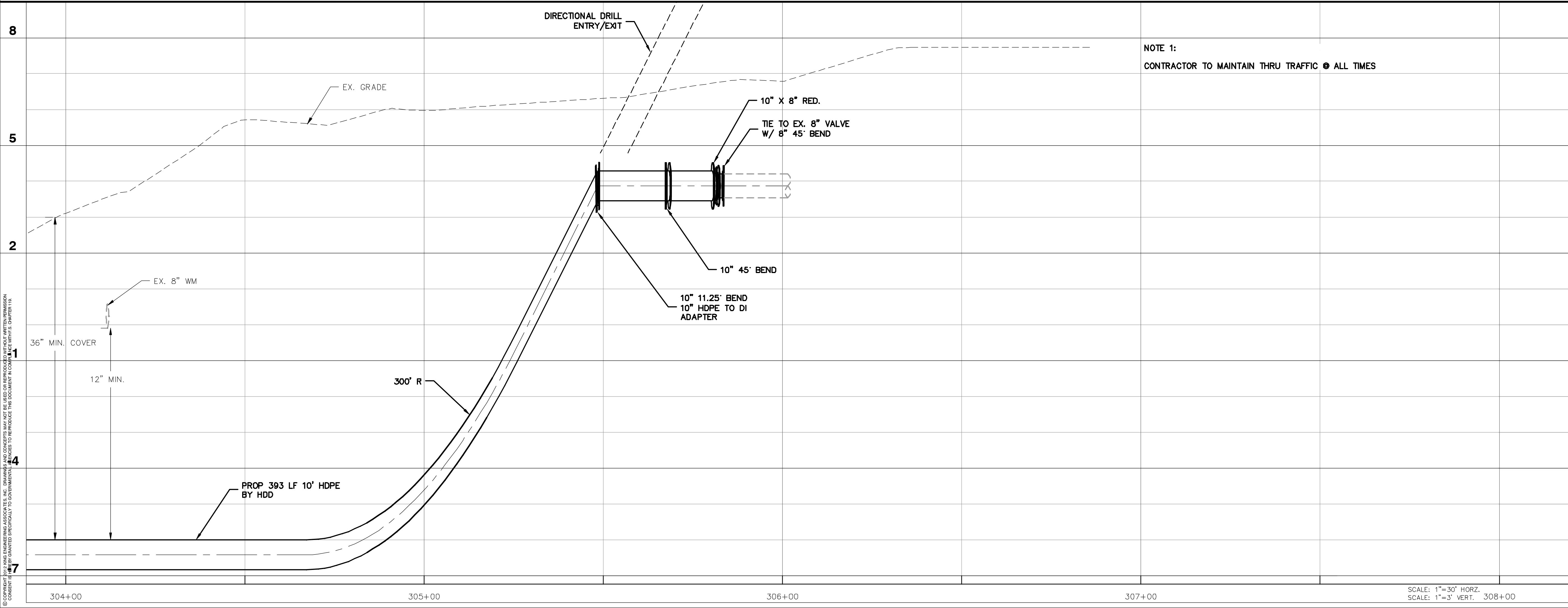
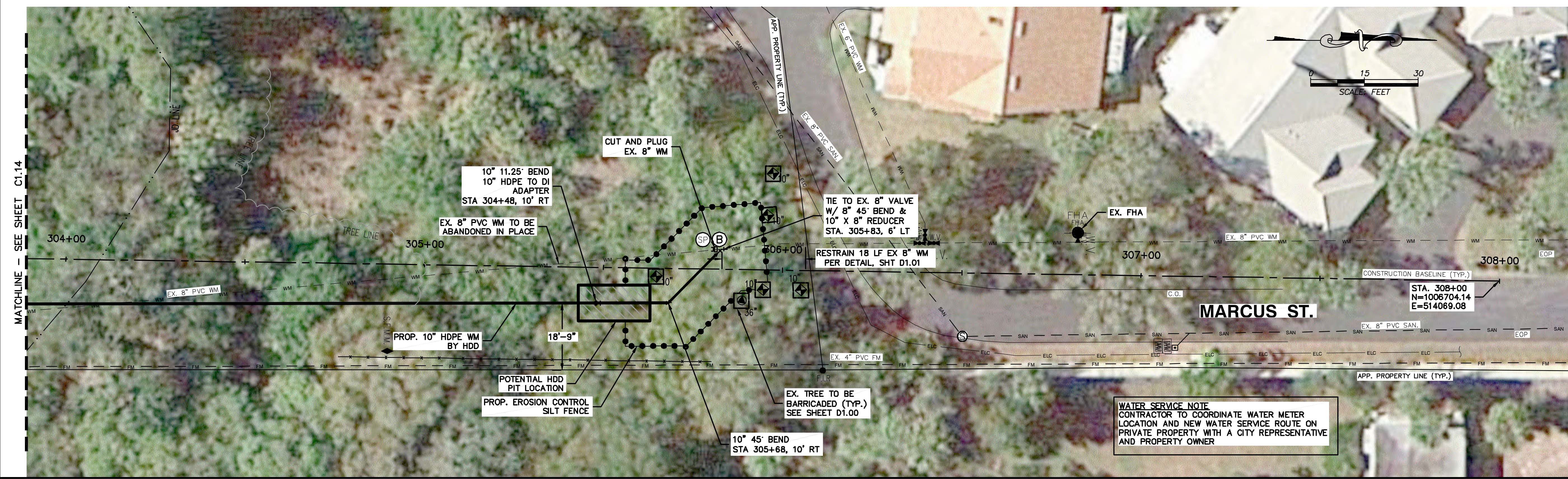
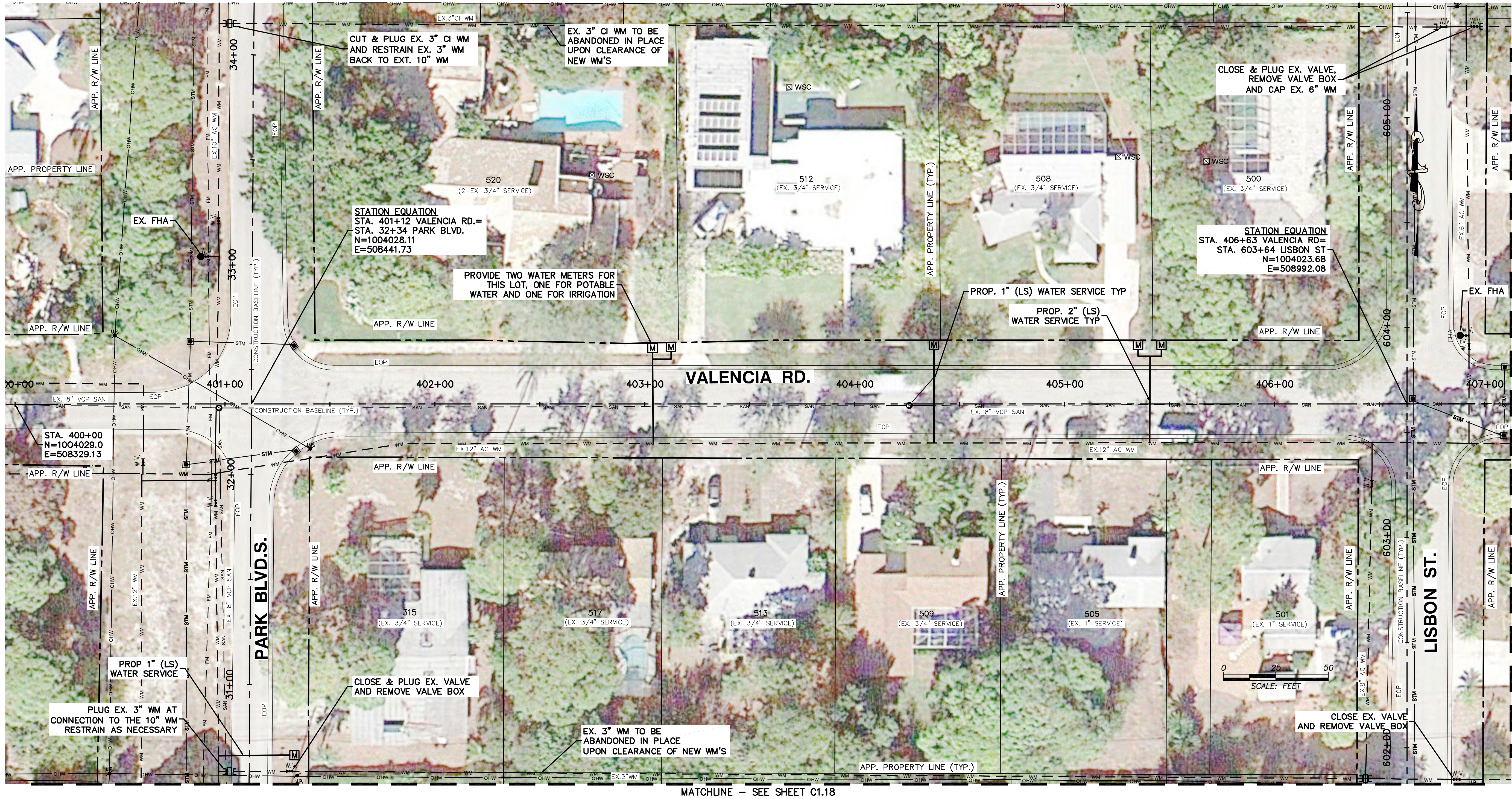


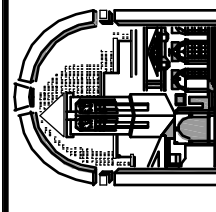


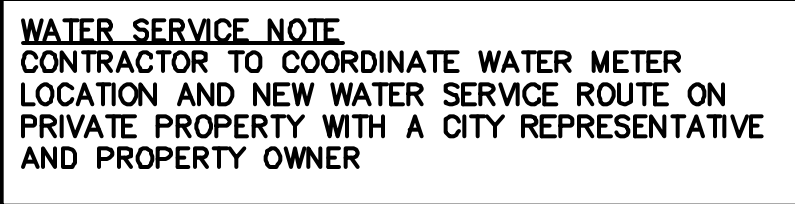
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City Of Venice Utility Department 200 North Wierfield Avenue Venice FL 34285 PH 941-489-2933 FAX 941-489-2929				
2930 University Parkway Sarasota, Florida 34243 Phone 941-538-6000 Fax 941-538-6540 www.king-engineering.com Engineering License #2410				
King ENGINEERING ASSOCIATES, INC.				
WATER MAIN REPLACEMENT PROGRAM PHASE-1				
TITLE HATCHETT CREEK STA. 303+89 TO STA. 308+00				
THE SIGNATURE OF THE QUALITY CONTROL OFFICER IN THIS SPACE INDICATES THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED AND THAT CONSTRUCTION IS AUTHORIZED TO COMMENCE.				
JOB NO. 4799-002-000		SHEET NO. C1.15		
DATE: JUNE 2012				
SCALE: AS SHOWN				
BID DOCUMENT SEPT. 13, 2013				

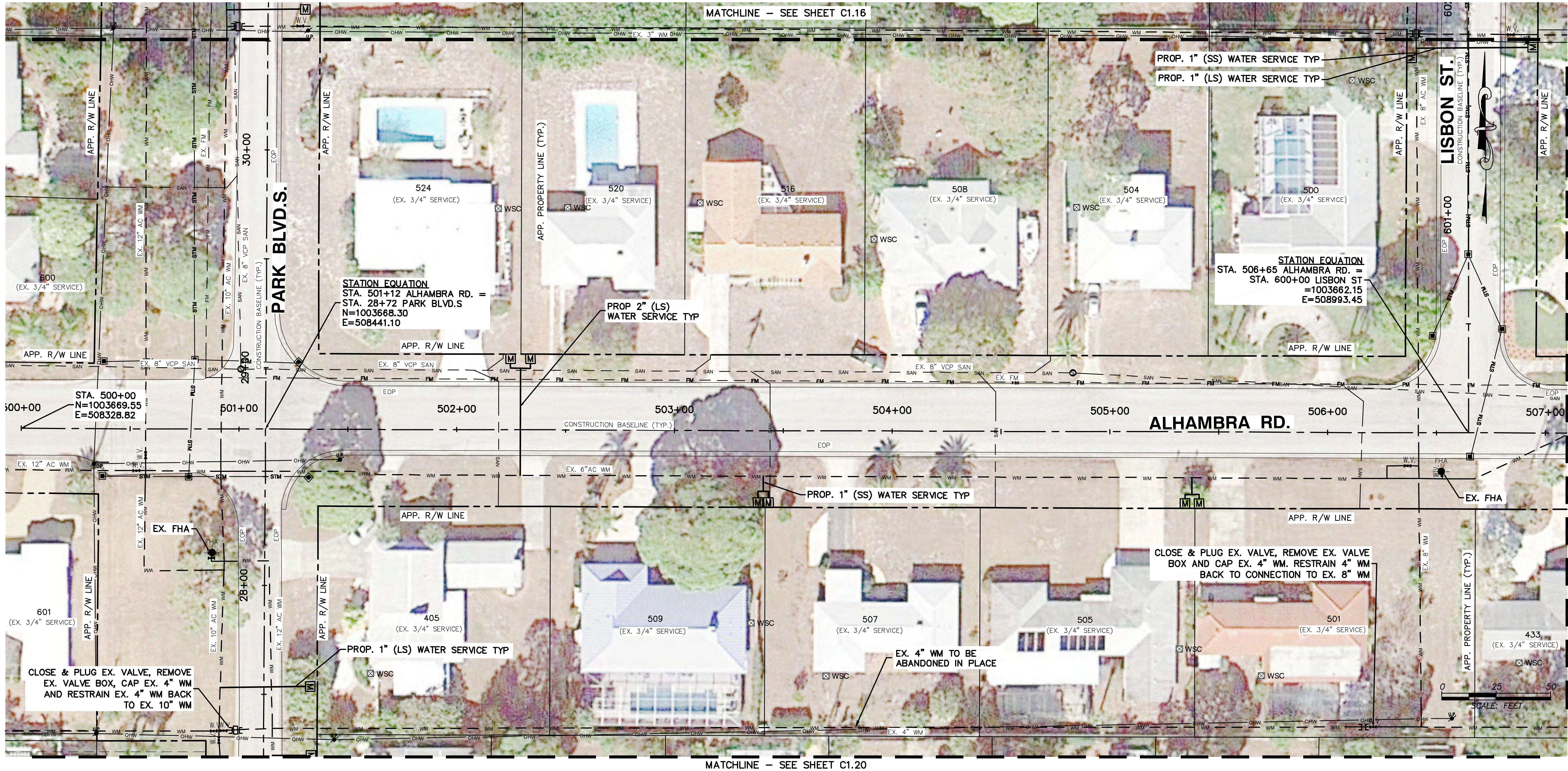


WATER SERVICE NOTE
CONTRACTOR TO COORDINATE WATER METER LOCATION AND NEW WATER SERVICE ROUTE ON PRIVATE PROPERTY WITH A CITY REPRESENTATIVE AND PROPERTY OWNER

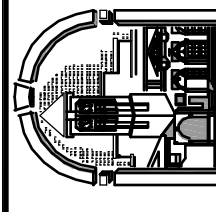
MATCHLINE - SEE SHEET C1.17

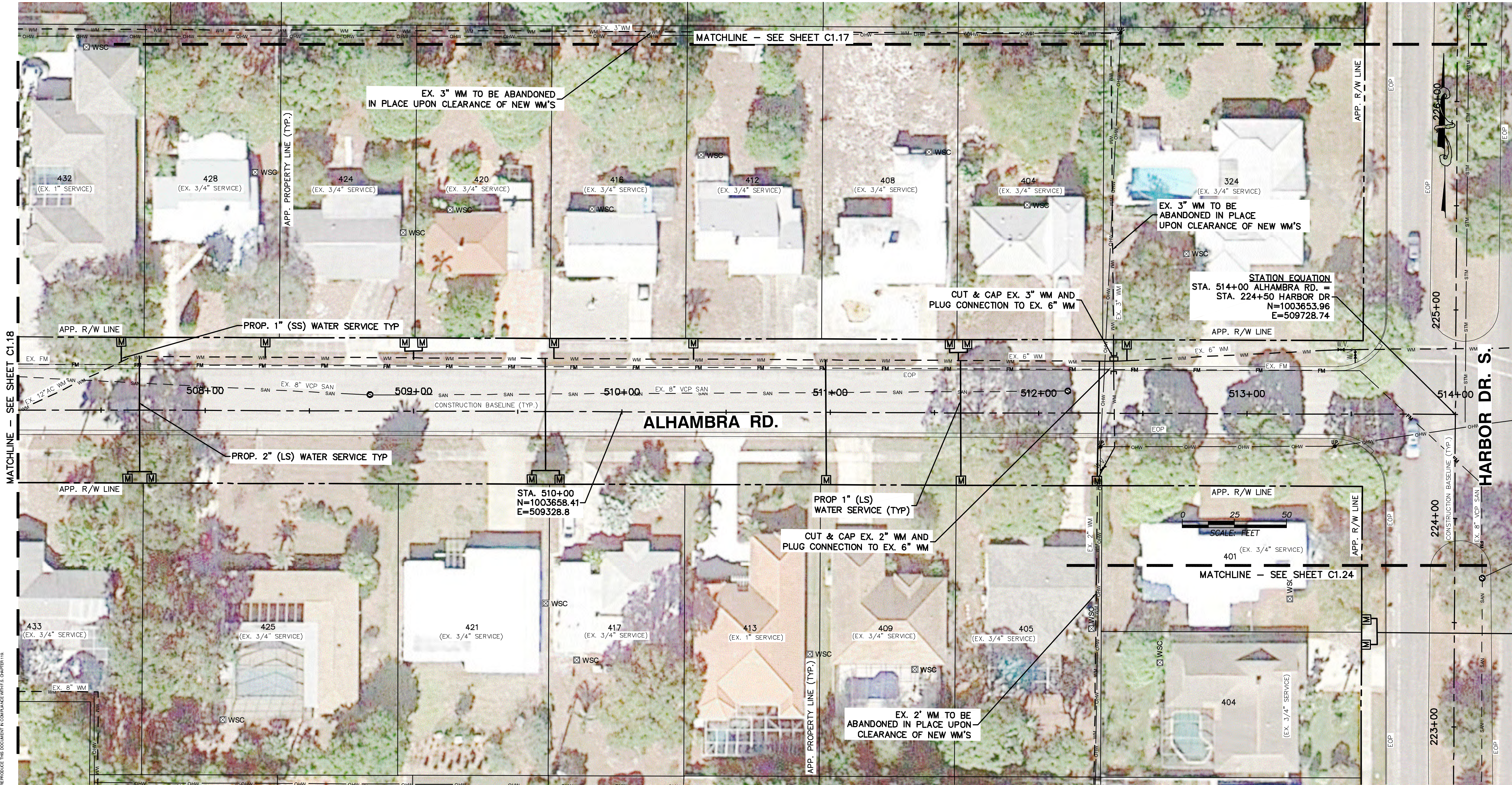
 City Of Venice Utility Department 200 North Warfield Avenue Venice FL 34285 PH: 941-489-2933 FAX: 941-489-2929		DESIGNED: MUG DRAWN: CS/OPS CHECKED: SLP DATE: 7/11										
WATER MAIN REPLACEMENT PROGRAM PHASE-1		King ENGINEERING ASSOCIATES, INC. 2930 University Parkway Sarasota, Florida 34243 Phone 941-538-6500 Fax 941-538-6540 www.kingeng.com Engineering License #2410										
<table><thead><tr><th>NO.</th><th>DATE</th><th>RE-BID DOCUMENT</th><th>DESCRIPTION</th><th>APPROVED</th></tr></thead><tbody><tr><td>1</td><td>08/13/2013</td><td></td><td></td><td></td></tr></tbody></table>		NO.	DATE	RE-BID DOCUMENT	DESCRIPTION	APPROVED	1	08/13/2013				
NO.	DATE	RE-BID DOCUMENT	DESCRIPTION	APPROVED								
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TITLE: VALENCIA ROAD STA. 400+00 TO 407+08												
THE SIGNATURE OF THE QUALITY CONTROL OFFICER IN THIS SPACE INDICATES THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED AND THAT CONSTRUCTION IS AUTHORIZED TO COMMENCE.												
JOB NO. 4799-002-000 DATE: JUNE 2012 SCALE: AS SHOWN	SHEET NO. C1.16											
BID DOCUMENT SEPT. 13, 2013												





WATER SERVICE NOTE
CONTRACTOR TO COORDINATE WATER METER LOCATION AND NEW WATER SERVICE ROUTE ON PRIVATE PROPERTY WITH A CITY REPRESENTATIVE AND PROPERTY OWNER

 City Of Venice Utility Department 200 North Wierfield Avenue Venice FL 34285 PH: 941-489-2833 FAX: 941-489-2829		DESIGNED: MUG DRAWN: CS/OPS CHECKED: SLP DATE: 7/11	
WATER MAIN REPLACEMENT PROGRAM PHASE-1			
TITLE ALHAMBRA ROAD STA. 500+00 TO 507+10		THE SIGNATURE OF THE QUALITY CONTROL OFFICER IN THIS SPACE INDICATES THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED AND THAT CONSTRUCTION IS AUTHORIZED TO COMMENCE.	
JOB NO. 4799-002-000 DATE: JUNE 2012 SCALE: AS SHOWN		SHEET NO. C1.18	
BID DOCUMENT SEPT. 13, 2013			



WATER SERVICE NOTE
CONTRACTOR TO COORDINATE WATER METER LOCATION
AND NEW WATER SERVICE ROUTE ON PRIVATE PROPERTY
WITH A CITY REPRESENTATIVE AND PROPERTY OWNER

**WATER MAIN
REPLACEMENT PROGRAM
PHASE-1**

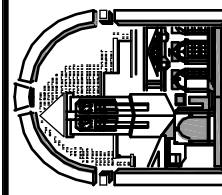
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1	09/13/2013			

TITLE
**ALHAMBRA ROAD
STA. 500+00 TO
507+10**

THE SIGNATURE OF THE QUALITY CONTROL
OFFICER IN THIS SPACE INDICATES THAT ALL
REQUIRED PERMITS HAVE BEEN OBTAINED AND
THAT CONSTRUCTION IS AUTHORIZED TO
COMMENCE.

JOB NO. 4799-002-000	SHEET NO. C1.19
DATE: JUNE 2012	
SCALE: AS SHOWN	

BID DOCUMENT
SEPT. 13, 2013

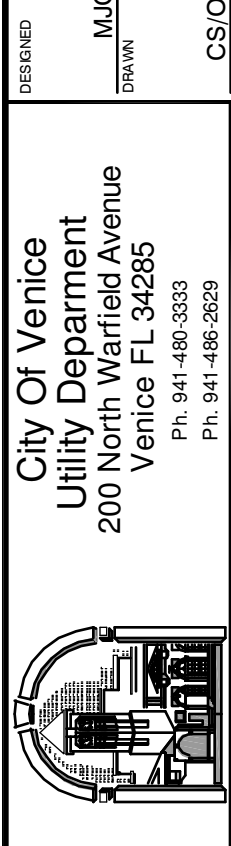


City Of Venice
Utility Department
200 North Warfield Avenue
Venice FL 34285
PH: 941-489-3933
FAX: 941-489-3939

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Engineering License #2410

DESIGNED	MUG
DRAWN	
CHECKED	CS/OPS
IN CHARGE	SLP



King
ENGINEERING ASSOCIATES, INC.

WATER MAIN REPLACEMENT PROGRAM PHASE-1

NO.	DATE	RE-BID DOCUMENT	DESCRIPTION	APPROVE
1	09/13/2013			

TITLE
**VERDI ST. STA.
800+00 TO 805+10
AND BEATRICE ST.
STA. 1000+00 TO
1005+10**

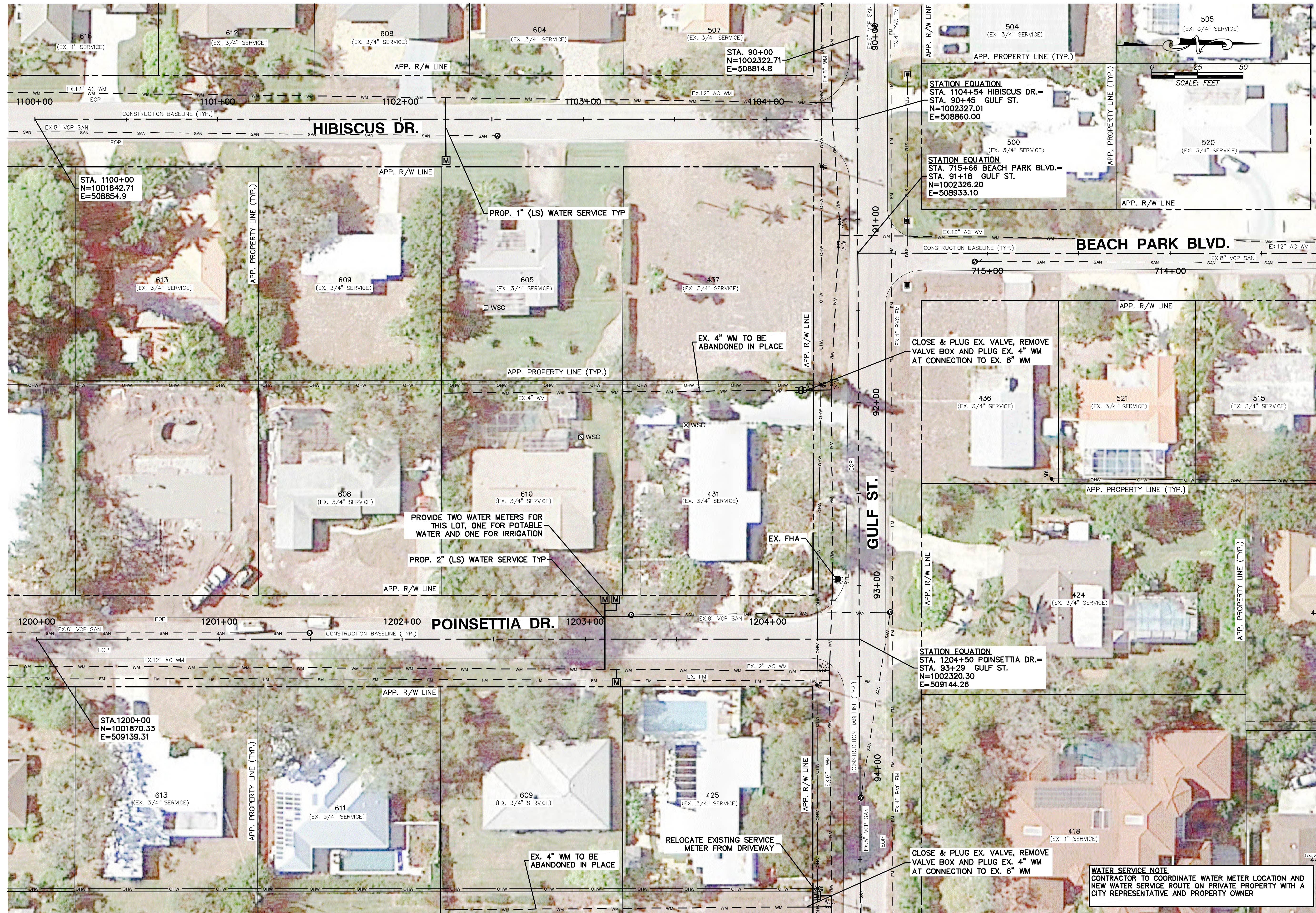
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REQUIRED PERMITS HAVE BEEN OBTAINED AND
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COMMENCE.

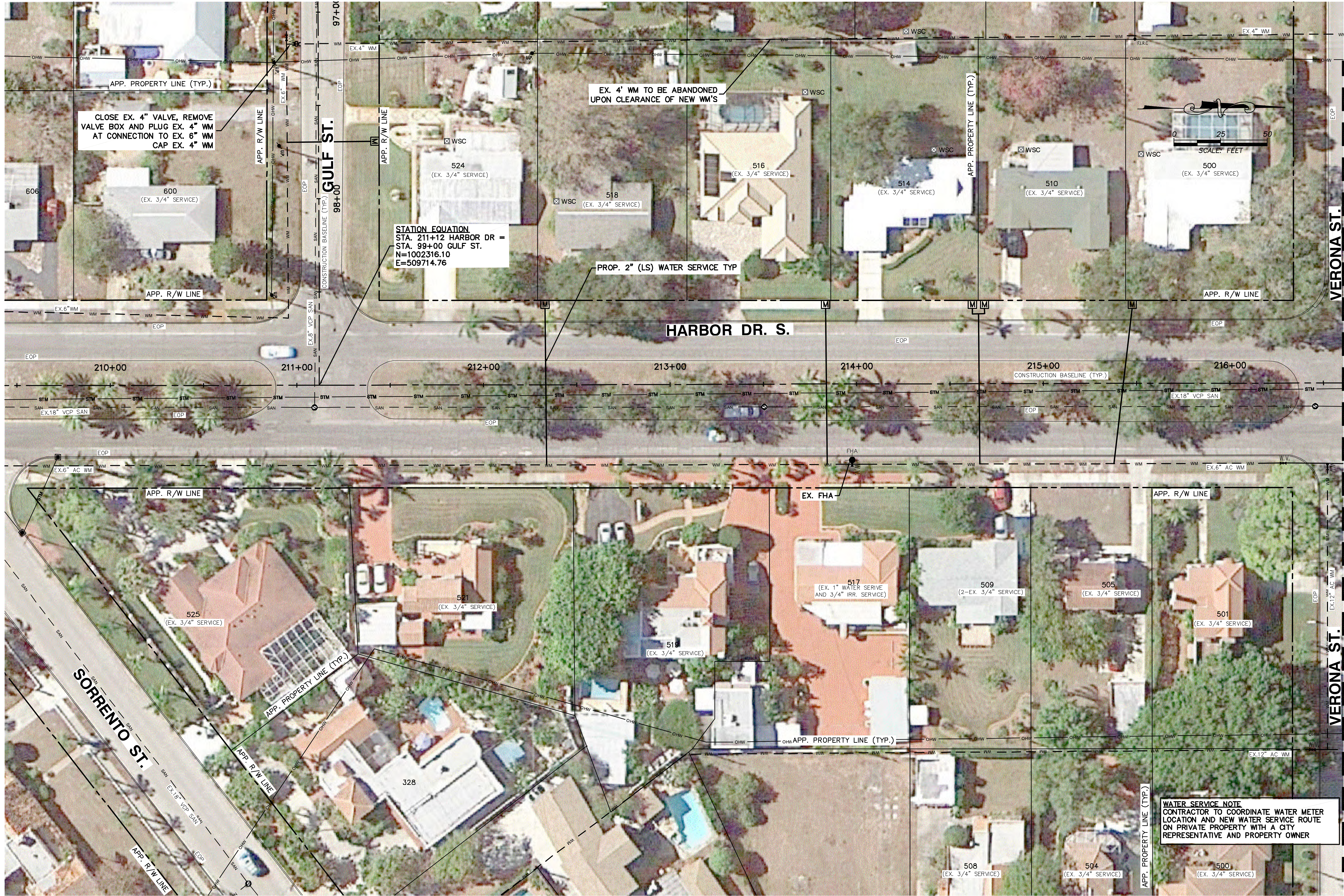
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4799-002-000
DATE:
JUNE 2012
SCALE:
AS SHOWN

SHEET NO.
C1.21

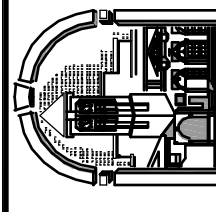
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SEPT. 13, 2013

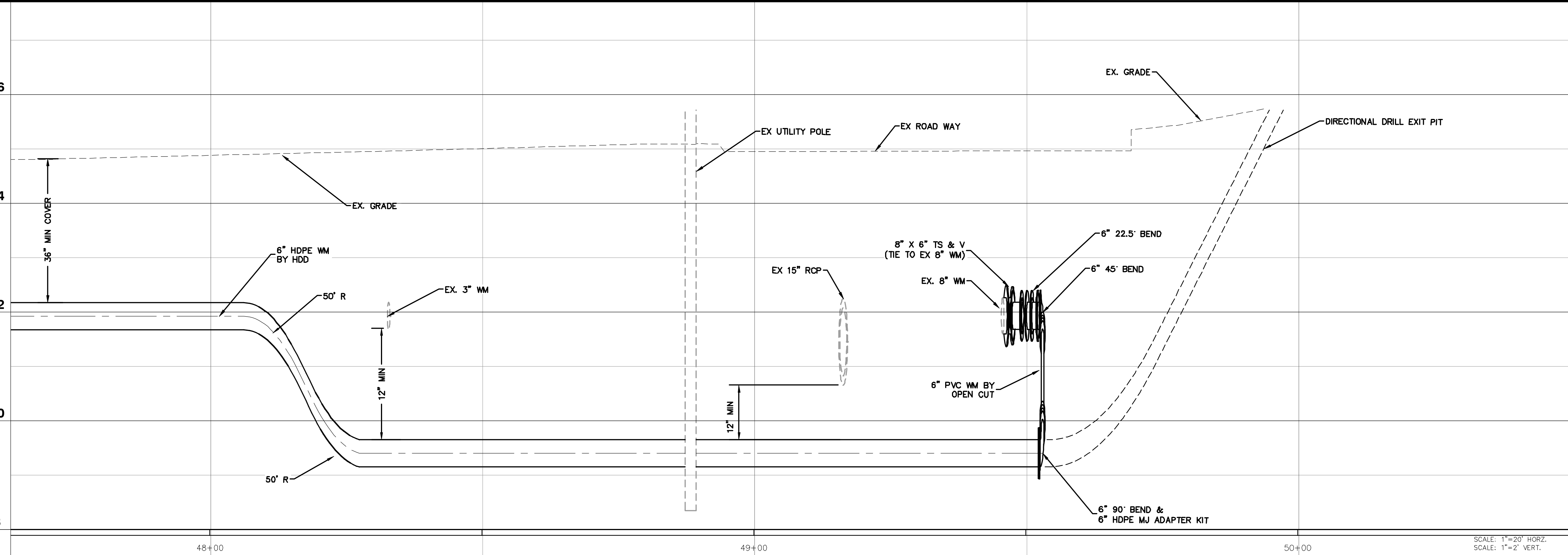
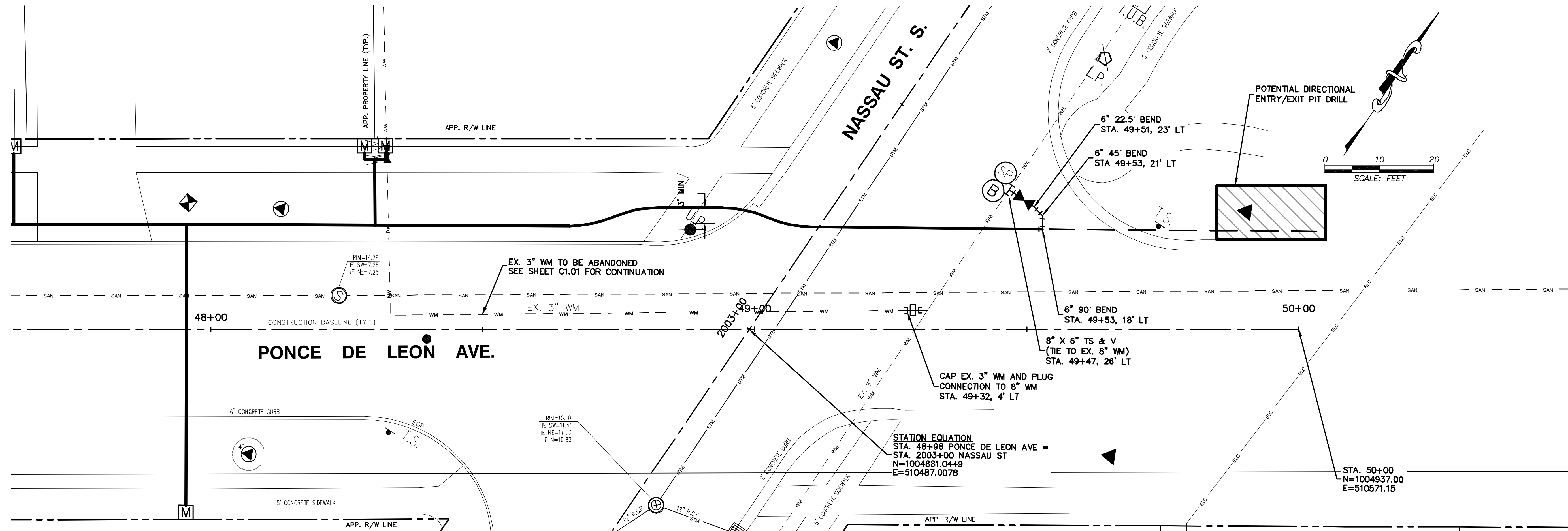
WATER SERVICE NOTE
CONTRACTOR TO COORDINATE WATER
METER LOCATION AND NEW WATER
SERVICE ROUTE ON PRIVATE PROPERTY
WITH A CITY REPRESENTATIVE AND
PROPERTY OWNER

[illegible]



MATCHLINE - SEE SHEET C1.24

DESIGNED MUG DRAWN		CS/OPS CHECKED SLP DATE										
City Of Venice Utility Department 200 North Warfield Avenue Venice FL 34285 PH 941-489-2833 PH 941-489-2829  King ENGINEERING ASSOCIATES, INC.												
WATER MAIN REPLACEMENT PROGRAM PHASE-1												
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NO.	DATE	RE-BID DOCUMENT	DESCRIPTION	APPROVE								
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TITLE HARBOR DR. S. STA. 209+43 TO 216+60												
THE SIGNATURE OF THE QUALITY CONTROL OFFICER IN THIS SPACE INDICATES THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED AND THAT CONSTRUCTION IS AUTHORIZED TO COMMENCE.												
JOB NO. 4799-002-000 DATE: JUNE 2012 SCALE: AS SHOWN		SHEET NO. C1.23										
BID DOCUMENT SEPT. 13, 2013												





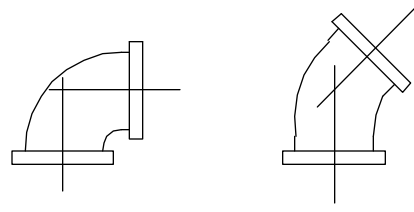
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C2.01

[illegible]

[illegible]

NOTES:

1. FOR TEE OR REDUCER FITTINGS SUBMIT RESTRAINED JOINT LENGTH CALCULATIONS TO CITY ENGINEER FOR REVIEW AND APPROVAL, USING THE ASSUMPTIONS LISTED
2. RESTRAINED JOINT LENGTH FOR WATER AND REUSE MAINS BASED ON TEST PRESSURE OF 150 PSI. RESTRAINED JOINT LENGTH FOR FORCE (SEWER) MAINS BASED ON TEST PRESSURE OF 100 PSI. CALCULATIONS WERE MADE USING EBAA IRON SOFTWARE (AVAILABLE AT WWW.EBAA.COM) AND THE FOLLOWING ASSUMPTIONS: GRANULAR MATERIAL (GM) SOIL TYPE, TRENCH TYPE 3, BURY DEPTH OF 3 FT, AND SAFETY FACTOR OF 2 TO 1. IF FIELD CONDITIONS DIFFER FROM ABOVE ASSUMPTIONS EOR SHALL PROVIDE CALCULATIONS BASED ON ACTUAL CONDITIONS.
3. RESTRAINED JOINT SHALL BE USED ON ALL JOINTS FROM ANY MAIN TEE TO ANY FIRE HYDRANT ASSEMBLY.
4. THRUST BLOCKS WILL NOT BE ACCEPTED, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
5. VALVES SHALL BE RESTRAINED SAME AS PLUGS



- 1.) ALL PIPE FITTINGS SHALL BE COMPACT, DUCTILE IRON.
- 2.) ALL APPLICATIONS (RAW, POTABLE, REUSE, SEWER) SHALL BE FUSION BONDED EPOXY COATED INSIDE AND OUT.
- 3.) ALL FITTINGS SHALL MEET ANSI/AWWA C116/A21.16 STANDARDS

7 PIPE FITTINGS

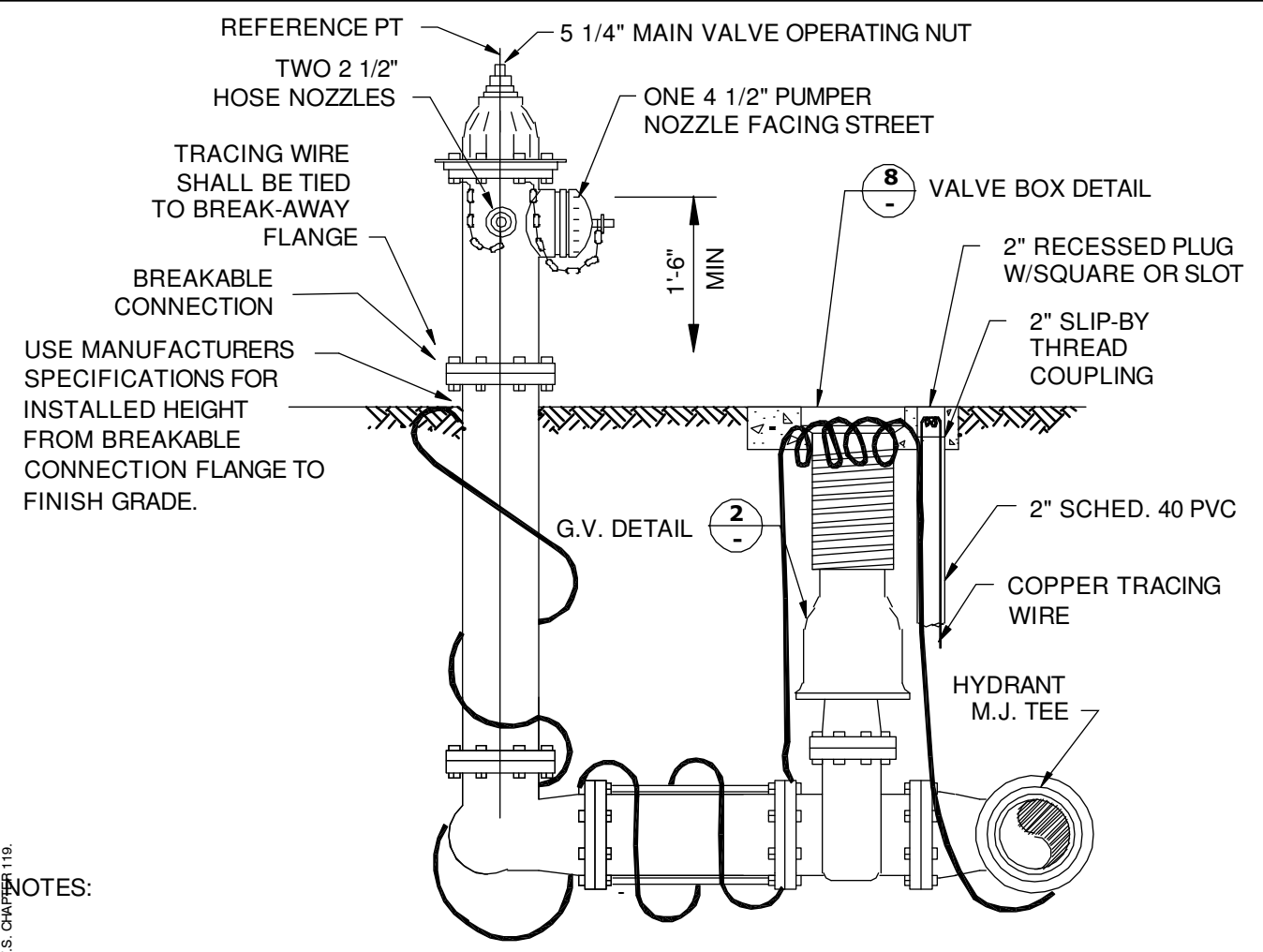
WSR-3

MINIMUM LENGTH (FT) OF WATER OR REUSE MAIN TO BE RESTRAINED ON EACH SIDE OF FITTING											
FITTING		PIPE SIZE (INCHES)									
		4	6	8	10	12	16	18	20	24	
90 BEND:	H	23	33	43	51	60	76	83	90	104	
	45 BEND:										
	H	10	14	18	21	25	31	34	37	43	
VD											
	H	6	8	11	13	16	20	22	24	28	
	VD	22	30	40	48	56	72	80	87	102	
22.5 BEND:	H	5	7	8	10	12	15	17	18	21	
	VD										
	H	3	4	5	6	7	10	11	12	14	
11.25 BEND:	VD	10	15	19	23	27	35	38	42	49	
	H	2	3	4	5	6	7	8	9	10	
PLUGS:		52	73	96	115	136	174	193	211	246	

ABBREVIATIONS: H=HORIZONTAL, VU=VERTICAL UP, VD=VERTICAL DOWN.

2 PRESSURE MAIN RESTRAINED JOINT TABLES

WSR-3



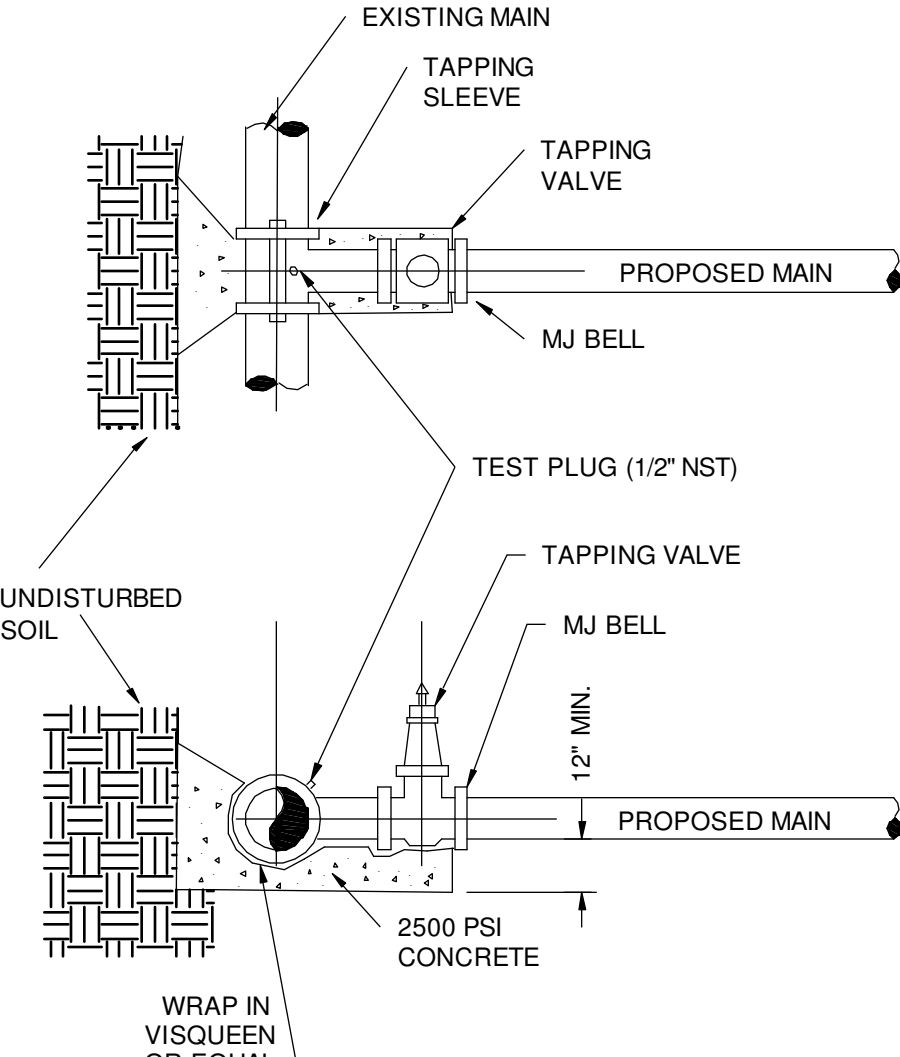
NOTES:

- 1) POTABLE WATER FIRE HYDRANTS SHALL BE PAINTED "SAFETY YELLOW" (BENJAMIN MOORE: URETHANE ALKYD GLOSS ENAMEL #M2215).
- 2) REUSE FIRE HYDRANTS SHALL BE PAINTED PANTONE PURPLE 522C AND TAGGED WITH A PERMANENT LABEL "RECLAIMED WATER-DO NOT DRINK."
- 3) HYDRANT SHALL BE MUELLER SUPER CENTURIAN MODEL A423, AMERICAN B848V OR CLOW MEDALLION WITH BREAK-AWAY FEATURE. ALL BOLTS SHALL BE SS (BONNET, SAFETY FLANGE, SHOE).
- 4) RESTRAINED JOINTS SHALL BE USED BETWEEN TEE AND HYDRANT.
- 5) BAG HYDRANT UNTIL MAINS PASS.
- 6) ALL WEEP HOLES SHALL BE PLUGGED.
- 7) PER FLORIDA ADMINISTRATIVE CODE 62-555.314 (4) HYDRANT LOCATED AT LEAST 3' OR MORE FROM ANY STORM WATER PIPE OR DITCH. AT LEAST 6' OR MORE FROM ANY SANITARY SEWER STRUCTURE.
- 8) FOR CLEARANCE ISSUES, PLEASE REFER TO CURRENT FLORIDA FIRE PREVENTION CODE REQUIREMENTS.
- 9) COPPERHEAD TRACING WIRE PART #1230HS #12 AWG SHALL BE USED. IT SHALL BE COLOR CODED TO REFLECT THE TYPE OF PIPE CARRIES. (BLUE = WATER, PURPLE = REUSE)
- 10) FIRE HYDRANT ASSEMBLY SHALL BE WHATED IN 8" OF #57 STONE OR EQUIVALENT.
- 11) FIRE HYDRANT ASSEMBLY INCLUDES GATE VALVE.

4 FIRE HYDRANT ASSEMBLY

VSR-1

SCALE: NONE



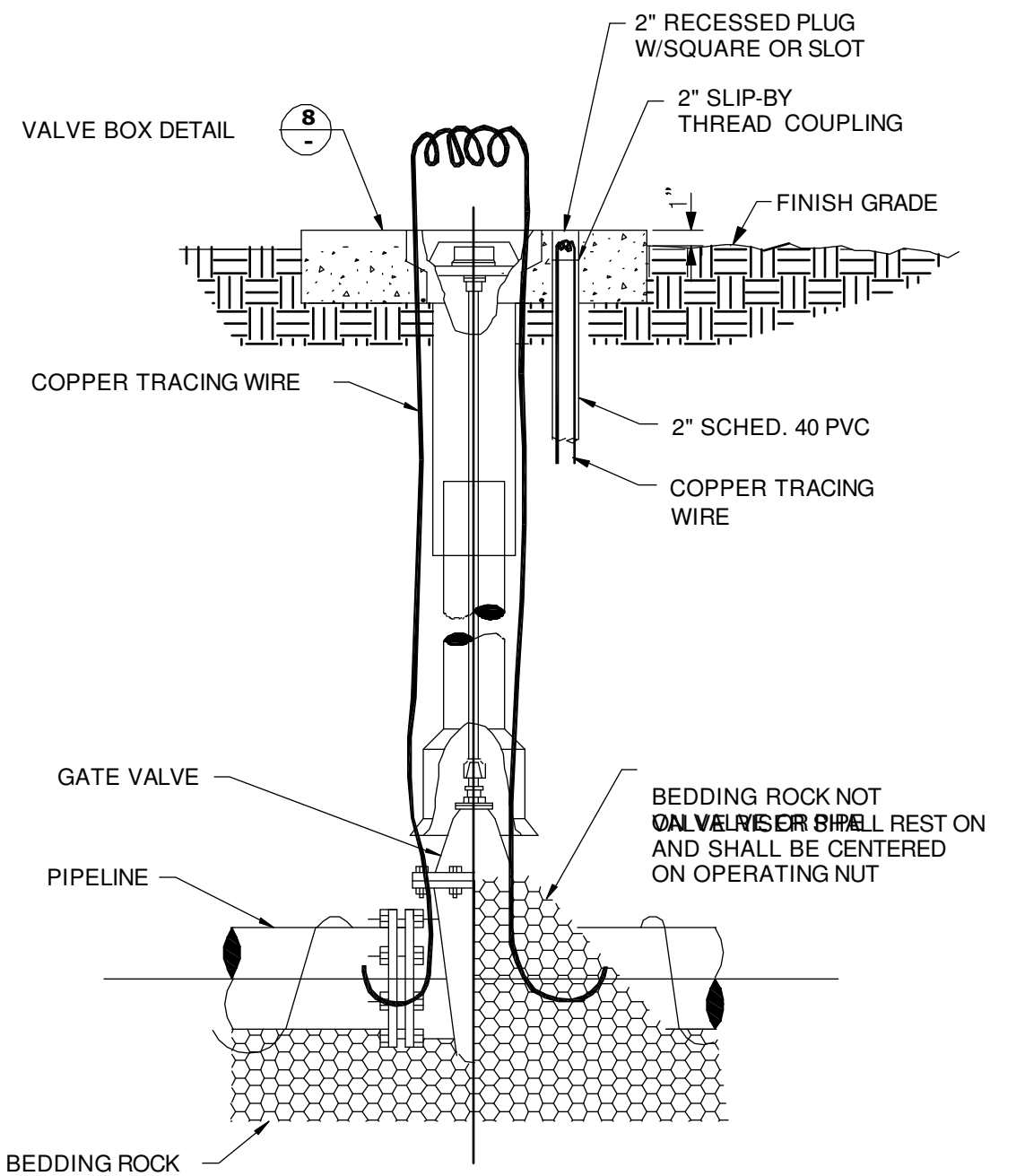
NOTES:

- 1) EXISTING MAIN SHALL NOT BE TAPPED UNTIL THE ASSEMBLED SLEEVE AND VALVE ARE TESTED IN PLACE AT A MINIMUM OF 150 PSI FOR THIRTY MINUTES.
- 2) UPON SUCCESSFUL TAPPING SLEEVE PRESSURE TEST (NOTE 1), THE THRUST BLOCK SHALL BE POURED AND HAVE SET FOR 24 HRS PRIOR TO TAPPING. READY-MADE THRUST BLOCKS CAN BE USED WITH CITY APPROVAL.
- 3) STAINLESS STEEL TAPPING SLEEVE SHALL BE FORD. ALL HARDWARE SHALL BE STAINLESS STEEL. GASKETS SHALL BE VIRGIN SBR COMPOUND FOR WATER SERVICE.
- 4) GATE VALVES SHALL BE RESILIENT WEDGE-TYPE MANUFACTURED BY MUELLER OR AMERICAN VALVE. ALL GATE VALVES SHALL BE FUSION BONDED EPOXY COATED (INTERIOR AND EXTERIOR) MEET ANSI/AWWA C550, AND BE NSF61 CERTIFIED.

5 TAPPING SLEEVE AND VALVE DETAIL

WSR-1

SCALE: NONE



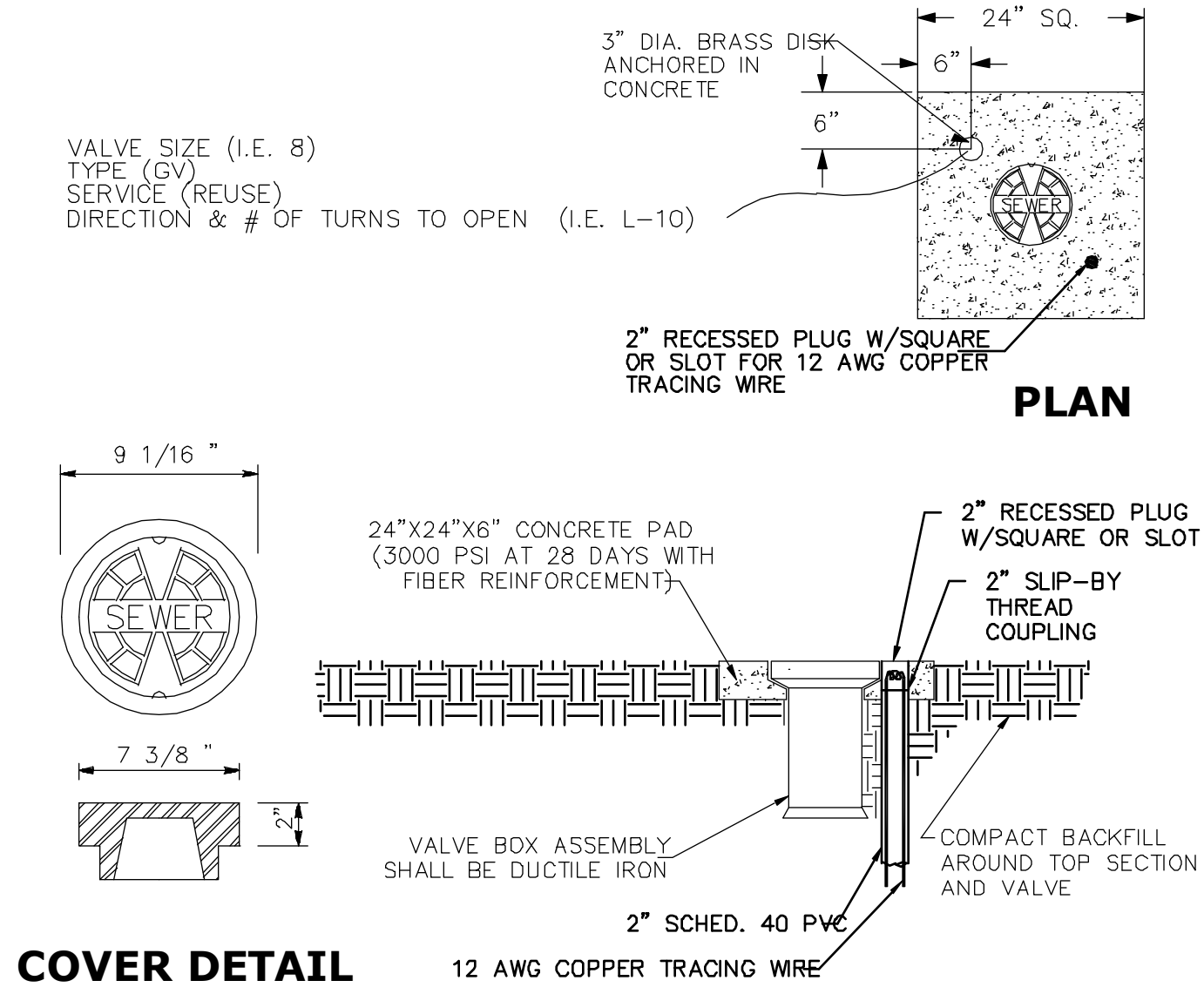
NOTES

- 1.) GATE VALVES SHALL BE RESILIENT WEDGE-TYPE MANUFACTURED BY MUELLER, AMERICAN VALVE, OR EQUAL. ALL GATE VALVES SHALL BE FUSED BONDED EPOXY COATED (INTERIOR AND EXTERIOR) MEET ANSI/AWWA C550, AND BE NSF61 CERTIFIED.
- 2.) FOR VALVES LARGER THAN 12" IN DIAMETER AN OFFSET GEAR ACTUATED OPERATOR IS REQUIRED.
- 3.) VALVE SHALL BE INSTALLED IN CONFORMANCE WITH MANUFACTURER'S INSTALLATION AND MAINTENANCE INSTRUCTIONS.
- 4.) COPPERHEAD TRACING WIRE PART #1230HS #12 AWG SHALL BE USED. IT SHALL BE COLOR CODED TO REFLECT WHAT THE PIPE CARRIES. (BLUE = WATER, PURPLE = REUSE)

2 GATE VALVE DETAIL
WSP 1 SCALE: NONE (WATER AND F)

W3R-1

SCALE: NONE (WATER AND REUSE ONLY)



COVER DETAIL
APPROPRIATE SERVICE
SHALL BE INDICATED

APPROPRIATE SERVICE
SHALL BE INDICATED

PROFILE

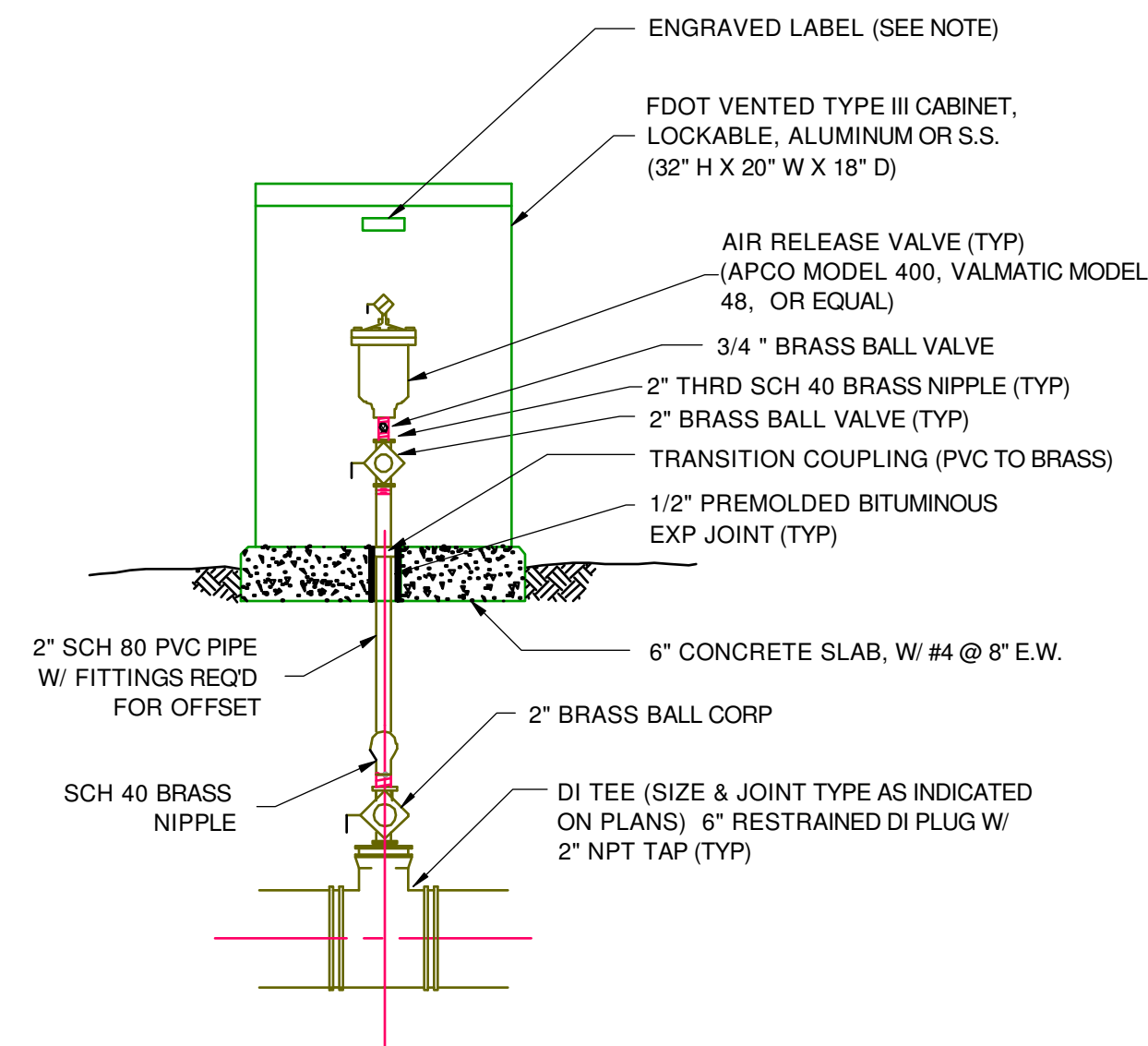
NOTES:

- 1.) PAVED AREAS: SET CONCRETE PAD AND COVER FLUSH WITH FINISHED PAVEMENT SURFACE.
- 2.) UNPAVED AREAS: SET PAD AND COVER 1 INCH ABOVE FINISHED GRADE.
- 3.) VALVES LOCATED IN DITCH AND OVER 4' DEPTH (LINE) MUST USE TRENCH ADAPTER VALVE BOX (AMERICAN FLOW CONTROL).
- 4.) COPPERHEAD TRACING WIRE PART #1230HS #12 AWG SHALL BE USED. IT SHALL BE COLOR CODED TO REFLECT WHAT THE PIPE CARRIES. (BLUE = WATER, GREEN = SEWER, PURPLE = REUSE)
- 5.) PRE-CAST PADS MAY BE USED WITH CITY APPROVAL.

8 VALVE BOX DETAIL

WSR-1

SCALE: NONE

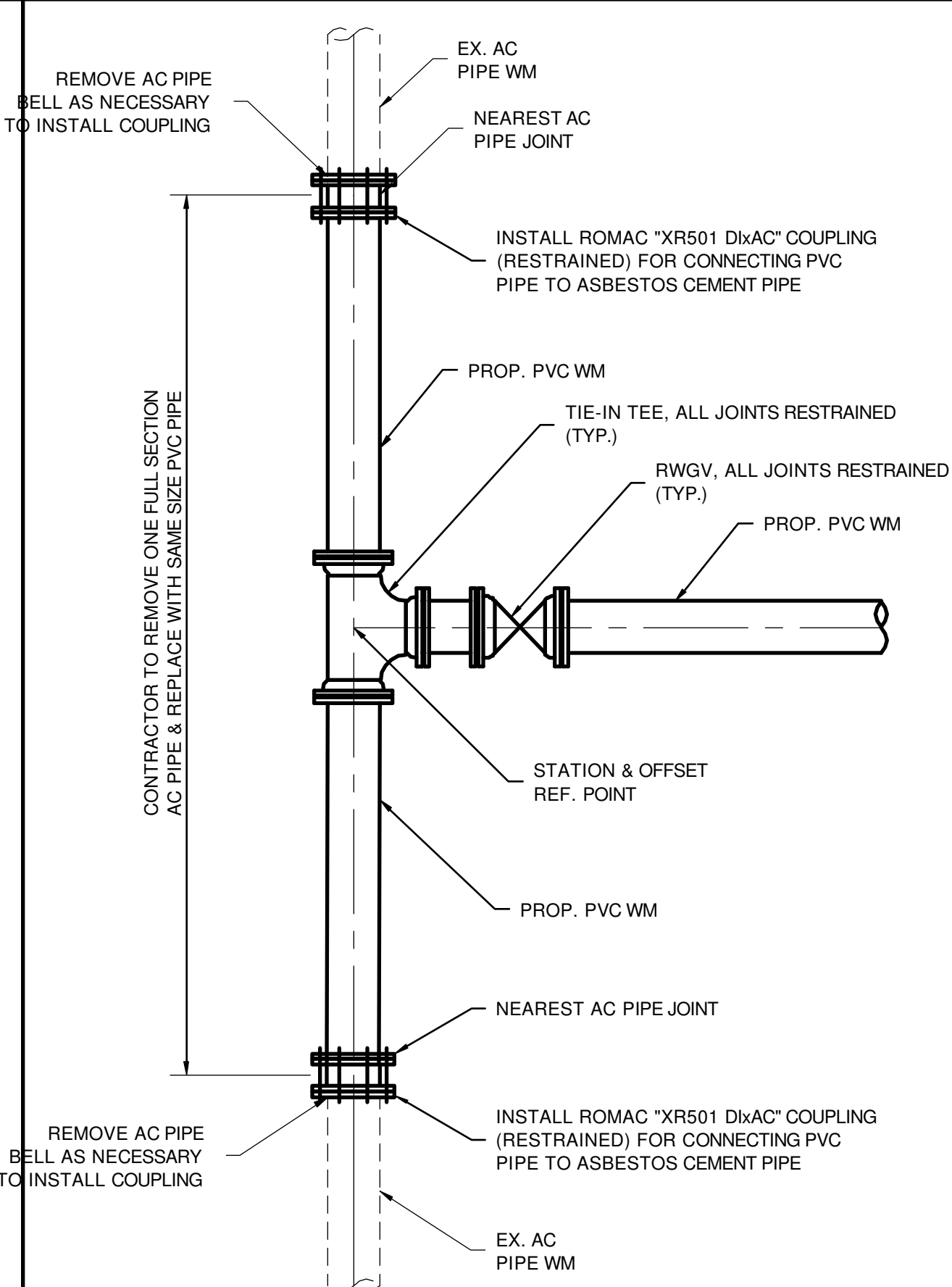


NOTES:

1. ENGRAVED LABEL W/ 1/4" LETTERS, WHITE ON BLACK, MOUNTED W/ 2 ALUM RIVETS ON INSIDE BACK PANEL ABOVE ARV WITH WORDS "POTABLE WATER"
2. S.S. = STAINLESS STEEL

ABOVE GROUND AUTOMATIC COMBINATION AIR RELEASE VALVE (CAV)

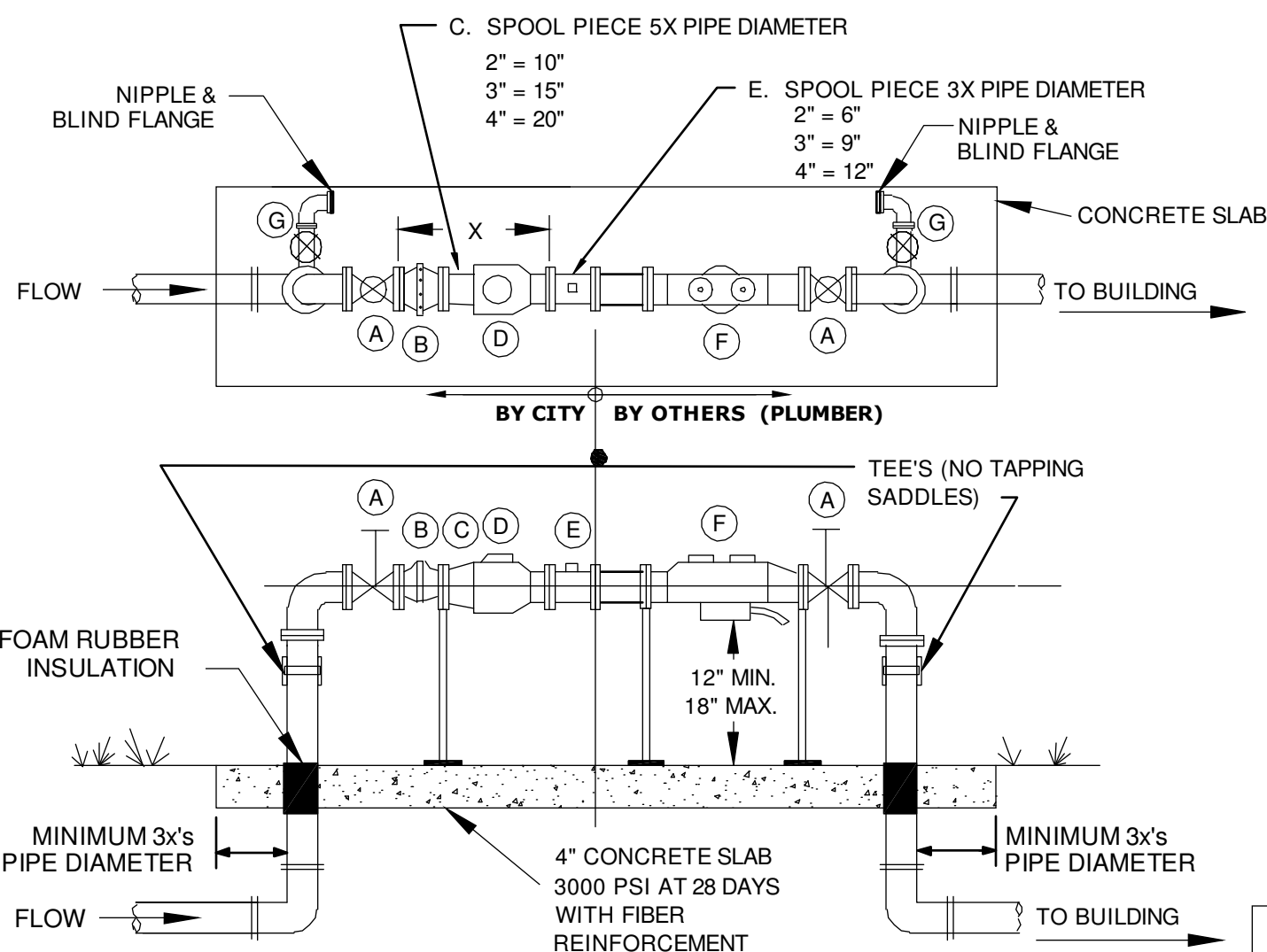
SCALE: NONE



AC PIPE TIE-IN DETAIL

SCALE: NONE

[illegible]



- NOTES:
- 1.) EITHER 90°-DEGREE OR 45°-DEGREE FITTINGS MAY BE USED WITH THE REQUIRED LENGTH OF RESTRAINED JOINT FITTINGS.
 - 2.) B. F. P. A. SHALL BE REDUCED PRESSURE TYPE. ALL BACKFLOW PREVENTION ASSEMBLIES SHALL BE APPROVED BY THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH AND/OR ASSE 1013.
 - 3.) ALL CONCRETE PENETRATIONS SHALL REQUIRE PIPE TO BE WRAPPED WITH INSULATING MATERIAL.
 - 4.) VALVES SHALL BE NON-RISING STEM TYPE.
 - 5.) ALL METERS 1 1/2 & UP WILL HAVE FLANGES.
 - 6.) PIPE BETWEEN TAP & ISOLATION VALVE SHALL BE C900 PVC OR DUCTILE.
 - 7.) THE WATER METER AND BACKFLOW PREVENTER SHALL BE THE SAME SIZE.
 - 8.) 2" AND SMALLER METERS REQUIRE A LOCKABLE CURB STOP. 3" AND LARGER METERS WILL HAVE A FLANGED WHEEL HANDLE GATE VALVE.
 - 9.) NO SPOOL PIECE REQUIRED FOR 3/4", 1", OR 1 1/2".
 - 10.) ALL COMMERCIAL AND MULTI FAMILY UNIT METERS MUST BE ABOVE GRADE. BACKFLOW PREVENTION ASSEMBLY NOT REQUIRED FOR REUSE METER.

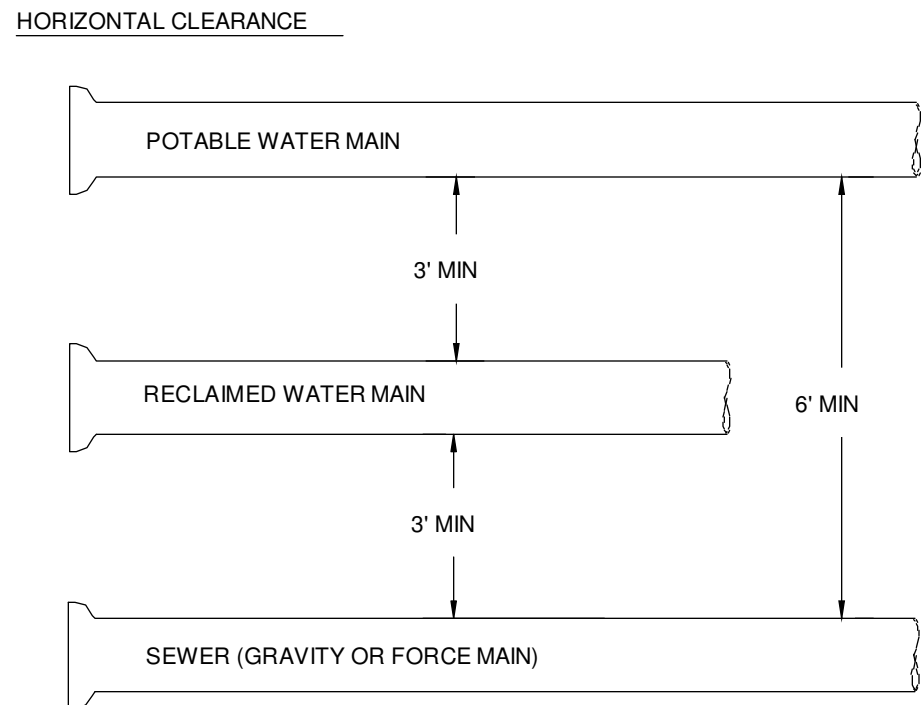
2 WATER & REUSE METER & BACKFLOW PREVENTION ASSEMBLY

COMMERCIAL / MULTI-UNIT MASTER METER (WITH BY PASS)

METER SIZE (IN.)	X (IN.)
3/4"	7 1/2"
1"	11"
1 1/2"	13 1/8"
2" PD	17"
2" COMPOUND	15 1/4"
3"	17"
4"	20"

METER SIZE (IN.)	BY-PASS SIZE
3/4"	3/4"
1"	3/4"
1 1/2"	1"
2"	1 1/2"
3"	2"
4"	3"

- (A) FLANGED GATE VALVE
(B) STRAINER
(C) SPOOL PIECE
(D) METER (PROVIDED BY THE CITY)
(E) SPOOL PIECE
(F) BACKFLOW PREVENTION ASSEMBLY
(G) LOCKABLE BALL VALVE



MINIMUM SEPARATION DISTANCES (FT)

(OUTSIDE OF PIPELINE TO OUTSIDE OF PIPELINE)

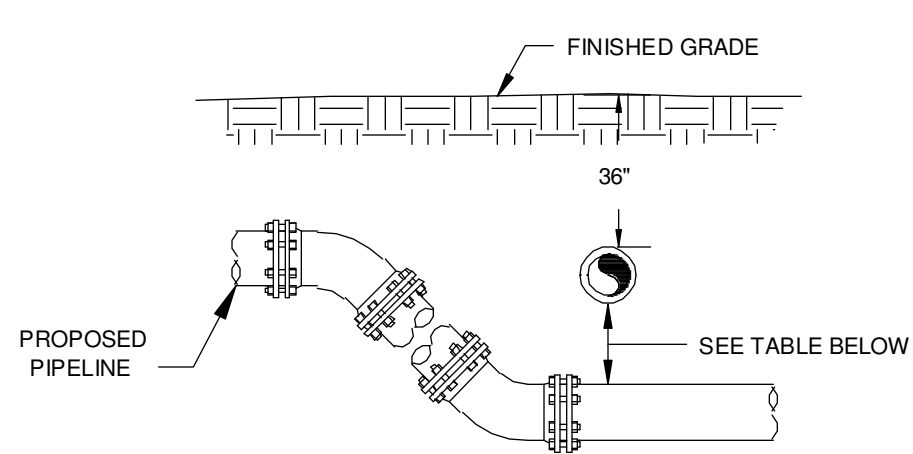
	WATER MAIN	FORCE MAIN	SANITARY SERVICE	REUSE MAIN	STORM WATER	OTHER UTILITIES (TELEPHONE CABLE, ETC.)
WATER MAIN	3	6	6	3	3	3
FORCE MAIN	6	3	3	3	3	3
SANITARY SEWER	6	3	3	3	3	3
REUSE MAIN	3	3	3	3	3	3
STORM WATER	3	3	3	3	3	3
OTHER UTILITIES	3	3	3	3	3	3

MINIMUM VERTICAL SEPARATION DISTANCES (IN)

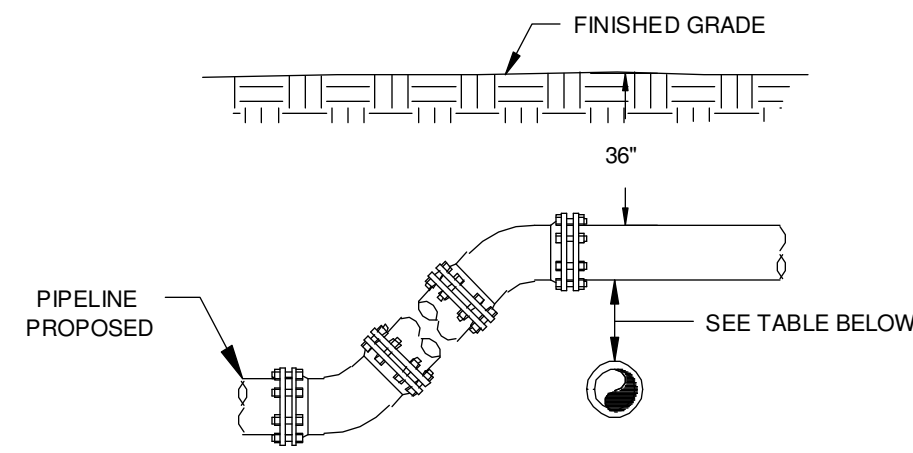
(OUTSIDE OF PIPELINE TO OUTSIDE OF PIPELINE)

	WATER MAIN	FORCE MAIN	SANITARY SERVICE	REUSE MAIN	STORM WATER	OTHER UTILITIES (TELEPHONE CABLE, ETC.)
WATER MAIN	6	12	12	12	6	6
FORCE MAIN	12	6	6	6	6	6
SANITARY SEWER	12	6	6	6	6	6
REUSE MAIN	6	6	6	6	6	6
STORM WATER	6	6	6	6	6	6
OTHER UTILITIES	6	6	6	6	6	6

5 UTILITY CONFLICT DETAILS

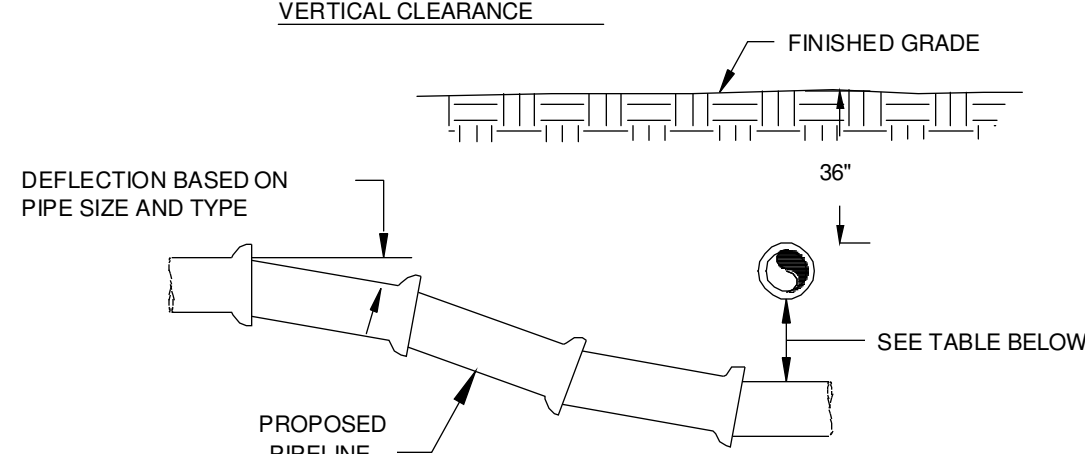


ADJUSTMENT UNDER EXISTING USING FITTINGS

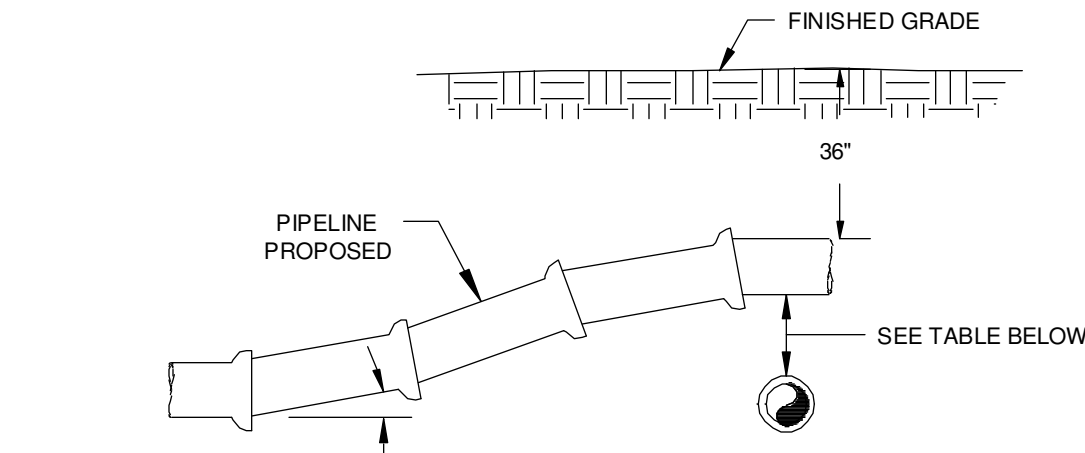


ADJUSTMENT OVER EXISTING USING FITTINGS

- NOTES:
- 1.) MAXIMUM JOINT DEFLECTION SHALL BE 90% OF MANUFACTURER'S RECOMMENDATION.
 - 2.) WHEREVER POSSIBLE, THE STRATIGRAPHY OF UTILITIES SHALL PLACE SANITARY SEWER AND SEWER FORCE MAINS BELOW RECLAIMED MAINS AND BELOW WATER MAINS, RESPECTIVELY. WHERE WATER MAINS ARE ABOVE GRAVITY SEWERS OR WASTEWATER FORCE MAINS, A VERTICAL CLEARANCE OF 6 INCHES IS ACCEPTABLE.
 - 3.) ACCEPTABLE VARIANCES
 - A. WHERE HORIZONTAL SEPARATION CANNOT BE MAINTAINED, C900 DR14 PVC PIPE SHALL BE USED FOR ONE OF THE PIPELINES.
 - B. WHERE VERTICAL CLEARANCE CANNOT BE MAINTAINED, ONE FULL LENGTH OF DUCTILE IRON PIPE OR DR14 C900 PIPE SHALL BE INSTALLED CENTERED AT THE POINT OF CROSSING.
 - C. WHERE 30" MINIMUM DEPTH OF COVER CANNOT BE MAINTAINED, SPECIAL PROTECTION OR PIPE MATERIAL UPGRADE MAY BE REQUIRED, AT THE DISCRETION OF THE CITY ENGINEER.
 - 4.) NO WATER PIPE SHALL PASS THROUGH, OR COME IN CONTACT WITH ANY PART OF A SANITARY MANHOLE OR STORMWATER STRUCTURE.

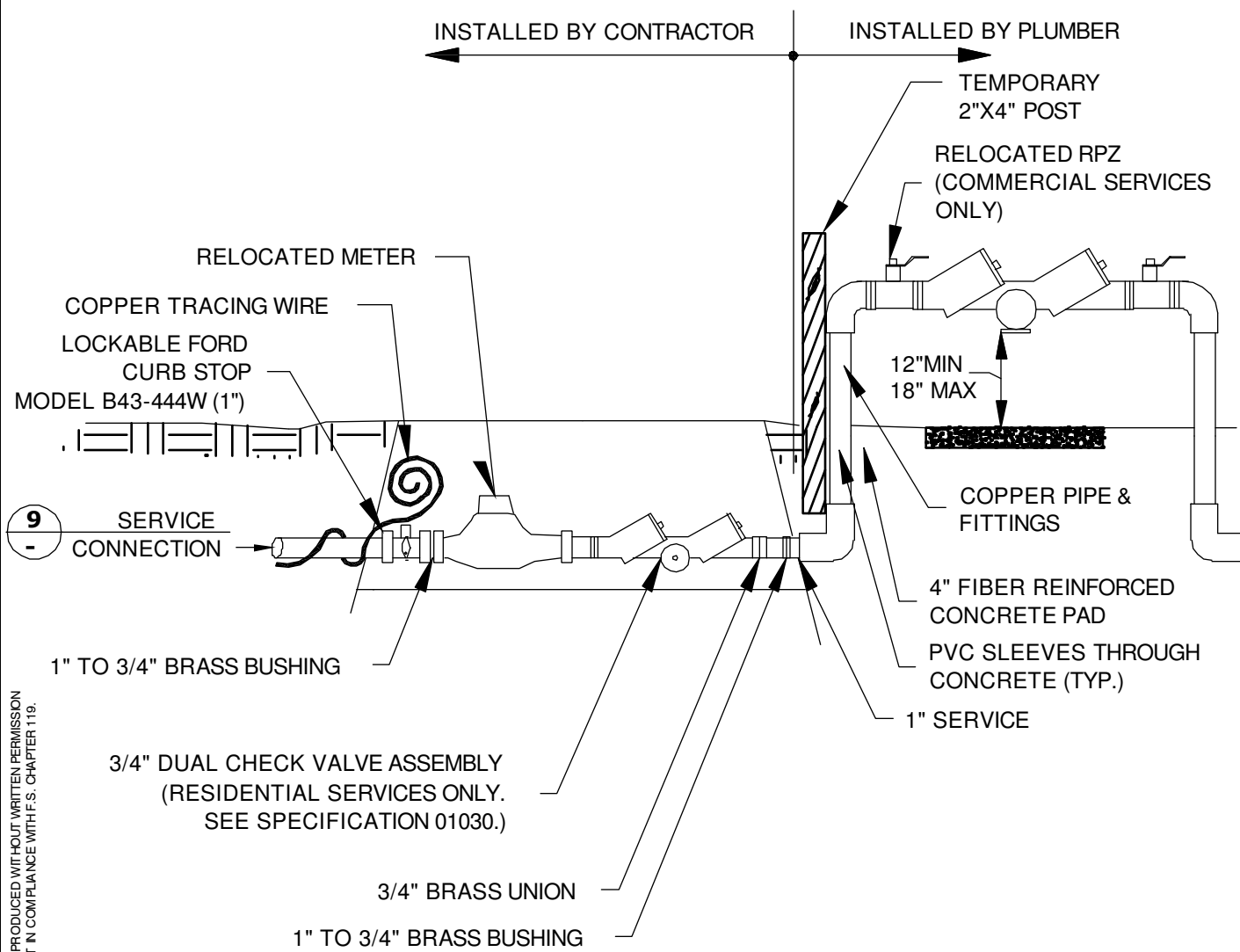


ADJUSTMENT UNDER EXISTING USING PIPE JOINT DEFLECTION



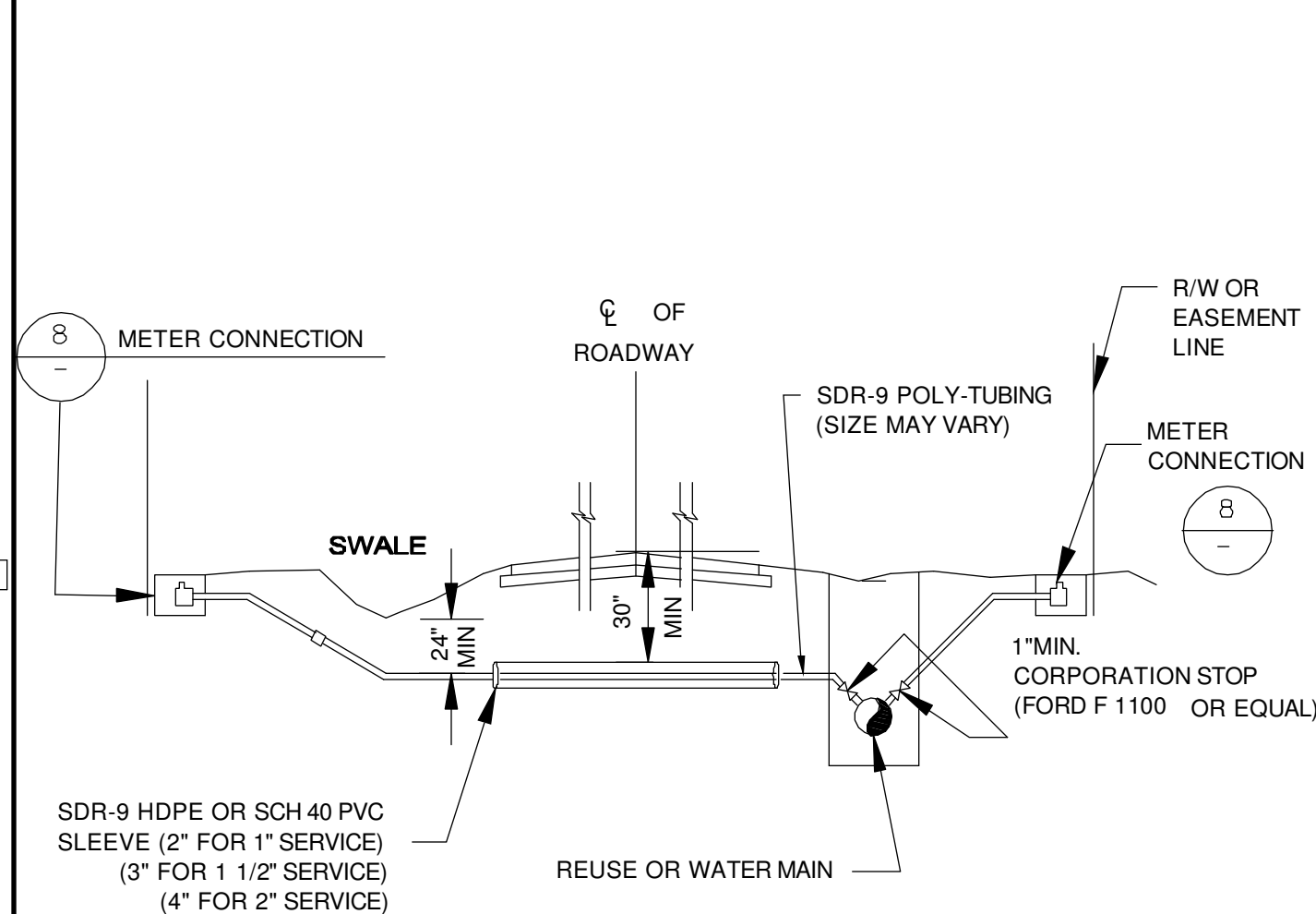
ADJUSTMENT UNDER EXISTING USING PIPE JOINT DEFLECTION

EXISTING STORM SEWER, WATER MAIN, TELEPHONE CABLE, SANITARY SEWER, POWER, CABLE TV, FORCE MAIN, GAS MAIN



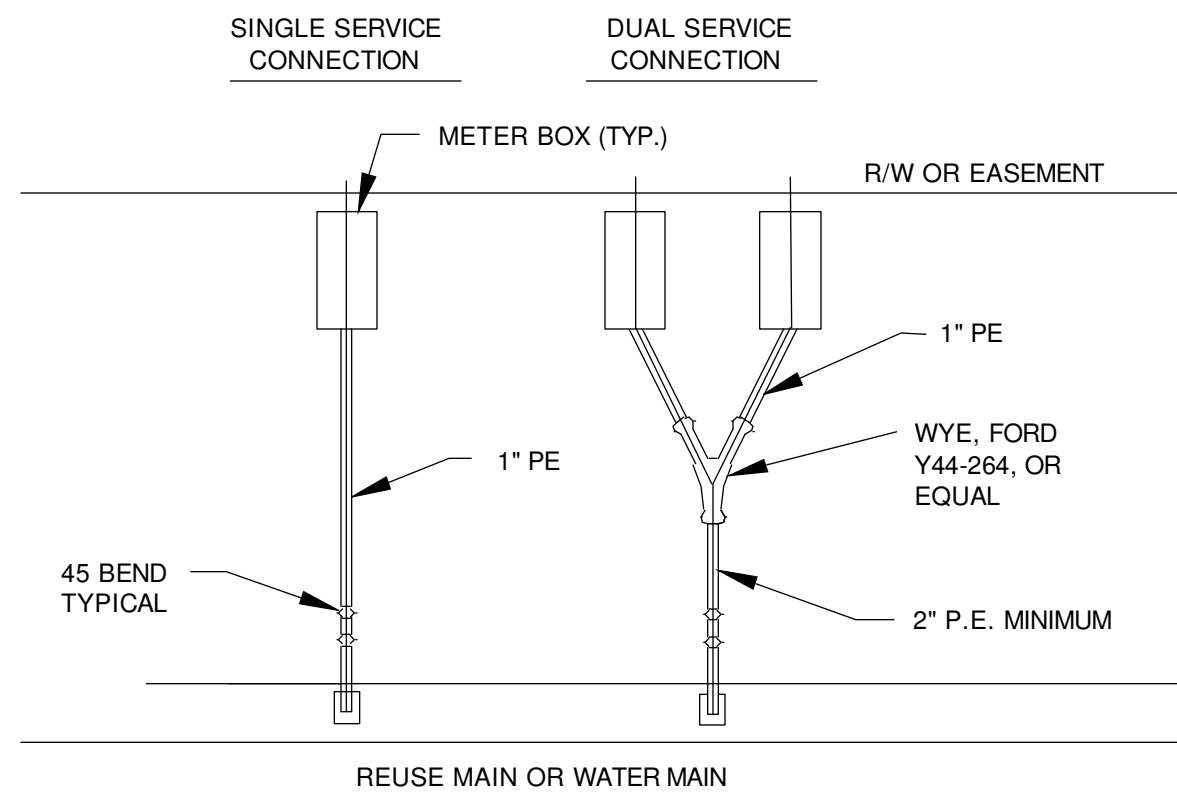
- NOTES:
1. THE POTABLE WATER SYSTEM SHALL USE A BROOKS/CARSON MODEL# 1220 JUMBO BLACK PLASTIC METER BOX WITH METAL READER AND BLACK SOLID RODS. CENTER METER IN BOX.
 2. BLOCK ENDS OF BOX.
 3. COPPERHEAD TRACING WIRE PART #1230HS #12 AWG SHALL BE USED. IT SHALL BE COLOR CODED TO REFLECT WHAT THE PIPE CARRIES. (BLUE = WATER).
 4. CURB STOP MUST BE LOCATED IN BOX.
 5. ALL BACKFLOW PREVENTION ASSEMBLIES SHALL BE APPROVED BY THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH AND/OR ASSE 1013.
 6. ALL RPZ PIPING SHALL BE RIGID COPPER.
 7. THE WATER METER AND BACKFLOW PREVENTER SHALL BE THE SAME SIZE.

6 BELOW GROUND WATER METER & REDUCED PRESSURE PRINCIPAL ASSEMBLY



- NOTES:
1. TAPS SHALL NOT BE CLOSER THAN TWO FEET APART OR WITHIN TWO FEET OF ANY JOINT.
 2. TAPS IN MULTIPLE GROUPS SHALL NOT BE MADE IN THE SAME LONGITUDINAL LINE OF THE PIPE BUT MUST BE STAGGERED VERTICALLY.
 3. TAPPING SADDLE SHALL BE EPOXY COATED, DUCTILE IRON BODY WITH STAINLESS STEEL BAND(S) AND HARDWARE.
 4. BRASS FITTINGS AND BALL VALVES SHALL BE FORD F1100 OR EQUAL.
 5. ALL SERVICES SHALL BE 1" MIN. FROM THE CORPORATION STOP TO THE CURBSTOP. ALL SERVICES SHALL HAVE COPPER TRACING WIRE.
 6. ALL SLEEVE ENDS SHALL BE SEALED WITH FOAM SEAL.
 7. STEEL INSERT STIFFENERS WILL NOT BE ACCEPTABLE.
 8. SLEEVE SHALL BE INSTALLED UNDER THE ROADWAY BY PNEUMATIC BULLET OR DIRECTIONAL DRILL.

9 SERVICE CONNECTIONS

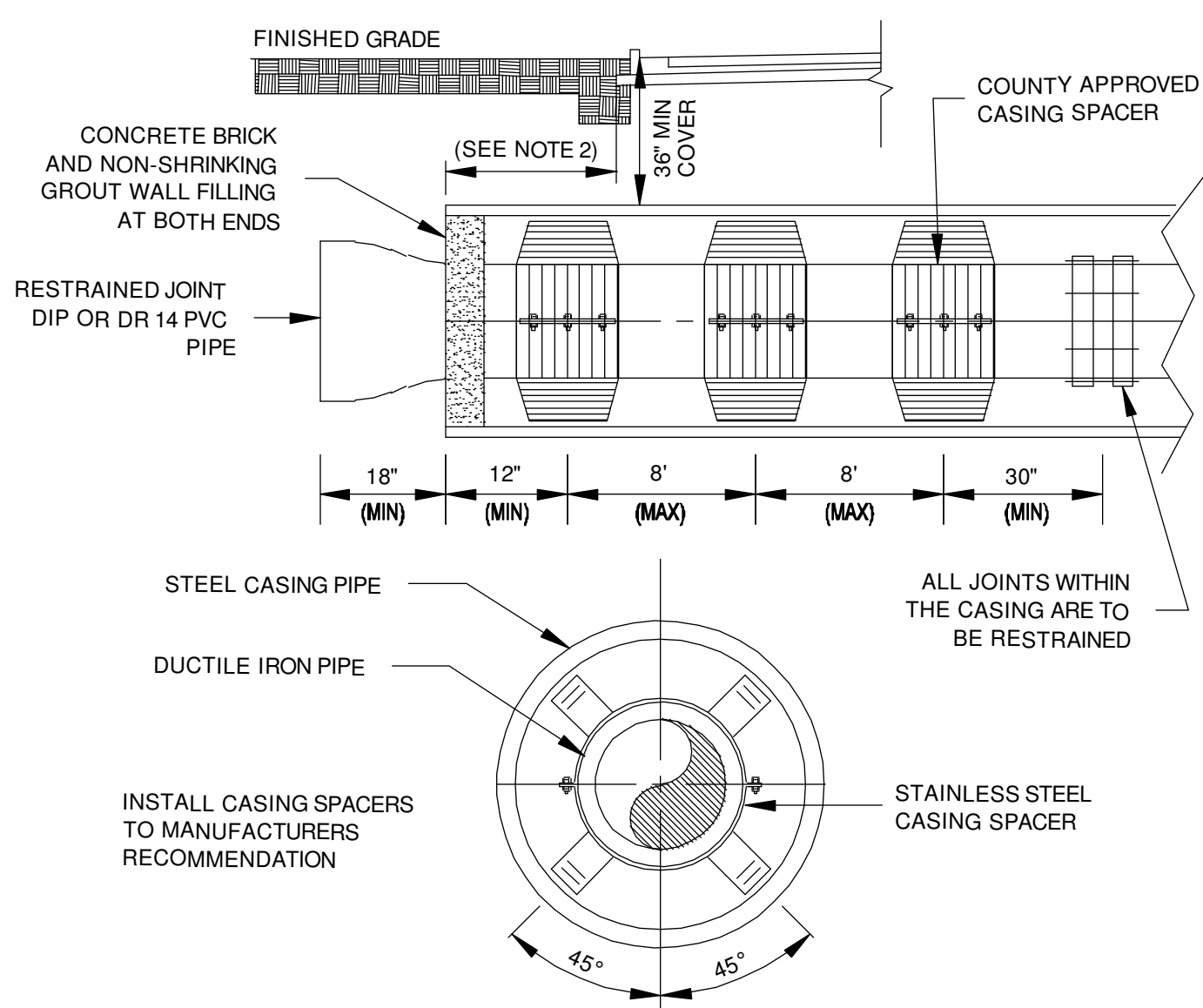


8 METER CONNECTION

RESIDENTIAL USE ONLY

1. A DRILLING BORE LOG SHALL BE SUBMITTED WITHIN SEVEN (7) DAYS OF PERFORMING THE BORE. DEPTHS SHALL BE RECORDED AT A MAXIMUM OF EVERY TEN (10) FEET. RECORD DRAWINGS SHALL INDICATE ELEVATIONS.
2. ALL DBs SHALL BE HIGH-DENSITY POLYETHYLENE (HDPE) WITH DR-11 MINIMUM OR EQUAL.
3. PIPE SHALL BE COLOR-CODED BY THE PIPE MANUFACTURED DURING FABRICATION INDICATING APPROPRIATE SERVICE.
4. AIR RELEASE VALVES SHALL BE INSTALLED ON THE UPSTREAM SIDE OF THE BORE, IF SHOWN ON THE DRAWINGS.
5. WELDED MJ ADAPTERS ARE REQUIRED AT BOTH ENDS OF THE BORE. STEEL INSERT STIFFENERS WILL NOT BE ACCEPTABLE.
6. TRACE WIRES REQUIRED. SECURE TO PIPE PRIOR TO PULLING.
7. ISOLATION VALVE SHALL BE INSTALLED ON BOTH SIDES OF DIRECTIONAL BORE.
8. DIRECTIONAL BORING MUST BE COMPLETED BETWEEN THE HOURS OF 8:00 A.M. AND 3:00 P.M.
9. ALL D.B.'S CROSSING A DITCH/SWALE MUST BE AT LEAST 36" BELOW ACTUAL/DESIGN BOTTOM OF CONVEYANCE.

10 DIRECTIONAL BORING (DB)



CARRIER PIPE NOMINAL DIAMETER	CASING OUTSIDE DIAMETER	CASING WALL THICKNESS
6"	16"	0.250"
8"	20"	0.250"
10"	24"	0.250"
12"	30"	0.312"
16"	30"	0.312"
20"	36"	0.375"
24"	42"	0.500"
30"	48"	0.500"
36"	54"	0.500"
42"	60"	0.500"

- NOTES:
1. PVC PIPE MAY BE USED UPON APPROVAL BY CITY OF VENICE.
 2. WHERE POSSIBLE, CASING SHALL EXTEND 8' PAST E.O.P. AND NO LESS THAN 6' FROM E.O.P.
 3. WHEN CONSTRUCTION IS WITHIN FDOT JURISDICTION, ADDITIONAL REQUIREMENTS MAY APPLY.
 4. WOODEN CASING SPACERS ARE NOT ACCEPTED.

11 JACK AND BORE DETAIL

DESIGNED
MUG
DRAWN
VENICE FL 34285
CS/OPS
CHECKED
SLP
DATE

City Of Venice
Utility Department
200 North Warfield Avenue
Venice FL 34285
Phone 941-486-2833
Fax 941-486-2833
www.cityofvenice.com
Engineering License #2410

WATER MAIN REPLACEMENT PROGRAM PHASE-1

NO.	DATE	RE-BID DOCUMENT	DESCRIPTION	APPROVAL
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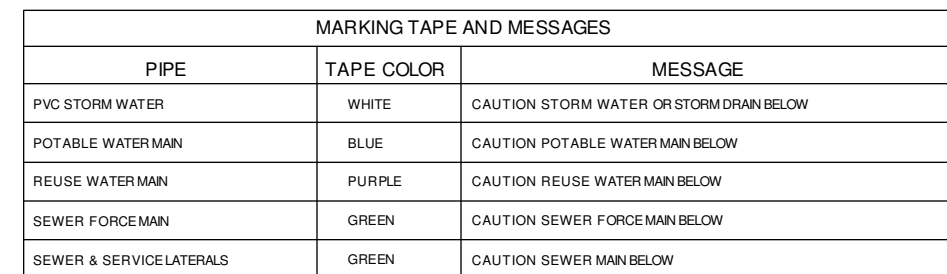
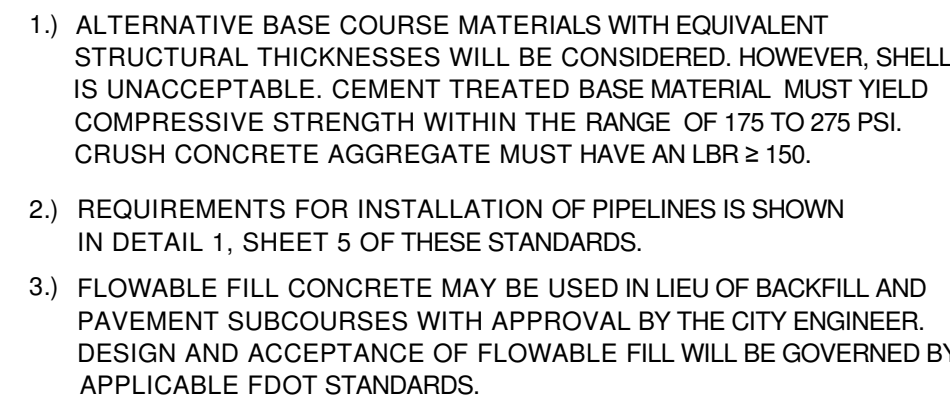
TITLE
POTABLE WATER DETAILS (2)

THE SIGNATURE OF THE QUALITY CONTROL OFFICER IN THIS SPACE INDICATES THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED AND THAT CONSTRUCTION IS AUTHORIZED TO COMMENCE.

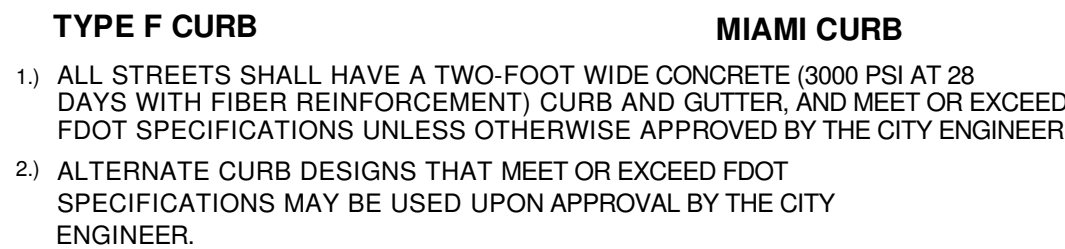
JOB NO.
4799-002-000
DATE:
JUNE 2012
SCALE:
AS SHOWN

SHEET NO.
D1.02

BID DOCUMENT
SEPT. 13, 2013



- 1.) COPPERHEAD TRACING WIRE PART #1230HS #12 AWG SHALL BE ATTACHED TO TOP OF PIPE AT 20' INTERVALS ON ALL RECLAIMED WATER, FORCE, OR POTABLE WATER MAINS. IT SHALL BE COLOR CODED TO REFLECT WHAT THE PIPE CARRIES. (BLUE = WATER, GREEN = SEWER, PURPLE = REUSE)
- 2.) MINIMUM COVER SHALL BE 30" FROM TOP OF PIPE TO FINISHED GRADE MAXIMUM COVER SHALL BE 42" FROM FINISHED GRADE UNLESS OTHERWISE APPROVED.
- 3.) INSTALLATION OF PIPE SHALL BE IN CONFORMANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- 4.) PAVEMENT RESTORATION SHALL CONFORM WITH DETAIL 7, SHEET 3 OF THESE CITY STANDARDS.
- 5.) CONFLICTS - UTILIZE 45° BENDS WITH SEPARATION AS PER DETAIL 5, SHEET 6.
- 6.) ALL UTILITIES (PUBLIC & PRIVATE) THAT CROSS A DITCH/SWALE SHALL BE 36" MIN BELOW THE ACTUAL/DESIGN BOTTOM OF CONVEYANCE.



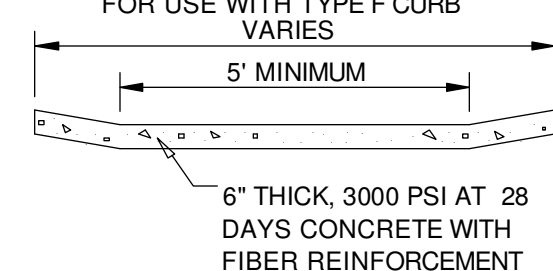
1 CURB DETAILS

A.) PUBLIC AND PRIVATE ROADWAYS

SUBGRADE - TYPE B STABILIZED LBR 40 MIN.
ABC3 - ASPHALT BASE _____
CTB _____
CCA _____
ASPHALTIC CONCRETE _____

ALTERNATE PAVEMENT FOR PARKING LOTS ONLY:

SUBGRADE - 12" TYPE B STABILIZED LBR 40 MIN.
PAVEMENT - 6" CONCRETE 3000PSI @28 DAYS WITH MAX. 4" SLUMP & FIBER
REINFORCEMENT.



N.T.S.

12" 12"

12 12

6"

ASPHALT AND BASE

CURB DETAIL
(SECTION B-B)

- 1) ALL CONCRETE RAMPS SHALL BE 4" THICK, INCREASING TO 6" THICK AT THE CURB FROM A DISTANCE OF 48"
- 2) ALL CONNECTIONS TO AN EXISTING SIDEWALK SHALL BE AT AN EXPANSION OR CONTRACTION JOINT
- 3) WHERE PEDESTRIAN MOVEMENT CROSSES RAMP, THE MAXIMUM SLOPE SHALL BE 1:12
- 4) ALL RAMPS AND WALKS WITHIN THREE FEET OF A FREQUENTLY USED DRIVE (GREATER THAN DUPLEX) SHALL HAVE A TACTILE SURFACE. RAMPS ARE DEFINED AS WALKS WITH A SLOPE GREATER THAN 1:12 AND/OR ADJACENT TO CURBS.
- 5) TACTILE SURFACE SHALL BE CAST-IN-PLACE COMPOSITE TACTILE (BRICK RED) (ADA SOLUTIONS OR APPROVED EQUALS), OR CAST-IN-PLACE ULTRA-ADA PADS (BRICK RED) (ULTRA TECH OR APPROVED EQUALS).
- 6) ALL MATERIALS & METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH LATEST EDITION OF THE FDOT, "STANDARDS FOR ROAD & BRIDGE CONSTRUCTION". IN ADDITION, CONCRETE SHALL BE 3000 PSI AT 28 DAYS WITH A MAXIMUM 4" SLUMP AND FIBER REINFORCEMENT.

3 TYPICAL HANDICAPPED RAMP

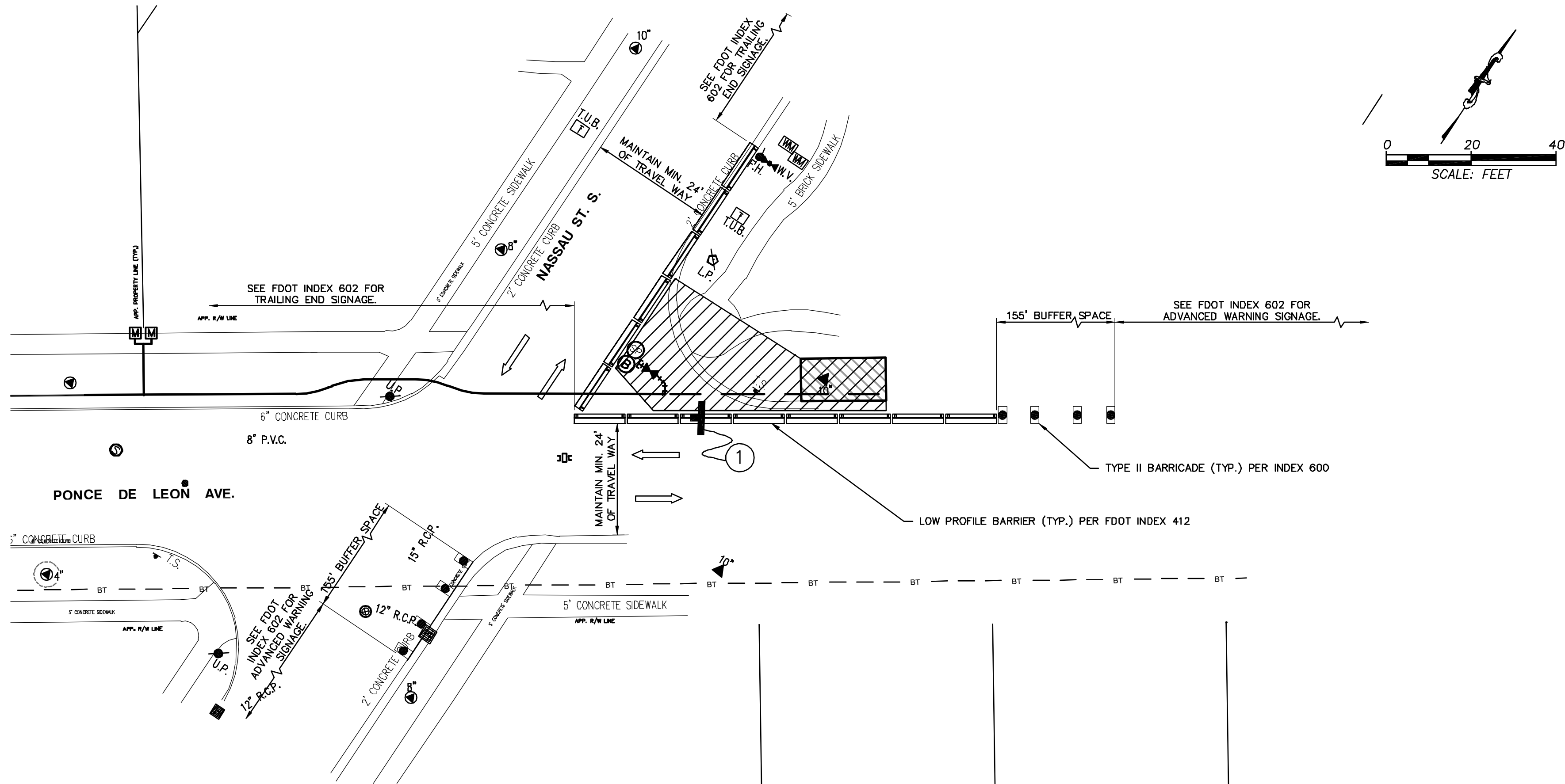


PLAN VIEW

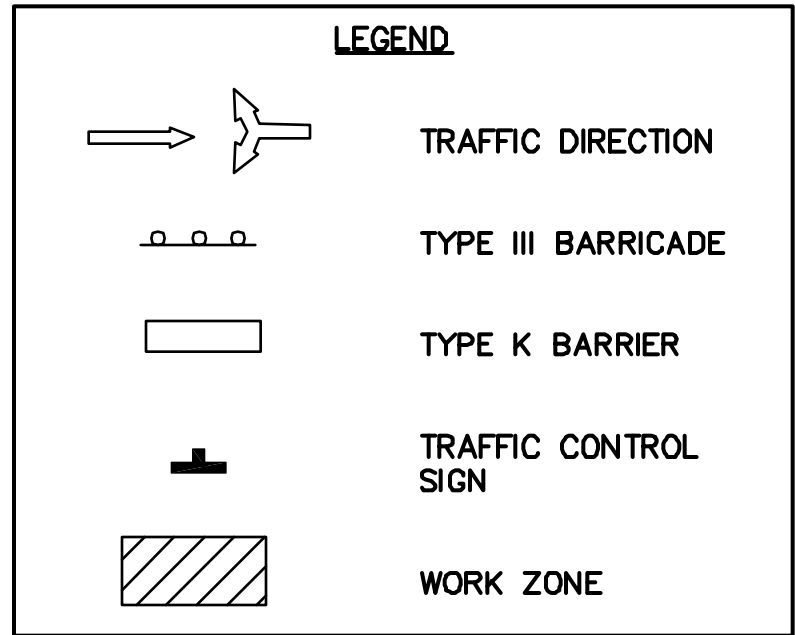


- 1) SIDEWALKS SHALL BE CONSTRUCTED OF 3000 PSI AT 28 DAYS CONCRETE (MAXIMUM 4" SLUMP) WITH FIBER REINFORCEMENT.
- 2) ALL SIDEWALKS WIDTHS AND SLOPES SHALL MATCH EXISTING.
- 3) CONTRACTION SAW-CUTS SHALL BE CONSTRUCTED EVERY 5' LENGTH OF SIDEWALK. EXPANSION JOINTS SHALL BE CONSTRUCTED AT 50' INTERVALS.
- 4) 1/2-INCH THICK ASPHALTIC FELT OR "PRESSURE TREATED WOOD SHALL BE PLACED AT EACH EXPANSION JOINT.
- 5) EXISTING CURB AND GUTTER SHALL BE REMOVED ONLY AT EXISTING JOINTS.
- 6) DRIVEWAY WIDTH AND LOCATION SHALL COMPLY WITH ZONING CODES, SECTIONS 122-446, 62-64, 62-65.
- 7) ALL MATERIALS & METHODS OF CONSTRUCTION SHALL BE IN 7.) ACCORDANCE WITH LATEST EDITION OF THE FDOT, "STANDARDS FOR ROAD & BRIDGE CONSTRUCTION". IN ADDITION, CONCRETE SHALL BE 3000 PSI AT 28 DAYS WITH A MAXIMUM 4" SLUMP AND FIBER REINFORCEMENT.
- 8) DRIVEWAY SLOPES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FDOT,
"ROADWAY AND TRAFFIC DESIGN STANDARDS", INDEX 515.





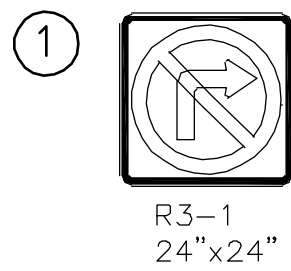
DETAIL A
(N.T.S.)



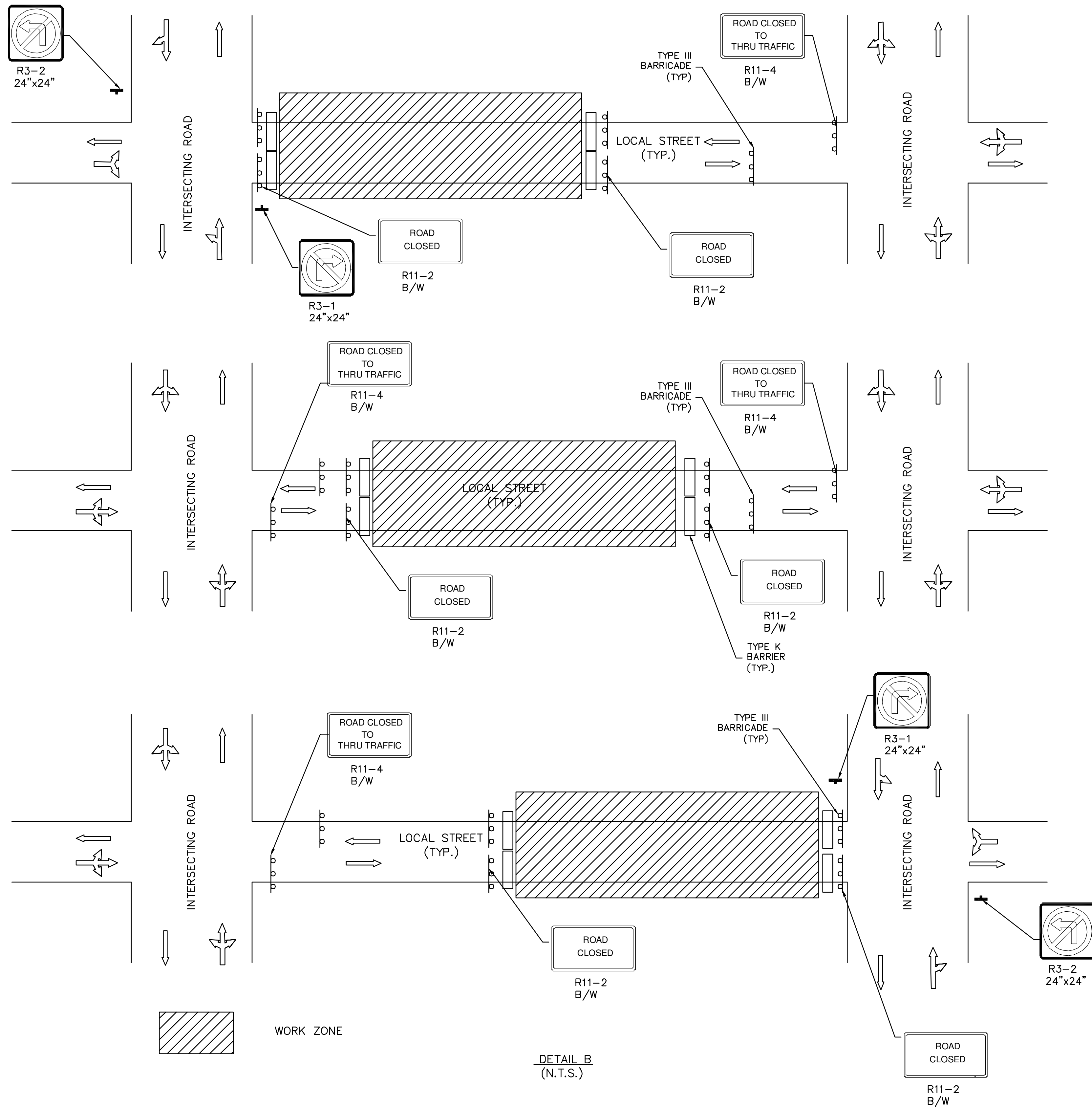
NOTE: ANY DROP-OFF CONDITION WITHIN A WORK ZONE THAT IS CREATED AND NOT RESTORED WITHIN THE SAME CONTINUOUS/ACTIVE WORK PERIOD SHALL BE SUBJECT TO THE USE OF BARRIER (LOW PROFILE OR TYPE K PER FDOT INDEXES 412 AND 414).

**NASSAU ST. S. AND PONCE DE LEON AVE. INTERSECTION
WORK ZONE TRAFFIC CONTROL PHASING NOTES**

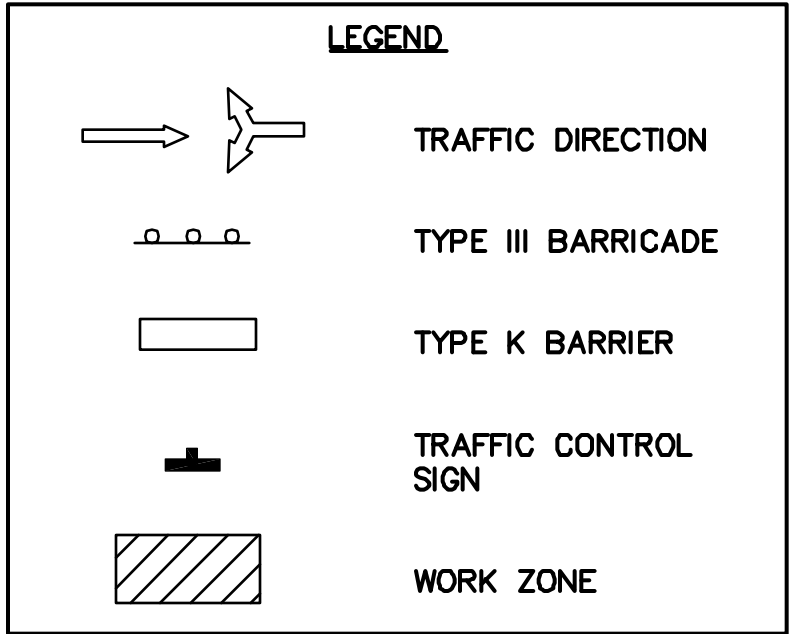
1. PERFORM ALL WORK PER FDOT INDICES 600 AND 660.
2. ADVANCE WARNING SIGNAGE SHOULD BE PLACED PER FDOT INDEX 602.
3. ANY DROP-OFF HAZARD MUST BE SHIELDED PER FDOT INDEX 600.
4. TRAFFIC CONTROL DEVICES, INCLUDING BARRIER, AT INTERSECTIONS MUST PROVIDE PROPER SIGHT DISTANCE. CONSTRUCTION EQUIPMENT OR MATERIALS SHALL NOT RESTRICT INTERSECTION SIGHT DISTANCE.
5. PROTECT PEDESTRIANS FROM ENTERING WORK ZONE. RE-ROUTE EXISTING PEDESTRIAN AND BICYCLE TRAFFIC AROUND WORK ZONE PER INDEX 660.
6. PROVIDE PROPER CRASH CUSHION DEVICES AS REQUIRED PER FDOT INDEX AND STANDARD SPECIFICATIONS.
7. PLACE BARRIER WITH PROPER DEFLECTION SPACING PER FDOT INDICES 412 AAND 600.



DESIGNED MUG	CITY OF VENICE UTILITY DEPARTMENT 200 NORTH WARFIELD AVENUE VENICE, FL 34285 PH: 941-489-2833 FAX: 941-489-2839
DRAWN CS/CPS	2930 UNIVERSITY PARKWAY SARASOTA, FLORIDA 34243 PHONE 941-538-6000 FAX 941-538-6540 WWW.KINGENGINEERING.COM ENGINEERING LICENSE #2410
CHECKED SLP	King ENGINEERING ASSOCIATES, INC.
TITLE WATER MAIN REPLACEMENT PROGRAM PHASE-1	
JOB NO. 4799-002-000	
DATE JUNE 2012	
SCALE AS SHOWN	
SHEET NO. TC1.02	
THE SIGNATURE OF THE QUALITY CONTROL OFFICER IN THIS SPACE INDICATES THAT ALL REQUIRED PERMITS HAVE BEEN OBTAINED AND THAT CONSTRUCTION IS AUTHORIZED TO COMMENCE.	
BID DOCUMENT SEPT. 13, 2013	

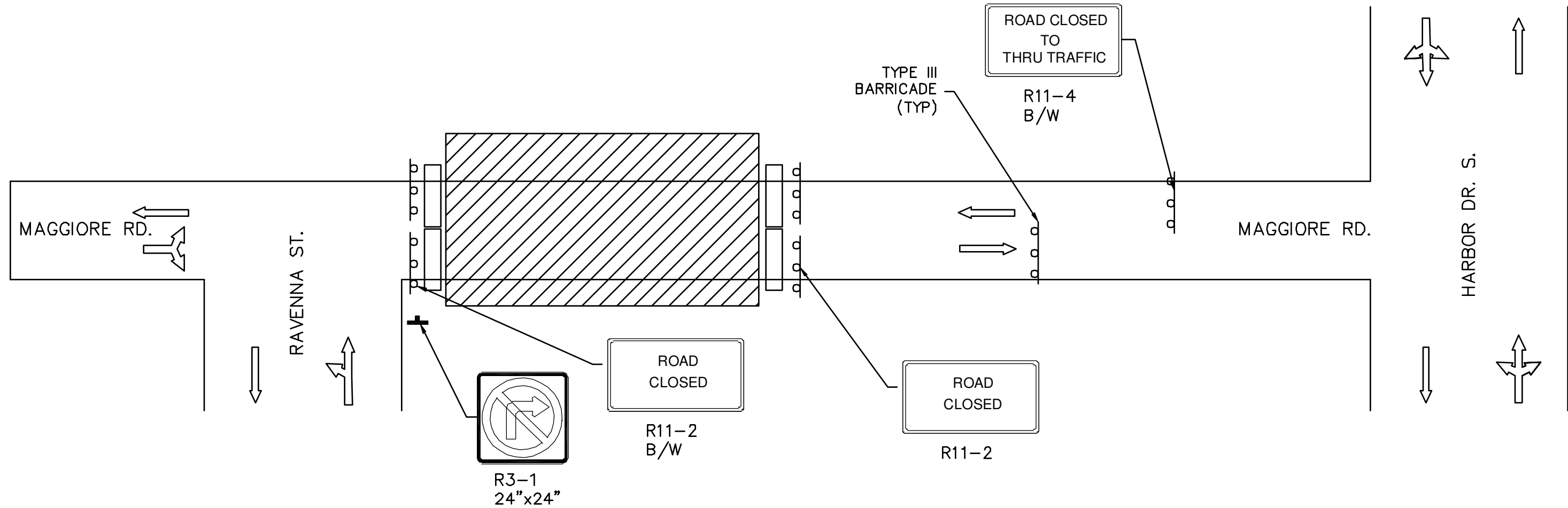


DETAIL B
(N.T.S.)



TYPE K BARRIER MAY BE ELIMINATED IF DROP-OFF CONDITIONS WITHIN THE WORK ZONE IS RESTORED BY THE END OF THE WORK PERIOD.

		DESIGNED MUG	CS/CPS CHECKED	SLP V.C.												
City Of Venice Utility Department 200 North Warfield Avenue Venice FL 34285 PH: 941-489-2833		2930 University Parkway Sarasota, Florida 34243 Phone 941-538-6500 Fax 941-538-6540 www.king-engineering.com Engineering License #2410														
WATER MAIN REPLACEMENT PROGRAM PHASE-1																
<table><thead><tr><th>NO.</th><th>DATE</th><th>RE-BID DOCUMENT</th><th>DESCRIPTION</th><th>CHK</th><th>APPV</th></tr></thead><tbody><tr><td>1</td><td>09/13/2013</td><td></td><td></td><td></td><td></td></tr></tbody></table>					NO.	DATE	RE-BID DOCUMENT	DESCRIPTION	CHK	APPV	1	09/13/2013				
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JOB NO. 4799-002-000		SHEET NO. TC1.03														
DATE: JUNE 2012																
SCALE: AS SHOWN																
BID DOCUMENT SEPT. 13, 2013																



DETAIL C
(N.T.S.)

LEGEND

TRAFFIC DIRECTION

TYPE III BARRICADE

TYPE K BARRIER

TRAFFIC CONTROL SIGN

WORK ZONE

TYPE K BARRIER MAY BE ELIMINATED IF DROP-OFF CONDITIONS WITHIN THE WORK ZONE IS RESTORED BY THE END OF THE WORK PERIOD.

DESIGNED
MUG

DRAWN
CS/OPS

CHECKED
SLP

DATE
7/11

City Of Venice
Utility Department
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Venice FL 34285
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Ph: 941-489-2629

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Engineering License #2610

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PHASE-1

NO.

DATE

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DESCRIPTION

CHK

APPROV

TITLE

TYPICAL
DETAILS (3)

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JOB NO.
4799-002-000

DATE
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SCALE
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SHEET NO.
TC1.04

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SEPT. 13, 2013



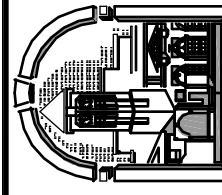
**WATER MAIN
REPLACEMENT PROGRAM
PHASE-1**

**TRAFFIC
CONTROL
PLAN (1)**

JOB NO.
4799-002-000
DATE:
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AS SHOWN

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TC2.01

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SEPT. 13, 2013



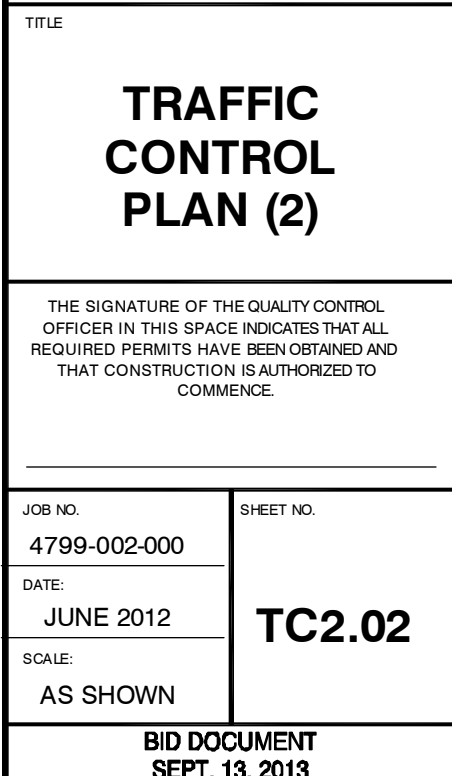
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Utility Department
200 North Warfield Avenue
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Ph: 941-489-2833
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King
ENGINEERING ASSOCIATES, INC.

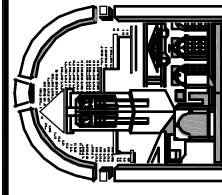
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Engineering License #2410

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1	09/13/2013				

TITLE

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WATER MAIN REPLACEMENT PROGRAM PHASE-1



City Of Venice
Utility Department
00 North Warfield Avenue

DRA 1111

DRA 1111

DRA 1111



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