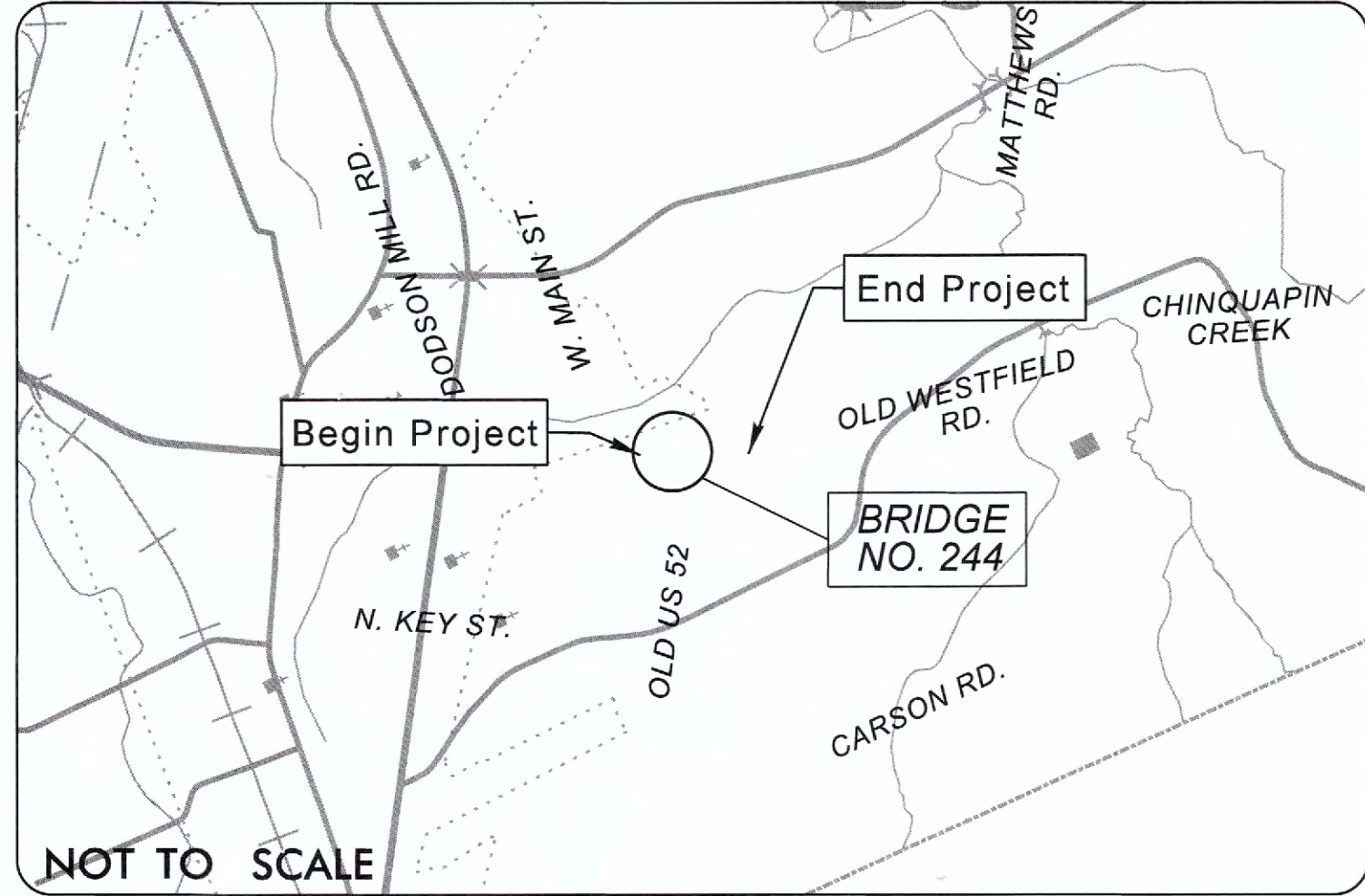


STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BD-5111V	UC-1	11
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
45357.1.22	BRZ-1809(5)	PE	

09/08/19

TIP PROJECT: BD-5111V



VICINITY MAP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SURRY COUNTY
UTILITY CONSTRUCTION PLANS

LOCATION: SR 1908 (OLD WESTFIELD RD.) OVER SR 1856 (OLD US 52)
TYPE OF WORK: WATER LINE & SANITARY SEWER LINE RELOCATION

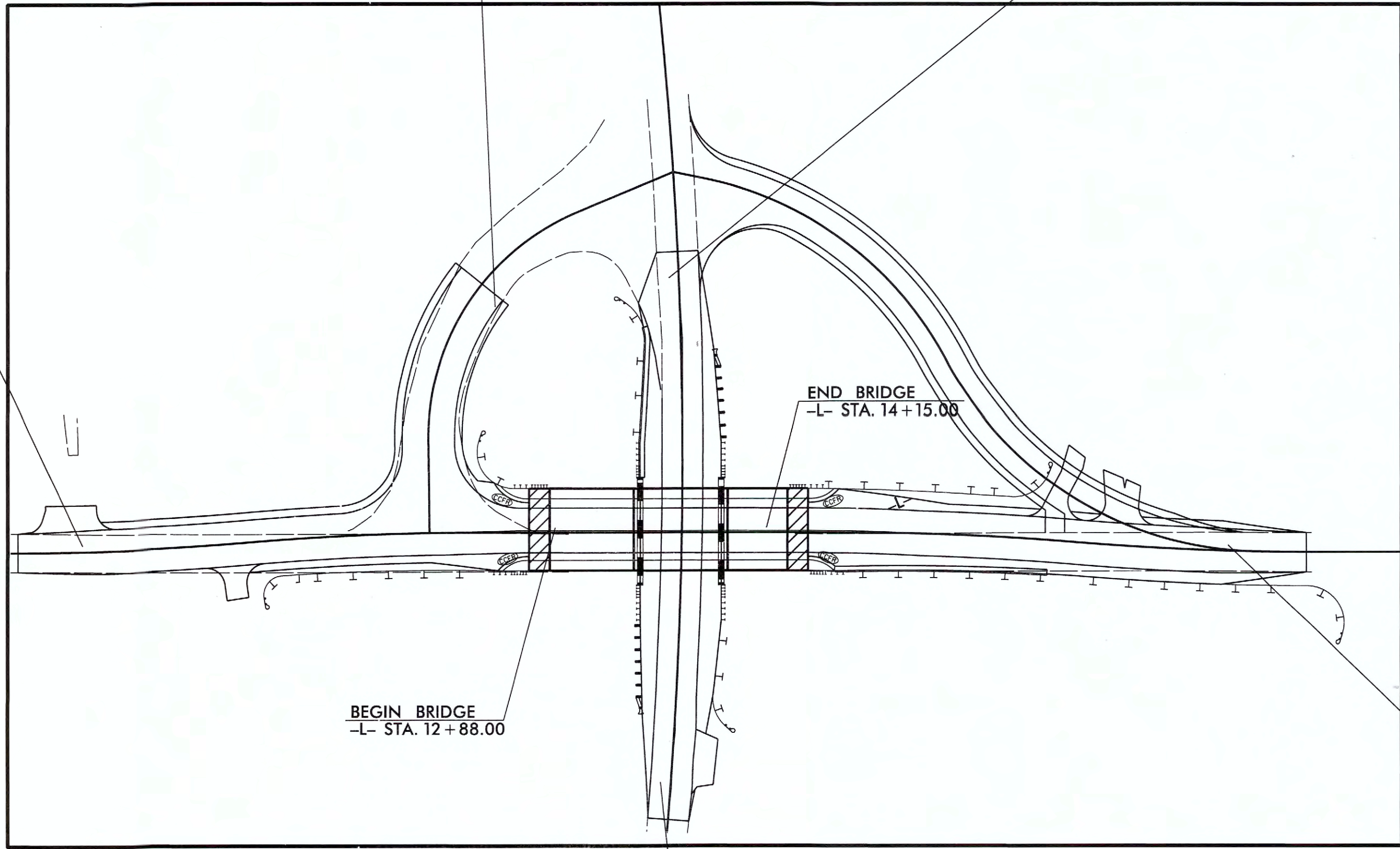
BEGIN CONSTRUCTION

-Y2- STA. 11 + 20.00

BEGIN CONSTRUCTION

-Y1- STA. 10 + 82.62

BEGIN PROJECT BD-5111V
-L- STA. 10 + 03.92



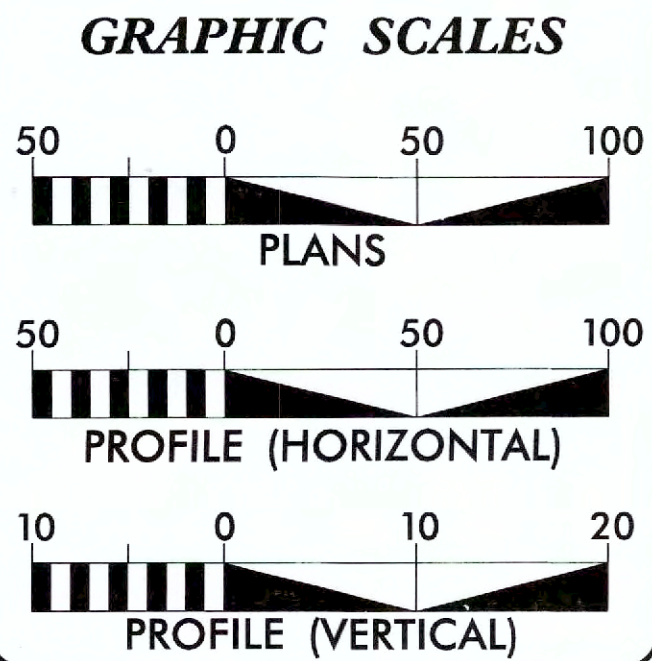
NAD 83/NSRS 2007

END CONSTRUCTION

-Y1- STA. 13 + 86.99

END PROJECT BD-5111V
-L- STA. 16 + 92.54

CONTRACT:



DESIGN DATA

DESIGN SPEED = 40 mph
ADT = 3,000 (2010)

INDEX OF SHEETS

- | | |
|---------------|----------------|
| UC-1 | TITLE SHEET |
| UC-2 | SYMBOL SHEET |
| UC-3 | PROJECT NOTES |
| UC-3A THRU 3E | DETAIL SHEETS |
| UC-4 | PLAN SHEET |
| UC-5 & UC-6 | PROFILE SHEETS |

UTILITY OWNER

TOWN OF PILOT MOUNTAIN
6" & 12" WATER
8" GRAVITY SANITARY SEWER



RUMMEL, KLEPPER & KAHL, LLP
900 RIDGEFIELD DRIVE, SUITE 350
RALEIGH, NORTH CAROLINA 27609
NC LICENSE NO. F-0112
1-888-521-4455 OR 919-878-9560

2012 STANDARD SPECIFICATIONS

LETTING DATE:

FOR
DIVISION OF HIGHWAYS

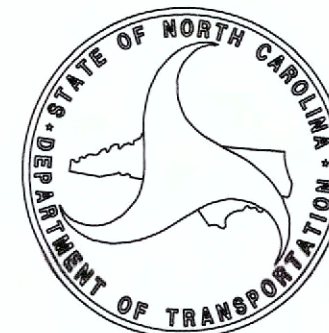
B. Keith Skinner, P.E.
PROJECT ENGINEER

Stephen E. Roberts, P.E.
PROJECT DESIGN ENGINEER



SIGNATURE: *Bryan M. Bady* P.E.
UTILITY ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA



2/18/2015
R:\Utilities\Rdy_Ut\Proj\BD-5111V_UC_psh01.dgn
Bbodey

5/14/99

R:\Utilities\6205\6205-UC\6205-UC.dgn
REV: 2/1/2012

PROJECT REFERENCE NO.
BD-5111V

SHEET NO.
UC-2



UTILITY CONSTRUCTION PLANS

PROPOSED WATER SYMBOLS

Water Line (Sized as Shown)	12" WL
11¼ Degree Bend	++
22½ Degree Bend	++x
45 Degree Bend	+x
90 Degree Bend	+
Plug	
Tee	+
Cross	+
Reducer	►
Gate Valve	GV
Butterfly Valve	BV
Tapping Valve	TGV
Line Stop	LS
Line Stop with Bypass	LS/BP
Blow Off	BO
Fire Hydrant	PFH
Relocate Fire Hydrant	RFH
Remove Fire Hydrant	REM FH
Water Meter	PWM
Relocate Water Meter	RWM
Remove Water Meter	REM WM
Water Pump Station	PSTW
RPZ Backflow Preventer	RPZ
DCV Backflow Preventer	PBFP
Relocate RPZ Backflow Preventer	RRPZ
Relocate DCV Backflow Preventer	RBFP

PROPOSED SEWER SYMBOLS

Gravity Sewer Line (Sized as Shown)	12" SS
Force Main Sewer Line (Sized as Shown)	12" FSS
Manhole (Sized per Note)	•
Sewer Pump Station	PS(SS)

PROPOSED MISCELLANEOUS UTILITIES SYMBOLS

Power Pole	⊙
Telephone Pole	⊙
Joint Use Pole	⊙
Telephone Pedestal	TEL PED
Utility Line by Others (Type as Shown)	PROP O/H POW LINES
Trenchless Installation	12" TL INSTALL
Encasement by Open Cut	24" ENCAS BY OC
Encasement	24" ENCASMENT

Thrust Block	
Air Release Valve	AR
Utility Vault	UV
Concrete Pier	CP
Steel Pier	SP
Plan Note	NOTE
Pay Item Note	PAY ITEM

EXISTING UTILITIES SYMBOLS

Power Pole	•
Telephone Pole	•
Joint Use Pole	•
Utility Pole	•
Utility Pole with Base	□
H-Frame Pole	•—•
Power Transmission Line Tower	⊠
Water Manhole	⊙
Power Manhole	⊙
Telephone Manhole	⊙
Sanitary Sewer Manhole	⊙
Hand Hole for Cable	⊠
Power Transformer	⊠
Telephone Pedestal	⊠
CATV Pedestal	⊠
Gas Valve	◇
Gas Meter	◇
Located Miscellaneous Utility Object	⊙
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

*Underground Power Line	P
*Underground Telephone Cable	T
*Underground Telephone Conduit	TC
*Underground Fiber Optics Telephone Cable	T FO
*Underground TV Cable	TV
*Underground Fiber Optics TV Cable	TV FO
*Underground Gas Pipeline	G
Aboveground Gas Pipeline	A/G Gas
*Underground Water Line	W
Aboveground Water Line	A/G Water
*Underground Gravity Sanitary Sewer Line	SS
Aboveground Gravity Sanitary Sewer Line	A/G Sanitary Sewer
*Underground SS Forced Main Line	FSS
Underground Unknown Utility Line	UTL
SUE Test Hole	⊙
Water Meter	⊙
Water Valve	⊙
Fire Hydrant	⊙
Sanitary Sewer Cleanout	⊙

*For Existing Utilities
Utility Line Drawn from Record (Type as Shown)
Designated Utility Line (Type as Shown)

PLANS PREPARED BY :



RUMMEL, KLEPPER & KAHL, LLP
900 RIDGEFIELD DRIVE SUITE 350
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UTILITY CONSTRUCTION

GENERAL NOTES:

1. THE PROPOSED UTILITY CONSTRUCTION SHALL MEET THE APPLICABLE REQUIREMENTS OF THE NC DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" DATED JANUARY 2012.

2. THE EXISTING UTILITIES BELONG TO THE TOWN OF PILOT MOUNTAIN.

3. ALL WATER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL AND NATURAL RESOURCES, DIVISION OF WATER RESOURCES. ALL SEWER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES, DIVISION OF WATER RESOURCES. PERFORM ALL WORK IN ACCORDANCE WITH THE APPLICABLE PLUMBING CODES.

4. THE UTILITY OWNER OWNS THE EXISTING UTILITY FACILITIES AND WILL OWN THE NEW UTILITY FACILITIES AFTER ACCEPTANCE BY THE DEPARTMENT. THE DEPARTMENT OWNS THE CONSTRUCTION CONTRACT AND HAS ADMINISTRATIVE AUTHORITY. COMMUNICATIONS AND DECISIONS BETWEEN THE CONTRACTOR AND UTILITY OWNER ARE NOT BINDING UPON THE DEPARTMENT OR THIS CONTRACT UNLESS AUTHORIZED BY THE ENGINEER. AGREEMENTS BETWEEN THE UTILITY OWNER AND CONTRACTOR FOR THE WORK THAT IS NOT PART OF THIS CONTRACT OR IS SECONDARY TO THIS CONTRACT ARE ALLOWED, BUT ARE NOT BINDING UPON THE DEPARTMENT.

5. PROVIDE ACCESS FOR THE DEPARTMENT PERSONNEL AND THE UTILITY OWNER'S REPRESENTATIVES TO ALL PHASES OF CONSTRUCTION. NOTIFY DEPARTMENT PERSONNEL AND THE UTILITY OWNER TWO WEEKS PRIOR TO COMMENCEMENT OF ANY WORK AND ONE WEEK PRIOR TO SERVICE INTERRUPTION. KEEP UTILITY OWNERS' REPRESENTATIVES INFORMED OF WORK PROGRESS AND PROVIDE OPPORTUNITY FOR INSPECTION OF CONSTRUCTION AND TESTING.

6. THE PLANS DEPICT THE BEST AVAILABLE INFORMATION FOR THE LOCATION, SIZE, AND TYPE OF MATERIAL FOR ALL EXISTING UTILITIES. MAKE INVESTIGATIONS FOR DETERMINING THE EXACT LOCATION, SIZE, AND TYPE MATERIAL OF THE EXISTING FACILITIES AS NECESSARY FOR THE CONSTRUCTION OF THE PROPOSED UTILITIES AND FOR AVOIDING DAMAGE TO EXISTING FACILITIES. REPAIR ANY DAMAGE INCURRED TO EXISTING FACILITIES TO THE ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE DEPARTMENT.

7. MAKE FINAL CONNECTIONS OF THE NEW WORK TO THE EXISTING SYSTEM WHERE INDICATED ON THE PLANS, AS REQUIRED TO FIT THE ACTUAL CONDITIONS, OR AS DIRECTED.

8. MAKE CONNECTIONS BETWEEN EXISTING AND PROPOSED UTILITIES AT TIMES MOST CONVENIENT TO THE PUBLIC, WITHOUT ENDANGERING THE UTILITY SERVICE, AND IN ACCORDANCE WITH THE UTILITY OWNER'S REQUIREMENTS. MAKE CONNECTIONS ON WEEKENDS, AT NIGHT, AND ON HOLIDAYS IF NECESSARY.

9. ALL UTILITY MATERIALS SHALL BE APPROVED PRIOR TO DELIVERY TO THE PROJECT. SEE 1500-7, " SUBMITTALS AND RECORDS" IN SECTION 1500 OF THE STANDARD SPECIFICATIONS.

LIST OF STANDARD DRAWINGS

1515.02 FIRE HYDRANT

1520.01 SEWER CLEAN OUT

PROJECT SPECIFIC NOTES:

1. PROPOSED WATER LINE -W2- LINE
STATION 10+00 TO STATION 14+57
SHALL BE D.I.R.J. (DUCTILE IRON
RESTRAINED JOINT) PIPE PRESSURE
CLASS 350. MANUFACTURED RESTRAINED
JOINTS SHALL BE USED FOR THE BRIDGE
ATTACHMENT.

2. PROPOSED WATER LINE -W1- LINE
STATION 9+60 TO STATION 13+02
SHALL BE DUCTILE IRON PIPE
PRESSURE CLASS 350. RESTRAINED
JOINT WHERE NOTED ON PLANS.

3. VALVES ON WATER MAINS 6 INCHES IN DIAMETER OR LARGER SHALL BE GATE VALVES, UNLESS OTHERWISE NOTED ON THE UTILITY CONSTRUCTION PLANS.

4. CONTRACTOR SHALL CONNECT ALL WATER LINES AND SERVICE CONNECTIONS USING NECESSARY FITTINGS.



UTILITY CONSTRUCTION PLANS

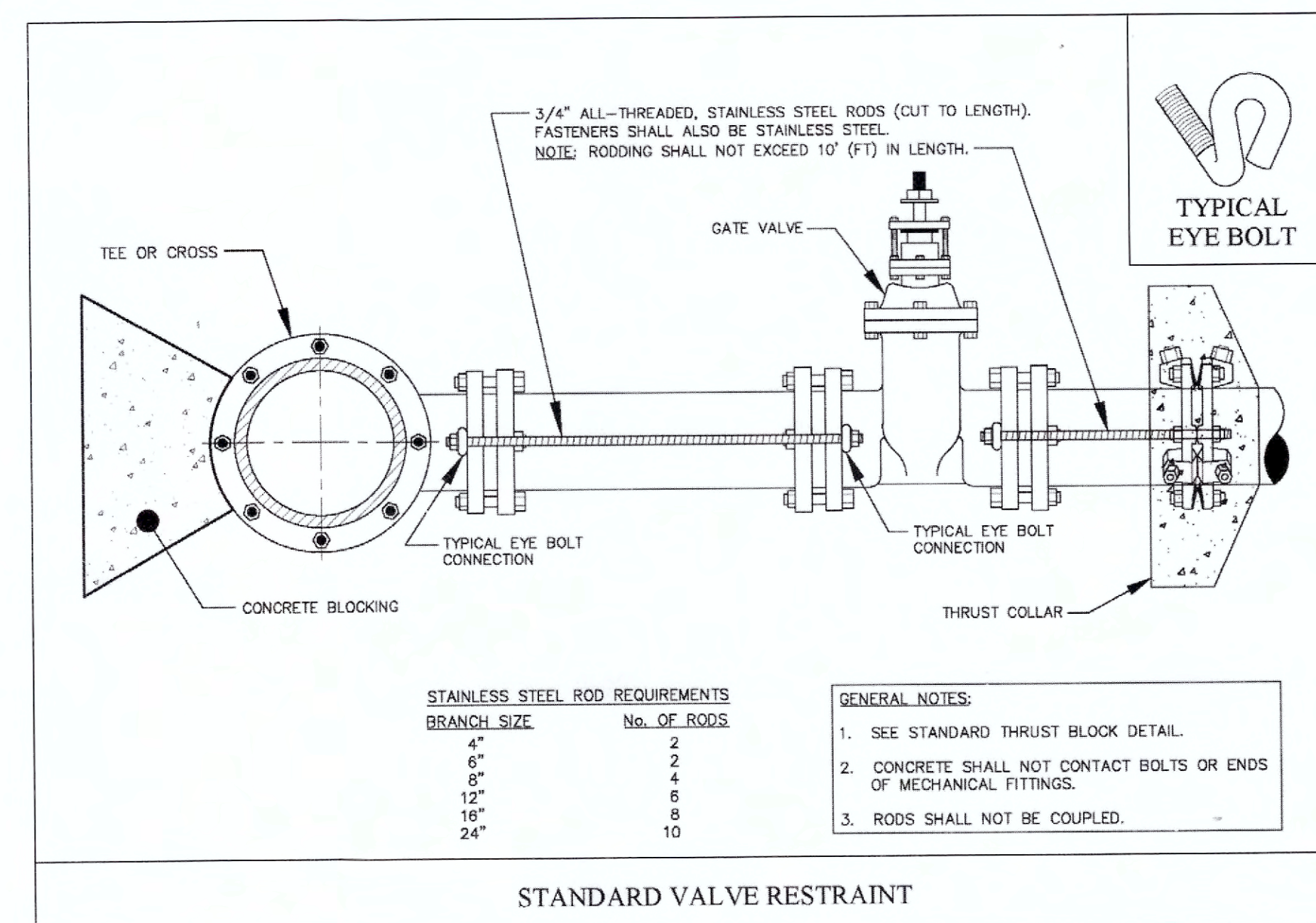
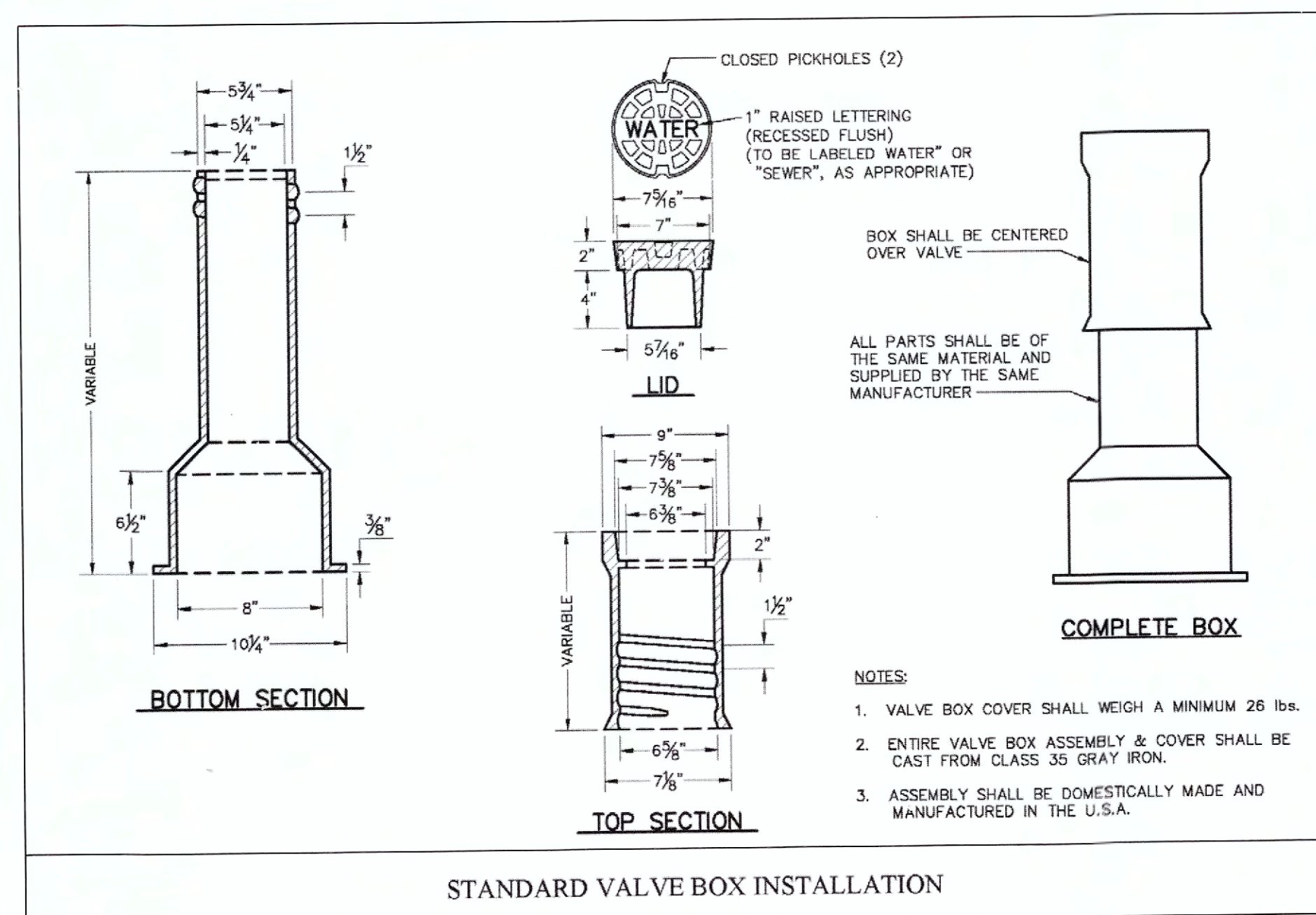
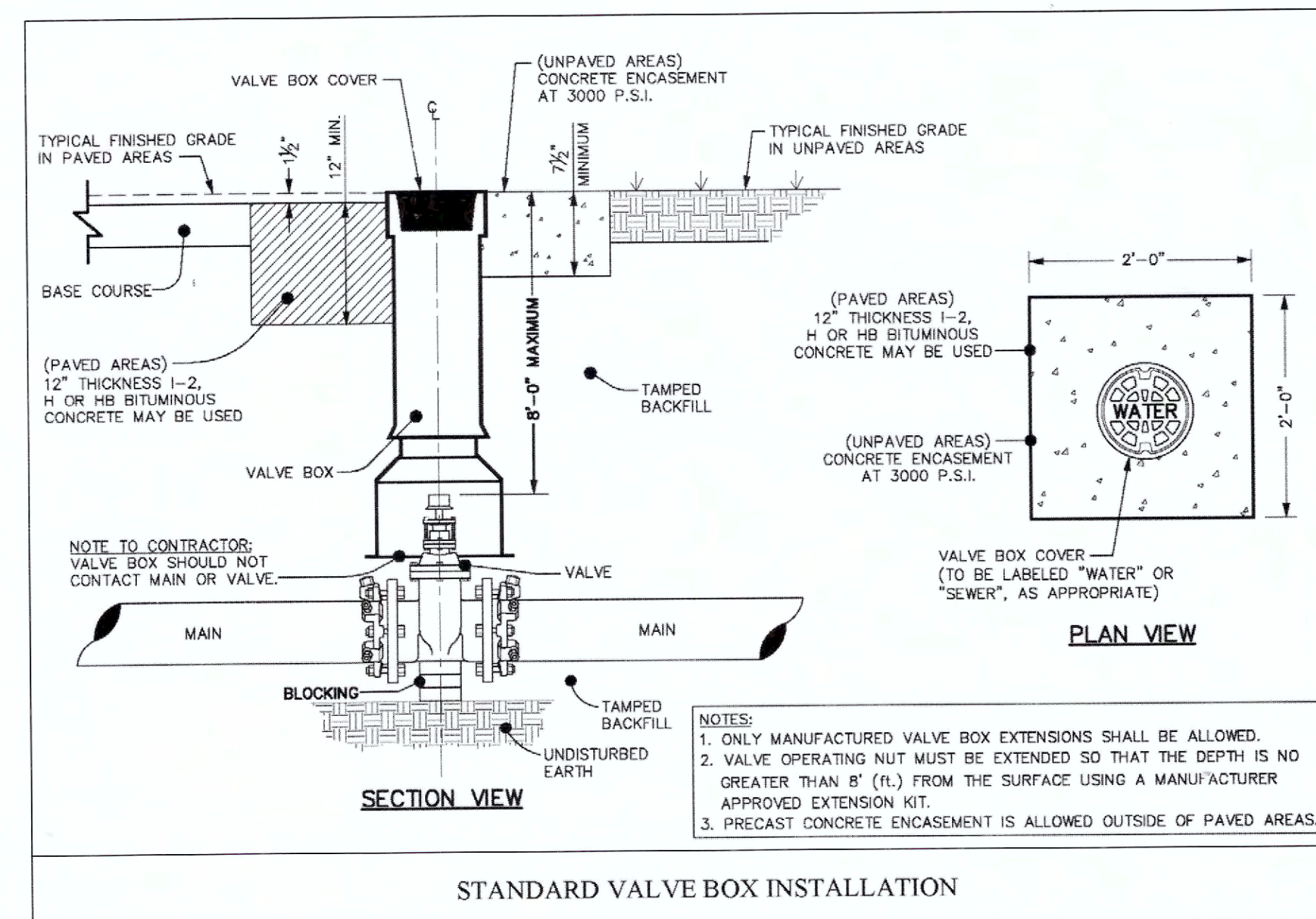
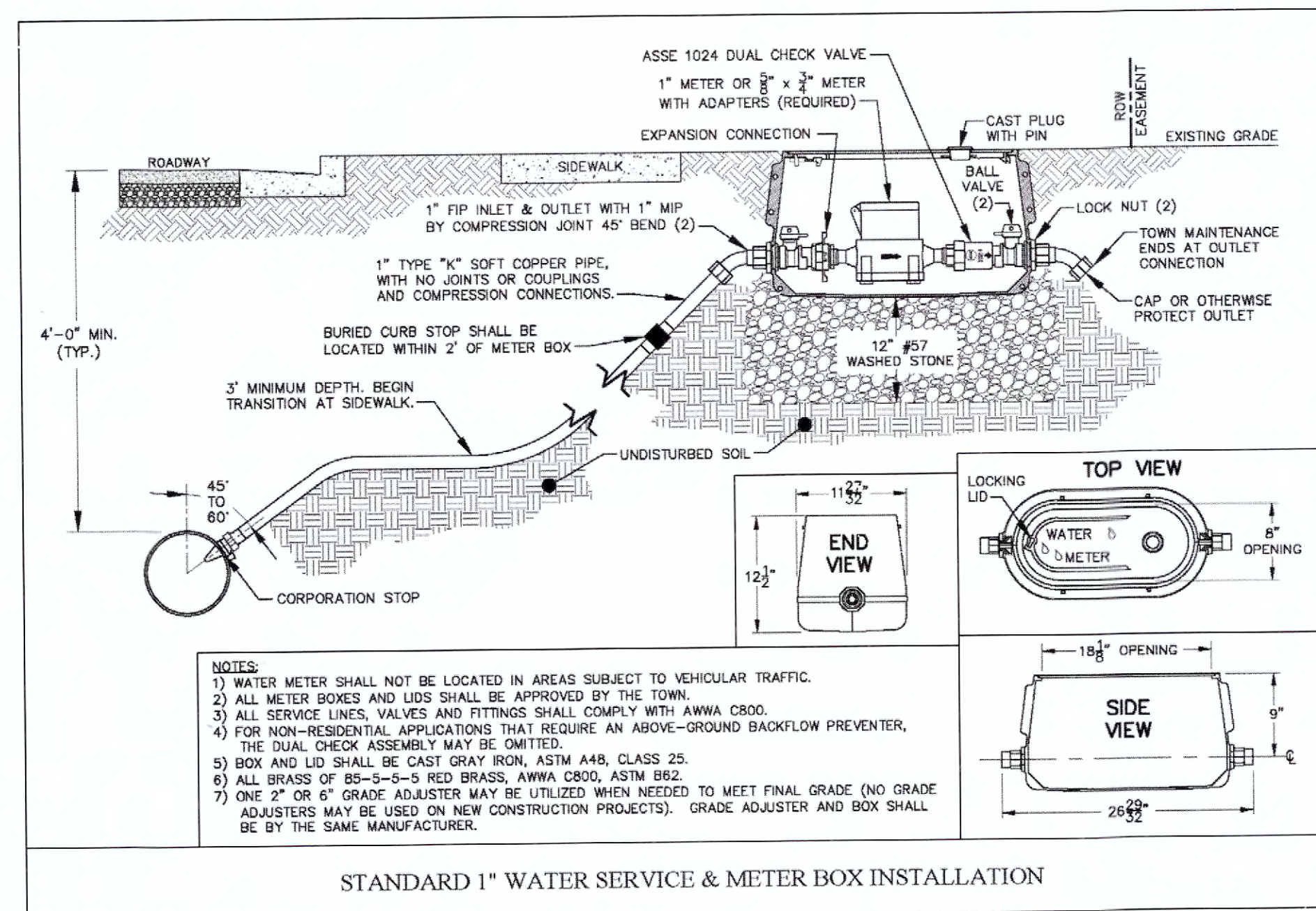
PLANS PREPARED BY :

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UTILITY CONSTRUCTION PLANS



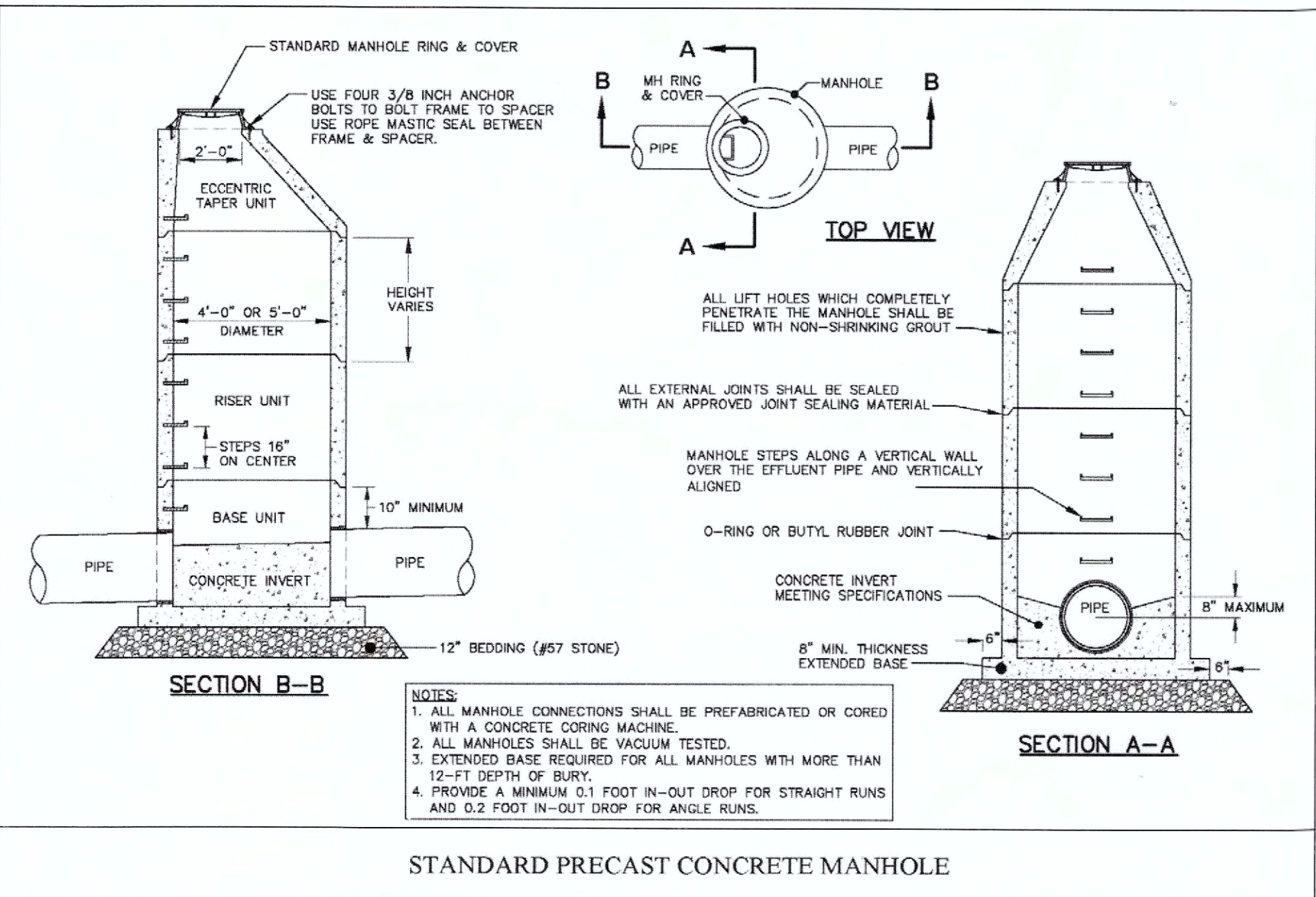
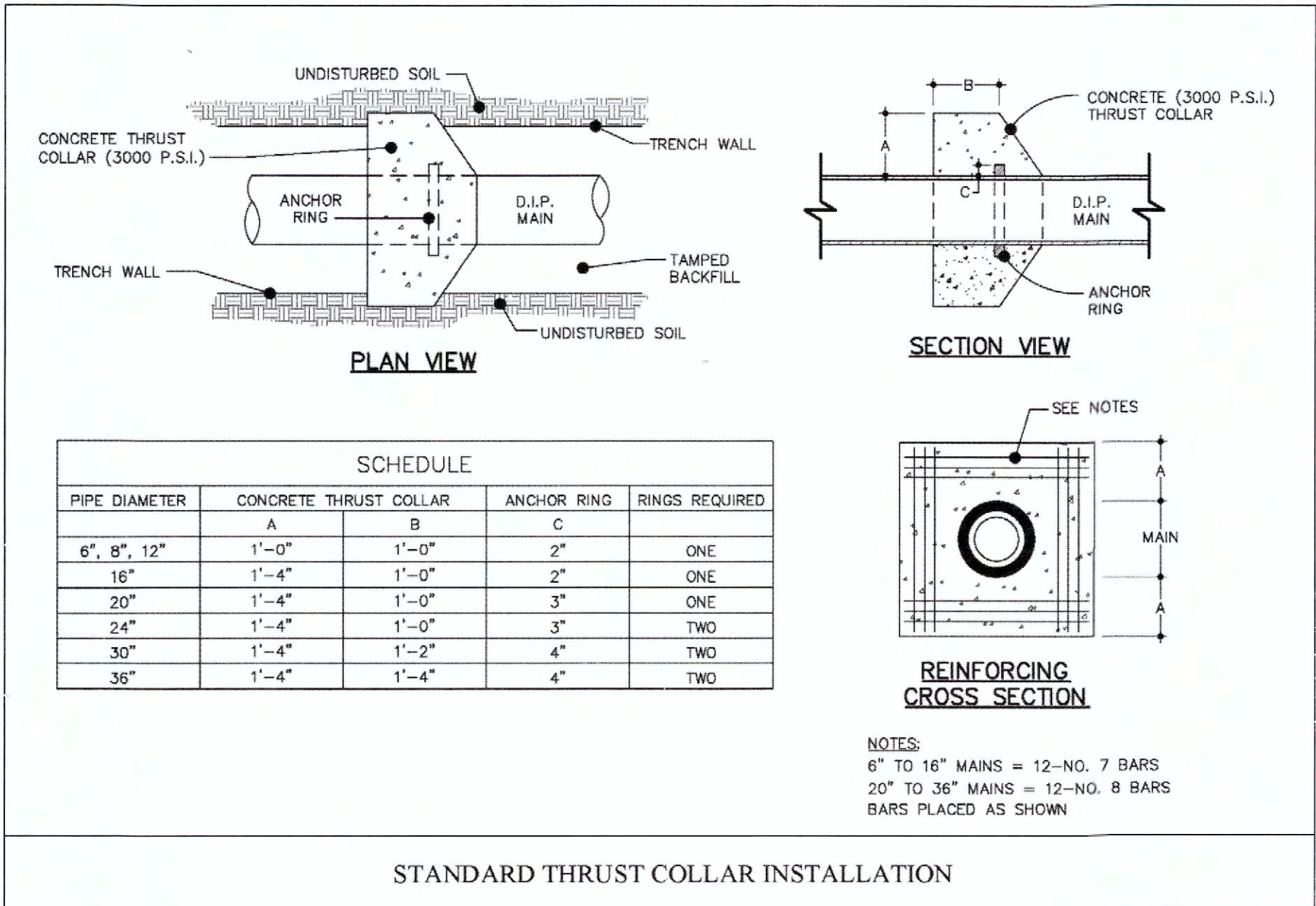
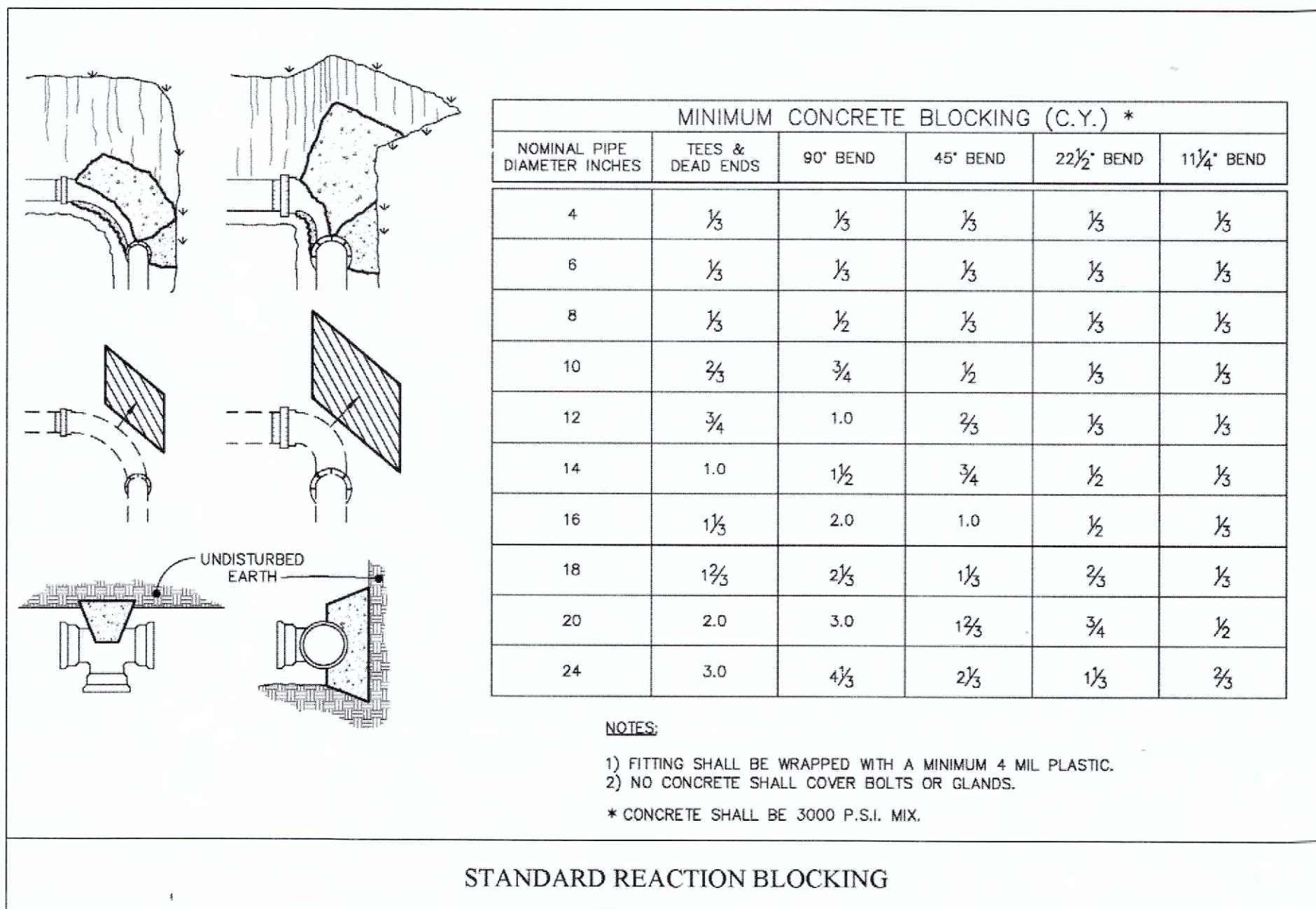
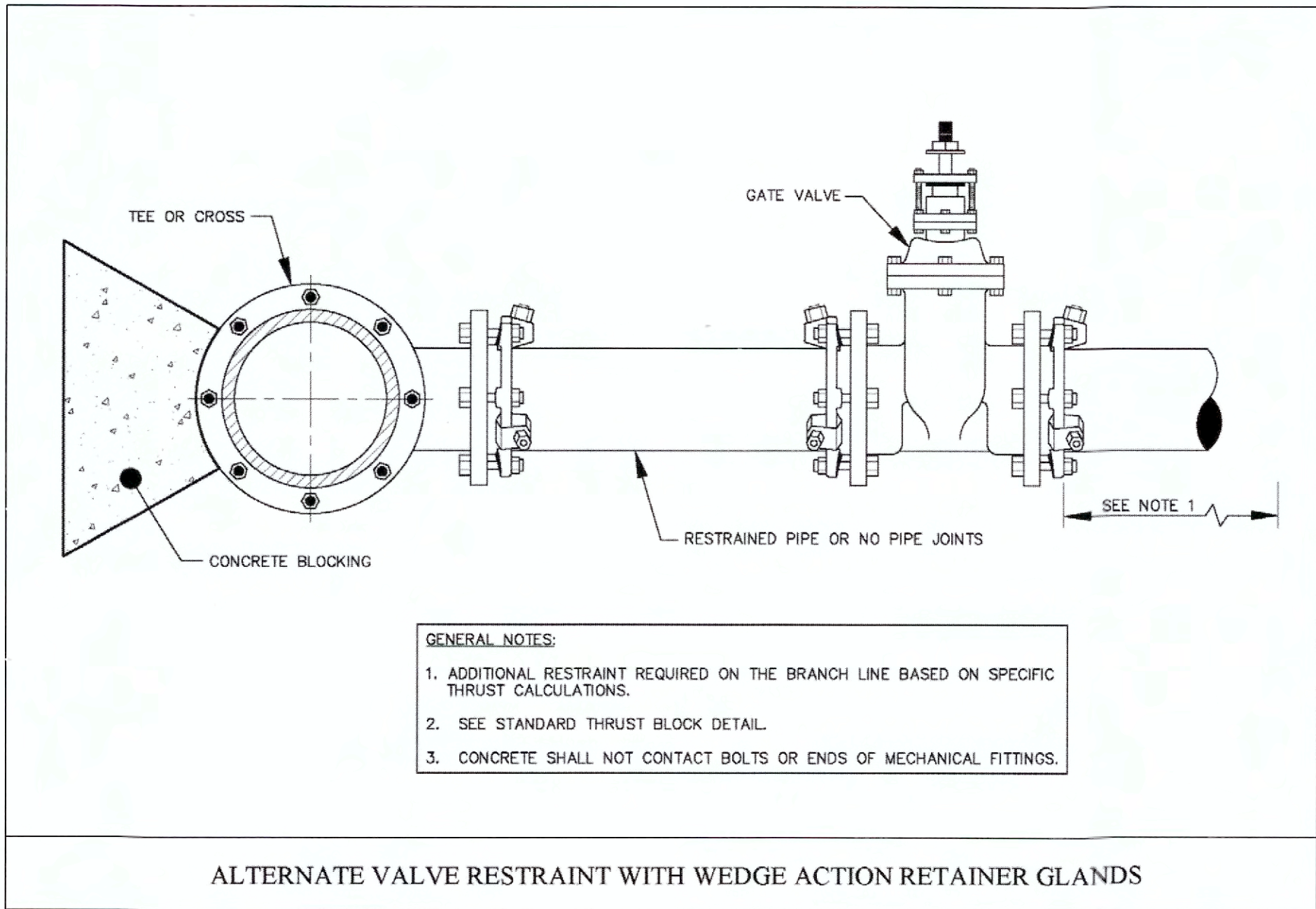
PLANS PREPARED BY :

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UTILITY CONSTRUCTION PLANS

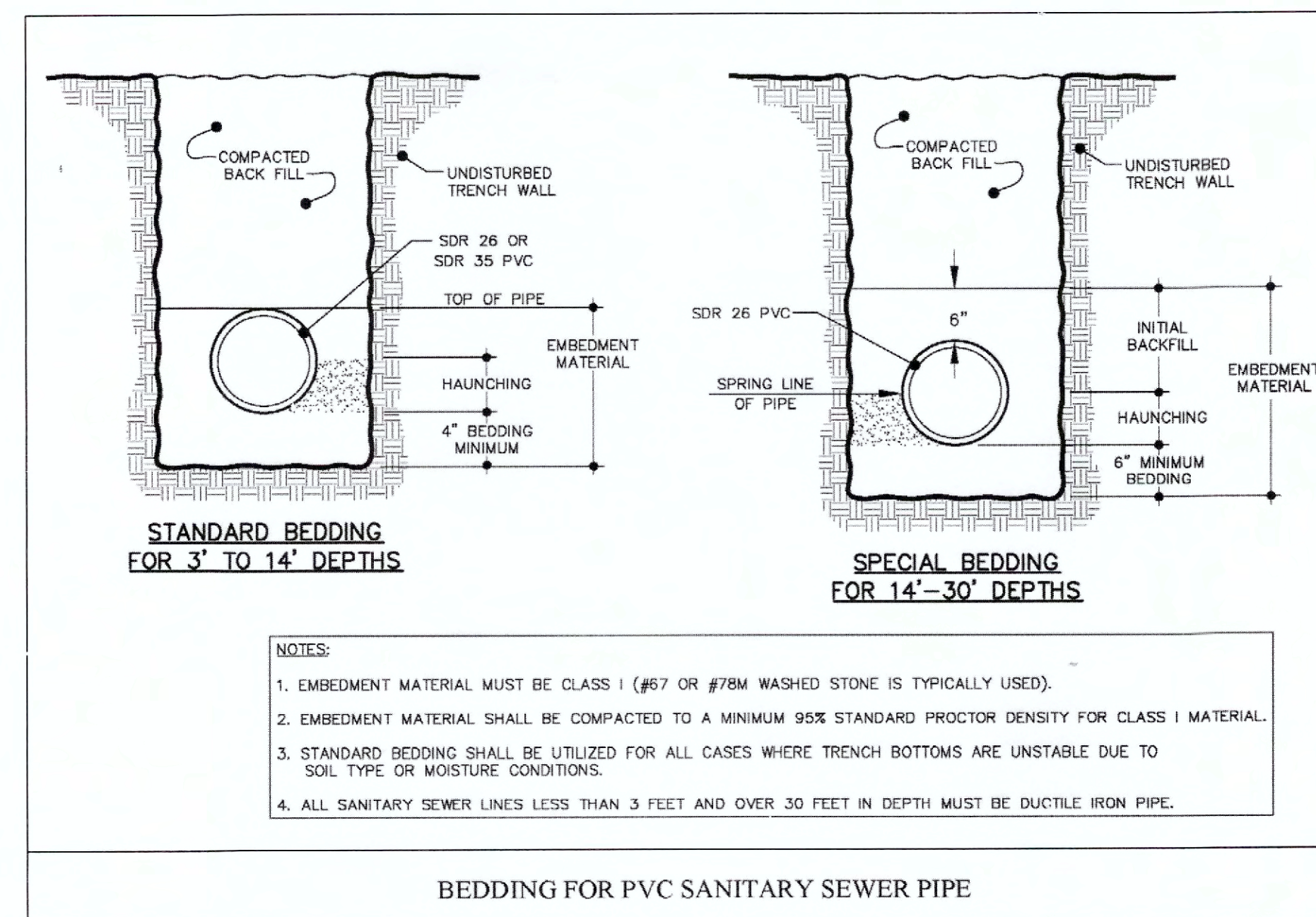
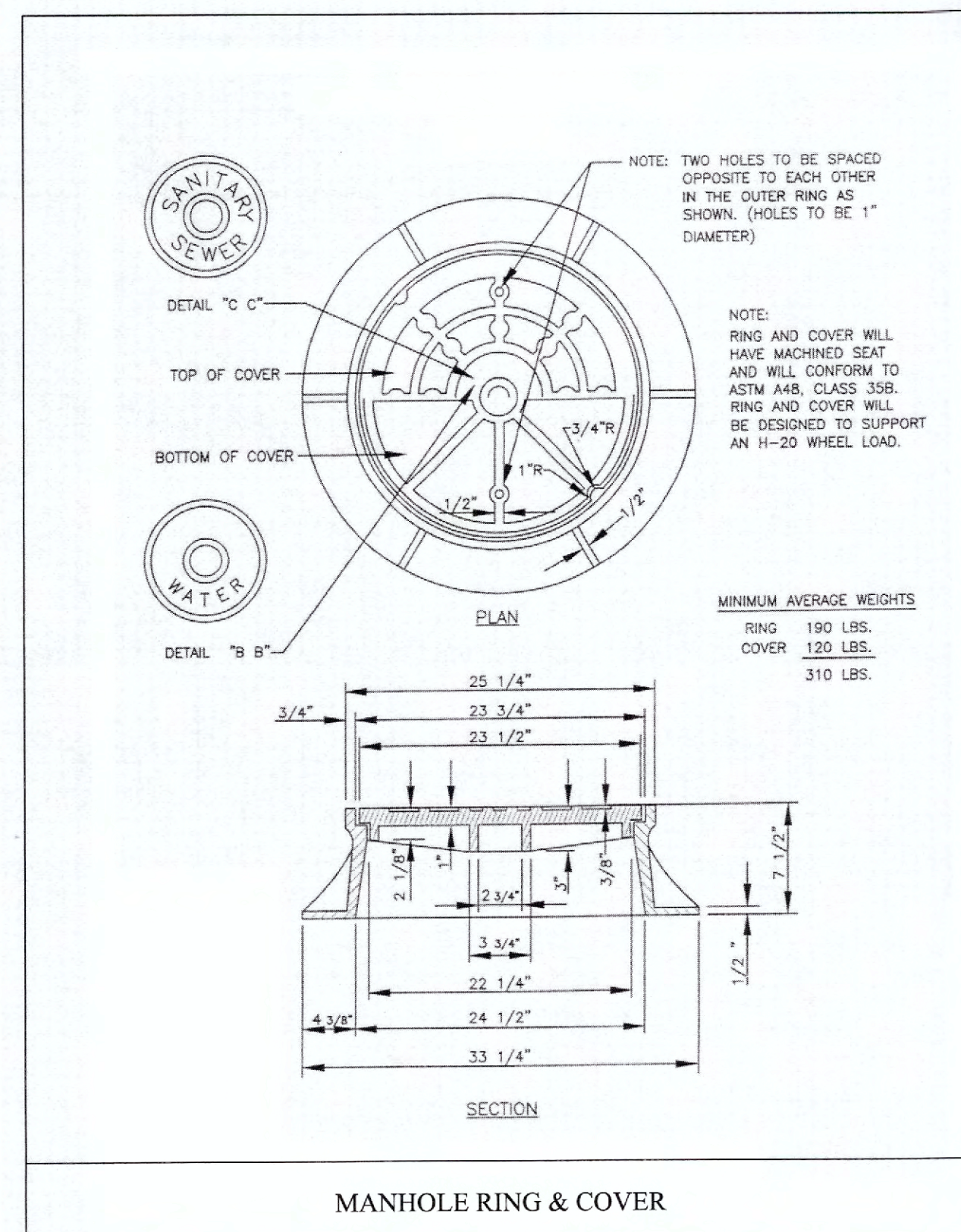
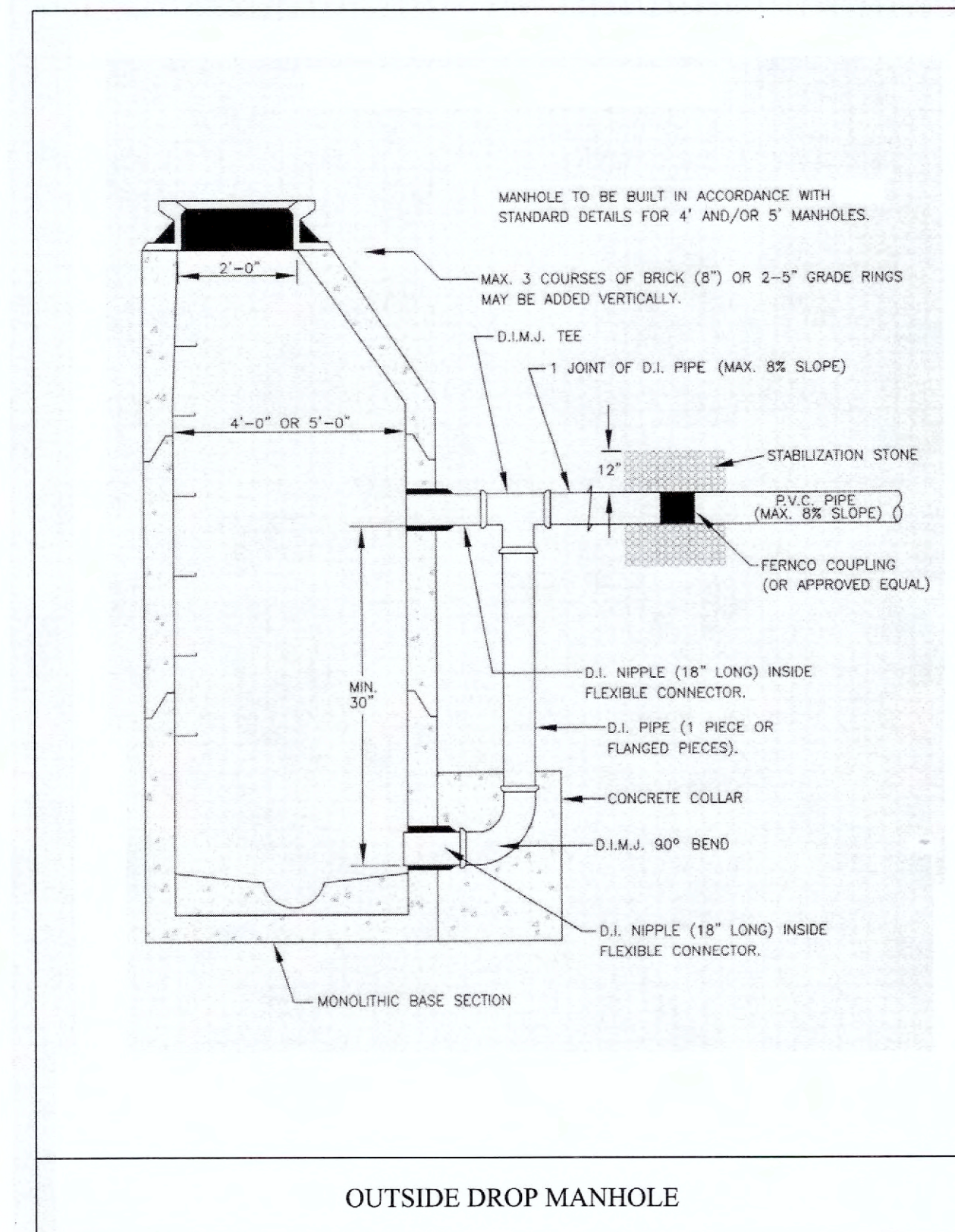
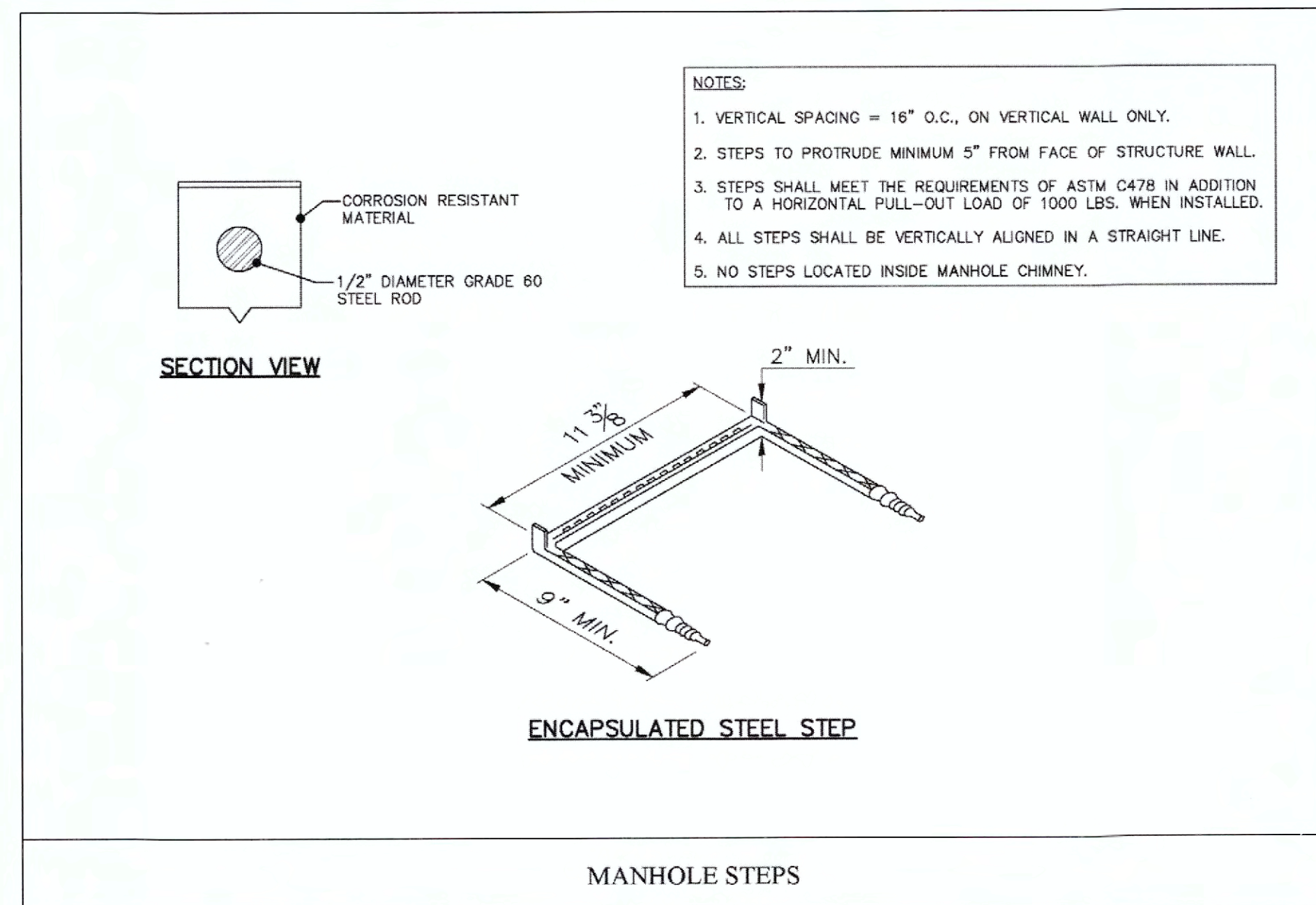


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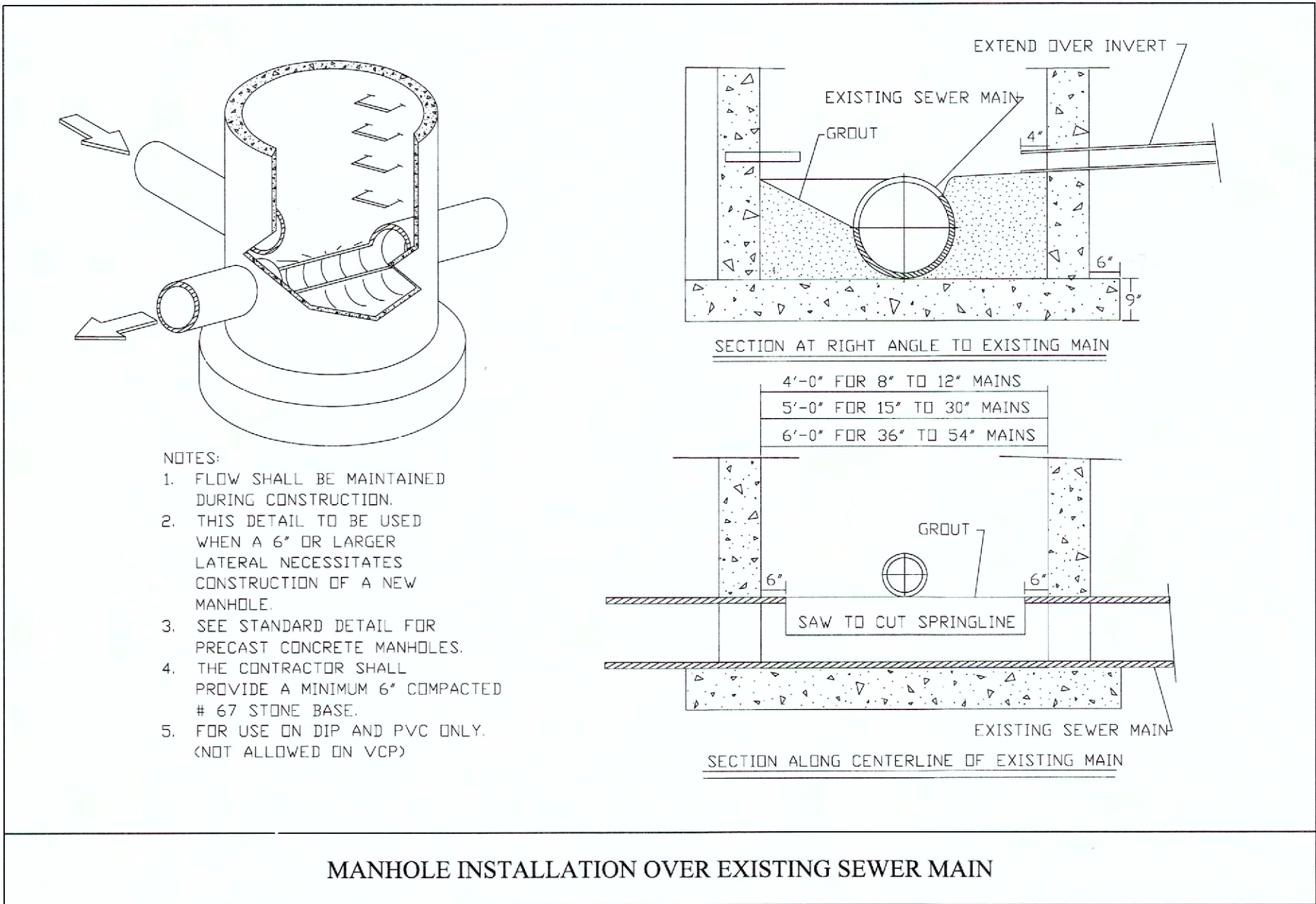


UTILITY CONSTRUCTION PLANS





UTILITY CONSTRUCTION PLANS



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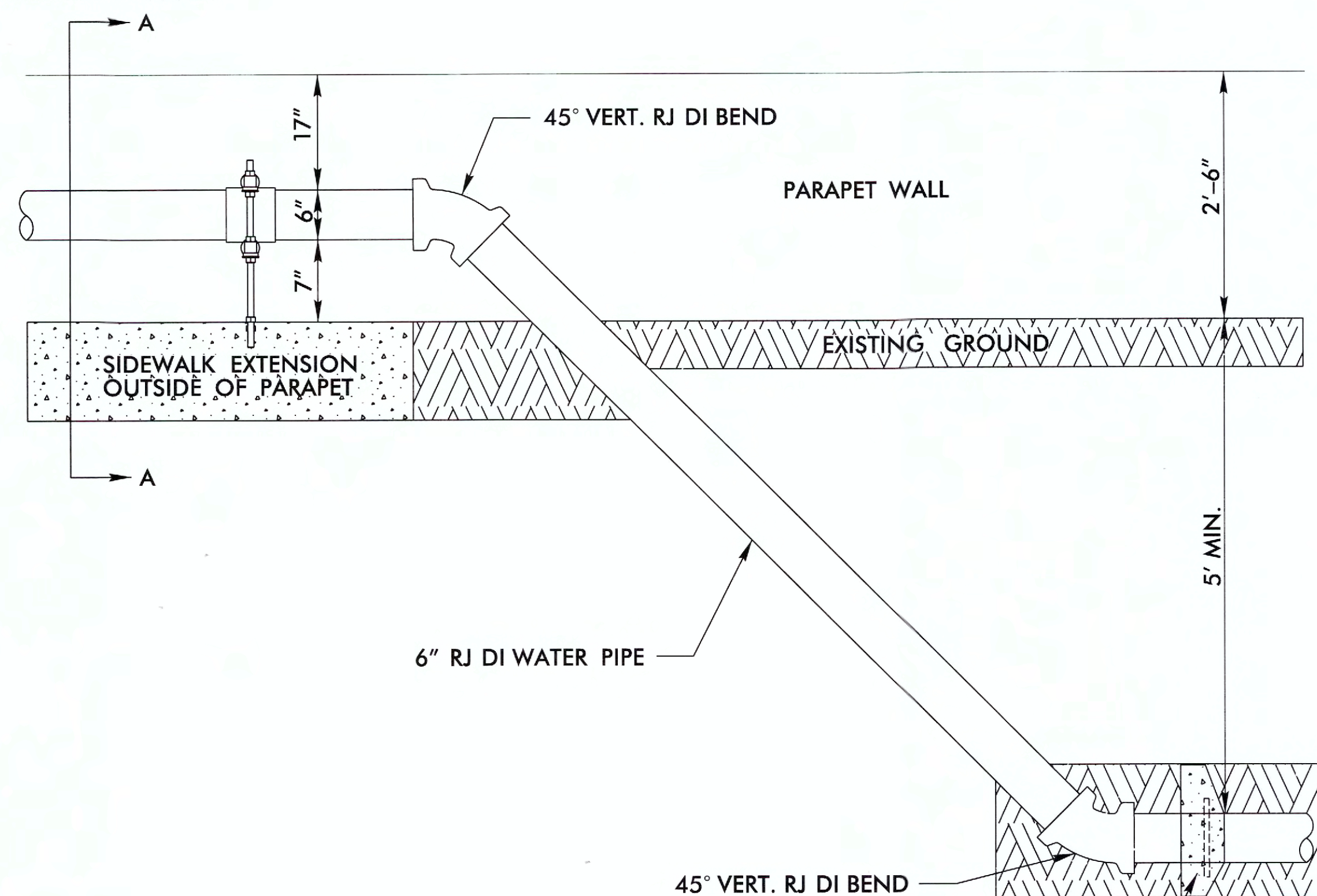
8/17/99

I:\2015\Utilities\Rdy_Ut\Proj\BD-5111V_UC.psh03e.dgn
chuman



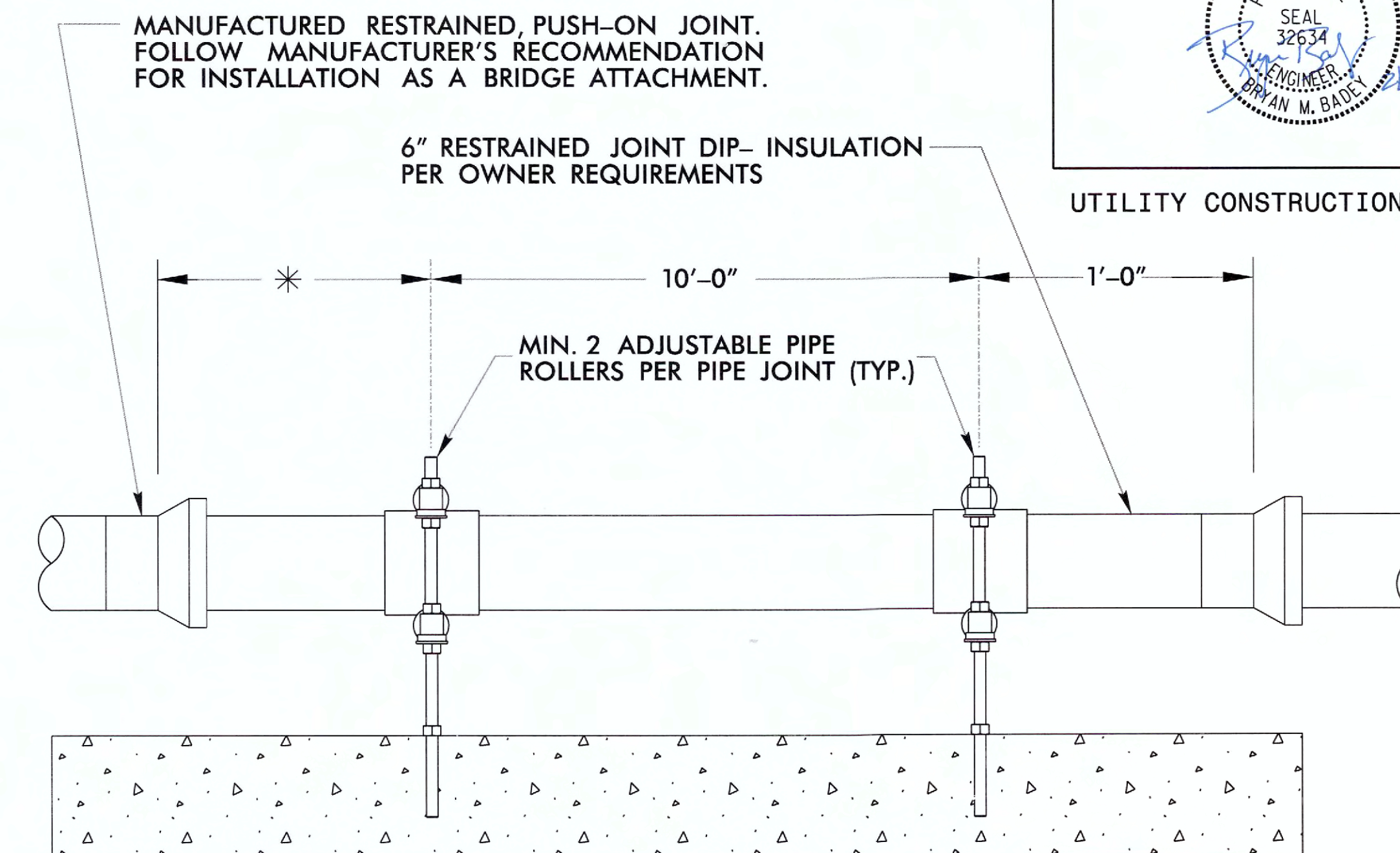
UTILITY CONSTRUCTION PLANS

ADJUSTABLE PIPE ROLLER



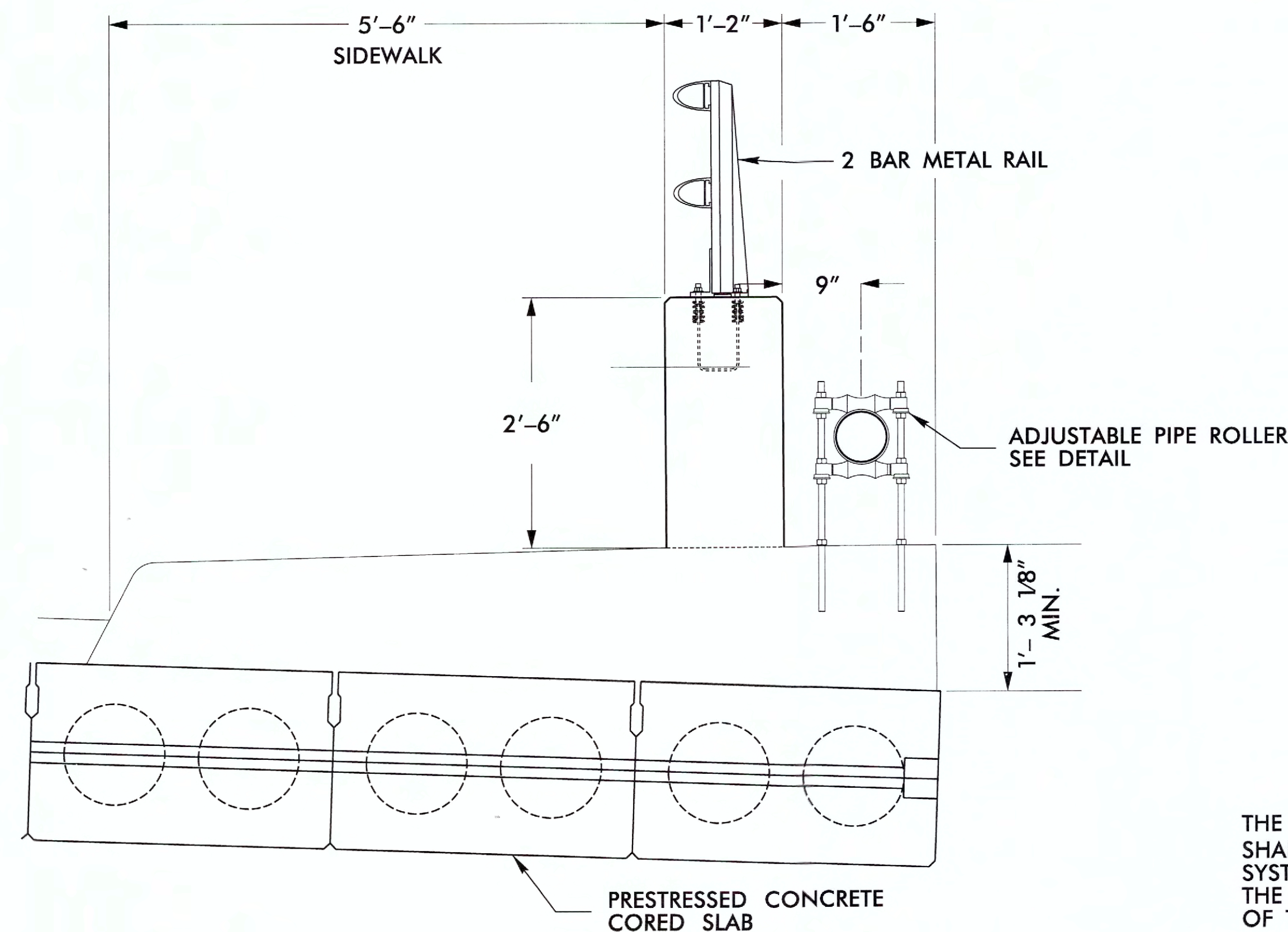
PROFILE VIEW

THRUST COLLAR
SEE DETAIL SHT. 3B

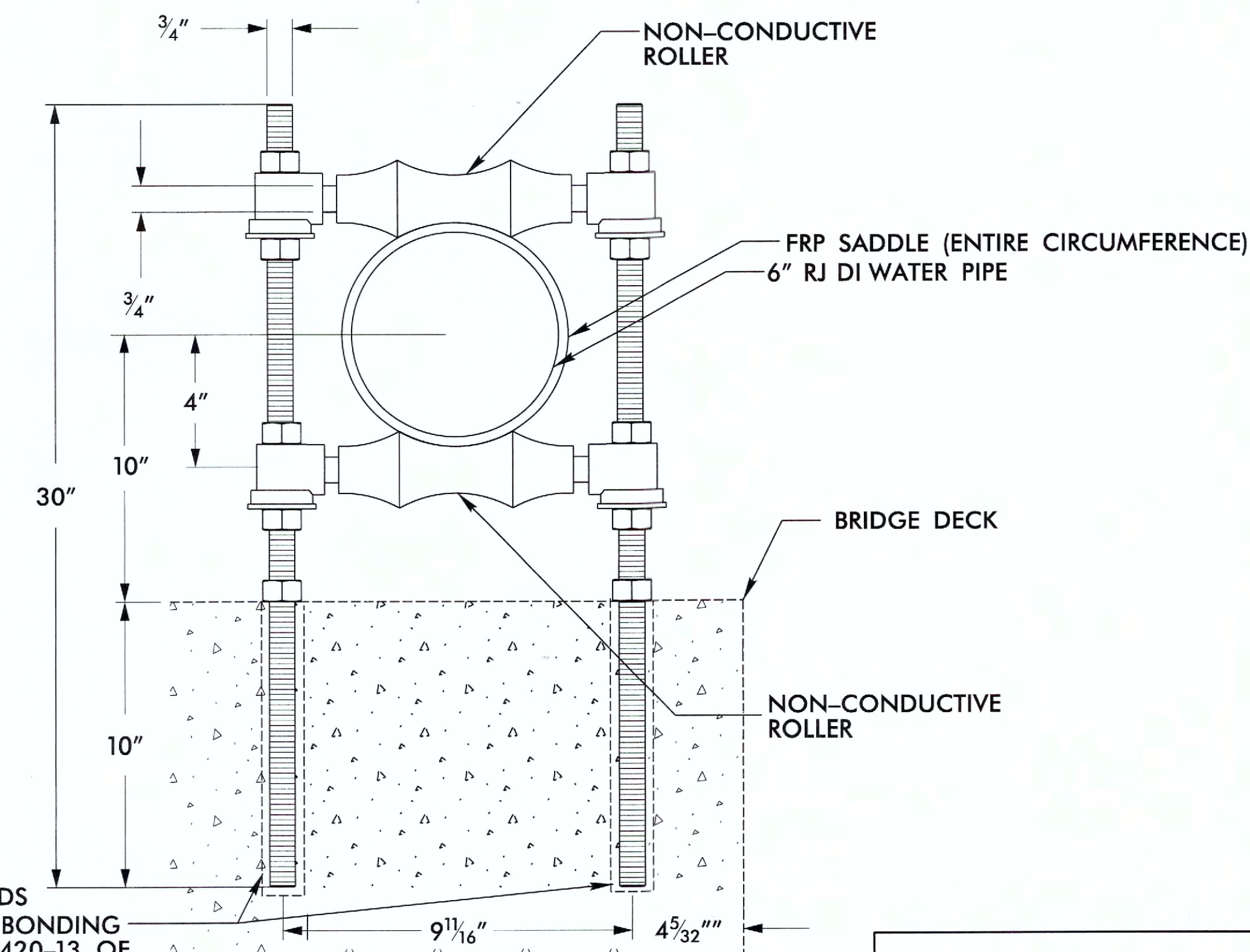


* DISTANCE DEPENDENT
ON LENGTH OF PIPES

PIPE ROLLER SPACING DETAIL



SECTION A-A



THE STAINLESS STEEL 3/4" DIA. THREADED RODS SHALL BE INSTALLED USING AN ADHESIVE BONDING SYSTEM IN ACCORDANCE WITH SECTION 420-13 OF THE NCDOT STANDARD SPECIFICATIONS. FIELD TESTING OF THE ADHESIVE BONDING SYSTEM IS NOT REQUIRED.

ADJUSTABLE PIPE ROLLER

PLANS PREPARED BY :

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8/17/99

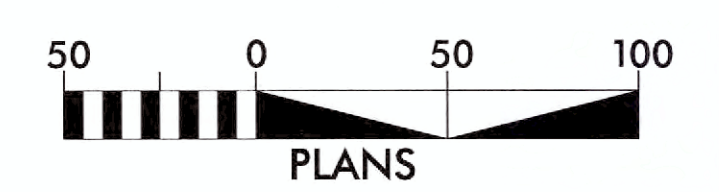
ROW REVISION - 04/03/13 - REVISED TCE ALONG -Y2- STA.11+20.00 RT TO 11+75.00 RT FOR PARCEL NOS. 3 & 4.
ROW REVISION - 4/03/13 - REVISED TCE AND ROW ALONG -Y- STA.14+95.00 RT TO 16+85.00 RT FOR PARCEL NOS. 10 & 11.
ROW REVISION - 4/22/13 - DELETED TCE FROM -L- STA.10+03.92 RT TO 11+25.00 RT FOR PARCEL NOS. 5 & 6.
ROW REVISION - 4/22/13 - ADDED PARCEL NO.10.02 WITH REQUIRED TCE AND ROW.

12/8/2014
R:\Utilities\RD\11\UC\psh04.dgn
B:\Utilities\RD\11\UC\psh04.dgn

PROJECT REFERENCE NO.	SHEET NO.
BD-5111V	UC-4



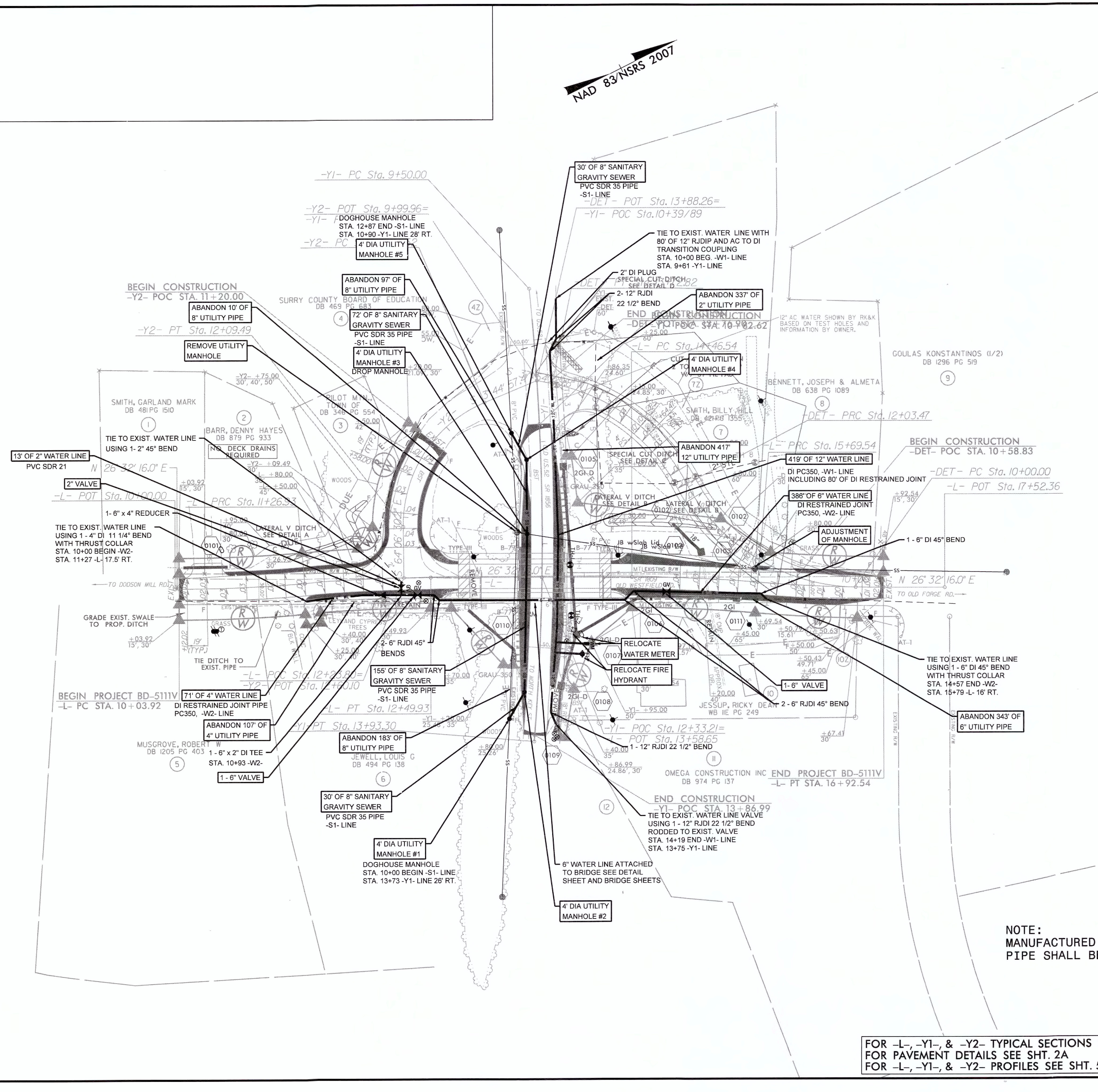
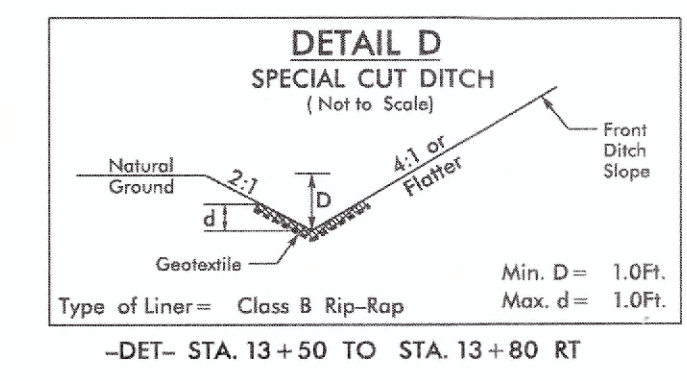
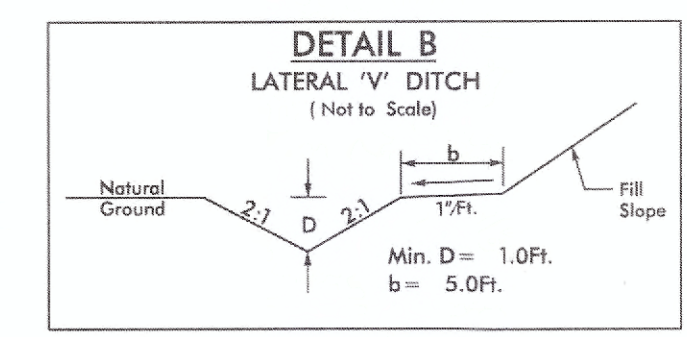
GRAPHIC SCALES



DESIGN SPEED = 40mph
ADT = 3,000 (2010)

SURRY #244

UTILITY CONSTRUCTION PLANS
Revised -W1- Line due to ramp detour. 12-4-14
Abandon 2" water line due to ramp detour. 12-4-14



-DET-	
PI Sta 11+12.72 $\Delta = 61' 21'' 27.2''$ (RT) $D = 30' 09'' 20.4''$ $L = 203.47'$ $T = 112.72'$ $R = 190.00'$ $SE = 0.04$ $V = 30\text{mph}$	PI Sta 12+94.23 $\Delta = 51' 04'' 06.1''$ (LT) $D = 30' 09'' 20.4''$ $L = 169.35'$ $T = 90.76'$ $R = 190.00'$ $SE = 0.04$ $V = 30\text{mph}$

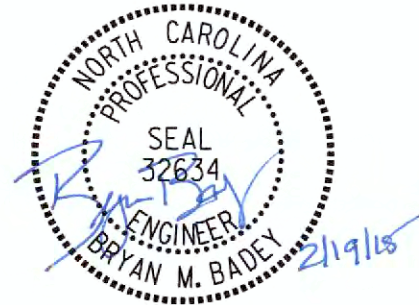
NOTE:
MANUFACTURED RESTRAINED JOINT DUCTILE IRON
PIPE SHALL BE USED FOR BRIDGE ATTACHMENT

PLANS PREPARED BY :

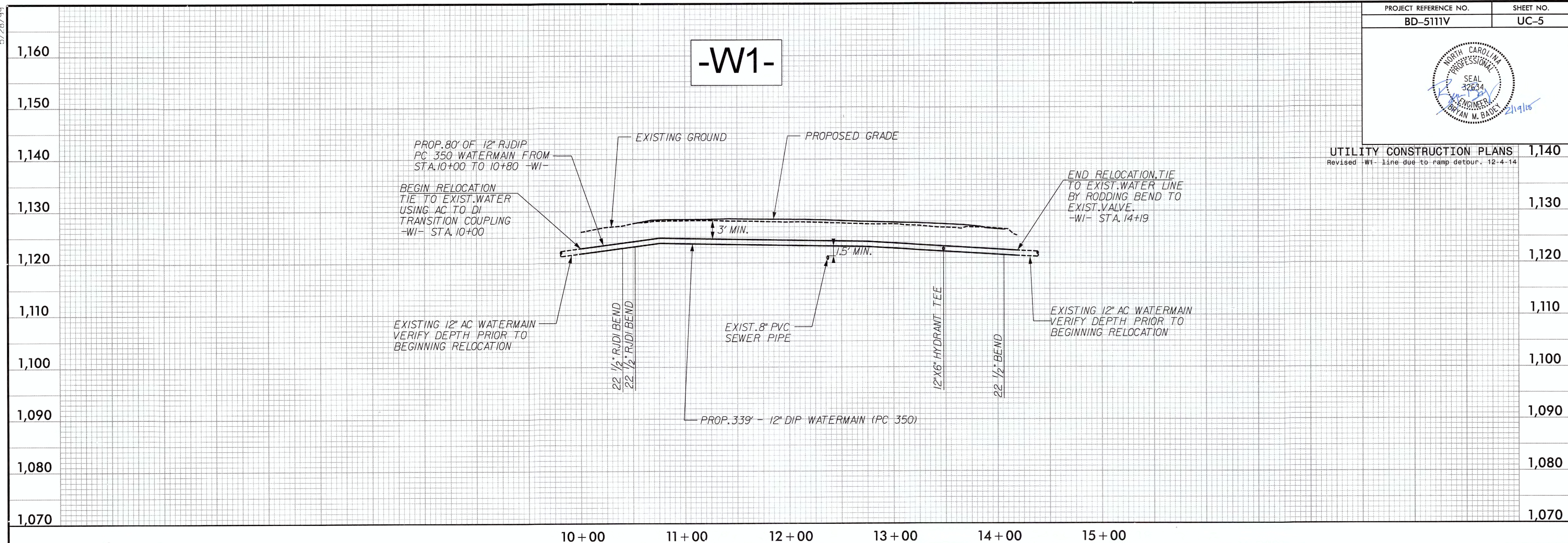


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RALEIGH, NORTH CAROLINA 27609-3960
NC LICENSE NO. F-0112 • (919) 878-9560

FOR -L-, -Y1-, & -Y2- TYPICAL SECTIONS SEE SHT. 2
FOR PAVEMENT DETAILS SEE SHT. 2A
FOR -L-, -Y1-, & -Y2- PROFILES SEE SHT. 5



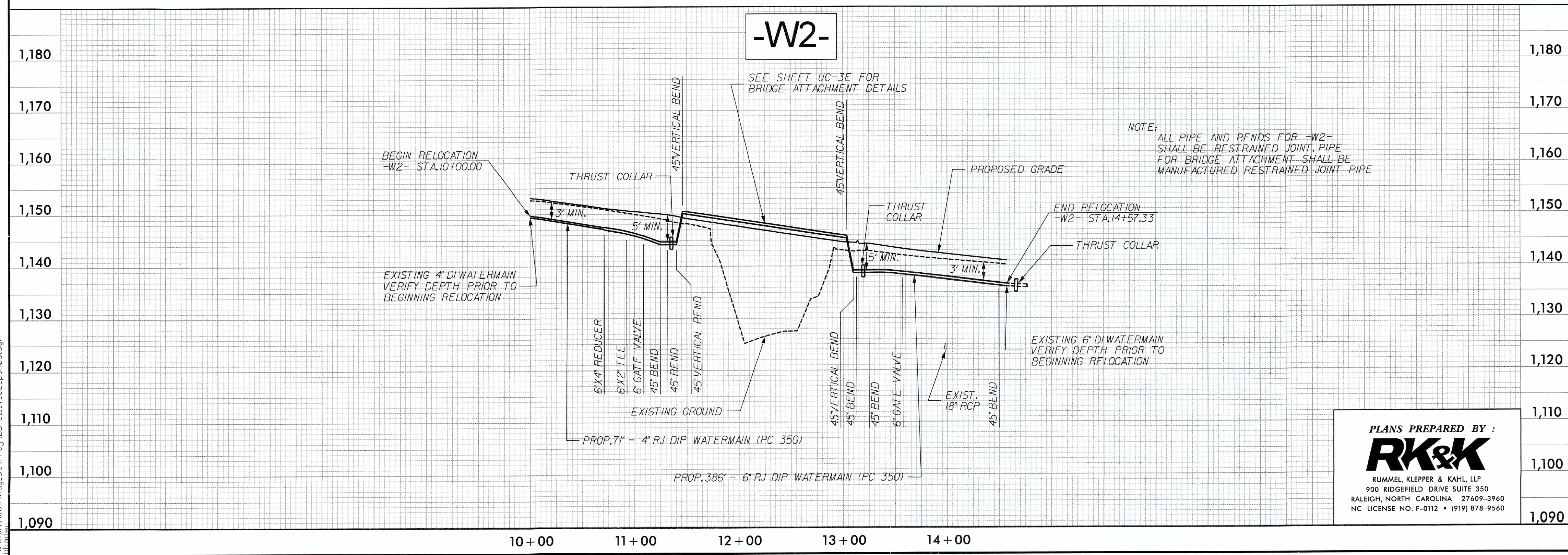
UTILITY CONSTRUCTION PLANS	1,140
Revised -W1- line due to ramp detour. 12-4-14	



-W2-

SEE SHEET UC-3E FOR
BRIDGE ATTACHMENT DETAILS

NOTE:
ALL PIPE AND BENDS FOR W2-
SHALL BE RESTRAINED JOINT. PIPE
FOR BRIDGE ATTACHMENT SHALL BE
MANUFACTURED RESTRAINED JOINT PIPE



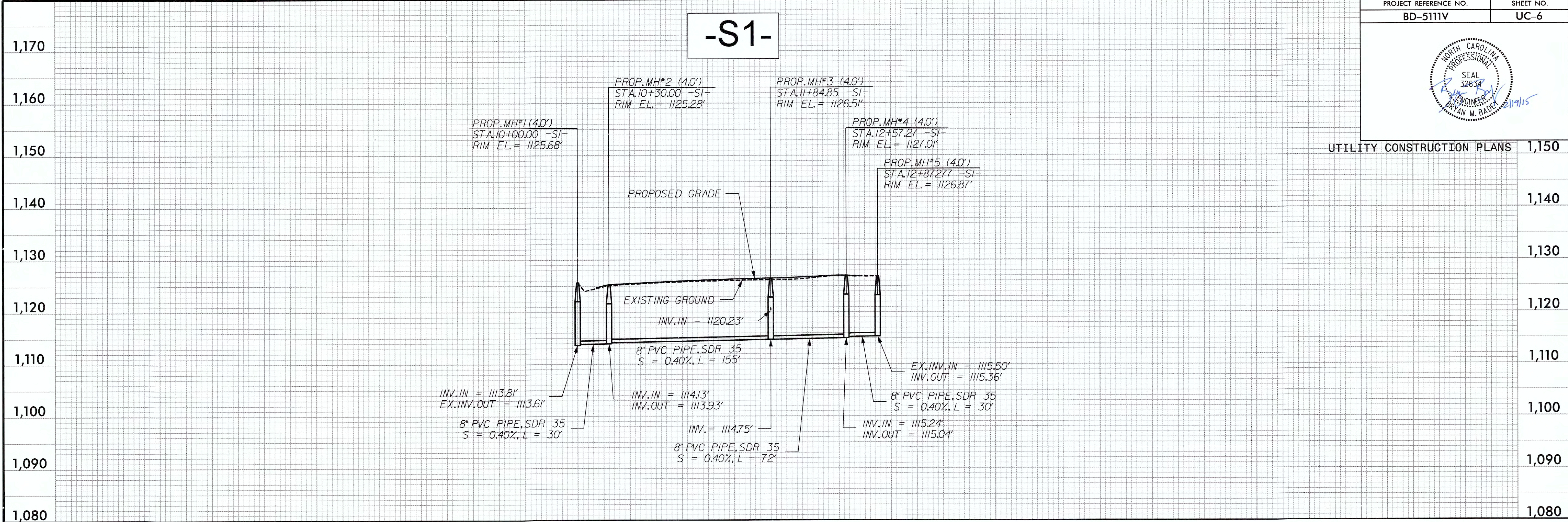
PLANS PREPARED BY :

RK&K

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5/28/99

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PROJECT REFERENCE NO.	SHEET NO.
BD-5111V	UC-6

2/19/15

UTILITY CONSTRUCTION PLANS	1,150
	1,140
	1,130
	1,120
	1,110
	1,100
	1,090
	1,080

PLANS PREPARED BY :

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NOTE:

1. EXISTING AT&T TOLL UNDERGROUND MARKERS VERIFIED, AT&T TOLL HAS ABANDON ALL UNDERGROUND TELEPHONE IN THIS AREA PER JIM BROOKS WITH AT&T.
2. DUKE TO RELOCATE AND REMOVE OLD POWER POLES AND AERIAL LINES
3. TIME WARNER CATV TO RELOCATE WITH DUKE.
4. CENTURYLINK IS NOT IN CONFLICT AND THE FILL GOING AROUND EXISTING TELEPHONE POLE AT APPROXIMATE STA 15+65 36' RT. PER JERONE MABE WITH CENTURYLINK.
5. SURRY TELEPHONE JOINT USE WITH CENTURYLINK TELEPHONE.

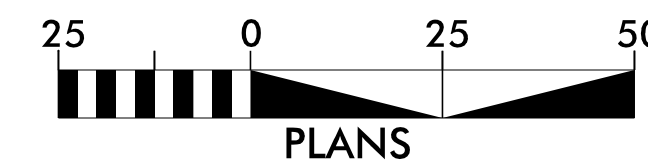
NAD 83/NSRS 2007

PROJECT REFERENCE NO. **BD-511IV** SHEET NO. **UO-1**

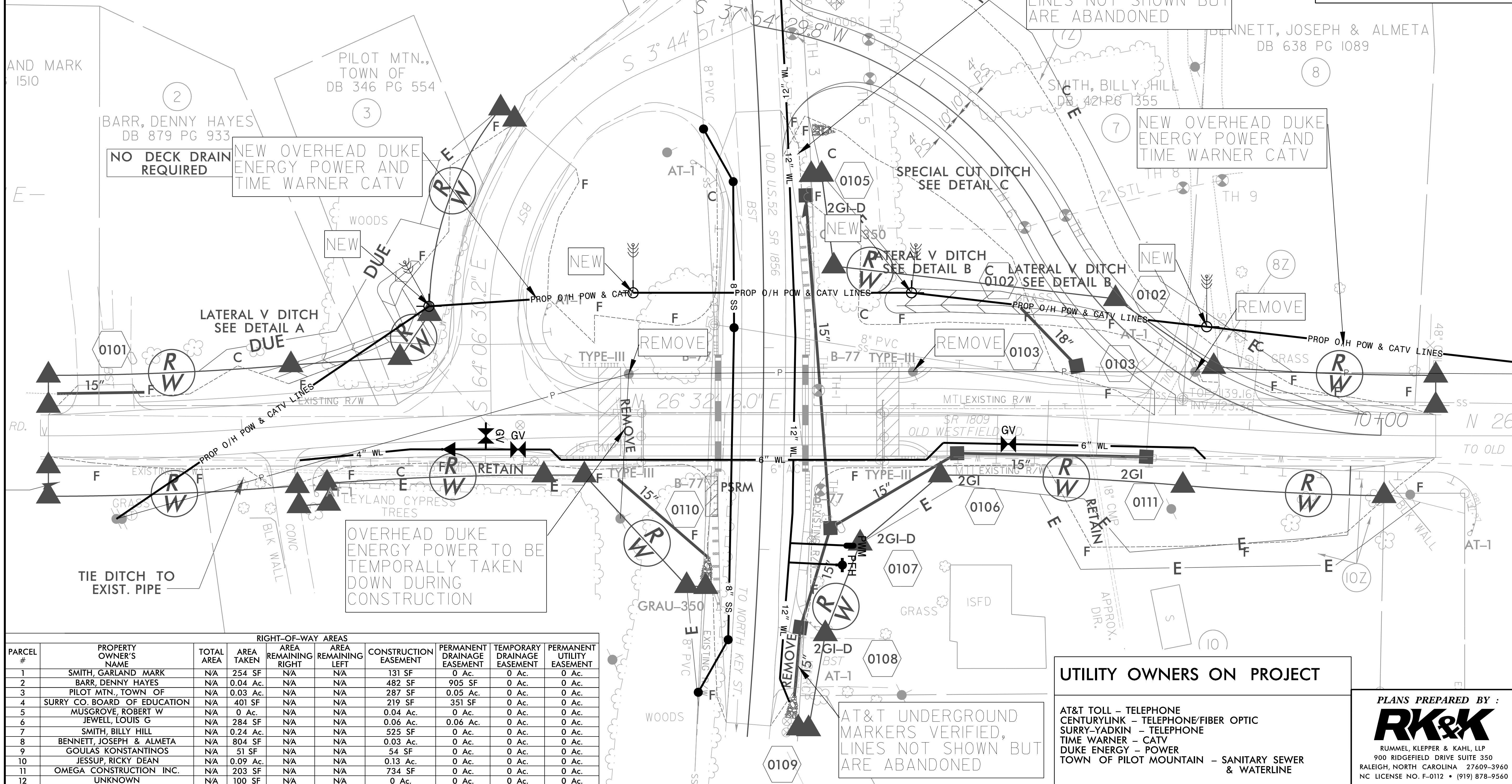
UTILITIES BY OTHERS

NOTE:
ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS

GRAPHIC SCALES



DESIGN SPEED = 40mph
ADT = 3,000 (2010)



PARCEL #	PROPERTY OWNER'S NAME	RIGHT-OF-WAY AREAS				CONSTRUCTION EASEMENT	PERMANENT DRAINAGE EASEMENT	TEMPORARY DRAINAGE EASEMENT	PERMANENT UTILITY EASEMENT
		TOTAL AREA	AREA TAKEN	AREA REMAINING RIGHT	AREA REMAINING LEFT				
1	SMITH, GARLAND MARK	N/A	254 SF	N/A	N/A	131 SF	0 Ac.	0 Ac.	0 Ac.
2	BARR, DENNY HAYES	N/A	0.04 Ac.	N/A	N/A	482 SF	0.05 Ac.	0 Ac.	0 Ac.
3	PILOT MTN., TOWN OF	N/A	0.03 Ac.	N/A	N/A	287 SF	0.05 Ac.	0 Ac.	0 Ac.
4	SURRY CO. BOARD OF EDUCATION	N/A	401 SF	N/A	N/A	219 SF	0.06 Ac.	0 Ac.	0 Ac.
5	MUSGROVE, ROBERT W	N/A	0 Ac.	N/A	N/A	0.04 Ac.	0 Ac.	0 Ac.	0 Ac.
6	JEWELL, LOUIS G	N/A	284 SF	N/A	N/A	0.06 Ac.	0.06 Ac.	0 Ac.	0 Ac.
7	SMITH, BILLY HILL	N/A	0.24 Ac.	N/A	N/A	525 SF	0 Ac.	0 Ac.	0 Ac.
8	BENNETT, JOSEPH & ALMETA	N/A	804 SF	N/A	N/A	0.03 Ac.	0 Ac.	0 Ac.	0 Ac.
9	GOULAS KONSTANTINOS	N/A	51 SF	N/A	N/A	54 SF	0 Ac.	0 Ac.	0 Ac.
10	JESSUP, RICKY DEAN	N/A	0.09 Ac.	N/A	N/A	0.13 Ac.	0 Ac.	0 Ac.	0 Ac.
11	OMEGA CONSTRUCTION INC.	N/A	203 SF	N/A	N/A	734 SF	0 Ac.	0 Ac.	0 Ac.
12	UNKNOWN	N/A	100 SF	N/A	N/A	0 Ac.	0 Ac.	0 Ac.	0 Ac.

UTILITY OWNERS ON PROJECT

AT&T TOLL - TELEPHONE
CENTURYLINK - TELEPHONE/FIBER OPTIC
SURRY-YADKIN - TELEPHONE
TIME WARNER - CATV
DUKE ENERGY - POWER
TOWN OF PILOT MOUNTAIN - SANITARY SEWER & WATERLINE

PLANS PREPARED BY :

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