

****VETERAN - OWNED****
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FOR CONSTRUCTION



JONES CIVIL DESIGN, P.C.
C-3859

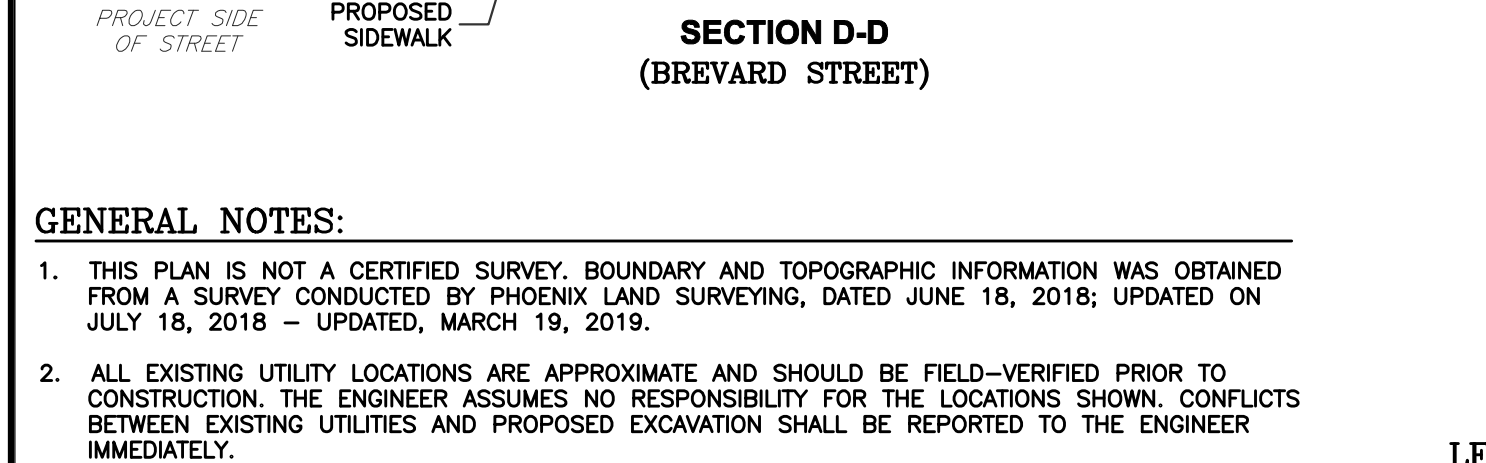
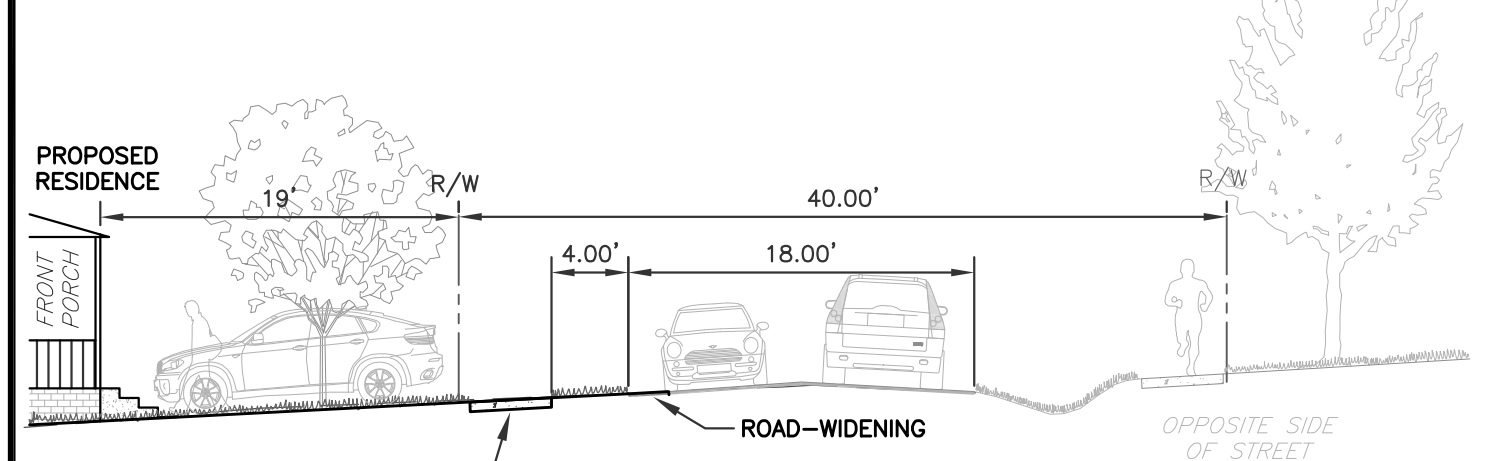
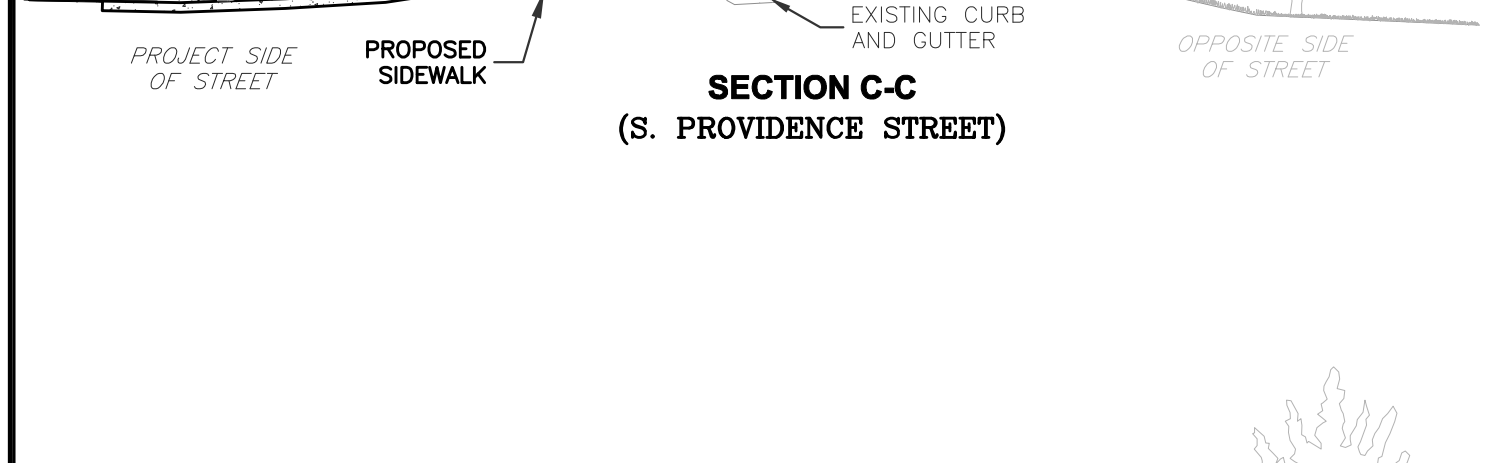
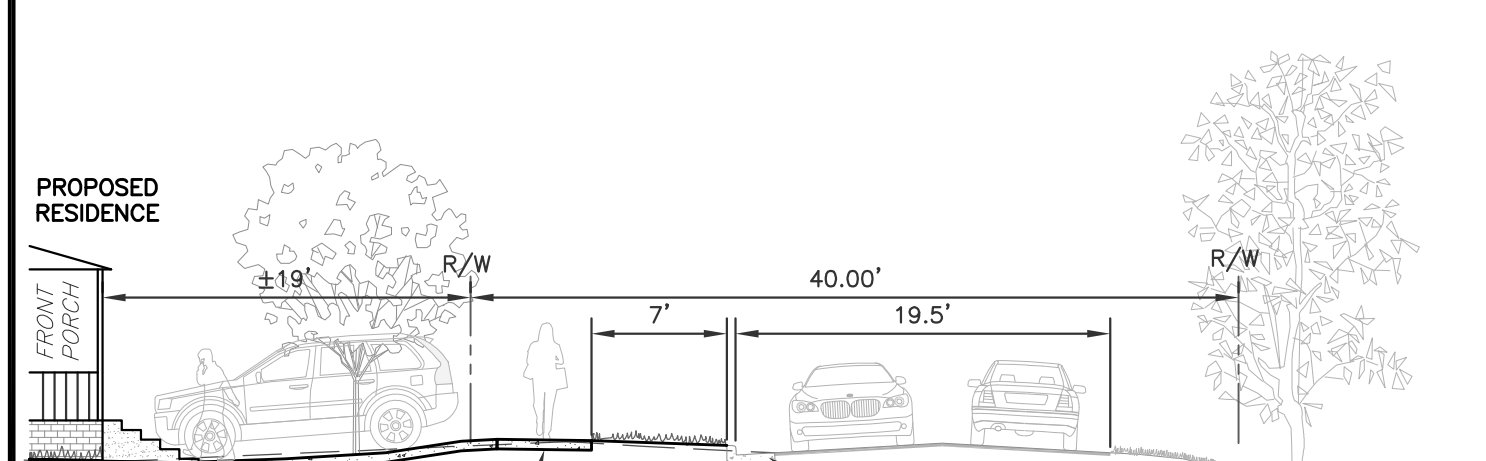
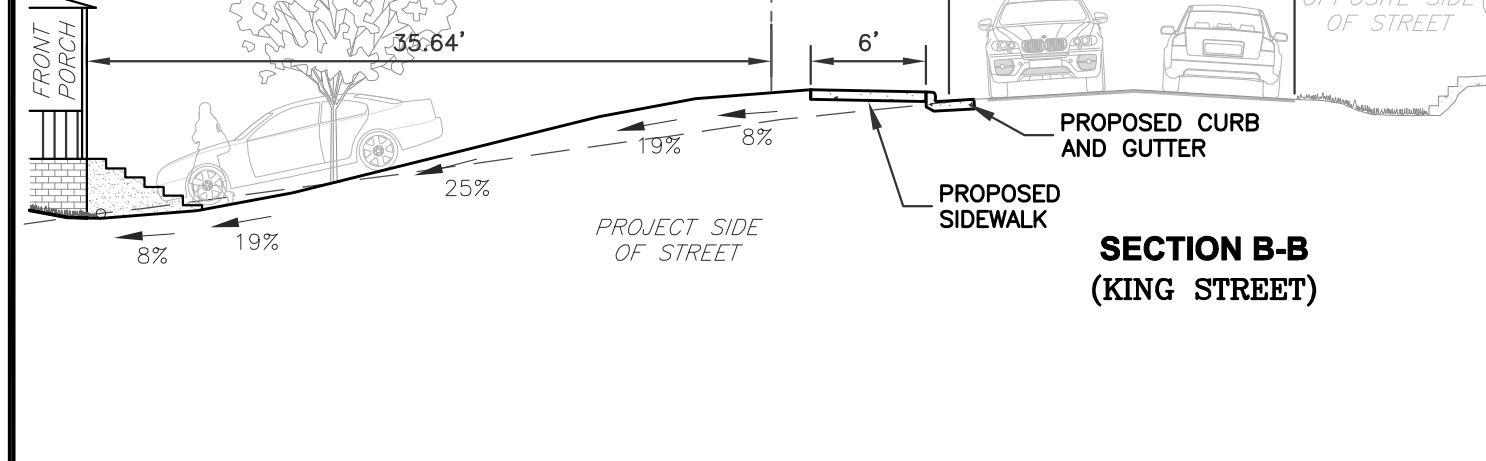
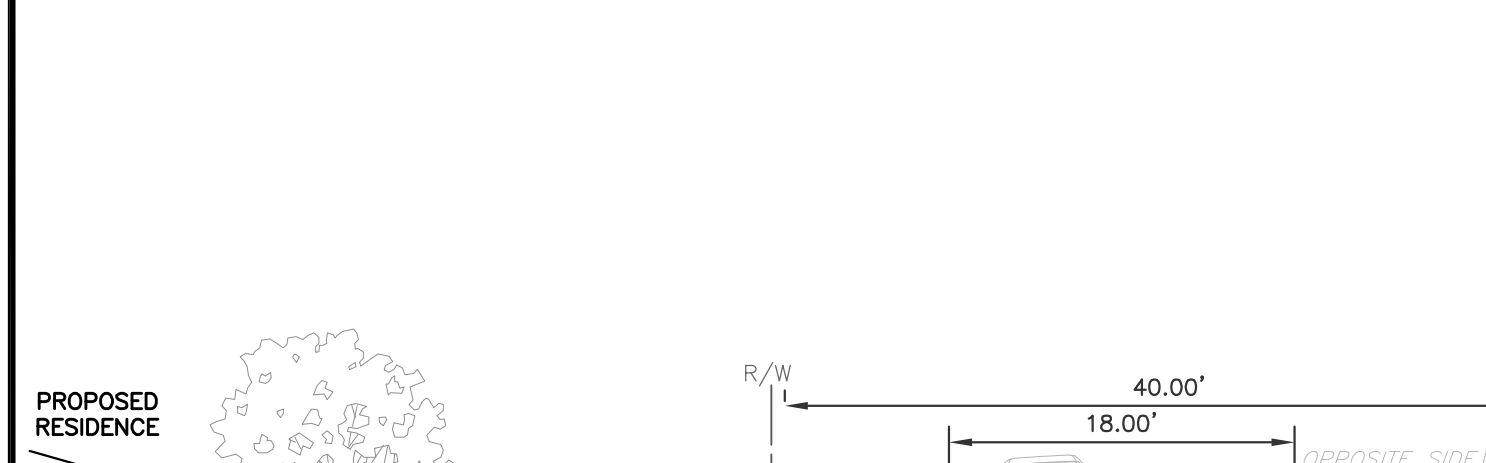
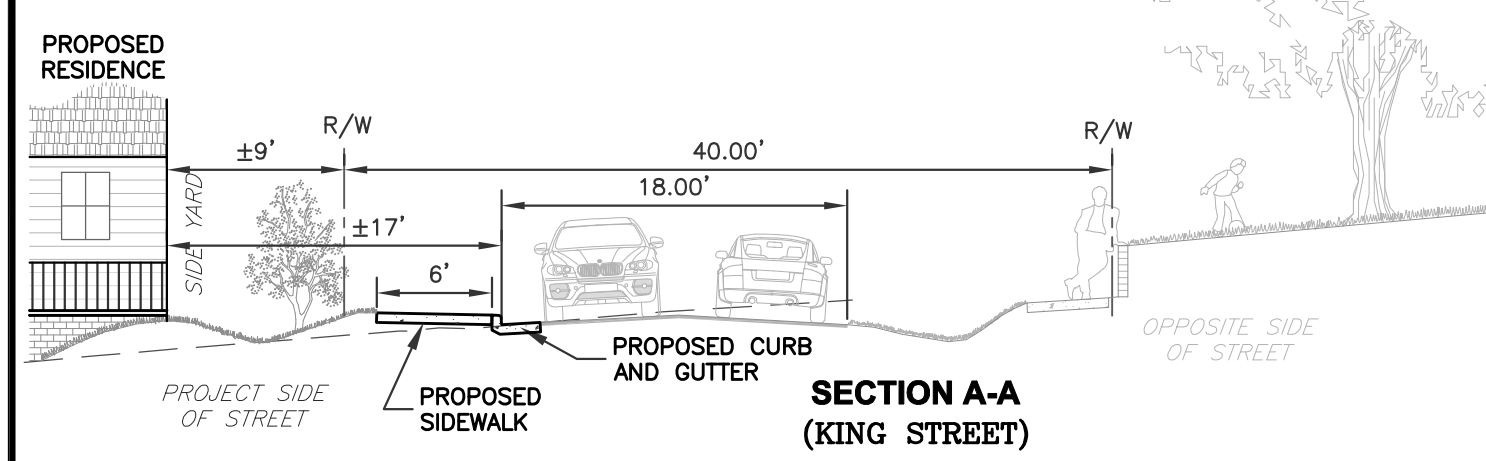
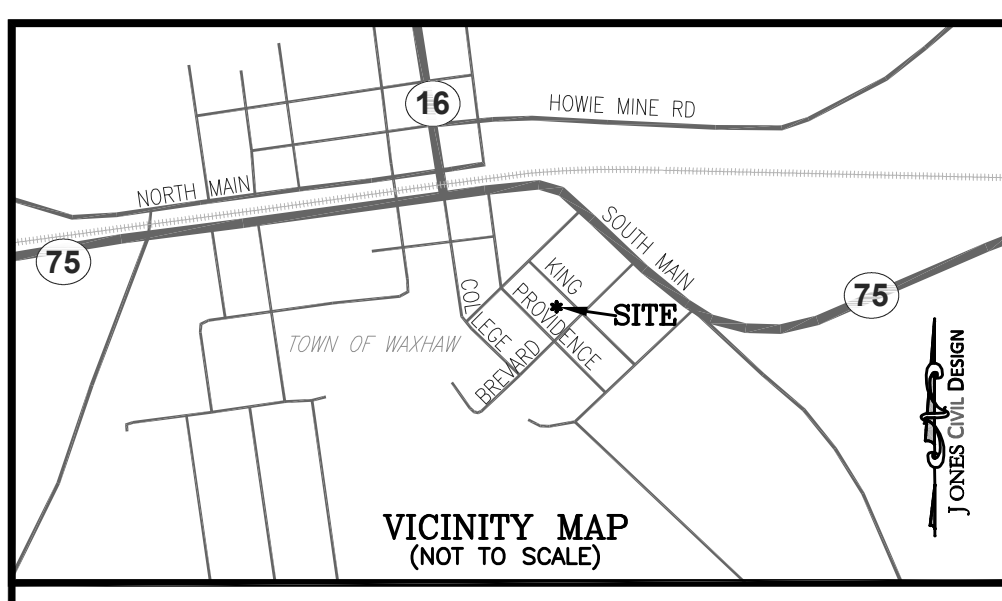
REV.	DATE	BY	DESCRIPTION
1	1/27/19	CMJ	ISSUED PER TOWN COMMENTS
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5	8/29/19	CMJ	REVISED PER TOWN COMMENTS

KING'S CORNER (SITE DEVELOPMENT)

SITE PLAN
415 S. PROVIDENCE ST.
WAXHAW, NC

FILE NAME: BASE-18011.dwg
JOB NUMBER: 18011
ORIGINAL DATE: 3/29/2019
DRAWN BY: CMJ

SHEET
C1.1

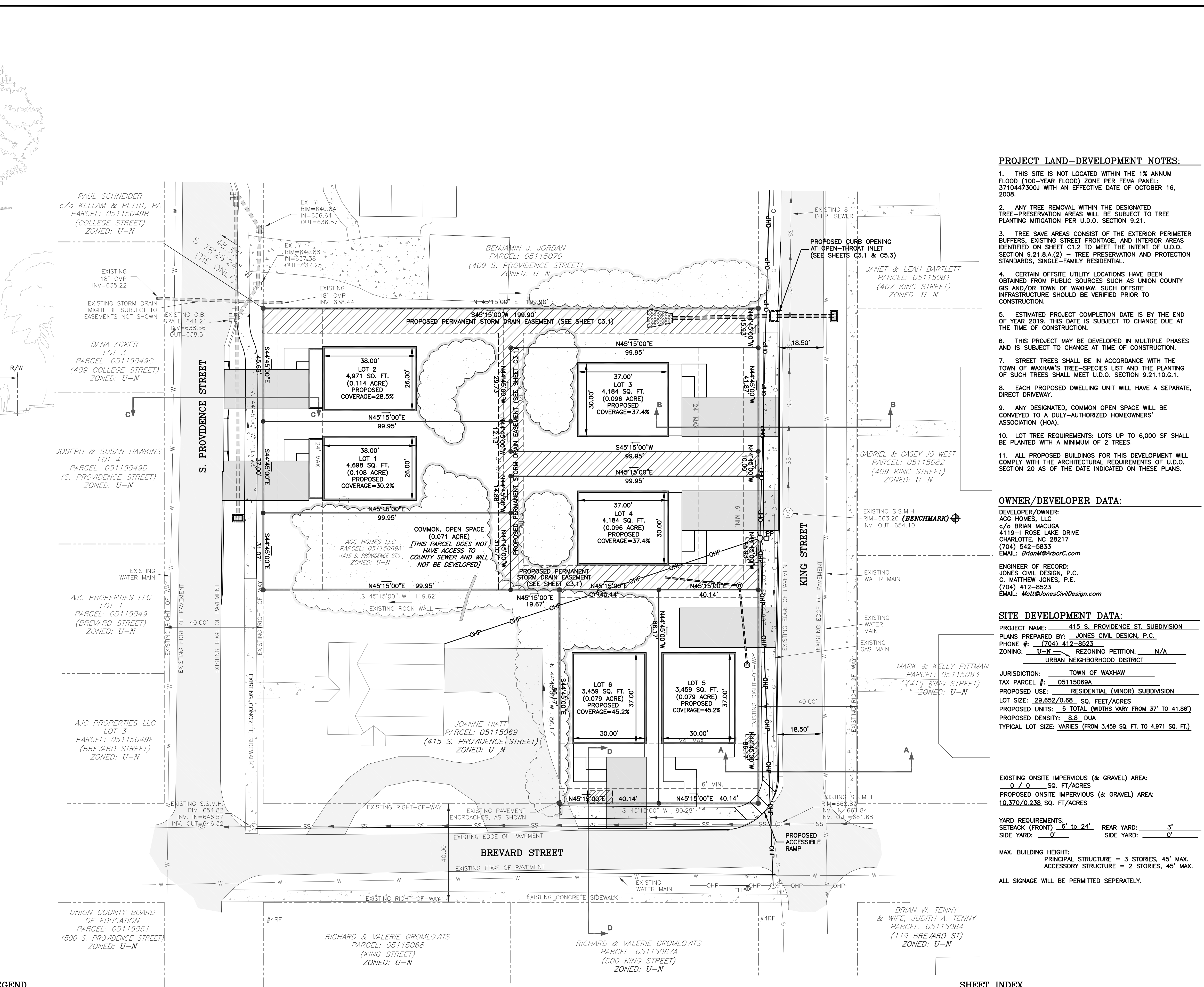


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LEGEND

SS	SANITARY SEWER LINE
W	WATER LINE
G	GAS LINE
C	CONDUIT (EMPTY PVC)
UGE	UNDERGROUND ELECTRIC
OHP	OVERHEAD POWER
METAL FENCE	METAL FENCE
WOODEN FENCE	WOODEN FENCE
SILT FENCE	SILT FENCE
TREE PROTECTION FENCE	TREE PROTECTION FENCE
PROPERTY / RIGHT-OF-WAY	PROPERTY / RIGHT-OF-WAY
CREEK/SWALE/DITCH	CREEK/SWALE/DITCH
STORM DRAIN PIPE	STORM DRAIN PIPE
TREELINE	TREELINE



PROJECT LAND-DEVELOPMENT NOTES:

- THIS SITE IS NOT LOCATED WITHIN THE 1% ANNUAL FLOOD (100-YEAR FLOOD) ZONE PER FEMA PANEL: 3710447300J WITH AN EFFECTIVE DATE OF OCTOBER 16, 2008.
- ANY TREE REMOVAL WITHIN THE DESIGNATED TREE-PRESERVATION AREAS WILL BE SUBJECT TO TREE PLANTING MITIGATION PER U.D.O. SECTION 9.21.
- TREE SAVE AREAS CONSIST OF THE EXTERIOR PERIMETER BUFFERS, EXISTING STREET FRONTAGE, AND INTERIOR AREAS IDENTIFIED ON SHEET C1.2 TO MEET THE INTENT OF U.D.O. SECTION 9.21.8.A.(2) - TREE PRESERVATION AND PROTECTION STANDARDS, SINGLE-FAMILY RESIDENTIAL.
- CERTAIN OFFSITE UTILITY LOCATIONS HAVE BEEN OBTAINED FROM PUBLIC SOURCES SUCH AS UNION COUNTY GIS AND/OR TOWN OF WAXHAW. SUCH OFFSITE INFRASTRUCTURE SHOULD BE VERIFIED PRIOR TO CONSTRUCTION.
- ESTIMATED PROJECT COMPLETION DATE IS BY THE END OF YEAR 2019. THIS DATE IS SUBJECT TO CHANGE DUE TO THE TIME OF CONSTRUCTION.
- THIS PROJECT MAY BE DEVELOPED IN MULTIPLE PHASES AND IS SUBJECT TO CHANGE AT TIME OF CONSTRUCTION.
- STREET TREES SHALL BE IN ACCORDANCE WITH THE TOWN OF WAXHAW'S TREE-SPECIES LIST AND THE PLANTING OF SUCH TREES SHALL MEET U.D.O. SECTION 9.21.10.G.1.
- EACH PROPOSED DWELLING UNIT WILL HAVE A SEPARATE, DIRECT DRIVEWAY.
- ANY DESIGNATED, COMMON OPEN SPACE WILL BE CONVEYED TO A DULY-AUTHORIZED HOMEOWNERS' ASSOCIATION (HOA).
- LOT TREE REQUIREMENTS: LOTS UP TO 6,000 SF SHALL BE PLANTED WITH A MINIMUM OF 2 TREES.
- ALL PROPOSED BUILDINGS FOR THIS DEVELOPMENT WILL COMPLY WITH THE ARCHITECTURAL REQUIREMENTS OF U.D.O. SECTION 20 AS OF THE DATE INDICATED ON THESE PLANS.

OWNER/DEVELOPER DATA:

DEVELOPER/OWNER:
ACG HOMES, LLC
c/o BRIAN MACUGA
4119-1 ROSE LAKE DRIVE
CHARLOTTE, NC 28217
(704) 542-5833
EMAIL: BrianM@ArborC.com

ENGINEER OF RECORD:
JONES CIVIL DESIGN, P.C.
C. MATTHEW JONES, P.E.
(704) 412-8523
EMAIL: Matt@JonesCivilDesign.com

SITE DEVELOPMENT DATA:

PROJECT NAME: 415 S. PROVIDENCE ST. SUBDIVISION
PLANS PREPARED BY: JONES CIVIL DESIGN, P.C.
PHONE #: (704) 412-8523
ZONING: U-N REZONING PETITION: N/A
URBAN NEIGHBORHOOD DISTRICT

JURISDICTION: TOWN OF WAXHAW
TAX PARCEL #: 05115069A
PROPOSED USE: RESIDENTIAL (MINOR) SUBDIVISION
LOT SIZE: 29,852/0.68 SQ. FEET/ACRES
PROPOSED UNITS: 6 TOTAL (WIDTHS VARY FROM 37' TO 41.86')
PROPOSED DENSITY: 8.8 DUA
TYPICAL LOT SIZE: VARIES (FROM 3,459 SQ. FT. TO 4,971 SQ. FT.)

EXISTING ONSITE IMPERVIOUS (& GRAVEL) AREA:
0 / 0 SQ. FT./ACRES
PROPOSED ONSITE IMPERVIOUS (& GRAVEL) AREA:
10,370/0.238 SQ. FT./ACRES

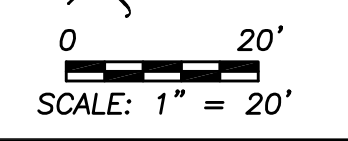
YARD REQUIREMENTS:
SETBACK (FRONT): 6' to 24' REAR YARD: 3'
SIDE YARD: 0' SIDE YARD: 0'

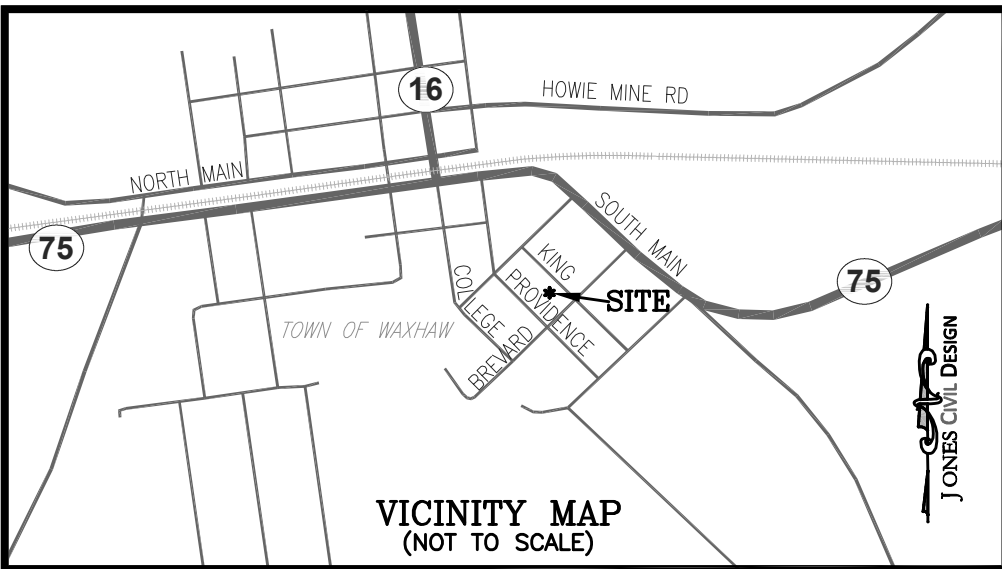
MAX. BUILDING HEIGHT:
PRINCIPAL STRUCTURE = 3 STORIES, 45' MAX.
ACCESSORY STRUCTURE = 2 STORIES, 45' MAX.

ALL SIGNAGE WILL BE PERMITTED SEPARATELY.

SHEET INDEX

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TREE PLANTING AND PRESERVATION NOTES

- PLANT MATERIAL**
- MINIMUM TREE SIZE AT PLANTING IS 2" CALIPER FOR SINGLE-STEM TREES. ALL MULTI-STEM PLANTS MUST BE TREE-FORM, MAXIMUM 3 TO 5 TRUNKS, AND MINIMUM 6" TALL. WHERE 3" SINGLE-STEM CALIPER TREES ARE SPECIFIED/REQUIRED THE MINIMUM HEIGHT SHALL BE 10' TALL, IF MULTI-STEM TREES ARE SPECIFIED THEN THEY SHALL BE A MINIMUM OF 12' TALL.
 - ALL NEW TREES MUST HAVE STRAIGHT TRUNKS WITH STRONG CENTRAL LEADERS INTACT TO THE TOP OF THE CROWN UNLESS MULTI-STEM TREES ARE SPECIFIED. ALL REQUIRED TREES SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY, HAVE NORMAL GROWTH HABITS, HAVE WELL-DEVELOPED BRANCHES, BE VIGOROUS AND HAVE FIBROUS ROOT SYSTEMS. TREES WITH CO-DOMINANT BRANCHING WILL NOT BE ACCEPTED. TREES THAT HAVE BEEN SHEARED, TOPPED OR CUT BACK TO MULTIPLY THE BRANCHING STRUCTURE WILL NOT BE ACCEPTED. TREES SHALL BE FREE OF ABRASIONS, DAMAGE, DISEASE, PESTS AND CRACKS. ALL PRUNING CUTS GREATER THAN 1/4" INCH DIAMETER SHALL HAVE CALLUS TISSUE FORMED PRIOR TO PLANTING. NO PRUNING CUT ON THE TRUNK SHALL BE MORE THAN ONE-HALF THE DIAMETER OF THE CENTRAL LEADER AT THE HEIGHT WHERE THE CUT WAS MADE. ROOT FLARES SHALL BE LOCATED AT GRADE. TREES WITH MORE THAN 2" OF SOIL COVERING THE ROOT BALL/FLARE FROM WILL NOT BE ACCEPTED.
 - SIZE OF REQUIRED PLANTS, SPREAD OF ROOTS AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH ANSI Z60.1 (LATEST EDITION) AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION, EXCEPT WHERE SPECIFIED/AUTHORIZED BY LOCAL AUTHORITY.
 - ALL REQUIRED TREES OF A PARTICULAR SPECIES AND VARIETY SHALL BE UNIFORM IN SIZE AND CONFIGURATION.
 - PERIMETER TREES IN URBAN ZONES SHALL BE 3" IN CALIPER AND BE FREE OF BRANCHES UP TO 6' FROM THE TOP OF ROOT CROWN (BALL).
 - A MINIMUM OF 50% OF NEW TREES MUST BE NATIVE SPECIES, AND SITES WITH MORE THAN 20 TREES REQUIRED WILL HAVE TO INSTALL MULTIPLE (3 OR MORE) SPECIES PURSUANT TO THE TREE ORDINANCE GUIDELINES.
 - 75% OF REQUIRED TREES MUST BE LARGE MATURE SPECIES EXCEPT IN SITUATIONS WITH OVERHEAD POWER LINE CONFLICTS.
- PLANTING REQUIREMENTS**
- SEE DETAIL SHEET FOR TREE PLANTING REQUIREMENTS.
 - PLASTIC HOSE PARTS WILL NOT BE ACCEPTED FOR TREE STAKING. SEE CLDS 40.01 FOR APPROVED STAKING METHOD/MATERIALS.
 - ALL STRAPPING AND TOP 1/3 OF WIRE BASKET AND BURLAP MUST BE CUT AWAY AND REMOVED FROM ROOT BALL WHEN PLANTING.
 - FOR NEW PLANTING AREAS, REMOVE ALL PAVEMENT, GRAVEL SUB-BASE AND CONSTRUCTION DEBRIS; REMOVE COMPACTED SOIL AND ADD 18" NEW TOPSOIL, OR TILL AND AMEND THE TOP 18" OF EXISTING SOIL TO MEET TOPSOIL/PLANTING MIX STANDARDS FOR TREES (WITHIN ENTIRE MINIMUM AREA OF 274 SQUARE FEET PER LARGE MATURE TREE AND 200 SQUARE FEET PER SMALL MATURE TREE).
 - TREES PLANTED ON PUBLIC PROPERTY WILL NEED APPROVAL FROM THE LOCAL AUTHORITY AND/OR NCDOT.
 - IF SOIL AMENDMENTS SEEM NECESSARY, NOTIFY THE ENGINEER AND LOCAL AUTHORITY FOR VERIFICATION.
 - IF ANY UTILITY IS BEING INSTALLED IN OR NEAR ANY REQUIRED TREE(S) OR TREE SAVE AREA(S), CALL THE LOCAL AUTHORITY TO RESOLVE PRIOR TO UTILITY INSTALLATION.
 - LARGE MATURING TREES MAY NOT BE PLANTED WITHIN 25' OF OVERHEAD POWER DISTRIBUTION OR TRANSMISSION LINES.
 - IF TREES CONFLICT WITH POWER LINES OR SIGNS, CALL THE LOCAL AUTHORITY TO RESOLVE BEFORE PLANTING.
 - ADJUST TREE PLANTING LOCATIONS TO AVOID UNDERGROUND UTILITIES. PLANT 15' FROM ALL UNDERGROUND UTILITIES.
 - NO LIGHT POLES, UTILITY POLES OR TRANSFORMERS CAN BE INSTALLED IN TREE ISLANDS.
 - COMMERCIAL SCALE LIGHTING (> 15' IN HEIGHT) MUST BE A MINIMUM DISTANCE OF 30' FROM A TREE. PEDESTRIAN SCALE LIGHTING (= 15' IN HEIGHT) MUST BE A MINIMUM DISTANCE OF 15' FROM A TREE. SHOW SITE LIGHTING ON LANDSCAPE PLAN.
- TREE SAVE AND PRESERVATION**
- TREE PROTECTION MUST BE INSTALLED AND VERIFIED BY THE LOCAL AUTHORITY PRIOR TO STARTING ANY CONSTRUCTION ACTIVITY.
 - SHOW TREE PROTECTION AND TREE SAVE AREA ON EROSION CONTROL, GRADING AND LANDSCAPE SHEETS.
 - AVOID EXPOSING THE TREE ROOTS. IN THIS CASE, THE ROOTS MUST BE CUT WITH A SHARP CUT WITH A SHARP PRUNING TOOL; FILL THE MATERIAL TO MINIMIZE EXPOSURE TO AIR. TREE SAVE AREAS MUST BE RECORDED ON A FINAL PLAT WITH THE MECKLENBURG COUNTY REGISTER OF DEEDS BEFORE URBAN FORESTRY HOLDS CAN BE RELEASED. A 10' NO BUILD ZONE AROUND TREE SAVE AREAS MUST BE REFERENCED ON THE PLAT.
 - TREE SAVE AREAS SHALL BE FREE OF INVASIVE PLANT SPECIES. IF AN AREA PROPOSED FOR TREE SAVE CONTAINS INVASIVE PLANT SPECIES AT TIME OF PROPOSAL, SUCH INVASIVE PLANT SPECIES SHALL BE REMOVED PRIOR TO FINAL CO.
 - THE AREA OF ANY EASEMENTS (WATER, SEWER, UTILITY, ETC.) CAN NOT BE COUNTED TOWARD THE TREE SAVE REQUIREMENT.
 - ANY ALTERATIONS TO TREE SAVE AREAS MUST BE ACCOMPLISHED WITHOUT MECHANIZED EQUIPMENT.
 - NO STRUCTURE WILL BE ALLOWED WITHIN 10' OF TREE SAVE AREAS UNLESS APPROVED BY URBAN FORESTRY.
 - ALL TREES ON PUBLIC PROPERTY ARE PROTECTED BY LAW AND REMOVAL MUST BE PERMITTED BY THE LOCAL AUTHORITY AND/OR NCDOT.
 - CONTACT THE LOCAL AUTHORITY PRIOR TO ANY CRANE SET-UP, MACHINERY OPERATION OR TEMPORARY BUILDING ERECTION THAT MAY IMPACT PROTECTED TREES OR TREE SAVE AREAS, INCLUDING TREES LOCATED IN A RIGHT OF WAY. IMPACTS MAY INCLUDE BUT ARE NOT LIMITED TO: ENCRoACHING WITH TREE DRIP-LINES, EXCAVATION, SOIL COMPACTION, TREE TRIMMING, ERECTING AND DISMANTLING OF CONSTRUCTION CRANES.
- GENERAL**
- CALL THE LOCAL AUTHORITY FOR AN INSPECTION OF TREE PROTECTION FOR THIS AREA, AT LEAST 3 DAYS IN ADVANCE OF CONSTRUCTION.
 - VISIT THE TOWN OF WAXHAW WEBSITE: [HTTPS://WWW.WAXHAW.COM/172/PLANS-POLICIES-ORDINANCES/](https://www.waxhaw.com/172/PLANS-POLICIES-ORDINANCES/) FOR ADDITIONAL INFORMATION, ORDINANCES, AND REQUIREMENTS.

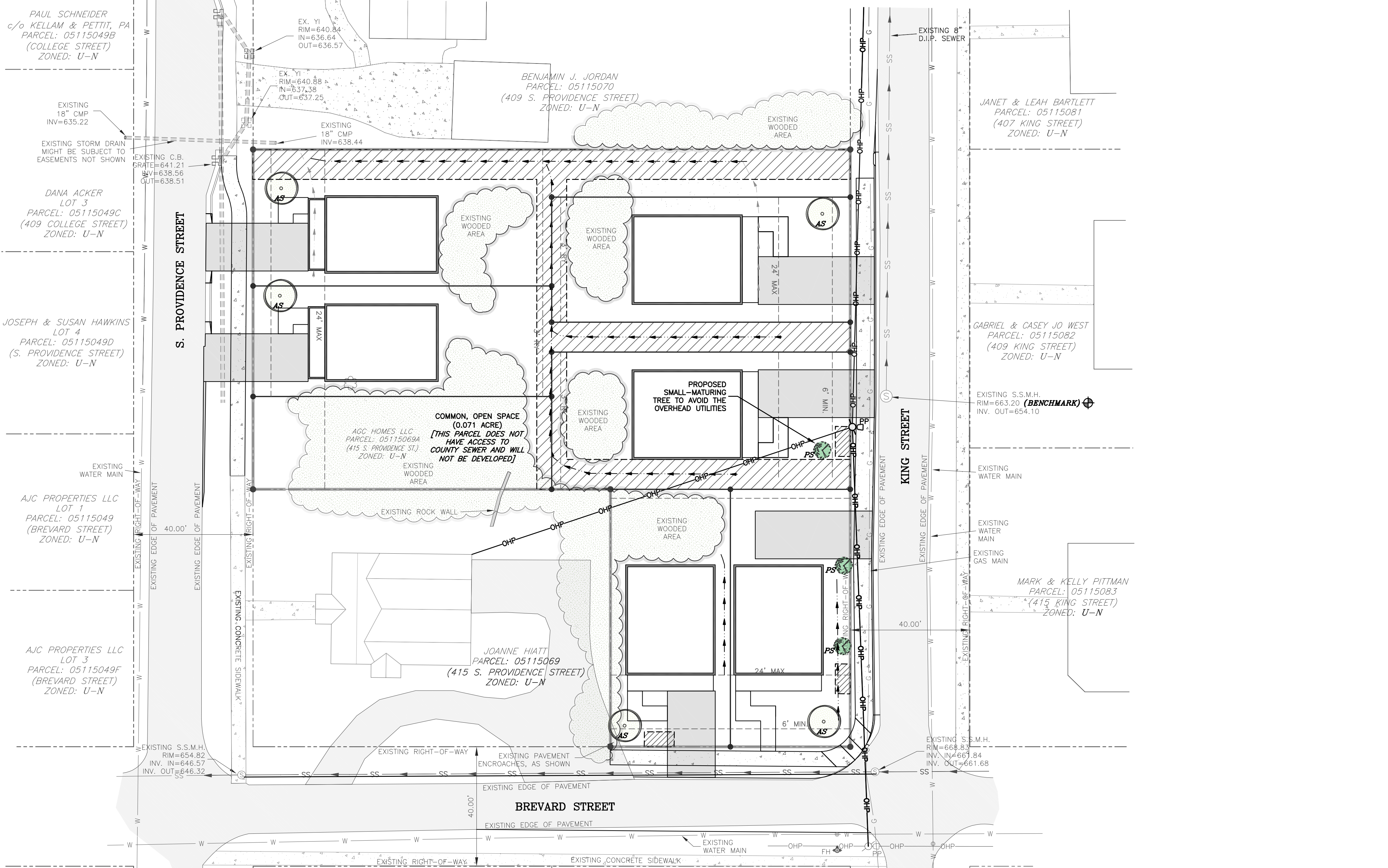
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TOPSOIL PLANTING MIX - MINIMUM REQUIREMENTS

- WHERE PAVEMENT CUTOUPS OR RENOVATED SITES ARE REQUIRED AND/OR WHERE NEW PLANTING STRIPS OR ISLANDS ARE REQUIRED, ALL PAVEMENT, CONSTRUCTION DEBRIS AND GRAVEL SUB-BASE MUST BE REMOVED BEFORE PREPARING SOIL AND PLANTING TREES. EXISTING COMPACTED SOIL MUST BE REMOVED AND REPLACED WITH 24" OF TOPSOIL/PLANTING MIX -OR- EXISTING SOIL MAY BE UNCOMPACTED TO A DEPTH OF 24" AND AMENDED TO MEET TOPSOIL STANDARDS FOR THE ENTIRE PLANTING AREA.
- SOIL IN ALL PLANTING STRIPS OR ISLANDS, WHETHER EXISTING OR NEW (ON NEW OR RENOVATED SITES), MUST MEET THE MINIMUM TOPSOIL/PLANTING MIX SPECIFICATIONS. SOIL AMENDMENTS OR FRESH TOPSOIL/PLANTING MIX ARE OFTEN NEEDED FOR PLANTING AREAS AT SITES WHERE ORIGINAL TOPSOIL IS OF POOR QUALITY, HEAVILY COMPACTED OR WHERE TOPSOIL HAS BEEN COMPLETELY REMOVED DURING GRADING.
- TOPSOIL/PLANTING MIX SHOULD BE NATURAL, FERTILE, AGRICULTURAL SOIL CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH. IT SHOULD BE UNIFORM COMPOSITION THROUGHOUT, WITH ADMIXTURE OF SUBSOIL. IT SHOULD BE FREE OF STONES, LUMPS, LIVE PLANTS AND THEIR ROOTS, STICKS AND OTHER EXTRANEOUS MATTER. TOPSOIL SHOULD NOT BE USED WHILE IN A FROZEN OR MUDDY CONDITION.
- TOPSOIL/PLANTING MIX SHALL HAVE AN ACIDITY RANGE OF PH 5.5-7.0 AND THE FOLLOWING COMPOSITION:
 - CLAY (RED CLAY, WELL PULVERIZED) MINIMUM 10%; MAXIMUM 35%
 - COMPOST*/ORGANIC MINIMUM 5%; MAXIMUM 10%
 - SILT MINIMUM 50%; MAXIMUM 50%
 - COARSE SAND (FREE OF ROCKS, 0.5 TO 1.0 MM F) MINIMUM 30%; MAXIMUM 45%

* ORGANIC MATERIAL SUCH AS SAWDUST OR LEAF MOLD THAT HAS COMPLETED THE DECOMPOSITION PROCESS



LANDSCAPE LEGEND

SYMBOL	DESCRIPTION	QTY.
(Circle with 'S')	PROPOSED SUGAR MAPLE (ACER SACHARINUM) (LMT) 2" CAL., 8' MIN. HEIGHT, B&B	5
(Circle with 'C')	PROPOSED JAPANESE 'KWANZAN' CHERRY (PRUNUS SERRULATA 'KWANZAN') (SMT) 2" CAL., 6' MIN. HEIGHT, B&B	3

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CS	CREEK/SWALE/DITCH
SD	STORM DRAIN PIPE
TL	TREELINE

TOPSOIL PLANTING - RECOMMENDATIONS

- ALL PLANTING AREAS SHOULD BE TESTED FOR PROPER DRAINAGE.
- DRAINAGE SHOULD BE CORRECTED AS NECESSARY TO INSURE PROPER TREE GROWTH AND SURVIVAL.
- THE FOLLOWING LEVEL OF NUTRIENT ELEMENTS IS RECOMMENDED FOR PROPER GROWTH:
 - CALCIUM 55 - 80%
 - MAGNESIUM 10 - 30%
 - POTASSIUM 5 - 8%

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 1019 THORNSBY LANE, MATTHEWS, NC 28105
 PH: (704) 412-8523
 www.jonescivil.com

FINAL DESIGN
 SEAL 034936
 ENGINEER
 CURTIS MATTHEW JONES
 FOR CONSTRUCTION
 NORTH CAROLINA
 JONES CIVIL DESIGN, P.C.
 C-3859
 STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION

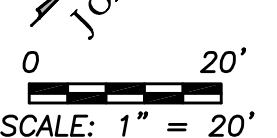
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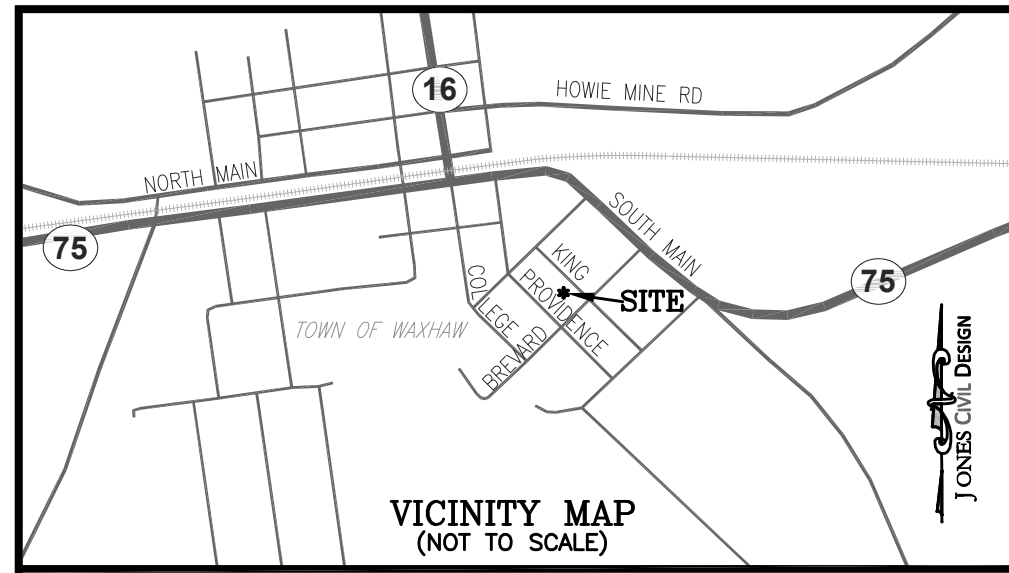
**KING'S CORNER
 (SITE DEVELOPMENT)**

LANDSCAPE PLAN
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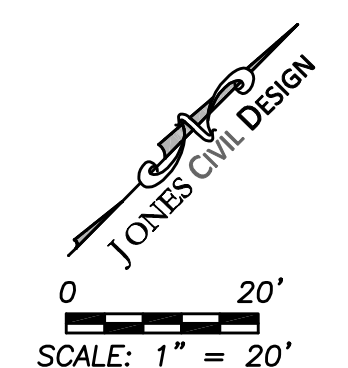
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 CIVIL ENGINEERING | LAND SOLUTIONS
 FROM CONCEPTION TO COMPLETION
 VETERAN - OWNED
 ENGINEER@JonesCivilDesign.com
 1019 THORNSBY LANE, MATTHEWS, NC 28105
 PH: (704) 412-8523
 www.JonesCivilDesign.com

FINAL DESIGN
 NORTH CAROLINA
 JONES CIVIL DESIGN, P.C.
 C-3859
 CURTIS MATTHEW JONES
 ENGINEER
 034936
 FOR CONSTRUCTION
 NORTH CAROLINA
 JONES CIVIL DESIGN, P.C.
 C-3859
 CURTIS MATTHEW JONES
 ENGINEER
 034936

REV	DATE	BY	DESCRIPTION
1	4/27/19	CAJ	REVISED PER TOWN COMMENTS
2	6/28/19	CAJ	REVISED PER TOWN COMMENTS
3	7/15/19	CAJ	UPDATED STORM DRAIN EASEMENT

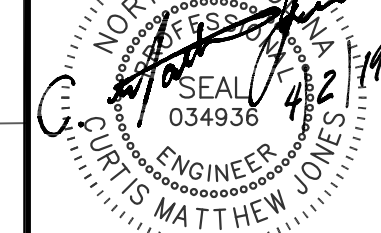
**KING'S CORNER
 (SITE DEVELOPMENT)**

**EXISTING, AERIAL
 PHOTO OF SITE**
 415 S. PROVIDENCE ST.
 WAXHAW, NC
 FILE NAME: BASE-18011.dwg JOB NUMBER: 18011
 ORIGINAL DATE: 3/29/2019 DRAWN BY: CAJ

**SHEET
 C1.3**

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FINAL DESIGN



FOR CONSTRUCTION

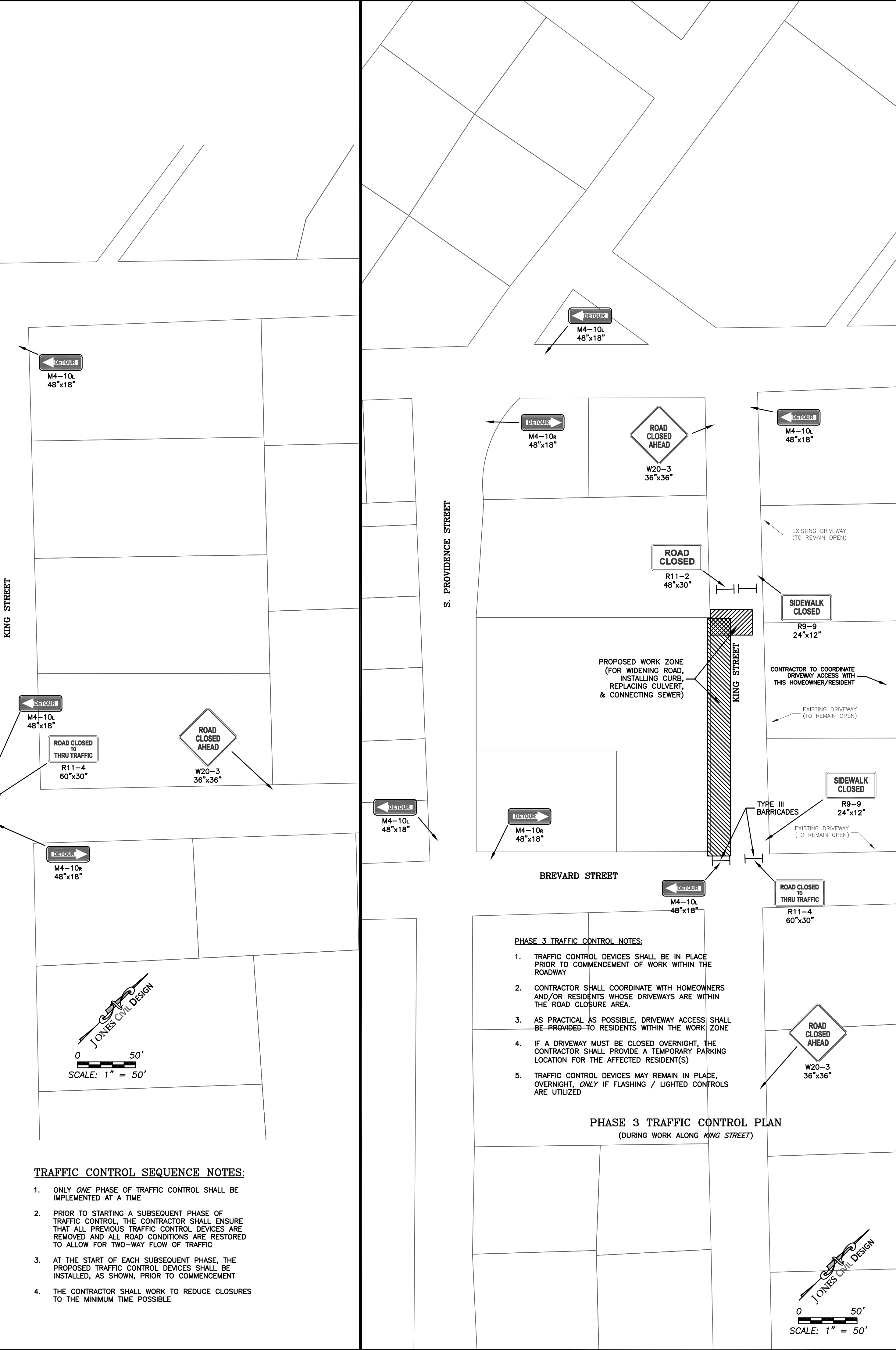
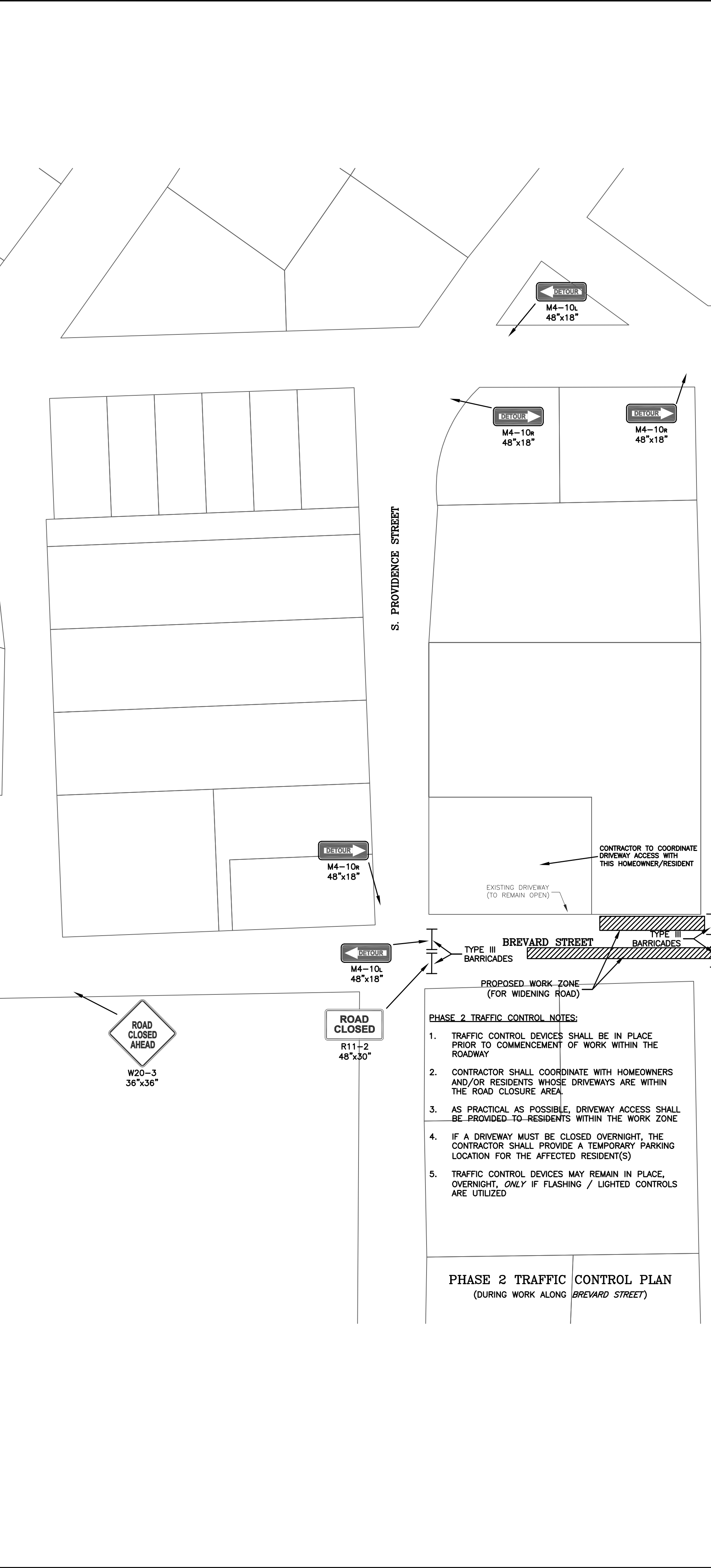
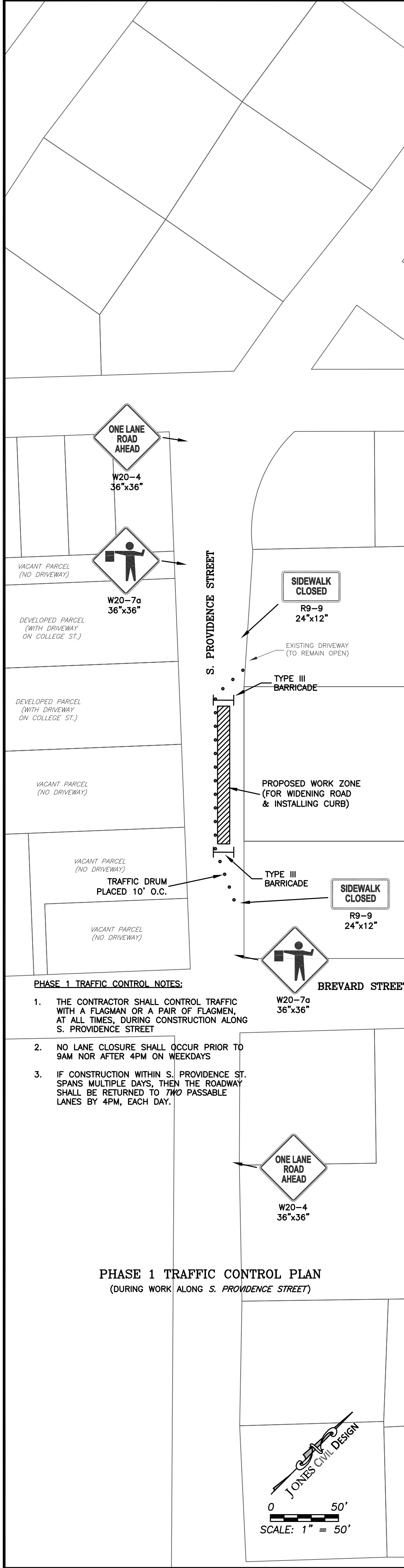


REV.	DATE	BY	DESCRIPTION

KING'S CORNER (SITE DEVELOPMENT)

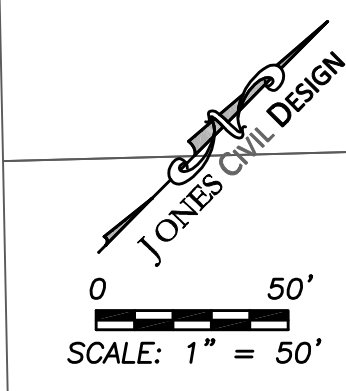
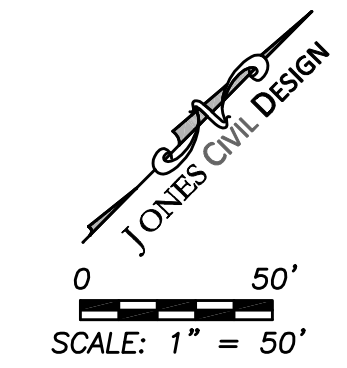
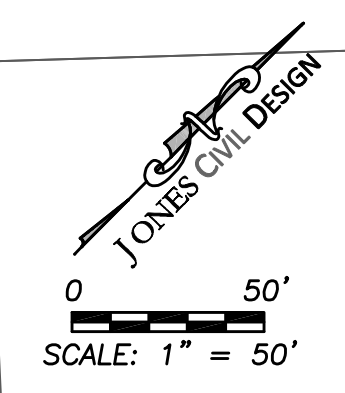
TRAFFIC CONTROL PLAN
415 S. PROVIDENCE ST.
WAXHAW, NC

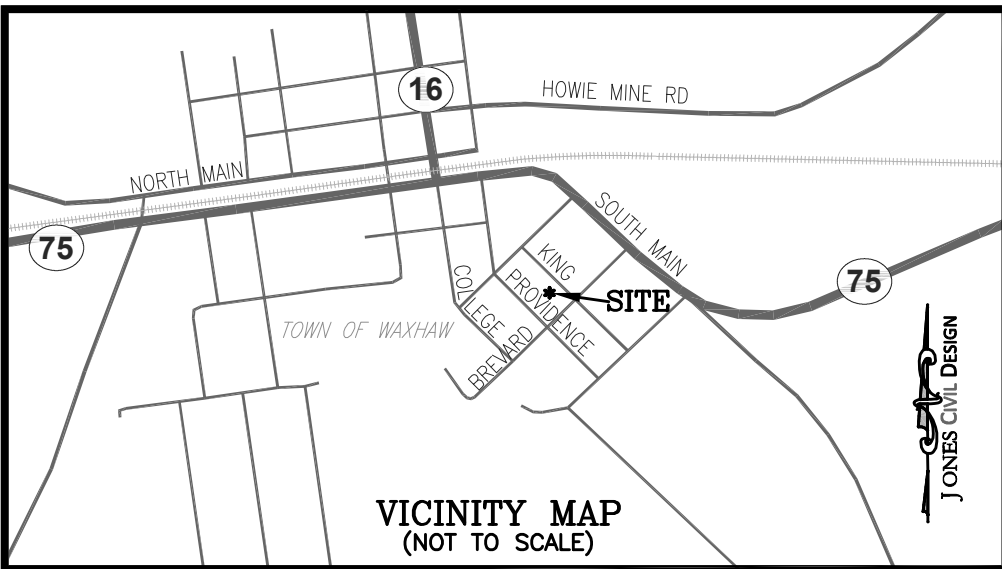
FILE NAME: BASE-18011.dwg
JOB NUMBER: 18011
ORIGINAL DATE: 3/29/2019
DRAWN BY: CAJ



TRAFFIC CONTROL SEQUENCE NOTES:

- ONLY ONE PHASE OF TRAFFIC CONTROL SHALL BE IMPLEMENTED AT A TIME
- PRIOR TO STARTING A SUBSEQUENT PHASE OF TRAFFIC CONTROL, THE CONTRACTOR SHALL ENSURE THAT ALL PREVIOUS TRAFFIC CONTROL DEVICES ARE REMOVED AND ALL ROAD CONDITIONS ARE RESTORED TO ALLOW FOR TWO-WAY FLOW OF TRAFFIC
- AT THE START OF EACH SUBSEQUENT PHASE, THE PROPOSED TRAFFIC CONTROL DEVICES SHALL BE INSTALLED, AS SHOWN, PRIOR TO COMMENCEMENT
- THE CONTRACTOR SHALL WORK TO REDUCE CLOSURES TO THE MINIMUM TIME POSSIBLE





UTILITY NOTES:

1. THE PROPOSED SEWER LINE SHALL HAVE A MINIMUM COVER OF 36".
2. DUCTILE-IRON PIPE SHALL BE REQUIRED FOR WATER AND SEWER LINES IF ANY OF THE FOLLOWING CONDITIONS ARE NOT MET:
 12" CLEARANCE FROM STORM DRAINS, GAS MAINS, TELEPHONE DUCT BANKS, AND UNDERGROUND CABLES.
 18" VERTICAL CLEARANCE FOR WATER LINE INSTALLED ABOVE SEWER LINE.
 WATER LINE CROSSING UNDER SEWER LINE.
 10' HORIZONTAL SEPARATION FOR WATER PARALLEL TO SEWER LINE.
3. THE SIZE AND LOCATION OF EXISTING WATER AND SEWER LINES SHALL BE FIELD-VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR SHALL COORDINATE THE PROPOSED UTILITY WORK WITH UNION COUNTY PUBLIC WORKS (UCPW) AND BUILDING CODE ENFORCEMENT.
5. ALL UTILITY TAPS ARE TO BE INSTALLED BY THE DEVELOPER'S LICENSED UTILITY CONTRACTOR UNDER UCPW INSPECTION.
6. ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH UNION COUNTY POLICIES, PROCEDURES, STANDARDS, AND SPECIFICATIONS FOR PUBLIC AND PRIVATE UTILITIES.
7. ALL SANITARY SEWER LATERALS SHALL HAVE A MINIMUM 1.0% SLOPE.
8. THE CONTRACTOR SHALL PROVIDE A MINIMUM 48-HOUR NOTICE TO THE OWNER OR THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCING CONSTRUCTION.
9. THE CONTRACTOR SHALL CONTACT "JONES CIVIL DESIGN" AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION SO THAT A REPRESENTATIVE FROM THE FIRM CAN BE ON-SITE, PERIODICALLY, TO OBSERVE CONSTRUCTION.
10. THE CONTRACTOR SHALL PROVIDE "JONES CIVIL DESIGN" WITH AN AS-BUILT SURVEY OF THE WATER AND SEWER LINES UPON COMPLETION OF UTILITY CONSTRUCTION.
11. THE CONTRACTOR IS RESPONSIBLE FOR THE REPAIR AND/OR REPLACEMENT OF ANY UTILITY DAMAGED DURING CONSTRUCTION.
12. THE CONTRACTOR SHALL USE EXTREME CARE WHEN WORKING NEAR ALL UNDERGROUND AND OVERHEAD UTILITIES.

SUPPLEMENTAL NOTES:

1. VERIFICATION HAS BEEN MADE BY JONES CIVIL DESIGN THAT EACH LOT IS CAPABLE OF HAVING GRAVITY SEWER SERVICE TO THE CENTER OF THE LOT AT THE FRONT SETBACK.
2. REFER TO UNION COUNTY SPECIFICATIONS, UNION COUNTY WATER & SEWER EXTENSION POLICY, AND UNION COUNTY WATER & SEWER EXTENSION ORDINANCE.
3. DE-WATERING: THE CONTRACTOR SHALL, AT ALL TIMES, PROVIDE AND MAINTAIN AMPLIFIED MEANS AND EQUIPMENT WITH WHICH TO REMOVE AND PROPERLY DISPOSE OF ANY AND ALL WATER ENTERING THE EXCAVATION OR OTHER PARTS OF THE WORK AND KEEP ALL EXCAVATIONS DRY UNTIL SUCH TIME AS PIPE LAYING AND GRADING IS COMPLETED AND STRUCTURES TO BE BUILT THEREIN ARE COMPLETED.
4. NO WATER SHALL BE ALLOWED TO RISE ABOVE THE PIPE IN UNBACKFILLED TRENCHES NOR SHALL IT BE ALLOWED TO RISE OVER MASONRY UNTIL THE CONCRETE OR MORTAR HAS SET (MINIMUM 24 HOURS). ALL WATER PUMPED OR DRAINED FROM THE WORK SHALL BE DISPOSED OF IN SUCH A MANNER AS TO PREVENT SILTATION AND EROSION TO ADJACENT PROPERTY OR OTHER CONSTRUCTION.

VERIFICATION NOTE:

THIS DESIGN HAS BEEN FIELD VERIFIED BY A GROUND SURVEY CONDUCTED BY PHOENIX LAND SURVEYING, DATED: JULY 18, 2018 - UPDATED, MARCH 19, 2019.

GENERAL NOTES:

1. THIS PLAN IS NOT A CERTIFIED SURVEY. BOUNDARY AND TOPOGRAPHIC INFORMATION WAS OBTAINED FROM A SURVEY CONDUCTED BY PHOENIX LAND SURVEYING, DATED JUNE 18, 2018; UPDATED ON JULY 18, 2018 - UPDATED, MARCH 19, 2019.
2. ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AND SHOULD BE FIELD-VERIFIED PRIOR TO CONSTRUCTION. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN. CONFLICTS BETWEEN EXISTING UTILITIES AND PROPOSED EXCAVATION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
3. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 48 HOURS NOTICE TO OWNER OR REPRESENTATIVE PRIOR TO INTERRUPTION OF ANY EXISTING UTILITY.
4. THE CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ANY UTILITIES DAMAGED DURING CONSTRUCTION.
5. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL NECESSARY PERMITS AND APPROVALS HAVE BEEN OBTAINED PRIOR TO CONSTRUCTION. THESE PERMITS AND APPROVALS MAY INCLUDE BUT ARE NOT LIMITED TO GRADING, DEMOLITION, ZONING, BUILDING, DRIVEWAY, DETENTION, SUBDIVISION, SPECIAL USE, SEWER AND WATER.
6. CONTACT THE APPROPRIATE UTILITY COMPANY TO RELOCATE ANY EXISTING UTILITY POLES.
7. A PERMIT MAY BE REQUIRED IF REMOVING TREES FROM THE ROAD RIGHT-OF-WAY. THE CONTRACTOR SHALL COORDINATE AND VERIFY WITH THE LOCAL AUTHORITY PRIOR TO REMOVING ANY R/W TREES.
8. APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS.
9. BEFORE YOU DIG, STOP. CALL THE NC ONE-CALL CENTER AT 1-800-632-4949. "IT'S THE LAW"

LEGEND

- SS — SANITARY SEWER LINE
- W — WATER LINE
- G — GAS LINE
- C — CONDUIT (EMPTY PVC)
- UGE — UNDERGROUND ELECTRIC
- OHP — OVERHEAD POWER
- METAL FENCE
- WOODEN FENCE
- SILT FENCE
- TREE PROTECTION FENCE
- PROPERTY / RIGHT-OF-WAY
- CREEK/SWALE/DITCH
- STORM DRAIN PIPE
- TREELINE

[PUBLIC] MATERIAL SUMMARY:

4" PVC SANITARY SEWER LATERAL	40 L.F.
4" DIAMETER PVC CLEANOUT	4, EA.
3/4" WATER LINE	208 L.F.
4" DIAMETER MANHOLE	2, EA.

(PRIVATE) MATERIAL SUMMARY:

4" PVC SANITARY SEWER LATERAL	135 L.F.
4" DIAMETER PVC CLEANOUT	6, EA.
3/4" WATER LINE	160 L.F.
1" DIAMETER PVC FORCEMAIN	298.5 L.F.

DEVELOPMENT DATA:

DEVELOPER/OWNER:
 ARBOR CONSTRUCTION
 c/o BRIAN MACUGA
 4119-1 ROSE LAKE DRIVE
 CHARLOTTE, NC 28217
 (704) 542-5833
 EMAIL: BrianM@ArborC.com

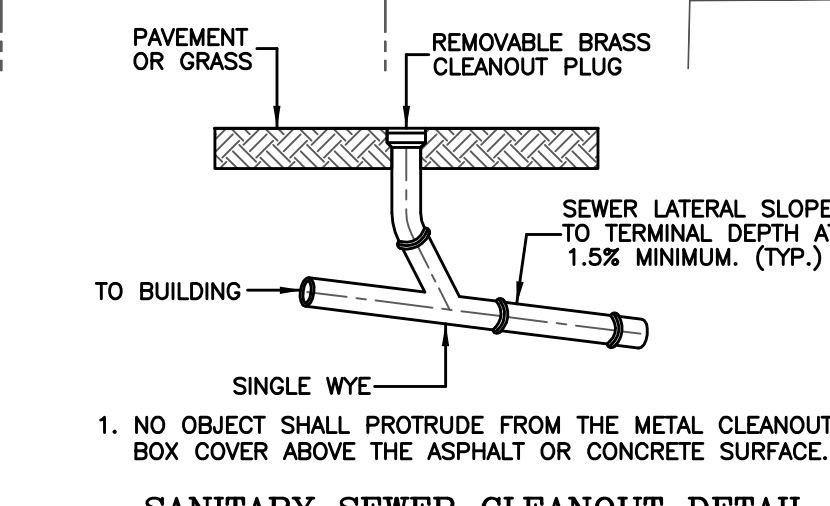
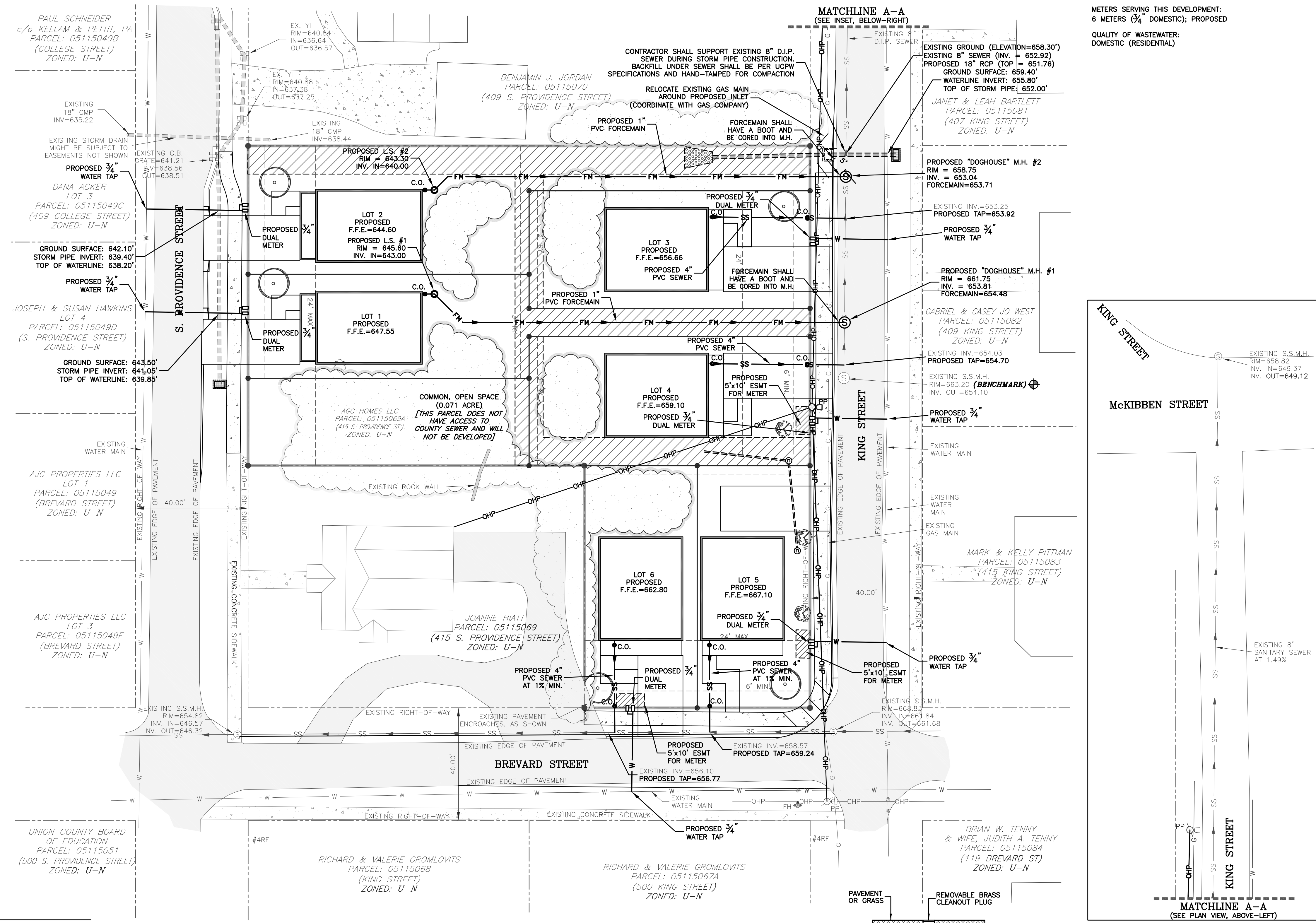
ENGINEER OF RECORD:
 JONES CIVIL DESIGN, P.C.
 MATT JONES, P.E.
 (704) 412-8523
 EMAIL: Matt@JonesCivilDesign.com

PROPOSED USE:
 RESIDENTIAL, SINGLE-FAMILY

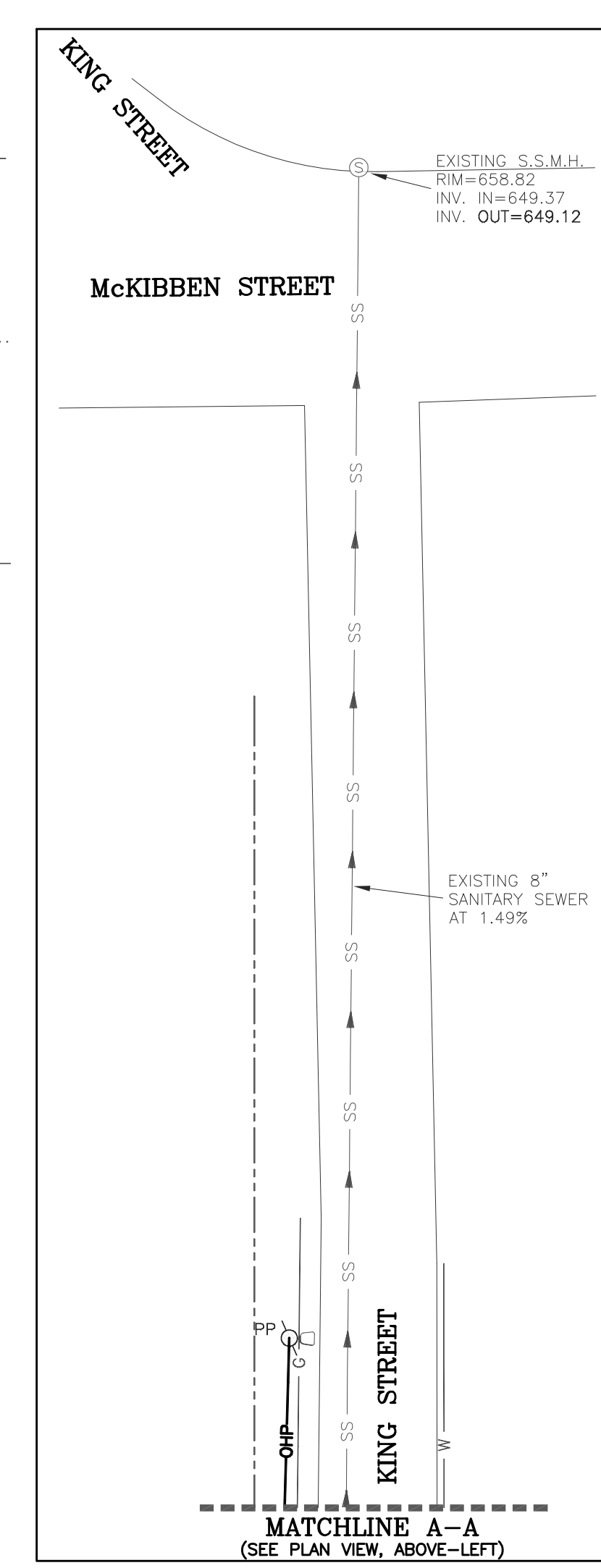
AVERAGE DAILY FLOW:
 280 GPD (PER RESIDENCE) x 6 RESIDENCES = 1,680 GPD

METERS SERVING THIS DEVELOPMENT:
 6 METERS (3/4" DOMESTIC); PROPOSED

QUALITY OF WASTEWATER:
 DOMESTIC (RESIDENTIAL)



1. NO OBJECT SHALL PROTRUDE FROM THE METAL CLEANOUT BOX COVER ABOVE THE ASPHALT OR CONCRETE SURFACE.



JONES CIVIL DESIGN
 CIVIL ENGINEERING | LAND SOLUTIONS
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FINAL DESIGN
 NORTH CAROLINA
 REAL ESTATE
 CURTIS MATT THEW JONES
 034936

FOR CONSTRUCTION
 NORTH CAROLINA
 JONES CIVIL DESIGN, P.C.
 C-3859

REV.	DATE	BY	DESCRIPTION
1	1/27/19	LMJ	REVISED PER TOWN & COUNTY (PUBLIC WORKS) COMMENTS
2	6/28/19	LMJ	REVISED PER TOWN & COUNTY (PUBLIC WORKS) COMMENTS
3	7/15/19	LMJ	UPDATED STORM DRAIN EASEMENT
4	8/12/19	LMJ	REVISED PER UNION COUNTY (PUBLIC WORKS) COMMENTS
5	8/26/19	LMJ	REVISED PER UNION COUNTY (PUBLIC WORKS) & TOWN COMMENTS

UTILITY PLAN
 415 S. PROVIDENCE ST.
 WAXHAW, NC

SHEET
 C2.1

FILE NAME: BASE-18011.dwg
 JOB NUMBER: 18011
 ORIGINAL DATE: 3/29/2019
 DRAWN BY: CMJ

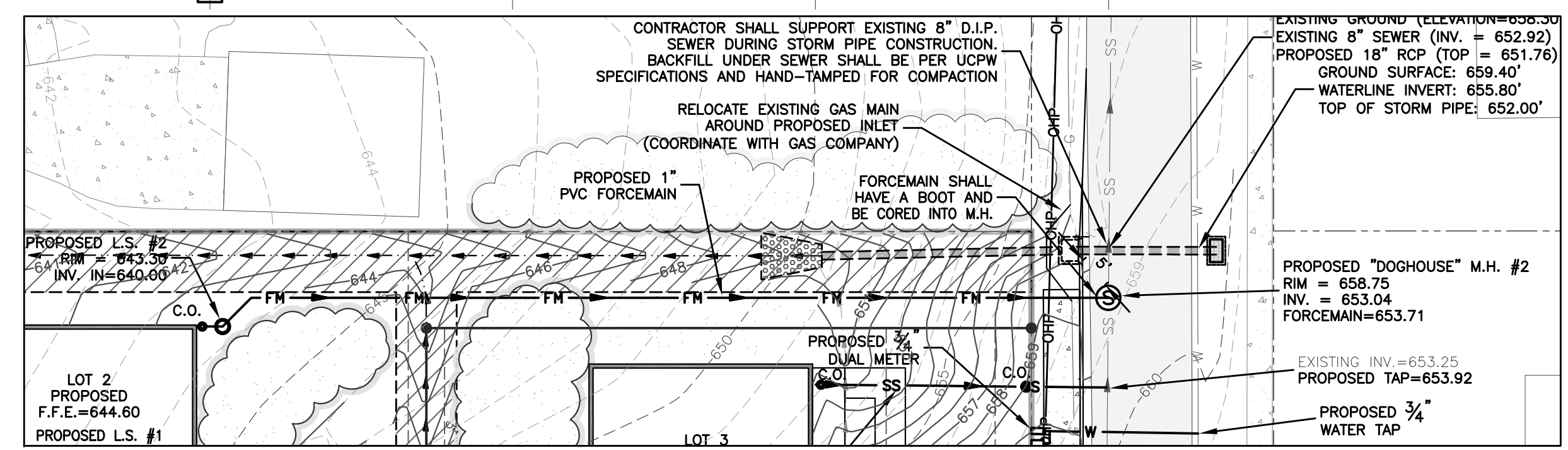
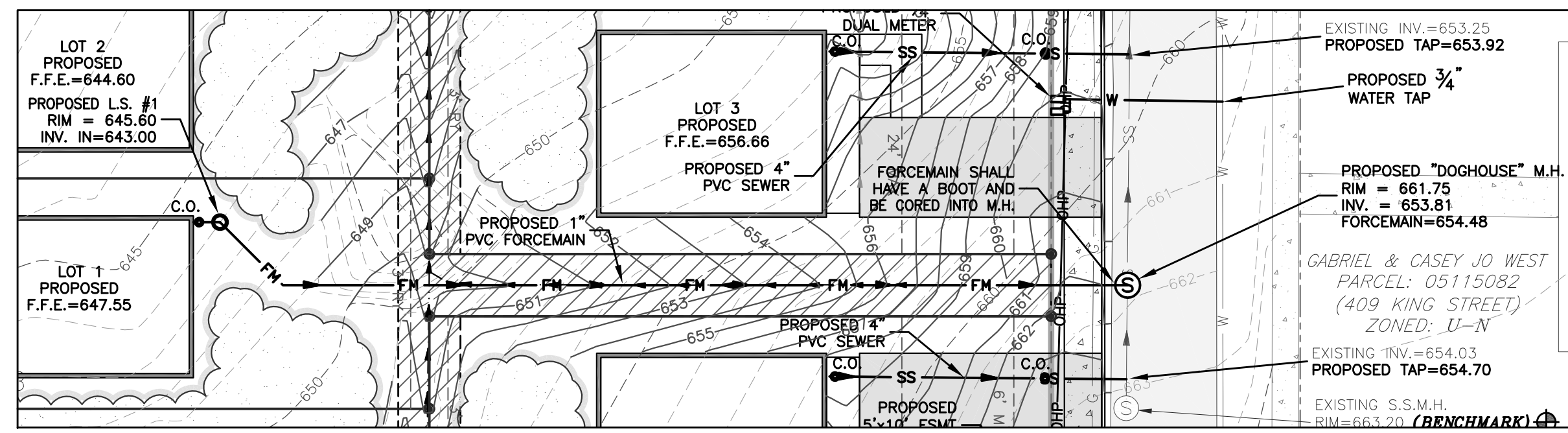
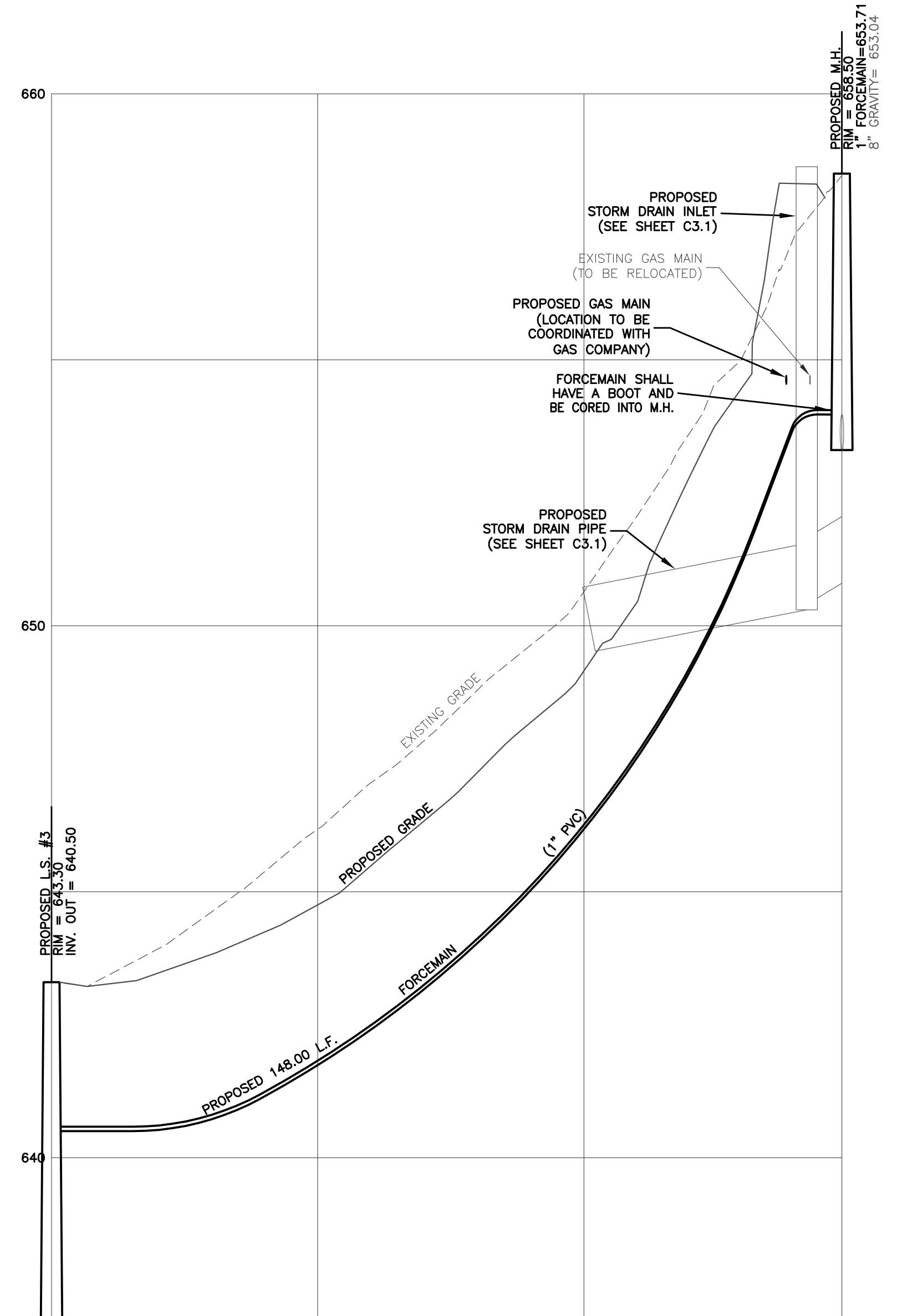
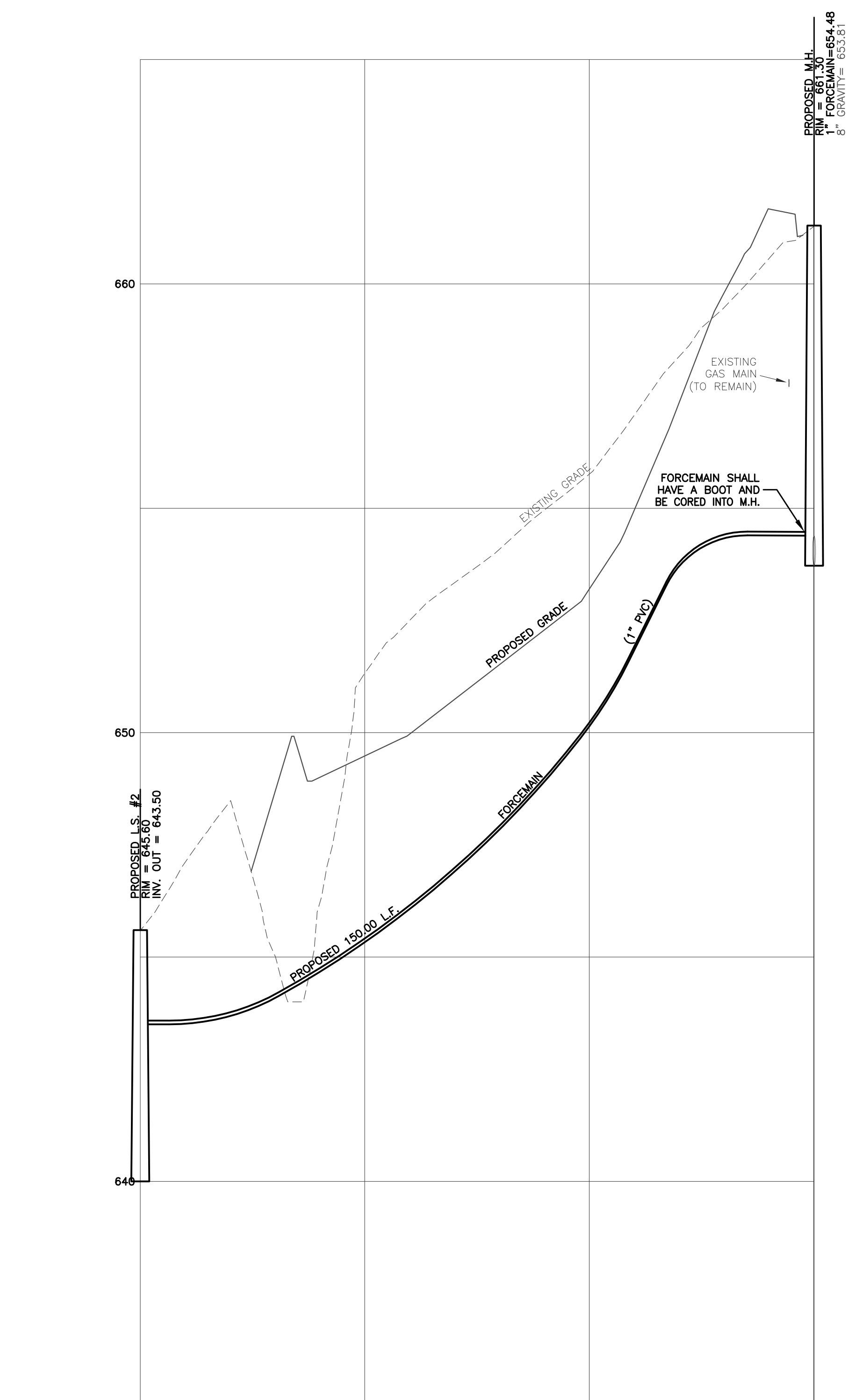
REV	DATE	BY	DESCRIPTION
1	4/22/19	CMJ	ISSUED PER TOWN COMMENTS
2	6/28/19	CMJ	REVISED PER TOWN & COUNTY (PUBLIC WORKS) COMMENTS
3	7/15/19	CMJ	UPDATED STORM DRAIN EASEMENT
4	8/2/19	CMJ	REVISED PER UNION COUNTY (PUBLIC WORKS) COMMENTS
5	8/26/19	CMJ	REVISED PER UNION COUNTY (PUBLIC WORKS) & TOWN COMMENTS

KING'S CORNER
(SITE DEVELOPMENT)

PROPOSED FORCEMAIN
PLAN & PROFILE
415 S. PROVIDENCE ST.
WAXHAW, NC

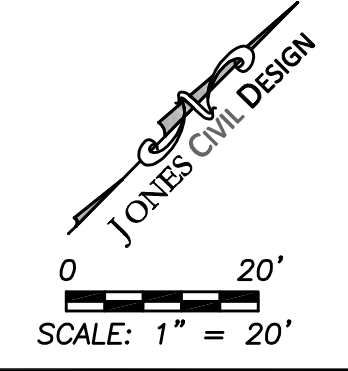
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ORIGINAL DATE: 3/29/2019 DRAWN BY: CMJ

SHEET
C2.2

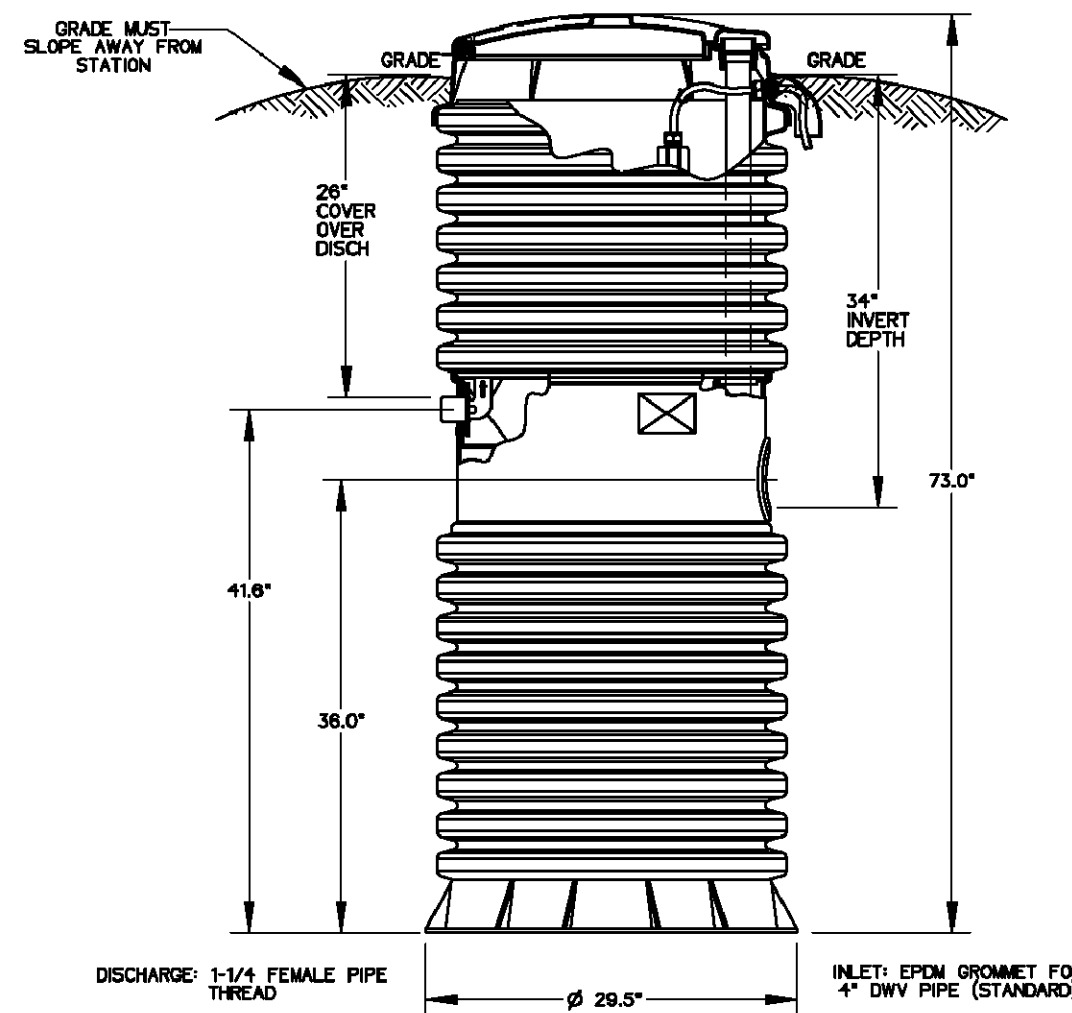


- LEGEND**
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 - W — WATER LINE
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 - C — CONDUIT (EMPTY PVC)
 - UGE — UNDERGROUND ELECTRIC
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 - M — METAL FENCE
 - WF — WOODEN FENCE
 - SF — SILT FENCE
 - TF — TREE PROTECTION FENCE
 - PR — PROPERTY / RIGHT-OF-WAY
 - CS — CREEK/SWALE/DITCH
 - SD — STORM DRAIN PIPE
 - TL — TREELINE

CALL
811
BEFORE YOU DIG.
KNOW WHAT'S BELOW
IT'S THE LAW



OPTIONS : DH071-74 (HARD WIRED LEVEL CONTROLS)
 DR071-74 (WIRELESS LEVEL CONTROLS)



CONCRETE BALLAST MAY BE REQUIRED
SEE INSTALLATION INSTRUCTIONS
FOR DETAILS

NOTE: DIMENSIONS ARE FOR REF ONLY

AD	CAH	07/12/07	C	1/16
DR BY	CHK'D	DATE	ISSUE	SCALE

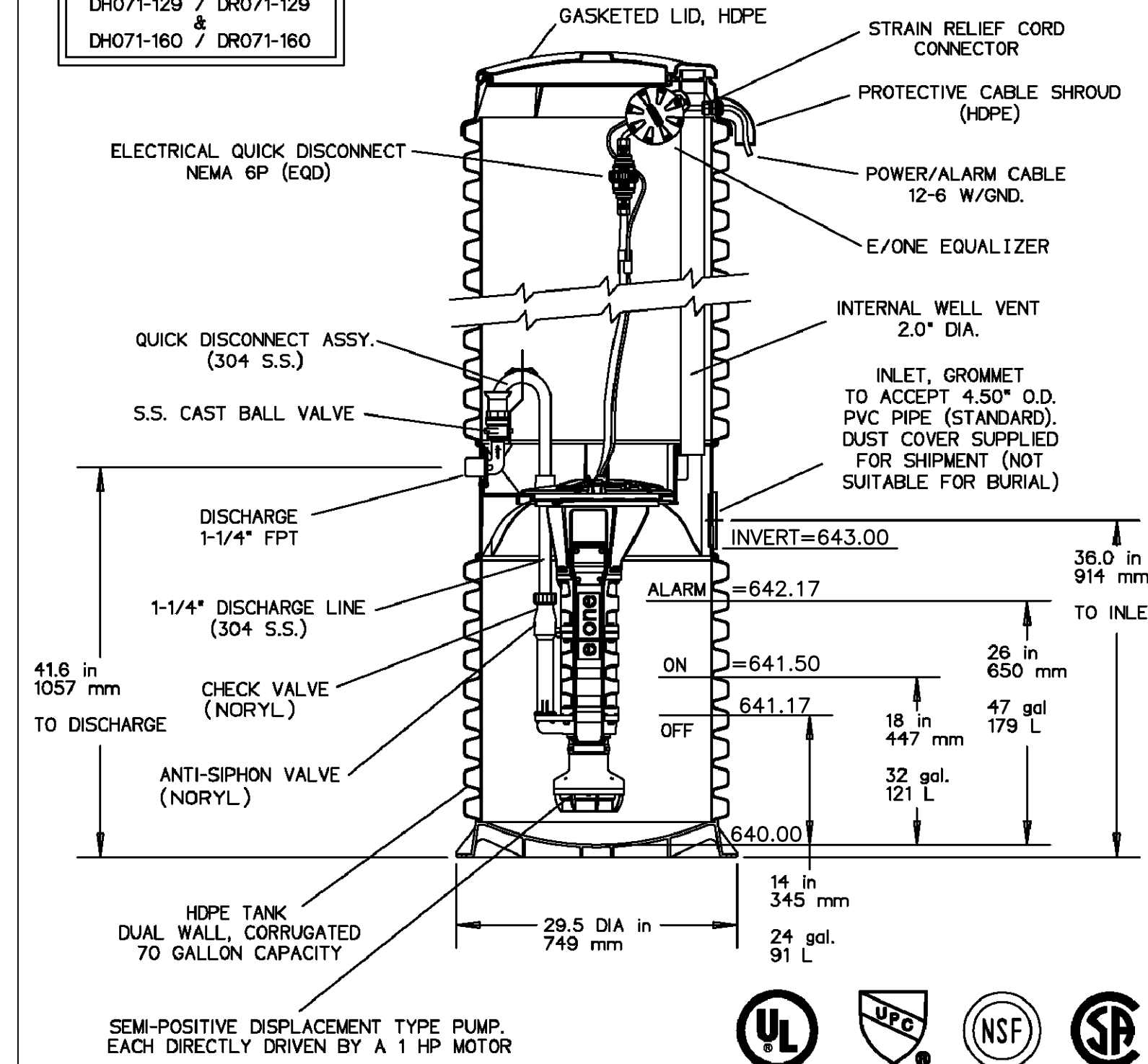


MODEL DH071-74 / DR071-74

NA0050P05

OPTIONS : DH071 (HARD WIRED LEVEL CONTROLS)
 DR071 (WIRELESS LEVEL CONTROLS)

FIELD JOINT REQUIRED FOR MODELS DH071-129 / DR071-129 & DH071-160 / DR071-160



CONCRETE BALLAST MAY BE REQUIRED
SEE INSTALLATION INSTRUCTION
FOR DETAILS

NOTE: DIMENSIONS ARE FOR REF ONLY

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DR BY	CHK'D	DATE	ISSUE	SCALE

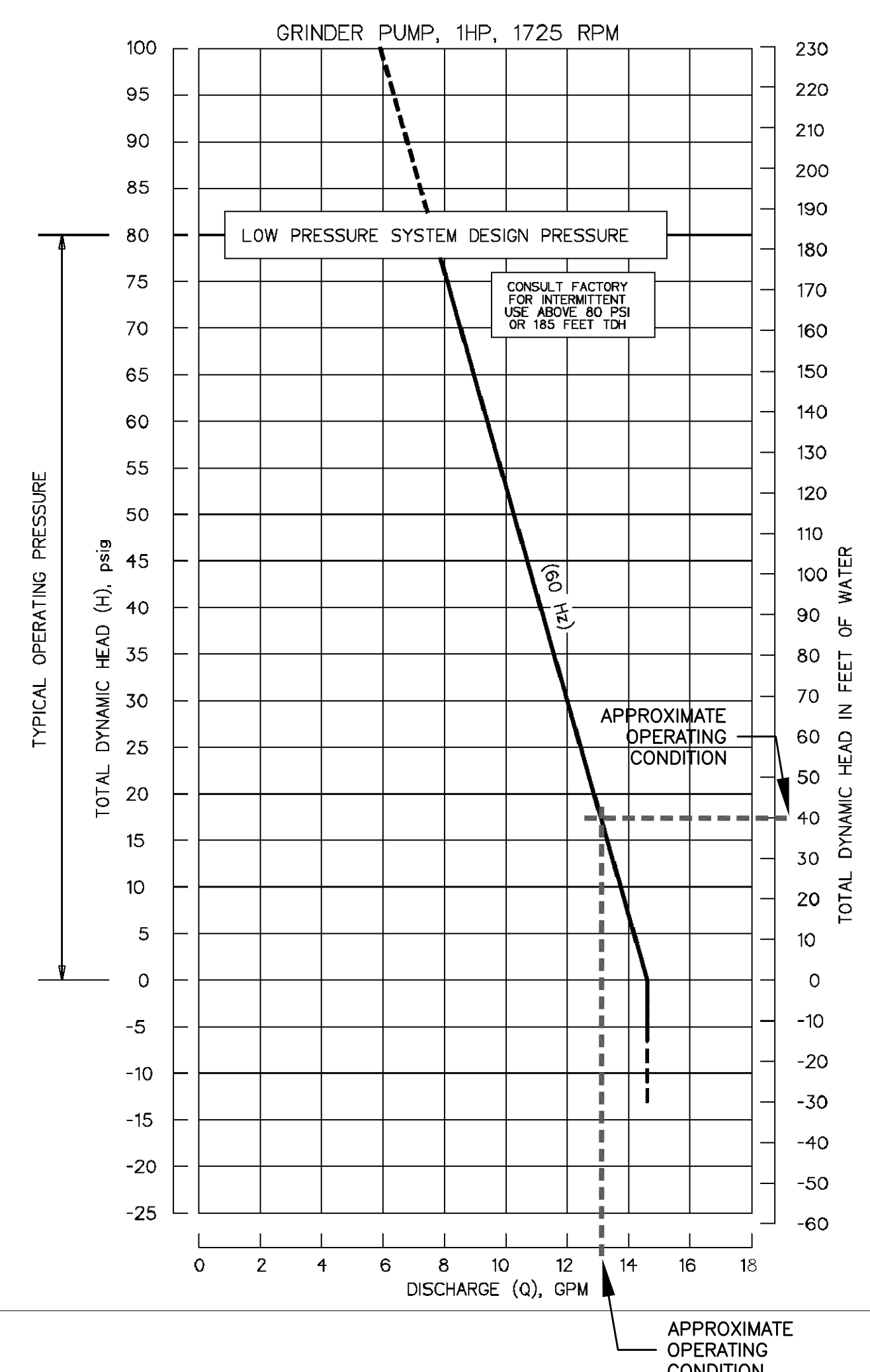


MODEL DH071 / DR071
DETAIL SHEET

NA0050P02

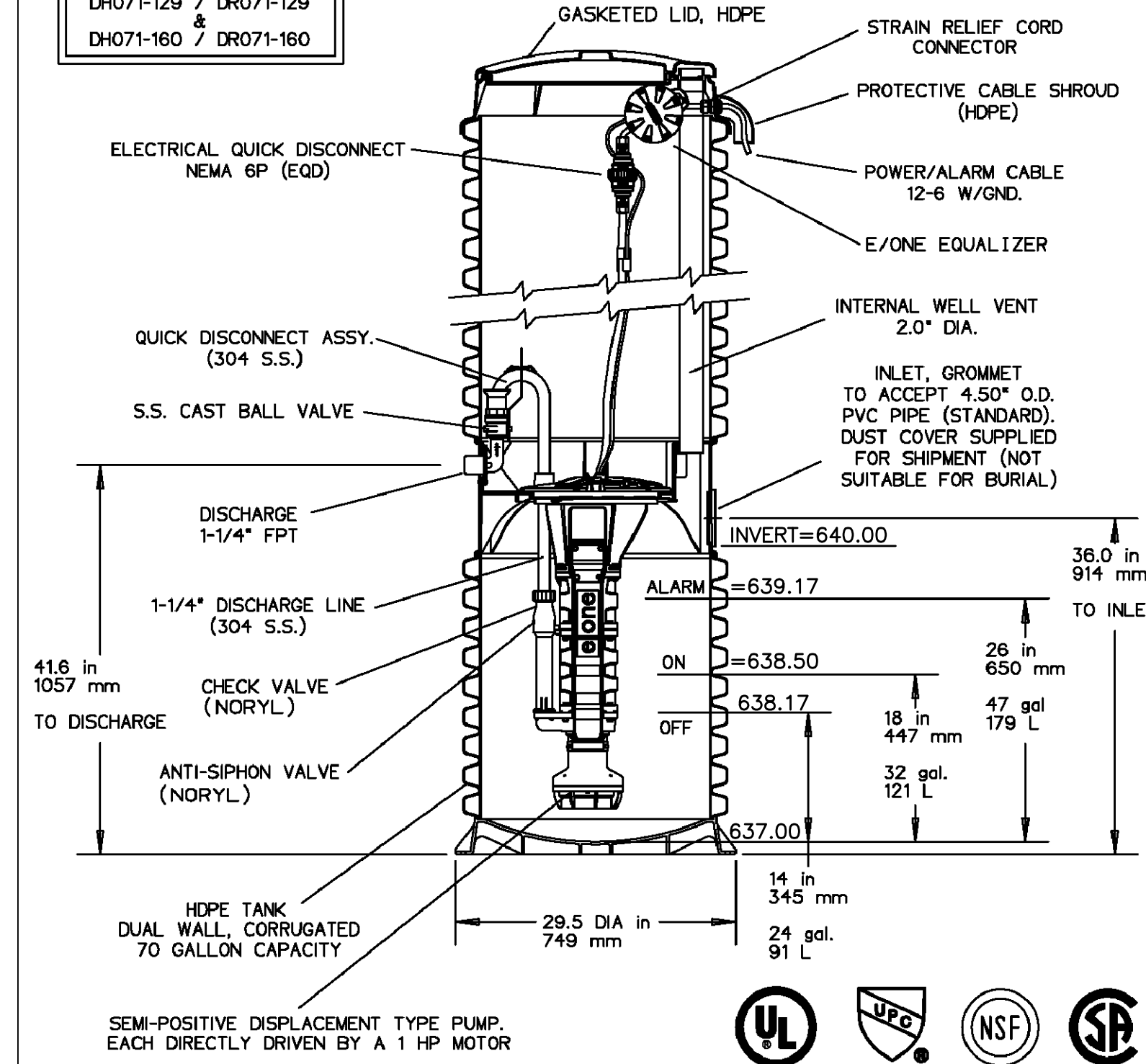
L.S. #1

EONE SPD PUMP PERFORMANCE CURVE



OPTIONS : DH071 (HARD WIRED LEVEL CONTROLS)
 DR071 (WIRELESS LEVEL CONTROLS)

FIELD JOINT REQUIRED FOR MODELS DH071-129 / DR071-129 & DH071-160 / DR071-160



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AD	CH	10/20/10	E	
DR BY	CHK'D	DATE	ISSUE	SCALE



MODEL DH071 / DR071
DETAIL SHEET

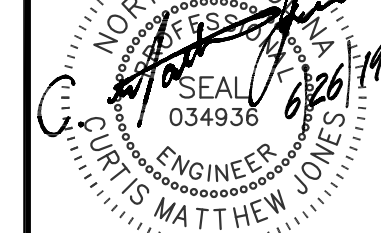
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L.S. #2

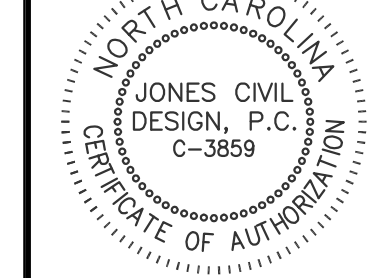
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FINAL DESIGN



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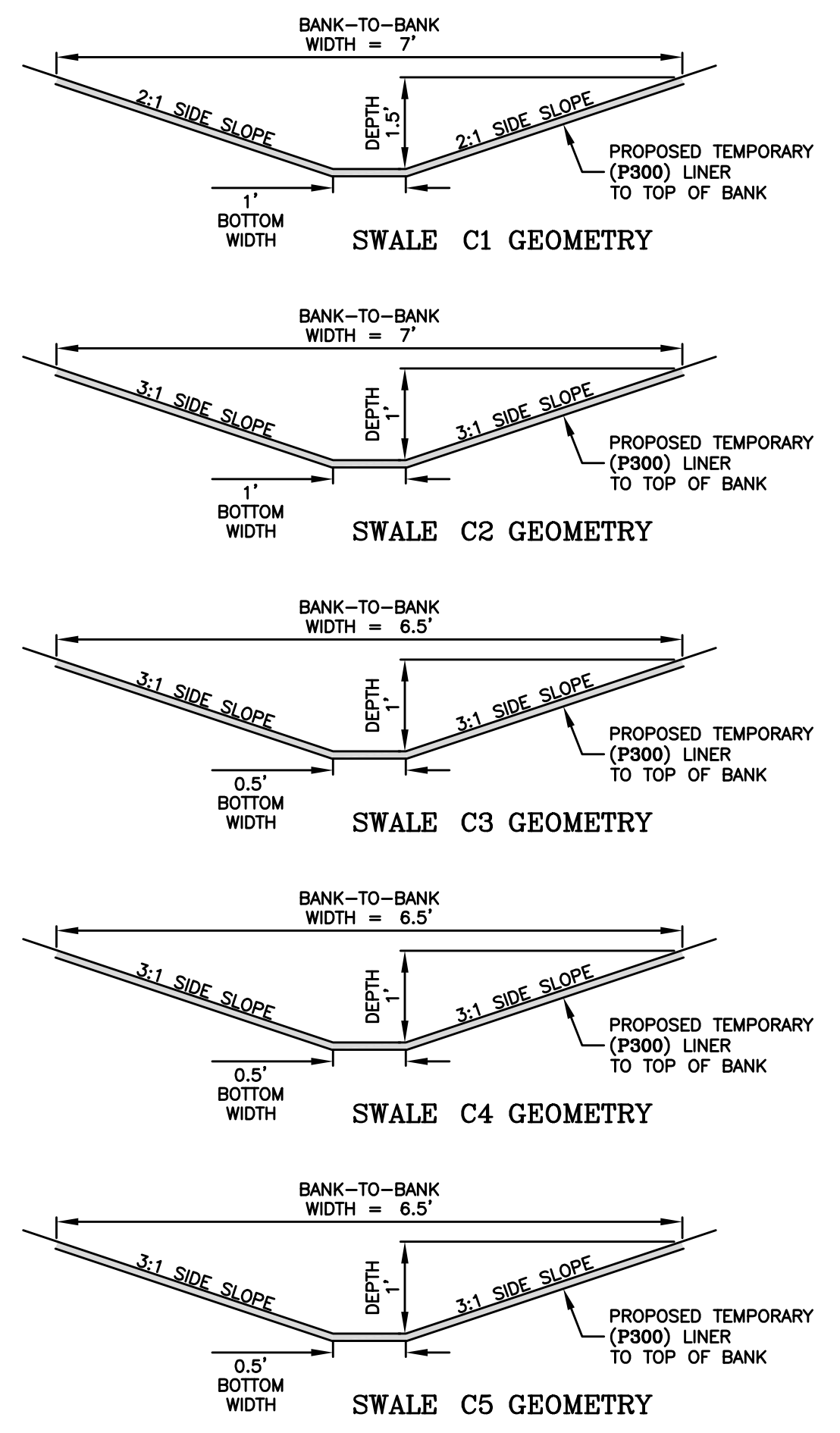
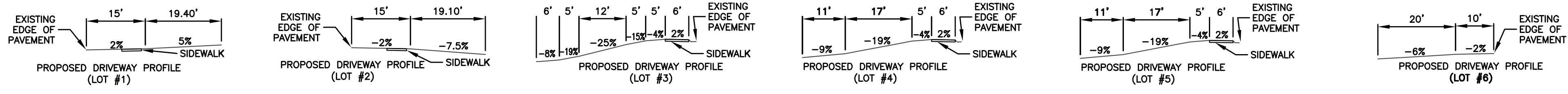
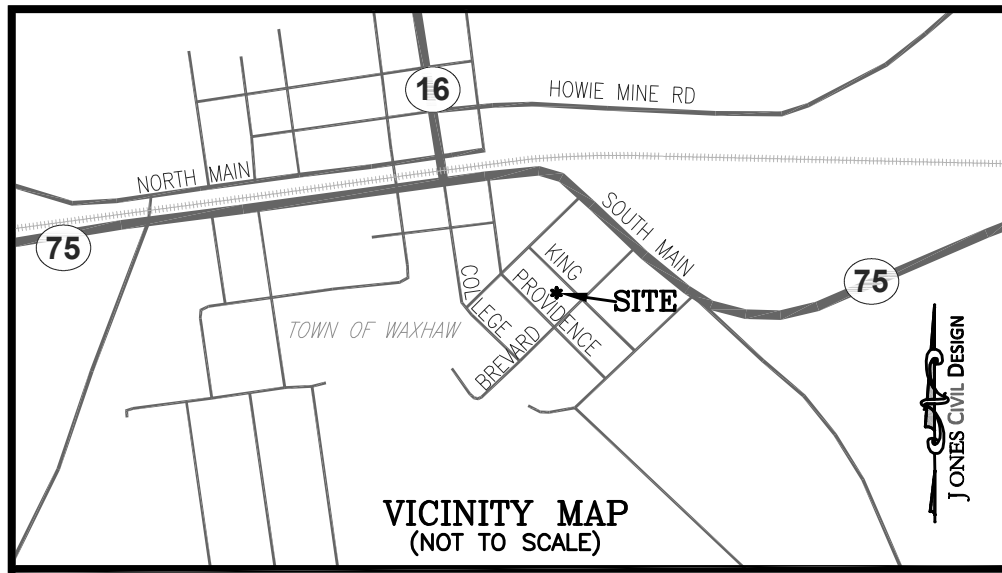


REV	DATE	BY	DESCRIPTION
2	6/28/19	CAH	ELIMINATED ONE LIFT STATION

KING'S CORNER
(SITE DEVELOPMENT)

PROPOSED LIFT
STATION DETAILS
 415 S. PROVIDENCE ST.
 WAXHAW, NC
 FILE NAME: BASE-18011.dwg
 ORIGINAL DATE: 3/29/2019
 JOB NUMBER: 18011
 DRAWN BY: CAH

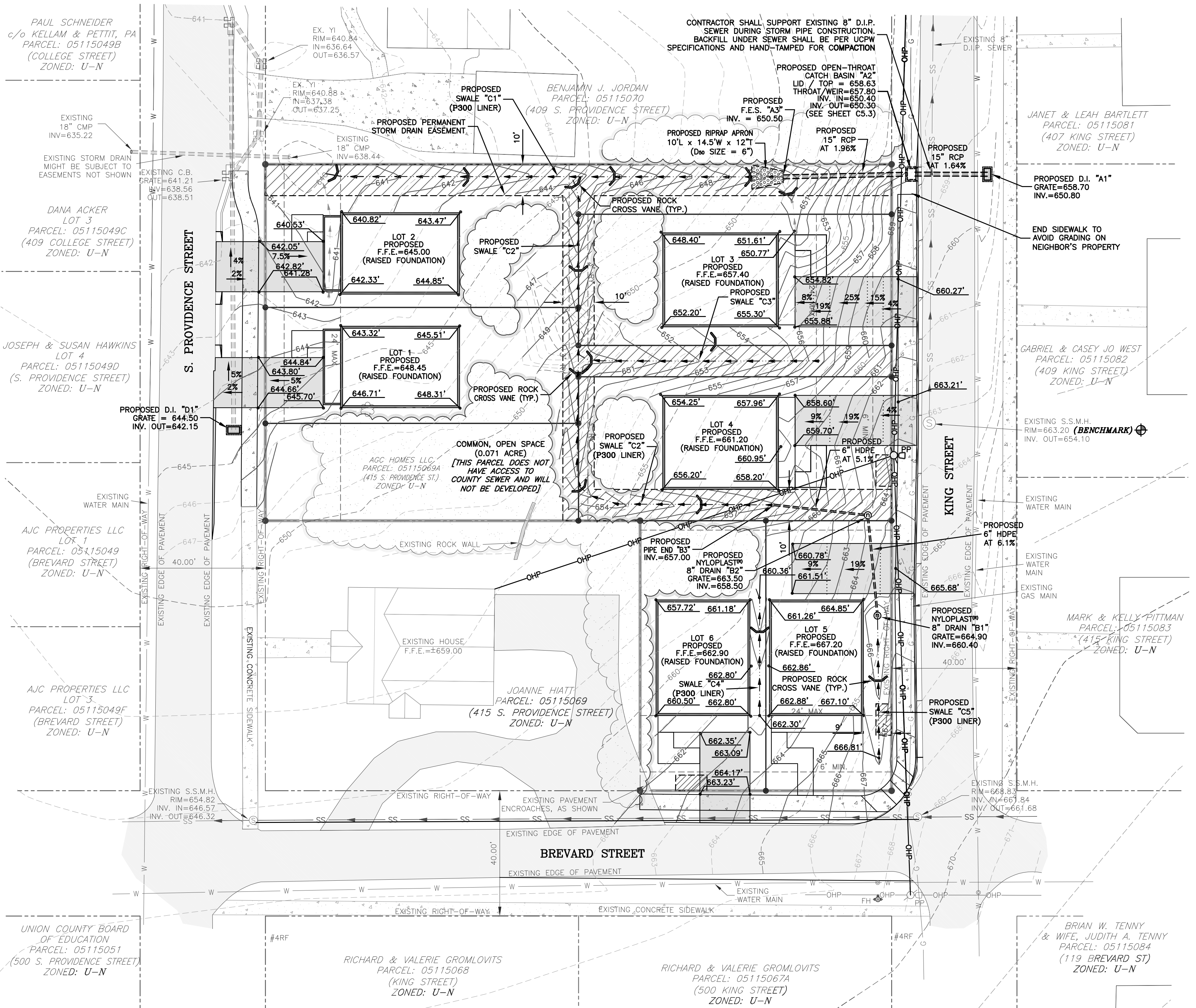
SHEET
C2.3



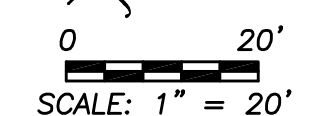
- DRAINAGE NOTES:**
1. THE PROPOSED CONTOURS WITHIN PAVED AREAS ARE GRAPHICAL REPRESENTATIONS ONLY. THE CONTRACTOR IS RESPONSIBLE FOR GRADING UNIFORMLY BETWEEN SPOT ELEVATIONS.
 2. THE CONTRACTOR SHALL GRADE ALL AREAS WITHIN THE PROJECT TO DRAIN STORM WATER. CARE SHALL BE TAKEN TO ENSURE THAT ALL AREAS WITHIN PARKING LOTS AND LANDSCAPED ISLANDS SHALL NOT HOLD WATER UPON PROJECT COMPLETION.
 3. THE MINIMUM SLOPE ON ALL ASPHALT SHALL BE 1.5%.
 4. THE MINIMUM SLOPE ON CURB AND GUTTER CARRYING STORM WATER SHALL BE 0.5%.
 5. ALL GRASS SWALES SHALL HAVE A MINIMUM SLOPE OF 1.8%.
 6. AREAS DESIGNATED AS HANDICAPPED ACCESSIBLE SHALL NOT EXCEED A 2% SLOPE IN ALL DIRECTIONS WITHIN THAT AREA.
 7. SUBSURFACE DRAINAGE FACILITIES MAY BE REQUIRED IN THE STREET RIGHT-OF-WAY IF DEEMED NECESSARY BY THE INSPECTOR.
 8. HIGH-DENSITY POLYETHYLENE (HDPE) STORM DRAINAGE PIPE INSTALLED WITHIN EXISTING OR PROPOSED PUBLIC STREET RIGHT-OF-WAY MUST BE APPROVED BY THE CITY'S INSPECTOR PRIOR TO ANY BACKFILL BEING PLACED.
 9. BACKFILL MATERIAL MUST BE APPROVED BY THE CITY INSPECTOR PRIOR TO PLACEMENT OF THE MATERIAL WITHIN THE PUBLIC STREET RIGHT-OF-WAY.
 10. NON-STANDARD ITEMS (I.E.: PAVERS, IRRIGATION SYSTEMS, ETC.) IN THE STREET RIGHT-OF-WAY REQUIRE A RIGHT-OF-WAY ENCROACHMENT AGREEMENT WITH THE NCDOT AND/OR THE TOWN OF WAXHAW BEFORE INSTALLATION.
 11. PE-SEALED SHOP DRAWINGS FOR RETAINING WALL MUST BE SUBMITTED TO CITY ENGINEER PRIOR TO CONSTRUCTION.

- GENERAL NOTES:**
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www.jonescivil.com

****VETERAN - OWNED****

FINAL DESIGN

SEAL
034936
ENGINEER
CURTIS MATTHEW JONES

FOR CONSTRUCTION

JONES CIVIL DESIGN, P.C.
C-3859

REV.	DATE	BY	DESCRIPTION
1	11/27/19	CMJ	LOCAL REVISION PER TOWN COMMENTS
2	6/28/19	CMJ	REVISION PER TOWN COMMENTS
3	7/15/19	CMJ	CALL REVISION FROM NEIGHBOR'S PROPERTY
4	8/12/19	CMJ	CALL REVISION PER UNION COUNTY (PUBLIC WORKS) COMMENTS
5	8/26/19	CMJ	CALL REVISION PER UNION COUNTY (PUBLIC WORKS) & TOWN COMMENTS

**KING'S CORNER
(SITE DEVELOPMENT)**

GRADING PLAN

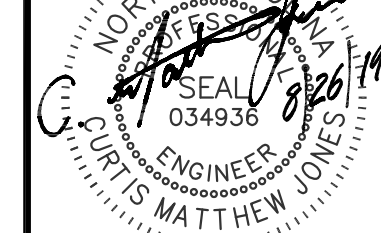
**415 S. PROVIDENCE ST.
WAXHAW, NC**

FILE NAME: BASE-18011.dwg
JOB NUMBER: 18011
ORIGINAL DATE: 3/29/2019
DRAWN BY: CMJ

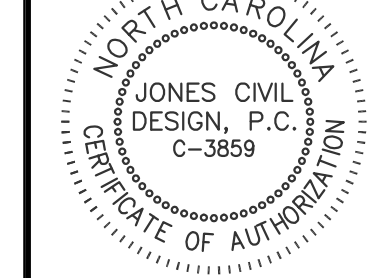
**SHEET
C3.1**

****VETERAN - OWNED****
 Engineer@JonesCivilDesign.com

FINAL DESIGN



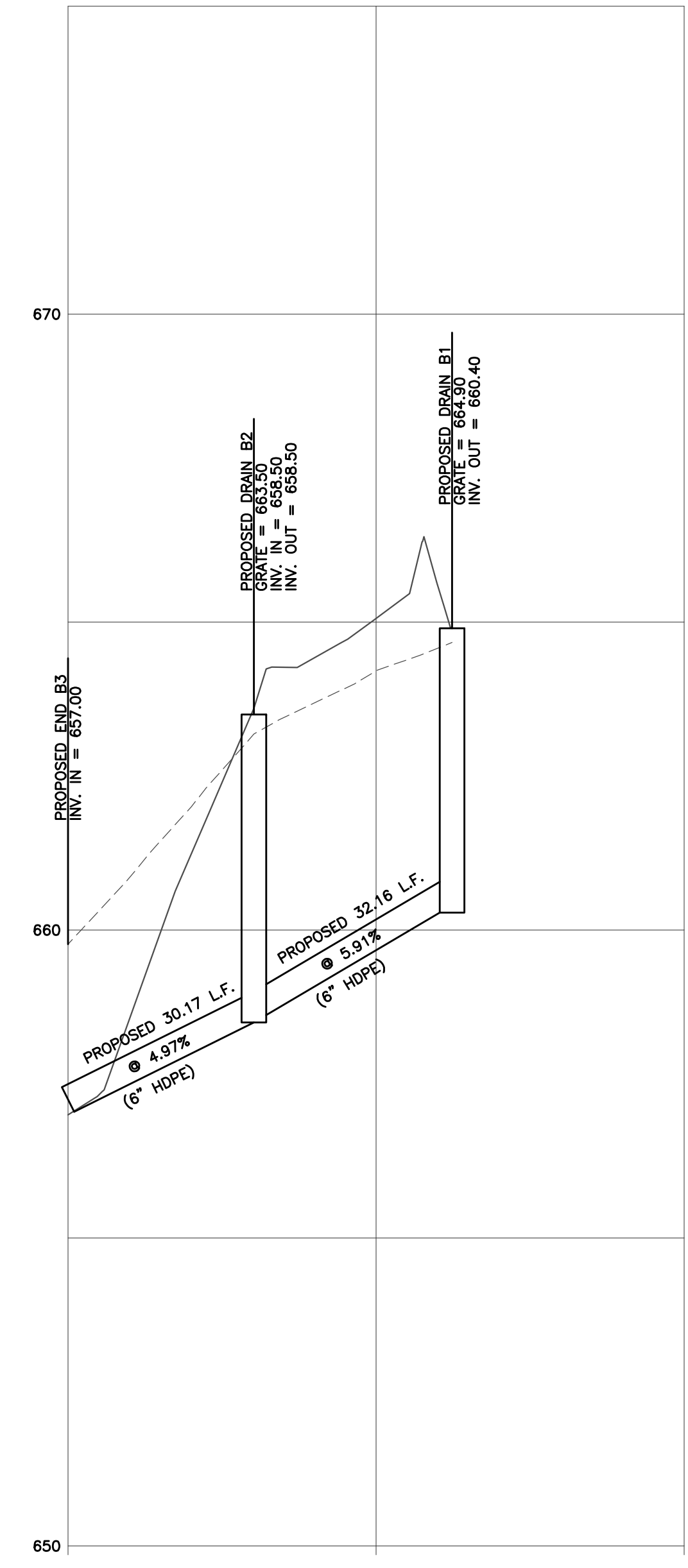
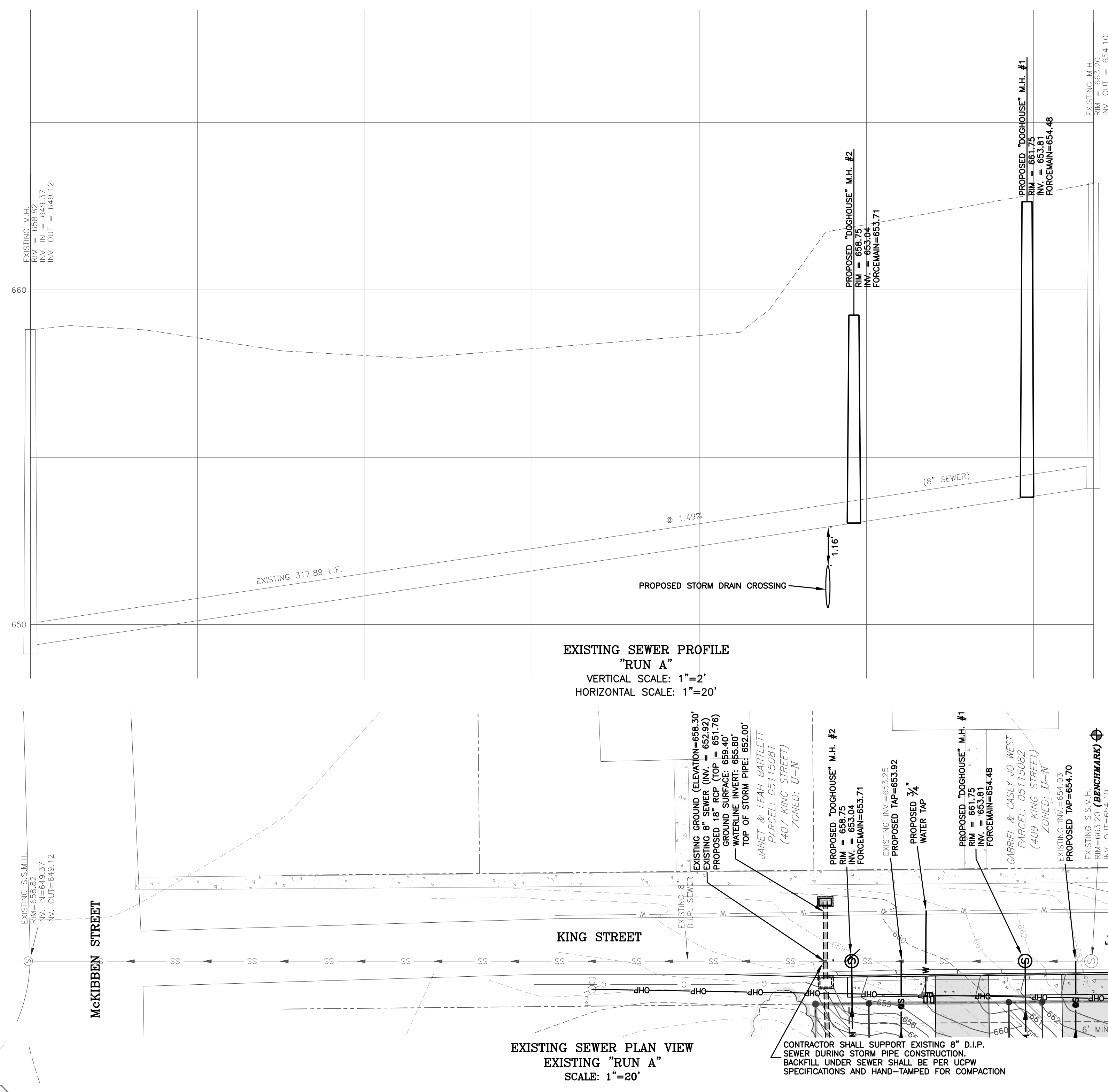
FOR CONSTRUCTION



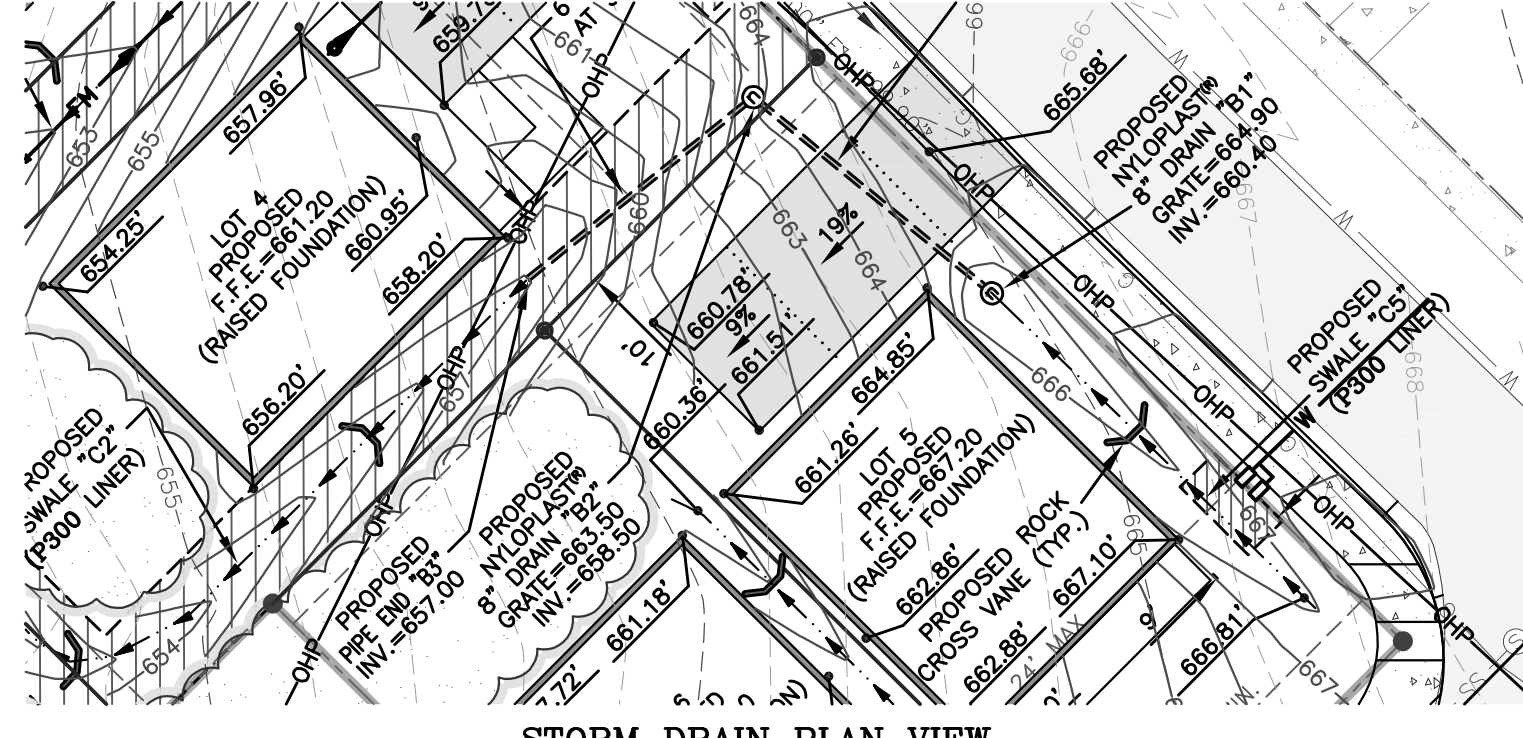
REV.	DATE	BY	DESCRIPTION
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2	7/15/19	CMJ	REVISED PER TOWN COMMENTS
3	7/15/19	CMJ	REVISED PER TOWN COMMENTS
4	8/2/19	CMJ	REVISED PER UNION COUNTY (PUBLIC WORKS) COMMENTS
5	8/26/19	CMJ	REVISED PER UNION COUNTY (PUBLIC WORKS) & TOWN COMMENTS

**KING'S CORNER
 (SITE DEVELOPMENT)**

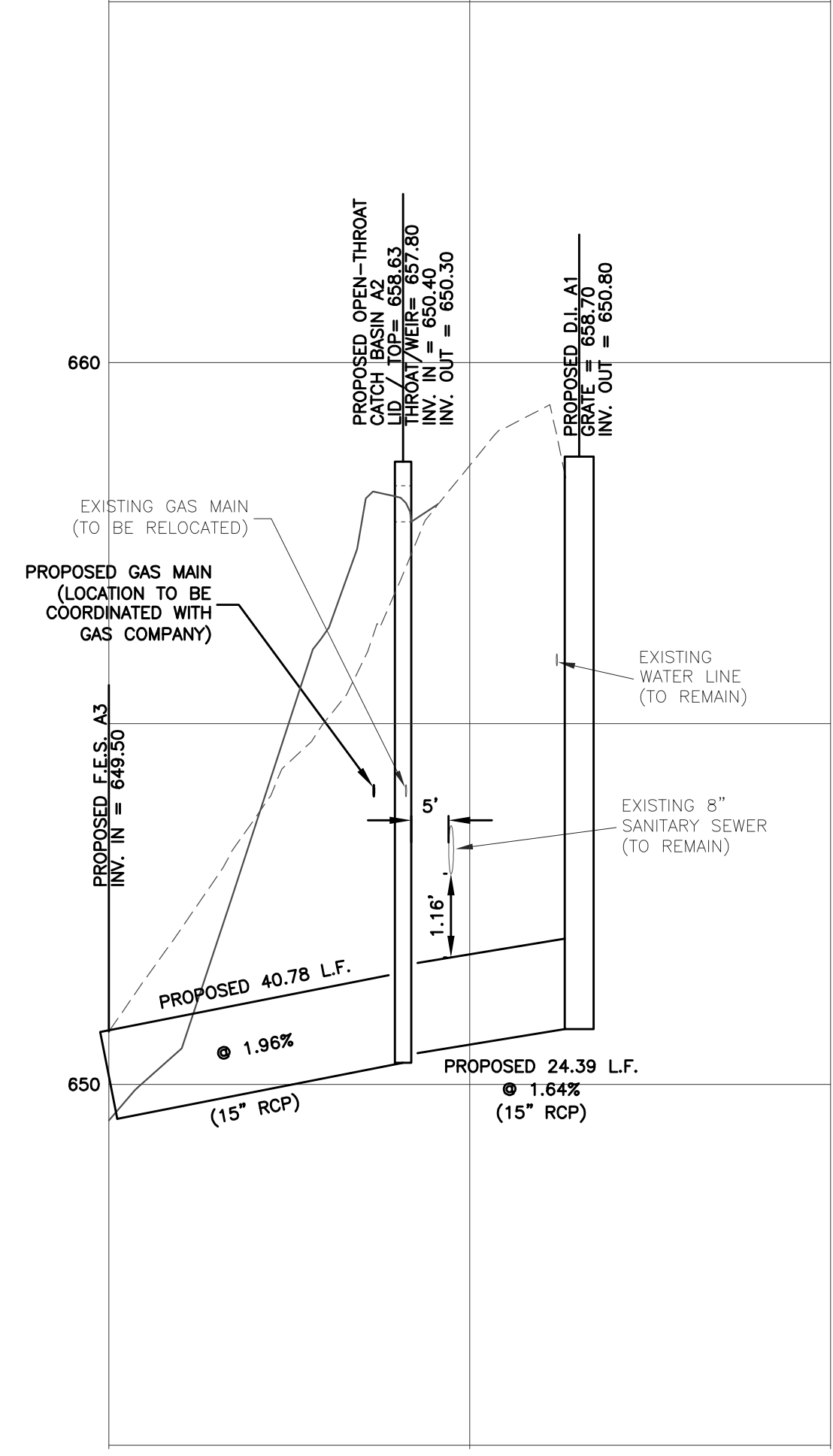
PROPOSED & EXISTING PIPE PROFILES
415 S. PROVIDENCE ST. WAXHAW, NC
FILE NAME: BASE-18011.dwg
JOB NUMBER: 18011
ORIGINAL DATE: 3/29/2019
DRAWN BY: CMJ



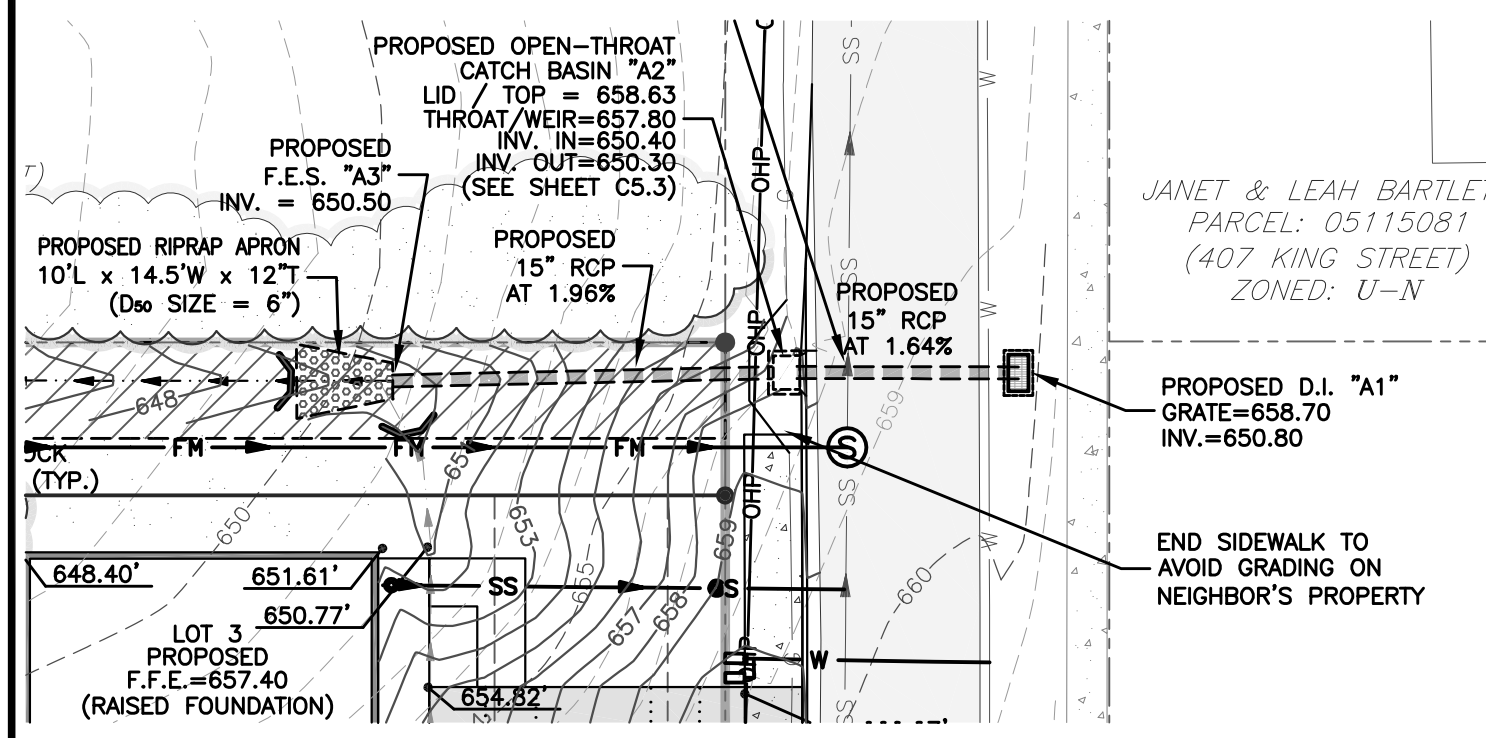
**STORM DRAIN PROFILE
 PROPOSED "DRAIN B"**
 VERTICAL SCALE: 1"=2'
 HORIZONTAL SCALE: 1"=20'



**STORM DRAIN PLAN VIEW
 PROPOSED "DRAIN B"**
 SCALE: 1"=20'



**STORM DRAIN PROFILE
 PROPOSED "DRAIN A"**
 VERTICAL SCALE: 1"=2'
 HORIZONTAL SCALE: 1"=20'



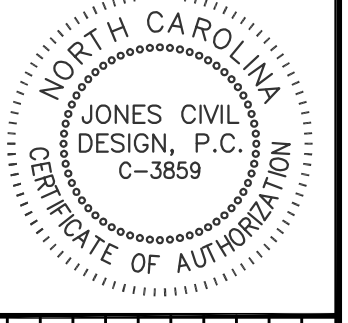
**STORM DRAIN PLAN VIEW
 PROPOSED "DRAIN A"**
 SCALE: 1"=20'

****VETERAN - OWNED****
Engineer@JonesCivilDesign.com

FINAL DESIGN



FOR CONSTRUCTION



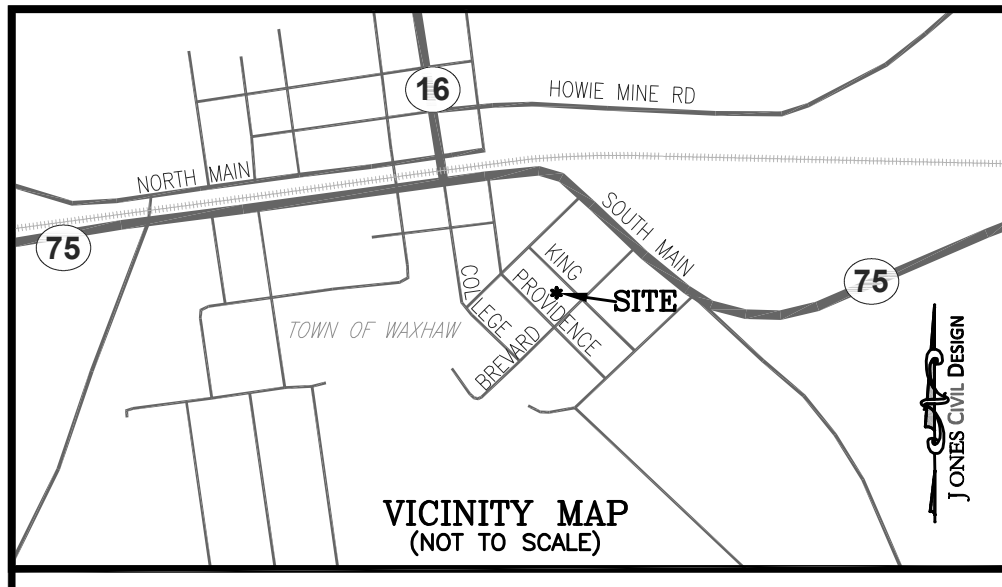
REV.	DATE	BY	DESCRIPTION
1	6/28/19	LM	REVISION PER TOWN COMMENTS
2	7/15/19	CM	UPDATED STORM DRAIN EASEMENT
3	8/26/19	CM	REVISED PER UNION COUNTY (PUBLIC WORKS) & TOWN COMMENTS

**KING'S CORNER
(SITE DEVELOPMENT)**

**SEDIMENT & EROSION
CONTROL PLAN (PHS. 1)**
415 S. PROVIDENCE ST.
WAXHAW, NC

FILE NAME: BASE-18011.dwg
JOB NUMBER: 18011
ORIGINAL DATE: 7/2/2018
DRAWN BY: CMJ

SHEET
C4.1

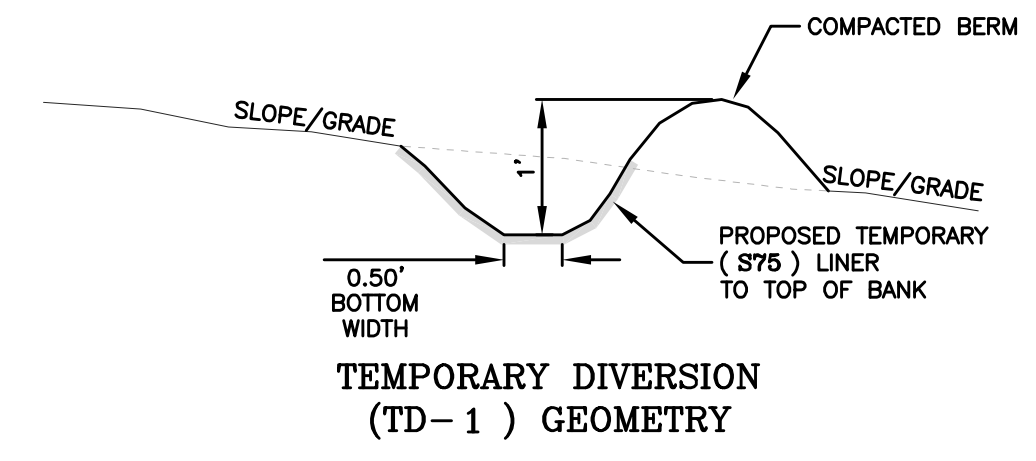
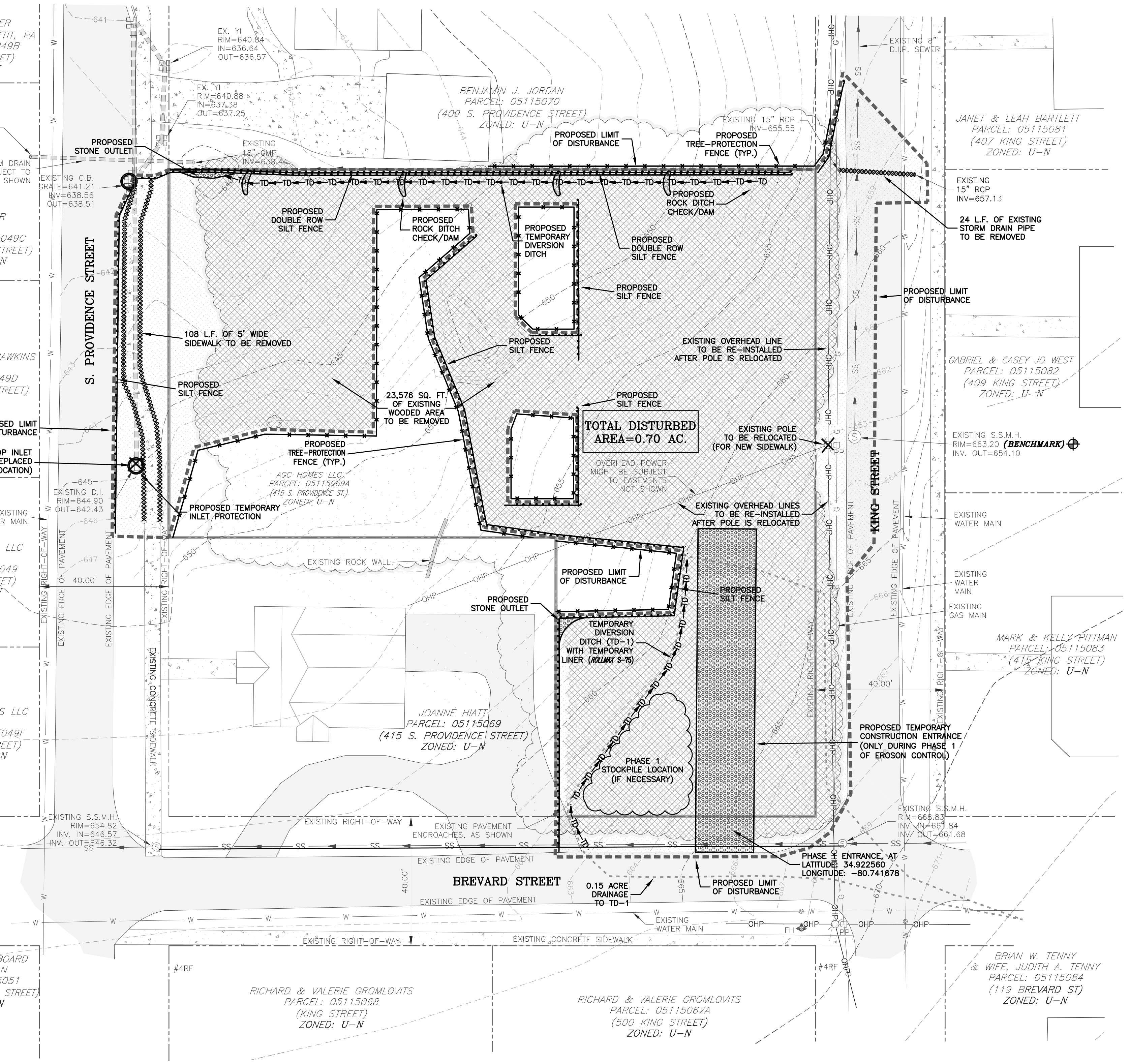


- EROSION CONTROL NOTES:**
- IF DISTURBING LESS THAN 1 ACRE, ADD THIS NOTE: GROUND COVER ON EXPOSED SLOPES SHALL BE APPLIED WITHIN 14 WORKING DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING. PERMANENT GROUND COVER FOR ALL DISTURBED AREAS SHALL BE APPLIED WITHIN 15 WORKING DAYS OR 60 CALENDAR DAYS, 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 SEDIMENTATION AND EROSION CONTROL INSPECTOR.
 - ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BASED UPON SPECIFIC SITE CONDITIONS.
 - CONTACT THE SEDIMENTATION AND EROSION CONTROL INSPECTOR, AT 704-843-2195, EXTENSION 236 FOR A PRE-CONSTRUCTION MEETING PRIOR TO ANY LAND DISTURBING ACTIVITY.
 - 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 DEPARTMENT.
 - ALL EROSION CONTROL DESIGNS SHALL BE IN ACCORDANCE WITH THE TOWN OF WAXHAW ENGINEERING, STANDARDS AND PROCEDURES MANUAL, AND THE NCEDEQ EROSION AND SEDIMENTATION CONTROL PLANNING AND DESIGN MANUAL, LATEST EDITION.
 - FOR PHASED EROSION CONTROL PLANS, THE CONTRACTOR SHALL MEET WITH THE SEDIMENTATION AND EROSION CONTROL INSPECTOR PRIOR TO COMMENCING EACH PHASE OF EROSION CONTROL MEASURES.
 - 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 NCEDEQ.
 - CONTRACTOR IS TO KEEP STREET CLEAR OF MUD AND OTHER DEBRIS. IF SEDIMENTATION OCCURS, ALL MUD AND DEBRIS WILL BE REMOVED IMMEDIATELY PER TOWN OF WAXHAW EROSION CONTROL ORDINANCE.
 - 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.
 - 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.
 - SILT SACKS WILL BE PLACED IN BASINS/INLETS ALONG ROADWAYS AT THE TIME OF INSTALLATION OF SUCH BASINS/INLETS.
 - 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.

- CONSTRUCTION SEQUENCE - PHASE 1**
- OBTAIN GRADING/EROSION CONTROL PLAN APPROVAL FROM THE TOWN OF WAXHAW
 - SET UP A PRE-CONSTRUCTION CONFERENCE AS NECESSARY WITH THE SEDIMENTATION AND EROSION CONTROL INSPECTOR TO DISCUSS THE EROSION CONTROL MEASURES. FAILURE TO SCHEDULE SUCH A CONFERENCE 48 HRS. PRIOR TO ANY LAND DISTURBING ACTIVITY IS A VIOLATION AND IS SUBJECT TO FINE.
 - INSTALL SILT FENCE, TREE-PROTECTION FENCE, AND TEMPORARY CONSTRUCTION ENTRANCE AS SHOWN ON PHASE 1 OF THE PLAN. CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES.
 - STOP
 - CALL FOR ON-SITE INSPECTION BY THE SEDIMENTATION AND EROSION CONTROL INSPECTOR.
 - WHEN APPROVED BY THE SEDIMENTATION AND EROSION CONTROL INSPECTOR, DEMOLITION MAY BEGIN.
 - BEGIN CLEARING TREES, BRUSH, AND TOPSOIL UNSUITABLE. EXCESS MATERIAL SHALL BE DISPOSED OFFSITE, ACCORDING TO THE APPLICABLE REGULATIONS OF UNION COUNTY, THE STATE OF NORTH CAROLINA, AND THE TOWN OF WAXHAW.
 - INSTALL TEMPORARY DIVERSION DITCH, WHERE SHOWN, AS SOON AS THE TREES ARE CLEARED FROM THE VICINITY OF THE DITCH.
 - DEMOLISH AND DISPOSE OF ALL ITEMS SHOWN AS "TO BE REMOVED" ON THIS PLAN.
 - STOP
 - PRIOR TO ESTABLISHING ROUGH GRADE, INSTALL THE PROPOSED DIVERSION DITCH AND ROCK CHECK/DAMS ALONG THE NORTHERN PROPERTY LINE AS SHOWN ON THIS PLAN.
 - PHASE 1 EROSION CONTROL ENDS. PROCEED TO PHASE 2 EROSION CONTROL AS SHOWN ON SHEET C4.2.
- NOTE:
ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE N.C. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, U.S. DEPARTMENT OF AGRICULTURE, AND THE TOWN OF WAXHAW STANDARDS.

- GENERAL NOTES:**
- THIS PLAN IS NOT A CERTIFIED SURVEY. BOUNDARY AND TOPOGRAPHIC INFORMATION WAS OBTAINED FROM A SURVEY CONDUCTED BY PHOENIX LAND SURVEYING, DATED JUNE 18, 2018; UPDATED ON JULY 18, 2018 - UPDATED, MARCH 19, 2019.
 - ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AND SHOULD BE FIELD-VERIFIED PRIOR TO CONSTRUCTION. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN. CONFLICTS BETWEEN EXISTING UTILITIES AND PROPOSED EXCAVATION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
 - THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 48 HOURS NOTICE TO OWNER OR REPRESENTATIVE PRIOR TO INTERRUPTION OF ANY EXISTING UTILITY.
 - THE CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ANY UTILITIES DAMAGED DURING CONSTRUCTION.
 - THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL NECESSARY PERMITS AND APPROVALS HAVE BEEN OBTAINED PRIOR TO CONSTRUCTION. THESE PERMITS AND APPROVALS MAY INCLUDE BUT ARE NOT LIMITED TO GRADING, DEMOLITION, ZONING, BUILDING, DRIVEWAY, DETENTION, SUBDIVISION, SPECIAL USE, SEWER AND WATER.
 - CONTACT THE APPROPRIATE UTILITY COMPANY TO RELOCATE ANY EXISTING UTILITY POLES.
 - A PERMIT MAY BE REQUIRED IF REMOVING TREES FROM THE ROAD RIGHT-OF-WAY. THE CONTRACTOR SHALL COORDINATE AND VERIFY WITH THE LOCAL AUTHORITY PRIOR TO REMOVING ANY R/W TREES.
 - APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS.
 - BEFORE YOU DIG, STOP. CALL THE NC ONE-CALL CENTER AT 1-800-632-4949. "IT'S THE LAW"

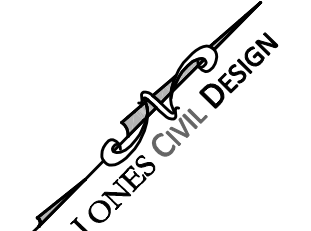
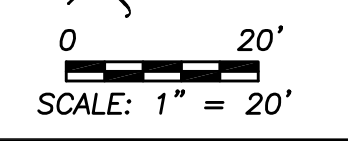
- EROSION CONTROL LEGEND**
- SS SANITARY SEWER LINE
 - W WATER LINE
 - G GAS LINE
 - C CONDUIT (EMPTY PVC)
 - UGE UNDERGROUND ELECTRIC
 - OHP OVERHEAD POWER
 - M METAL FENCE
 - WOODEN FENCE
 - SILT FENCE
 - TREE PROTECTION FENCE
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 - CREEK/SWALE/DITCH
 - STORM DRAIN PIPE
 - TEMP. DIVERSION DITCH
 - INLET PROTECTION

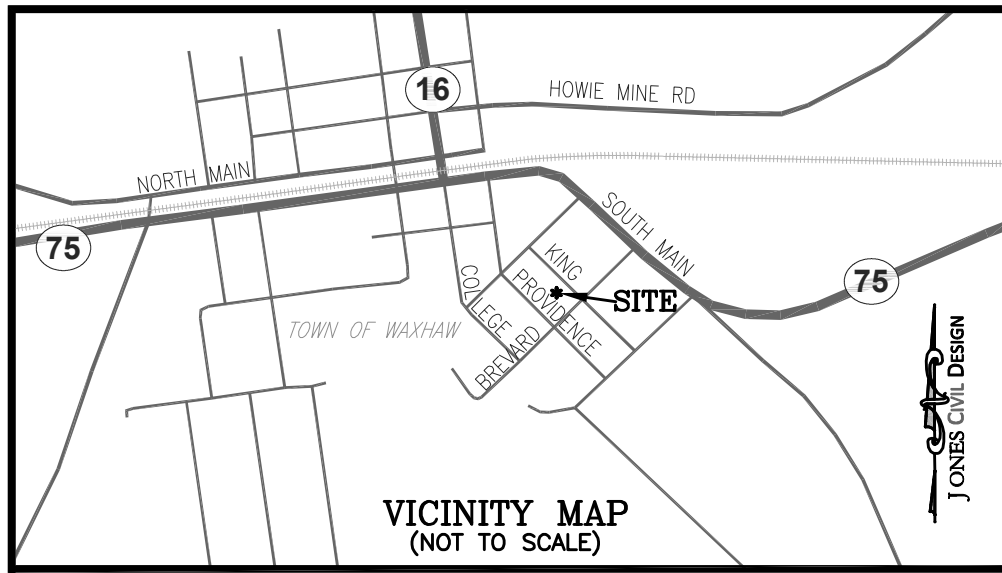


DIVERSION DITCH TABLE

TD-1	
BOTTOM WIDTH:	0.5'
TOP WIDTH:	4.5'
DEPTH:	1'
SIDE SLOPE:	2:1
LINER:	S75
DITCH LENGTH:	105 L.F.
DITCH SLOPE:	2.3%
DRAINAGE AREA:	0.15 ACRES

**CALL 811
BEFORE YOU DIG,
KNOW WHAT'S BELOW
IT'S THE LAW**





EROSION CONTROL 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 WITHIN 14 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 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.
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CONSTRUCTION SEQUENCE - PHASE 2
STOP

- PRIOR TO STARTING THIS PHASE OF CONSTRUCTION, REFER TO SHEET C4.1 AND COMPLETE ALL STEPS OUTLINED, THERE.
- AFTER COMPLETION OF PHASE 1 EROSION CONTROL:
- THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL MEASURES.
 - INSTALL SWALES AND STORM DRAINAGE AS SHOWN ON THESE PLANS. (REFER TO SHEETS C3.1 & C3.2) PROTECT STORM DRAINAGE WITH INLET PROTECTION AS NECESSARY.
 - INSTALL UTILITIES AND INFRASTRUCTURE AS SHOWN ON THESE PLANS.
 - STABILIZE DISTURBED AREAS AS THE SITE IS BROUGHT TO FINISHED GRADE. WHERE SHOWN, INSTALL LINERS IN DITCHES/SWALES.
 - ESTABLISH FINAL GRADES, PAVEMENT, AND FINISHED GROUND SURFACE AS SHOWN ON THESE PLANS.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY TEMPORARY AND PERMANENT SEEDING, AS NEEDED, TO COMPLY WITH NC DEC REQUIREMENTS AS WELL AS TOWN OF WAXHAW REQUIREMENTS. ALSO, THE CONTRACTOR SHALL ESTABLISH A FINAL GROUND COVER SUFFICIENT TO RESTRAIN EROSION AS DIRECTED BY THE ENGINEER AND/OR THE SEDIMENT AND EROSION CONTROL INSPECTOR.
 - COORDINATE WITH THE SEDIMENTATION AND EROSION CONTROL INSPECTOR PRIOR TO REMOVAL OF ANY EROSION CONTROL MEASURE.
 - REMOVE EROSION CONTROL DEVICES UPON COMPLETION OF PROJECT AND PROPER, PERMANENT STABILIZATION.
 - THE CONTRACTOR SHALL SCHEDULE A TERMINATION INSPECTION WITH THE SEDIMENTATION AND EROSION CONTROL INSPECTOR WHEN THE PROJECT IS CONSIDERED COMPLETE.

NOTE:
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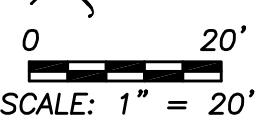
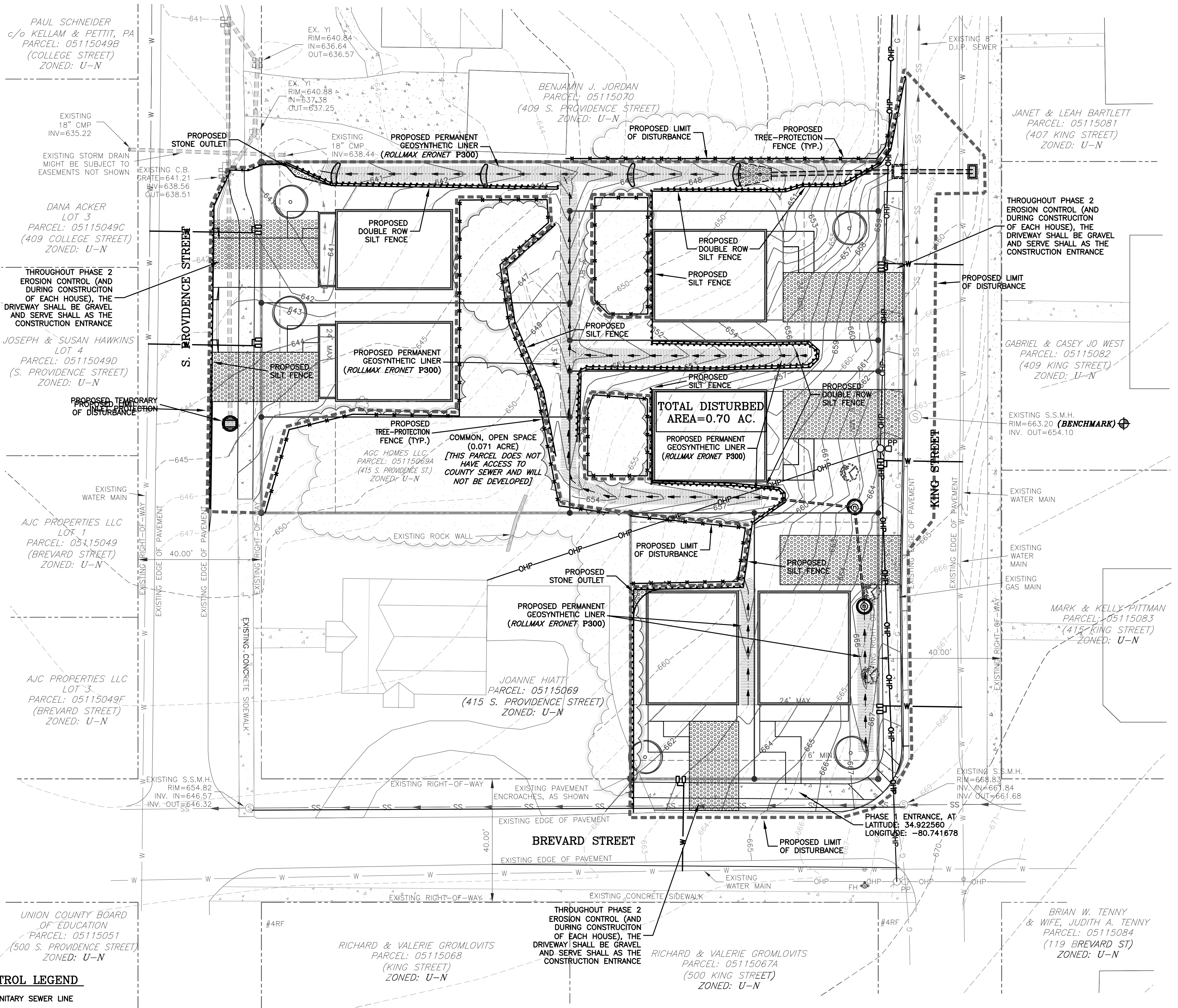
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- CONTACT THE APPROPRIATE UTILITY COMPANY TO RELOCATE ANY EXISTING UTILITY POLES.
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EROSION CONTROL LEGEND

- SS SANITARY SEWER LINE
- W WATER LINE
- G GAS LINE
- C CONDUIT (EMPTY PVC)
- UGE UNDERGROUND ELECTRIC
- OHP OVERHEAD POWER
- METAL FENCE
- WOODEN FENCE
- ▨ SILT FENCE
- ▤ TREE PROTECTION FENCE
- PROPERTY / RIGHT-OF-WAY
- CREEK/SWALE/DITCH
- STORM DRAIN PIPE
- TEMP. DIVERSION DITCH
- INLET PROTECTION

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JONES CIVIL DESIGN
1019 THORNSBY LANE, MATTHEWS, NC 28105
PH: (704) 412-8523
www.jonescivil.com

****VETERAN - OWNED****
Engineer #019230200@nc.gov

FINAL DESIGN
Professional Engineer Seal: CURTIS MATT HEW JONES, ENGINEER, 034936

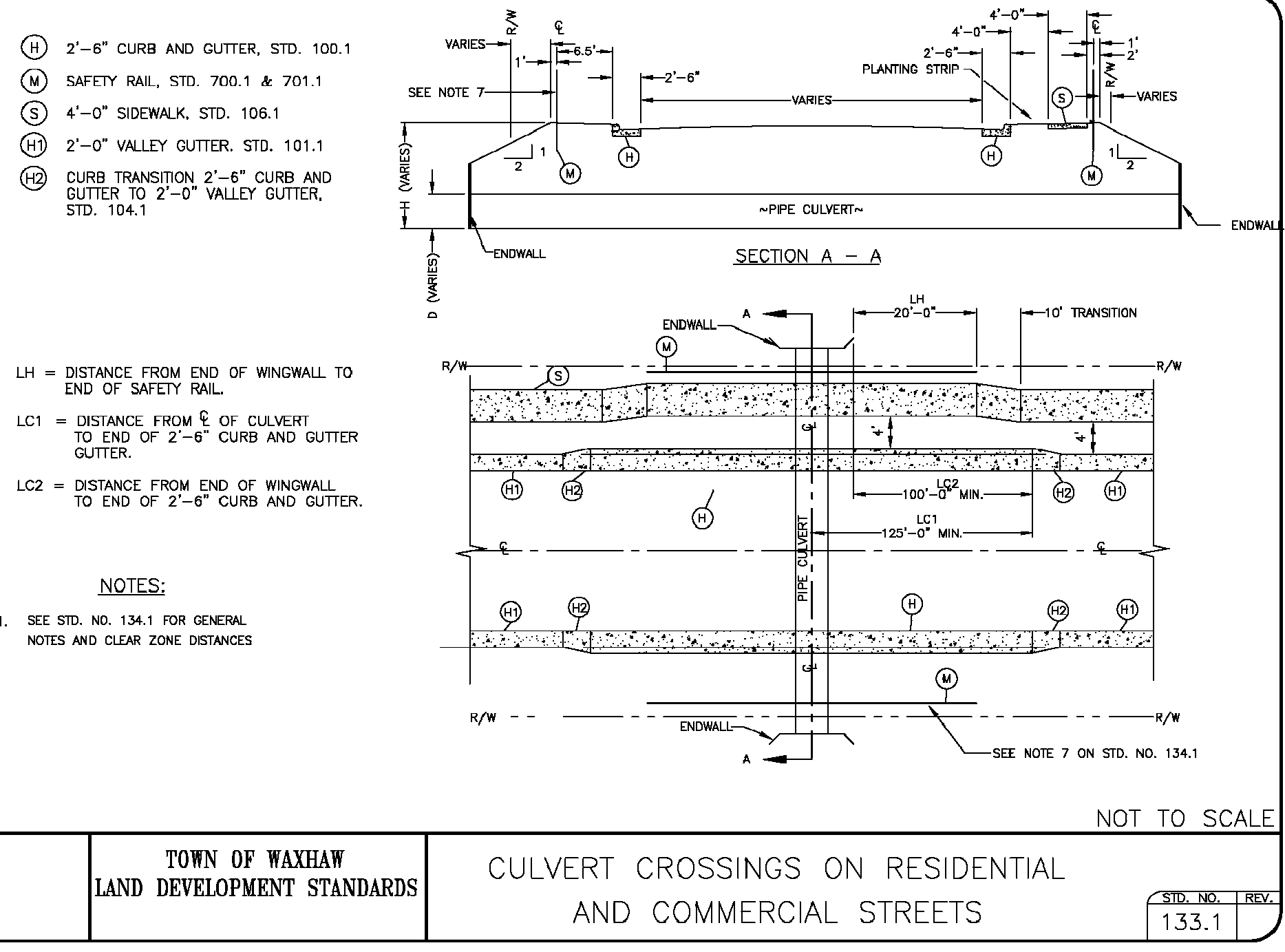
FOR CONSTRUCTION
Professional Engineer Seal: JONES CIVIL DESIGN, P.C., C-3859

REV.	DATE	BY	DESCRIPTION
1	12/27/19	CMJ	REVISED PER TOWN COMMENTS
2	6/26/19	CMJ	REVISED PER TOWN COMMENTS
3	7/15/19	CMJ	UPDATED STORM DRAIN EASEMENT
4	8/27/19	CMJ	REVISED PER UNION COUNTY (PUBLIC WORKS) COMMENTS
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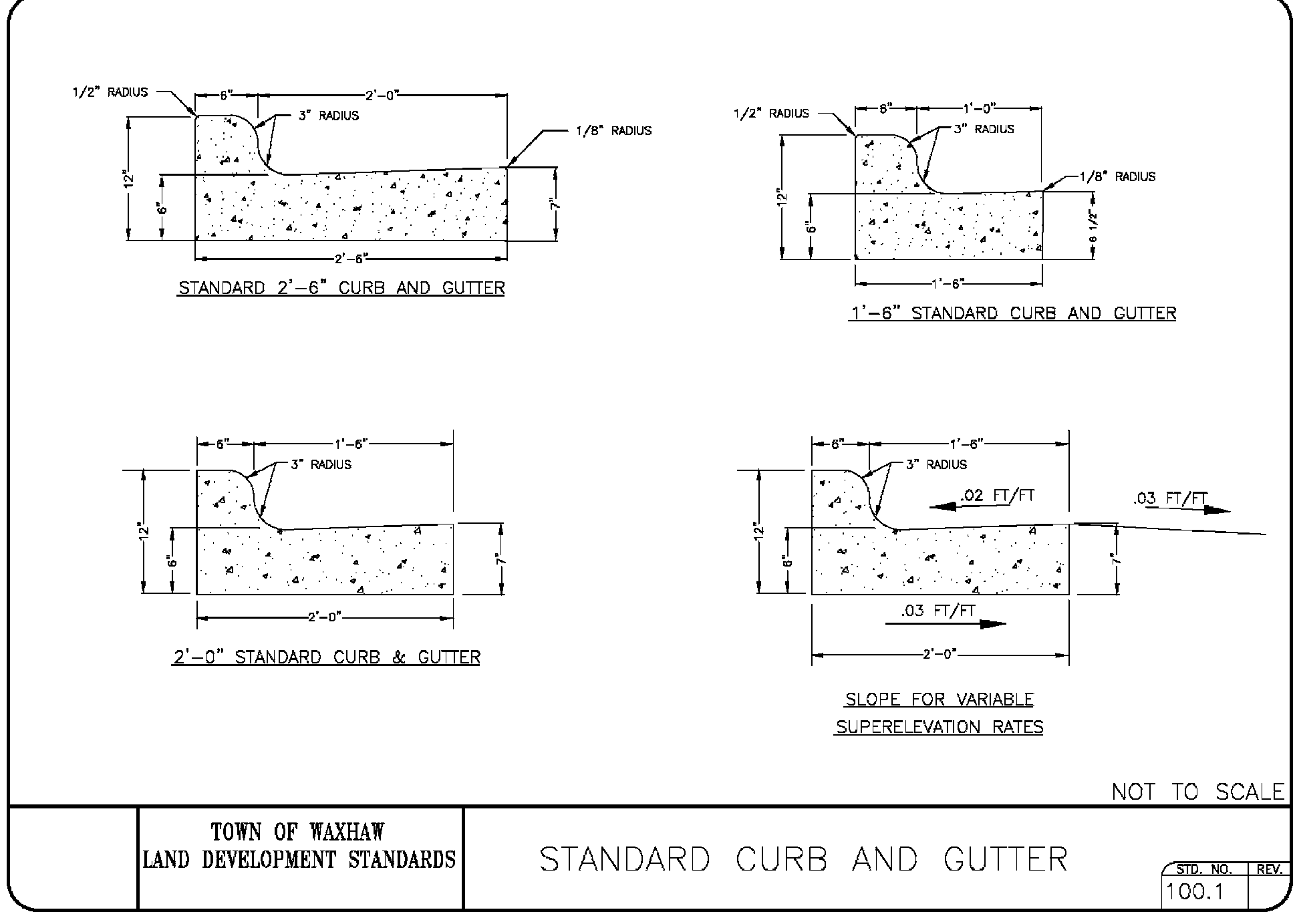
SEDIMENT & EROSION CONTROL PLAN (PHS. 2)
415 S. PROVIDENCE ST.
WAXHAW, NC

FILE NAME: BASE-18011.dwg
JOB NUMBER: 18011
ORIGINAL DATE: 7/2/2018
DRAWN BY: CMJ

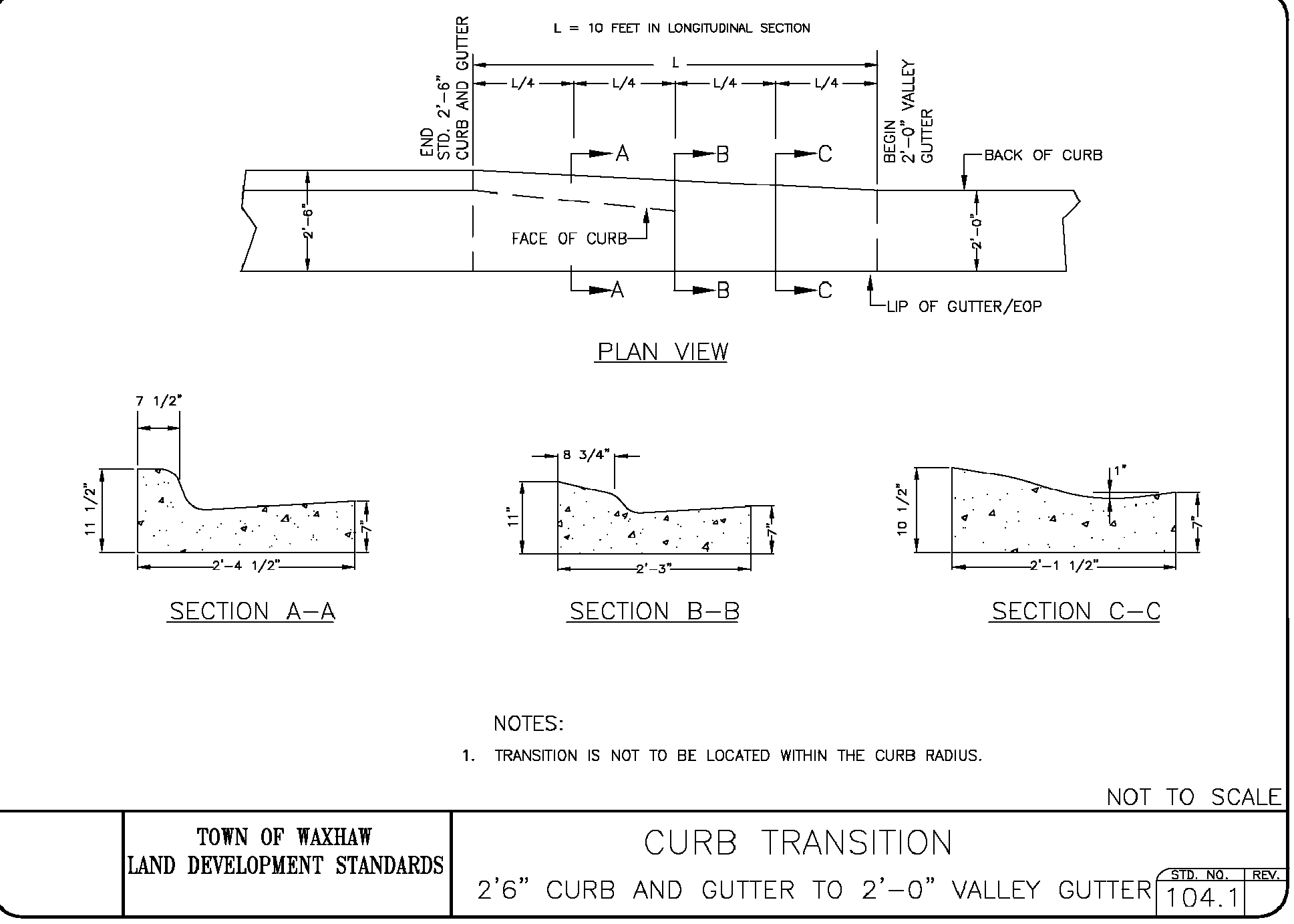
SHEET C4.2



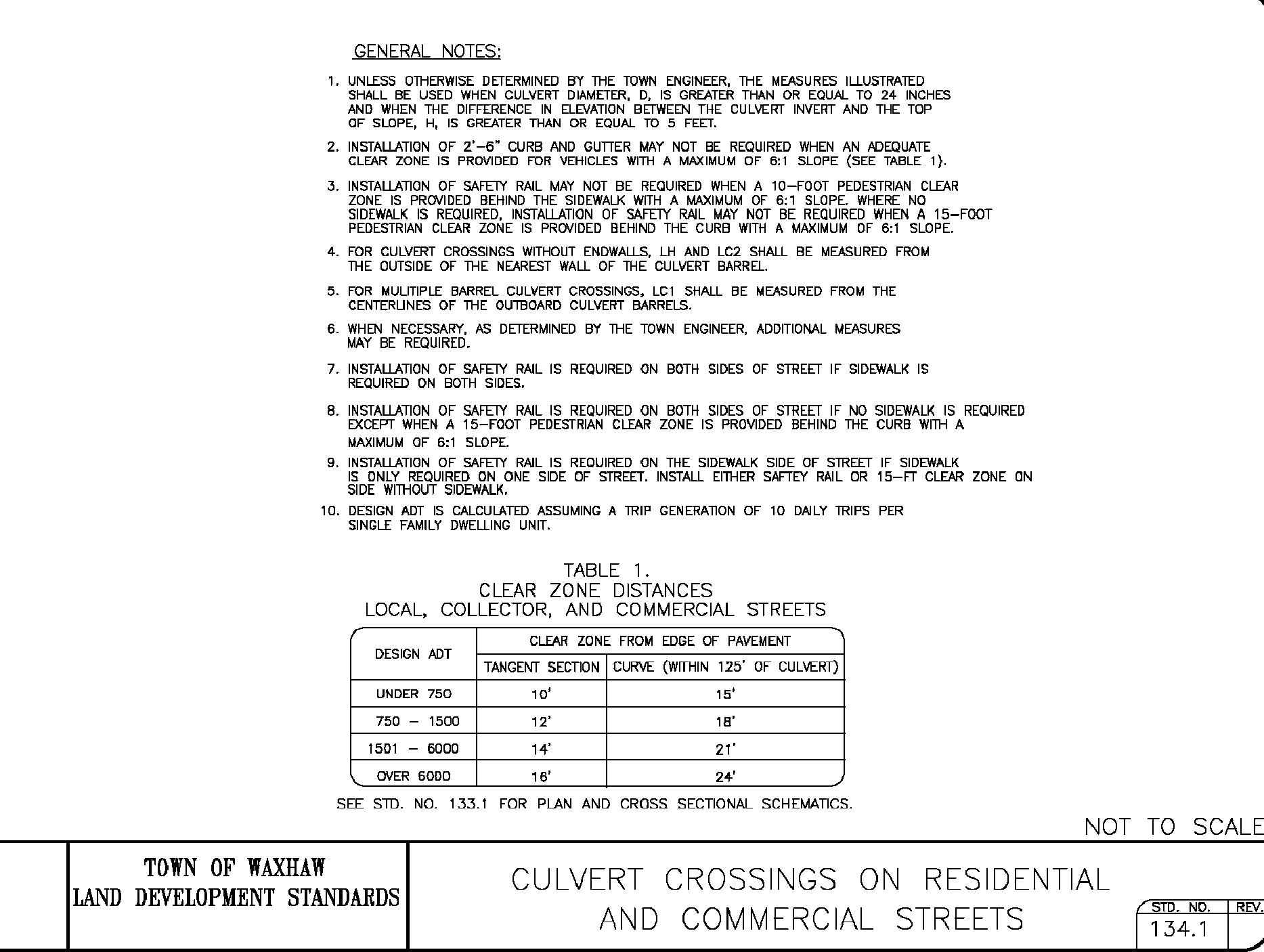
TOWN OF WAXHAW
 LAND DEVELOPMENT STANDARDS
 CULVERT CROSSINGS ON RESIDENTIAL AND COMMERCIAL STREETS
 STD. NO. 133.1



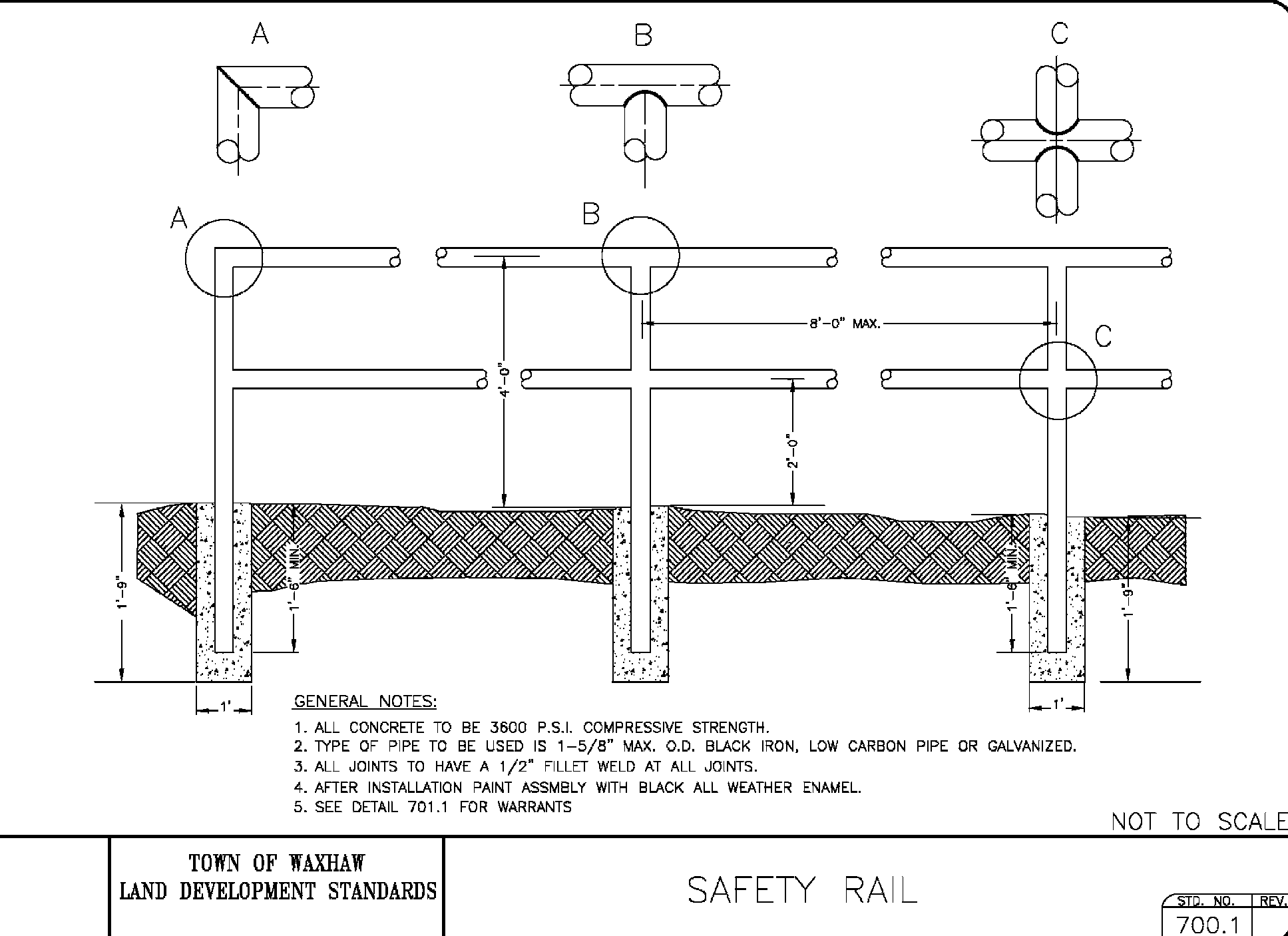
TOWN OF WAXHAW
 LAND DEVELOPMENT STANDARDS
 STANDARD CURB AND GUTTER
 STD. NO. 100.1



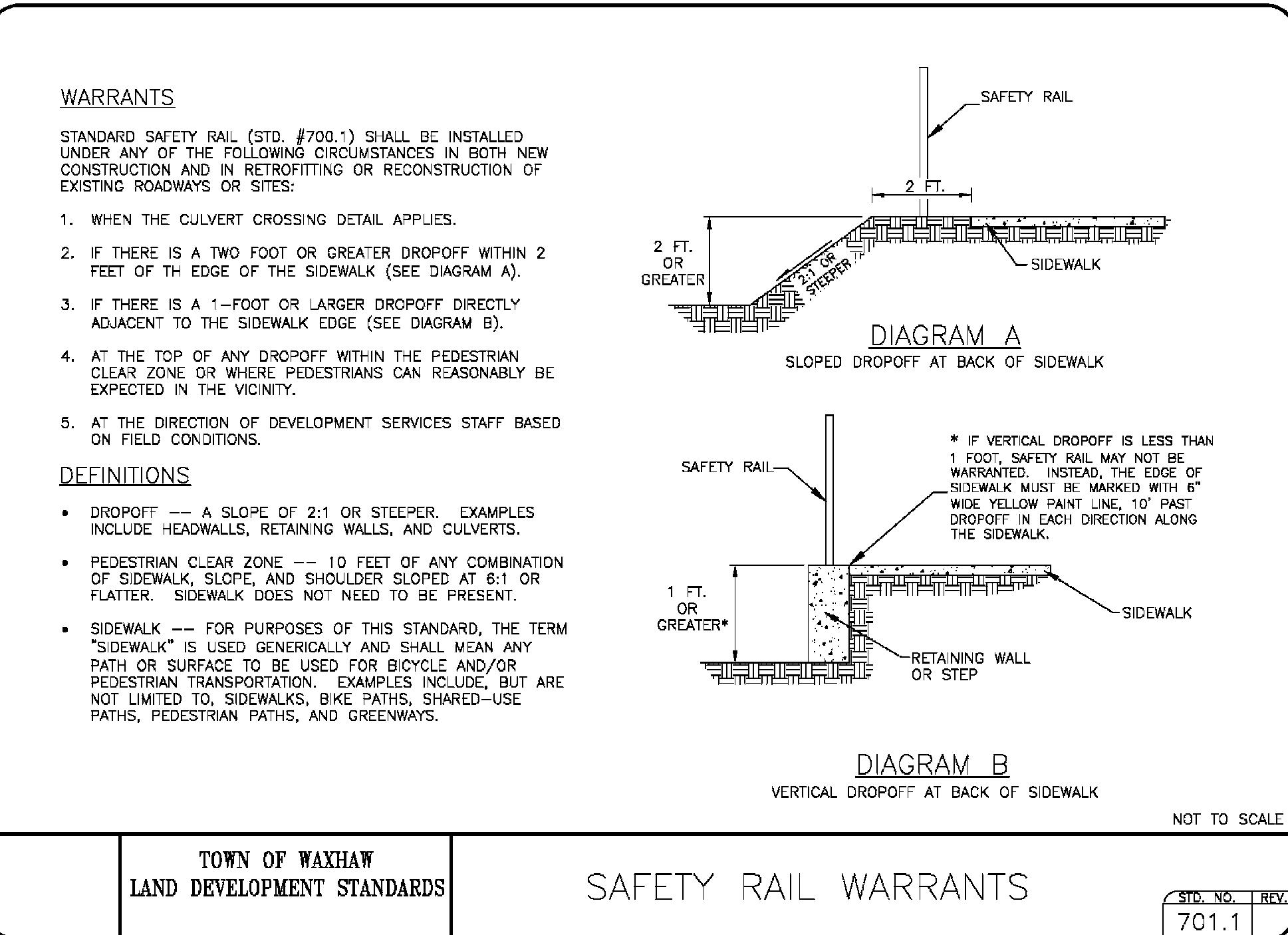
TOWN OF WAXHAW
 LAND DEVELOPMENT STANDARDS
 CURB TRANSITION
 2'6" CURB AND GUTTER TO 2'-0" VALLEY GUTTER
 STD. NO. 104.1



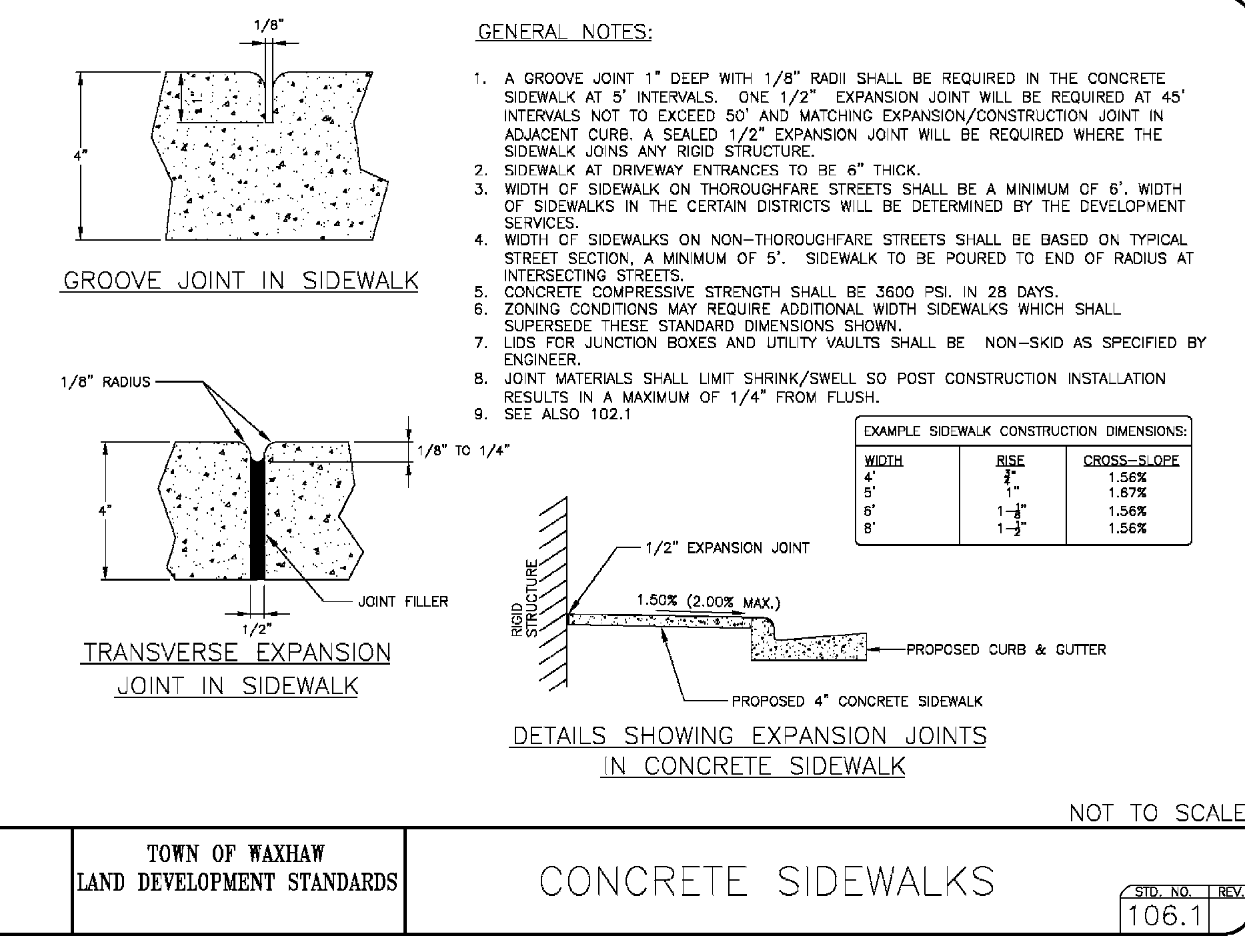
TOWN OF WAXHAW
 LAND DEVELOPMENT STANDARDS
 CULVERT CROSSINGS ON RESIDENTIAL AND COMMERCIAL STREETS
 STD. NO. 133.1



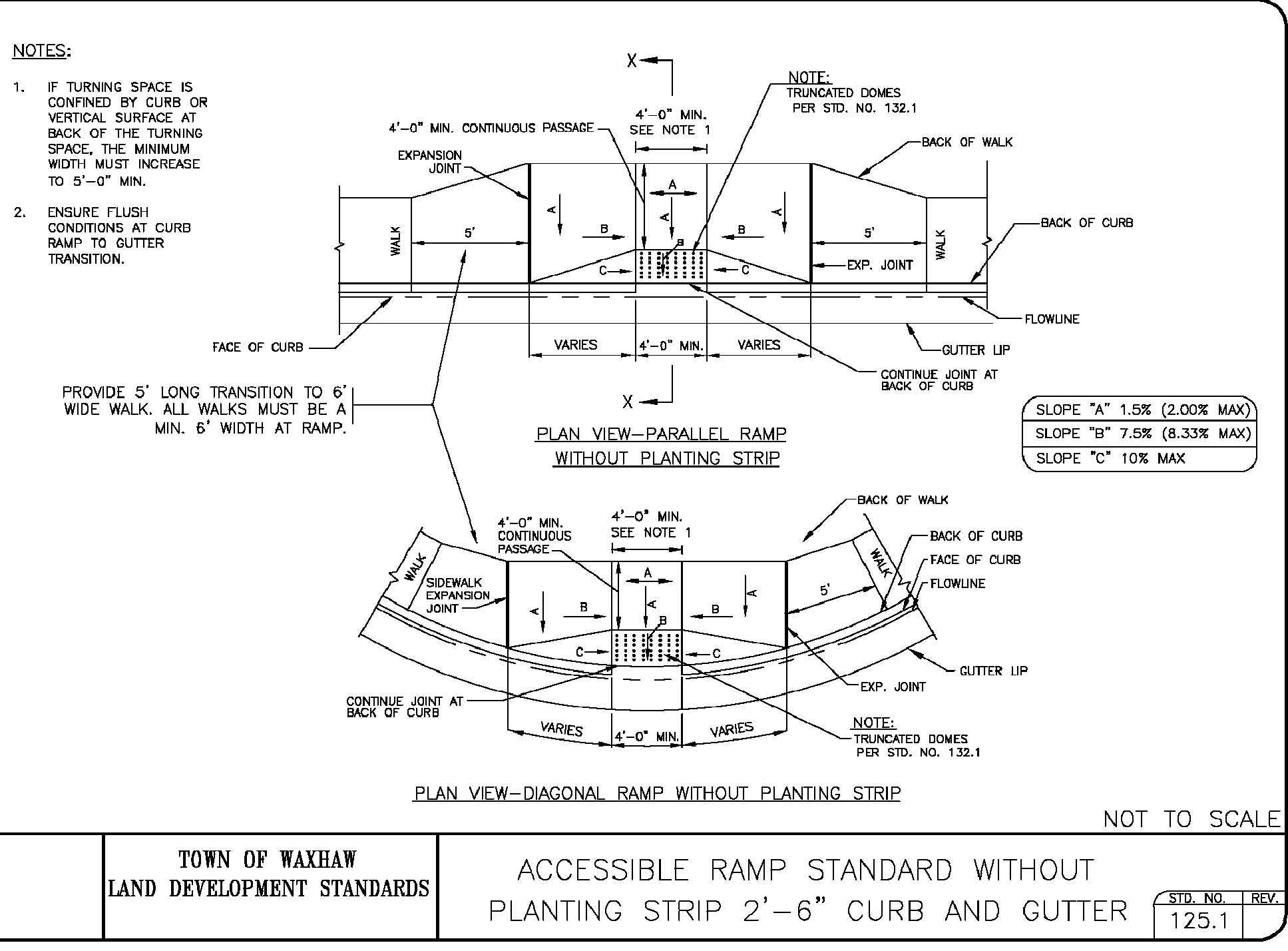
TOWN OF WAXHAW
 LAND DEVELOPMENT STANDARDS
 SAFETY RAIL
 STD. NO. 700.1



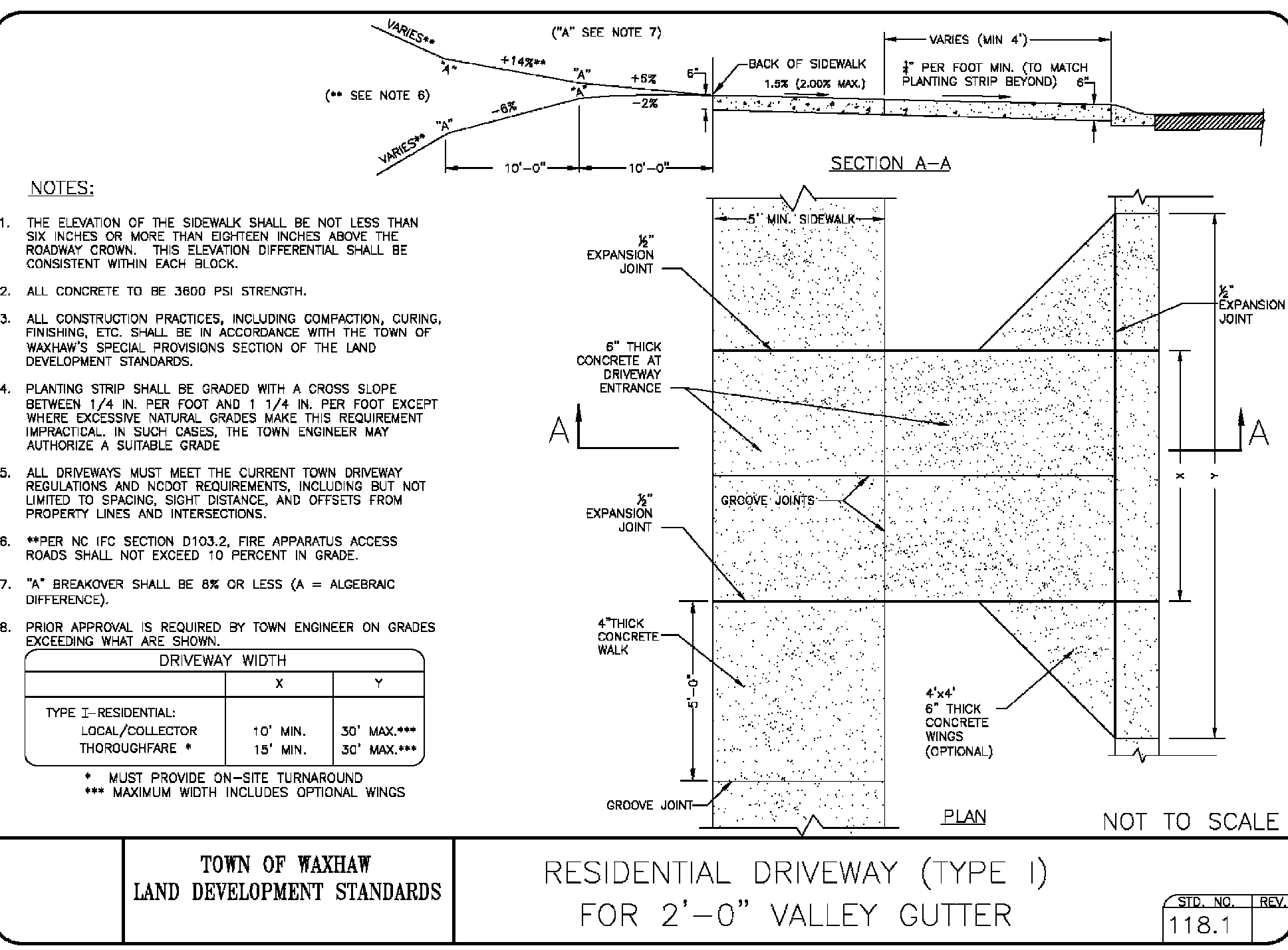
TOWN OF WAXHAW
 LAND DEVELOPMENT STANDARDS
 SAFETY RAIL WARRANTS
 STD. NO. 701.1



TOWN OF WAXHAW
 LAND DEVELOPMENT STANDARDS
 CONCRETE SIDEWALKS
 STD. NO. 106.1



TOWN OF WAXHAW
 LAND DEVELOPMENT STANDARDS
 ACCESSIBLE RAMP STANDARD WITHOUT PLANTING STRIP 2'-6" CURB AND GUTTER
 STD. NO. 125.1



TOWN OF WAXHAW
 LAND DEVELOPMENT STANDARDS
 RESIDENTIAL DRIVEWAY (TYPE 1) FOR 2'-0" VALLEY GUTTER
 STD. NO. 118.1

JONES CIVIL DESIGN
 1019 THORNSBY LANE, MATTHEWS, NC 28105
 PH: (704) 412-8523
 www.jonescivil.com

****VETERAN-OWNED****
 ENGINEER
 REAL
 034936
 CURTIS MATTHEW JONES
 REGISTERED PROFESSIONAL ENGINEER
 STATE OF NORTH CAROLINA
 LICENSE NO. 4827

FINAL DESIGN

FOR CONSTRUCTION

JONES CIVIL DESIGN, P.C.
 C-3859
 REGISTERED PROFESSIONAL CORPORATION
 STATE OF NORTH CAROLINA

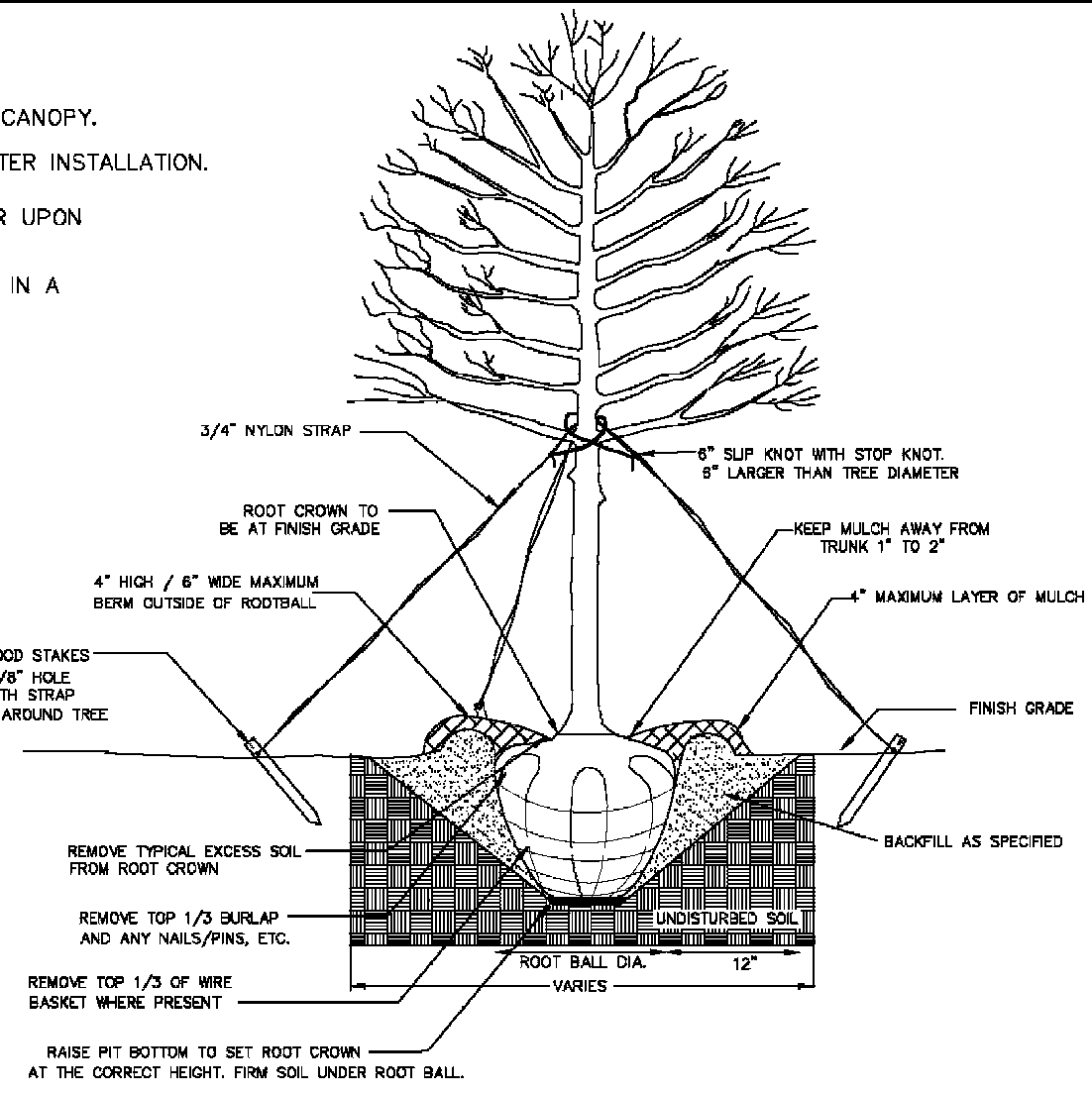
KING'S CORNER (SITE DEVELOPMENT)

SITEWORK DETAILS
 415 S. PROVIDENCE ST., WAXHAW, NC
 FILE NAME: BASE-18011.dwg
 JOB NUMBER: 18011
 ORIGINAL DATE: 3/29/2019
 DRAWN BY: CHJ

SHEET C5.1

NOTES:

1. REMOVE WIRE AND NYLON TWINE FROM BALL AND CANOPY.
2. SOAK ROOT BALL AND PLANT PIT IMMEDIATELY AFTER INSTALLATION.
3. STAKING IS REQUIRED FOR ALL TREES IN R.O.W. OR UPON REQUEST OF ARBORIST.
4. REMOVE EXCESS SOIL FROM SITE AND DISPOSE OF IN A LEGAL MANNER.
5. RESEED UNMULCHED, DISTURBED AREAS.



ALL TREES SHALL MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z601-2004)
 FOR EXAMPLE: CALIPER HEIGHT (RANGE) MAX. HEIGHT MIN. ROOT BALL DIA. MIN. ROOT BALL DEPTH

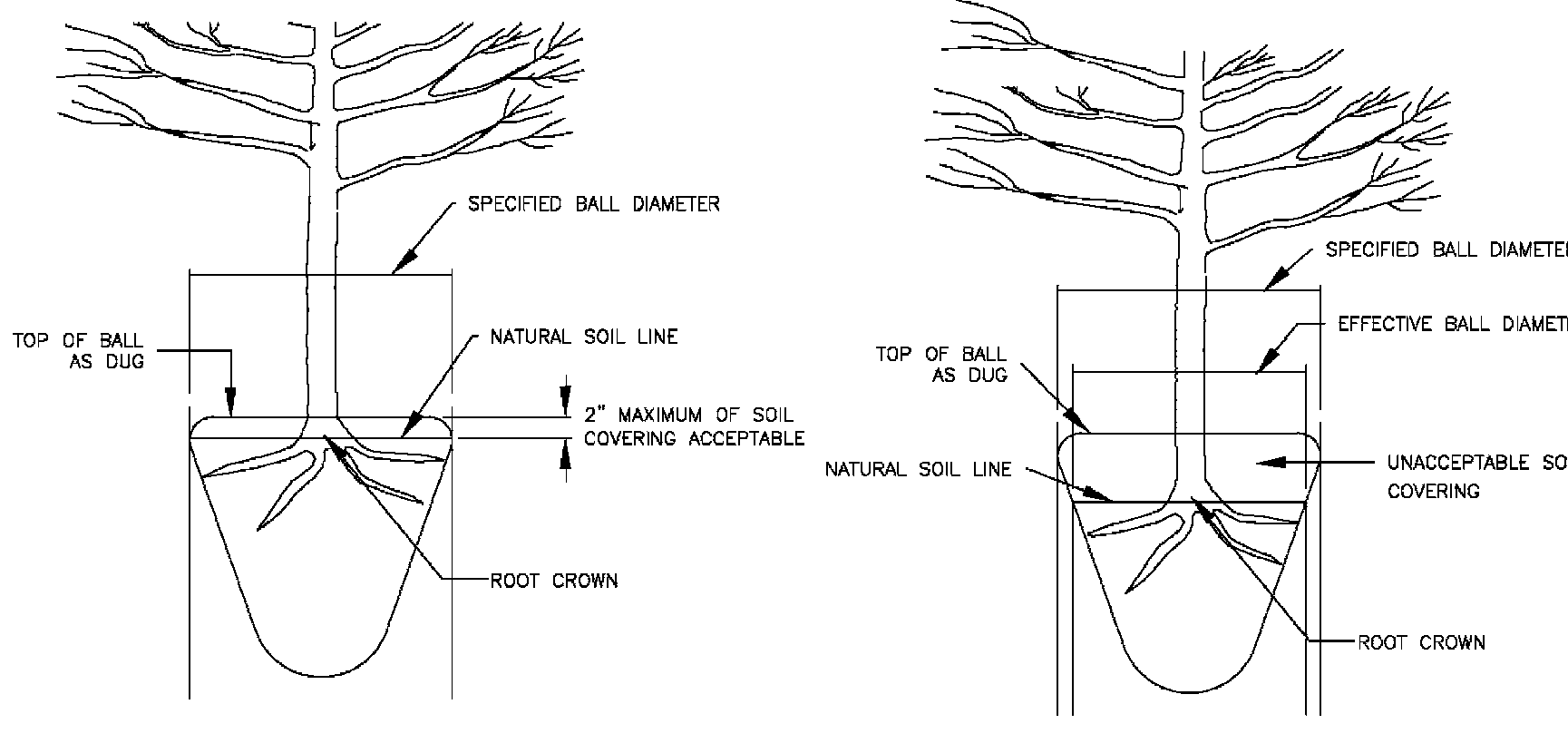
3"	12-14'	18'	24"	18"
4"	14-16'	21'	32"	21"

NOT TO SCALE

TOWN OF WAXHAW LAND DEVELOPMENT STANDARDS

TREE PLANTING (FOR SINGLE AND MULTI-STEM TREES)

STD. NO. REV. 600.1



ACCEPTABLE CONDITION (AS DELIVERED)

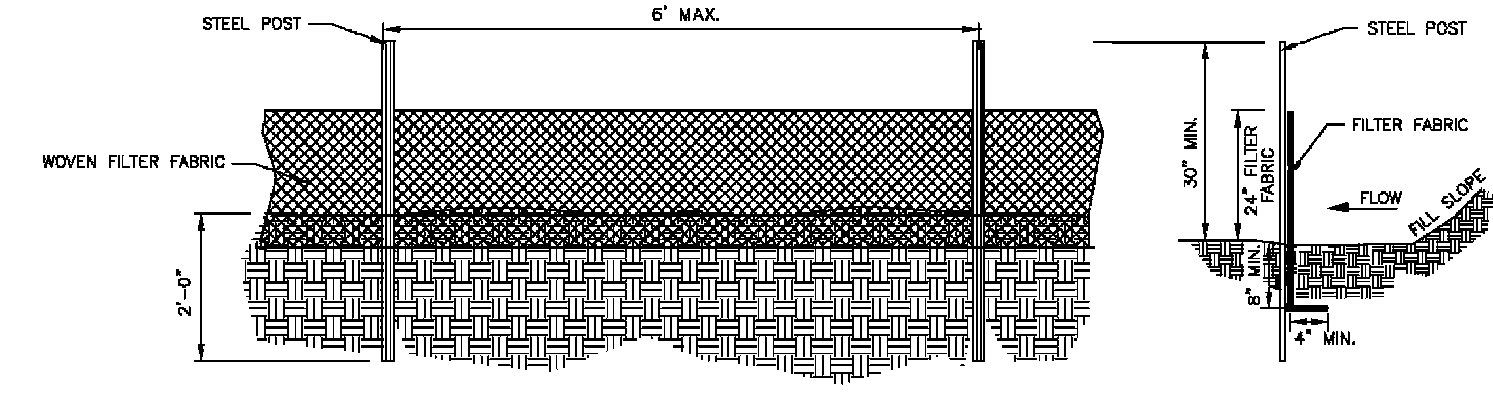
UNACCEPTABLE CONDITION (AS DELIVERED)

NOTE:
 A ROOT FLARE EXCAVATION FOR ALL TREES SPECIFIED WILL BE DONE BY THE ARBORIST TO ENSURE THAT TREES WERE NOT PLANTED/GROWN TOO DEEPLY AT SOURCE (NURSERY). LANDSCAPE CONTRACTOR SHALL HAVE SUPPLIER MARK GROUND LEVEL LINE ABOVE ROOT BALL. IF ARBORIST DETERMINES THAT THERE IS EXCESSIVE SOIL OVER THE ROOT CROWN, THESE TREES WILL BE REJECTED.

TOWN OF WAXHAW LAND DEVELOPMENT STANDARDS

ROOT FLARE DEPTHS (TREE ROOT BALL CONDITION ON TREES FROM SUPPLIERS)

STD. NO. REV. 614.1



GENERAL NOTES:

1. WOVEN FILTER FABRIC BE USED WHERE SILT FENCE IS TO REMAIN FOR A PERIOD OF MORE THAN 30 DAYS.
2. STEEL POSTS SHALL BE 5'-0" IN HEIGHT AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
3. TURN SILT FENCE UP SLOPE AT ENDS.
4. ORANGE SAFETY FENCE IS REQUIRED AT BACK OF SILT FENCE WHEN GRADING IS ADJACENT TO SWIM BUFFERS, STREAMS OR WETLANDS (REFER TO SWIM BUFFER GUIDELINES). THE COLOR ORANGE IS RESERVED FOR VISUAL IDENTIFICATION OF ENVIRONMENTALLY SENSITIVE AREAS.
5. DRAINAGE AREA CAN NOT BE GREATER THAN 1/4 ACRE PER 100 FT OF FENCE.
6. SLOPE LENGTHS CAN NOT EXCEED CRITERIA SHOWN IN TABLE 6.8.2A NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
7. DO NOT INSTALL SEDIMENT FENCE ACROSS STREAMS, DITCHES, WATERWAYS OR OTHER AREAS OF CONCENTRATED FLOW.

MAINTENANCE NOTES:

1. FILTER BARRIERS SHALL BE INSPECTED BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS NEEDED SHALL BE MADE IMMEDIATELY.
2. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH APPROX. HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS REMOVED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEED.

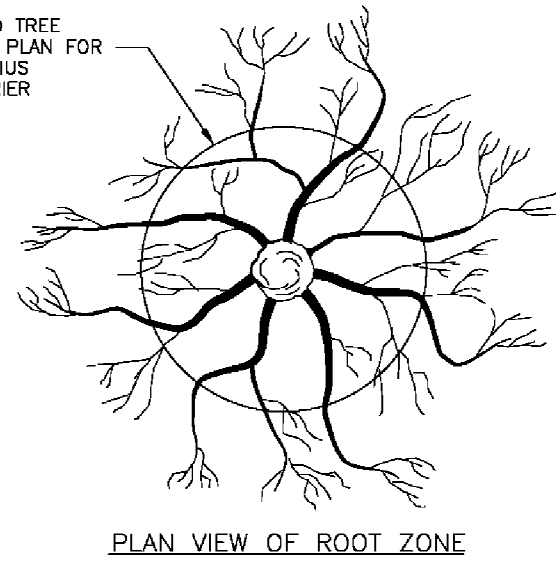
NOT TO SCALE

TOWN OF WAXHAW LAND DEVELOPMENT STANDARDS

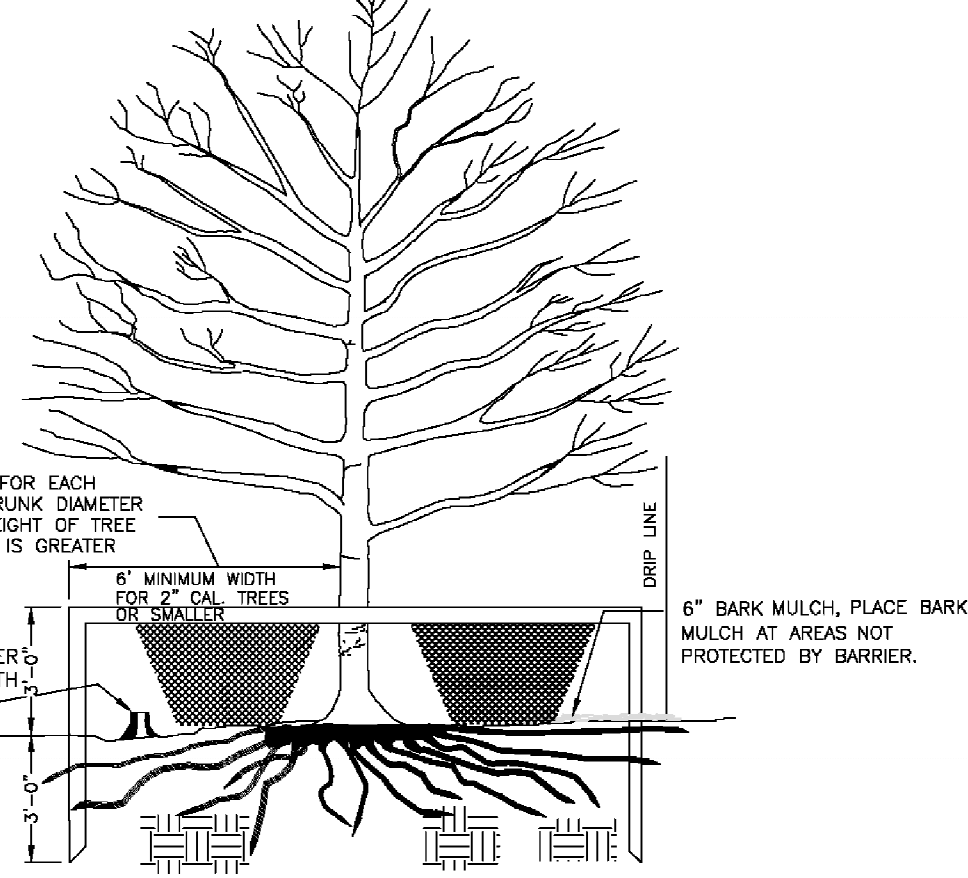
TEMPORARY SILT FENCE

STD. NO. REV. 507.1

SEE APPROVED TREE PRESERVATION PLAN FOR REQUIRED RADIUS OF TREE BARRIER



- NOTES:
1. REMOVE ALL BARRIERS UPON COMPLETION OF PROJECT.
 2. LANDSCAPING PLANS SHALL SHOW THE LOCATIONS OF ALL TREE PROTECTION FENCES.

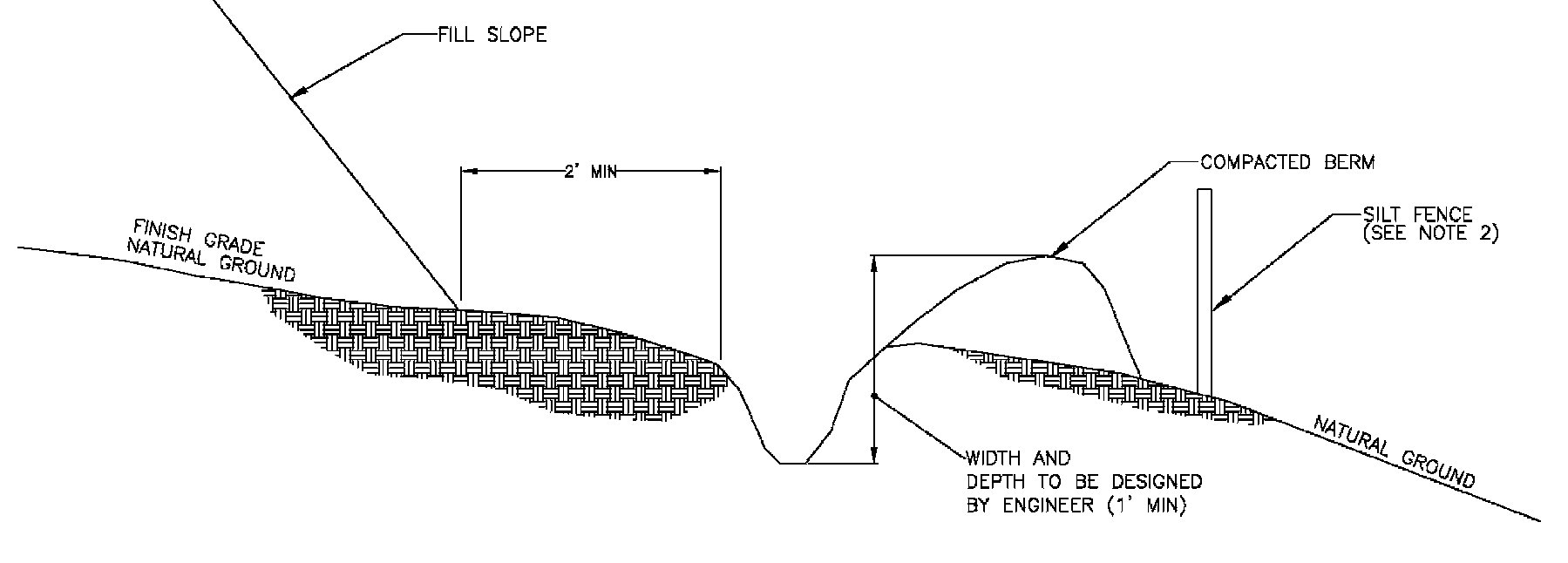


TREE PROTECTION DETAIL

STD. NO. REV. 601.1

TOWN OF WAXHAW LAND DEVELOPMENT STANDARDS

CALL 811 BEFORE YOU DIG, KNOW WHAT'S BELOW IT'S THE LAW



- NOTE:
1. DITCH SHOULD HAVE LONGITUDINAL SLOPE OF 1%.
 2. SILT FENCE MAY BE REQUIRED BEHIND BERM.

NOT TO SCALE

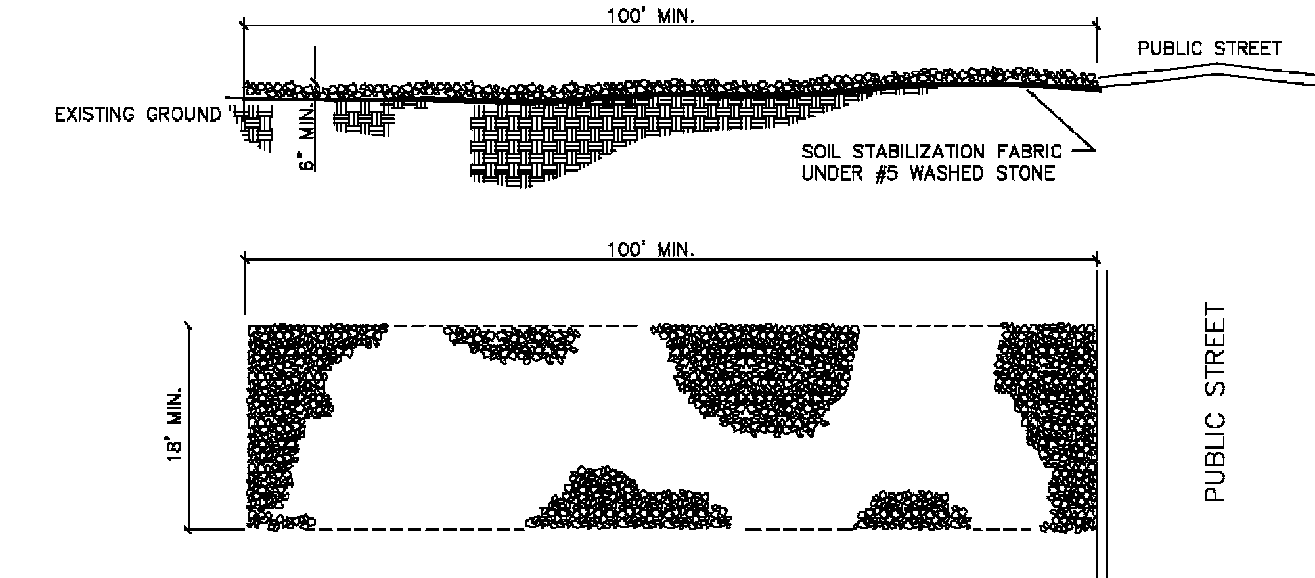
TOWN OF WAXHAW LAND DEVELOPMENT STANDARDS

TEMPORARY SILT DITCH

STD. NO. REV. 506.1

NOTES:

1. A STABILIZED ENTRANCE PAD OF #5 WASHED STONE AND RAILROAD BALLAST SHALL BE LOCATED WHERE TRAFFIC WILL ENTER OR LEAVE THE CONSTRUCTION SITE ONTO A PUBLIC STREET.
2. FILTER FABRIC OR COMPACTED CRUSHER RUN STONE SHALL BE USED AS A BASE FOR THE CONSTRUCTION ENTRANCE.
3. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC STREETS OR EXISTING PAVEMENT. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS WARRANT AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
4. ANY SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC STREETS MUST BE REMOVED IMMEDIATELY. ANY AGGREGATE TRACKED INTO THE ROADWAY MUST BE SWEEPED BACK ON SITE ON A NIGHTLY BASIS.
5. WHEN APPROPRIATE, WHEELS MUST BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTERING A PUBLIC STREET. WHEN WASHING IS REQUIRED, IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN (SEE STD. NO. 515.1).
6. THE TOWN MAY REQUIRE A STANDARD COMMERCIAL DRIVEWAY (STD. 108.1 & 109.1) TO ACCESS THE CONSTRUCTION SITE IF THE DRIVEWAY IS ON A THROUGHFARE.



NOT TO SCALE

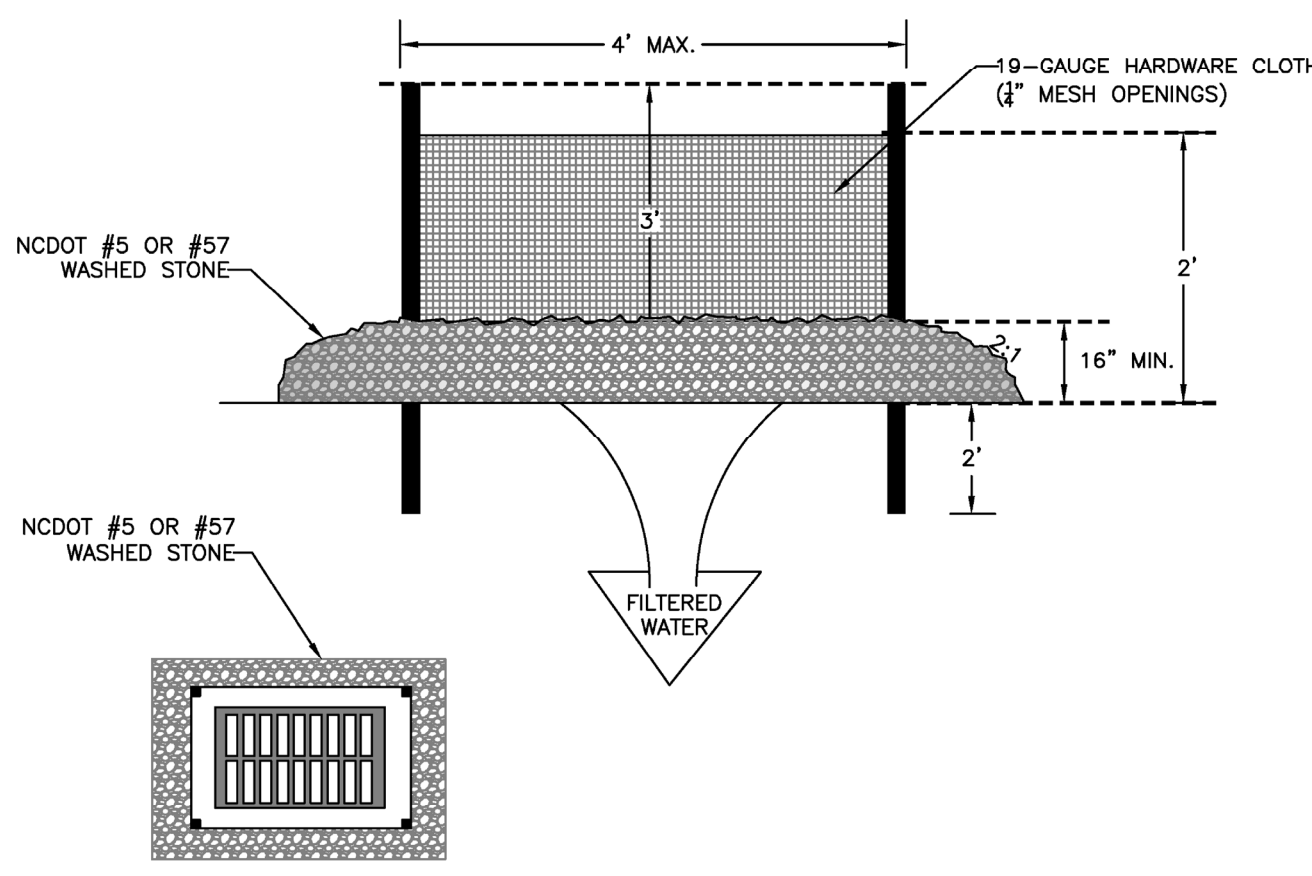
TOWN OF WAXHAW LAND DEVELOPMENT STANDARDS

STABILIZED CONSTRUCTION ENTRANCE

STD. NO. REV. 514.1

GENERAL NOTES:

1. UNIFORMLY GRADE A SHALLOW DEPRESSION APPROACHING THE INLET.
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 STABILIZED IT WITH GROUND COVER.



NOT TO SCALE

TOWN OF WAXHAW LAND DEVELOPMENT STANDARDS

HARDWARE CLOTH AND GRAVEL INLET PROTECTION

STD. NO. REV. 512.1

GENERAL NOTES:

1. WIRE FENCING SHALL BE A MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
2. WOVEN FILTER FABRIC BE USED WHERE SILT FENCE IS TO REMAIN FOR A PERIOD OF MORE THAN 30 DAYS.
3. STEEL POSTS SHALL BE 5'-0" IN HEIGHT AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
4. WIRE FENCING SHALL BE AT LEAST #10 GAUGE WITH A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
5. TURN SILT FENCE UP SLOPE AT ENDS.
6. WIRE MESH SHALL BE MIN. 13 GAUGE WITH MAXIMUM 12" OPENINGS.
7. WIRE AND WASHED STONE IS REQUIRED TO BE SHOWN ON PLANS AT THE TOE OF SLOPES GREATER THAN 10 FEET VERTICAL (2:1 SLOPE).
8. ORANGE SAFETY FENCE IS REQUIRED AT BACK OF SILT FENCE WHEN GRADING IS ADJACENT TO SWIM BUFFERS, STREAMS OR WETLANDS (REFER TO SWIM BUFFER GUIDELINES). THE COLOR ORANGE IS RESERVED FOR VISUAL IDENTIFICATION OF ENVIRONMENTALLY SENSITIVE AREAS.
9. DRAINAGE AREA CAN NOT BE GREATER THAN 1/4 ACRE PER 100 FT OF FENCE.
10. SLOPE LENGTHS CAN NOT EXCEED CRITERIA SHOWN IN TABLE 6.8.2A NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
11. DO NOT INSTALL SEDIMENT FENCE ACROSS STREAMS, DITCHES, WATERWAYS OR OTHER AREAS OF CONCENTRATED FLOW.

MAINTENANCE NOTES:

1. FILTER BARRIERS SHALL BE INSPECTED BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS NEEDED SHALL BE MADE IMMEDIATELY.
2. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS REMOVED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEED.

NOT TO SCALE

TOWN OF WAXHAW LAND DEVELOPMENT STANDARDS

HIGH HAZARD TEMPORARY SILT FENCE

STD. NO. REV. 508.1

FOR LATE WINTER AND EARLY SPRING:

SEEDING MIXTURE:
 RYE (GRAIN) - 120 LB/ACRE
 ANNUAL LESPEDEZA (KOBE) - 50 LB/ACRE
 (OMIT ANNUAL LESPEDEZA WHEN DURATION OF TEMPORARY COVER IS NOT TO EXCEED BEYOND JUNE)

SEEDING DATES:
 JAN. 1 - MAY 1

SOIL AMENDMENTS:
 FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER

MULCH:
 APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE:
 REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, FERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE

FOR SUMMER:

SEEDING MIXTURE:
 GERMAN MILLET - 40 LB/ACRE
 (A SMALL-STEMMED SUDANGRASS MAY BE SUBSTITUTED AT A RATE OF 50 LB/ACRE)

SEEDING DATES:
 MAY 1 - AUG. 15

SOIL AMENDMENTS:
 FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER

MULCH:
 APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE:
 REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, FERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE

FOR FALL:

SEEDING MIXTURE:
 RYE (GRAIN) - 120 LB/ACRE

SEEDING DATES:
 AUG. 15 - DEC 30

SOIL AMENDMENTS:
 FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 1,000 LB/ACRE 10-10-10 FERTILIZER

MULCH:
 APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE:
 REPAIR AND REFERTILIZE DAMAGED AREAS IMMEDIATELY. TOPDRESS WITH 50 LB/ACRE OF NITROGEN IN MARCH. IF IT IS NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 LB/ACRE KOBE LESPEDEZA IN LATE FEBRUARY OR EARLY MARCH.

FOR ADDITIONAL INFORMATION, REFER TO NCDEN EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL (ESCPDM), SECTION 6.10. FOR PERMANENT SEEDING SPECIFICATIONS, INCLUDING SEED BED PREP, SEASONAL LIMITATIONS FOR SEEDING OPERATIONS, THE KINDS OF GRADES OF FERTILIZERS, THE KINDS OF SEED, AND THE RATES OF APPLICATION OF LIMESTONE, FERTILIZER, AND SEED, REFER TO NCDENR ESOPDM SECTION 6.11.

TOWN OF WAXHAW LAND DEVELOPMENT STANDARDS

TEMPORARY SEEDING SCHEDULE

STD. NO. REV. 521.1

CIVIL ENGINEERING | LAND SOLUTIONS FROM CONCEPTION TO COMPLETION

JONES CIVIL DESIGN

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 www.jonescivil.com

****VETERAN - OWNED****
 Engineering@jonescivil.com

FINAL DESIGN

SEAL 034936
 ENGINEER
 CURTIS MATTHEW JONES

FOR CONSTRUCTION

SEAL 034936
 ENGINEER
 JONES CIVIL DESIGN, P.C.
 C-3859
 CERTIFICATE OF AUTHORIZATION

REV.	DATE	BY	DESCRIPTION

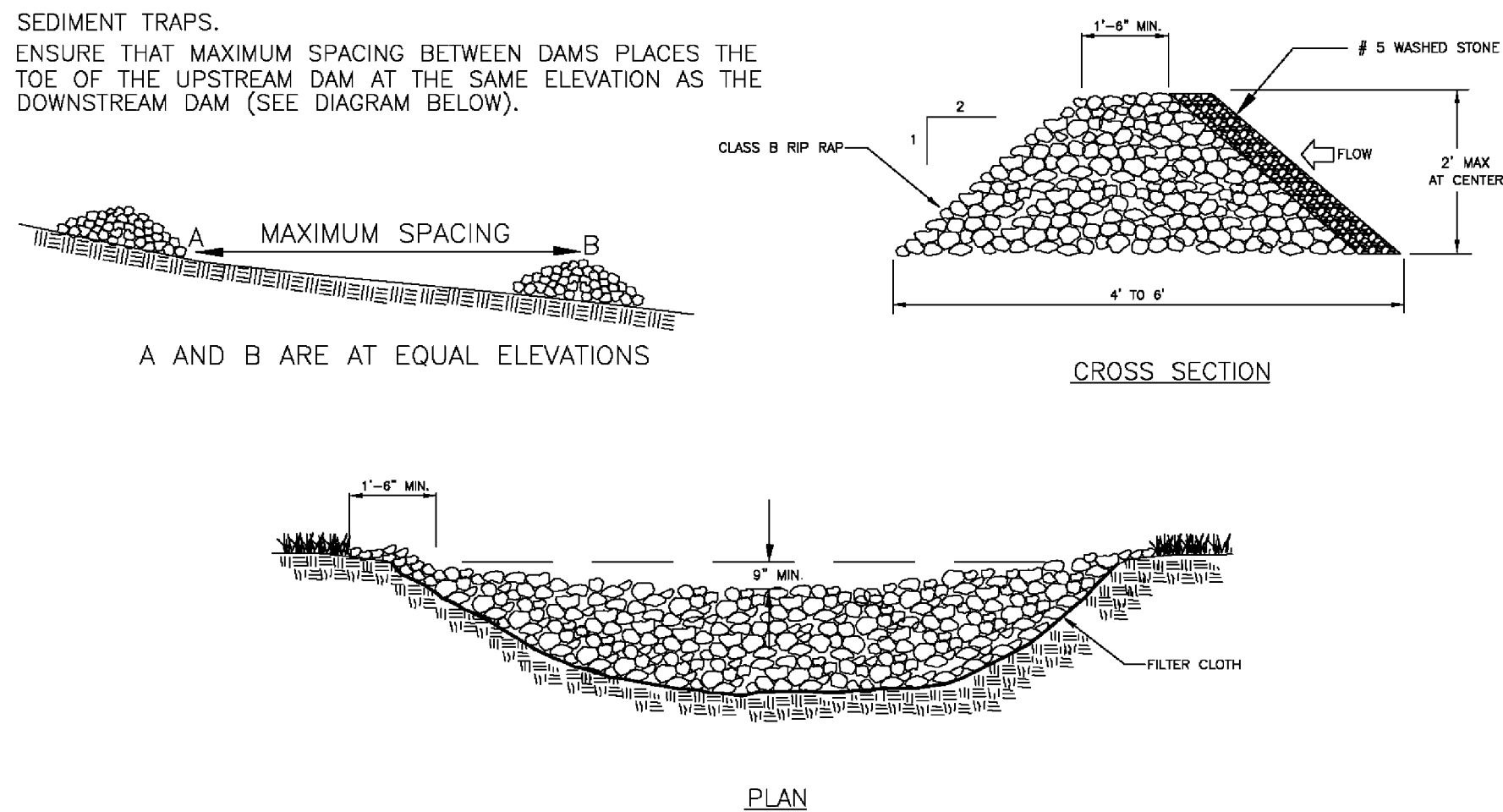
KING'S CORNER (SITE DEVELOPMENT)

SITEWORK DETAILS
415 S. PROVIDENCE ST.
WAXHAW, NC

FILE NAME: BASE-18011.dwg
 ORIGINAL DATE: 3/29/2019
 JOB NUMBER: 18011
 DRAWN BY: CMJ

GENERAL NOTES:

- RIPRAP SIZE TO BE DESIGNED BY ENGINEER.
- CHECK DAMS MAY BE USED IN SLOPING DITCHES OR CHANNELS TO SLOW VELOCITY OR TO CREATE SEDIMENT TRAPS.
- ENSURE THAT MAXIMUM SPACING BETWEEN DAMS PLACES THE TOE OF THE UPSTREAM DAM AT THE SAME ELEVATION AS THE DOWNSTREAM DAM (SEE DIAGRAM SAME).

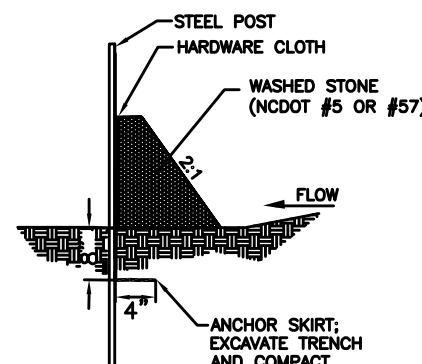
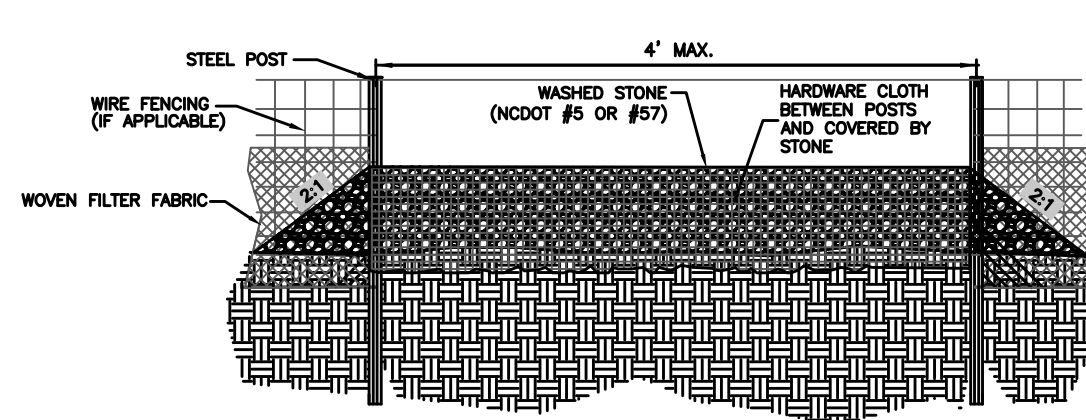


NOT TO SCALE

TOWN OF WAXHAW
LAND DEVELOPMENT STANDARDS

TEMPORARY ROCK CHECK DAM

STD. NO.	REV.
513.1	



GENERAL NOTES:

- SEDIMENT FILTER OUTLET AND HARDWARE CLOTH SHALL BE 16 INCHES HIGH BUT NO TALLER THAN 18 INCHES.
- HARDWARE CLOTH SHALL BE ANCHORED TO THE STEEL POSTS SECURELY USING APPROPRIATE ANCHORS. HARDWARE CLOTH SHALL BE KEPT IN A MINIMUM OF 12 INCHES IN LENGTH AND BACKFILLED PROPERLY AS SHOWN IN ABOVE DETAIL. HARDWARE CLOTH TO BE SAME AS STD. #30.09 (19 GAUGE, 1/4" SPACING).
- POSTS SHALL BE NO MORE THAN 4 FEET APART.
- SITE OUTLETS AT ANY POINT SMALL CONCENTRATED FLOWS ARE ANTICIPATED AND AT THE DIRECTION OF THE INSPECTOR.

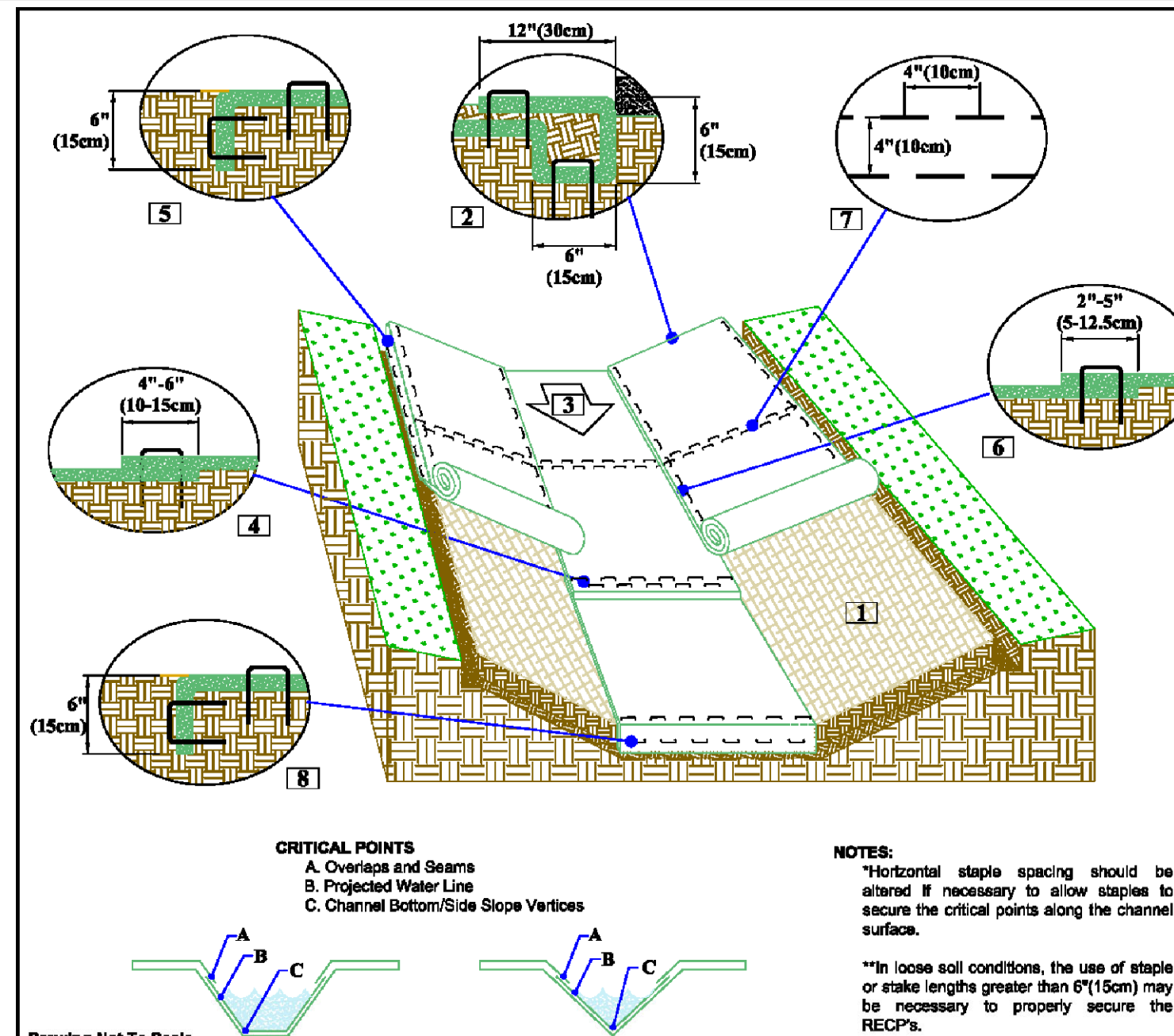
MAINTENANCE NOTES:

- FILTER OUTLETS SHALL BE INSPECTED BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS NEEDED SHALL BE MADE IMMEDIATELY.
- THE STONE SHALL BE REPLACED PROMPTLY AFTER ANY EVENT THAT HAS CLOGGED OR REMOVED IT.
- SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OUTLET IS REMOVED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

**SILT FENCE
OUTLET**

NOT TO SCALE

TOWN OF WAXHAW
LAND DEVELOPMENT STANDARDS



Drawing Not To Scale

NORTH AMERICAN GREEN
5401 St. Wendel - Cynthiana Rd.
Poseyville, IN 47833
TEL: 800-722-2940
www.nagreen.com

LINER INSTALLATION

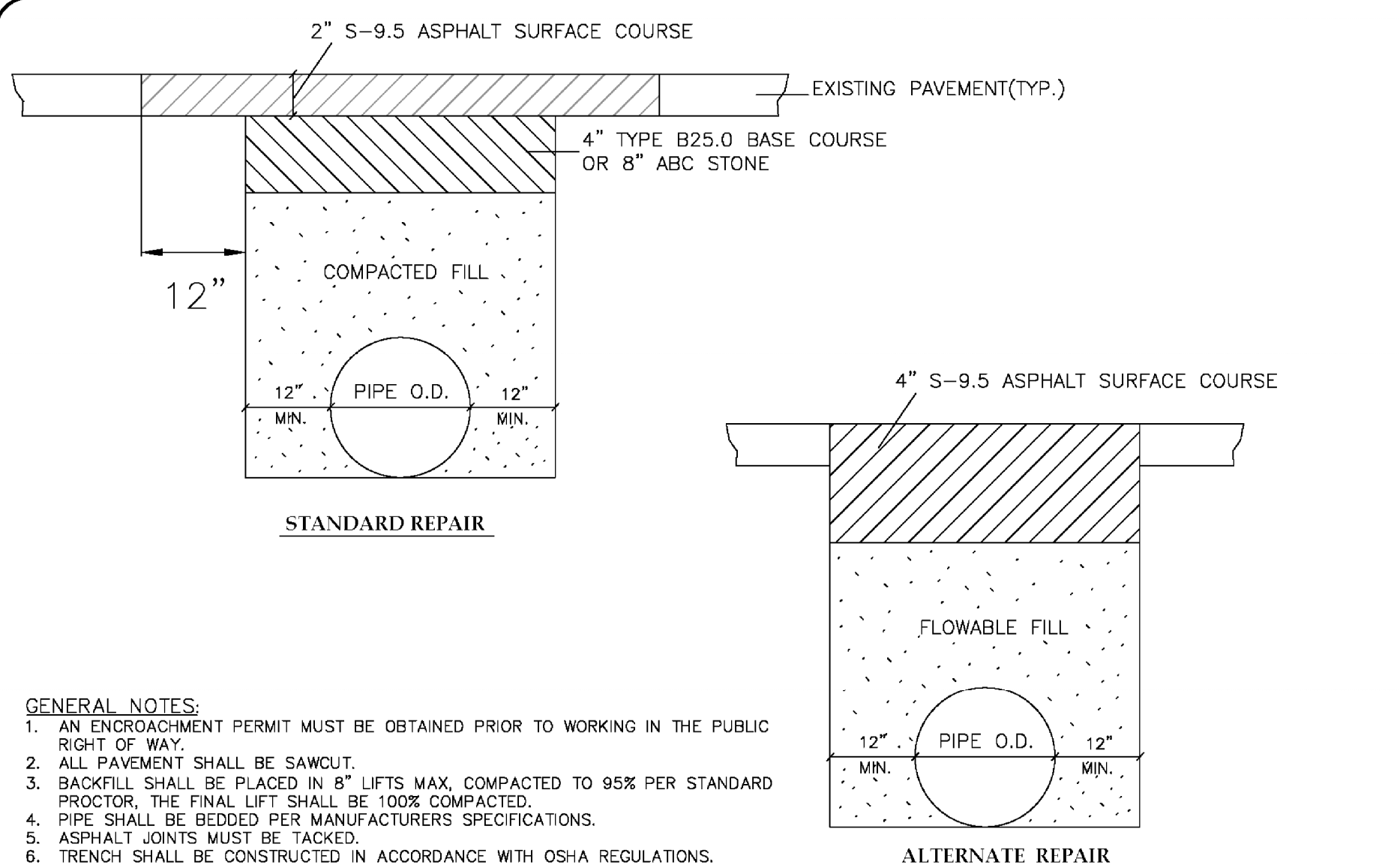
(FOR SWALES, DITCHES, & CHANNELS)

**CHANNEL
INSTALLATION
DETAIL**

- Prepare soil before installing unless erosion control products (RECP's), including any necessary application of lime, fertilizer and seed.
- Begin at the top of the channel by installing the RECP's in a 6" (150mm) deep X 6" (150mm) wide trench with approximately 12" (300mm) of RECP's extended beyond the up-slope portion of the trench. Use StoneMax mat at the channel/bottom outlet as erosion control. Secure RECP's over compacted soil with a row of staples/stakes spaced approximately 12" apart across the width of the RECP's.
- Roll center RECP's in direction of water flow in bottom of channel. RECP's will unroll with appropriate side against the soil surface. All RECP's must be securely flattened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide.
- Place consecutive RECP's end-over-end (8" (200mm) overlap) using a 4" (100mm) staple in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to the compacted soil and fold the remaining 12" (300mm) portion of RECP's back over the seed and compacted soil. Secure RECP's over compacted soil with a row of staples/stakes spaced approximately 12" apart across the width of the RECP's.
- Full length edge of RECP's at top of slope must be anchored with a row of staples/stakes approximately 12" (300mm) apart in a 6" (150mm) deep X 6" (150mm) wide trench. Backfill and compact the trench after stapling.
- Adjacent RECP's must be overlapped approximately 2" (50mm) (Depending on RECP's type) and stapled.
- In high flow channel applications a staple check-staple is recommended at 30 to 40 foot (9-12m) intervals. Use a double row of staples staggered 4" (100mm) apart and 4" (100mm) over the entire width of the channel.
- The terminal end of the RECP's must be anchored with a row of staples/stakes approximately 12" (300mm) apart in a 6" (150mm) deep X 6" (150mm) wide trench. Backfill and compact the trench after stapling.

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1019 THORNSBY LANE, MATTHEWS, NC 28105
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****VETERAN - OWNED****
ENGINEER
CURTIS MATT HEW JONES
034936
FOR CONSTRUCTION
STATE OF NORTH CAROLINA
JONES CIVIL DESIGN, P.C.
C-3859
LICENSED PROFESSIONAL ENGINEER

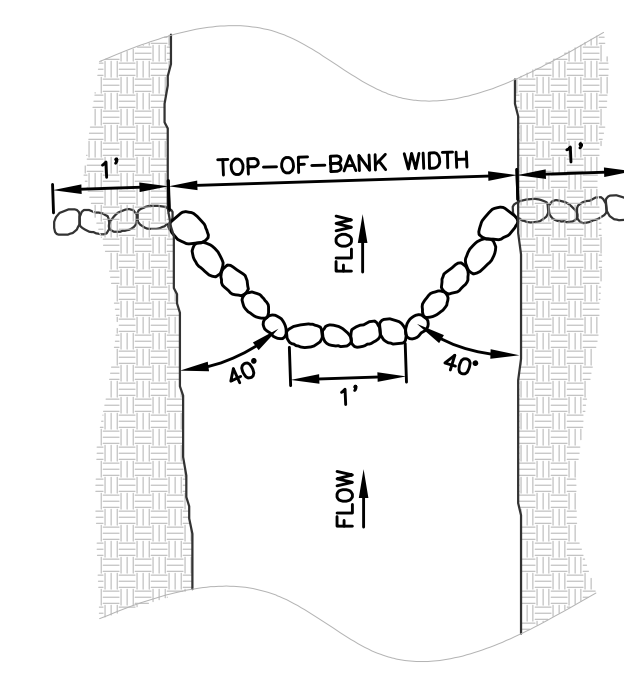


NOT TO SCALE

TOWN OF WAXHAW
LAND DEVELOPMENT STANDARDS

**FINAL PAVEMENT REPAIR
OF UTILITY CUTS
TYPICAL SECTION**

REV.	DATE
290.1	



SWALE	K _v	K _d	W _b	W _s	H	T	D ₅₀
"C1"	1.5'	1'	1'	7'	0.60'	0.30'	18"
"C2"	1.5'	1'	1'	7'	0.30'	0.15'	12"
"C3"	1'	0.75'	0.5'	6.5'	0.12'	0.06'	6"
"C4"	0.75'	0.50'	0.5'	6.5'	0.09'	0.06'	6"
"C5"	0.75'	0.50'	0.5'	6.5'	0.07'	0.06'	6"

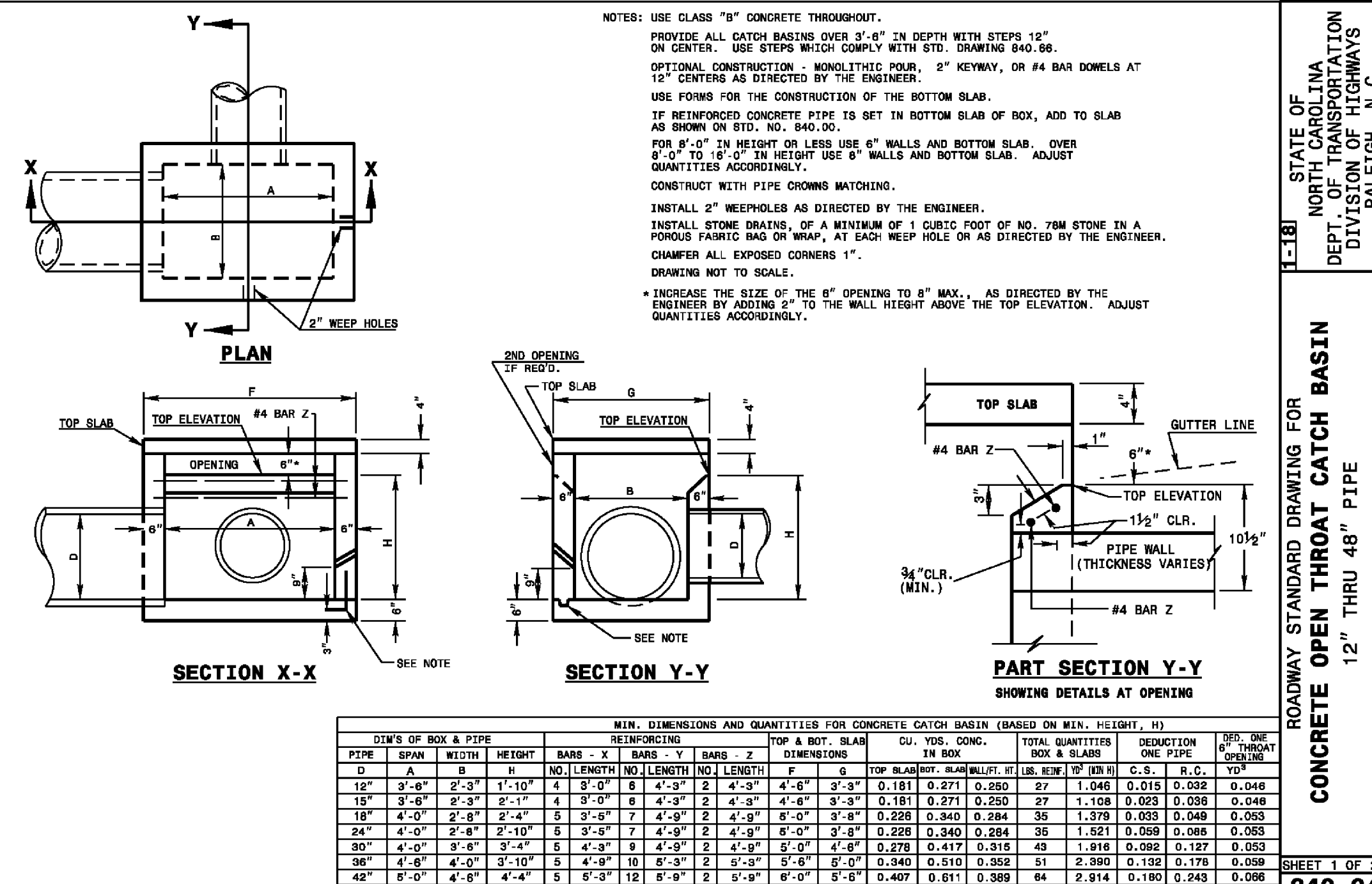
STONE (SIZE D₅₀) SHALL BE "KEYED" INTO SOIL AROUND AND BENEATH THE CROSS VANE

CALL 811 BEFORE YOU DIG, KNOW WHAT'S BELOW IT'S THE LAW

ROCK CROSS VANE

NOT TO SCALE

TOWN OF WAXHAW
LAND DEVELOPMENT STANDARDS

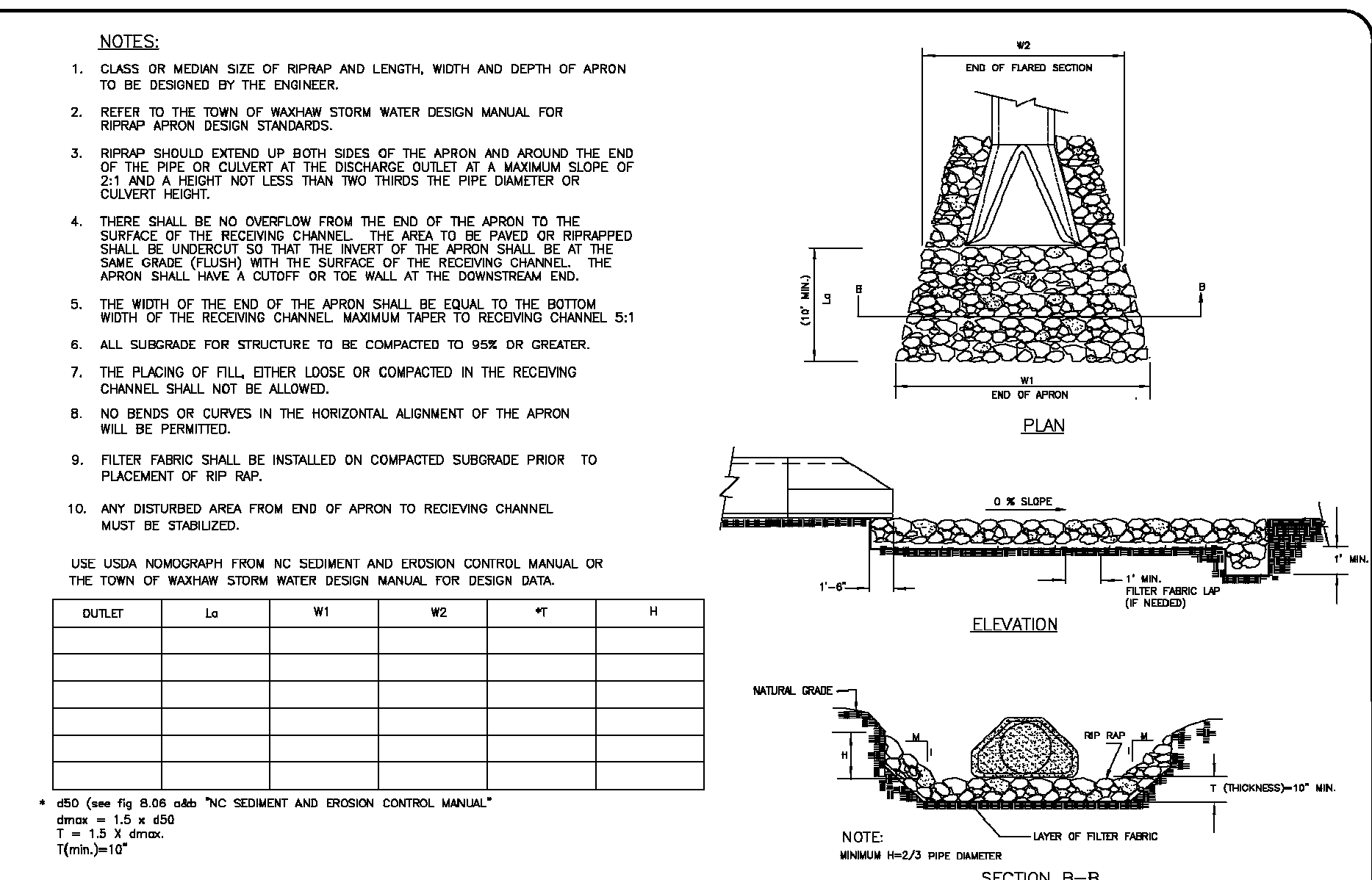


PIPE SIZE	BOX SIZE	MIN. DIMENSIONS AND QUANTITIES FOR CONCRETE CATCH BASIN (BASED ON MIN. HEIGHT, H)		TOTAL QUANTITIES		REDUCTION		CONCRETE	REINFORCING
		MIN. DIMENSIONS	QUANTITIES	CONCRETE	REINFORCING	CONCRETE	REINFORCING		
12"	12" x 12"	12" x 12" x 12"	1	1.046	0.515	0.532	0.048	1.046	0.515
15"	15" x 15"	15" x 15" x 12"	1	1.158	0.555	0.555	0.048	1.158	0.555
18"	18" x 18"	18" x 18" x 12"	1	1.378	0.633	0.648	0.063	1.378	0.633
24"	24" x 24"	24" x 24" x 12"	1	1.521	0.699	0.699	0.063	1.521	0.699
30"	30" x 30"	30" x 30" x 12"	1	1.618	0.727	0.727	0.053	1.618	0.727
36"	36" x 36"	36" x 36" x 12"	1	1.700	0.770	0.770	0.053	1.700	0.770
42"	42" x 42"	42" x 42" x 12"	1	1.774	0.800	0.800	0.053	1.774	0.800
48"	48" x 48"	48" x 48" x 12"	1	1.844	0.826	0.826	0.053	1.844	0.826

SHEET 1 OF 2
840.04

ROADWAY STANDARD DRAWING FOR
CONCRETE OPEN THROAT CATCH BASIN
12" THRU 48" PIPE

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

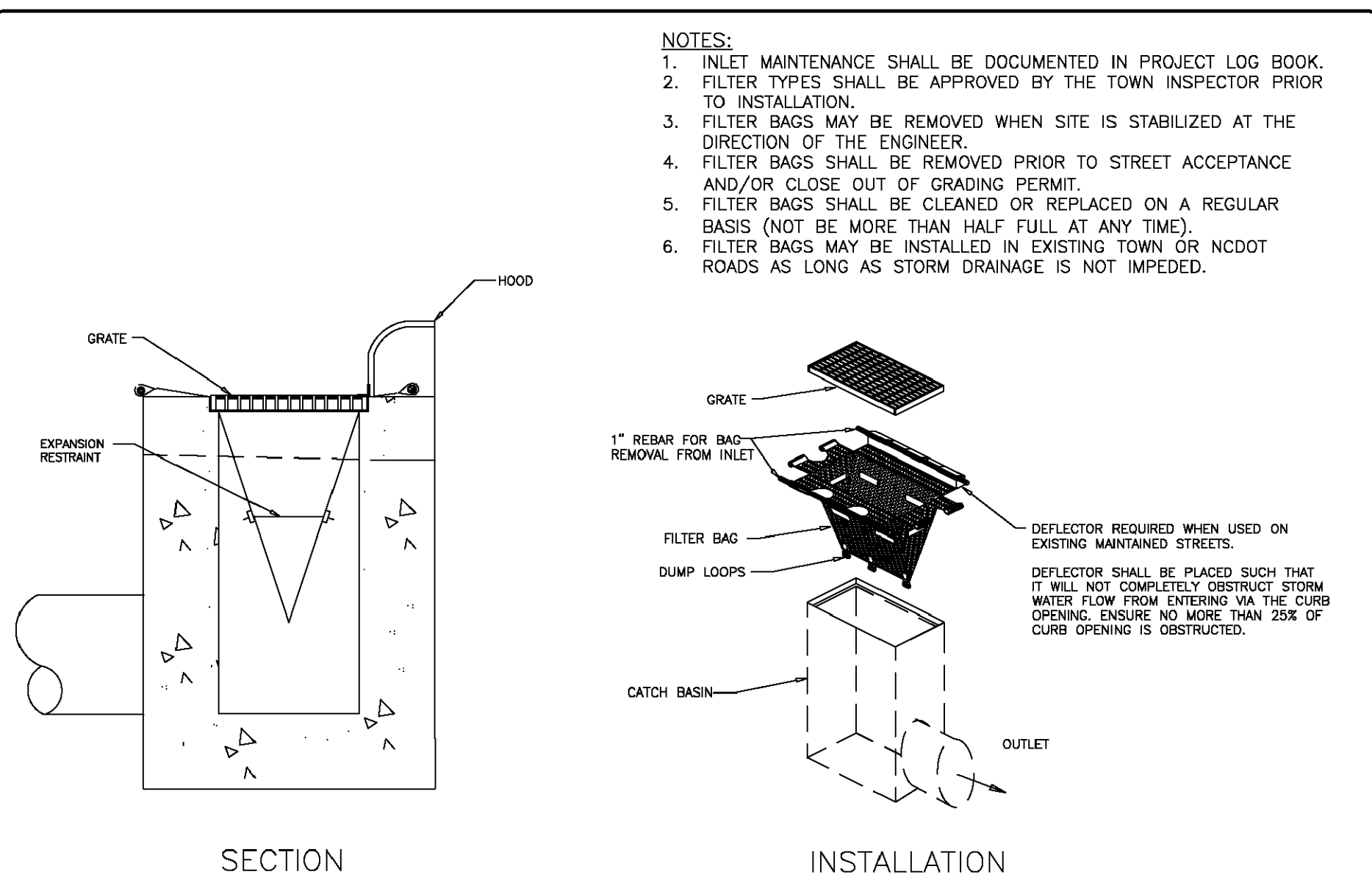


NOT TO SCALE

TOWN OF WAXHAW
LAND DEVELOPMENT STANDARDS

**RIPRAP APRON AT PIPE OUTFALLS
OTHER THAN AT SWIM**

STD. NO.	REV.
306.1	

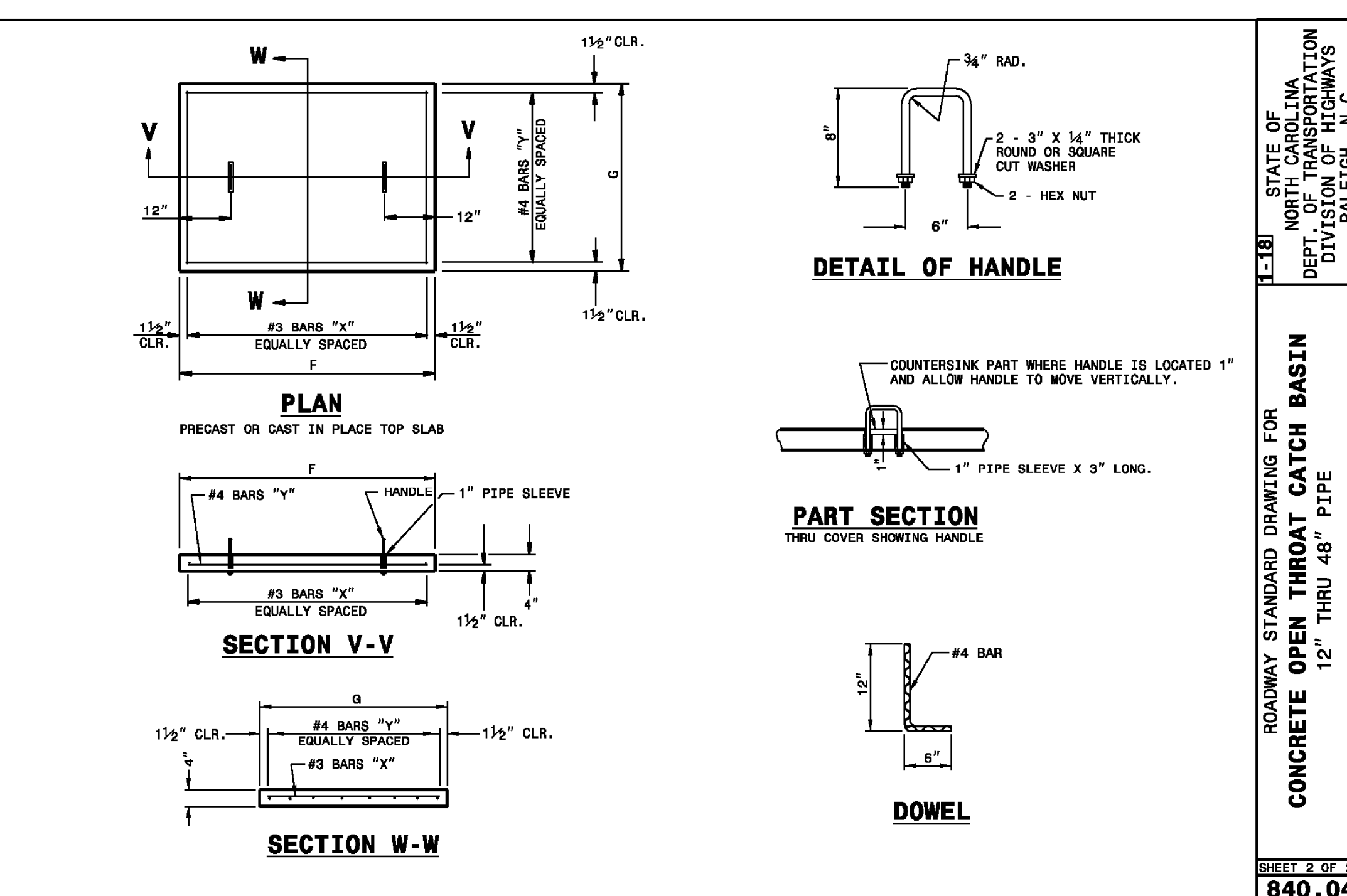


NOT TO SCALE

TOWN OF WAXHAW
LAND DEVELOPMENT STANDARDS

CATCH BASIN INLET PROTECTION

STD. NO.	REV.
519.1	



SHEET 2 OF 2
840.04

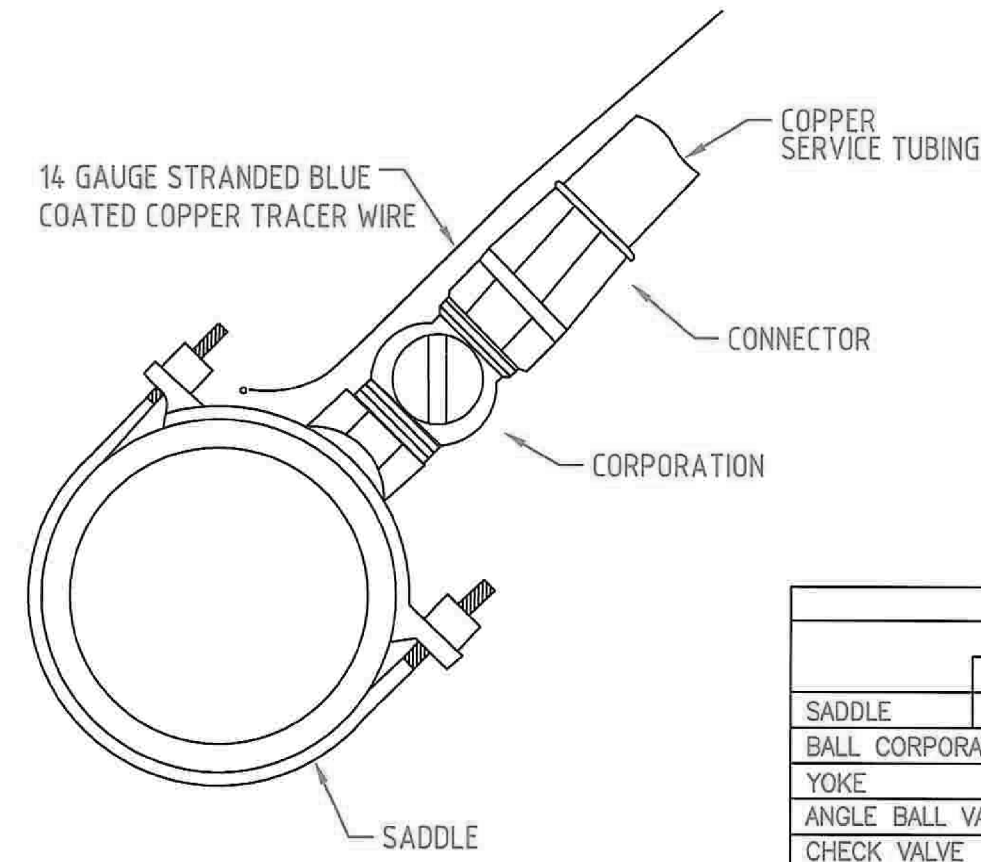
ROADWAY STANDARD DRAWING FOR
CONCRETE OPEN THROAT CATCH BASIN
12" THRU 48" PIPE

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

SITEWORK DETAILS
415 S. PROVIDENCE ST.
WAXHAW, NC

FILE NAME: BASE-18011.dwg
JOB NUMBER: 18011
ORIGINAL DATE: 3/29/2019
DRAWN BY: CHJ

**KING'S CORNER
(SITE DEVELOPMENT)**



APPROVED SERVICE HARDWARE			
	MUELLER	FORD	
SADDLE UP TO 8"	H-13420	S70	
BALL CORPORATION	B-25008	FB1000G	
YOKE	H-5020	Y 502	
ANGLE BALL VALVE	B-24273	BA94-323WG	
CHECK VALVE	H-14247-A	HHS91-323	
CONNECTORS COPPER	STYLE 110	GRIP JOINT	
EXPANSION CONNECTION		EC 23	

NOTE:
ROMAC 10" IN SHALL REPLACE MUELLER FOR PIPE DIAMETER UP TO 8"
SMITH BLAIR 317, FORD FC 202 OR ROMAC 202N SHALL REPLACE MUELLER FOR PIPE DIA. 12" AND UP

UNION COUNTY PUBLIC WORKS DEPARTMENT
UNION COUNTY, N.C.

STANDARD DETAIL

SERVICE CONNECTION

SCALE: N.T.S.
DATE: 10-4-11

5

SECTION 2721
ENGINEERED SURFACE DRAINAGE PRODUCTS

GENERAL
PVC SURFACE DRAINAGE INLETS SHALL INCLUDE THE DRAIN BASIN TYPE AS INDICATED ON THE CONTRACT DRAWING AND REFERENCED WITHIN THE CONTRACT SPECIFICATIONS. THE DUCTILE IRON GRATES (12" AND 15" FRAMES ARE CAST IRON) FOR EACH OF THESE FITTINGS ARE TO BE CONSIDERED AN INTEGRAL PART OF THE SURFACE DRAINAGE INLET AND SHALL BE FURNISHED BY THE SAME MANUFACTURER. THE SURFACE DRAINAGE INLETS SHALL BE AS MANUFACTURED BY NYLOPLAST A DIVISION OF ADVANCED DRAINAGE SYSTEMS, INC., OR PRIOR APPROVED EQUAL.

MATERIALS
THE DRAIN BASINS REQUIRED FOR THIS CONTRACT SHALL BE MANUFACTURED FROM PVC PIPE STOCK, UTILIZING A THERMO-MOLDING PROCESS TO REFORM THE PIPE STOCK TO THE SPECIFIED CONFIGURATION. THE DRAINAGE PIPE CONNECTION STUBS SHALL BE MANUFACTURED FROM PVC PIPE STOCK AND FORMED TO PROVIDE A WATER TIGHT CONNECTION WITH THE SPECIFIED PIPE SYSTEM. THIS JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR JOINTS FOR DRAIN AND SEWER PLASTIC PIPE USING FLEXIBLE ELASTOMERIC SEALS. THE PIPE BELL SPIGOT SHALL BE JOINED TO THE MAIN BODY OF THE DRAIN BASIN OR CATCH BASIN. THE PIPE STOCK USED TO MANUFACTURE THE MAIN BODY AND PIPE STUBS OF THE SURFACE DRAINAGE INLETS SHALL MEET THE MECHANICAL PROPERTY REQUIREMENTS FOR FABRICATED FITTINGS AS DESCRIBED BY ASTM D3034, STANDARD FOR SEWER PVC PIPE AND FITTINGS; ASTM F1336, STANDARD FOR PVC GASKETED SEWER FITTINGS.

THE GRATES FURNISHED FOR ALL SURFACE DRAINAGE INLETS SHALL BE DUCTILE IRON GRATES FOR SIZES 8", 10", 12", 15", 18", 24" AND 30" (12" AND 15" FRAMES ARE CAST IRON) SHALL BE MADE SPECIFICALLY FOR EACH BASIN SO AS TO PROVIDE A ROUND BOTTOM FLANGE THAT CLOSELY MATCHES THE DIAMETER OF THE SURFACE DRAINAGE INLET. GRATES FOR DRAIN BASINS SHALL BE CAPABLE OF SUPPORTING H-25 WHEEL LOADING FOR HEAVY-DUTY TRAFFIC OR H-10 LOADING FOR PEDESTRIAN TRAFFIC. 12" AND 15" GRATES WILL BE HINGED TO THE FRAME USING PINS. METAL USED IN THE MANUFACTURE OF THE CASTINGS SHALL CONFORM TO ASTM A536 GRADE 70-50-05 FOR DUCTILE IRON AND ASTM A-48-83 CLASS 30B FOR 12" AND 15" CAST IRON FRAMES. GRATES SHALL BE PROVIDED PAINTED BLACK.

INSTALLATION
THE SPECIFIED PVC SURFACE DRAINAGE INLET SHALL BE INSTALLED USING CONVENTIONAL FLEXIBLE PIPE BACKFILL MATERIALS AND PROCEDURES. THE BACKFILL MATERIAL SHALL BE CRUSHED STONE OR OTHER GRANULAR MATERIAL MEETING THE REQUIREMENTS OF CLASS 1 OR 2 MATERIAL AS DEFINED IN ASTM D2321. THE SURFACE DRAINAGE INLETS SHALL BE BEDDED AND BACK-FILLED UNIFORMLY IN ACCORDANCE WITH ASTM D2321. THE DRAIN BASIN BODY WILL BE CUT AT THE TIME OF THE FINAL GRADE SO AS TO MAINTAIN A ONE PIECE, LEAK PROOF STRUCTURE. NO BRICK, STONE OR CONCRETE BLOCK WILL BE USED TO SET THE GRATE TO THE FINAL GRADE HEIGHT. FOR H-25 LOAD RATED INSTALLATIONS, AN 8" TO 10" THICK CONCRETE RING WILL BE POURED UNDER THE GRATE AND FRAME AS RECOMMENDED BY DETAILS PROVIDED FROM THE MANUFACTURER.

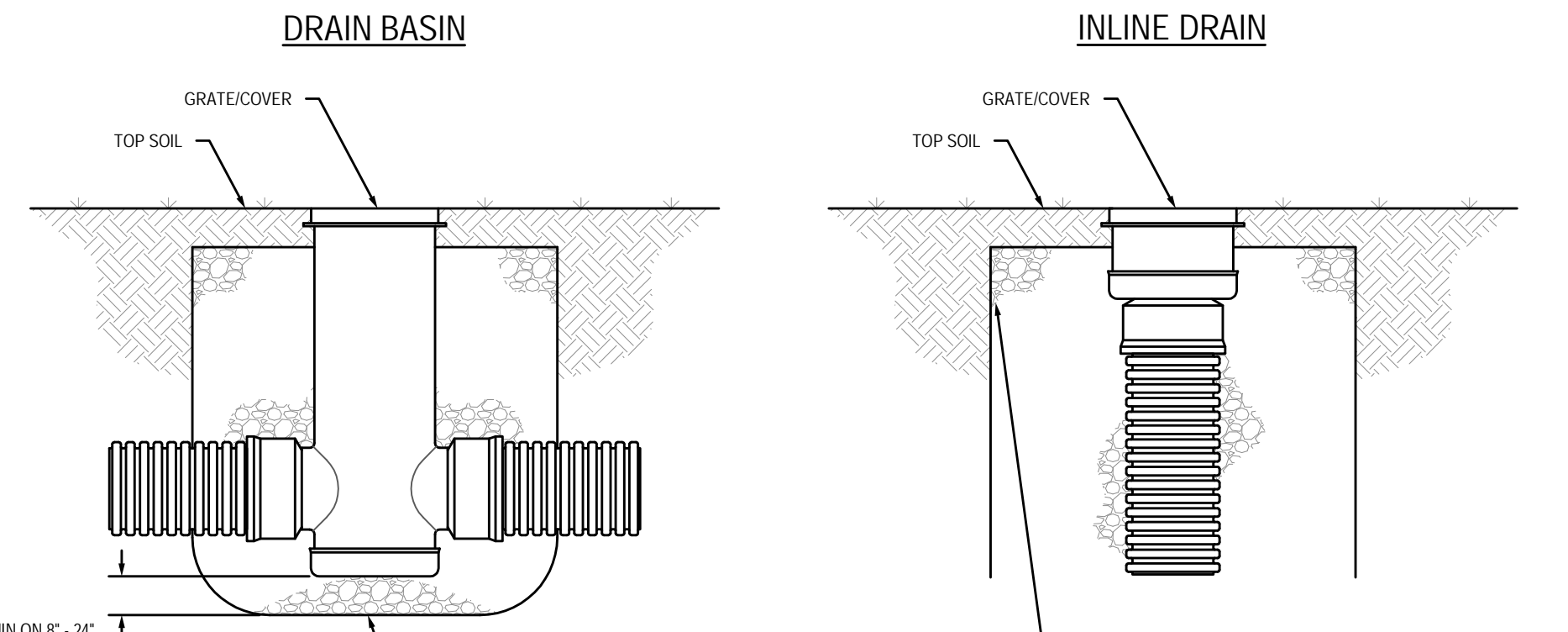
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DRAWN BY: CJA
DATE: 3-10-00
REVISED BY: NMH
DATE: 02-21-18
DWG SIZE: A
SCALE: 1:1
SHEET: 1 OF 1

MATERIAL: 3130 VERONA AVE
BUFORD, GA 30818
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplast-us.com

TITLE: 8" IN - 36" IN DRAIN BASIN SPECIFICATIONS
DWG NO: 7001-110-011
REV: J

NON TRAFFIC INSTALLATION



THE BACKFILL MATERIAL SHALL BE CRUSHED STONE OR OTHER GRANULAR MATERIAL MEETING THE REQUIREMENTS OF CLASS I, CLASS II, OR CLASS III MATERIAL AS DEFINED IN ASTM D2321. BEDDING & BACKFILL FOR SURFACE DRAINAGE INLETS SHALL BE PLACED & COMPACTED UNIFORMLY IN ACCORDANCE WITH ASTM D2321.

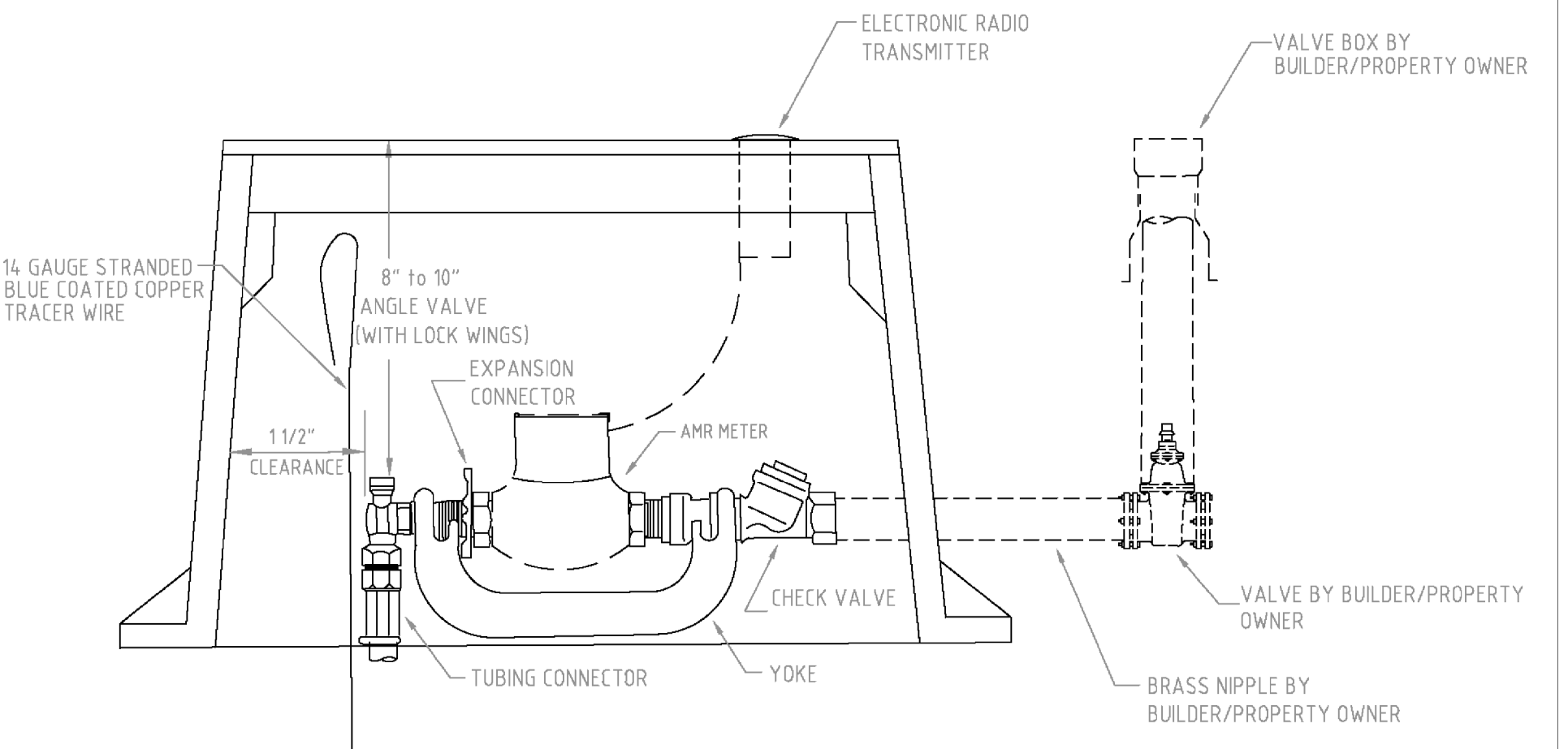
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DRAWN BY: CJA
DATE: 9-30-99
REVISED BY: NMH
DATE: 03-11-16
DWG SIZE: A
SCALE: 1:25
SHEET: 1 OF 1

MATERIAL: 3130 VERONA AVE
BUFORD, GA 30818
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplast-us.com

TITLE: DRAIN BASIN & INLINE DRAIN NOW TRAFFIC INSTALLATION
DWG NO: 7001-110-111
REV: E

GENERAL NOTES:
1) METER BOX LID TO HAVE AMR LOCATOR (ALLIANCE 1200 OR EQUAL FOR 50W ERT, STANDARD LID FOR 60W ERT)
2) BUILDER/PROPERTY OWNER TO INSTALL NIPPLE, VALVE AND VALVE BOX BEFORE METER WILL BE SET.
3) METER AND ERT BY UNION COUNTY @ PREVAILING RATE



UNION COUNTY PUBLIC WORKS DEPARTMENT
UNION COUNTY, N.C.

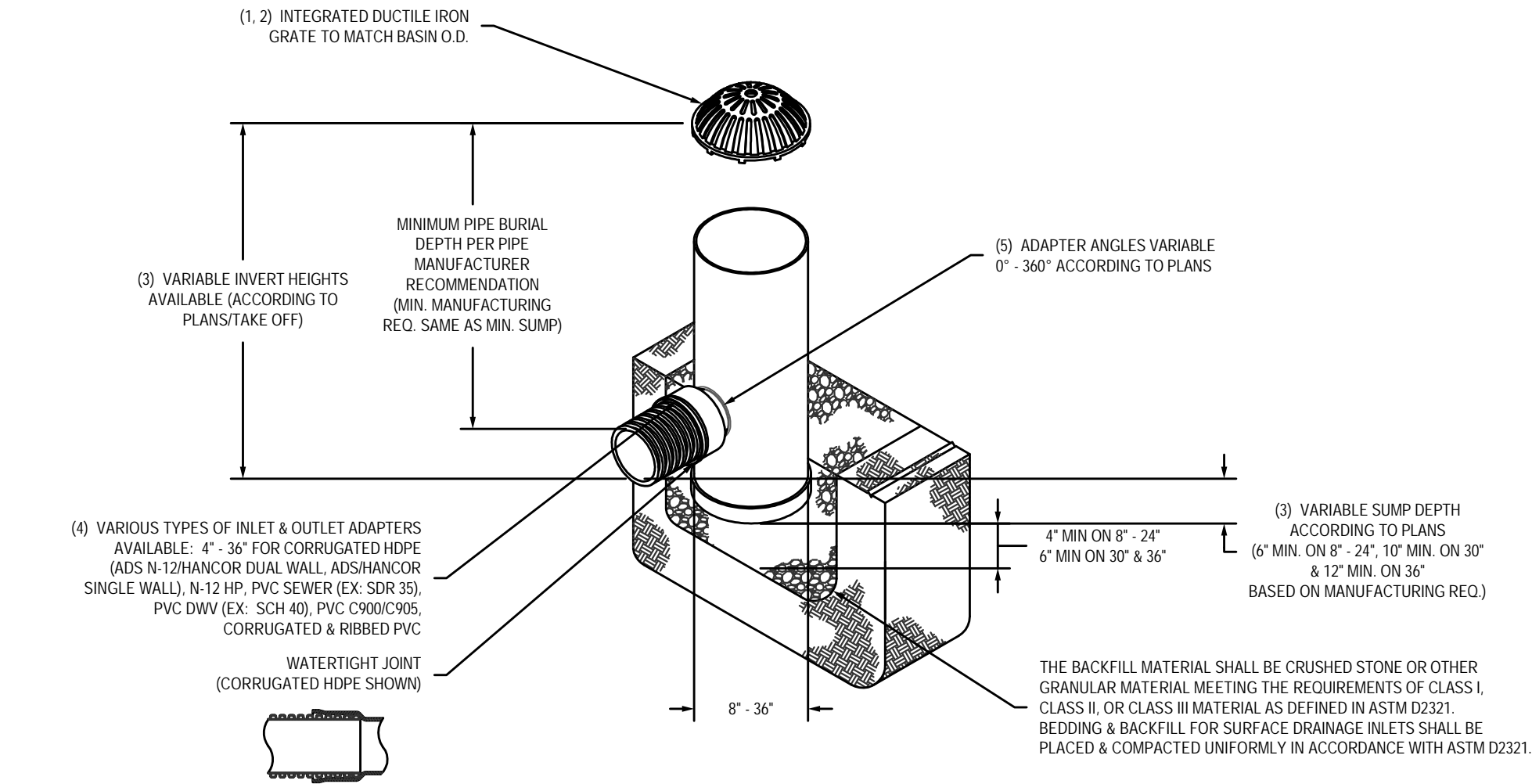
STANDARD DETAIL

METER INSTALLATION FOR AMR METERS

SCALE: N.T.S.
DATE: 1-2-14

6

NYLOPLAST DRAIN BASIN WITH DOME GRATE



- 8" - 30" DOME GRATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
- 8" & 10" DOME GRATES SET ONTO THE DRAIN BASINS WITH THE USE OF A PVC BODY TOP. SEE DRAWING NO. 7001-110-045.
- DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 8" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-060.
- DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE AND N-12HANCOR DUAL WALL.
- ADAPTERS CAN BE MOUNTED ON AN ANGLE 0° TO 360° TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.
- 8" - 30" DOME GRATES HAVE NO LOAD RATING.

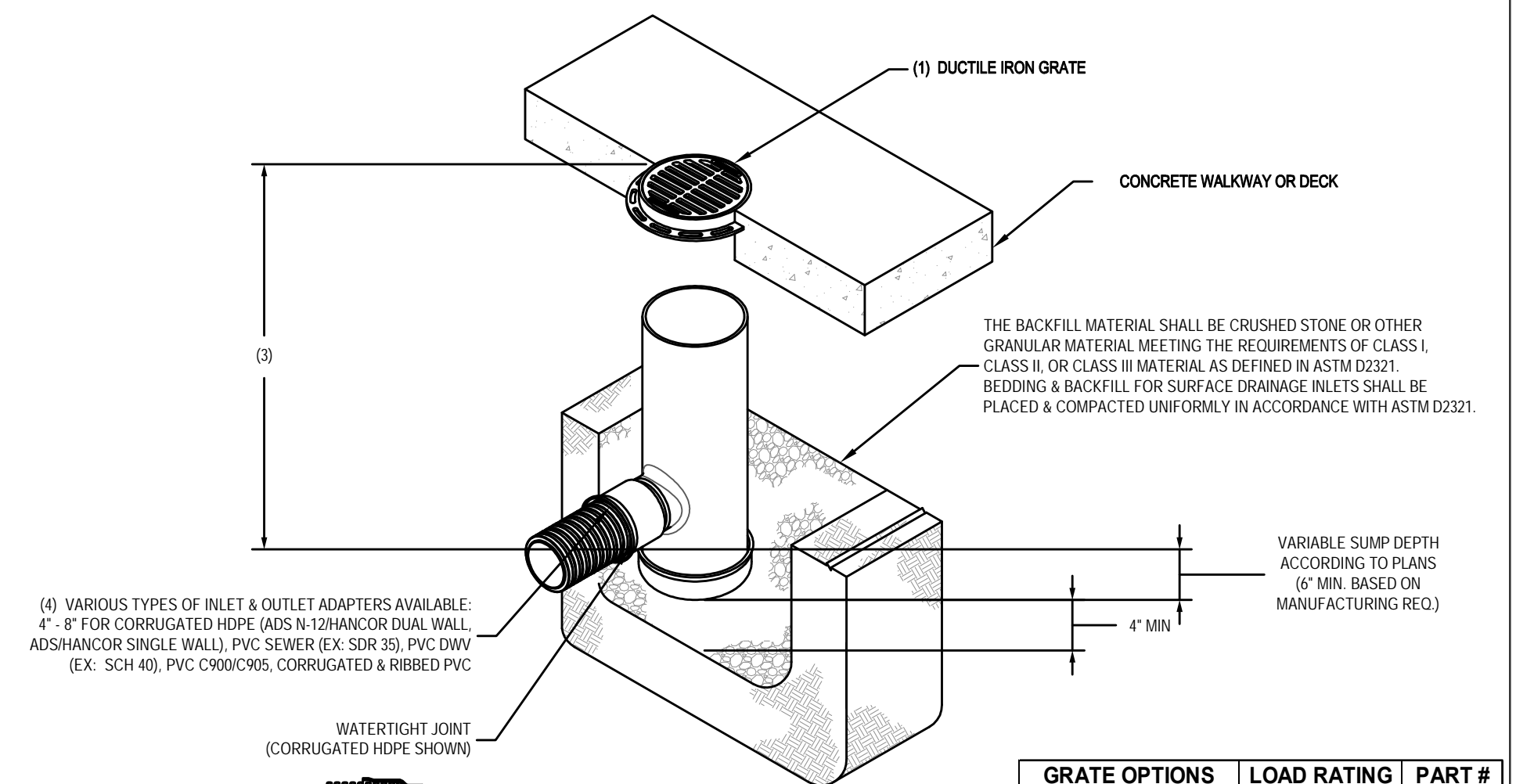
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DRAWN BY: EBC
DATE: 03-25-10
REVISED BY: NMH
DATE: 06-12-18
DWG SIZE: A
SCALE: 1:40
SHEET: 1 OF 1

MATERIAL: 3130 VERONA AVE
BUFORD, GA 30818
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplast-us.com

TITLE: DRAIN BASIN WITH DOME GRATE QUICK SPEC INSTALLATION DETAIL
DWG NO: 7001-110-397
REV: E

NYLOPLAST 8" DRAIN BASIN: 2808AG __ X



- GRATE/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05, WITH THE EXCEPTION OF THE BRONZE GRATE.
- CUSTOM DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 8" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-060.
- STANDARD DRAIN BASIN HAS FIXED ADAPTER LOCATIONS OF 0° & 180°. CUSTOM DRAIN BASIN ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360° TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.
- DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (AND N-12HANCOR DUAL WALL) & PVC SEWER (8" - 24").

THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN. REPRODUCTION OF THIS PRINT OR ANY INFORMATION CONTAINED HEREIN, OR MANUFACTURE OF ANY ARTICLE HEREFROM FOR THE DISCLOSURE TO OTHERS IS FORBIDDEN, EXCEPT BY SPECIFIC WRITTEN PERMISSION FROM NYLOPLAST.

DRAWN BY: NMH
DATE: 6-25-18
APP'D BY: NMH
DATE: 6-25-18
DWG SIZE: A
SCALE: 1:12
SHEET: 1 OF 1

MATERIAL: 3130 VERONA AVE
BUFORD, GA 30818
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplast-us.com

TITLE: 8" IN DRAIN BASIN QUICK SPEC INSTALLATION DETAIL
DWG NO: 7001-110-272
REV: F

GRATE OPTIONS	LOAD RATING	PART #
STANDARD	LIGHT DUTY	0899CGSF
SOLID COVER	LIGHT DUTY	0899CGCF
BRONZE	N/A	0899CGBF
DOME	N/A	0899CGDF
DROP IN GRATE	LIGHT DUTY	0801DI

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www.jonescivil.com

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Engineering & Surveying
Professional Seal
No. 034936
Matthew Jones
Professional Engineer
No. 62871
Matthew Jones
Professional Engineer
No. 62871

FOR CONSTRUCTION

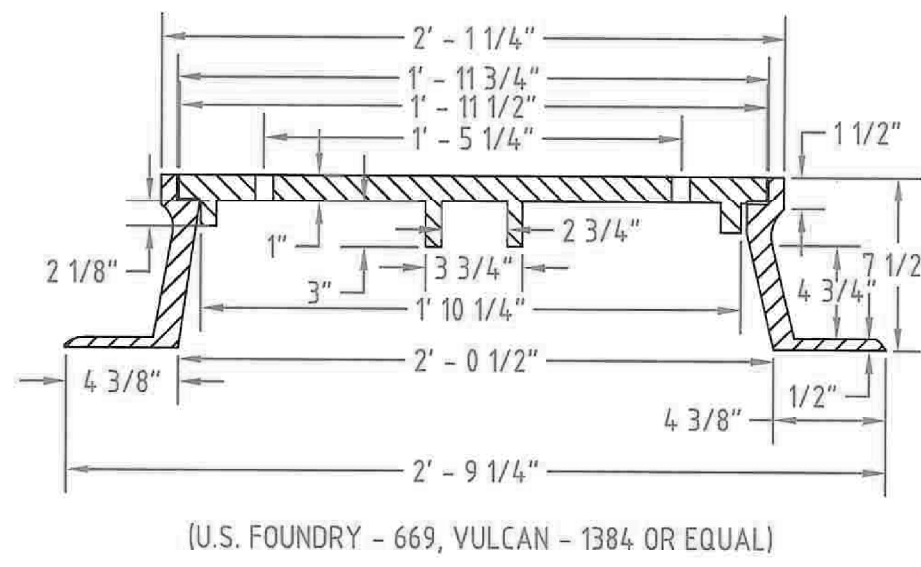
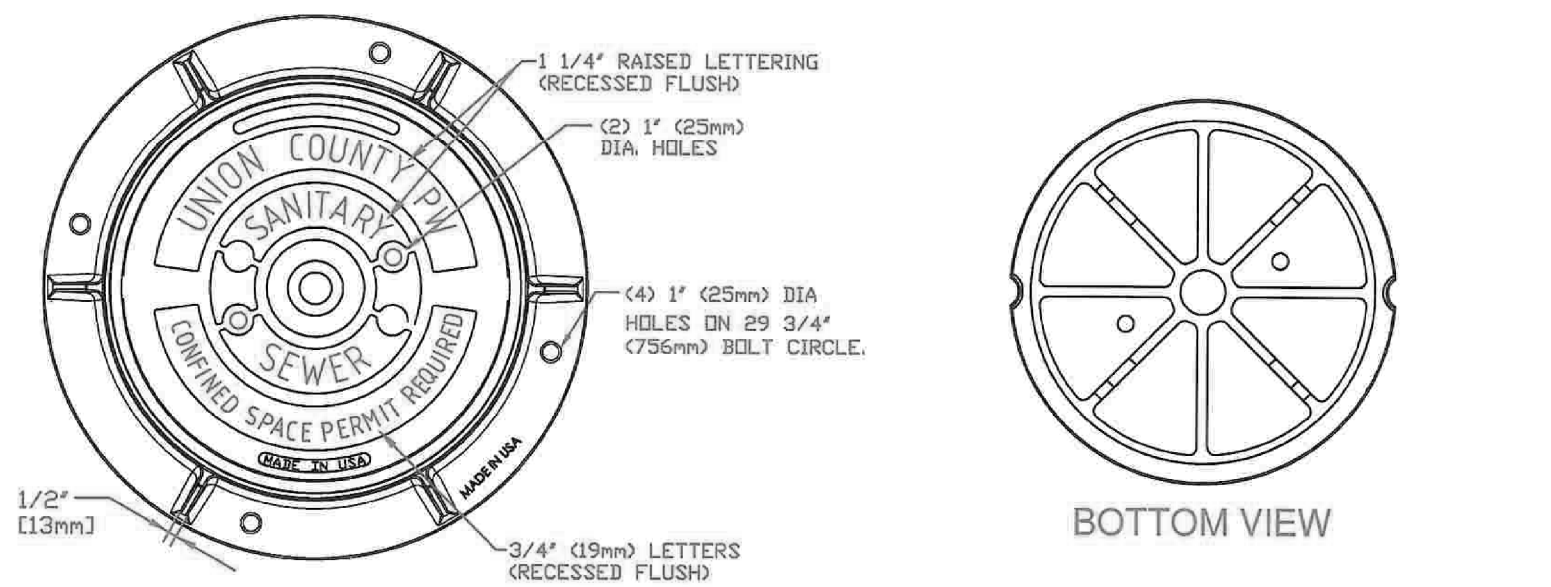
JONES CIVIL DESIGN, P.C.
C-3859
STATE OF NORTH CAROLINA
REGISTERED PROFESSIONAL ENGINEER

REV	DATE	BY	DESCRIPTION
1	6/28/19	EAH	REVISED PER TOWN COMMENTS

KING'S CORNER
(SITE DEVELOPMENT)

SITework DETAILS
415 S. PROVIDENCE ST.
WAXHAW, NC

FILE NAME: BASE-18011.dwg
JOB NUMBER: 18011
ORIGINAL DATE: 3/29/2019
DRAWN BY: CHJ



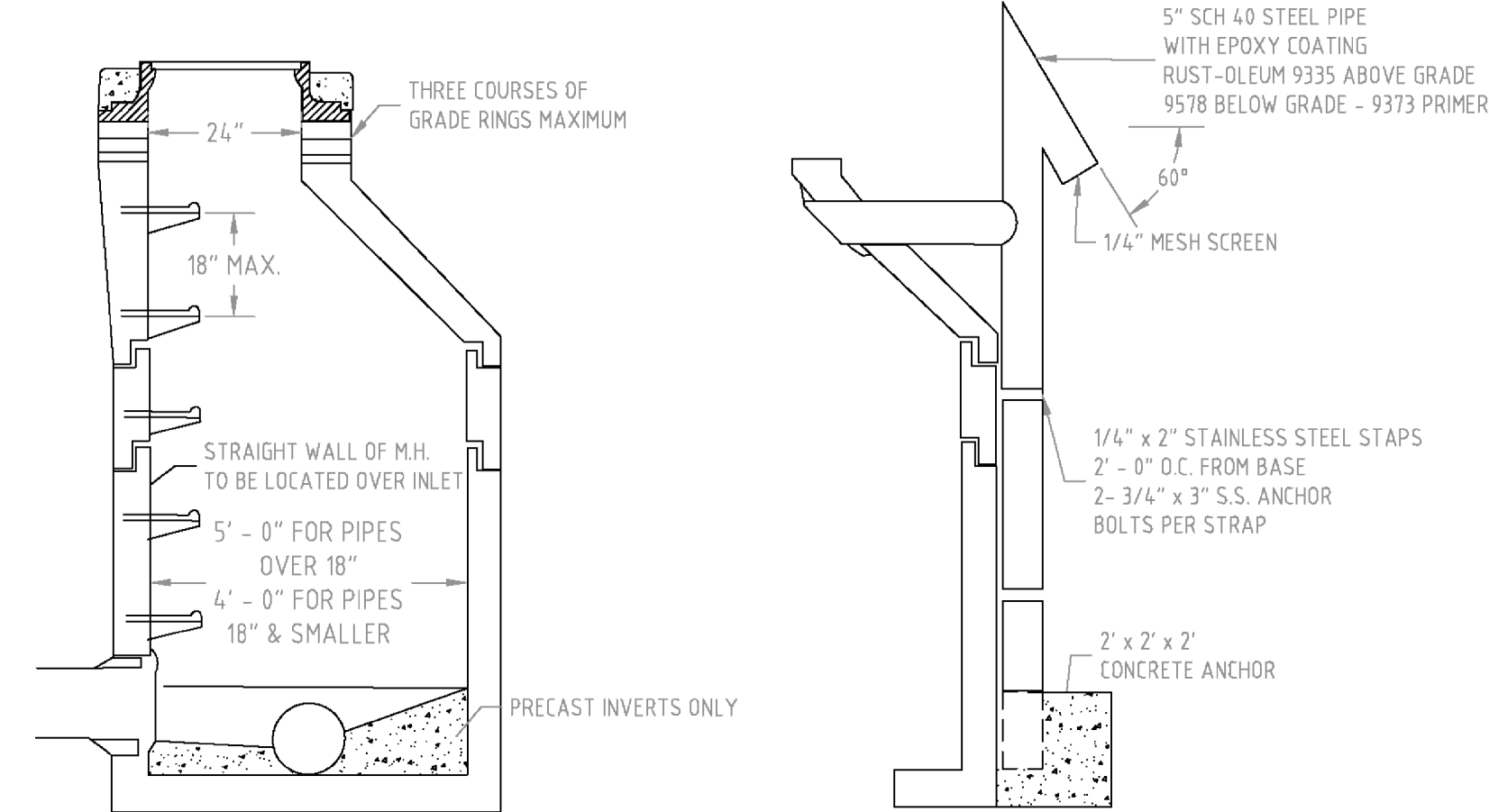
NOTES:

1. ALL CASTINGS TO BE FREE FROM SAND HOLES. NO PLUGGING ALLOWED.
2. MACHINE ALL CONTACT SURFACES BETWEEN RING AND COVER.
3. PROVIDE TWO VENT HOLES IN COVER, 1" DIA. TAPERED TO 1-1/8" ON REVERSE SIDE.
4. MINIMUM WEIGHTS: COVER - 120 LBS. RING - 190 LBS.
5. ALL MANHOLE RINGS OUT OF ROAD RIGHT OF WAY SHALL BE BOLTED INTO MANHOLE WITH 5/8" DIAMETER KWIK BOLT STUD ANCHOR SYSTEM. HILTI BRAND OR APPROVED EQUAL.

UNION COUNTY PUBLIC WORKS DEPARTMENT
UNION COUNTY, N.C.

STANDARD DETAIL
RING & COVER

SCALE: N.T.S.
DATE: 9-9-11
9

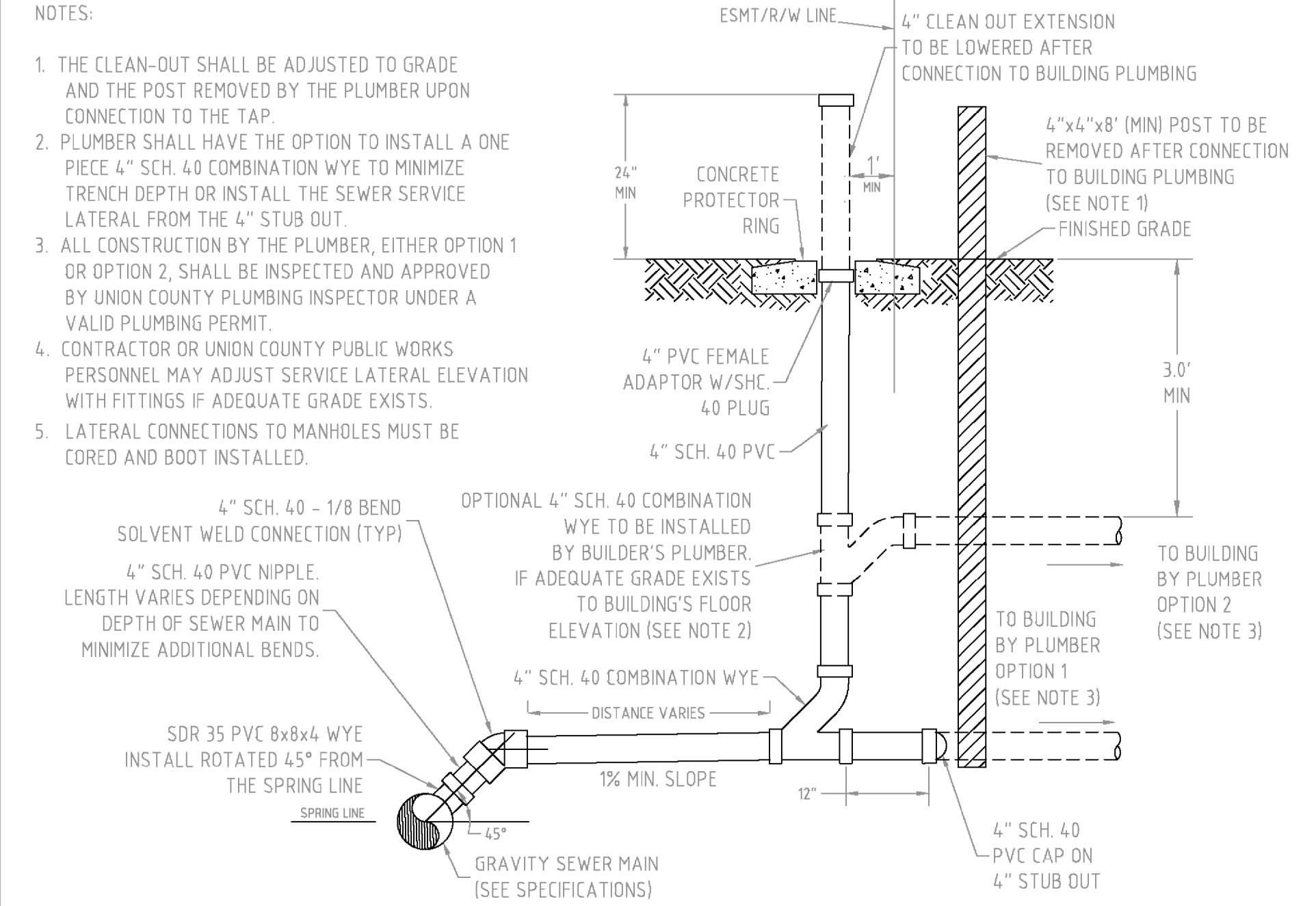


- GENERAL NOTES:
- (1) 1 ROLL OF MASTIC AND A 6" EXTERNAL JOINT/SEAM WRAP INSTALLED ON EACH MANHOLE SECTION
 - (2) MANHOLE VACUUM TESTING - AFTER EACH MANHOLE IS INSTALLED AND ALL PIPES ARE CONNECTED, BUT BEFORE BACKFILLING, THE MANHOLE SHALL BE VACUUM TESTED. ALL PIPES ENTERING THE MANHOLE SHALL BE PLUGGED AND BRACED. THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR AND EQUIPMENT NECESSARY TO PERFORM THE TESTING. A VACUUM OF 10 INCHES OF MERCURY SHALL BE CREATED ON THE INSIDE OF THE MANHOLE. AT THE VACUUM OF 10 INCHES OF MERCURY, THE PUMP SHALL BE STOPPED AND THE TIME SHALL BE MEASURED FOR THE VACUUM TO DROP TO 9 INCHES. FAILURE OF THE TEST SHALL BE ANY AMOUNT OF TIME LESS THAN THE FOLLOWING:
 4 FT. DIAMETER MANHOLE = 60 SECONDS
 5 FT. DIAMETER MANHOLE = 75 SECONDS
 6 FT. DIAMETER MANHOLE = 90 SECONDS
 7 FT. DIAMETER MANHOLE = 105 SECONDS
 8 FT. DIAMETER MANHOLE = 120 SECONDS
 10 FT. DIAMETER MANHOLE = 150 SECONDS
 UPON TEST FAILURE, THE CONTRACTOR SHALL REPAIR ALL LEAKS AND RETEST THE MANHOLE UNTIL THE TEST HAS PASSED.

UNION COUNTY PUBLIC WORKS DEPARTMENT
UNION COUNTY, N.C.

STANDARD DETAIL
MANHOLE

SCALE: N.T.S.
DATE: 7-31-14
10



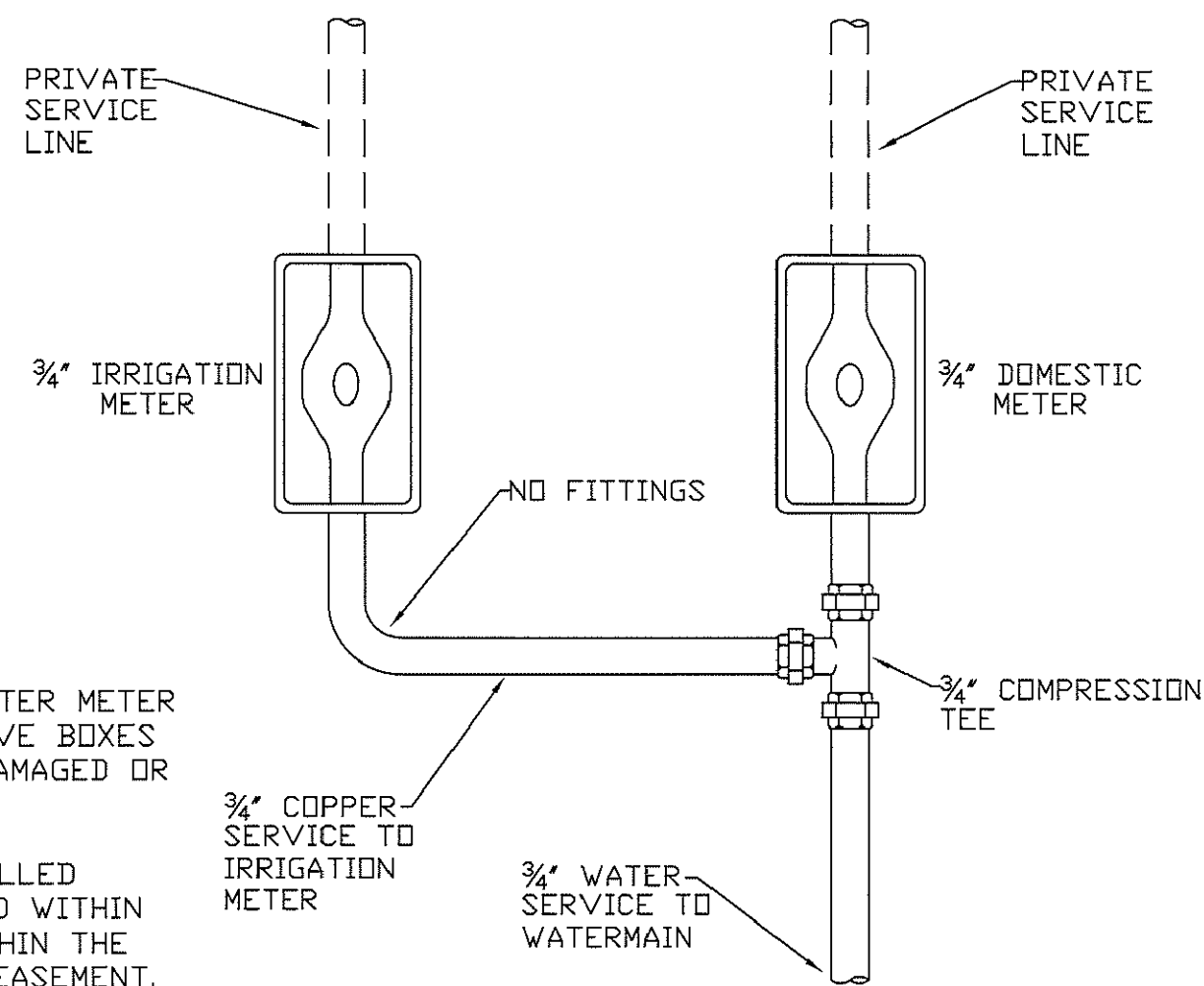
NOTES:

1. THE CLEAN-OUT SHALL BE ADJUSTED TO GRADE AND THE POST REMOVED BY THE PLUMBER UPON CONNECTION TO THE TAP.
2. PLUMBER SHALL HAVE THE OPTION TO INSTALL A ONE PIECE 4" SCH. 40 COMBINATION WYE TO MINIMIZE TRENCH DEPTH OR INSTALL THE SEWER SERVICE LATERAL FROM THE 4" STUB OUT.
3. ALL CONSTRUCTION BY THE PLUMBER, EITHER OPTION 1 OR OPTION 2, SHALL BE INSPECTED AND APPROVED BY UNION COUNTY PLUMBING INSPECTOR UNDER A VALID PLUMBING PERMIT.
4. CONTRACTOR OR UNION COUNTY PUBLIC WORKS PERSONNEL MAY ADJUST SERVICE LATERAL ELEVATION WITH FITTINGS IF ADEQUATE GRADE EXISTS.
5. LATERAL CONNECTIONS TO MANHOLES MUST BE CORED AND BOOT INSTALLED.

UNION COUNTY PUBLIC WORKS DEPARTMENT
UNION COUNTY, N.C.

STANDARD DETAIL
SEWER LATERAL

SCALE: N.T.S.
DATE: 7/19-14
11



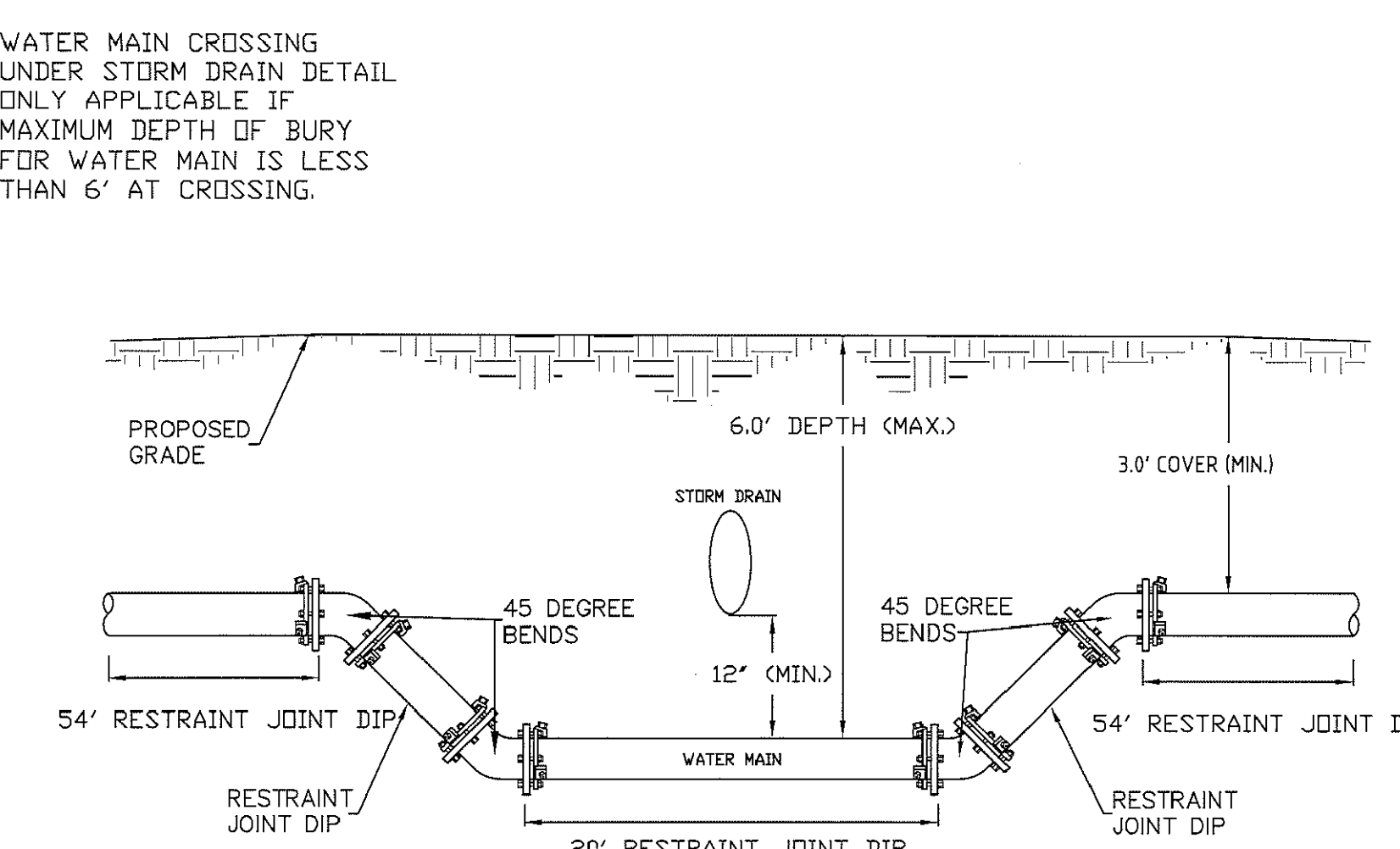
NOTES:

1. METERS WILL NOT BE SET IF WATER METER BOXES, SEWER CLEAN-OUTS, VALVE BOXES OR THEIR APPURTENANCES ARE DAMAGED OR IMPROPERLY POSITIONED.
2. WATER METERS ARE TO BE INSTALLED PERPENDICULAR TO THE ROAD AND WITHIN THE ROAD RIGHT-OF-WAY OR WITHIN THE LIMITS OF A PROPOSED UTILITY EASEMENT.
3. IF THE IRRIGATION LINE IS TO BE UTILIZED AND A METER SET, THE APPROPRIATE REDUCED PRESSURE ASSEMBLY SHALL BE INSTALLED BY THE CONTRACTOR PER UCPW DETAIL 24A.

UNION COUNTY PUBLIC WORKS DEPARTMENT
UNION COUNTY, N.C.

STANDARD DETAIL
IRRIGATION AND DOMESTIC DUAL METER TAP

SCALE: N.T.S.
DATE: 07-18-16
30



WATER MAIN CROSSING UNDER STORM DRAIN DETAIL ONLY APPLICABLE IF MAXIMUM DEPTH OF BURY FOR WATER MAIN IS LESS THAN 6' AT CROSSING.

UNION COUNTY PUBLIC WORKS DEPARTMENT
UNION COUNTY, N.C.

STANDARD DETAIL
WATER MAIN UNDER STORM DRAIN CROSSING

SCALE: N.T.S.
DATE: 08-31-16
31

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JONES CIVIL DESIGN

1019 THORNBSBY LANE, MATTHEWS, NC 28105
PH: (704) 412-8523
www.jonescivil.com

****VETERAN - OWNED****
Engineer@JonesCivilDesign.com

FINAL DESIGN

REGISTERED PROFESSIONAL ENGINEER
CURTIS MATT HEW JONES
034936
NORTH CAROLINA

FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
JONES CIVIL DESIGN, P.C.
C-3859
NORTH CAROLINA
STATE BOARD OF AUTHORIZATION

REV.	DATE	BY	DESCRIPTION
1	6/28/19	CHJ	REVISION PER TOWN COMMENTS

KING'S CORNER
(SITE DEVELOPMENT)

SITEWORK DETAILS
415 S. PROVIDENCE ST.
WAXHAW, NC

FILE NAME: BASE-18011.dwg
JOB NUMBER: 18011
ORIGINAL DATE: 3/29/2019
DRAWN BY: CHJ

SHEET
C5.5