISTOPHER MICHAEL MCKEE
REGISTERED
20340
STATE OF
WEST VIRGINIA
PROFESSIONAL ENGINEER
3/14/24

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NO.	DATE	COMMENTS	BY	CHK'D
4	03.13.2024	CITY OF RANSON RESUBMISSION	JWH	CMS
3	10.06.2023	CITY OF RANSON RESUBMISSION	JWH	CMS
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1	09.29.2023	PERMIT RESUBMISSION	JWH	CMS
0	07.19.2023	PERMIT SUBMISSION	JWH	CMS

ISSUE / REVISIONS

DETAILS

WAWA - RANSON, WEST VIRGINIA
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

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PITTSBURGH, PA 15235
PHONE 724.420.5367

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Williamsport, PA 17701
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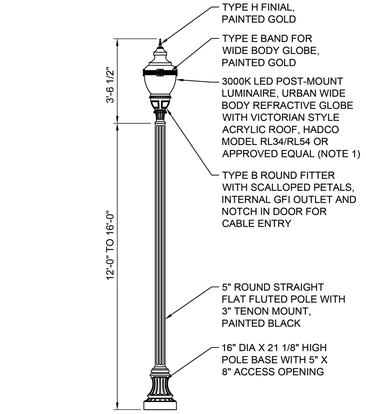
FAX 570.323.9902 • www.larsondesigngroup.com

SHEET NO.: D9.6

PROJECT NO.: 11693-041

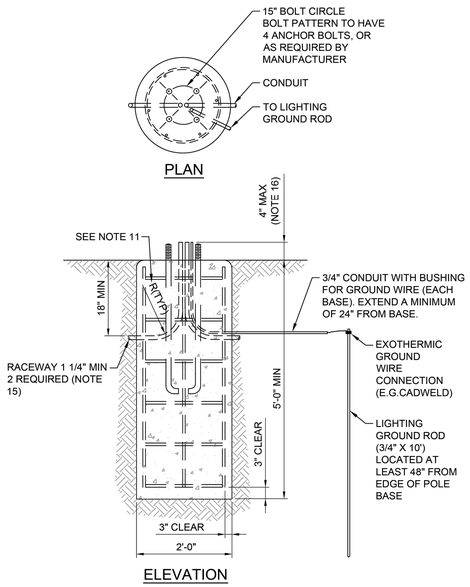


NOTES:

1. PROVIDE TYPE III (RL34) OR TYPE V (RL54) LIGHT DISTRIBUTION AS SHOWN ON PLANS. PROVIDE TYPE V DISTRIBUTION WHERE REQUIRED TO PREVENT LIGHT SPILLOVER ONTO ADJACENT RESIDENTIAL USES.
2. SEE DETAIL LT-04 FOR LIGHT POLE FOUNDATION. DIRECT BURIAL NOT ALLOWED.
3. PROVIDE FIELD ADJUSTMENT SWITCH TO ALLOW THE CITY TO ADJUST ILLUMINATION LEVEL AFTER INSTALLATION. WHERE NEW LIGHTING IS TO BE INSTALLED ON A SEPARATE CIRCUIT, FIELD ADJUSTMENT SWITCH MAY BE LOCATED ON LIGHTING CONTROLLER. WHERE NEW LIGHTING IS TO BE ADDED TO AN EXISTING CIRCUIT, PROVIDE A FIELD ADJUSTMENT SWITCH ON EACH NEW POLE.

NOT TO SCALE

RANSON	COMMERCIAL POST-TOP STREETLIGHT CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		LT-02	1 OF 1	12/1/2023

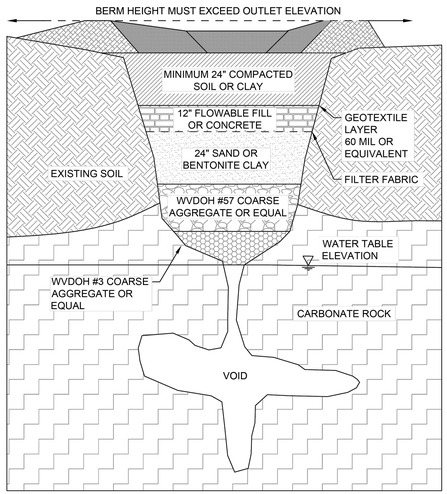


NOTES:

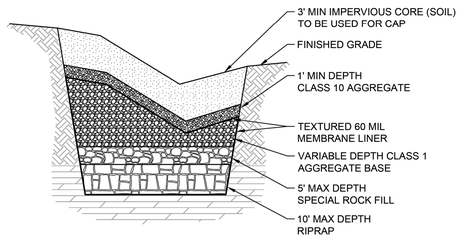
1. ALL EXPOSED CONCRETE SHALL HAVE A NORMAL FINISH.
2. ALL OUTSIDE CONCRETE CORNERS AND EDGES SHALL HAVE A 3/4 " CHAMFER.
3. CONCRETE TO BE RODDED OR VIBRATED WHILE POURING.
4. ALL CONCRETE SHALL BE WVDOH CLASS "B".
5. REINFORCING STEEL SHALL NOT BE CLOSER THAN 3" TO THE OUTSIDE SURFACE OF THE FOOTING AND SHALL BE TIED OR WELDED.
6. VERTICAL BARS SHALL BE TIED WITH #4 HOOP BARS AT 1'-0" ON CENTER. THE #4 HOOP BARS SHALL HAVE A 1'-0" MINIMUM LAP.
7. ALL FOOTINGS IN SIDEWALKS SHALL BE FINISHED FLUSH WITH THE EXISTING SIDEWALKS, UNLESS OTHERWISE SPECIFIED BY THE PROJECT ENGINEER.
8. FOOTINGS SHALL BE CIRCULAR IN CROSS-SECTION.
9. WITH PERMISSION OF THE PROJECT ENGINEER, THE DEPTH OF THE FOOTING MAY BE REDUCED ONE (1) FOOT WHEN THE FOOTING IS PLACED IN A CONCRETE OR ASPHALTIC CONCRETE SIDEWALK OR PAVED SURFACE. THE FOOTINGS MAY BE REDUCED BY ONE (1) FOOT WHEN THE FOOTING IS IN ROCK.
10. NO FORMS MAY EXTEND TO A DEPTH GREATER THAN 12" UNLESS APPROVAL IS GRANTED BY THE CITY ENGINEER.
11. THE RADIUS (R) OF THE CURVE OF THE INNER EDGE OF ANY BEND SHALL NOT BE LESS THAN THE SIZE SPECIFIED IN THE NATIONAL ELECTRICAL CODE.
12. GROUNDING:
    A. THE CONTRACTOR IS TO ENGAGE A QUALIFIED TESTING AND INSPECTION AGENCY TO PERFORM FIELD TESTS AND INSPECTIONS
    B. AFTER INSTALLING GROUNDING SYSTEM BUT BEFORE PERMANENT ELECTRICAL CIRCUITS HAVE BEEN ENERGIZED, TEST FOR COMPLIANCE WITH THE FOLLOWING REQUIREMENTS:
    (1) TEST COMPLETED GROUNDING SYSTEM AT EACH POLE AND AT SERVICE DISCONNECT ENCLOSURE.
    (2) MEASURE GROUND RESISTANCE NOT LESS THAN TWO FULL DAYS AFTER THE LAST TRACE OF PRECIPITATION AND WITHOUT SOIL BEING MOISTENED BY ANY MEANS OTHER THAN NATURAL DRAINAGE OR SEEPAGE AND WITHOUT CHEMICAL TREATMENT OR OTHER ARTIFICIAL MEANS OF REDUCING NATURAL GROUND RESISTANCE.
    (3) PERFORM THE TEST BY THE FALL-OF-POTENTIAL METHOD ACCORDING TO IEEE STANDARD 81.
    C. INSTALL ADDITIONAL GROUND RODS AS REQUIRED UNTIL MEASURED GROUND RESISTANCE IS 5 OHMS OR LESS.
    D. GROUND RODS ARE TO BE DRIVEN TO A DEPTH OF 2 INCHES BELOW FINISHED GRADE TO TOP OF ROD AND SEPARATED BY A MINIMUM DISTANCE OF 8 FEET.
    E. INTERCONNECT GROUND RODS WITH A #2 AWG BARE, STRANDED COPPER CONDUCTOR BURIED AT 18 INCHES BELOW GRADE.
13. INSTALL POLE, ANCHOR BOLTS, LEVELING SYSTEM, GROUNDING, AND WIRING PER MANUFACTURER SPECIFICATIONS.
14. SEE DETAIL LT-01 FOR CITY STANDARD POST-TOP LIGHT POLE.
15. IF ONE IS SPARE CONDUIT, AN ARROW SHALL BE ETCHED ON THE TOP OF THE BASE TO SHOW THE LOCATION/ DIRECTION OF THE SPARE CONDUIT.
16. USE 3" MAX WHEN USING TRANSFORMER BASES.

NOT TO SCALE

RANSON	POST TOP STREETLIGHT FOUNDATION - 16' MAX POLE HEIGHT CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		LT-04	1 OF 1	12/1/2023



RANSON	SINKHOLE REPAIR DETAIL CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		MSC-02	1 OF 1	12/1/2023



NOTES:

1. PRIOR TO ANY SINKHOLE EXCAVATION OR WORK TO OR AROUND THE SINKHOLE THE CONTRACTOR SHALL CONTACT CITY OF RANSON PUBLIC WORKS A MINIMUM OF 72 HOURS PRIOR TO THE SCHEDULED WORK.
2. THE SINKHOLE SHALL BE TREATED BASED ON THE EXISTING FIELD CONDITIONS OF THE SITE AT THE TIME OF CONSTRUCTION.
3. CONSECUTIVE LAYERS OF AGGREGATE AS SHOWN IN THE DETAIL DRAWINGS SHALL BE PLACED IN SUCH A MANNER AS TO PREVENT MIGRATION OF SMALLER AGGREGATES INTO THE VOIDS IN THE LARGER AGGREGATES.
4. ALL EXCAVATION REQUIRED TO CONSTRUCT THE FILTER IN THE SINKHOLE, AS PER THE DETAIL DRAWINGS, SHALL BE INCIDENTAL TO THE IMPERVIOUS CORE PAID PER SQ FOOT.
5. THE BOTTOM LAYER OF RIPRAP, AS SPECIFIED IN THE DETAIL DRAWINGS, SHALL BE TO THE SIZE AND DIMENSIONS AS DETERMINED BY THE ENGINEER UPON REVIEW OF THE EXISTING FIELD CONDITIONS OF THE SINKHOLE TO BE REPAIRED.
6. ALL EROSION AND SEDIMENT CONTROL AROUND THE AREA OF THE SINKHOLE SHALL CONFORM TO THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES MANUAL LATEST EDITION. SEED AND MULCH THE AREA UPON COMPLETION AND ACCEPTANCE OF THE WORK.
7. THE IMPERVIOUS CORE SHALL OVERLAP A MINIMUM OF 3' BETWEEN THE CLASS I AGGREGATE AND THE CLASS 10 AGGREGATE BASE COURSE LAYER.
8. ALL WORK CONCERNING SINKHOLES SHALL BE CONSTRUCTED TO THE SATISFACTION OF THE CITY ENGINEER OR RANSON PUBLIC WORKS DEPARTMENT PERSONNEL.

NOT TO SCALE

RANSON	SINKHOLE REPAIR - WVDOH STANDARD CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		MSC-01	1 OF 1	12/1/2023

CHRISTOPHER MICHAEL MCAFEE
REGISTERED
20340
STATE OF
WEST VIRGINIA
PROFESSIONAL ENGINEER
3/4/24

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4	03.13.2024	CITY OF RANSON RESUBMISSION	JWH	CMS
3	02.06.2024	CITY OF RANSON RESUBMISSION	JWH	CMS
2	10.02.2023	CITY OF RANSON RESUBMISSION	JWH	CMS
1	09.29.2023	PERMIT RESUBMISSION	JWH	CMS
0	07.19.2023	PERMIT SUBMISSION	JWH	CMS

DETAILS

WAWA – RANSON, WEST VIRGINIA
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

PTV 1132, LLC
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PHONE 570.323.6603 TOLL FREE 877.323.6603
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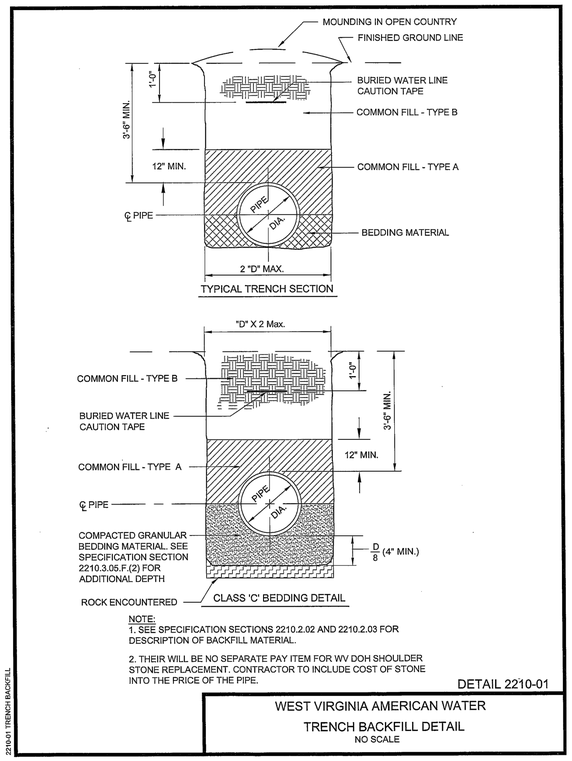
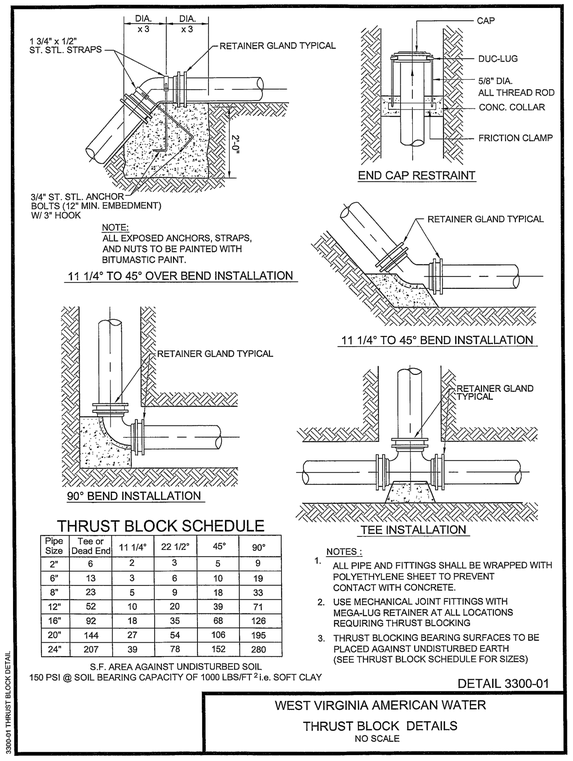
SHEET NO.: D9.7

PROJECT NO.: 11693–041

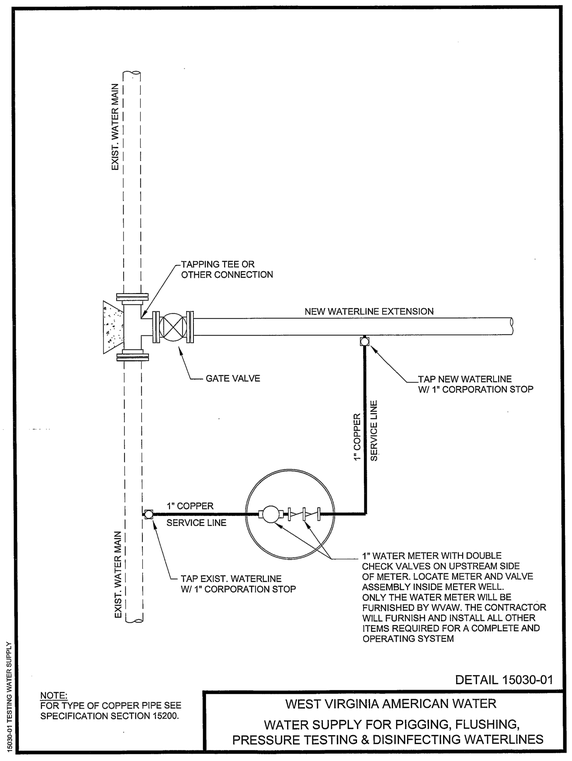


2210-01 TRENCH BACKFILL

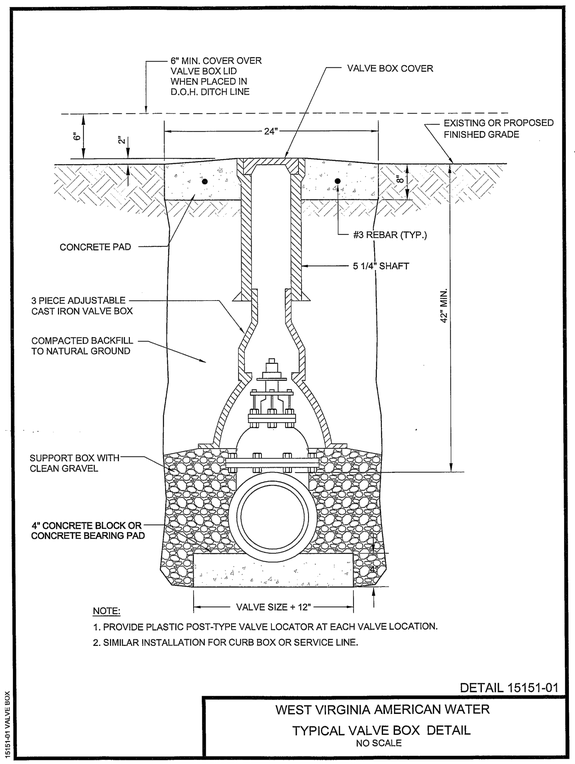


Pipe Size	Tee or Dead End	11 1/4°	22 1/2°	45°	90°
2"	6	2	3	5	9
6"	13	3	6	10	19
8"	23	5	9	18	33
12"	52	10	20	39	71
16"	92	18	35	68	126
20"	144	27	54	106	195
24"	207	39	78	152	280

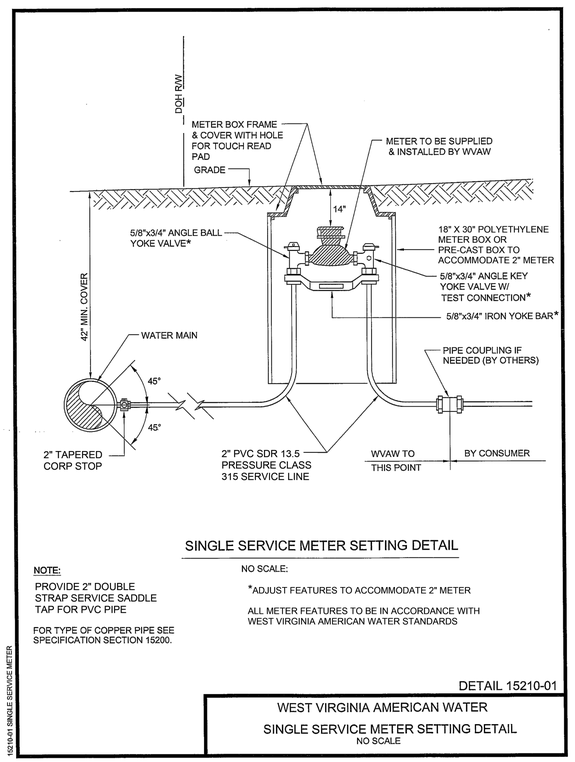
3300-01 THRUST BLOCK DETAIL



15030-01 TESTING WATER SUPPLY



15151-01 VALVE BOX



15210-01 SINGLE SERVICE METER

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2	09.29.2023	CITY OF RANSON ACCEPT RESUBMISSIONS	JWH	CMS
1	09.29.2023	PERMIT RESUBMISSION	JWH	CMS
0	07.19.2023	PERMIT SUBMISSION	JWH	CMS

ISSUE / REVISIONS

WEST VIRGINIA AMERICAN WATER DETAILS
WAWA – RANSON, WEST VIRGINIA
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

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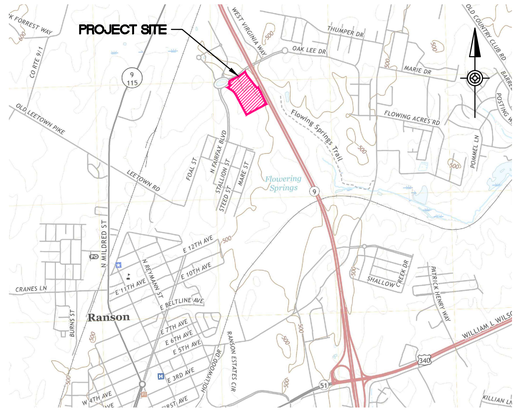
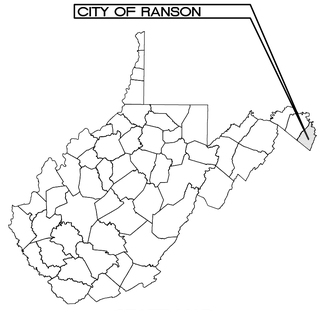
SHEET NO.: D9.8
PROJECT NO.: 11693–041

EROSION AND SEDIMENT CONTROL PLAN
FOR
WAWA CONVENIENCE STORE – RANSON
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA



PROJECT LOCATION MAP
CHARLES TOWN USGS QUAD
SCALE: AS SHOWN

2000 0 2000 4000 FEET
SCALE



STATE MAP
SCALE: NOT TO SCALE

GENERAL NOTES

1. RESPONSIBLE PARTY:
   PTV 1132 LLC
   400 PENN CENTER BLVD, BLDG. 4 STE. 1000
   PITTSBURGH, PENNSYLVANIA 15235

2. SURVEYOR:
   LARSON DESIGN GROUP
   ATTN: CHRISTOPHER SHEAFFER, PE
   1000 COMMERCE PARK DRIVE, SUITE 201
   WILLIAMSPORT, PA 17701
   PHONE: 570.374.5700
   EMAIL: csheaffer@larsondesigngroup.com

3. COUNTY: JEFFERSON COUNTY
   MUNICIPALITY: CITY OF RANSON
   STATE: WEST VIRGINIA

4. PROJECT LOCATION:
   LOCATED ON THE SOUTHWEST CORNER OF THE INTERSECTION OF NORTH FAIRFAX BOULEVARD AND SR–9 IN RANSON, WV.

5. PROJECT NARRATIVE:
   THE PURPOSE OF THIS PROJECT IS TO CONSTRUCT A 5,915 SQUARE–FOOT COMMERCIAL CONVENIENCE STORE, ALONG WITH PARKING, FUELING AND OTHER AMENITIES. THE CONSTRUCTION PROCESS TAKING PLACE WILL INCLUDE GRADING, PAVEMENT INSTALLATIONS, LANDSCAPING, STORMWATER MANAGEMENT, AND MUNICIPAL CONSTRUCTION ACTIVITIES.

6. SOURCE OF TITLE:
   INSTRUMENT NUMBER 202000001346
   DEED BOOK 1235 PAGE 707
   TAX PARCEL: 19–8–8–1–4

7. NO EXISTING WETLANDS HAVE BEEN IDENTIFIED BY WETLAND DELINEATION DATED JUNE 2023.

8. A PORTION OF THE SITE IS LOCATED WITHIN THE FLOOD ZONE AE WITH A BASE FLOOD ELEVATION (B.F.E.) OF 490' PER THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD MAPPING ACCORDING TO COMMUNITY PANEL NUMBER 54037C0130E (EFFECTIVE DATE DECEMBER 18, 2009). A PORTION OF THE SITE IS DETERMINED TO BE WITHIN THE 0.2% CHANCE OF ANNUAL FLOODING. A PORTION OF THE SITE IS ALSO AFFECTED BY LOMR 11–03–1484P EFFECTIVE MAY 23, 2012.

9. THE PROJECT WILL BE SERVED BY PUBLIC SANITARY SEWER AND PUBLIC WATER.

10. LIMIT OF DISTURBANCE = 15.50 AND PERMIT BOUNDARY = 16.20 ACRES

LIST OF DRAWINGS

ES0.0	COVER SHEET
ES1.0	SEDIMENT CONTROL PLAN – OVERALL
ES1.1	EROSION AND SEDIMENT CONTROL PLAN – NORTH
ES1.2	EROSION AND SEDIMENT CONTROL PLAN – SOUTH
ES2.0	EROSION AND SEDIMENT CONTROL PLAN NOTES AND DETAILS
ES3.0	EROSION AND SEDIMENT CONTROL PLAN DETAILS
ES4.0	EROSION AND SEDIMENT CONTROL PLAN CROSS SECTION
DA.1	PRE–DEVELOPMENT DRAINAGE AREAS
DA.2	POST–DEVELOPMENT DRAINAGE AREAS
DA.3	POST–DEVELOPMENT INDIVIDUAL DRAINAGE AREAS
DA.4	POST–DEVELOPMENT BMP AREAS

CHRISTOPHER MICHAEL SHEAFFER
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PROFESSIONAL ENGINEER
3/14/24

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1	09.29.2023	PERMIT RESUBMISSION	JWH	CMS
0	07.19.2023	PERMIT SUBMISSION	JWH	CMS

COMMENTS

COVER SHEET

WAWA – RANSON, WEST VIRGINIA
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

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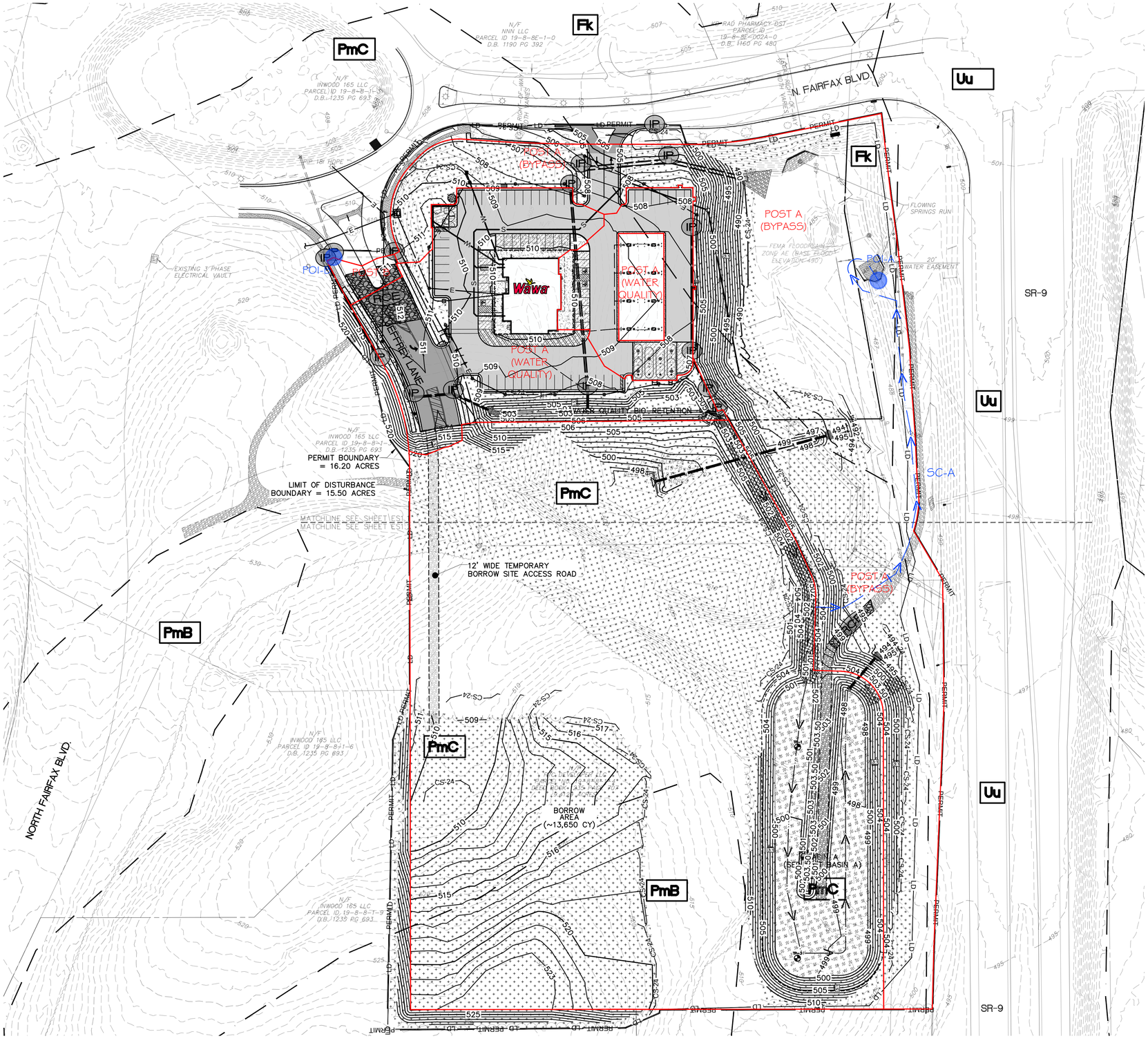
SHEET NO.:
ES0.0

PROJECT NO.: 11693–041



LEGEND

	EXISTING	PROPOSED
FEATURES TEXT	*Feature text*	FEATURES TEXT
PROPERTY LINE		
RIGHT-OF-WAY LINE		
EASEMENT LINE		
CONTOUR LINE	100	100
CENTER LINE OF ROAD		
BUILDING SETBACK		
BUILDING LINE		
FENCE LINE	x	X
EDGE OF PAVEMENT		
GRAVEL		
CONCRETE CURB		
CONCRETE/SIDEWALK		
SIGN		
BENCHMARK		
CHANNEL		
DRAINAGE LINE, MANHOLE & CB	MH	D
SANITARY SEWER & MANHOLE	MH S	S
WATER MAIN & VALVE	WV W	WV W
GAS MAIN & VALVE	GV G	GV G
UNDERGROUND ELECTRIC	UE	E
OVERHEAD UTILITIES & POLE	OH	OH
GUIDE RAIL		
12" COMPOST FILTER SOCK		CS-12
24" COMPOST FILTER SOCK		CS-24
SILT FENCE		SF
LIMIT OF DISTURBANCE		LD
SOILS BOUNDARY		
SOIL TYPE		HhC2
DRAINAGE DIVIDES		
TIME OF CONCENTRATION		
ROCK CONSTRUCTION ENTRANCE		RCE
LEVEL SPREADER		LS
INLET PROTECTION		IP
AREA OF MINIMUM COMPACTION		
SEED AND MULCH		
LOW-MOW SEED MIX FOR DRY STORMWATER BASINS		
EROSION AND SEDIMENT CONTROL MATTING		
INFILTRATION TEST LOCATION		IP-1

NOTE:
1. ON SITE MATERIAL MAY BE UTILIZED FOR FILL ACTIVITES AND SHOULD MEET THE REQUIREMENTS OF THE GEOTECHNICAL REPORT PREPARED BY HILLIS-CARNES ENGINEER ASSOCIATES, DATED SEPTEMBER 5, 2023. ANY ITEMS NOT COVERED IN THE REPORT SHOULD BE COORDINATED WITH A QUALIFIED PROFESSIONAL.
2. LOW-MOW SEED MIX FOR DRY STORMWATER BASINS:
   - 50% CREEPING RED FESCUE
   - 25% HARD FESCUE
   - 10% CHEWINGS FESCUE
   - 10% KENTUCKY BLUEGRASS
   - 5% WHITE CLOVER

CHRISTOPHER MICHAEL MCARTHUR — REGISTERED — 20340 — STATE OF — PROFESSIONAL ENGINEER — 3/14/24

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1	09.29.2023	PERMIT RESUBMISSION	JWH	CMS
0	07.19.2023	PERMIT SUBMISSION	JWH	CMS

LDG

EROSION AND SEDIMENT CONTROL PLAN - OVERALL

WAWA - RANSON, WEST VIRGINIA

CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

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SHEET NO.: ES1.0

PROJECT NO.: 11693-041

NOTE:
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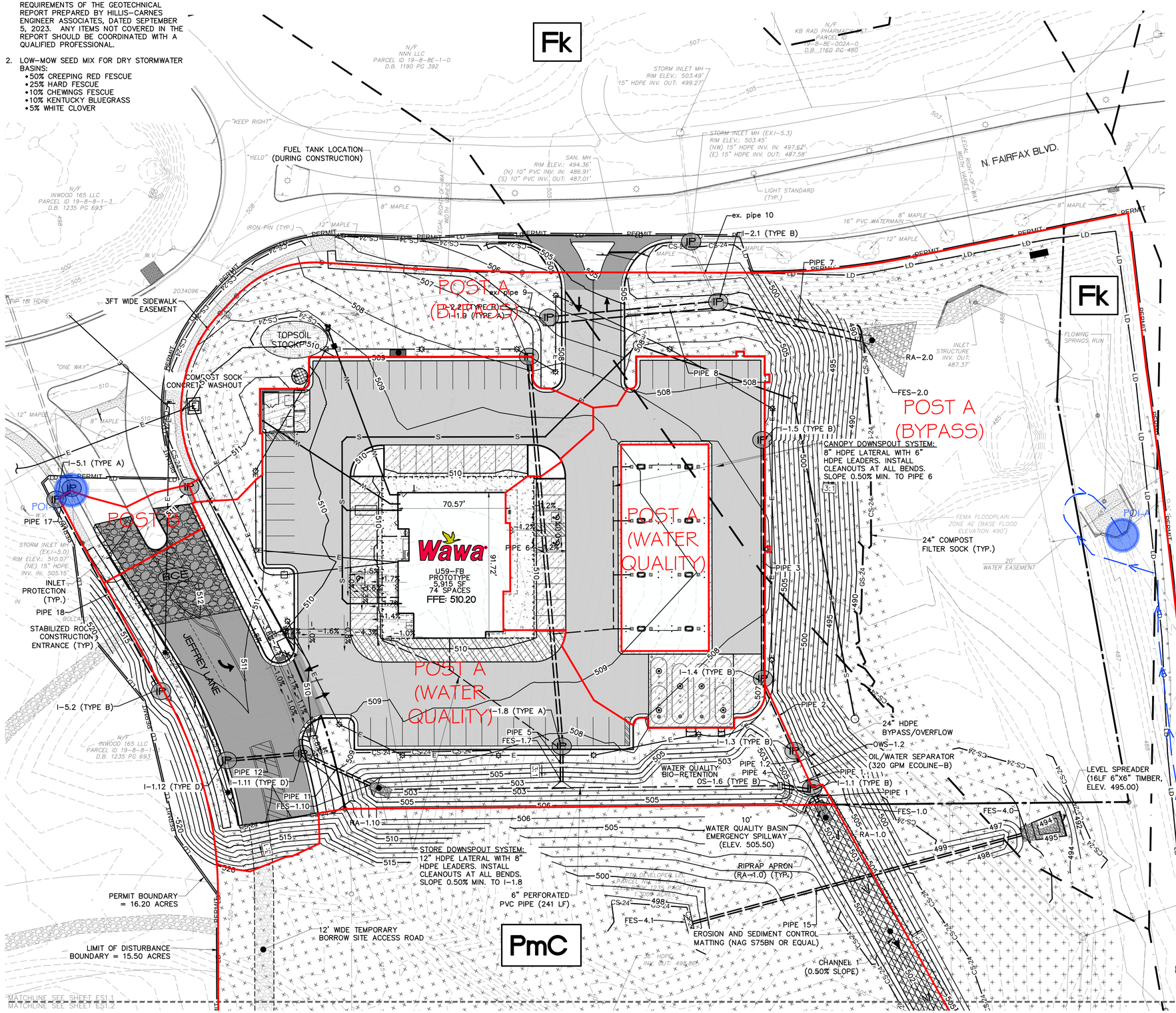

LEGEND

	EXISTING	PROPOSED
FEATURES TEXT	*Feature text*	FEATURES TEXT
PROPERTY LINE		
RIGHT-OF-WAY LINE		
EASEMENT LINE		
CONTOUR LINE	100	100
CENTER LINE OF ROAD		
BUILDING SETBACK		
BUILDING LINE		
FENCE LINE	x	X
EDGE OF PAVEMENT		
GRAVEL		
CONCRETE CURB		
CONCRETE/SIDEWALK		
SIGN		
BENCHMARK		
CHANNEL		
DRAINAGE LINE, MANHOLE & CB	MH	D
SANITARY SEWER & MANHOLE	MH S	S
WATER MAIN & VALVE	WV W	WV W
GAS MAIN & VALVE	GV G	GV G
UNDERGROUND ELECTRIC	UE	E
OVERHEAD UTILITIES & POLE	OH	OH
GUIDE RAIL		
12" COMPOST FILTER SOCK		CS-12
24" COMPOST FILTER SOCK		CS-24
SILT FENCE		SF
LIMIT OF DISTURBANCE		LD
SOILS BOUNDARY		HhC2
SOIL TYPE		
DRAINAGE DIVIDES		
TIME OF CONCENTRATION		RCE
ROCK CONSTRUCTION ENTRANCE		LS
LEVEL SPREADER		IP
INLET PROTECTION		
AREA OF MINIMUM COMPACTION		
SEED AND MULCH		
EROSION AND SEDIMENT CONTROL MATTING		
INFILTRATION TEST LOCATION		TP-1

CHRISTOPHER MICHAEL MCAFEE — REGISTERED — 20340 — STATE OF PENNSYLVANIA — PROFESSIONAL ENGINEER — 3/31/24

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NO	DATE	ISSUE / REVISIONS	BY	CHK'D
0	07.19.2023	PERMIT SUBMISSION	JWH	CMS
1	09.29.2023	PERMIT RESUBMISSION	JWH	CMS
2	10.06.2023	CITY OF RANSON RESUBMISSION	JWH	CMS
3	10.27.2023	CITY OF RANSON RESUBMISSION	JWH	CMS
4	03.13.2024	CITY OF RANSON RESUBMISSION	JWH	CMS

EROSION AND SEDIMENT CONTROL PLAN - NORTH

WAWA - RANSON, WEST VIRGINIA
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

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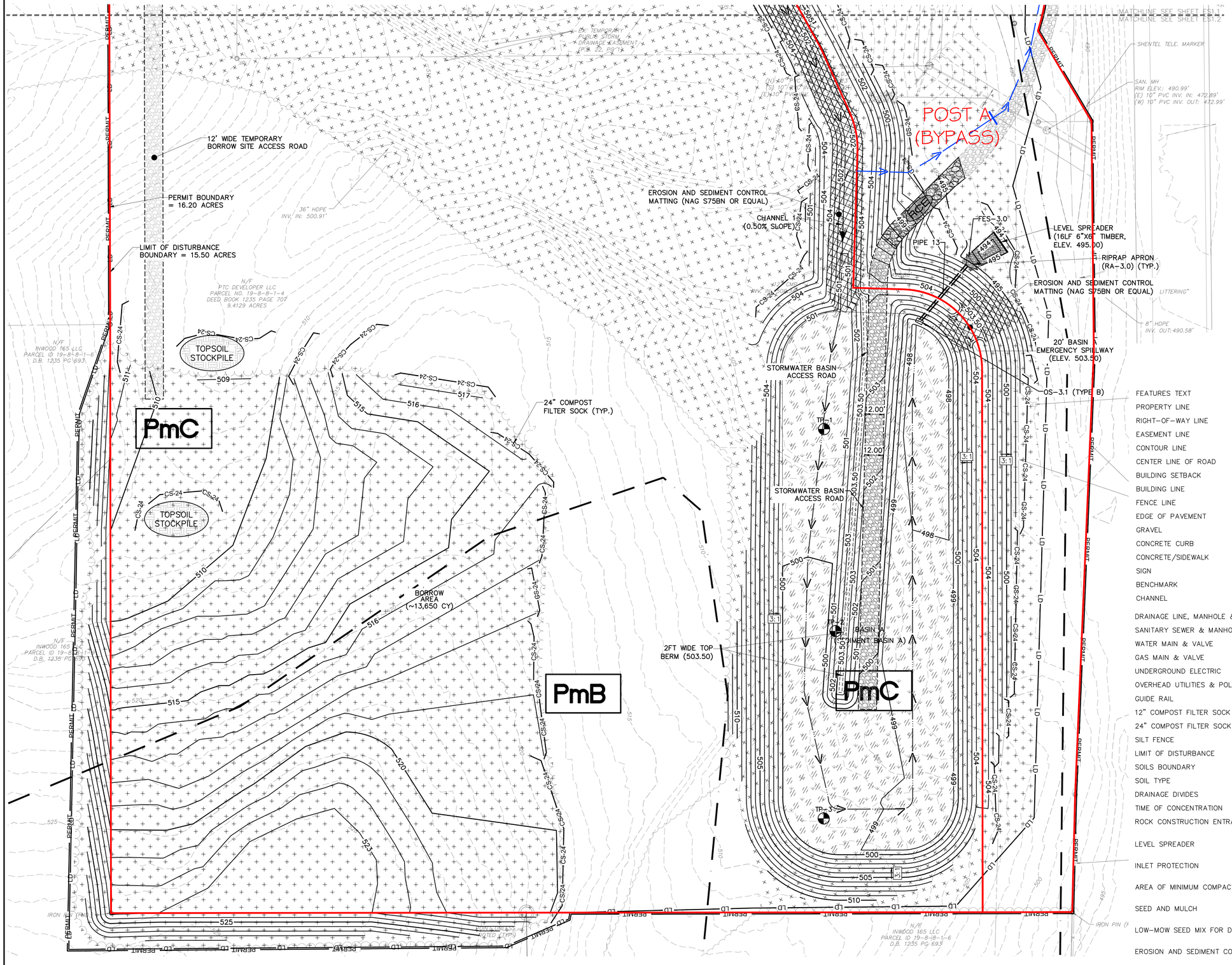
SHEET NO.: ES1.1

PROJECT NO.: 11693-041



NOTE:

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2. LOW-MOW SEED MIX FOR DRY STORMWATER BASINS:
   - 50% CREEPING RED FESCUE
   - 25% HARD FESCUE
   - 10% CHEWINGS FESCUE
   - 10% KENTUCKY BLUEGRASS
   - 5% WHITE CLOVER

30 0 30 60 FEET
SCALE

LEGEND

	EXISTING	PROPOSED
	Feature text	FEATURES TEXT
FEATURES TEXT		
PROPERTY LINE		
RIGHT-OF-WAY LINE		
EASEMENT LINE		
CONTOUR LINE	*100*	100
CENTER LINE OF ROAD		
BUILDING SETBACK		
BUILDING LINE		
FENCE LINE	x	X
EDGE OF PAVEMENT		
GRAVEL		
CONCRETE CURB		
CONCRETE/SIDEWALK		
SIGN		
BENCHMARK		
CHANNEL		
DRAINAGE LINE, MANHOLE & CB	MH	D
SANITARY SEWER & MANHOLE	MH	S
WATER MAIN & VALVE	WV	WV W
GAS MAIN & VALVE	GV	GV G
UNDERGROUND ELECTRIC	UE	E
OVERHEAD UTILITIES & POLE	OH	OH
GUIDE RAIL		
12" COMPOST FILTER SOCK		CS-12
24" COMPOST FILTER SOCK		CS-24
SILT FENCE		SF
LIMIT OF DISTURBANCE		LD
SOILS BOUNDARY		
SOIL TYPE		HhC2
DRAINAGE DIVIDES		
TIME OF CONCENTRATION		
ROCK CONSTRUCTION ENTRANCE		RCE
LEVEL SPREADER		LS
INLET PROTECTION		IP
AREA OF MINIMUM COMPACTION		
SEED AND MULCH		
LOW-MOW SEED MIX FOR DRY STORMWATER BASINS		
EROSION AND SEDIMENT CONTROL MATTING		
INFILTRATION TEST LOCATION		TP-1

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STATE OF
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PROFESSIONAL ENGINEER
3/14/24

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1	07.19.2023	PERMIT SUBMISSION	JWH CWS
0		COMMENTS	BY CHKD

EROSION AND SEDIMENT CONTROL PLAN - SOUTH

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SHEET NO.: ES1.2

PROJECT NO.: 11693-041

SOIL EROSION AND SEDIMENTATION CONTROL NOTES

1. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED.
2. BEFORE INITIATING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE WVDEP.
3. AT LEAST 2 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE WEST VIRGINIA ONE CALL SYSTEM INCORPORATED AT 1-800-245-4848 (OR 811) FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED BY THE OWNER.
5. TOPSOIL STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SIDE SLOPES MUST BE 2:1 OR FLATTER.
6. IMMEDIATELY UPON IDENTIFYING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE CONTRACTOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
7. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG OR EQUIVALENT SEDIMENT REMOVAL FACILITY, OVER UNDISTURBED VEGETATED AREAS. NO DISCHARGE OF SILT, MUD OR OTHER POLLUTANTS DIRECTLY INTO ANY WATERCOURSE WHEN USING PUMPS DURING CONSTRUCTION WILL BE PERMITTED.
8. ALL CHANNELS MUST BE KEPT FREE OF OBSTRUCTIONS SUCH AS FILL GROUND, FALLEN LEAVES & WOODY DEBRIS, ACCUMULATED SEDIMENT, AND CONSTRUCTION MATERIALS/WASTES. CHANNELS SHOULD BE KEPT MOWED AND/OR FREE OF ALL WEEDY, BRUSHY OR WOODY GROWTH. ANY UNDERGROUND UTILITIES RUNNING ACROSS/THROUGH THE CHANNEL(S) SHALL BE IMMEDIATELY BACKFILLED AND THE CHANNEL(S) REPAIRED AND STABILIZED PER THE VEGETATED/RIPRAP CHANNEL DETAIL.
9. VEGETATED CHANNELS SHALL BE CONSTRUCTED FREE OF ROCKS, TREE ROOTS, STUMPS OR OTHER PROJECTIONS THAT WILL IMPEDE NORMAL CHANNEL FLOW AND/OR PREVENT GOOD LINING TO SOIL CONTACT. THE CHANNEL SHALL BE INITIALLY OVER EXCAVATED TO ALLOW FOR THE PLACEMENT OF TOPSOIL.
10. FILL MATERIAL SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES AND OTHER OBJECTIONABLE MATERIALS.
11. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
12. AN EROSION CONTROL BLANKET WILL BE INSTALLED ON ALL DISTURBED SLOPES STEEPER THAN 3:1.
13. SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOOD PLAINS OR DRAINAGE CHANNELS AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.
14. FILL MATERIAL FOR THE EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN MAXIMUM 12" LAYERED LIFTS AT 98% OF THE LABORATORY MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR METHOD (ASTM D1557). CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT FOR ADDITIONAL FILL PLACEMENT REQUIREMENTS.
15. ALL BUILDING MATERIALS AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS. NO BUILDING MATERIALS, WASTES OR UNUSED MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
16. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL OF ANY EXCESS MATERIAL AND MAKE SURE THE SITE(S) RECEIVING THE EXCESS HAS AN APPROVED EROSION AND SEDIMENT CONTROL PLAN THAT MEETS STATE OR FEDERAL REGULATIONS.
17. TOPSOIL SHALL BE REDISTRIBUTED ON ALL DISTURBED AREAS TO BE STABILIZED PRIOR TO SEEDING.
18. TEMPORARY SEEDING AND MULCHING WITHIN 4 DAYS WHEN AREAS WILL NOT BE RE-DISTURBED FOR MORE THAN 14 DAYS..
19. PERMANENT SEEDING AND MULCHING WITHIN 4 DAYS OF REACHING FINAL GRADE.
20. FINAL STABILIZATION WITHIN 4 DAYS AFTER CONSTRUCTION HAS BEEN COMPLETE.
21. AREAS WHERE THE SEED HAS FAILED TO GERMINATE ADEQUATELY (UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70%) WITHIN 30 DAYS AFTER SEEDING AND MULCHING MUST BE RE-SEEEDED IMMEDIATELY, OR AS SOON AS WEATHER CONDITIONS ALLOW
22. ACCORDING TO THE SOILS SURVEY OF JEFFERSON COUNTY, WV. THE SOIL ON SITE IS COMPOSED OF THE FOLLOWING SOILS:
    - v POPLIMENTO SILT LOAM, 8 TO 15 PERCENT (PmC)
    - v FUNKSTOWN SILT LOAM, 0 TO 3 PERCENT (Fk)
    - v POPLIMENTO SILT LOAM, 0 TO 8 PERCENT (PmB)
    - v URBAN LAND-UDORTHENTS, 0 TO 3 PERCENT (Uu)

CONSTRUCTION SEQUENCE

1. FIELD MARKINGS FOR LIMITS OF DISTURBANCE SHOULD BE INSTALLED.
2. INSTALL COMPOST FILTER SOCKS DOWNSLOPE OF SITE AS SHOWN ON THE PLAN.
3. INSTALL ROCK CONSTRUCTION ENTRANCE.
4. CLEARING AND GRUBING WILL CONSIST OF REMOVING ALL BRUSH, TREES, AND VEGETATION FROM THE PROJECT SITE, BUT LIMITED TO THE AREAS OF PERIMETER BMPS.
5. STRIP TOPSOIL AND PERFORM ROUGH GRADING. STOCKPILE TOPSOIL AT LOCATIONS SHOWN ON PLANS. INSTALL COMPOST FILTER SOCKS AROUND STOCKPILES. DISTURBED AREAS SUCH AS SLOPES MUST BE STABILIZED AS SOON AS EARTHWORK OCCURS.
6. CONSTRUCT THE SEDIMENT BASIN AND DIRECT RUNOFF TO THE AREA FOR TREATMENT WITH DIVERSION CHANNELS AND EVENTUALLY THE CONVEYANCE SYSTEM ONCE SUFFICIENT MATERIAL IS PLACED FOR POSITIVE GRADES.
7. PERFORM EARTHWORK AND GRADING, IN A MANNER TO MINIMIZE DUST, IN AREAS OF BUILDING FOUNDATION, PROPOSED PAVEMENT AND PARKING LOT TO ACHIEVE REQUIRED SUBGRADES.
8. INSTALL CONCRETE WASHOUT PRIOR TO ANY CONCRETE CONSTRUCTION ACTIVITIES.
9. BEGIN BUILDING FOUNDATION/RETAINING WALL ERECTION, AND UTILITY SERVICE CONNECTIONS. MAINTAIN SHEET FLOW AND PREVENT CONCENTRATION FLOWS FROM LEAVING THE SITE.
10. STABILIZE DRIVEWAYS, PARKING LOT AND WALKWAY AREAS WITH SUBBASE.
11. INSTALL CONVEYANCE SYSTEM INCLUDING CHANNELS AND STORMWATER PIPE, WORKING DOWNSTREAM TO UPSTREAM. INSTALL EROSION CONTROL MATTING IN CHANNEL 1 AND INLET PROTECTION AS INLETS ARE SET. DO NOT WAIT FOR ALL FEATURES TO BE COMPLETED.
12. CONSTRUCT SIDEWALK, PAVEMENT, AND OTHER SITE AMENITIES. PROPOSED DRIVEWAY WORK TO BE PERFORMED WHEN THE ROCK CONSTRUCTION ENTRANCE CAN BE REMOVED, FOLLOWED BY FINAL PAVING OF PROPOSED BITUMINOUS AREAS.
13. COMPLETE FINAL GRADING AND SEEDING ON REAR PORTION OF SITE.
14. IMMEDIATELY STABILIZE DISTURBED AREAS UPON TEMPORARY CESSATION OF WORK, FOUR (4) DAYS OR MORE, AS SOON AS ANY GRADED AREA REACHES FINAL GRADE. IT IS NOT ACCEPTABLE TO WAIT FOR AN ENTIRE PHASE TO BE FINAL GRADED BEFORE SEEDING AND MULCHING TAKES PLACE.
15. UPON ACHIEVING FINAL GRADES, ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED IN ACCORDANCE WITH THE FINAL CONDITIONS.
16. REMOVE ALL TEMPORARY BMPS STILL REMAINING ON THE PROJECT SITE. CLEAN ANY ACCUMULATED SEDIMENT FROM BASIN, CHANNELS, CATCH BASINS AND CULVERTS. ALL EROSION CONTROL MATTING SHALL REMAIN IN PLACE.

MAINTENANCE PROGRAM

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES.
2. THE E&S MEASURES SHALL BE INSPECTED, AT MINIMUM, ONCE EVERY 4 CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT OF 0.25 INCHES OR GREATER OF RAINFALL. ANY REQUIRED REPAIRS OR MAINTENANCE SHALL BE MADE IMMEDIATELY.
3. THE CONTRACTOR SHALL INSPECT ALL PAVED ROADS WITHIN THE PROJECT LIMITS AND SITE ACCESS. SWEEP/CLEAN AS NEEDED.
4. THE CONTRACTOR SHALL INSTALL INLET PROTECTION AS SOON AS NEW INLETS ARE BROUGHT ONLINE.
5. THE CONTRACTOR IS RESPONSIBLE FOR INSPECTING, MAINTAINING, AND CLEANING BOTH THE EXISTING AND PROPOSED STORMWATER SYSTEM FOR THE ENTIRE PROJECT AREA.
6. A LOG SHOWING DATES THAT E&S CONTROLS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION. THE FOLLOWING ARE SOME TYPICAL MAINTENANCE ITEMS:

SEDIMENT BARRIERS
- THE SEDIMENT BARRIER INSTALLATION SHOULD BE INSPECTED AS SPECIFIED AND ANY NECESSARY REPAIRS WILL BE MADE IMMEDIATELY.
- ACCUMULATED SEDIMENTS WILL BE REMOVED AS REQUIRED TO KEEP THE BMP FUNCTIONAL. IN ALL CASES REMOVE DEPOSITS WHERE ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE BMP.
- ALL UNDER CUTTING OR EROSION OF THE TOE ANCHOR WILL BE REPAIRED IMMEDIATELY WITH COMPACTED BACKFILL MATERIALS.
- ADHERE TO ANY MANUFACTURER'S RECOMMENDATIONS FOR REPLACING THE PRODUCT DUE TO WEATHERING.
- OVERTOPPING SHALL BE REPAIRED IMMEDIATELY BY REMOVING THE DAMAGED SECTION AND REPLACING IT WITH A ROCK FILTER OUTLET.

PUMPED WATER FILTER BAG
- FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.
- ACCUMULATED SEDIMENTS WILL BE REMOVED AS REQUIRED TO KEEP THE BMP FUNCTIONAL. IN ALL CASES REMOVE DEPOSITS WHERE ACCUMULATIONS REACH 1/2 THE BAG DEPTH/CAPACITY.

INLET PROTECTION
- THE INLET PROTECTION SHOULD BE INSPECTED AS SPECIFIED AND ANY NECESSARY REPAIRS WILL BE MADE IMMEDIATELY.
- ACCUMULATED SEDIMENTS WILL BE REMOVED AS REQUIRED TO KEEP THE BMP FUNCTIONAL. IN ALL CASES REMOVE DEPOSITS WHERE ACCUMULATIONS REACH 1/2 THE DESIGN DEPTH OF THE TRAP.
- INLET PROTECTION SHALL REMAIN IN PLACE AND OPERATIONAL UNTIL DRAINAGE AREA IS COMPLETELY STABILIZED. IMMEDIATELY STABILIZE THE AREA DISTURBED BY THE INSTALLATION AND REMOVAL OF THE PRACTICE.

EROSION AND SEDIMENT CONTROL BLANKET
- DURING THE INITIAL PERIOD AFTER INSTALLATION INSPECT AS SPECIFIED. BASIC MONITORING SHOULD CONSIST OF VISUAL INSPECTIONS TO DETERMINE MAT INTEGRITY AND ATTACHMENT PERFORMANCE.
- RILL DEVELOPMENT BENEATH THE MAT OR EDGE LIFTING IS EVIDENCE OF INADEQUATE ATTACHMENT.
- UNTIL THE VEGETATION IS FULLY ESTABLISHED, THE GROUND SURFACE SHOULD BE INSPECTED FOR SIGNS OF RILL OR GULLY EROSION BELOW THE MATTING.
- ANY SIGNS OF EROSION, TEARING OF THE MATTING, OR AREAS WHERE THE MATTING IS NO LONGER ANCHORED FIRMLY TO THE GROUND SHOULD BE REPAIRED.
- REPAIR ANY DAMAGED AREAS IMMEDIATELY BY RESTORING SOIL TO FINISHED GRADE, RE-APPLYING SOIL AMENDMENTS AND SEED, AND REPLACING THE RECPS.
- ADDITIONAL STAKING AND TRENCHING CAN BE EMPLOYED TO CORRECT DEFECTS. RECENTLY PLACED MATS MAY BE REPLACED, BUT ONCE VEGETATION BECOMES ESTABLISHED, REPLACEMENT IS NOT A REASONABLE OPTION UNLESS LARGE FAILURES HAVE OCCURRED.
- IF THE RECPS ARE VEGETATED, THE VEGETATION SHOULD BE WATERED AS NEEDED. GETTING GRASS ESTABLISHED AS QUICKLY AS POSSIBLE IS VERY IMPORTANT.

CONCRETE WASHOUT FACILITY
- ALL CONCRETE WASHOUT FACILITIES SHOULD BE INSPECTED DAILY. DAMAGED OR LEAKING WASHOUTS SHOULD BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY.
- ACCUMULATED MET AERIALS SHOULD BE REMOVED WHEN THEY REACH 75% CAPACITY.
- PLASTIC LINERS SHOULD BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.

SEDIMENT BASIN
- SEDIMENT BASINS SHOULD BE INSPECTED AS SPECIFIED ABOVE.
- DEBRIS SHALL BE REMOVED DISPOSED OF APPROPRIATELY.
- SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED THE CLEAN OUT ELEVATION ON THE STAKE AND TRAP SHALL BE RESTORED TO ITS ORIGINAL DIMENSION.
- CHECK EMBANKMENTS, SPILLWAYS, AND OUTLETS FOR EROSION, PIPING AND SETTLEMENT. CLOGGED OR DAMAGED SPILLWAYS AND/OR EMBANKMENTS SHALL BE IMMEDIATELY RESTORED TO THE DESIGN SPECIFICATIONS.
- DISPLACED RIPRAP WITHIN THE SPILLWAY OR OUTLET PROTECTION SHALL BE REPLACED IMMEDIATELY.
- ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISTURBED AREAS INSIDE THE TRAP SHALL BE STABILIZED BEFORE CONVERSION TO A STORMWATER MANAGEMENT FACILITY.

GENERAL MAINTENANCE
- REPAIR, RESEED AND REMULCH ANY AREAS THAT ERODE PRIOR TO FINAL STABILIZATION. FINAL STABILIZATION WILL BE ACHIEVED WHEN THERE IS A UNIFORM VEGETATIVE COVER OF 70% ACROSS THE DISTURBED AREA.
- REMOVAL OF ACCUMULATED SOIL MATERIAL SHALL BE SCHEDULED PERIODICALLY WITHIN THE STORMWATER FACILITY. RESPONSIBILITY FOR THE MAINTENANCE OF THE FACILITIES SHALL REMAIN WITH THE OWNER UNLESS THE FACILITIES ARE DEDICATED TO, AND ACCEPTED BY, THE LOCAL MUNICIPALITY.

ELEVATION FOR WET STORAGE	=	**500.17**	FEET
ELEVATION FOR DRY STORAGE	=	**500.96**	FEET
CLEANOUT ELEVATION STORAGE	=	**499.63**	FEET
RISER PERFORATIONS			
TOTAL AREA OF HOLES	=	0.0726	HOLES (MINIMUM NUMBER OF HOLES) S.F.
DIAMETER OF HOLES	=	1.8	INCHES



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EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

WAWA - RANSON, WEST VIRGINIA
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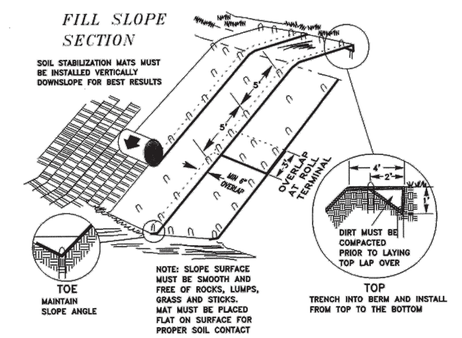
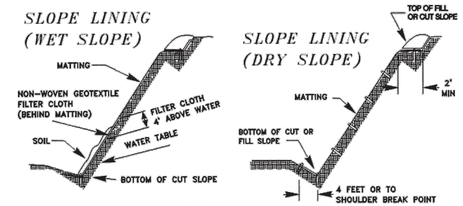
PROJECT NO.: 11693-041

FIGURE 3.13.2

ROLLED EROSION CONTROL PRODUCTS



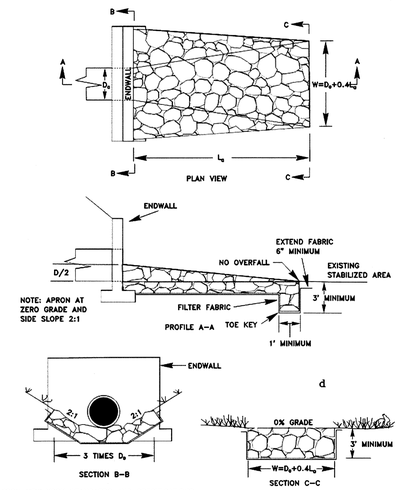


SOURCE: VDOT STANDARDS AND VIRGINIA DCR-DSWC

FIGURE 3.17.3

OUTLET PROTECTION

DISCHARGE TO UNCONFINED SECTION (MINIMUM TAILWATER)

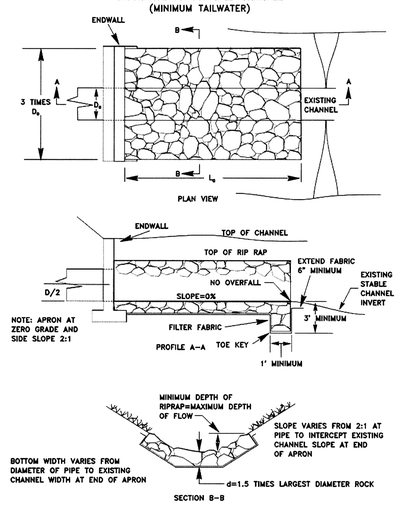


FROM NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL

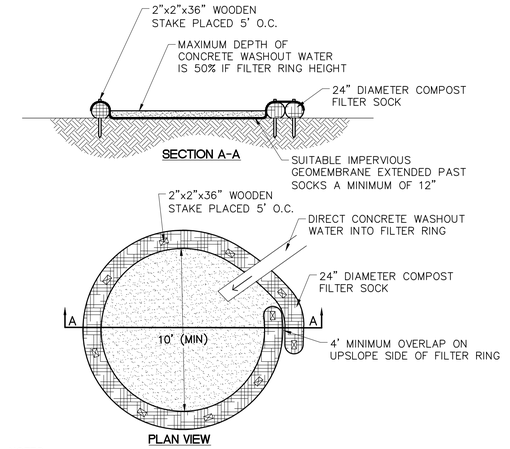
FIGURE 3.17.4

OUTLET PROTECTION

DISCHARGE TO CONFINED CHANNEL (MINIMUM TAILWATER)



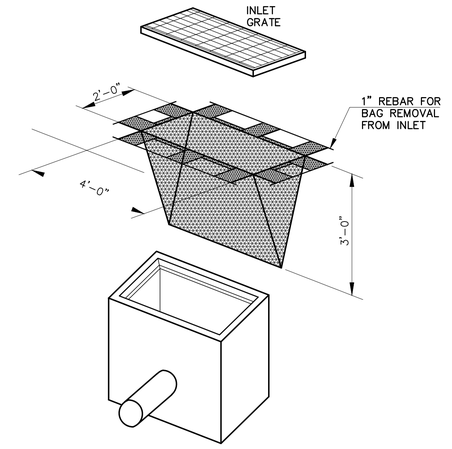
FROM NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL

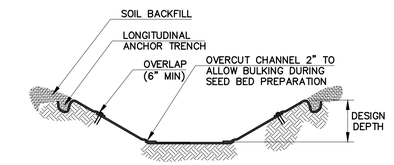


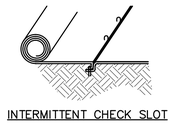
NOTES:
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE.
2. 18" DIAMETER FILTER SOCK MAY BE STACKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.
3. A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCKS

COMPOST SOCK CONCRETE WASHOUT

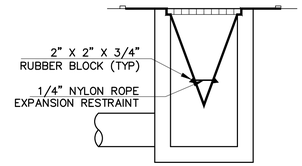
SCALE: NOT TO SCALE



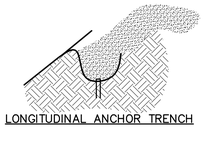




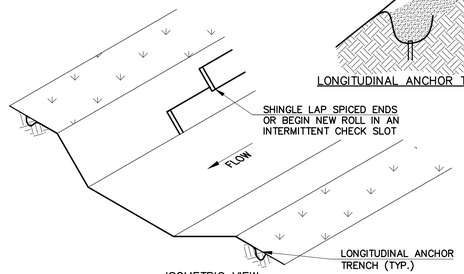
INTERMITTENT CHECK SLOT



INSTALLATION DETAIL

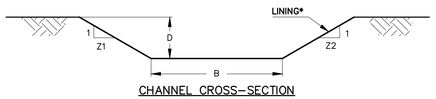


LONGITUDINAL ANCHOR TRENCH



ISOMETRIC VIEW

ISOMETRIC VIEW



CHANNEL CROSS-SECTION

CHANNEL NO.	SLOPE (%)	BOTTOM WIDTH B (FT)	DEPTH D (FT)	Z1 (FT)	Z2 (FT)	LINING *
1	0.50	5.0	3.00	3	3	NAG S75BN OR EQUAL

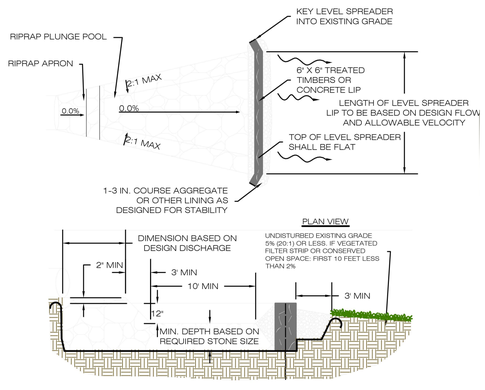
*SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS, AND VEGETATION STABILIZATION SPECIFICATIONS FOR SOIL AMENDMENTS, SEED MIXTURES,AND MULCHING INFORMATION.

INSTALLATION
1. ANCHOR TRENCHES SHALL BE INSTALLED AT BEGINNING AND END OF CHANNEL IN SAME MANNER AS LONGITUDINAL ANCHOR TRENCHES.
2. PREPARE SOIL AND APPLY SEED BEFORE INSTALLING BLANKETS, MATS, OR OTHER TEMPORARY CHANNEL LINER SYSTEM
3. EXCAVATE SOIL TO DESIGN GRADE AND CROSS SECTION.

MAINTENANCE
1. CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS OF INSPECTION.
2. DAMAGED LINING SHALL BE REPLACED WITHIN 48 HOURS OF INSPECTION.

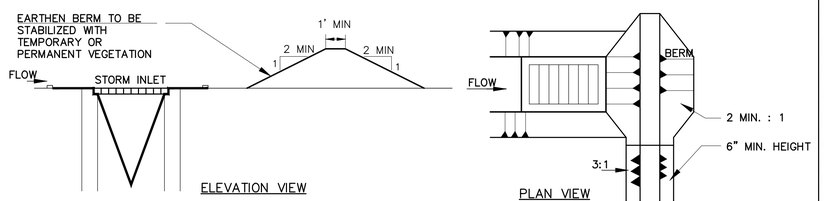
VEGETATED CHANNEL

SCALE: NOT TO SCALE



CONCENTRATED (PIPE) INFLOW LEVEL SPREADER

SCALE: NOT TO SCALE



INSTALLATION
1. MAXIMUM DRAINAGE AREA = 1/2 ACRE.
2. INLET PROTECTION IS NOT REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS REQUIRED FOR ALL INSTALLATIONS.
3. AT A MINIMUM, THE FABRIC SHALL HAVE A GRAB TENSILE STRENGTH OF 120 LB., A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL SHEAR STRENGTH OF 50 LB. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

MAINTENANCE
1. EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR TO REMAIN PERMANENTLY.
2. INSPECT ON A WEEKLY BASIS AND AFTER EACH PRECIPITATION EVENT. REPAIRS SHOULD BE MADE IMMEDIATELY AFTER INSPECTION.
3. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN 1/2 FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED AS SO TO CAUSE FLOODING BYPASSING THE OUTLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR THE THE REPLACEMENT OF BAGS.
4. DISPOSE ACCUMULATED SEDIMENT AS WELL AS USED BAGS ACCORDING TO THE PLAN NOTES.
5. DO NOT USE ON MAJOR PAVED ROADS WHEN PONDING MAY CAUSE TRAFFIC HAZARDS.

FILTER BAG INLET PROTECTION

SCALE: NOT TO SCALE

CHRISTOPHER MICHAEL MCARTHUR REGISTERED 20340 STATE OF PENNSYLVANIA PROFESSIONAL ENGINEER 3/1/24

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NO.	DATE	ISSUE / REVISIONS	BY	CHKD
4	03.13.2024	CITY OF RANSON RESUBMISSION	JWH	CMS
3	12.06.2023	CITY OF RANSON RESUBMISSION	JWH	CMS
2	10.02.2023	CITY OF RANSON RESUBMISSION	JWH	CMS
1	09.29.2023	PERMIT RESUBMISSION COMMENTS	JWH	CMS
0	07.19.2023	PERMIT SUBMISSION	JWH	CMS

LDG

EROSION AND SEDIMENT CONTROL DETAILS

WAWA - RANSON, WEST VIRGINIA

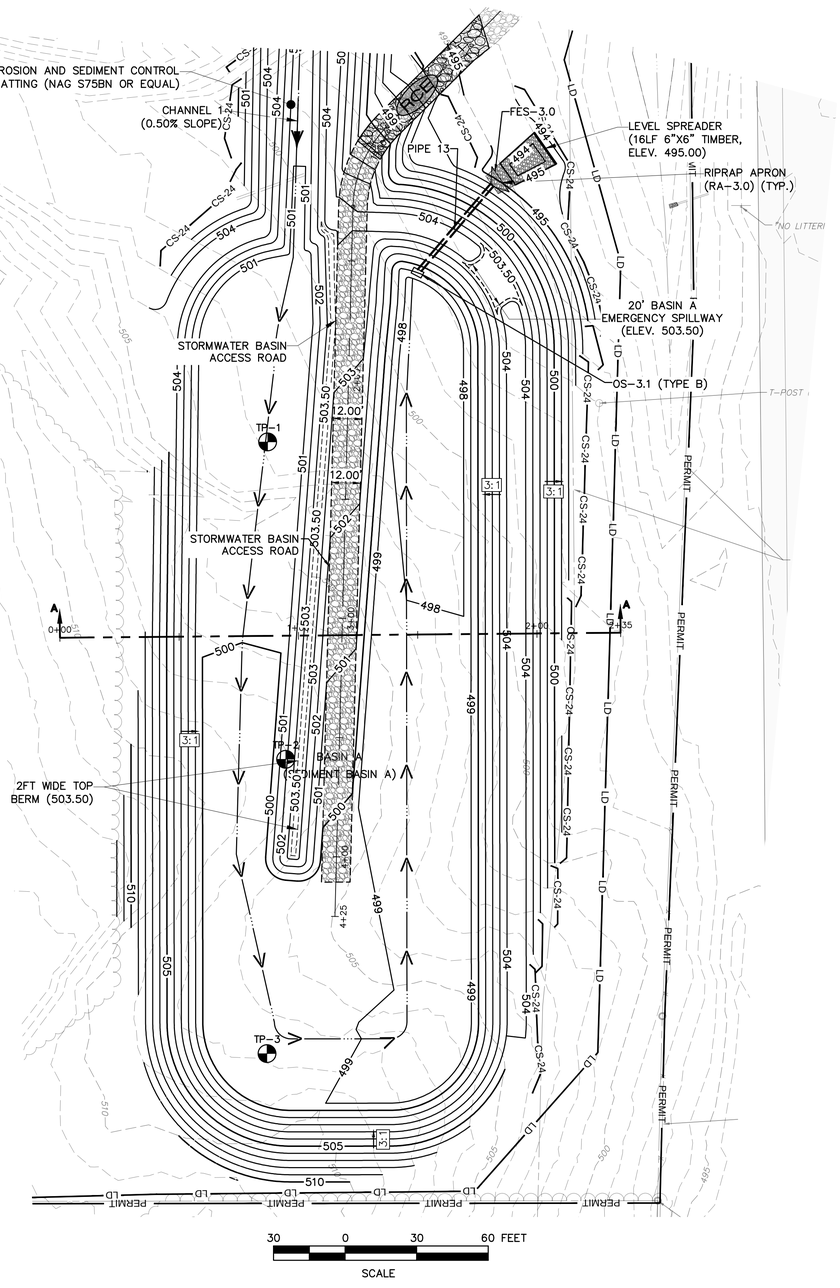
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

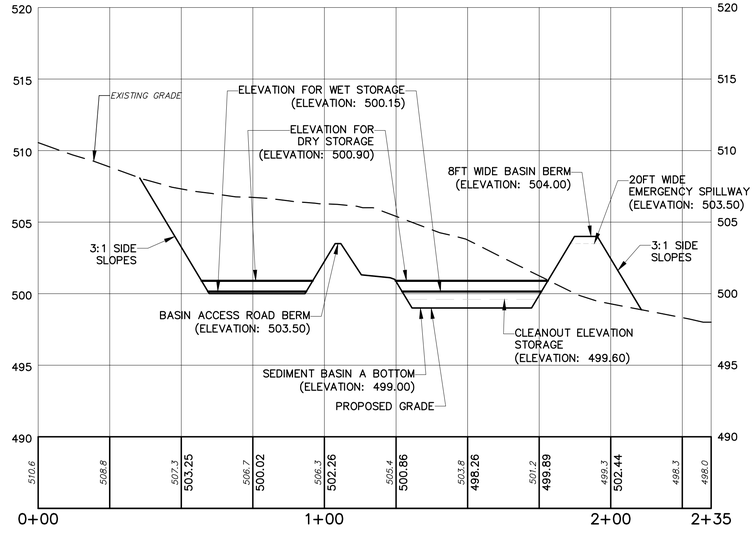
PTV 1132, LLC
400 PENN CENTER BLVD, BUILDING 4, SUITE 1000
PITTSBURGH, PA 15235
PHONE 724.420.5367

Larson Design Group • Architects Engineers Surveyors
1000 Commerce Park Drive • Suite 201
Williamsport, PA 17701
PHONE 570.323.6603 TOLL FREE 877.323.6603
FAX 570.323.9902 • www.larsondesigngroup.com

SHEET NO.: ES3.0

PROJECT NO.: 11693-041





CROSS SECTION A-A PROFILE

HORIZONTAL SCALE: 25 0 25 50 FEET

VERTICAL SCALE: 5 0 5 10 FEET

LEGEND

- EXISTING GRADE
- PROPOSED GRADE

CHRISTOPHER MICHAEL MCARTHUR
REGISTERED
20340
STATE OF
WEST VIRGINIA
PROFESSIONAL ENGINEER
3/4/24

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NO.	DATE	COMMENTS	BY	CHKD
4	03.13.2024	CITY OF RANSON RESUBMISSION	JWH	CMS
3	02.06.2024	CITY OF RANSON RESUBMISSION	JWH	CMS
2	10.02.2023	CITY OF RANSON ARCHIVED RESUBMISSIONS	JWH	CMS
1	09.29.2023	PERMIT RESUBMISSION	JWH	CMS
0	07.19.2023	PERMIT SUBMISSION	JWH	CMS

ISSUE / REVISIONS

LDG

EROSION AND SEDIMENT CONTROL CROSS SECTION

WAWA - RANSON, WEST VIRGINIA

CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

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SHEET NO.: ES4.0

PROJECT NO.: 11693-041

AGENDA ITEM IV.3

Planning Commission Request for Action

TO:

FROM: Darla Armstrong, Community & Economic Development

ITEM TYPE: Presentation

AGENDA SECTION: PLANNING COMMISSION BUSINESS

SUBJECT:

The purpose of the public hearing is to accept public comments on the final plat proposal for Briar Run Phase VI-B located off Whiskers Way and Cecily Way, Ranson WV (Lots 1 thru 38 & out lots "A, B, & C" Briar Run Estates), accepting the bond for Briar Run Phase VI-B and entering a Development Agreement for Briar Run Phase VI-B.

1. Open Public Hearing
2. Comments/questions from public
3. Close Public Hearing

ATTACHMENTS:

Legal Notice Briar Run VI-B Plat DA Bond 412024.docx

LEGAL NOTICE
PUBLIC HEARING NOTICE
CITY OF RANSON

In accordance with W. Va. Code §8A-5-8 et seq., the Ranson Planning Commission will hold a public hearing on Monday, April 1, 2024, at 7 pm at Ranson City Hall, 312 S. Mildred Street, Ranson, WV. The purpose of the public hearing is to accept public comments on the final plat proposal for Briar Run Phase VI-B located off Whiskers Way and Cecily Way, Ranson WV (Lots 1 thru 38 & out lots "A, B, & C" Briar Run Estates), accepting the bond for Briar Run Phase VI-B and entering a Development Agreement for Briar Run Phase VI-B. All persons are invited to attend and make comments about the proposed final plat.

Copies of the proposed plat and bond are available upon request in the Community Development Department. If you cannot attend but wish to comment, you may write and it must be received to the following address: City of Ranson, Attn: Community Development Department, 312 S. Mildred Street, Ranson, WV 25438 or email cityclerk@ransonwv.us. Written Comments received prior to March 27, 2024, will be provided to the Planning Commission, and inserted into the official record.

Community Development Director

AGENDA ITEM IV.4

Planning Commission Request for Action

TO:

FROM: Darla Armstrong, Community & Economic Development

ITEM TYPE: Presentation

AGENDA SECTION: PLANNING COMMISSION BUSINESS

SUBJECT:

ATTACHMENTS:

Bond Estimate - Supplementary Sheet.xlsx
Briar Run Phase VI Bond Estimate 2.xlsx
2024-03-25 Brian Run Record Plat cmt rsp ltr.pdf
Development Agreement Briar Run Phae VI-8.docx
PC24-05 briar Run Phase VI-8 Development Agreement.docx
23-63-FP-Briar Run Record Plat 2.20.24.pdf

City of Ranson, West Virginia
Community Development
Construction Bond - Estimate - Supplementary Sheet

Project Name: Briar Run Date:

Section: VI- Parcel C-2 C.O.R. File No.

Bond Amount Approved: $

By: Date:

Item No.	Description	Unit	Unit Cost	Quantity
2.1	Paved Surface Construction			
56	Permanent Utility Asphalt Patch	SY	$ 15.00	75
4.1	Sanitary Sewer System			
10	Core / Rechannel Manhole	EA	$ 1,200.00	1
11	Temporary Utility Asphalt or Cold Patch	SY	$ 15.00	40
4.2	Potable Water System			
18	8" C-900 PVC Water Main	LF	$ 68.00	546
19	Temporary Utility Asphalt or Cold Patch	SY	$ 15.00	35
5.1	Storm Water Management & Storm Drainage			
	Storm Drain Structures			
	Inlet (not at curb)	EA	$ 3,000.00	3
	Core / Rechannel Inlet	EA	$ 1,200.00	1

Grand Total All Costs
Mobilization (5%)
15% Contingency
TOTAL BOND AMOUNT

12/5/2023

Total Cost
$ 1,125.00
$ 1,200.00
$ 600.00
$ 37,128.00
$ 525.00
$ 9,000.00
$ 1,200.00

$ 50,778.00
$ 2,538.90
$ 7,616.70
$ 60,933.60

City of Ranson, West Virginia
Community Development
Construction Bond - Estimate

Project Name: Briar Run Date: 12/5/2023

Section: VI- Parcel C-2 C.O.R. File No. _____

Bond Amount Approved: $ _____

By: _____ **Date:** _____

Official Use Do Not Write In This Box

Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
1.1	**Erosion & Sediment Control**				
1	Stabilized Construction Entrance	EA	$ 2,475.00	1	$ 2,475.00
2	Silt Fence - Standard	LF	$ 4.40		$ -
3	Silt Fence - Super	LF	$ 18.15	1720	$ 31,218.00
4	Earth Dike Construction (1)	LF	$ 3.96		$ -
5	Inlet Protection Device	EA	$ 388.14	8	$ 3,105.08
6	Outlet Protection Device	EA	$ 385.00		$ -
7	Stone Check Dams	EA	$ 192.50		$ -
8	Sediment Trap Excavation	CY	$ 15.35		$ -
9	Riser Structure for Sediment Basin/Pond	EA	$ 6,456.24		$ -
10	Impermeable Liner for Sediment Basin/Pond	SY	$ 22.83		$ -
11	Rip-Rap Apron/Plunge Pool	CY	$ 122.72		$ -
12	Grass Waterway/Drainage Swale	LF	$ 11.99		$ -
13	Temporary Seeding (60 lbs/ac)	SF	$ 0.10	23670	$ 2,343.33
14	Permanent Seeding (98 lbs/ac)	SF	$ 0.12		$ -
15	Mulch, Straw or Hay (2 tn/ac)	TN	$ 550.13		$ -
16	Mulch, Wood Cellulose Fiber (1,500 lbs/ac)	TN	$ 545.34		$ -
17	Mulch, Shredded Bark or Wood Chip (35 cy/ac)	CY	$ 89.10		$ -
18	Sod	SY	$ 5.90		$ -
19	Soil Stabilizing Matt - Biodegradable	SY	$ 4.95		$ -
20	Soil Stabilizing Matt - Non-biodegradable	SY	$ 11.00		$ -
21	Geotextile Fabric	SF	$ 3.30		$ -
22	4 ft Safety Fence	LF	$ 8.84		$ -
23	6 ft Chain Link Safety Fence	LF	$ 11.00		$ -
24	Tree Protection	LF	$ 3.30		$ -
25	Temporary Utility Line Stream Crossing/Diversion	EA	$ 1,375.00		$ -
1.2	**Site Preparation & Demolition**				
1	Clearing & Grubbing - Light Cover	ACRE	$ 7,342.50		$ -
2	Clearing & Grubbing - Moderate Cover	ACRE	$ 10,725.00		$ -
3	Clearing & Grubbing - Heavy Cover	ACRE	$ 13,475.00		$ -
4	Clearing & Grubbing - Very Heavy Cover	ACRE	$ 15,950.00		$ -
5	Sawcut Existing Asphalt Pavement	LF	$ 2.20	260	$ 572.00
6	Sawcut Existing Concrete Pavement	LF	$ 3.52		$ -
7	Removal of Asphalt Pavement	SY	$ 8.25	383	$ 3,159.75
8	Removal of Fencing	LF	$ 5.67		$ -
9	Removal of Power Pole	EA	$ 8,415.00		$ -
10	Removal of Structures/Buildings	EA	$ 5,000.00		$ -

Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
1.3	**Earthwork**				
1	Strip Topsoil	CY	$ 4.13	300	$ 1,237.50
2	Common Excavation	CY	$ 25.01	7395	$ 184,978.53
3	Borrow Material - On Site	CY	$ 22.34	1365	$ 30,495.47
4	Borrow Material - Imported from Off Site	CY	$ 40.26		$ -
5	Rock Excavation	CY	$ 99.00		$ -
6	Furnish Topsoil	CY	$ 52.76	0	$ -
2.1	**Paved Surface Construction**				
1	Subgrade	CY	$ 73.37	432	$ 31,695.84
2	Fabric for Subgrade Stabilization	SY	$ 3.19		$ -
3	Aggregate Base Course	CY	$ 97.30	576	$ 56,041.92
4	Open Graded Free Draining Base Course	CY	$ 120.89		$ -
5	Free Draining Base Trench	LF	$ 12.08		$ -
6	Outlet Pipe	LF	$ 39.75		$ -
7	Bituminous Asphalt Tack Coat	SY	$ 0.51		$ -
8	Superpave Asphalt Base Course - Type 25	TN	$ 93.50		$ -
9	Superpave Asphalt Base Course - Type 19	TN	$ 106.70	23	$ 2,411.42
10	Superpave Asphalt Surface Course - Type 9.5	TN	$ 117.70	11	$ 1,330.01
11	Reinforced Concrete Pavement	CY	$ 450.55		$ -
12	Standard Milling	SY	$ 7.07	24	$ 169.75
13	Controlled Low Strength Material	CY	$ 368.98		$ -
14	6" Concrete Entrance Apron - Residential	SY	$ 104.07	50	$ 5,203.55
15	8" Concrete Entrance Apron - Commercial Site	SY	$ 137.50		$ -
16	Concrete Curb & Gutter	LF	$ 66.00	1145	$ 75,570.00
17	Concrete Curb Only	LF	$ 55.00		$ -
18	Bituminous Asphalt Walkway	SF	$ 14.85		$ -
19	Concrete Sidewalk	SY	$ 97.13	620	$ 60,220.60
20	Bed Course Material (for sidewalk)	CY	$ 88.57		$ -
21	Concrete Curb Ramp	EA	$ 2,750.00	9	$ 24,750.00
22	Detectable Warning Surface	EA	$ 486.72	9	$ 4,380.45
23	Concrete Precast Wheel Stops	EA	$ 275.00		$ -
24	One Direction Lane Arrow	EA	$ 275.00		$ -
25	Multi Directional Land Arrow	EA	$ 460.90		$ -
26	Bicycle Shared Lane Marking	EA	$ 302.50		$ -
27	Bicycle Lane Marking	EA	$ 302.50		$ -
28	Pavement Letters	EA	$ 82.27		$ -
29	4" Edge/Lane Line - Painted	LF	$ 0.51	576	$ 291.46
30	6" Edge/Lane Line - Painted	LF	$ 0.66		$ -
31	8" Edge/Lane Line - Painted	LF	$ 0.83		$ -
32	4" Edge/Lane Line - Thermoplastic	LF	$ 0.76		$ -
33	6" Edge/Lane Line - Thermoplastic	LF	$ 1.17		$ -
34	8" Edge/Lane Line - Thermoplastic	LF	$ 1.97		$ -
35	4" Edge/Lane Line - Preformed Thermoplastic	LF	$ 4.95		$ -
36	6" Edge/Lane Line - Preformed Thermoplastic	LF	$ 7.37		$ -
37	8" Edge/Lane Line - Preformed Thermoplastic	LF	$ 9.24		$ -
38	4" Edge/Lane Line w/ Contrast - Preformed Thermoplastic	LF	$ 7.07		$ -
39	6" Edge/Lane Line w/ Contrast - Preformed Thermoplastic	LF	$ 7.70		$ -
40	8" Edge/Lane Line w/ Contrast - Preformed Thermoplastic	LF	$ 9.90		$ -
41	12" Crosswalk/Stop/Transverse Line - Painted	LF	$ 3.58	106	$ 378.95
42	12" Crosswalk/Stop/Transverse Line - Preformed Thermoplastic	LF	$ 14.85		$ -
43	24" Stop Line - Preformed Thermoplastic	LF	$ 24.75	40	$ 990.00
44	Handicapped Parking Symbol	EA	$ 341.17		$ -
45	0.08 in Flat Sheet Sign	SF	$ 49.50		$ -

Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
46	City standard sign post	LF	$ 27.50		$ -
47	Sign - Street Name per E911 Addressing Ordinance	EA	$ 467.50	1	$ 467.50
48	Guard Rail - Steel Beam & Posts	LF	$ 20.16		$ -
49	Fence - Chain Link 6' High	LF	$ 45.24		$ -
50	Fence - Wood 3-Rail	LF	$ 33.00		$ -
51	Fence - Decorative Iron, 42" High	LF	$ 82.50		$ -
52	Pedestrian/Bicycle Barrier Railing - Wood - 42" high	LF	$ 57.20		$ -
53	Lights - Street and Parking Lot (light fixture, pole, foundation, & wiring)	EA	$ 13,200.00	5	$ 66,000.00
54	Bollards (wood or steel)	EA	$ 495.00		$ -
55	Traffic Control/Stop Light (WVDOH cost estimate)	EA	$ -		$ -

Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
3.1	**Landscaping**				
1	Transplanting Trees (6' or less)	EA	$ 148.50		$ -
2	Transplanting Shrubs	EA	$ 126.50		$ -
3	Plant Shrubs (Evergreen or Deciduous)	EA	$ 165.00		$ -
4	Plant Tree (2"-3" caliper) - Evergreen	EA	$ 412.50		$ -
5	Plant Tree (2"-3" caliper) - Deciduous	EA	$ 550.00	8	$ 4,400.00
6	Plant Tree (2"-3" caliper) - Flowering	EA	$ 330.00	14	$ 4,620.00
7	Plant Ground Cover	EA	$ 7.70		$ -
8	Plant Wetlands or Bioretention Vegetation	EA	$ 27.50		$ -
9	Plant Screen Trees	EA	$ 165.00		$ -
10	Plant Street/Shade Trees	EA	$ 550.00	10	$ 5,500.00
11	Mulching (wood landscape mulch in place)	CY	$ 89.10		$ -
4.1	**Sanitary Sewer System**				
1	2" PVC Schedule 80 Pipe (force main)	LF	$ 121.00		$ -
2	6" PVC Schedule 80 Pipe	LF	$ 168.76		$ -
3	8" PVC Schedule 80 Pipe	LF	$ 109.45	437	$ 47,829.65
4	10" PVC Schedule 80 Pipe	LF	$ 121.55		$ -
5	Manhole 4' Diameter (6' height or less)	EA	$ 6,674.68	3	$ 20,024.04
6	Grease Trap	EA	$ 6,875.00		$ -
7	4" Service Lateral (20' to Edge of R.O.W./Property Line)	LF	$ 68.31	647	$ 44,196.57
8	Sanitary Sewer Pump Station (sewage pump)	EA	$ -		$ -
9	Road Bore/Crossing (with Pipe & Steel Casing)	LF	$ 440.00	80	$ 35,200.00
4.2	**Potable Water System**				
1	3/4" Copper Service Line	LF	$ 117.76	571	$ 67,238.11
2	1" Copper Service Line	LF	$ 193.60		$ -
3	2" Copper Service Line	LF	$ 39.60		$ -
4	4" Ductile Iron Pipe	LF	$ 57.20		$ -
5	6" Ductile Iron Pipe	LF	$ 74.80		$ -
6	8" Ductile Iron Pipe	LF	$ 92.40		$ -
7	10" Ductile Iron Pipe	LF	$ 104.50		$ -
8	12" Ductile Iron Pipe	LF	$ 115.50		$ -
9	Fire Hydrant with 6" line	LF	$ 5,513.77	1	$ 5,513.77
10	4" Gate Valve & Box	EA	$ 1,225.13		$ -
11	6" Gate Valve & Box	EA	$ 1,954.65		$ -
12	8" Gate Valve & Box	EA	$ 1,617.98		$ -
13	10" Gate Valve & Box	EA	$ 2,420.00		$ -
14	12" Gate Valve & Box	EA	$ 4,271.09		$ -
15	Pressure Reducing Valve & Vault	EA	$ -		$ -
16	Tapping Sleeve & Valve for Water Service Connection	EA	$ 726.00	2	$ 1,452.00
17	Water Meter Setter, Box & Service Line Tap	EA	$ 3,335.29		$ -
5.1	**Storm Water Management & Storm Drainage**				
	SWM Basin/Ponds				
1	Excavation - Basin/Pond	CY	$ 25.01		$ -
2	Excavation - Core Trench	CY	$ 25.01		$ -
3	Embankment Construction - On-Site Material	CY	$ 22.34		$ -
4	Embankment Construction - Imported Material	CY	$ 40.26		$ -
5	Impervious Core	SF	$ 1.98		$ -
6	Concrete Control Structure and Pipe Cradles	CY	$ 1,300.59		$ -
7	Corrugated Metal Pipe Control Structure	EA	$ 6,456.24		$ -
8	Dewatering Pipes or Structures	EA	$ 558.02		$ -
9	Filter Stone for Dewatering Pipe (1" to 2" dia. clean)	CY	$ 53.12		$ -
10	Antiseep Collar	f width	$ 165.00		$ -
11	Trash Rack	ch dia.	$ 55.00		$ -
12	Water Tight Pipe Bands	ch dia.	$ 8.25		$ -
	Low Impact Development BMP				

Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
13	Urban Bioretention Basin (in sidewalk areas)	SF	$ 55.00		$ -
14	Bioretention Basin	SF	$ 38.50		$ -
15	Grass Channel	SF	$ 30.00		$ -
16	Permeable Pavers	SY	$ 50.00		$ -
	PVC Slotted Pipe				
17	4" PVC Slotted or Perforated Drain Pipe	LF	$ 16.50		$ -
18	6" PVC Slotted or Perforated Drain Pipe	LF	$ 17.60		$ -
19	8" PVC Slotted or Perforated Drain Pipe	LF	$ 21.85		$ -
20	12" PVC Slotted or Perforated Drain Pipe	LF	$ 36.30		$ -
	Corrugate Metal Pipe (Circular)				
21	15" Storm Drain Pipe	LF	$ 171.48		$ -
22	18" Storm Drain Pipe	LF	$ 112.79		$ -
23	24" Storm Drain Pipe	LF	$ 173.24		$ -
24	30" Storm Drain Pipe	LF	$ 198.00		$ -
25	36" Storm Drain Pipe	LF	$ 209.06		$ -
26	42" Storm Drain Pipe	LF	$ 244.20		$ -
27	48" Storm Drain Pipe	LF	$ 278.30		$ -
28	54" Storm Drain Pipe	LF	$ 313.50		$ -
29	60" Storm Drain Pipe	LF	$ 352.00		$ -

Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
	Reinforced Concrete Pipe (circular)				
30	15" Storm Drain Pipe	LF	$ 312.02		$ -
31	18" Storm Drain Pipe	LF	$ 118.94		$ -
32	24" Storm Drain Pipe	LF	$ 136.22		$ -
33	30" Storm Drain Pipe	LF	$ 180.69		$ -
34	36" Storm Drain Pipe	LF	$ 259.58		$ -
35	42" Storm Drain Pipe	LF	$ 246.40		$ -
36	48" Storm Drain Pipe	LF	$ 665.17		$ -
37	54" Storm Drain Pipe	LF	$ 316.80		$ -
38	60" Storm Drain Pipe	LF	$ 352.00		$ -
	High Density Polyethlyene (HDPE) Pipe (Circular)				
39	15" Storm Drain Pipe	LF	$ 126.32	599	$ 75,668.08
40	18" Storm Drain Pipe	LF	$ 169.63		$ -
41	24" Storm Drain Pipe	LF	$ 180.58		$ -
42	30" Storm Drain Pipe	LF	$ 312.33		$ -
43	36" Storm Drain Pipe	LF	$ 209.91		$ -
44	42" Storm Drain Pipe	LF	$ 250.80		$ -
45	48" Storm Drain Pipe	LF	$ 297.00		$ -
46	54" Storm Drain Pipe	LF	$ 308.00		$ -
47	60" Storm Drain Pipe	LF	$ 319.00		$ -
	End Sections (Circular) - Metal (for CMP and HDPE Pipe)				
48	15" Metal End Section	EA	$ 797.50		$ -
49	18" Metal End Section	EA	$ 697.76		$ -
50	24" Metal End Section	EA	$ 960.88		$ -
51	30" Metal End Section	EA	$ 1,240.92		$ -
52	36" Metal End Section	EA	$ 1,210.00		$ -
53	42" Metal End Section	EA	$ 1,430.00		$ -
54	48" Metal End Section	EA	$ 1,760.00		$ -
55	54" Metal End Section		$ 2,200.00		$ -
56	60" Metal End Section		$ 2,200.00		$ -
	End Sections (Circular) - Concrete				
57	15" RCP End Section	EA	$ 533.50		$ -
58	18" RCP End Section	EA	$ 621.50		$ -
59	24" RCP End Section	EA	$ 830.50		$ -
60	30" RCP End Section	EA	$ 1,314.50		$ -
61	36" RCP End Section	EA	$ 1,941.50		$ -
62	42" RCP End Section	EA	$ 1,974.50		$ -
63	48" RCP End Section	EA	$ 2,348.50		$ -
64	54" RCP End Section	EA	$ 3,074.50		$ -
65	60" RCP End Section	EA	$ 3,800.50		$ -
	Corrugated Metal Pipe Arch				
66	17" x 13" Storm Drain Pipe	LF	$ 171.48		$ -
67	21" x 15" Storm Drain Pipe	LF	$ 112.79		$ -
68	24" x 18" Storm Drain Pipe	LF	$ 173.24		$ -
69	35" x 24" Storm Drain Pipe	LF	$ 198.00		$ -
70	42" x 29" Storm Drain Pipe	LF	$ 209.06		$ -
71	57" x 38"Storm Drain Pipe	LF	$ 244.20		$ -
72	64" x 43" Storm Drain Pipe	LF	$ 278.30		$ -

Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
	Reinforced Concrete Elliptical Pipe				
73	23" x 14" Storm Drain Pipe	LF	$ 118.94		$ -
74	30" x 19" Storm Drain Pipe	LF	$ 136.22		$ -
75	38" x 24" Storm Drain Pipe	LF	$ 180.69		$ -
76	45" x 29" Storm Drain Pipe	LF	$ 259.58		$ -
77	53" x 34" Storm Drain Pipe	LF	$ 665.17		$ -
78	60" x 38" Storm Drain Pipe	LF	$ 665.17		$ -
79	68" x 43" Storm Drain Pipe	LF	$ 352.00		$ -
	End Sections - Corrugated Metal Pipe Arch (for CMP and HDPE Pipe)				
80	17" x 13" Metal End Section	EA	$ 797.50		$ -
81	21" x 15" Metal End Section	EA	$ 697.76		$ -
82	24" x 18" Metal End Section	EA	$ 709.50		$ -
83	35" x 24" Metal End Section	EA	$ 1,240.92		$ -
84	42" x 29" Metal End Section	EA	$ 1,210.00		$ -
85	57" x 38" Metal End Section	EA	$ 1,760.00		$ -
86	64" x 43" Metal End Section	EA	$ 2,200.00		$ -
	End Sections - Reinforced Concrete Elliptical Pipe				
86	23" x 14" RCP End Section	EA	$ 621.50		$ -
88	30" x 19" RCP End Section	EA	$ 830.50		$ -
89	38" x 24" RCP End Section	EA	$ 1,314.50		$ -
90	45" x 29" RCP End Section	EA	$ 1,941.50		$ -
91	53" x 34" RCP End Section	EA	$ 1,974.50		$ -
92	60" x 38" RCP End Section	EA	$ 2,348.50		$ -
93	68" x 43" RCP End Section	EA	$ 3,074.50		$ -
	Storm Drain Structures				
94	Drop Inlet	EA	$ 3,879.85		$ -
95	Curb Inlet - 6' Opening	EA	$ 4,620.00	1	$ 4,620.00
96	Curb Inlet - 10' Opening	EA	$ 5,280.00	1	$ 5,280.00
97	Curb Inlet - 12' Opening	EA	$ 6,050.00	1	$ 6,050.00
98	Curb Inlet - 16' Opening	EA	$ 6,820.00		$ -
99	Curb Inlet - 20' Opening	EA	$ 7,370.00		$ -
100	Manhole (4' dia., 6' height or less)	EA	$ 6,674.79	6	$ 40,048.73
	Outfall & Channel Protection				
101	Concrete Endwall/Wingwall	SF	$ 110.00		$ -
102	Gabion Basket Structure	CY	$ 275.50		$ -
103	Rip-Rap Stone - Class 1	CY	$ 122.72		$ -
5.1	**Civc Standards**				
1	Small Playground Tot Lot (< 10 Childred)	EA	$ 19,800.00		$ -
2	Medium Playground Tot Lot (10-50 Childred)	EA	$ 55,000.00		$ -
3	Large Playground Tot Lot (50+ Childred)	EA	$ 110,000.00		$ -
6.1	**Miscellaneous Site Construction & Structures**				
1	Bus Stop Enclosure	EA	$ 3,850.00		$ -
2	Mail Box Cluster	EA	$ 1,100.00	2	$ 2,200.00
3	Construction Stake-out	AC	$ 11,000.00	2	$ 25,630.00
4	Traffic Control During Construction	LS	$ 10,000.00	1	$ 10,000.00
5	Set Property Corners	EA	$ 132.00		$ -

Grand Total All Costs	$	994,957.05
Mobilization (5%)	$	49,747.85
15% Contingency	$	156,705.74
TOTAL BOND AMOUNT	$	1,151,662.79

City of Ranson, West Virginia
Community Development
Construction Bond - Estimate

Project Name: ____ Date: _____

Section: ____ C.O.R. File No. _____

Bond Amount Approved: $ _____

By: _____ **Date:** _____

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					Bond Estimate
Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
1.1	**Erosion & Sediment Control**				
1	Stabilized Construction Entrance	EA	$ 2,475.00	1	$ 2,475.00
2	Silt Fence - Standard	LF	$ 4.40	0	$ -
3	Silt Fence - Super	LF	$ 18.15	1720	$ 31,218.00
4	Earth Dike Construction (1)	LF	$ 3.96	0	$ -
5	Inlet Protection Device	EA	$ 388.14	8	$ 3,105.08
6	Outlet Protection Device	EA	$ 385.00	0	$ -
7	Stone Check Dams	EA	$ 192.50	0	$ -
8	Sediment Trap Excavation	CY	$ 15.35	0	$ -
9	Riser Structure for Sediment Basin/Pond	EA	$ 6,456.24	0	$ -
10	Impermeable Liner for Sediment Basin/Pond	SY	$ 22.83	0	$ -
11	Rip-Rap Apron/Plunge Pool	CY	$ 122.72	0	$ -
12	Grass Waterway/Drainage Swale	LF	$ 11.99	0	$ -
13	Temporary Seeding (60 lbs/ac)	SF	$ 0.10	23670	$ 2,343.33
14	Permanent Seeding (98 lbs/ac)	SF	$ 0.12	0	$ -
15	Mulch, Straw or Hay (2 tn/ac)	TN	$ 550.13	0	$ -
16	Mulch, Wood Cellulose Fiber (1,500 lbs/ac)	TN	$ 545.34	0	$ -
17	Mulch, Shredded Bark or Wood Chip (35 cy/ac)	CY	$ 89.10	0	$ -
18	Sod	SY	$ 5.90	0	$ -
19	Soil Stabilizing Matt - Biodegradable	SY	$ 4.95	0	$ -
20	Soil Stabilizing Matt - Non-biodegradable	SY	$ 11.00	0	$ -
21	Geotextile Fabric	SF	$ 3.30	0	$ -
22	4 ft Safety Fence	LF	$ 8.84	0	$ -
23	6 ft Chain Link Safety Fence	LF	$ 11.00	0	$ -
24	Tree Protection	LF	$ 3.30	0	$ -
25	Temporary Utility Line Stream Crossing/Diversion	EA	$ 1,375.00	0	$ -
1.2	**Site Preparation & Demolition**				
1	Clearing & Grubbing - Light Cover	ACRE	$ 7,342.50	0	$ -
2	Clearing & Grubbing - Moderate Cover	ACRE	$ 10,725.00	0	$ -
3	Clearing & Grubbing - Heavy Cover	ACRE	$ 13,475.00	0	$ -
4	Clearing & Grubbing - Very Heavy Cover	ACRE	$ 15,950.00	0	$ -
5	Sawcut Existing Asphalt Pavement	LF	$ 2.20	260	$ 572.00
6	Sawcut Existing Concrete Pavement	LF	$ 3.52	0	$ -
7	Removal of Asphalt Pavement	SY	$ 8.25	383	$ 3,159.75
8	Removal of Fencing	LF	$ 5.67	0	$ -

Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
9	Removal of Power Pole	EA	$ 8,415.00	0	$ -
10	Removal of Structures/Buildings	EA	Detailed estimate required.	0	#VALUE!

Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
1.3	**Earthwork**				
1	Strip Topsoil	CY	$ 4.13	300	$ 1,237.50
2	Common Excavation	CY	$ 25.01	7395	$ 184,978.53
3	Borrow Material - On Site	CY	$ 22.34	1365	$ 30,495.47
4	Borrow Material - Imported from Off Site	CY	$ 40.26	0	$ -
5	Rock Excavation	CY	$ 99.00	0	$ -
6	Furnish Topsoil	CY	$ 52.76	0	$ -
2.1	**Paved Surface Construction**				
1	Subgrade	CY	$ 73.37	432	$ 31,695.84
2	Fabric for Subgrade Stabilization	SY	$ 3.19	0	$ -
3	Aggregate Base Course	CY	$ 97.30	576	$ 56,041.92
4	Open Graded Free Draining Base Course	CY	$ 120.89	0	$ -
5	Free Draining Base Trench	LF	$ 12.08	0	$ -
6	Outlet Pipe	LF	$ 39.75	0	$ -
7	Bituminous Asphalt Tack Coat	SY	$ 0.51	0	$ -
8	Superpave Asphalt Base Course - Type 25	TN	$ 93.50	0	$ -
9	Superpave Asphalt Base Course - Type 19	TN	$ 106.70	22.6	$ 2,411.42
10	Superpave Asphalt Surface Course - Type 9.5	TN	$ 117.70	11.3	$ 1,330.01
11	Reinforced Concrete Pavement	CY	$ 450.55	0	$ -
12	Standard Milling	SY	$ 7.07	24	$ 169.75
13	Controlled Low Strength Material	CY	$ 368.98	0	$ -
14	6" Concrete Entrance Apron - Residential	SY	$ 104.07	50	$ 5,203.55
15	8" Concrete Entrance Apron - Commercial Site	SY	$ 137.50	0	$ -
16	Concrete Curb & Gutter	LF	$ 66.00	1145	$ 75,570.00
17	Concrete Curb Only	LF	$ 55.00	0	$ -
18	Bituminous Asphalt Walkway	SF	$ 14.85	0	$ -
19	Concrete Sidewalk	SY	$ 97.13	620	$ 60,220.60
20	Bed Course Material (for sidewalk)	CY	$ 88.57	0	$ -
21	Concrete Curb Ramp	EA	$ 2,750.00	9	$ 24,750.00
22	Detectable Warning Surface	EA	$ 486.72	9	$ 4,380.45
23	Concrete Precast Wheel Stops	EA	$ 275.00	0	$ -
24	One Direction Lane Arrow	EA	$ 275.00	0	$ -
25	Multi Directional Land Arrow	EA	$ 460.90	0	$ -
26	Bicycle Shared Lane Marking	EA	$ 302.50	0	$ -
27	Bicycle Lane Marking	EA	$ 302.50	0	$ -
28	Pavement Letters	EA	$ 82.27	0	$ -
29	4" Edge/Lane Line - Painted	LF	$ 0.51	576	$ 291.46
30	6" Edge/Lane Line - Painted	LF	$ 0.66	0	$ -
31	8" Edge/Lane Line - Painted	LF	$ 0.83	0	$ -
32	4" Edge/Lane Line - Thermoplastic	LF	$ 0.76	0	$ -
33	6" Edge/Lane Line - Thermoplastic	LF	$ 1.17	0	$ -
34	8" Edge/Lane Line - Thermoplastic	LF	$ 1.97	0	$ -
35	4" Edge/Lane Line - Preformed Thermoplastic	LF	$ 4.95	0	$ -
36	6" Edge/Lane Line - Preformed Thermoplastic	LF	$ 7.37	0	$ -
37	8" Edge/Lane Line - Preformed Thermoplastic	LF	$ 9.24	0	$ -
38	4" Edge/Lane Line w/ Contrast - Preformed Thermoplastic	LF	$ 7.07	0	$ -
39	6" Edge/Lane Line w/ Contrast - Preformed Thermoplastic	LF	$ 7.70	0	$ -
40	8" Edge/Lane Line w/ Contrast - Preformed Thermoplastic	LF	$ 9.90	0	$ -
41	12" Crosswalk/Stop/Transverse Line - Painted	LF	$ 3.58	106	$ 378.95
42	12" Crosswalk/Stop/Transverse Line - Preformed Thermoplastic	LF	$ 14.85	0	$ -
43	24" Stop Line - Preformed Thermoplastic	LF	$ 24.75	40	$ 990.00
44	Handicapped Parking Symbol	EA	$ 341.17	0	$ -
45	0.08 in Flat Sheet Sign	SF	$ 49.50	0	$ -
46	City standard sign post	LF	$ 27.50	0	$ -

Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
47	Sign - Street Name per E911 Addressing Ordinance	EA	$ 467.50	1	$ 467.50
48	Guard Rail - Steel Beam & Posts	LF	$ 20.16	0	$ -
49	Fence - Chain Link 6' High	LF	$ 45.24	0	$ -
50	Fence - Wood 3-Rail	LF	$ 33.00	0	$ -
51	Fence - Decorative Iron, 42" High	LF	$ 82.50	0	$ -
52	Pedestrian/Bicycle Barrier Railing - Wood - 42" high	LF	$ 57.20	0	$ -
53	Lights - Street and Parking Lot (light fixture, pole, foundation, & wiring)	EA	$ 13,200.00	5	$ 66,000.00
54	Bollards (wood or steel)	EA	$ 495.00	0	$ -
55	Traffic Control/Stop Light (WVDOH cost estimate)	EA	DOH estimate required.	0	#VALUE!

Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
3.1	**Landscaping**				
1	Transplanting Trees (6' or less)	EA	$ 148.50	0	$ -
2	Transplanting Shrubs	EA	$ 126.50	0	$ -
3	Plant Shrubs (Evergreen or Deciduous)	EA	$ 165.00	0	$ -
4	Plant Tree (2"-3" caliper) - Evergreen	EA	$ 412.50	0	$ -
5	Plant Tree (2"-3" caliper) - Deciduous	EA	$ 550.00	8	$ 4,400.00
6	Plant Tree (2"-3" caliper) - Flowering	EA	$ 330.00	14	$ 4,620.00
7	Plant Ground Cover	EA	$ 7.70	0	$ -
8	Plant Wetlands or Bioretention Vegetation	EA	$ 27.50	0	$ -
9	Plant Screen Trees	EA	$ 165.00	0	$ -
10	Plant Street/Shade Trees	EA	$ 550.00	10	$ 5,500.00
11	Mulching (wood landscape mulch in place)	CY	$ 89.10	0	$ -
4.1	**Sanitary Sewer System**				
1	2" PVC Schedule 80 Pipe (force main)	LF	$ 121.00	0	$ -
2	6" PVC Schedule 80 Pipe	LF	$ 168.76	0	$ -
3	8" PVC Schedule 80 Pipe	LF	$ 109.45	437	$ 47,829.65
4	10" PVC Schedule 80 Pipe	LF	$ 121.55	0	$ -
5	Manhole 4' Diameter (6' height or less)	EA	$ 6,674.68	3	$ 20,024.04
6	Grease Trap	EA	$ 6,875.00	0	$ -
7	4" Service Lateral (20' to Edge of R.O.W./Property Line)	LF	$ 68.31	647	$ 44,196.57
8	Sanitary Sewer Pump Station (sewage pump)	EA	Detailed estimate required.	0	#VALUE!
9	Road Bore/Crossing (with Pipe & Steel Casing)	LF	$ 440.00	80	$ 35,200.00
4.2	**Potable Water System**				
1	3/4" Copper Service Line	LF	$ 117.76	571	$ 67,238.11
2	1" Copper Service Line	LF	$ 193.60	0	$ -
3	2" Copper Service Line	LF	$ 39.60	0	$ -
4	4" Ductile Iron Pipe	LF	$ 57.20	0	$ -
5	6" Ductile Iron Pipe	LF	$ 74.80	0	$ -
6	8" Ductile Iron Pipe	LF	$ 92.40	0	$ -
7	10" Ductile Iron Pipe	LF	$ 104.50	0	$ -
8	12" Ductile Iron Pipe	LF	$ 115.50	0	$ -
9	Fire Hydrant with 6" line	EA	$ 5,513.77	1	$ 5,513.77
10	4" Gate Valve & Box	EA	$ 1,225.13	0	$ -
11	6" Gate Valve & Box	EA	$ 1,954.65	0	$ -
12	8" Gate Valve & Box	EA	$ 1,617.98	0	$ -
13	10" Gate Valve & Box	EA	$ 2,420.00	0	$ -
14	12" Gate Valve & Box	EA	$ 4,271.09	0	$ -
15	Pressure Reducing Valve & Vault	EA	Detailed estimate required.	0	#VALUE!
16	Tapping Sleeve & Valve for Water Service Connection	EA	$ 726.00	2	$ 1,452.00
17	Water Meter Setter, Box & Service Line Tap	EA	$ 3,335.29	0	$ -
5.1	**Storm Water Management & Storm Drainage**				
	SWM Basin/Ponds				
1	Excavation - Basin/Pond	CY	$ 25.01	0	$ -
2	Excavation - Core Trench	CY	$ 25.01	0	$ -
3	Embankment Construction - On-Site Material	CY	$ 22.34	0	$ -
4	Embankment Construction - Imported Material	CY	$ 40.26	0	$ -
5	Impervious Core	SF	$ 1.98	0	$ -
6	Concrete Control Structure and Pipe Cradles	CY	$ 1,300.59	0	$ -
7	Corrugated Metal Pipe Control Structure	EA	$ 6,456.24	0	$ -
8	Dewatering Pipes or Structures	EA	$ 558.02	0	$ -
9	Filter Stone for Dewatering Pipe (1" to 2" dia. clean)	CY	$ 53.12	0	$ -
10	Antiseep Collar	width	$ 165.00	0	$ -

	' HVFUSVRQ	8 QW	□□□□8 QV& RW	4 XDQW	7 RWDO& RW
□□	7 UDVK 5 DFN	FK GD	□	□	□
□□	: DMU7 UKV8 LSH %DQGV	FK GD	□	□	□
	Low Impact Development BMP				
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□□	%RUHAHQJRQ %DMQ	6)	□	□	□
□□	□UDVV & KDQQHO	6)	□	□	□
□□	3 HUP HDE6WI3 DYH LV	6 <	□	□	□
	PVC Slotted Pipe				
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□□	□□3 9 & 6 6RWWHG RU3 HURUDWHG " UDQG3 LSH	/)	□	□	□
□□	□□3 9 & 6 6RWWHG RU3 HURUDWHG " UDQG3 LSH	/)	□	□	□
□□	□□□3 9 & 6 6RWWHG RU3 HURUDWHG " UDQG3 LSH	/)	□	□	□
	Corrugate Metal Pipe (Circular)				
□□	□□□6 VRUP " UDQG3 LSH	/)	□	□	□
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□□	□□□6 VRUP " UDQG3 LSH	/)	□	□	□

,WHP 1R	' HVFULSWLRQ	8QLW	8QLW& RVW	4XDQWLW	7RWDO& RVW
	Reinforced Concrete Pipe (circular)				
□□	□□□6 VRUP " UDLQ3 LSH	/)	□,□□□□□□□□□□□□	□	□,□□□□□□□□□□□□

,WHP 1R	' HVFLIS\WRQ	8 QW	8 QW& RW	4 XDQWW	7 RWDO& RW
	Reinforced Concrete Elliptical Pipe				
	6 WRUP UDLQ3 LSH	/)			
	6 WRUP UDLQ3 LSH	/)			
	6 WRUP UDLQ3 LSH	/)			
	6 WRUP UDLQ3 LSH	/)			
	6 WRUP UDLQ3 LSH	/)			
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	6 WRUP UDLQ3 LSH	/)			
	End Sections - Corrugated Metal Pipe Arch (for CMP and HDPE Pipe)				
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	0 HWDO CG36 HFWRQ	($			
	0 HWDO CG36 HFWRQ	($			
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	Storm Drain Structures				
	' URS QBW	($			
	& XUE QBW 2 SHQLQJ	($			
	& XUE QBW 2 SHQLQJ	($			
	& XUE QBW 2 SHQLQJ	($			
	& XUE QBW 2 SHQLQJ	($			
	& XUE QBW 2 SHQLQJ	($			
	0 DQKROH GD KH\KWRUBWV	($			
	Outfall & Channel Protection				
	& RQFUHWH (CGZ DQD IQJZ DQD	6)			
	DEIRQ %DVH\WH WKFNHVV	&<			
	5 IS 5 DS 6 WRCH & QVV	&<			
5.1	**Civc Standards**				
	6 P DQD QD JURXQG 7 RW RW & KQDLHG	($			
	0 HGXP 3 QD JURXQG 7 RW RW & KQDLHG	($			
	/ DJH 3 QD JURXQG 7 RW RW & KQDLHG	($			
6.1	**Miscellaneous Site Construction & Structures**				
	%XV 6 WRS (CFGRVXLH	($			
	0 DLO%R & QVWUX	($			
	& RQ WKFNHVV 6 WDNH RXW	$&			
	7 UDIILF & RQWRO XUQJ & RQWKFNHVV	/ 6	HWDO DWH HWP DWH UHTXLUHG		9 $ / 8 (
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	7 27 $ / 2 1 ' 3 0 2 8 1 7				9 $ / 8 (

&LWLRI 5DQVRQ HWWOH ILJLQLD
&RP P XQLW\ HYHBSP HQW
Construction Bond - Estimate

3URMHFW1DPH □ _____ 'DWH □ _____

6HFWLRQ □ _____ &2 5 □)LGH1R □ _____

Bond Amount Approved: □BBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBB

By: BBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBB **Date:** BBBBBBBBBBBBBB

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					%RQG(VWLPDWH	
,WHP □1R	' HVFULSWLRQ	8QLW	□□□□8QLW&RVW	4XDQWLW	7RWDO&RVW	
1.1	**Erosion & Sediment Control**					
□	6WDELOLHG&RQVWUFWRQ(QWUDQFH	(\$	□□□□□□□□□□□□□□	□	□□	
□	6LOW HQFH□6WDQGDUG	/)	□□□□□□□□□□□□□□	□	□□	
□	6LOW HQFH□6XSHU	/)	□□□□□□□□□□□□□□	□□□□	□□	
□	(DUWK□LN-H&RQVWUFWRQ□□□	/)	□□□□□□□□□□□□□□	□	□□	
□	,QBWDOODWLRQ□HYLFH	(\$	□□□□□□□□□□□□□□	□	□□	
□	2 XWORVWDOODWLRQ□HYLFH	(\$	□□□□□□□□□□□□□□	□	□□	
□	6WRCH&KHFN□DP V	(\$	□□□□□□□□□□□□□□	□	□□	
□	6HGLP HQW7UDS(□FDYDWLRQ	&<	□□□□□□□□□□□□□□	□	□□	
□	5LVHUS WKFWLRQHURS6HGLP HQW%DVLQ3RQG	(\$	□□□□□□□□□□□□□□	□	□□	
□□	,P SHUP HDEGH/ LQHUIRUS6HGLP HQW%DVLQ3RQG	6<	□□□□□□□□□□□□□□	□	□□	
□□	5LS5DS\$SURQ3 OWQJH3RO	&<	□□□□□□□□□□□□□□	□	□□	
□□	□UDW□ DMUZD□□ UDLQDJH6ZDB	/)	□□□□□□□□□□□□□□	□	□□	
□□	7HP SRUDU□6HHGLQJ□□□□GBV DF□	6)	□□□□□□□□□□□□□□	□□□□□	□□	
□□	3HUP DQHQW6HHGLQJ□□□□GBV DF□	6)	□□□□□□□□□□□□□□	□	□□	
□□	0 XOBK□6WDZ RU+ D□□□WQDF□	71	□□□□□□□□□□□□□□	□	□□	
□□	0 XOBK□ RRG&HQKBRVH/) LEHU□□□□□□GBV DF□	71	□□□□□□□□□□□□□□	□	□□	
□□	0 XOBK□6KUHGGHG%DURU□ RRG&KS□□□F□DF□	&<	□□□□□□□□□□□□□□	□	□□	
□□	6RG	6<	□□□□□□□□□□□□□□	□	□□	
□□	6RG6WDELOLQJ 0 DWW%RGHU UDGDE6H	6<	□□□□□□□□□□□□□□	□	□□	
□□	6RG6WDELOLQJ 0 DWW1 RQ ELRGHU UDGDE6H	6<	□□□□□□□□□□□□□□	□	□□	
□□	□HRWK\WB\() DEUF	6)	□□□□□□□□□□□□□□	□	□□	
□□	□IW6DIHW\() HQFH	/)	□□□□□□□□□□□□□□	□	□□	
□□	□IW& KDQG/ LQN6DIHW\() HQFH	/)	□□□□□□□□□□□□□□	□	□□	
□□	7UHI3URMFWRQ	/)	□□□□□□□□□□□□□□	□	□□	
□□	7HP SRUDU□8 WDW/ /LQH6WHDP '&URVVLQJ '' DYHLWRQ	(\$	□□□□□□□□□□□□□□	□	□□	
1.2	**Site Preparation & Demolition**					
□	&GDUDJ□□□□UXEEHQJ□□7/ LJKW&RYHU	\$&5(	□□□□□□□□□□□□□□	□	□□	
□	&GDUDJ□□□□UXEEHQJ□□0 RGHUDWH&RYHU	\$&5(	□□□□□□□□□□□□□□	□	□□	
□	&GDUDJ□□□□UXEEHQJ□□+ HDY□&RYHU	\$&5(	□□□□□□□□□□□□□□	□	□□	
□	&GDUDJ□□□□UXEEHQJ□□9 HU\+ HDY□&RYHU	\$&5(	□□□□□□□□□□□□□□	□	□□	
□	6DZFXW□WLWQJ\$VSKDOW8DYHP HQW	/)	□□□□□□□□□□□□□□	□□□	□□	
□	6DZFXW□WLWQJ&RFUHWH3DYHP HQW	/)	□□□□□□□□□□□□□□	□	□□	
□	5HP RYDORI\$VSKDOW8DYHP HQW	6<	□□□□□□□□□□□□□□	□□□	□□	
□	5HP RYDORI□HQFLQJ	/)	□□□□□□□□□□□□□□	□	□□	

Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
9	Removal of Power Pole	EA	$ 8,415.00	0	$ -
10	Removal of Structures/Buildings	EA	Detailed estimate required.	0	#VALUE!

Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
1.3	**Earthwork**				
1	Strip Topsoil	CY	$ 4.13	300	$ 1,237.50
2	Common Excavation	CY	$ 25.01	7395	$ 184,978.53
3	Borrow Material - On Site	CY	$ 22.34	1365	$ 30,495.47
4	Borrow Material - Imported from Off Site	CY	$ 40.26	0	$ -
5	Rock Excavation	CY	$ 99.00	0	$ -
6	Furnish Topsoil	CY	$ 52.76	0	$ -
2.1	**Paved Surface Construction**				
1	Subgrade	CY	$ 73.37	432	$ 31,695.84
2	Fabric for Subgrade Stabilization	SY	$ 3.19	0	$ -
3	Aggregate Base Course	CY	$ 97.30	576	$ 56,041.92
4	Open Graded Free Draining Base Course	CY	$ 120.89	0	$ -
5	Free Draining Base Trench	LF	$ 12.08	0	$ -
6	Outlet Pipe	LF	$ 39.75	0	$ -
7	Bituminous Asphalt Tack Coat	SY	$ 0.51	0	$ -
8	Superpave Asphalt Base Course - Type 25	TN	$ 93.50	0	$ -
9	Superpave Asphalt Base Course - Type 19	TN	$ 106.70	22.6	$ 2,411.42
10	Superpave Asphalt Surface Course - Type 9.5	TN	$ 117.70	11.3	$ 1,330.01
11	Reinforced Concrete Pavement	CY	$ 450.55	0	$ -
12	Standard Milling	SY	$ 7.07	24	$ 169.75
13	Controlled Low Strength Material	CY	$ 368.98	0	$ -
14	6" Concrete Entrance Apron - Residential	SY	$ 104.07	50	$ 5,203.55
15	8" Concrete Entrance Apron - Commercial Site	SY	$ 137.50	0	$ -
16	Concrete Curb & Gutter	LF	$ 66.00	1145	$ 75,570.00
17	Concrete Curb Only	LF	$ 55.00	0	$ -
18	Bituminous Asphalt Walkway	SF	$ 14.85	0	$ -
19	Concrete Sidewalk	SY	$ 97.13	620	$ 60,220.60
20	Bed Course Material (for sidewalk)	CY	$ 88.57	0	$ -
21	Concrete Curb Ramp	EA	$ 2,750.00	9	$ 24,750.00
22	Detectable Warning Surface	EA	$ 486.72	9	$ 4,380.45
23	Concrete Precast Wheel Stops	EA	$ 275.00	0	$ -
24	One Direction Lane Arrow	EA	$ 275.00	0	$ -
25	Multi Directional Land Arrow	EA	$ 460.90	0	$ -
26	Bicycle Shared Lane Marking	EA	$ 302.50	0	$ -
27	Bicycle Lane Marking	EA	$ 302.50	0	$ -
28	Pavement Letters	EA	$ 82.27	0	$ -
29	4" Edge/Lane Line - Painted	LF	$ 0.51	576	$ 291.46
30	6" Edge/Lane Line - Painted	LF	$ 0.66	0	$ -
31	8" Edge/Lane Line - Painted	LF	$ 0.83	0	$ -
32	4" Edge/Lane Line - Thermoplastic	LF	$ 0.76	0	$ -
33	6" Edge/Lane Line - Thermoplastic	LF	$ 1.17	0	$ -
34	8" Edge/Lane Line - Thermoplastic	LF	$ 1.97	0	$ -
35	4" Edge/Lane Line - Preformed Thermoplastic	LF	$ 4.95	0	$ -
36	6" Edge/Lane Line - Preformed Thermoplastic	LF	$ 7.37	0	$ -
37	8" Edge/Lane Line - Preformed Thermoplastic	LF	$ 9.24	0	$ -
38	4" Edge/Lane Line w/ Contrast - Preformed Thermoplastic	LF	$ 7.07	0	$ -
39	6" Edge/Lane Line w/ Contrast - Preformed Thermoplastic	LF	$ 7.70	0	$ -
40	8" Edge/Lane Line w/ Contrast - Preformed Thermoplastic	LF	$ 9.90	0	$ -
41	12" Crosswalk/Stop/Transverse Line - Painted	LF	$ 3.58	106	$ 378.95
42	12" Crosswalk/Stop/Transverse Line - Preformed Thermoplastic	LF	$ 14.85	0	$ -
43	24" Stop Line - Preformed Thermoplastic	LF	$ 24.75	40	$ 990.00
44	Handicapped Parking Symbol	EA	$ 341.17	0	$ -
45	0.08 in Flat Sheet Sign	SF	$ 49.50	0	$ -
46	City standard sign post	LF	$ 27.50	0	$ -

Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
47	Sign - Street Name per E911 Addressing Ordinance	EA	$ 467.50	1	$ 467.50
48	Guard Rail - Steel Beam & Posts	LF	$ 20.16	0	$ -
49	Fence - Chain Link 6' High	LF	$ 45.24	0	$ -
50	Fence - Wood 3-Rail	LF	$ 33.00	0	$ -
51	Fence - Decorative Iron, 42" High	LF	$ 82.50	0	$ -
52	Pedestrian/Bicycle Barrier Railing - Wood - 42" high	LF	$ 57.20	0	$ -
53	Lights - Street and Parking Lot (light fixture, pole, foundation, & wiring)	EA	$ 13,200.00	5	$ 66,000.00
54	Bollards (wood or steel)	EA	$ 495.00	0	$ -
55	Traffic Control/Stop Light (WVDOH cost estimate)	EA	DOH estimate required.	0	#VALUE!

Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
3.1	**Landscaping**				
1	Transplanting Trees (6' or less)	EA	$ 148.50	0	$ -
2	Transplanting Shrubs	EA	$ 126.50	0	$ -
3	Plant Shrubs (Evergreen or Deciduous)	EA	$ 165.00	0	$ -
4	Plant Tree (2"-3" caliper) - Evergreen	EA	$ 412.50	0	$ -
5	Plant Tree (2"-3" caliper) - Deciduous	EA	$ 550.00	8	$ 4,400.00
6	Plant Tree (2"-3" caliper) - Flowering	EA	$ 330.00	14	$ 4,620.00
7	Plant Ground Cover	EA	$ 7.70	0	$ -
8	Plant Wetlands or Bioretention Vegetation	EA	$ 27.50	0	$ -
9	Plant Screen Trees	EA	$ 165.00	0	$ -
10	Plant Street/Shade Trees	EA	$ 550.00	10	$ 5,500.00
11	Mulching (wood landscape mulch in place)	CY	$ 89.10	0	$ -
4.1	**Sanitary Sewer System**				
1	2" PVC Schedule 80 Pipe (force main)	LF	$ 121.00	0	$ -
2	6" PVC Schedule 80 Pipe	LF	$ 168.76	0	$ -
3	8" PVC Schedule 80 Pipe	LF	$ 109.45	437	$ 47,829.65
4	10" PVC Schedule 80 Pipe	LF	$ 121.55	0	$ -
5	Manhole 4' Diameter (6' height or less)	EA	$ 6,674.68	3	$ 20,024.04
6	Grease Trap	EA	$ 6,875.00	0	$ -
7	4" Service Lateral (20' to Edge of R.O.W./Property Line)	LF	$ 68.31	647	$ 44,196.57
8	Sanitary Sewer Pump Station (sewage pump)	EA	Detailed estimate required.	0	#VALUE!
9	Road Bore/Crossing (with Pipe & Steel Casing)	LF	$ 440.00	80	$ 35,200.00
4.2	**Potable Water System**				
1	3/4" Copper Service Line	LF	$ 117.76	571	$ 67,238.11
2	1" Copper Service Line	LF	$ 193.60	0	$ -
3	2" Copper Service Line	LF	$ 39.60	0	$ -
4	4" Ductile Iron Pipe	LF	$ 57.20	0	$ -
5	6" Ductile Iron Pipe	LF	$ 74.80	0	$ -
6	8" Ductile Iron Pipe	LF	$ 92.40	0	$ -
7	10" Ductile Iron Pipe	LF	$ 104.50	0	$ -
8	12" Ductile Iron Pipe	LF	$ 115.50	0	$ -
9	Fire Hydrant with 6" line	LF	$ 5,513.77	1	$ 5,513.77
10	4" Gate Valve & Box	EA	$ 1,225.13	0	$ -
11	6" Gate Valve & Box	EA	$ 1,954.65	0	$ -
12	8" Gate Valve & Box	EA	$ 1,617.98	0	$ -
13	10" Gate Valve & Box	EA	$ 2,420.00	0	$ -
14	12" Gate Valve & Box	EA	$ 4,271.09	0	$ -
15	Pressure Reducing Valve & Vault	EA	Detailed estimate required.	0	#VALUE!
16	Tapping Sleeve & Valve for Water Service Connection	EA	$ 726.00	2	$ 1,452.00
17	Water Meter Setter, Box & Service Line Tap	EA	$ 3,335.29	0	$ -
5.1	**Storm Water Management & Storm Drainage**				
	SWM Basin/Ponds				
1	Excavation - Basin/Pond	CY	$ 25.01	0	$ -
2	Excavation - Core Trench	CY	$ 25.01	0	$ -
3	Embankment Construction - On-Site Material	CY	$ 22.34	0	$ -
4	Embankment Construction - Imported Material	CY	$ 40.26	0	$ -
5	Impervious Core	SF	$ 1.98	0	$ -
6	Concrete Control Structure and Pipe Cradles	CY	$ 1,300.59	0	$ -
7	Corrugated Metal Pipe Control Structure	EA	$ 6,456.24	0	$ -
8	Dewatering Pipes or Structures	EA	$ 558.02	0	$ -
9	Filter Stone for Dewatering Pipe (1" to 2" dia. clean)	CY	$ 53.12	0	$ -
10	Antiseep Collar	width	$ 165.00	0	$ -

Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
11	Trash Rack	ch dia.	$ 55.00	0	$ -
12	Water Tight Pipe Bands	ch dia.	$ 8.25	0	$ -
	Low Impact Development BMP				
13	Urban Bioretention Basin (in sidewalk areas)	SF	$ 55.00	0	$ -
14	Bioretention Basin	SF	$ 38.50	0	$ -
15	Grass Channel	SF	$ 30.00	0	$ -
16	Permeable Pavers	SY	$ 50.00	0	$ -
	PVC Slotted Pipe				
17	4" PVC Slotted or Perforated Drain Pipe	LF	$ 16.50	0	$ -
18	6" PVC Slotted or Perforated Drain Pipe	LF	$ 17.60	0	$ -
19	8" PVC Slotted or Perforated Drain Pipe	LF	$ 21.85	0	$ -
20	12" PVC Slotted or Perforated Drain Pipe	LF	$ 36.30	0	$ -
	Corrugate Metal Pipe (Circular)				
21	15" Storm Drain Pipe	LF	$ 171.48	0	$ -
22	18" Storm Drain Pipe	LF	$ 112.79	0	$ -
23	24" Storm Drain Pipe	LF	$ 173.24	0	$ -
24	30" Storm Drain Pipe	LF	$ 198.00	0	$ -
25	36" Storm Drain Pipe	LF	$ 209.06	0	$ -
26	42" Storm Drain Pipe	LF	$ 244.20	0	$ -
27	48" Storm Drain Pipe	LF	$ 278.30	0	$ -
28	54" Storm Drain Pipe	LF	$ 313.50	0	$ -
29	60" Storm Drain Pipe	LF	$ 352.00	0	$ -

Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
	Reinforced Concrete Pipe (circular)				
30	15" Storm Drain Pipe	LF	$ 312.02	0	$ -
31	18" Storm Drain Pipe	LF	$ 118.94	0	$ -
32	24" Storm Drain Pipe	LF	$ 136.22	0	$ -
33	30" Storm Drain Pipe	LF	$ 180.69	0	$ -
34	36" Storm Drain Pipe	LF	$ 259.58	0	$ -
35	42" Storm Drain Pipe	LF	$ 246.40	0	$ -
36	48" Storm Drain Pipe	LF	$ 665.17	0	$ -
37	54" Storm Drain Pipe	LF	$ 316.80	0	$ -
38	60" Storm Drain Pipe	LF	$ 352.00	0	$ -
	High Density Polyethlyene (HDPE) Pipe (Circular)				
39	15" Storm Drain Pipe	LF	$ 126.32	599	$ 75,668.08
40	18" Storm Drain Pipe	LF	$ 169.63	0	$ -
41	24" Storm Drain Pipe	LF	$ 180.58	0	$ -
42	30" Storm Drain Pipe	LF	$ 312.33	0	$ -
43	36" Storm Drain Pipe	LF	$ 209.91	0	$ -
44	42" Storm Drain Pipe	LF	$ 250.80	0	$ -
45	48" Storm Drain Pipe	LF	$ 297.00	0	$ -
46	54" Storm Drain Pipe	LF	$ 308.00	0	$ -
47	60" Storm Drain Pipe	LF	$ 319.00	0	$ -
	End Sections (Circular) - Metal (for CMP and HDPE Pipe)				
48	15" Metal End Section	EA	$ 797.50	0	$ -
49	18" Metal End Section	EA	$ 697.76	0	$ -
50	24" Metal End Section	EA	$ 960.88	0	$ -
51	30" Metal End Section	EA	$ 1,240.92	0	$ -
52	36" Metal End Section	EA	$ 1,210.00	0	$ -
53	42" Metal End Section	EA	$ 1,430.00	0	$ -
54	48" Metal End Section	EA	$ 1,760.00	0	$ -
55	54" Metal End Section		$ 2,200.00	0	$ -
56	60" Metal End Section		$ 2,200.00	0	$ -
	End Sections (Circular) - Concrete				
57	15" RCP End Section	EA	$ 533.50	0	$ -
58	18" RCP End Section	EA	$ 621.50	0	$ -
59	24" RCP End Section	EA	$ 830.50	0	$ -
60	30" RCP End Section	EA	$ 1,314.50	0	$ -
61	36" RCP End Section	EA	$ 1,941.50	0	$ -
62	42" RCP End Section	EA	$ 1,974.50	0	$ -
63	48" RCP End Section	EA	$ 2,348.50	0	$ -
64	54" RCP End Section	EA	$ 3,074.50	0	$ -
65	60" RCP End Section	EA	$ 3,800.50	0	$ -
	Corrugated Metal Pipe Arch				
66	17" x 13" Storm Drain Pipe	LF	$ 171.48	0	$ -
67	21" x 15" Storm Drain Pipe	LF	$ 112.79	0	$ -
68	24" x 18" Storm Drain Pipe	LF	$ 173.24	0	$ -
69	35" x 24" Storm Drain Pipe	LF	$ 198.00	0	$ -
70	42" x 29" Storm Drain Pipe	LF	$ 209.06	0	$ -
71	57" x 38"Storm Drain Pipe	LF	$ 244.20	0	$ -
72	64" x 43" Storm Drain Pipe	LF	$ 278.30	0	$ -

Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
	Reinforced Concrete Elliptical Pipe				
73	23" x 14" Storm Drain Pipe	LF	$ 118.94	0	$ -
74	30" x 19" Storm Drain Pipe	LF	$ 136.22	0	$ -
75	38" x 24" Storm Drain Pipe	LF	$ 180.69	0	$ -
76	45" x 29" Storm Drain Pipe	LF	$ 259.58	0	$ -
77	53" x 34" Storm Drain Pipe	LF	$ 665.17	0	$ -
78	60" x 38" Storm Drain Pipe	LF	$ 665.17	0	$ -
79	68" x 43" Storm Drain Pipe	LF	$ 352.00	0	$ -
	End Sections - Corrugated Metal Pipe Arch (for CMP and HDPE Pipe)				
80	17" x 13" Metal End Section	EA	$ 797.50	0	$ -
81	21" x 15" Metal End Section	EA	$ 697.76	0	$ -
82	24" x 18" Metal End Section	EA	$ 709.50	0	$ -
83	35" x 24" Metal End Section	EA	$ 1,240.92	0	$ -
84	42" x 29" Metal End Section	EA	$ 1,210.00	0	$ -
85	57" x 38" Metal End Section	EA	$ 1,760.00	0	$ -
86	64" x 43" Metal End Section	EA	$ 2,200.00	0	$ -
	End Sections - Reinforced Concrete Elliptical Pipe				
86	23" x 14" RCP End Section	EA	$ 621.50	0	$ -
88	30" x 19" RCP End Section	EA	$ 830.50	0	$ -
89	38" x 24" RCP End Section	EA	$ 1,314.50	0	$ -
90	45" x 29" RCP End Section	EA	$ 1,941.50	0	$ -
91	53" x 34" RCP End Section	EA	$ 1,974.50	0	$ -
92	60" x 38" RCP End Section	EA	$ 2,348.50	0	$ -
93	68" x 43" RCP End Section	EA	$ 3,074.50	0	$ -
	Storm Drain Structures				
94	Drop Inlet	EA	$ 3,879.85	0	$ -
95	Curb Inlet - 6' Opening	EA	$ 4,620.00	1	$ 4,620.00
96	Curb Inlet - 10' Opening	EA	$ 5,280.00	1	$ 5,280.00
97	Curb Inlet - 12' Opening	EA	$ 6,050.00	1	$ 6,050.00
98	Curb Inlet - 16' Opening	EA	$ 6,820.00	0	$ -
99	Curb Inlet - 20' Opening	EA	$ 7,370.00	0	$ -
100	Manhole (4' dia., 6' height or less)	EA	$ 6,674.79	6	$ 40,048.73
	Outfall & Channel Protection				
101	Concrete Endwall/Wingwall	SF	$ 110.00	0	$ -
102	Gabion Basket Structure	CY	$ 275.50	0	$ -
103	Rip-Rap Stone - Class 1	CY	$ 122.72	0	$ -
5.1	**Civc Standards**				
1	Small Playground Tot Lot (< 10 Childred)	EA	$ 19,800.00	0	$ -
2	Medium Playground Tot Lot (10-50 Childred)	EA	$ 55,000.00	0	$ -
3	Large Playground Tot Lot (50+ Childred)	EA	$ 110,000.00	0	$ -
6.1	**Miscellaneous Site Construction & Structures**				
1	Bus Stop Enclosure	EA	$ 3,850.00	0	$ -
2	Mail Box Cluster	EA	$ 1,100.00	2	$ 2,200.00
3	Construction Stake-out	AC	$ 11,000.00	2.33	$ 25,630.00
4	Traffic Control During Construction	LS	Detailed estimate required.	1	#VALUE!
5	Set Property Corners	EA	$ 132.00	0	$ -

	Total
Grand Total All Costs	#VALUE!
Mobilization (5%)	#VALUE!
15% Contingency	#VALUE!
TOTAL BOND AMOUNT	#VALUE!

March 25, 2024

Reiley Stanley
Community Development Director
City of Ranson
312 South Mildred Street
Ranson, WV 25438

Re: Briar Run Phase VI B Record Plat
Project #21258.002.00

Dear Reiley:

We are in receipt of comments regarding the record plat. Please see below for our responses.

Regarding Comment #1 Dedication and recordation of transfer of Oak Lee Drive circle to the City of Ranson. Our record plat shows the relevant area being dedicated for Right of Way purposes. The owner intends to dedicate concurrent with the recordation of this plat.

Regarding Comment #2 The demolition of the existing utility easement shown on sheet C102. There are no improvements within this easement and no separate easement document. This recordation of this plat will vacate the easement.

Regarding Comment #3 Acquisition of THOMFAIR LLC property- The Owner's Certificate / consent has been added to the plat for conveyance with recordation. There is no separate acquisition required.

Sincerely,

IMEG Consultants Corp.
Sylke Knuppel, P.E.
Project Executive

SSK/dml

RECORDING REQUESTED By
City of Ranson Planning Commission

WHEN RECORDED RETURN To

City of Ranson
312 S. Mildred Street
Ranson, WV 25438

DEVELOPMENT AGREEMENT FOR BRIAR RUN PHASE VI-8

THE CITY OF RANSON AND MARCUS ENTERPRISES LLC

THIS AGREEMENT is made and entered into by and between the City of Ranson Planning Commission, hereinafter referred to as "City" and sometimes "Ranson" and Marcus Enterprises LLC, hereinafter referred to as "Developer," for a subdivision known as Briar Run Phase VI-8, both of whom understand and agree as follows:

WITNESSETH:

WHEREAS, the Developer will need to record a Final Plat for this phase of the Development.

WHEREAS, this agreement is executed pursuant to the provisions of land use planning as set forth in West Virginia Code §8A-1-1 and the Ranson Municipal Code;

NOW THEREFORE, in the best interest of the City of Ranson and in consideration of Developer posting security; and, in order to insure satisfactory performance by Developer of its obligations under Ranson's Land Development ordinances; and to clarify that a recorded final plat for Phase VI-8 will have to be recorded to ensure consistency with the approved Land Development Plan and Plat, the parties agree as follows:

1. Performance of Work
   Developer will do and perform, or cause to be done and performed, at Developer's own expense, in a good and workmanlike manner and furnish all required materials, all under the direction and to the satisfaction of the City, all of the work and improvements required by the Ranson Planning Commission for this subdivision in accordance with the approved plans and specifications on file as herein specified, or with any changes required or ordered by the City, which in its opinion are necessary or required to complete the work. Any sewer work or water supply work shall be subject to the approval of the respective special districts having to do with the said types of work.

2. Work: Places and Grades to be Approved by Engineer
   All of said work is to be done at the places, of the materials, in the manner, and at the grades, all as shown upon the plans and specifications therefore, heretofore approved by the Ranson Planning Commission and which are now on file in its office, and to the satisfaction of said City. The actual work of surveying shall be performed by the Developer's engineer.

3. Specifications
   The work embraced herein shall be done in accordance with the provisions of all applicable

ordinances, regulations and policies adopted by the City of Ranson in effect at the time of building permit issuance, including but not limited to: West Virginia Code §8A, the Ranson Municipal Code, the Ranson Design Guidelines, and/or the Ranson Standard Engineering Detail Manual. In case of conflict between any of the aforementioned authorities, the Ranson standard shall prevail. In case of conflict between any of the aforementioned authorities, the plans and this agreement, the approved plans and this agreement shall take precedence over and be used in lieu of such conflicting portions of the aforementioned authorities.

4. Work: Time for Completion
   City hereby fixes the time for the completion of all public infrastructure improvements in Phase 1 to be within two (2) years after the date of approval of this Agreement unless a written extension is granted by the Planning Commission. However in no case shall the time of completion for required infrastructure extend beyond three (3) years beyond the date of approval of this Agreement. Absent a written extension by the Planning Commission, the Planning Commission reserve the right to call the bond to complete the infrastructure in accordance with the approved plan. Nothing in this agreement, however, shall be construed to limit the Planning Commission's right to call the bond at any time if exigent circumstances require such action. Such circumstances shall be determined at the sole discretion of the Ranson Planning Commission.

5. Time of Essence – Extension
   Time is of the essence of this agreement; provided, that in the event good cause is shown therefore, the Ranson Planning Commission may extend the time for completion of the improvements hereunder. Any such extension may be granted without notice to the Developer's surety, and extensions so granted shall not relieve the surety's liability on the bond to secure the faithful performance of this agreement. The Ranson Planning Commission shall be the sole and final judge as to whether or not good cause has been shown to entitle Developer to an extension.

6. Repairs or Replacements
   Developer shall replace, or have replaced, or repair, or have repaired, as the case may be, all pipes and monuments shown on the map which have been destroyed or damaged, and Developer shall replace or have replaced, repair, or have repaired, as the case may be, or pay to the owner, the entire cost of replacement or repairs, or any and all property damaged or destroyed by reason of any work done hereunder, whether such property be owned by the United States or any agency thereof, or the State of West Virginia, or any agency or political subdivision thereof, or by the City or by a public or private corporation, or by any person whomsoever, or by any combination of such owners. Any such repair or replacement shall be to the satisfaction, and subject to the approval of the City Engineer.

7. Permits: Compliance with Law
   Developer shall, at Developer's expense, obtain all necessary permits and licenses for the construction of such improvements, give all necessary notices and pay all fees and taxes required by law.

8. Superintendence by Developer or its Designated Representative
   Developer shall give personal superintendence to the work on said improvement, or have a competent foreman or superintendent, satisfactory to the City, on the work at all times during progress, with authority to act for the Developer.

9. Inspection by City of Ranson

Developer shall at all times maintain proper facilities, and provide safe access for inspection by City, to all parts of the work, and to the shops wherein the work is in preparation.

10. Subdivision Surety
Developer shall post subdivision surety consistent with Ranson Municipal Code 16-80 et seq. *See Exhibit A for surety documents. for Phase VI-8.*

11. Hold-Harmless Agreement
Developer hereby agrees to, and shall, hold City, its elective and appointive boards, commissions, officers, agents and employees, harmless from any liability for damage or claims for damage for personal injury, including death, as well as from claims for property damage which may arise from Developer's or Developer's contractors', subcontractors', agents', or employees' operations under this agreement, whether such operations be by Developer or by any of Developer's contractors, subcontractors, or by any one or more persons directly or indirectly employed by, or acting as agent for Developer or any of Developer's contractors, or subcontractors. Developer agrees to and shall defend City and its elective and appointive boards, commission, officers, agents and employees from any suits or actions at law or in equity for damages caused, or alleged to have been caused, by reason of any of the aforesaid operations; provided as follows: That the aforesaid hold-harmless agreement by Developer shall apply to all damages and claims for damages of every kind suffered, or alleged to have been suffered by reason of any of the aforesaid operations referred to in this paragraph, regardless of whether or not City has prepared, supplied or approved of, plans and/or specifications for the subdivision, or regardless of whether or not any of the insurance policies described herein shall have been determined to be applicable to any of such damages or claims for damages.

12. Developer's Insurance
Developer shall not commence work under this agreement until Developer shall have obtained all insurance required under this paragraph, nor shall Developer allow any contractor or subcontractor to commence work on his contract or subcontract until all similar insurance required of the contractor or subcontractor shall have been so obtained and approved. All requirements herein provided shall appear either in the body of the insurance policies or as endorsements and shall specifically bind the insurance carrier.

    a. Compensation Insurance
    Developer shall maintain, during the life of this agreement, Workmen's Compensation Insurance for all Developer's employees employed at the site of the improvement, and in case any work is sublet, Developer shall require any contractor or subcontractor similarly to provide Workmen's Compensation Insurance for all contractor's or subcontractor's employees, unless such employees are covered by the protection afforded by Developer. In case any class of employees engaged in work under this agreement at the site of the project is not protected under any Workmen's Compensation Law, Developer shall provide, and shall cause each contractor and subcontractor to provide, adequate insurance for the protection of employees not otherwise protected. Developer hereby indemnifies City for any damage resulting to it from failure of either Developer or any contractor or subcontractor to take out or maintain such insurance.

    b. Public Liability and Property Damage Insurance
    Developer shall take out and maintain during the life of this agreement such public liability and property damage insurance as shall insure City, its elective and appointive boards, commissions, officers, agents, and employees, Developer and any contractor or subcontractor performing work covered by this agreement from claims for damages for

personal injury, including death, as well as from claims for property damage which may arise from Developer's or any contractor's or subcontractor's operations hereunder, whether such operations be by Developer or any contractor or subcontractor, or by anyone directly or indirectly employed by either Developer or any contractor or subcontractor.

c. Contractual Liability Insurance

Developer shall take out and maintain during the life of the agreement an insurance policy insuring City, its elective and appointive boards, commissions, officers, agents and employees, Developer and any contractor or subcontractor performing work covered by this agreement against damages sustained by reason of any action or actions at law or in equity, and/or any claims or demands by reason of any breach or alleged breach of any contract, or provision thereof, or by reason of any contractual liability or alleged contractual liability on any contract, entered into by Developer and/or any of Developer's contractors, subcontractors, agents and/or employees.

In the event that any of the aforesaid insurance policies provided for herein insures any entity, person, board or commission other than those mentioned in this paragraph, such policy shall contain a standard form of cross-liability endorsement, insuring on such policy, City, its elective and appointive boards, commissions, officers, agents and employees, Developer and any contractor or subcontractor performing work covered by this agreement.

13. Title to Improvements

Title to, and ownership of, all street and infrastructure improvements constructed hereunder by Developer shall vest absolutely in City, upon completion of such streets in accordance with the approved plan and acceptance of such improvements by City. All infrastructure shall meet City of Ranson maintenance standards and approved by the City prior to dedication. Developer and City shall work together to turn over improvements in sections as they are completed.

14. Specific Conditions of Development

a. Developer and/or established Homeowners' Association shall be responsible for maintaining and mowing all common areas. Common areas shall include, but not be limited to, all open space, storm water management facilities, and landscaped areas. Homeowners' Association and/or Developer shall be responsible for the perpetual maintenance, trimming, and protection of buffers and landscaped plantings, including trees. Diseased, infested, dying, dead or damaged landscaping shall be replaced by Developer and/or Homeowners' Association as soon as possible but no later than the next planting season.

b. Developer shall make Builders aware that in order to receive a Use & Occupancy Certificate, the City will require
   (1) finished individual driveways to include top coat,
   (2) sod is to be installed on front, rear and side yards along with 4 inches of top soil on residential lots,
   (3) Installation of required street trees as shown on the approved engineering plans,
   (4) Seasonal bonding shall be available to achieve the same result,

c. Developer shall ensure that street lights and community landscaping is installed sequentially

as development occurs and structures are built.

d. Vacant lots, and lots adjacent to public infrastructure shall be mowed and maintained

e. Developer shall have a dedicated construction entrance for the use of site and building contractors.

f. The Developer shall be responsible in screening the onsite storage of all site development materials, such as but not limited to utility service pipes, stormwater pipes, gravel and construction material, from the public streets and surrounding residents.

15. Repair or Reconstruction of Defective Work

If, within a period of one year after final acceptance of the work performed under this agreement, and notification by City to Developer, any structure or part of any structure furnished and/or installed or constructed, or caused to be installed or constructed by Developer, or any of the work done under this agreement, fails to fulfill any of the requirements of this agreement or the specifications referred to herein, Developer shall without delay and without any cost to the City, repair or replace or reconstruct any defective or otherwise unsatisfactory part or parts of the work or structure. Should Developer fail to act promptly, or in accordance with this requirement, or should the exigencies of the case require repairs or replacements to be made before Developer can be notified, City may, at its option, make the necessary repairs or replacements or perform the necessary work and Developer shall pay to the City the actual cost of such repairs plus fifteen percent (15%).

16. Developer not Agent of City

Neither Developer nor any of Developer's agents or contractors are or shall be considered to be agents of City in connection with the performance of Developer's obligations under this agreement.

17. Notice of Breach and Default

If after notification, Developer refuses or fails to obtain prosecution of the work, or any severable part thereof, with such diligence as will insure its completion within the time specified, or any extensions thereof, or fails to obtain completion of said work within such time, or if the Developer should be adjudged a bankrupt, or Developer should make a general assignment for the benefit of Developer's insolvency or is Developer, or any of Developer's contractors, subcontractors, agents, or employees, should violate any of the provisions of this agreement, City Engineer, City Manager or his designee or Planning Commission shall serve written notice upon Developer and Developer's surety of breach of this agreement, or of any portion thereof, and default of Developer.

18. Breach of Agreement: Performance by Surety or City of Ranson

In the event of any such notice of breach Developer's surety shall have the duty to takeover and complete the work and the improvement herein specified; provided, however, that if the surety, within sixty (60) days after the serving upon it of such notice of breach, does not give City written notice of its intention to take over the performance of the contract, and does not commence performance thereof within ninety (90) days after notice to City of such election, City may take over the work and prosecute the same to completion, by contract or by any other method City may deem advisable, for the account and at the expense of Developer, and Developer's surety shall be liable to City for any excess cost or damages occasioned City thereby; and, in such event, City, without liability for so doing, may take possession of, and utilize in completing the work,

such materials, appliances, plant and other property belonging to Developer as maybe on the site of the work and necessary therefor.

19. Completion

Upon completion of all the work described in the said Agreement and upon the City authorizing a written Notice of Completion and Acceptance of said work, the Planning Commission will release all surety to 80% of the surety. The remaining 20% shall be held by the City for a period of one (1) year after the date of the Notice of Completion as a guarantee bond to secure the performance of Section 17of this Agreement and shall thereafter be released. The amount specified above for labor and materials shall be held by City for a period of one (1) year after the date official acceptance of the improvements specified in the said Agreement.

20. Enforcement and Guarantees

Pursuant to W. Va. Code § 8A-6-3, failure to meet all conditions in this Agreement shall constitute cause to deny Developer, the issuance of any of the required use, occupancy or improvement local permits, as may be appropriate. Nothing in this Agreement waives any of the remedies the Planning Commission or Ranson possesses to administer and enforce conditions under the authority granted in W. Va. Code § 8A-6-3.

City must notify Developer if requirements are not met or violations exist and Developer shall give the City written notice of its intent to cure within (5) days after the City's notice is provided. If Developer provides its written confirmation to cure to the City, the Developer shall have a 30 day right to cure period. Failure to cure within the 30 day cure period shall constitute cause for the City to withhold issuing building permits, use and occupancy permits and/or approving plats for future phases and calling surety

21. Notices

All notices herein required shall be in writing, and delivered in person or sent by registered mail, postage prepaid. Notices required to be given to City shall be addressed as follows:

City of Ranson
Attn: City Manager
312 South Mildred Street
Ranson, WV 25438

Notices required to be given to Developer shall be addressed as follows:

_____

_____

Provided that any party or the surety may change such address by notice in writing to the other party and thereafter notices shall be addressed and transmitted to the new address.

22. Binding Effect of Agreement

This Agreement shall be binding on and inure to the benefit of the parties to this Agreement and their estates, heirs, personal representatives, successors and assigns. However, the homeowner association or any owner of any unit shall not be deemed a third party beneficiary and not entitled to enforce any provision hereunder.

23. Authority

Any conflict arising from this Agreement shall be governed by and construed in accordance with

the laws of the State of West Virginia.

DATED this _____ day of _____, 2024.

RANSON PLANNING COMMISSION

By:

_____
Mike Anderson
Its: President

DEVELOPER

By: _____

Its: _____

STATE OF WEST VIRGINIA;
COUNTY OF JEFFERSON; to-wit:

The foregoing instrument was acknowledged before me by Anthony Grant, Ranson Planning Commission President, this ____ day of _____, 2016.

My commission expires: _____

NOTARY PUBLIC

STATE OF _____;
COUNTY OF _____; to-wit:

The foregoing instrument was acknowledged before me by _____.
for_____, its _____, this ____ day of_____, 2016.

My commission expires: _____

NOTARY PUBLIC

RESOLUTION#: PC-24-05

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF RANSON APPROVING A DEVELOPMENT AGREEMENT BY AND BETWEEN THE RANSON PLANNING COMMISSION AND MARCUS ENTERPRISES INC. FOR A SUBDIVISION "BRIAR RUN PHASE VI-8"

WHEREAS Christopher Consultants LLC applied for Phase VI-8 of Briar Run on August 8, 2023 on behalf of Marcus Enterprises. Plat is for 38 townhomes. This phase includes T4 zoning on 3.48 acres. A true copy of the Record Plat is attached.

WHEREAS Consideration of the Development Agreement was advertised in the Spirit of Jefferson on March 13, 2024 and March 20, 2024 in accordance with Ranson Code 16-62

WHEREAS The Planning Commission President is authorized and hereby directed to execute the Development Agreement on behalf of the City of Ranson Planning Commission.

NOW THEREFORE, The Planning Commission of the City of Ranson pursuant to its authority within Ranson Municipal Code 16-60 approves the attached Development Agreement by and between the Ranson Planning Commission and Marcus Enterprises, for a subdivision commonly referred to and known as "Briar Run Phase VI-8".

AND THEREFORE, The Planning Commission hereby authorizes the City Manager or his designee to execute any and all documents necessary to carry out the conditions of the attached Development Agreement., including any documents requested by financial institutions, lenders, attorneys, lienholders, contractors, sureties, and/or third parties.

AND THEREFORE, The Planning Commission President is authorized and hereby directed to execute the Development Agreement on behalf of the City of Ranson Planning Commission.

This Resolution and executed Development Agreement shall become effective immediately upon its adoption.

Signed and approved this 1st day of April, 2024.

_____
Planning Commission
President

ATTEST:

_____
Planning Commission Member

AFFIX CITY SEAL

NOTES:

1. THE PROPERTIES SHOWN HEREON ARE IDENTIFIED ON JEFFERSON COUNTY, RANSON CORPORATION DISTRICT 8 TAX MAP 8A PARCELS 3, 3.2, 3.3 AND A PORTION OF PARCEL OSA AND ARE ZONED T4.
2. THE PROPERTIES SHOWN HEREON ARE NOW IN THE NAME OF MARCUS ENTERPRISES RECORDED AT DEED BOOK 1028, PAGE 659 AND THOMFAIR LLC RECORDED AT DEED BOOK 1118, PAGE 456 ALL AMONG THE LAND RECORDS OF JEFFERSON COUNTY, WEST VIRGINIA.
3. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT AND MAY NOT SHOW ALL ENCUMBRANCES.
4. THE PROPERTY SHOWN HEREON IS LOCATED ON THE FLOOD INSURANCE RATE MAP (FIRM), COMMUNITY PANEL NO. 54037C 0130E, REVISED ON DECEMBER 18, 2009. BY GRAPHICALLY DEPICTION ONLY, THE PROPERTY SHOWN HEREON IS SHOWN IN: FLOOD ZONE "X", AREA OF MINIMAL FLOOD HAZARD.
5. THE CURRENT NATIONAL WETLANDS INVENTORY MAP DOES NOT SHOW WETLANDS/SENSITIVE AREAS ON THE SUBJECT PROPERTY.
6. ALL KNOWN EXISTING AND PROPOSED EASEMENTS AND RIGHTS-OF-WAY FOR THIS SECTION ARE SHOWN HEREON.
7. SERVICE LATERALS TO INDIVIDUAL LOTS OR SITES SHALL BE INSTALLED PRIOR TO CONSTRUCTION OF THE FINISHED ROAD PAVEMENT SURFACE.
8. PRIVATE WELLS AND/OR PRIVATE SEPTIC SYSTEMS FOR DOMESTIC USE ARE PROHIBITED WHERE CENTRAL WATER AND/OR SANITARY SEWER SERVICE IS AVAILABLE.
9. UNLESS OTHERWISE NOTED, BUILDING SETBACKS ARE AS FOLLOWED:
   FRONT: 18 FEET MAX (PRINCIPAL), 10 FEET MAX (SECONDARY)
   SIDE: 0 FEET, OR 6 FEET MAX TOTAL
   REAR: 3 FEET MINIMUM
10. LOT ACCESS IS LIMITED TO INTERIOR ROADS ONLY.
11. ALL RESIDENTIAL AND NON-RESIDENTIAL BUILDING LOTS SHALL HAVE STABILIZED CONSTRUCTION ENTRANCES AND A PERIMETER SILT FENCE INSTALLED PRIOR TO BEGINNING CONSTRUCTION ON THE LOT.
12. A COMMON INTEREST OWNERSHIP AGREEMENT MUST BE ESTABLISHED TO PROVIDE FOR THE MAINTENANCE OF COMMONLY OWNED LAND, INCLUDING SNOW REMOVAL. THIS COMMON INTEREST OWNERSHIP AGREEMENT MUST BE DEVELOPED IN ACCORDANCE WITH THE UNIFORM COMMON INTEREST OWNERSHIP ACT OF WEST VIRGINIA. THIS IS NOT A PUBLIC RESPONSIBILITY NOR THE RESPONSIBILITY OF JEFFERSON COUNTY, WV.
13. NO STRUCTURES, FENCES, OR LANDSCAPING SHALL BE LOCATED IN THE EASEMENTS.
15. THE BOUNDARY OF THESE LOTS WAS ESTABLISHED WITH A NETWORK OF TRAVERSE CONTROL HAVING AN ERROR OF CLOSURE OF 1:15,000 OR BETTER.
16. THE TOTAL RIGHT-OF-WAY DEDICATION SHOWN HEREON INCLUDES CECILY WAY, A PUBLIC ALLEY, FUZZY TAIL DRIVE, AND A PORTION OF OAK LEE DRIVE.

AREA TABULATIONS:

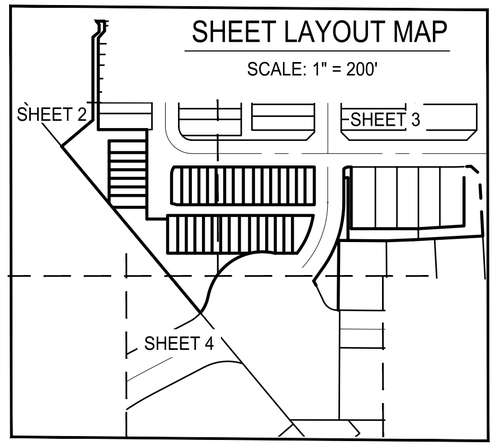
BEFORE SUBDIVISION			
PARCEL 3	57,961 SQ. FT.	OR	1.3306 AC.
PARCEL 3.2	18,156 SQ. FT.	OR	0.4168 AC.
PARCEL 3.3	74,606 SQ. FT.	OR	1.7127 AC.
PARCEL OSA (PORTION)	10,792 SQ. FT.	OR	0.2478 AC.
TOTAL AREA	161,515 SQ. FT.	OR	3.7079 AC.

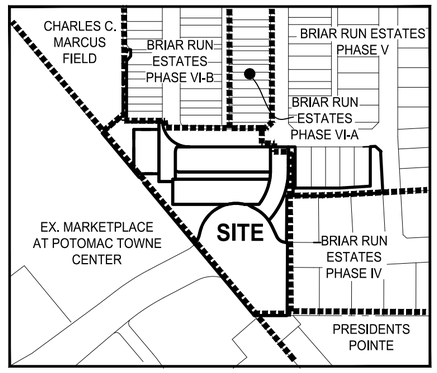
AFTER SUBDIVISION			
RESIDENTIAL LOTS (38)	45,528 SQ. FT.	OR	1.0452 AC.
RIGHT-OF-WAY	77,981 SQ. FT.	OR	1.7902 AC.
OUTLOT A	10,586 SQ. FT.	OR	0.2430 AC.
OUTLOT B	13,371 SQ. FT.	OR	0.3070 AC.
OUTLOT C	4,582 SQ. FT.	OR	0.1052 AC.
PARCEL OSA RESIDUE	9,467 SQ. FT.	OR	0.2173 AC.
TOTAL AREA	161,515 SQ. FT.	OR	3.7079 AC.

LAND OWNERS:
MARCUS ENTERPRISES, LLC
608 EAST WASHINGTON STREET
CHARLES TOWN, WEST VIRGINIA 25414
(304) 725-9233

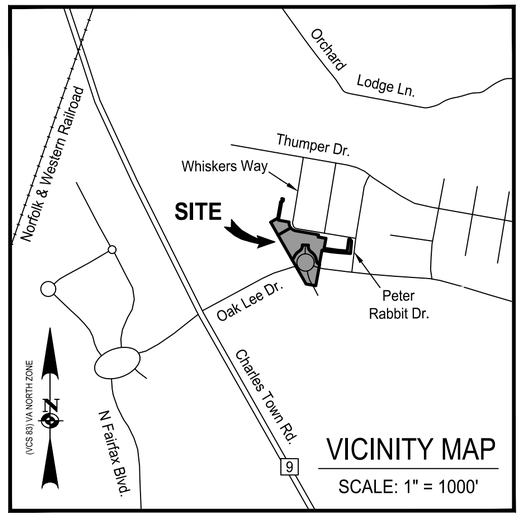
THOMFAIR, LLC
175 JOHN J THOMAS WAY
CHARLES TOWN, WEST VIRGINIA 25414
(304) 283-2601

JEFFERSON COUNTY FILE NUMBER:
SUBDIVISION REGULATIONS ADOPTED 10/9/08 AND AMENDED 2/1/18
ZONING ORDINANCE ADOPTED 7/7/88 AND AMENDED 5/17/18





SITE MAP
SCALE: 1" = 300'



VICINITY MAP
SCALE: 1" = 1000'

LIST OF APPROVALS:

JEFFERSON UTILITIES
AVAILABILITY LETTER:
DATED: _____

CITY OF CHARLES TOWN SEWER
AVAILABILITY LETTER:
DATED: _____

WV DEPARTMENT OF HIGHWAYS
PERMIT # _____
DATE: _____

STATE HEALTH PERMITS
PERMIT #: _____
DATE: _____
PERMIT #: _____
DATE: _____

JEFFERSON COUNTY ADDRESSING
APPROVED: _____

WV NPDES PERMIT
APPROVED: _____
PERMIT #: _____

SURVEYOR'S CERTIFICATE:

I HEREBY CERTIFY THAT THE FINAL PLAT SHOWN HEREON IS CORRECT; THAT IT IS A SUBDIVISION OF BRIAR RUN PHASE VI SECTION B PART OF THE LANDS CONVEYED, BY MARCUS ENTERPRISES TO MARCUS ENTERPRISES, LLC BY DEED DATED, AND RECORDED IN THE LAND RECORDS OF JEFFERSON COUNTY, AT PAGE 659, OF BOOK 1028, AND BRIAR RUN PHASE VI SECTION B PART OF THE LANDS CONVEYED, BY MARCUS ENTERPRISES, LLC TO THOMFAIR, LLC BY DEED DATED, AND RECORDED IN THE LAND RECORDS OF JEFFERSON COUNTY, AT PAGE 456, OF BOOK 1118, AND THAT THE REQUIREMENTS OF THE SUBDIVISION ORDINANCES OF THE CITY OF RANSON AS ENACTED OR AMENDED SO FAR AS IT MAY CONCERN THE MAKING OF THIS PLAT AND THE SETTING OF MONUMENTS AND MARKERS HAVE BEEN COMPLIED WITH.

JEFFREY S. SMITH
LICENSE NO. 01974
IN THE STATE OF WEST VIRGINIA

JEFFREY S. SMITH LICENSED No. 01974 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

OWNER'S CERTIFICATION AND DEDICATION

WE, MARCUS ENTERPRISES, LLC AND THOMFAIR, LLC, OWNERS OF THE PROPERTY SHOWN AND DESCRIBED HEREON CONSENT TO AND ADOPT THIS PLAN OF SUBDIVISION AND IN CONSIDERATION OF THE APPROVAL OF THIS FINAL PLAT BY THE PLANNING COMMISSION, ESTABLISH THE MINIMUM BUILDING RESTRICTION LINES; AND DEDICATE THE STREETS, WALKWAYS, AND OTHER EASEMENTS, TO PUBLIC USE, UNLESS OTHERWISE NOTED ON THIS PLAT.

WE CERTIFY THAT THERE ARE NO SUITS, ACTIONS OF LAWS, LEASES, LIENS, MORTGAGES, TRUSTS, EASEMENTS, OR RIGHTS-OF-WAY(S) AFFECTING THE PROPERTY INCLUDED IN THIS PLAN OF SUBDIVISION, EXCEPT AS HEREIN INDICATED, AND THAT THE REQUIREMENTS OF THE SUBDIVISION ORDINANCES OF THE CITY OF RANSON AS ENACTED OR AMENDED SO FAR AS IT MAY CONCERN THE MAKING OF THIS PLAT AND THE SETTING OF MONUMENTS AND MARKERS HAVE BEEN COMPLIED WITH.

_____
RONALD MARCUS DATE
MARCUS ENTERPRISES, LLC
608 EAST WASHINGTON STREET
CHARLES TOWN, WEST VIRGINIA 25414

OWNER'S CERTIFICATION AND DEDICATION

WE, THOMFAIR, LLC, OWNERS OF THE PROPERTY SHOWN AND DESCRIBED HEREON CONSENT TO AND ADOPT THIS PLAN OF SUBDIVISION AND IN CONSIDERATION OF THE APPROVAL OF THIS FINAL PLAT BY THE PLANNING COMMISSION, ESTABLISH THE MINIMUM BUILDING RESTRICTION LINES; AND DEDICATE THE STREETS, WALKWAYS, AND OTHER EASEMENTS, TO PUBLIC USE, UNLESS OTHERWISE NOTED ON THIS PLAT.

WE CERTIFY THAT THERE ARE NO SUITS, ACTIONS OF LAWS, LEASES, LIENS, MORTGAGES, TRUSTS, EASEMENTS, OR RIGHTS-OF-WAY(S) AFFECTING THE PROPERTY INCLUDED IN THIS PLAN OF SUBDIVISION, EXCEPT AS HEREIN INDICATED, AND THAT THE REQUIREMENTS OF THE SUBDIVISION ORDINANCES OF THE CITY OF RANSON AS ENACTED OR AMENDED SO FAR AS IT MAY CONCERN THE MAKING OF THIS PLAT AND THE SETTING OF MONUMENTS AND MARKERS HAVE BEEN COMPLIED WITH.

_____
JOHN THOMAS DATE
THOMFAIR, LLC
608 EAST WASHINGTON STREET
CHARLES TOWN, WEST VIRGINIA 25414

PLANNING COMMISSION APPROVAL

THIS PLAT MEETS THE REQUIREMENTS OF THE SUBDIVISION ORDINANCES OF THE CITY OF RANSON AND HAS BEEN APPROVED FOR RECORDATION BY THE CITY OF RANSON PLANNING COMMISSION.

_____ _____
(PLANNING COMMISSION PRESIDENT) DATE

REV#	DATE	REVISION
1	1/24/2024	ADDRESS TOWN COMMENTS

christopher consultants | now IMEG
50 Catoctin Circle NE Suite 210
Leesburg, VA 20176 P 703.777.2755
engineering • surveying • land planning

FINAL SUBDIVISION PLAT SHOWING LOTS 1 THRU 38 & OUTLOTS "A, B & C"

BEING A CONSOLIDATION AND DIVISION OF
BRIAR RUN ESTATES
PHASE VI, PARCEL C-1, PARCEL C-2, AND PARCEL 3
AND A PORTION OF PHASE V, PARCEL OSA

BRIAR RUN ESTATES PHASE VI

JEFFERSON COUNTY, WEST VIRGINIA
RANSON CORPORATION DISTRICT

PROJECT: 21258.002
DRAWING NO.:
SCALE: N/A
DATE: 06/19/2023
DRAWN: DAS
CHECKED: AAV
SHEET No.
1 of 5

P:\Projects\21258\002\SURVEYS\Plats\Record\Briar Run Record Plat.dwg, 2/5/2024 3:03:36 PM, Matt.E.Baird, 1:1, christopher consultants, ltd, christopher consultants, ltd

P:\Projects\21258\002\SURVEYS\Plats\Record\Briar Run Record Plat.dwg

MATCHLINE - SEE SHEET 5

PHASE VI C
CHARLES C. MARCUS FIELD
RC M8 P3.1
RANSON BUILDING COMMISSION
D.B. 1052 PG. 527

LOT 326
RC M8A P326
DAN RYAN BUILDERS WEST VIRGINIA LLC
D.B. 1255 PG. 347

LOT 325
RC M8A P325
DAN RYAN BUILDERS WEST VIRGINIA LLC
D.B. 1255 PG. 347

CECILY WAY
(50' ROW)

LOT 322
RC M8A P322
KHALID
D.B. 1263 PG. 665

LOT 323
RC M8A P323
KHAN
D.B. 1263 PG. 368

LOT 324
RC M8A P324
ZUZZI
D.B. 1263 PG. 421

BRIAR RUN ESTATES PHASE VI
OPEN SPACE

E 2,436,225
N 303,675

N10°03'02"E 154.49'
S10°03'02"W 170.50'
RBF
RBS
S79°56'58"E 100.19'
90.49'
9.70'
10.99'
10.01'
℄ N79°55'07"W 95.10'
N59°52'42"E 76.25'
EX 20' DRAINAGE ESMT
D.B. 24 PG. 38A
N 303,663.21
E 2,435,985.27
RBF
S51°21'31"W 35.04'
20' DRAINAGE ESMT
S79°56'58"E 70.33'
21.87'
21.87'
OUTLOT A
10,586 S.F.
0.2430 AC.
1
1,538 S.F.
0.0353 AC.
2
1,125 S.F.
0.0258 AC.
3
1,125 S.F.
0.0258 AC.
4
1,125 S.F.
0.0258 AC.
5
1,125 S.F.
0.0258 AC.
6
1,125 S.F.
0.0258 AC.
7
1,516 S.F.
0.0348 AC.
16.00'
70.33'
14.59'
9.48'
S10°03'02"W 116.47'
S10°03'02"W 166.65'
E 2,435,950
N 303,650
PORTION OF EX 20' DRAINAGE ESMT D.B. 24 PG. 38A HEREBY VACATED
138.11'
EX. PROPERTY LINE HEREBY DELETED
TOTAL RIGHT-OF-WAY DEDICATION
77,981 SQ. FT. OR 1.7902 ACRES
WHISKERS WAY
(50' ROW)
EX. PROPERTY LINE HEREBY DELETED
EX 10' UTILITY ESMT
D.B. 24 PG. 38A
RBS
S79°56'58"E 296.29'
14.25'
16.00'
16.00'
16.00'
16.00'
C10
R=23.50'
L=15.00'
CECILY WAY
VARIABLE WIDTH
RIGHT-OF-WAY
46.0'
S10°03'02"W 53.70'
8
1,294 S.F.
0.0297 AC.
9
1,125 S.F.
0.0258 AC.
10
1,125 S.F.
0.0258 AC.
11
1,125 S.F.
0.0258 AC.
12
1,125 S.F.
0.0258 AC.
70.33'
N64°41'40"W
9.99'
9.24'
N79°56'58"W 256.15'
BRIAR RUN, PHASE VI
SECTION B, LOT C-2
PARCEL 3.3
RC M8 P3.3
MARCUS ENTERPRISES, LLC
D.B. 1028 PG. 659
21.88'
21.90'
ALLEY
VARIABLE WIDTH
RIGHT-OF-WAY
20.0'
18.88'
N79°56'58"W 271.33'
6.65'
28.62'
10.00'
N79°56'58"W 38.62'
24
1,328 S.F.
0.0305 AC.
25
1,125 S.F.
0.0258 AC.
26
1,125 S.F.
0.0258 AC.
27
1,125 S.F.
0.0258 AC.
28
1,125 S.F.
0.0258 AC.
29
1,125 S.F.
0.0258 AC.
63.69'
S10°03'02"W 70.33'
S10°03'00"W 71.81'
18.88'
S79°56'58"E 153.46'
MATCHLINE - SEE SHEET 3
BRIAR RUN, PHASE VI
SECTION B, LOT C-1
PARCEL 3.2
DRC M8 P3.2
THOMFAIR, LLC
D.B. 1118 PG. 456
LOT 2
RC M8B P2
POTOMAC 2017 LLC
D.B. 1192 PG. 665
OUTLOT B
13,371 S.F.
0.3070 AC.
N29°45'55"W 663.41'
256.13'
℄ S68°09'15"E 49.08'
20' DRAINAGE ESMT
MATCHLINE - SEE SHEET 4
W VA STATE GRID NORTH (NAD83)

CORNER MONUMENTATION

RBF = REBAR FOUND
RBS = REBAR SET
PKS = PK NAIL SET
○ = #5 REBAR TO BE SET
□ = CONCRETE MONUMENT TO BE SET

CURVE TABLE						
CURVE	DELTA	RADIUS	ARC	TANGENT	CHORD	CH. BEARING
C1	28°35'21"	155.00'	77.34'	39.49'	76.54'	N33°17'08"E
C2	33°48'10"	210.00'	123.89'	63.81'	122.10'	N26°57'07"E
C3	5°10'52"	105.00'	9.49'	4.75'	9.49'	N17°53'52"W
C4	64°11'10"	27.00'	30.25'	16.93'	28.69'	S47°23'59"E
C5	29°02'13"	65.00'	32.94'	16.83'	32.59'	N35°34'24"E
C6	38°47'31"	105.00'	71.09'	36.97'	69.74'	N40°27'05"E
C7	1°30'41"	155.00'	4.09'	2.04'	4.09'	N10°48'22"E
C8	77°03'07"	4.00'	5.38'	3.18'	4.98'	N48°34'36"E
C9	42°22'48"	180.00'	133.14'	69.78'	130.13'	N31°14'26"E
C10	36°33'57"	23.50'	15.00'	7.76'	14.74'	N28°20'00"E
C11	14°53'38"	16.00'	4.16'	2.09'	4.15'	N79°39'21"E

LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S52°48'14"E	4.06'
L2	S79°56'58"E	4.24'
L3	S10°03'02"W	0.50'
L4	S79°56'58"E	2.20'

E 2,436,050
N 303,450

20 10 0 20 40
GRAPHIC SCALE
1" = 20'

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FINAL SUBDIVISIONPLAT SHOWING
LOTS 1 THRU 38 & OUTLOTS "A, B & C"
BEING A CONSOLIDATION AND DIVISION OF
BRIAR RUN ESTATES
PHASE VI, PARCEL C-1, PARCEL C-2, AND PARCEL 3
AND A PORTION OF PHASE V, PARCEL OSA
BRIAR RUN ESTATES
PHASE VI

JEFFERSON COUNTY, WEST VIRGINIA
RANSON CORPORATION DISTRICT

PROJECT: 21258.002
DRAWING NO.:
SCALE: 1" = 20'
DATE: 06/19/2023
DRAWN: DAS
CHECKED: AAV
SHEET No.
2 of 5

LOT 323
RC M8A P323
KHAN
D.B. 1263 PG. 368

LOT 324
RC M8A P324
ZUZZI
D.B. 1263 PG. 421

LOT 278
RC M8A P278
GROMEN
D.B. 1258 PG. 531

BRIAR RUN ESTATES
PHASE VI

LOT 277
RC M8A P277
JONES
D.B. 1040 PG. 749

BRIAR RUN ESTATES
HOMEOWNERS ASSOCIATION INC
RC M8A OPEN SPACE
D.B. 1198 PG. 138

FUZZY TAIL DRIVE
(50' ROW)

E 2,436,550
N 303,625

LOT 275
RC M8A P275
RAO & SHIELDS LLC
D.B. 1211 PG. 593

LOT 276
RC M8A P276
KAPLAN
D.B. 1206 PG. 291

MARCUS ENTERPRISES LLC
RC M8A OPEN SPACE
D.B. 1028 PG. 659

BRIAR RUN ESTATES
PHASE V

W VA STATE GRID NORTH (NAD83)

WHISKERS WAY
(50' ROW)

EX 10' UTILITY ESMT
D.B. 24 PG. 38A

S79°56'58"E 296.29'

PUBLIC PEDESTRIAN ESMT
DRAINAGE ESMT

(TIE) 10.05'

N61°05'24"W 18.55'

L3
L4
L2
L1
2.35' (TIE)
3.64' (TIE)
17.21'

62.00'

S79°56'58"E 6.97'

N 303,531.34
E 2,436,509.88

RBF
C11
C8
14.66'
S79°56'58"E 7.87'
RBF

EX. PROPERTY LINE
HEREBY DELETED

10' UTILITY ESMT

16.00'	16.00'	18.87'	18.87'	16.00'	16.00'	16.00'	16.00'	16.00'	16.00'	17.16'

13	14	15	16	17	18	19	20	21	22	23
1,125 S.F. 0.0258 AC.	1,125 S.F. 0.0258 AC.	1,327 S.F. 0.0305 AC.	1,327 S.F. 0.0305 AC.	1,125 S.F. 0.0258 AC.	1,125 S.F. 0.0258 AC.	1,125 S.F. 0.0258 AC.	1,125 S.F. 0.0258 AC.	1,125 S.F. 0.0258 AC.	1,125 S.F. 0.0258 AC.	1,210 S.F. 0.0278 AC.

70.33'

N10°03'02"E 66.24'

N10°03'02"E 66.24'

S10°03'02"W 60.90'

46.24'

S10°03'02"W 115.00'

S10°03'02"W 116.89'

25.0'

30.0'

TOTAL RIGHT-OF-WAY DEDICATION
77,981 SQ. FT. OR 1.7902 ACRES

R=155.00'
L=4.09'
C7

PORTION OF BRIAR RUN, PHASE V,
PARCEL OSA
RC M8A OPEN SPACE
MARCUS ENTERPRISES, LLC
D.B. 1028 PG. 659

LOT 225
RC M8A P225
HARRIS
D.B. 1026 PG. 161

LOT 224
RC M8A P224
LIPPINCOTT
D.B. 1042 PG. 665

LOT 223
RC M8A P223
GUNN
D.B. 1282 PG. 714

S79°57'13"E 125.00'

RESIDUE
PARCEL OSA
9,482 S.F.
0.2177 AC.

17.18'

RBF
RBF
S79°33'10"E 88.63'

N81°58'08"W 49.97'

MATCHLINE - SEE SHEET 5

N79°56'58"W 256.15'

ALLEY
VARIABLE WIDTH
RIGHT-OF-WAY

BRIAR RUN, PHASE VI
SECTION B, LOT C-2 PARCEL 3.3
RC M8 P3.3
MARCUS ENTERPRISES, LLC
D.B. 1028 PG. 659

EX UTILITY ESMT
D.B. 24 PG. 38A

MATCHLINE - SEE SHEET 2

N79°56'58"W 271.33'

16.00'	16.00'	18.87'	18.88'	16.00'	16.00'	16.00'	16.00'	16.00'	38.70'

29	30	31	32	33	34	35	36	37	38
1,125 S.F. 0.0258 AC.	1,125 S.F. 0.0258 AC.	1,328 S.F. 0.0305 AC.	1,328 S.F. 0.0305 AC.	1,105 S.F. 0.0254 AC.	1,084 S.F. 0.0249 AC.	1,104 S.F. 0.0253 AC.	1,125 S.F. 0.0258 AC.	1,125 S.F. 0.0258 AC.	1,906 S.F. 0.0438 AC.

70.33'

67.98'

67.97'

S10°03'02"W 70.33'

FUZZY TAIL DRIVE
VARIABLE WIDTH RIGHT-OF-WAY

C1
R=155.00' L=77.34'
C9
R=180.00' L=133.14'
C2
R=210.00' L=123.89'

EX. PROPERTY LINE
HEREBY DELETED

0.83'
L=15.36'
L=16.02'
0.65'
L=15.54'

00'	16.00'	18.87'	18.88'	16.00'	16.00'	8.51'

S79°56'58"E 153.46'

N79°56'58"W 41.16'

PARCEL 3
RC M8 P003
MARCUS ENTERPRISES, LLC
D.B. 1028 PG. 659

E 2,436,350
N 303,372

R=102.65' L=48.56'

RBF
C6
R=105.00'
L=71.09'

OUTLOT B
13,371 S.F.
0.3070 AC.

EX. PROPERTY LINE
HEREBY DELETED

N45°07'22"E 35.67'

OUTLOT C
4,582 S.F.
0.1052 AC.

S10°30'29"W 130.00'

R=105.00'
L=9.49'
C3
RBF

MATCHLINE - SEE SHEET 4

LOT 161
RC M8A P161
LLOYD
D.B. 982 PG. 575

E 2,436,550
N 303,350

162
RC M8A P162
BELLMAN
D.B. 1231 PG. 534

20 10 0 20 40
GRAPHIC SCALE
1" = 20'

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FINAL SUBDIVISION PLAT SHOWING LOTS 1 THRU 38 & OUTLOTS "A, B & C"

BEING A CONSOLIDATION AND DIVISION OF
BRIAR RUN ESTATES
PHASE VI, PARCEL C-1, PARCEL C-2, AND PARCEL 3
AND A PORTION OF PHASE V, PARCEL OSA

BRIAR RUN ESTATES
PHASE VI

JEFFERSON COUNTY, WEST VIRGINIA

RANSON CORPORATION DISTRICT

PROJECT: 21258.002
DRAWING NO.:
SCALE: 1" = 20'
DATE: 06/19/2023
DRAWN: DAS
CHECKED: AAV
SHEET No.
3 of 5

MATCHLINE - SEE SHEET 2

MATCHLINE - SEE SHEET 3

EX. PROPERTY LINE
HEREBY DELETED

W VA STATE GRID NORTH (NAD83)

OUTLOT B
13,371 S.F.
0.3070 AC.

256.13'

C6
R=105.00' L=71.09'

E 2,436,274
N 303,348

BRIAR RUN, PHASE VI
SECTION B, LOT C-2
PARCEL 3.3
RC M8 P3.3
MARCUS ENTERPRISES, LLC
D.B. 1028 PG. 659

RBF

LOT 2
RC M8B P2
POTOMAC 2017 LLC
D.B. 1192 PG. 665

C5
R=65.00' L=32.94'

RBF

PARCEL 3
RC M8 P003
MARCUS ENTERPRISES, LLC
D.B. 1028 PG. 659

TOTAL RIGHT-OF-WAY
DEDICATION
77,981 SQ. FT. OR 1.7902 ACRES

C3

N15°18'27"W 33.95'

OUTLOT C
4,582 S.F.
0.1052 AC.

RBF

C4
R=27.00' L=30.25'

2.48'

RBF

2.69'

RBS

S79°29'31"E 5.17'

S10°30'29"W 130.00'

LOT 161
RC M8A P161
LLOYD
D.B. 982 PG. 575

OAK LEE DRIVE
(ROW VARIES IN WIDTH)

OAK LEE DRIVE
(ROW VARIES IN WIDTH)

N29°45'55"W 663.41'

259.69'

S10°17'38"W 204.63'

E 2,436,450
N 303,150

E 2,436,350
N 303,150

LOT 160
RC M8A P160
BONACORDA
D.B. 1188 PG. 625

POTOMAC MARKET PLACE
LOT 7 (GLORY DAYS)
RC M8 P007
POTOMAC 2017 LLC
D.B. 1192 PG. 665

N 303,071.08
E 2,436,405.46

RBF

S79°51'41"E 92.28'

PKS

RC M8
STANLEY MARTIN
COMPANIES LLC
D.B. 1230 PG. 240

20 10 0 20 40
GRAPHIC SCALE
1" = 20'

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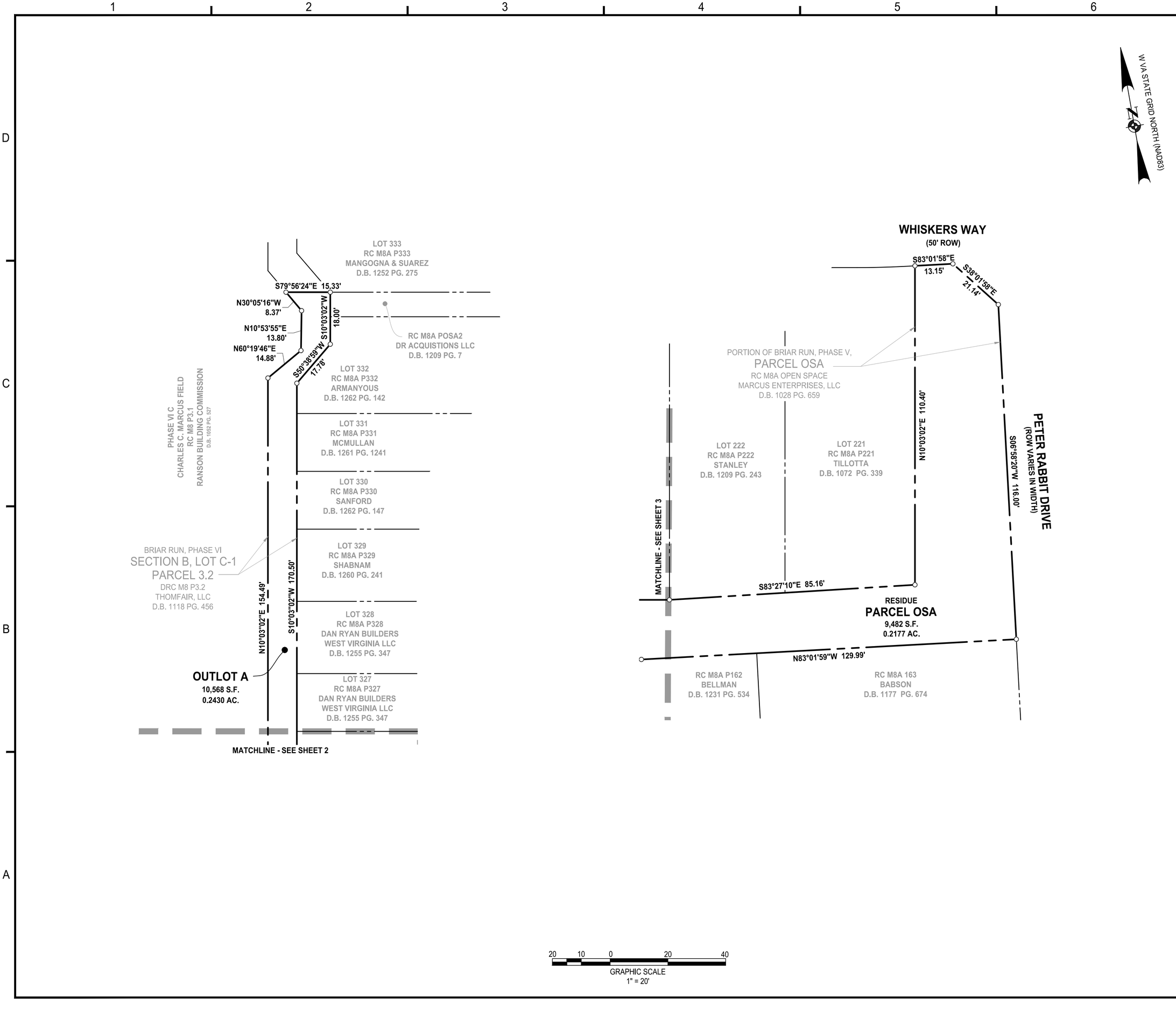
JEFFERSON COUNTY, WEST VIRGINIA

FINAL SUBDIVISION PLAT SHOWING
LOTS 1 THRU 38 & OUTLOTS "A, B & C"
BEING A CONSOLIDATION AND DIVISION OF
BRIAR RUN ESTATES
PHASE VI, PARCEL C-1, PARCEL C-2, AND PARCEL 3
AND A PORTION OF PHASE V, PARCEL OSA
BRIAR RUN ESTATES
PHASE VI

RANSON CORPORATION DISTRICT

PROJECT: 21258.002
DRAWING NO.:
SCALE: 1" = 20'
DATE: 06/19/2023
DRAWN: DAS CHECKED: AAV
SHEET No. 4 of 5



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FINAL SUBDIVISION PLAT SHOWING LOTS 1 THRU 38 & OUTLOTS "A, B & C"

BEING A CONSOLIDATION AND DIVISION OF
BRIAR RUN ESTATES
PHASE VI, PARCEL C-1, PARCEL C-2, AND PARCEL 3
AND A PORTION OF PHASE V, PARCEL OSA

BRIAR RUN ESTATES
PHASE VI

JEFFERSON COUNTY, WEST VIRGINIA

RANSON CORPORATION DISTRICT

PROJECT:	21258.002
DRAWING NO.:	
SCALE:	1" = 20'
DATE:	06/19/2023
DRAWN:	DAS
CHECKED:	AAV
SHEET No.	5 of 5