SITE PLAN

CUTHBERTSON CROSSING

3012 S. PROVIDENCE ROAD, WAXHAW, NORTH CAROLINA 28173

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EROSION & SEDIMENT CONTROL DETAILS

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CHIPOTLE - ONE SHEET

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SITE INFORMATION

GENERAL PROJECT INFORMATION

R-1 (CC) **ZONING:** 06162002 PARCEL ID NUMBER: 08349 **DEED BOOK:** DEED PAGE: JURISDICTION:

UNION COUNTY PROPOSED USE: COMMERCIAL / RETAIL MAXIMUM BUILDING HEIGHT:

NUMBER OF STORIES:

LOT SIZE:

±5.11 AC **DISTURBED ACRES:** ±5.0 AC

SETBACK REQUIREMENTS

FRONT YARD: 40' FT FROM FUTURE R.O.W. SIDE YARD (R): SIDE YARD (L) 10' FT

20' FT

BUFFER REQUIREMENTS

REAR YARD:

*SEE SHEET L100 FOR LANDSCAPE CODE TABULATIONS

SCREENING REQUIREMENTS

FRONT YARD: REAR YARD: SIDE YARD (R): SIDE YARD (L) PARKING ONLY

*SEE SHEET L100 FOR LANDSCAPE CODE TABULATIONS

OPEN SPACE INFORMATION

OVERALL SITE AREA: 222,745 SF (±5.11 AC) IMPERVIOUS AREA: 82,185 SF (±1.89 AC / 37%) LANDSCAPED AREA: 140,560 SF (±3.23 AC / 63%)

STREET TREE REQUIREMENT

NOT APPLICABLE IN R-1 ZONE

*SEE SHEET L100 FOR LANDSCAPE CODE TABULATIONS

INTERIOR PARKING LOT TREE REQUIREMENT

SEE LANDSCAPE PLANS

*SEE SHEET L100 FOR LANDSCAPE CODE TABULATIONS

PARKING REQUIREMENT TABLE 45-1. COMMERCIAL PARCEL A RESTAURANT 10 SPACES PER 1,000 SF

2,800 SF = 28 SPACES REQUIRED

= 28 SPACES PROVIDED (2 ACCESSIBLE)

PARCEL B **COFFEE SHOP** 15 SPACES PER 1,000 SF

= 6 REQUIRED SPACES

= 6 SPACES PROVIDED (1 ACCESSIBLE)

PARCEL C **AUTO SERVICE**

1 SPACE PER EMPLOYEE PLUS TWO PER SERVICE BAY 8 EMPLOYEES PLUS 9 SERVICE BAYS

=26 REQUIRED SPACES

=26 SPACES PROVIDED (2 ACCESSIBLE)

PARCEL D **CAR WASH**

1 PACE PER 3 EMPLOYEES

12 EMPLOYEES MAX = 4 REQUIRED SPACES

=4 SPACES PROVIDED (1 ACCESSIBLE)

BICYCLE PARKING REQUIREMENT

SPACES REQUIRED:

SPACES PROVIDED:

VICINITY MAP

OWNER

AABC-WAXHAW, LLC 500 EAST MOREHEAD STREET, SUITE 230 CHARLOTTE, NC 28202 (980) 270-9217

LAND PLANNING

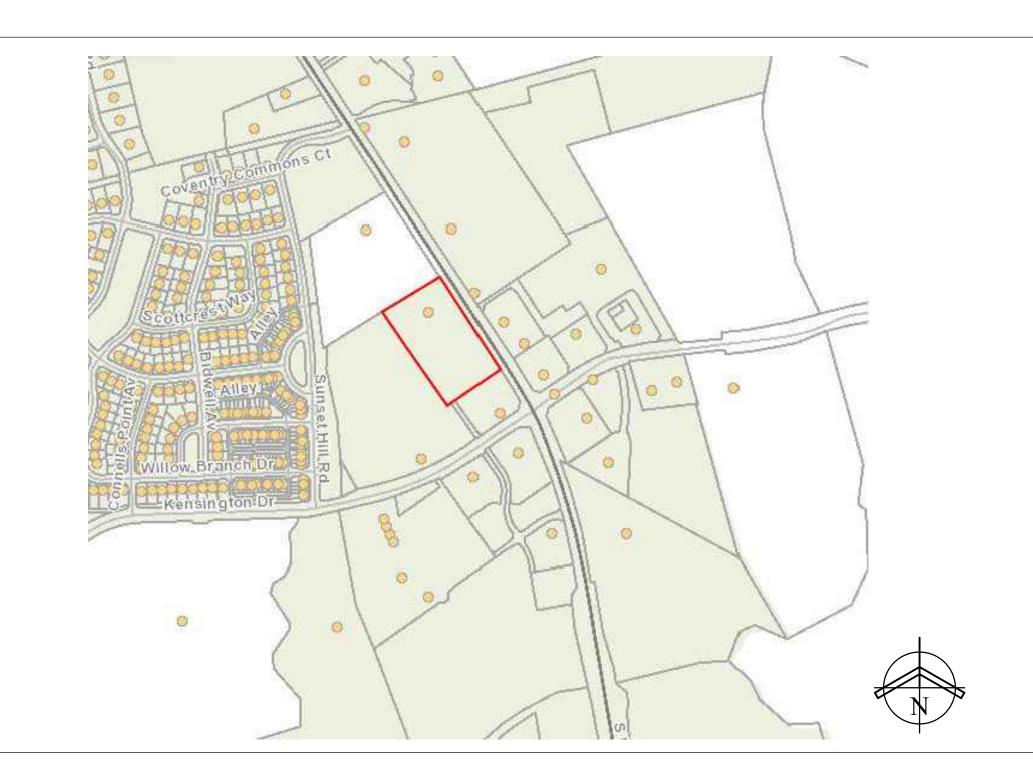
LITTLE DIVERSIFIED ARCHITECTURAL CONSULTING 615 SOUTH COLLEGE STREET, SUITE 1600 CHARLOTTE, NORTH CAROLINA 28202 (704)-525-6350

CIVIL ENGINEER

LITTLE DIVERSIFIED ARCHITECTURAL CONSULTING 615 SOUTH COLLEGE STREET, SUITE 1600 CHARLOTTE, NORTH CAROLINA 28202 FRANK G. MILLER, P.E. (704) 525-6350

SURVEYOR

EAGLE ENGINEERING 2013A VAN BUREN AVENUE INDIAN TRAIL, NC 28079 (704)-882-4222





Charlotte, NC 28202 T: 704.525.6359

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CONSTRUCTION DOCUMENTS

08/18/2023

ı	NO.	REASON	DATE

PRINCIPAL IN CHARGE POWLEN PROJECT MANAGER

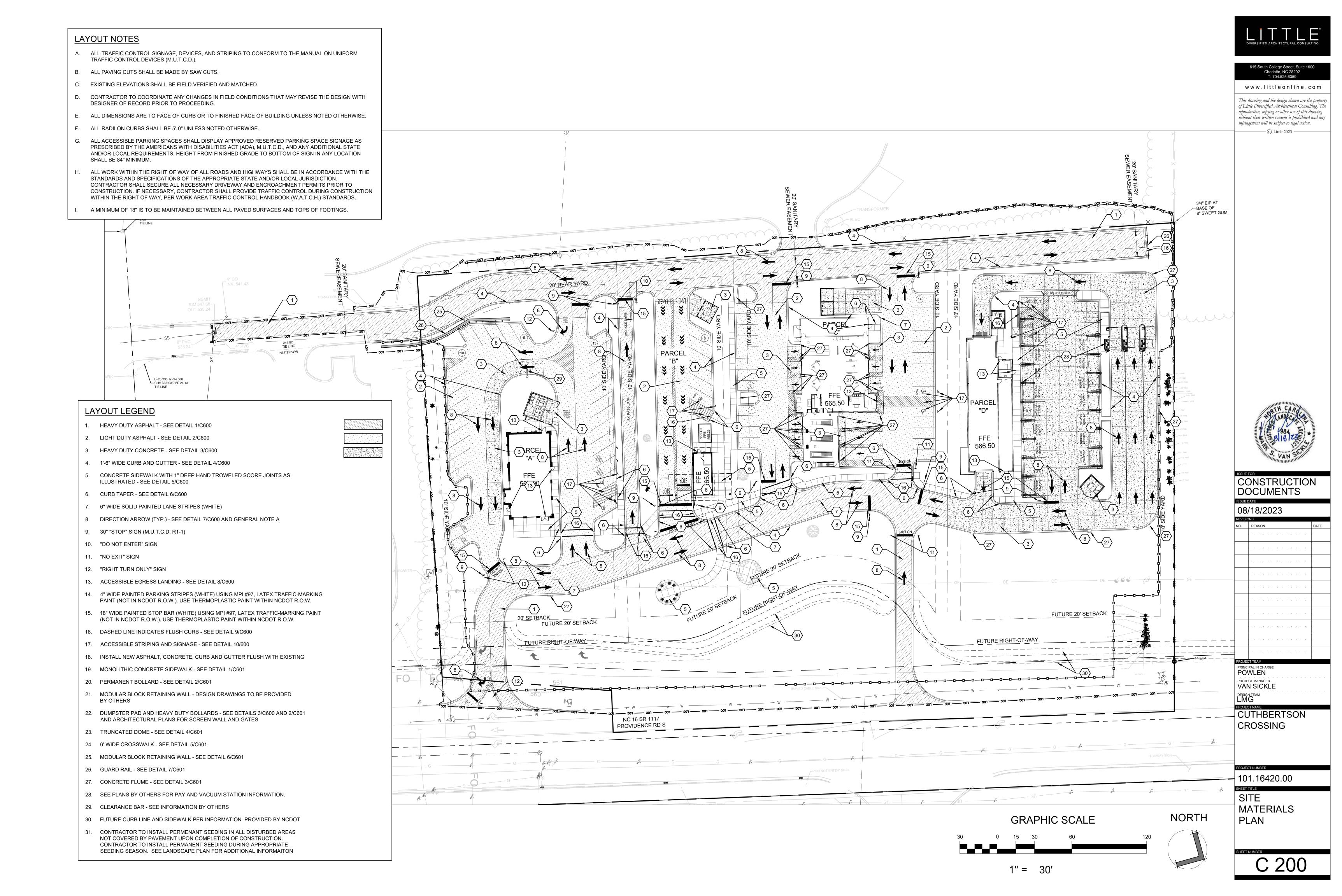
VAN SICKLE

CUTHBERTSON CROSSING

101.16420.00

GENERAL NOTES

DEMOLITION NOTES A. PARTIAL BOUNDARY AND TOPOGRAPHICAL SURVEY INFORMATION IS TAKEN FROM A SURVEY BY EAGLE ENGINEERING, 2013A VAN BUREN AVE. INDIAN TRAIL, NC 28079 704-882-4222 AND ENTITLED "EXISTING CONDITIONS SURVEY". CONTRACTOR SHALL OBTAIN A COPY OF THE ORIGINAL SURVEY. 615 South College Street, Suite 1600 Charlotte, NC 28202 T: 704.525.6359 THE CONTRACTOR SHALL NOTIFY A PRIVATE UTILITY LOCATOR SERVICE AND RESEARCH EXISTING DRAWINGS AND OTHER DOCUMENTATION PRIOR TO www.littleonline.com BEGINNING CONSTRUCTION. ANY BELOW GRADE APPURTENANCES NOT CHARTED BY THE SURVEYOR ARE TO BE REPORTED TO THE DESIGNER OF RECORD. ALL This drawing and the design shown are the property REPAIRS/REPLACEMENTS MUST BE APPROVED BY DESIGNER OF RECORD. of Little Diversified Architectural Consulting. The reproduction, copying or other use of this drawing THE UTILITIES AND THE LOCATION SHOWN ON THE PLANS REPRESENT THE without their written consent is prohibited and any DESIGNER'S UNDERSTANDING OF EXISTING UTILITIES LOCATED WITHIN THE infringement will be subject to legal action. LIMITS OF CONSTRUCTION. PRIOR TO ANY EXCAVATION, CONTRACTOR IS TO — © Little 2023 —— FIELD VERIFY THE LOCATION, DEPTH, AND EXISTENCE OF ALL UTILITIES (ELECTRICAL, MECHANICAL, WATER, TELEPHONE, GAS, STORM, ETC.) WITH THE OWNER AND/OR THE APPROPRIATE UTILITY COMPANY. THE OMISSION OF, NONEXISTENCE OF, OR INCLUSION OF UTILITY LOCATIONS ON THE PLANS IS NOT TO BE CONSIDERED AS ABSOLUTE. DAMAGED UTILITIES SHALL BE REPAIRED/REPLACED AT THE CONTRACTOR'S EXPENSE. CONTRACTOR TO COORDINATE ANY FIELD CONDITIONS THAT MAY REVISE THE DESIGN WITH THE DESIGNER OF RECORD PRIOR TO PROCEEDING. INSTALL ALL EROSION CONTROL MEASURES PRIOR TO BEGINNING CONSTRUCTION. INSTALL INLET PROTECTION AS NOTED ON EROSION CONTROL PLANS AT ALL EXISTING STORM DRAINAGE STRUCTURES ADJACENT TO OR DOWNSTREAM OF DEMOLITION AREAS TO PREVENT FLOW OF SEDIMENT AND DEBRIS INTO EXISTING STORM DRAINAGE SYSTEMS. NO SOIL DISTURBANCE, SOIL COMPACTION, CONSTRUCTION MATERIALS, OR CONSTRUCTION TRAFFIC IS ALLOWED BEYOND THE LIMITS OF CONSTRUCTION 3/4" EIP AT SHOWN OR WITHIN TREE PROTECTION ZONES. -BASE OF 8" SWEET GL G. TREE PROTECTION BARRICADES MUST BE INSTALLED PRIOR TO ANY GRADING. DEMOLITION, OR CONSTRUCTION AND SHALL NOT BE REMOVED UNTIL PROJECT IS COMPLETED. . 20. □ □ 2001 □ 2001 □ 200 L=25.230, R=24.500 CH= S63°03'01"E 24.13' CONSTRUCTION DOCUMENTS 08/18/2023 **DEMOLITION LEGEND** 1. SAWCUT AND REMOVE EXISTING ASPHALT AND GRAVEL DRIVES 2. SAWCUT AND REMOVE EXISTING CURB AND GUTTER 3. CONSTRUCTION ENTRANCE - SEE DETAIL X ____ 4. EXISTING LANDSCAPING TO BE REMOVED - COORDINATE WITH LANDSCAPE PLANS 5. EXISTING UTILITIES TO REMAIN - PROTECT DURING CONSTRUCTION 6. LIMITS OF CONSTRUCTION (XXX AC.) LOC — 7. REMOVE EXISTING FENCE POWLEN 8. EXISTING TREES AND LANDSCAPING TO REMAIN AND BE PROTECTED PROJECT MANAGER DURING CONSTRUCTION VAN SICKLE 9. EXISTING WATER LINE TO REMAIN AND BE PROTECTED DURING CONSTRUCTION - COORDINATE WITH UTILITY PLANS CUTHBERTSON CROSSING 10. EXISTING SANITARY SEWER LINE TO REMAIN AND BE PROTECTED DURING CONSTRUCTION - COORDINATE WITH UTILITY PLANS 11. EXISTING STORM PIPES AND STRUCTURES TO REMAIN AND BE PROTECTED DURING CONSTRUCTION - COORDINATE WITH GRADING PLANS 12. REMOVE EXISTING BUILDINGS -DEMOLITION PERMIT TO BE OBTAINED PRIOR 101.16420.00 TO COMMENCEMENT OF DEMOLITION ACTIVITIES 13. REMOVE PORTION OF EXISTING MODULAR BLOCK WALL 14. EXISTING WELL TO BE ABANDON / REMOVED FROM SERVICE. FOLLOW LOCAL AND STATE REQUIREMENTS FOR THIS WORK. NORTH GRAPHIC SCALE ├─ TPF -15. TREE PROTECTION FENCE - SEE DETAIL 16. SILT FENCE - SEE DETAIL





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CONSTRUCTION DOCUMENTS

08/18/2023

REASON DATE

PROJECT TEAM

PRINCIPAL IN CHARGE

POWLEN

PROJECT MANAGER

VAN SICKLE

DESIGN TEAM LMG
PROJECT NAME
CUTHBERTSON
CROSSING

PROJECT NUMBER 101.16420.00

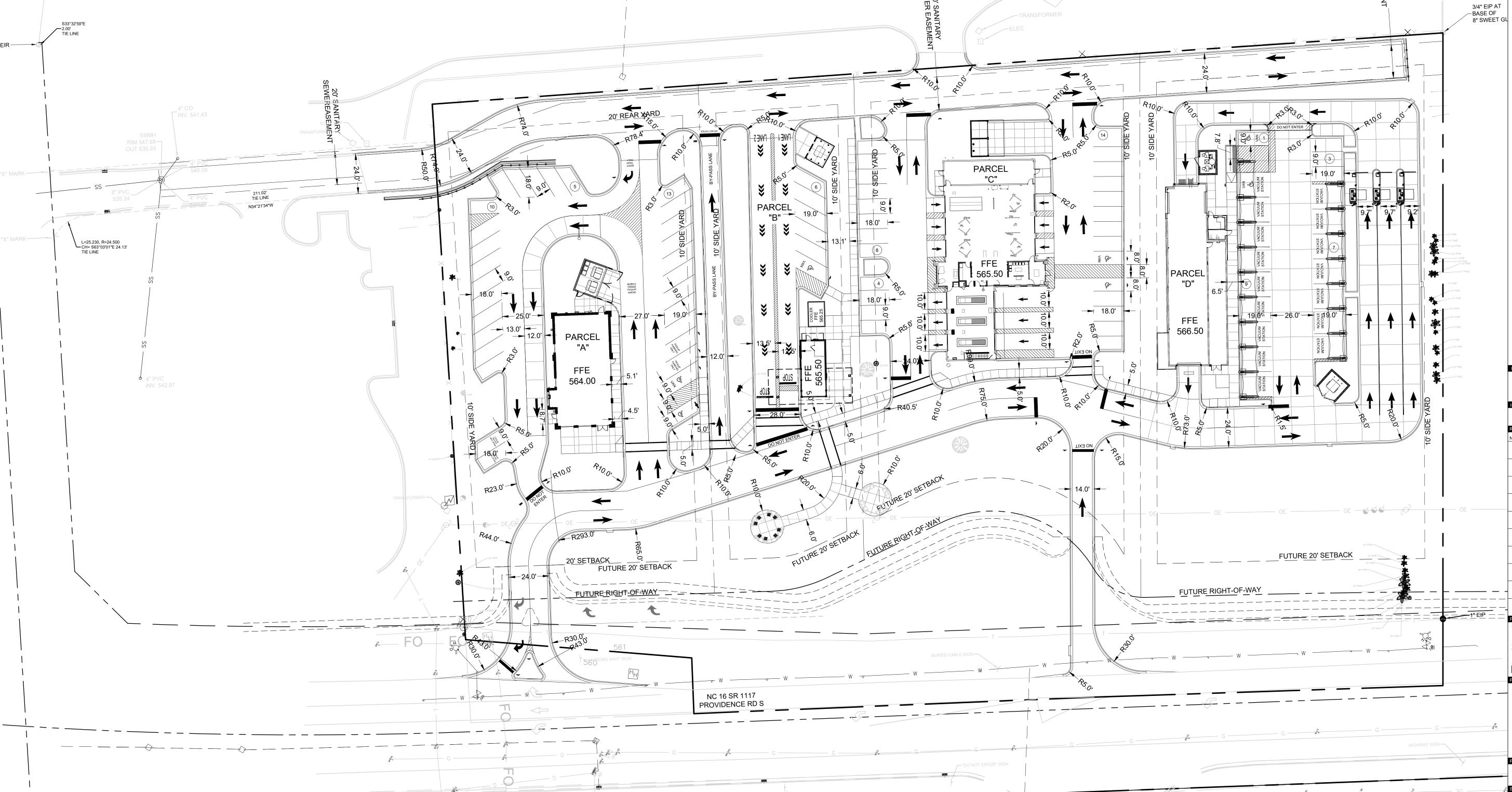
SITE LAYOUT PLAN

C 201

GRAPHIC SCALE

NORTH

1" = 30'







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3/4" EIP AT

BASE OF
8" SWEET GU

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CONSTRUCTION DOCUMENTS

08/18/2023

PRINCIPAL IN CHARGE POWLEN

PROJECT MANAGER
VAN SICKLE LMG

PROJECT NAME

CUTHBERTSON CROSSING

101.16420.00

OPEN SPACE & TREE SAVE PLAN

NORTH

C 202

GRAPHIC SCALE

1" = 30'

20' REAR YARD

PARCEL "A"

FFE 564.00

4,350 SF-TREE SAVE

PARCEL "B"

*** ***

NC 16 SR 1117 PROVIDENCE RD S

211.02' TIE LINE N34°21'34"W

L=25.230, R=24.500 CH= S63°03'01"E 24.13' TIE LINE

PARCEL

565.50

TREE SAVE/ OPEN SPACE = 12,500 SF
THIS PORTION OF OPEN SPACE TO BE
DEVELOPED WITH WALKS AND SEATING TO
CREATE PEDESTRIAN USE AREAS FOR
THE OVERALL DEVELOPMENT

PROJECT TOTALS:
TREE SAVE = 10,988 SF
OPEN SPACE = 12,500
TOTAL COMBINED = 23,488 (10.55%)

§ F

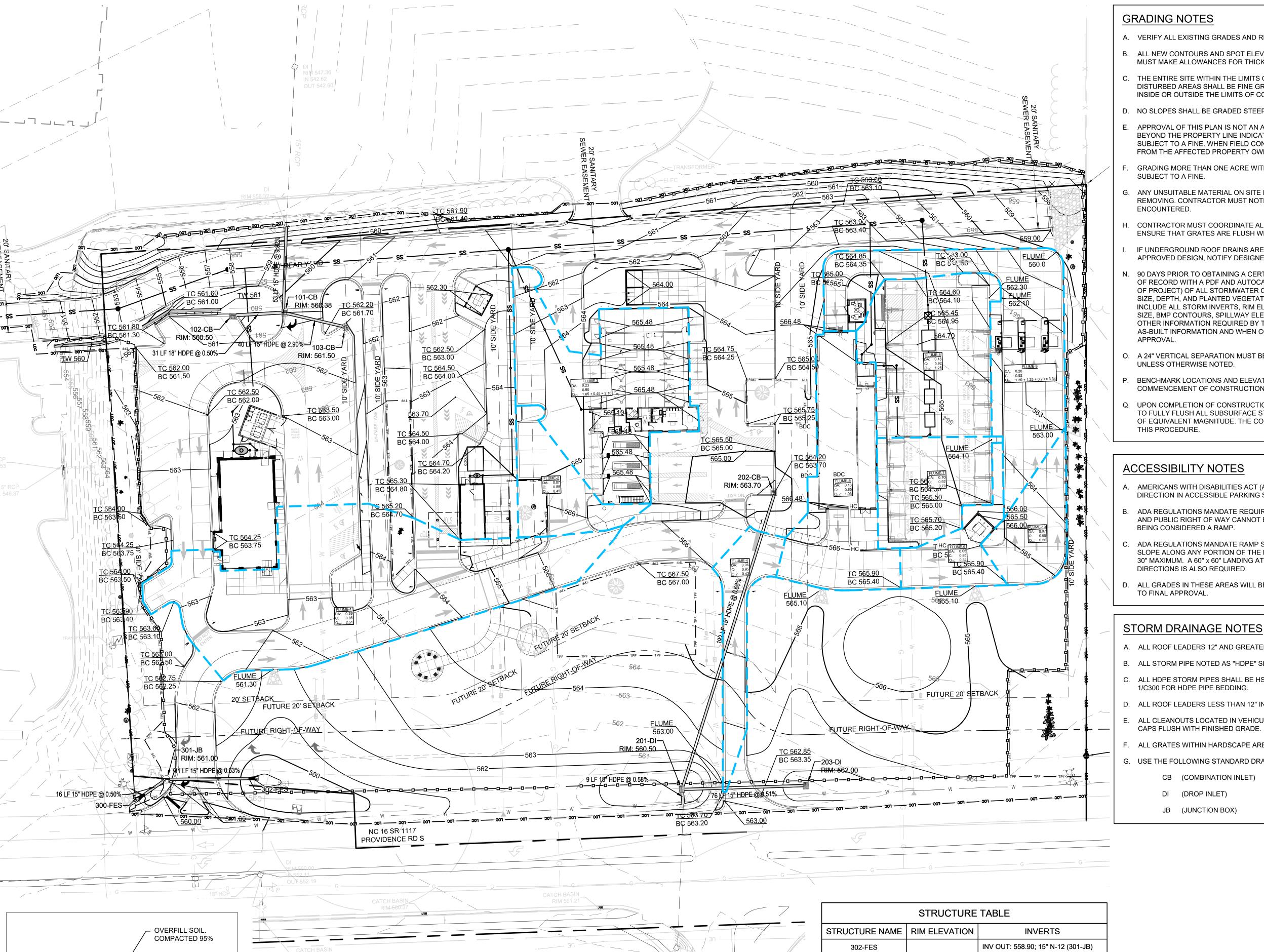
PARCEL

FFE 566.50



3,950 SF TREE SAVE

_FUTURE 20' SETBACK



→ 12" MIN. 🔫

NOT TO SCALE

→ 12" MIN. 🔫

#57 STONE

-COMPACTED

SUBGRADE

HDPE PIPE BEDDING

INV IN: 558.58; 15" N-12 (302-FES) 301-JB INV OUT: 558.58; 15" N-12 (300-FES) INV IN: 558.50; 15" N-12 (301-JB) 300-FES INV OUT: 558.54; 15" N-12 (201-DI) 203-DI 562.00 202-CB 563.70 INV OUT: 559.45; 15" N-12 (201-DI) INV IN: 558.15; 15" N-12 (202-CB) INV IN: 558.15; 15" N-12 (203-DI) 201-DI INV OUT: 557.89; 18" N-12 (200-DI EX) 103-CB INV OUT: 557.25; 15" N-12 (101-CB) 561.50 102-CB INV OUT: 556.12; 18" N-12 (101-CB) 560.50 INV IN: 556.09; 15" N-12 (103-CB) INV IN: 555.96; 18" N-12 (102-CB) 101-CB 560.38 INV OUT: 555.99; 15" N-12 (100-DI EX)

GRADING NOTES

- A. VERIFY ALL EXISTING GRADES AND REPORT ANY DISCREPANCIES TO DESIGNER OF RECORD.
- B. ALL NEW CONTOURS AND SPOT ELEVATIONS ARE SHOWN AS FINISHED GRADES. THE GRADING CONTRACTOR
- C. THE ENTIRE SITE WITHIN THE LIMITS OF CONSTRUCTION SHALL BE GRADED TO DRAIN FREELY. ALL DISTURBED AREAS SHALL BE FINE GRADED AND SEEDED TO ESTABLISH A PERMANENT LAWN, WHETHER INSIDE OR OUTSIDE THE LIMITS OF CONSTRUCTION.
 - D. NO SLOPES SHALL BE GRADED STEEPER THAN 3:1, UNLESS INDICATED OTHERWISE.
 - APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. ANY GRADING BEYOND THE PROPERTY LINE INDICATED ON THE CONSTRUCTION DOCUMENTS IS A VIOLATION AND IS SUBJECT TO A FINE. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS.
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 - H. CONTRACTOR MUST COORDINATE ALL DRAINAGE STRUCTURE GRATES SHOWN WITH FIELD CONDITIONS TO ENSURE THAT GRATES ARE FLUSH WITH FINISHED GRADE.
 - IF UNDERGROUND ROOF DRAINS ARE ENCOUNTERED OR IF EXISTING ROOF DRAINS INTERFERE WITH APPROVED DESIGN, NOTIFY DESIGNER OF RECORD.
 - N. 90 DAYS PRIOR TO OBTAINING A CERTIFICATE OF OCCUPANCY, THE CONTRACTOR IS TO PROVIDE DESIGNER OF RECORD WITH A PDF AND AUTOCAD AS-BUILT SURVEY (SEALED BY REGISTERED SURVEYOR WITHIN STATE OF PROJECT) OF ALL STORMWATER CONTROL AND MANAGEMENT DEVICES SHOWING THE FIELD LOCATION, SIZE, DEPTH, AND PLANTED VEGETATION OF ALL MEASURES AND DEVICES AS INSTALLED. SURVEY TO INCLUDE ALL STORM INVERTS, RIM ELEVATIONS, OUTLET CONTROL WEIRS & ORIFICE DIAMETERS, ORIFICE SIZE, BMP CONTOURS, SPILLWAY ELEVATION, SPILLWAY DIMENSIONS, TOP OF BERM ELEVATION, AND ANY OTHER INFORMATION REQUIRED BY THE PERMITTING AUTHORITY. DESIGNER OF RECORD WILL REVIEW AS-BUILT INFORMATION AND WHEN COMPLETED, SUBMIT TO PERMITTING AUTHORITY FOR STORMWATER APPROVAL.
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ACCESSIBILITY NOTES

- A. AMERICANS WITH DISABILITIES ACT (ADA) REGULATIONS MANDATE A MAXIMUM OF 2% SLOPE IN ANY DIRECTION IN ACCESSIBLE PARKING SPACES AND ACCESS AISLES.
- B. ADA REGULATIONS MANDATE REQUIRED EGRESS SIDEWALKS FROM PARKING TO THE BUILDING ENTRANCE AND PUBLIC RIGHT OF WAY CANNOT EXCEED 2% CROSS SLOPE AND 5% (1:20) RUNNING SLOPE WITHOUT IT BEING CONSIDERED A RAMP.
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STORM DRAINAGE NOTES

- A. ALL ROOF LEADERS 12" AND GREATER IN SIZE SHALL BE HDPE.
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- C. ALL HDPE STORM PIPES SHALL BE HS-25 RATED WITH 24" MINIMUM COVER IN TRAFFIC AREAS SEE DETAIL 1/C300 FOR HDPE PIPE BEDDING.
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- ALL CLEANOUTS LOCATED IN VEHICULAR AND/OR PEDESTRIAN TRAFFIC AREAS SHALL HAVE SOLID METAL
- ALL GRATES WITHIN HARDSCAPE AREAS ARE TO BE HEEL-PROOF AND ADA-COMPLIANT.
- G. USE THE FOLLOWING STANDARD DRAWINGS FOR STORM STRUCTURES:
 - NCDOT STD. 840.01 or 840.02 CB (COMBINATION INLET)

 - NCDOT STD. 840.14 or 840.15 DI (DROP INLET)
 - NCDOT STD. 840.31 or 840.32 JB (JUNCTION BOX)

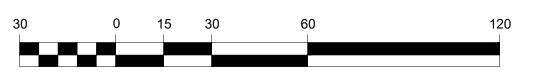
PROJECT NUMBER 101.16420.00

NORTH

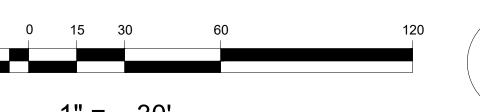
GRADING &

C 300

GRAPHIC SCALE



1" = 30'





MUST MAKE ALLOWANCES FOR THICKNESS OF PAVING SECTIONS, CONCRETE SLABS, ETC. 615 South College Street, Suite 1600

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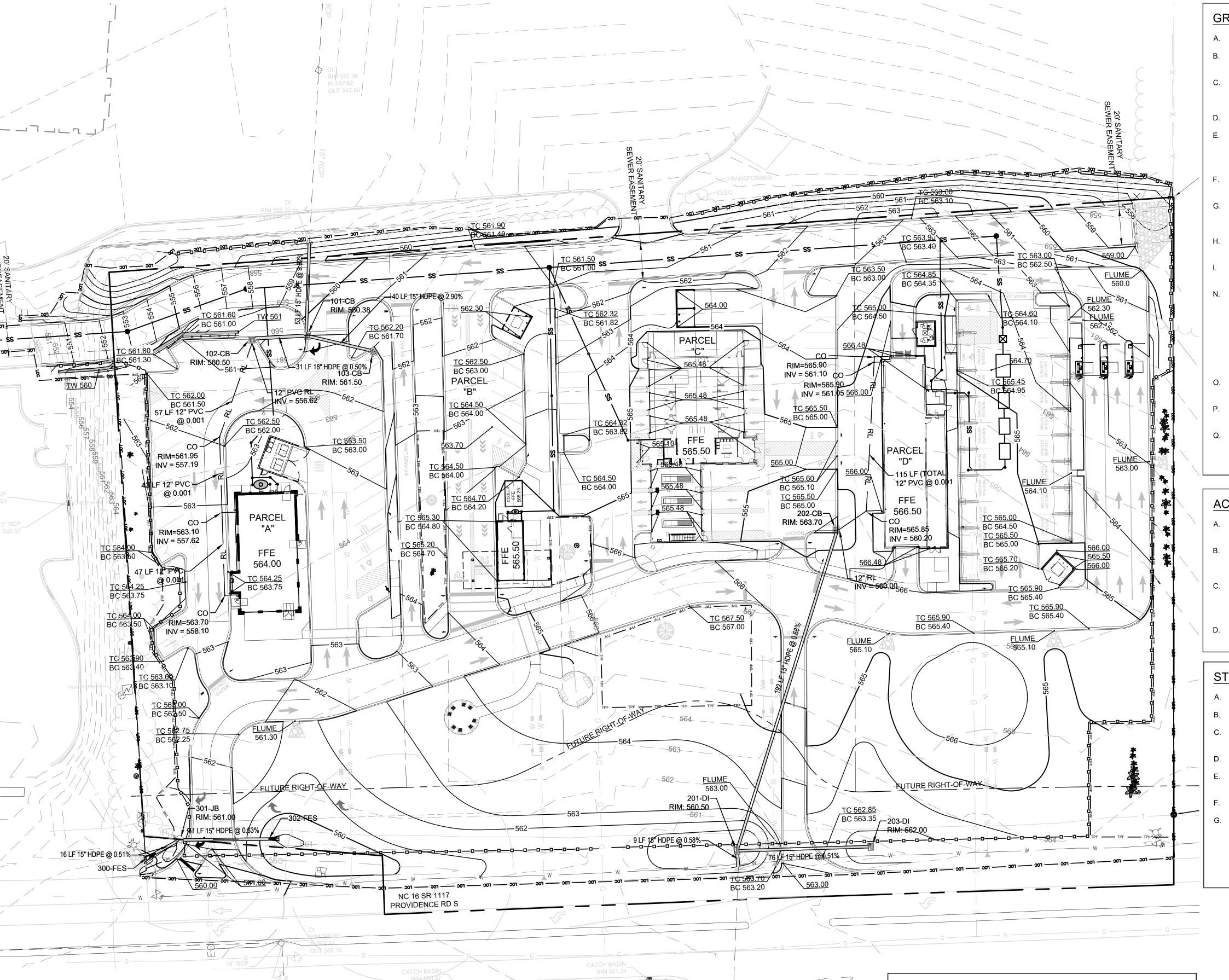
08/18/2023

POWLEN PROJECT MANAGER

VAN SICKLE

CUTHBERTSON CROSSING

DRAINAGE PLAN



HDPE PIPE BEDDING

NOT TO SCALE

	STRUCTURE	TABLE
TRUCTURE NAME	RIM ELEVATION	INVERTS
302-FES		INV OUT: 558.90; 15" N-12 (301-JB)
301-JB	561.00	INV IN: 558.58; 15" N-12 (302-FES) INV OUT: 558.58; 15" N-12 (300-FES)
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103-CB	561.50	INV OUT: 557.25; 15" N-12 (101-CB)
102-CB	560.50	INV OUT: 556.12; 18" N-12 (101-CB)
101-CB	560.38	INV IN: 556.09; 15" N-12 (103-CB) INV IN: 555.96; 18" N-12 (102-CB) INV OUT: 555.99; 15" N-12 (100-DI EX)

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ACCESSIBILITY NOTES

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CB (COMBINATION INLET) NCDOT STD. 840.01 or 840.02

DI (DROP INLET) NCDOT STD. 840.14 or 840.15

JB (JUNCTION BOX) NCDOT STD. 840.31 or 840.32

GRAPHIC SCALE

30 0 15 30 60 120

1" = 30'

NORTH

DIVERSIFIED ARCHITECTURAL CONSULTING

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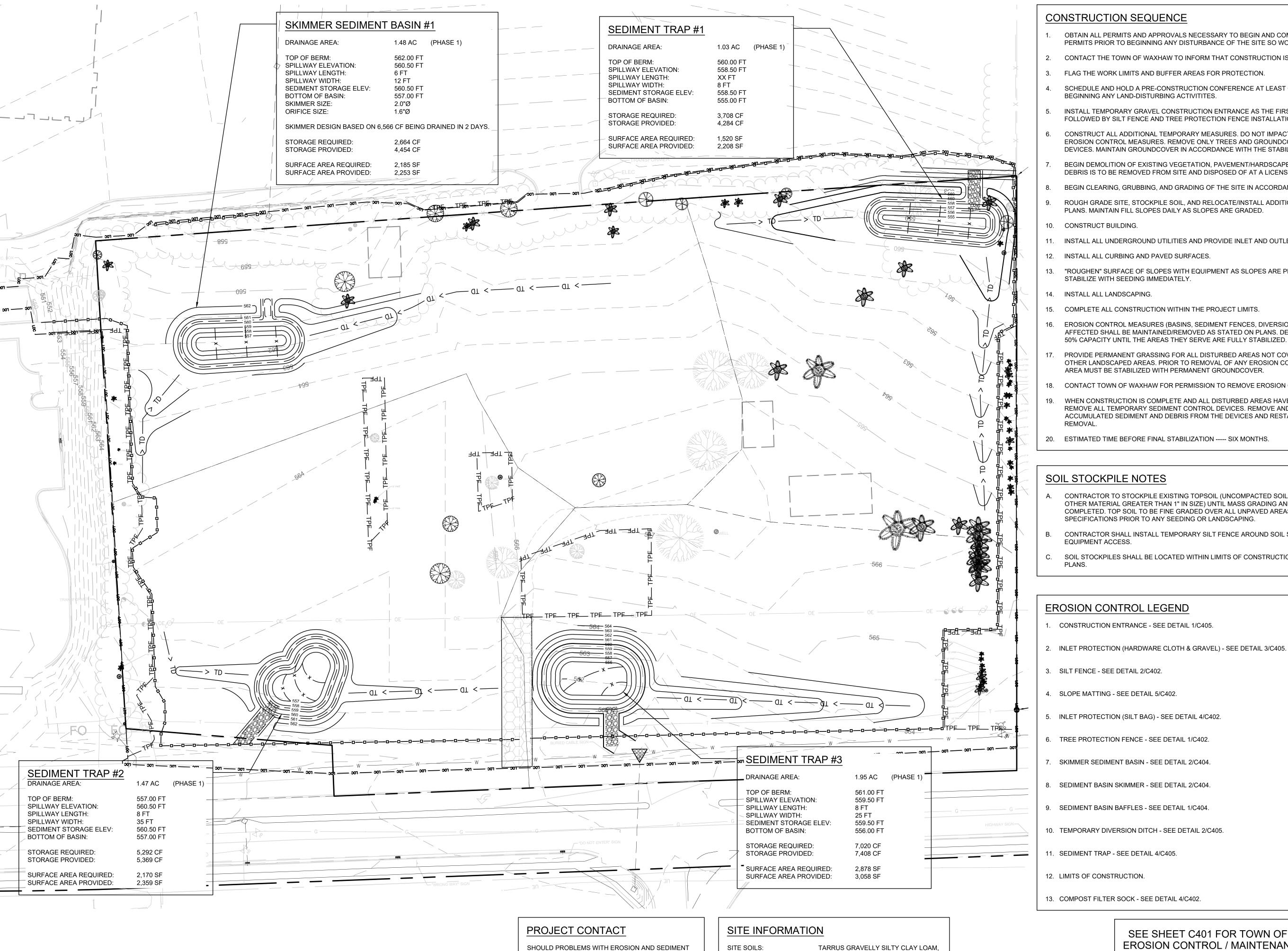
NO.	RE.	ASC	NC						
						_		_	
			_	_	 		 _	 	_

PRINCIPAL IN CHARGE
POWLEN
PROJECT MANAGER
VAN SICKLE

PROJECT NAME
CUTHBERTSON
CROSSING

101.16420.00

GRADING &
DRAINAGE PLAN



SHOULD PROBLEMS WITH EROSION AND SEDIMENT CONTROL ARISE DURING CONSTRUCTION, CONTACT:

JOHN WILSON CAROLINA CAPITAL RE 500 EAST MOREHEAD STREET, STE 230 CHARLOTTE, NC 28202 704-661-1178 JWILSON@CAROLINACAPITALRE.COM

TOTAL SITE AREA: **DENUDED AREA:**

5.40 AC 34°57'26.5" LATITUDE: LONGITUDE: 80°45'31.3" RIVER BASIN:

CATAWBA TWELVEMILE CREEK DOWNSTREAM CREEK: DOWNSTREAM INDEX: 11-138 WATERSHED: TWELVEMILE CREEK

5.40 AC

2 TO 8 PERCENT SLOPES (TbB2)

CONSTRUCTION SEQUENCE

- 1. OBTAIN ALL PERMITS AND APPROVALS NECESSARY TO BEGIN AND COMPLETE THE PROJECT. OBTAIN ALL PERMITS PRIOR TO BEGINNING ANY DISTURBANCE OF THE SITE SO WORK WILL NOT BE INTERRUPTED.
- 2. CONTACT THE TOWN OF WAXHAW TO INFORM THAT CONSTRUCTION IS READY TO BEGIN.

FOLLOWED BY SILT FENCE AND TREE PROTECTION FENCE INSTALLATION.

- 3. FLAG THE WORK LIMITS AND BUFFER AREAS FOR PROTECTION.
 - SCHEDULE AND HOLD A PRE-CONSTRUCTION CONFERENCE AT LEAST ONE WEEK PRIOR TO STARTING BEGINNING ANY LAND-DISTURBING ACTIVITITES.
- INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCE AS THE FIRST CONSTRUCTION ACTIVITY,
- CONSTRUCT ALL ADDITIONAL TEMPORARY MEASURES. DO NOT IMPACT ADJACENT PROPERTIES WITH EROSION CONTROL MEASURES. REMOVE ONLY TREES AND GROUNDCOVER NECESSARY TO INSTALL THESE

DEVICES. MAINTAIN GROUNDCOVER IN ACCORDANCE WITH THE STABILIZATION REQUIREMENTS.

- BEGIN DEMOLITION OF EXISTING VEGETATION, PAVEMENT/HARDSCAPE, AND UTILITIES. ALL DEMOLITION DEBRIS IS TO BE REMOVED FROM SITE AND DISPOSED OF AT A LICENSED LANDFILL OR RECYCLING CENTER.
- BEGIN CLEARING, GRUBBING, AND GRADING OF THE SITE IN ACCORDANCE WITH PLANS.
- 9. ROUGH GRADE SITE, STOCKPILE SOIL, AND RELOCATE/INSTALL ADDITIONAL SILT FENCE AS REQUIRED BY PLANS. MAINTAIN FILL SLOPES DAILY AS SLOPES ARE GRADED.
- 10. CONSTRUCT BUILDING.
- 11. INSTALL ALL UNDERGROUND UTILITIES AND PROVIDE INLET AND OUTLET PROTECTION DEVICES.
- 12. INSTALL ALL CURBING AND PAVED SURFACES.
- 13. "ROUGHEN" SURFACE OF SLOPES WITH EQUIPMENT AS SLOPES ARE PREPARED TO FINISHED GRADE. STABILIZE WITH SEEDING IMMEDIATELY.
- 14. INSTALL ALL LANDSCAPING.
- 15. COMPLETE ALL CONSTRUCTION WITHIN THE PROJECT LIMITS.
- 16. EROSION CONTROL MEASURES (BASINS, SEDIMENT FENCES, DIVERSION DITCHES, ETC.) DIRECTLY AFFECTED SHALL BE MAINTAINED/REMOVED AS STATED ON PLANS. DEVICES SHALL BE MAINTAINED TO MAX. 50% CAPACITY UNTIL THE AREAS THEY SERVE ARE FULLY STABILIZED.
- 17. PROVIDE PERMANENT GRASSING FOR ALL DISTURBED AREAS NOT COVERED BY BUILDINGS, PAVING, OR OTHER LANDSCAPED AREAS. PRIOR TO REMOVAL OF ANY EROSION CONTROL MEASURES, THE DRAINAGE AREA MUST BE STABILIZED WITH PERMANENT GROUNDCOVER.
- 18. CONTACT TOWN OF WAXHAW FOR PERMISSION TO REMOVE EROSION CONTROL DEVICES.
- WHEN CONSTRUCTION IS COMPLETE AND ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED, REMOVE ALL TEMPORARY SEDIMENT CONTROL DEVICES. REMOVE AND PROPERLY DISPOSE OF ACCUMULATED SEDIMENT AND DEBRIS FROM THE DEVICES AND RESTABILIZE AREAS DISTURBED BY THEIR REMOVAL.
- 20. ESTIMATED TIME BEFORE FINAL STABILIZATION ----- SIX MONTHS.

SOIL STOCKPILE NOTES

- CONTRACTOR TO STOCKPILE EXISTING TOPSOIL (UNCOMPACTED SOIL WITH NO STONES, ROOTS, OR ANY OTHER MATERIAL GREATER THAN 1" IN SIZE) UNTIL MASS GRADING AND SITE CONSTRUCTION ARE COMPLETED. TOP SOIL TO BE FINE GRADED OVER ALL UNPAVED AREAS TO THE DEPTH INDICATED IN THE SPECIFICATIONS PRIOR TO ANY SEEDING OR LANDSCAPING.
- CONTRACTOR SHALL INSTALL TEMPORARY SILT FENCE AROUND SOIL STOCKPILES, LEAVING ROOM FOR EQUIPMENT ACCESS.
- SOIL STOCKPILES SHALL BE LOCATED WITHIN LIMITS OF CONSTRUCTION NOTED ON THE EROSION CONTROL

EROSION CONTROL LEGEND

CONSTRUCTION ENTRANCE - SEE DETAIL 1/C405.

4. SLOPE MATTING - SEE DETAIL 5/C402.

5. INLET PROTECTION (SILT BAG) - SEE DETAIL 4/C402.

6. TREE PROTECTION FENCE - SEE DETAIL 1/C402.

7. SKIMMER SEDIMENT BASIN - SEE DETAIL 2/C404.

10. TEMPORARY DIVERSION DITCH - SEE DETAIL 2/C405.

11. SEDIMENT TRAP - SEE DETAIL 4/C405.

12. LIMITS OF CONSTRUCTION.

GRAPHIC SCALE

SEE SHEET C401 FOR TOWN OF WAXHAW **EROSION CONTROL / MAINTENANCE NOTES**

NORTH

1" = 30'



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CONSTRUCTION DOCUMENTS

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_____ TPF ____

_____ > TD _____

____ LOC ____

08/18/2023

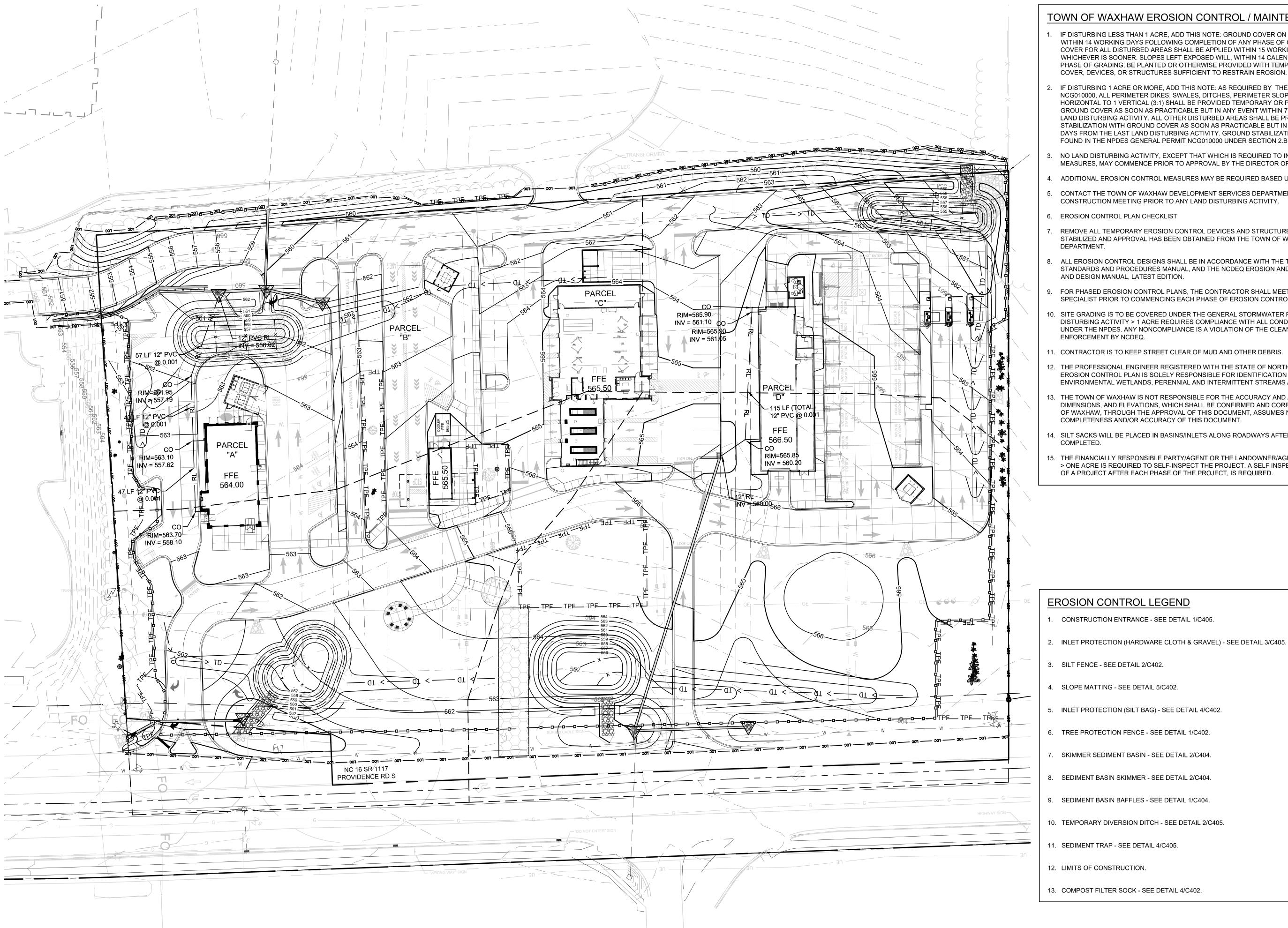
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POWLEN PROJECT MANAGER VAN SICKLE

CUTHBERTSON CROSSING

101.16420.00

EROSION CONTROL PLAN STAGE 1



TOWN OF WAXHAW EROSION CONTROL / MAINTENANCE NOTES

- IF DISTURBING LESS THAN 1 ACRE, ADD THIS NOTE: GROUND COVER ON EXPOSED SLOPES SHALL BE APPLIED WITHIN 14 WORKING DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING. PERMANENT GROUND COVER FOR ALL DISTURBED AREAS SHALL BE APPLIED WITHIN 15 WORKING DAYS OR 60 CALENDAR DAYS, WHICHEVER IS SOONER. SLOPES LEFT EXPOSED WILL, WITHIN 14 CALENDAR DAYS OF COMPLETION OF ANY PHASE OF GRADING, BE PLANTED OR OTHERWISE PROVIDED WITH TEMPORARY OR PERMANENT GROUND COVER, DEVICES, OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION.
- IF DISTURBING 1 ACRE OR MORE, ADD THIS NOTE: AS REQUIRED BY THE NPDES GENERAL PERMIT NCG010000, ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 7 CALENDAR DAYS FROM THE LAST LAND DISTURBING ACTIVITY. ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 14 CALENDAR DAYS FROM THE LAST LAND DISTURBING ACTIVITY. GROUND STABILIZATION TIMEFRAME EXEMPTIONS CAN BE FOUND IN THE NPDES GENERAL PERMIT NCG010000 UNDER SECTION 2.B. GROUND STABILIZATION.
- NO LAND DISTURBING ACTIVITY. EXCEPT THAT WHICH IS REQUIRED TO INSTALL EROSION CONTROL MEASURES, MAY COMMENCE PRIOR TO APPROVAL BY THE DIRECTOR OF DEVELOPMENT SERVICES.
- I. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BASED UPON SPECIFIC SITE CONDITIONS.
- CONTACT THE TOWN OF WAXHAW DEVELOPMENT SERVICES DEPARTMENT, AT 704-843-2195, FOR A PRE-CONSTRUCTION MEETING PRIOR TO ANY LAND DISTURBING ACTIVITY.
- 6. EROSION CONTROL PLAN CHECKLIST
- REMOVE ALL TEMPORARY EROSION CONTROL DEVICES AND STRUCTURES ONLY AFTER SITE IS FULLY STABILIZED AND APPROVAL HAS BEEN OBTAINED FROM THE TOWN OF WAXHAW DEVELOPMENT SERVICES
- 8. ALL EROSION CONTROL DESIGNS SHALL BE IN ACCORDANCE WITH THE TOWN OF WAXHAW ENGINEERING, STANDARDS AND PROCEDURES MANUAL, AND THE NCDEQ EROSION AND SEDIMENTATION CONTROL PLANNING AND DESIGN MANUAL, LATEST EDITION.
- FOR PHASED EROSION CONTROL PLANS, THE CONTRACTOR SHALL MEET WITH THE EROSION CONTROL SPECIALIST PRIOR TO COMMENCING EACH PHASE OF EROSION CONTROL MEASURES.
- 10. SITE GRADING IS TO BE COVERED UNDER THE GENERAL STORMWATER PERMIT NCG010000. ANY LAND DISTURBING ACTIVITY > 1 ACRE REQUIRES COMPLIANCE WITH ALL CONDITIONS OF THIS GENERAL PERMIT UNDER THE NPDES. ANY NONCOMPLIANCE IS A VIOLATION OF THE CLEAN WATER ACT AND MAY REQUIRE ENFORCEMENT BY NCDEQ.
- 11. CONTRACTOR IS TO KEEP STREET CLEAR OF MUD AND OTHER DEBRIS.
- 12. THE PROFESSIONAL ENGINEER REGISTERED WITH THE STATE OF NORTH CAROLINA WHO PREPARED THE EROSION CONTROL PLAN IS SOLELY RESPONSIBLE FOR IDENTIFICATION AND LOCATION OF ALL ENVIRONMENTAL WETLANDS, PERENNIAL AND INTERMITTENT STREAMS AND BUFFERS SHOWN ON THE PLANS.
- 13. THE TOWN OF WAXHAW IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND ELEVATIONS, WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE. THE TOWN OF WAXHAW, THROUGH THE APPROVAL OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.
- 14. SILT SACKS WILL BE PLACED IN BASINS/INLETS ALONG ROADWAYS AFTER INITIAL ASPHALT SURFACE WORK IS
- 15. THE FINANCIALLY RESPONSIBLE PARTY/AGENT OR THE LANDOWNER/AGENT OF A LAND DISTURBING ACTIVITY > ONE ACRE IS REQUIRED TO SELF-INSPECT THE PROJECT. A SELF INSPECTION, AS WELL AS DOCUMENTATION OF A PROJECT AFTER EACH PHASE OF THE PROJECT, IS REQUIRED.

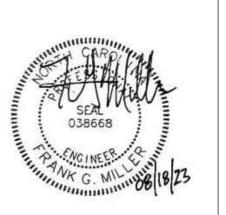


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CONSTRUCTION DOCUMENTS

08/18/2023

NO.	RE	ASC	N						DATE
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POWLEN VAN SICKLE

CUTHBERTSON CROSSING

101.16420.00

EROSION CONTROL PLAN

STAGE 2

C 401

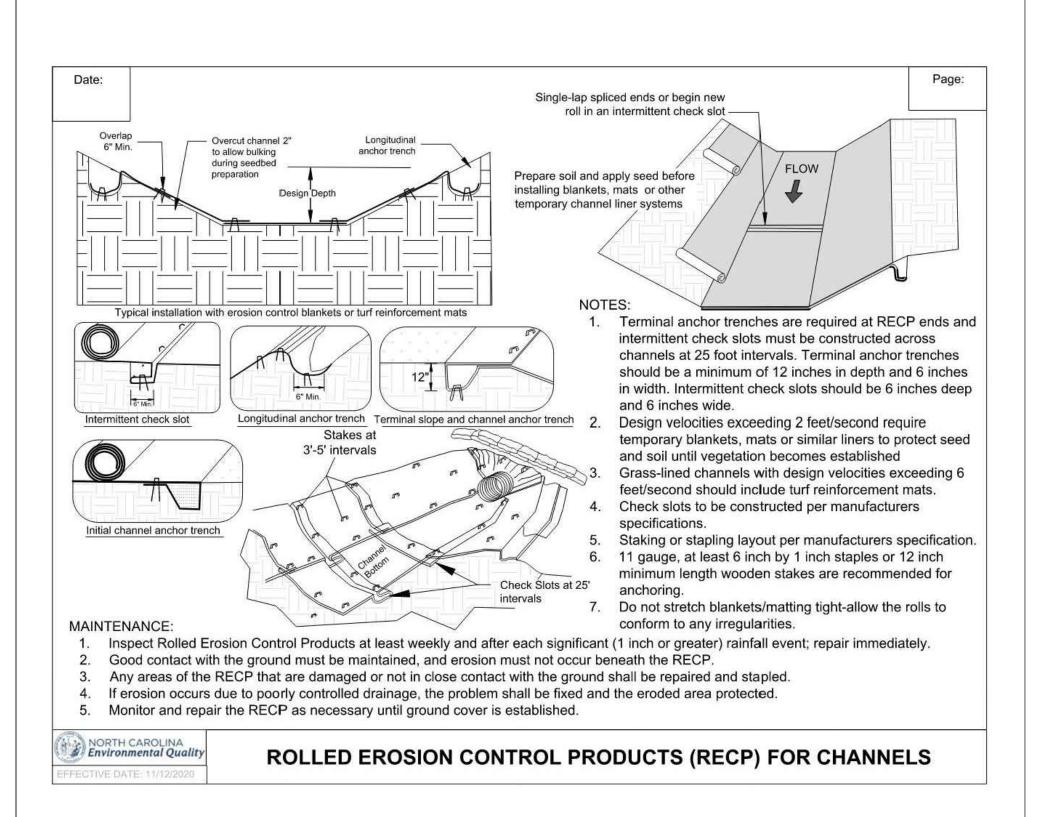
NORTH

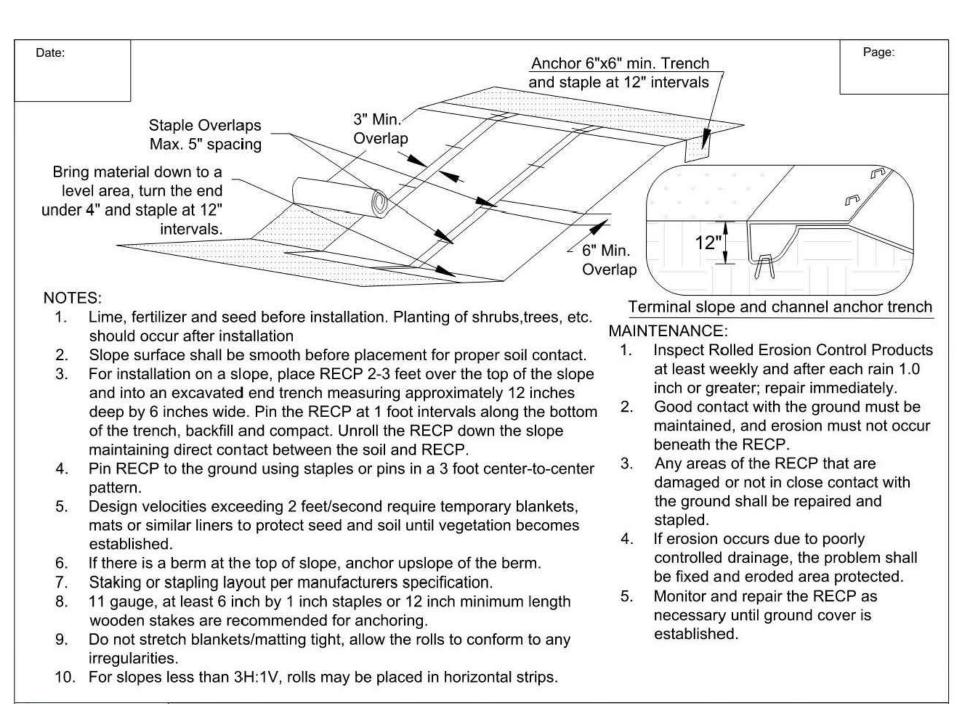
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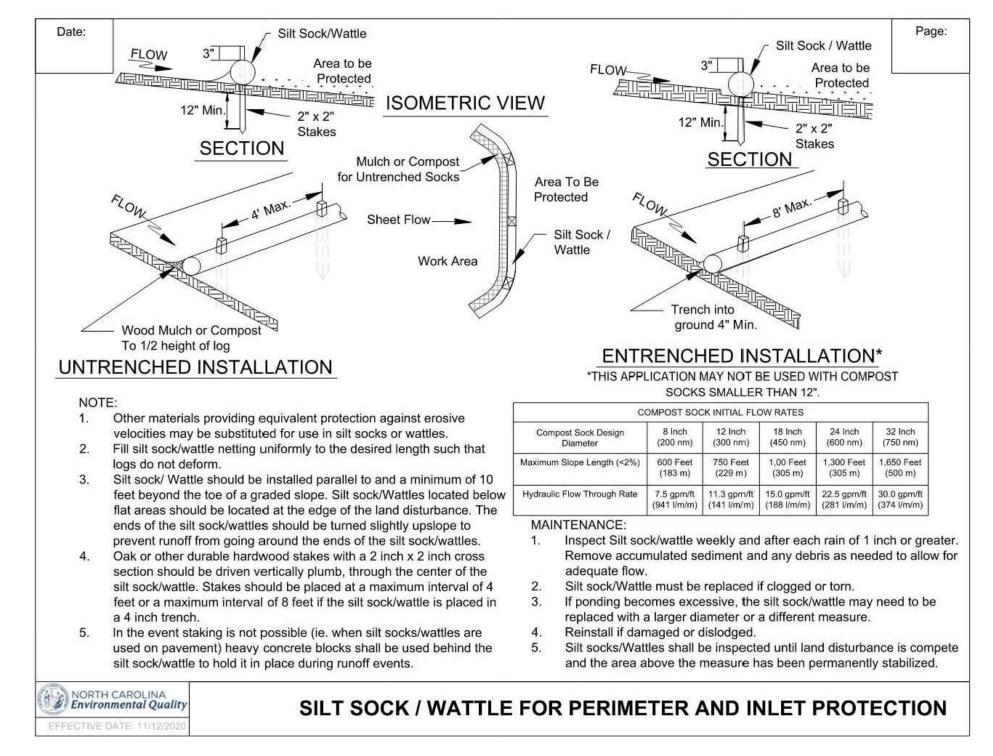
GRAPHIC SCALE

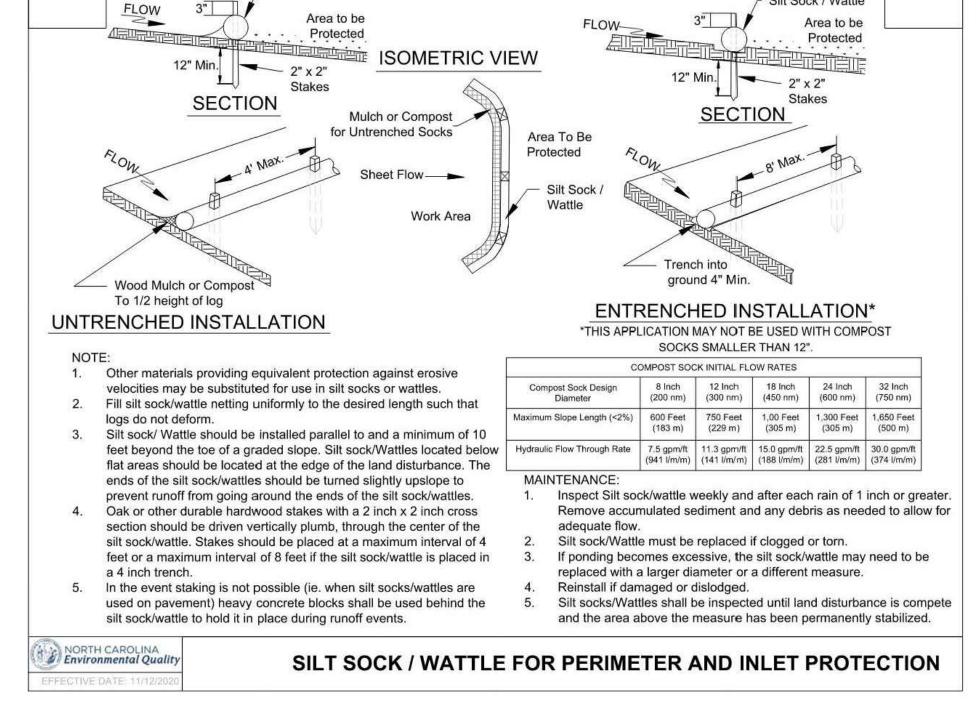
1" = 30'

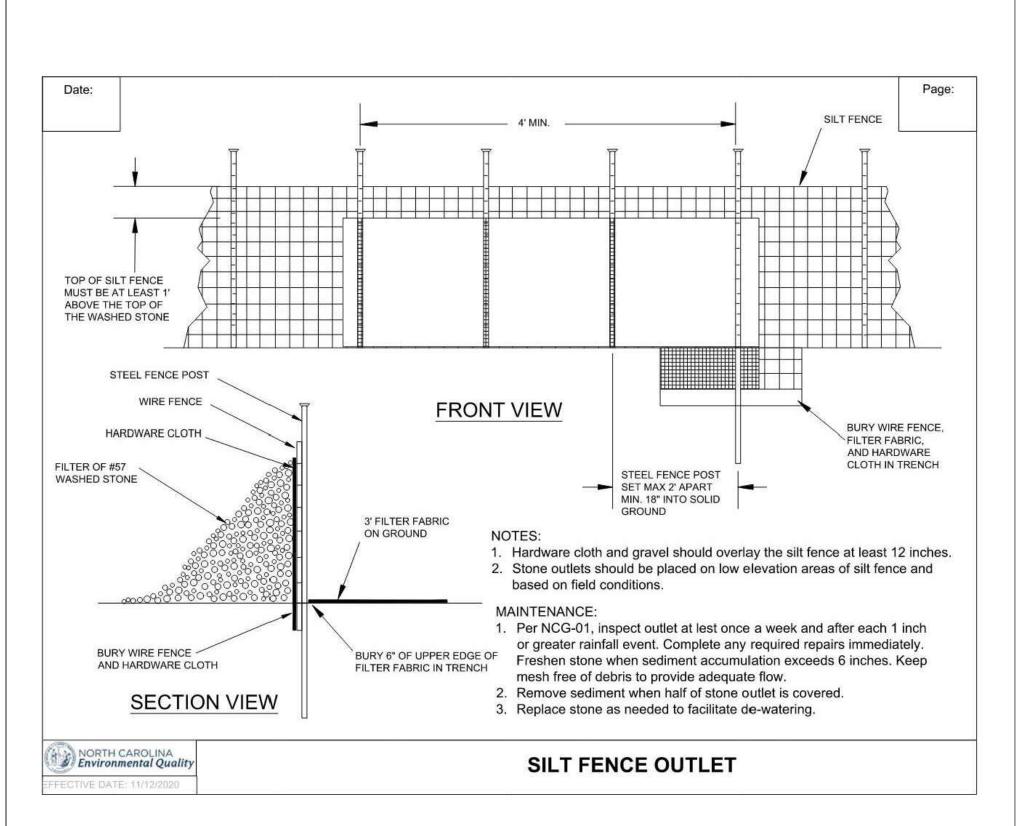




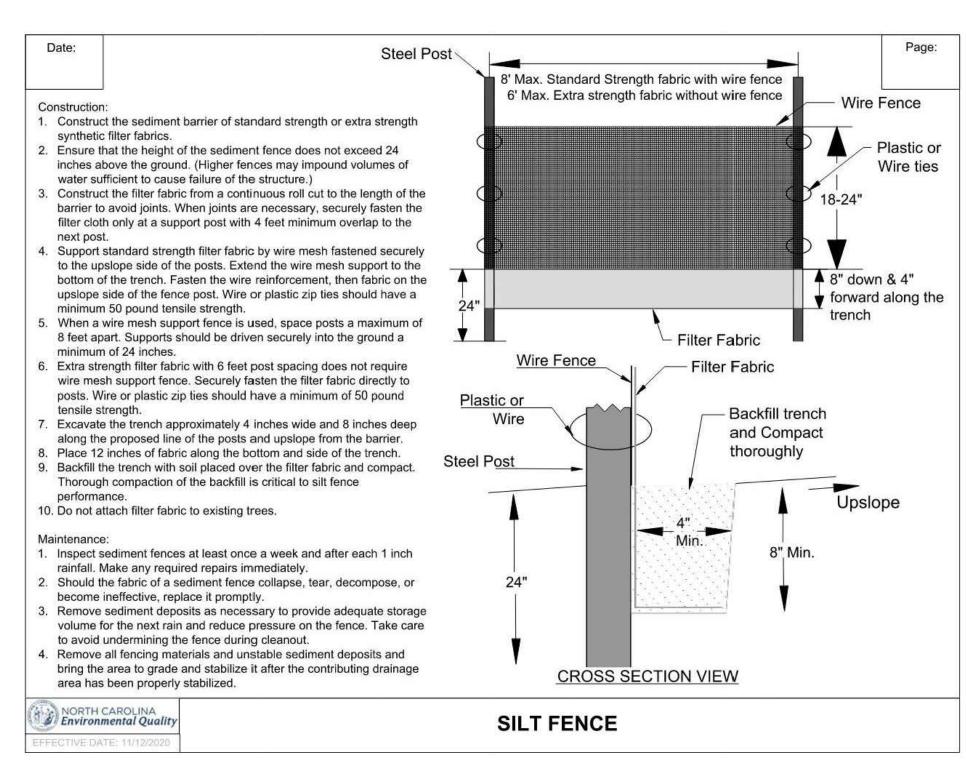
ROLLED EROSION CONTROL PRODUCTS (RECP) FOR SLOPES



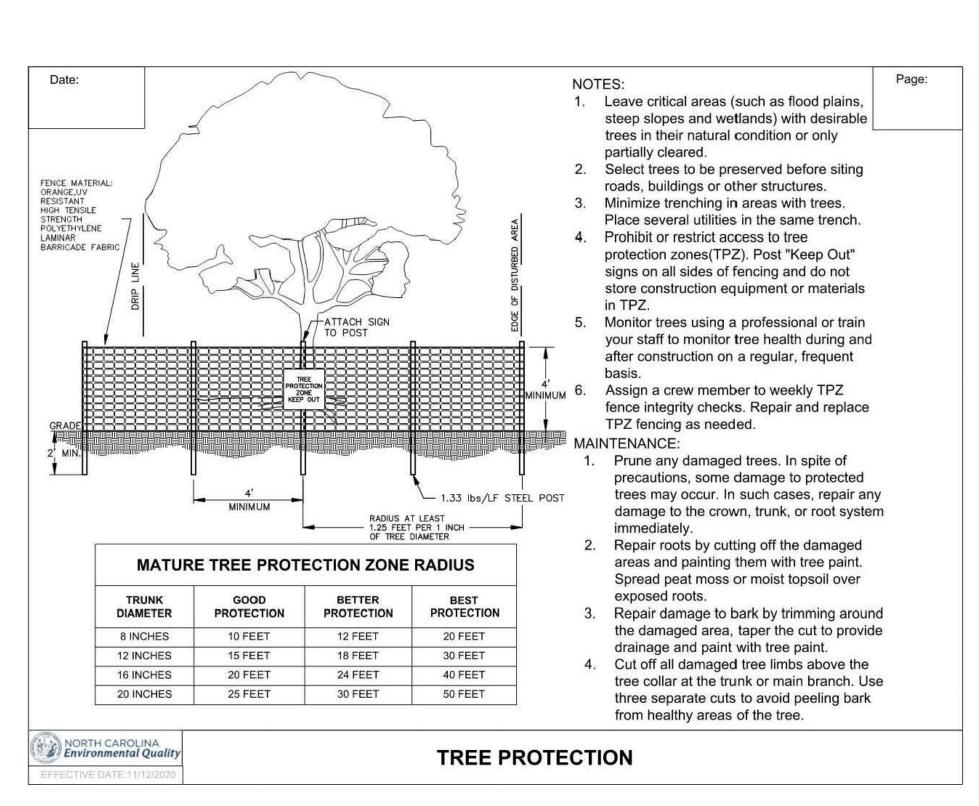


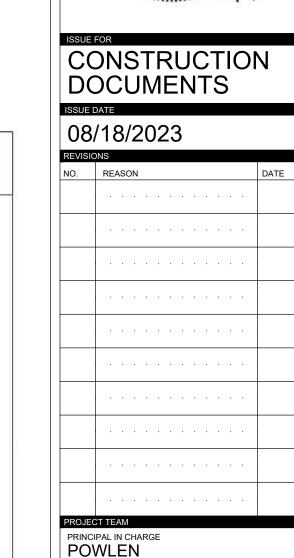


ROLLED EROSION CONTROL PRODUCTS - CHANNELS



ROLLED EROSION CONTROL PRODUCTS - SLOPES





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PROJECT MANAGER VAN SICKLE PROJECT NAME CUTHBERTSON

CROSSING

101.16420.00

EROSION CONTROL **DETAILS**

SILT FENCE

NORTH CAROLINA Environmental Quality

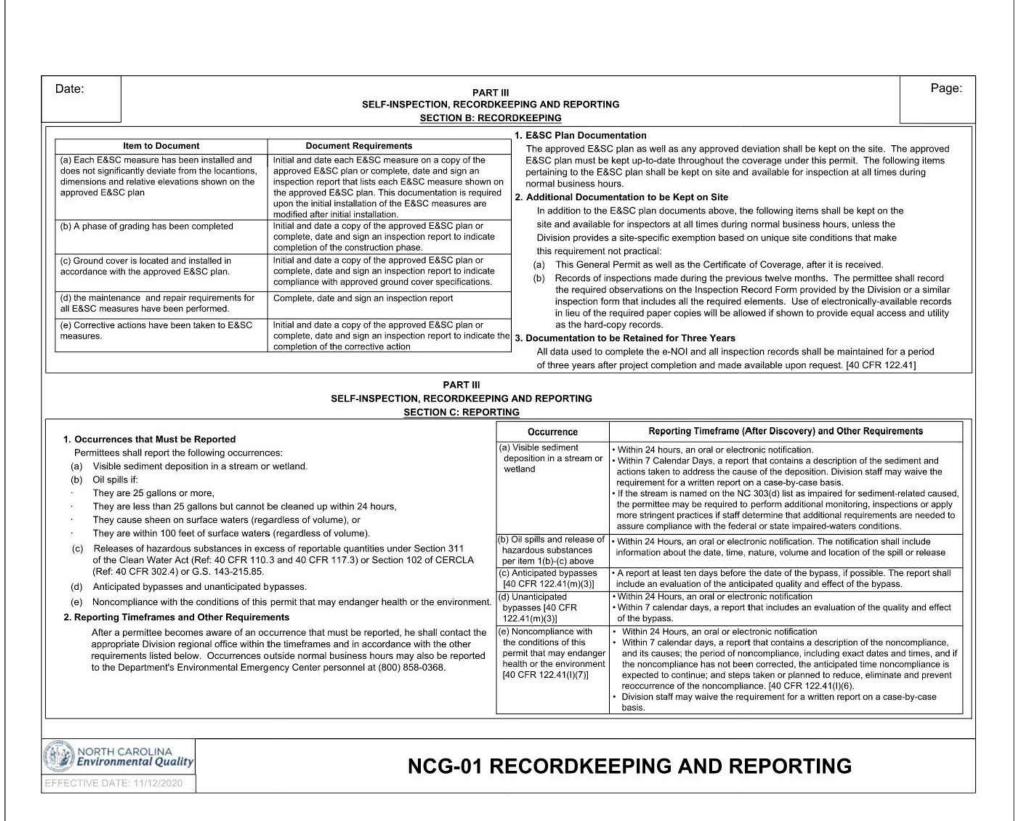
NOT TO SCALE

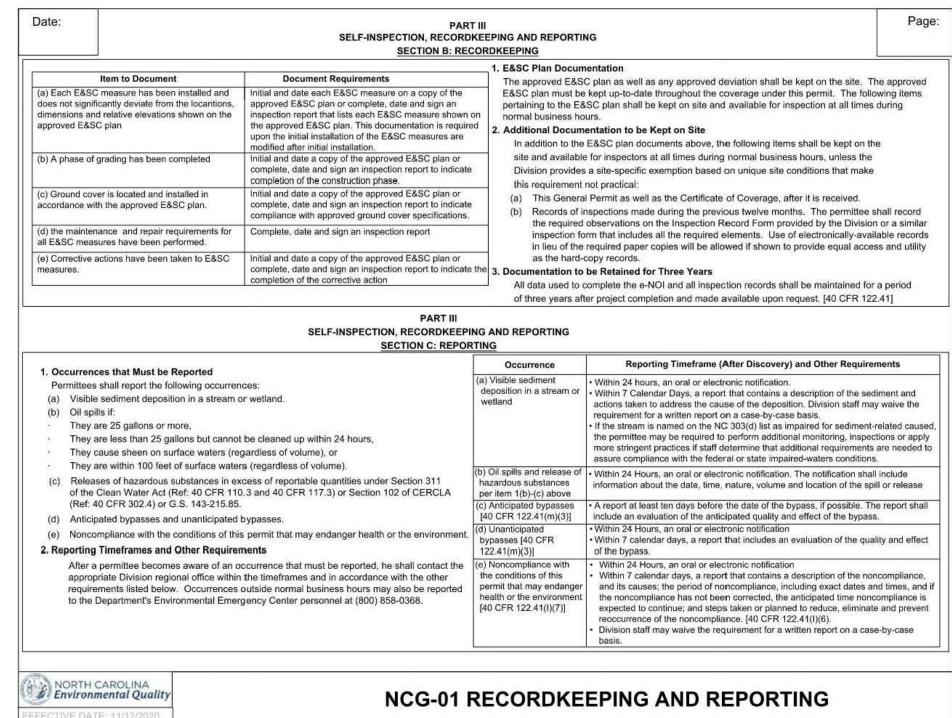
TREE PROTECTION

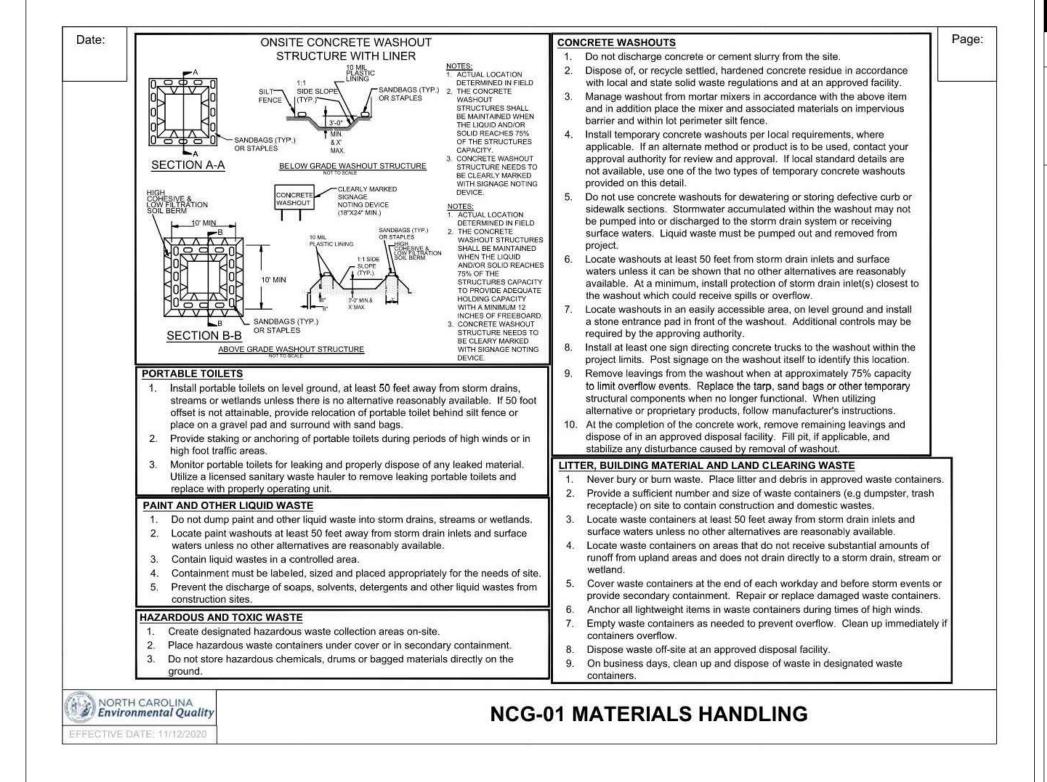
COMPOST FILTER SOCK

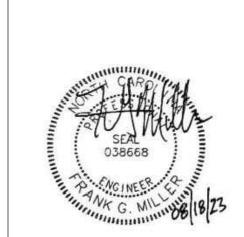
SILT FENCE OUTLET

NOT TO SCALE









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NCG01 SELF REPORTING

High Quality Water

(HQW) Zones

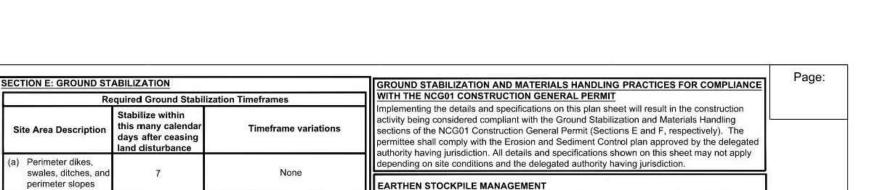
d) Slopes 3:1 to 4:1

Areas with slopes

other mulch

NORTH CAROLINA
Environmental Quality

Plastic sheeting



ARTHEN STOCKPILE MANAGEMENT slopes are 10 feet or less in lend and are not steeper than 2:1, 14 d feet from the toe of stockpile. re allowed Provide stable stone access point when feasible 7 days for slopes greater than 50' n length and with slopes steeper erosion on disturbed soils for temporary or permanent control needs. 7 days for perimeter dikes, swales, tches, perimeter slopes and HQW ERBICIDES, PESTICIDES AND RODENTICIDES

10 days for Falls Lake Watershe days for perimeter dikes, swales litches, perimeter slopes and HQW 10 days for Falls Lake Watershed ss there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the oil. Use one of the techniques in the table below: Temporary Stabilization Temporary grass seed covered or other mulches and tackifiers with straw or other mulches Geotextile fabrics such as permanent soil and tackifiers. reinforcement matting Hydroseeding Rolled erosion control products Shrubs or other permanent plantings with or without temporary grass

Permanent grass seed covered with straw covered with mulch Jniform and evenly distributed ground cover Appropriately applied straw or sufficient to restrain erosion

Structural methods such as concrete.

Rolled erosion control products with grass

asphalt or retaining walls

Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available Protect stockpile with silt fence installed along toe of slope with a minimum offset of five

Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated

Store and apply herbicides, pesticides and rodenticides in accordance with label Store herbicides, pesticides and rodenticides in their original containers with the label which lists directions for use, ingredients and first aid steps in case of accidental

Do not store herbicides, pesticides and rodenticides in areas where flooding is possib or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately. Do not stockpile these materials onsite. POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

Select flocculants that are appropriate for the soils being exposed during construction selecting from the NC DWR List of Approved PAMS/Flocculants. Apply flocculants at or before the inlets to Erosion and Sediment Control Measures Apply flocculants at the concentrations specified in the NC DWR List of Approved PAMS/Flocculants and in accordance with the manufacturer's instructions.

Provide ponding area for containment of treated Stormwater before discharging offsite Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE Maintain vehicles and equipment to prevent discharge of fluids. Provide drip pans under any stored equipment. Identify leaks and repair as soon as feasible, or remove leaking equipment from the

Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible). Remove leaking vehicles and construction equipment from service until the problem has been corrected.

Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

NCG-01 GROUND COVER

NCG01 RECORD KEEPING & REPORTING

NON-INVASIVE PERMANENT SEEDING Date: RECOMMENDATIONS FOR FALL SEEDING MIXTURE NON-INVASIVE PERMANENT SEEDING RECOMMENDATIONS FOR LATE Species WINTER AND EARLY SPRING Hard Fescue 15 lbs/acre 2.5-3.5 lbs/acre* Switchgrass SEEDING MIXTURE 5-7 lbs/acre* Indian Grass Species NON-INVASIVE PERMANENT SEEDING 5-7 lbs/acre* Bia Bluestem Centipede 5 lbs/acre RECOMMENDATIONS FOR SUMMER Indian Woodoats 1.5-2.5 lbs/acre* Indian Woodoats 1.5-2.5 lbs/acre* Virginia Wild Rye 4-6 lbs/acre* Virginia Wild Rye 4-6 lbs/acre* SEEDING MIXTURE Species *Depending upon mix with other species. See table *Depending upon mix with other species. See table Indian Woodoats 1.5-2.5 lbs/acre* 6.11.d from Chapter 6 of the NC Erosion and Sediment 6.11.d from Chapter 6 of the NC Erosion and Sediment Virginia Wild Rye 4-6 lbs/acre* Control Planning and Design Manual. Control Planning and Design Manual. *Depending upon mix with other species. Seeding Dates Seeding Dates See table 6.11.d from Chapter 6 of the NC Mountains - Hard Fescue- Aug 1 - June 1 Coastal or Eastern Piedmont for Centipede- Sept. 1 Erosion and Sediment Control Planning Mountains- Switchgrass, Indian Grass, Big Bluestemand Design Manual. Dec 1 - April 15 Coastal and Piedmont for Indian Woodoats and Virginia Wild Rye- Feb 15 - April 1

Piedmont and Coastal-Switchgrass, Indian Grass, Big Bluestem- Dec 1 - April 1 Coastal- Indian Woodoats and Virginia Wild Rye-Sept 1 - Nov 1

Mountains for Indian Woodoats and Virginia Wild Rye-March 1 - May 15 Maintenance: Maintenance: Significant maintenance may be required to obtain Indian Woodoats and Virginia Wild Rye Hard Fescue is not recommended for slopes > 5%.

desired cover once centipede is planted. Acceptable for Prefers shade. SEED BED PREPARATION:

LIMING- Apply lime according to soil test recommendations. If the pH (acidity) of the soil is not known, an application of ground agricultural limestone at the rate of 1 to 1 ½ tons/acre on coarse-textured soils and 2-3 tons/acre on fine-textured soils is usually sufficient. Apply limestone uniformly and incorporate into the top 4-6 inches of soil. Soils with a pH of 6 or FERTILIZER- Base application rates on soil tests. When these are not possible, apply a 10-10-10 grade fertilizer at 700-1,000 lb/acre. Both fertilizer and lime should be incorporated into the top 4-6 inches of soil. If a hydraulic seeder is used, do not mix seed and fertilizer more than 30 minutes before application.

SURFACE ROUGHENING- If recent tillage operations have resulted in a loose surface additional roughening may not be required, except to break up large clods. If rainfall causes the surface to become sealed or crusted, loosen it just prior to seeding by raking, harrowing, or other suitable methods for fine grading. The finished grade shall be a smooth even soil surface with a loosen uniformly fine texture. All ridges and depressions shall be removed and filled to provide the approved surface drainage. Planting is to be done immediately after finished grades are obtained and seedbed preparation is completed.

Permanent seeding, sodding or other means of stabilization are required when all construction work is completed according to the NPDES timeframe's table. A North Carolina Department of Agriculture soils test (or equal) is highly recommended to be obtained for all areas to be seeded, sprigged, sodded or planted. Use a seeding mix that will produce fast growing nurse crops and includes non-invasive species that will eventually provide a permanent groundcover. Soil blankets may be used in lieu of nurse crops. Mat, tack or crimp mulch, as needed to stabilize seeded areas until root establishment. Mulch must be applied uniformly over the soil with a cover density

of at least 80%. 4. Ground cover shall be maintained until permanent vegetation is established and stable against accelerated erosion.

NORTH CAROLINA Environmental Qualit PERMANENT SEEDING RECOMMENDATIONS NCG01 MATERIALS HANDLING

Page: Date: TEMPORARY SEEDING RECOMMENDATIONS TEMPORARY SEEDING TEMPORARY SEEDING RECOMMENDATIONS FOR SUMMER FOR LATE WINTER AND EARLY SPRING RECOMMENDATIONS FOR FALL Seeding Mixture Seeding Mixture Seeding Mixture Species Rate (lb/acre) Species Rate (lb/acre) Species Rate (lb/acre) Rye (grain) German millet Rye (grain) Annual lespedeza (Kobe in In the Piedmont and Mountains, a Piedmont and Coastal Plain, Seeding Dates Korean in Mountains) small-stemmed Sudangrass may be Mountains—Aug. 15 - Dec. 15 substituted at a rate of 50 lb/acre. Coastal Plain and Piedmont-Aug. 15 - Dec. 31 Omit annual lespedeza when duration of temporary cover is not to extend beyond June. Seeding Dates Mountains—May 15 - Aug. 15 Seeding Dates Apply 4,000 lb/acre straw. Anchor straw by Mountains—Above 2500 feet: Feb. 15 - May 15 Piedmont—May 1 - Aug. 15 tacking with asphalt, netting, or a mulch Below 2500 feet: Feb. 1- May 1 Coastal Plain—Apr. 15 - Aug. 15 anchoring tool. A disk with blades set nearly Piedmont—Jan. 1 - May 1 straight can be used as a mulch anchoring tool. Coastal Plain—Dec. 1 - Apr. 15 Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a Repair and refertilize damaged areas Apply 4,000 lb/acre straw. Anchor straw by

mulch anchoring tool. A disk with blades immediately. Topdress with 50 lb/acre of nitrogen set nearly straight can be used as a in March. If it is necessary to extend temporary mulch anchoring tool. cover beyond June 15, overseed with 50 lb/acre Kobe (Piedmont and Coastal Plain) or Korean Refertilize if growth is not fully adequate. (Mountains) lespedeza in late February or early Reseed, refertilize and mulch immediately | March. following erosion or other damage.

SEED BED PREPARATION: LIMING- Apply lime according to soil test recommendations. If the pH (acidity) of the soil is not known, an application of ground agricultural limestone at the rate of 1 to 1 ½ tons/acre on coarse-textured soils and 2-3 tons/acre on fine-textured soils is usually sufficient. Apply limestone uniformly and incorporate into the top 4-6 inches of soil. Soils with a pH of 6 or

higher need not be limed FERTILIZER- Base application rates on soil tests. When these are not possible, apply a 10-10-10 grade fertilizer at 700-1,000 lb/acre. Both fertilizer and lime should be incorporated into the top 4-6 inches of soil. If a hydraulic seeder is used, do not mix seed and fertilizer more than 30 minutes before application. SURFACE ROUGHENING- If recent tillage operations have resulted in a loose surface additional roughening may not be required, except to break up large clods. If rainfall causes the

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NORTH CAROLINA Environmental Quality

Maintenance

tacking with asphalt, netting, or a mulch

Refertilize if growth is not fully adequate.

following erosion or other damage.

Reseed, refertilize and mulch immediately

anchoring tool. A disk with blades set nearly

straight can be used as a mulch anchoring tool.

Page:

TEMPORARY SEEDING RECOMMENDATIONS

POWLEN PROJECT MANAGER VAN SICKLE

PROJECT NAME CUTHBERTSON **CROSSING**

101.16420.00

EROSION

CONTROL **DETAILS**

NCG01 GROUND COVER

PERMANENT SEEDING

Seeding Dates

Maintenance:

Mountains - July 15- Aug 15

Piedmont - Aug 15 - Oct 15

are both sun and shade tolerant.

TEMPORARY SEEDING

- Construction 1. Clear, grub, and strip the area under the embankment of all vegetation and root mat. Remove all surface soil containing high amounts of organic matter Specifications and stockpile or dispose of it properly. Haul all objectionable material to the designated disposal area. Place temporary sediment control measures below basin as needed
 - 2. Ensure that fill material for the embankment is free of roots, woody vegetation, organic matter, and other objectionable material. Place the fill in lifts not to exceed 9 inches, and machine compact it. Over fill the embankment 6 inches to allow for settlement.
 - 3. Shape the basin to the specified dimensions. Prevent the skimming device from settling into the mud by excavating a shallow pit under the skimmer or providing a low support under the skimmer of stone or timber.
 - 4. Place the barrel (typically 4-inch Schedule 40 PVC pipe) on a firm, smooth foundation of impervious soil. Do not use pervious material such as sand, gravel, or crushed stone as backfill around the pipe. Place the fill material around the pipe spillway in 4-inch layers and compact it under and around the pipe to at least the same density as the adjacent embankment. Care must be taken not to raise the pipe from the firm contact with its foundation when compacting under the pipe haunches.

Place a minimum depth of 2 feet of compacted backfill over the pipe spillway before crossing it with construction equipment. In no case should the pipe conduit be installed by cutting a trench through the dam after the embankment is complete.

- 5. Assemble the skimmer following the manufacturers instructions, or as designed.
- 6. Lay the assembled skimmer on the bottom of the basin with the flexible joint at the inlet of the barrel pipe. Attach the flexible joint to the barrel pipe and position the skimmer over the excavated pit or support. Be sure to attach a rope to the skimmer and anchor it to the side of the basin. This will be used to pull the skimmer to the side for maintenance.
- 7. Earthen spillways—Install the spillway in undisturbed soil to the greatest extent possible. The achievement of planned elevations, grade, design width, and entrance and exit channel slopes are critical to the successful operation of the spillway. The spillway should be lined with laminated plastic or impermeable geotextile fabric. The fabric must be wide and long enough to cover the bottom and sides and extend onto the top of the dam for anchoring in a trench. The edges may be secured with 8-inch staples or pins. The fabric must be long enough to extend down the slope and exit onto stable ground. The width of the fabric must be one piece, not joined or spliced; otherwise water can get under the fabric. If the length of the fabric is insufficient for the entire length of the spillway, multiple sections, spanning the complete width, may be used. The upper section(s) should overlap the lower section(s) so that water cannot flow under the fabric. Secure the upper edge and sides of the fabric in a trench with staples or pins. (Adapted from "A Manual for Designing, Installing and Maintaining Skimmer Sediment Basins." February, 1999. J. W. Faircloth & Son.).
- 8. Inlets—Discharge water into the basin in a manner to prevent erosion. Use temporary slope drains or diversions with outlet protection to divert sedimentladen water to the upper end of the pool area to improve basin trap efficiency (References: Runoff Control Measures and Outlet Protection).

- 9. Erosion control—Construct the structure so that the disturbed area is minimized. Divert surface water away from bare areas. Complete the embankment before the area is cleared. Stabilize the emergency spillway embankment and all other disturbed areas above the crest of the principal spillway immediately after construction (References: Surface Stabilization).
- 10. Install porous baffles as specified in Practice 6.65, Porous Baffles.
- 11. After all the sediment-producing areas have been permanently stabilized, remove the structure and all the unstable sediment. Smooth the area to blend with the adjoining areas and stabilize properly (References: Surface Stabilization).

Inspect skimmer sediment basins at least weekly and after each significant (one-half inch or greater) rainfall event and repair immediately. Remove sediment and restore the basin to its original dimensions when sediment accumulates to one-half the height of the first baffle. Pull the skimmer to one side so that the sediment underneath it can be excavated. Excavate the sediment from the entire basin, not just around the skimmer or the first cell, Make sure vegetation growing in the bottom of the basin does not hold down the skimmer.

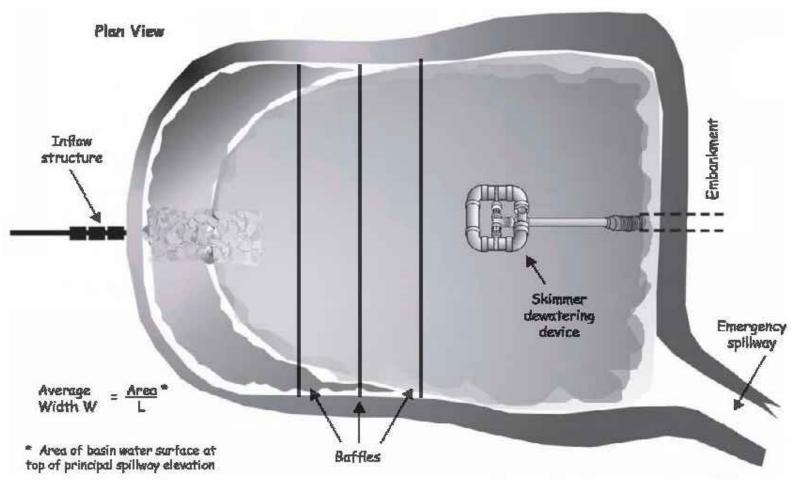
Repair the baffles if they are damaged. Re-anchor the baffles if water is flowing underneath or around them.

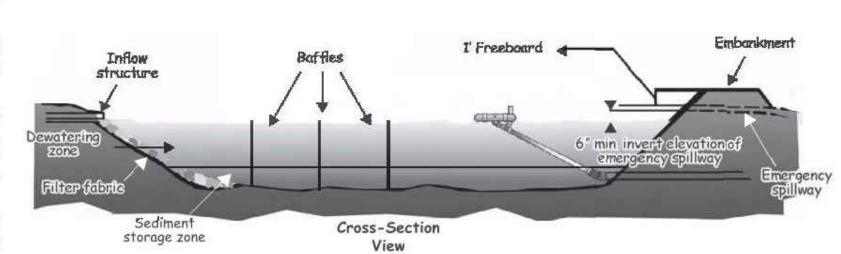
If the skimmer is clogged with trash and there is water in the basin, usually jerking on the rope will make the skimmer bob up and down and dislodge the debris and restore flow. If this does not work, pull the skimmer over to the side of the basin and remove the debris. Also check the orifice inside the skimmer to see if it is clogged; if so remove the debris.

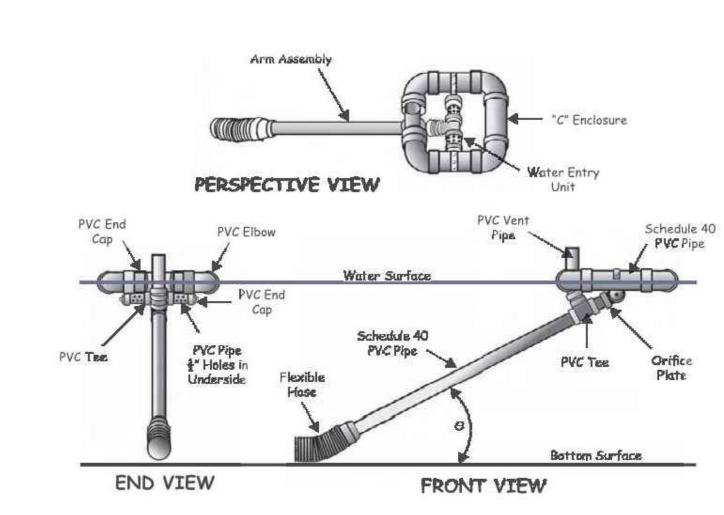
If the skimmer arm or barrel pipe is clogged, the orifice can be removed and the obstruction cleared with a plumber's snake or by flushing with water. Be sure and replace the orifice before repositioning the skimmer.

Check the fabric lined spillway for damage and make any required repairs with fabric that spans the full width of the spillway. Check the embankment, spillways, and outlet for erosion damage, and inspect the embankment for piping and settlement. Make all necessary repairs immediately. Remove all trash and other debris from the skimmer and pool areas.

Freezing weather can result in ice forming in the basin. Some special precautions should be taken in the winter to prevent the skimmer from









Specifications

- 1. Use matting made of 100% coconut fiber (coir) twine woven into high strength matrix with the properties shown in Table 6.65a.
- 2. Staples should be made of 0.125 inch diameter new steel wire formed into a 'U' shape not less than 12 inches in length with a throat of 1 inch in width. The staples anchor the porous baffles into the sides and bottom of the basin.
- 3. Ensure that steel posts for porous baffles are of a sufficient height to support baffles at desired height. Posts should be approximately 1-3/8" wide measured parallel to the fence, and have a minimum weight of 1.25 lb/linear ft. The posts must be equipped with an anchor plate having a minimum area of 14.0 square inches and be of the self-fastener angle steel type to have a means of retaining wire and coir fiber mat in the desired position without displacement.

4. Use 9-gauge high tension wire for support wire.

Table 6.65a Specifications for Porous Baffle Material

Coir Fiber Baffle Mater	ial Property Requirements
Thickness	0.30 in. minimum
Tensile Strength (Wet)	900 x 680 lb/ft minimum
Elongation (Wet)	69% x 34% maximum
Flow Velocity	10-12 ft/sec
Weight	20 oz/SY (680 g/m ²) minimum
Minimum Width	6.5 feet
Open Area	50% maximum

CONSTRUCTION

1. Grade the basin so that the bottom is level front to back and side to side.

- 2. Install the coir fiber baffles immediately upon excavation of the basins.
- 3. Install posts across the width of the sediment trap (Practice 6.62, Sediment
- **4.** Steel posts should be driven to a depth of 24 inches and spaced a maximum of 4 feet apart. The top of the fabric should be a minimum of 6 inches higher than the invert of the spillway. Tops of baffles should be a minimum of 2 inches lower than the top of the earthen embankment.
- 5. Install at least three rows of baffles between the inlet and outlet discharge point. Basins less than 20 feet in length may use 2 baffles.
- **6.** Attach a 9 gauge high tension wire strand to the steel posts at a height of 6 inches above the spillway elevation with plastic ties or wire fasteners to prevent sagging. If the temporary sediment basin will be converted to a permanent stormwater basin of a greater depth, the baffle height should be based on the pool depth during use as a temporary sediment basin.

- 7. Extend 9 gauge minimum high tension wire strand to side of basin or install steel T-posts to anchor baffle to side of basin and secure to vertical end posts as shown in Figure 6.65b.
- **8.** Drape the coir fiber mat over the wire strand mounted at a height of 6 inches above the spillway elevation. Secure the coir fiber mat to the wire strand with plastic ties or wire fasteners. Anchor the matting to the sides and floor of the basin with 12 inch wire staples, approximately 1 ft apart, along the bottom and side slopes of the basin.
- **9.** Do not splice the fabric, but use a continuous piece across the basin
- 10. Adjustments may be required in the stapling requirements to fit individual site conditions.

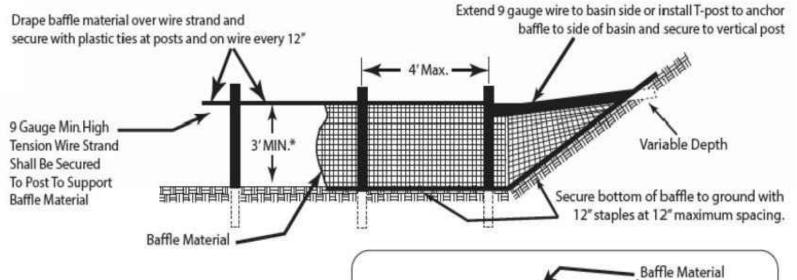
Maintenance

Inspect baffles at least once a week and after each rainfall. Make any required repairs immediately.

Be sure to maintain access to the baffles. Should the fabric of a baffle collapse, tear, decompose, or become ineffective, replace it promptly.

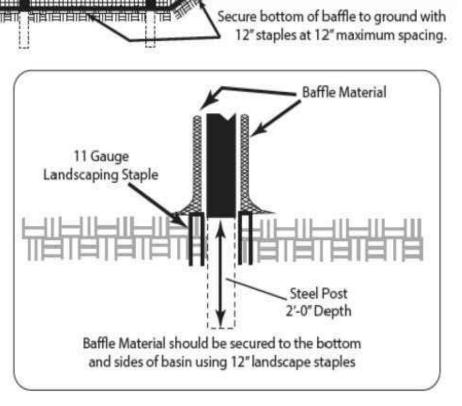
Remove sediment deposits when it reaches half full, to provide adequate storage volume for the next rain and to reduce pressure on the baffles. Take care to avoid damaging the baffles during cleanout, and replace if damaged during cleanout operations. Sediment depth should never exceed half the designed storage depth.

After the contributing drainage area has been properly stabilized, remove all baffle materials and unstable sediment deposits, bring the area to grade, and stabilize it.



* If the temporary sediment basin will be converted to a permanent stormwater basin of greater depth, the baffle height should be based on the pool depth during use as a temporary sediment basin.

Note: Install three (3) coir fiber baffles in basins at drainage outlets with a spacing of 1/4 the basin length. Two (2) coir fiber baffles can be installed in the basins less than 20 ft. in length with a spacing of 1/3 the basin length.



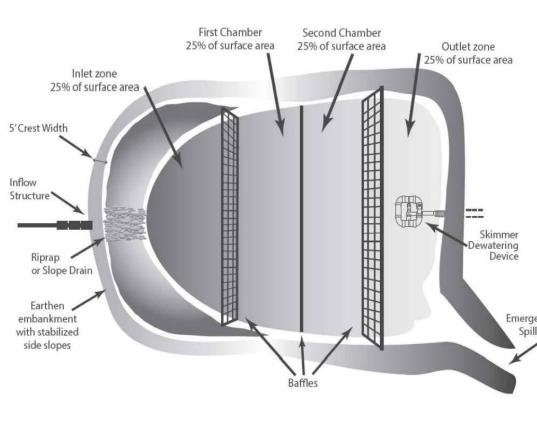


Figure 6.65a Porous baffles in a sediment basin. The flow is distributed evenly across the basin to reduce flow rates and turbulence, resulting in greater sediment retention.

POROUS BAFFLES

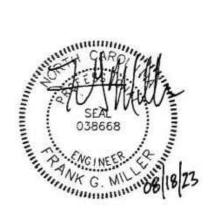


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CONSTRUCTION DOCUMENTS

08/18/2023

NO.	REASON	DAT

POWLEN PROJECT MANAGER VAN SICKLE

LMG PROJECT NAME CUTHBERTSON CROSSING

101.16420.00

EROSION

CONTROL DETAILS

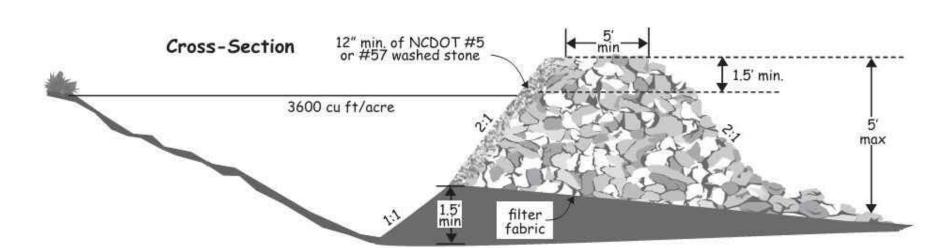
Side slopes—Keep the side slopes of the spillway section at 2:1 or flatter. To protect the embankment, keep the sides of the spillway at least 21 inches

Depth—The basin should be excavated 1.5 feet below grade.

Stone spillway height—The sediment storage depth should be a minimum of 2 feet and a maximum of 3.5 feet above grade.

Protection from piping—Place filter cloth on the foundation below the riprap to prevent piping. An alternative would be to excavate a keyway trench across the riprap foundation and up the sides to the height of the dam.

Weir length and depth—Keep the spillway weir at least 4 feet long and sized to pass the peak discharge of the 10-year storm (Figure 6.60a). A maximum flow depth of six inches, a minimum freeboard of 1 foot, and maximum side slopes of 2:1 are recommended. Weir length may be selected from Table 6.60a shown for most site locations in North Carolina.



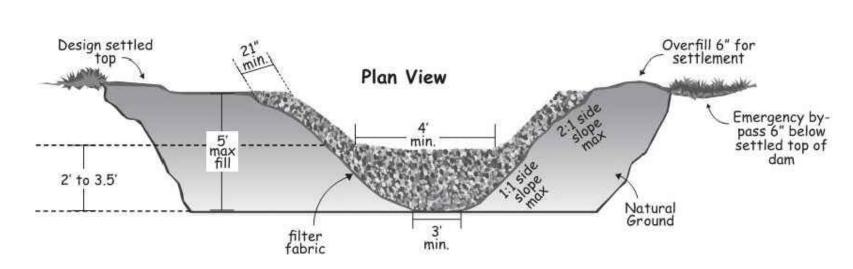


Figure 6.60a Plan view and cross-section view of a temporary sediment trap.

- Construction 1. Clear, grub, and strip the area under the embankment of all vegetation and Specifications root mat. Remove all surface soil containing high amounts of organic matter, and stockpile or dispose of it properly. Haul all objectionable material to the designated disposal area.
 - 2. Ensure that fill material for the embankment is free of roots, woody vegetation, organic matter, and other objectionable material. Place the fill in lifts not to exceed 9 inches, and machine compact it. Over fill the embankment 6 inches to allow for settlement.
 - 3. Construct the outlet section in the embankment. Protect the connection between the riprap and the soil from piping by using filter fabric or a keyway cutoff trench between the riprap structure and soil.
 - Place the filter fabric between the riprap and the soil. Extend the fabric across the spillway foundation and sides to the top of the dam; or
 - · Excavate a keyway trench along the center line of the spillway foundation extending up the sides to the height of the dam. The trench should be at least 2 feet deep and 2 feet wide with 1:1 side slopes.
 - 4. Clear the pond area below the elevation of the crest of the spillway to facilitate sediment cleanout.
 - All cut and fill slopes should be 2:1 or flatter.
 - 6. Ensure that the stone (drainage) section of the embankment has a minimum bottom width of 3 feet and maximum side slopes of 1:1 that extend to the bottom of the spillway section.
 - 7. Construct the minimum finished stone spillway bottom width, as shown on the plans, with 2:1 side slopes extending to the top of the over filled embankment. Keep the thickness of the sides of the spillway outlet structure at a minimum of 21 inches. The weir must be level and constructed to grade to assure design capacity.
 - 8. Material used in the stone section should be a well-graded mixture of stone with a d_{sa} size of 9 inches (class B erosion control stone is recommended) and a maximum stone size of 14 inches. The stone may be machine placed and the smaller stones worked into the voids of the larger stones. The stone should be hard, angular, and highly weather-resistant.
 - 9. Discharge inlet water into the basin in a manner to prevent erosion. Use temporary slope drains or diversions with outlet protection to divert sedimentladen water to the upper end of the pool area to improve basin trap efficiency (References: Runoff Control Measures and Outlet Protection).

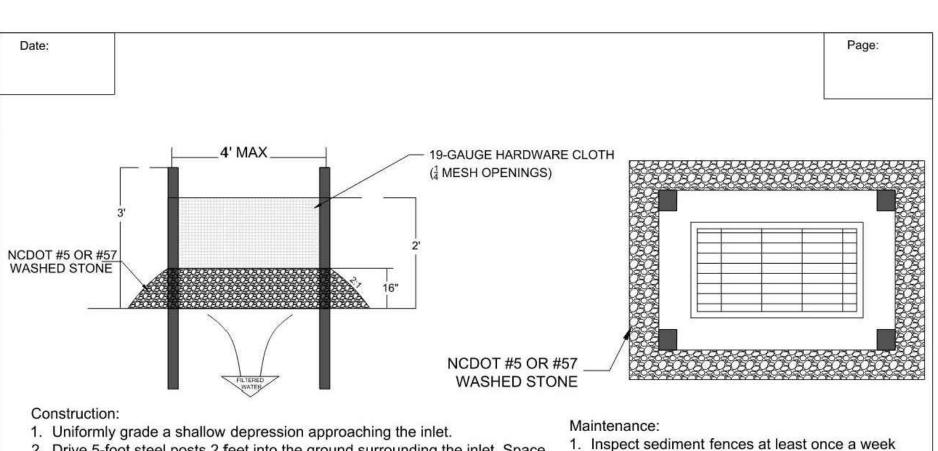
- 10. Ensure that the stone spillway outlet section extends downstream past the toe of the embankment until stable conditions are reached and outlet velocity is acceptable for the receiving stream. Keep the edges of the stone outlet section flush with the surrounding ground, and shape the center to confine the outflow stream (References: Outlet Protection).
- 11. Direct emergency bypass to natural, stable areas. Locate bypass outlets so that flow will not damage the embankment.
- 12. Stabilize the embankment and all disturbed areas above the sediment pool and downstream from the trap immediately after construction (References: Surface Stabilization).
- 13. Show the distance from the top of the spillway to the sediment cleanout level (1/2 the design depth) on the plans and mark it in the field.
- 14. Install porous baffles as specified in Practice 6.65, Porous Baffles.

Maintenance Inspect temporary sediment traps at least weekly and after each significant (1/2 inch or greater) rainfall event and repair immediately. Remove sediment, and restore the trap to its original dimensions when the sediment has accumulated to one-half the design depth of the trap. Place the sediment that is removed in the designated disposal area, and replace the part of the gravel facing that is impaired by sediment.

> Check the structure for damage from erosion or piping. Periodically check the depth of the spillway to ensure it is a minimum of 1.5 feet below the low point of the embankment. Immediately fill any settlement of the embankment to slightly above design grade. Any riprap displaced from the spillway must be replaced immediately.

After all sediment-producing areas have been permanently stabilized, remove the structure and all unstable sediment. Smooth the area to blend with the adjoining areas, and stabilize properly (References: Surface Stabilization).





2. Drive 5-foot steel posts 2 feet into the ground surrounding the inlet. Space posts evenly around the perimeter of the inlet, a maximum of 4 feet apart.

3. Surround the posts with wire mesh hardware cloth. Secure the wire mesh to

- the steel posts at the top, middle, and bottom. Placing a 2-foot flap of the wire mesh under the gravel for anchoring is recommended. 4. Place clean gravel (NC DOT #5 or #57 stone) on a 2:1 slope with a height
- of 16 inches around the wire, and smooth to an even grade.
- 5. Once the contributing drainage area has been stabilized, remove accumulated sediment, and establish final grading elevations.
- 6. Compact the area properly and stabilize with groundcover.

INLET PROTECTION

and after each 1 inch or greater rainfall. Make

objects to provide adequate flow for subsequent

rains. Take care not to damage or undercut the

Clear the mesh wire of any debris or other

any required repairs immediately.

mesh during sediment removal.

Replace stone as needed.

Coarse aggregate

Figure 6.20b Temporary gravel diversion dike for vehicle crossing (modified from Va SWCC).

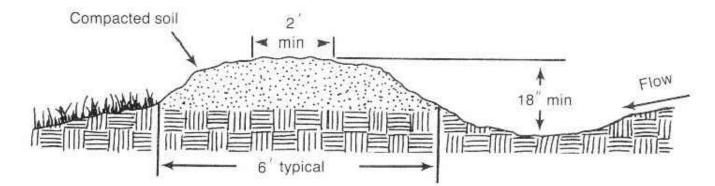
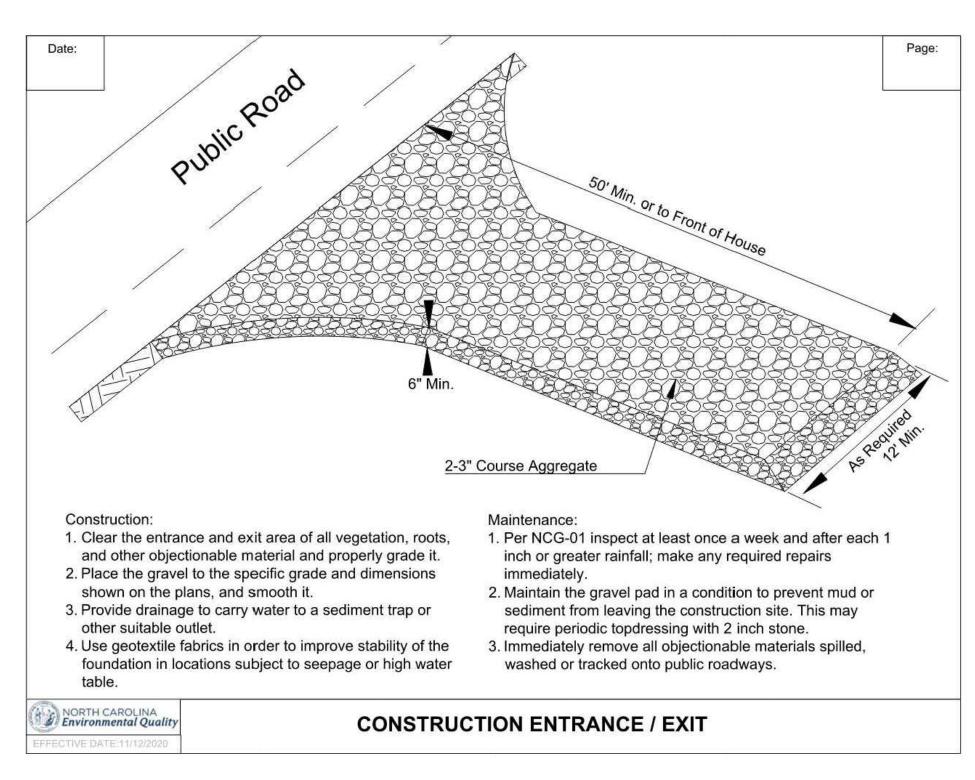


Figure 6.20a Temporary earthen diversion dike.

Specifications

- Construction 1. Remove and properly dispose of all trees, brush, stumps, and other objectionable material.
 - 2. Ensure that the minimum constructed cross section meets all design
 - 3. Ensure that the top of the dike is not lower at any point than the design elevation plus the specified settlement.
 - 4. Provide sufficient room around diversions to permit machine regrading and
 - 5. Vegetate the ridge immediately after construction, unless it will remain in place less than 30 working days.

Maintenance Inspect temporary diversions once a week and after every rainfall. Immediately remove sediment from the flow area and repair the diversion ridge. Carefully check outlets and make timely repairs as needed. When the area protected is permanently stabilized, remove the ridge and the channel to blend with the natural ground level and appropriately stabilize it.



CONSTRUCTION ENTRANCE



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CONSTRUCTION DOCUMENTS

00/10/2022

NO.	REASON	D.

POWLEN PROJECT MANAGER

DESIGN TEAM LMG

VAN SICKLE

CUTHBERTSON **CROSSING**

101.16420.00

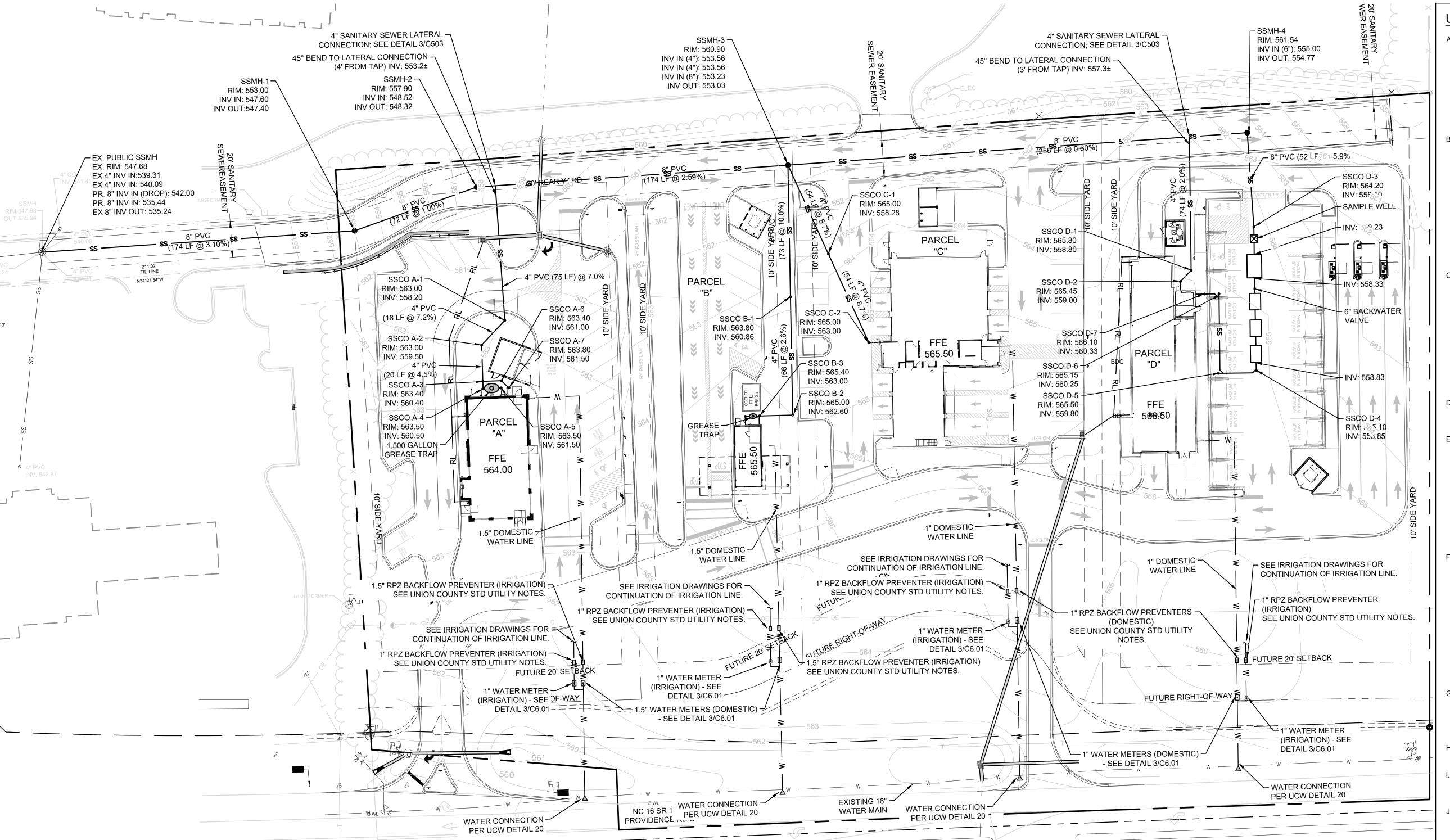
EROSION

CONTROL **DETAILS**

C 405



NORTH CAROLINA Environmental Quality



NCDEQ SANITARY SEWER SYSTEM PERMIT NOTES

- A. PROJECT INCLUDES A PROPOSED PUBLIC/PRIVATE SANITARY SEWER SYSTEM, FROM SSMH-XX TO SSMH-XX, PERMITTED BY NCDEQ UNDER PERMIT NUMBER XXXXXXXXXXX.
- B. [LATERAL CONNECTION TO LINE PRESSURE TEST NOTE].
- C. FINAL CERTIFICATION OF SANITARY SEWER SYSTEM SHALL BE OBTAINED FROM NCDEQ PRIOR TO PLACING SANITARY SEWER SYSTEM INTO SERVICE.
- D. PRIOR TO PLACING SANITARY SEWER SYSTEM INTO SERVICE, CONTRACTOR SHALL:
- PERFORM LOW-PRESSURE TEST ON SANITARY SEWER LINES AS OUTLINED IN ASTM F1417. ENGINEER OF RECORD MUST OBSERVE THIS TEST. CONTRACTOR SHALL PROVIDE 48 HOURS NOTICE TO ENGINEER OF RECORD PRIOR TO TEST.
- PERFORM PIPE DEFLECTION TEST (MANDREL TEST) ON EACH SANITARY SEWER LINE TO CONFIRM PIPE DEFLECTION DOES NOT EXCEED 5%. ENGINEER OF RECORD MUST OBSERVE THIS TEST. CONTRACTOR SHALL PROVIDE 48 HOURS NOTICE TO ENGINEER OF RECORD PRIOR TO TEST.
- PERFORM VACUUM TEST ON EACH SANITARY SEWER MANHOLE AS DESCRIBED IN ASTM C1244. ENGINEER OF RECORD MUST OBSERVE THIS TEST. CONTRACTOR SHALL PROVIDE 48 HOURS NOTICE TO ENGINEER OF RECORD PRIOR TO TEST.
- PROVIDE RECORD DRAWINGS OF SANITARY SEWER SYSTEM TO OWNER AND ENGINEER OF RECORD. RECORD DRAWINGS SHALL INCLUDE LOCATION, RIM ELEVATION, & INVERT ELEVATION OF MANHOLES, AND SIZE, MATERIAL, & SLOPE OF
- [IF SYSTEM IS PUBLIC, INSERT ANY ADDITIONAL REQUIREMENTS FROM LOCAL JURISDICTION OR UTILITY DEPARTMENT
- D. PRIOR TO PLACING SANITARY SEWER SYSTEM INTO SERVICE, ENGINEER OF RECORD SHALL:
- OBSERVE TESTS NOTED ABOVE.
- OBTAIN RECORD DRAWINGS NOTED ABOVE.
- [IF SYSTEM IS PUBLIC, INSERT ANY ADDITIONAL REQUIREMENTS FROM LOCAL JURISDICTION OR UTILITY DEPARTMENT
- SUBMIT FAST TRACK SEWER ENGINEERING CERTIFICATION FORM, RECORD DRAWINGS, AND TEST RESULTS TO NCDEQ FOR FINAL CERTIFICATION.
- RECEIVE FINAL CERTIFICATION FROM NCDEQ.

WATER DISTRIBUTION NOTES

- WATER LINE TO BE INSTALLED PER [(LOCAL JURISDICTION/UTILITY DEPARTMENT) SPECIFICATIONS] or [APPLICABLE AWWA & ASTM STANDARDS].
- B. MAINTAIN MINIMUM 18" VERTICAL SEPARATION BETWEEN WATER LINE AND SANITARY SEWER LINES.
- WHERE A WATER MAIN IS TO BE INSTALLED BELOW A STORM DRAIN PIPE, A MINIMUM OF 18" VERTICAL CLEARANCE BETWEEN PIPES SHALL BE MAINTAINED UNLESS OTHERWISE DIRECTED BY THE DESIGNER OF RECORD. USE DUCTILE IRON PIPE FOR WATER MAINS WHEN CROSSING UNDER STORM DRAINS. USE CRUSHER RUN STONE BETWEEN STORM DRAINS AND PRESSURE MAINS.
- WHEN A WATER MAIN PARALLELS A STORM SEWER PIPE, A HORIZONTAL SEPARATION OF AT LEAST 10' SHOULD BE MAINTAINED WHERE PRACTICAL.
- ALL WATER LINES AND FORCE MAINS 4" AND LARGER SHALL BE PVC (AWWA C-900, SDR 14 OR LESS) PRESSURE CLASS 200, UNLESS OTHERWISE NOTED.
- ALL WATER LINES 3" AND SMALLER SHALL BE PVC (ASTM D-2241, SDR 21 OR LESS) PRESSURE CLASS 200, UNLESS OTHERWISE NOTED.
- DEFLECTION OF PIPE JOINTS AND CURVATURE OF PIPE SHALL NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS. SECURELY CLOSE ALL OPEN ENDS OF PIPE AND FITTINGS WITH A WATERTIGHT PLUG WHEN WORK IS NOT IN PROGRESS. THE INTERIOR OF ALL PIPES SHALL BE CLEAN AND JOINT SURFACES WIPED CLEAN AND DRY AFTER THE PIPE HAS BEEN LOWERED INTO THE TRENCH. VALVES SHALL BE PLUMB AND LOCATED ACCORDING TO THE PLANS.
- ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF 36" UNLESS OTHERWISE NOTED. ALL WATER SYSTEM FITTINGS SHALL BE MEGALUG RESTRAINED.
- COORDINATE INSPECTIONS OF ALL MECHANICAL RESTRAINTS AND CONNECTIONS TO EXISTING INFRASTRUCTURE WITH PERSONNEL OF LOCAL JURISDICTION PRIOR TO BACKFILLING.
- NUMBER 12 TRACER WIRE AND WARNING TAPE SHALL BE REQUIRED FOR ALL PRESSURE MAINS. EXTEND TRACER WIRE THROUGH VALVE BOXES FOR CONNECTION TO LOCATING EQUIPMENT.
- FOR WATER LINE SIZES 4" AND LARGER, PROVIDE THRUST BLOCKS AT ALL BENDS, TEES, AND VALVES, UNLESS NOTED TO HAVE MECHANICAL RESTRAINED JOINTS. SEE DETAIL X/XXX FOR THRUST BLOCKING.
- FIRE DEPARTMENT CONNECTION TO BE DESIGNED BY SPRINKLER DESIGNER. NUMBER AND SIZE OF CONNECTIONS AS WELL AS STANDPIPE SIZE TO BE DETERMINED BY SPRINKLER DESIGNER.

UNION COUNTY STANDARD UTILITY NOTES

- 1" REDUCED PRESSURE ZONE ASSEMBLY (RPZ) IRRIGATION RPZ BACKFLOW PREVENTER LOCATED BEHIND FUTURE SETBACK IN ABOVE-GROUND, INSULATED, WATERPROOF ENCLOSURE PER UNION COUNTY REQUIREMENTS. ENCLOSURE TO INCLUDE DRAIN PORT(S) FOR DISCHARGE WATER. SEE DETAIL 7/C6.02
- 1.5" REDUCED PRESSURE ZONE ASSEMBLY IRRIGATION
- RPZ BACKFLOW PREVENTER LOCATED BEHIND FUTURE SETBACK IN ABOVE-GROUND, INSULATED, WATERPROOF ENCLOSURE PER UNION COUNTY REQUIREMENTS. ENCLOSURE TO INCLUDE DRAIN PORT(S) FOR DISCHARGE WATER. SEE DETAIL 7/C6.02.
- 1" REDUCED PRESSURE ZONE ASSEMBLY DOMESTIC
- RPZ BACKFLOW PREVENTER LOCATED BEHIND RIGHT-OF-WAY IN ABOVE-GROUND, INSULATED, WATERPROOF ENCLOSURE PER UNION COUNTY REQUIREMENTS. ENCLOSURE TO INCLUDE DRAIN PORT(S) FOR DISCHARGE WATER. SEE DETAIL

UTILITY NOTES

- A. AS A PART OF THIS CONTRACT. THE CONTRACTOR SHALL NOTIFY A PRIVATE UTILITY LOCATOR SERVICE, RESEARCH EXISTING DRAWINGS AND OTHER DOCUMENTATION, CONSULT WITH THE OWNER'S MAINTENANCE DEPARTMENT. AND DOCUMENT ANY OTHER BELOW-GRADE IMPROVEMENTS NOT CHARTED BY THE SURVEYOR, PRIOR TO BEGINNING CONSTRUCTION. ANY EXISTING UTILITIES AND BELOW-GRADE IMPROVEMENTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR IN A MANNER ACCEPTABLE TO THE OWNER.
- THE UTILITIES AND THE LOCATION SHOWN ON THE PLANS REPRESENT THE DESIGNER'S UNDERSTANDING OF EXISTING UTILITIES LOCATED WITHIN THE LIMITS OF CONSTRUCTION, PRIOR TO ANY EXCAVATION, CONTRACTOR IS TO FIELD VERIFY THE LOCATION, DEPTH, AND EXISTENCE OF ALL UTILITIES (ELECTRICAL, MECHANICAL, WATER, TELEPHONE, GAS, STORM, ETC.) WITH THE OWNER AND/OR THE APPROPRIATE UTILITY COMPANY. THE OMISSION OF, NONEXISTENCE OF, OR INCLUSION OF UTILITY LOCATIONS ON THE PLANS IS NOT TO BE CONSIDERED AS ABSOLUTE. DAMAGED UTILITIES SHALL BE REPAIRED/REPLACED AS THE CONTRACTOR'S EXPENSE. CONTRACTOR TO COORDINATE ANY FIELD CONDITIONS THAT MAY REVISE THE DESIGN WITH THE DESIGNER OF RECORD PRIOR TO PROCEEDING.
- CONTRACTOR SHALL MAINTAIN WATER, SEWER, ELECTRICAL AND OTHER UTILITY SERVICE TO EXISTING BUILDINGS SCHEDULED TO REMAIN AT ALL TIMES. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES (INCLUDING SANITARY SEWER, WATER, AND STORM DRAINAGE) FROM DAMAGE DURING CONSTRUCTION. THE DESIGNER OF RECORD SHALL BE IMMEDIATELY NOTIFIED OF ALL UNDERGROUND UTILITIES EXPOSED DURING CONSTRUCTION OR THOSE LEFT WITH LESS THAN ACCEPTABLE EARTH COVER. THE DESIGNER OF RECORD SHALL DETERMINE THE RESOLUTION OF THE UTILITY AND DETERMINE IF A CHANGE ORDER IS REQUIRED OR IF THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS INVOLVED.
- CONTRACTOR SHALL VERIFY ELECTRICAL CONNECTION(S) TO BUILDING WITH ARCHITECT AND COORDINATE WITH LOCAL POWER COMPANY PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL CONSTRUCT THE GRAVITY SEWER LATERAL, GRAVITY SEWER LINES, DOMESTIC WATER AND FIRE PROTECTION SYSTEM AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL FURNISH ALL NECESSARY MATERIALS, EQUIPMENT, MACHINERY, TOOLS, MEANS OF TRANSPORTATION AND LABOR NECESSARY TO COMPLETE THE WORK IN FULL AND IN ACCORDANCE WITH THE SHOWN DESCRIBED AND REASONABLY INTENDED REQUIREMENTS OF THESE PLANS, LOCAL REGULATIONS AND THE SPECIFICATIONS OF THIS JOB. IN THE EVENT THAT THESE SPECIFICATIONS ARE NOT IN AGREEMENT, THE MOST STRINGENT SPECIFICATION SHALL GOVERN.
- ALL PHASES OF INSTALLATION, INCLUDING UNLOADING, TRENCHING, LAYING AND BACKFILLING, SHALL BE DONE IN A FIRST-CLASS WORKMANLIKE MANNER. ALL PIPE AND FITTINGS SHALL BE CAREFULLY STORED FOLLOWING MANUFACTURER'S RECOMMENDATIONS. CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE COATING OR LINING IN ANY DUCTILE IRON PIPE FITTINGS. ANY PIPE OR FITTING WHICH IS DAMAGED OR WHICH HAS FLAWS OR IMPERFECTIONS WHICH, IN THE OPINION OF THE DESIGNER OF RECORD, RENDERS IT UNFIT FOR USE, SHALL NOT BE USED, ANY PIPE NOT SATISFACTORY FOR USE SHALL BE CLEARLY MARKED, IMMEDIATELY REMOVED FROM THE JOB SITE AND SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- JURISDICTION AND THE DESIGNER OF RECORD. NO WORK IS TO BEGIN UNTIL SHOP DRAWINGS HAVE BEEN REVIEWED, APPROVED. AND RETURNED TO THE CONTRACTOR

APPURTENANCES SHALL BE APPROVED BY THE GOVERNING

- WATER FOR FIRE FIGHTING SHALL BE AVAILABLE FOR USE PRIOR TO COMBUSTIBLES BEING BROUGHT ON SITE.
- ALL UTILITY TRENCHES LOCATED UNDER AREAS TO RECEIVE PAVING SHALL BE COMPLETELY BACKFILLED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

SHOP DRAWINGS FOR ALL MATERIALS AND

- MAINTAIN A MINIMUM 10' HORIZONTAL SEPARATION BETWEEN WATER MAINS AND STORM DRAIN PIPES, SANITARY SEWER AND FORCE MAIN LINES.
- WHERE WATER AND SEWER MAINS CROSS WITH LESS THAN 18" VERTICAL CLEARANCE, THE SEWER WILL BE 20' OF EITHER DUCTILE IRON PIPE OR CONCRETE ENCASED PIPE, CENTERED ON THE POINT OF CROSSING. WHEN A WATER MAIN PARALLELS A SEWER MAIN, A HORIZONTAL SEPARATION OF AT LEAST 10' SHOULD BE MAINTAINED

WHERE PRACTICAL.

GRAPHIC SCALE

- CONTRACTOR SHALL REFER TO ARCHITECT'S PLANS AND SPECIFICATIONS FOR ACTUAL LOCATION OF ALL UTILITY ENTRANCES TO BUILDING INCLUDING SANITARY SEWER LATERALS, DOMESTIC AND FIRE PROTECTION WATER SERVICE. ELECTRICAL, TELEPHONE AND GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND ASSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH THE REGULATORY AGENCY AS TO THE LOCATION AND SCHEDULING OF THE TIE-INS/CONNECTIONS TO THEIR FACILITIES.
- M. THE SITE WORK CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL UNDERGROUND UTILITIES WITH THEIR WORK. ALL UNDERGROUND UTILITIES (WATER, SANITARY SEWER, STORM SEWER, ELECTRICAL CONDUIT, IRRIGATION SLEEVES, AND ANY OTHER MISCELLANEOUS) SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF BASE COURSE MATERIAL.
- N. ALL AT-GRADE UTILITIES ARE TO BE OUT OF THE CURB LINE. ALL ABOVE-GROUND UTILITIES SHALL BE LOCATED BEYOND THE RIGHT-OF-WAY LINE. FIRE HYDRANTS CAN BE ON THE RIGHT-OF-WAY LINE.

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POWLEN PROJECT MANAGER VAN SICKLE

CUTHBERTSON CROSSING

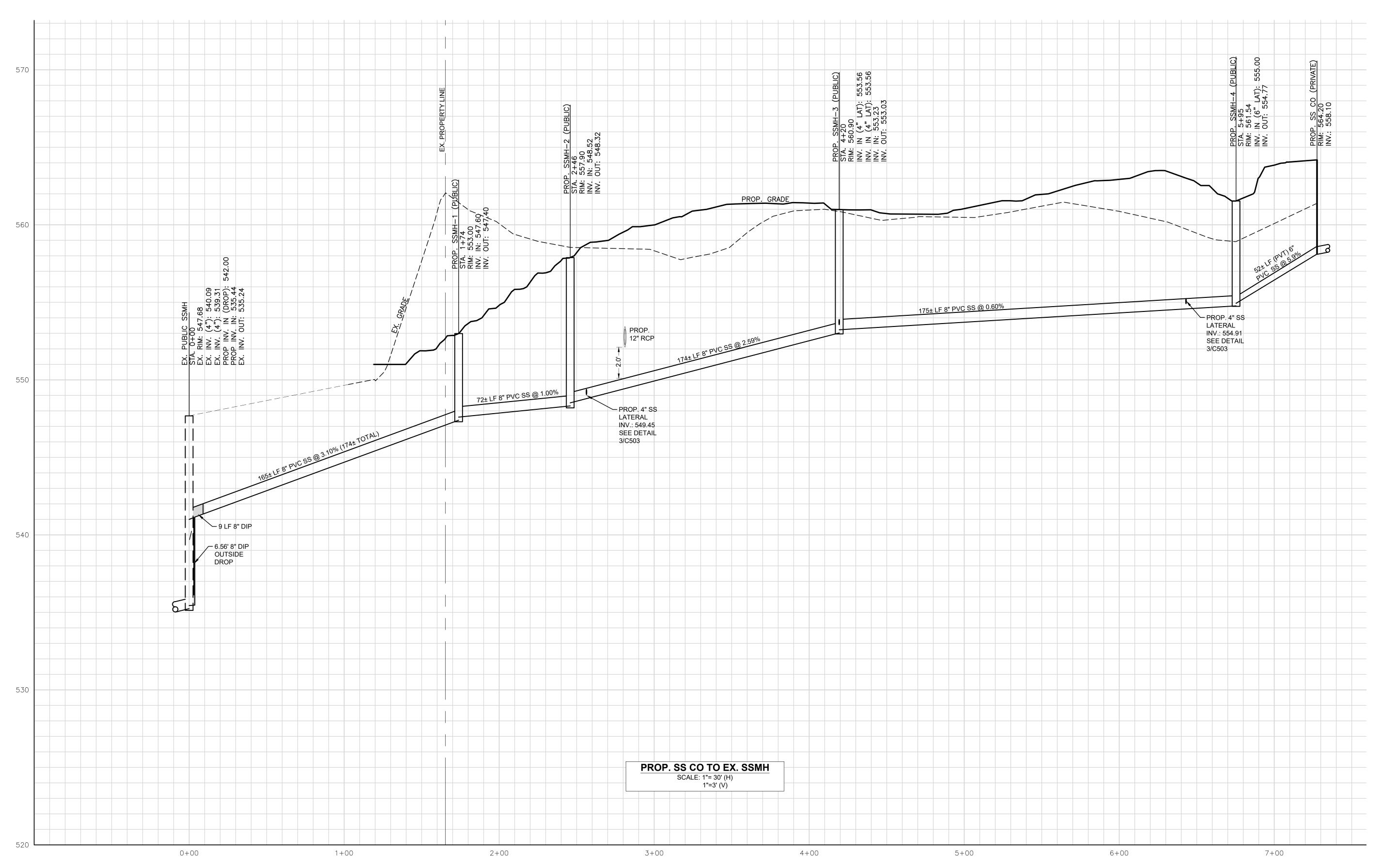
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UTILITY PLAN

C 500



NORTH



SANITARY SEWER NOTES

- A. SANITARY SEWER LINE(S) TO BE INSTALLED PER [(LOCAL JURISDICTION/UTILITY DEPARTMENT) SPECIFICATIONS] or [APPLICABLE ASTM STANDARDS].
- B. SANITARY SEWER MAINS SHALL BE PVC (ASTM D3034-SDR 35) WITH STONE BEDDING EXCEPT WHERE DUCTILE IRON PIPE OR LONG SPAN STEEL PIPE IS SHOWN. DUCTILE IRON PIPE SHALL BE BITUMINOUS COATED, CEMENT LINED WITH PUSH-ON JOINTS CONFORMING TO ASA A21.54 PC350. TRANSITIONAL COUPLINGS SHALL BE USED FOR PVC/DI SEWER CONNECTIONS. SEWER SERVICES SHALL BE SCHEDULE 40 PVC. LONG SPAN STEEL PIPE SHALL BE COATED ON BOTH SIDES WITH 3 MILS EPOXY. ANY SEWER LINE PLACED AT 16' OR GREATER IN DEPTH SHALL BE DUCTILE IRON PIPE.
- C. ALL SEWER MANHOLES SHALL BE PRE-CAST CONCRETE WITH INTEGRALLY CAST WATERTIGHT CONNECTIONS.
- D. DUCTILE IRON PIPE SHALL BE IN ACCORDANCE WITH AWWA C150/A21.50 & AWWA C151/A21.51.
- E. PLACE CLEAN-OUTS ON SANITARY SEWER LINES PER PLUMBING CODE REQUIREMENTS.
- F. MAINTAIN A MINIMUM 24" VERTICAL SEPARATION BETWEEN SANITARY SEWER PIPES AND STORM DRAIN PIPES UNLESS NOTED OTHERWISE.
- G. A CONTINUOUS AND UNIFORM BEDDING SHALL BE PROVIDED IN THE TRENCH FOR ALL BURIED PIPE. BACKFILL MATERIAL SHALL BE TAMPED IN LAYERS AROUND THE PIPE AND TO A SUFFICIENT HEIGHT ABOVE THE PIPE TO ADEQUATELY SUPPORT AND PROTECT THE PIPE. STONES, OTHER THAN CRUSHED BEDDING, SHALL NOT COME INTO CONTACT WITH THE PIPE AND SHALL NOT BE WITHIN 6" OF THE PIPE.
- H. CONTRACTOR TO LOCATE BUILDING TIE-INS PER PLUMBING PLANS.
- I. SEWER SERVICE LATERALS CONNECTION TO THE MAINLINE WITHIN 10' OF A MANHOLE MUST GO DIRECTLY INTO THE MANHOLE.
- O. COORDINATE INSPECTIONS OF ALL MANHOLE BOOTS AND STAINLESS STEEL BANDS AFTER INSTALLATION WITH LOCAL INSPECTOR(S) PRIOR TO BACKFILLING.
- P. FOR CLEANOUT INSTALLATION, SEE DETAIL X/XXX.
- Q. INTERIORS OF ALL SANITARY SEWER MANHOLES SHALL BE TREATED WITH ANTI-CORROSIVE COATING.



CAUTION!!!

The locations and elevations of existing underground utilities as shown on this drawing are only APPROXIMATE. No guarantee is either expressed or implied as to the completeness of accuracy thereof. The contractor shall be exclusively responsible for determining the exact utility locations and elevations prior to the start of construction



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PRINCIPAL IN CHAR
POWLEN

PROJECT MANAGER
VAN SICKLE

ESIGN TEAM MG

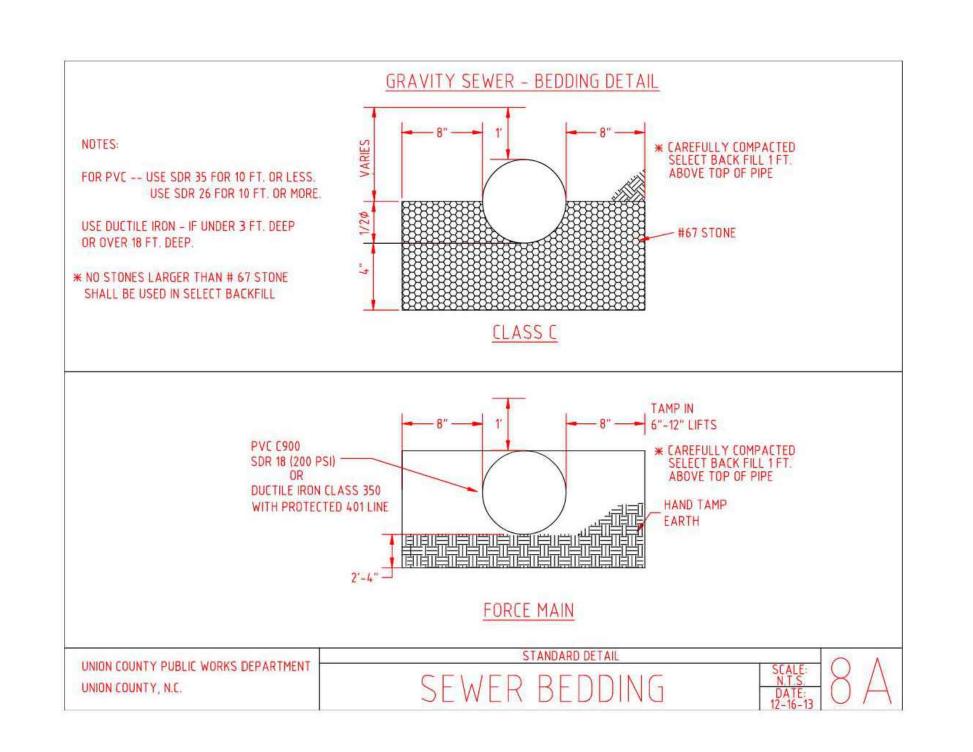
PROJECT NAME
CUTHBERTSON

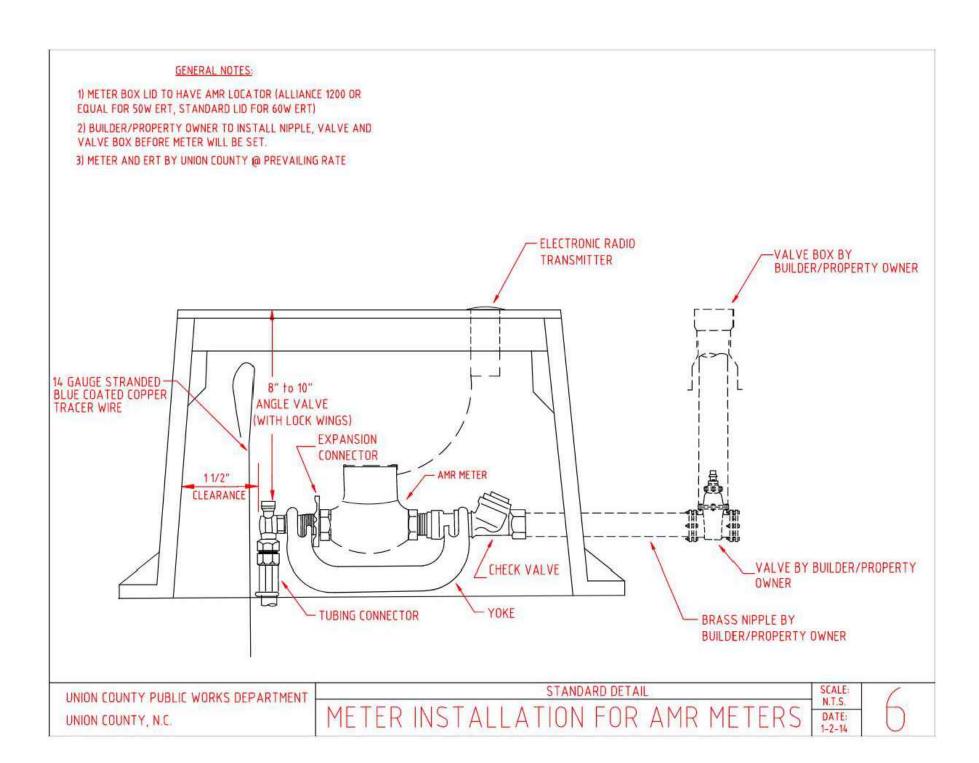
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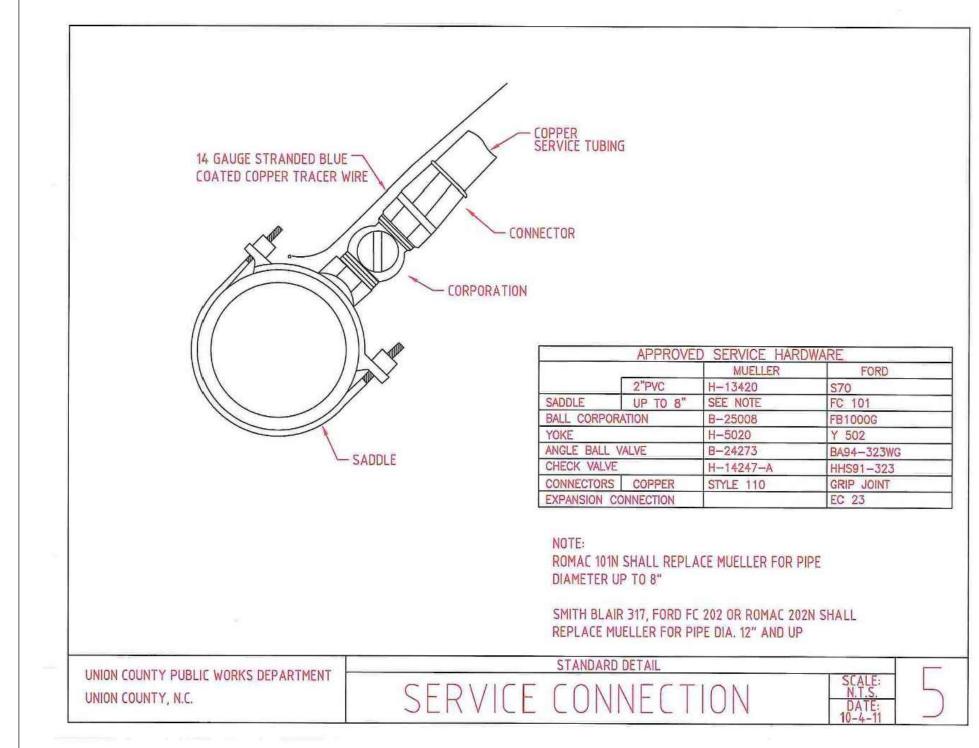
ECT NUMBER

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PUBLIC SANITARY SEWER PROFILE









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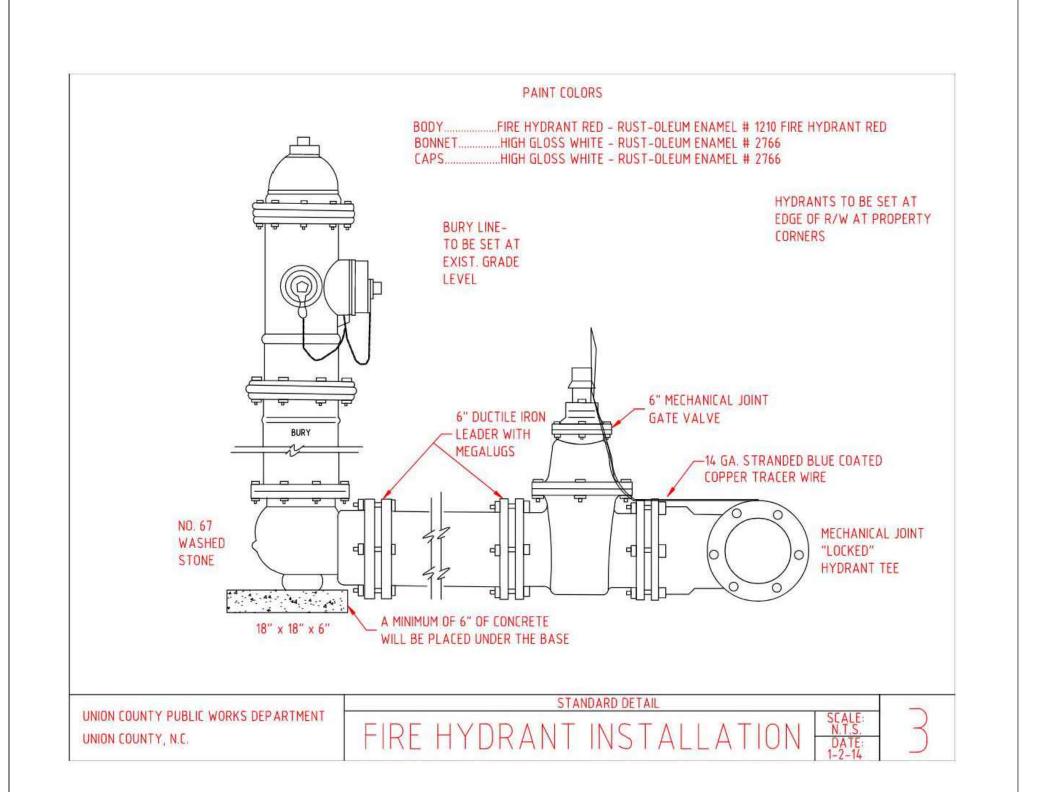
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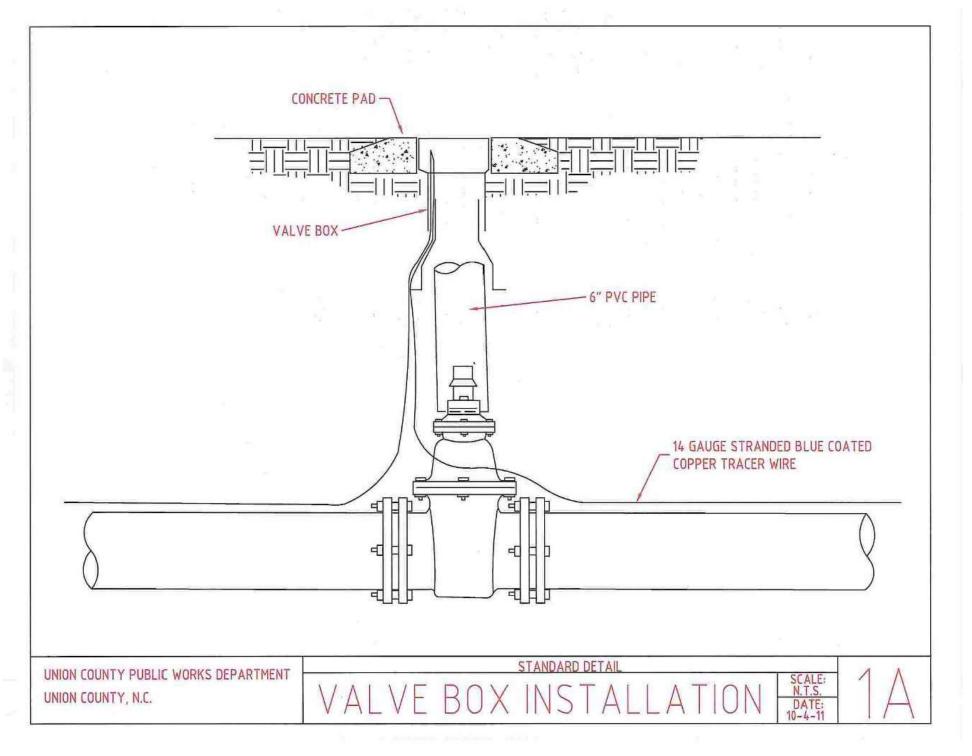


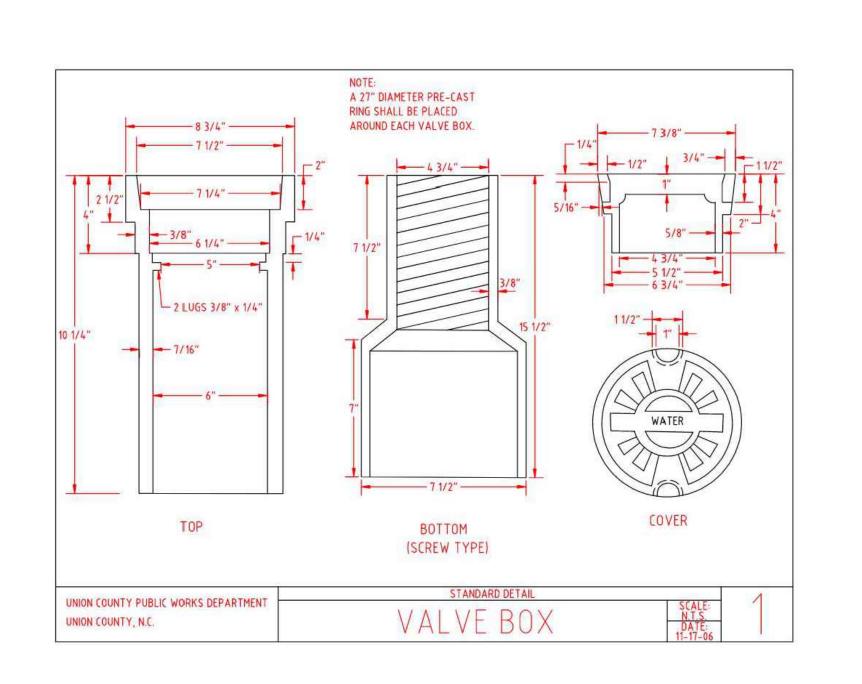
FIRE HYDRANT INSTALLATION











CONSTRUCTION DOCUMENTS

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	T MANAGER	-	•		•	•	•	•	•	•
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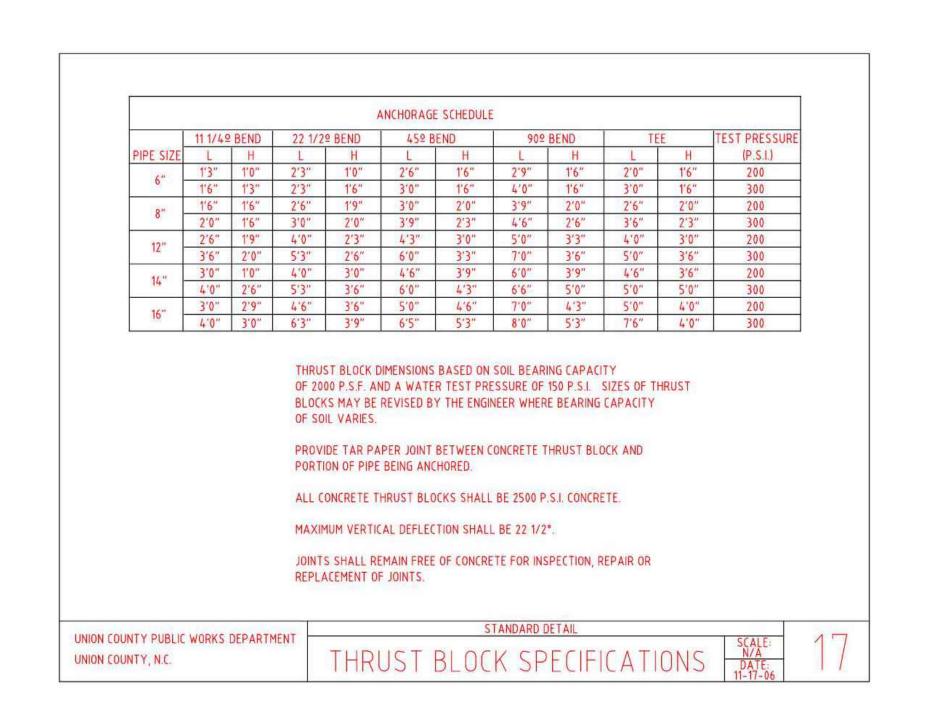
LMG PROJECT NAME CUTHBERTSON CROSSING

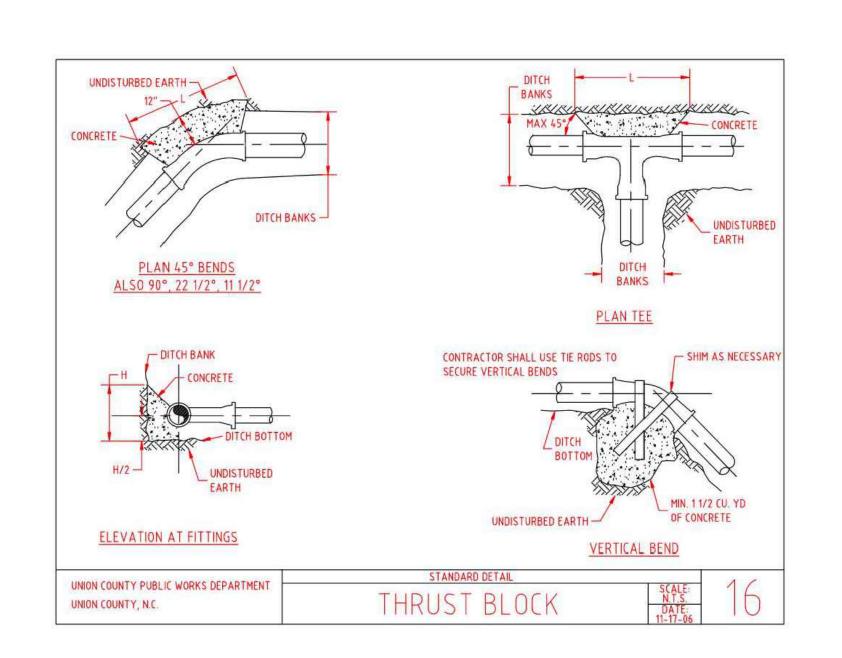
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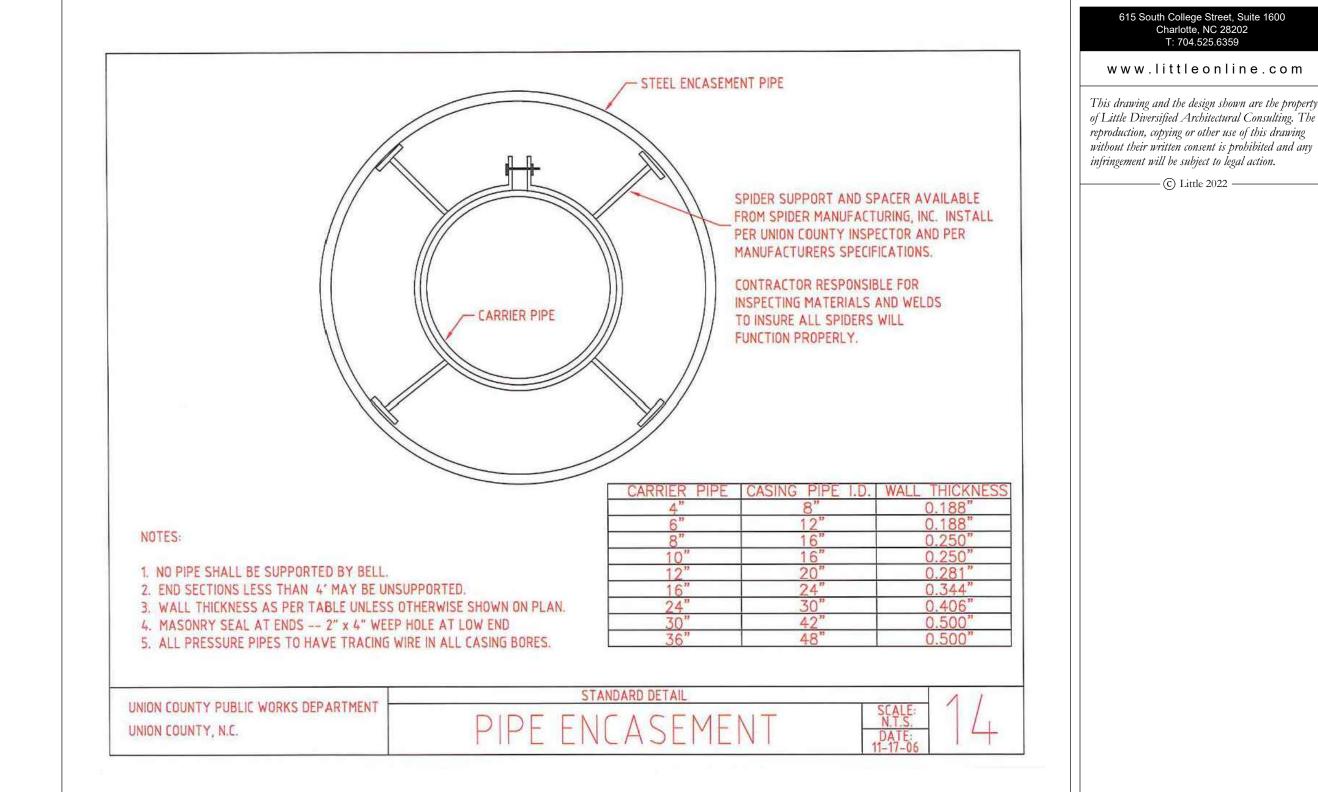
UTILITY **DETAILS**

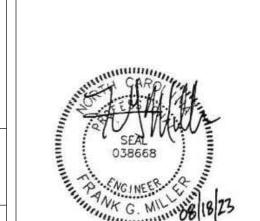
VALVE BOX INSTALLATION

VALVE BOX NOT TO SCALE









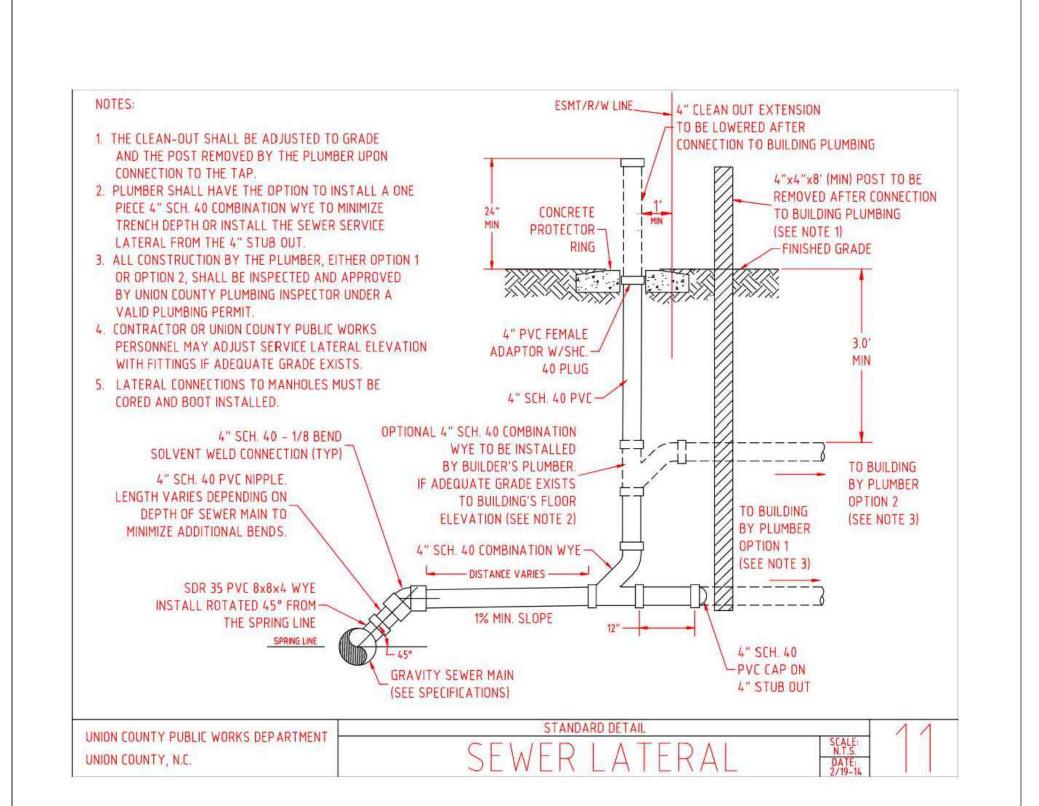
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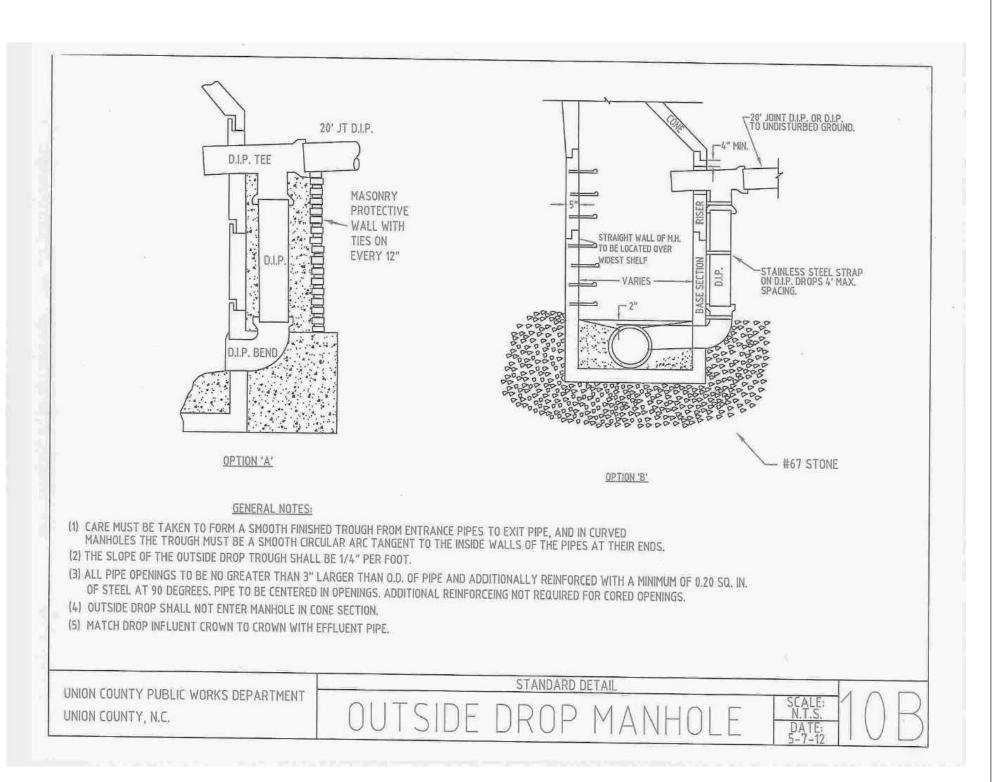
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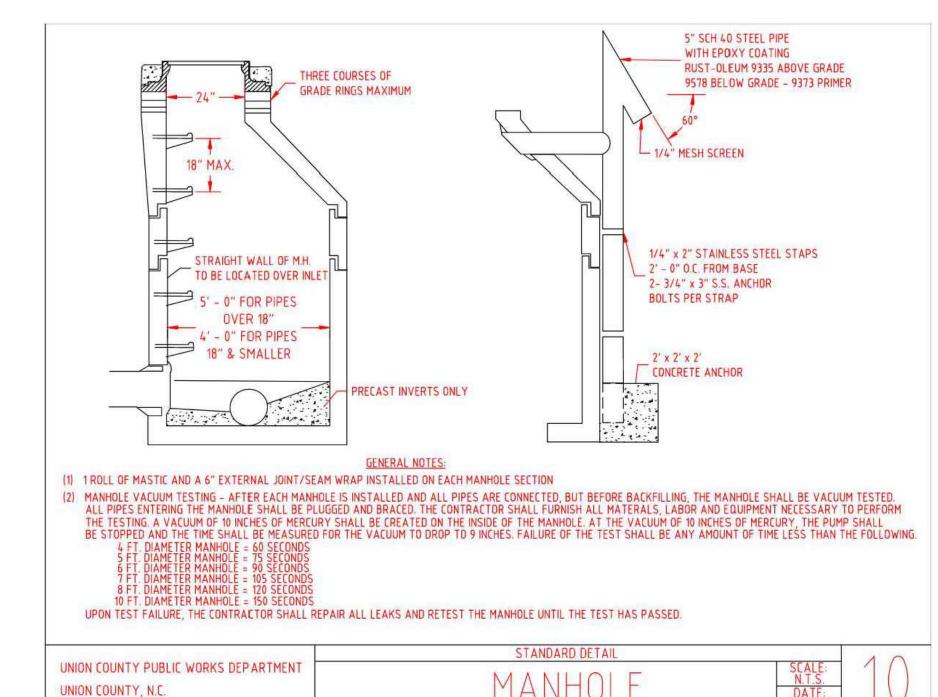
THRUST BLOCK





OUTSIDE DROP MANHOLE





CONSTRUCTION DOCUMENTS

08/18/2023

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VAN SICKLE

PROJECT MANAGER

PROJECT NAME CUTHBERTSON

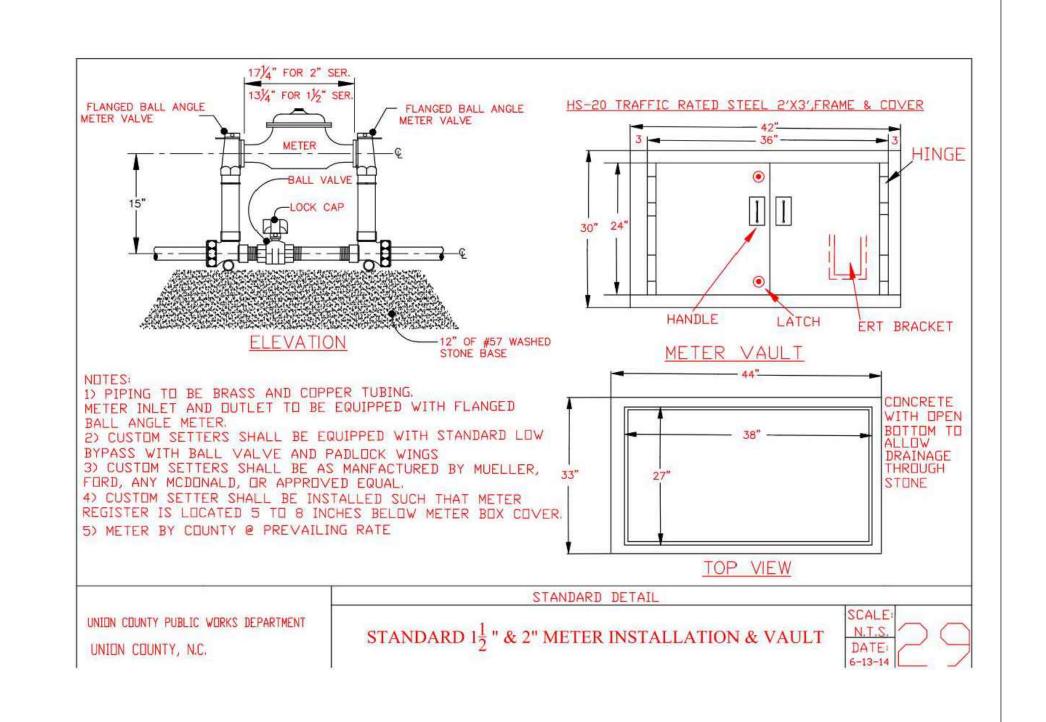
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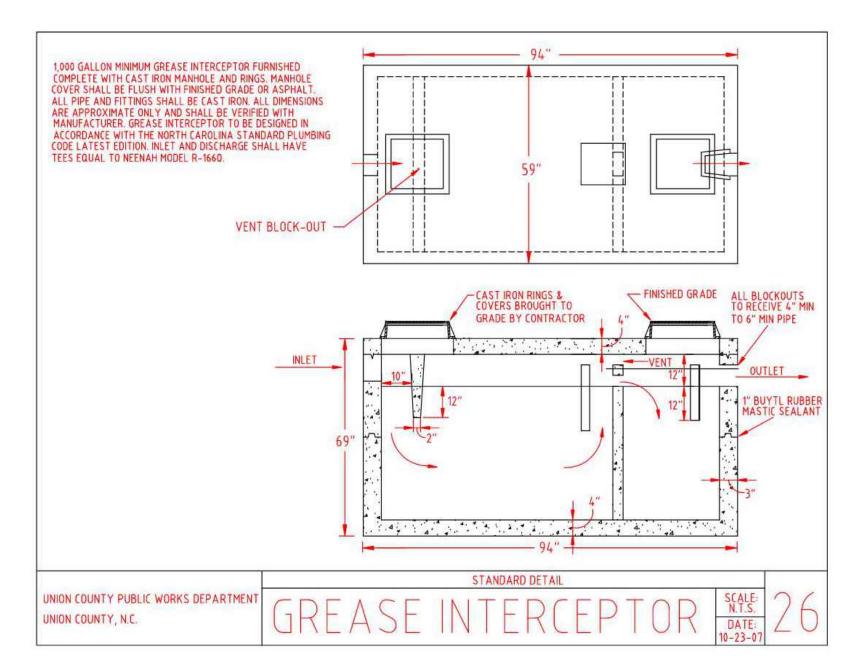
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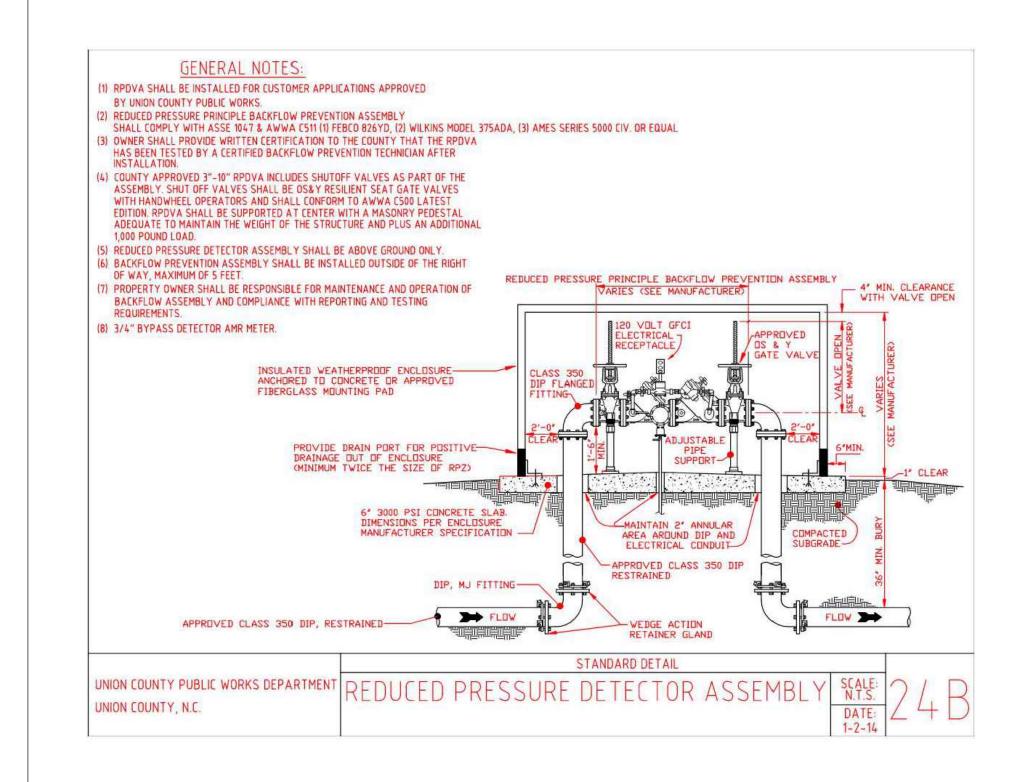
UTILITY **DETAILS**

MANHOLE NOT TO SCALE

SEWER LATERAL

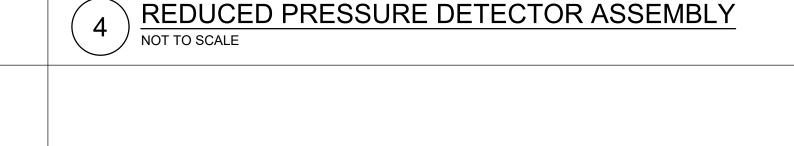


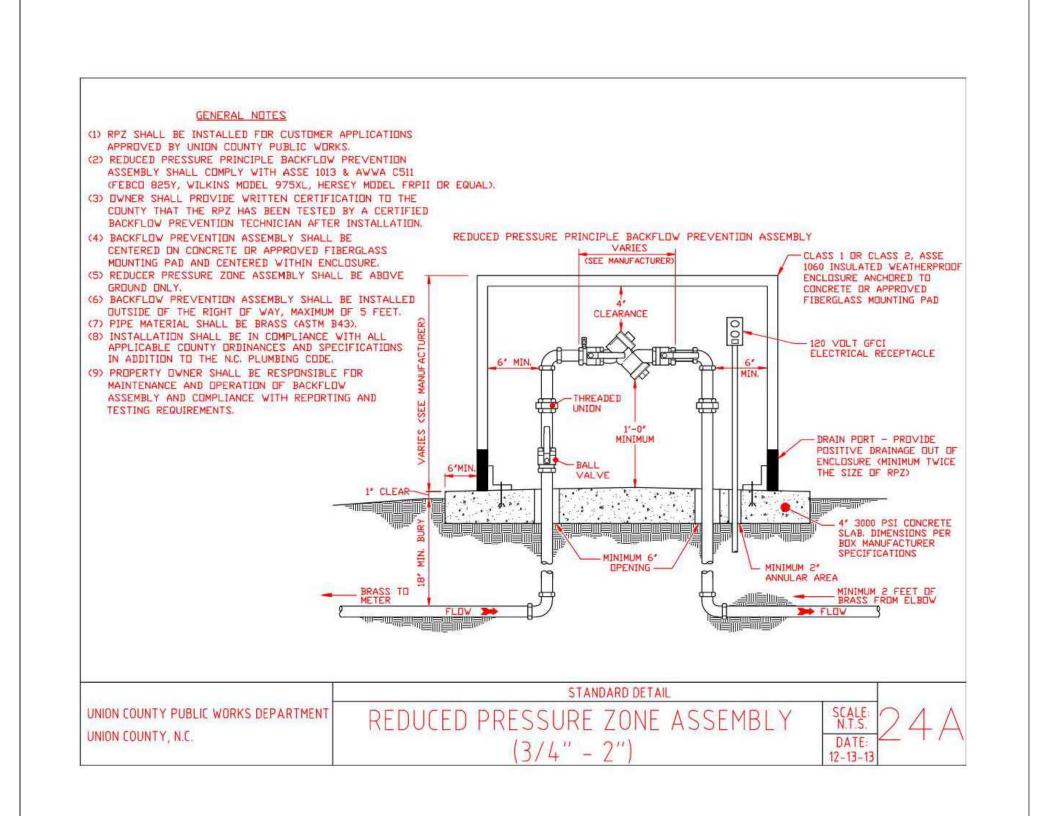


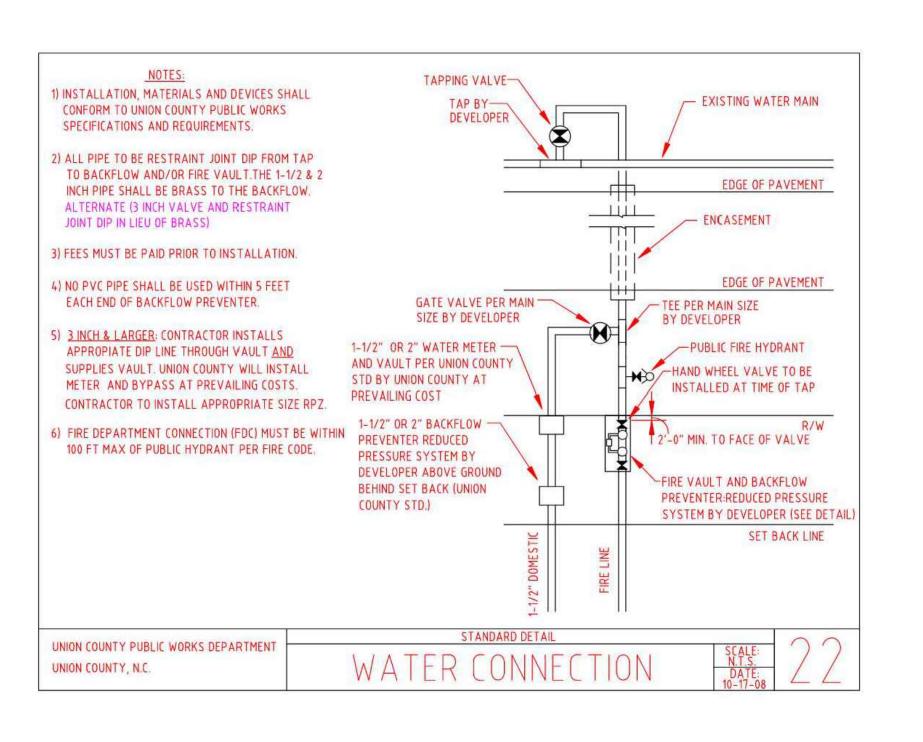


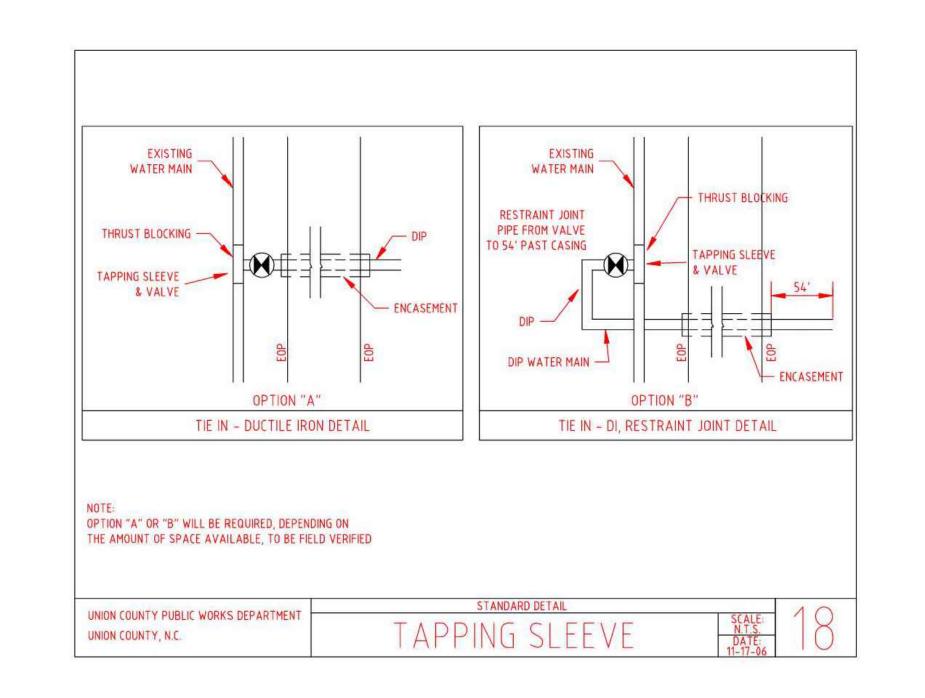












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POWLEN
PROJECT MANAGER

VAN SICKLE

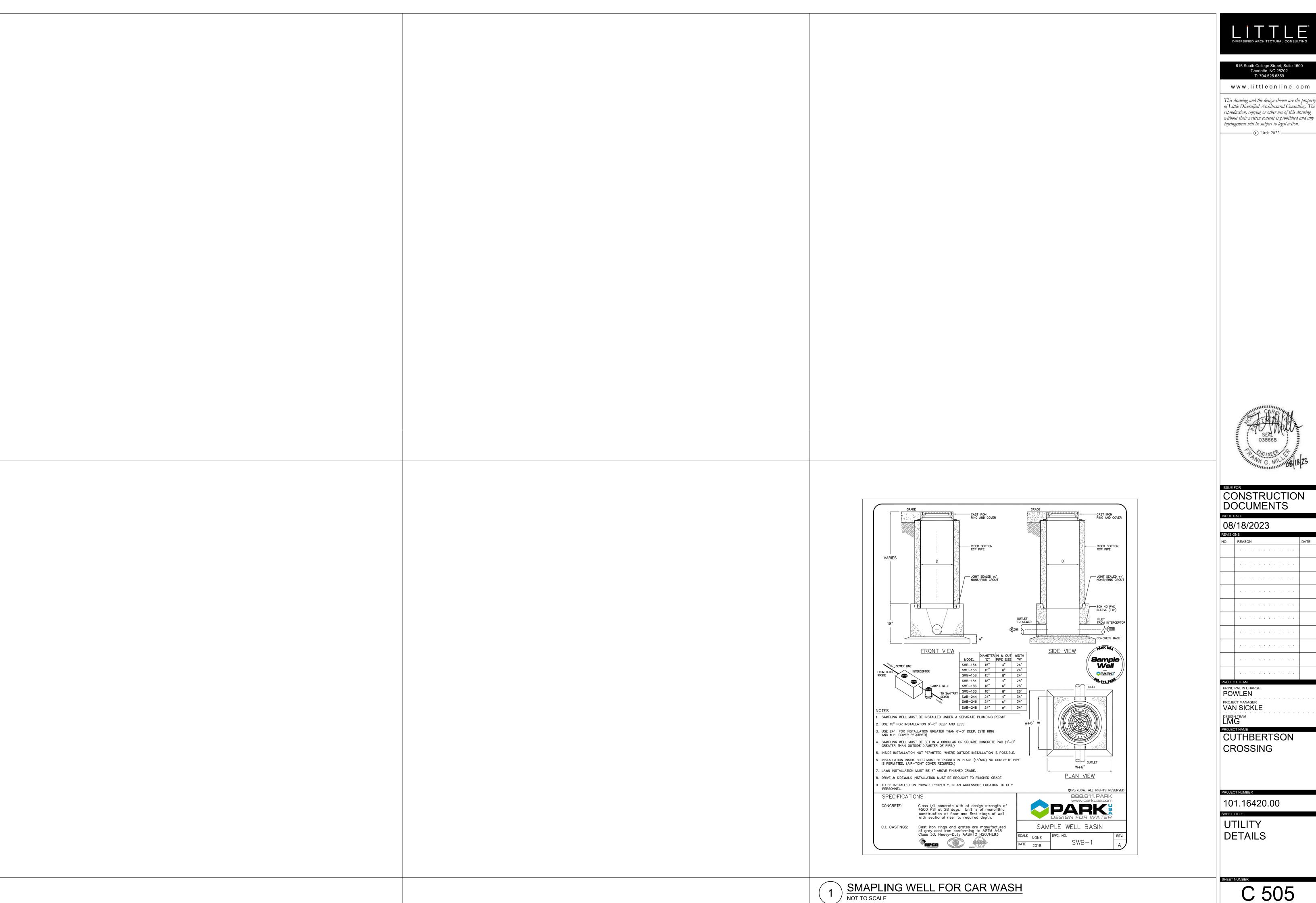
DESIGN TEAM

CDOSCINO CDOSCINO

CROSSING

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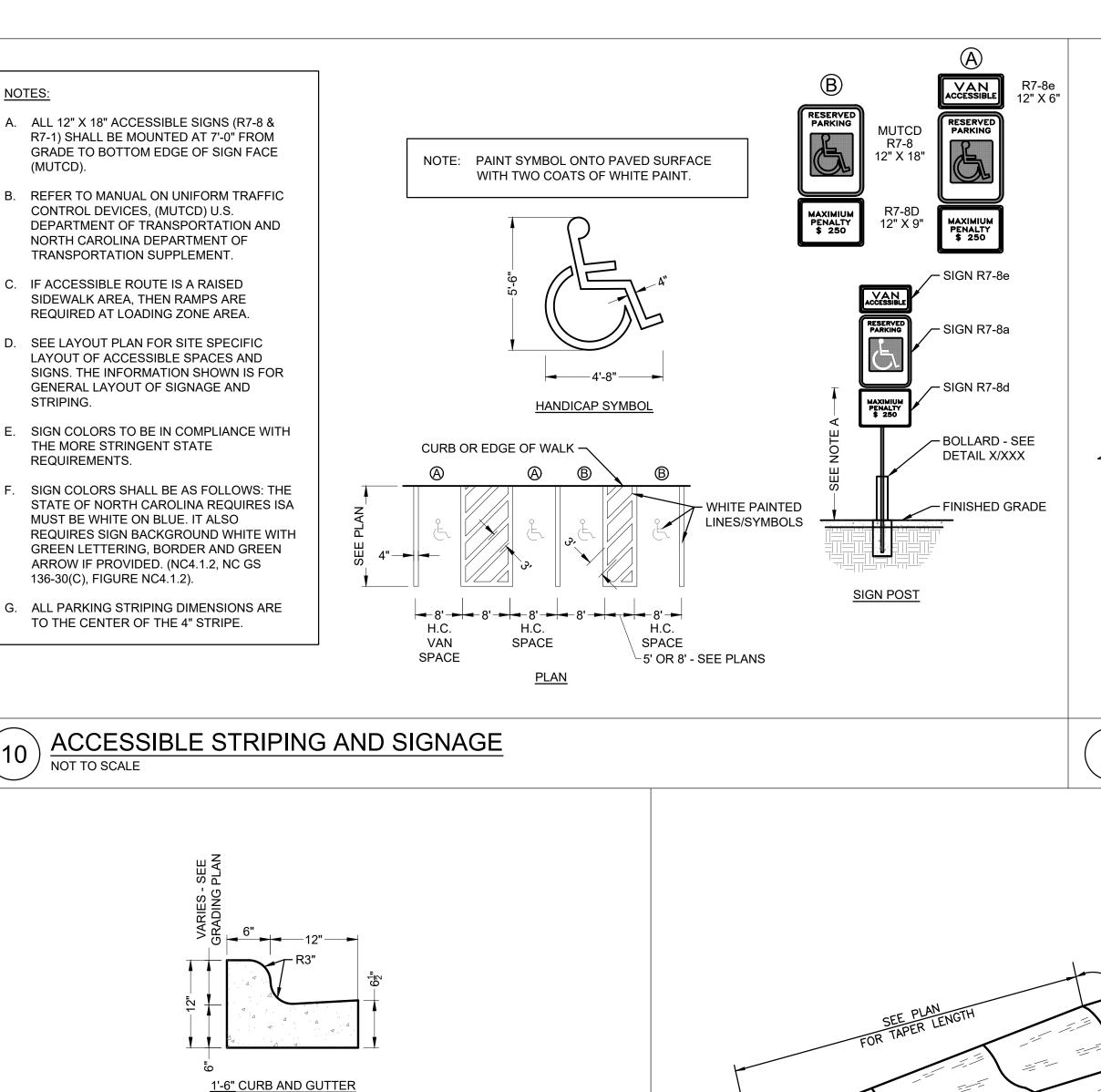
PRINCIPAL IN CHARGE POWLEN PROJECT MANAGER
VAN SICKLE

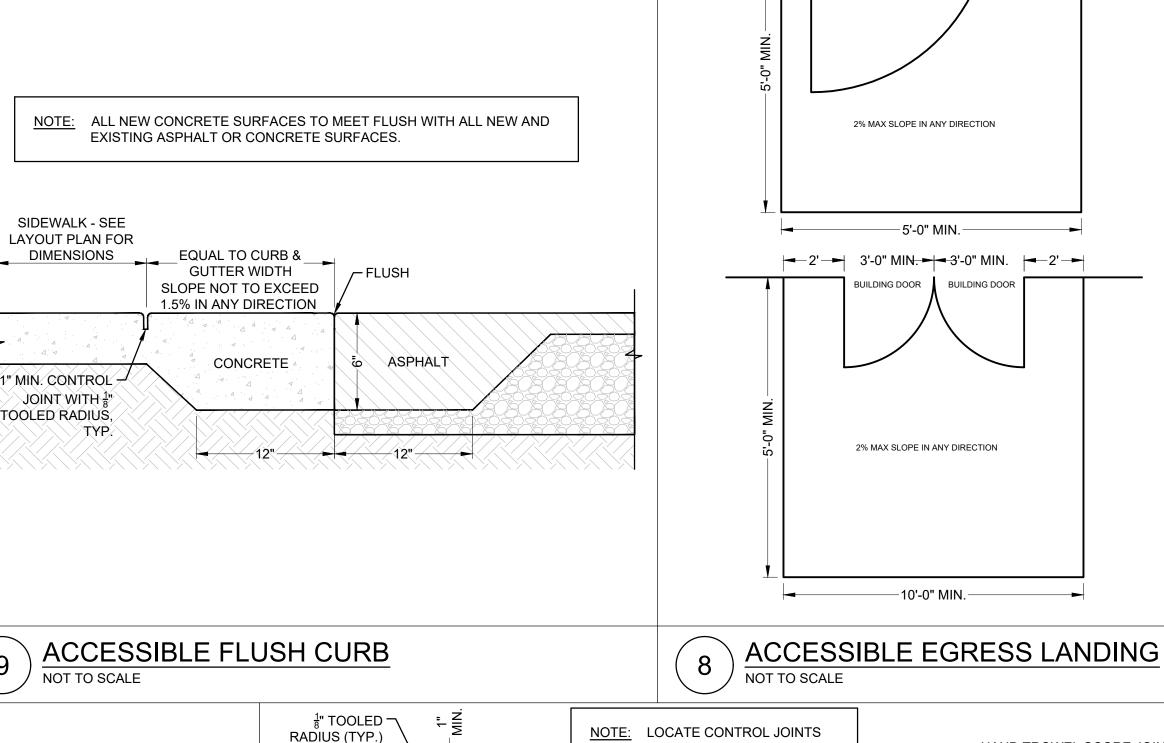
CUTHBERTSON CROSSING

PROJECT NUMBER

101.16420.00

UTILITY DETAILS





AT A DISTANCE EQUAL TO

WIDTH OF WALK, OR AS

INDICATED ON PLAN.

RIGID -

STRUCTURE

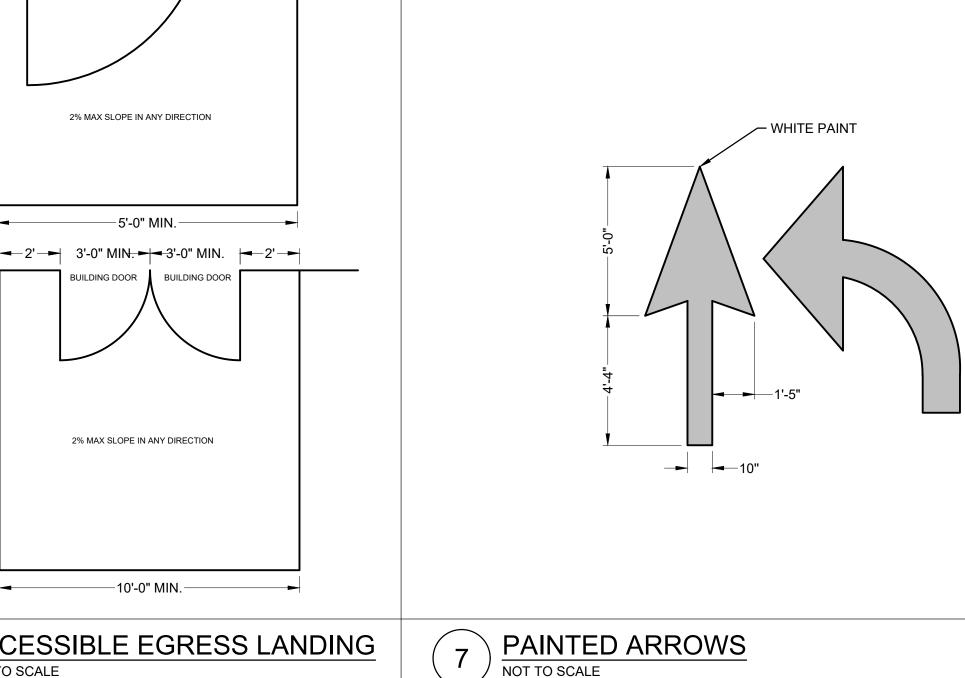
COMPACTED SUBGRADE

➤ COMPACTED SUBGRADE

3'-0" MIN.

BUILDING DOOR

───── 18" MIN. —



¹/₂" PREFORMED ⁻

EXPANSION JOINT

(NON-BITUMINOUS

FINISHED GRADE -OF ASPHALT

EQ. TO WIDTH → OR AS INDICATED

ON PLANS

<u>NOTES</u>

1" SURFACE COURSE -

NCDOT STANDARDS)

COURSE IS NOT TO EXCEED 3".

NEW PAVEMENTS.

S9.5C ASPHALT MIX (PER

WITH SEALANT

PAVING - SEE

PLANS

A. A CONTROL JOINT 1" DEEP WITH 1/8" RADII SHALL BE REQUIRED IN THE

CONCRETE SIDEWALK AT EQUAL SPACES AS DELINEATED ON SITE

LOCATIONS SHOWN ON SITE LAYOUT PLAN. A 1/2" EXPANSION JOINT

LAYOUT PLAN. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT

WILL BE REQUIRED WHERE THE SIDEWALK JOINS ANY RIGID

EXPANSION JOINT EXCEPT AGAINST RIGID STRUCTURES.

B. ALL CONCRETE TO BE AT LEAST 3000 P.S.I. IN 28 DAYS.

D. CROSS SLOPE SHALL NOT EXCEED 2.0% MAX.

STRUCTURE. A SAWED SCORE JOINT MAY BE USED IN LEIU OF

C. § EXPANSION MATERIAL WHERE SIDEWALK ABUTS CURB AND GUTTER.

- TACK COAT

A. THE PAVEMENT SECTION SHALL BE PLACED IN AT LEAST THREE SEPARATE LIFTS -

B. IF THE SURFACE COURSE THICKNESS IS GREATER THAN 2", THIS SECTION SHALL BE PLACED

EXCEED 2" NOR BE LESS THAN 1.5". THE MAXIMUM TOTAL THICKNESS OF THE SURFACE

C. THE INTERMEDIATE COURSE SHALL BE PLACED IN ONE LIFT WITH A THICKNESS OF 2.5" TO 4".

D. THE COMPACTED ABC LAYER SHALL BE PLACED IN ONE LIFT UP TO A THICKNESS OF 8". ANY

E. EDGES OF NEW ASPHALT PAVEMENT SHALL MEET FLUSH WITH ALL ADJOINING EXISTING OR

F. IF THE EXISTING PAVEMENT SECTION IS LARGER THAN WHAT IS SHOWN CONTRACTOR SHALL

IN TWO SEPARATE LIFTS. THE MAXIMUM PLACEMENT THICKNESS OF EACH LIFT SHALL NOT

COMPACTED ABC, INTERMEDIATE COURSE, AND SURFACE COURSE.

THICKNESS GREATER THAN 8" SHALL BE PLACED IN TWO LIFTS.

CONTACT THE DESIGNER OF RECORD TO DETERMINE HOW TO PROCEED.

THAND TROWEL SCORE JOINT - 2" X 1"

DEEP TOOLED JOINTS TO EXTEND

PERPENDICULAR TO TRAFFIC FLOW

ENTIRE WIDTH OF SIDEWALK

- STIFF BROOM FINISH

<u>PLAN</u>

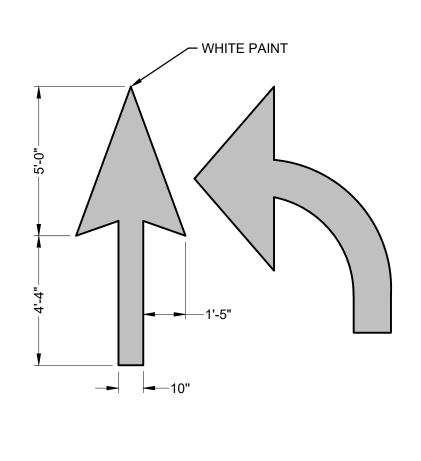
ー ラ" EXPANSION JOINT

¹/₂" EXPANSION JOINT

AGAINST ALL RIGID STRUCTURES (SEALED)

- MAX. 2% CROSS SLOPE

- 4" CONCRETE SIDEWALK



CONTROL

└─ COMPACTED SUBGRADE

- 2" INTERMEDIATE COURSE

119.0C ASPHALT MIX (PER

NCDOT STANDARDS)

COMPACTED SUBGRADE

─ 8" COMPACTED ABC

(95% COMPACTION)



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PROJECT MANAGER VAN SICKLE

CUTHBERTSON

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SITE DETAILS

NOT TO SCALE

- JOINT SEALER -RECESSED ¹/₈" TYP. SURFACE OF GUTTER ½" → JOINT FILLER TRANSVERSE EXPANSION JOINT

EXPANSION JOINT AS NEEDED

NOTE: CURB TAPER TO BE PAINTED YELLOW

CONCRETE SIDEWALK NOT TO SCALE

EXPANSION JOINT

CONTROL JOINT

1/8" TOOLED ¬

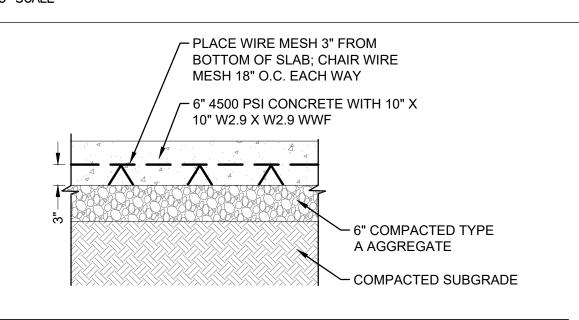
RADIUS (TYP.)

NOTE: LOCATE EXPANSION JOINTS AT 30'-0" (TYP.) OR AS INDICATED ON PLAN.

EXPANSION JOINT

MATERIAL WITH

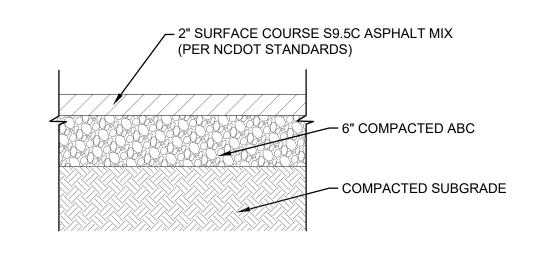
SEALANT



NOTES:

- A CONTROL JOINT 1" DEEP WITH 1/8" RADII SHALL BE REQUIRED IN THE CONCRETE PAVING AT 12' ON CENTER OR AS DELINEATED ON SITE LAYOUT PLAN. A 1/2" MAX EXPANSION JOINT WILL BE REQUIRED WHERE THE PAVING JOINS ANY RIGID STRUCTURE. A SAWED SCORE JOINT MAY BE USED IN LIEU OF EXPANSION JOINT EXCEPT AGAINST RIGID STRUCTURES.
- 2. ALL CONCRETE TO BE AT LEAST 4,500 P.S.I. IN 28 DAYS.
- 3. 1/2" MAX EXPANSION MATERIAL WHERE PAVING ABUTS CURB AND GUTTER OR SIDEWALK.
- SLOPE SHALL NOT EXCEED 2.0% IN ANY DIRECTION. IN THE ACCESSIBLE PARKING AND ASSOCIATED ACCESS AISLE SHALL NEVER EXCEED 2.0% IN SLOPE ANYWHERE.
- NEW CONCRETE PAVEMENT SHALL MEET FLUSH WITH ALL ADJOINING EXISTING OR NEW EDGES OF PAVEMENT.

HEAVY DUTY CONCRETE



- A. THE PAVEMENT SECTION SHALL BE PLACED IN AT LEAST TWO SEPARATE LIFTS COMPACTED ABC AND SURFACE COURSE.
- B. IF THE SURFACE COURSE THICKNESS IS GREATER THAN 2", THIS SECTION SHALL BE PLACED IN TWO SEPARATE LIFTS. THE MAXIMUM PLACEMENT THICKNESS OF EACH LIFT SHALL NOT EXCEED 2" NOR BE LESS THAN 1.5". THE MAXIMUM TOTAL THICKNESS OF THE SURFACE COURSE IS NOT TO EXCEED 3".
- C. THE COMPACTED ABC LAYER SHALL BE PLACED IN ONE LIFT UP TO A THICKNESS OF 8". ANY THICKNESS GREATER THAN 8" SHALL BE PLACED IN TWO LIFTS.
- D. EDGES OF NEW ASPHALT PAVEMENT SHALL MEET FLUSH WITH ALL ADJOINING EXISTING OR NEW PAVEMENTS.
- E. IF THE EXISTING PAVEMENT SECTION IS LARGER THAN WHAT IS SHOWN CONTRACTOR SHALL CONTACT THE DESIGNER OF RECORD TO DETERMINE HOW TO PROCEED.

ASPHALT PAVING

IN CURB AND GUTTER

HEAVY DUTY ASPHALT PAVING

CURB AND GUTTER NOT TO SCALE

SIDEWALK.

|< 0 ►|< -12" ──►

<u>1'-6" CURB AND</u> GUTTER - REVERSE SLOPE

NOTES:

A. CONTRACTION JOINTS SHALL BE SPACED AT 10'-0" INTERVALS,

ENGINEER TO PREVENT UNCONTROLLED CRACKING.

MINIMUM DEPTH OF 1½" SHALL BE OBTAINED.

ADJACENT TO ALL RIGID OBJECTS.

F. CONCRETE SHALL BE 3600 PSI IN 28 DAYS.

B. CONTRACTION JOINTS MAY BE INSTALLED BY THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS.

WHERE SUCH JOINTS ARE NOT FORMED BY TEMPLATES, A

C. ALL CONTRACTION JOINTS SHALL BE FILLED WITH JOINT SEALER.

D. EXPANSION JOINTS SHALL BE SPACED AT 90'-0" INTERVALS AND

E. JOINTS SHALL MATCH LOCATIONS WITH JOINT IN ABUTTING

G. TOP 6" OF SUBGRADE BENEATH CURB AND GUTTER SHALL BE

COMPACTED TO 100% STANDARD PROCTOR DENSITY.

EXCEPT THAT A 15'-0" SPACING MAY BE USED WHEN A MACHINE

IS USED OR WHEN SATISFACTORY SUPPORT FOR THE FACE OF

AT 10'-0" INTERVALS. JOINT SPACING MAY BE ALTERED BY THE

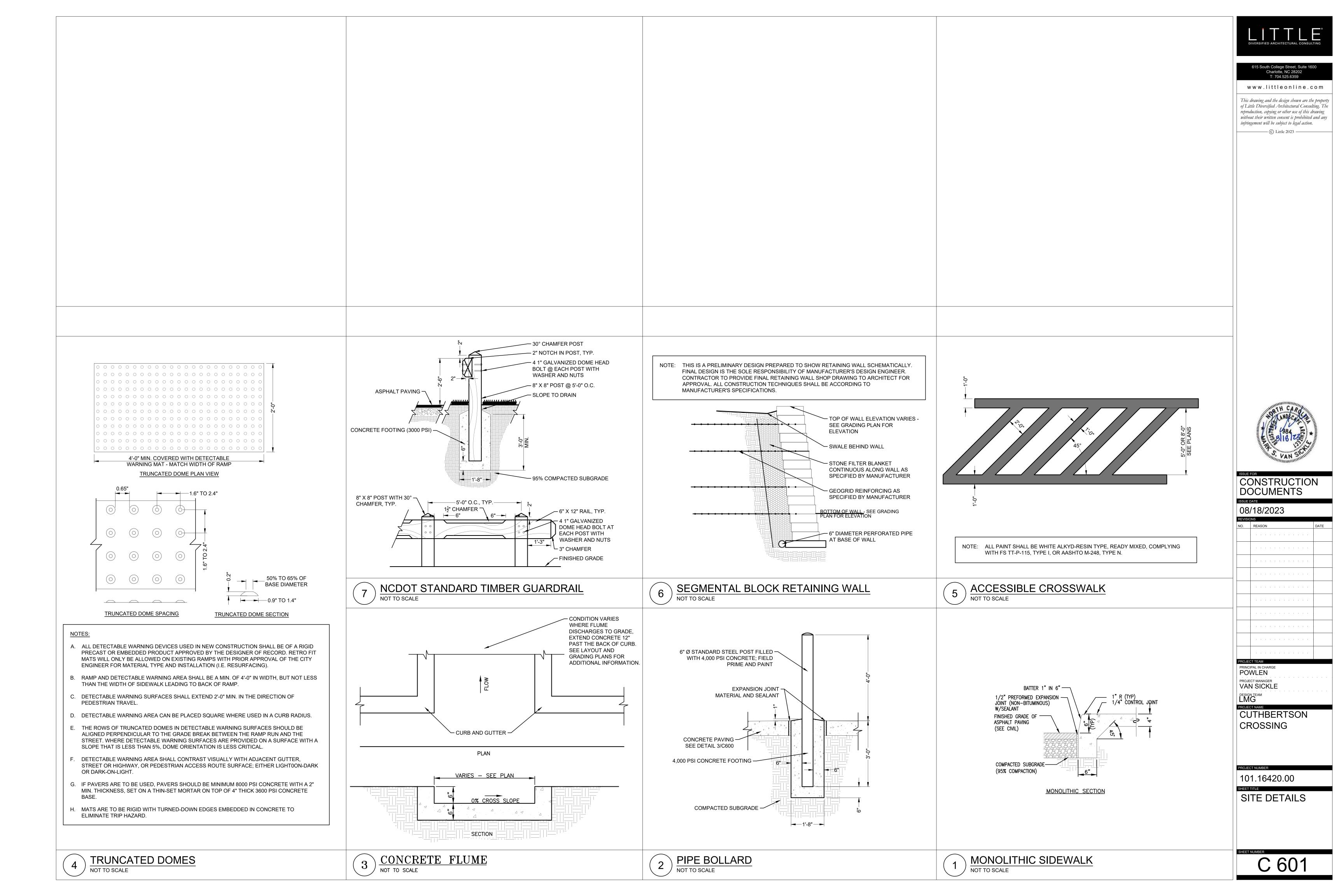
THE FORM CAN BE OBTAINED WITHOUT THE USE OF TEMPLATES

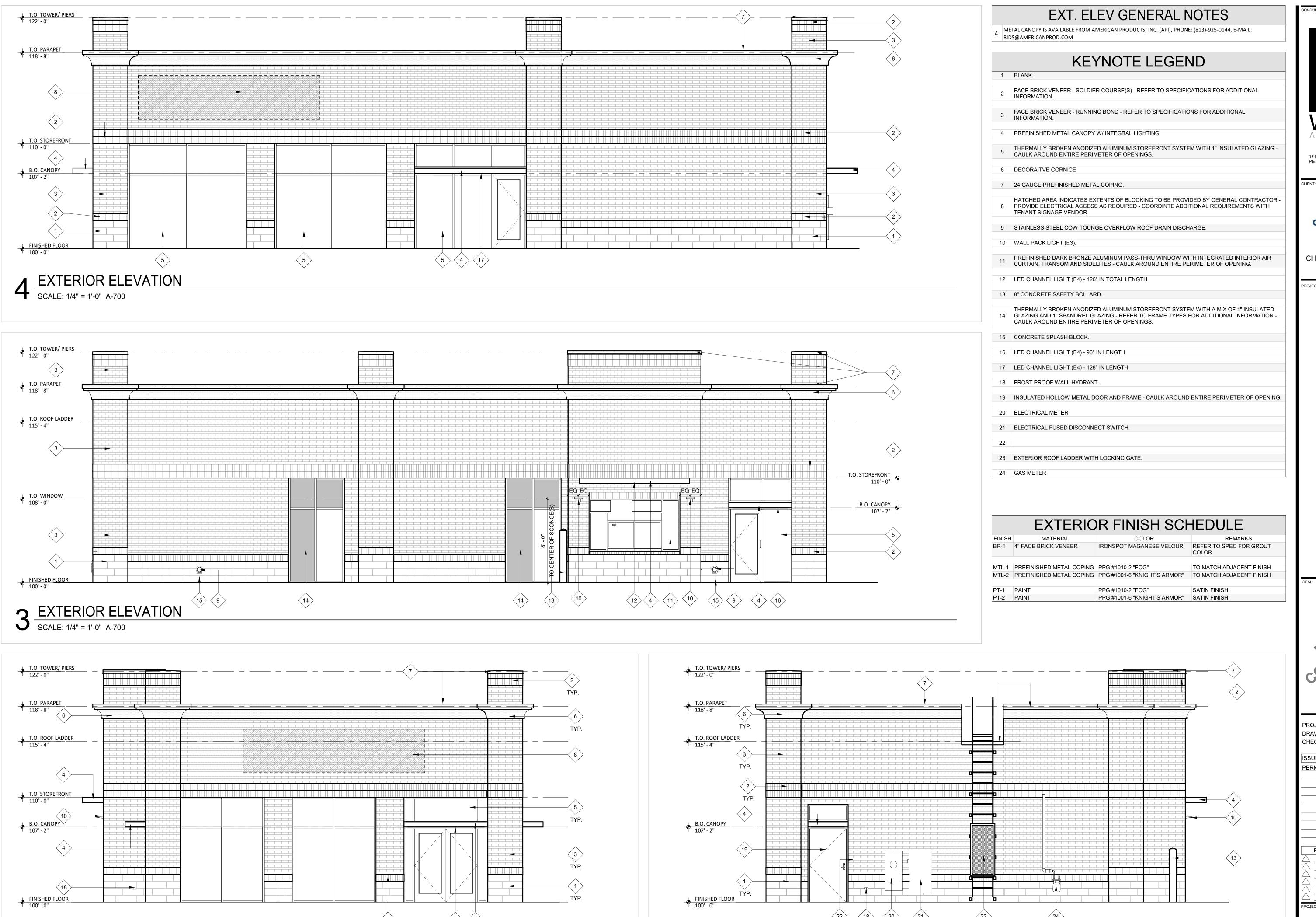
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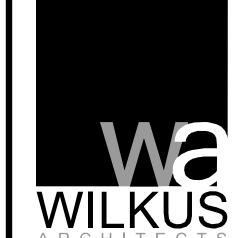
CROSSING





EXTERIOR ELEVATION

SCALE: 1/4" = 1'-0" A-700



15 Ninth Avenue North, Hopkins, MN 55343 Phone: 952.941.8660/ www.wilkusarch.com



500 EAST MOREHEAD STREET, SUITE 230 CHARLOTTE, NC 28202-2616

PROJECT INFORMATION:

ROJECT NO.:	2022-0371
RAWN BY:	D. ALDERINK

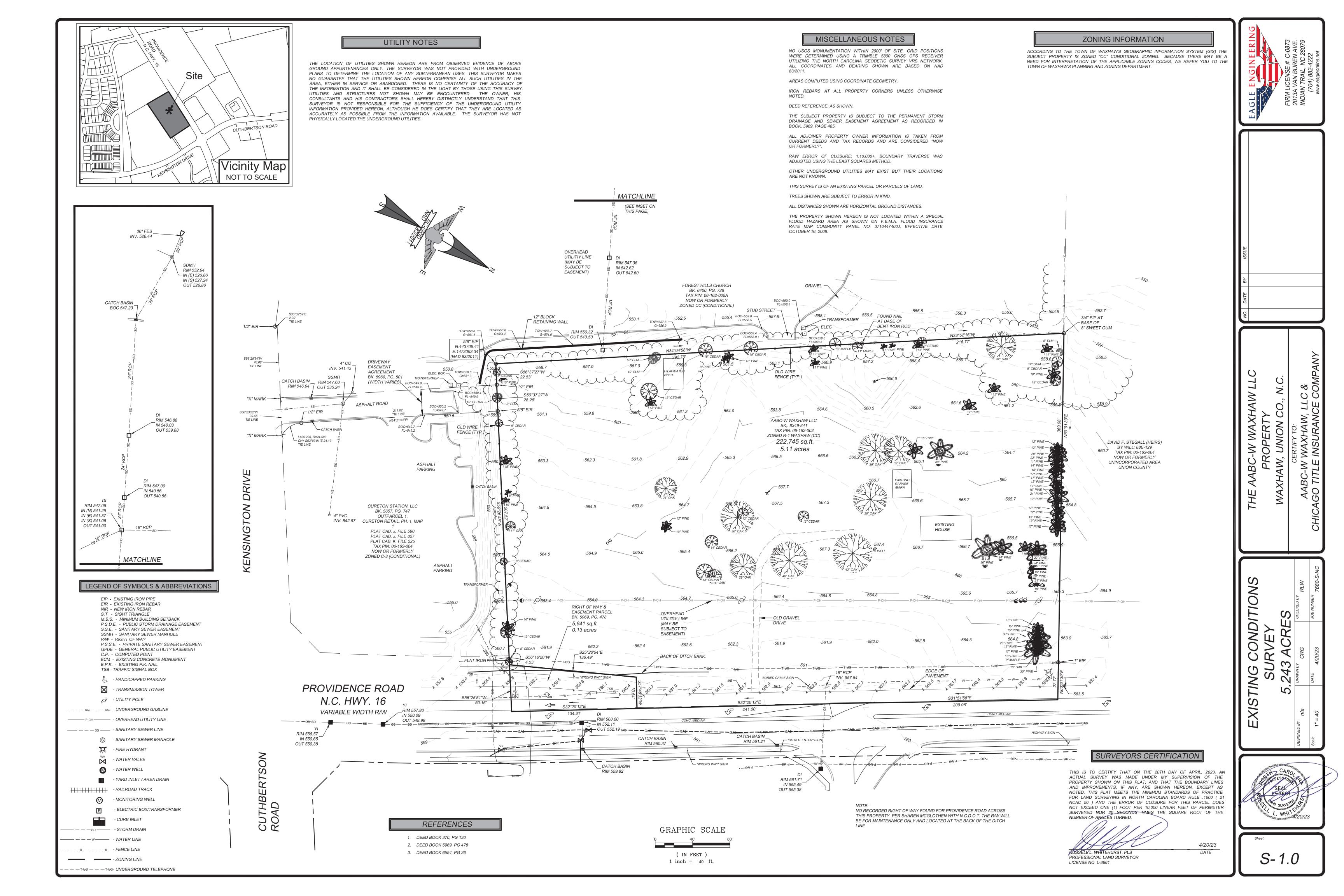
CHECKED BY: K. MOAN

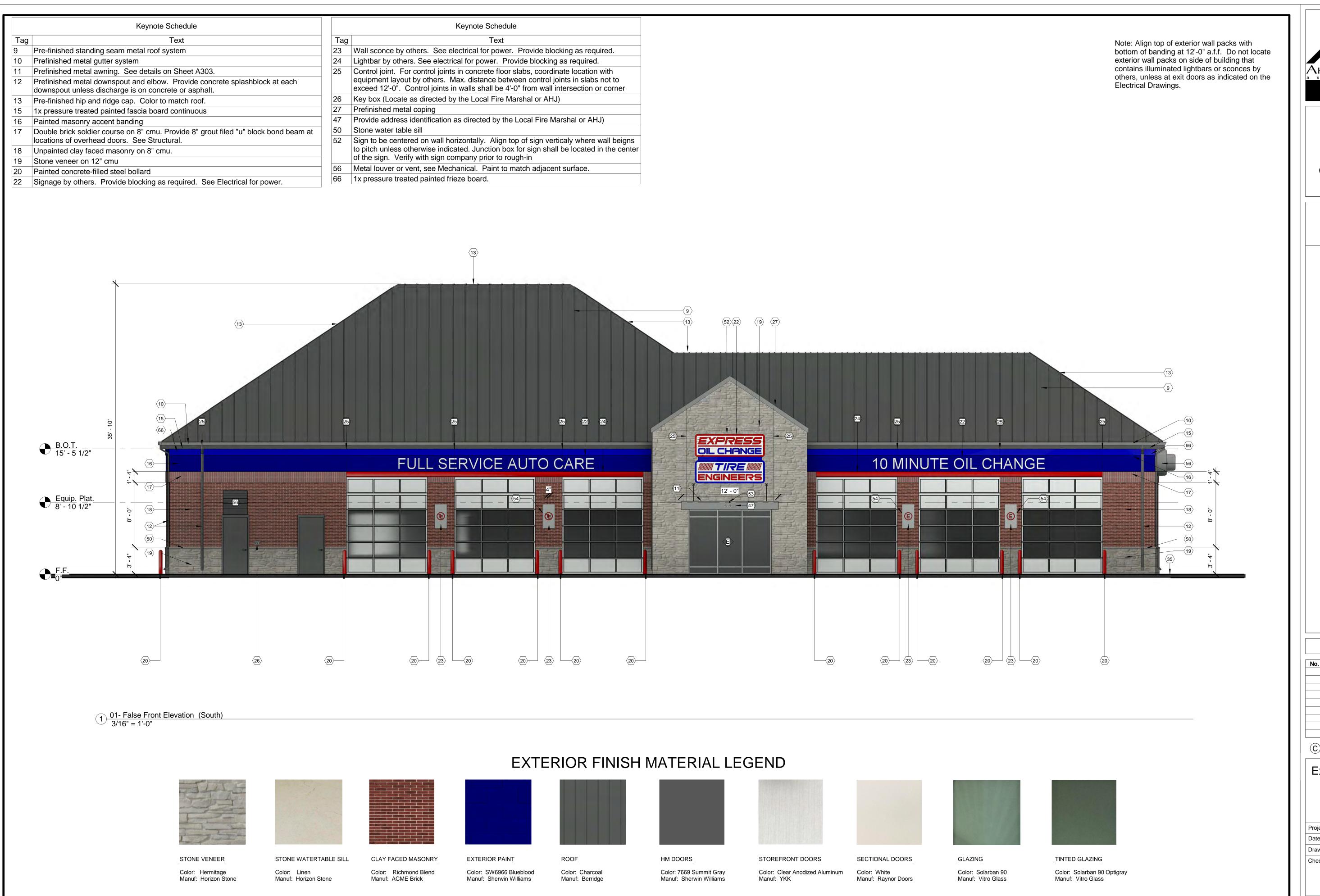
PERMIT PLAN REVIEW XX/XX/XXX

WAXHAW, NC

EXTERIOR ELEVATION

SCALE: 1/4" = 1'-0" A-700









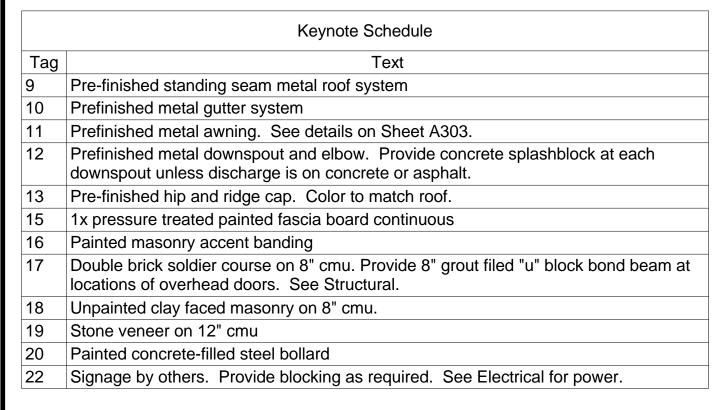
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Engineers ear Entry with S Change & Tireland Oil Change / F and

	CONCEPTUAL				
No.	Description	Date			
(C)	2023 Aho Architects, a sole p All Rights Rese				
Ex	terior Eleva False Fror (South)				

Project number	23043
Date	08/17/2023
Drawn by	ARC
Checked by	TAA

A200 As indicated



	Keynote Schedule
Tag	Text
23	Wall sconce by others. See electrical for power. Provide blocking as required.
24	Lightbar by others. See electrical for power. Provide blocking as required.
25	Control joint. For control joints in concrete floor slabs, coordinate location with equipment layout by others. Max. distance between control joints in slabs not to exceed 12'-0". Control joints in walls shall be 4'-0" from wall intersection or corner
26	Key box (Locate as directed by the Local Fire Marshal or AHJ)
27	Prefinished metal coping
47	Provide address identification as directed by the Local Fire Marshal or AHJ)
50	Stone water table sill
52	Sign to be centered on wall horizontally. Align top of sign vertically where wall beigns to pitch unless otherwise indicated. Junction box for sign shall be located in the center of the sign. Verify with sign company prior to rough-in
56	Metal louver or vent, see Mechanical. Paint to match adjacent surface.
66	1x pressure treated painted frieze board.

Note: Align top of exterior wall packs with bottom of banding at 12'-0" a.f.f. Do not locate exterior wall packs on side of building that contains illuminated lightbars or sconces by others, unless at exit doors as indicated on the Electrical Drawings.





Engineers ear Entry with S

I Change & Tire Hand Oil Change / Re Storage



1 02- Rear Entry Elevation (North) 3/16" = 1'-0"

EXTERIOR FINISH MATERIAL LEGEND



Color: Hermitage

Manuf: Horizon Stone

STONE WATERTABLE SILL STONE VENEER

Color: Linen

Manuf: Horizon Stone

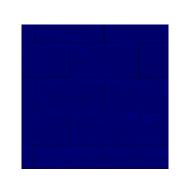




CLAY FACED MASONRY

Color: Richmond Blend

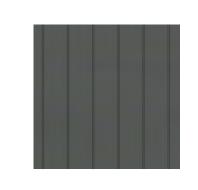
Manuf: ACME Brick



EXTERIOR PAINT

Color: SW6966 Blueblood

Manuf: Sherwin Williams



<u>ROOF</u>

Color: Charcoal

Manuf: Berridge



Color: 7669 Summit Gray

Manuf: Sherwin Williams

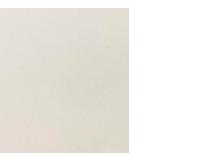
HM DOORS



Color: Clear Anodized Aluminum

STOREFRONT DOORS

Manuf: YKK



SECTIONAL DOORS

Manuf: Raynor Doors

Color: White



<u>GLAZING</u>

Color: Solarban 90 Manuf: Vitro Glass



TINTED GLAZING Color: Solarban 90 Optigray Manuf: Vitro Glass

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CONCEPTUAL

Description

Exterior Elevation -Rear Entry (North)

23043 Project number 08/17/2023 Drawn by Checked by

As indicated

	Keynote Schedule
Tag	Text
9	Pre-finished standing seam metal roof system
10	Prefinished metal gutter system
11	Prefinished metal awning. See details on Sheet A303.
12	Prefinished metal downspout and elbow. Provide concrete splashblock at each downspout unless discharge is on concrete or asphalt.
13	Pre-finished hip and ridge cap. Color to match roof.
15	1x pressure treated painted fascia board continuous
16	Painted masonry accent banding
17	Double brick soldier course on 8" cmu. Provide 8" grout filed "u" block bond beam at locations of overhead doors. See Structural.
18	Unpainted clay faced masonry on 8" cmu.
19	Stone veneer on 12" cmu
20	Painted concrete-filled steel bollard
22	Signage by others. Provide blocking as required. See Electrical for power.

	Keynote Schedule
Tag	Text
23	Wall sconce by others. See electrical for power. Provide blocking as required.
24	Lightbar by others. See electrical for power. Provide blocking as required.
25	Control joint. For control joints in concrete floor slabs, coordinate location with equipment layout by others. Max. distance between control joints in slabs not to exceed 12'-0". Control joints in walls shall be 4'-0" from wall intersection or corner
26	Key box (Locate as directed by the Local Fire Marshal or AHJ)
27	Prefinished metal coping
47	Provide address identification as directed by the Local Fire Marshal or AHJ)
50	Stone water table sill
52	Sign to be centered on wall horizontally. Align top of sign vertically where wall beigns to pitch unless otherwise indicated. Junction box for sign shall be located in the center of the sign. Verify with sign company prior to rough-in
56	Metal louver or vent, see Mechanical. Paint to match adjacent surface.
66	1x pressure treated painted frieze board.

Note: Align top of exterior wall packs with bottom of banding at 12'-0" a.f.f. Do not locate exterior wall packs on side of building that contains illuminated lightbars or sconces by others, unless at exit doors as indicated on the Electrical Drawings.





Change & Tire Engineers and Oil Change / Rear Entry with Side Storage Single

	CONCEPTUAL				
No.	Description	Date			
(C)	2023 Aho Architects, a sole p All Rights Rese				
Ex	Exterior Elevation - Left (West)				

23043 Project number 08/17/2023 Drawn by Checked by

As indicated

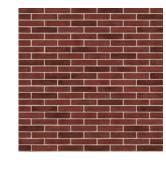
Eguip. Plat. 8' - 10 1/2" EQ. 13' - 3 5/8" 13' - 3 5/8" EQ.

1 04- Left Elevation (West) 3/16" = 1'-0"

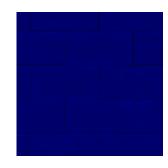
EXTERIOR FINISH MATERIAL LEGEND



STONE VENEER STONE WATERTABLE SILL Color: Hermitage Manuf: Horizon Stone Color: Linen Manuf: Horizon Stone



CLAY FACED MASONRY Color: Richmond Blend Manuf: ACME Brick



EXTERIOR PAINT Color: SW6966 Blueblood Manuf: Sherwin Williams



ROOF

Color: Charcoal Manuf: Berridge

HM DOORS Color: 7669 Summit Gray Manuf: Sherwin Williams



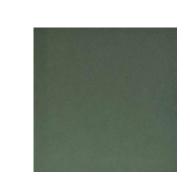
STOREFRONT DOORS Color: Clear Anodized Aluminum Manuf: YKK



SECTIONAL DOORS Color: White Manuf: Raynor Doors



<u>GLAZING</u> Color: Solarban 90 Manuf: Vitro Glass



TINTED GLAZING Color: Solarban 90 Optigray Manuf: Vitro Glass

	Keynote Schedule
Tag	Text
9	Pre-finished standing seam metal roof system
10	Prefinished metal gutter system
11	Prefinished metal awning. See details on Sheet A303.
12	Prefinished metal downspout and elbow. Provide concrete splashblock at each downspout unless discharge is on concrete or asphalt.
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	Keynote Schedule
Tag	Text
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Note: Align top of exterior wall packs with bottom of banding at 12'-0" a.f.f. Do not locate exterior wall packs on side of building that contains illuminated lightbars or sconces by others, unless at exit doors as indicated on the Electrical Drawings.





e Tire

S. Providence Road v, North Carolina 28173

Express Oil Change & Tire Engineers Single Building - Right Hand Oil Change / Rear Entry with Side Storage

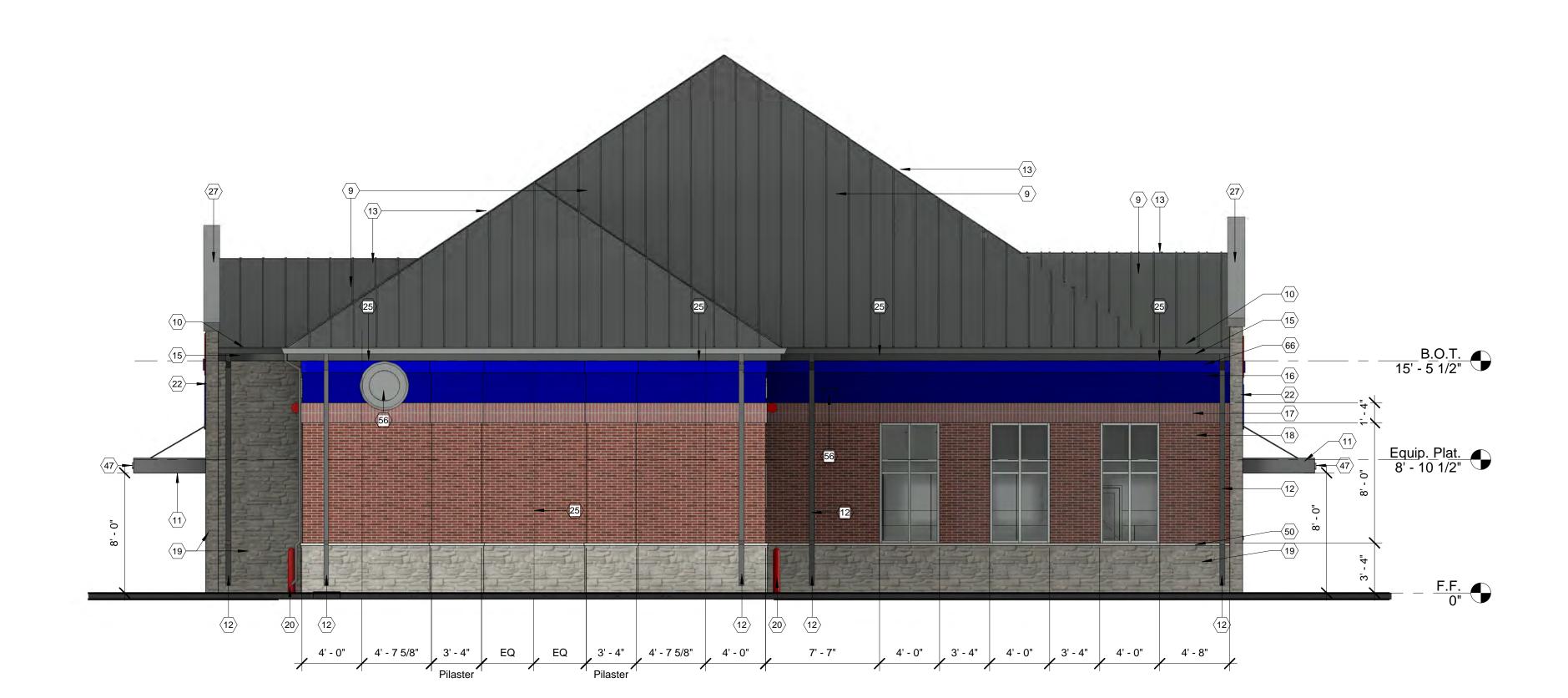
	CONCEPTUA	L
No.	Description	Date
\bigcirc	2023	

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Exterior Elevation - Right (East)

Project number	23043
Date	08/17/2023
Drawn by	ARC
Checked by	TAA

A203
Scale As indicated



EXTERIOR FINISH MATERIAL LEGEND



STONE VENEER

Color: Hermitage
Manuf: Horizon Stone



1 03- Right Elevation (East) 3/16" = 1'-0"

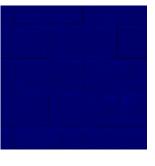
STONE WATERTABLE SILL

Color: Linen
Manuf: Horizon Stone



CLAY FACED MASONRY

Color: Richmond Blend
Manuf: ACME Brick



EXTERIOR PAINT

Color: SW6966 Blueblood
Manuf: Sherwin Williams

ROOF

Color: Charcoal
Manuf: Berridge



HM DOORS

Color: 7669 Summit Gray
Manuf: Sherwin Williams



STOREFRONT DOORS

Color: Clear Anodized Aluminum
Manuf: YKK



SECTIONAL DOORS

Color: White
Manuf: Raynor Doors



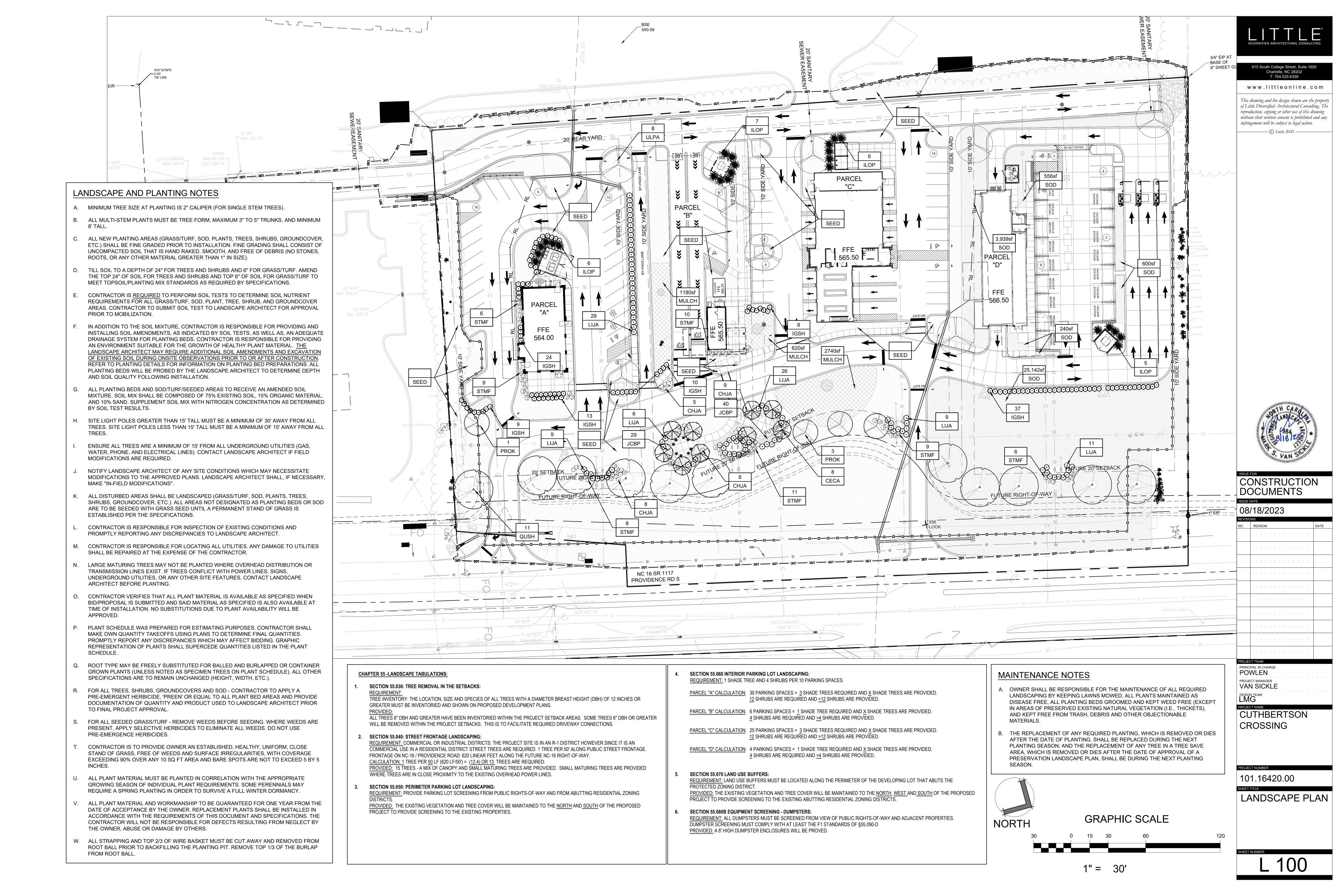
GLAZING

Color: Solarban 90

Manuf: Vitro Glass

TINTED GLAZING

Color: Solarban 90 Optigray Manuf: Vitro Glass



DIVERSIFIED ARCHITECTURAL CONSULTING

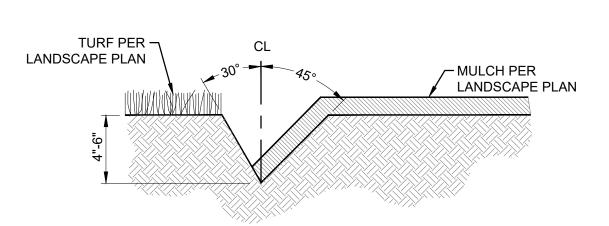
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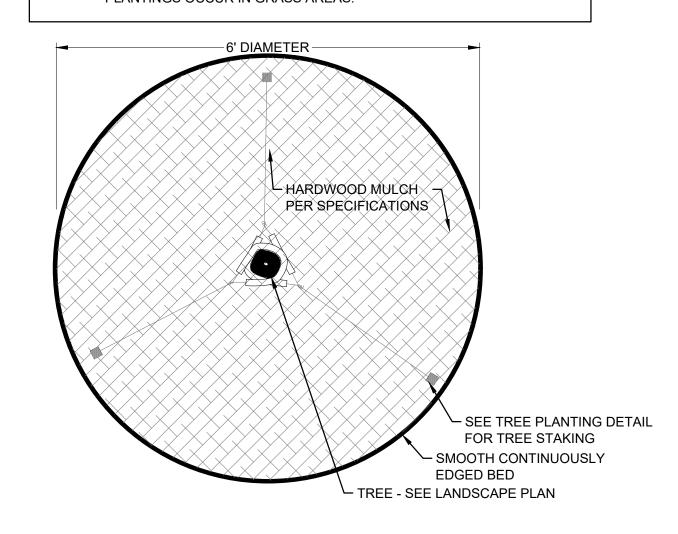
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NOTE: EXCAVATE TRENCH BY HAND WITH SPADE. ADD EXCESS SOIL TO ADJACENT PLANT BED AFTER PULLING BACK EXISTING MULCH. RAKE SOIL AND SMOOTH BEFORE MULCHING.

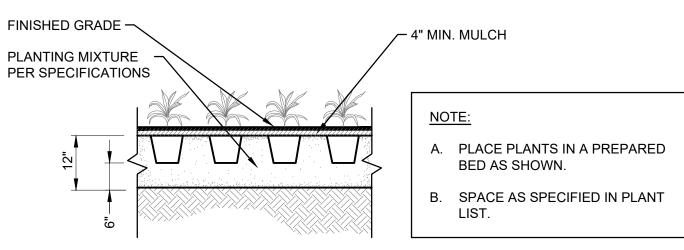


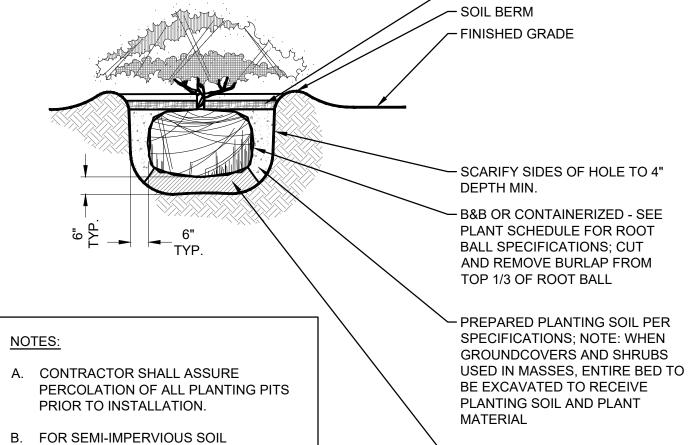
NOTE: APPLY HARDWOOD MULCH IN A 6' DIAMETER RING WHERE TREE PLANTINGS OCCUR IN GRASS AREAS.



PED GRADE

SPACE
S





TRIANGULAR SPACING

"NON-STANDARD" BED AREAS

QUANTITIES SHOWN ON PLAN INDICATE

- 4" MIN. MULCH

- COMPACT PLANTING SOIL

BENEATH ROOT BALL



6 TRENCHED BED EDGING



4 PLANT MASSING AND GROUNDCOVER

3 SHRUB PLANTING
NOT TO SCALE

BALL ELEVATIONS.

SOD

SEED

MULCH

CONDITIONS AND FOR ALL AZALEA

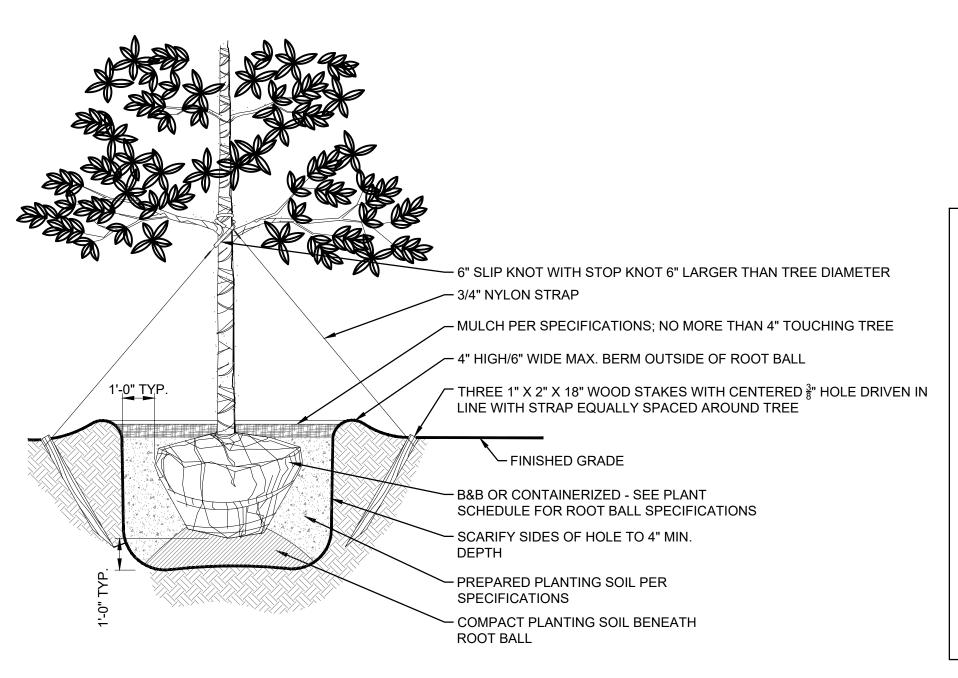
PLANTING, ROOT BALL ELEVATION

COORDINATE WITH LANDSCAPE

SHALL BE 2" ABOVE FINISHED GRADE.

ARCHITECT PRIOR TO SETTING ROOT

<u>KEY</u>	QUANTITY	BOTANICAL NAME	COMMON NAME	CALIPER/ SIZE	SPACING	REMARKS
TREES						
CECA	8	CERCIS CANDENSIS	EASTERN REDBUD	2" CAL. (6'-8' HT.)	AS SHOWN	B&B, SPECIMENS, FULL CROWNS
ILOP	24	ILEX OPACA	AMERICAN HOLLY	8' HT	AS SHOWN	B&B, MATCHED SPECIMENS
PROK	4	PRUNUS 'OKAME'	OKAME CHERRY	2" CAL. (12'-14' HT)	AS SHOWN	B&B, SPECIMENS, FULL CROWNS
QUSH	11	QUERCUS SHUMARDII	SHUMARD OAK	2" CAL. (12'-14' HT)	AS SHOWN	B&B, MATCHED SPECIMENS
ULPA	8	ULMUS PARVIFOLIA	LACE BARK ELM	2" CAL. (12'-14' HT)	AS SHOWN	B&B, MATCHED SPECIMENS
SHRUBS						
IGSH	64	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY	24-30" HT. x 24-30" SP.		CONTAINER
STMF	59	SPIRAEA THUNBERGII 'MT. FUJI	MT. FUJI SPIREA	15"-18" HT x 15"-18" SP.		
CHJA	30	CHAENOMELES JAPONICA	JAPANESE FLOWERING QUINCE	15"-18" HT x 15"-18" SP.		CONTAINER; FULL
LIJA	84	LIGUSTRUM JAPONICUM	JAPANESE PRIVET	30-36" HT. x 30-36" SP.		CONTAINER
ORNAME	ENTAL GR	ASSES, GROUNDCOVERS, & TURF				
JCBP	69	JUNIPERUS CONFERTA 'BLUE PACIFICA'	SHORE JUNIPER	15-18" SP.		QUANTITY BASED ON SPACING @ 36" O.C. AND



NOTES:

- A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY LANDSCAPE ARCHITECT.
- B. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.
- C. FOR SEMI-IMPERVIOUS SOIL CONDITIONS, INSTALL ROOT BALL 4" ABOVE FINISHED GRADE.
- D. REMOVE WIRE AND NYLON TWINE FROM BALL AND CANOPY.
- E. SOAK ROOT BALL AND PLANTING PIT IMMEDIATELY AFTER INSTALLATION.
- F. STAKING IS REQUIRED FOR ALL TREES.
- G. REMOVE EXCESS SOIL FROM SITE AND DISPOSE OF IN A LEGAL MANNER.
- H. RESEED ALL DISTURBED AREAS.

SOD

SEED

NOTES:

1. CCQ = CONTRACTOR TO COMPUTE

2. BERMUDA GRASS, DEPENDING ON TIME OF PLANTING. TALL FESCUE TURF AS OPTION.

3. LANDSCAPE ARCHITECT TO BE ONSITE TO APPROVE FINAL PLANT LAYOUT.

1 PLANT SCHEDULE

SCALE: NOT TO SCALE

30,548 sf BERMUDA GRASS

CCQ BERMUDA GRASS

CCQ HARDWOOD MULCH



08/18/2023

UO	10/2023	
REVISIO	DNS	
NO.	REASON	DATE

PRINCIPAL IN CHARGE
POWLEN
PROJECT MANAGER
VAN SICKLE

MG

CUTHBERTSON CROSSING

101.16420.00

SHEET TITLE

LANDSCAPE DETAILS

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