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STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

UTILITIES PLAN SHEET SYMBOLS

PROPOSED WATER SYMBOLS

Water Line (Sized as Shown)	
11 1/4 Degree Bend	
22 1/2 Degree Bend	
45 Degree Bend	
90 Degree Bend	
Plug	
Tee	
Cross	
Reducer	
Gate Valve	
Butterfly Valve	
Tapping Valve	
Line Stop	
Line Stop with Bypass	
Blow Off	
Fire Hydrant	
Relocate Fire Hydrant	
Remove Fire Hydrant	
Water Meter	
Relocate Water Meter	
Remove Water Meter	
Water Pump Station	
RPZ Backflow Preventer	
DCV Backflow Preventer	
Relocate RPZ Backflow Preventer	
Relocate DCV Backflow Preventer	

PROPOSED SEWER SYMBOLS

Gravity Sewer Line (Sized as Shown)	
Force Main Sewer Line (Sized as Shown)	
Manhole (Sized per Note)	
Sewer Pump Station	

PROPOSED MISCELLANEOUS UTILITIES SYMBOLS

Power Pole	
Telephone Pole	
Joint Use Pole	
Telephone Pedestal	
Utility Line by Others (Type as Shown)	
Trenchless Installation	
Encasement by Open Cut	
Encasement	

Thrust Block	
Air Release Valve	
Utility Vault	
Concrete Pier	
Steel Pier	
Plan Note	
Pay Item Note	

EXISTING UTILITIES SYMBOLS

Power Pole		*Underground Power Line	
Telephone Pole		*Underground Telephone Cable	
Joint Use Pole		*Underground Telephone Conduit	
Utility Pole		*Underground Fiber Optics Telephone Cable	
Utility Pole with Base		*Underground TV Cable	
H-Frame Pole		*Underground Fiber Optics TV Cable	
Power Transmission Line Tower		*Underground Gas Pipeline	
Water Manhole		Aboveground Gas Pipeline	
Power Manhole		*Underground Water Line	
Telephone Manhole		Aboveground Water Line	
Sanitary Sewer Manhole		*Underground Gravity Sanitary Sewer Line	
Hand Hole for Cable		Aboveground Gravity Sanitary Sewer Line	
Power Transformer		*Underground SS Forced Main Line	
Telephone Pedestal		Underground Unknown Utility Line	
CATV Pedestal		SUE Test Hole	
Gas Valve		Water Meter	
Gas Meter		Water Valve	
Located Miscellaneous Utility Object		Fire Hydrant	
Abandoned According to Utility Records		Sanitary Sewer Cleanout	
End of Information			

*For Existing Utilities
 Utility Line Drawn from Record

Designated Utility Line

(Type as Shown)


5/14/99

REV: 2/1/2012

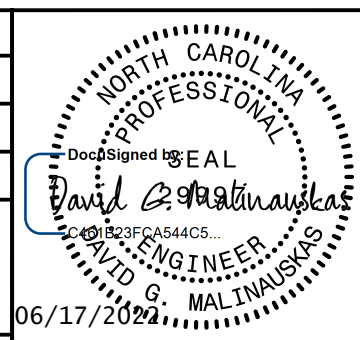
5/14/99

NCDOT PROJECT DETAILS

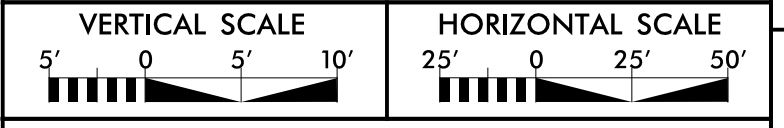
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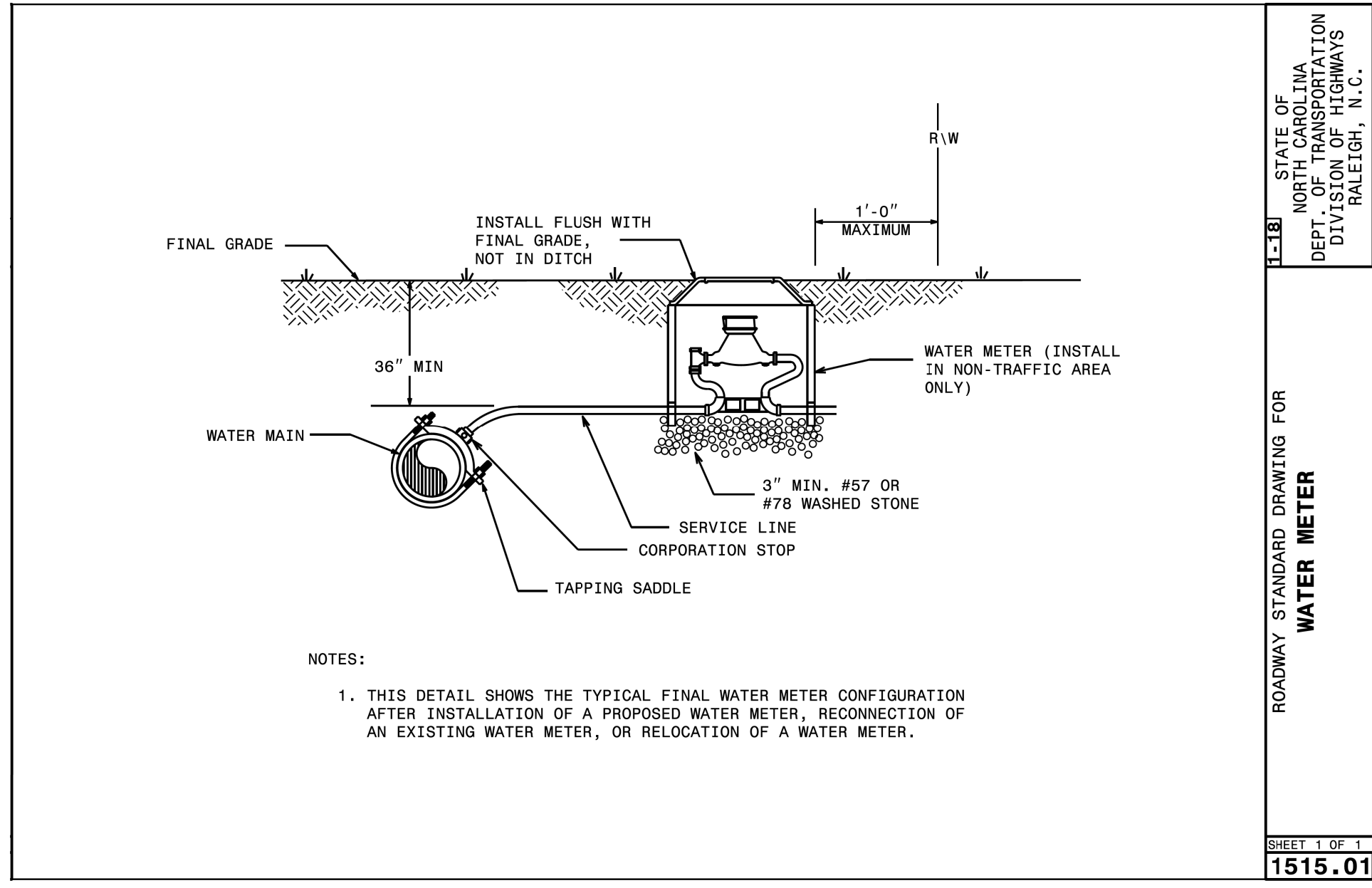
120 North Boylan Avenue Raleigh, NC 27603-1423
919.828.0531 Fax 919.834.3559
License Number: F-0115

PROJECT REFERENCE NO.	U-6223	SHEET NO.	UC-3A
DESIGNED BY:	CMG		
DRAWN BY:	TK		
CHECKED BY:	DGM		
APPROVED BY:	CMG		
REVISED:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION			
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151			

06/17/2024
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UTILITY CONSTRUCTION PLANS ONLY



UTILITY CONSTRUCTION

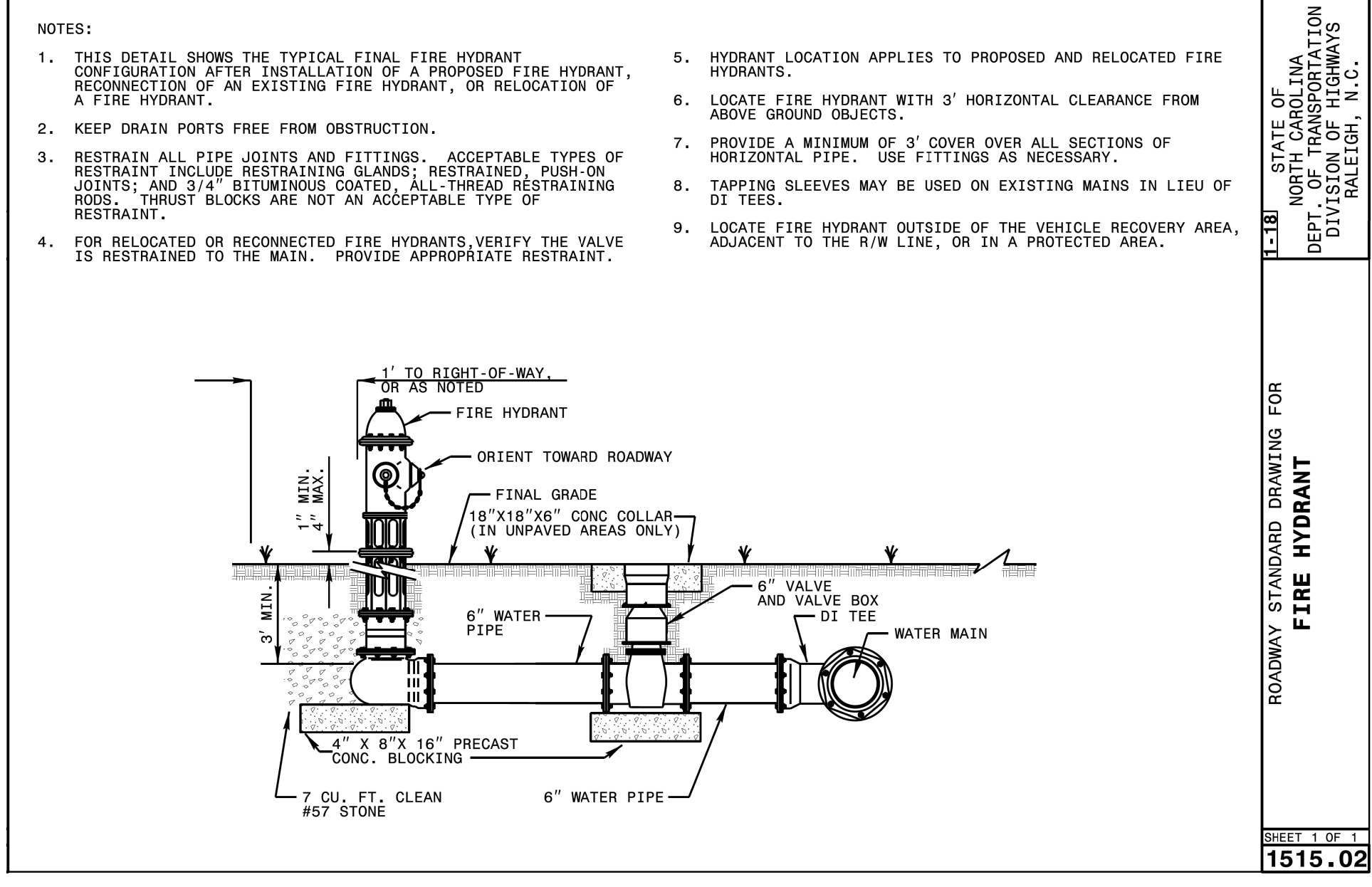


- NOTES:
1. THIS DETAIL SHOWS THE TYPICAL FINAL WATER METER CONFIGURATION AFTER INSTALLATION OF A PROPOSED WATER METER, RECONNECTION OF AN EXISTING WATER METER, OR RELOCATION OF A WATER METER.

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

ROADWAY STANDARD DRAWING FOR
WATER METER

SHEET 1 OF 1
1515.01

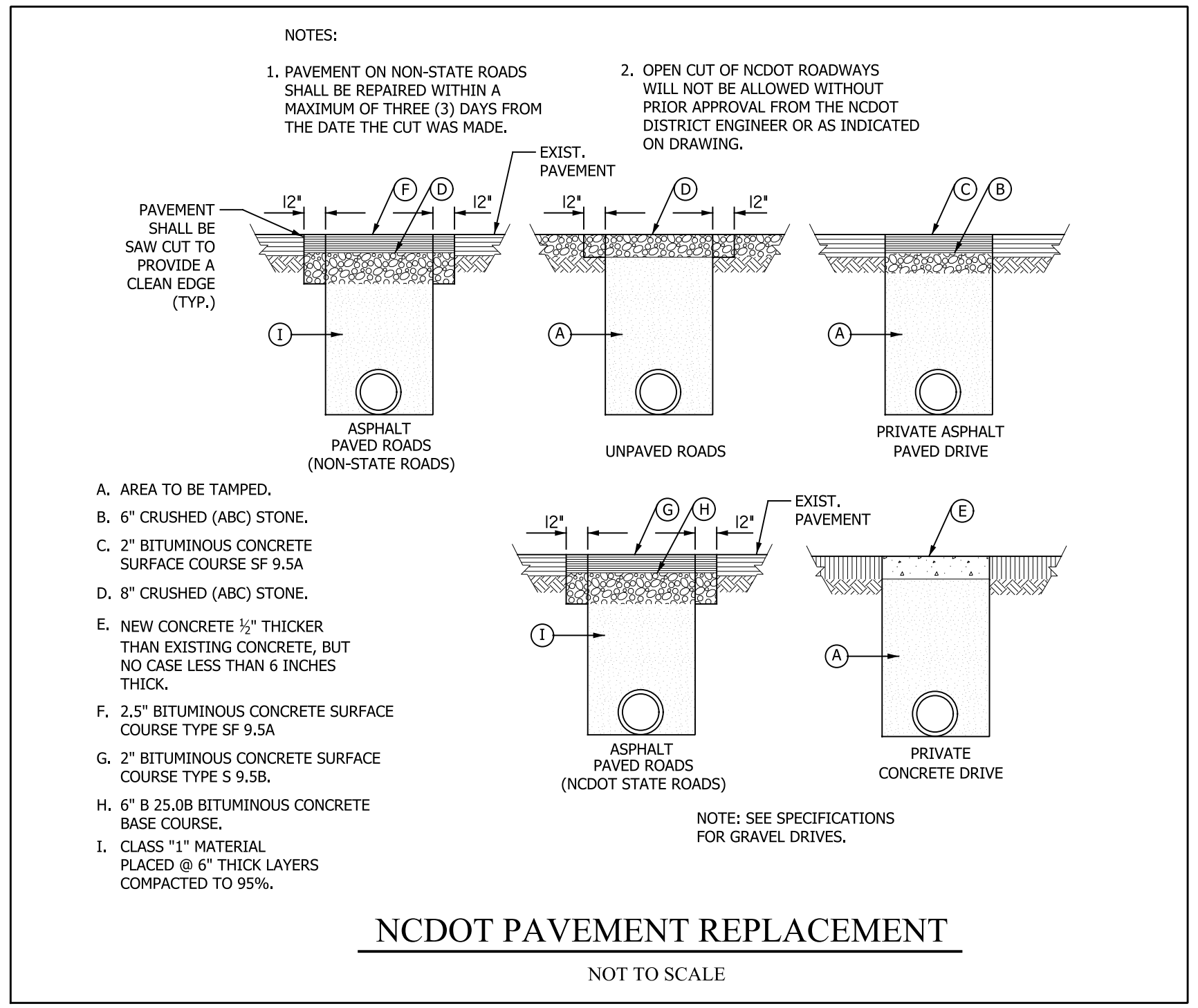


- NOTES:
1. THIS DETAIL SHOWS THE TYPICAL FINAL FIRE HYDRANT CONFIGURATION AFTER INSTALLATION OF A PROPOSED FIRE HYDRANT, RECONNECTION OF AN EXISTING FIRE HYDRANT, OR RELOCATION OF A FIRE HYDRANT.
 2. KEEP DRAIN PORTS FREE FROM OBSTRUCTION.
 3. RESTRAIN ALL PIPE JOINTS AND FITTINGS. ACCEPTABLE TYPES OF RESTRAINT INCLUDE RESTRAINING GLANDS; RESTRAINED, PUSH-ON JOINTS; AND 3/4" BITUMINOUS COATED, ALL-THREAD RESTRAINING RODS. THRUST BLOCKS ARE NOT AN ACCEPTABLE TYPE OF RESTRAINT.
 4. FOR RELOCATED OR RECONNECTED FIRE HYDRANTS, VERIFY THE VALVE IS RESTRAINED TO THE MAIN. PROVIDE APPROPRIATE RESTRAINT.
 5. HYDRANT LOCATION APPLIES TO PROPOSED AND RELOCATED FIRE HYDRANTS.
 6. LOCATE FIRE HYDRANT WITH 3' HORIZONTAL CLEARANCE FROM ABOVE GROUND OBJECTS.
 7. PROVIDE A MINIMUM OF 3' COVER OVER ALL SECTIONS OF HORIZONTAL PIPE. USE FITTINGS AS NECESSARY.
 8. TAPPING SLEEVES MAY BE USED ON EXISTING MAINS IN LIEU OF DI TEES.
 9. LOCATE FIRE HYDRANT OUTSIDE OF THE VEHICLE RECOVERY AREA, ADJACENT TO THE R/W LINE, OR IN A PROTECTED AREA.

STATE OF NORTH CAROLINA
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RALEIGH, N.C.

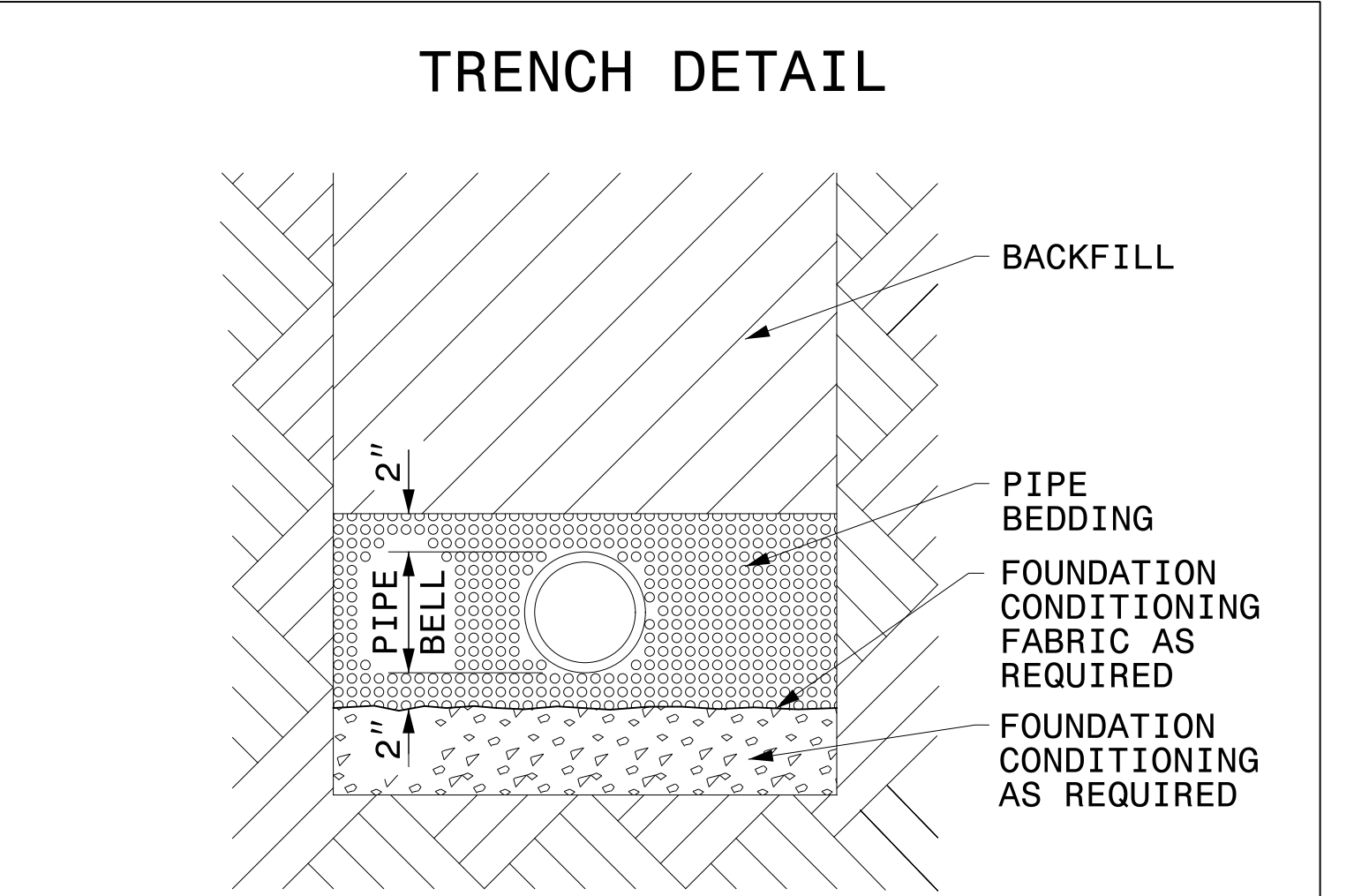
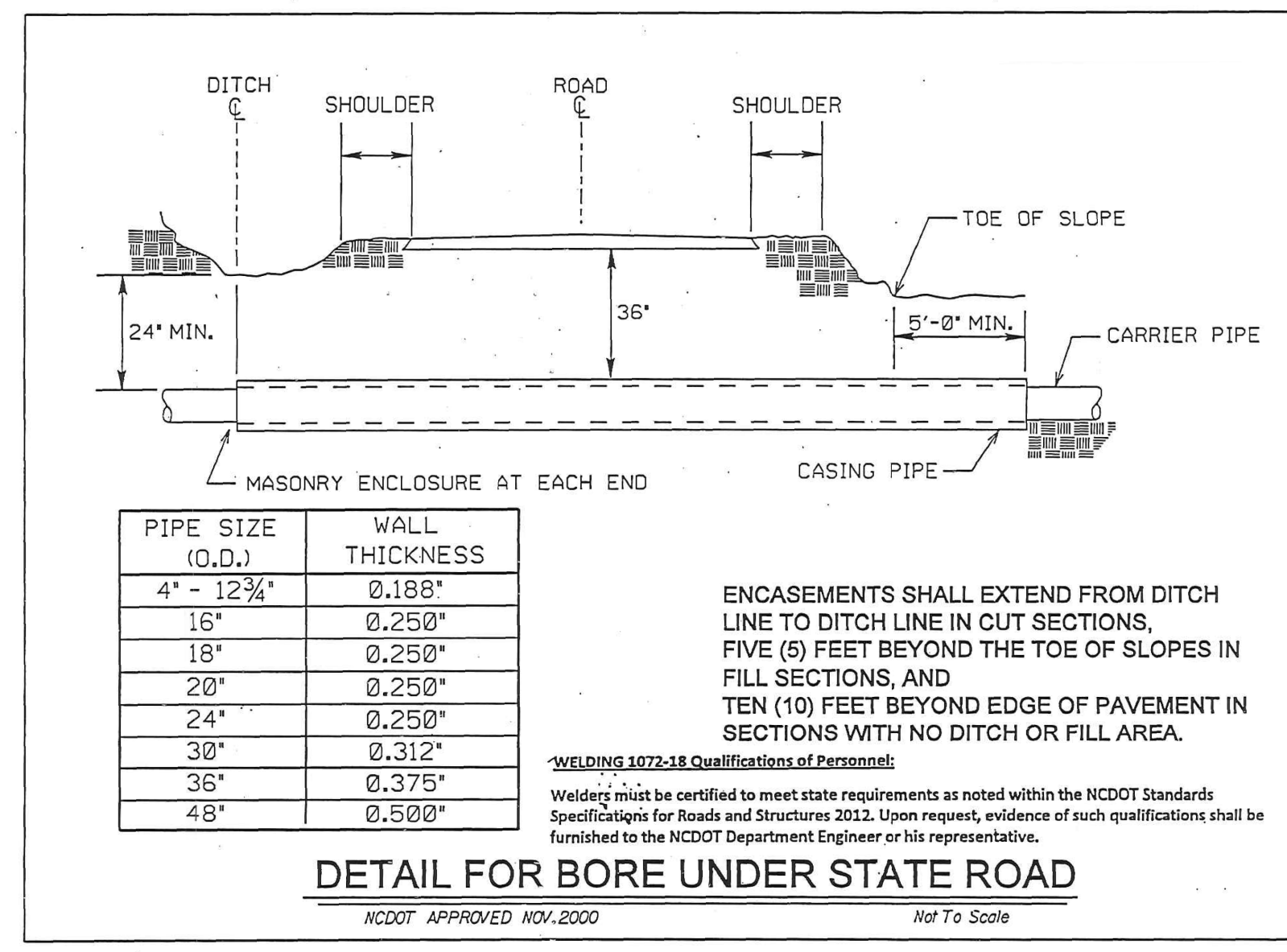
ROADWAY STANDARD DRAWING FOR
FIRE HYDRANT

SHEET 1 OF 1
1515.02

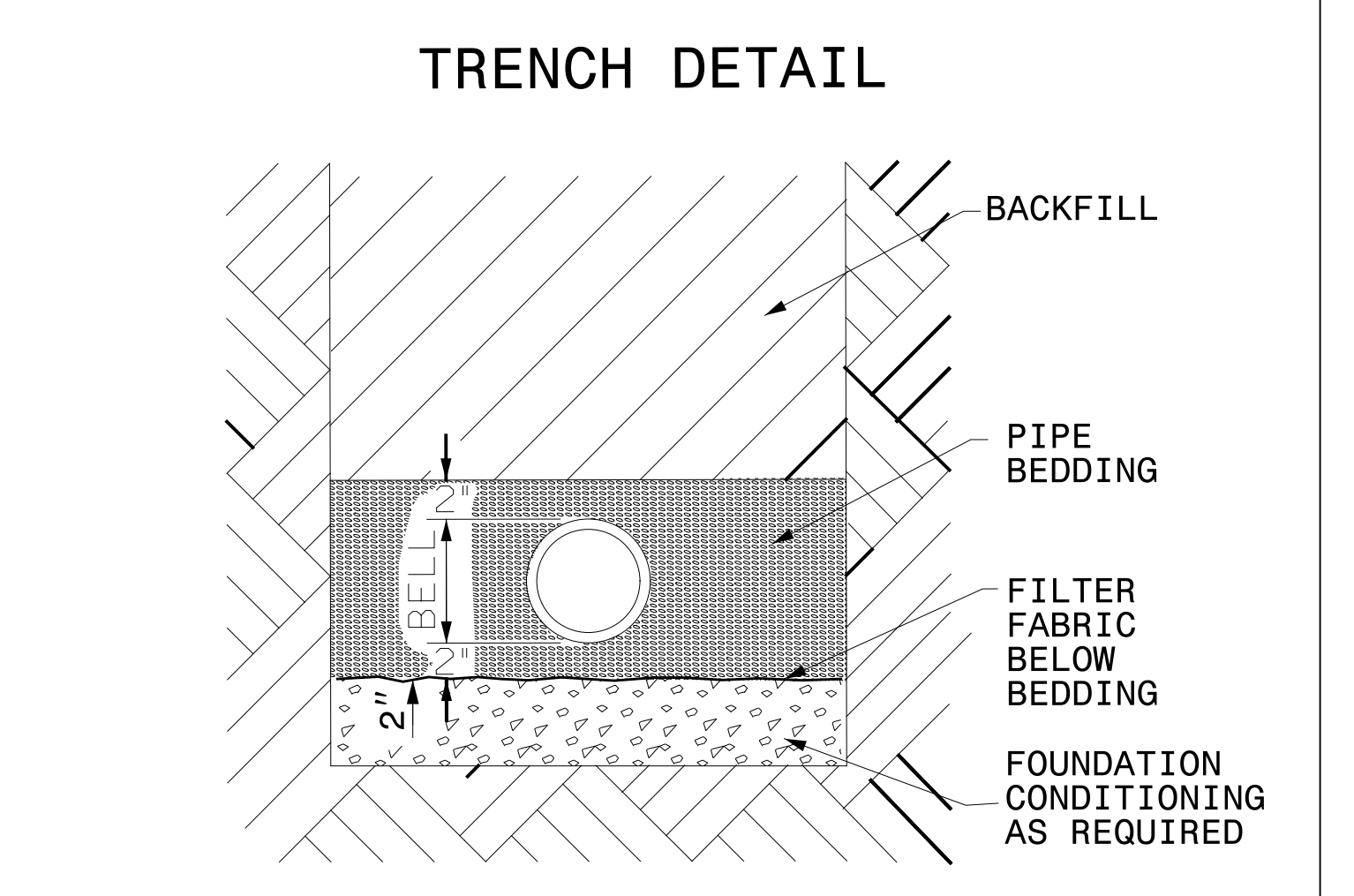


MAXIMUM TRENCH WIDTH AT TOP OF PIPE

NOMINAL PIPE SIZE (INCHES)	TRENCH WIDTH (INCHES)	NOMINAL PIPE SIZE (INCHES)	TRENCH WIDTH (INCHES)
4	28	20	44
6	30	24	48
8	32	30	54
10	34	36	60
12	36	42	66
14	38	48	72
16	40	54	78
18	42		



PLACE FOUNDATION CONDITIONING MATERIAL BELOW BEDDING IF REQUIRED, AS DIRECTED BY ENGINEER. PIPE BEDDED IN SELECT MATERIAL, CLASS II (TYPE 1) OR CLASS III. TRENCH BACKFILLED IN LOOSE 6" LAYERS COMPACTED TO TOP OF TRENCH USING LOCAL EXCAVATED MATERIAL IF APPROVED BY THE ENGINEER, OR SELECT MATERIAL. ALL MATERIAL SHALL BE FREE OF ROCKS, FOREIGN MATERIAL, AND FROZEN EARTH. COMPACTION SHALL BE TO APPROXIMATELY 95% DENSITY IN ACCORDANCE WITH AASHTO T-99 AS MODIFIED BY THE DEPARTMENT OF TRANSPORTATION.




PLACE FOUNDATION CONDITIONING MATERIAL BELOW BEDDING IF REQUIRED, AS DIRECTED BY ENGINEER. PIPE BEDDED IN SELECT MATERIAL, CLASS IV. TRENCH BACKFILLED IN LOOSE 6" LAYERS COMPACTED TO TOP OF TRENCH USING LOCAL EXCAVATED MATERIAL IF APPROVED BY THE ENGINEER, OR SELECT MATERIAL. ALL MATERIAL SHALL BE FREE OF ROCKS, FOREIGN MATERIAL, AND FROZEN EARTH. COMPACTION SHALL BE TO APPROX. 95% DENSITY IN ACCORDANCE WITH AASHTO T-99 AS MODIFIED BY THE DEPARTMENT OF TRANSPORTATION.

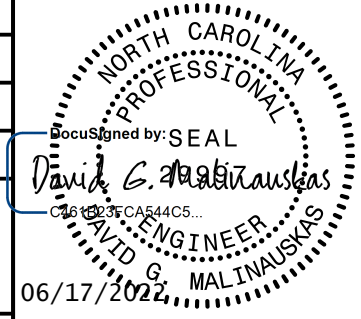
5/14/99

JOHNSTON COUNTY DETAILS

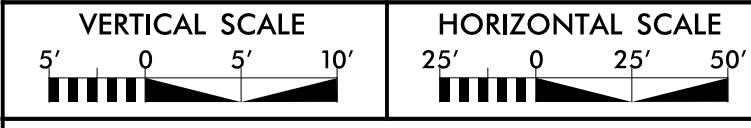
PREPARED IN THE OFFICE OF:



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919.828.0531 Fax 919.834.3559
License Number: F-0115

PROJECT REFERENCE NO.	U-6223	SHEET NO.	UC-3B
DESIGNED BY:	CMG		
DRAWN BY:	TK		
CHECKED BY:	DGM		
APPROVED BY:	CMG		
REVISÉ:			
			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151			

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UTILITY CONSTRUCTION PLANS ONLY



UTILITY CONSTRUCTION

PERMANENT BLOW-OFF ASSEMBLY
NOT TO SCALE

NOTE:
1) THE TOP OF THE BLOW-OFF STANDPIPE SHALL BE NO MORE THAN 4'-6" BELOW GRADE.
2) BLOW-OFFS SHALL BE LOCATED IN AREAS WHICH WILL ALLOW FOR POSITIVE DRAINAGE WHEN UTILIZED.
3) ALL MATERIALS USED IN THE POTABLE WATER SYSTEM MUST BE NSF61 AND NSF372 CERTIFIED AND MEET THE LATEST FEDERAL SAFE DRINKING WATER ACT REQUIREMENTS.

Drawn By:	Name	Date	
Checked By:			
Approved By:			
Scale:			
Rev.	Description	Date	Int.

JOHNSTON COUNTY
Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

WATER STANDARD DETAIL
Permanent Blow Off Assembly

PAGE **2**

FIRE HYDRANT ASSEMBLY
NOT TO SCALE

NOTE:
1. MIN. OF 4 CU. FT. STONE (MORE IF REQ'D).
2. CONC. THRUST BLOCK TO HAVE MIN. OF 6 SQ. FT. BEARING ON SOLID BANK (MORE IF REQ'D).
3. DRAIN HOLES AND FLANGES SHALL BE CLEAR OF CONC.
4. FIRE HYDRANT BARREL SHALL BE PLUMB.
5. ALL MATERIALS USED IN THE POTABLE WATER SYSTEM MUST BE NSF61 AND NSF372 CERTIFIED AND MEET THE LATEST FEDERAL SAFE DRINKING WATER ACT REQUIREMENTS.

"FIRE HYDRANTS INSTALLED ON EXISTING 6" WATER MAINS, MUST BE INSTALLED USING A 6"x6" TEE CUT INTO THE EXISTING WATER MAIN. FIRE HYDRANTS INSTALLED ON EXISTING WATER MAINS LARGER THAN 6", CAN BE INSTALLED USING A TAPPING SLEEVE AND VALVE ON THE EXISTING WATER MAIN.

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Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

WATER STANDARD DETAIL
Fire Hydrant Assembly

PAGE **4**

TAPPING SLEEVE & VALVE ASSEMBLY
NOT TO SCALE

NOTE:
1. TAPPING SLEEVE SHALL BE FABRICATED OF TYPE 304 OR 316 S.S. AND PROVIDE A 360° SEAL AROUND EXISTING PIPE WITH FULL CIRCUMFERENTIAL GASKET.
2. TAPPING SLEEVE SHALL BE JCM 432, MUELLER H-304, FORD FTSS, ROMAC ST III OR APPROVED EQUAL.
3. ALL MATERIALS USED IN THE POTABLE WATER SYSTEM MUST BE NSF61 AND NSF372 CERTIFIED AND MEET THE LATEST FEDERAL SAFE DRINKING WATER ACT REQUIREMENTS.

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JOHNSTON COUNTY
Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

WATER STANDARD DETAIL
Tapping Sleeve and Valve Assembly

PAGE **5**

STANDARD BORE ENCASEMENT
NOT TO SCALE

NOTE:
1. CARRIER PIPE SHALL BE D.I.P. UNLESS EXPRESSLY APPROVED BY THE COUNTY.
2. STAINLESS STEEL SPACERS SHALL BE USED. NO TIMBER SKIDS ARE ALLOWED.
3. TWO SPACERS PER JOINT SHALL BE USED FOR D.I.P. CARRIER PIPE.
4. THREE SPACERS PER JOINT SHALL BE USED FOR PVC CARRIER PIPE.
5. ENCASED BORES ALONG GRAVITY COLLECTION SYSTEMS SHALL NOT REQUIRE BRIDLE RODS.
6. 2 EA. 3/4" S.S. BRIDLE RODS SHALL BE REQUIRED ON ALL LINES 8"Ø AND SMALLER. 4 EA. 3/4" S.S. BRIDLE RODS SHALL BE REQUIRED ON ALL LINES 10"Ø AND LARGER.
7. CARRIER PIPE SHALL BE INSTALLED USING FIELD 'LOK' GASKETS OR APPROVED EQUAL.

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Department of Public Utilities
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WATER STANDARD DETAIL
Standard Bore Encasement

PAGE **6**

VERTICAL BEND RODDING AND BLOCKING DETAIL
NOT TO SCALE

SIZE OF 45° BEND	STATIC THRUST IN POUNDS	NUMBER OF RODS REQUIRED
6"	4,328	2
8"	7,684	2
12"	17,312	4
16"	30,779	6
20"	48,091	8
24"	69,252	10

GENERAL NOTES:
1. RODS AND NUTS SHALL BE OF TYPE 304 OR TYPE 316 STAINLESS STEEL.
2. CONCRETE SHALL NOT CONTACT BOLTS OR ENDS OF MECHANICAL JOINT BENDS.

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JOHNSTON COUNTY
Department of Public Utilities
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Smithfield, NC 27577

WATER STANDARD DETAIL
Critical Bend Rodding and Blocking Details

PAGE **7**

THRUST BLOCK DETAIL
NOT TO SCALE

PIPE SIZE	90° BEND				45° BEND				22 1/2° BEND				11 1/4° BEND				TEE				PLUG			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
6"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"
8"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"
10"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"
12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"
14"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"
16"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"
18"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"
20"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"
24"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"

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Department of Public Utilities
P.O. Box 2263
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WATER STANDARD DETAIL
Thrust Block

PAGE **8**

THRUST COLLAR INSTALLATION
NOT TO SCALE

PIPE DIAMETER	CONCRETE THRUST COLLAR			ANCHOR COLLAR	RINGS REQUIRED
	A	B	C		
6", 8", 12"	1-1/2"	1-1/2"	2"	ONE	
16"	1-1/2"	1-1/2"	2"	ONE	
20"	1-1/2"	1-1/2"	2"	ONE	
24"	1-1/2"	1-1/2"	2"	TWO	
30"	1-1/2"	1-1/2"	2"	TWO	
36"	1-1/2"	1-1/2"	2"	TWO	

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Department of Public Utilities
P.O. Box 2263
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WATER STANDARD DETAIL
Thrust Collar Installation

PAGE **9**

HARNESS RESTRAINT DETAIL
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WATER STANDARD DETAIL
Restraint Harness

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TOWN OF CLAYTON DETAILS

PREPARED IN THE OFFICE OF:

Wooten

120 North Boylan Avenue Raleigh, NC 27603-1423
919.828.0531 Fax 919.834.3559
License Number: F-0115

PROJECT REFERENCE NO. **U-6223** SHEET NO. **UC-3E**

DESIGNED BY: CMG

DRAWN BY: TK

CHECKED BY: DGM

APPROVED BY: CMG

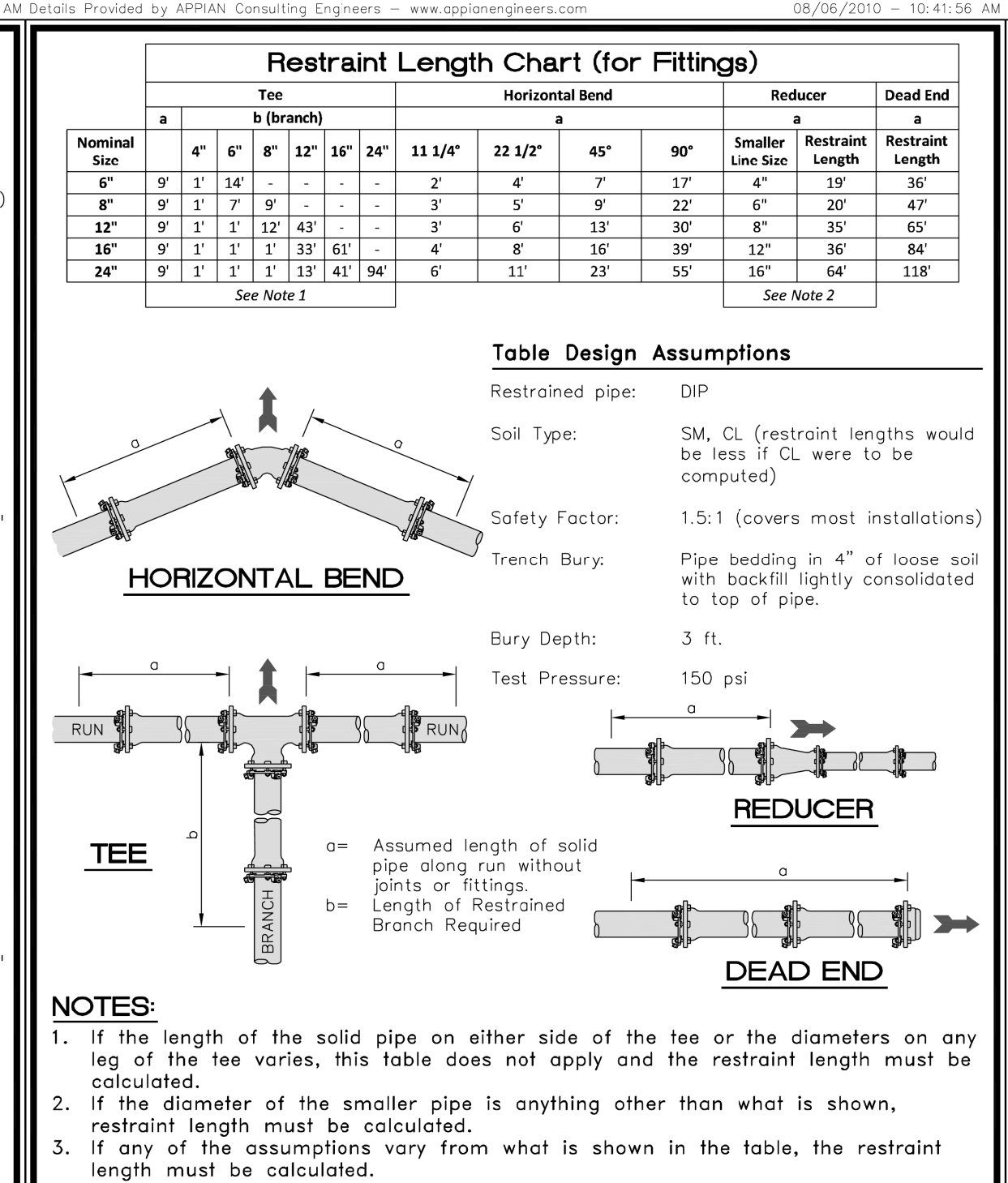
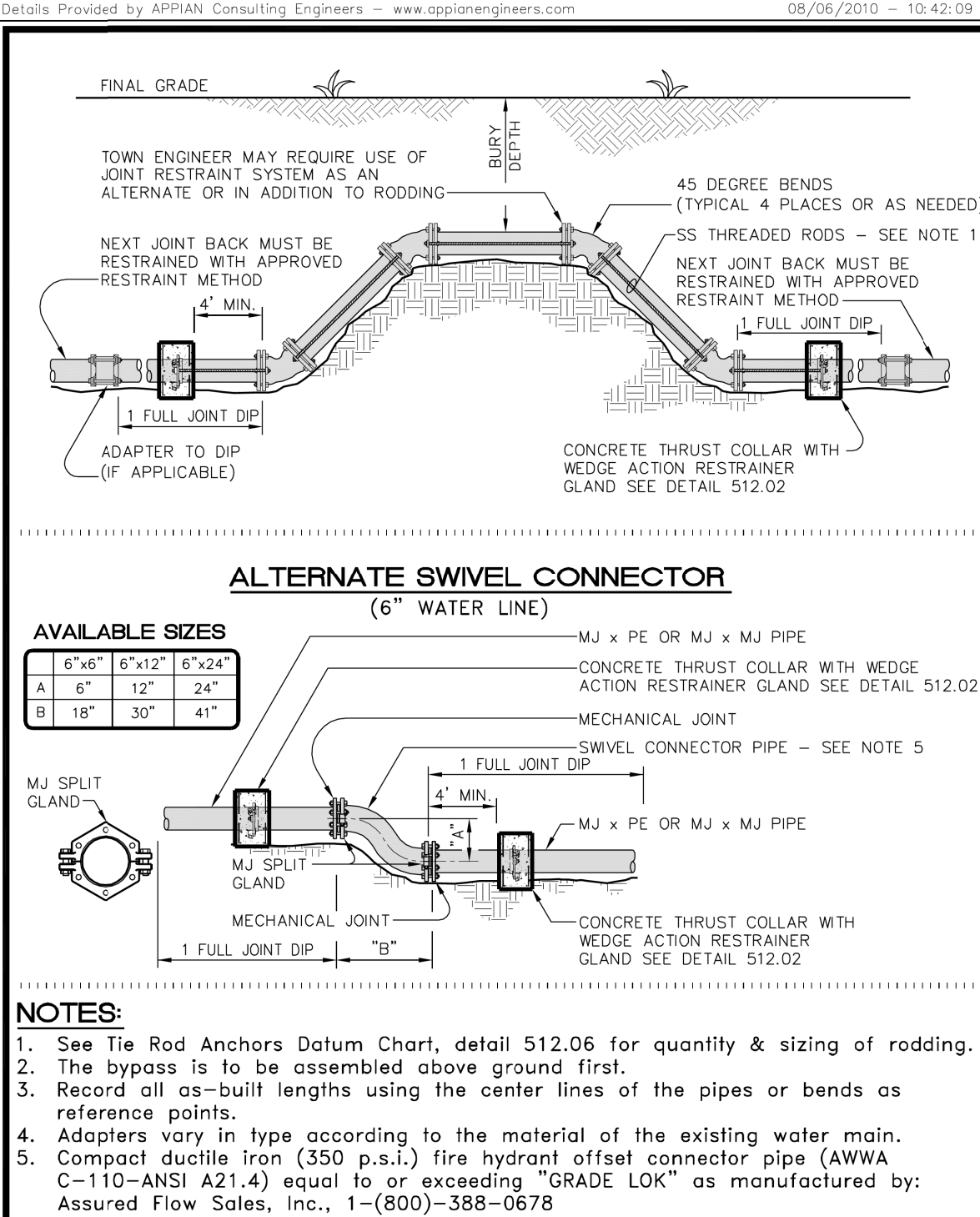
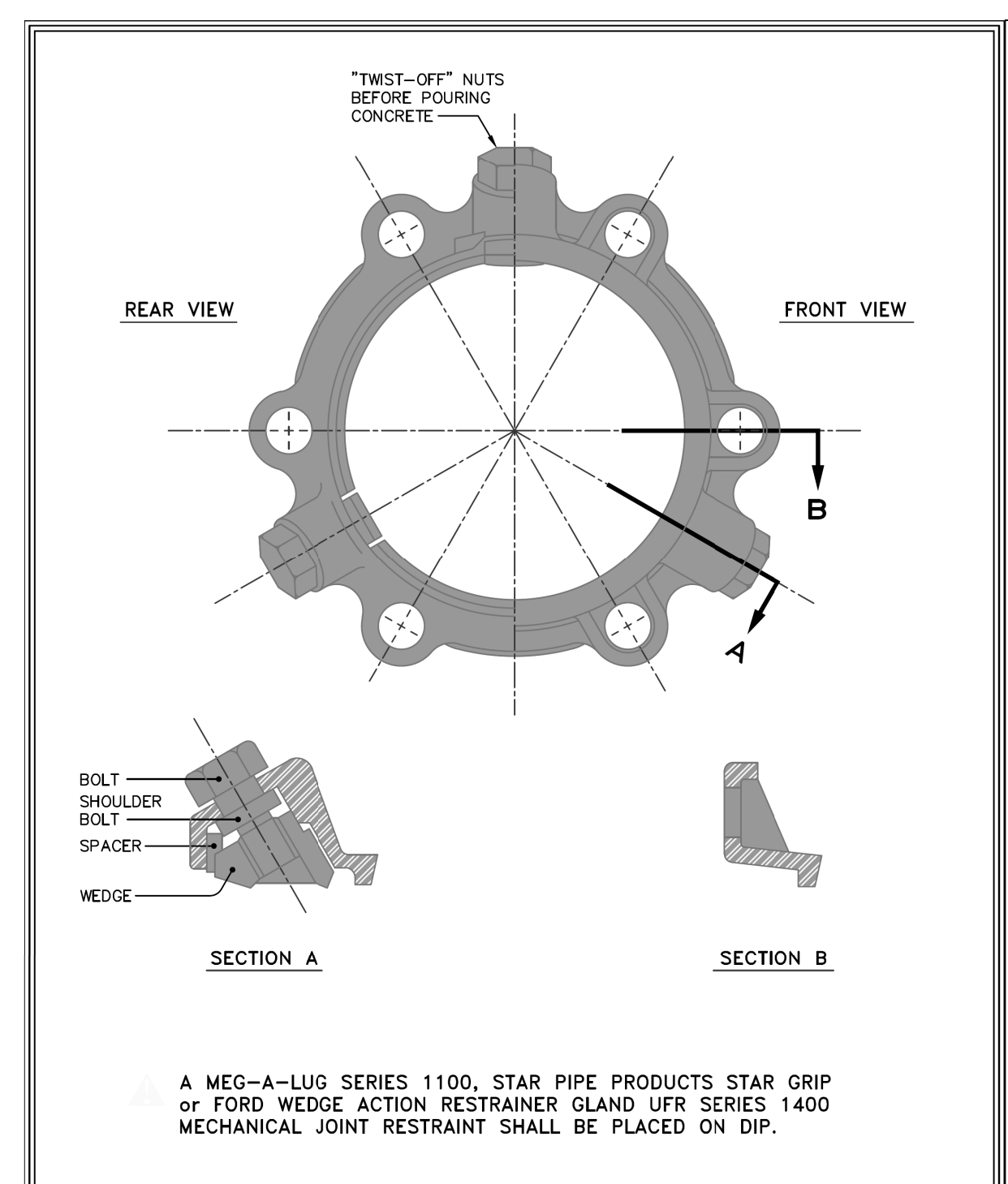
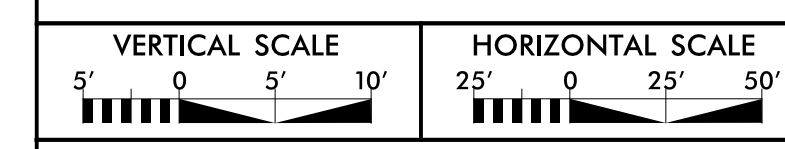
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UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151

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06/17/2010



TIE ROD ANCHORS DATUM

PIPE SIZE (INCHES)	ROD DIAMETER	NUMBER OF SS RODS REQUIRED
TEST PRESSURE = 150 PSI		
6	3/4"	2
8	3/4"	2
10	3/4"	2
12	3/4"	4
16	3/4"	6
20	3/4"	8
24	3/4"	8
30	1"	10
36"	1"	12
TEST PRESSURE = 200 PSI		
6	3/4"	2
8	3/4"	2
10	3/4"	4
12	3/4"	6
16	3/4"	8
20	3/4"	12
24	3/4"	10
30	1"	14
36"	1"	16

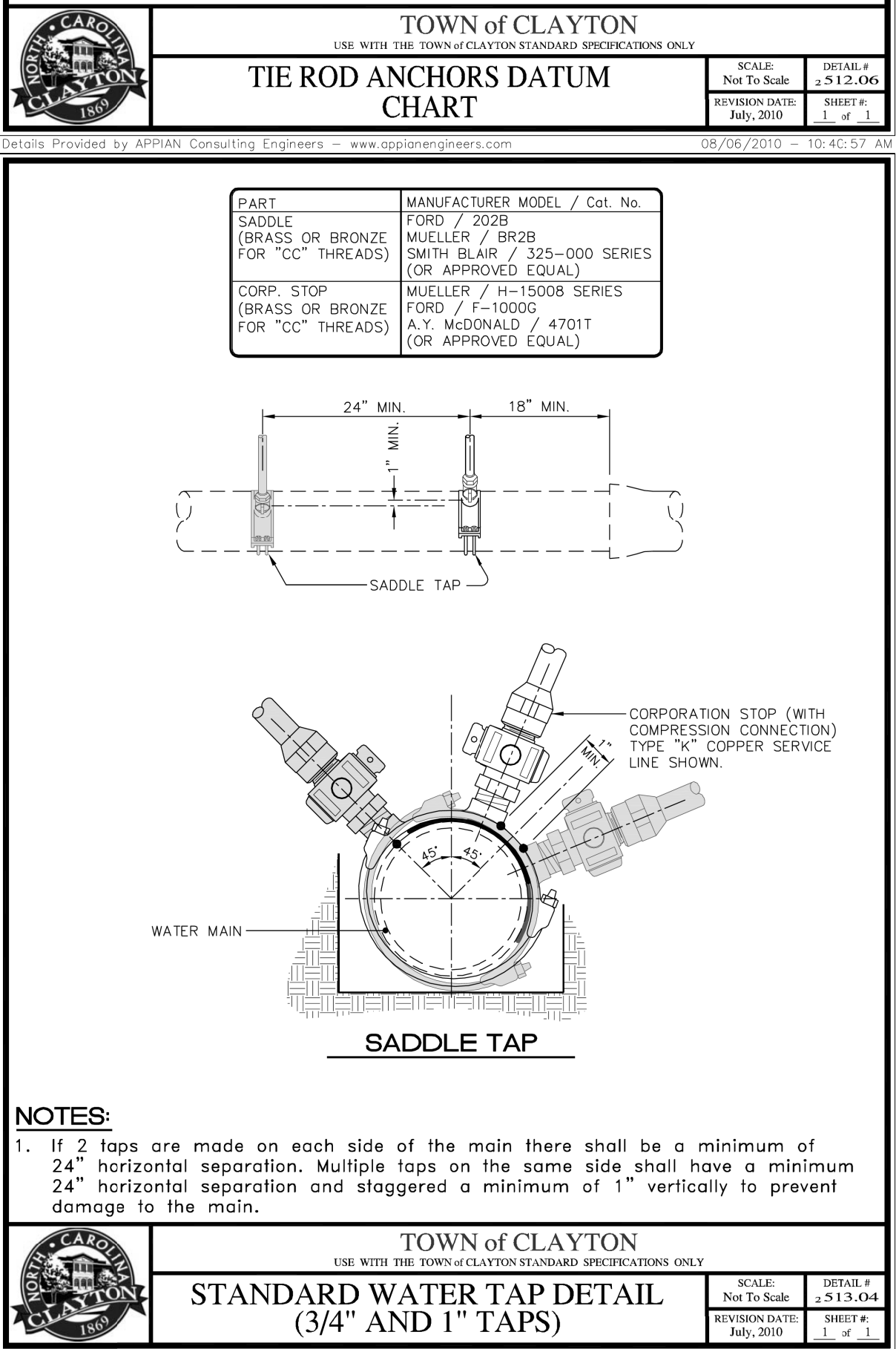
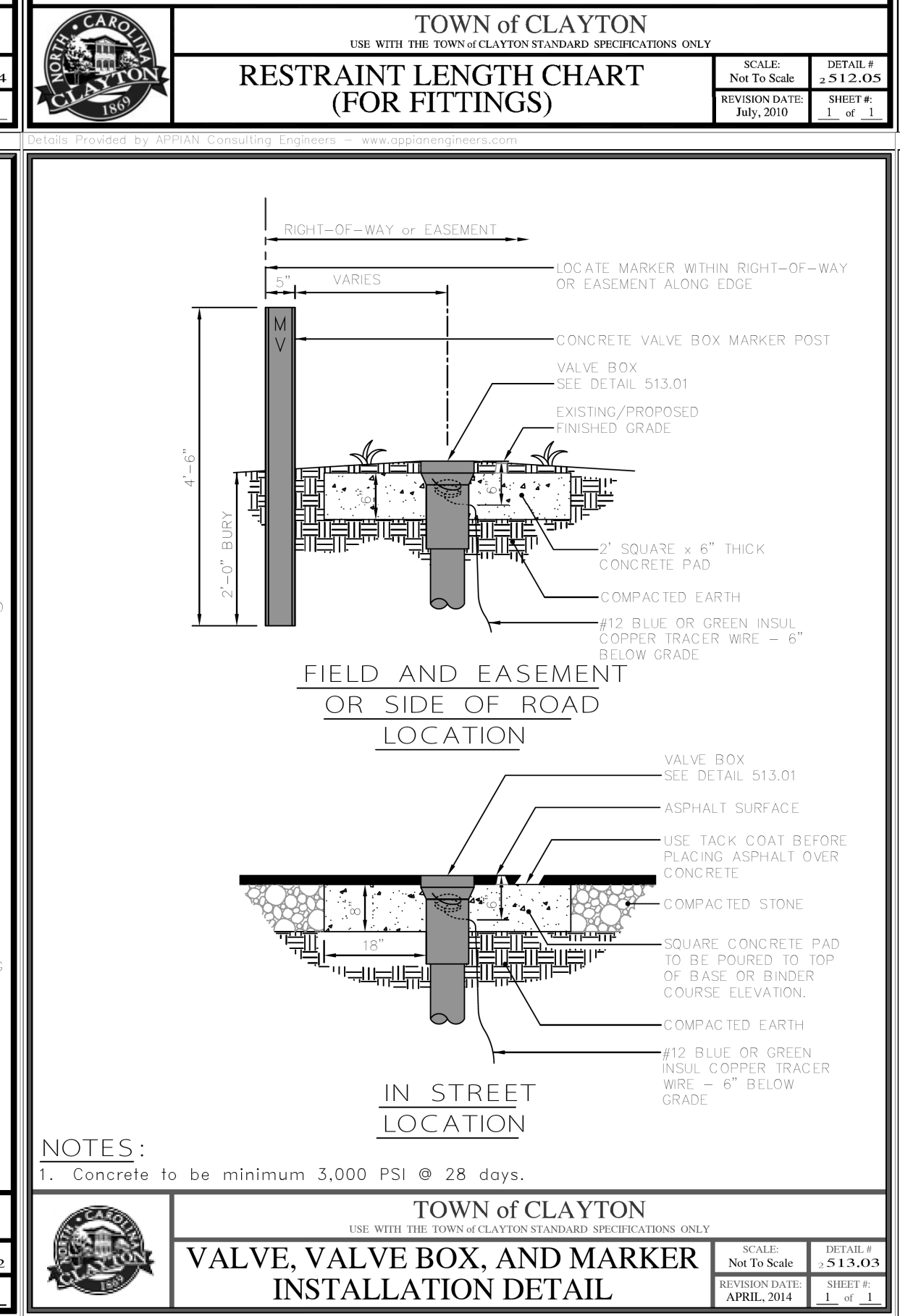
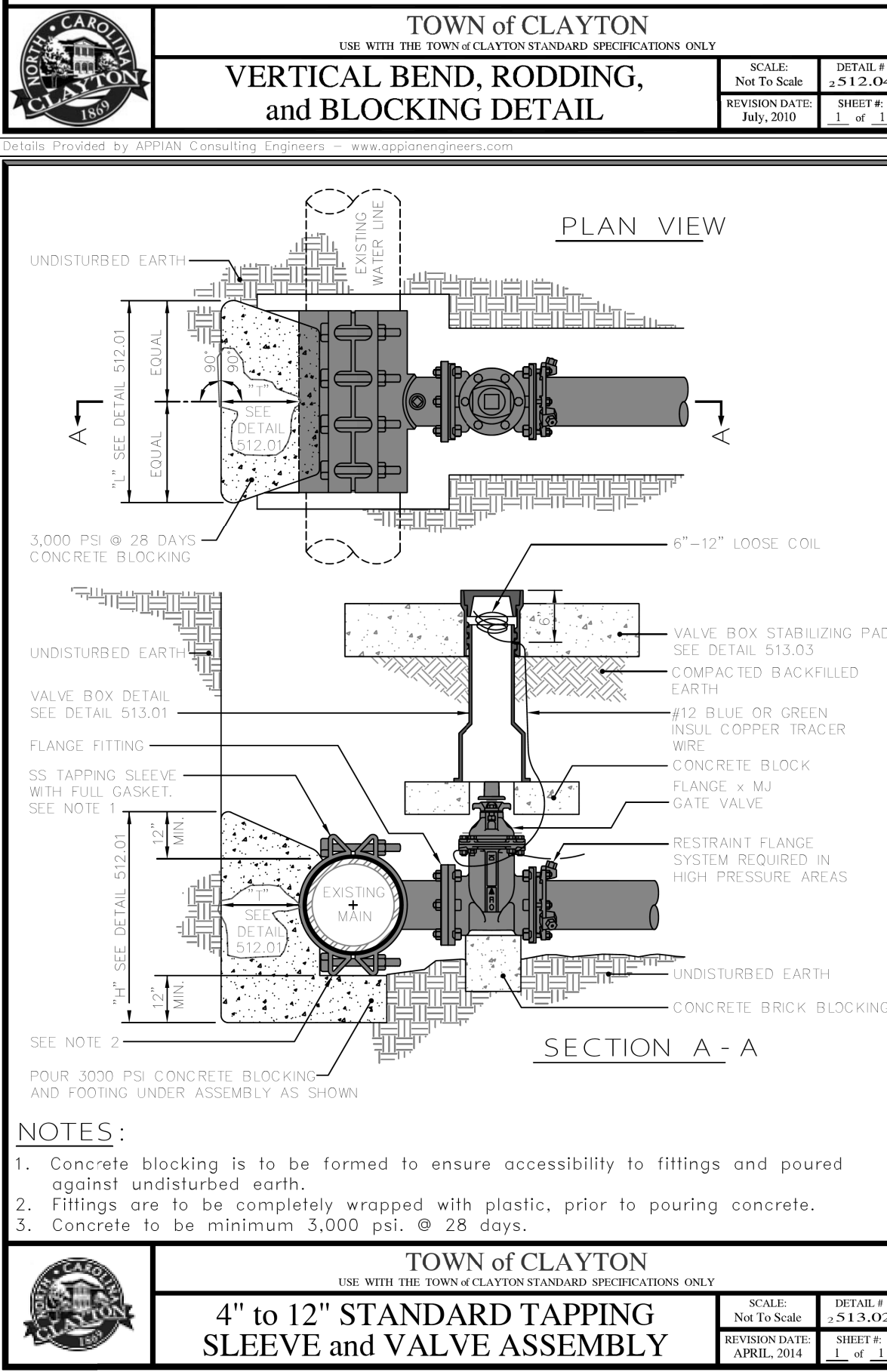
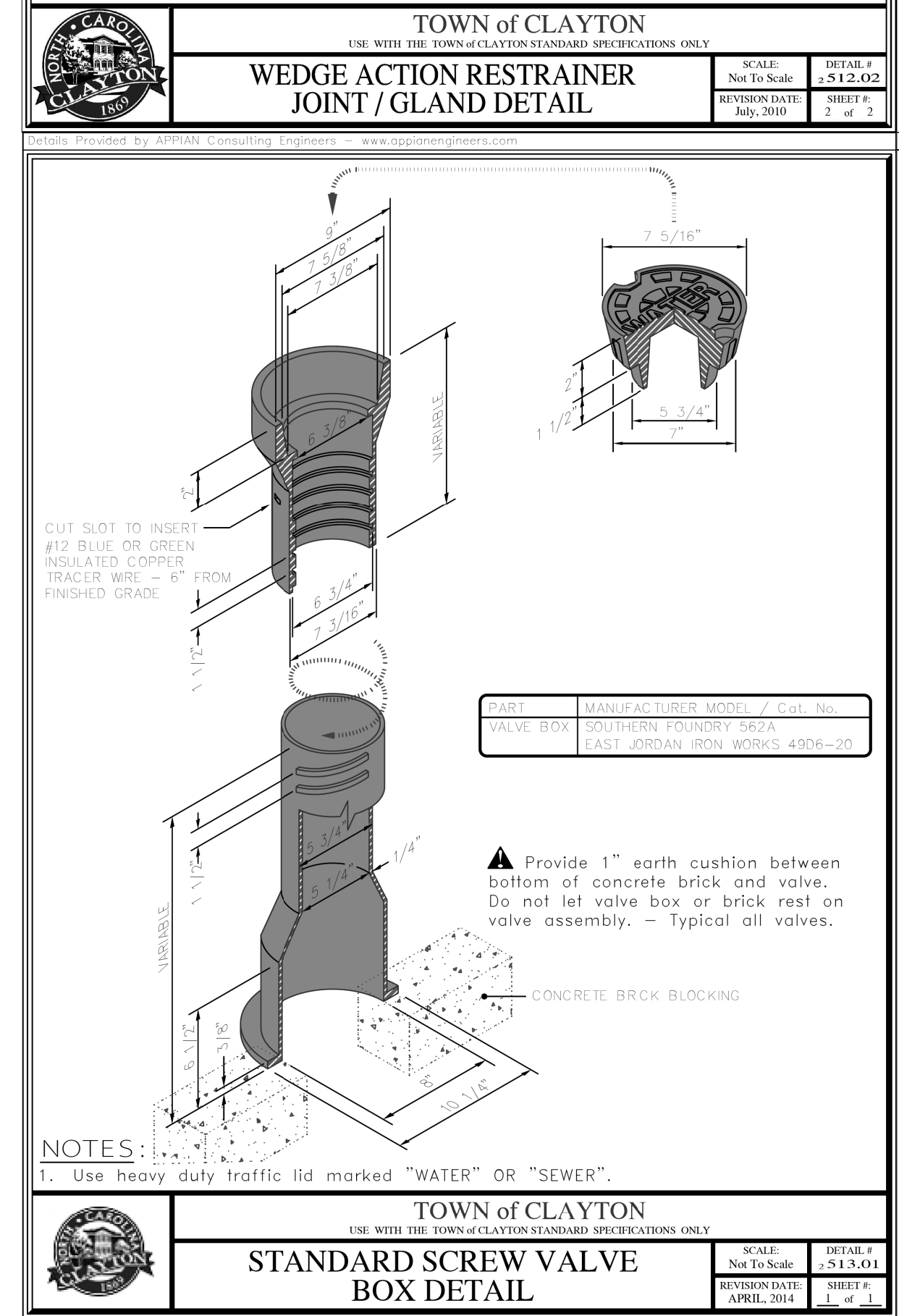
316 GRADE STAINLESS STEEL (ALL THREAD) RODS

TOWN of CLAYTON
USE WITH THE TOWN of CLAYTON STANDARD SPECIFICATIONS ONLY

TIE ROD ANCHORS DATUM CHART


SCALE: Not To Scale DETAIL # 512.06
REVISION DATE: July, 2010 SHEET # 1 of 1

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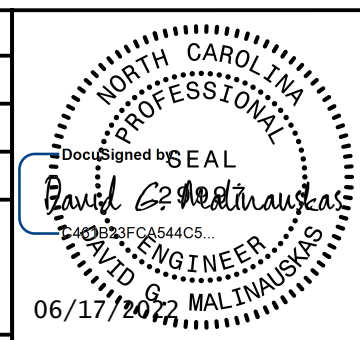
TOWN OF CLAYTON DETAILS

PREPARED IN THE OFFICE OF:



120 North Boylan Avenue Raleigh, NC 27603-1423
919.828.0531 Fax 919.834.3559
License Number: F-0115

PROJECT REFERENCE NO. U-6223	SHEET NO. UC-3F
DESIGNED BY: CMG	
DRAWN BY: TK	
CHECKED BY: DGM	
APPROVED BY: CMG	
REVISED:	
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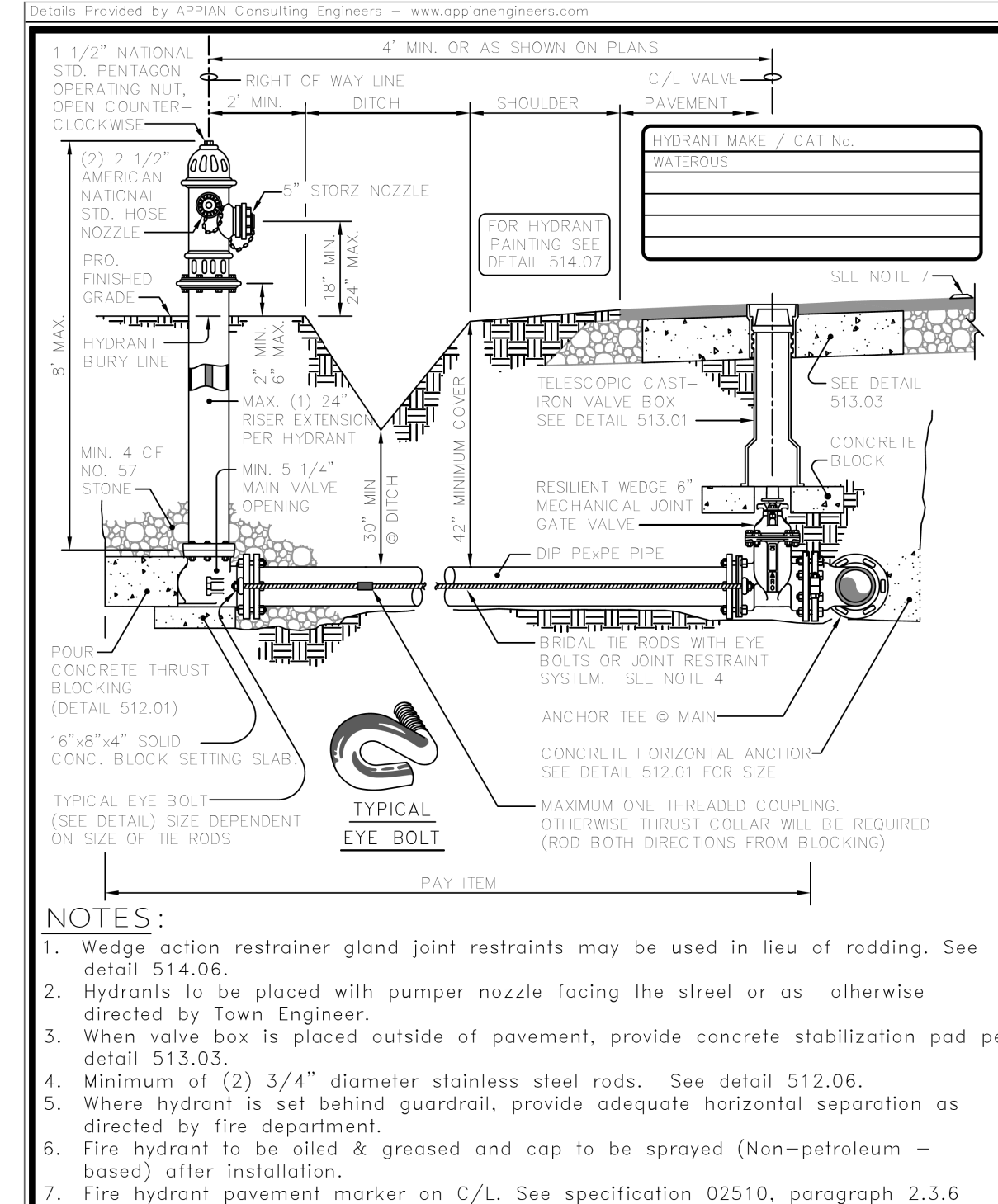
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VERTICAL SCALE
5' 0 5' 10'

HORIZONTAL SCALE
25' 0 25' 50'

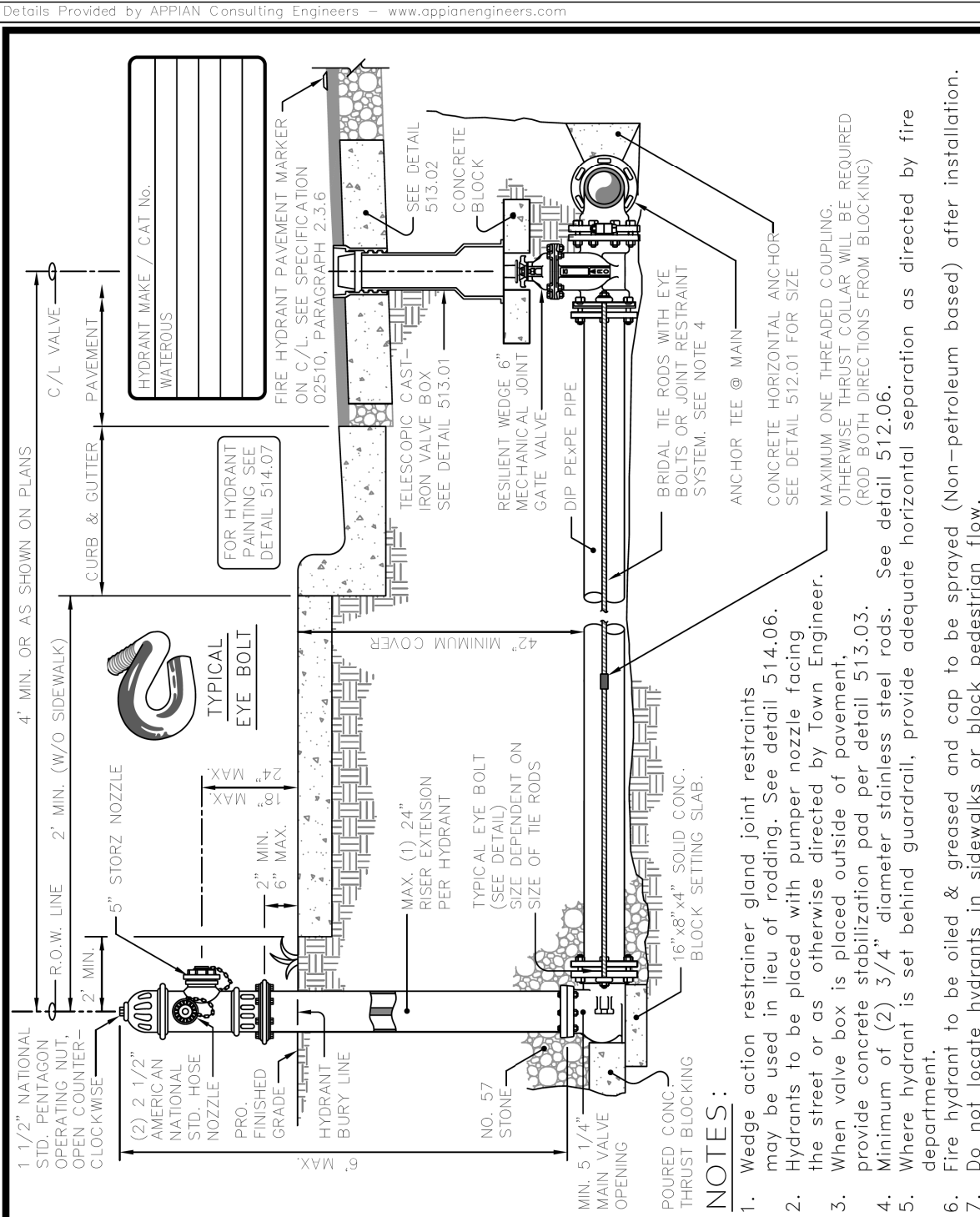
UTILITY CONSTRUCTION



TOWN of CLAYTON
USE WITH THE TOWN OF CLAYTON STANDARD SPECIFICATIONS ONLY

TYPICAL FIRE HYDRANT STREETS with SIDE DITCH

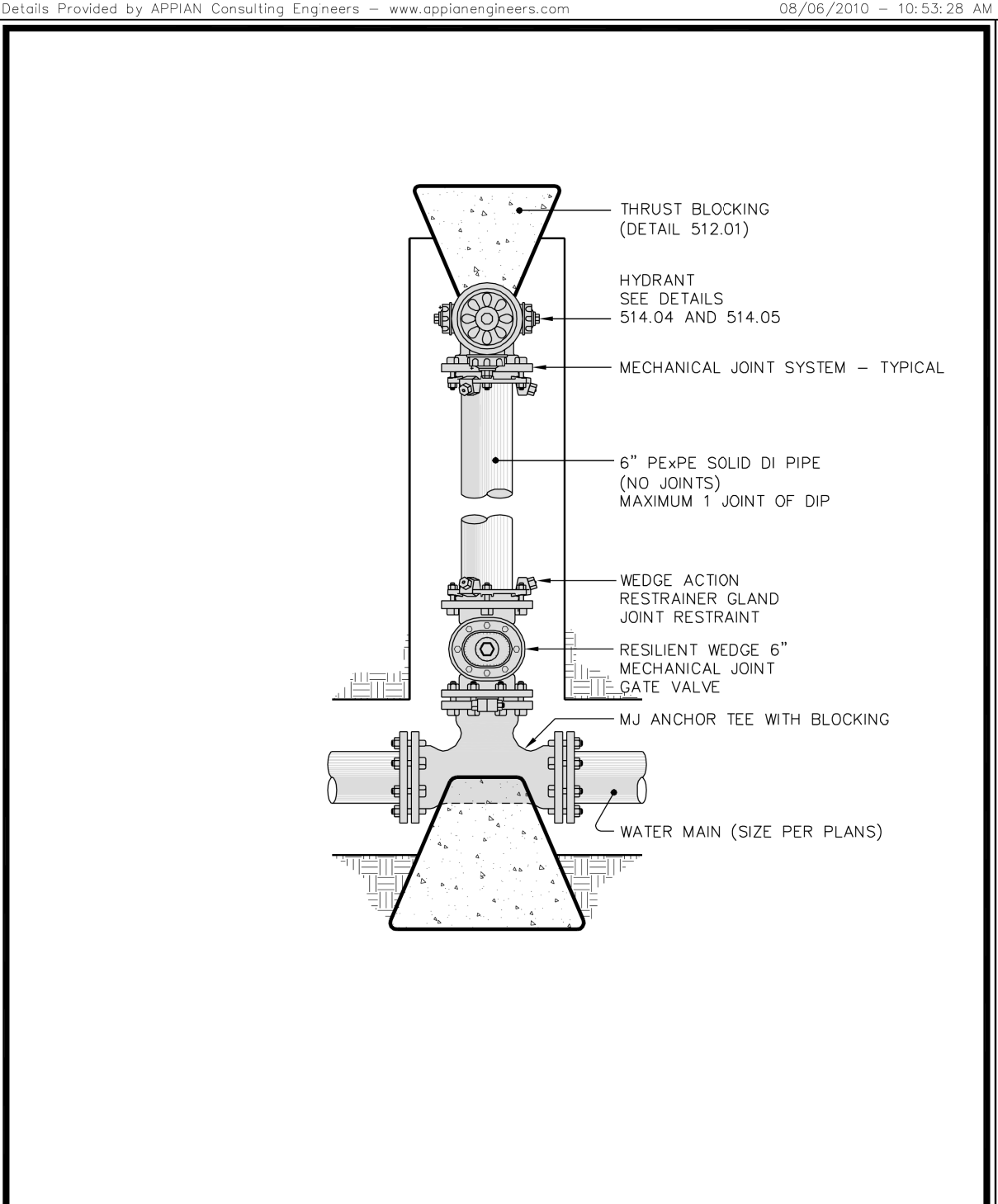
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SHEET # 1 of 1



TOWN of CLAYTON
USE WITH THE TOWN OF CLAYTON STANDARD SPECIFICATIONS ONLY

TYPICAL FIRE HYDRANT STREETS with CURB & GUTTER

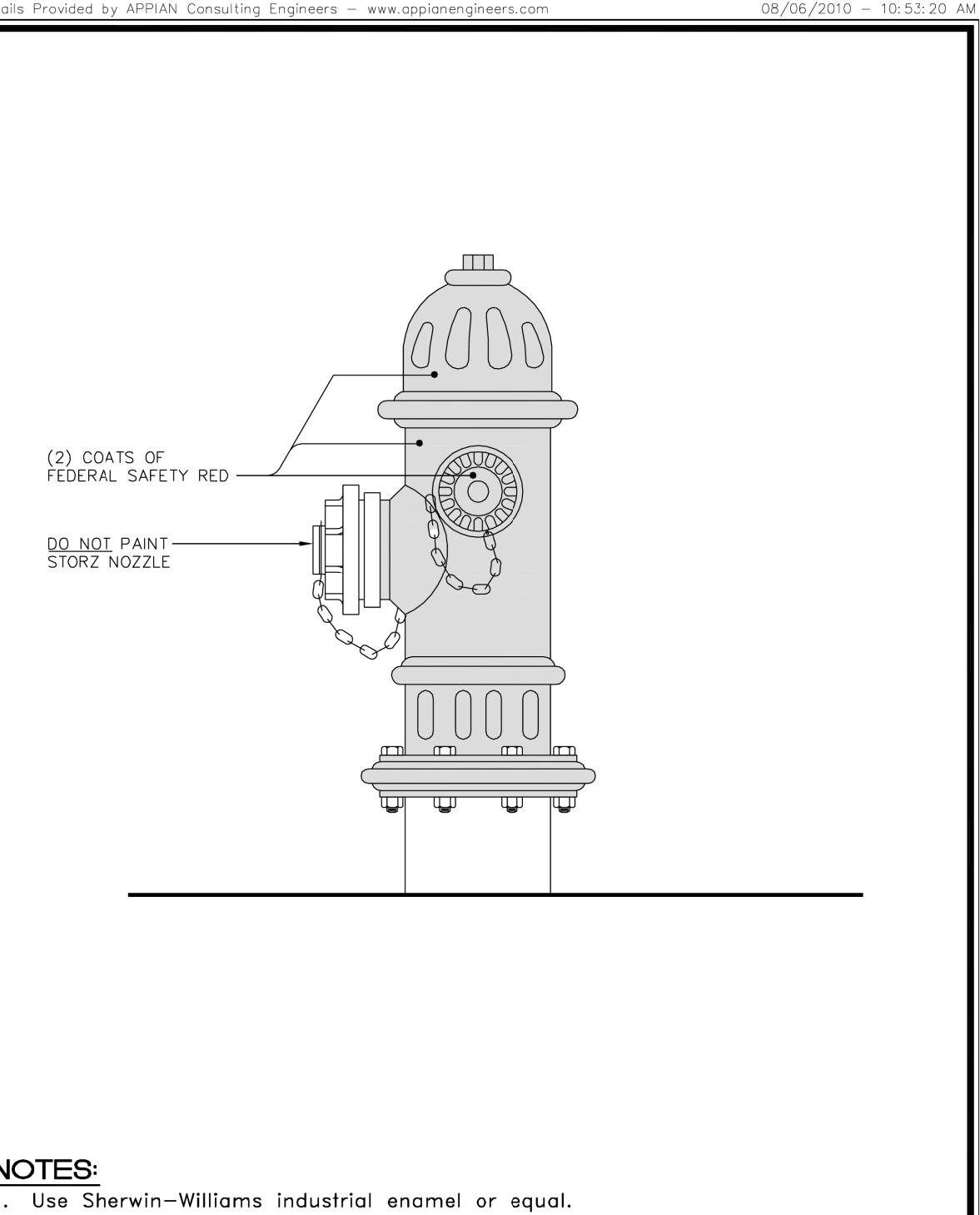
SCALE: Not To Scale
REVISION DATE: APRIL 2014
SHEET # 1 of 1



TOWN of CLAYTON
USE WITH THE TOWN OF CLAYTON STANDARD SPECIFICATIONS ONLY

ALTERNATE HYDRANT SETTINGS JOINT RESTRAINT & R.S. GATE VALVE

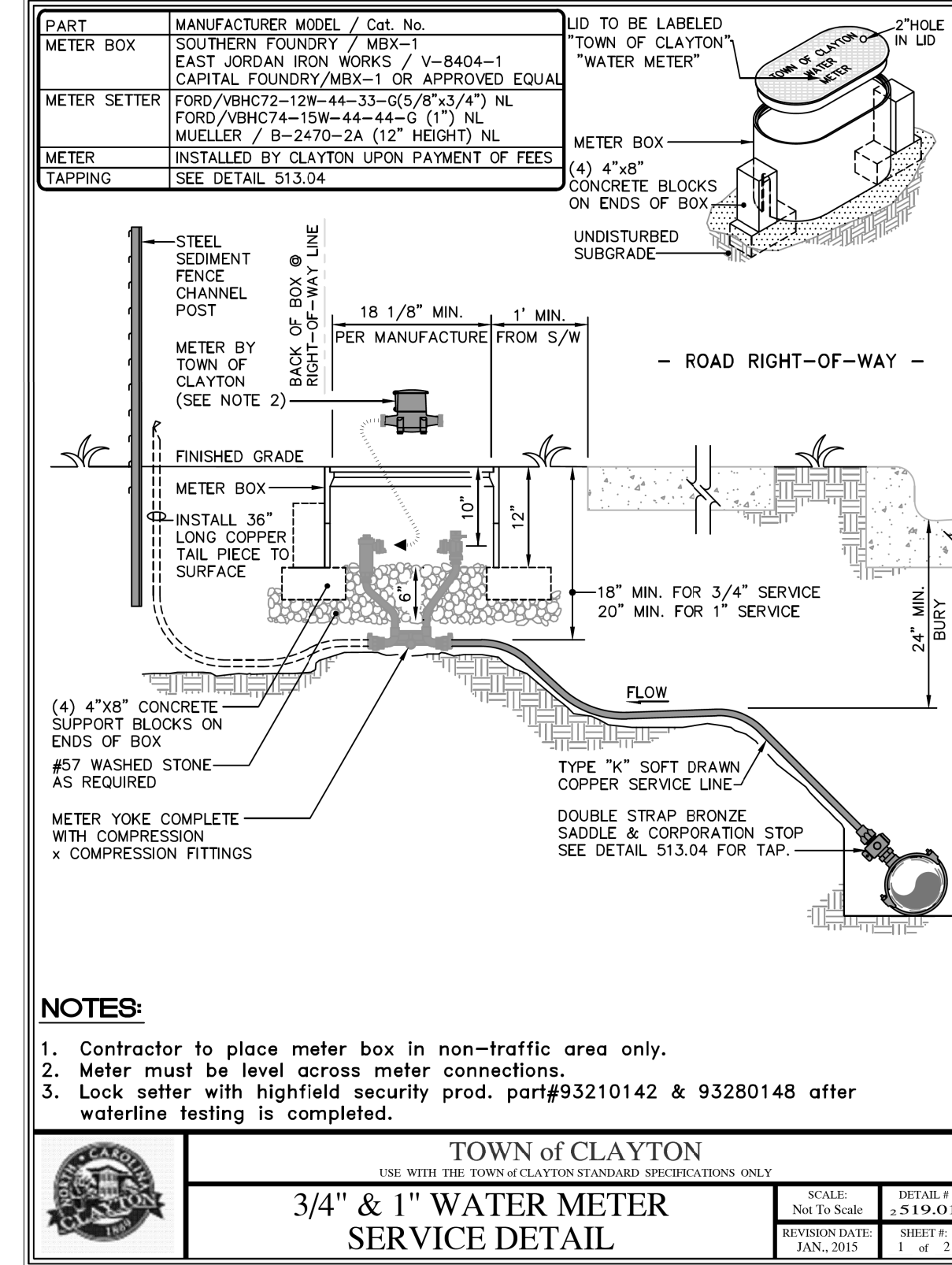
SCALE: Not To Scale
REVISION DATE: July, 2010
SHEET # 1 of 1



TOWN of CLAYTON
USE WITH THE TOWN OF CLAYTON STANDARD SPECIFICATIONS ONLY

FIRE HYDRANT PAINTING SPECIFICATIONS

SCALE: Not To Scale
REVISION DATE: July, 2010
SHEET # 1 of 1



TOWN of CLAYTON
USE WITH THE TOWN OF CLAYTON STANDARD SPECIFICATIONS ONLY

3/4\" & 1\" WATER METER SERVICE DETAIL

SCALE: Not To Scale
REVISION DATE: JAN. 2015
SHEET # 1 of 2

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TOWN OF CLAYTON DETAILS

PREPARED IN THE OFFICE OF:

Wooten

120 North Boylan Avenue Raleigh, NC 27603-1423
919.828.0531 Fax 919.834.3559
License Number: F-0115

PROJECT REFERENCE NO. **U-6223** SHEET NO. **UC-3G**

DESIGNED BY: CMG
DRAWN BY: TK
CHECKED BY: DGM
APPROVED BY: CMG

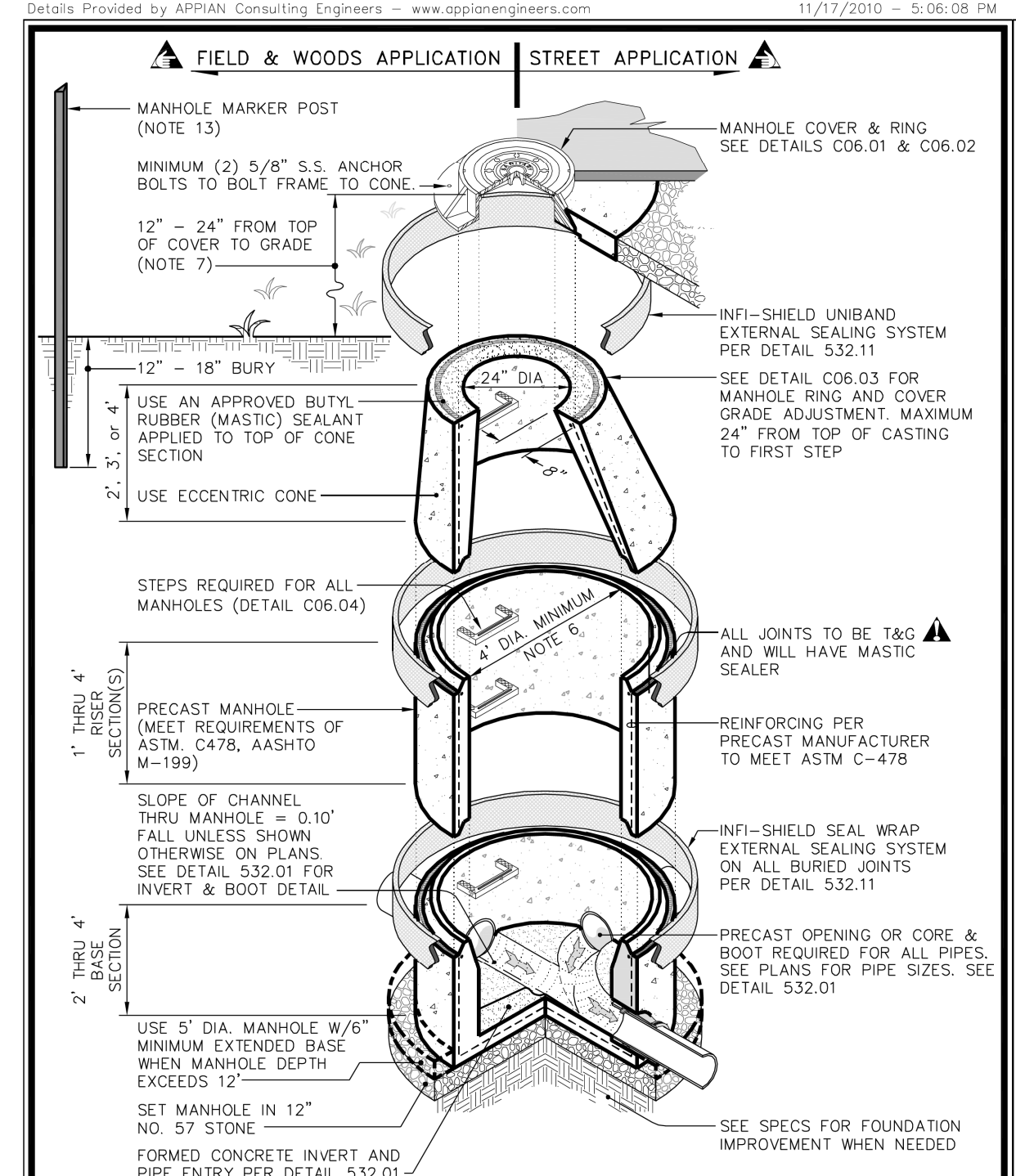
REVISIONS:

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

UTILITIES ENGINEERING SEC.
PHONE: (919) 707-6690
FAX: (919) 250-4151

Document Not Considered Final Unless All Signatures Completed
UTILITY CONSTRUCTION PLANS ONLY

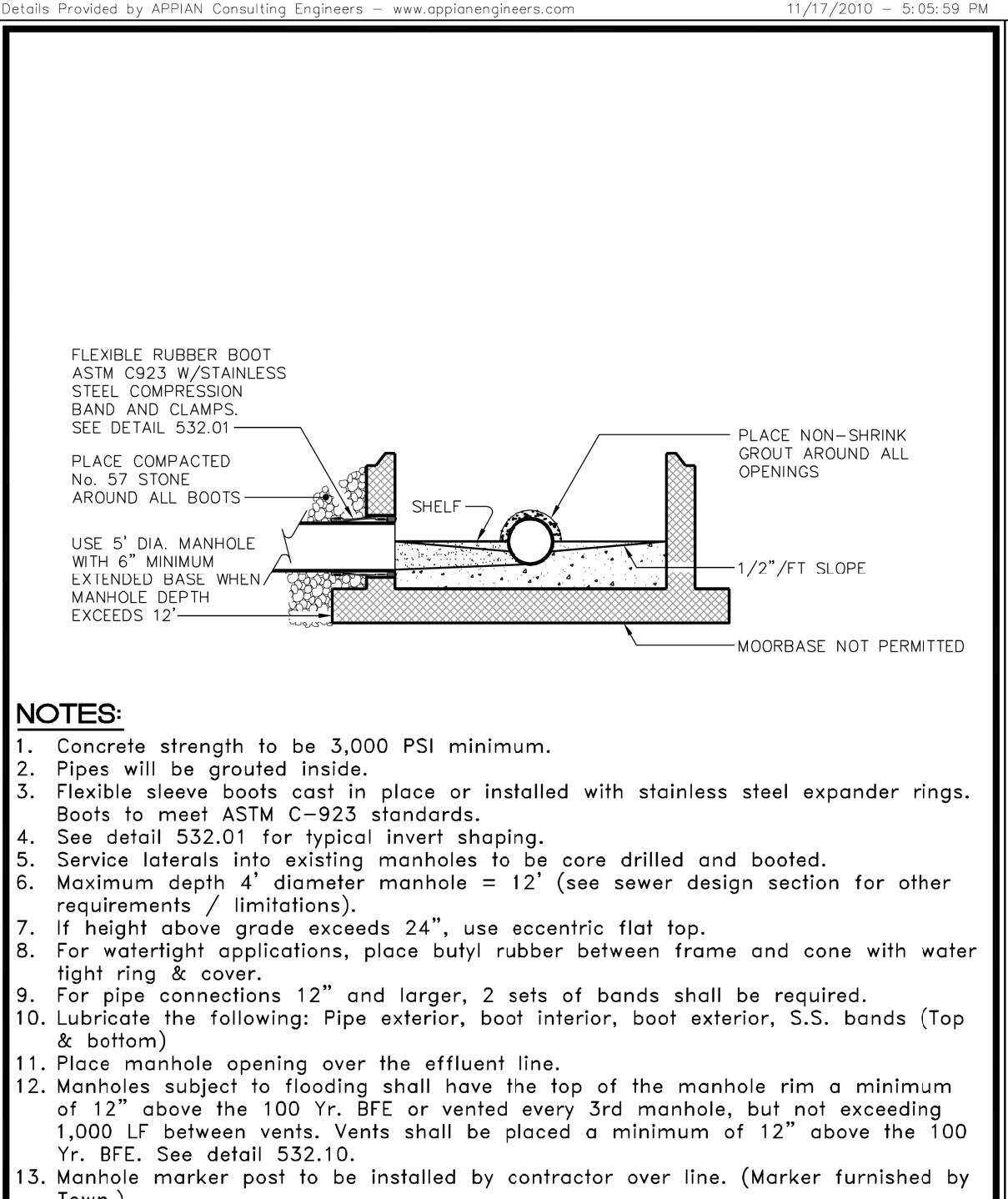
VERTICAL SCALE: 0 5' 10'
HORIZONTAL SCALE: 0 25' 50'



TOWN of CLAYTON
USE WITH THE TOWN OF CLAYTON STANDARD SPECIFICATIONS ONLY

STANDARD ECCENTRIC PRECAST MANHOLE DETAIL

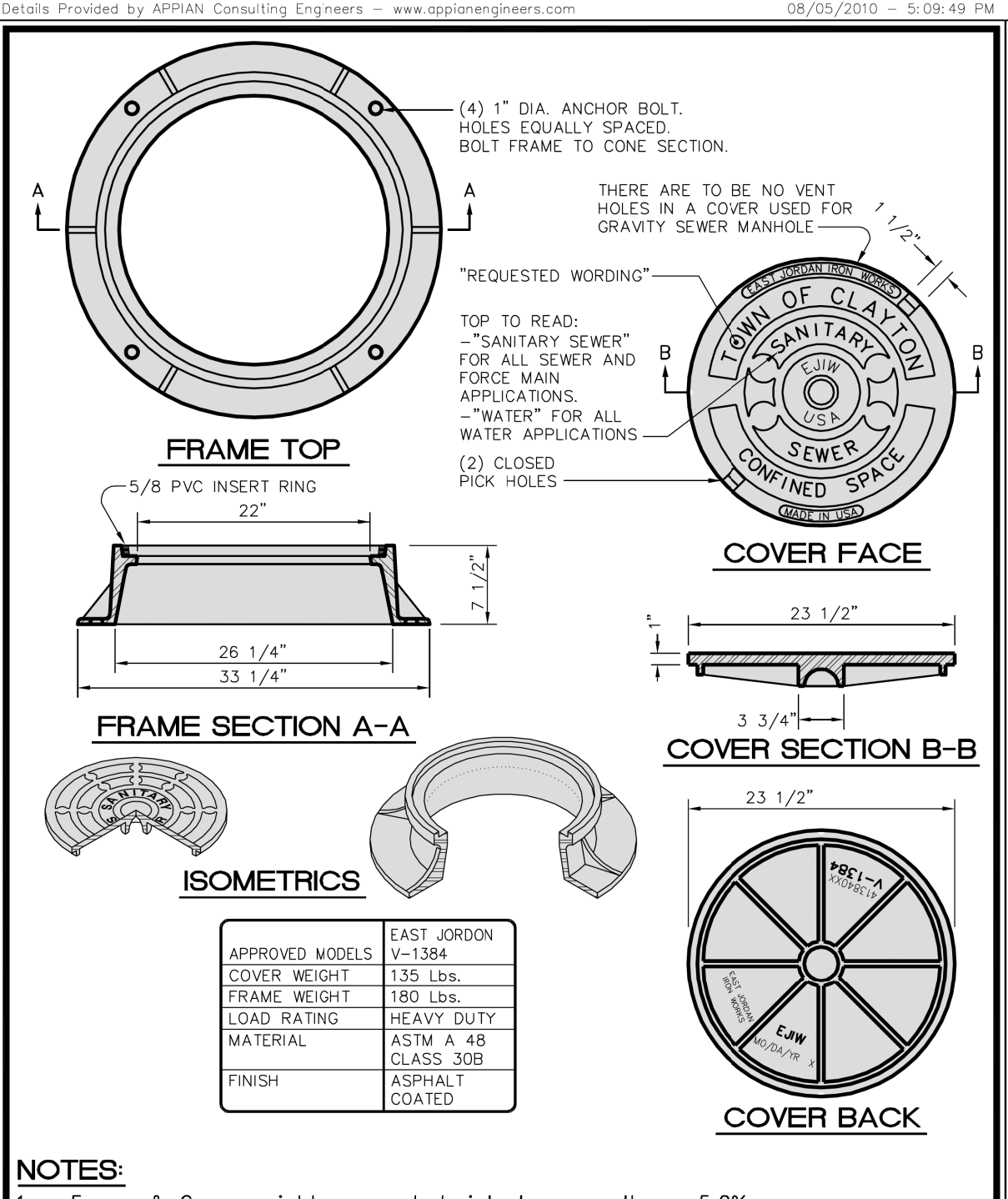
SCALE: Not To Scale
DETAIL # C06.03
REVISION DATE: July, 2010
SHEET # 1 of 2



TOWN of CLAYTON
USE WITH THE TOWN OF CLAYTON STANDARD SPECIFICATIONS ONLY

STANDARD ECCENTRIC PRECAST MANHOLE DETAIL

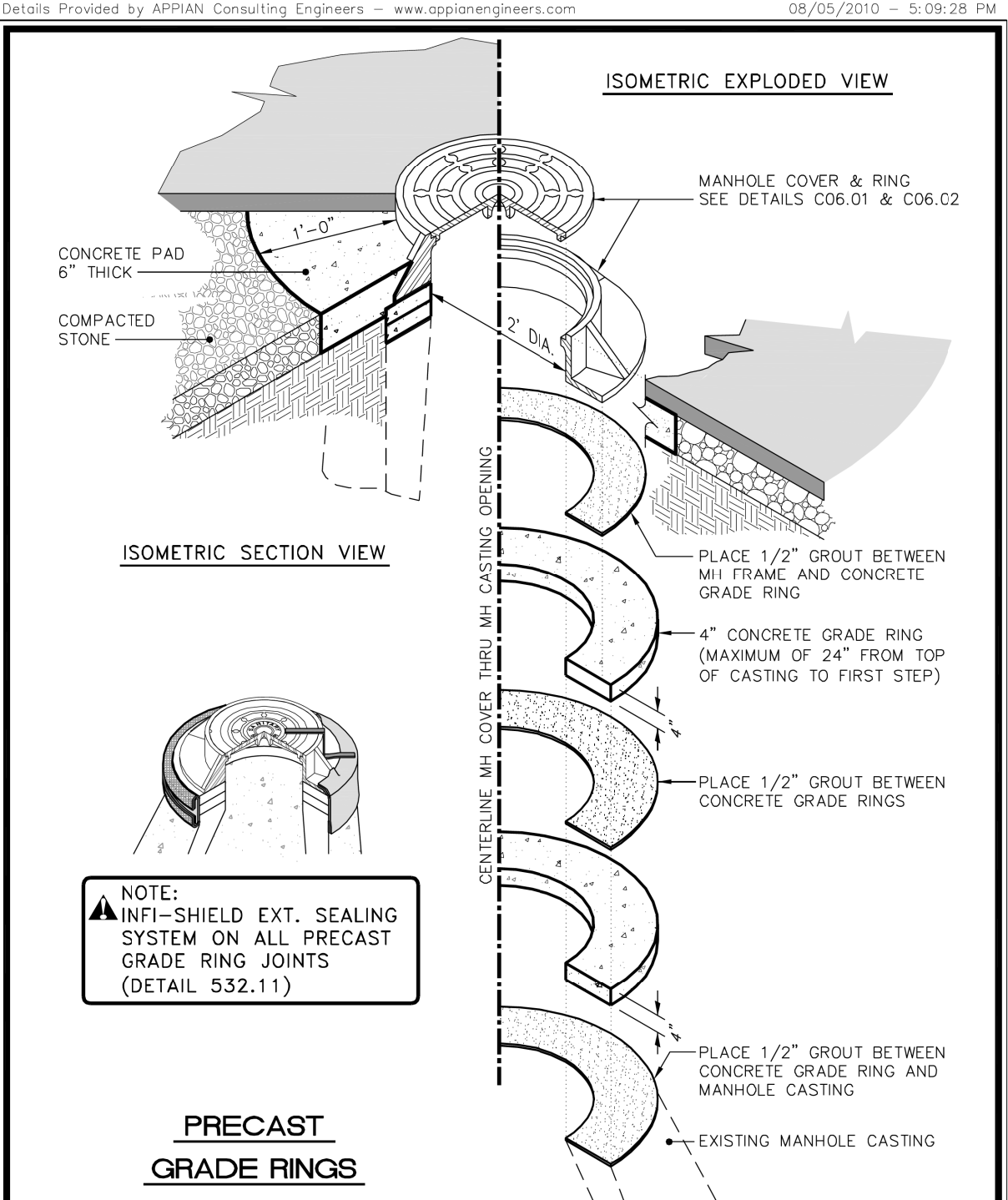
SCALE: Not To Scale
DETAIL # C06.03
REVISION DATE: July, 2010
SHEET # 2 of 2



TOWN of CLAYTON
USE WITH THE TOWN OF CLAYTON STANDARD SPECIFICATIONS ONLY

STANDARD MANHOLE FRAME and COVER

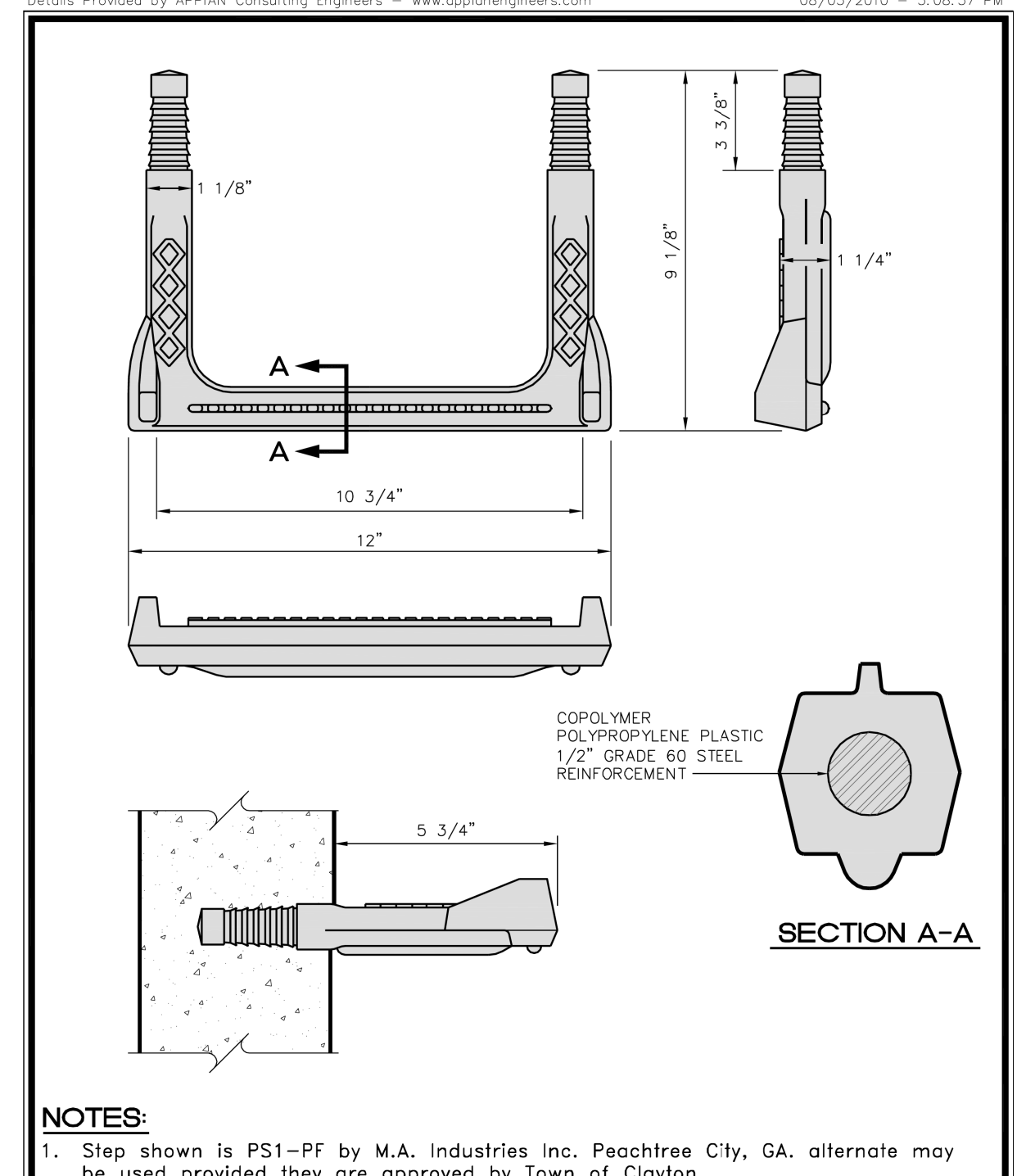
SCALE: Not To Scale
DETAIL # C06.01
REVISION DATE: July, 2010
SHEET # 1 of 1



TOWN of CLAYTON
USE WITH THE TOWN OF CLAYTON STANDARD SPECIFICATIONS ONLY

MANHOLE RING AND COVER GRADE ADJUSTMENT

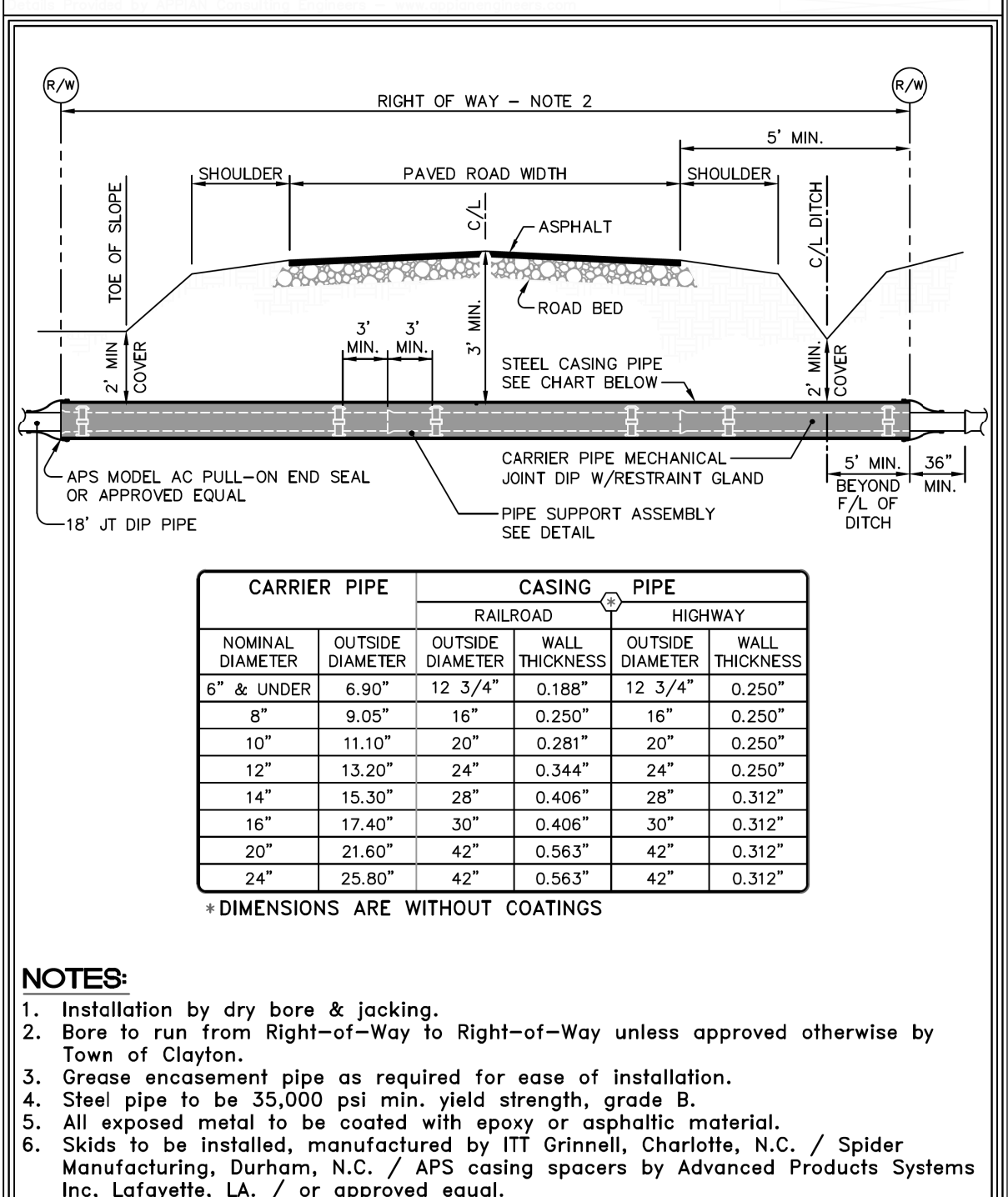
SCALE: Not To Scale
DETAIL # C06.03
REVISION DATE: July, 2010
SHEET # 1 of 1



TOWN of CLAYTON
USE WITH THE TOWN OF CLAYTON STANDARD SPECIFICATIONS ONLY

POLYPROPYLENE PLASTIC STEP

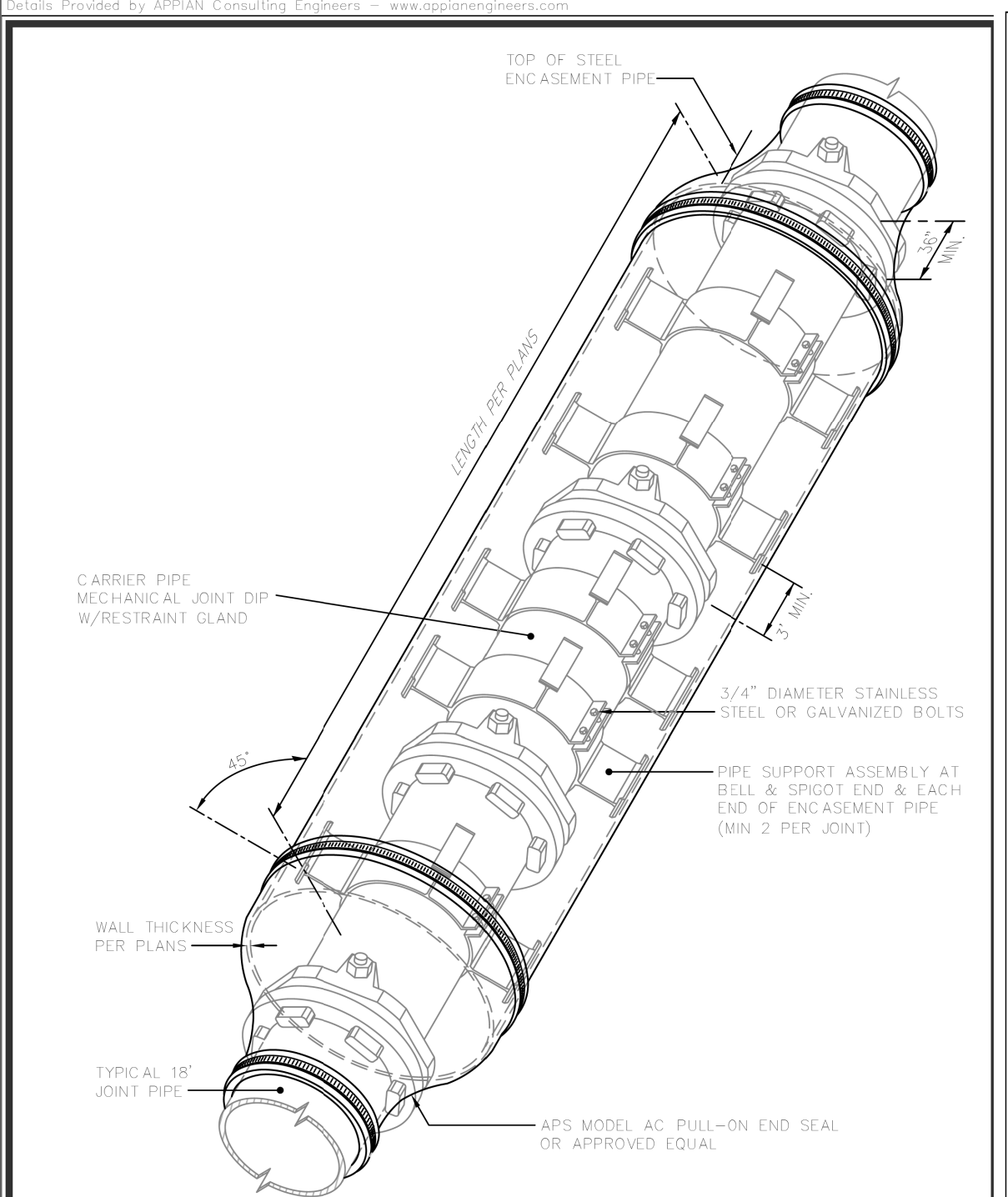
SCALE: Not To Scale
DETAIL # C06.04
REVISION DATE: July, 2010
SHEET # 1 of 1



TOWN of CLAYTON
USE WITH THE TOWN OF CLAYTON STANDARD SPECIFICATIONS ONLY

TYPICAL DETAIL for BORE UNDER PAVED ROADS / HIGHWAYS

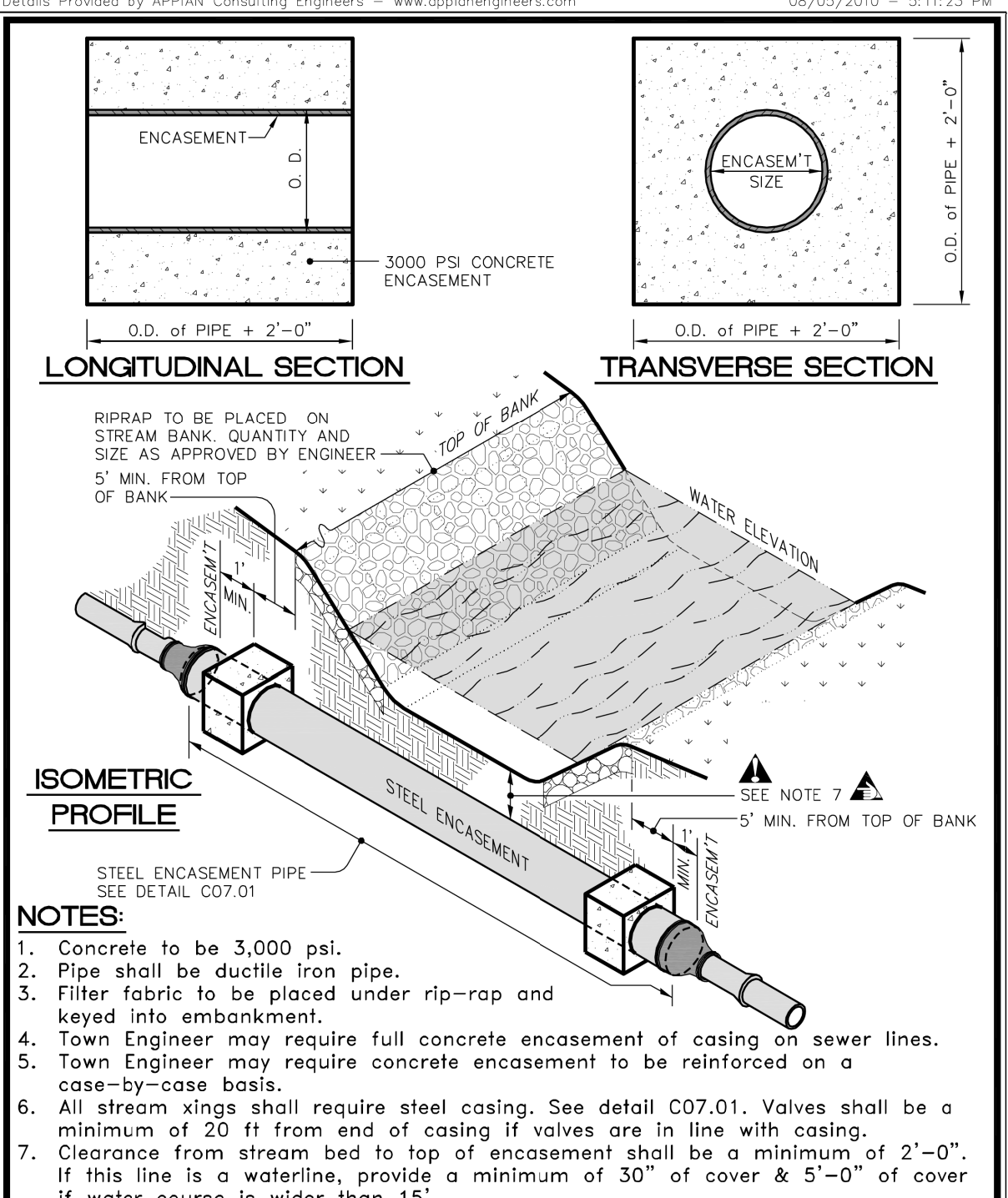
SCALE: Not To Scale
DETAIL # C07.01
REVISION DATE: July, 2010
SHEET # 1 of 2



TOWN of CLAYTON
USE WITH THE TOWN OF CLAYTON STANDARD SPECIFICATIONS ONLY

TYPICAL DETAIL for BORE UNDER PAVED ROADS / HIGHWAYS

SCALE: Not To Scale
DETAIL # C07.01
REVISION DATE: April, 2012
SHEET # 2 of 2



TOWN of CLAYTON
USE WITH THE TOWN OF CLAYTON STANDARD SPECIFICATIONS ONLY

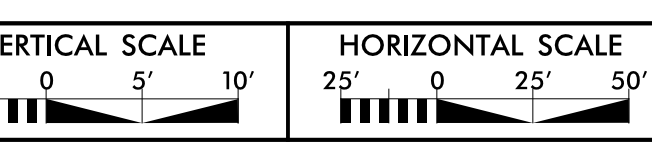
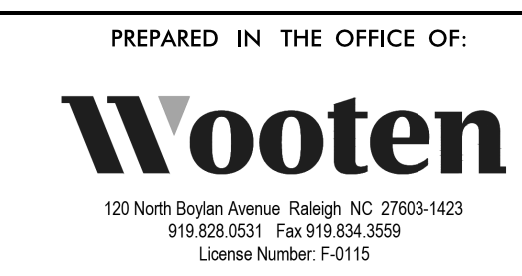
STANDARD STREAM/CREEK CROSSING

SCALE: Not To Scale
DETAIL # C07.02
REVISION DATE: July, 2010
SHEET # 1 of 1

5/14/99

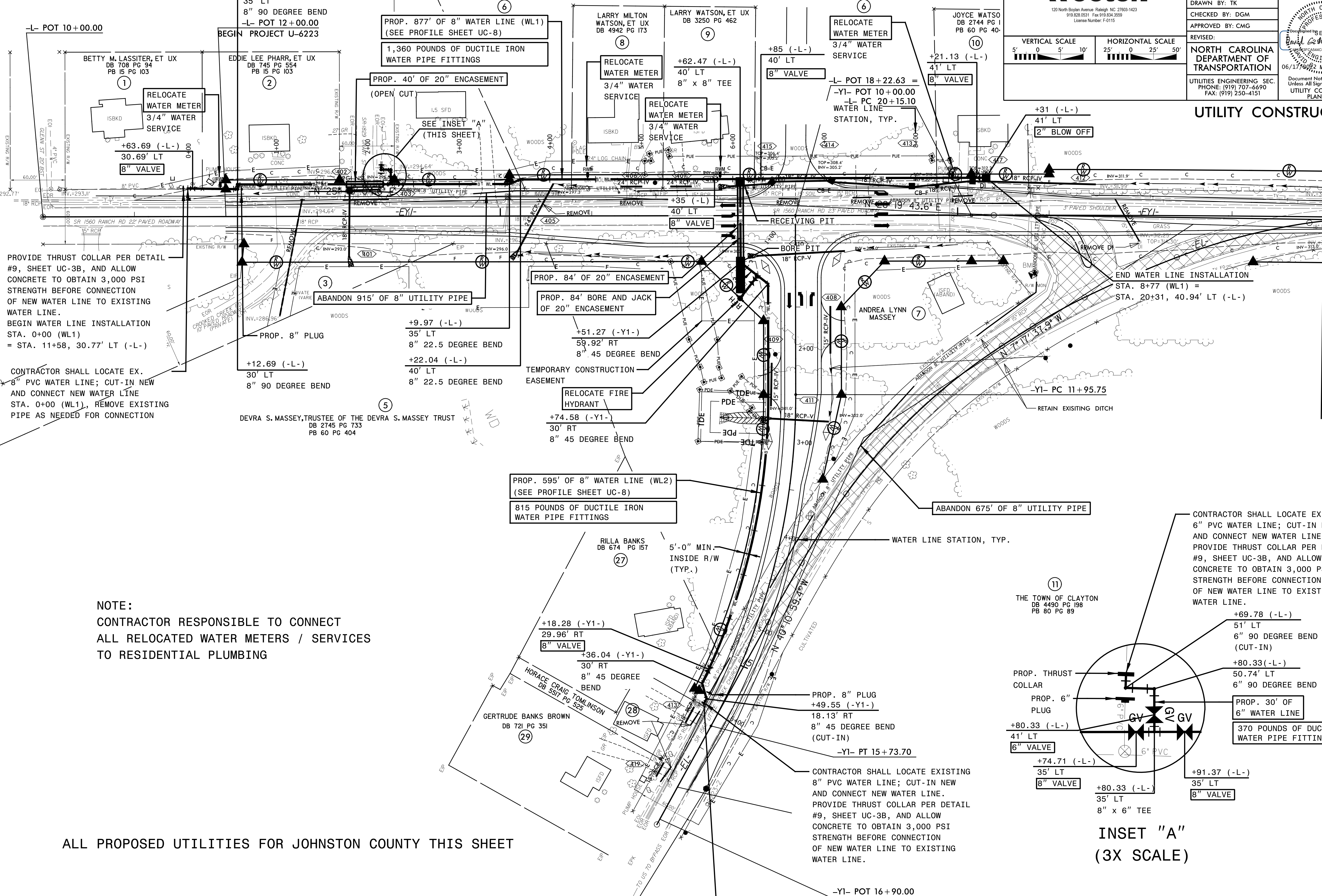
DEVRA S. MASSEY, TRUSTEE OF THE DEVRA S. MASSEY TRUST DB 2745 PG 733 PB 60 PG 404

DEVRA S. MASSEY, TRUSTEE OF THE DEVRA S. MASSEY TRUST DB 2745 PG 733 PB 60 PG 404



PROJECT REFERENCE NO.	U-6223	SHEET NO.	UC-4
DESIGNED BY:	CMG		
DRAWN BY:	TK		
CHECKED BY:	DGM		
APPROVED BY:	CMG		
REVISED:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		Professional Seal of David C. Strickland, PE, License No. 54445	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		Document Not Considered Final Unless All Signatures Completed UTILITY CONSTRUCTION PLANS ONLY	

UTILITY CONSTRUCTION



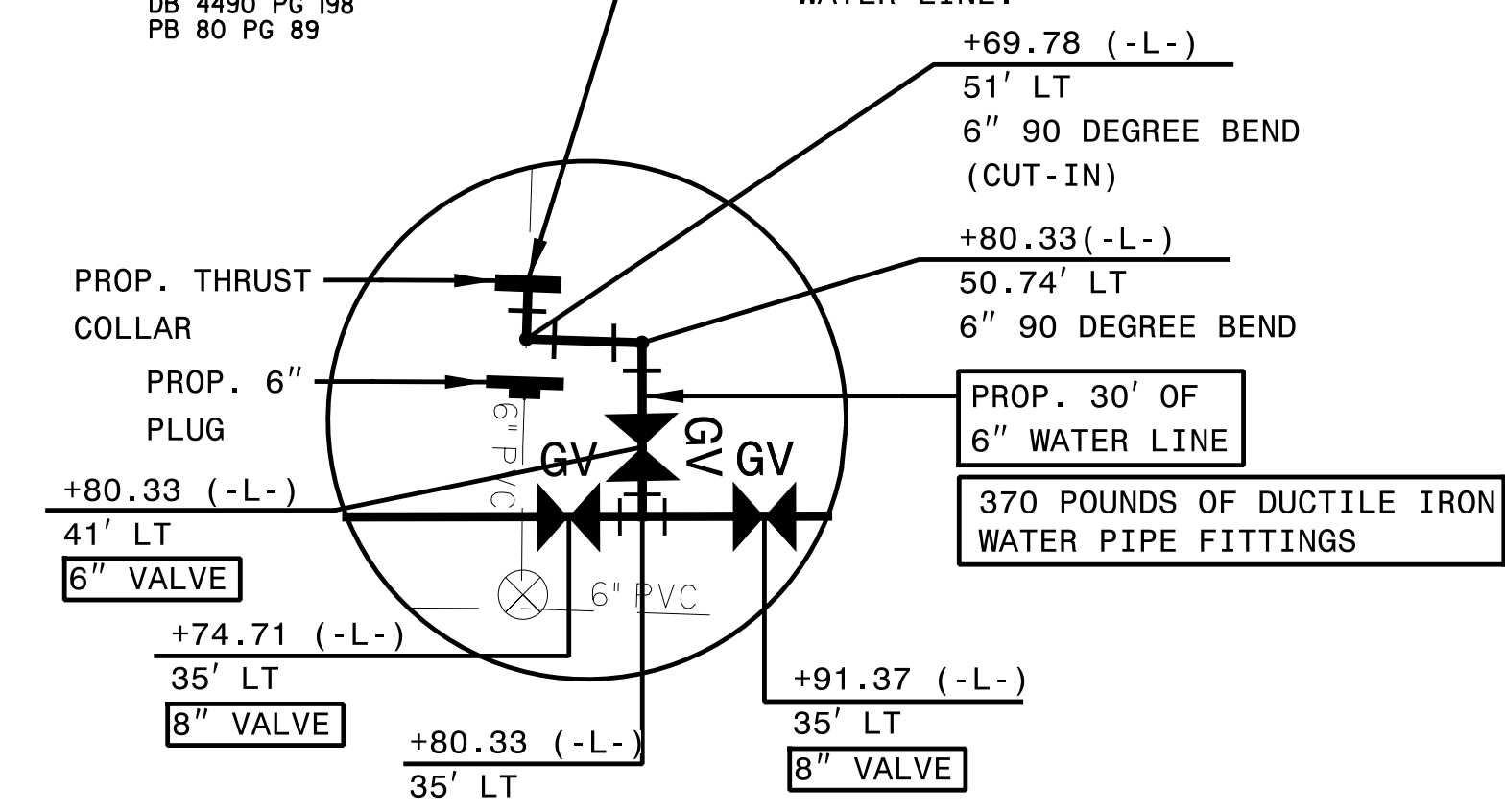
PROVIDE THRUST COLLAR PER DETAIL #9, SHEET UC-3B, AND ALLOW CONCRETE TO OBTAIN 3,000 PSI STRENGTH BEFORE CONNECTION OF NEW WATER LINE TO EXISTING WATER LINE. BEGIN WATER LINE INSTALLATION STA. 0+00 (WL1) = STA. 11+58, 30.77' LT (-L-)

CONTRACTOR SHALL LOCATE EX. 8" PVC WATER LINE; CUT-IN NEW AND CONNECT NEW WATER LINE STA. 0+00 (WL1), REMOVE EXISTING PIPE AS NEEDED FOR CONNECTION

NOTE:
CONTRACTOR RESPONSIBLE TO CONNECT ALL RELOCATED WATER METERS / SERVICES TO RESIDENTIAL PLUMBING

ALL PROPOSED UTILITIES FOR JOHNSTON COUNTY THIS SHEET

CONTRACTOR SHALL LOCATE EXISTING 6" PVC WATER LINE; CUT-IN NEW AND CONNECT NEW WATER LINE. PROVIDE THRUST COLLAR PER DETAIL #9, SHEET UC-3B, AND ALLOW CONCRETE TO OBTAIN 3,000 PSI STRENGTH BEFORE CONNECTION OF NEW WATER LINE TO EXISTING WATER LINE.

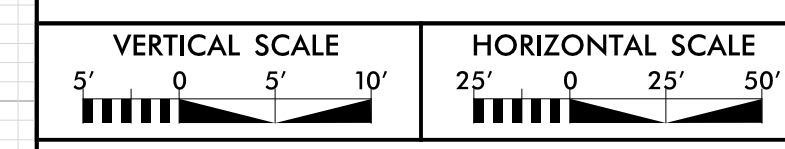


END WATER LINE INSTALLATION STA. 6+00 = STA. 15+54.72, 18.31' RT (-Y1-)

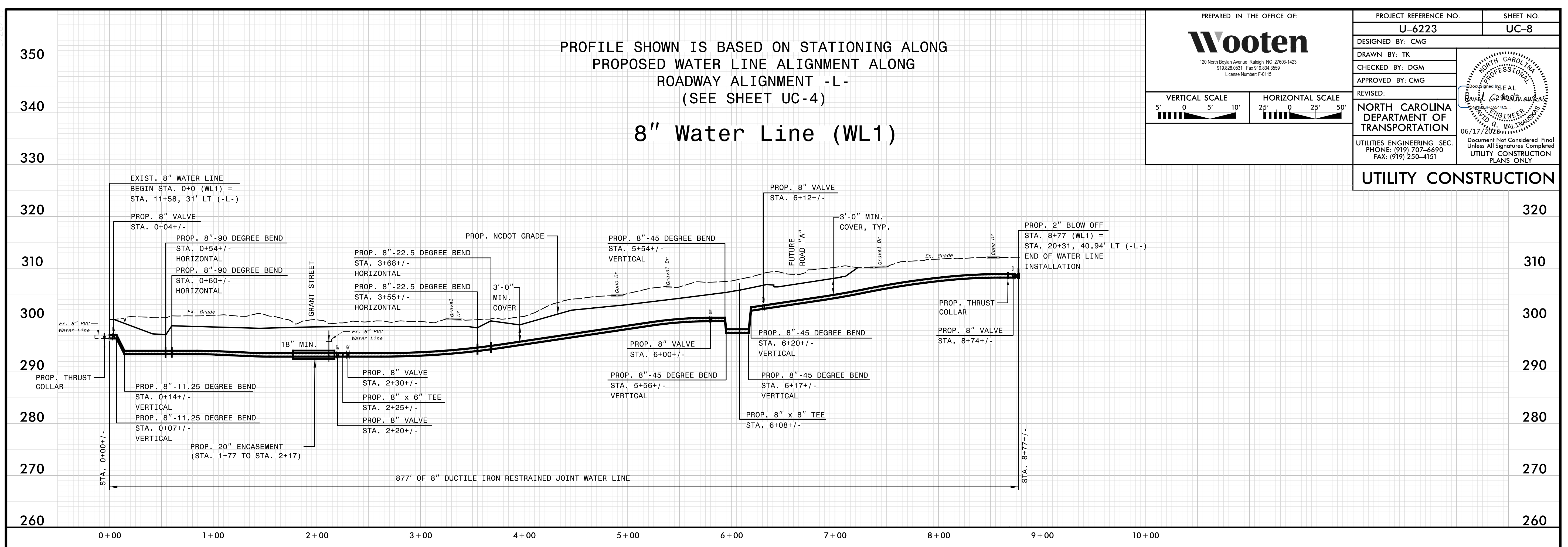
MATCHLINE SEE SHEET UC-5

PROFILE SHOWN IS BASED ON STATIONING ALONG
 PROPOSED WATER LINE ALIGNMENT ALONG
 ROADWAY ALIGNMENT -L-
 (SEE SHEET UC-4)

8" Water Line (WL1)



UTILITY CONSTRUCTION



PROFILE SHOWN IS BASED ON STATIONING ALONG
 PROPOSED WATER LINE ALIGNMENT ALONG
 ROADWAY ALIGNMENT -L-
 (SEE SHEET UC-4)

8" Water Line (WL2)

