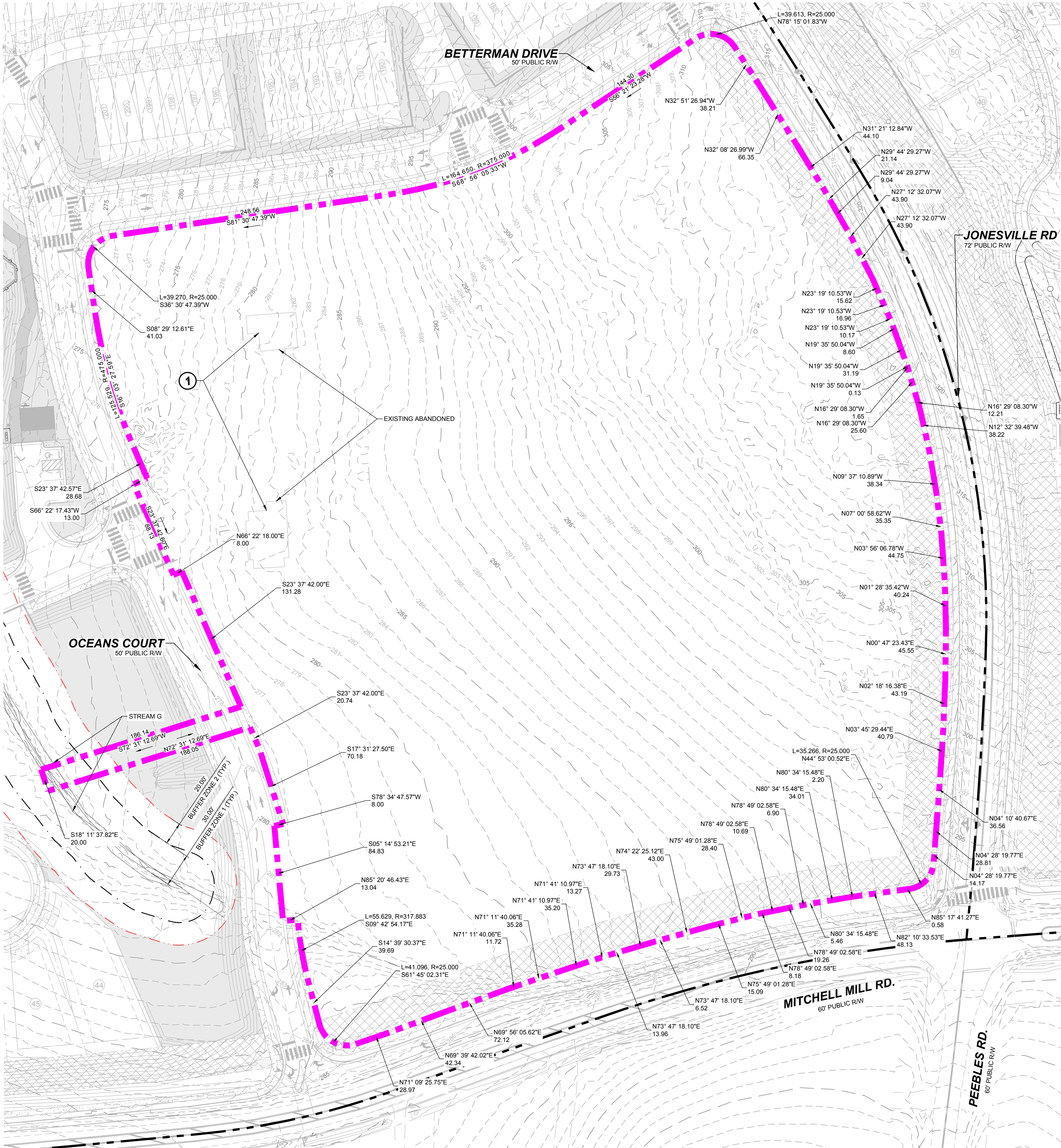


**TOWN OF ROLESVILLE, WAKE COUNTY, NORTH CAROLINA**

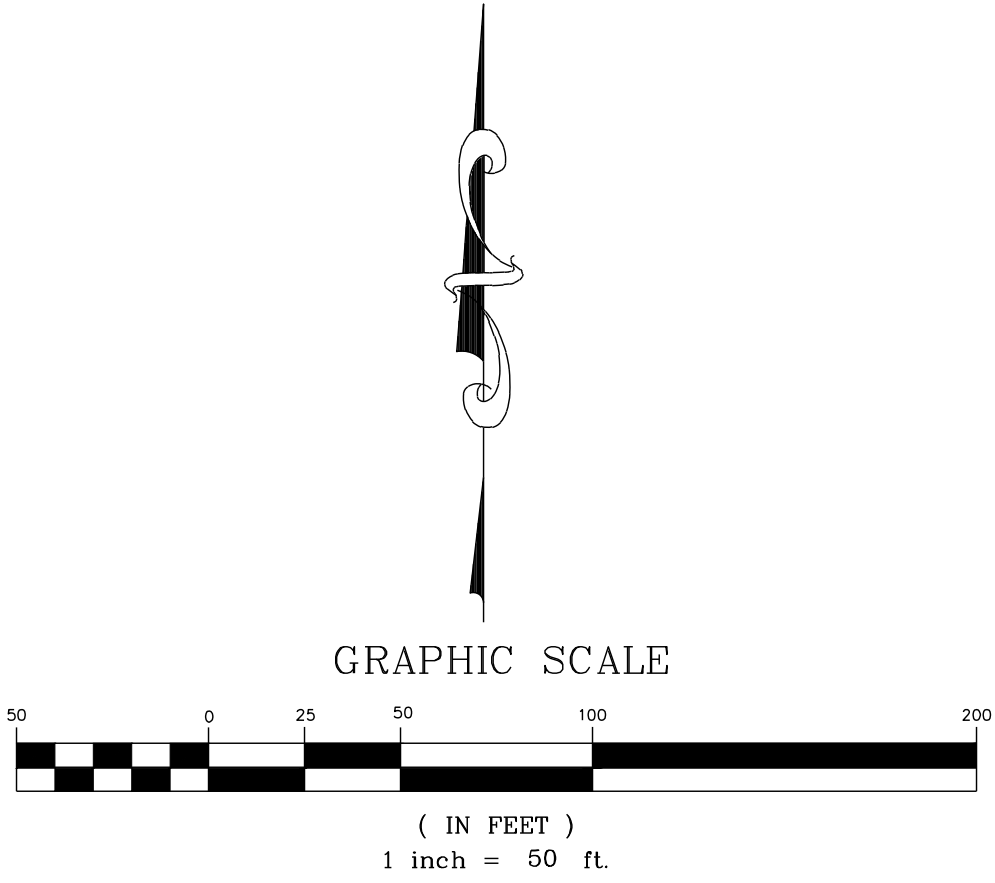
## 01 OF 17





**DEMOLITION KEYNOTES:**

1 EXISTING ABANDONED TO BE REMOVED



STRONGROCK

ENGINEERING GROUP

STRONG ROCK ENGINEERING GROUP, PLLC | COMPANY LICENSE # P-2166  
305 CHURCH AT NORTH HILLS STREET, SUITE 1110 RALEIGH, NC 27609 | INFORMATION@STRONGROCKGROUP.COM

STRONG ROCK PROJECT  
PSP-24-03

NOT FOR  
CONSTRUCTION

SCALE  
AS SHOWN

DESIGNED BY  
SRG

DRAWN BY  
SRG

CHECKED BY  
SRG

RESERVE @ MITCHELL MILL  
COMMERCIAL  
TOWN OF ROLESVILLE, WAKE COUNTY, NORTH CAROLINA  
CONSTRUCTION PLANS  
EXISTING CONDITIONS &  
DEMOLITION PLAN

DRAWING  
SHEET  
**C-2.0**

**02 OF 17**

CD SUBMITTAL #1

0

08/01/2025

SEAL:

0

08/01/2025

REVISIONS

DATE

BY

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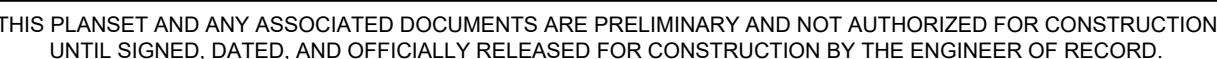
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**RESERVE @ MITCHELL MILL  
COMMERCIAL  
TOWN OF ROLSVILLE, WAKE COUNTY, NORTH CAROLINA  
CONSTRUCTION PLANS  
SITE PLAN**

03 OF 17





SSMH TABLE					
SSMH NO	SIZE	TOP	INV. IN	INV. OUT	DEPTH
SSMH #1	4'	278.86	272.28 N	272.08 SW	6.78
SSMH #2	4'	282.15	272.93 E	272.73 S	9.43
SSMH #3	4'	283.94	273.85 E 274.05 N	273.65 W	10.28
SSMH #4	5'	288.92	274.99 S	274.79 W	14.13
SSMH #5	5'	288.06	276.09 E	275.89 N	12.17
SSMH #6	4'	288.13	276.58 S	276.38 W	11.75
SSMH #7	4'	287.52	276.92 S 276.92 E	276.72 N	10.80
SSMH #8	4'	287.00	278.28 W	278.08 N	8.93
SSMH #9	4'	286.85	278.69 S 278.69 W	278.49 E	8.36
SSMH #10	4'	285.03	279.08 S	278.88 E	6.15
SSMH #239	4'	276.99	267.50 E	265.00 N	11.99

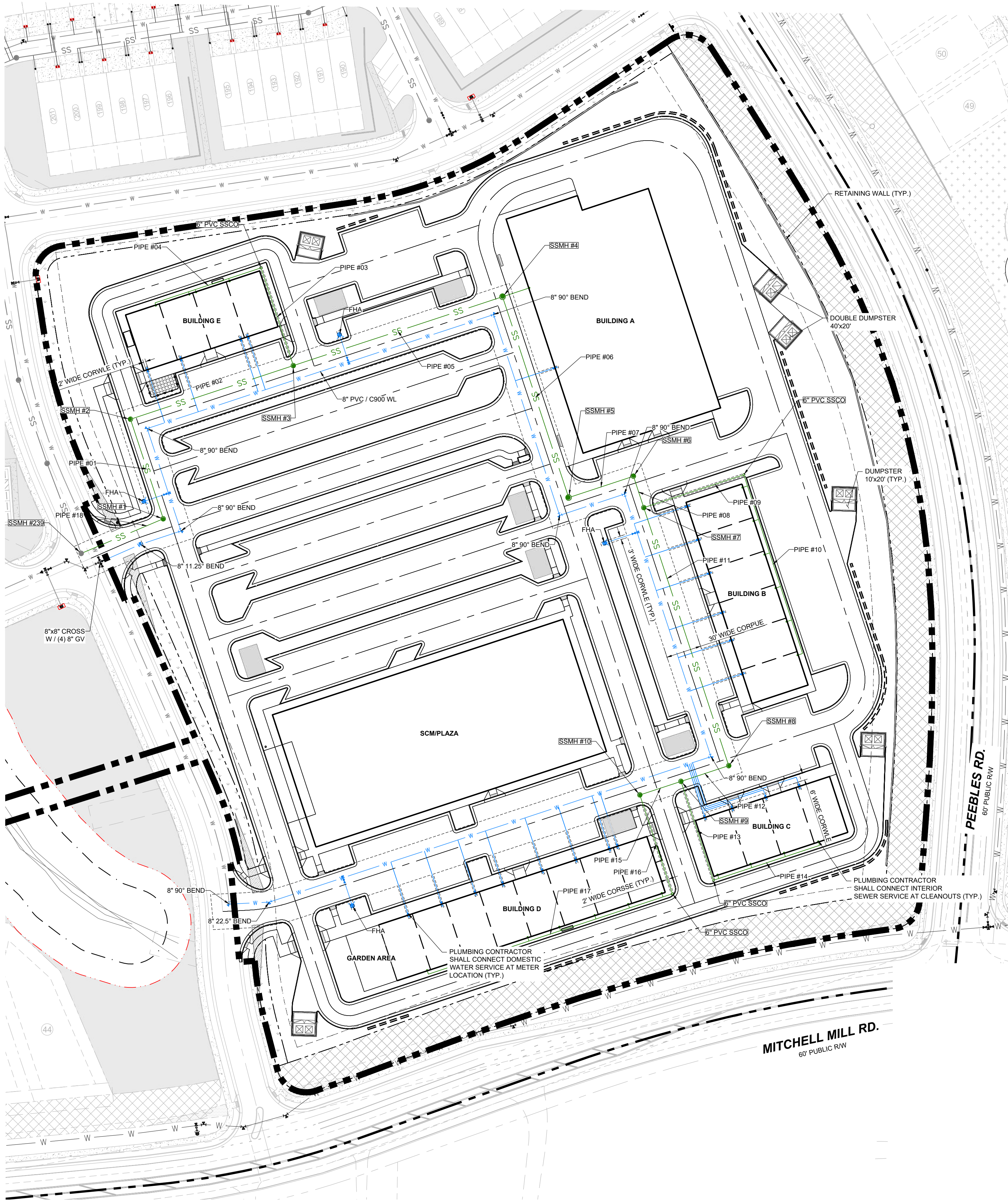
PIPE TABLE						
PIPE NO	TYPE	SIZE	LF	INV. IN	INV. OUT	GRADE
PIPE #01 BEGIN: SSMH #2 END: SSMH #1	PVC - SDR 26	8"	89	272.73	272.28	0.50%
PIPE #02 BEGIN: SSMH #3 END: SSMH #2	PVC - SDR 26	8"	146	273.65	272.93	0.50%
PIPE #03 BEGIN: SSCO #04 END: SSMH #3	PVC - SDR 26	8"	87	274.49	274.05	0.50%
PIPE #04 BEGIN: END: SSCO #04	PVC - SDR 26	8"	95	274.96	274.49	0.50%
PIPE #05 BEGIN: SSMH #4 END: SSMH #3	PVC - SDR 26	8"	187	274.79	273.85	0.50%
PIPE #06 BEGIN: SSMH #5 END: SSMH #4	PVC - SDR 26	8"	180	275.89	274.99	0.50%
PIPE #07 BEGIN: SSMH #6 END: SSMH #5	PVC - SDR 26	8"	58	276.38	276.09	0.50%
PIPE #08 BEGIN: SSMH #7 END: SSMH #6	PVC - SDR 26	8"	28	276.72	276.58	0.50%
PIPE #09 BEGIN: SSCO #03 END: SSMH #7	PVC - SDR 26	8"	89	277.37	276.92	0.50%
PIPE #10 BEGIN: END: SSCO #03	PVC - SDR 26	8"	160	278.17	277.37	0.50%
PIPE #11 BEGIN: SSMH #8 END: SSMH #7	PVC - SDR 26	8"	231	278.08	276.92	0.50%
PIPE #12 BEGIN: SSMH #9 END: SSMH #8	PVC - SDR 26	8"	43	278.49	278.28	0.50%
PIPE #13 BEGIN: SSCO #02 END: SSMH #9	PVC - SDR 26	8"	89	279.13	278.69	0.50%
PIPE #14 BEGIN: END: SSCO #02	PVC - SDR 26	8"	95	279.61	279.13	0.50%
PIPE #15 BEGIN: SSMH #10 END: SSMH #9	PVC - SDR 26	8"	37	278.88	278.69	0.50%
PIPE #16 BEGIN: SSCO #01 END: SSMH #10	PVC - SDR 26	8"	88	279.52	279.08	0.50%
PIPE #17 BEGIN: END: SSCO #01	PVC - SDR 26	8"	218	280.61	279.52	0.50%
PIPE #18 BEGIN: SSMH #1 END:	PVC - SDR 26	8"	76	272.08	267.50	6.05%
PIPE #19 BEGIN: SSCO #04 END: SSCO #04	PVC - SDR 26	8"	97	262.91	262.43	0.50%

ATTENTION CONTRACTORS

THE CONTRACTOR RESPONSIBLE FOR THE EXTENSION OF WATER, SEWER, AND/OR REUSE, AS APPROVED IN THESE PLANS, IS RESPONSIBLE FOR CONTACTING THE INFRASTRUCTURE INSPECTIONS DIVISION AND SCHEDULE A PRE-CONSTRUCTION MEETING ON THE DEVELOPMENT PORTAL PRIOR TO BEGINNING ANY CONSTRUCTION. RALEIGH WATER MUST BE CONTACTED AT (919) 996-4540 AT LEAST TWENTY-FOUR HOURS PRIOR TO BEGINNING ANY WORK ACTIVITY AROUND CRITICAL WATER AND SEWER INFRASTRUCTURE.

FAILURE TO NOTIFY CITY DEPARTMENTS IN ADVANCE OF BEGINNING CONSTRUCTION, WILL RESULT IN THE ISSUANCE OF MONETARY FINES AND REQUIRE REINSTALLATION OF ANY WATER OR SEWER FACILITIES NOT INSPECTED AS A RESULT OF THIS NOTIFICATION FAILURE.

FAILURE TO CALL FOR INSPECTION, INSTALL A DOWNSTREAM PLUG, HAVE PERMITTED PLANS ON THE JOBSITE, OR ANY OTHER VIOLATION OF CITY OF RALEIGH STANDARDS WILL RESULT IN A FINE AND POSSIBLE EXCLUSION FROM FUTURE WORK IN THE CITY OF RALEIGH.



STANDARD UTILITY NOTES:

UTILITY PLAN(S) FOR CITY OF RALEIGH AND MERGER TOWNS

STANDARD UTILITY NOTES :

- ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORPUD HANDBOOK, CURRENT EDITION)
- UTILITY SEPARATION REQUIREMENTS:
  - 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 ENCASEMENT 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 18" 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-48).
  - 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 RALEIGH PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION.
- DEVELOPER SHALL PROVIDE 30 DAYS ADVANCE WRITTEN NOTICE TO OWNER FOR ANY WORK REQUIRED WITHIN AN EXISTING CITY OF RALEIGH UTILITY EASEMENT TRAVERSING PRIVATE PROPERTY.
- 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 RALEIGH PUBLIC UTILITIES DEPARTMENT.
- SEWER BYPASS PUMPING -- A BYPASS PLAN SEALED BY AN NC PROFESSIONAL ENGINEER SHALL BE PROVIDED TO RALEIGH WATER PRIOR TO PUMPING OPERATIONS FOR APPROVAL. THE OPERATIONS AND EQUIPMENT SHALL COMPLY WITH THE PUBLIC UTILITIES HANDBOOK.
- 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCE MAINS. 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 RALEIGH PUBLIC UTILITIES DEPARTMENT. THIS INCLUDES ABANDONING TAP AT MAIN & REMOVAL OF SERVICE FROM ROW OR EASEMENT PER CORPUD HANDBOOK PROCEDURE.
- INSTALL 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.
- INSPECTIONS OF 4" AND LARGER WATER MAINS OF THE PRIVATE DISTRIBUTION SYSTEM WILL BE INSPECTED AS PART OF THE INFRASTRUCTURE PERMIT.
- PRIVATE SEWER MAINS AS PART OF A COLLECTION SYSTEM ARE PERMITTED AND INSPECTED UNDER THE PRIVATE INFRASTRUCTURE PERMIT FOR SEWER.
- ANY WATER OR SEWER SERVICES ON PRIVATE PROPERTY THAT WILL BE INSTALLED UNDER CONSTRUCTION DRAWINGS MAY REQUIRE A PLUMBING UTILITY PERMIT IN THE CITY OF RALEIGH. CONSULT WITH THE ENGINEERING INSPECTION COORDINATOR DURING THE PRE-CONSTRUCTION MEETING ON THE NECESSARY PERMITS.
- INSTALL SEWER SERVICES WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE & SPACED PER THE CURRENT NC PLUMBING CODE.
- 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.
- ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NCDWQ, USACE &/OR FEMA FOR ANY RIPARIAN BUFFER, WETLAND &/OR FLOODPLAIN IMPACTS (RESPECTIVELY) PRIOR TO CONSTRUCTION.
- NCDOT / RAILROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK (INCLUDING MAIN EXTENSIONS & SERVICE TAPS) WITHIN STATE OR RAILROAD ROW PRIOR TO CONSTRUCTION.
- GREASE INTERCEPTOR / OIL WATER SEPARATOR SIZING CALCULATIONS & INSTALLATION SPECIFICATIONS SHALL BE PROVIDED BY THE RW FOG PROGRAM COORDINATOR PRIOR TO ISSUANCE OF A JC AND/OR BUILDING PERMIT. CONTACT (919) 996-4516 OR fog@raleighnc.gov FOR MORE INFORMATION.
- CROSS-CONNECTION CONTROL PROTECTION DEVICES ARE REQUIRED BASED ON THE DEGREE OF HEALTH HAZARD INVOLVED AS LISTED IN APPENDIX B OF THE RULES GOVERNING PUBLIC WATER SYSTEMS IN NORTH CAROLINA.
- THE DEVICES SHALL MEET THE AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) STANDARDS AND BE ON THE UNIVERSITY OF SOUTHERN CALIFORNIA APPROVAL LIST.
- THE DEVICE AND INSTALLATION SHALL MEET THE GUIDELINES OF APPENDIX A -- GUIDELINES AND REQUIREMENTS FOR THE CROSS CONNECTION PROGRAM IN RALEIGH'S SERVICE AREA.
- 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 Cross.connection@raleighnc.gov FOR MORE INFORMATION.
- NOTICE FOR PROJECTS THAT INVOLVE AN OVERSIZED MAIN OR URBAN MAIN REPLACEMENT. ANY CITY REIMBURSEMENT GREATER THAN \$250,000.00 MUST UNDERGO THE PUBLIC BIDDING PROCESS.
- PRIVATE SUB-METERING - NO RESALE OF WATER SHALL OCCUR WITHOUT APPROVAL OF THE NORTH CAROLINA UTILITY COMMISSION. SUB-METERING SHALL BE IN ACCORDANCE WITH SECTION 1400 OF THE "SAFE DRINKING WATER ACT".

**PUBLIC**  
**WATER DISTRIBUTION / EXTENSION SYSTEM**  
THE CITY OF RALEIGH 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 # \_\_\_\_\_

**PRIVATE**  
**SEWER COLLECTION / EXTENSION SYSTEM**  
THE CITY OF RALEIGH CONSENTS TO THE CONNECTION TO ITS PUBLIC SEWER SYSTEM AND EXTENSION OF THE PRIVATE SEWER COLLECTION SYSTEM AS SHOWN ON THIS PLAN. THE MATERIAL AND CONSTRUCTIONS 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 # \_\_\_\_\_

- LEGEND:**
- W WATER LINE
  - SS SANITARY SEWER LINE
  - Water Meter / Service
  - Sanitary Cleanout / Service
  - Sanitary Manhole

GRAPHIC SCALE



( IN FEET )  
1 inch = 50 ft.

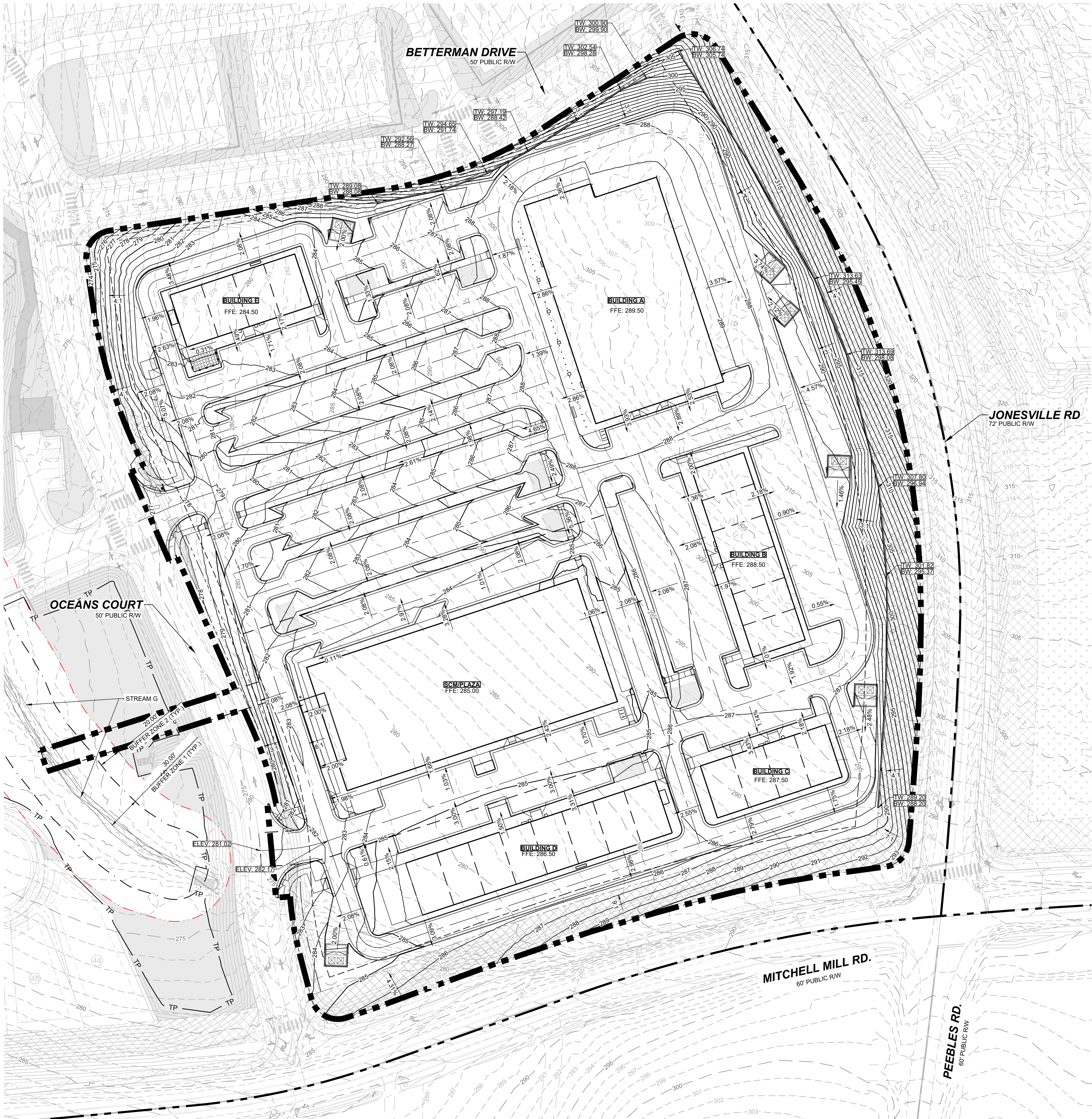
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ENGINEERING GROUP

STRONG ROCK ENGINEERING GROUP, PLLC | COMPANY LICENSE # P-2766  
305 CHURCH AT NORTH HILLS STREET, SUITE 1110 RALEIGH, NC 27609 | INFORMATION@STRONGROCKGROUP.COM

STRONG ROCK PROJECT PSP-24-03	NOT FOR CONSTRUCTION	SCALE AS SHOWN	DESIGNED BY SRG	DRAWN BY SRG	CHECKED BY SRG
RESERVE @ MITCHELL MILL COMMERCIAL TOWN OF ROLESVILLE, WAKE COUNTY, NORTH CAROLINA CONSTRUCTION PLANS UTILITY PLAN	DRAWING SHEET	C-4.0	04 OF 17	DATE	BY





**LEGEND:**

---	EXISTING PROPERTY LINE
- - -	EX. MAJOR CONTOURS
- - -	EX. MINOR CONTOURS
---	PROP. MAJOR CONTOURS
---	PROP. MINOR CONTOURS

GRAPHIC SCALE

50 0 25 50 100 200

( IN FEET )

1 inch = 50 ft.

STRONG ROCK PROJECT PSP-24-03	NOT FOR CONSTRUCTION	SCALE AS SHOWN	DESIGNED BY SRG	DRAWN BY SRG	CHECKED BY SRG	STRONG ROCK PROJECT PSP-24-03	NOT FOR CONSTRUCTION	SCALE AS SHOWN	DESIGNED BY SRG	DRAWN BY SRG	CHECKED BY SRG
RESERVE @ MITCHELL MILL COMMERCIAL TOWN OF ROLESVILLE, WAKE COUNTY, NORTH CAROLINA CONSTRUCTION PLANS GRADING PLAN						STRONG ROCK ENGINEERING GROUP STRONG ROCK ENGINEERING GROUP, PLLC   COMPANY LICENSE # P-2166 305 CHURCH AT NORTH HILLS STREET, SUITE 1110 RALEIGH, NC 27609   INFORMATION@STRONGROCKGROUP.COM					
DRAWING SHEET						C-5.0					
05 OF 17						CD SUBMITTAL #1					
0						08/01/2025					
SEAL:						REVISIONS					
No.						DATE					
BY						BY					



**BETTERMAN DRIVE**  
50' PUBLIC RW

**JONESVILLE RD**  
72' PUBLIC RW

**OCEANS COURT**  
50' PUBLIC RW

**MITCHELL MILL RD.**  
60' PUBLIC RW

**PEEBLES RD.**  
60' PUBLIC RW

**BUILDING A**

**BUILDING B**

**BUILDING C**

**BUILDING D**

**SCM PLAZA**

**INFILTRATION DETAIL E**

**INFILTRATION DETAIL A1**

**INFILTRATION DETAIL A2**

**INFILTRATION DETAIL B**

**INFILTRATION DETAIL C**

**INFILTRATION DETAIL D1**

**INFILTRATION DETAIL D2**

**12" HDPE (TYP.)**

**12" HDPE SLOTTED PIPES (TYP.)**

**15" HDPE (TYP.)**

**18" HDPE (TYP.)**

**24" HDPE (TYP.)**

**36" HDPE (TYP.)**

**36" GROUND WATER OUTLET**

**OUTLET STRUCTURE**  
TOP: 284.00  
INV OUT: 268.50 (W)

**STREAM G**

**FES #02**  
INV OUT: 267.75 (E)

**MONITORING WELL**

**SCM MAINTENANCE AND ACCESS EASEMENT**

**ROOF TREATMENT BOX D**

**ROOF DRAIN C1**

**ROOF DRAIN C2**

**HANCOR ADVANEDGE 24" (TYP.)**

**CB #01**

**CB #02**

**CB #03**

**CB #04**

**CB #05**

**CB #06**

**CB #07**

**CB #08**

**CB #09**

**CB #10**

**CB #11**

**CB #12**

**CB #13**

**CB #14**

**CB #15**

**CB #16**

**CB #17**

**CB #18**

**CB #19**

**CB #20**

**CB #21**

**CB #22**

**VI #01**

**VI #02**

**VI #03**

**VI #04**

**VI #05**

**VI #06**

**VI #07**

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**VI #210**

**VI #211**

**VI #212**

**VI #213**

**VI #214**

**VI #21**

EXISTING PROPERTY LINE  
PROPOSED HDPE SOLID PIPE  
PROPOSED HDPE PERFORATED PIPE  
PROPOSED HDPE SLOTTED PIPE  
PROPOSED RCP STORM OUTLET PIPE

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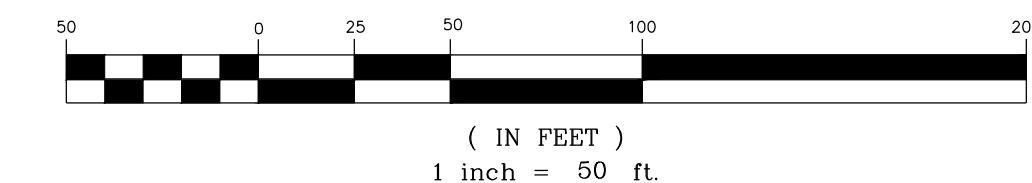
STRONG ROCK PROJECT PSP-23-03	NOT FOR CONSTRUCTION	SCALE	AS SHOWN	DESIGNED BY	SRG	DRAWN BY	SRG	CHECKED BY	SRG
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DRAWING  
SHEET

**C-6.0**

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**STRONG****ROCK**  
ENGINEERING GROUP  
STRONG ROCK ENGINEERING GROUP, PLLC | COMPANY LICENSE # P-2166  
3065 CHURCH AT NORTH HILLS STREET, SUITE 1110 RALEIGH, NC 27609 | INFORMATION@STRONGROCKGROUP.COM

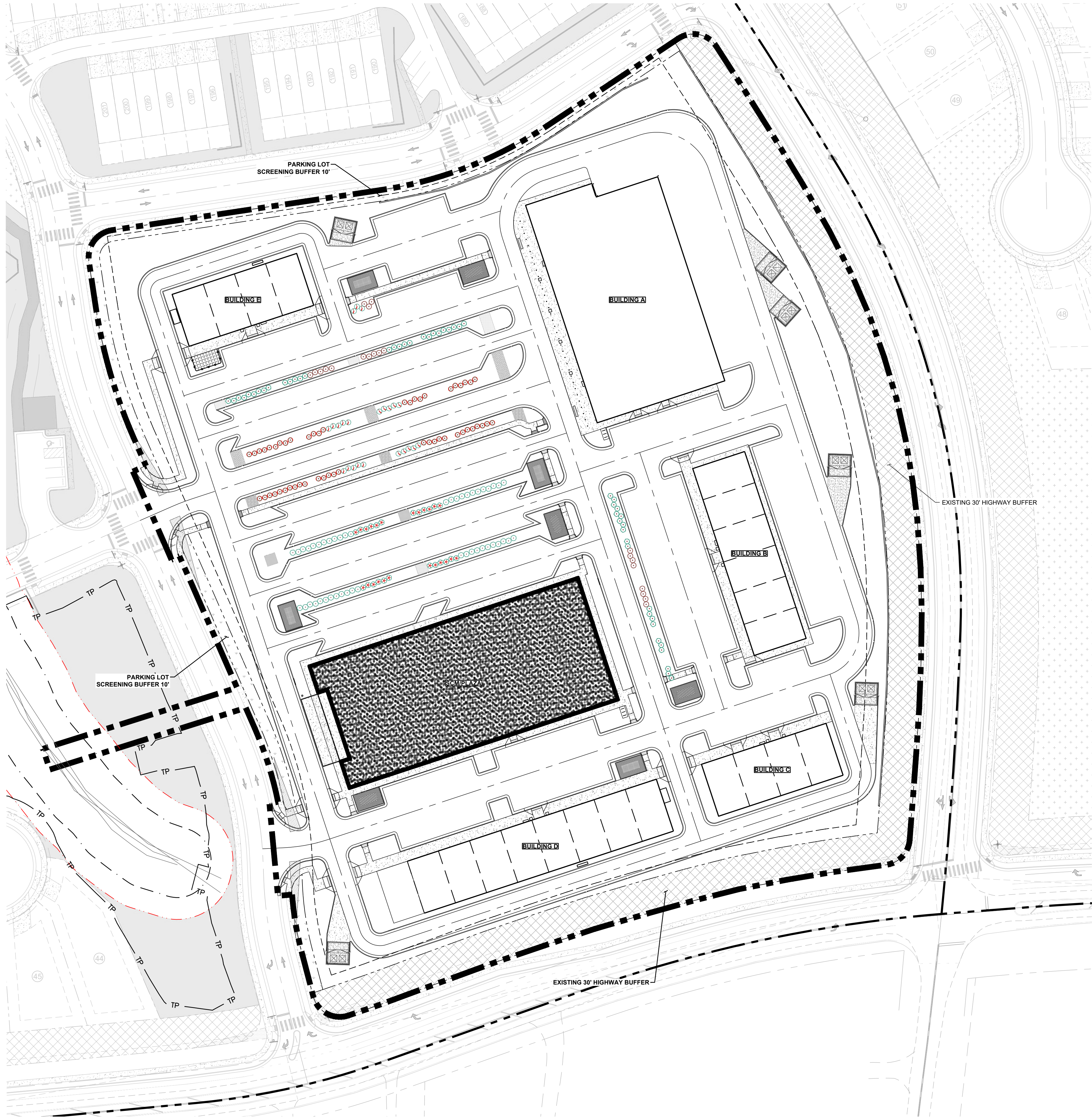
RESERVE @ MITCHELL MILL  
COMMERCIAL  
CONSTRUCTION PLANS  
PARKING LOT TREES AND  
PERIMETER BUFFER

## DRAWING SHEET

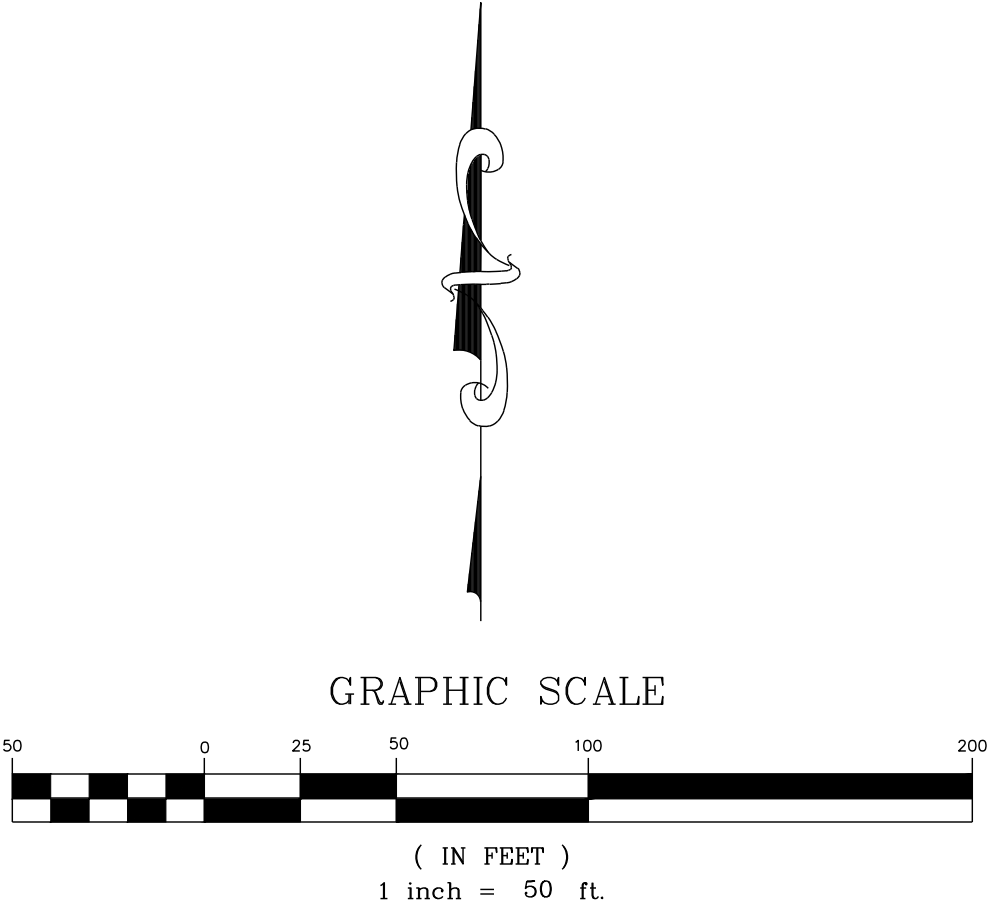
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07 OF 17





PLAN SCHEDULE								
SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER		REMARKS
SCM SHRUBS								
	ILE GLA	47	ILEX GLABRA	INKBERRY HOLLY	3 GAL.	POT		
	ILE W13	52	ILEX VERTICILLATA	WINTERBERRY	3 GAL.	POT		
	ILE VOM	49	ILEX VOMITORIA	YAUPON HOLLY	3 GAL.	POT		
	PHY N12	24	PHYSOCARPUS OPULIFOLIUS	NINEBARK	3 GAL.	POT		
	STY AME	23	STYRAX AMERICANUS	AMERICAN SNOWBELL	3 GAL.	POT		
	VIB BLA	21	VIBURNUM PRUNIFOLIUM	BLACKHAW VIBURNUM	3 GAL.	POT		
		216	SUBTOTAL:					
SCM GROUND COVER								
	BAP AUS	1,300	BAPTISIA AUSTRALIS	BLUE WILD INDIGO	#SP3	POT	6" o.c.	
	CAR CHE	2,341	CAREX CHEROKEENSIS	CHEROKEE SEDGE	#SP3	POT	6" o.c.	
	CAR GRA	1,349	CAREX GRAYI	GRAY'S SEDGE	#SP3	POT	6" o.c.	
	LOB CAR	832	LOBELIA CARDINALIS	CARDINAL FLOWER	#SP3	POT	6" o.c.	
	RUD MAG	416	RUDBECKIA PURPUREA	PURPLE CONEFLOWER	#SP3	POT	6" o.c.	
		6,238	SUBTOTAL:					
SOD/SEED								
	CYN T13	30,222 SF	CYNODON DACTYLON 'TIF 419'	TIF 419 BERMUDAGRASS	SOD	SOD		SOD FOR PLAZA
		30,222 SF	SUBTOTAL:					



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STRONGROCK

ENGINEERING GROUP

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305 CHURCH AT NORTH HILLS STREET, SUITE 1110 RALEIGH, NC 27609 | INFORMATION@STRONGROCKGROUP.COM

STRONG ROCK PROJECT PSP-24-03	NOT FOR CONSTRUCTION	SCALE AS SHOWN	DESIGNED BY SRG	DRAWN BY SRG	CHECKED BY SRG
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CONSTRUCTION PLANS  
SCM PLANTINGS

DRAWING  
SHEET

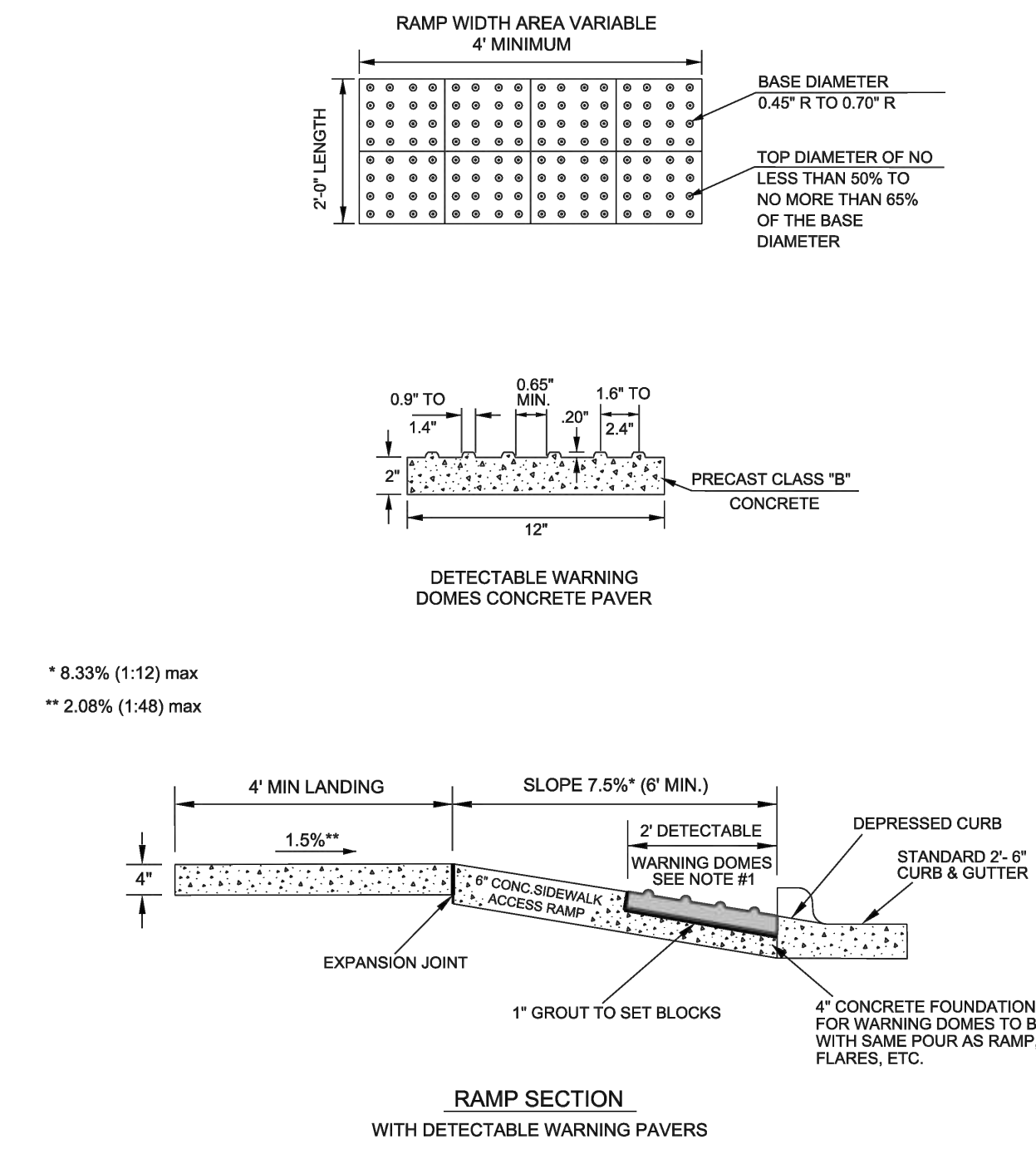
L-2.0

08/01/2025	IS/EC	BY
CD SUBMITTAL #1		DATE
0		No.
		REVISIONS









CITY OF RALEIGH		
STANDARD DETAIL		
REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022	DETECTABLE WARNING SURFACE PAVERS	
	<b>T-20.04.2</b>	

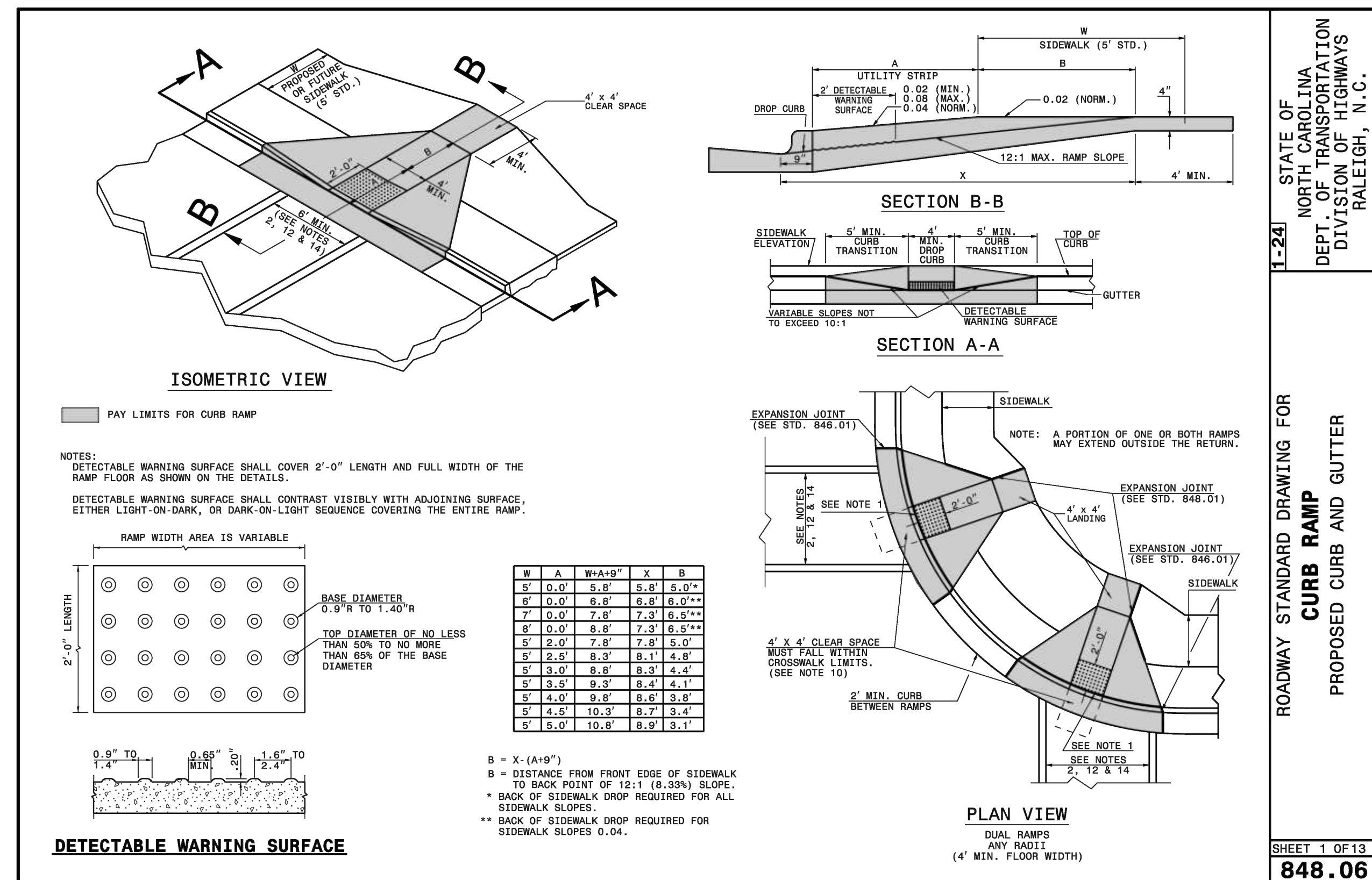
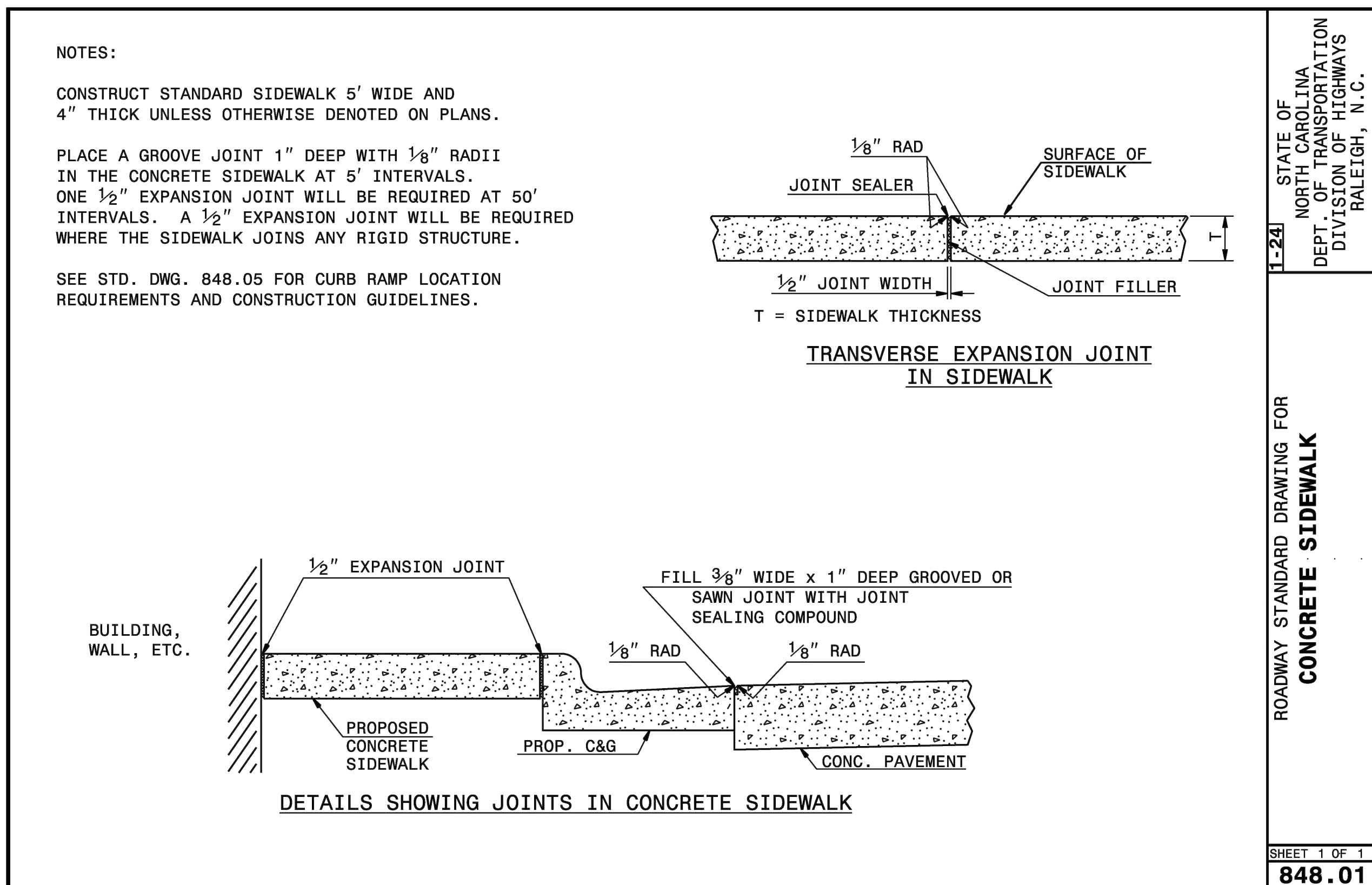
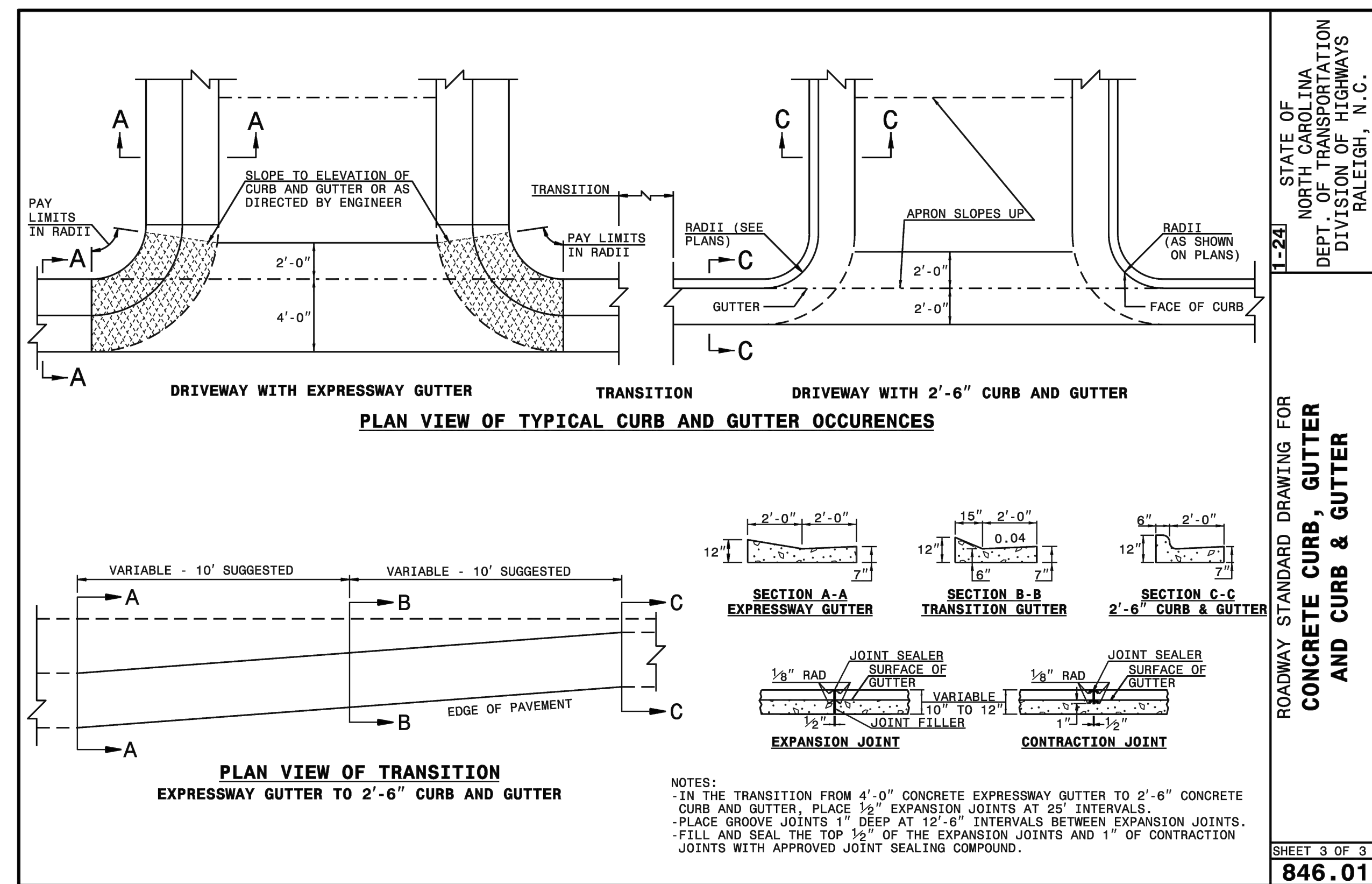
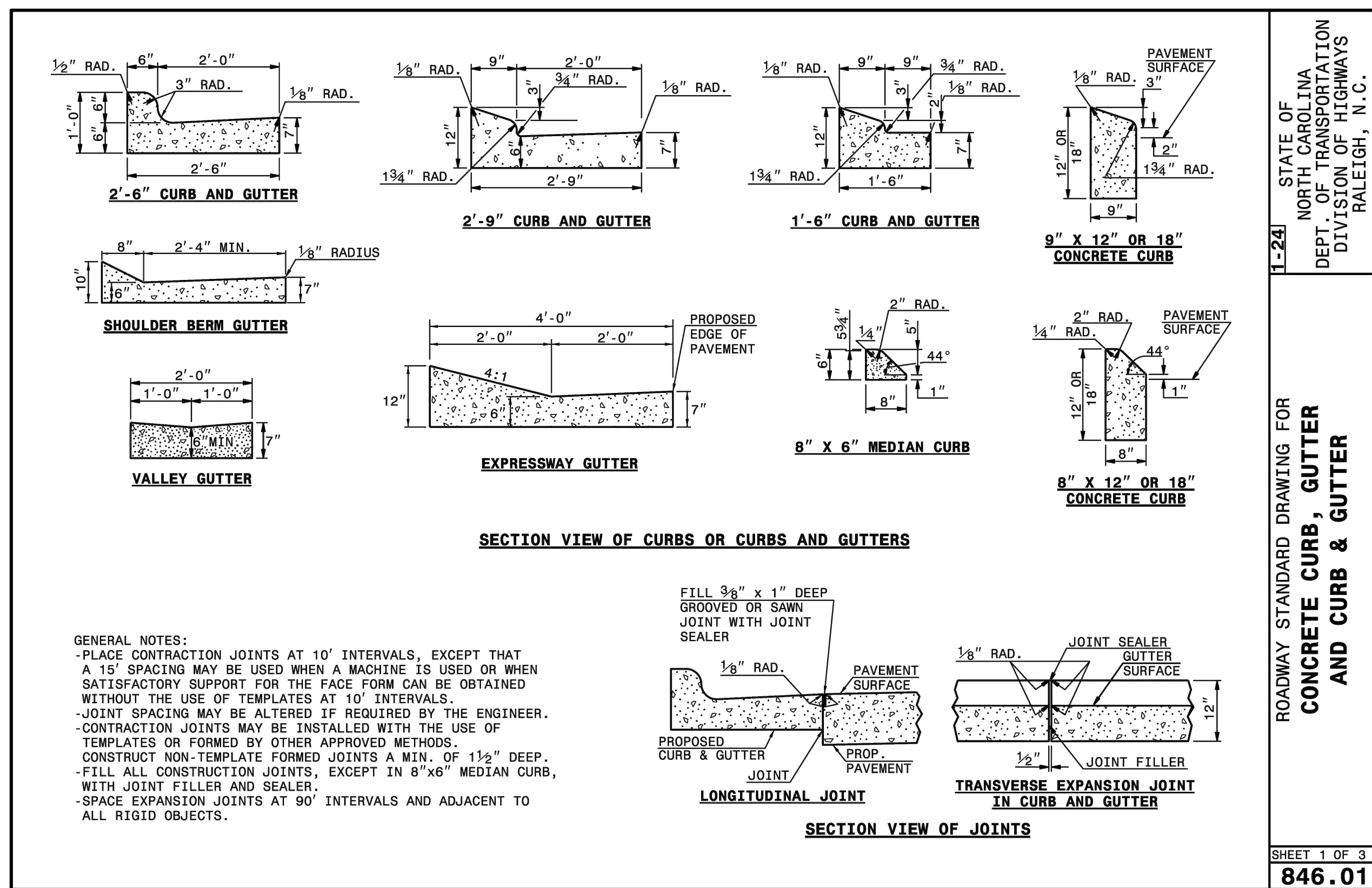


STRONG ROCK PROJECT PSP-23-03	NOT FOR CONSTRUCTION	SCALE	AS SHOWN	DESIGNED BY	SRG	DRAWN BY	SRG	CHECKED BY	SRG
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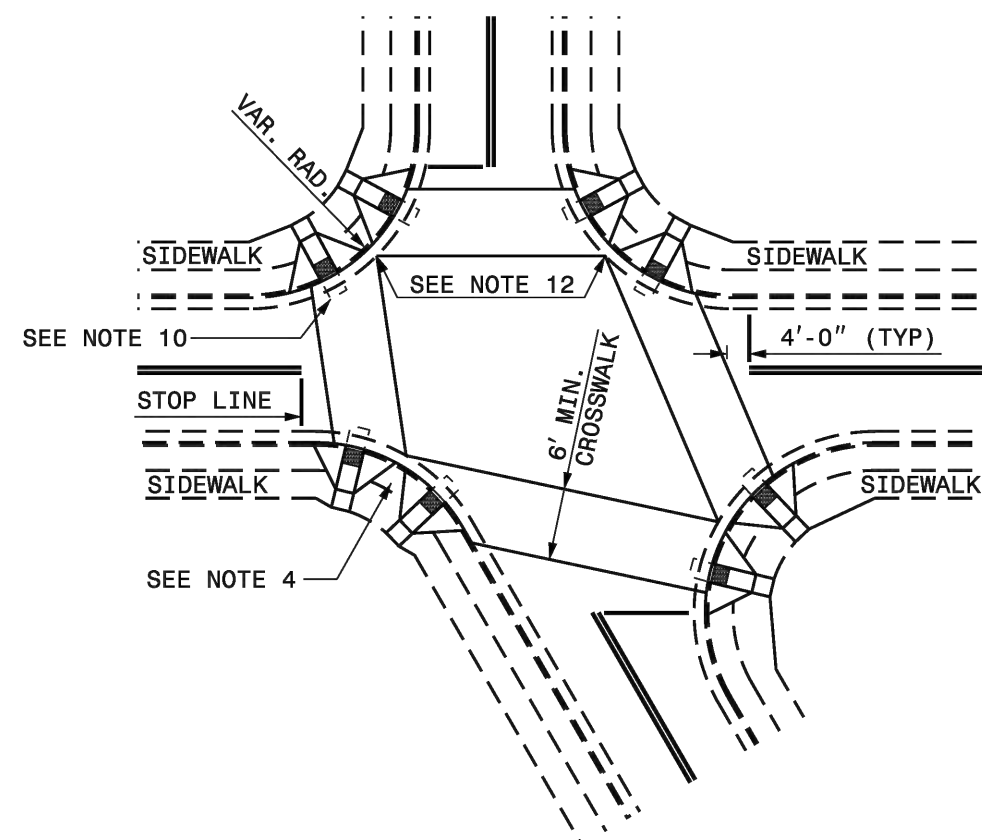
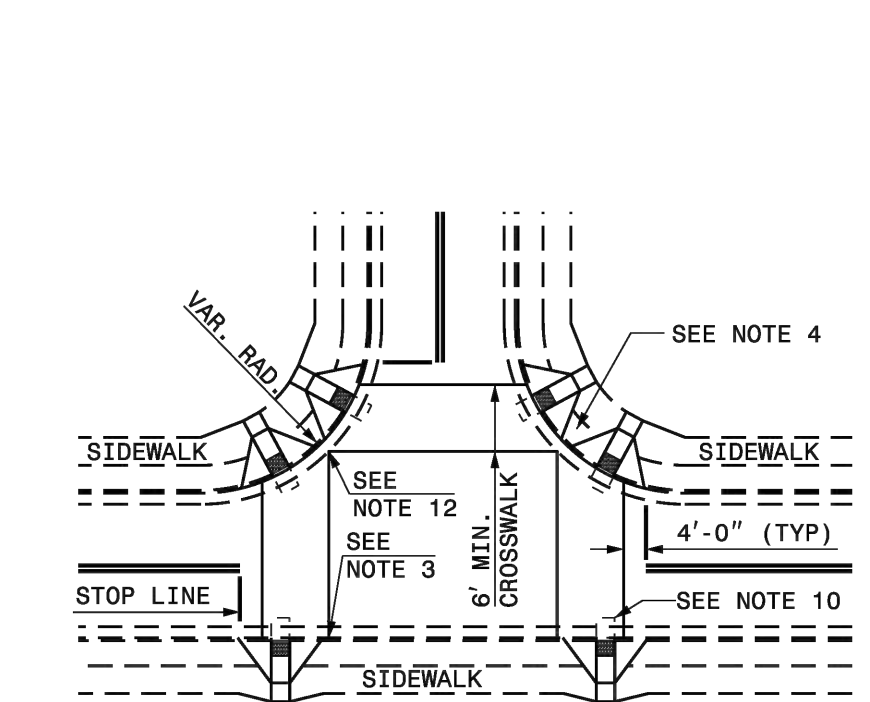
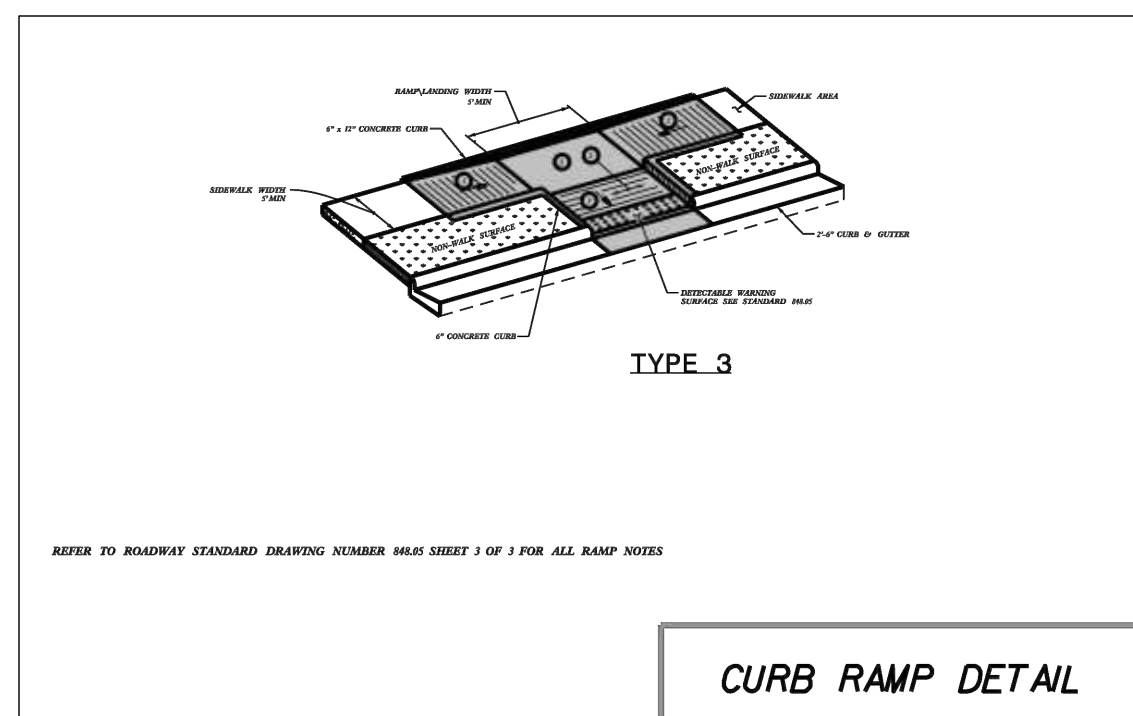
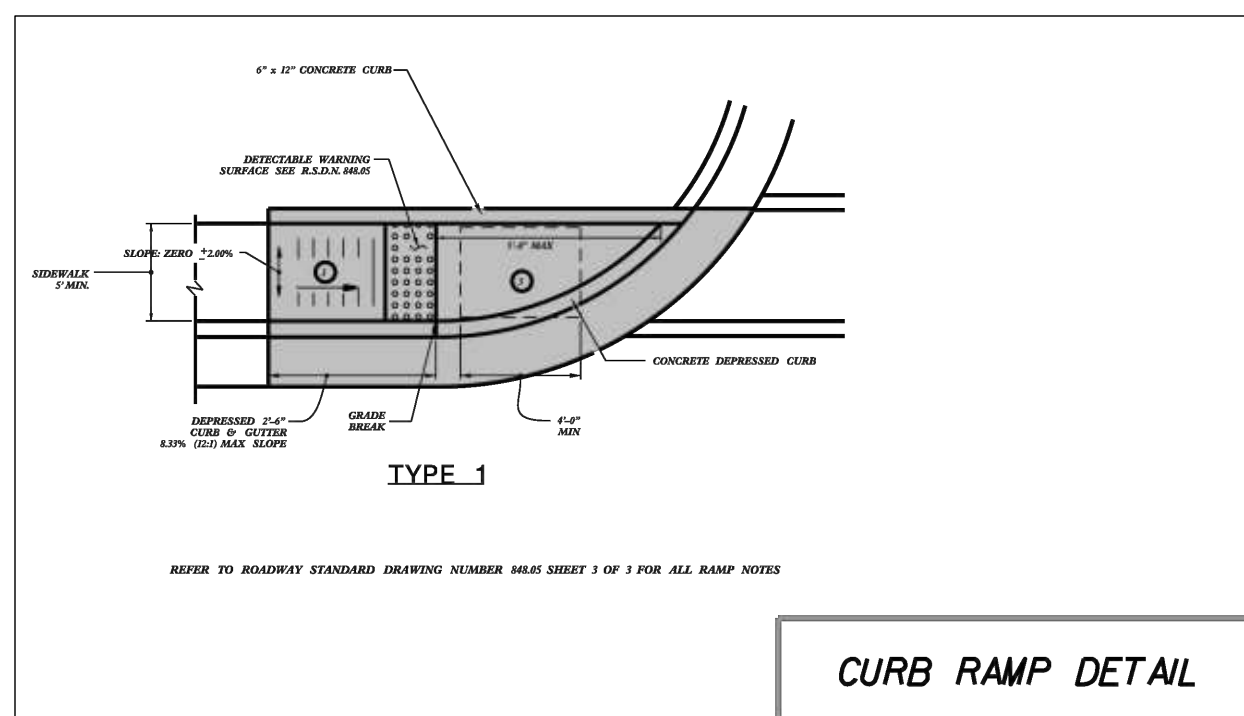
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COMMERCIAL  
TOWN OF ROLFSVILLE, WAKE COUNTY, NORTH CAROLINA  
CONSTRUCTION PLANS  
LANDSCAPE DETAILS**

## D-1.1



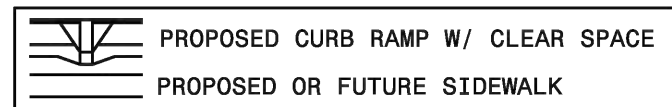
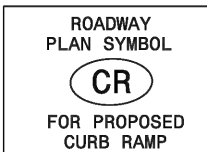






DETAIL SHOWING TYPICAL LOCATION OF CURB RAMPS,  
PEDESTRIAN CROSSWALKS AND STOP LINES FOR TEE INTERSECTIONS

DETAIL SHOWING TYPICAL LOCATION OF CURB  
RAMPS, PEDESTRIAN CROSSWALKS AND STOP LINES

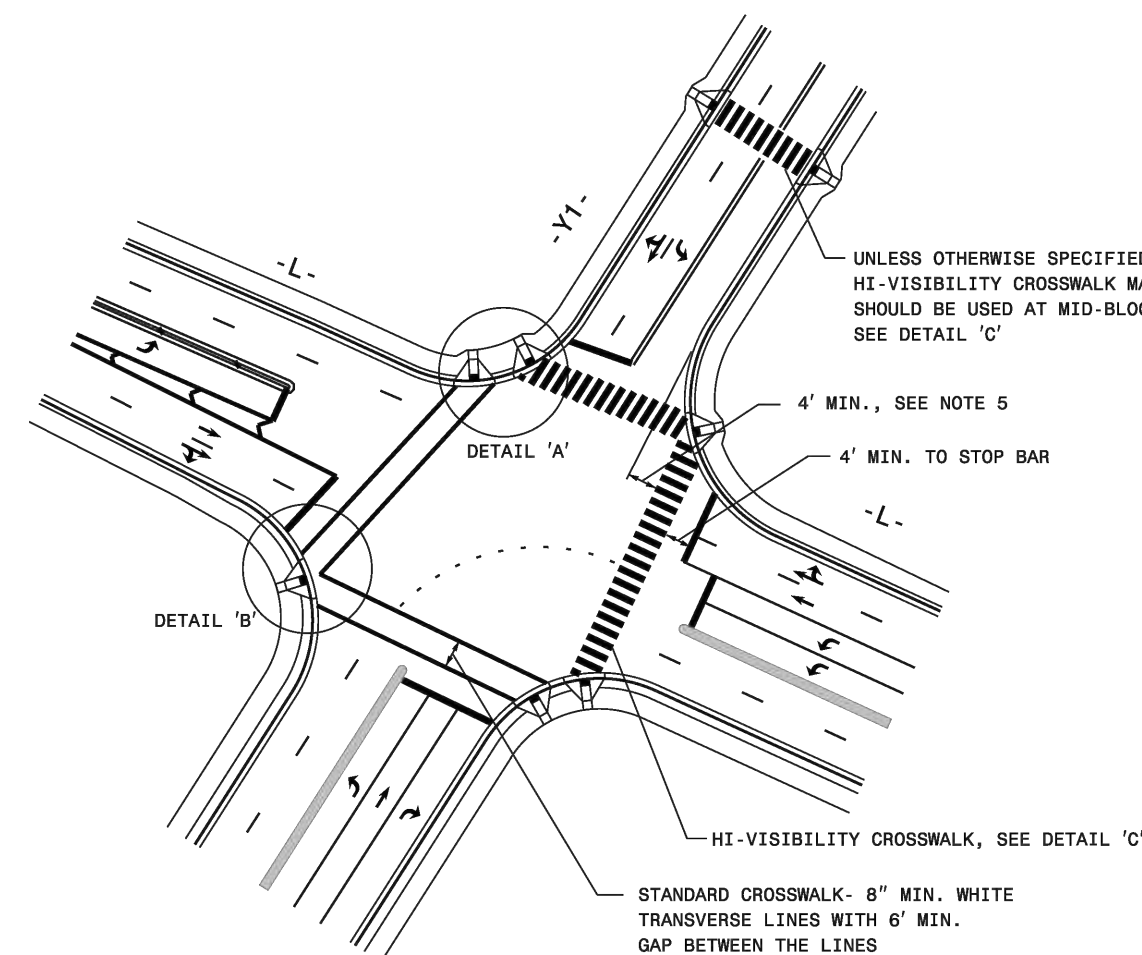


ALLOWABLE LOCATIONS  
-----  
DUAL RAMP RADII.....ANY

WAY STANDARD DRAWING FOR <b>CURB RAMP</b> CURB RAMP LOCATION	1-24 STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH N.C.
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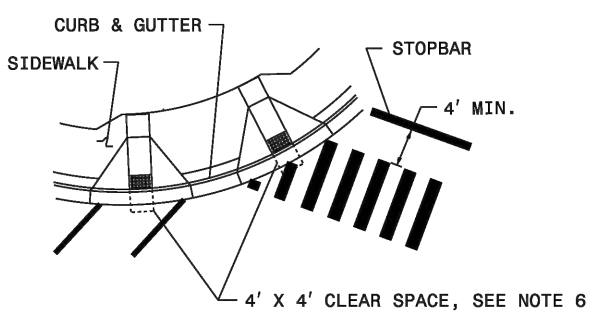
SHEET 5 OF 13  
**848.06**

## CROSSWALK PLACEMENT GUIDANCE

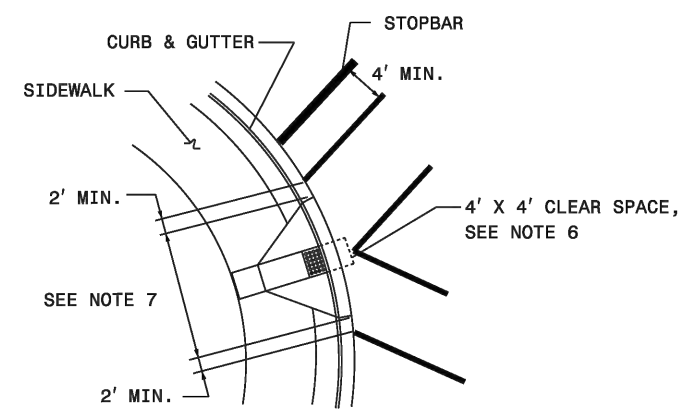


GENERAL NOTES:

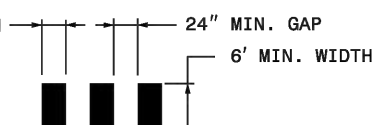
- 1- USE THE DETAILS ABOVE AND THE FOLLOWING NOTES FOR GUIDANCE IN PLACING CROSSWALK MARKINGS. REFER TO NCDOT ROADWAY STANDARD DRAWINGS, MUTCD AND ADA STANDARDS FOR ADDITIONAL GUIDANCE.
- 2- THE LOCATION AND TYPE OF CROSSWALK MARKINGS SHOWN ON THE ABOVE DETAILS ARE FOR REFERENCE ONLY. LOCATE CROSSWALK MARKINGS AS SHOWN ON THE PROJECT DETAIL SHEETS OR AS DIRECTED BY THE ENGINEER. THE CROSSWALK MARKING TYPE, STANDARD OR HI-VISIBILITY, SHALL BE INSTALLED AS SPECIFIED ON THE PROJECT DETAIL SHEETS OR AS DIRECTED BY THE ENGINEER.
- 3- THE STANDARD CROSSWALK IS TWO WHITE 6" MIN. TRANSVERSE LINES WITH A 6' MIN. GAP BETWEEN THE LINES. THE HI-VISIBILITY CROSSWALK IS TWO WHITE 6" MIN. TRANSVERSE LINES WITH 24" MIN. GAPS BETWEEN LINES. SEE DETAIL 'C'. HI-VISIBILITY CROSSWALKS SHOULD BE A MINIMUM OF 6' WIDE. CURB RAMPS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARES.
- 4- STOP BARS SHOULD BE PLACED A 4' MIN. IN ADVANCE OF NEAREST CROSSWALK LINE.
- 5- SET BACK DISTANCE FROM INSIDE CROSSWALK MARKING TO NEAREST EDGE OF TRAVEL IS 4' MIN.
- 6- BEYOND THE BOTTOM GRADE BREAK, A CLEAR SPACE OF 4' X 4' MIN. SHALL BE PROVIDED WITHIN THE MARKINGS.
- 7- SINGLE DIAGONAL CURB RAMPS WITH FLARED SIDES SHALL HAVE A SEGMENT OF CURB 2' MIN. LONG LOCATED ON EACH SIDE OF THE CURB RAMP AND WITHIN THE MARKED CROSSING, SEE DETAIL 'B'.
- 8- CURB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE TO THE LATEST NCDOT ROADWAY STANDARD DRAWINGS. CURB RAMPS THROUGH MEDIAN ISLANDS, SINGLE RAMPS AT JAIL CROSSINGS OR LIMITED 'B' SITUATIONS WILL BE HANDLED BY SPECIAL DETAILS. CONTACT THE CONTRACT STANDARDS AND DEVELOPMENT UNIT FOR DETAILS OR A SPECIAL DESIGN.



DETAIL 'A'- DUAL CURB RAMPS



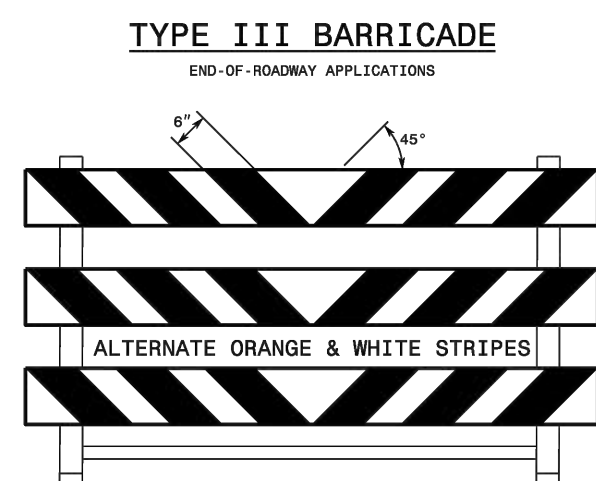
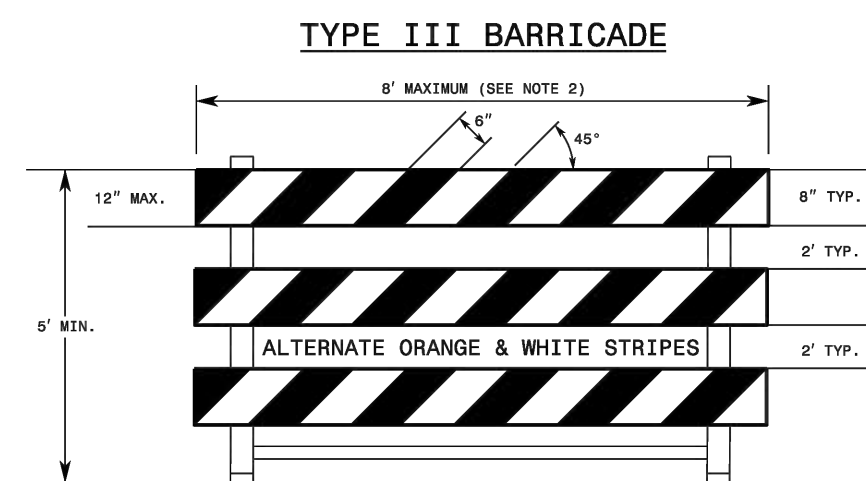
DETAIL 'B'- SINGLE DIAGONAL CURB RAMP



DETAIL 'C'- HI-VISIBILITY CROSSWALK

HIGHWAY STANDARD DRAWING FOR <b>PAVEMENT MARKINGS</b> PEDESTRIAN CROSSWALKS	1-24 STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.
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SHEET 1 OF 2  
1205.07



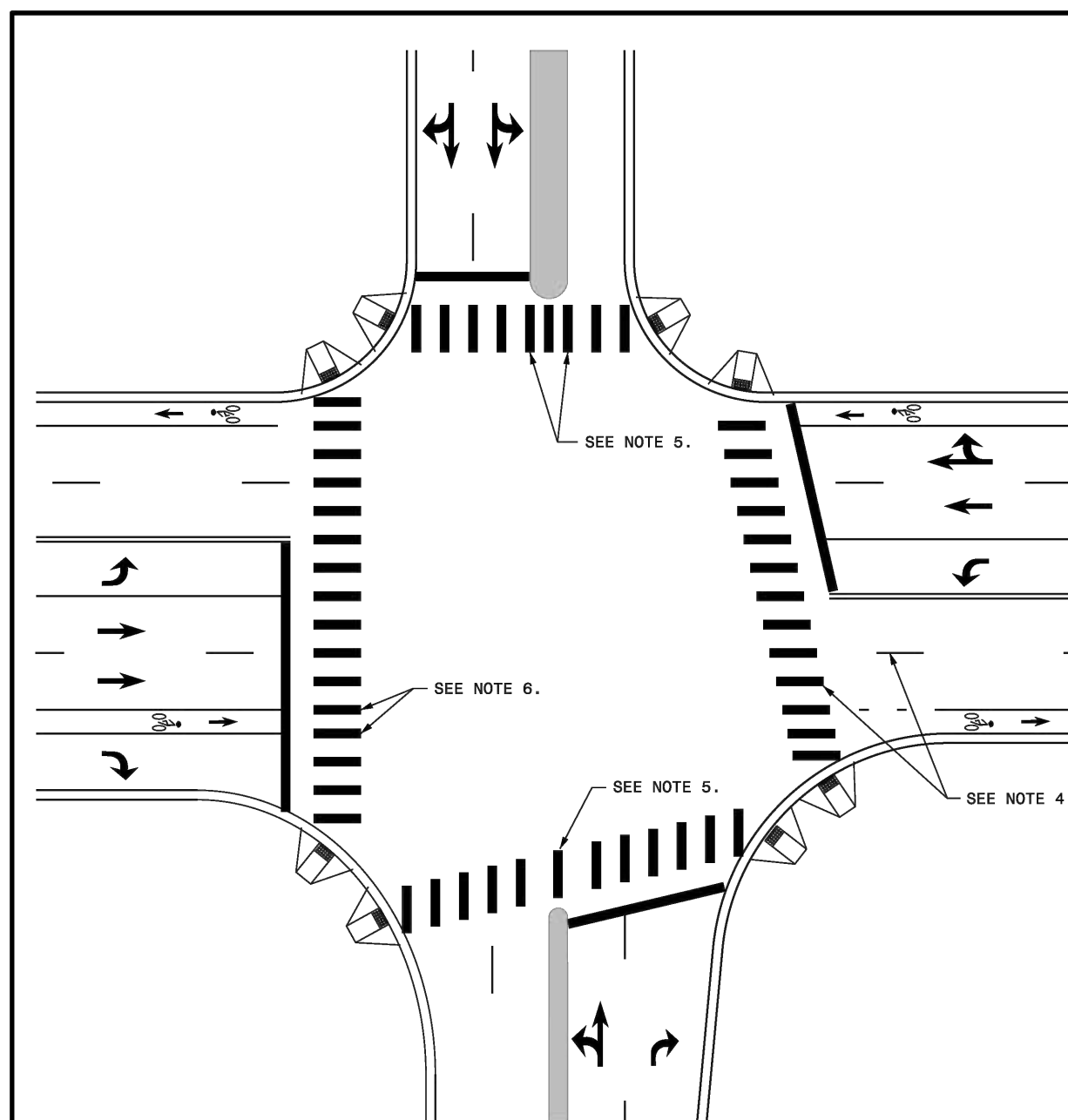
## GENERAL NOTES

1. HORIZONTAL RAILS FOR BARRICADES MAY BE CONSTRUCTED OF APPROVED COMPOSITE, HOLLOW/ CORRUGATED EXTRUDED RIGID POLYOLEFIN, HIGH DENSITY POLYETHYLENE, OR OTHER NCDOT APPROVED MATERIAL.
2. BARRICADE SHALL BE LIMITED TO A MAXIMUM LENGTH OF 8 FT UNLESS NCDOT APPROVED.
3. ONLY NCDOT APPROVED COMPOSITE AND ROLL-UP SIGNS MAY BE MOUNTED ON THE BARRICADE RAILS. MOUNT SIGNS TO BARRICADE RAILS TO ENSURE SIGN WILL NOT BECOME DETACHED UNDER NORMAL WIND AND TRAFFIC.
4. SIGNS SHALL BE MOUNTED A MINIMUM OF 1 FOOT FROM THE GROUND TO THE BOTTOM OF THE SIGN UNLESS SIGN R11-3 IS REQUIRED BY THE PLANS OR DIRECTED BY THE ENGINEER.
5. ASSEMBLY OF THE GENERIC BARRICADES MUST BE SELF CERTIFIED BY THE ASSEMBLER.
6. BARRICADES USED TO CLOSE A ROADWAY SHALL EXTEND ACROSS THE ENTIRE ROADWAY, WHERE LOCAL TRAFFIC MUST BE MAINTAINED. THEY MAY BE PLACED IN A STAGGERED PATTERN.
7. STRIPES ON WORK ZONE BARRICADE RAILS SHALL BE ALTERNATE ORANGE AND WHITE RETROREFLECTIVE STRIPES, SLOPE DOWNWARD TOWARDS THE SIDE WHICH TRAFFIC IS TO PASS OR TURN IN DETOURING. WHERE NO TURNS ARE INTENDED, THE STRIPES SHOULD SLOPE DOWNWARD TOWARD THE CENTER OF THE BARRICADE OR BARRICADES.
8. USE RED AND WHITE STRIPES FOR PERMANENT BARRICADES.
9. ALL BARRICADES MUST BE LISTED ON THE DEPARTMENT'S APPROVED PRODUCTS LIST.
10. PLACE SANDBAGS OR OTHER APPROVED BALLASTING METHODS ON THE FEET OF THE FRAME. DO NOT PLACE SANDBAGS ON TOP OF A STRIPED RAIL OR STABILIZER BAR. DO NOT BALLAST BARRICADES BY HEAVY OBJECTS SUCH AS ROCKS, CHUNKS OF CONCRETE OR OTHER ITEMS THAT WOULD CAUSE DAMAGE IF THE BARRICADE IS HIT BY A VEHICLE.

**1-24** STATE OF  
NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

# STANDARD DRAWING FOR BARRICADES TYPE-III

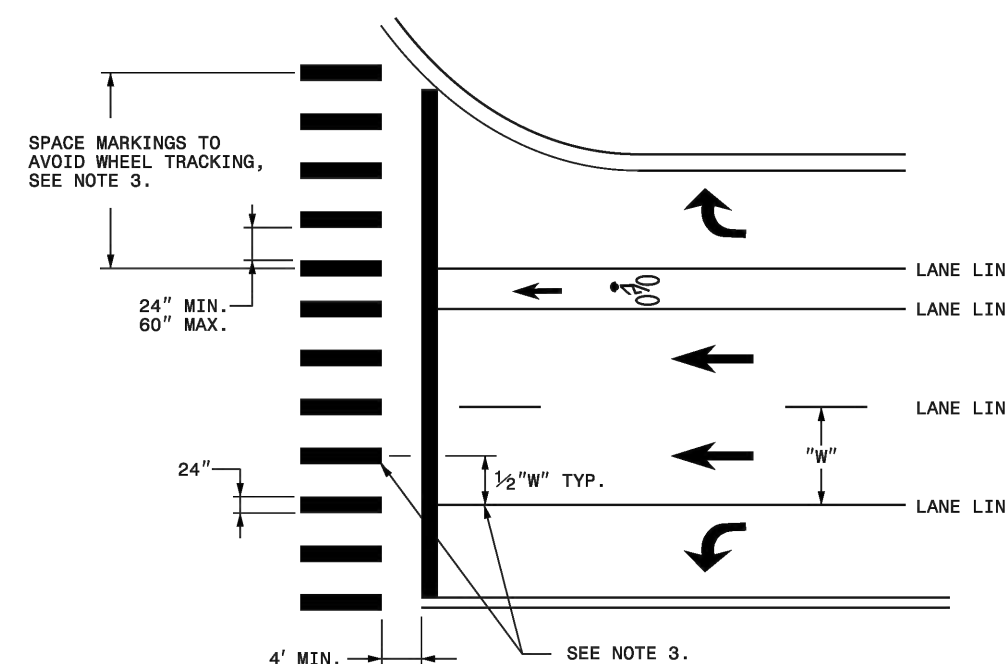
SHEET 1 OF 1  
**1145.01**



### CROSSWALK INTERSECTION DETAIL

GENERAL NOTES:

1. THE GUIDANCE IN THIS DETAIL IS TO BE USED WHEN NO-TRACK SPACING OF HI-VISIBILITY MARKINGS IS REQUESTED.
2. USE THE GUIDANCE SHOWN ON THE ABOVE DETAILS IN CONJUNCTION WITH PAVEMENT MARKING GUIDANCE SHOWN ON ROADWAY STANDARD DRAWINGS 1205.01 AND 1205.07.
3. PLACE MARKINGS TO AVOID WHEELPAATH OF VEHICLES. MARKINGS TYPICALLY WILL BE LOCATED CENTERED AT THE 4 FEET A SINGLE MARKING MAY BE USED. FOR MEDIAN MEDIANS, INSTALL ADDITIONAL MARKINGS IN THE MEDIAN AREA. THE SPACE BETWEEN THE MARKINGS SHALL NOT BE LESS THAN 24 INCHES. FOR GREAT RADIUS, LOCATE MARKINGS AT BEST SPACING TO AVOID WHEEL TRACKING. THE SPACE BETWEEN MARKINGS SHALL NOT BE LESS THAN 24 INCHES OR GREATER THAN 60 INCHES.
4. WHERE THE CROSSSALK IS SKewed TO THE LANE LINES, THE MARKINGS SHOULD BE PARALLEL TO THE LANE LINES.
5. PLACE MARKINGS ON BOTH EDGES OF THE NOSE OF A MEDIAN. FOR NARROW MEDIANS LESS THAN 4 FEET A SINGLE MARKING MAY BE USED. FOR MEDIAN MEDIANS, INSTALL ADDITIONAL MARKINGS IN THE MEDIAN AREA. THE SPACE BETWEEN THE MARKINGS SHALL NOT BE LESS THAN 24 INCHES. FOR GREAT RADIUS, LOCATE MARKINGS AT BEST SPACING TO AVOID WHEEL TRACKING. THE SPACE BETWEEN MARKINGS SHALL NOT BE LESS THAN 24 INCHES OR GREATER THAN 60 INCHES.
6. LOCATE MARKINGS CENTERED ON BICYCLE LANE LINES. MARKINGS SHALL NOT BE LOCATED IN THE CENTER OF THE BICYCLE PATH.



### CROSSWALK MARKING DETAIL

**1-24** STATE OF  
NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

## ROADWAY STANDARD DRAWING FOR PAVEMENT MARKINGS

SHEET 2 OF 2  
**1205.07**

[illegible]

SEAL:

**STRONGROCK**  
ENGINEERING GROUP

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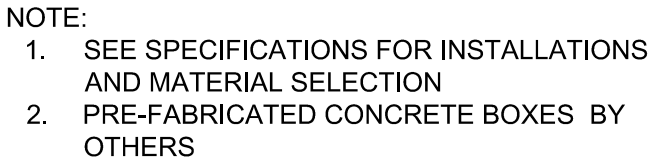
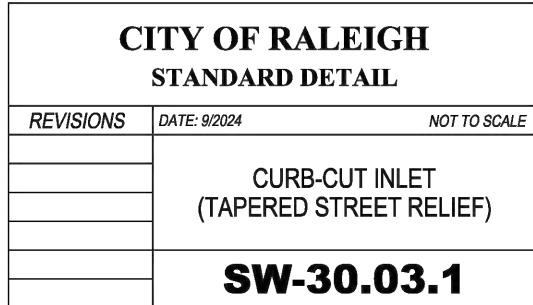
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COMMERCIAL  
TOWN OF ROLESVILLE, WAKE COUNTY, NORTH CAROLINA  
CONSTRUCTION PLANS  
SITE DETAILS**

## DRAWING SHEET

## D-2.1

12 OF 17

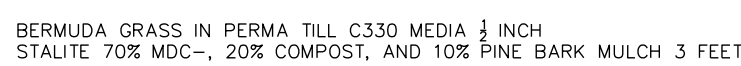




285 TURF

282 ELEVATION

281 ELEVATION



#6 STONE MEDIA 1 FOOT DEPTH

#78 STONE/ SAND MEDIA 4 FEET DEEP

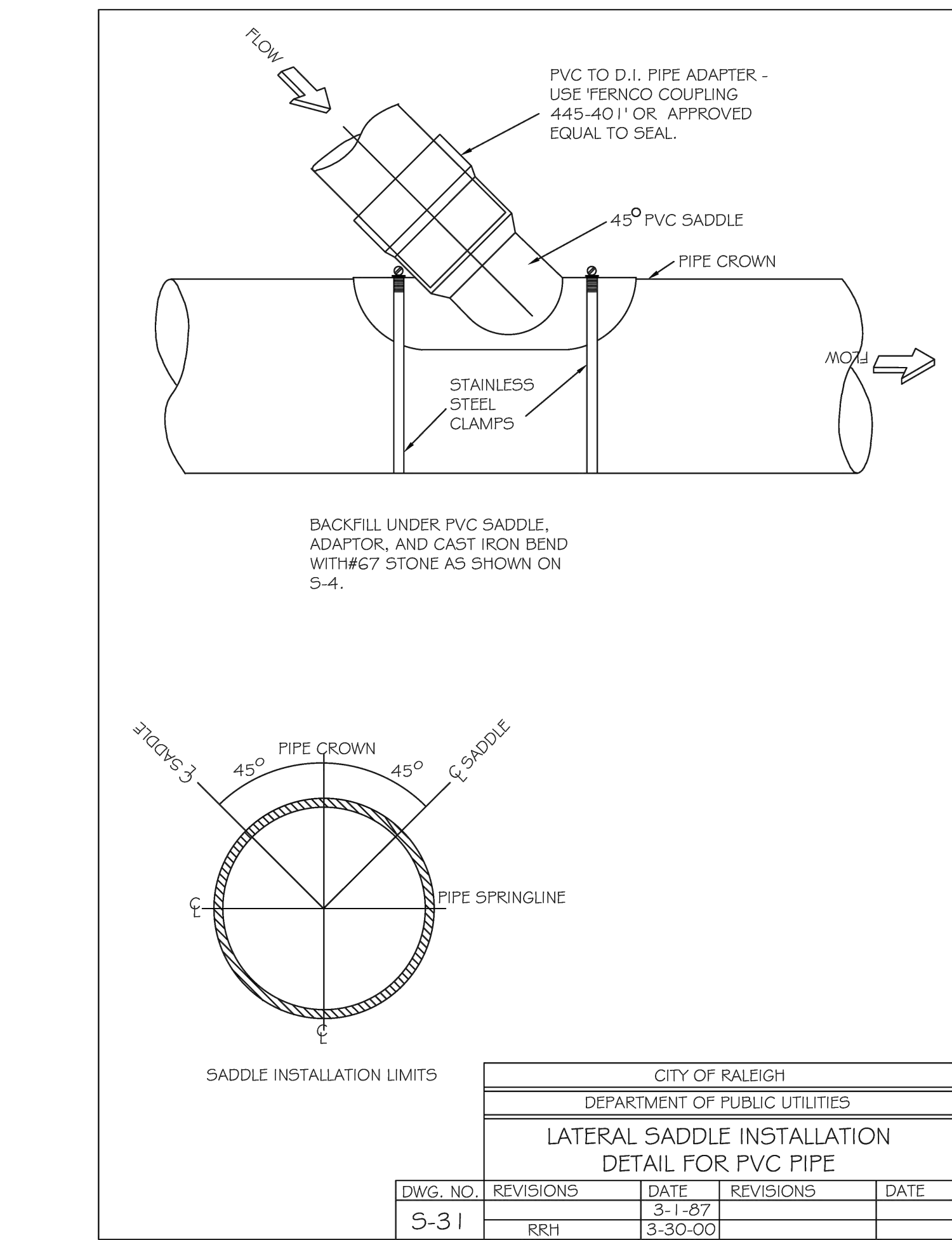
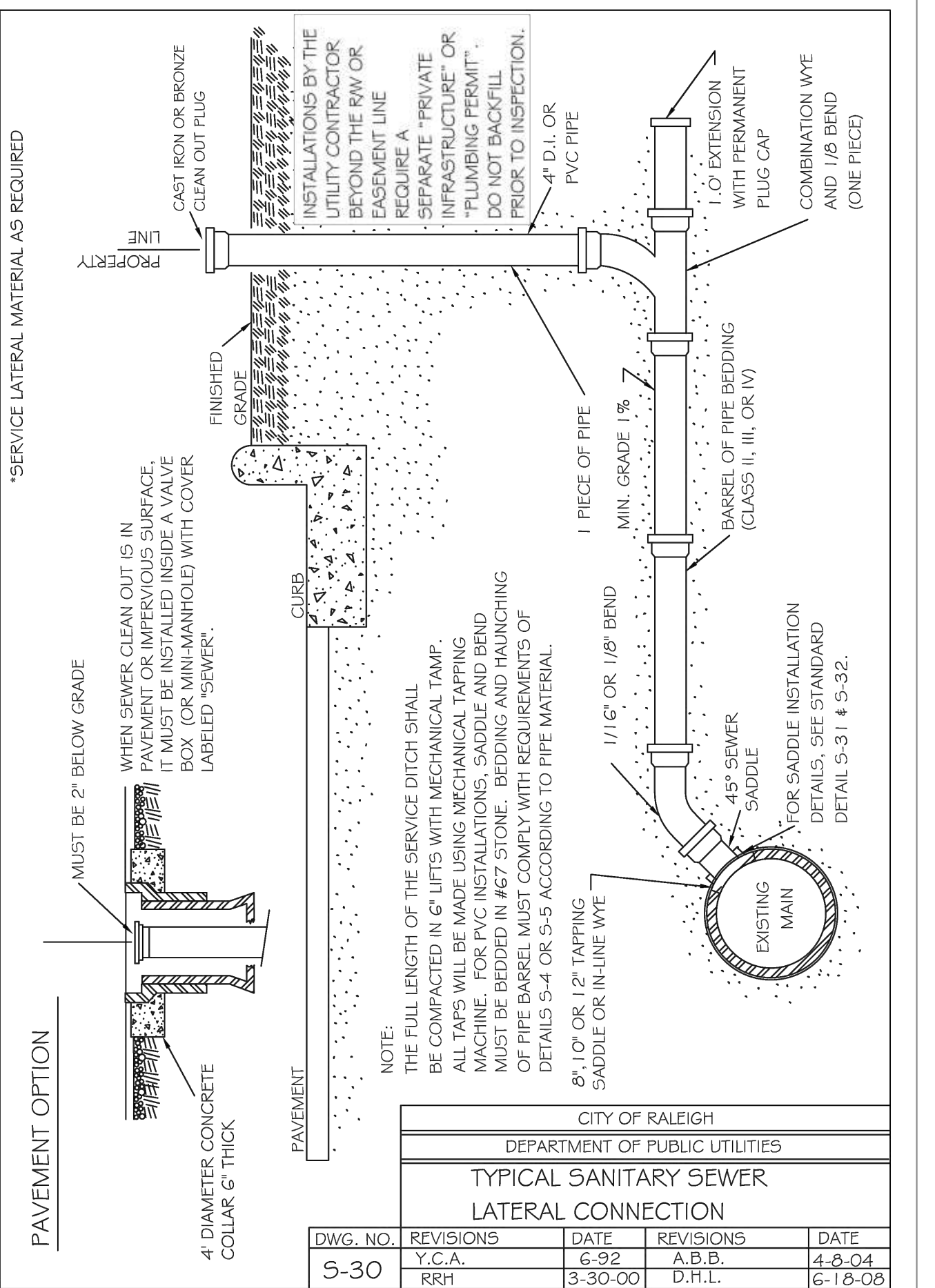
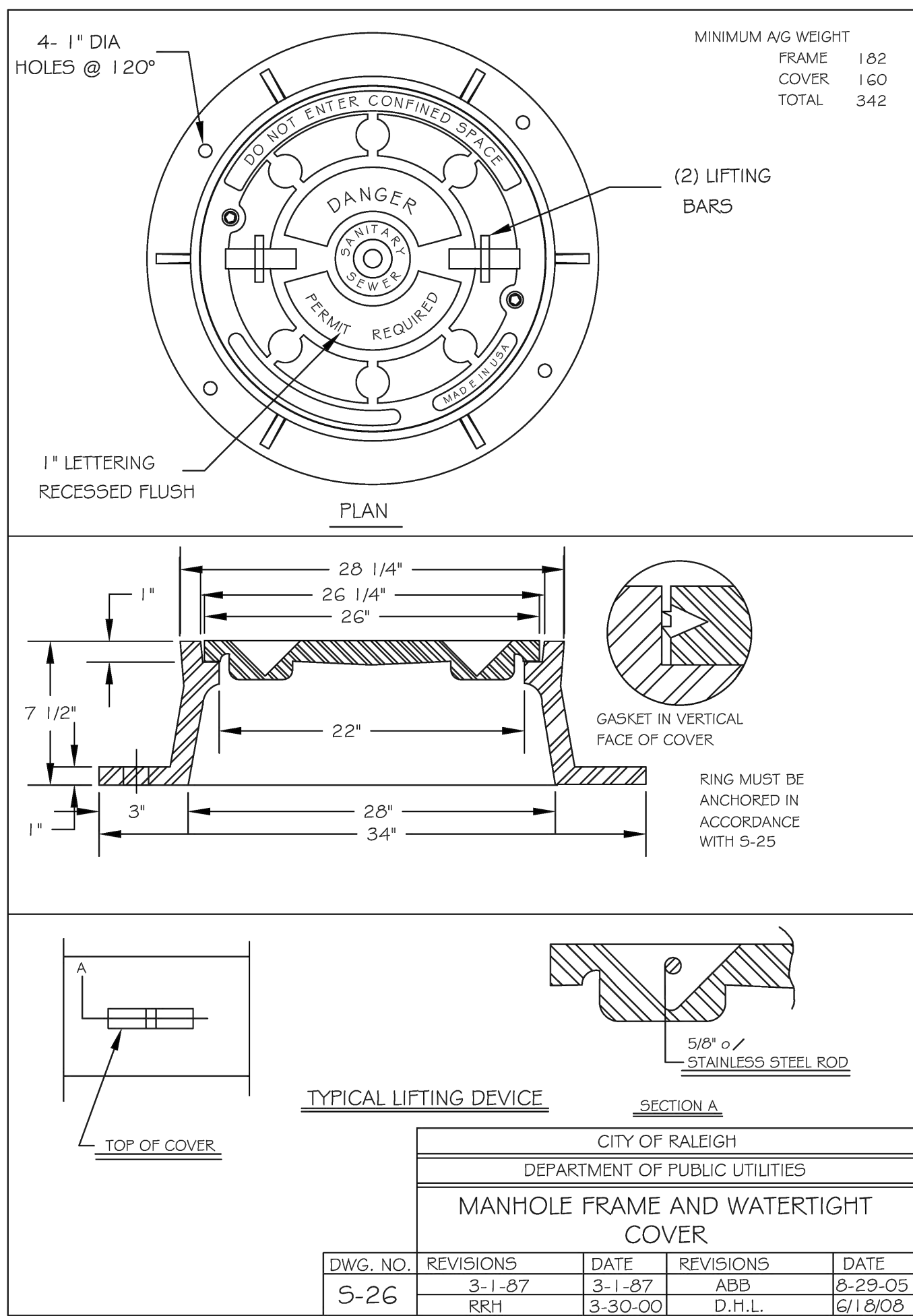
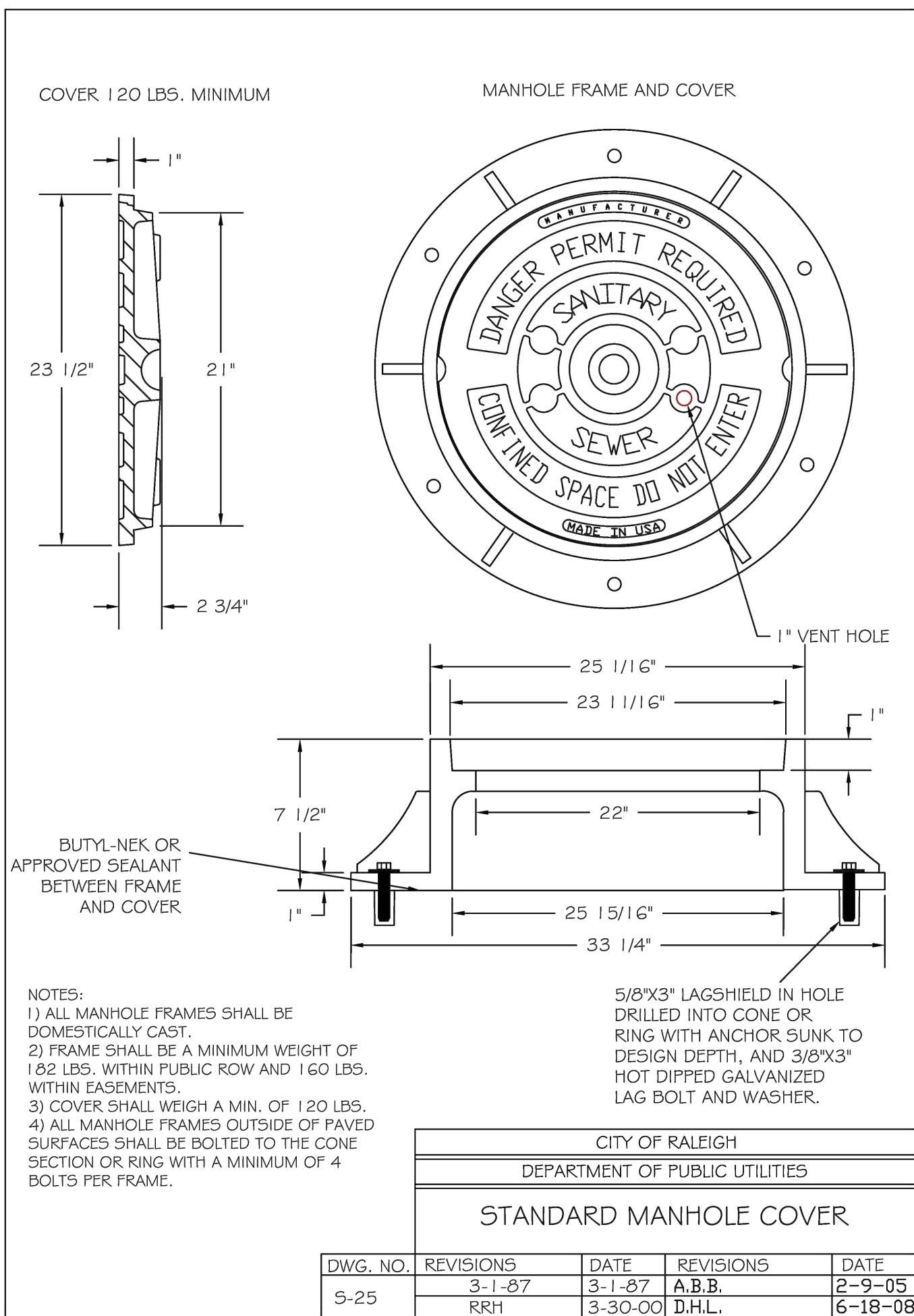
#6 STONE MEDIA 1 FOOT  
12" ADS HDPE PERFERATED DRAINAGE RUN PERPENDICTULAR  
#6 STONE MEDIA 1 FOOT  
12" ADS HDPE PERFERATED DRAINAGE PIPE 10FT OC SPACING  
#6 STONE MEDIA .5 FEET

#78 STONE/SAND MEDIA 3.5 FEET

#6 STONE MEDIA .5 FEET

NCDOT RIP-RAP CLASS A 2 FEET

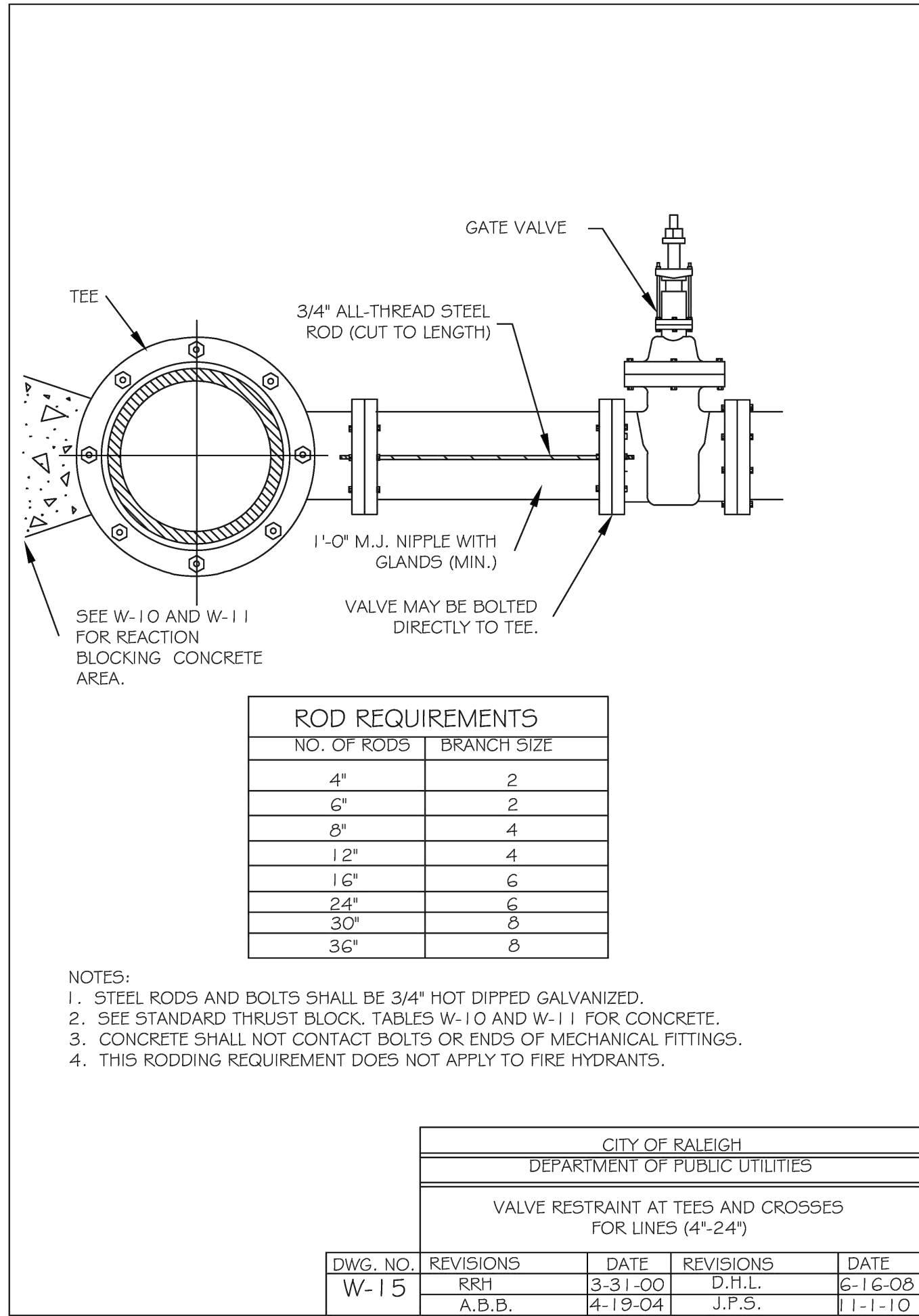
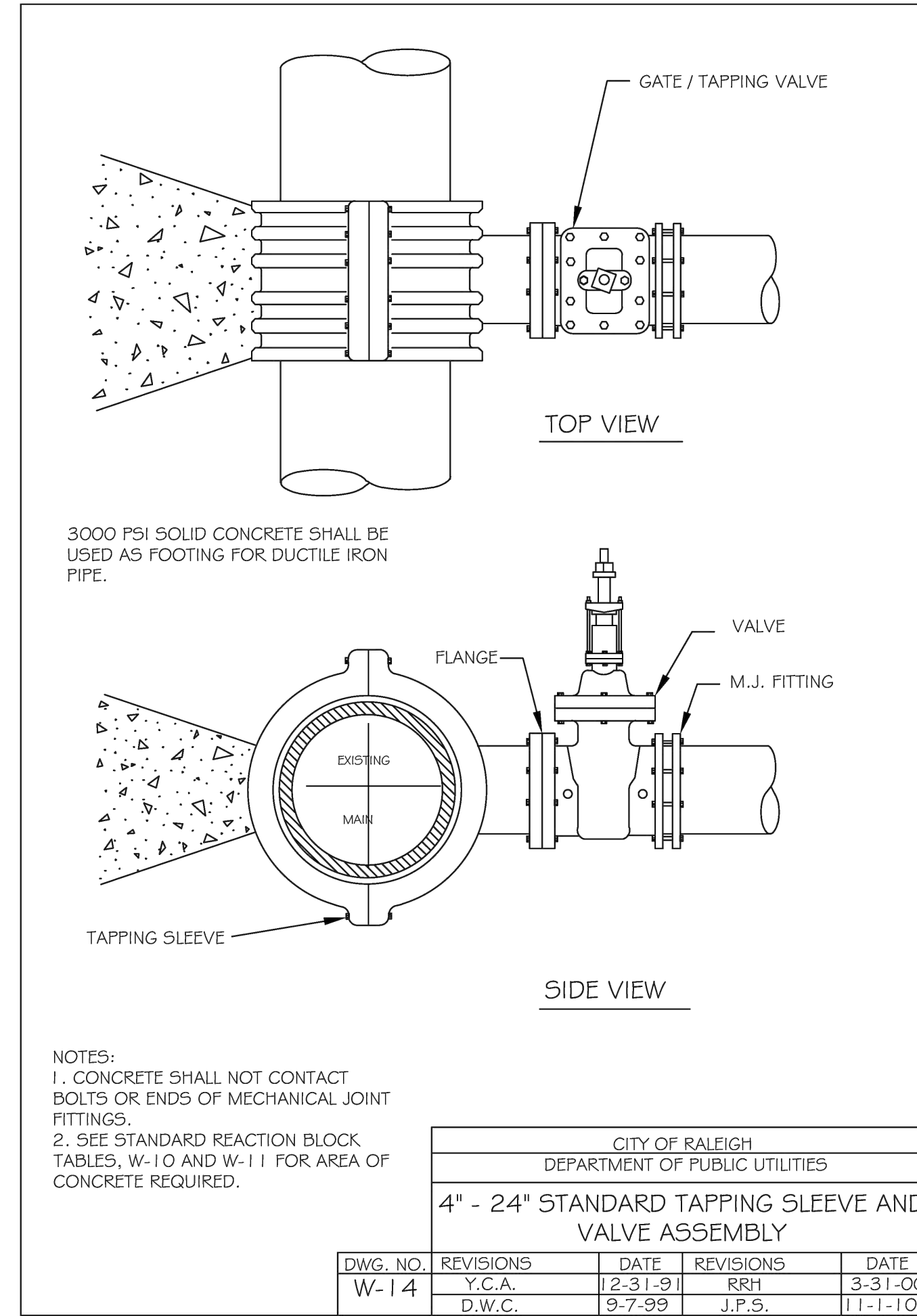
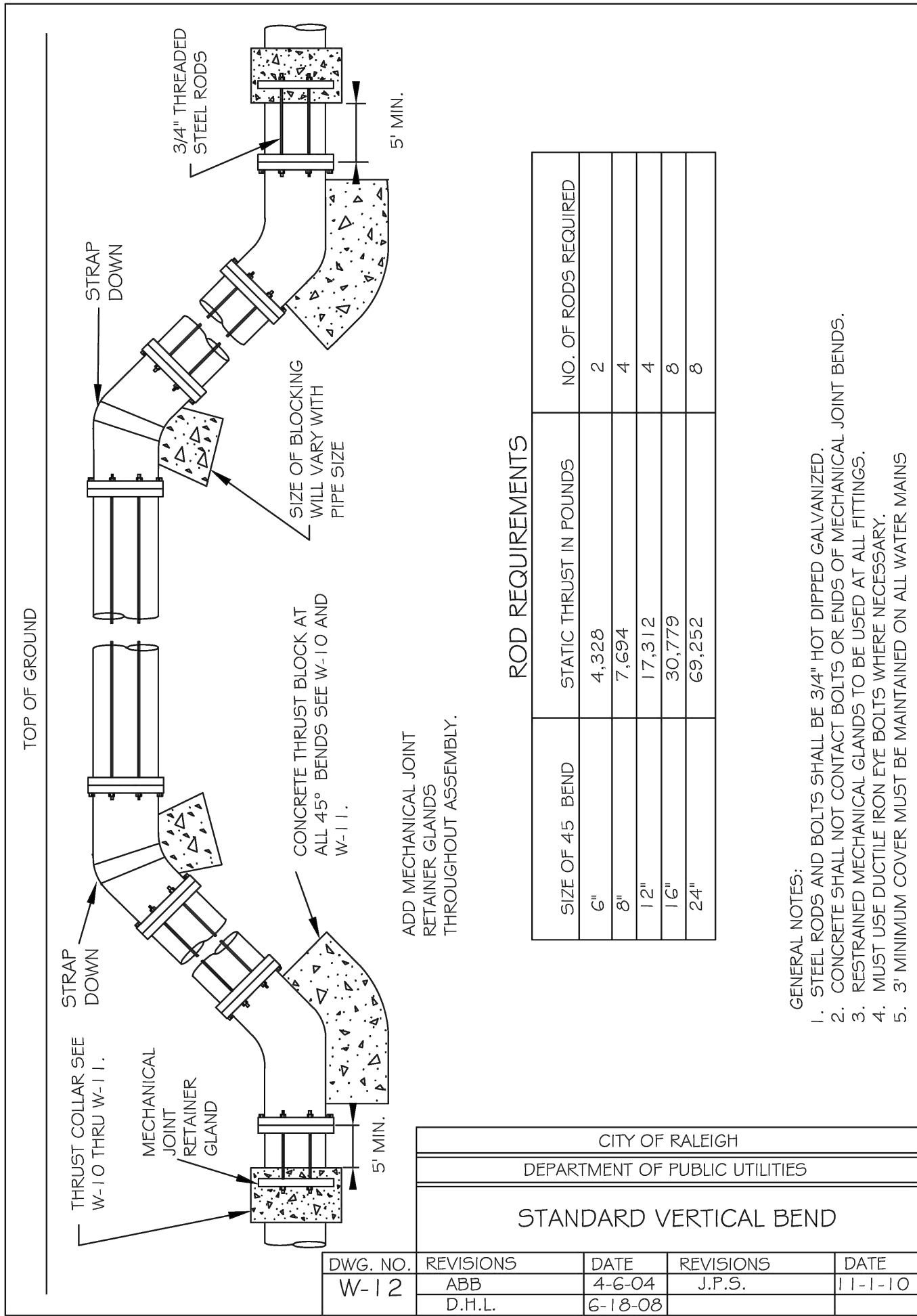
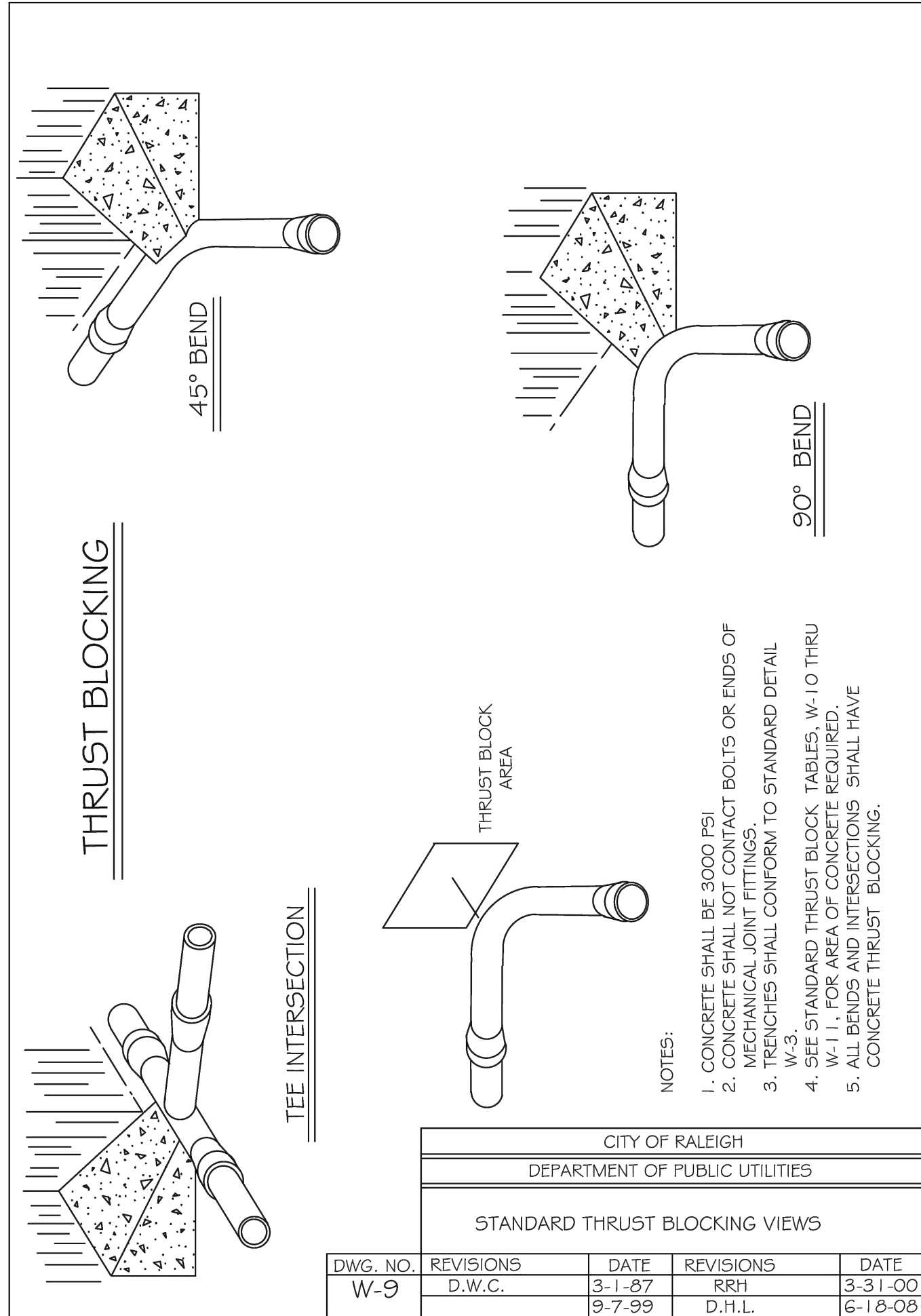
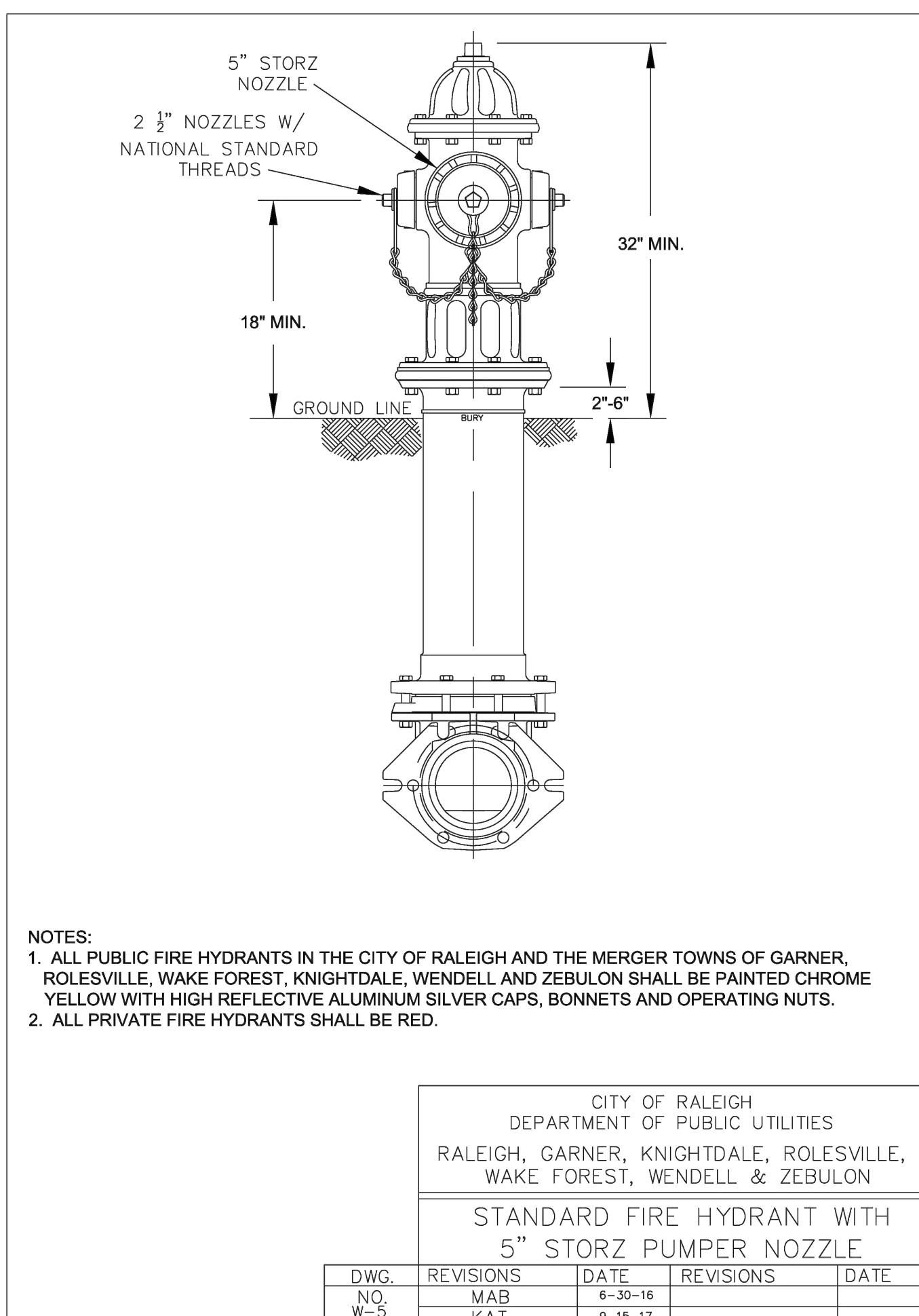
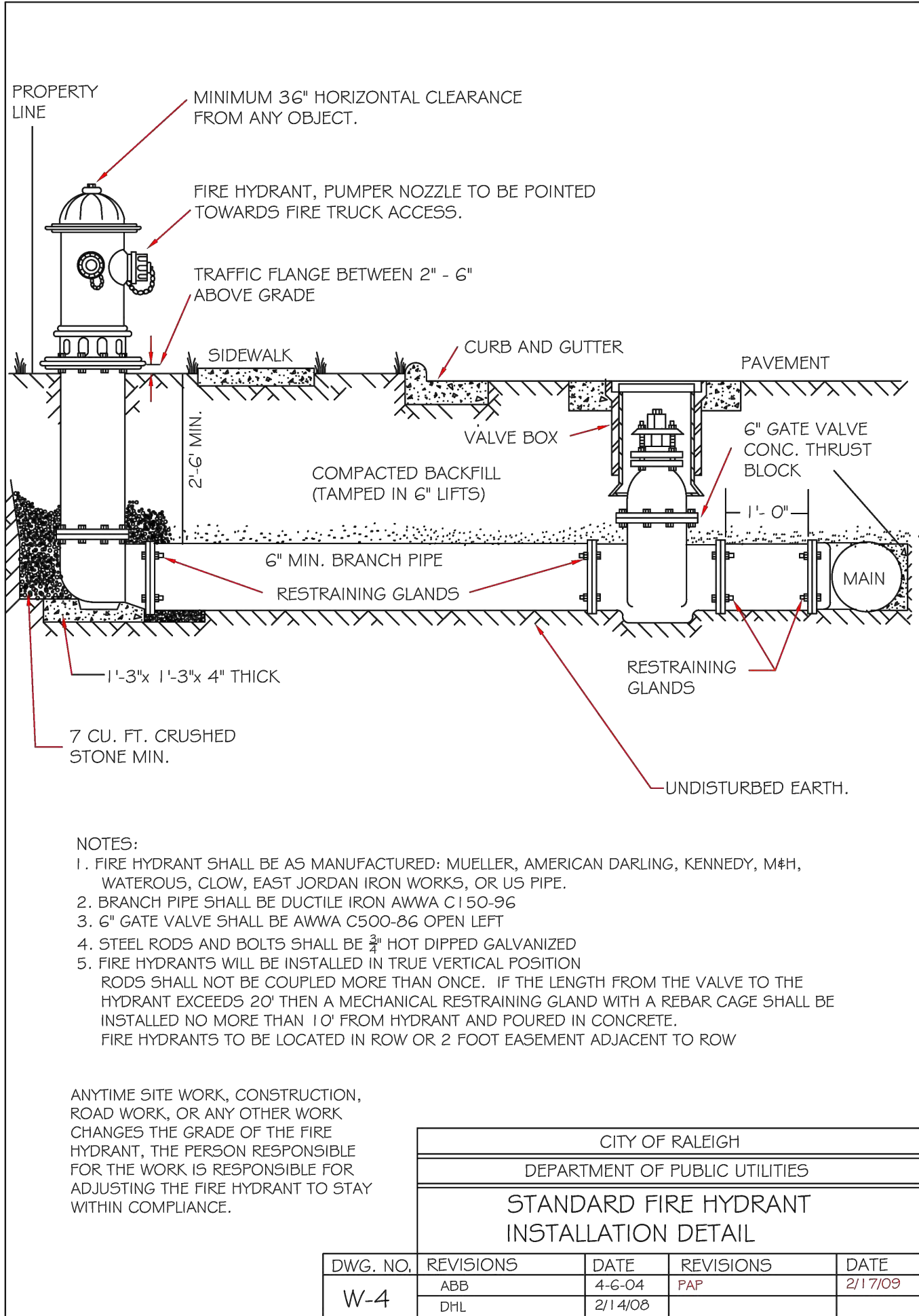












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THE CITY OF RALEIGH CONSENTS TO THE CONNECTION AND EXTENSION OF THE CITY'S PUBLIC WATER SYSTEM AS SHOWN ON THIS PLAN. THE MATERIAL AND CONSTRUCTION METHODS USED FOR THIS PROJECT SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY'S PUBLIC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

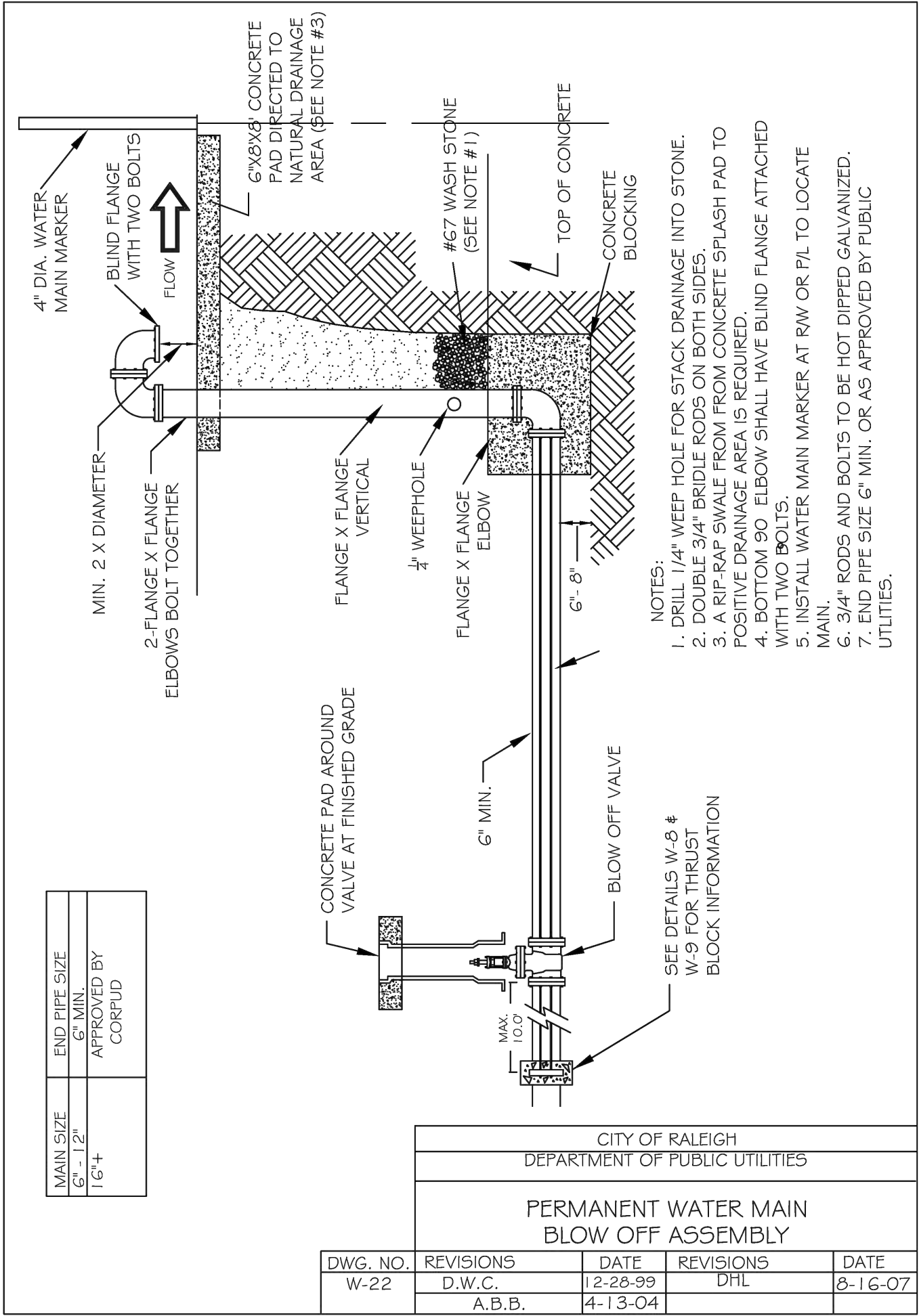
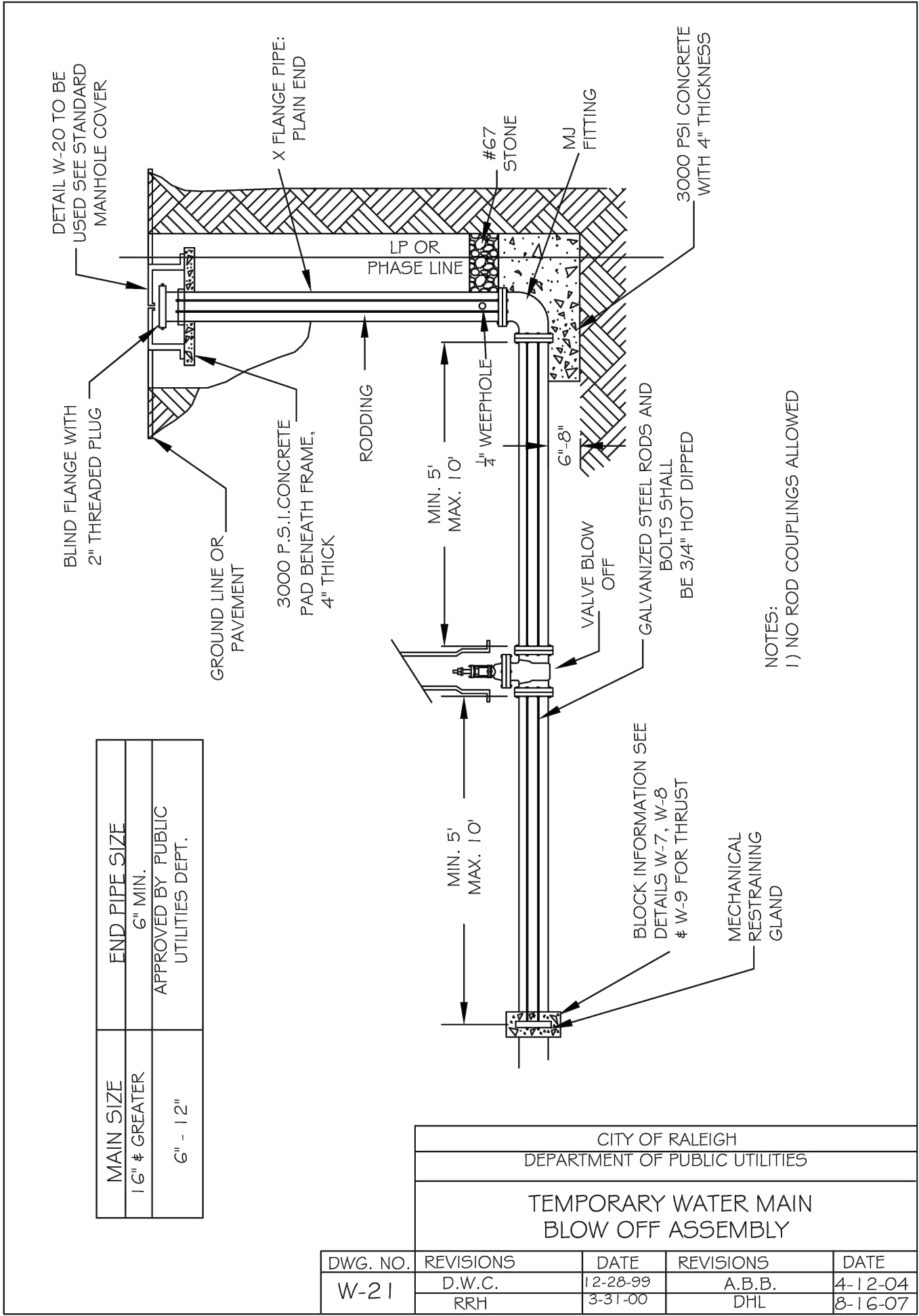
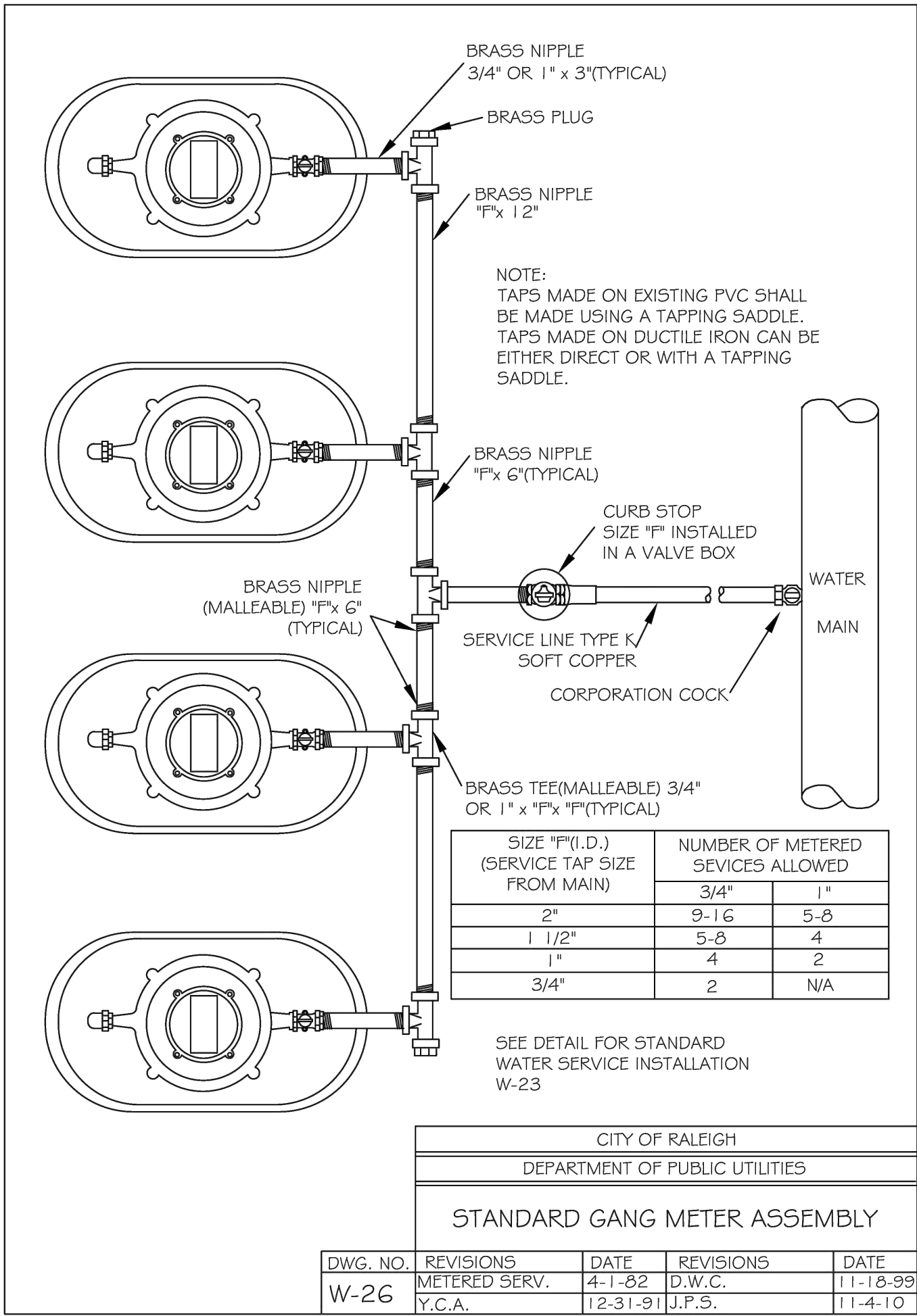
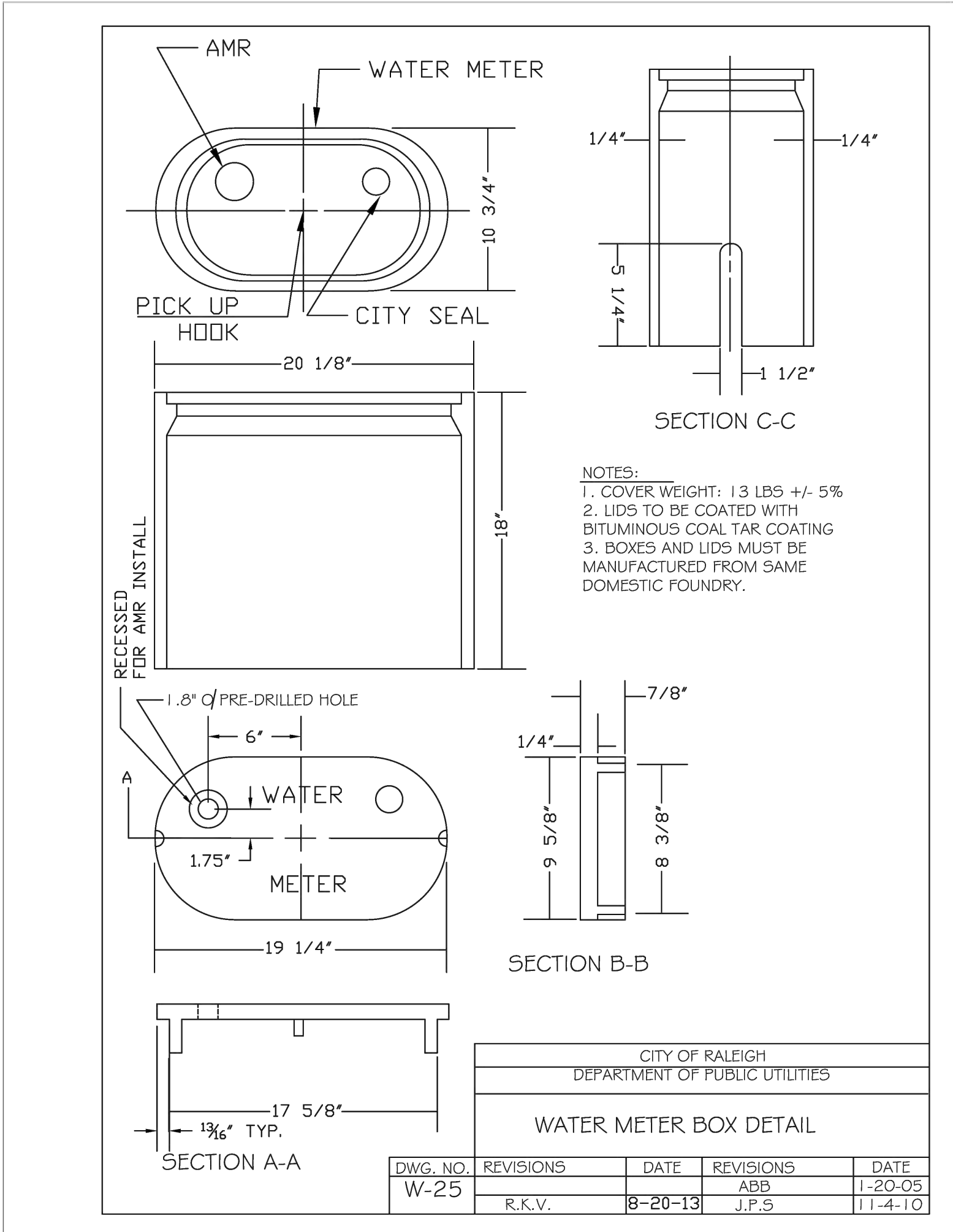
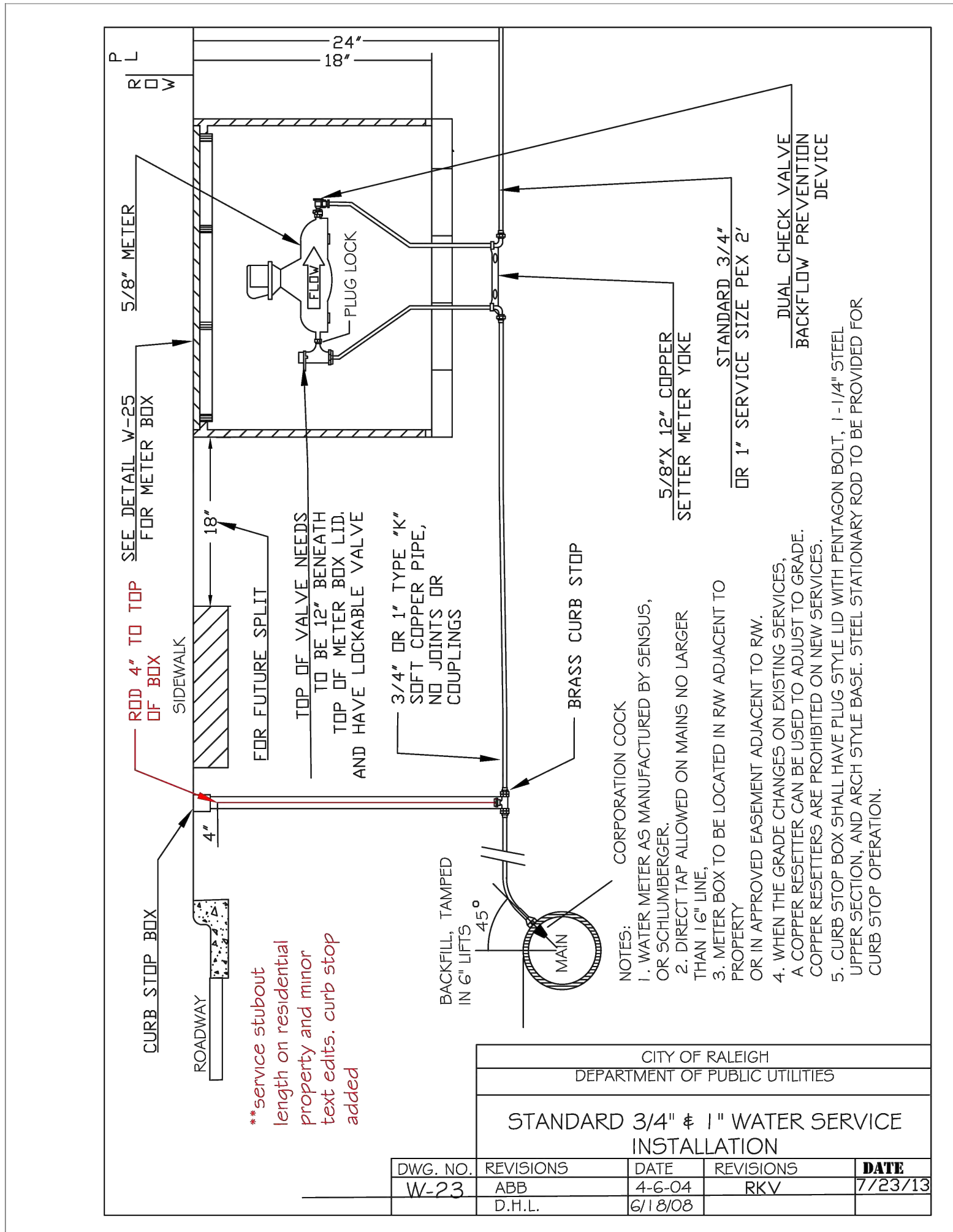
**PRIVATE**

**SEWER COLLECTION / EXTENSION SYSTEM**

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CITY OF RALEIGH  
PUBLIC UTILITIES DEPARTMENT PERMIT # \_\_\_\_\_

**PRIVATE**  
**SEWER COLLECTION / EXTENSION SYSTEM**  
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