

ARENDELL AVE SITE PLAN SET PROJECT #561602

SITE INFORMATION:

LOCATION: 706 N ARENDELL AVE, ZEBULON

COUNTY: WAKE
PARENT PIN: 2705274195
DB/PG: 018279/00189

ZONING: DTP
ACREAGE: 1.38 ACRES
CURRENT LAND USE MAP CLASSIFICATION: TN
PROPOSED LAND USE MAP CLASSIFICATION: TN

LAND CLASS: RESIDENTIAL

MINIMUM BUILDING SETBACKS:
FRONT YARD: 25' 2
SIDE YARD: 0' OR 5'
REAR YARD: 4'
CORNER YARD: 5' 1

RIGHT OF WAY & OTHER AREAS:
RIGHT OF WAY DEDICATION: 0.00 AC
NATURAL WETLANDS: 0.00 AC
STREAM BUFFER: 0.00 AC

LOT ACREAGE:
TOTAL NUMBER PROPOSED LOTS: 12
MAXIMUM ALLOWED DENSITY: 10 DU/AC
PROPOSED DENSITY: 8.70 DU/AC
MINIMUM ALLOWED LOT SIZE: 3,000 SF
MINIMUM PROPOSED LOT SIZE: 3,090 SF 4
MAXIMUM PROPOSED LOT SIZE: 3,427 SF
AVERAGE PROPOSED LOT SIZE: 3,152 SF
MINIMUM ALLOWABLE LOT WIDTH: 30'
MINIMUM PROPOSED LOT WIDTH: 30' 1
MAXIMUM ALLOWED LOT COVERAGE: 85%
MAXIMUM PROPOSED LOT COVERAGE: 63% 4

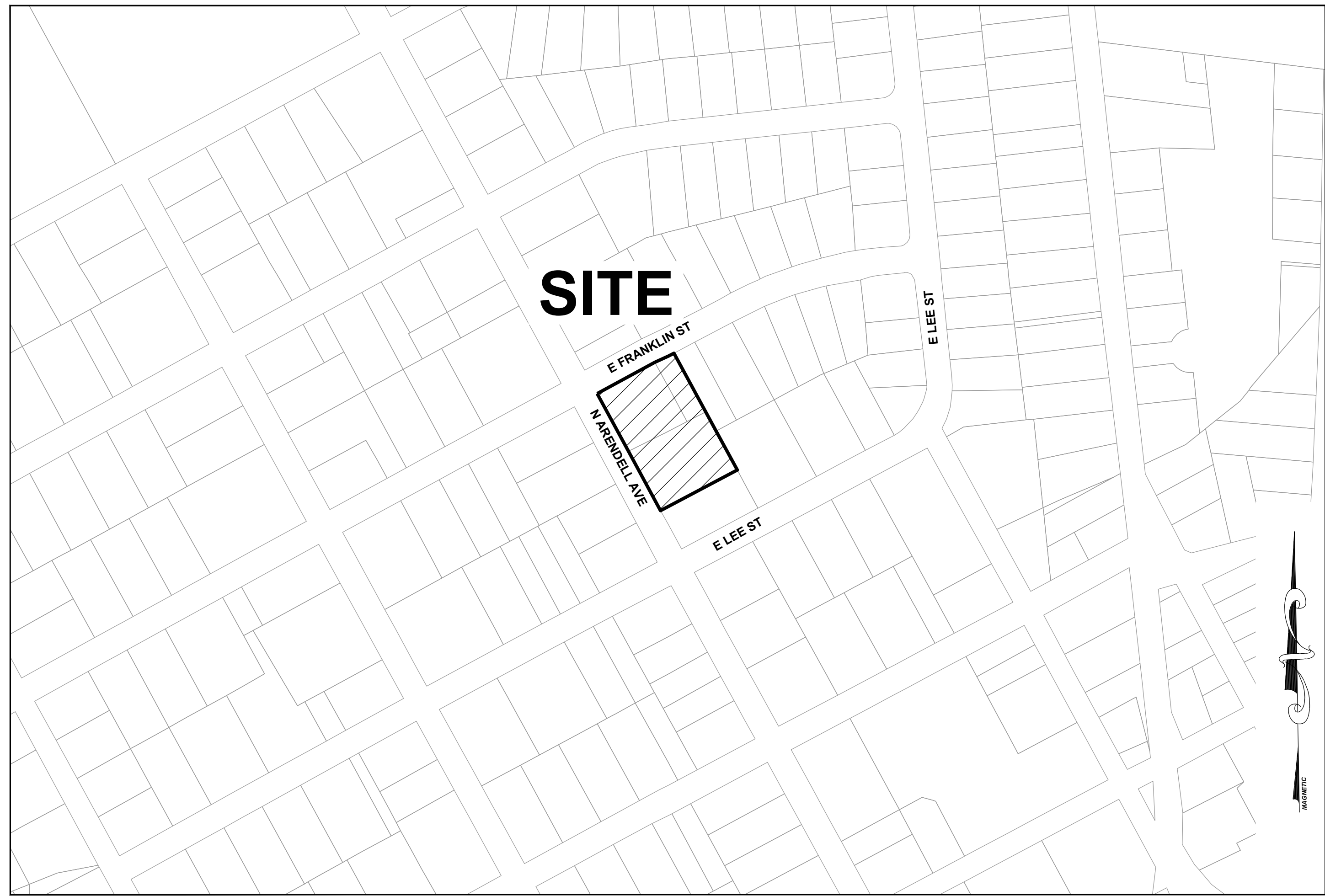
OPEN SPACE BREAKDOWN:
PROPERTY BOUNDARY: 60,200 SF (1.38 AC)
REQUIRED URBAN SET- ASIDE: 6,020 SF (10% OF TOTAL SITE) 4
PROVIDED URBAN SET-ASIDE: 10,284 SF (0.24 AC)

IMPERVIOUS AREAS:
ROADWAYS / PARKING: 8,169 SF (0.19 AC) 1
SIDEWALKS: 2,198 SF (0.05 AC) 2
LOTS (1,320 SF/LOT): 15,840 SF (0.36 AC)
TOTAL ON-SITE IMPERVIOUS AREA: 26,207 SF (0.6 AC) 4
TOTAL ON-SITE IMPERVIOUS PERCENT: 43.53%

UTILITY DEMANDS:
SEWAGE USAGE: 4,320 GPD
3 BED X 120 GPD/BED X 12 UNITS
WATER USAGE: 4,320 GPD
3 BED X 120 GPD/BED X 12 UNITS

DISTURBED AREA:
TOTAL DISTURBED AREA: 58,960 SF (1.35 AC) 2

STREET TYPE SUMMARY:
16' ROW SECTION: 390 LF 4



VICINITY MAP
1" = 200'

SHEET INDEX

C-0.0	COVER SHEET
C-1.0	EXISTING CONDITIONS PLAN
C-2.0	SITE PLAN
C-3.0	UTILITY PLAN
C-4.0	OFF-SITE SANITARY SEWER PLAN & PROFILE
C-5.0	GRADING PLAN
C-6.0	STORMWATER PLAN
C-7.0	EROSION CONTROL PLAN
C-8.0	LANDSCAPING PLAN
D-1.0	BUILDING ELEVATIONS
D-1.1	BUILDING ELEVATIONS
D-2.0	STORM DRAINAGE DETAILS
D-2.1	WATER DETAILS
D-2.2	SEWER DETAILS
D-2.3	SITE DETAILS
D-2.4	SITE DETAILS
D-2.5	LIGHTING DETAILS

PUBLIC UTILITY IMPROVEMENTS:

WATER MAIN: 0 SF
SEWER MAIN: 76 SF
WATER STUBS: 14
SEWER STUBS: 16

NOTE: STUB QUANTITY INCLUDES REMOVAL OF EXISTING STUBS.

PERMIT INFORMATION:

(PERMITTING AUTHORITY, PERMIT IDENTIFIERS, & EFFECTIVE DATES)

TOWN OF ZEBULON PLANNING AND ZONING:
- EFFECTIVE DATE OF ZONING APPROVAL: XX-XX-2020
- EFFECTIVE DATE OF MASTER PLAN APPROVAL: XX-XX-2020

WAKE COUNTY ENVIRONMENTAL:
-LAND DISTURBANCE PERMIT: SEC-XXXXXX-XXXX
-STORMWATER PERMIT: SWF-XXXXXX-XXXX

NCDWR/CITY OF ZEBULON PUBLIC UTILITIES:
-WATER EXTENSION PERMIT: W-XXXX
-SEWER EXTENSION PERMIT: S-XXXX

NC DEPT. OF TRANSPORTATION:
-DRIVEWAY PERMIT: D51-XXX-XXXX (DATE: XX-XX-XXXX)
-2 PARTY ENCROACHMENT AGMT: E51-XXX-XXXX (DATE: XX-XX-XXXX)
-3 PARTY ENCROACHMENT AGMT: E51-XXX-XXXX (DATE: XX-XX-XXXX)

U.S. ARMY CORPS OF ENGINEERS:
-IMPACT PERMIT: NOT REQUIRED

NC DIVISION OF WATER QUALITY:
-BUFFER IMPACT AUTHORIZATION: NOT REQUIRED

SURVEYOR:

TAYLOR LAND CONSULTANTS
5448 APEX PEAKWAY
APEX, NC 27502
919-801-1104 (O)
919-337-7998 (M)
CONTACT: JEREMY TAYLOR, PLS
jeremy@taylorlc.com

CIVIL ENGINEERING:

STRONG ROCK ENGINEERING GROUP, PLLC
PO BOX 55992
RALEIGH, NC 27624
COMPANY LICENSE #: P-2166
CONTACT: JOSH LAMBERT, PE
984-200-1932 (P)
josh@strongrockgroup.com

SITE PERMITTING APPROVAL:

WATER AND SEWER PERMITS (IF APPLICABLE)

CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT CONSENTS TO THE CONNECTION AND EXTENSION OF THE CITY'S PUBLIC SEWER SYSTEM AS SHOWN ON THIS PLAN. THE MATERIAL AND CONSTRUCTION METHODS USED FOR THIS PROJECT SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY'S PUBLIC UTILITIES HANDBOOK. CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PERMIT # S-3936

CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT CONSENTS TO THE CONNECTION AND EXTENSION OF THE CITY'S PUBLIC WATER SYSTEM AS SHOWN ON THIS PLAN. THE MATERIAL AND CONSTRUCTION METHODS USED FOR THIS PROJECT SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY'S PUBLIC UTILITIES HANDBOOK. CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PERMIT # N/A

CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT - PLANS AUTHORIZED FOR CONSTRUCTION

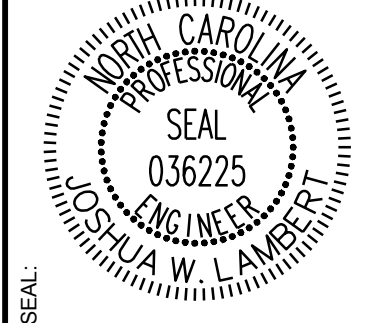
ELECTRONIC APPROVAL: THIS APPROVAL IS BEING ISSUED ELECTRONICALLY. THIS APPROVAL IS VALID ONLY UPON THE SIGNATURE OF A TOWN OF ZEBULON REVIEW OFFICER BELOW. THE CITY WILL RETAIN A COPY OF THE APPROVED PLANS. ANY WORK AUTHORIZED BY THIS APPROVAL MUST PROCEED IN ACCORDANCE WITH THE PLANS KEPT ON FILE WITH THE CITY. THIS ELECTRONIC APPROVAL MAY NOT BE EDITED ONCE ISSUED. ANY MODIFICATION TO THIS APPROVAL ONCE ISSUED WILL INVALIDATE THIS APPROVAL.

CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT DEVELOPMENT APPROVAL

CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT WATER REVIEW OFFICER



1	TRC REVIEW RESPONSES	09-30-2021					
2	TRC REVIEW RESPONSES	12-23-2021					
3	TRC REVIEW RESPONSES	03-23-2022					



STRONGROCK ENGINEERING GROUP

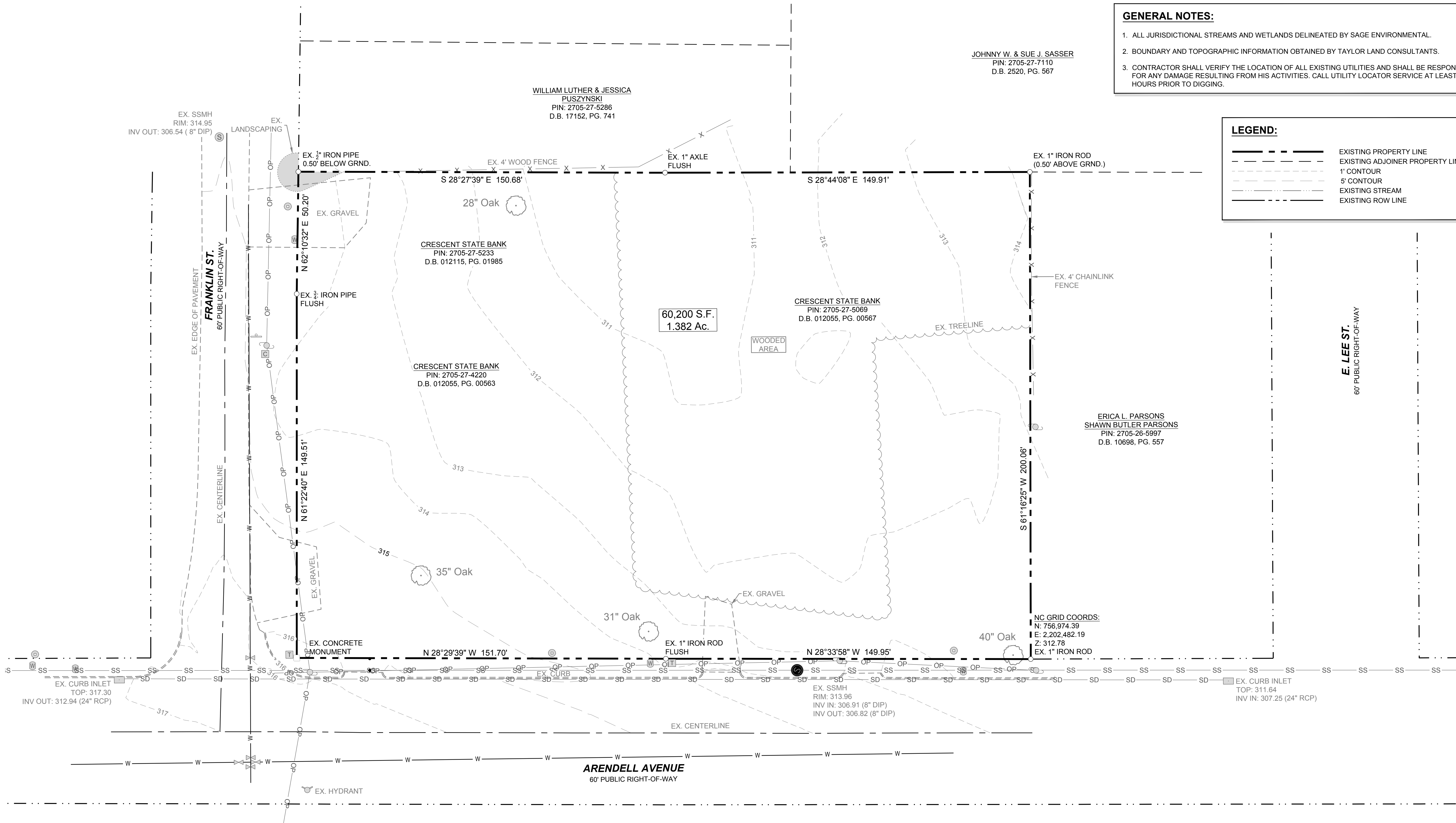
STRONG ROCK ENGINEERING GROUP, PLLC (COMPANY LICENSE # P-2166)
6801 FALLS OF NEUSE RD. SUITE 108 RALEIGH, NC 27615 | JOSH@STRONGROCKENGINEERING.COM

STRONG ROCK PROJECT	NOT FOR CONSTRUCTION	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
	AS SHOWN	AS SHOWN	R/LB	S/RG	J/WL

TRUE- ZEBULON-ARENDELL
TOWN OF ZEBULON, WAKE COUNTY, NORTH CAROLINA
CONSTRUCTION PLANS

COVER SHEET

DRAWING SHEET
C-0.0
01 OF 17



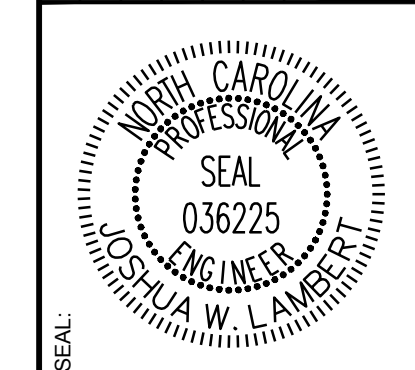
GENERAL NOTES:

1. ALL JURISDICTIONAL STREAMS AND WETLANDS DELINEATED BY SAGE ENVIRONMENTAL.
2. BOUNDARY AND TOPOGRAPHIC INFORMATION OBTAINED BY TAYLOR LAND CONSULTANTS.
3. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM HIS ACTIVITIES. CALL UTILITY LOCATOR SERVICE AT LEAST 48 HOURS PRIOR TO DIGGING.

LEGEND:

- EXISTING PROPERTY LINE
- - - EXISTING ADJOINER PROPERTY LINE
- 1' CONTOUR
- 5' CONTOUR
- EXISTING STREAM
- EXISTING ROW LINE

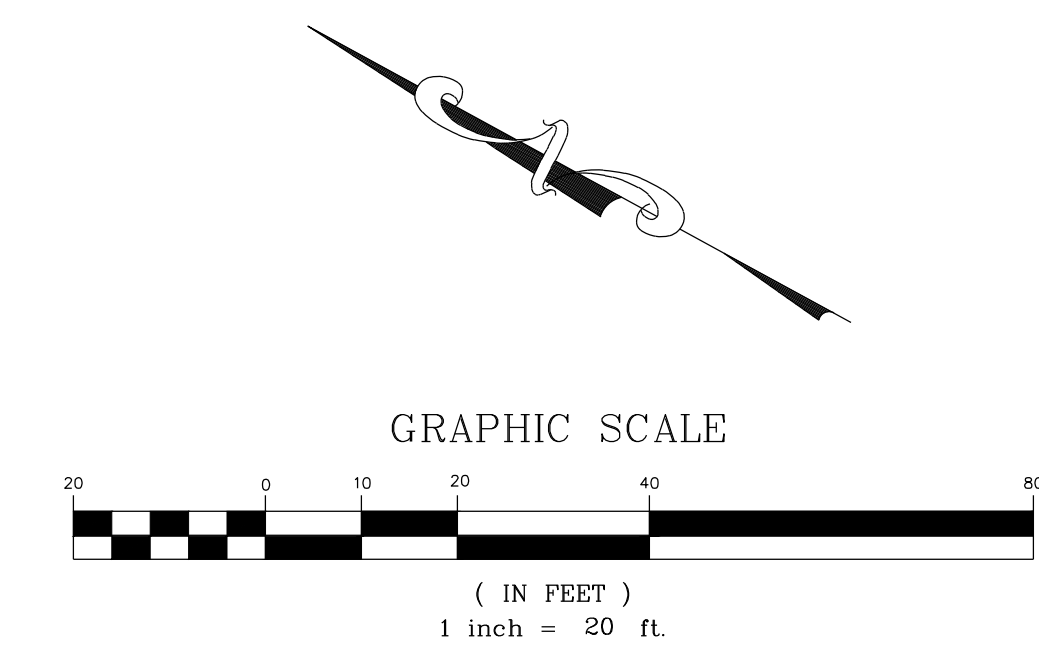
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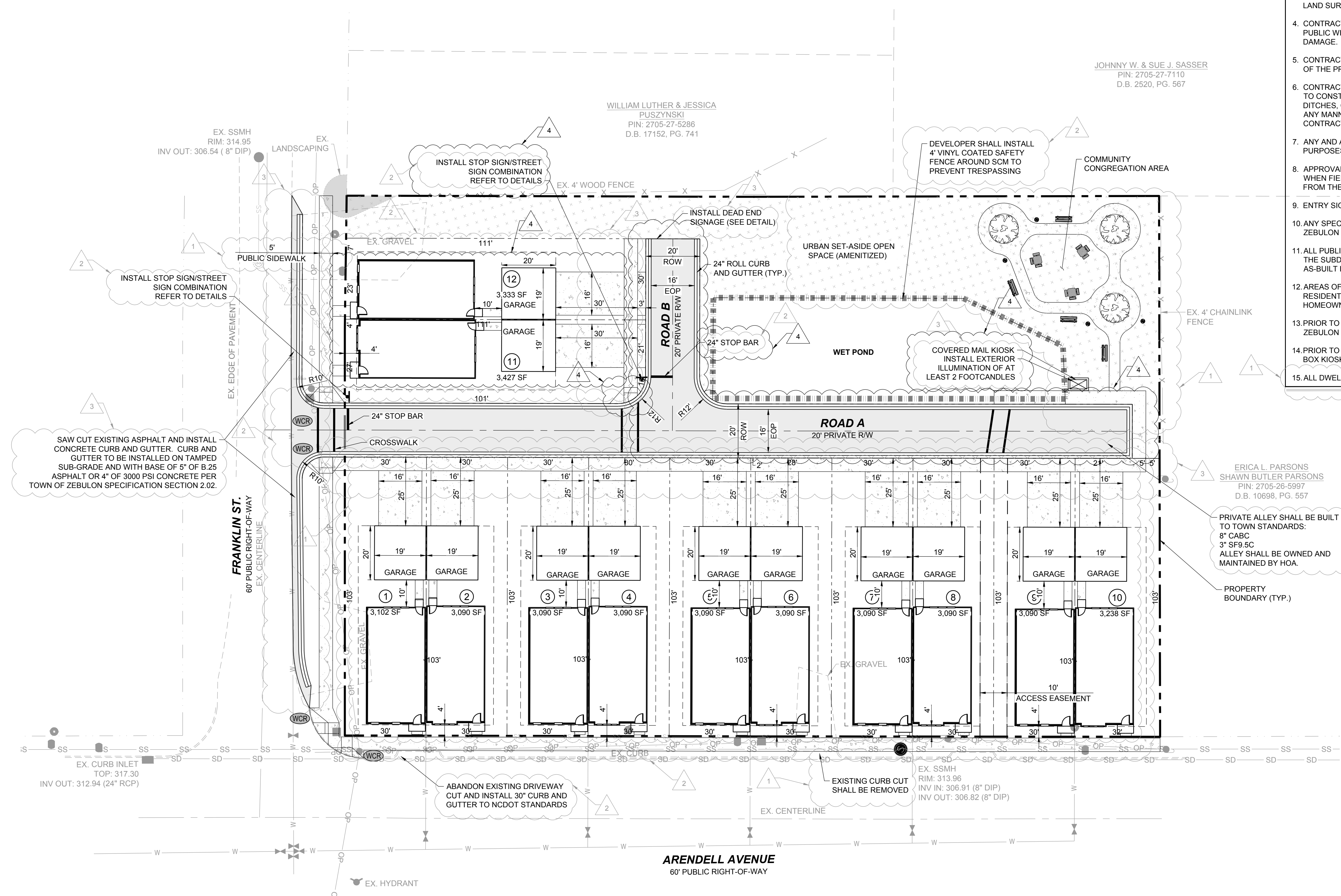


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TRUE- ZEBULON-ARENDELL
TOWN OF ZEBULON, WAKE COUNTY, NORTH CAROLINA
CONSTRUCTION PLANS
EXISTING CONDITIONS PLAN

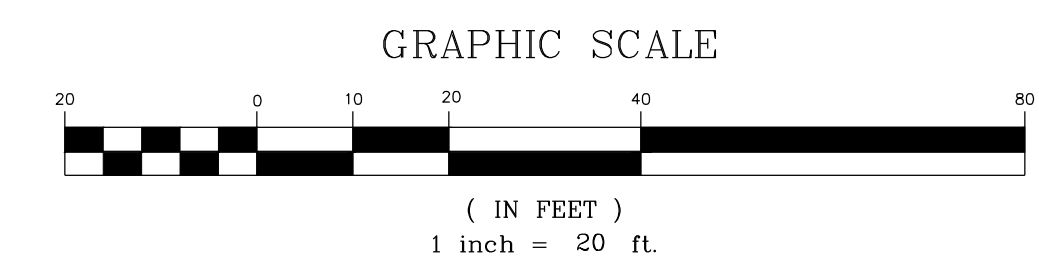




- GENERAL NOTES:**
- ALL CONSTRUCTION SHALL BE PER TOWN OF ZEBULON STANDARDS AND SPECIFICATIONS.
 - CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, RIGHT-OF-WAYS AND UTILITIES, PUBLIC OR PRIVATE BEFORE WORKING IN THESE AREAS.
 - PROTECT ALL PROPERTY MONUMENTS AND PINS. MONUMENTS AND PINS THAT WILL BE DISTURBED DURING CONSTRUCTION SHALL BE REFERENCED AND REPLACED BY A LICENSED LAND SURVEYOR AT THE COST OF THE CONTRACTOR.
 - CONTRACTOR SHALL MAINTAIN THE SITE IN SUCH A MANNER THAT WORKMEN AND THE PUBLIC WILL BE PROTECTED FROM INJURY AND ADJOINING PROPERTY PROTECTED FROM DAMAGE.
 - CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT AND AT LEAST ONCE A WEEK DURING CONSTRUCTION.
 - CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO ANY EXISTING ITEM AND/OR MATERIAL DUE TO CONSTRUCTION OPERATIONS. ALL STREET SURFACES, UTILITY POLES, CULVERTS, DITCHES, CURB AND GUTTER OR OTHER STRUCTURES THAT ME DISTURBED OR DAMAGED IN ANY MANNER AS A RESULT OF CONSTRUCTION SHALL BE REPLACED OR REPAIRED BY THE CONTRACTOR IN ACCORDANCE WITH THE APPROPRIATE SPECIFICATIONS.
 - ANY AND ALL QUANTITIES SHOWN OR IMPLIED ON THE PLANS ARE FOR ESTIMATION PURPOSES ONLY.
 - APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFFSITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS.
 - ENTRY SIGNS SHALL BE LOCATED IN A DEDICATED EASEMENT.
 - ANY SPECIALITY STREET SIGNS INCLUDING POSTS SHALL BE SUBMITTED TO THE TOWN OF ZEBULON FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
 - ALL PUBLIC AND PRIVATE EASEMENTS SHALL BE RECORDED AS PART OF THE FINAL PLAT OF THE SUBDIVISION. EASEMENTS BASED OF CENTER OF UTILITY OR PIPE SHALL BE PER AS-BUILT LOCATIONS.
 - AREAS OF PARENT PARCEL THAT ARE NOT SUBDIVIDED TO CREATE SINGLE FAMILY RESIDENTIAL LOTS ARE TO REMAIN AS ONE PARCEL TO BE OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION OF THE NEIGHBORHOOD.
 - PRIOR TO FINAL PLAT, DEVELOPER SHALL SUBMIT A LIGHTING PLAN TO THE TOWN OF ZEBULON SHOWING LIGHT FIXTURE DETAILS AND PHOTOMETRICS.
 - PRIOR TO FINAL PLAT, DEVELOPER SHALL SUBMIT CUT SHEETS FOR PARK BENCHES, MAIL BOX KIOSK, AND PEDESTRIAN WAYFINDING.
 - ALL DWELLINGS WILL BE IN COMPLIANCE WITH REQUIREMENTS OF ARTICLE 4 OF UDO.

LEGEND:

	EXISTING PROPERTY LINE
	ROADWAY CENTER LINE
	PROPOSED PROPERTY LINE
	STANDARD CURB & GUTTER
	ASPHALT PAVEMENT
	OPEN SPACE
	STREET LIGHT
	SIGN
	STOP BAR
	WHEELCHAIR RAMP



JOHNNY W. & SUE J. SASSER
PIN: 2705-27-7110
D.B. 2520, PG. 567

WILLIAM LUTHER & JESSICA
PUSZYNSKI
PIN: 2705-27-5286
D.B. 17152, PG. 741

ERICA L. PARSONS
SHAWN BUTLER PARSONS
PIN: 2705-26-5997
D.B. 10698, PG. 557

PRIVATE ALLEY SHALL BE BUILT TO TOWN STANDARDS:
8" CABC
3" SF9.5C
ALLEY SHALL BE OWNED AND MAINTAINED BY HOA.

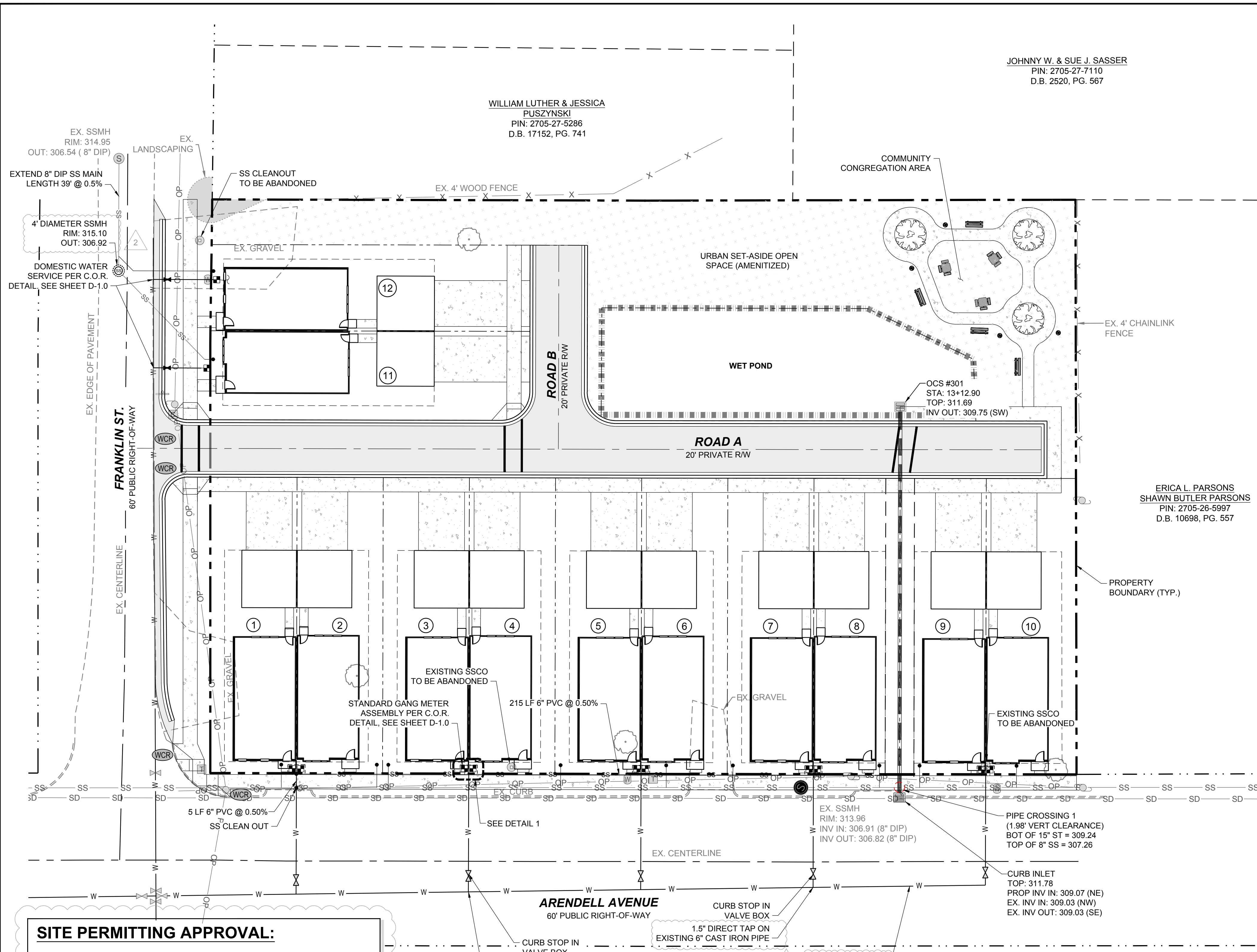
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SEAL:

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DRAWN BY	DRAWN BY
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UTILITY NOTES:

- ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF ZEBULON DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORPUD HANDBOOK, CURRENT EDITION)
- UTILITY SEPARATION REQUIREMENTS (TAKEN FROM CORPUD HANDBOOK, 2014 EDITION, SEWER DESIGN, MATERIAL, & CONSTRUCTION STANDARDS, SECTION 1, a. 15.):
 - A DISTANCE OF 100' SHALL BE MAINTAINED BETWEEN SANITARY SEWER & ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE SUCH AS AN IMPOUNDED RESERVOIR USED AS A SOURCE OF DRINKING WATER. IF ADEQUATE LATERAL SEPARATION CANNOT BE ACHIEVED, FERROUS SANITARY SEWER PIPE SHALL BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS. HOWEVER, THE MINIMUM SEPARATION SHALL NOT BE LESS THAN 25' FROM A PRIVATE WELL OR 50' FROM A PUBLIC WELL.
 - WHEN INSTALLING WATER &/OR SEWER MAINS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 10'. IF THIS SEPARATION CANNOT BE MAINTAINED DUE TO EXISTING CONDITIONS, THE VARIATION ALLOWED IS THE WATER MAIN IN A SEPARATE TRENCH WITH THE ELEVATION OF THE WATER MAIN AT LEAST 18" ABOVE THE TOP OF THE SEWER & MUST BE APPROVED BY THE PUBLIC UTILITIES DIRECTOR. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.
 - WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATERMAIN, DIP MATERIALS OR STEEL ENCASUREMENT EXTENDED 10' ON EACH SIDE OF CROSSING MUST BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS.
 - 5.0' MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER & STORM SEWER FACILITIES, UNLESS DIP MATERIAL IS SPECIFIED FOR SANITARY SEWER.
 - MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL WATERMAIN & RCP STORM DRAIN CROSSINGS. MAINTAIN 24" MIN. VERTICAL SEPARATION AT ALL SANITARY SEWER & RCP STORM DRAIN CROSSINGS. WHERE ADEQUATE SEPARATIONS CANNOT BE ACHIEVED, SPECIFY DIP MATERIALS & A CONCRETE CRADLE HAVING 6" MIN. CLEARANCE (PER CORPUD DETAILS W-41 & S-49).
 - ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED.
- ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AMENDED PLAN &/OR PROFILE BY THE CITY OF ZEBULON PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER & SEWER SERVICE TO EXISTING RESIDENCES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT. ANY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24 HOUR ADVANCE NOTICE TO THE CITY OF ZEBULON PUBLIC UTILITIES DEPARTMENT.
- 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCEMAINS. 4.0' MINIMUM COVER IS REQUIRED ON ALL REUSE MAINS.
- IT IS THE DEVELOPER'S RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER & SEWER SERVICES NOT BEING USED IN REDEVELOPMENT OF A SITE UNLESS OTHERWISE DIRECTED BY THE CITY OF ZEBULON PUBLIC UTILITIES DEPARTMENT. THIS INCLUDES ABANDONING TAP AT MAIN & REMOVAL OF SERVICE FROM ROW OR EASEMENT PER CORPUD HANDBOOK PROCEDURE.
- INSTALL 3/4" COPPER WATER SERVICES WITH METERS LOCATED AT ROW OR WITHIN A 2'X2' WATERLINE EASEMENT IMMEDIATELY ADJACENT. NOTE: IT IS THE APPLICANT'S RESPONSIBILITY TO PROPERLY SIZE THE WATER SERVICE FOR EACH CONNECTION TO PROVIDE ADEQUATE FLOW & PRESSURE.
- INSTALL 4" PVC SEWER SERVICES @ 1.0% MINIMUM GRADE WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE & SPACED EVERY 75 LINEAR FEET MAXIMUM.
- PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 80 PSI; BACKWATER VALVES ARE REQUIRED ON ALL SANITARY SEWER SERVICES HAVING BUILDING DRAINS LOWER THAN 1.0' ABOVE THE NEXT UPSTREAM MANHOLE.
- A 3-PARTY ENCROACHMENT AGREEMENT BETWEEN THE NCDOT, THE CITY OF ZEBULON PUBLIC UTILITIES, AND THE DEVELOPER MAY BE NEEDED FOR WATER AND SEWER SERVICE TAPS WITHIN THE NCDOT MAINTAINED RIGHT OF WAY. CROSS-CONNECTION CONTROL PROTECTION DEVICES ARE REQUIRED BASED ON DEGREE OF HEALTH HAZARD INVOLVED AS LISTED IN APPENDIX-B OF THE RULES GOVERNING PUBLIC WATER SYSTEMS IN NORTH CAROLINA. THESE GUIDELINES ARE THE MINIMUM REQUIREMENTS. THE DEVICES SHALL MEET AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) STANDARDS OR BE ON THE CITY OF SOUTHERN CALIFORNIA APPROVAL LIST. THE DEVICES SHALL BE INSTALLED AND TESTED (BOTH INITIAL AND PERIODIC TESTING THEREAFTER) IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS OR THE LOCAL CROSS-CONNECTION CONTROL PROGRAM, WHICHEVER IS MORE STRINGENT. CONTACT JOANIE HARTLEY AT (919) 996-5923 OR JOANIE.HARTLEY@RALEIGHNC.GOV FOR MORE INFORMATION.
- PROPOSED PRIVATE UTILITIES (POWER, TELEPHONE, NATURAL GAS, CABLE TV) ARE NOT SHOWN ON THIS PLAN. THE DEVELOPER SHALL COORDINATE THE INSTALLATION OF THOSE UTILITIES WHEN INSTALLING PUBLIC UTILITIES.
- CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES PRIOR TO ANY LAND DISTURBANCE ACTIVITIES. IF ANY EXISTING UTILITIES ARE LOCATED THAT CAUSE A CONFLICT WITH PROPOSED UTILITIES, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CIVIL ENGINEER OF RECORD IN WRITING. IF SUCH A SCENARIO ARISES, THE PROPOSED UTILITY IN QUESTION SHALL NOT BE INSTALLED UNTIL AN ACCEPTABLE SOLUTION IS PREPARED AND APPROVED BY THE AUTHORITY HAVING JURISDICTION.
- CONTRACTOR SHALL ADJUST ALL CLEANOUTS, VALVE BOXES, MANHOLES, ETC. TO THE FINISHED GRADES ESTABLISHED BY THE PROJECT.
- ALL UNDERGROUND ELECTRICAL CONDUITS SHALL HAVE A MINIMUM COVER OF 36"; GAS AND COMMUNICATION LINES SHALL HAVE DEPTH AND SPACING AS SPECIFIED BY SERVICE COMPANY.
- MAXIMUM SPACING FOR SANITARY SEWER CLEANOUTS IS 75 FEET. ALL CLEANOUTS LOCATED IN DRIVE AISLES AND/OR PARKING AREAS SHALL BE TRAFFIC RATED.
- INVERT AT CLEANOUT IS INVERT ELEVATION AT THE CONNECTION OF THE HORIZONTAL BEND.
- A 3-FOOT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS.
- CONTRACTOR SHALL PROVIDE PROPER NOTIFICATION TO AUTHORITIES HAVING JURISDICTION AS SPECIFIED IN AGENCY PERMIT CONDITIONS. AS A COURTESY, CIVIL ENGINEER OF RECORD REQUESTS NOTIFICATION.
- THRUST RESTRAINT SHALL BE IN ACCORDANCE WITH CITY OF ZEBULON STANDARD SPECIFICATIONS.
- WATER LINE TESTING AND STERILIZATION SHALL BE IN ACCORDANCE WITH CITY OF ZEBULON STANDARD SPECIFICATIONS.
- ALL NEW MANHOLES SHALL BE ECCENTRIC UNLESS OTHERWISE NOTED.
- ALL WATER AND SEWER SERVICE CONNECTIONS SHALL BE INSTALLED BY A LICENSED PLUMBER.

SITE PERMITTING APPROVAL:

WATER AND SEWER PERMITS (IF APPLICABLE)

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CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT - PLANS AUTHORIZED FOR CONSTRUCTION

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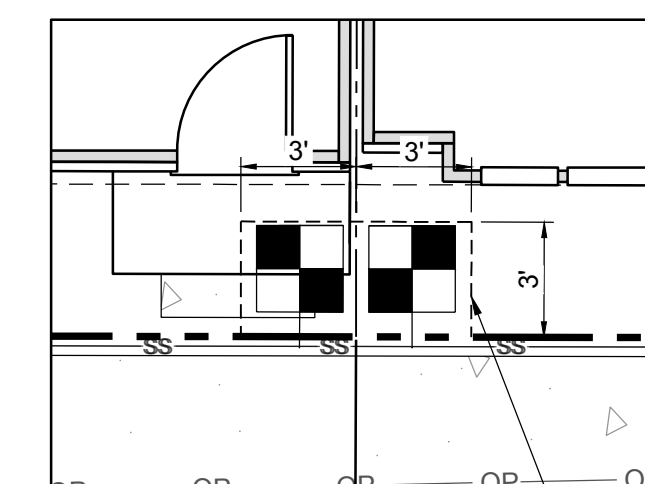
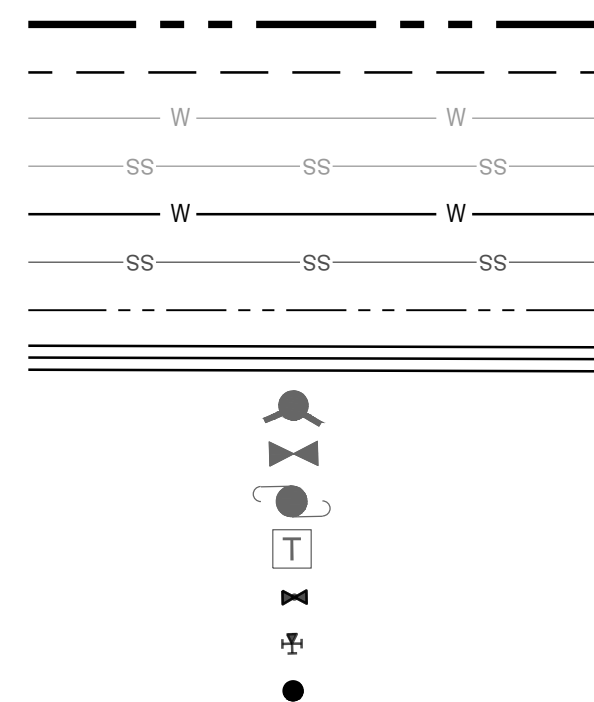
CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT WATER REVIEW OFFICER

NOTE:

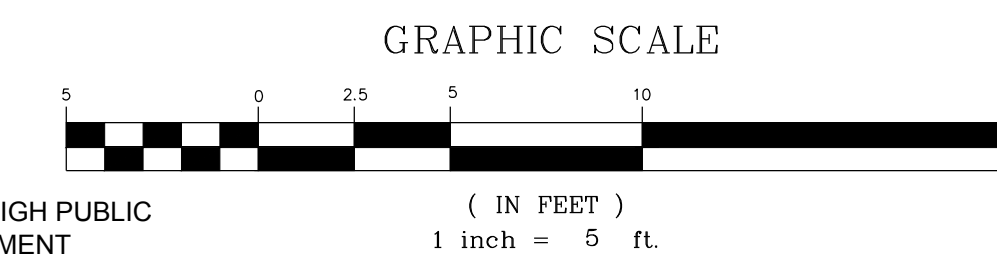
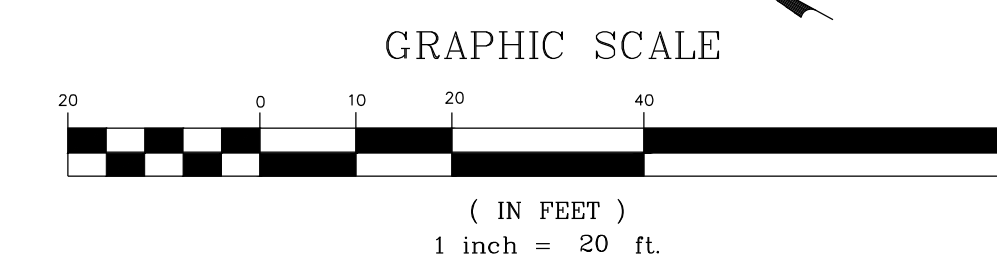
WHERE PROPOSED SS PASSES OVER WATER AND STORM, SS MUST BE DUCTILE IRON WITH CONCRETE COLLAR, REFER TO DETAIL S-49.

MAINTAIN 5' SEPARATION BETWEEN UTILITY SERVICE LINES AND TREE'S DRIPLINE.

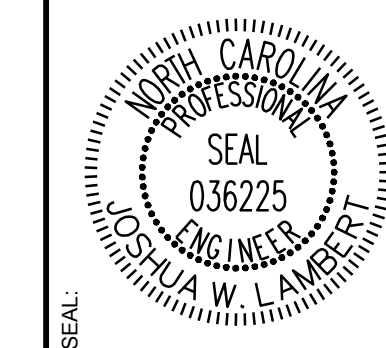
LEGEND:



1 DETAIL 1
SCALE: 1:5



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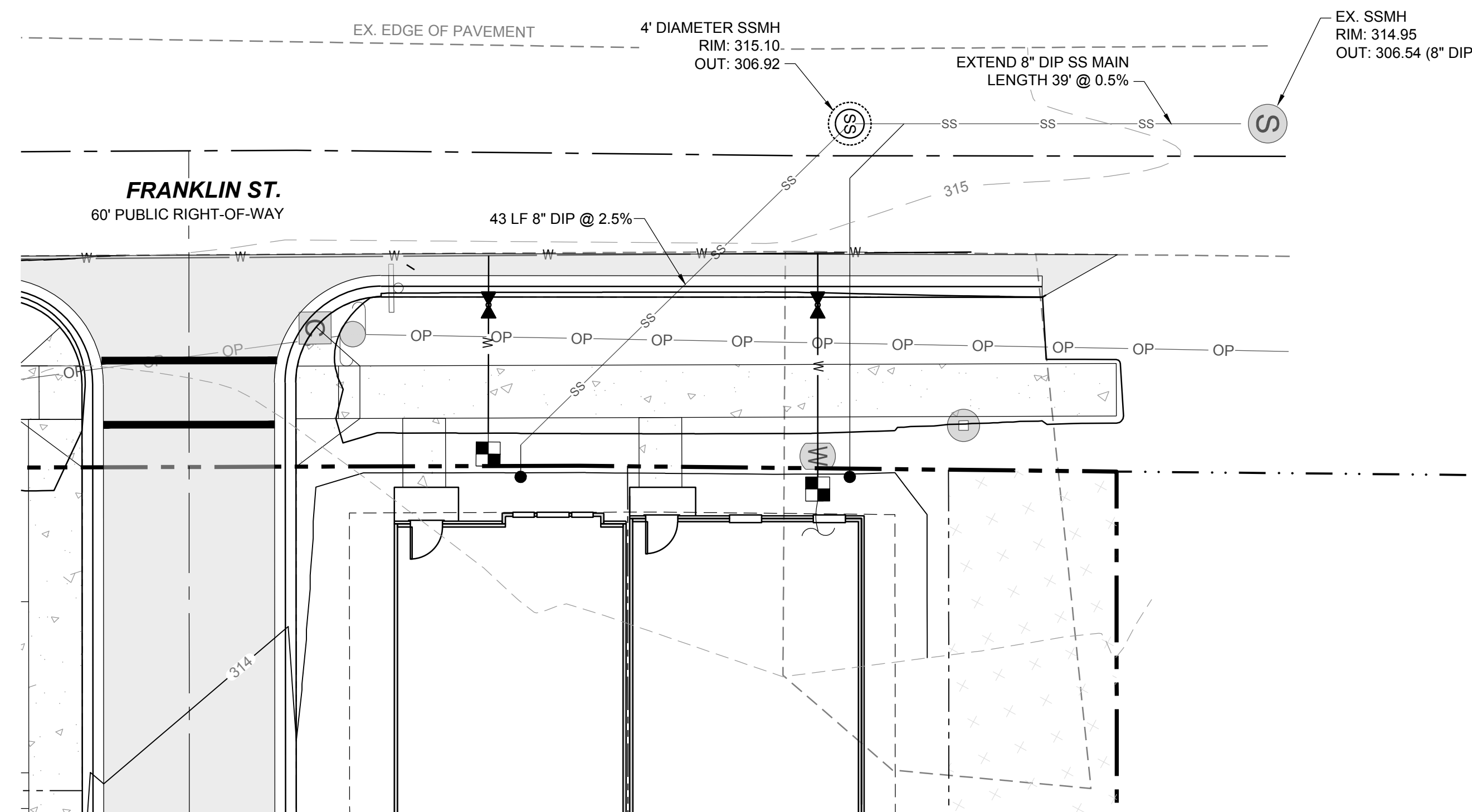
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DRAWN BY: SRG
CHECKED BY: JWL

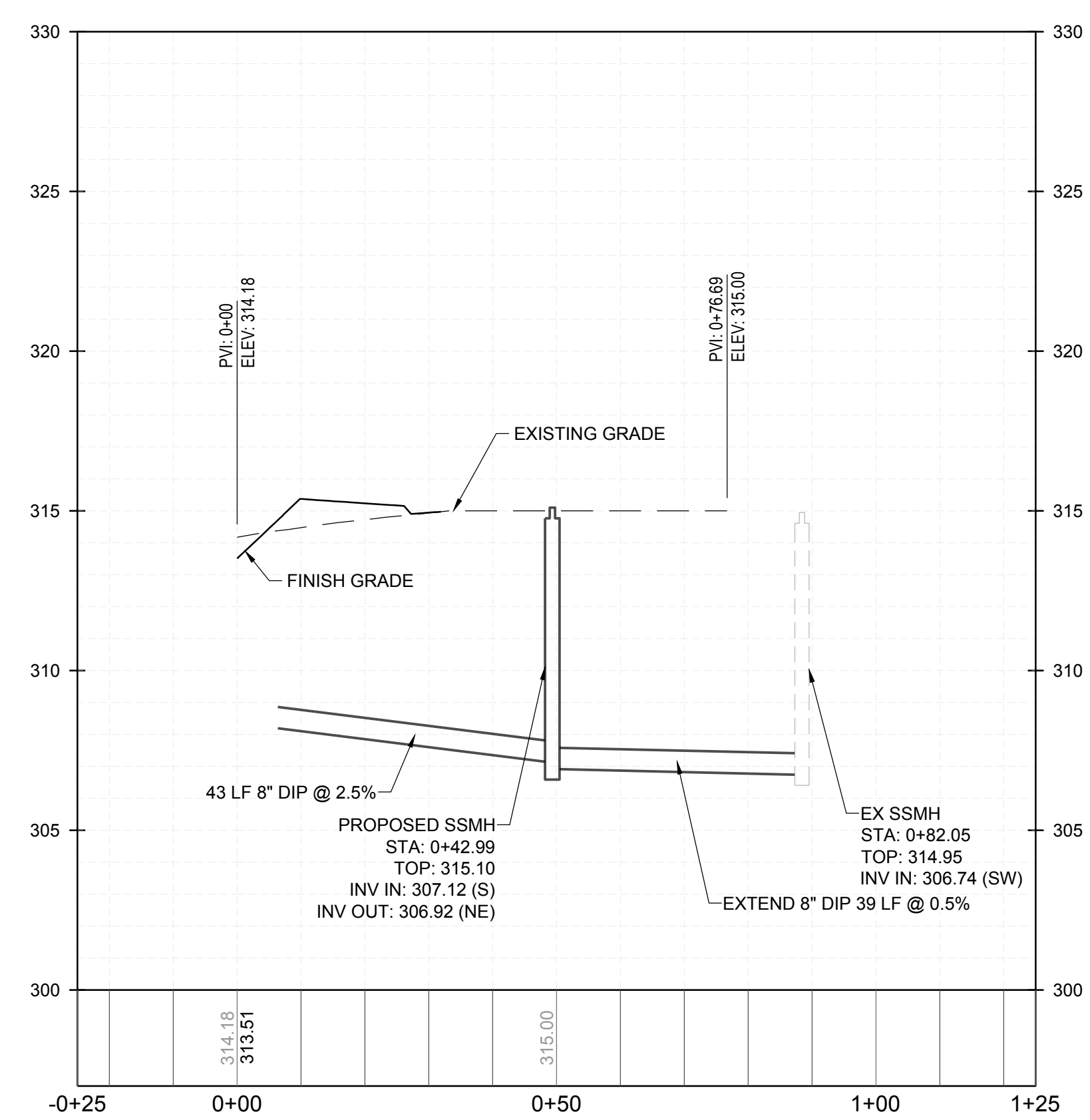
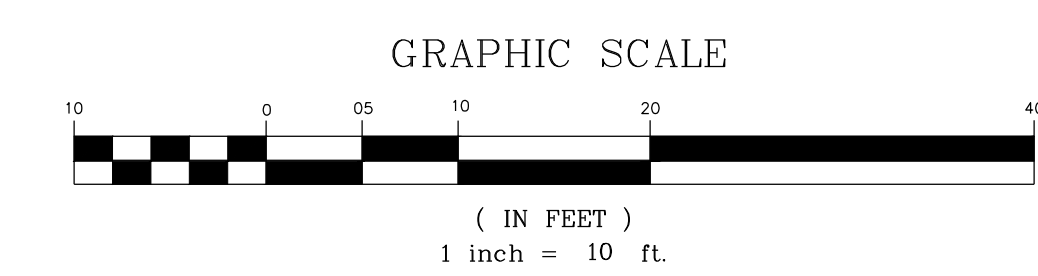
TRUE-ZEBULON-ARENDELL
TOWN OF ZEBULON, WAKE COUNTY, NORTH CAROLINA
CONSTRUCTION PLANS
UTILITY PLAN

DRAWING SHEET
C-3.0

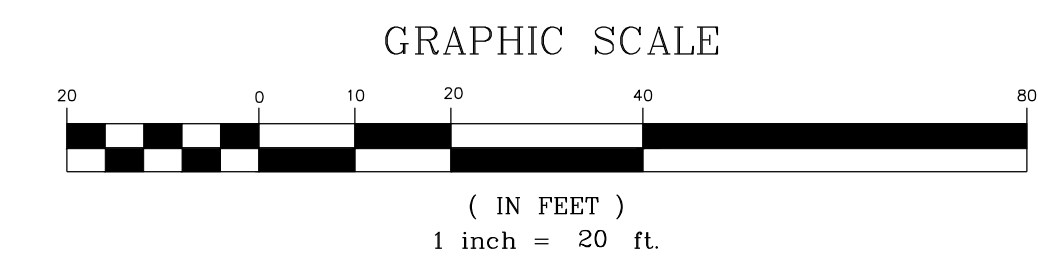
04 OF 17



OFF-SITE SANITARY SEWER - PLAN
HORIZONTAL: 1" = 10'



OFF-SITE SANITARY SEWER - PROFILE
VERTICAL: 1" = 5'
HORIZONTAL: 1" = 20'



SITE PERMITTING APPROVAL:

WATER AND SEWER PERMITS (IF APPLICABLE)

CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT CONSENTS TO THE CONNECTION AND EXTENSION OF THE CITY'S PUBLIC SEWER SYSTEM AS SHOWN ON THIS PLAN. THE MATERIAL AND CONSTRUCTION METHODS USED FOR THIS PROJECT SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY'S PUBLIC UTILITIES HANDBOOK.

CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PUBLIC UTILITIES DEPARTMENT PERMIT # S-3938

CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT CONSENTS TO THE CONNECTION AND EXTENSION OF THE CITY'S PUBLIC WATER SYSTEM AS SHOWN ON THIS PLAN. THE MATERIAL AND CONSTRUCTION METHODS USED FOR THIS PROJECT SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY'S PUBLIC UTILITIES HANDBOOK. CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PUBLIC UTILITIES DEPARTMENT PERMIT # N/A

CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT - PLANS AUTHORIZED FOR CONSTRUCTION

ELECTRONIC APPROVAL: THIS APPROVAL IS BEING ISSUED ELECTRONICALLY. THIS APPROVAL IS VALID ONLY UPON THE SIGNATURE OF A TOWN OF ZEBULON REVIEW OFFICER BELOW. THE CITY WILL RETAIN A COPY OF THE APPROVED PLANS. ANY WORK AUTHORIZED BY THIS APPROVAL MUST PROCEED IN ACCORDANCE WITH THE PLANS KEPT ON FILE WITH THE CITY. THIS ELECTRONIC APPROVAL MAY NOT BE EDITED ONCE ISSUED. ANY MODIFICATION TO THIS APPROVAL ONCE ISSUED WILL INVALIDATE THIS APPROVAL.

CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT DEVELOPMENT APPROVAL

CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT WATER REVIEW OFFICER

1	TRC REVIEW RESPONSES	09-30-2021	BY
2	TRC REVIEW RESPONSES	12-23-2021	DATE
3	TRC REVIEW RESPONSES	03-23-2022	
			REVISIONS
No.			

SEAL:

STRONGROCK
ENGINEERING GROUP
STRONG ROCK ENGINEERING GROUP, PLLC | COMPANY LICENSE # P-2166
6801 FALLS OF NEUSE RD. SUITE 108 RALEIGH, NC 27615 | JOSH@STRONGROCKENGINEERING.COM

STRONG ROCK PROJECT	NOT FOR CONSTRUCTION	SCALE AS SHOWN	DESIGNED BY RLB	SRG	JWL
			DRAWN BY		CHECKED BY

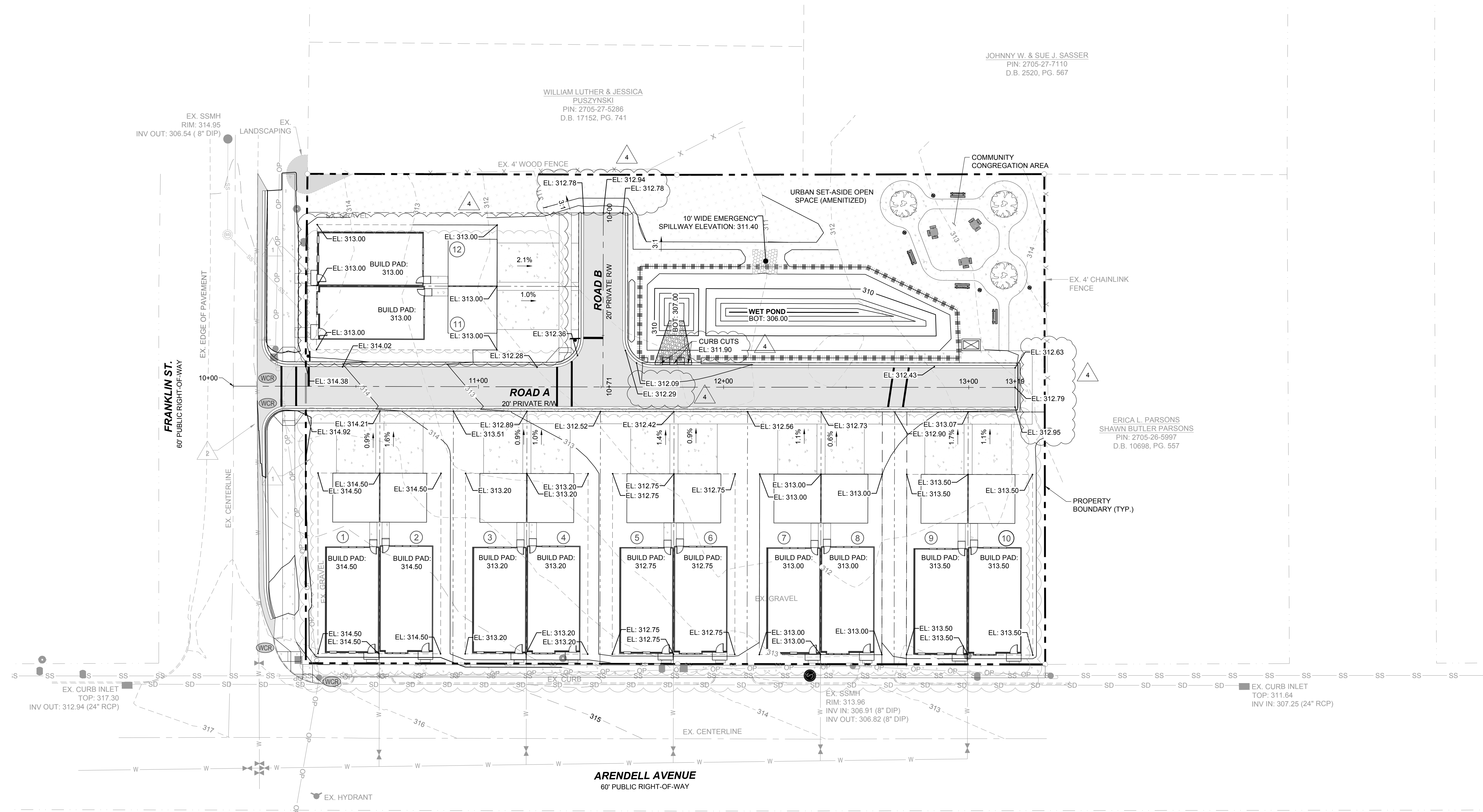
TRUE- ZEBULON-ARENDELL
TOWN OF ZEBULON, WAKE COUNTY, NORTH CAROLINA
CONSTRUCTION PLANS
**OFF-SITE SANITARY SEWER
PLAN & PROFILE**

DRAWING SHEET
C-4.0

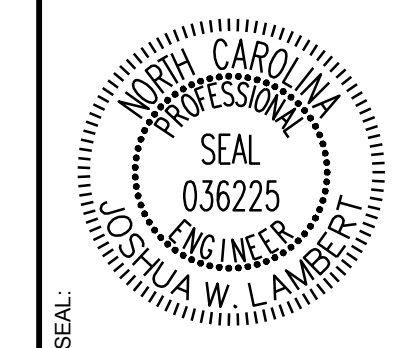
JOHNNY W. & SUE J. SASSER
PIN: 2705-27-7110
D.B. 2520, PG. 567

WILLIAM LUTHER & JESSICA
PUSZYNSKI
PIN: 2705-27-5286
D.B. 17152, PG. 741

ERICA L. PARSONS
SHAWN BUTLER PARSONS
PIN: 2705-26-5997
D.B. 10698, PG. 557



NO.	REVISIONS	DATE	BY
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STRONG ROCK PROJECT	NOT FOR CONSTRUCTION	SCALE AS SHOWN	DESIGNED BY	DRAWN BY	CHECKED BY
			RLB	SRG	JWL

TRUE-ZEBULON-ARENDELL
TOWN OF ZEBULON, WAKE COUNTY, NORTH CAROLINA
CONSTRUCTION PLANS
GRADING PLAN

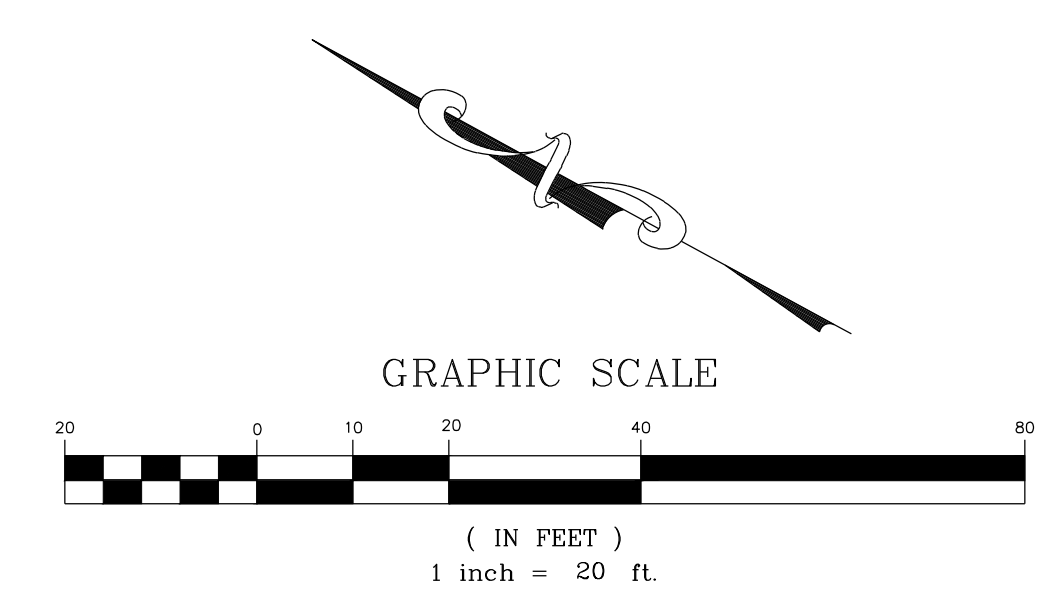
DRAWING SHEET
C-5.0
06 OF 17

LEGEND:

- MASTER PLAN BOUNDARY
- - - ADJOINER PROPERTY LINE
- - - EXISTING WATERLINE
- - - EXISTING SANITARY SEWER
- - - PROPOSED LOT LINE
- ==== PROPOSED ROLL CURB AND GUTTER
- - - EXISTING MAYOR CONTOUR
- - - EXISTING MINOR CONTOUR
- - - PROPOSED MAYOR CONTOUR
- - - PROPOSED MINOR CONTOUR
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING UTILITY POLE
- EXISTING TELEPHONE PEDEST

GRADING NOTES:

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH TOWN OF ZEBULON, NCDOT, AND/OR WAKE COUNTY STANDARDS AS APPLICABLE.
- CONTRACTOR SHALL COORDINATE ALL GRADING OPERATIONS WITH THE OWNERS GEOTECHNICAL ENGINEER.



JOHNNY W. & SUE J. SASSER
PIN: 2705-27-7110
D.B. 2520, PG. 567

WILLIAM LUTHER & JESSICA
PUSZYNSKI
PIN: 2705-27-5286
D.B. 17152, PG. 741

LEGEND:

- EXISTING PROPERTY LINE
- ROADWAY CENTER LINE
- PROPOSED PROPERTY LINE
- STANDARD ROLL CURB & GUTTER
- PROPOSED STORM DRAIN LINE

DRAINAGE NOTES:

- CONTRACTOR SHALL MAINTAIN POSITIVE SLOPE AND OUTFALL OF ANY FOUNDATION DRAIN SYSTEMS.
- ALL STORM DRAIN HOODS, MANHOLE COVERS AND GRATES ARE TO BE LABELED "NO DUMPING DRAINS TO STREAM".

SITE PERMITTING APPROVAL:

WATER AND SEWER PERMITS (IF APPLICABLE)

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CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PUBLIC UTILITIES DEPARTMENT PERMIT # S-3836

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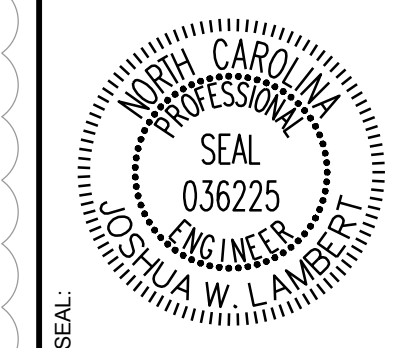
CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT - PLANS AUTHORIZED FOR CONSTRUCTION

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CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT DEVELOPMENT APPROVAL

CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT WATER REVIEW OFFICER

NO.	REVISIONS	DATE	BY
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2	TRC REVIEW RESPONSES	12-23-2021	
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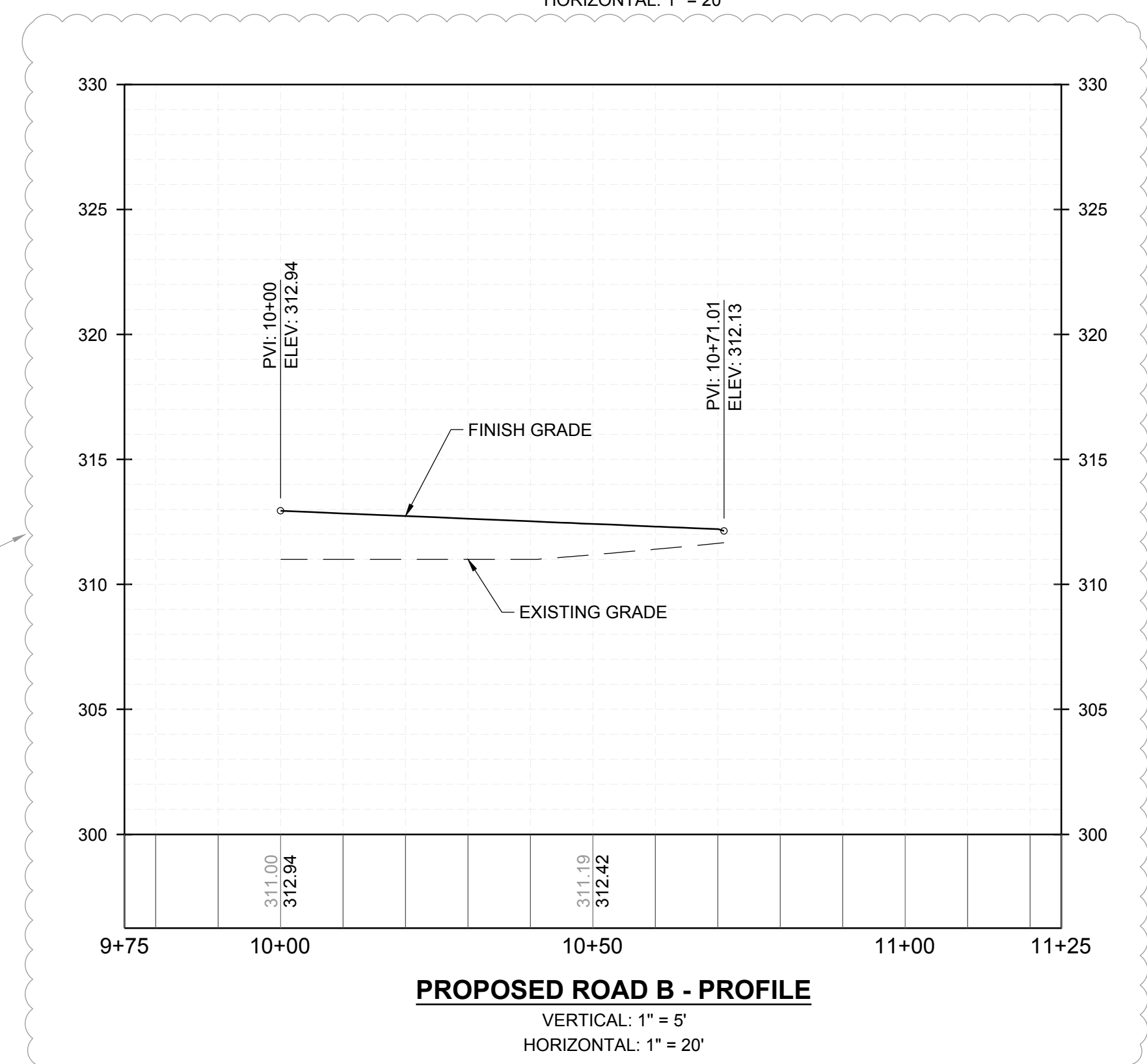
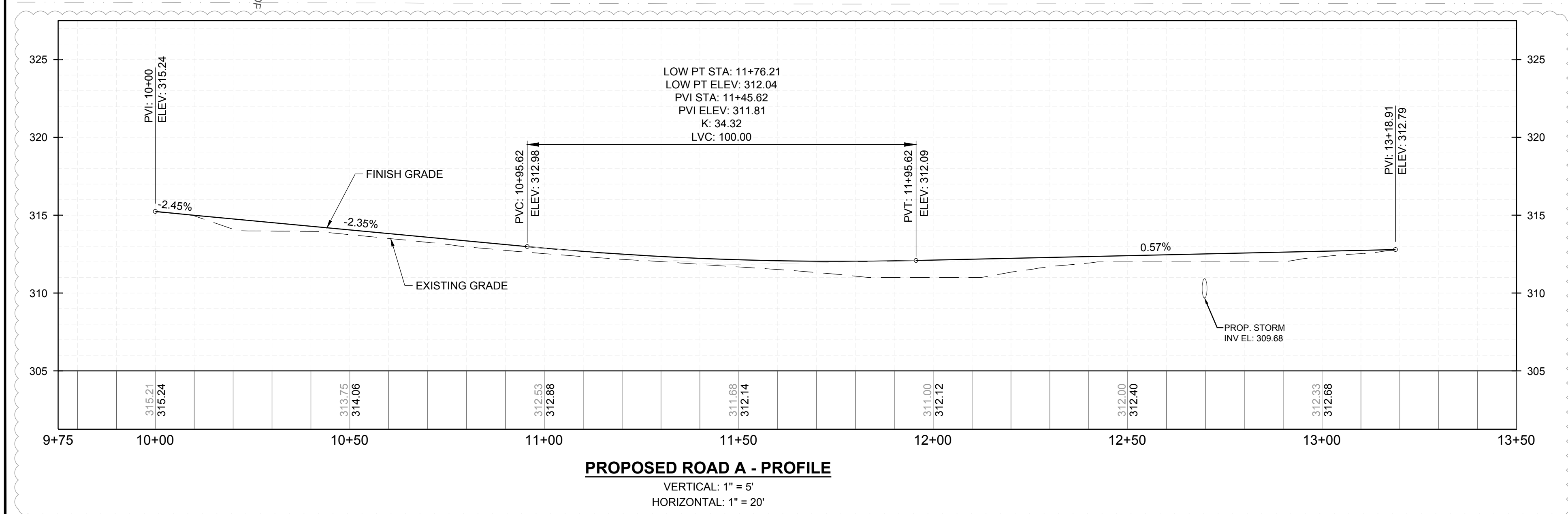
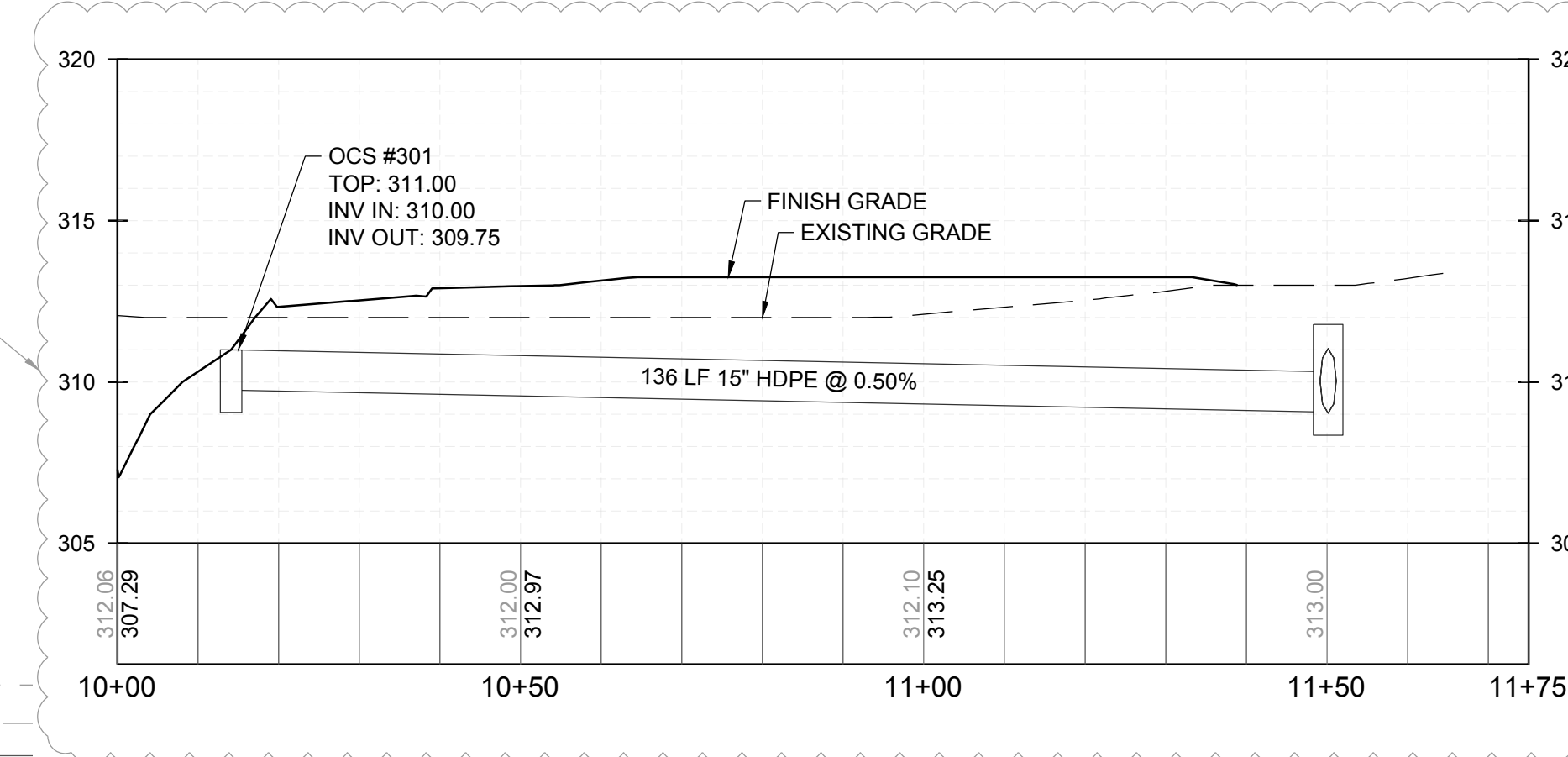
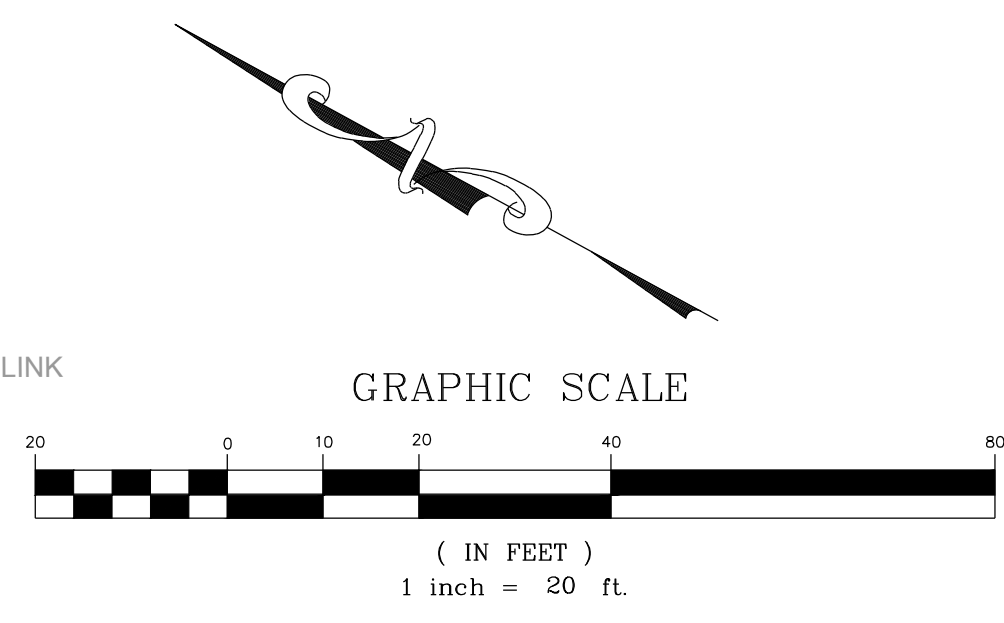
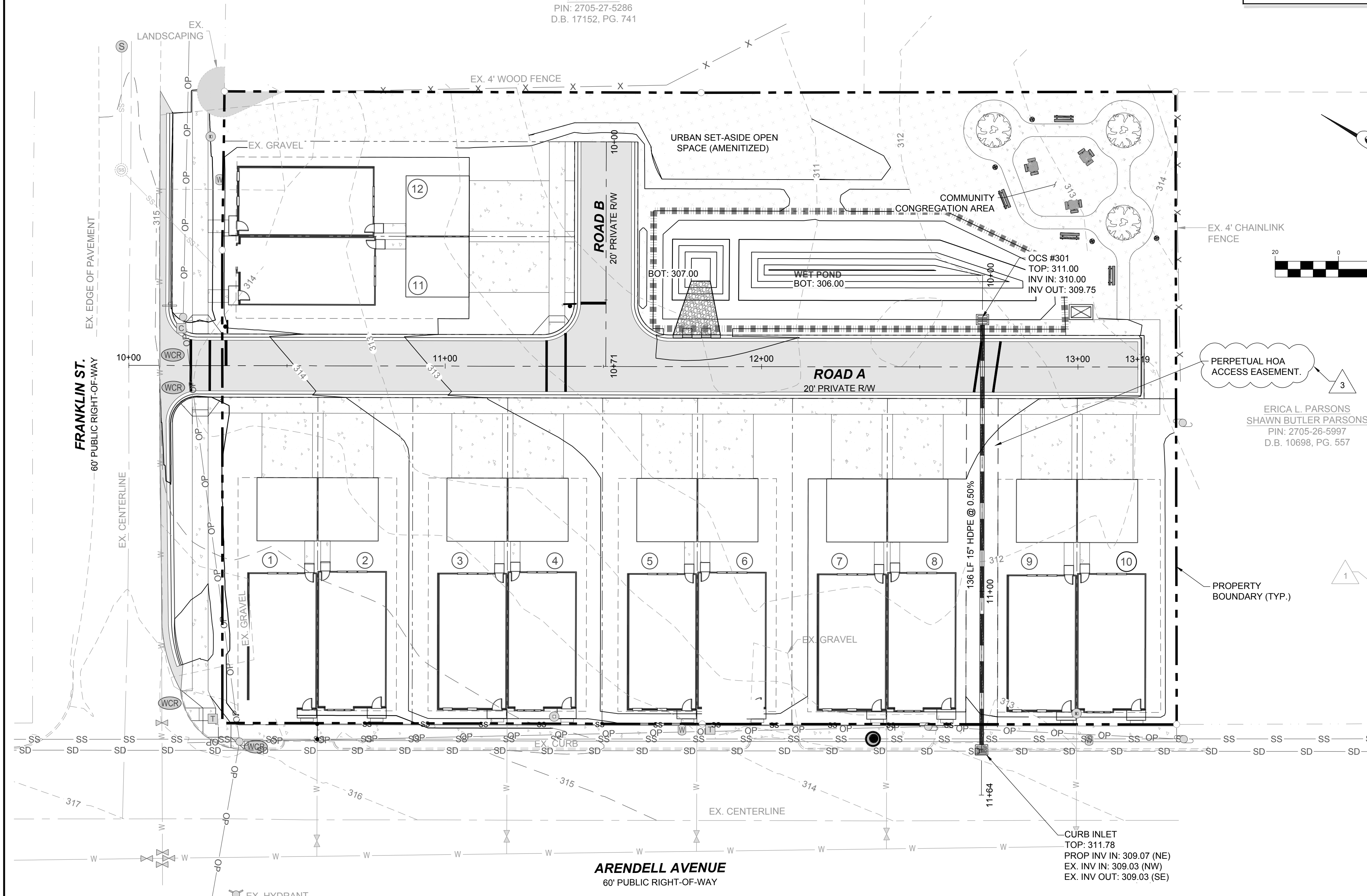
STRONGROCK ENGINEERING GROUP

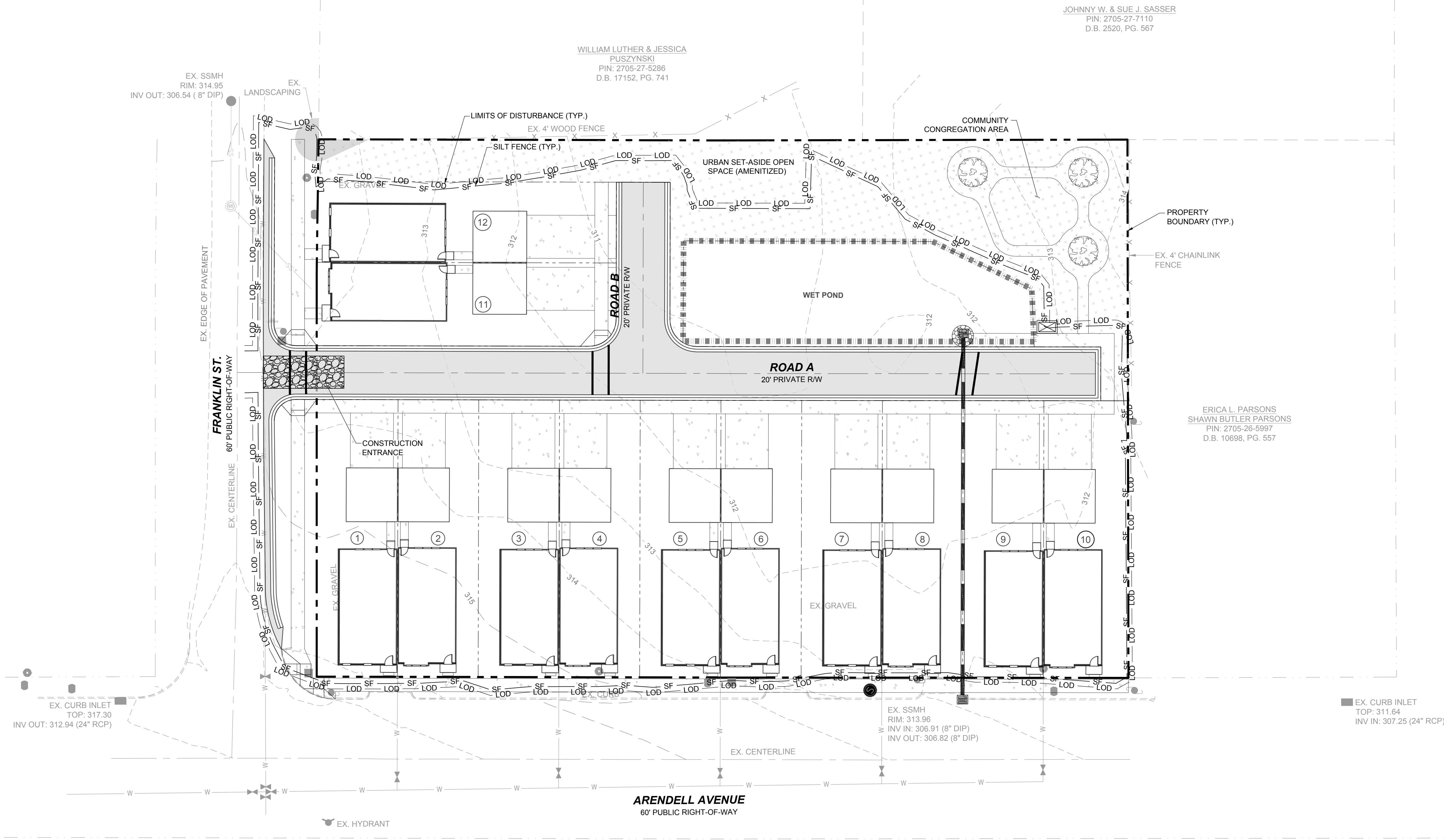
STRONG ROCK ENGINEERING GROUP, PLLC | COMPANY LICENSE # P-2166
6801 FALLS OF NEUSE RD., SUITE 108 RALEIGH, NC 27615 | JOSH@STRONGROCKENGINEERING.COM

STRONG ROCK PROJECT	NOT FOR CONSTRUCTION	SCALE AS SHOWN	DESIGNED BY	DRWN BY	CHECKED BY

TRUE-ZEBULON-ARENDELL
TOWN OF ZEBULON, WAKE COUNTY, NORTH CAROLINA
CONSTRUCTION PLANS
STORMWATER PLAN

DRAWING SHEET
C-6.0
07 OF 17





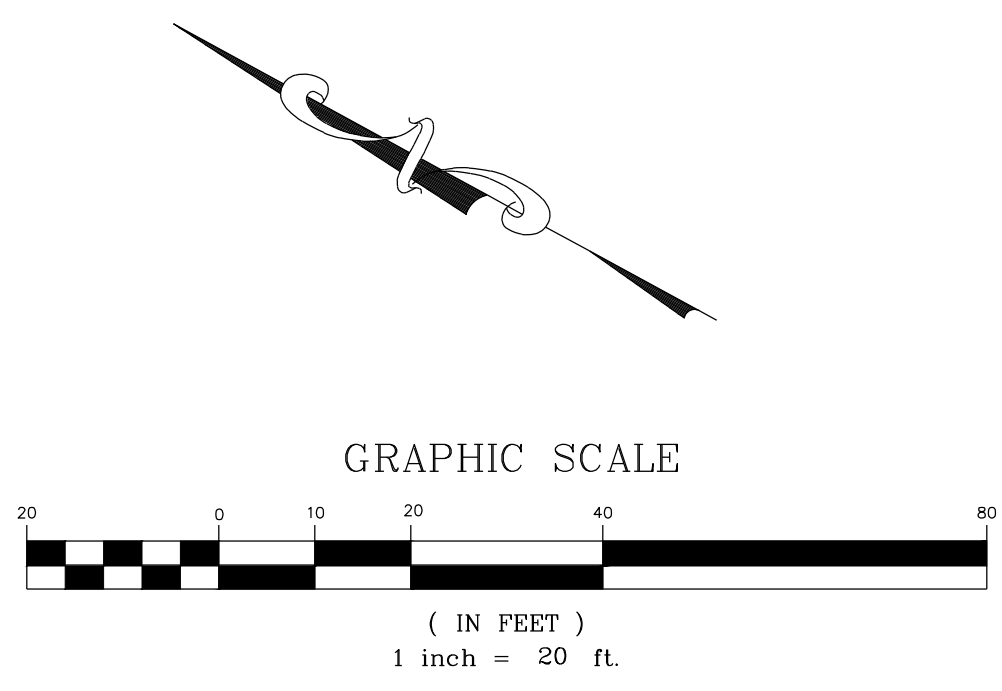
JOHNNY W. & SUE J. SASSER
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 D.B. 2520, PG. 567

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 D.B. 17152, PG. 741

ERICA L. PARSONS
 SHAWN BUTLER PARSONS
 PIN: 2705-26-5997
 D.B. 10698, PG. 557

LEGEND:

- EXISTING PROPERTY LINE
- LIMITS OF DISTURBANCE
- SILT FENCE
- CONSTRUCTION ENTRANCE
- INLET PROTECTION



1	TRC REVIEW RESPONSES	09-30-2021	BY
2	TRC REVIEW RESPONSES	12-23-2021	DATE
3	TRC REVIEW RESPONSES	03-23-2022	
No.	REVISIONS		

STRONG ROCK PROJECT

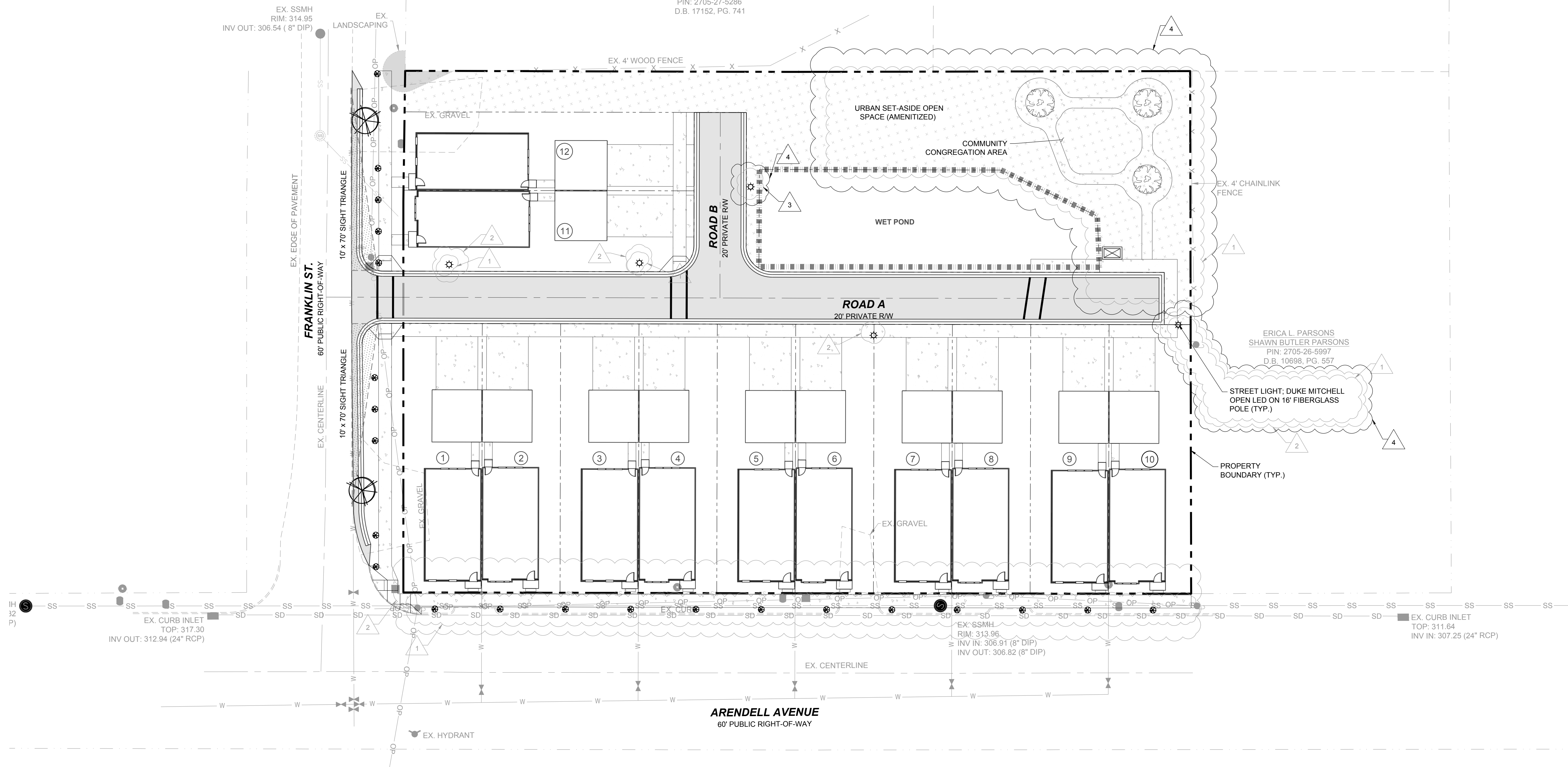
NOT FOR CONSTRUCTION	SCALE AS SHOWN	DESIGNED BY	DRAWN BY	CHECKED BY
		RLB	SRG	JWL

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TRUE- ZEBULON-ARENDELL
 TOWN OF ZEBULON, WAKE COUNTY, NORTH CAROLINA
 CONSTRUCTION PLANS
EROSION CONTROL PLAN

DRAWING SHEET
C-7.0
 08 OF 17

WILLIAM LUTHER & JESSICA
PUSZYNSKI
PIN: 2705-27-5286
D.B. 17152, PG. 741



NO.	REVISIONS	DATE	BY
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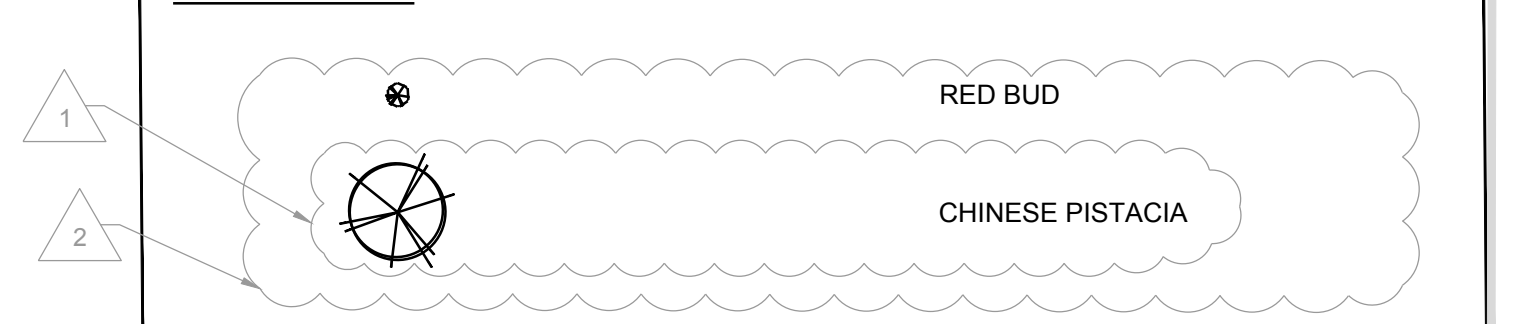
SEAL:

STRONGROCK
ENGINEERING GROUP
STRONG ROCK ENGINEERING GROUP, PLLC (COMPANY LICENSE # P-2166)
8801 FALLS OF NEUSE RD., SUITE 108 RALEIGH, NC 27615 | JOSH@STRONGROCKENGINEERING.COM

STRONG ROCK PROJECT	NOT FOR CONSTRUCTION	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
	AS SHOWN	RLB	SRG	JWL	

TRUE- ZEBULON-ARENDELL
TOWN OF ZEBULON, WAKE COUNTY, NORTH CAROLINA
CONSTRUCTION PLANS
LANDSCAPING PLAN

LEGEND:



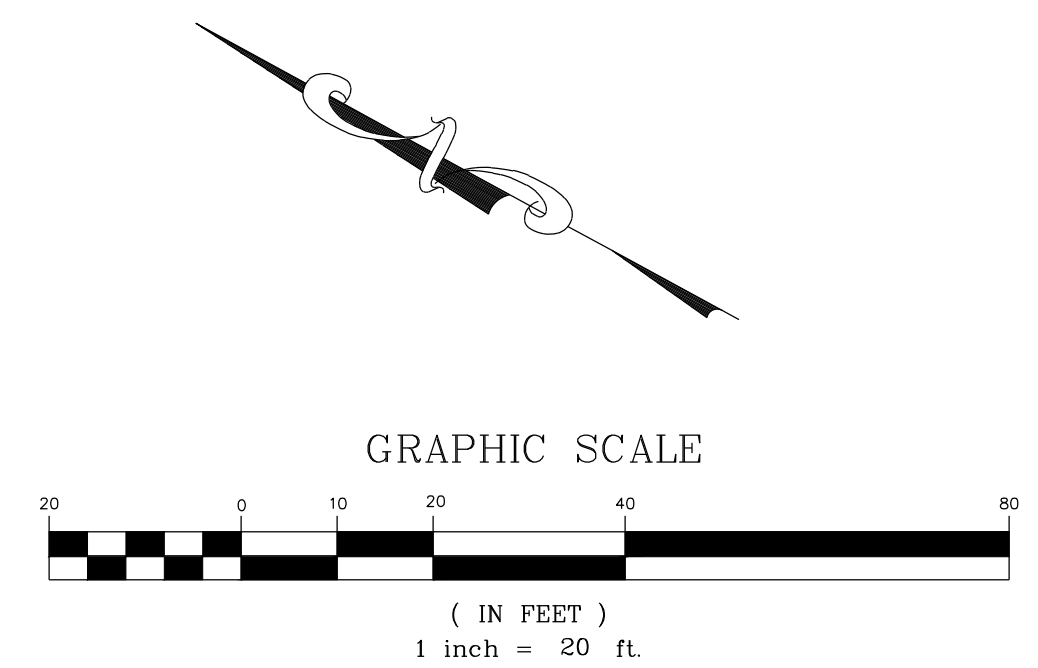
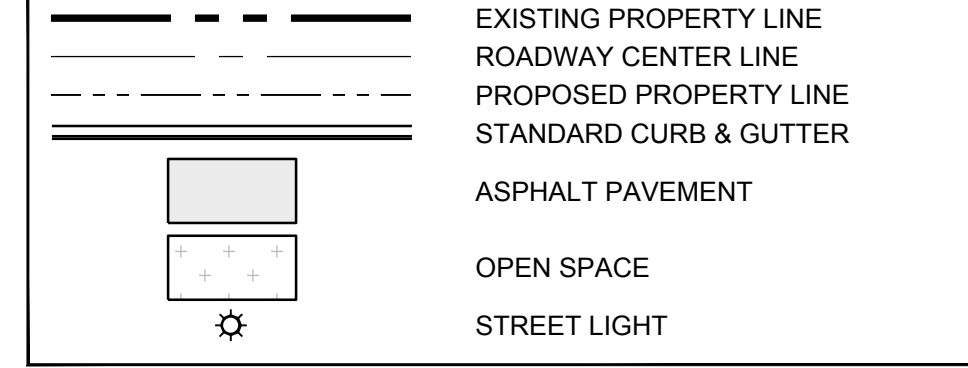
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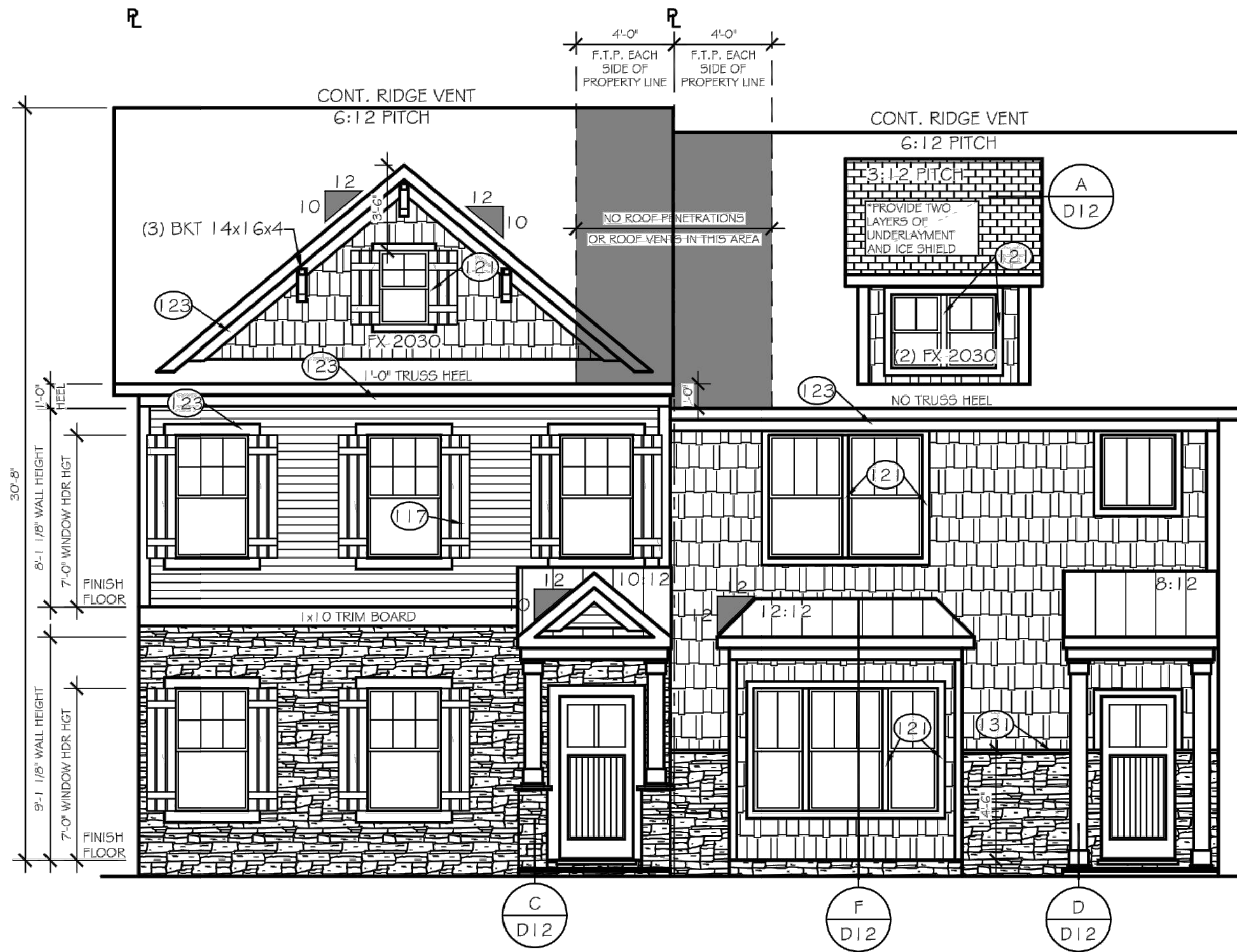
KEY	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	SIZE	HEIGHT
PERIMETER BUFFERS						
CP	2	CHINESE PISTACIA	BOTANICAL	B&B	1" CAL	6'
CJ	22	RED BUD	CERCIS CANADENSIS	GAL.	1" CAL	6'

GENERAL PLANTING NOTES:

- STREET TREES SHALL BE INSTALLED SUCH THAT ONE TREE IS REQUIRED ALONG THE RESIDENTIAL STREET AS SHOWN, SPACED EVERY 40 FEET.
- DO NOT PLACE STREET TREES WITHIN A PUBLIC STORM OR UTILITY EASEMENT.
- ALL CANOPY TREES SHALL BE MIN. 8' TALL AND 2" CALIPER AT TIME OF PLANTING.
- ALL UNDERSTORY TREES SHALL BE MIN. 6' TALL AND 1" CALIPER AT TIME OF PLANTING.
- LANDSCAPING IN AREAS OUTSIDE OF RIGHT OF WAY ARE TO BE PROVIDED BY THE DEVELOPER. ANY LANDSCAPING INSTALLED WITHIN THESE AREAS ARE TO BE MAINTAINED BY THE DEVELOPER UNTIL HOME OWNERS ASSOCIATION (HOA) IS ESTABLISHED. HOA WILL BE RESPONSIBLE FOR CONTINUED MAINTENANCE OF LANDSCAPING AND ANY IMPROVEMENTS OUTSIDE THE RIGHT OF WAY.
- ADDITIONAL LANDSCAPING ON SITE MAYBE PROVIDED BY DEVELOPER.

LEGEND:



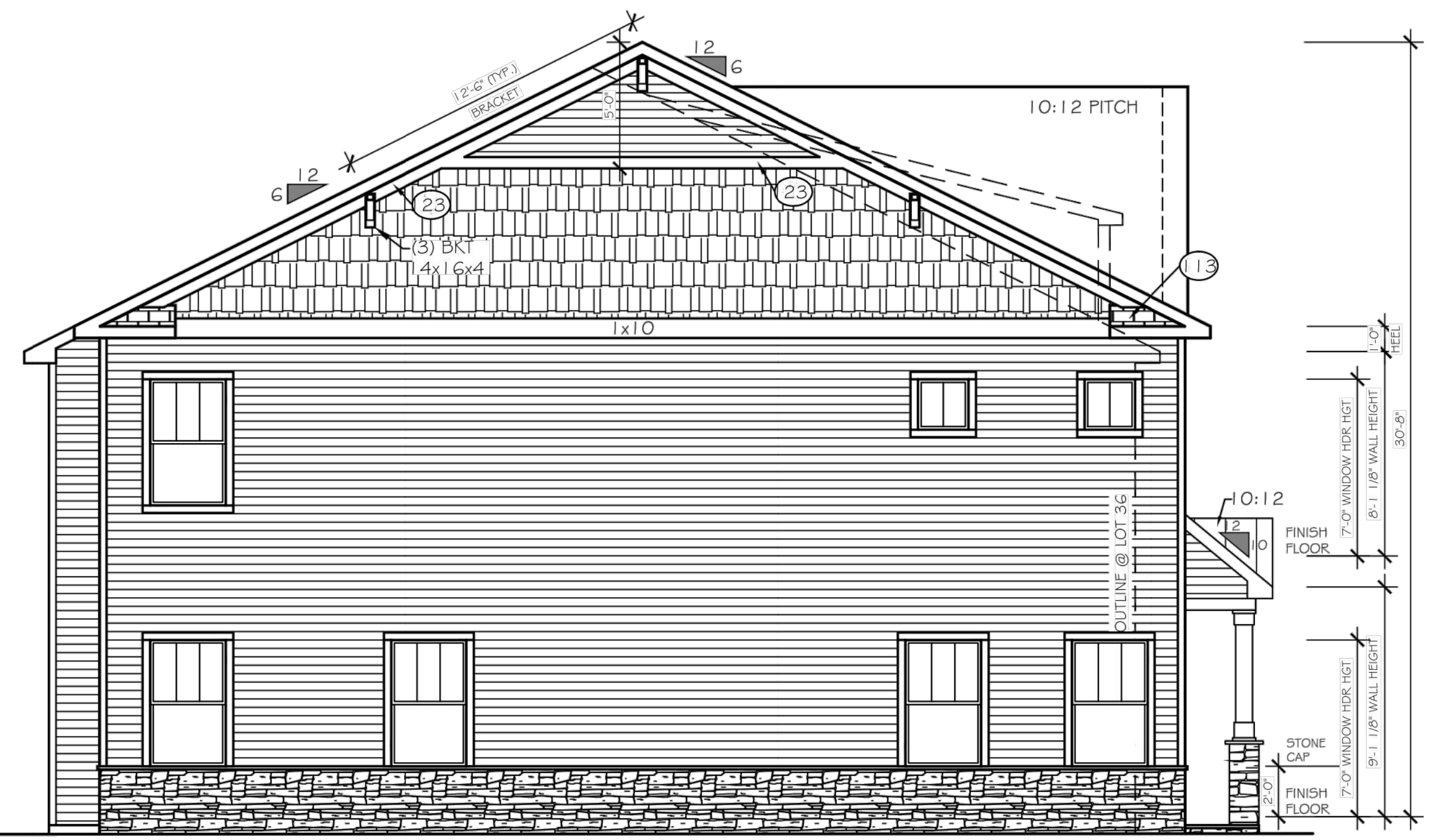


FRONT ELEVATION - A3F
SCALE: 1/4" = 1'-0"

LOT - 1

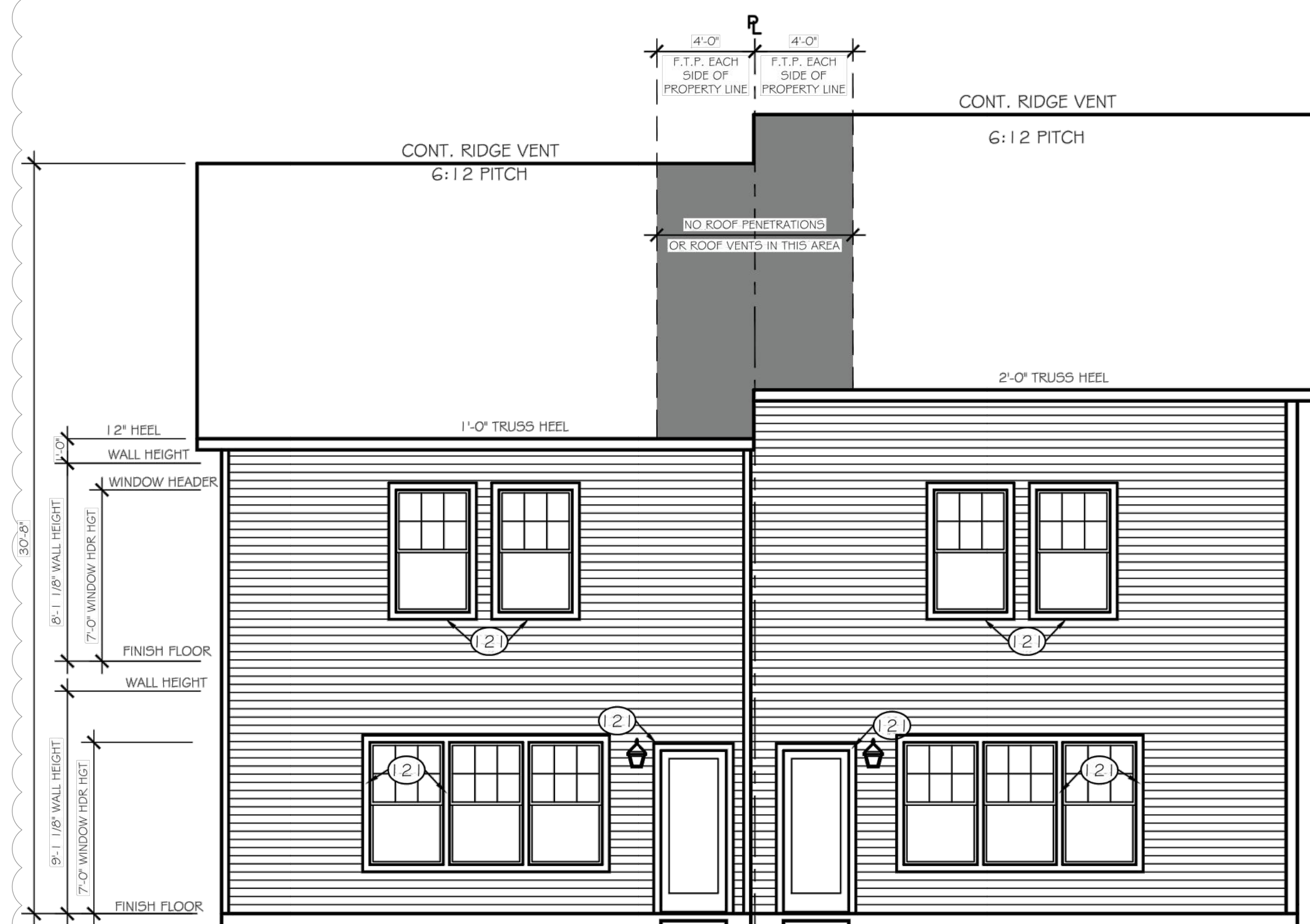
FRONT ELEVATION - C3B
SCALE: 1/4" = 1'-0"

LOT - 2



LEFT ELEVATION
SCALE: 1/4" = 1'-0"

LOT - 1

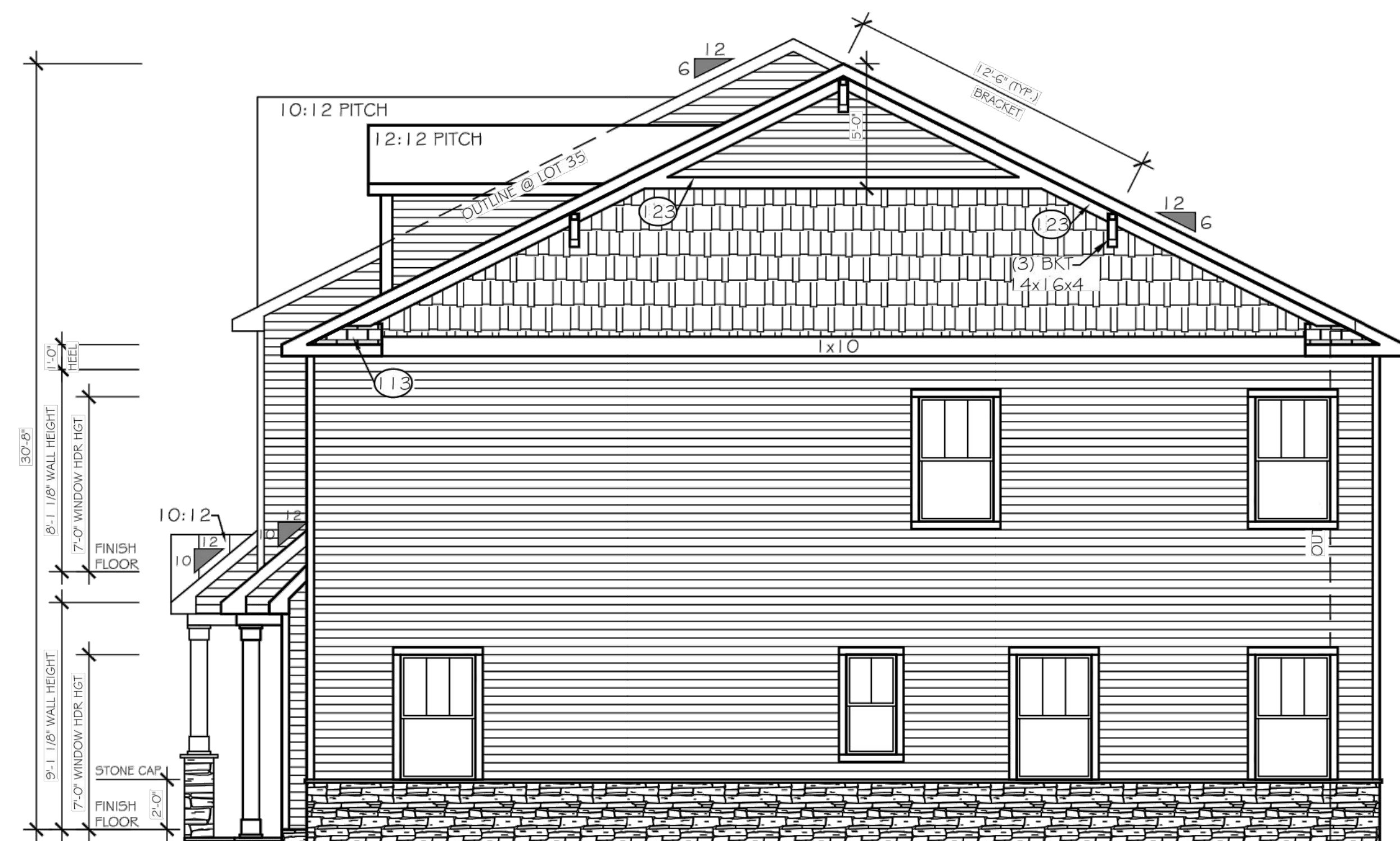


REAR ELEVATION
SCALE: 1/4" = 1'-0"

LOT - 51

REAR ELEVATION
SCALE: 1/4" = 1'-0"

LOT - 52



RIGHT ELEVATION
SCALE: 1/4" = 1'-0"

LOT - 2

NO.	REVISIONS	DATE	BY
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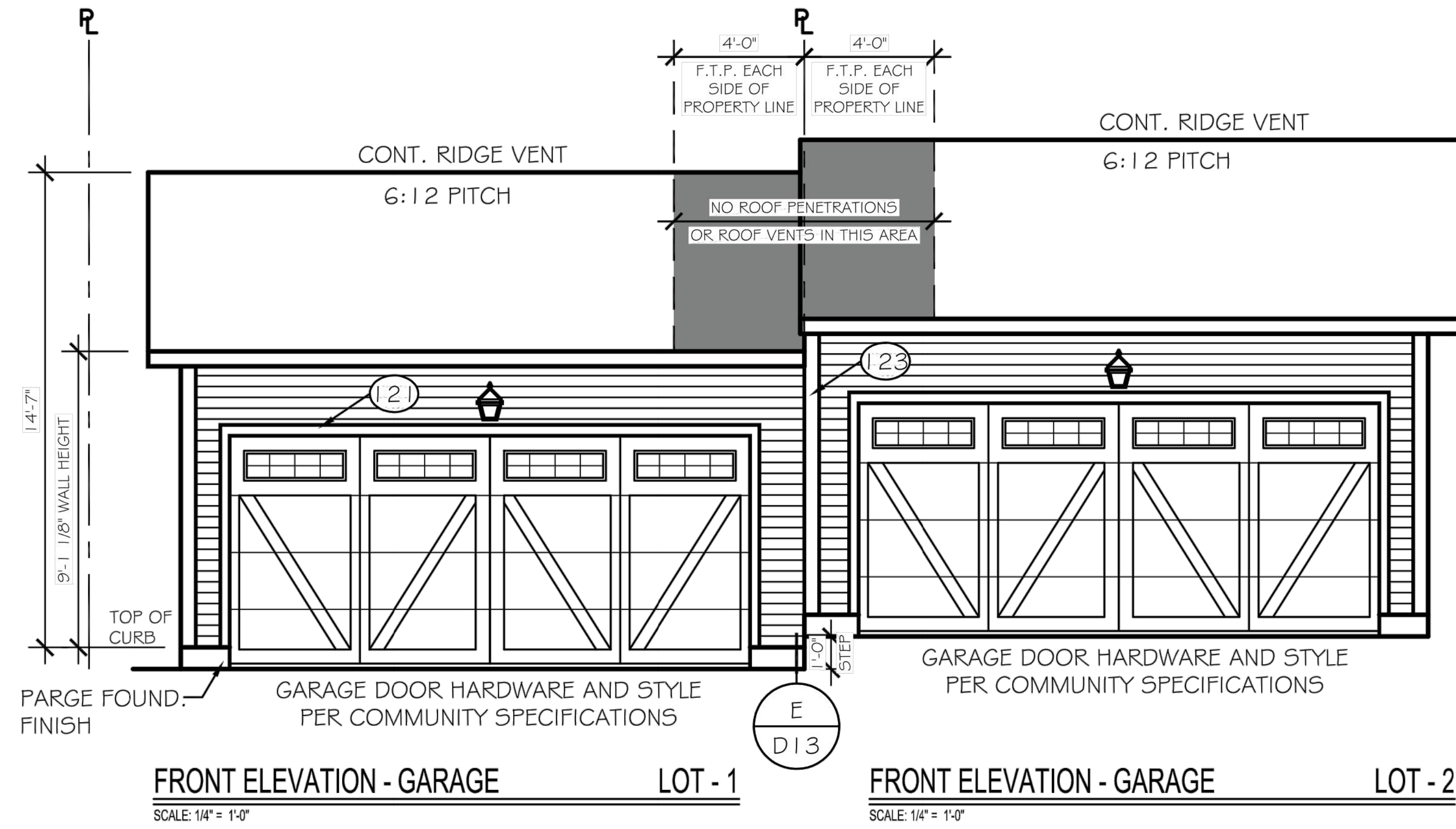
STRONG ROCK PROJECT	NOT FOR CONSTRUCTION	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
	AS SHOWN		RLB	SRG	JWL

TRUE- ZEBULON-ARENDELL
TOWN OF ZEBULON, WAKE COUNTY, NORTH CAROLINA
CONSTRUCTION PLANS
BUILDING ELEVATIONS

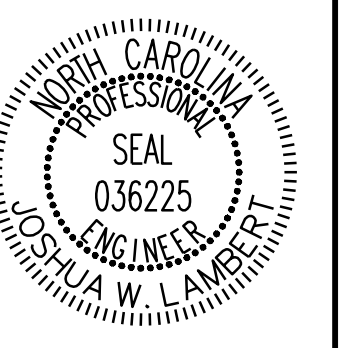
DRAWING SHEET

D-1.0

10 OF 17



No.	REVISIONS	DATE	BY
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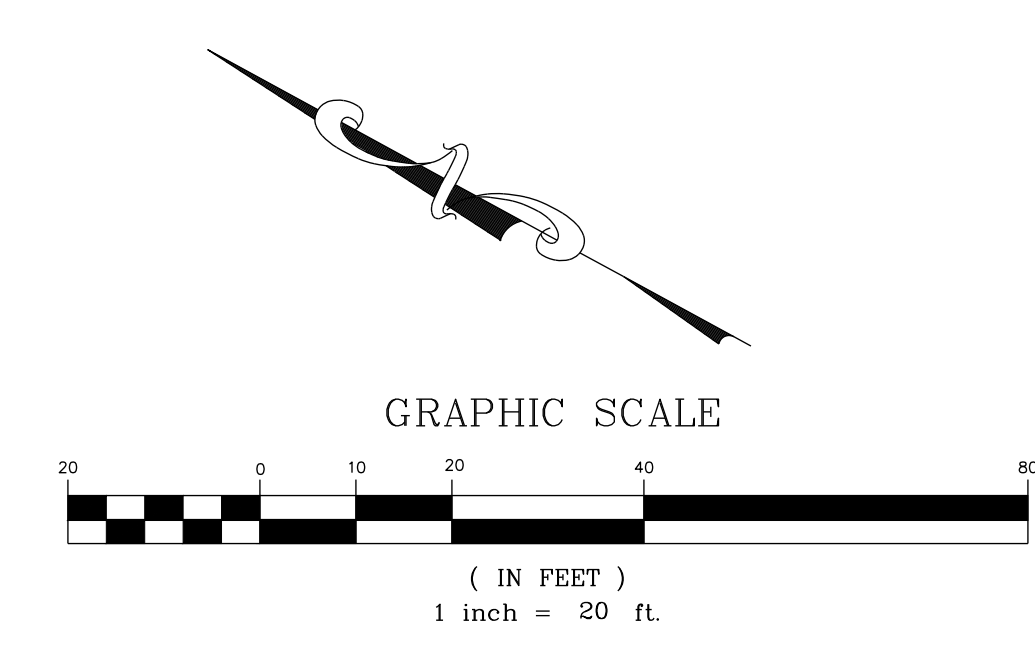
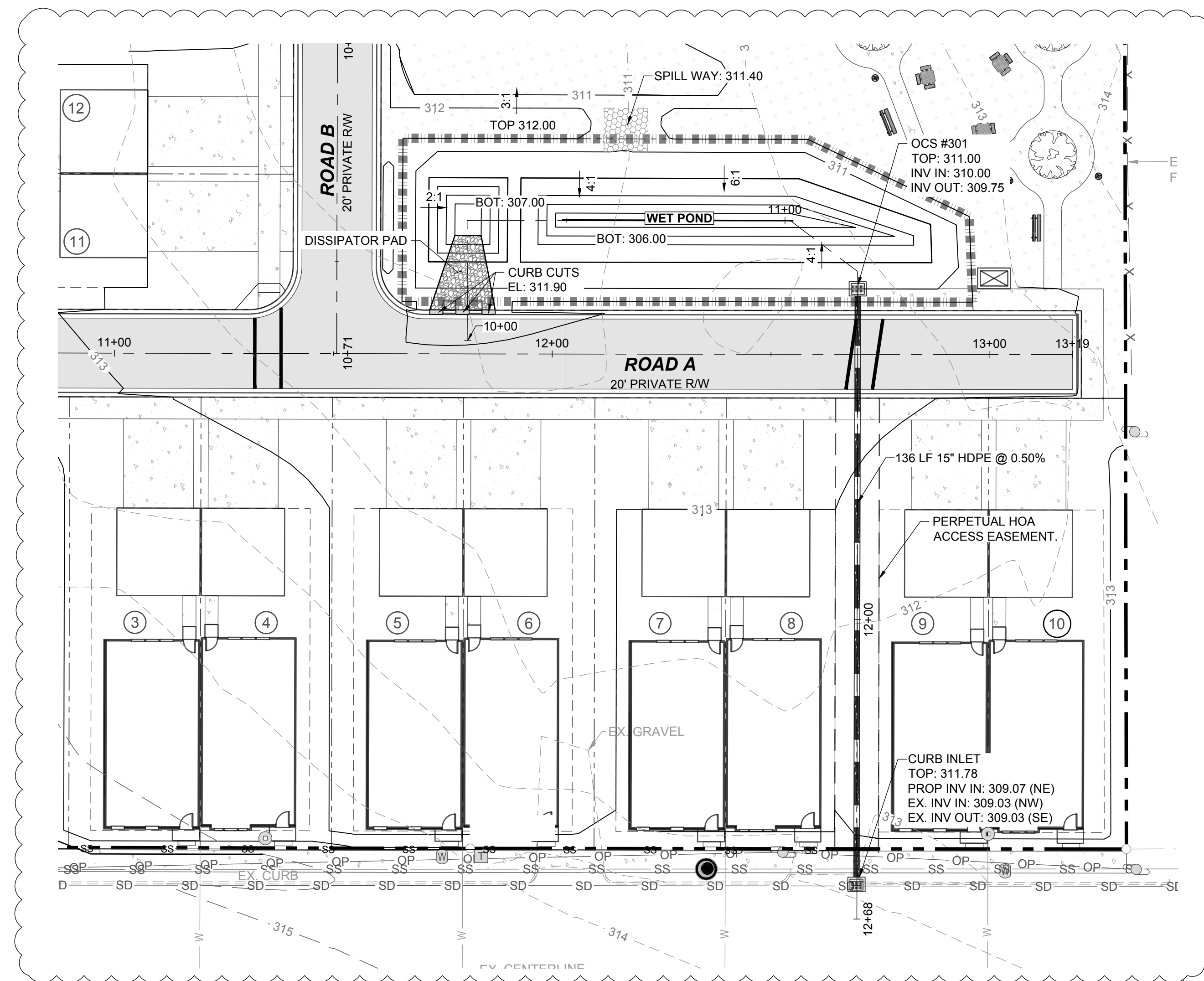
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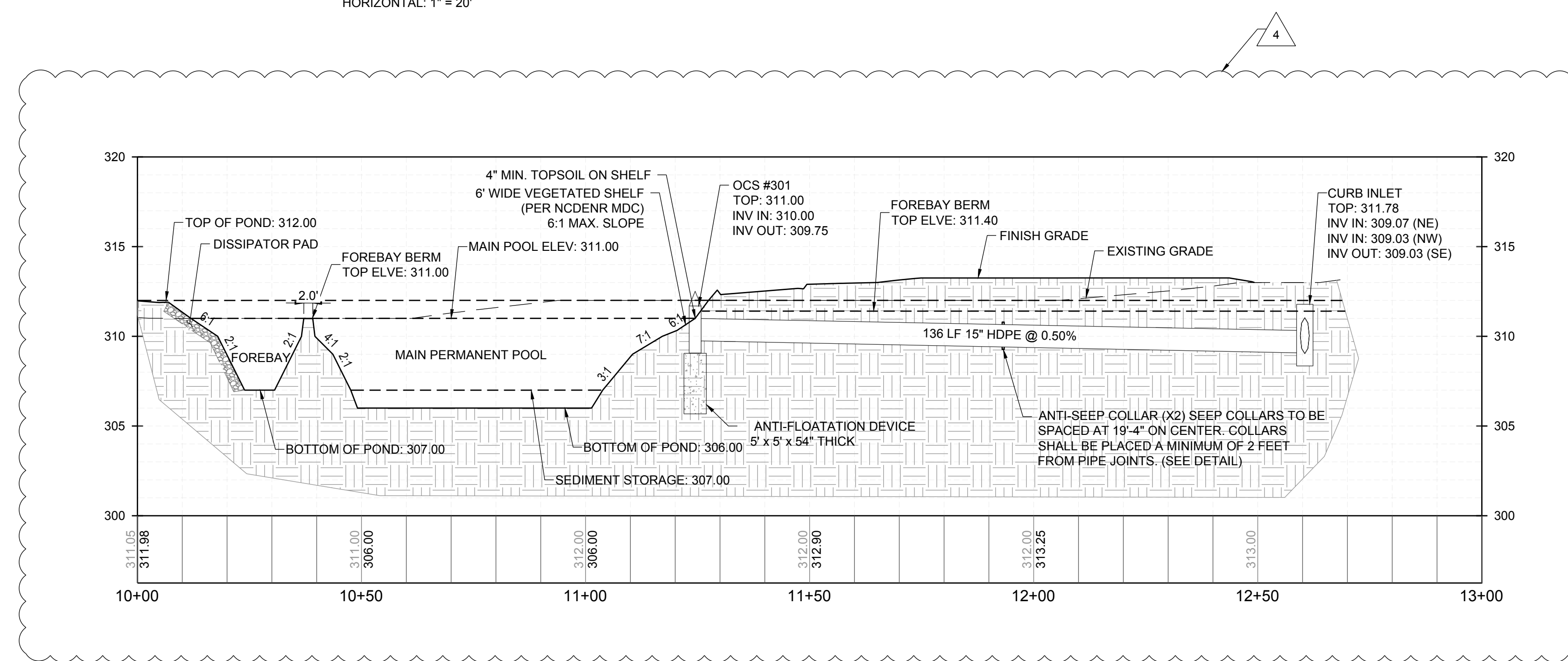
TRUE- ZEBULON-ARENDELL
TOWN OF ZEBULON, WAKE COUNTY, NORTH CAROLINA
CONSTRUCTION PLANS
BUILDING ELEVATIONS

DRAWING SHEET
D-1.1

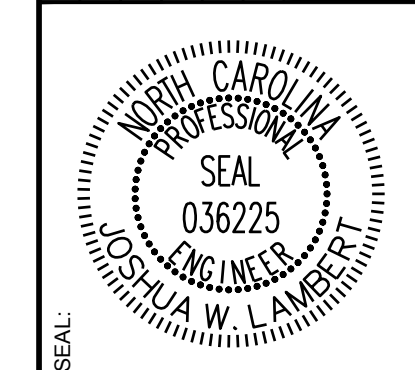


LEGEND:

	EXISTING PROPERTY LINE
	ROADWAY CENTER LINE
	PROPOSED PROPERTY LINE
	STANDARD ROLL CURB & GUTTER
	PROPOSED STORM DRAIN LINE



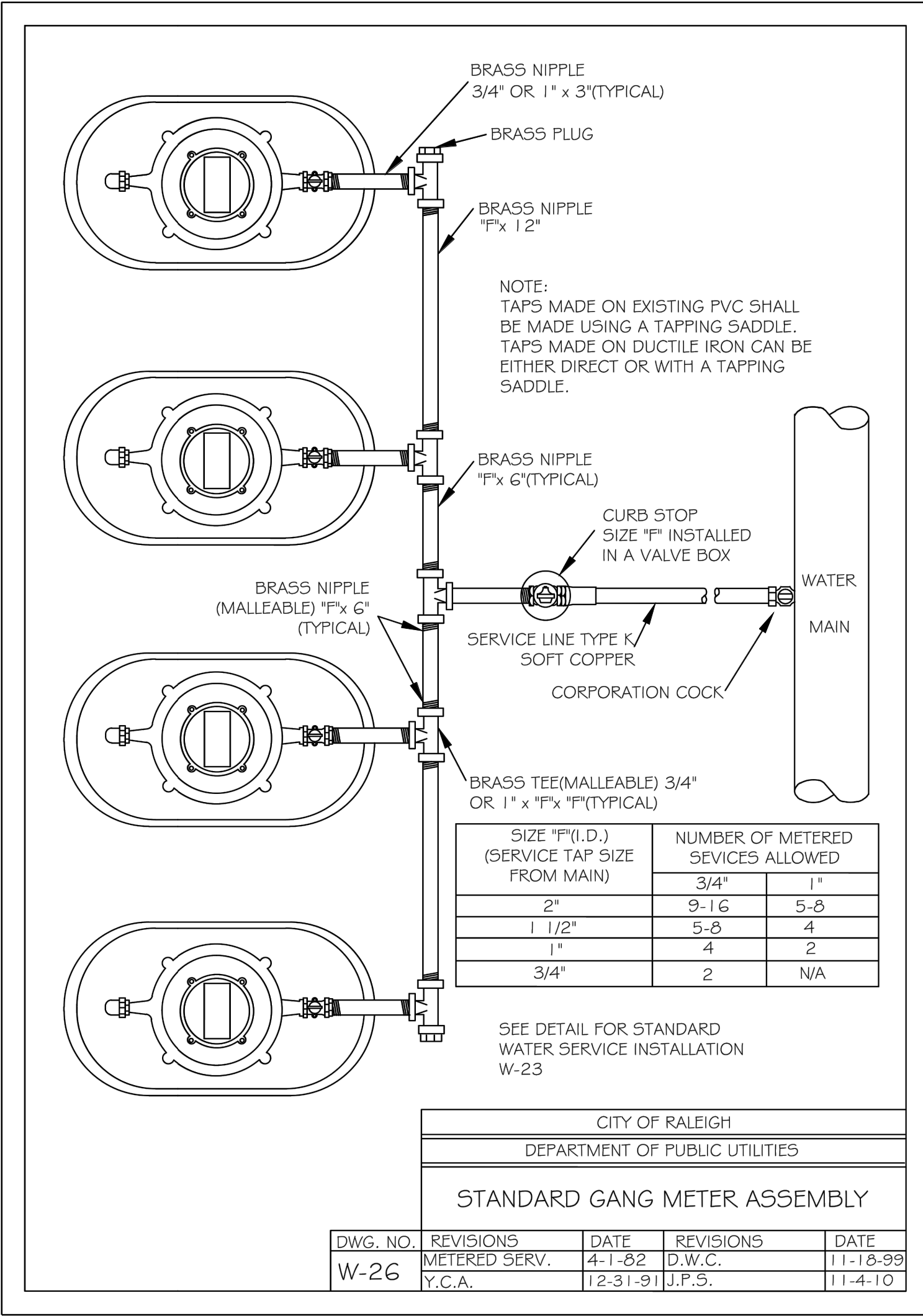
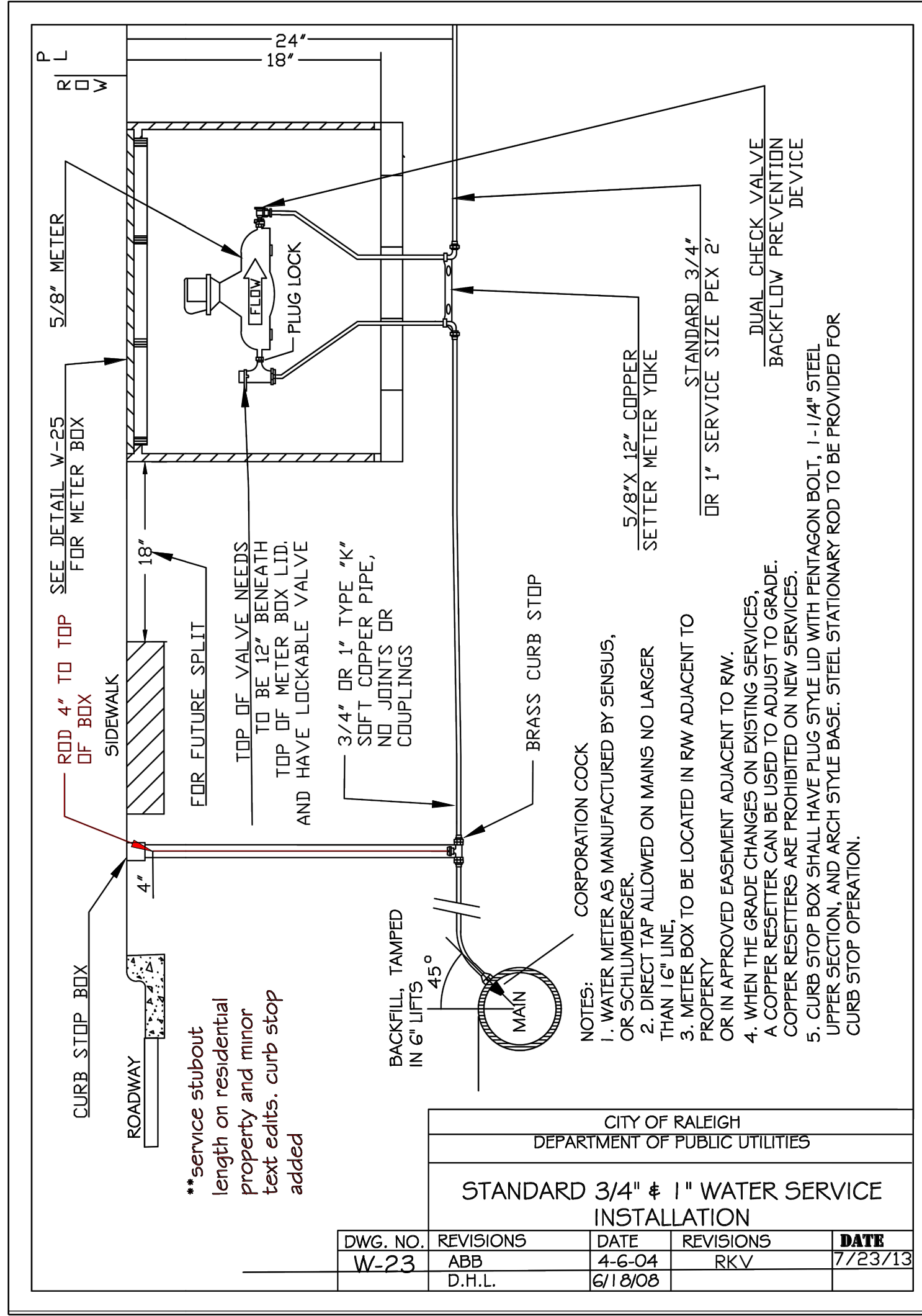
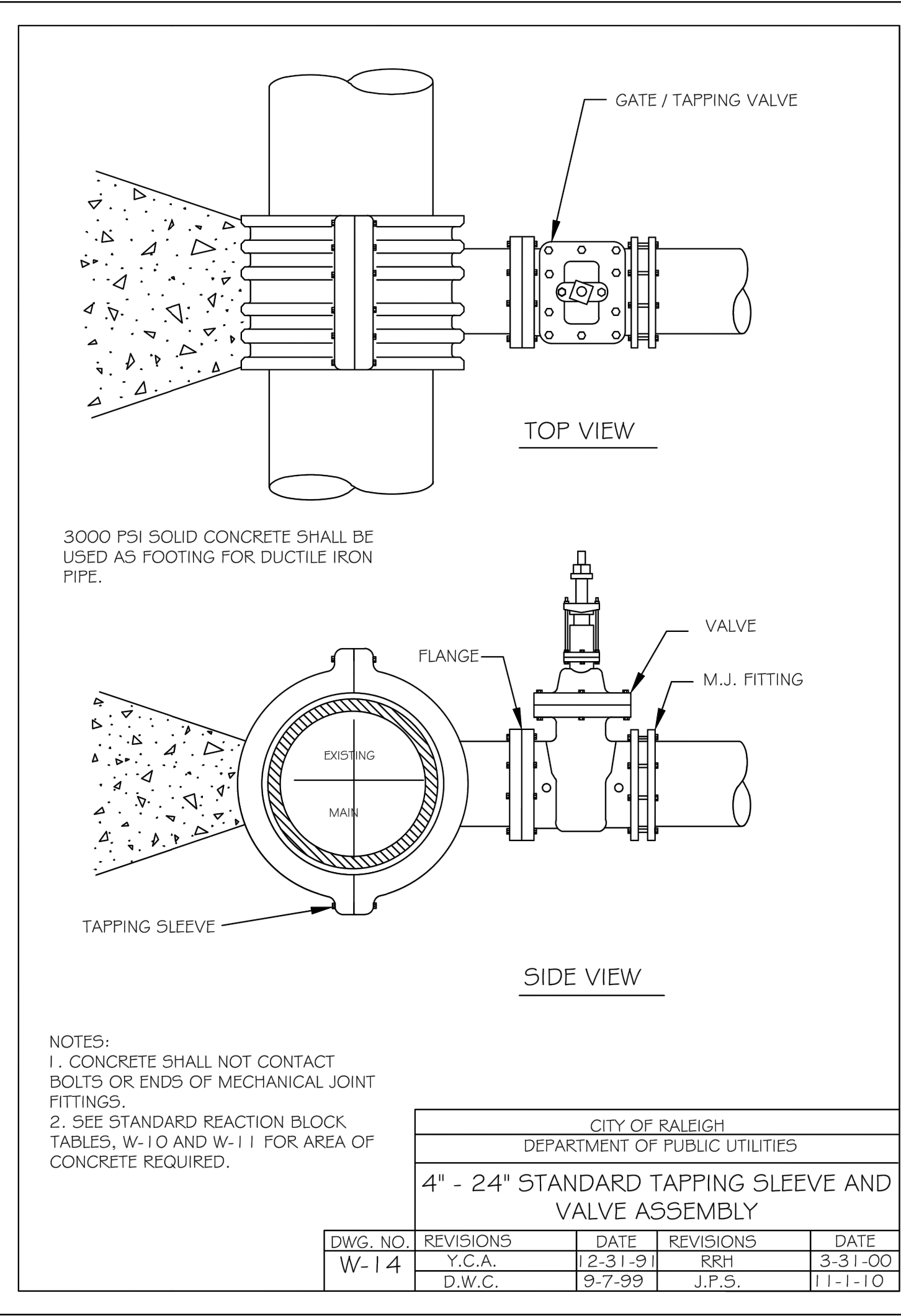
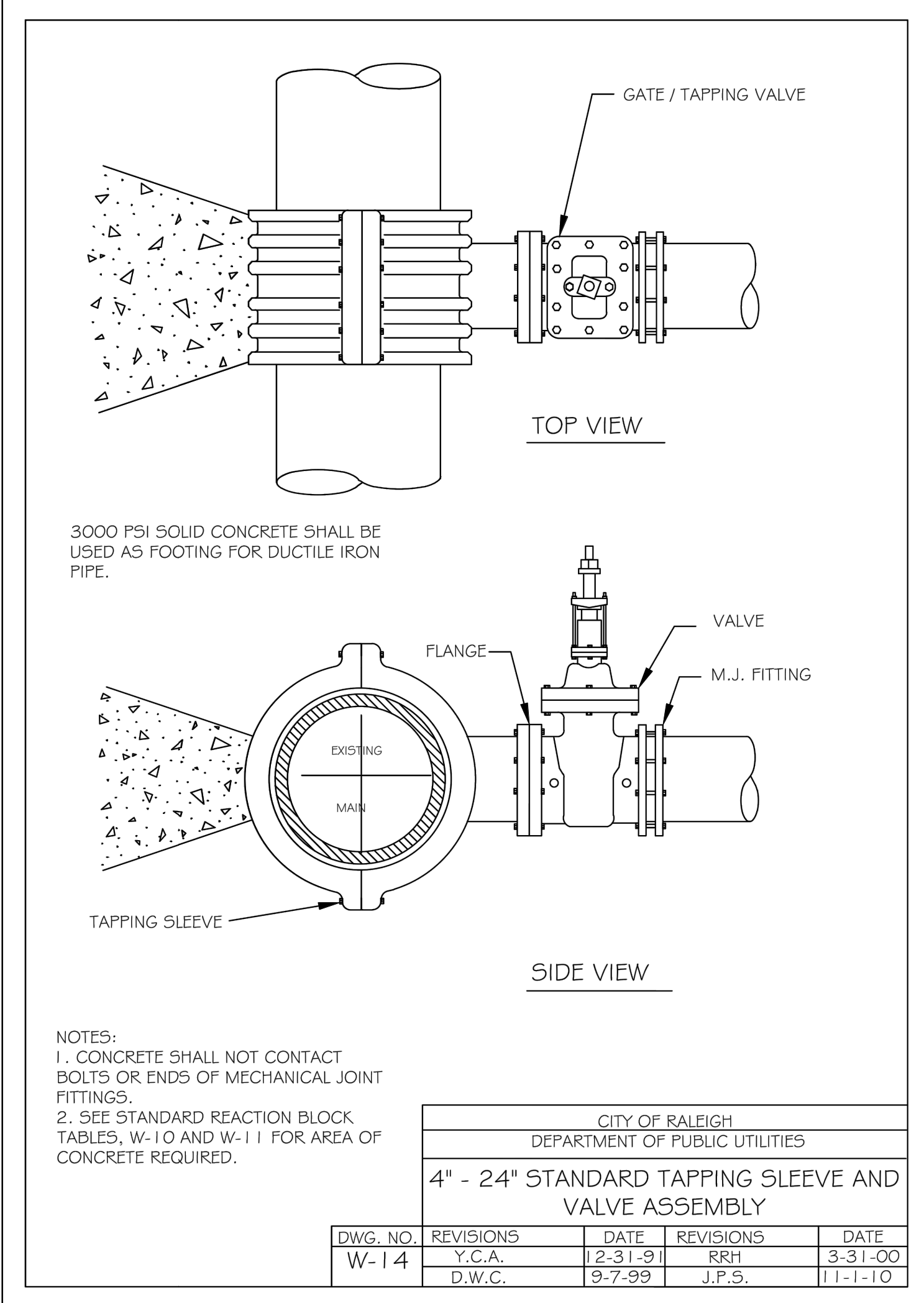
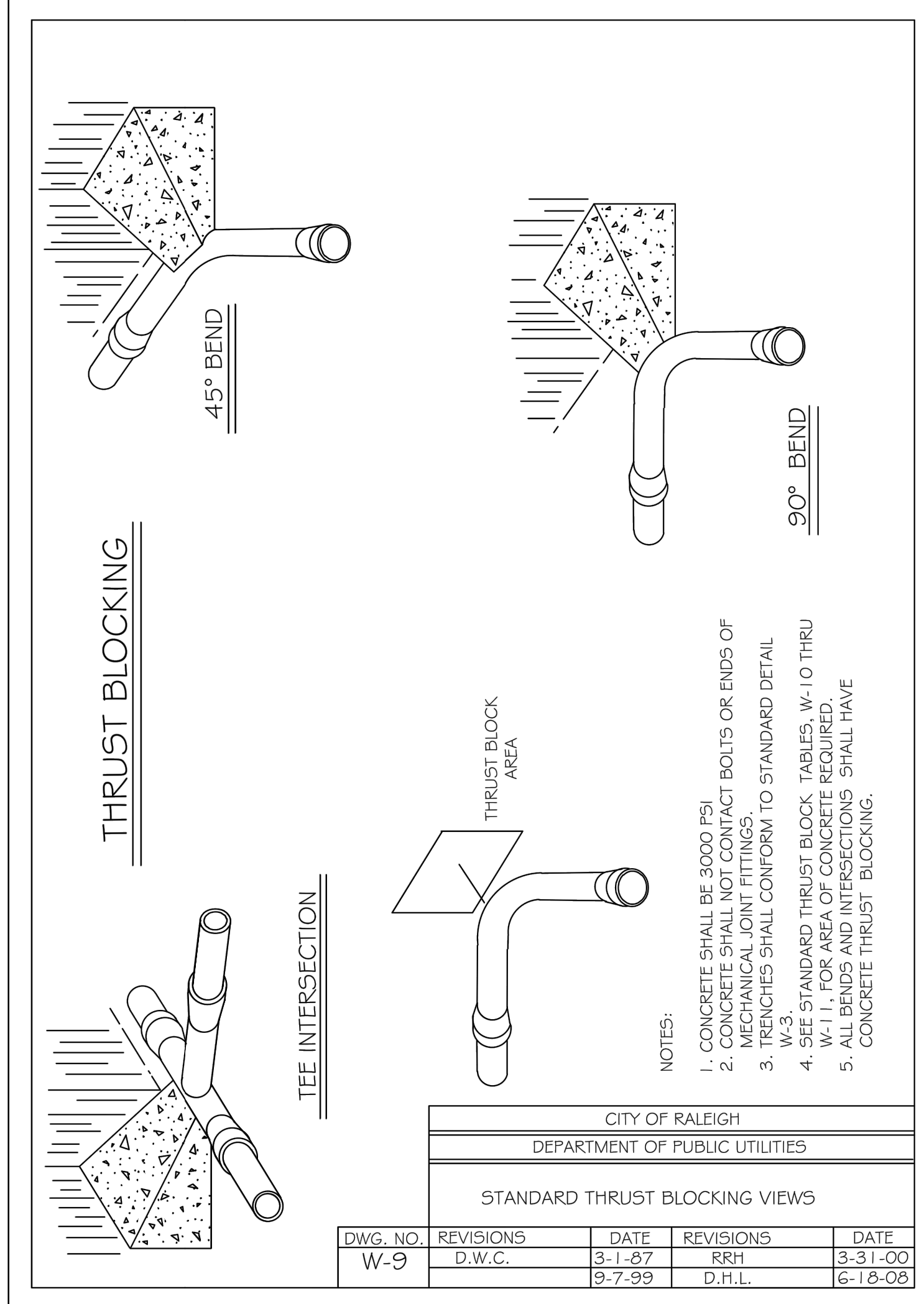
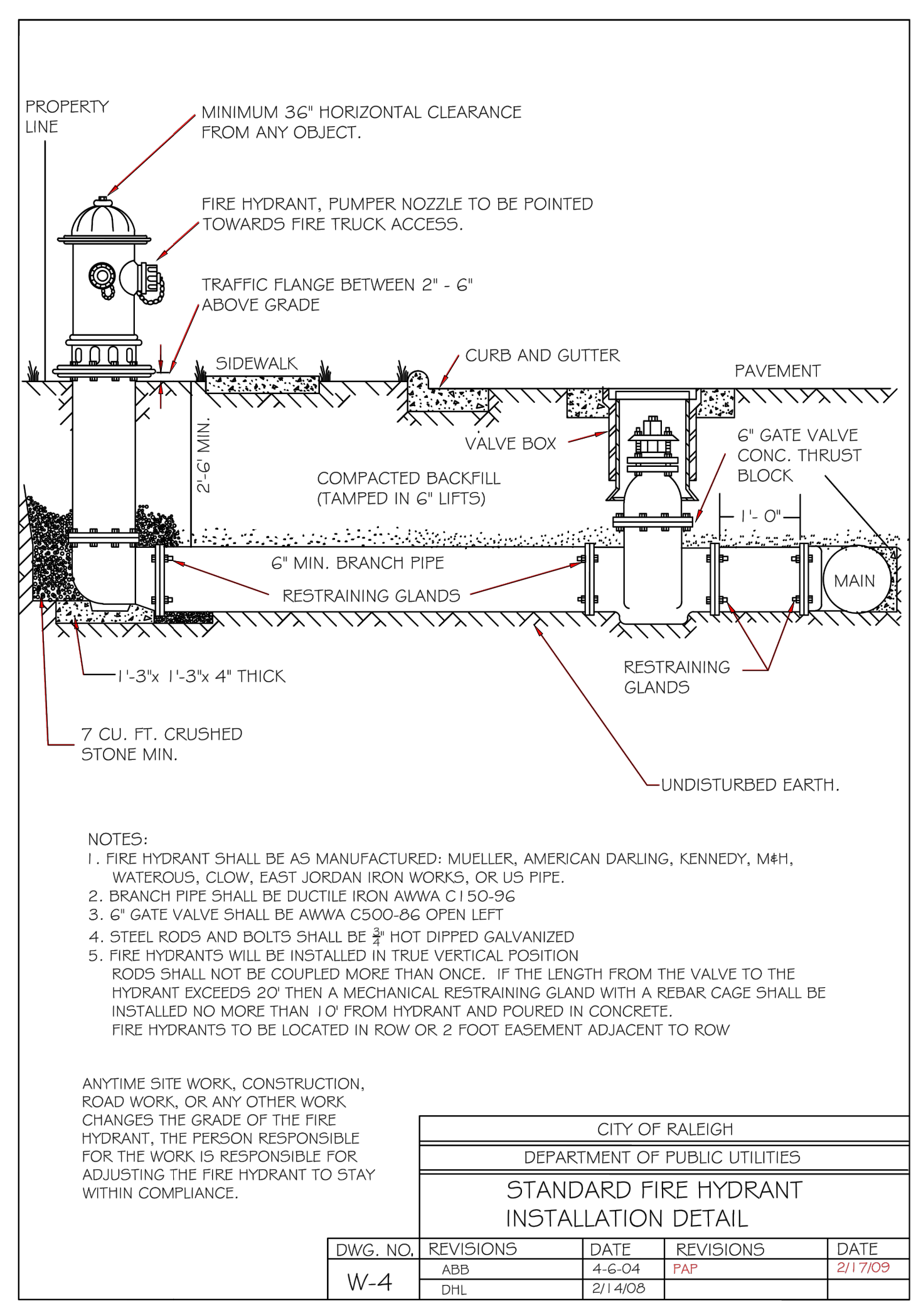
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STRONGROCK
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STRONG ROCK ENGINEERING GROUP, PLLC | COMPANY LICENSE # P-2166
8801 FALLS OF NEUSE RD., SUITE 108 RALEIGH, NC 27615 | JOSH@STRONGROCKENGINEERING.COM

STRONG ROCK PROJECT	NOT FOR CONSTRUCTION	SCALE AS SHOWN	DESIGNED BY RLB	DRAWN BY SRG	CHECKED BY JWL
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TRUE- ZEBULON-ARENDELL
TOWN OF ZEBULON, WAKE COUNTY, NORTH CAROLINA
CONSTRUCTION PLANS
STORM DRAINAGE DETAILS



SITE PERMITTING APPROVAL:

WATER AND SEWER PERMITS (IF APPLICABLE)

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CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT CONSENTS TO THE CONNECTION AND EXTENSION OF THE CITY'S PUBLIC WATER SYSTEM AS SHOWN ON THIS PLAN. THE MATERIAL AND CONSTRUCTION METHODS USED FOR THIS PROJECT SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY'S PUBLIC UTILITIES HANDBOOK. CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PUBLIC UTILITIES DEPARTMENT PERMIT # N/A

CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT - PLANS AUTHORIZED FOR CONSTRUCTION

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CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT DEVELOPMENT APPROVAL

CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT WATER REVIEW OFFICER

CITY OF ZEBULON - PLANS AUTHORIZED FOR CONSTRUCTION:

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CITY OF ZEBULON DEVELOPMENT APPROVAL

ZEBULON WATER REVIEW OFFICER

STRONGROCK ENGINEERING GROUP
 6801 FALLS OF NEUSE RD. SUITE 108 RALEIGH, NC 27615 | JOSH@STRONGROCKENGINEERING.COM

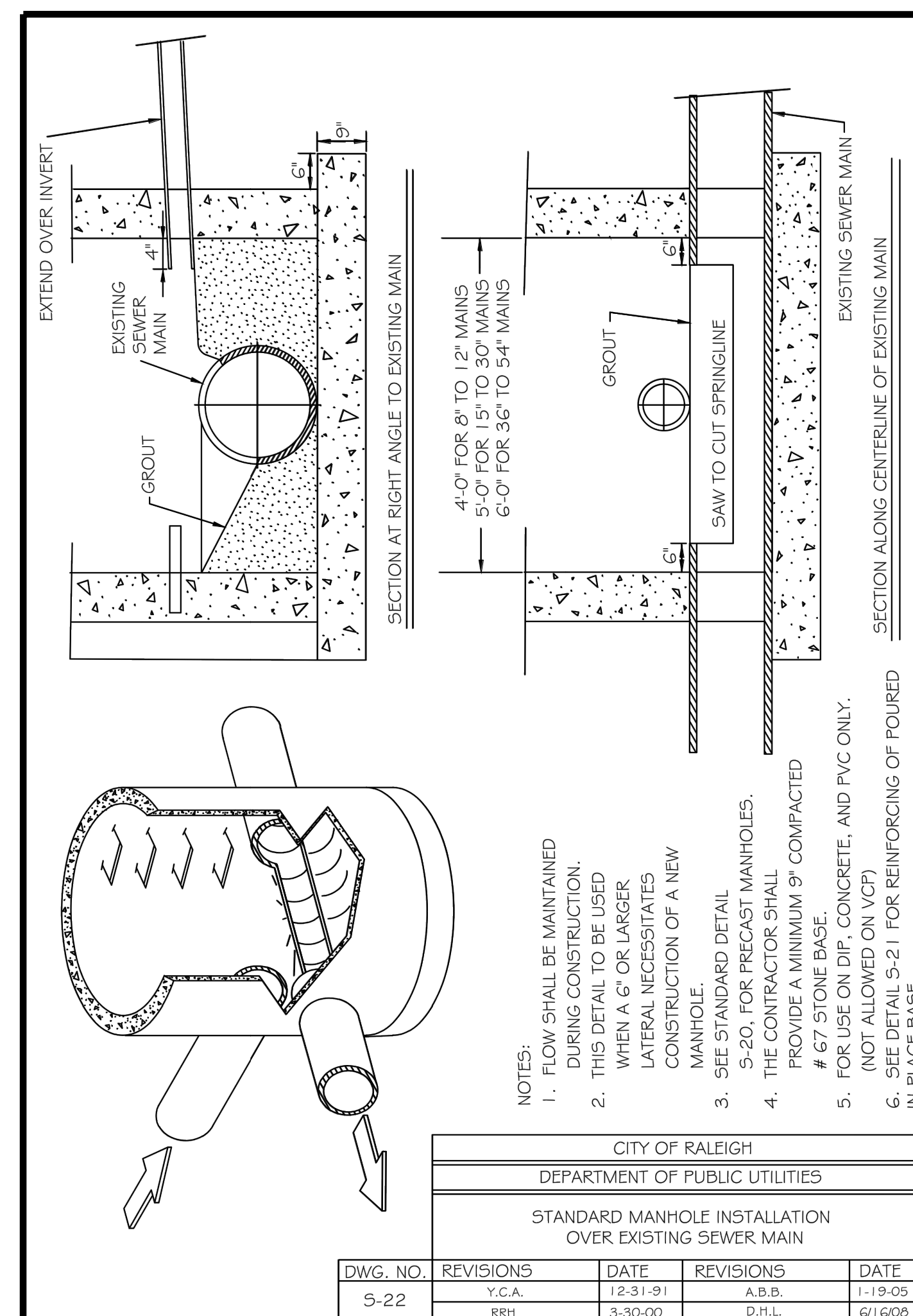
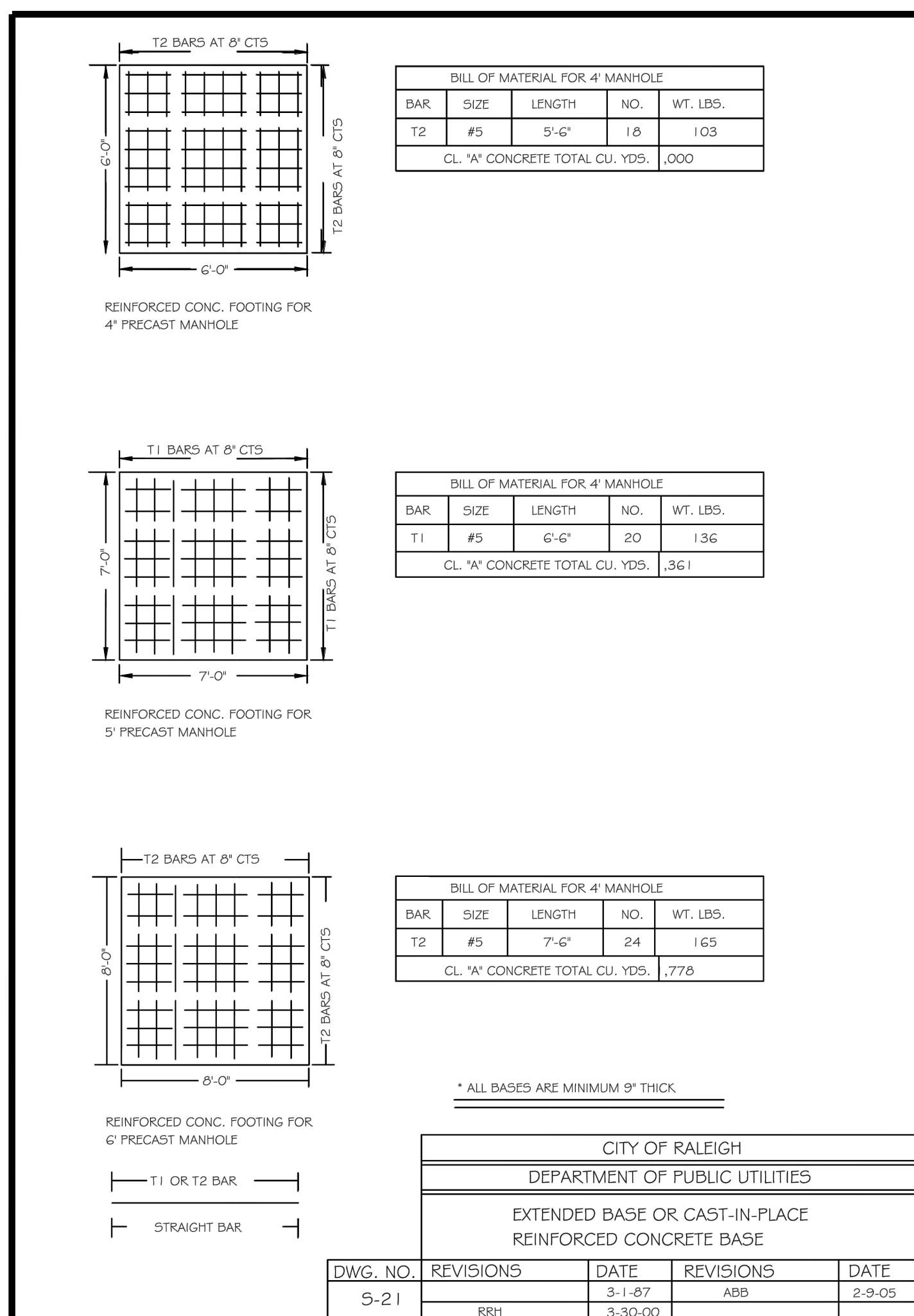
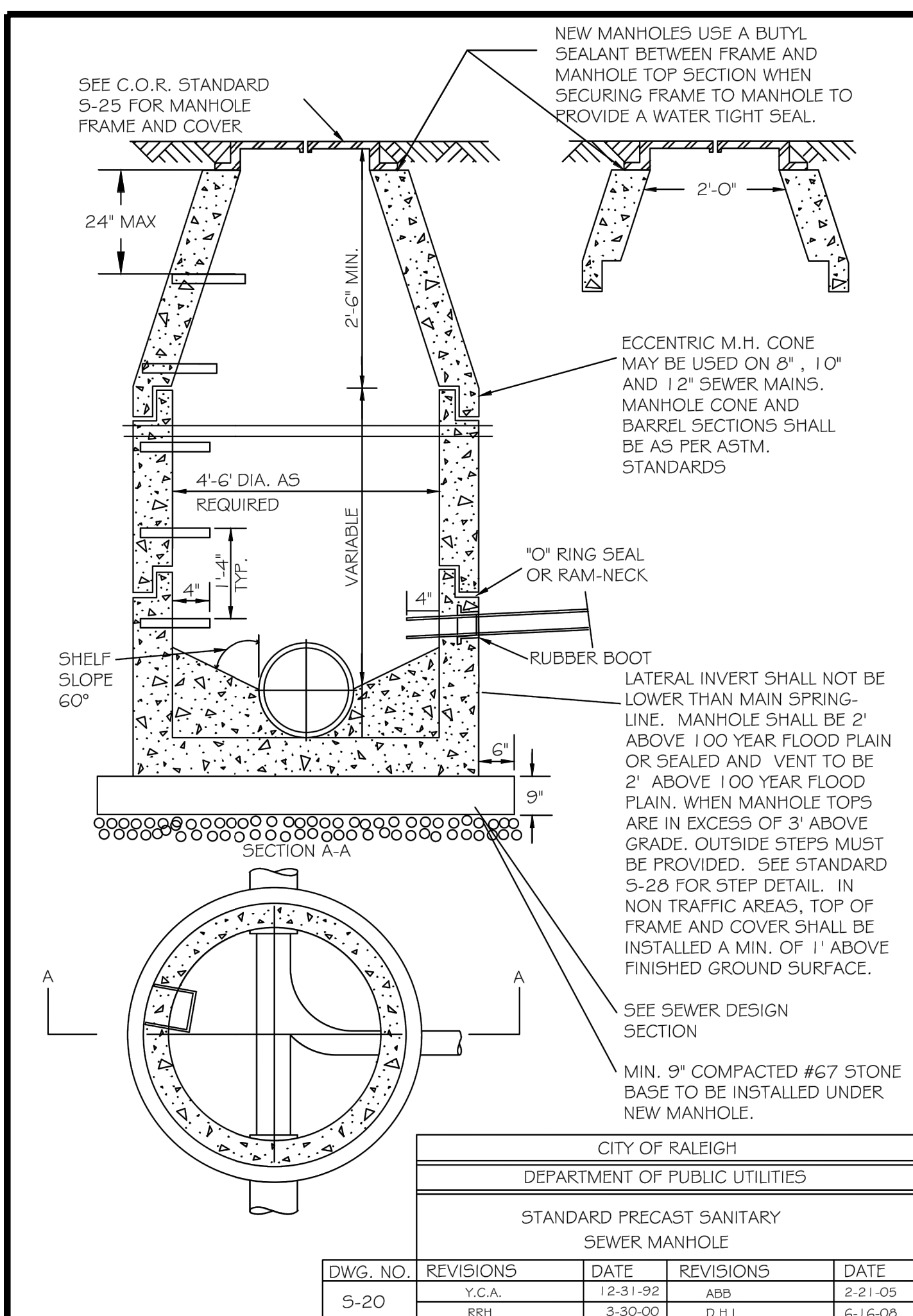
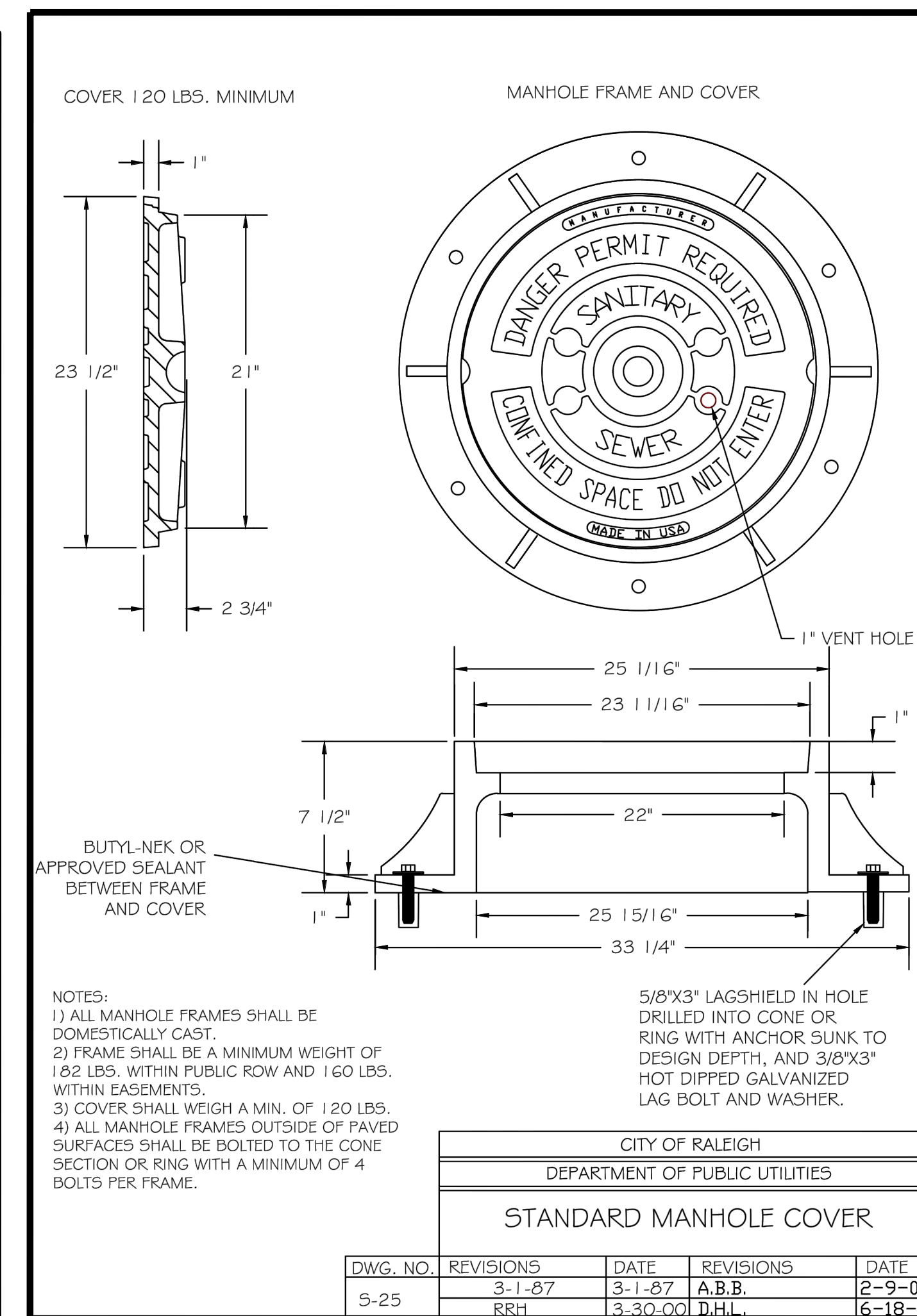
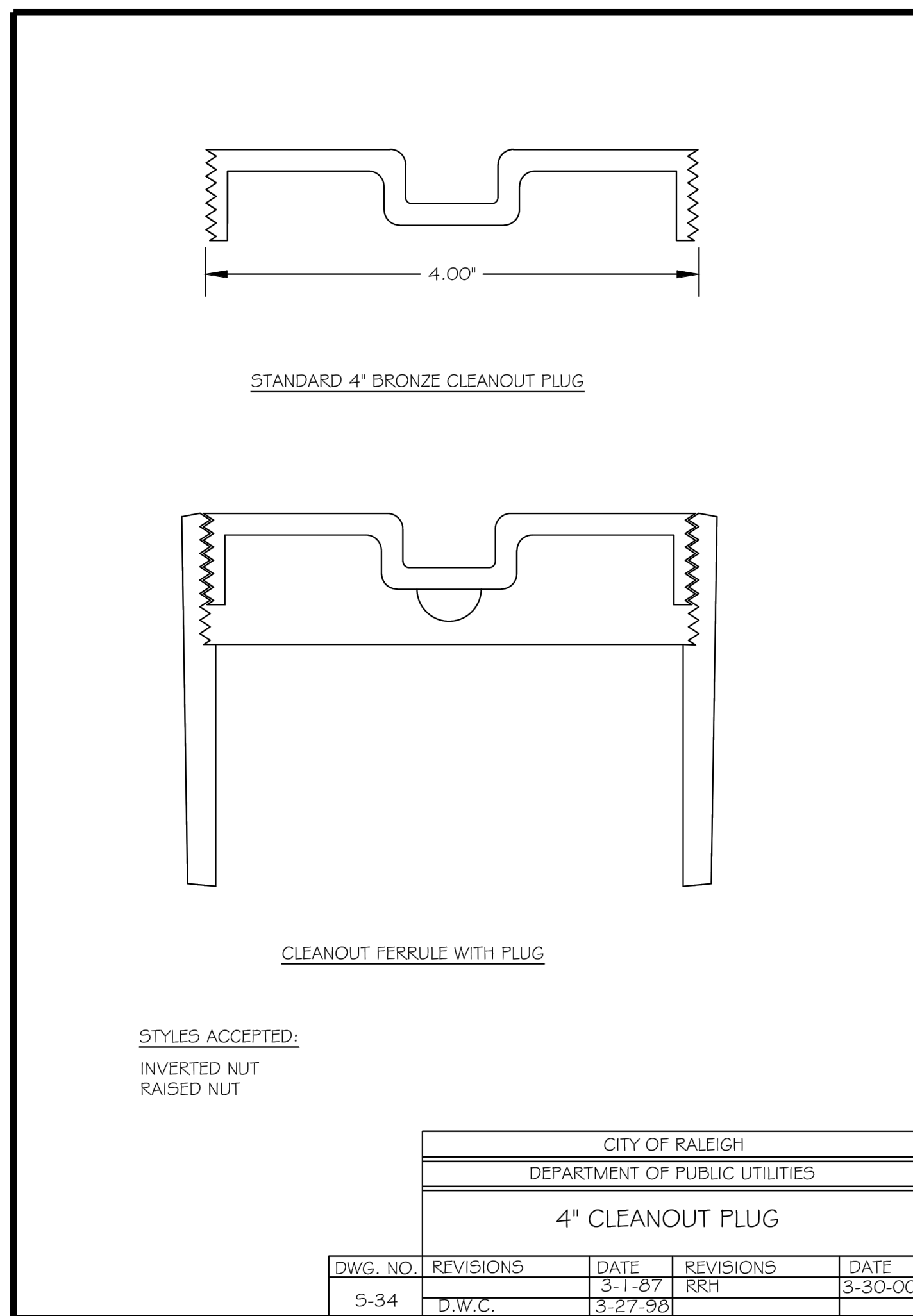
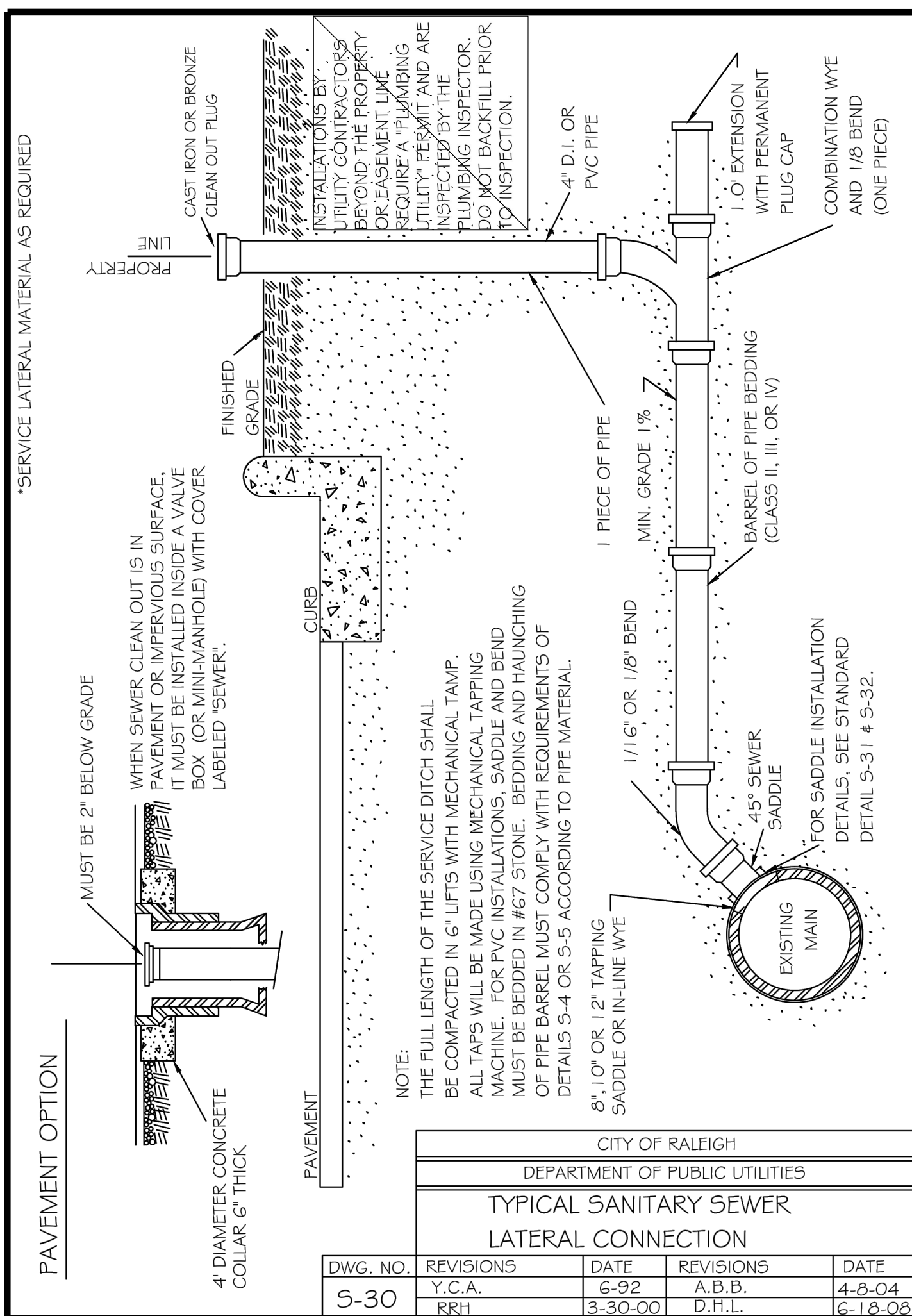
STRONG ROCK PROJECT: NOT FOR CONSTRUCTION
 SCALE: AS SHOWN
 DESIGNED BY: RLB
 DRAWN BY: SRG
 CHECKED BY: JWL

TRUE-ZEBULON-ARENDELL
 TOWN OF ZEBULON, WAKE COUNTY, NORTH CAROLINA
 CONSTRUCTION PLANS
 WATER DETAILS

DRAWING SHEET
D-2.1

13 OF 17

NO.	REVISIONS	DATE
1	TRC REVIEW RESPONSES	09-30-2021
2	TRC REVIEW RESPONSES	12-23-2021
3	TRC REVIEW RESPONSES	03-23-2022



SITE PERMITTING APPROVAL:

WATER AND SEWER PERMITS (IF APPLICABLE)

CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT CONSENTS TO THE CONNECTION AND EXTENSION OF THE CITY'S PUBLIC SEWER SYSTEM AS SHOWN ON THIS PLAN. THE MATERIAL AND CONSTRUCTION METHODS USED FOR THIS PROJECT SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY'S PUBLIC UTILITIES HANDBOOK. CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PUBLIC UTILITIES DEPARTMENT PERMIT # S-3936.

CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT CONSENTS TO THE CONNECTION AND EXTENSION OF THE CITY'S PUBLIC WATER SYSTEM AS SHOWN ON THIS PLAN. THE MATERIAL AND CONSTRUCTION METHODS USED FOR THIS PROJECT SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY'S PUBLIC UTILITIES HANDBOOK. CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PUBLIC UTILITIES DEPARTMENT PERMIT # N/A.

CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT - PLANS AUTHORIZED FOR CONSTRUCTION

ELECTRONIC APPROVAL: THIS APPROVAL IS BEING ISSUED ELECTRONICALLY. THIS APPROVAL IS VALID ONLY UPON THE SIGNATURE OF A TOWN OF ZEBULON REVIEW OFFICER BELOW. THE CITY WILL RETAIN A COPY OF THE APPROVED PLANS. ANY WORK AUTHORIZED BY THIS APPROVAL MUST PROCEED IN ACCORDANCE WITH THE PLANS KEPT ON FILE WITH THE CITY. THIS ELECTRONIC APPROVAL MAY NOT BE EDITED OR ISSUED. ANY MODIFICATION TO THIS APPROVAL ONCE ISSUED WILL INVALIDATE THIS APPROVAL.

CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT DEVELOPMENT APPROVAL

CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT WATER REVIEW OFFICER

CITY OF ZEBULON - PLANS AUTHORIZED FOR CONSTRUCTION:

ELECTRONIC APPROVAL: THIS APPROVAL IS BEING ISSUED ELECTRONICALLY. THIS APPROVAL IS VALID ONLY UPON THE SIGNATURE OF A CITY OF ZEBULON REVIEW OFFICER BELOW. THE CITY WILL RETAIN A COPY OF THE APPROVED PLANS. ANY WORK AUTHORIZED BY THIS APPROVAL MUST PROCEED IN ACCORDANCE WITH THE PLANS KEPT ON FILE WITH THE CITY. THIS ELECTRONIC APPROVAL MAY NOT BE EDITED OR ISSUED. ANY MODIFICATION TO THIS APPROVAL ONCE ISSUED WILL INVALIDATE THIS APPROVAL.

CITY OF ZEBULON DEVELOPMENT APPROVAL

ZEBULON WATER REVIEW OFFICER

STRONGROCK ENGINEERING GROUP
STRONG ROCK ENGINEERING GROUP, PLLC / COMPANY LICENSE # P-2166
6801 FALLS OF NEUSE RD. SUITE 108 RALEIGH, NC 27615 | JOSH@STRONGROCKENGINEERING.COM

TRUE- ZEBULON-ARENDELL TOWN OF ZEBULON, WAKE COUNTY, NORTH CAROLINA CONSTRUCTION PLANS SEWER DETAILS

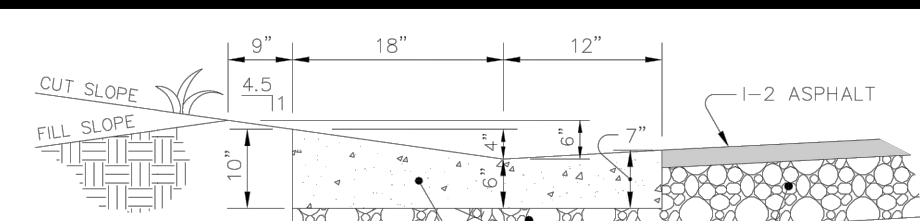
DRAWING SHEET D-2.2

14 OF 17

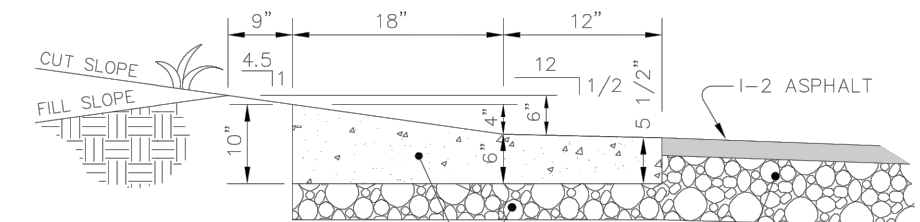
1	TRC REVIEW RESPONSES	09-30-2021			
2	TRC REVIEW RESPONSES	12-23-2021			
3	TRC REVIEW RESPONSES	03-23-2022			

SEAL: JOSHUA W. LAMBERT, NORTH CAROLINA PROFESSIONAL ENGINEER, 036225

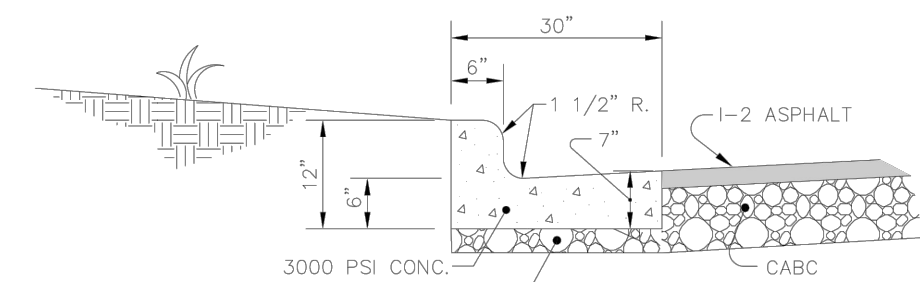
No.	REVISIONS	DATE



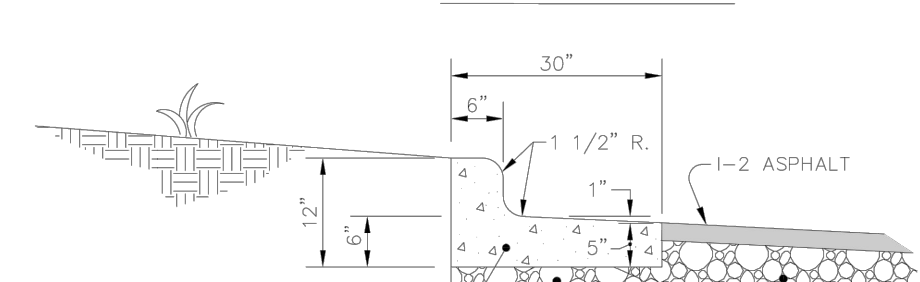
30° VALLEY - STANDARD



30° VALLEY - SPILL



STANDARD



SPILL

- NOTES:
1. SCORE CURB / VALLEY GUTTER AT 15' O.C.
 2. PROVIDE 1/2" EXPANSION JOINTS AT 90' O.C.
 3. FOR TRANSITION OF CURB TO CURB OPENING INLET, SEE STANDARD DETAIL 33.

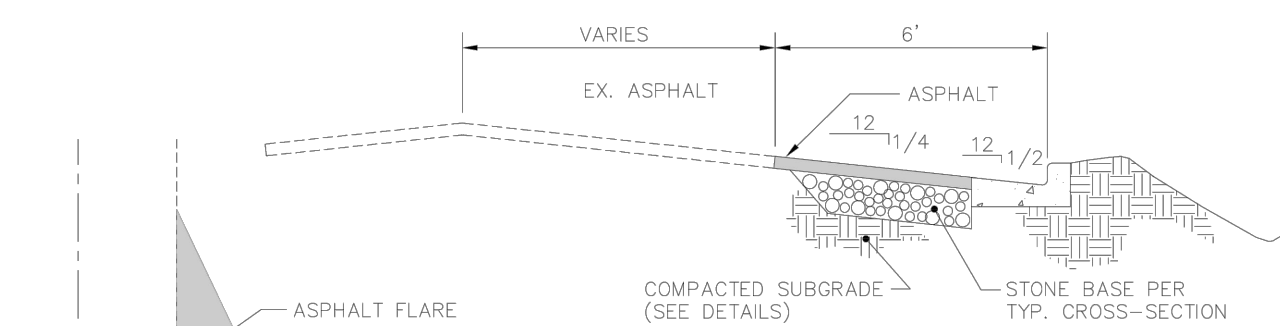
TOWN OF ZEBULON

STD. CURB & GUTTER & VALLEY GUTTER DETAIL

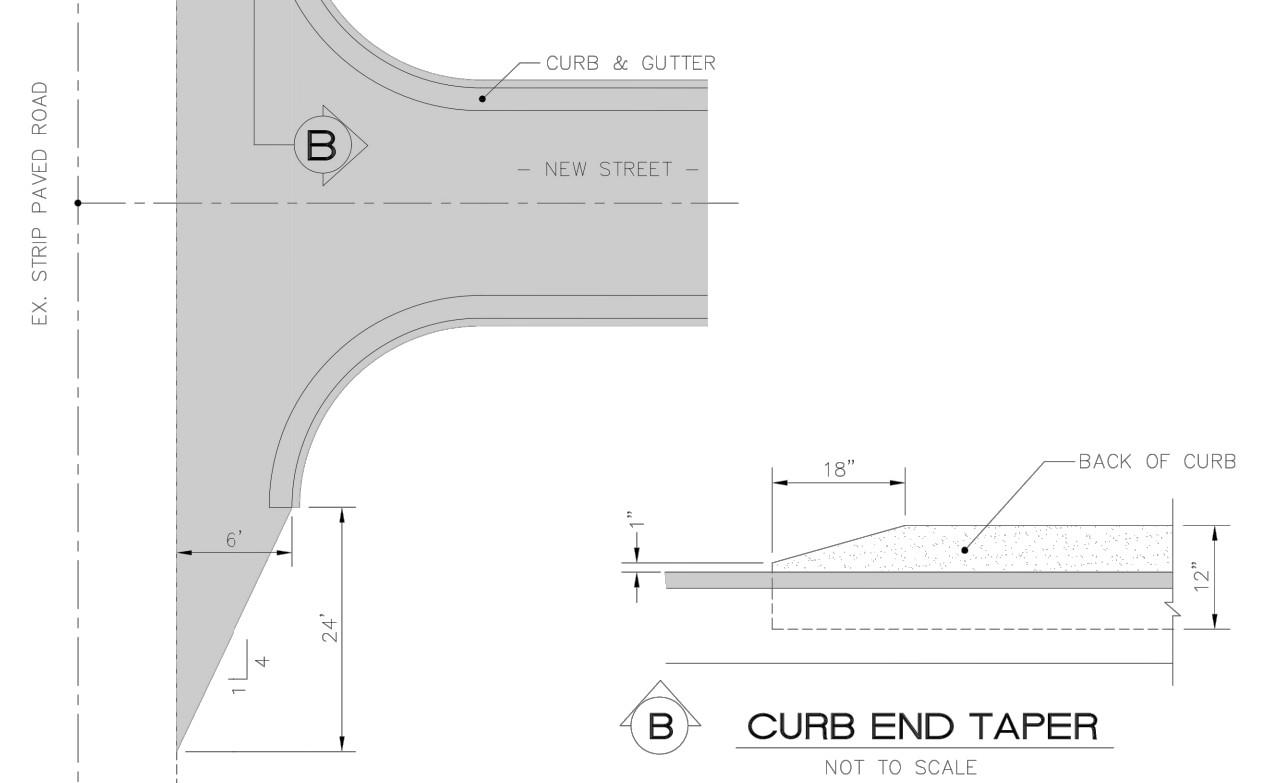
SCALE: NOT TO SCALE DETAIL # **3**

DATE: JULY 2010 SHEET # **1** OF **1**

USE WITH STANDARD SPECIFICATIONS ONLY



OFFSET CURB PAVEMENT WIDENING



CURB END TAPER

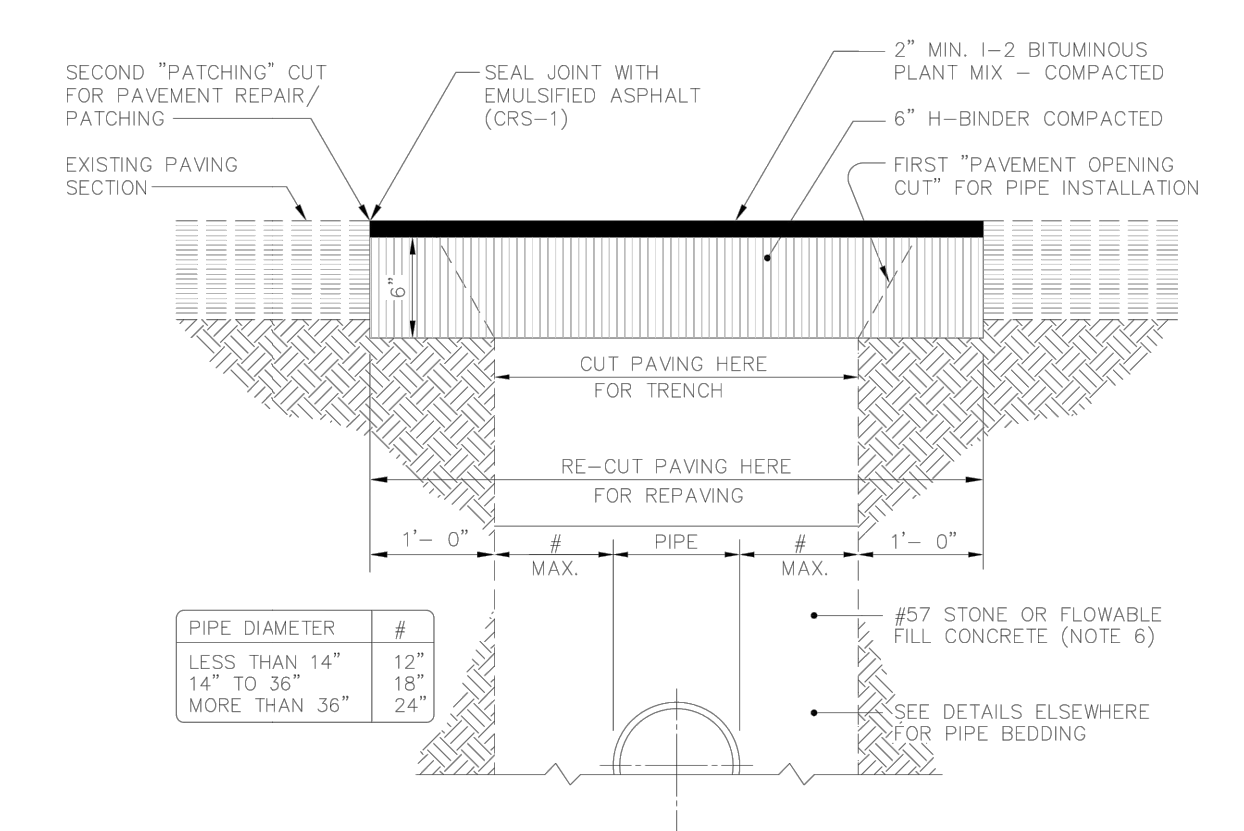
TOWN OF ZEBULON

TERMINAL END OF CURB at SHOULDER SECTIONS

SCALE: NOT TO SCALE DETAIL # **4**

DATE: JULY 2010 SHEET # **1** OF **1**

USE WITH STANDARD SPECIFICATIONS ONLY



SECTIONAL VIEW

- NOTES:
1. PAVEMENT REPAIRS SHALL HAVE 6" COMPACTED H-BINDER AND 2" TOPPING OF SF9.5B.
 2. TRENCH IS TO BE BACK FILLED IN 6" LIFTS AND COMPACTED TO 98% STANDARD DENSITY AS DETERMINED BY AASHTO TEST METHOD T-99 OR ASTM D-698 BEFORE PAVEMENT REPAIRS ARE MADE.
 3. COMPACTION TEST MAY BE REQUIRED AT REQUEST OF INSPECTOR.
 4. ALL EXISTING PAVED STREETS AND SECONDARY ROADS WHICH ARE OPEN CUT TO INSTALL SEWER OR WATER PIPE, MUST BE REPAIRED ACCORDING TO THIS DETAIL.
 5. CABG BACKFILL IS NOT ALLOWED IN ANY PART OF TRENCH WITHIN PAVEMENT.
 6. FIBER OPTIC & GAS: #57 STONE OR FLOWABLE FILL CONCRETE (MINIMUM 50 PSI) BUT MIN. 6" COMPACTED CLASS II OR III (DEFINITION IN SECTION 02210 - PARAGRAPH 3B OF SPECS) FILL OVER TOP OF FIBER OPTIC CABLE OR GAS PIPE.

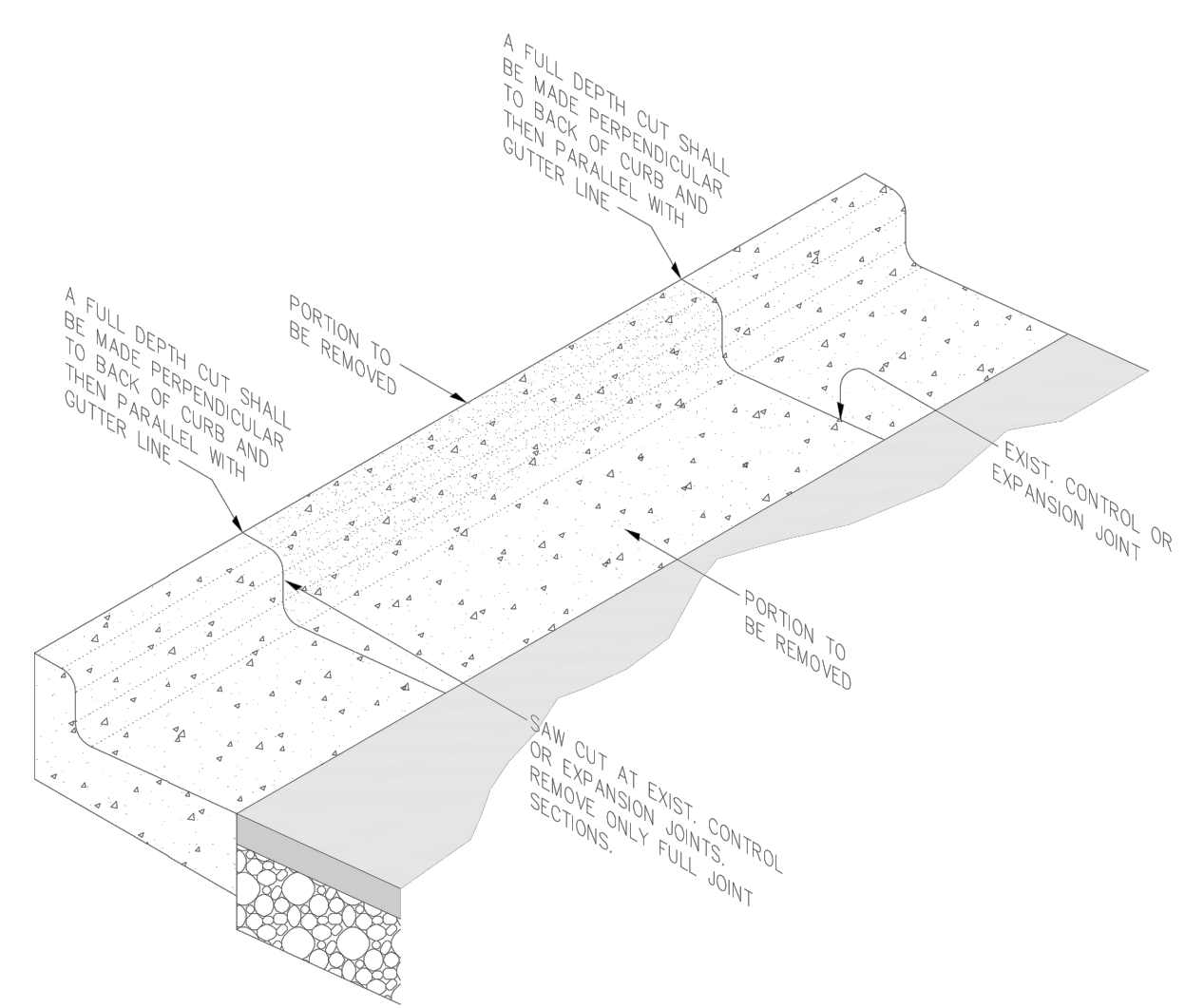
TOWN OF ZEBULON

FULL DEPTH ASPHALT REPAIR DETAIL FOR UTILITY CUTS

SCALE: NOT TO SCALE DETAIL # **6**

DATE: JULY 2010 SHEET # **1** OF **1**

USE WITH STANDARD SPECIFICATIONS ONLY



PERSPECTIVE

- NOTES:
1. CARE SHOULD BE EXERCISED WHEN REMOVING CONCRETE CURB NOT TO DAMAGE EXISTING CURB TO REMAIN.
 2. DAMAGE TO EXISTING CURB TO REMAIN WILL REQUIRE REMOVAL OF ENTIRE SECTION OF CURB.
 3. SEE INSTALLATION REQUIREMENTS ON SHEET 2 OF 2.

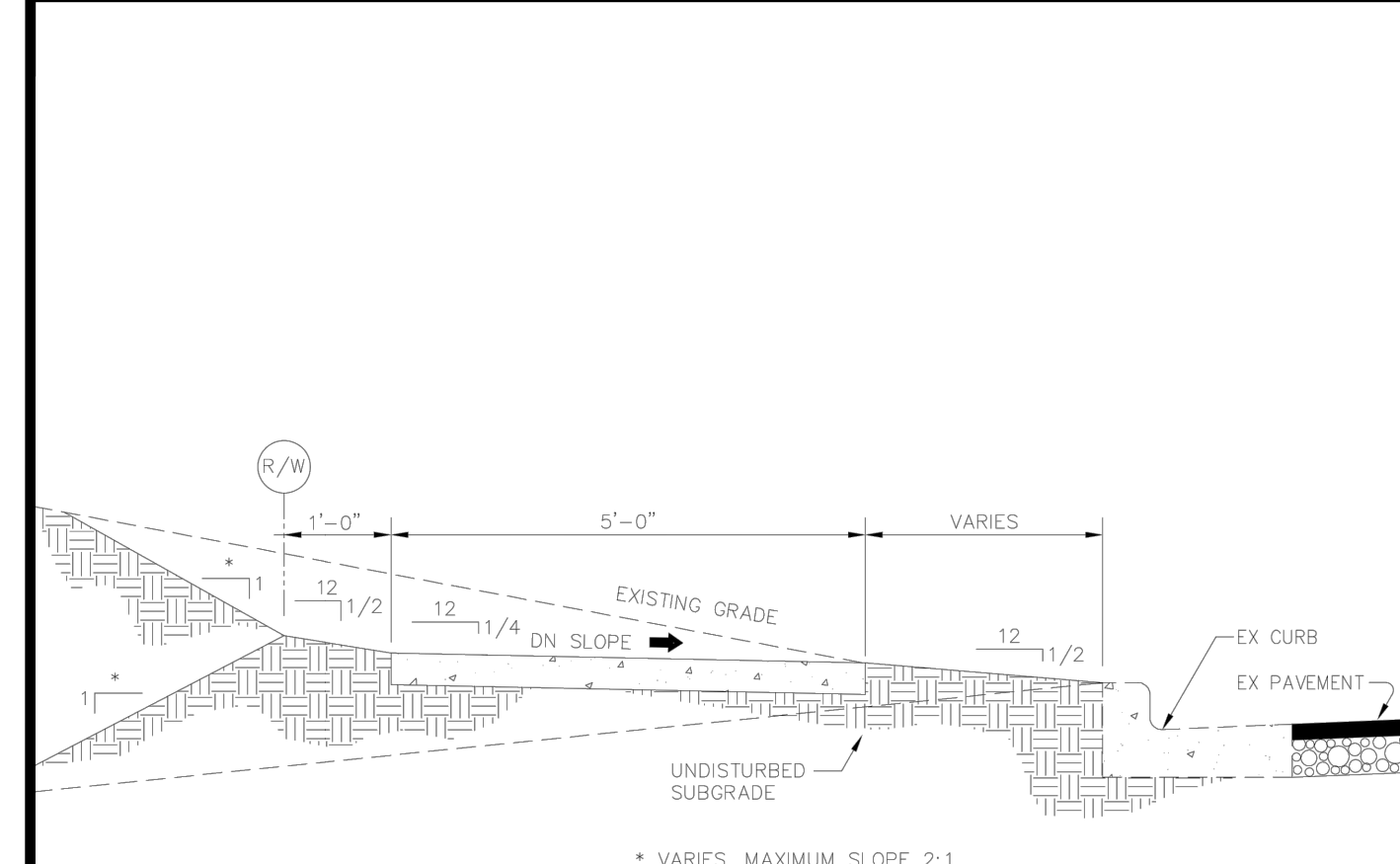
TOWN OF ZEBULON

STREET CURB CUT FOR DRIVEWAYS ON C&G STREETS

SCALE: NOT TO SCALE DETAIL # **8**

DATE: JULY 2010 SHEET # **1** OF **2**

USE WITH STANDARD SPECIFICATIONS ONLY



SECTIONAL VIEW

1. PROVIDE 3/4" DEEP TOOLED SCORE AT 5'-0" O.C.
2. EXPANSION JOINTS TO BE PLACED 30'-0" O.C. LONGITUDINALLY, ADJACENT TO CURBS, AND WHEN BUTTING EXISTING STRUCTURES, CONCRETE, OR BUILDINGS.
3. CONCRETE TO BE 3000 P.S.I. AT 28 DAYS, AIR-ENTRAINED.
4. SUBGRADE SHOULD NOT CONTAIN ORGANIC MATTER OR PLASTIC CLAYS. WHEN FOUND, REFER TO SPECS OR CONTACT ENGINEER FOR DIRECTIONS.
5. AREAS OF FILL ARE TO BE COMPACTED TO 95% STANDARD PROCTOR USING NCDOT CLASS III BORROW OR BETTER. REMOVE TOPSOIL BEFORE PLACING BORROW.
6. SIDEWALK TRANSVERSE SLOPE MAY INCREASE TO 1/2 IN 12 WITH TOWN'S ENGINEER APPROVAL.

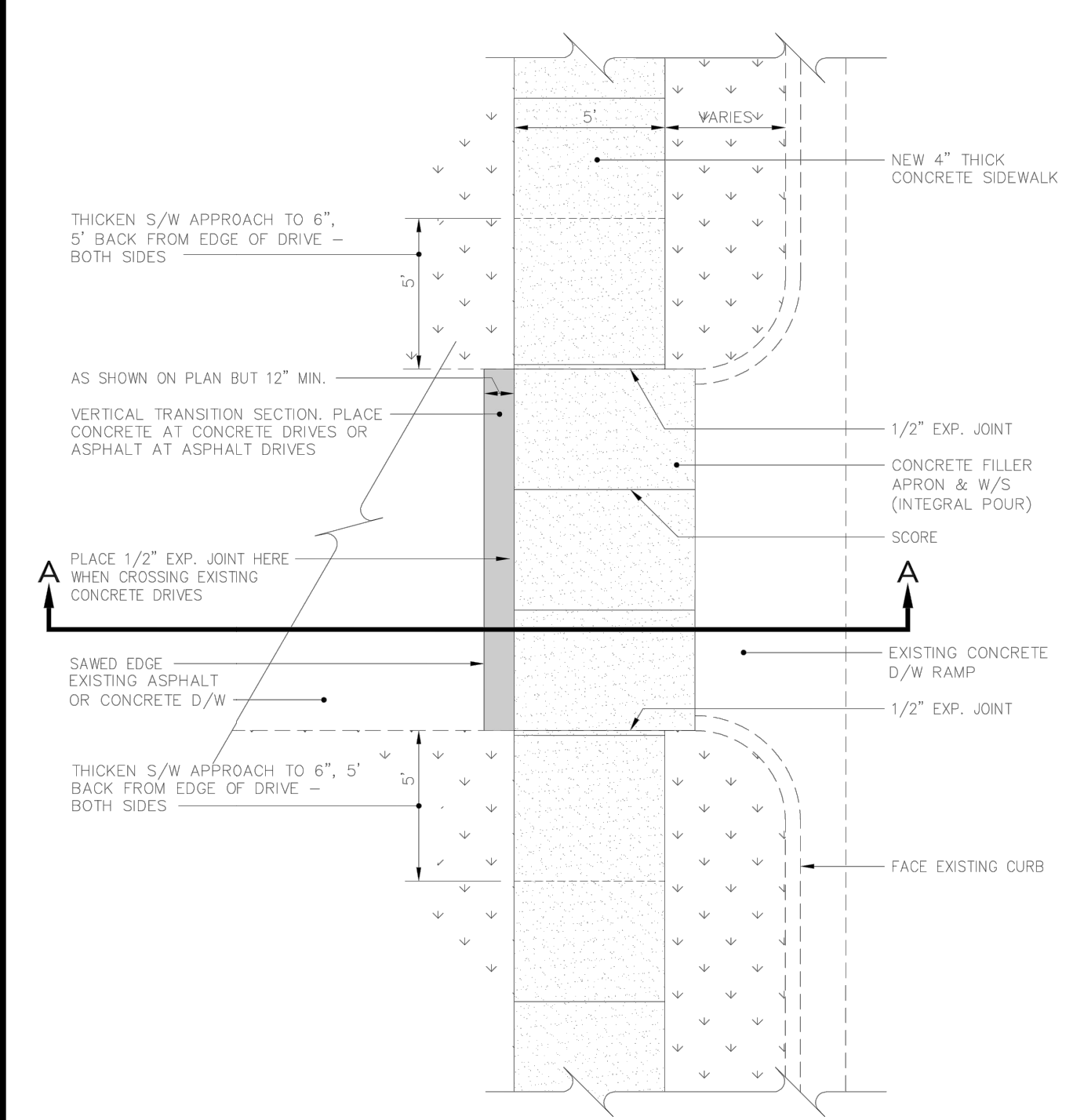
TOWN OF ZEBULON

TYP SIDEWALK in CUT or FILL SECTIONS

SCALE: NOT TO SCALE DETAIL # **13**

DATE: JULY 2010 SHEET # **1** OF **1**

USE WITH STANDARD SPECIFICATIONS ONLY



PLAN VIEW

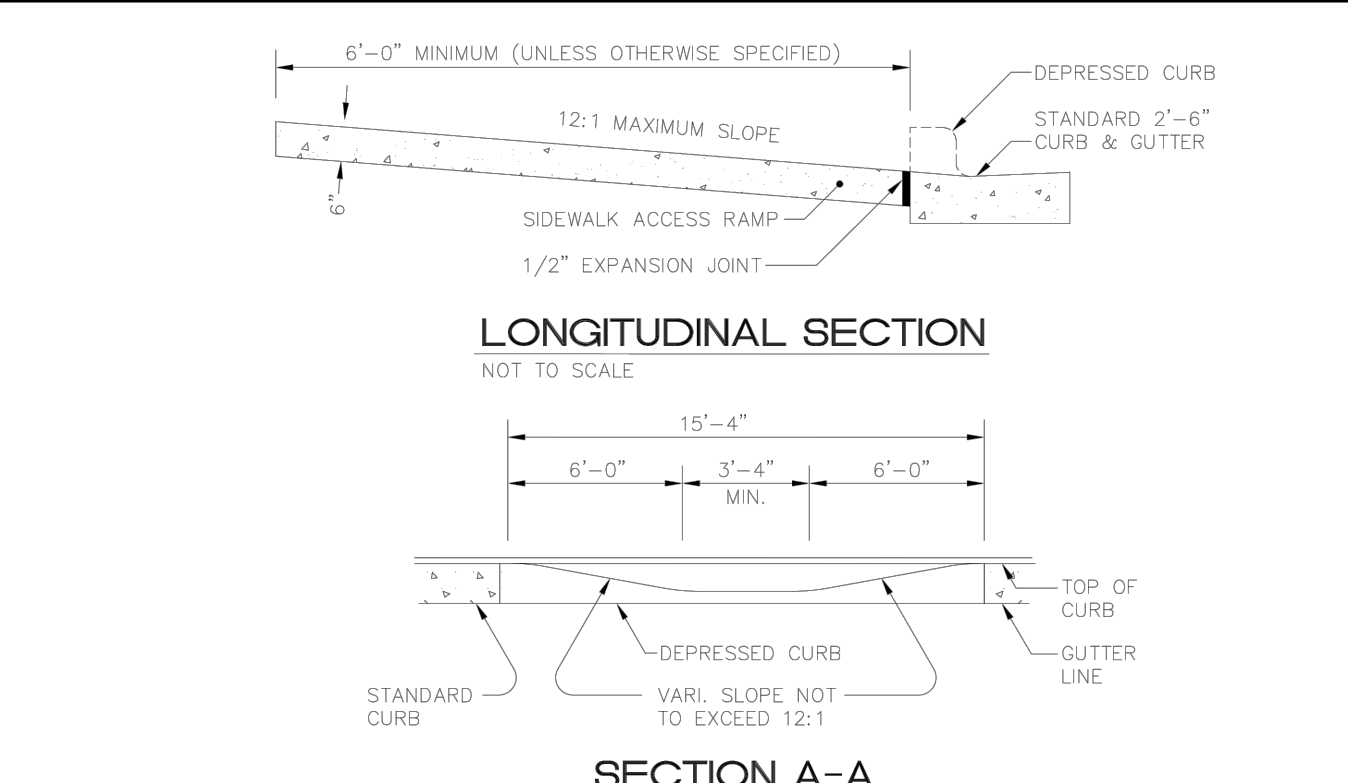
TOWN OF ZEBULON

SIDEWALK DETAIL X-ING EX. DRIVEWAYS

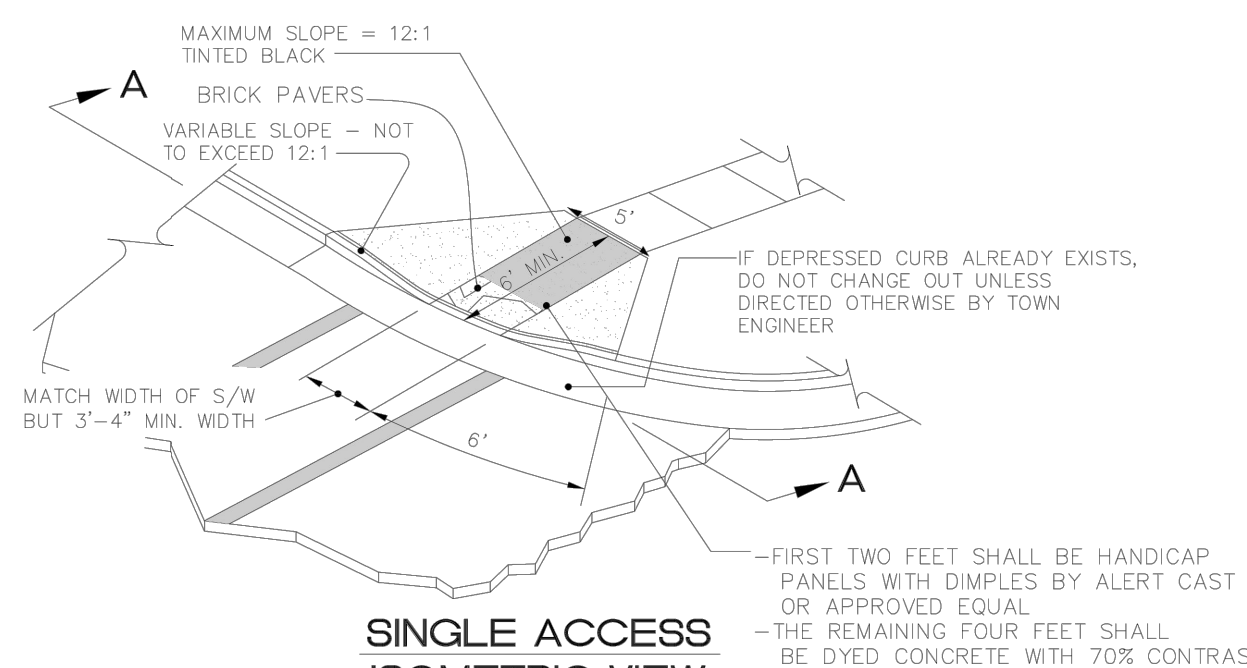
SCALE: NOT TO SCALE DETAIL # **14**

DATE: JULY 2010 SHEET # **1** OF **1**

USE WITH STANDARD SPECIFICATIONS ONLY



SECTION A-A ELEVATION OF SINGLE ACCESS RAMP



SINGLE ACCESS ISOMETRIC VIEW

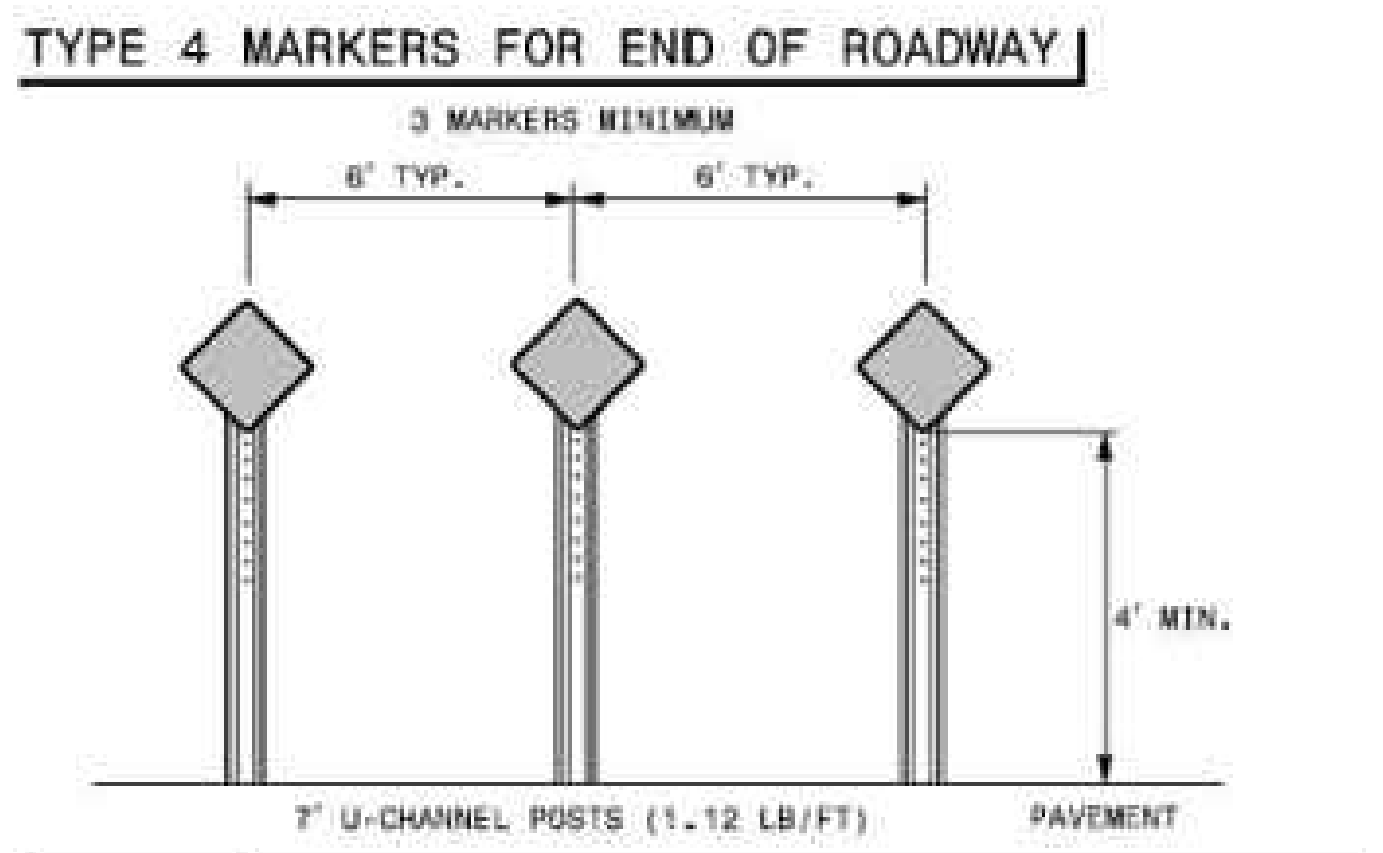
TOWN OF ZEBULON

SINGLE HANDICAP RAMP DETAIL

SCALE: NOT TO SCALE DETAIL # **20**

DATE: JULY 2010 SHEET # **1** OF **1**

USE WITH STANDARD SPECIFICATIONS ONLY



09-30-2021	TRC REVIEW RESPONSES	NO.	REVISIONS	DATE	BY
12-23-2021	TRC REVIEW RESPONSES				
03-23-2022	TRC REVIEW RESPONSES				

STRONGROCK ENGINEERING GROUP

STRONG ROCK ENGINEERING GROUP, PLLC / COMPANY LICENSE # P-2166

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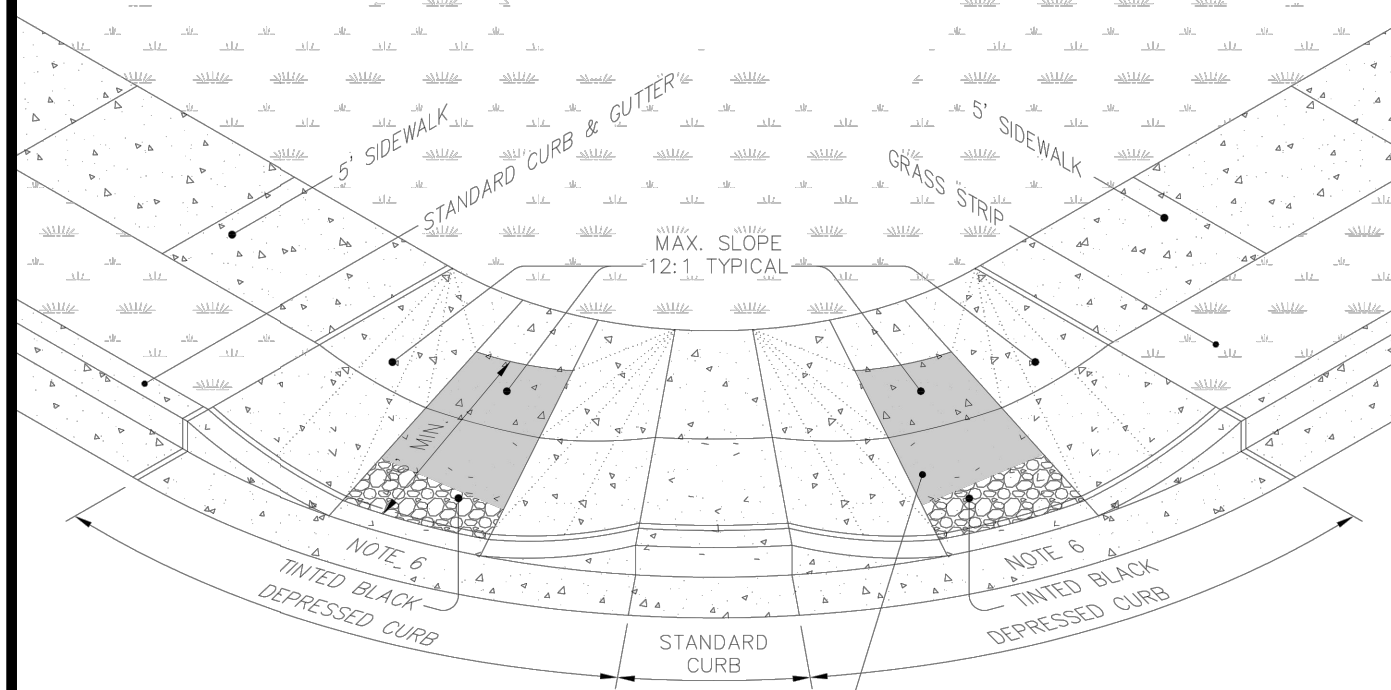
STRONG ROCK PROJECT	NOT FOR CONSTRUCTION	SCALE AS SHOWN	DESIGNED BY RLB	DRAWN BY SRG	CHECKED BY JWL
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TRUE-ZEBULON-ARENDELL
TOWN OF ZEBULON, WAKE COUNTY, NORTH CAROLINA
CONSTRUCTION PLANS
SITE DETAILS

DRAWING SHEET
D-2.3

NOTES:

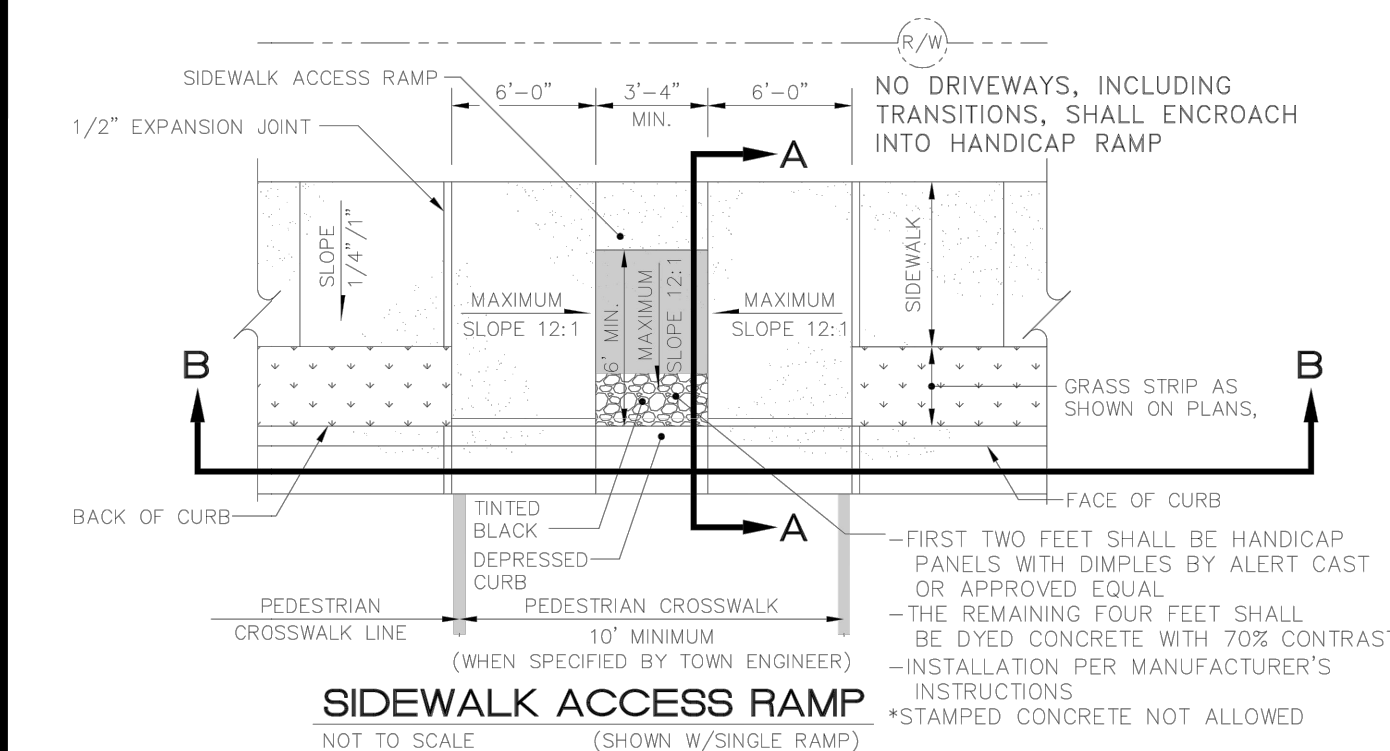
- WHEELCHAIR RAMPS SHALL BE PROVIDED AT LOCATIONS AS SHOWN ON THESE PLANS OR AS DIRECTED BY THE ENGINEER. WHEELCHAIR RAMPS SHALL BE LOCATED AS INDICATED IN THESE DETAILS; HOWEVER, THE LOCATION MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER WHERE EXISTING LIGHT POLES, FIRE HYDRANTS, DROP INLETS, ETC. AFFECT PLACEMENT. AT THESE LOCATIONS, NOT LESS THAN 2 FEET OF FULL HEIGHT CURB SHALL BE PLACED BETWEEN ADJACENT RAMPS.
- NO SLOPE ON THE WHEELCHAIR RAMP SHALL EXCEED 1" / 12" (12:1) IN RELATIONSHIP TO THE GRADE OF THE STREET.
- IN NO CASE SHALL THE WIDTH OF THE WHEELCHAIR RAMP BE LESS THAN 40" (3'-4") HOWEVER, WIDTH MAY EXCEED 40".
- USE AIR ENTRAINED 3000 PSI CONCRETE WITH A SIDEWALK FINISH IN ORDER TO OBTAIN A ROUGH NON-SKID TYPE SURFACE.
- A 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE CONCRETE WHEELCHAIR RAMP JOINS THE CURB AND AS SHOWN ON STANDARD DRAWINGS.
- CURB DEPRESSION MUST GO IN WHETHER OR NOT SIDEWALK IS PLACED.



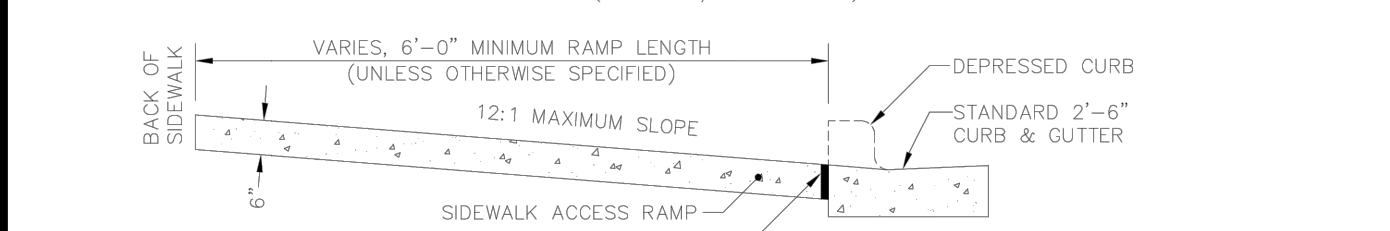
**STANDARD ADA WHEELCHAIR
SIDEWALK ACCESS AT CURB RETURNS**

PERSPECTIVE

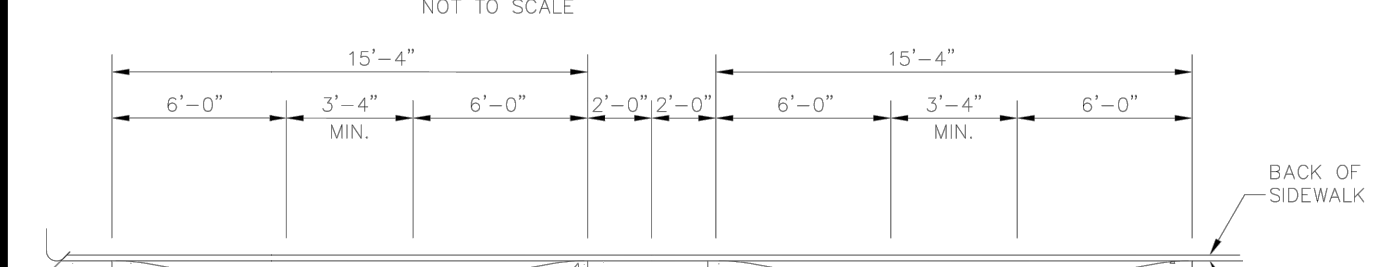
TOWN OF ZEBULON
DOUBLE HANDICAP RAMP DETAIL
SCALE: NOT TO SCALE
DATE: JULY 2010
SHEET # 1 OF 2
DETAIL # 21



SIDEWALK ACCESS RAMP
NOT TO SCALE (SHOWN W/SINGLE RAMP)

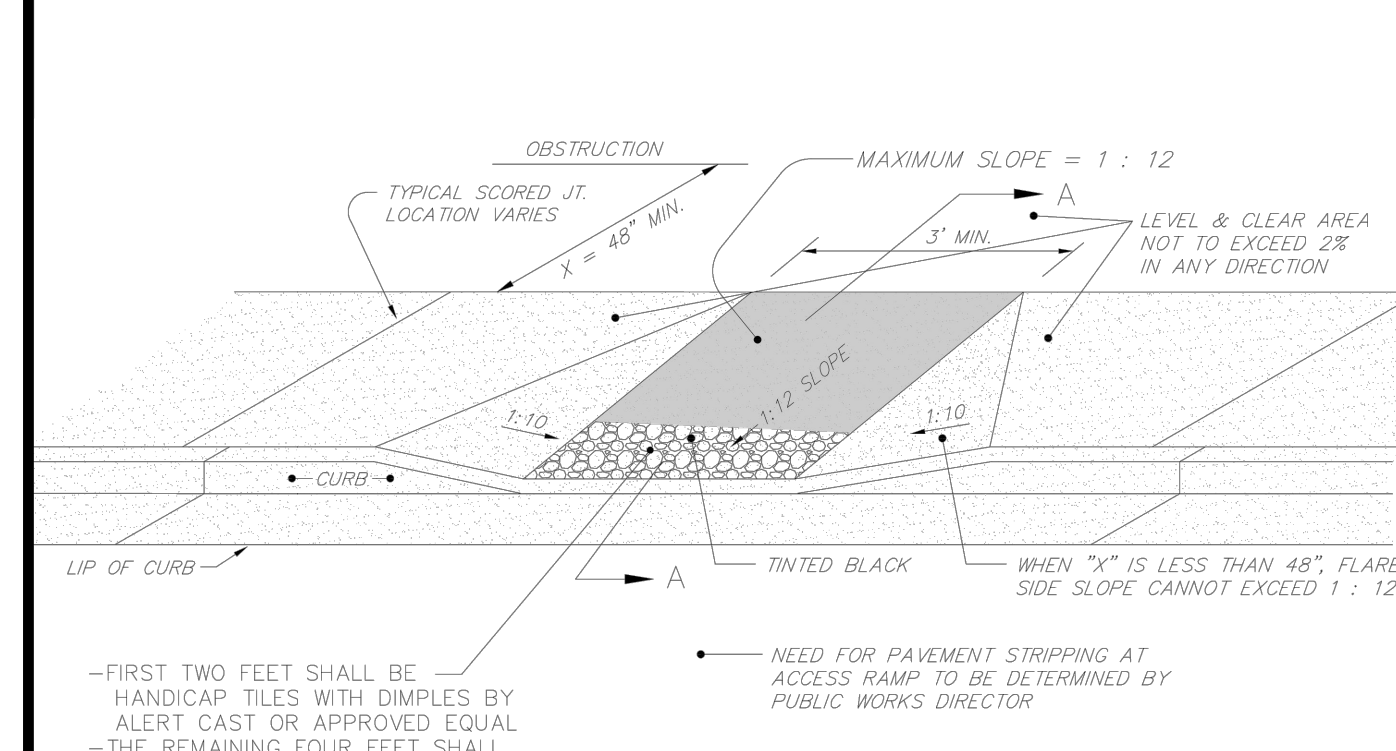


**SECTION A-A
PUBLIC STREET TIE-IN**
NOT TO SCALE

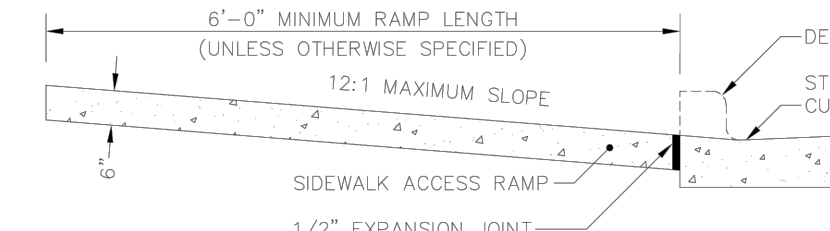


SECTION B-B
NOT TO SCALE

TOWN OF ZEBULON
DOUBLE HANDICAP RAMP DETAIL
SCALE: NOT TO SCALE
DATE: JULY 2010
SHEET # 2 OF 2
DETAIL # 21



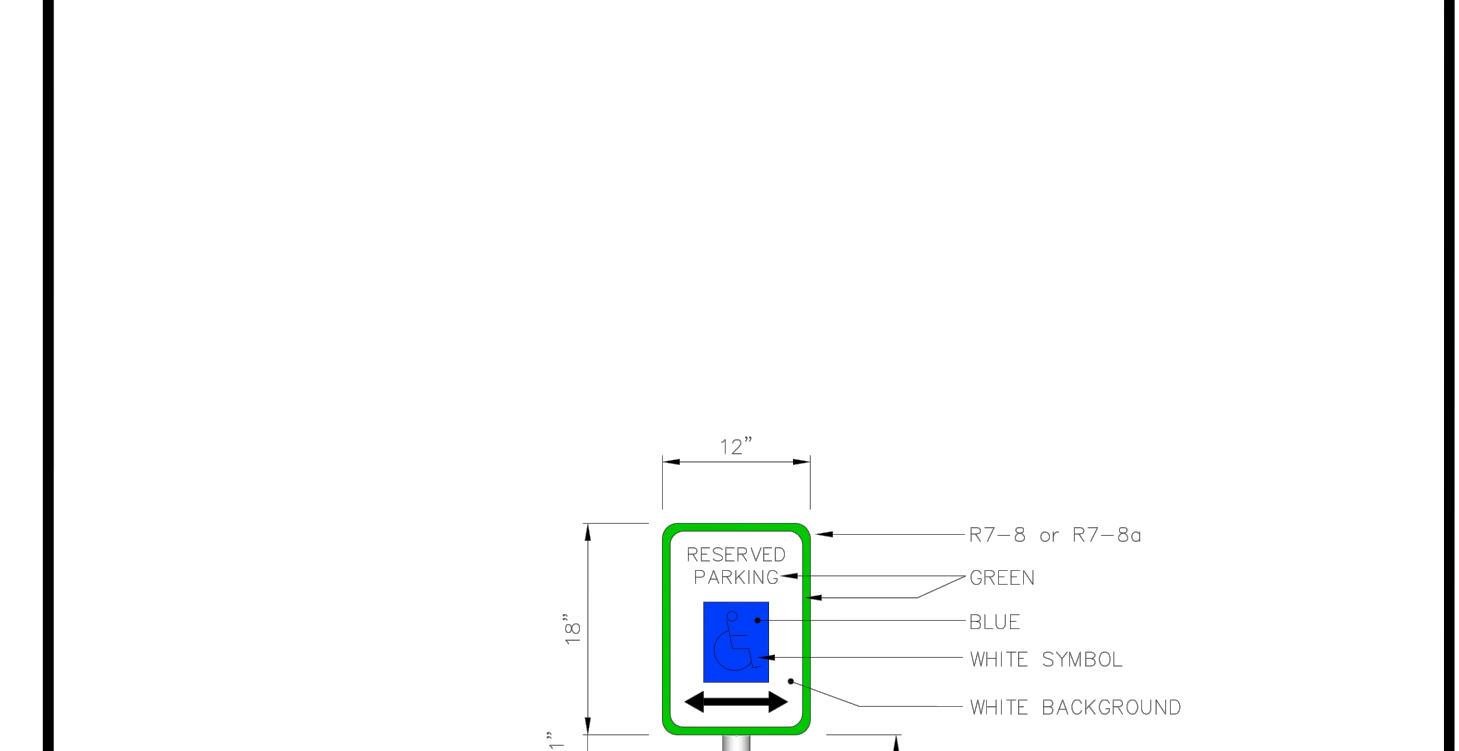
PERSPECTIVE



**SECTION A-A
IN-WALK HANDICAP RAMP**

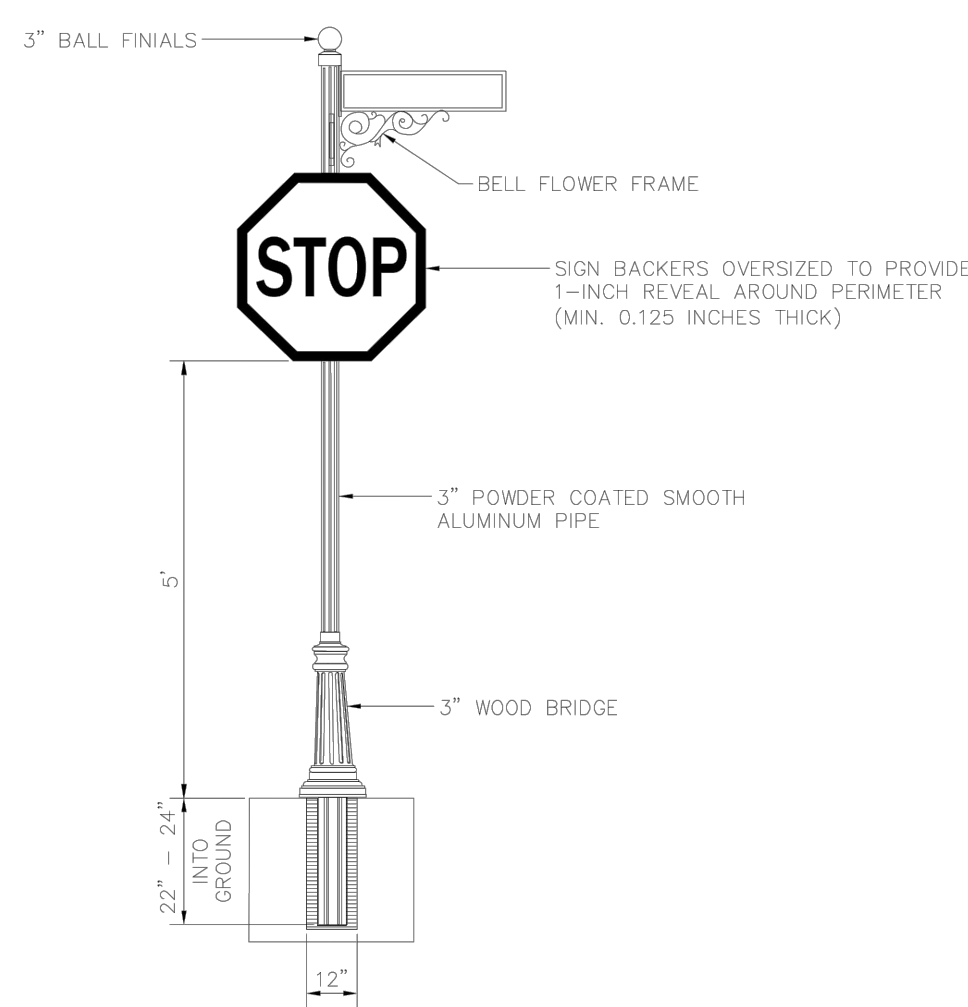
* THIS DETAIL APPLICABLE FOR PARALLEL PARKING IN MUNICIPAL APPLICATIONS ONLY

TOWN OF ZEBULON
HANDICAP PARKING STALL DETAIL *
SCALE: NOT TO SCALE
DATE: JULY 2010
SHEET # 1 OF 1
DETAIL # 22



ELEVATIONAL VIEW

TOWN OF ZEBULON
R7-8 HANDICAP SIGN DETAIL
SCALE: NOT TO SCALE
DATE: JULY 2010
SHEET # 1 OF 1
DETAIL # 23

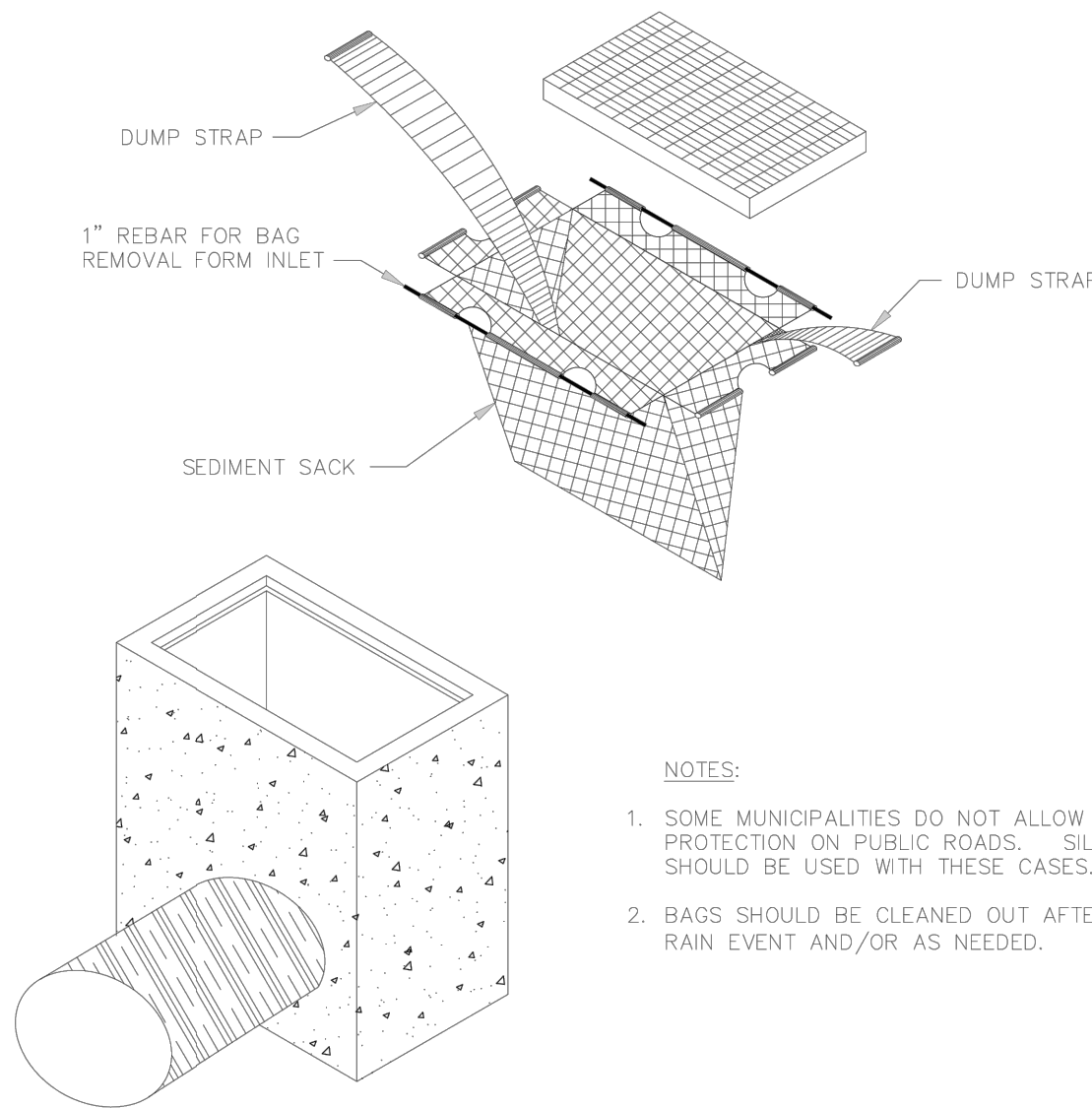


ELEVATIONAL VIEW

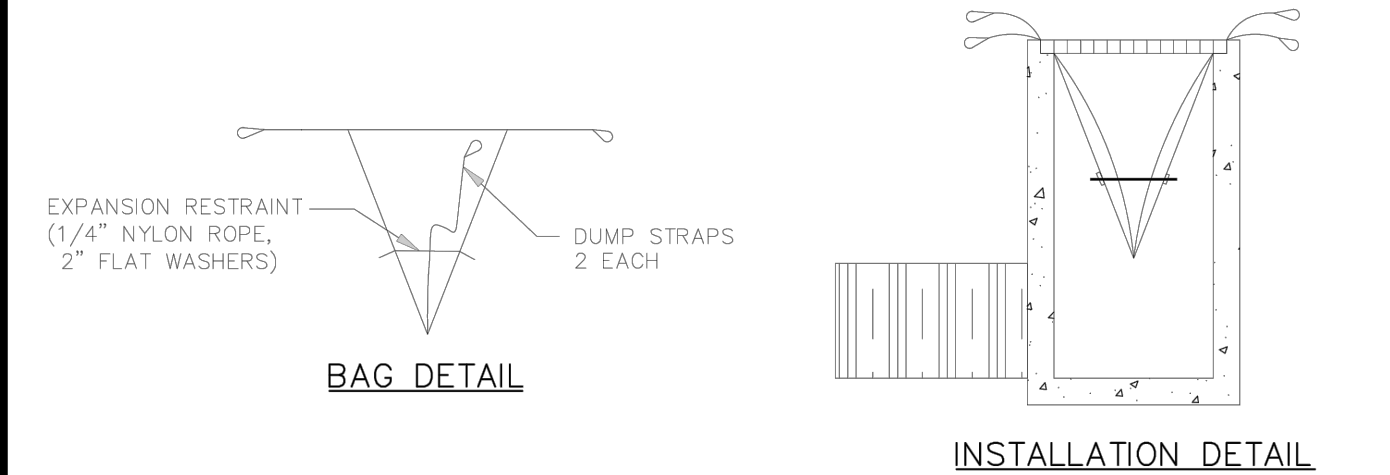
NOTES:

- SIGNS WILL BE CONSTRUCTED FROM QUALITY ALUMINUM AND POWDER COATED WITH GLOSS BLACK POLYESTER TWO COAT PROCESS.
- ALL FASTENERS WILL BE STAINLESS STEEL.
- STOP SIGNS WILL HAVE A 1/4" BLACK ALUMINUM BACKER.
- ALL STREET BLADES WILL BE FRAMED IN WITH ALUMINUM CASING.
- ALL REFLECTIVE SIGNS SHALL BE MADE OF HIGH INTENSITY GRADE REFLECTIVE SHEETING.
- DEVELOPER SHALL BE RESPONSIBLE FOR FURNISHING AND ERECTING ALL STREET NAME AND REGULATORY SIGNS.

TOWN OF ZEBULON
PREMIUM SIGN INSTALLATION DETAIL
SCALE: NOT TO SCALE
DATE: JULY 2010
SHEET # 1 OF 1
DETAIL # 31

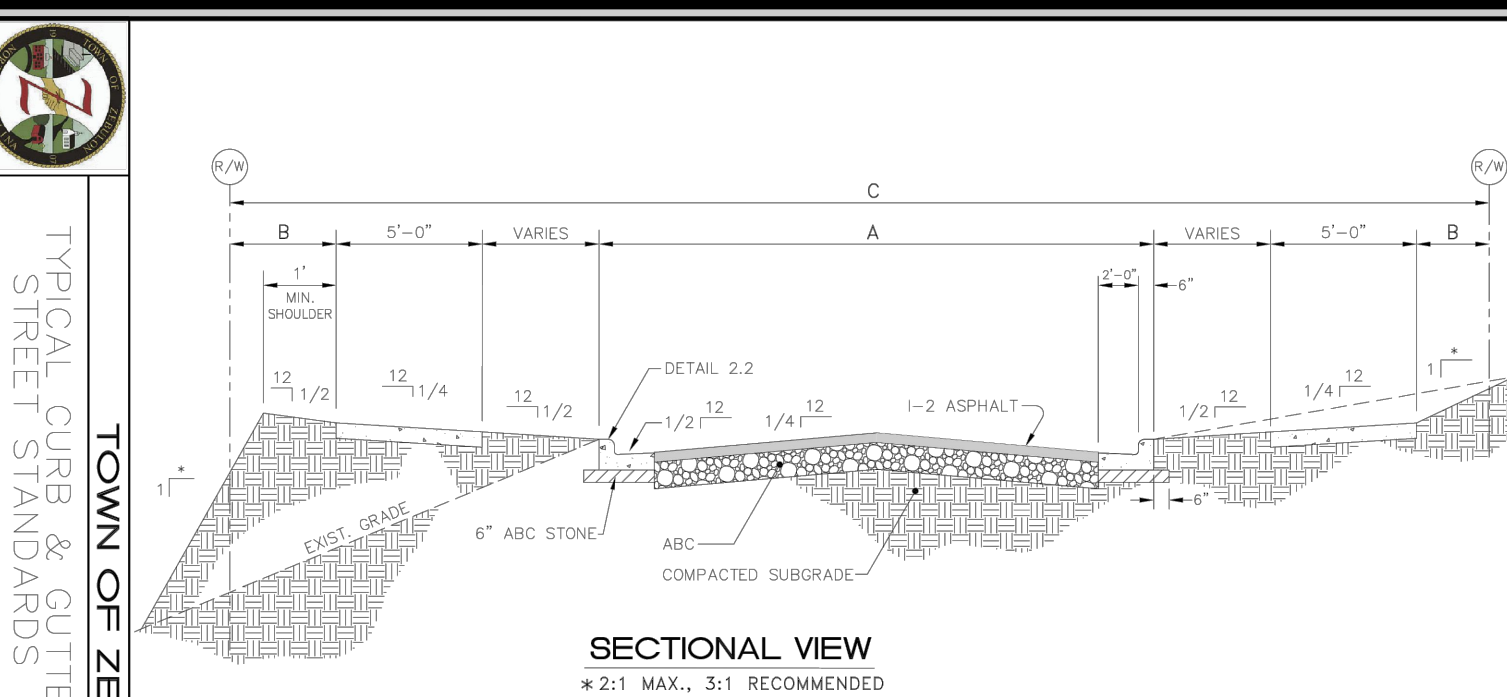


- NOTES:**
- SOME MUNICIPALITIES DO NOT ALLOW GUTTER PROTECTION ON PUBLIC ROADS. SILT BAGS SHOULD BE USED IN THESE CASES.
 - BAGS SHOULD BE CLEANED OUT AFTER EVERY RAIN EVENT AND/OR AS NEEDED.



INSTALLATION DETAIL

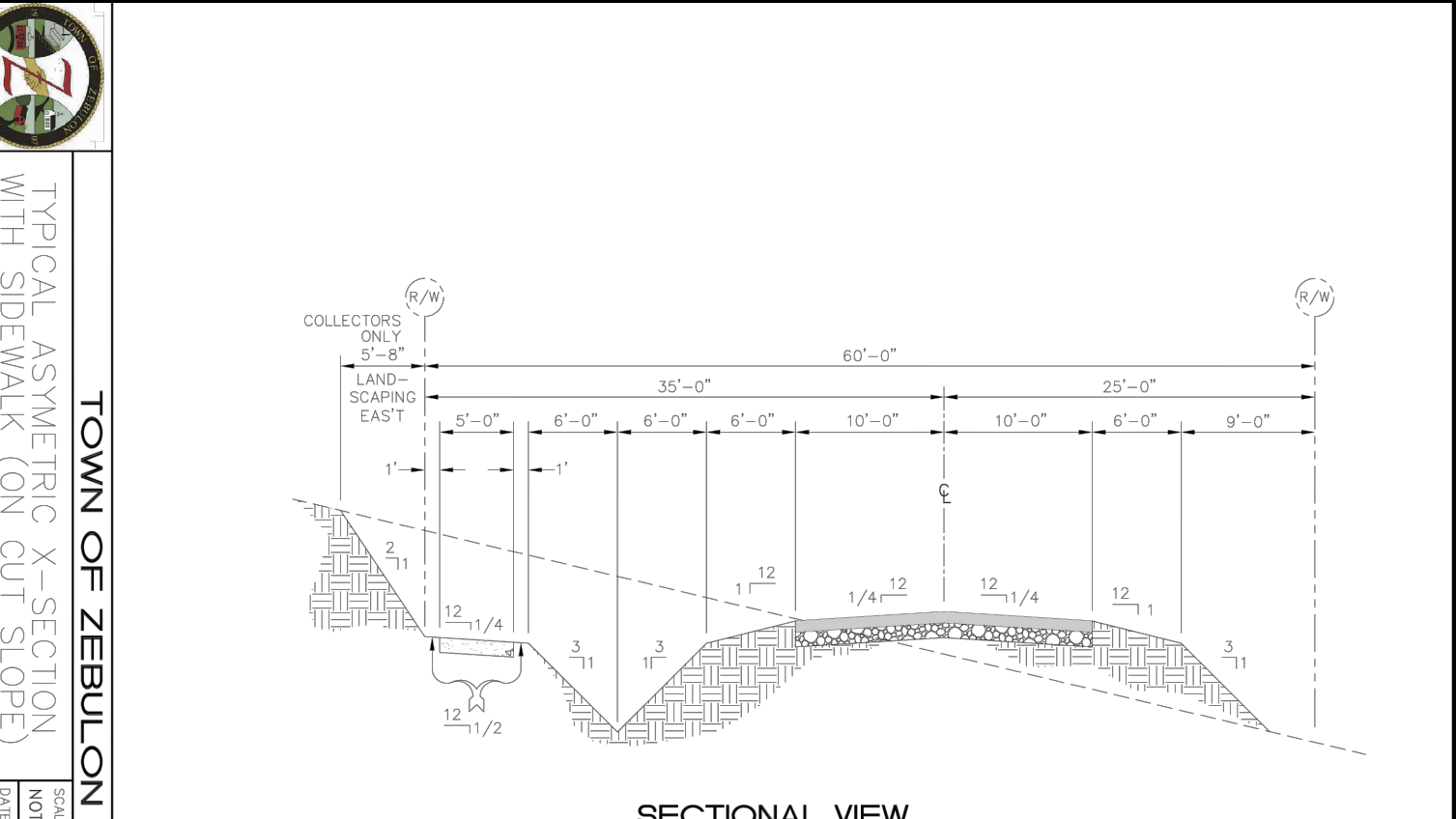
TOWN OF ZEBULON
CATCH BASIN - SEDIMENT CONTROL DEVICES
SCALE: NOT TO SCALE
DATE: JULY 2010
SHEET # 1 OF 1
DETAIL # 50



SECTIONAL VIEW
* 2:1 MAX., 3:1 RECOMMENDED

CLASSIFICATION	BASE TO BACK (FT)		PAVEMENT SECTION		C (FT)
	MIN	MAX	SPR.F.S	CABC	
QAL-GE-SAC	26"	N/A	3"	8"	10"
LOCAL STREET	26"	12" FROM 1/4"	3"	8"	50"
RESIDENTIAL COLLECTOR	35"	12" FROM 1/4"	4"	8"	60"
THOROUGHFARE	RES THOROUGHFARE PLAN	VARIES	SEE MDDOT STANDARDS	SEE MDDOT STANDARDS	SEE MDDOT STANDARDS

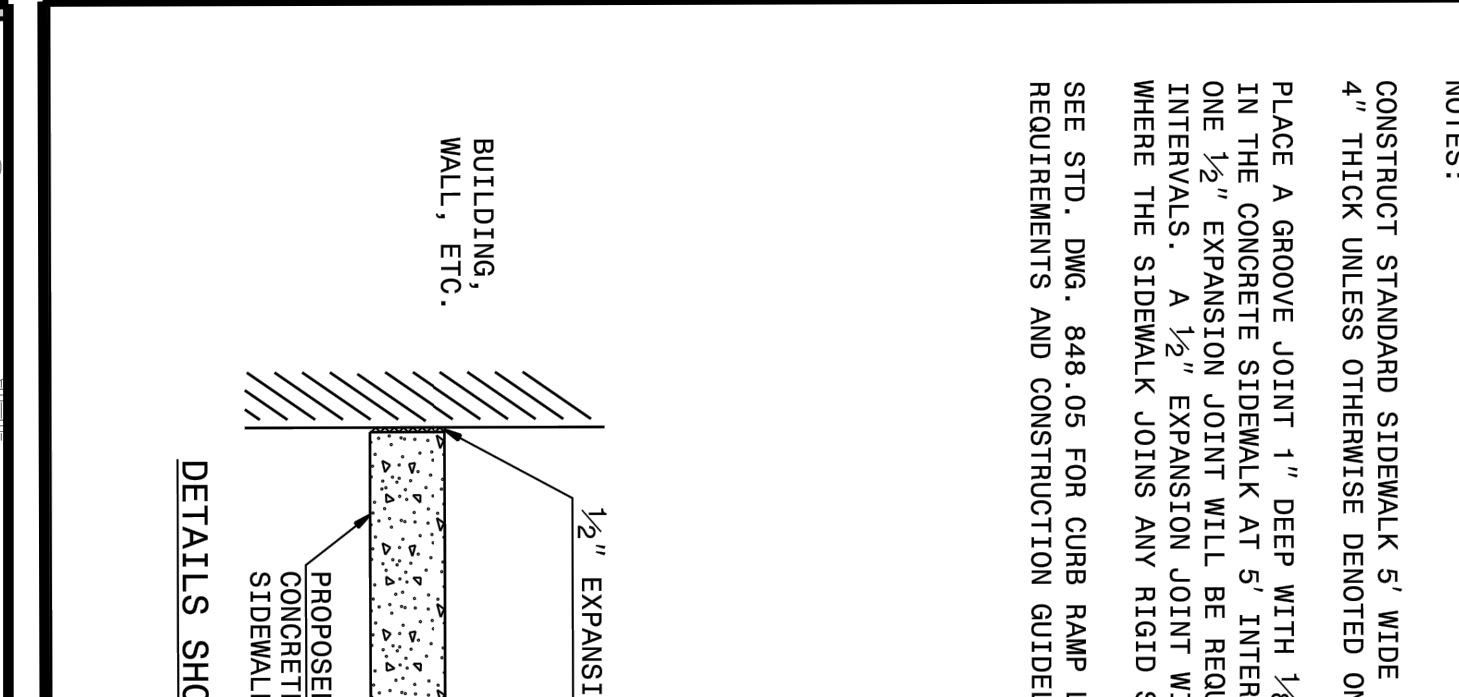
TOWN OF ZEBULON
TYPICAL CURB & GUTTER STREET STANDARDS
SCALE: NOT TO SCALE
DATE: JULY 2010
SHEET # 1 OF 1
DETAIL # 1



SECTIONAL VIEW

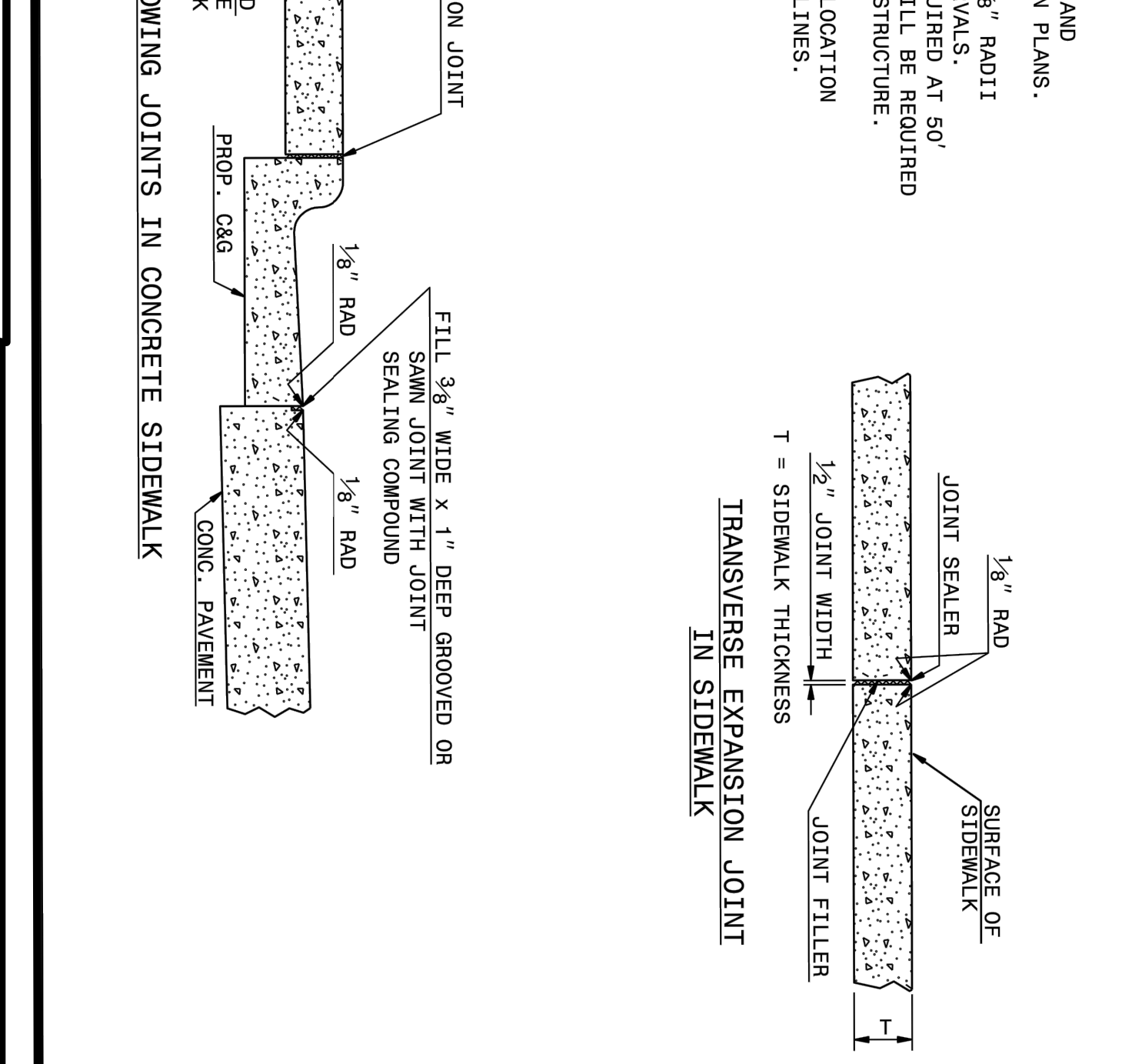
APPLIES TO STREET WHERE SIDE WALK IS REQUIRED

TOWN OF ZEBULON
TYPICAL ASYMMETRIC X-SECTION WITH SIDEWALK (ON CUT SLOPE)
SCALE: NOT TO SCALE
DATE: JULY 2010
SHEET # 2 OF 1
DETAIL # 2



DETAILS SHOWING JOINTS IN CONCRETE SIDEWALK

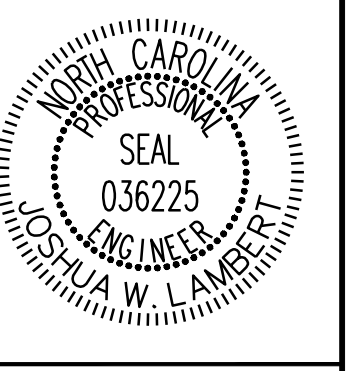
- NOTES:**
- CONSTRUCT STANDARD SIDEWALK 5' WIDE AND 4" THICK UNLESS OTHERWISE DENOTED ON PLANS.
 - PLACE A GROOVE JOINT 1" DEEP WITH 1/8" RADIUS IN THE CONCRETE SIDEWALK AT 5' INTERVALS.
 - ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 50' INTERVALS. A 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE.
 - SEE STD. DWG. 848.05 FOR CURB RAMP LOCATION REQUIREMENTS AND CONSTRUCTION GUIDELINES.



TRANSVERSE EXPANSION JOINT IN SIDEWALK

TOWN OF ZEBULON
ROADWAY STANDARD DRAWING FOR CONCRETE SIDEWALK
SCALE: NOT TO SCALE
DATE: JULY 2010
SHEET # 1 OF 1
DETAIL # 18

NO.	REVISIONS	DATE	BY
1	TRC REVIEW RESPONSES	09-30-2021	
2	TRC REVIEW RESPONSES	12-23-2021	
3	TRC REVIEW RESPONSES	03-23-2022	



STRONGROCK ENGINEERING GROUP
STRONG ROCK ENGINEERING GROUP, PLLC / COMPANY LICENSE # P-2166
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STRONG ROCK PROJECT	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
NOT FOR CONSTRUCTION	AS SHOWN	RLB	SRG	JWL

TRUE-ZEBULON-ARENDELL
TOWN OF ZEBULON, WAKE COUNTY, NORTH CAROLINA
CONSTRUCTION PLANS
SITE DETAILS
DRAWING SHEET
D-2.4
16 OF 17

Outdoor Lighting

Mitchell LED Series

Mitchell LED
Mitchell Top Hat LED
Mitchell LED with ribs, bands and medallions
Mitchell Open LED
Mitchell Top Hat LED with ribs, bands and medallions

The energy-efficient fixtures in the Mitchell LED Series enhance the character and prestige of streetscapes and parking lots, as well as pedestrian areas and greenways. These fixtures provide safety and security in commercial settings and complement any neighborhood with their classic, elegant design.

LED <i>(Light Emitting Diode)</i>	50 watts, 75 watts (<i>Mitchell Open</i>)
Mounting heights	12', 13', 16'
Color	Black
Poles	Fiberglass Smooth round concrete Style V Style VI Style VII

For additional information, visit us at duke-energy.com/OutdoorLighting or call us toll free at 866.769.6417.

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Outdoor Lighting

Mitchell LED Series

Light source: LED (white)
 Lumens: 4,332 – 5,678 (fixture dependent)
 Color temperature: 4,000K

	Wattage	Light Pattern	IESNA Backlight – Uplight – Glare (BUG) Rating
Mitchell LED	50	IESNA Type V	B3-U4-G3
Mitchell Top Hat LED	50	IESNA Type V	B3-U3-G3
Mitchell Open LED	75	IESNA Type III	B1-U0-G1
Mitchell LED with Ribs, Bands and Medallions	50	IESNA Type V	B3-U4-G3
Mitchell Top Hat LED with Ribs, Bands and Medallions	50	IESNA Type V	B3-G3-U3

Poles available:

Name	Mounting height	Color
Smooth concrete	12', 16'	Black
Fiberglass	16'	Black
Style V	12', 16'	Black
Style VI	12'	Black
Style VII	13'	Black

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No.	REVISIONS	DATE	BY
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STRONGROCK

ENGINEERING GROUP
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6801 FALLS OF NEUSE RD. SUITE 108 RALEIGH, NC 27615 | JOSH@STRONGROCKENGINEERING.COM

STRONG ROCK PROJECT	NOT FOR CONSTRUCTION	SCALE AS SHOWN	DESIGNED BY RLB	DRAWN BY SRG	CHECKED BY JWL
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TRUE- ZEBULON-ARENDELL
TOWN OF ZEBULON, WAKE COUNTY, NORTH CAROLINA
CONSTRUCTION PLANS
LIGHTING DETAILS