

Plot Date: 11/15/2019 11:44:04 AM

FILE NAME: 7568C1000G02.dwg

PROJECT NO. 7568C10

LAST SAVED BY: Dabbott

GENERAL NOTES

GENERAL NOTES

DETAIL REFERENCES

HATCH PATTERNS

- FOLLOWING NOTES ARE GENERAL AND APPLY TO ALL SHEETS OF THESE CONTRACT DOCUMENTS AS IF THEY WERE WRITTEN IN THEIR ENTIRETY ON EACH SHEET.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE STARTING WORK AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING CONDITIONS INCLUDING LOCATION AND DIMENSIONS OF ALL EXISTING FACILITIES AND UTILITIES. CONTRACTOR SHALL POTHOLE ALL EXISTING UTILITY CROSSINGS PRIOR TO COMMENCING FACILITIES AND FABRICATING PIPELINE TO VISUALLY CONFIRM DEPTH OF COVER. CONTRACTOR SHALL NOTIFY ENGINEER IF THERE IS A CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND EXISTING CONSTRUCTION BEFORE PROCEEDING WITH WORK.
- UNLESS DETAILED, SPECIFIED, OR OTHERWISE INDICATED ON THE DRAWINGS, CONSTRUCTION SHALL BE AS INDICATED IN THE APPLICABLE TYPICAL DETAILS AND GENERAL NOTES. TYPICAL DETAILS SHALL APPLY EVEN THOUGH NOT REFERENCED AT SPECIFIC LOCATIONS ON DRAWINGS.
- WHERE NO CONSTRUCTION DETAILS ARE SHOWN OR NOTED FOR ANY PART OF WORK. DETAILS SHALL BE THE SAME AS FOR OTHER SIMILAR WORK.
- CONTRACTOR SHALL COMPLY WITH LOCAL CONSTRUCTION STORM WATER DISCHARGE REGULATIONS AND REQUIREMENTS.
- PRIOR TO EXCAVATION FOR NEW STRUCTURES, ELECTRICAL CONDUIT, FABRICATION OF NEW PIPING AND/OR OTHER PROPOSED UTILITIES, CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL EXISTING PIPING AND UTILITIES IN THE CONSTRUCTION AREA. THE CONTRACTOR SHALL TEMPORARILY RELOCATE CONFLICTING EXISTING UTILITIES AT TIE-IN/CONNECTION LOCATIONS AND REINSTALL THEM AS REQUIRED TO ELIMINATE THE CONFLICT.
- ALL PIPELINES 12" AND LARGER SHALL HAVE A MINIMUM COVER OF 48" UNLESS THE COVER DEPTH IS SPECIFICALLY INDICATED ON THE DRAWINGS. PIPE SMALLER THAN 12" SHALL HAVE A MINIMUM COVER OF 30" UNLESS NOTED OTHERWISE. PIPES SHALL BE ROUTED AS SHOWN UNLESS MINOR REVISIONS ARE NECESSARY TO MISS EXISTING PIPES, STRUCTURES, ETC. CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL FITTINGS AND ADAPTERS REQUIRED TO MAKE THE ROUTING CHANGES AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR SHALL INCLUDE COST FOR THIS IN THE BID.
- EXISTING FACILITY AND UTILITY INFORMATION SHOWN ON THE DRAWINGS WAS OBTAINED FROM AVAILABLE RECORDS OR ELECTRONIC FILES. NEITHER THE OWNER NOR ENGINEER ASSUMES ANY RESPONSIBILITY FOR FACILITIES AND UTILITIES NOT SHOWN OR NOT IN THE LOCATION SHOWN. THE CONTRACTOR SHALL FIELD VERIFY AND VISUALLY CONFIRM ALL LOCATIONS, SIZES, MATERIAL TYPES, AND ELEVATIONS SHOWN AROUND OR NEAR AREAS OF NEW CONSTRUCTION PRIOR TO START OF CONSTRUCTION.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT FROM DAMAGE EXISTING FACILITIES AND UTILITIES SHOWN OR NOT SHOWN THAT ARE TO REMAIN IN PLACE. ALL FACILITIES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE EXPEDITIOUSLY REPAIRED OR RECONSTRUCTED TO THE ORIGINAL OR BETTER CONDITION AT THE CONTRACTOR'S EXPENSE WITHOUT ADDITIONAL COMPENSATION.
- CONTRACTOR SHALL MAKE CONNECTIONS TO EXISTING PIPE, EQUIPMENT, ETC. AS REQUIRED AND SHALL PROVIDE ALL FITTINGS, ADAPTERS, AND APPURTENANCES REQUIRED TO MAKE THE CONNECTIONS. PROVIDE ALL SUPPORTS REQUIRED FOR A RIGIDLY SUPPORTED COMPLETE AND WORKING SYSTEM.
- ADJUST ALL VALVE BOXES, VAULTS, PULL BOXES, AND MANHOLES TO FINISHED GRADE UNLESS OTHERWISE SHOWN OR DIRECTED. MANHOLES IN OPEN FIELDS SHALL BE SET TWELVE INCHES ABOVE FINISHED GRADE AND VAULTS SHALL BE SIX INCHES ABOVE FINISHED GRADE UNLESS OTHERWISE SHOWN OR DIRECTED.
- CONTRACTOR SHALL VERIFY THAT PIPING SHOWN TO BE ABANDONED OR AS ABANDONED PREVIOUSLY IS NO LONGER IN SERVICE. LINES IN SERVICE SHALL BE MAINTAINED UNTIL NO LONGER REQUIRED.
- CONTRACTOR SHALL REROUTE THE EXISTING PIPING IF REQUIRED TO MISS THE PROPOSED STRUCTURES. THE EXISTING PIPE SHALL REMAIN IN SERVICE UNTIL NEW PIPING IS READY TO BE PLACED INTO SERVICE. DOWNTIME SHALL BE A MAXIMUM OF 2 HOURS, UNLESS SPECIFIED OR SHOWN OTHERWISE.
- THE CONTRACTOR SHALL TAKE SPECIAL PRECAUTIONS IN THE VICINITY OF ANY OVERHEAD ELECTRIC LINES. CONTRACTOR SHALL ABIDE BY THE NATIONAL ELECTRIC CODE AND CAL-OSHA AND ANY REQUIREMENT BY THE OWNER OF THE ELECTRIC LINES.
- PROVIDE ALL SHEETING/SHORING REQUIRED TO PROTECT EXISTING STRUCTURES, PIPES AND FACILITIES.
- CONTRACTOR SHALL VERIFY LOCATION OF ALL ARCHITECTURAL, MECHANICAL, AND ELECTRICAL ITEMS BEFORE PLACING ANY STRUCTURAL STEEL OR CONCRETE. ALSO, STRUCTURAL DIMENSIONS AND OPENINGS CONTROLLED BY ARCHITECTURAL, MECHANICAL, OR ELECTRICAL EQUIPMENT SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
- MECHANICAL AND ELECTRICAL EQUIPMENT SUPPORTS, ANCHORAGES, OPENINGS, RECESSES, AND REVEALS NOT SHOWN ON THE STRUCTURAL DRAWINGS, THAT ARE REQUIRED BY OTHER CONTRACT DRAWINGS, SHALL BE PROVIDED PRIOR TO CASTING CONCRETE.
- ALL NEW AT GRADE UTILITY BOXES, VAULTS, HATCHES, AND MANHOLES SHALL BE HS-20 RATED.
- ENCROACHMENT PERMITS FROM THE APPLICABLE JURISDICTIONAL AGENCIES ARE REQUIRED PRIOR TO ANY WORK WITHIN PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL ADHERE TO ALL REQUIREMENTS OF ALL ENCROACHMENT PERMITS ISSUED. DRAFT ENCROACHMENT PERMITS HAVE BEEN PROVIDED IN APPENDICES A - D.
- ALL WORK WITHIN PRIVATE EASEMENTS SHALL BE PERFORMED IN ACCORDANCE WITH ALL CONDITIONS PROVIDED IN THE EASEMENT, RIGHT-OF-ENTRY, OR TEMPORARY PERMIT DOCUMENTS AS DESCRIBED IN SECTION 01140.
- TRENCH PAVING AC AND ABC THICKNESSES CAN BE FOUND IN SECTION 01140.
- WHERE TRENCH PAVING AND/OR OVERLAY PAVING IS REQUIRED, RAISE ALL EXISTING AND NEW VALVE CANS, MANHOLES, AND MONUMENTS TO GRADE.
- WATER, SEWER, GAS AND OTHER UTILITY SERVICE LATERALS ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL SERVICE LATERALS. CONTRACTOR SHALL BE AWARE THAT USA LOCATE MAY NOT BE ABLE TO LOCATE ALL UTILITY LATERALS AND CONTRACTOR SHALL BE PREPARED TO LOCATE THEM WHERE NEEDED.
- ALL SERVICE LATERALS DAMAGED OR BROKEN DURING CONSTRUCTION SHALL BE REPLACED IN KIND. SEWER AND WATER LATERAL REPAIRS SHALL CONFORM TO MCWD STD. DETAILS S-6, W-1 and W-2 RESPECTIVELY UNLESS DIRECTED OTHERWISE BY THE ENGINEER.

- UNDER THE DIRECTION OF A SURVEYOR LICENSED IN THE STATE OF CALIFORNIA, THE CONTRACTOR SHALL RESET ALL MONUMENTS DISTURBED OR REMOVED DURING CONSTRUCTION ACTIVITIES PER C040/TYP.
- WHERE THE RECYCLED WATERLINES CROSS EXISTING UTILITIES, THE RECYCLED WATERLINES SHALL BE INSTALLED A MINIMUM OF 12" CLEAR VERTICALLY FROM THE EXISTING UTILITY.
- CARVS ARE REQUIRED AT ALL HIGH POINTS IN PIPELINES. BLOW-OFFS ARE REQUIRED AT ALL LOW POINTS IN PIPELINES.
- THE CONTRACTOR SHALL TAKE SPECIAL PRECAUTIONS IN THE VICINITY OF ANY OVERHEAD ELECTRIC LINES. CONTRACTOR SHALL ABIDE BY THE NATIONAL ELECTRIC CODE AND ANY REQUIREMENT BY THE OWNER OF THE ELECTRIC LINES. WHERE EXCAVATING NEAR POWER POLES, CONTRACTOR SHALL COORDINATE WITH UTILITY AND PAY ALL COSTS TO TEMPORARILY SUPPORT POWER POLES.
- TRIM TREE BRANCHES AS REQUIRED FOR CONSTRUCTION BY QUALIFIED ARBORIST. PROTECT TREE PER SECTION 01562.

PLAN/TITLE
VIEW
A PLAN TITLE
FILE: FILE
PLAN NOT REFERENCED

SECTION CUT
VIEW
C
-- SHOWN ON SAME DRAWING
= SEE INDICATED DRAWING

SECTION OR DETAIL TITLE W/ REFERENCE
VIEW
C/1 SECTION/DETAIL TITLE
SCALE: SCALE
FILE: FILE
DRAWING CUT ORIGINATION

DETAIL CALL-OUT (ENLARGED)
VIEW
1
= SEE INDICATED DRAWING

DRAWING REFERENCE
AREA DESIGNATOR (WHEN APPLICABLE)
DISCIPLINE DESIGNATOR

CONSECUTIVE SHEET NUMBER

TYPICAL DETAIL REFERENCE
TYPICAL DETAIL #
? TYP

EXTERIOR ELEVATION VIEWS
A
###

PHOTO LOCATION

ARROW INDICATES POINT OF VIEW

GRID BUBBLE
A 1

TYPICAL DETAIL NUMBER
? TYP
LINE 3
LINE 1
LINE 2
MOD
TYPICAL DETAIL TITLE

MODIFICATION NOTE
S = STANDARD
J = JOB SPECIFIC
R = REVISED
N = NOTE TO TYPICAL DETAIL USER

SHT # OF #
SHEETS IN DETAIL

VER DATE
DATE CREATED (REVISED)

ABC		GRATING	
ALUMINUM		LANDSCAPING	
BRICK OR BLOCK		RUBBER	
BRONZE, BRASS, OR COPPER		SLURRY SEAL	
CAST IRON OR FIBERGLASS		SOIL	
CLASS "A", "B" AND "D" CONCRETE		STEEL	
CLASS "C" CONCRETE		TREAD PLATE	
DECOMPOSED GRANITE		WETLANDS NO SURFACE IMPACT	

DESIGNED	JPM
DRAWN	TLR
CHECKED	
DATE	OCTOBER 2019

REGISTERED PROFESSIONAL ENGINEER
CALIFORNIA
No. 73265
CIVIL
STATE OF CALIFORNIA

Digitally signed by Jonathan P. Marshall
Contact Info: Carollo Engineering, Inc.
Date: 2019.11.15 13:02:09-0800



Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT

RECYCLED WATER DISTRIBUTION MAINS

GENERAL

GENERAL NOTES, LEGENDS AND SYMBOLS

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 7568C.10
DRAWING NO. G02
SHEET NO. 2 OF 66

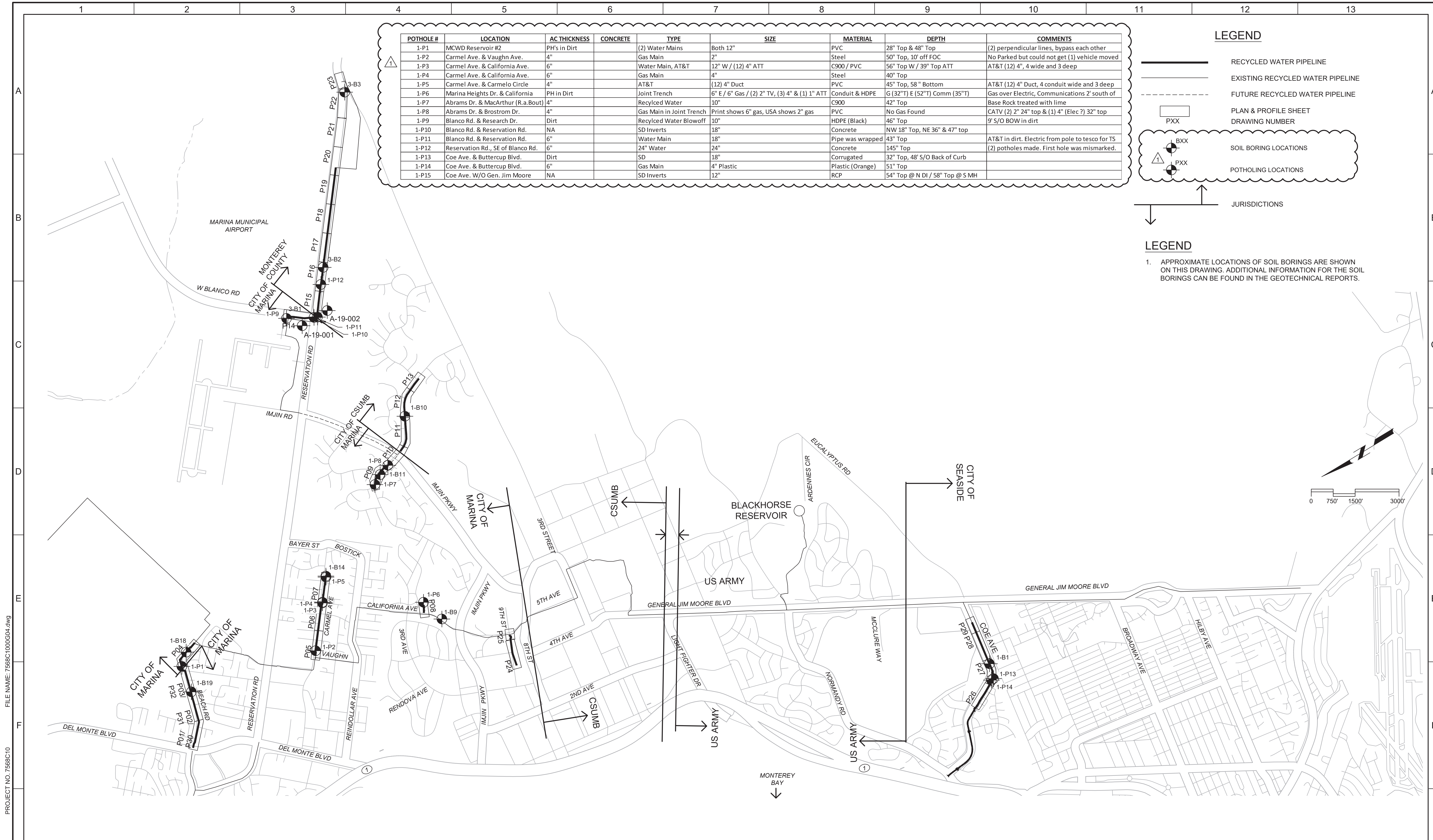
POTHOLE #	LOCATION	AC THICKNESS	CONCRETE	TYPE	SIZE	MATERIAL	DEPTH	COMMENTS
1-P1	MCWD Reservoir #2	PH's in Dirt		(2) Water Mains	Both 12"	PVC	28" Top & 48" Top	(2) perpendicular lines, bypass each other
1-P2	Carmel Ave. & Vaughn Ave.	4"		Gas Main	2"	Steel	50" Top, 10' off FOC	No Parked but could not get (1) vehicle moved
1-P3	Carmel Ave. & California Ave.	6"		Water Main, AT&T	12" W / (12) 4" ATT	C900 / PVC	56" Top W / 39" Top ATT	AT&T (12) 4", 4 wide and 3 deep
1-P4	Carmel Ave. & California Ave.	6"		Gas Main	4"	Steel	40" Top	
1-P5	Carmel Ave. & Carmelo Circle	4"		AT&T	(12) 4" Duct	PVC	45" Top, 58" Bottom	AT&T (12) 4" Duct, 4 conduit wide and 3 deep
1-P6	Marina Heights Dr. & California	PH in Dirt		Joint Trench	6" E / 6" Gas / (2) 2" TV, (3) 4" & (1) 1" ATT	Conduit & HDPE	G (32" T) E (52" T) Comm (35" T)	Gas over Electric, Communications 2' south of
1-P7	Abrams Dr. & MacArthur (R.a.Bout)	4"		Recycled Water	10"	C900	42" Top	Base Rock treated with lime
1-P8	Abrams Dr. & Brostrom Dr.	4"		Gas Main in Joint Trench	Print shows 6" gas, USA shows 2" gas	PVC	No Gas Found	CATV (2) 2" 24" top & (1) 4" (Elec ?) 32" top
1-P9	Blanco Rd. & Research Dr.	Dirt		Recycled Water Blowoff	10"	HDPE (Black)	46" Top	9' S/O BOW in dirt
1-P10	Blanco Rd. & Reservation Rd.	NA		SD Inverts	18"	Concrete	NW 18" Top, NE 36" & 47" top	
1-P11	Blanco Rd. & Reservation Rd.	6"		Water Main	18"	Pipe was wrapped	43" Top	AT&T in dirt. Electric from pole to tesco for TS
1-P12	Reservation Rd., SE of Blanco Rd.	6"		24" Water	24"	Concrete	145" Top	(2) potholes made. First hole was mismarked.
1-P13	Coe Ave. & Buttercup Blvd.	Dirt		SD	18"	Corrugated	32" Top, 48' S/O Back of Curb	
1-P14	Coe Ave. & Buttercup Blvd.	6"		Gas Main	4" Plastic	Plastic (Orange)	51" Top	
1-P15	Coe Ave. W/O Gen. Jim Moore	NA		SD Inverts	12"	RCP	54" Top @ N DI / 58" Top @ S MH	

LEGEND

RECYCLED WATER PIPELINE
 EXISTING RECYCLED WATER PIPELINE
 FUTURE RECYCLED WATER PIPELINE
 PLAN & PROFILE SHEET DRAWING NUMBER
 SOIL BORING LOCATIONS
 POTHOLING LOCATIONS
 JURISDICTIONS

LEGEND

1. APPROXIMATE LOCATIONS OF SOIL BORINGS ARE SHOWN ON THIS DRAWING. ADDITIONAL INFORMATION FOR THE SOIL BORINGS CAN BE FOUND IN THE GEOTECHNICAL REPORTS.



PROJECT NO. 7568C10
 FILE NAME: 7568C1000G04.dwg
 LAST SAVED BY: bbraves

REV	DATE	BY	DESCRIPTION
1	11-15-19	JPM	CHANGED PER ADDENDUM NO. 1

DESIGNED
JPM
 DRAWN
BH
 CHECKED

 DATE
OCTOBER 2019



Digitally signed by Jonathan P. Marshall
 DN: cn=Jonathan P. Marshall, o=Carollo Engineering, ou=Carollo Engineering, email=jmarshall@carollo.com, c=US



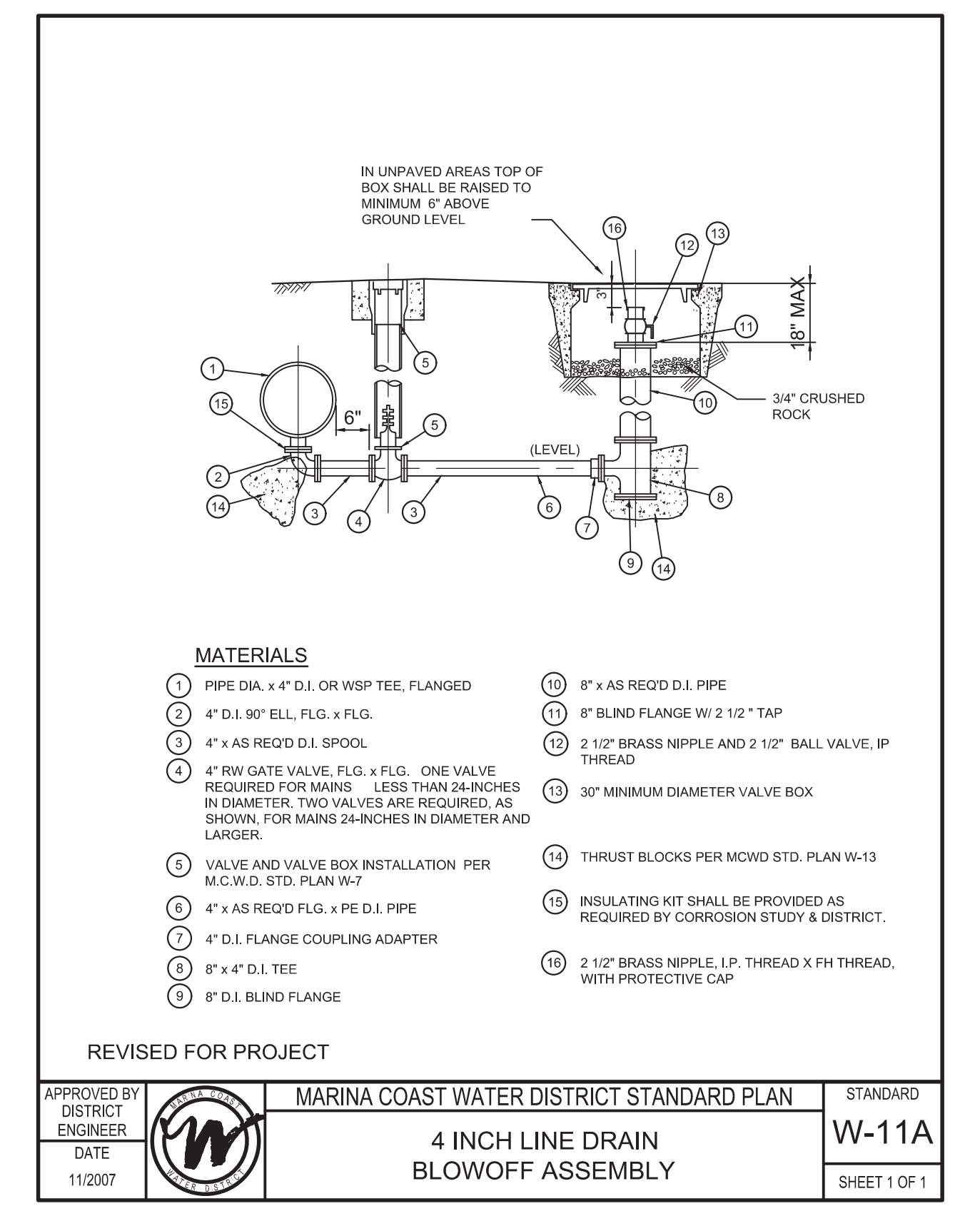
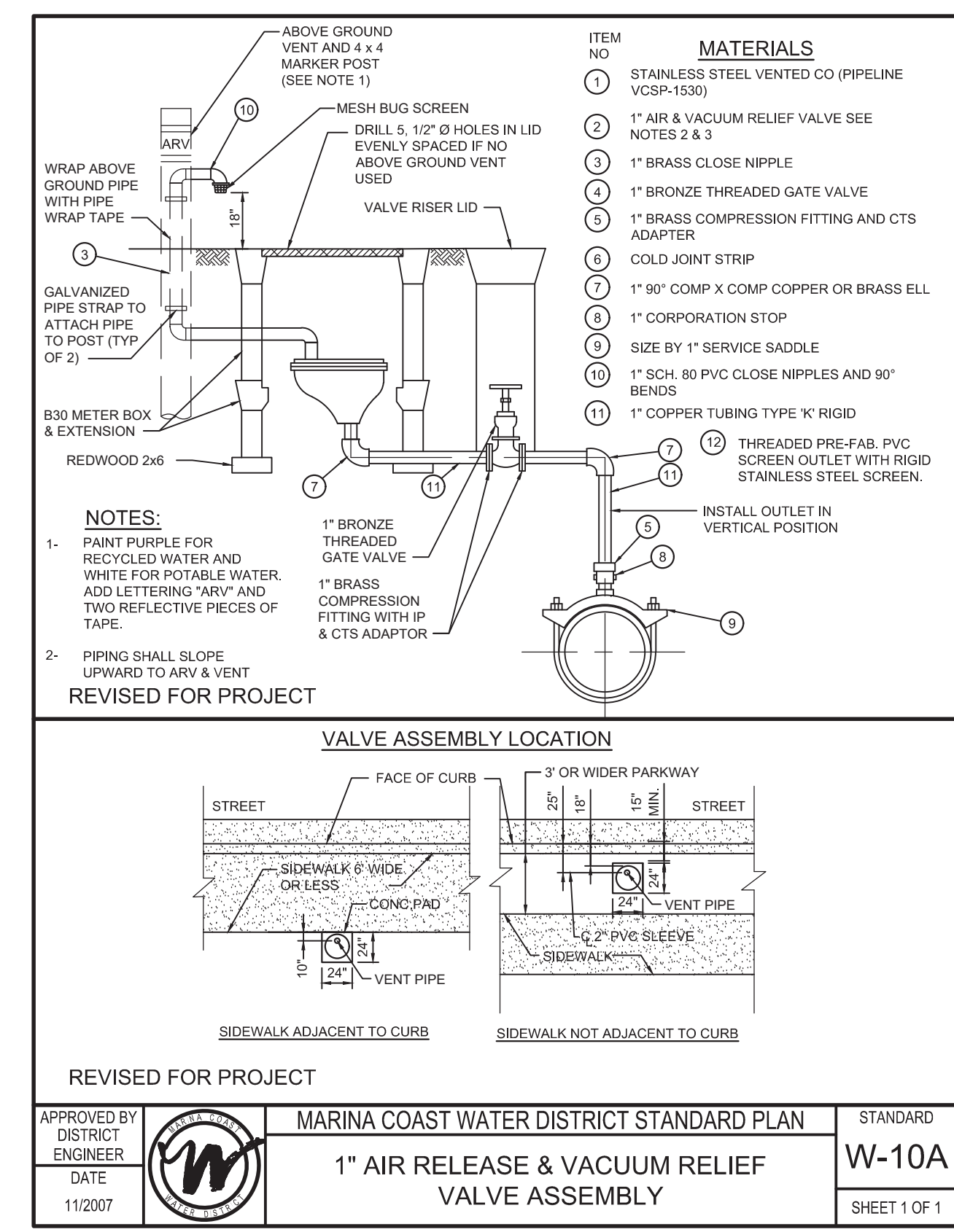
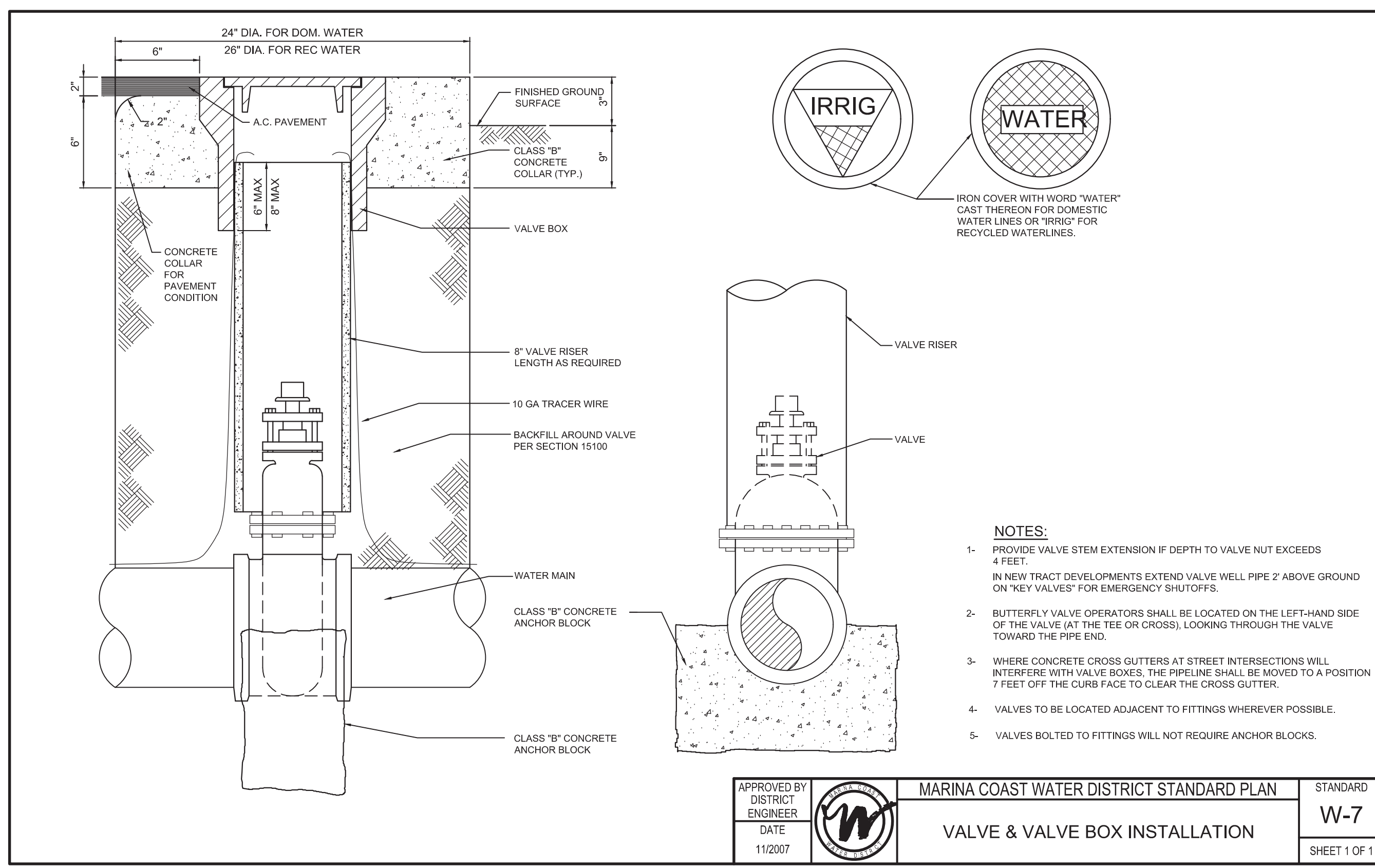
Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT
 RECYCLED WATER DISTRIBUTION MAINS
 CIVIL
INDEX MAP

VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWING
 0 1"

JOB NO. 7568C.10
 DRAWING NO. G04
 SHEET NO. 4 OF 66

Plot Date: 11/18/2019 7:21:47 AM



(A) NEW WATER MAINS AND NEW SUPPLY LINES SHALL NOT BE INSTALLED IN THE SAME TRENCH AS, AND SHALL BE AT LEAST 10 FEET HORIZONTALLY FROM AND ONE FOOT VERTICALLY ABOVE, ANY PARALLEL PIPELINE CONVEYING:

- (1) UNTREATED SEWAGE,
- (2) PRIMARY OR SECONDARY TREATED SEWAGE,
- (3) DISINFECTED SECONDARY-2.2 RECYCLED WATER (DEFINED IN SECTION 60301.220),
- (4) DISINFECTED SECONDARY-23 RECYCLED WATER (DEFINED IN SECTION 60301.225), AND
- (5) HAZARDOUS FLUIDS SUCH AS FUELS, INDUSTRIAL WASTES, AND WASTEWATER SLUDGE.

(B) NEW WATER MAINS AND NEW SUPPLY LINES SHALL BE INSTALLED AT LEAST 4 FEET HORIZONTALLY FROM, AND ONE FOOT VERTICALLY ABOVE, ANY PARALLEL PIPELINE CONVEYING:

- (1) DISINFECTED TERTIARY RECYCLED WATER (DEFINED IN SECTION 60301.230), AND
- (2) STORM DRAINAGE.

(C) NEW SUPPLY LINES CONVEYING RAW WATER TO BE TREATED FOR DRINKING PURPOSES SHALL BE INSTALLED AT LEAST 4 FEET HORIZONTALLY FROM, AND ONE FOOT VERTICALLY BELOW, ANY WATER MAIN.

(D) IF CROSSING A PIPELINE CONVEYING A FLUID LISTED IN SUBSECTION (A) OR (B), A NEW WATER MAIN SHALL BE CONSTRUCTED NO LESS THAN 45-DEGREES TO AND AT LEAST ONE FOOT ABOVE THAT PIPELINE. NO CONNECTION JOINTS SHALL BE MADE IN THE WATER MAIN WITHIN EIGHT HORIZONTAL FEET OF THE FLUID PIPELINE.

(E) THE VERTICAL SEPARATION SPECIFIED IN SUBSECTIONS (A), (B), AND (C) IS REQUIRED ONLY WHEN THE HORIZONTAL DISTANCE BETWEEN A WATER MAIN AND PIPELINE IS LESS THAN TEN FEET.

(F) NEW WATER MAINS SHALL NOT BE INSTALLED WITHIN 100 HORIZONTAL FEET OF THE NEAREST EDGE OF ANY SANITARY LANDFILL, WASTEWATER DISPOSAL POND, OR HAZARDOUS WASTE DISPOSAL SITE, OR WITHIN 25 HORIZONTAL FEET OF THE NEAREST EDGE OF ANY CESSPOOL, SEPTIC TANK, SEWAGE LEACH FIELD, SEEPAGE PIT, UNDERGROUND HAZARDOUS MATERIAL STORAGE TANK, OR GROUNDWATER RECHARGE PROJECT SITE.

(G) THE MINIMUM SEPARATION DISTANCES SET FORTH IN THIS SECTION SHALL BE MEASURED FROM THE NEAREST OUTSIDE EDGE OF EACH PIPE BARREL.

(H) WITH STATE BOARD APPROVAL, NEWLY INSTALLED WATER MAINS MAY BE EXEMPT FROM THE SEPARATION DISTANCES IN THIS SECTION, EXCEPT SUBSECTION (F), IF THE NEWLY INSTALLED MAIN IS:

- (1) LESS THAN 1320 LINEAR FEET,
- (2) REPLACING AN EXISTING MAIN, INSTALLED IN THE SAME LOCATION, AND HAS A DIAMETER NO GREATER THAN SIX INCHES MORE THAN THE DIAMETER OF THE MAIN IT IS REPLACING, AND
- (3) INSTALLED IN A MANNER THAT MINIMIZES THE POTENTIAL FOR CONTAMINATION, INCLUDING, BUT NOT LIMITED TO:

- (A) SLEEVING THE NEWLY INSTALLED MAIN, OR
- (B) UTILIZING UPGRADED PIPING MATERIAL.

WATER MAIN SEPARATION REQUIREMENTS

Water Boards
State Water Resources Control Board
Division of Drinking Water

December 14, 2017

Separation of Water Mains and Non-Potable Pipelines – Requests for Alternatives to the Waterworks Standards

Dear Public Water System Owners and Operators:

This letter supersedes prior guidance regarding the separation of water mains and non-potable pipelines, including Guidance Memo 2003-02, dated October 16, 2003. Guidance Memo 2003-02 and previous versions should be discarded.

The California Waterworks Standards (California Code of Regulations (CCR), Title 22, Division 4, Chapter 16, Section 64572) establish criteria for the separation of new water mains from non-potable pipelines. Public water systems should ensure that these distances are met, whenever feasible, for all new construction. The Division of Drinking Water (Division) recognizes that certain conditions may call for the installation of pipelines with less separation distance than what is required by the regulations. In these situations, the water system may propose an alternative pursuant to CCR, Title 22, Section 64551.100:

§64551.100. Waivers and Alternatives.

(a) A water system that proposes to use an alternative to a requirement in this chapter shall:

- (1) Demonstrate to the State Board that the proposed alternative would provide at least the same level of protection to public health; and
- (2) Obtain written approval from the State Board prior to implementation of the alternative.

In proposing an alternative to the Waterworks Standards, water systems should observe the following:

- The water system must accept responsibility for the adequacy of the proposed alternative. The Division may require a written statement, signed by the water system's management, certifying that the proposed alternative adequately protects public health.
- In most circumstances, the Division cannot offer technical assistance with pipeline or infrastructure design. The water system proposing an alternative must demonstrate adequate expertise on the part of its own personnel or its hired consultants.
- The water system should describe how the proposed alternative provides at least the same level of protection to public health as the minimum separation distances prescribed in the regulation.
- While exorbitant cost may present a hardship in meeting the regulatory separation requirements and can be considered, public health must be prioritized above construction costs in determining an acceptable alternative.

FELICIA MARICIS, CHAIR | THOMAS HOWARD, EXECUTIVE DIRECTOR
1001 I Street, Sacramento, CA 95814 | Mailing Address: P.O. Box 100, Sacramento, CA 95812-0100 | www.waterboards.ca.gov

WATER MAIN SEPARATION REQUIREMENTS

Public Water Systems - 2 - December 14, 2017

The Division has prepared an application checklist that may be used by water systems in proposing an alternative to the Waterworks Standards (Enclosure). The purpose of the checklist is to ensure that the Division has sufficient information to evaluate the proposal. **The water system may submit the information in a different format from the checklist, provided that the submittal provides adequate information.** The checklist may also be used to provide written certification that the proposed alternative adequately protects public health.

If you have any questions, please contact the Division office that oversees your water system.

Sincerely,

Darrin Polhemus, P.E.
Deputy Director
Division of Drinking Water

Enclosure: Waterworks Standards Main Separation Alternative Request Example Checklist

WATER MAIN SEPARATION REQUIREMENTS

DESIGNED	JPM
DRAWN	TLR
CHECKED	
DATE	OCTOBER 2019
REV	11-15-19
DATE	JPM
BY	CHANGED PER ADDENDUM NO. 1
DESCRIPTION	

Digitally signed by Jonathan P. Marshall
Contact Info: Carollo Engineers, Inc.
Date: 2019.11.18 13:10:29 -0800

No. 73265
REGISTERED PROFESSIONAL ENGINEER
EXPIRATION P. MARSHALL
CIVIL
STATE OF CALIFORNIA

Carollo

Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT
RECYCLED WATER DISTRIBUTION MAINS
TYPICALS
AGENCY TYPICAL DETAILS - 3

VERIFY SCALES
JOB NO. 7568C.10
DRAWING NO. T03
SHEET NO. 8 OF 66

FILE NAME: 7568C1000T03.dwg

PROJECT NO. 7568C10

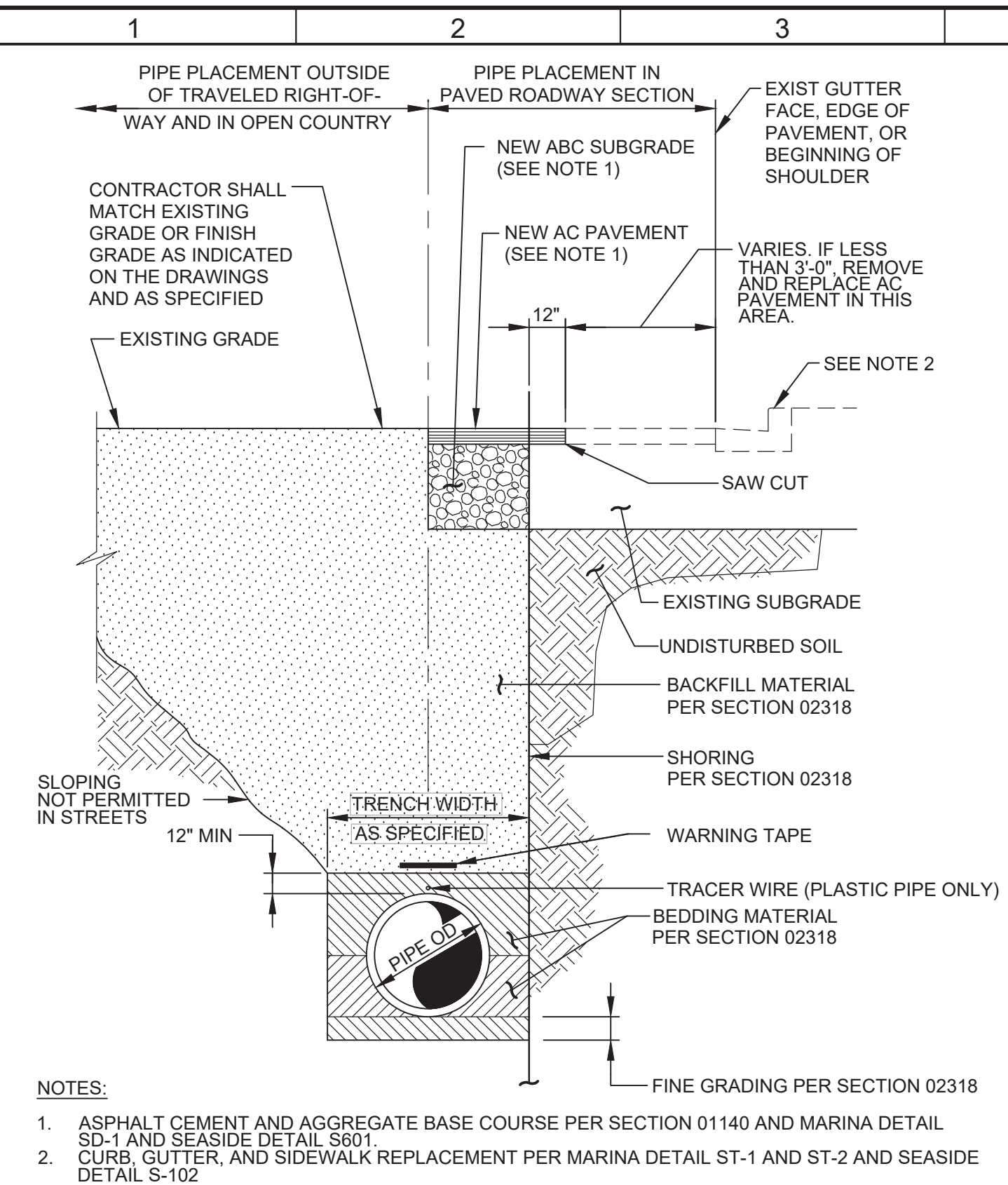
LAST SAVED BY: bhaves

Plot Date: 11/15/2019 12:08:15 PM

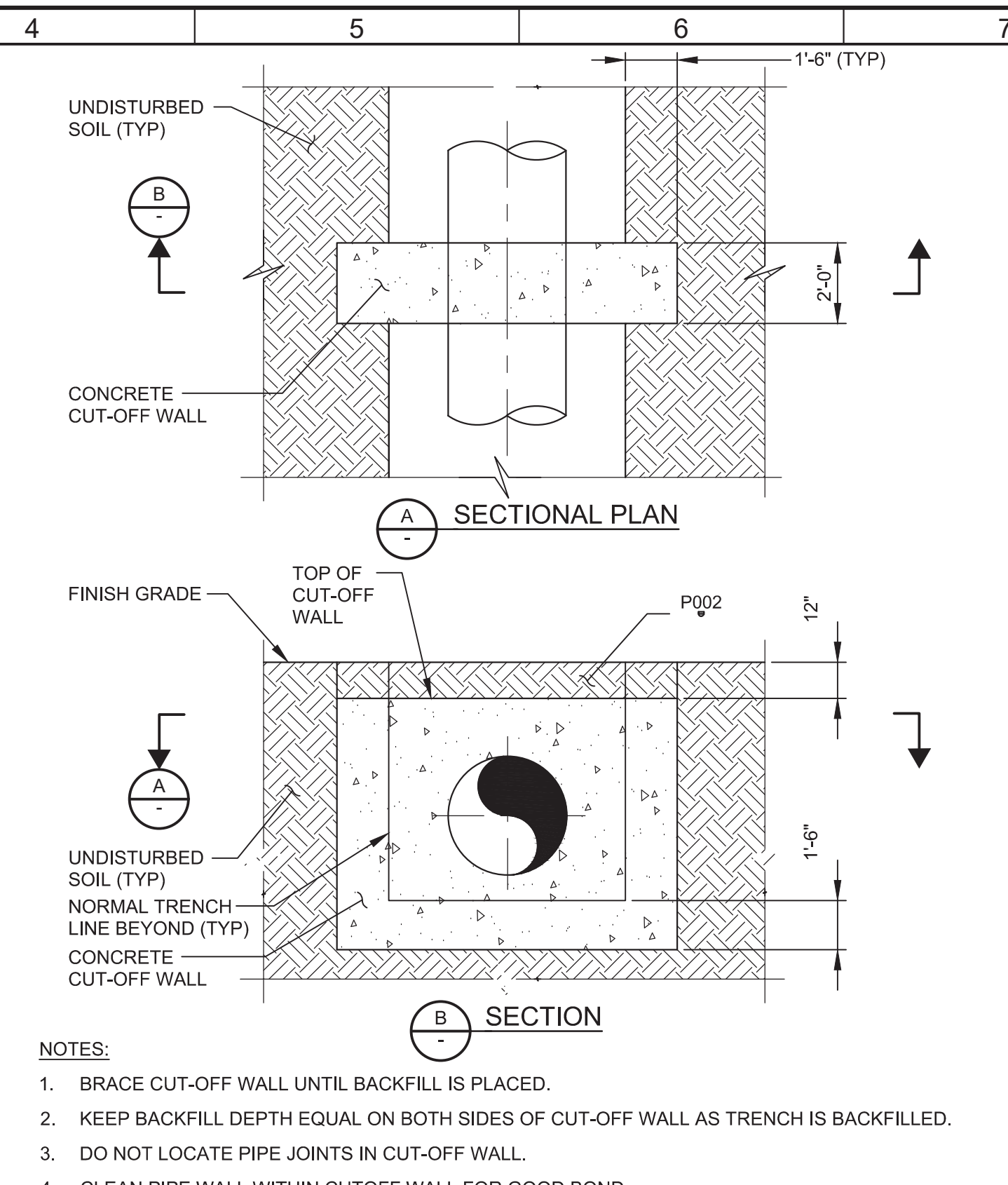
FILE NAME: 7568C1000TP01.dwg

PROJECT NO. 7568C10

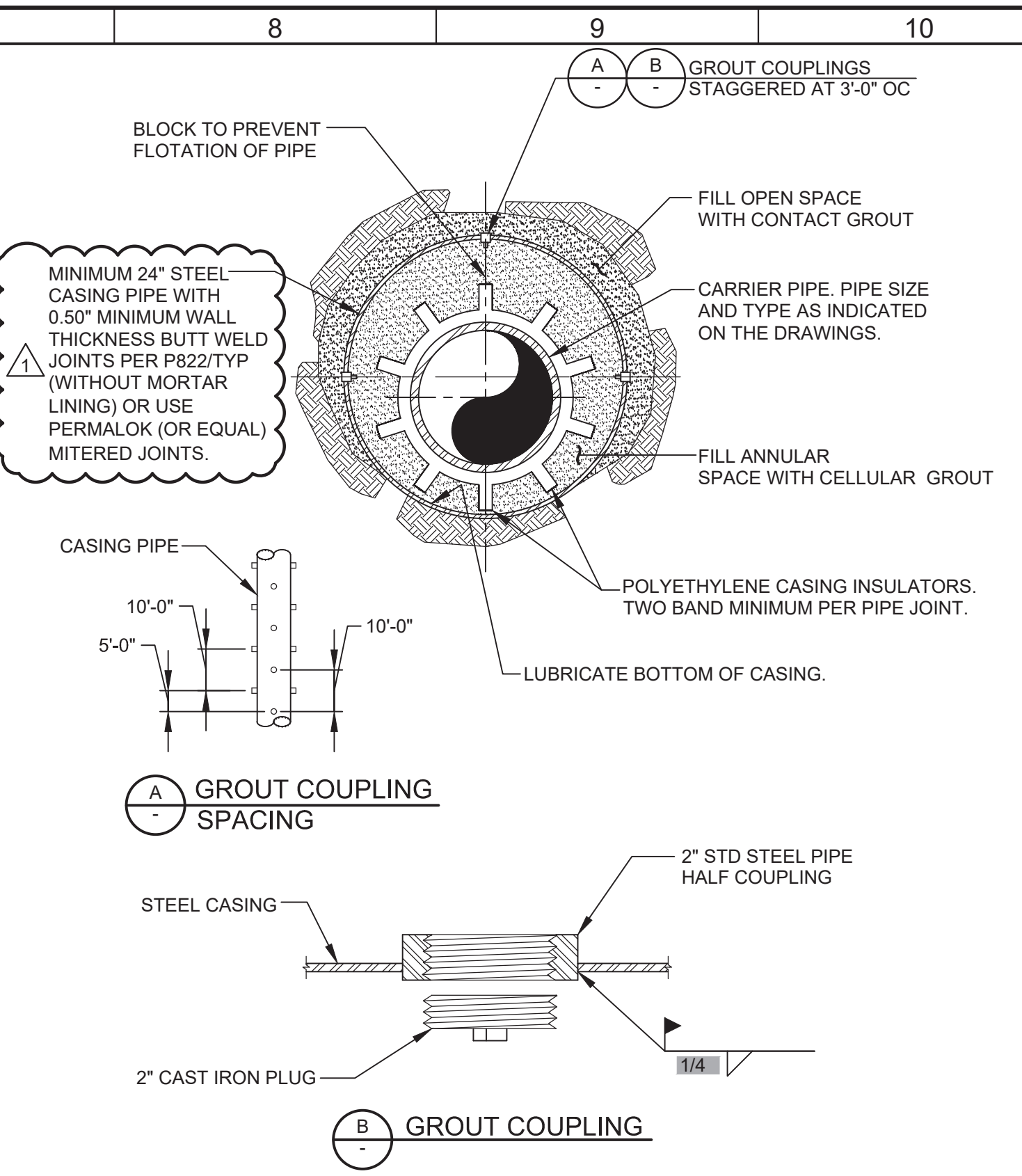
LAST SAVED BY: Dabbott



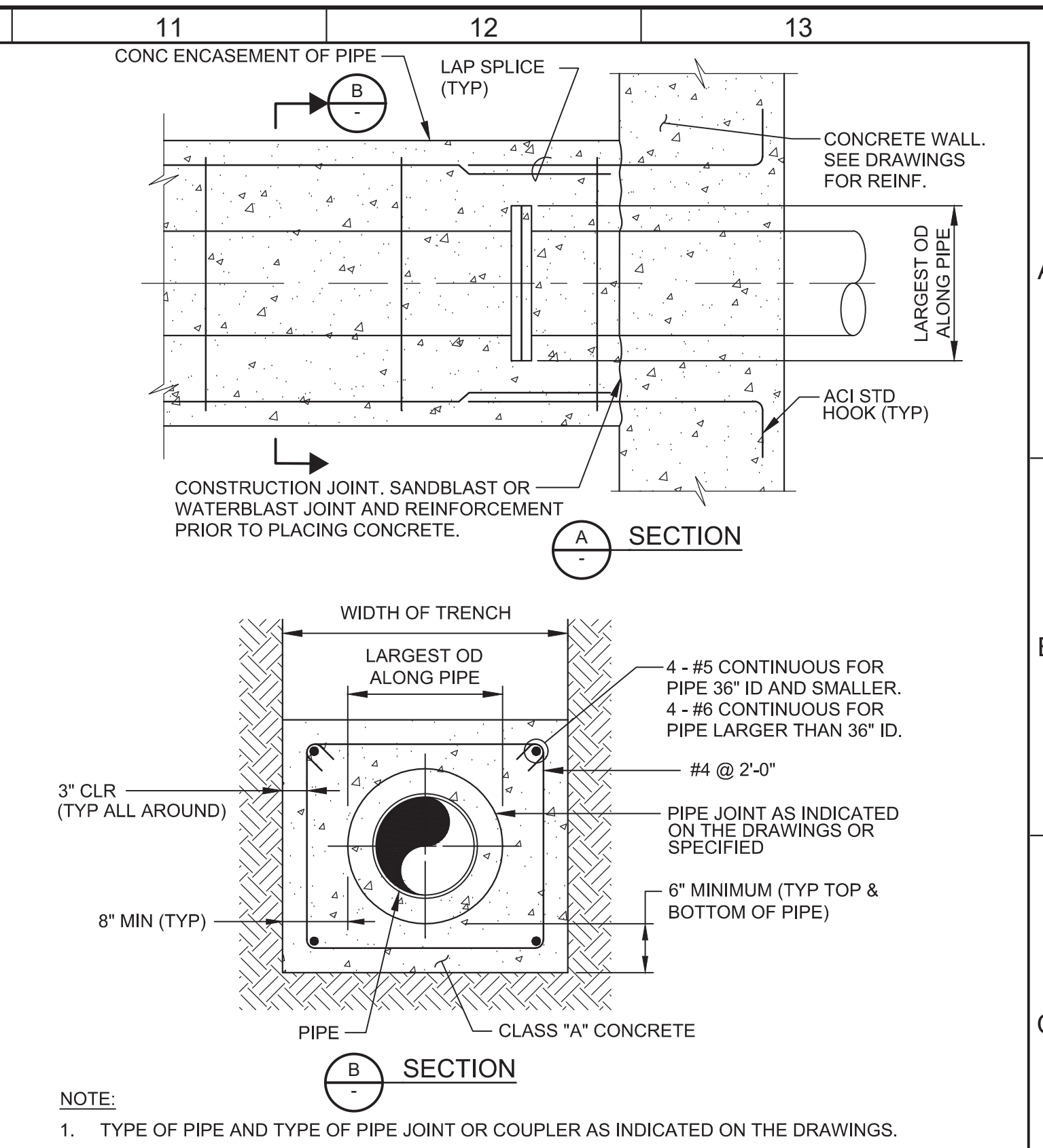
P002 PIPE INSTALLATION AND PAVEMENT REPLACEMENT
TYP



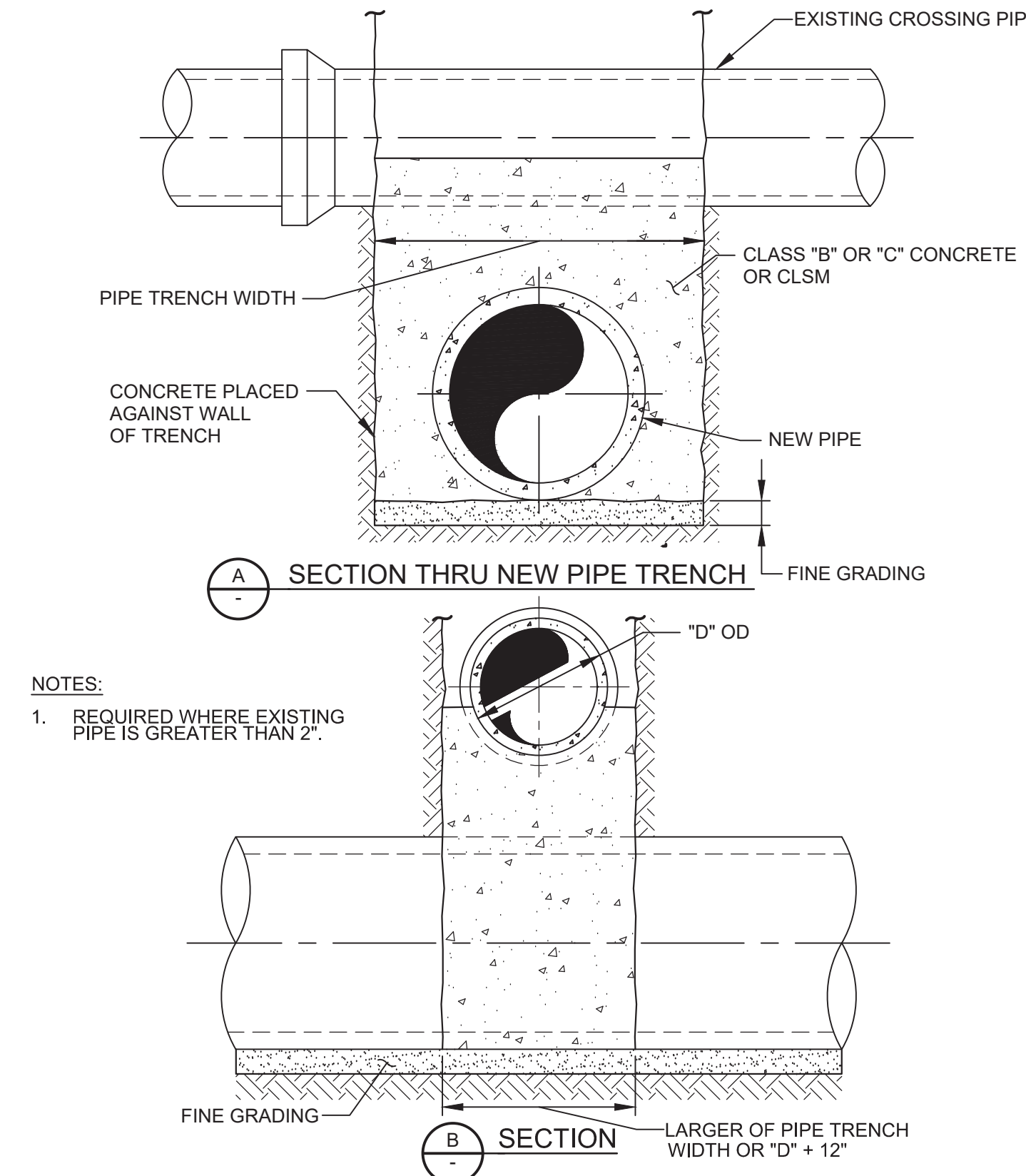
P014 PIPE TRENCH CONCRETE CUT-OFF WALL
TYP



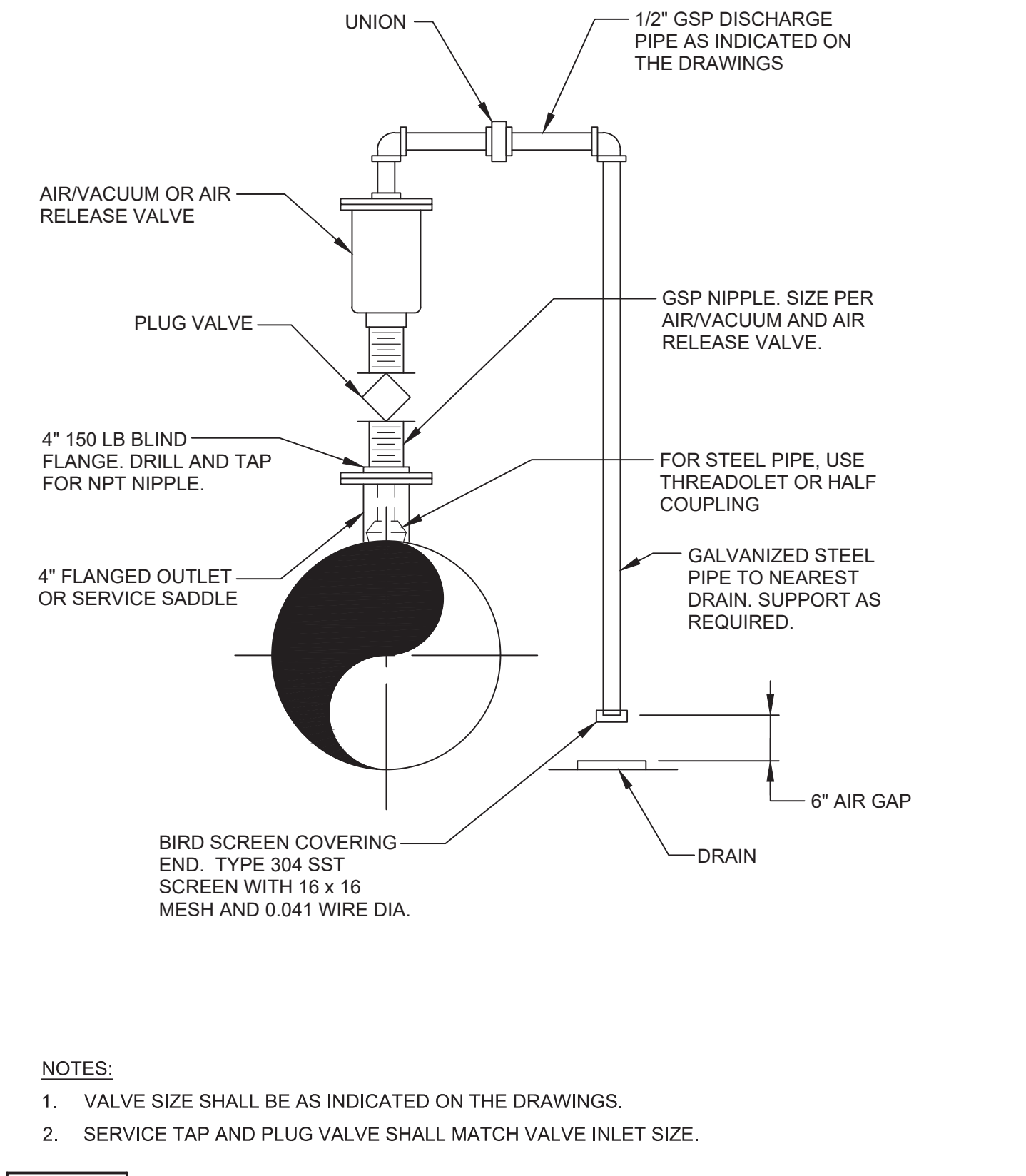
P030 PIPE IN STEEL CASING - GROUT FILL
TYP



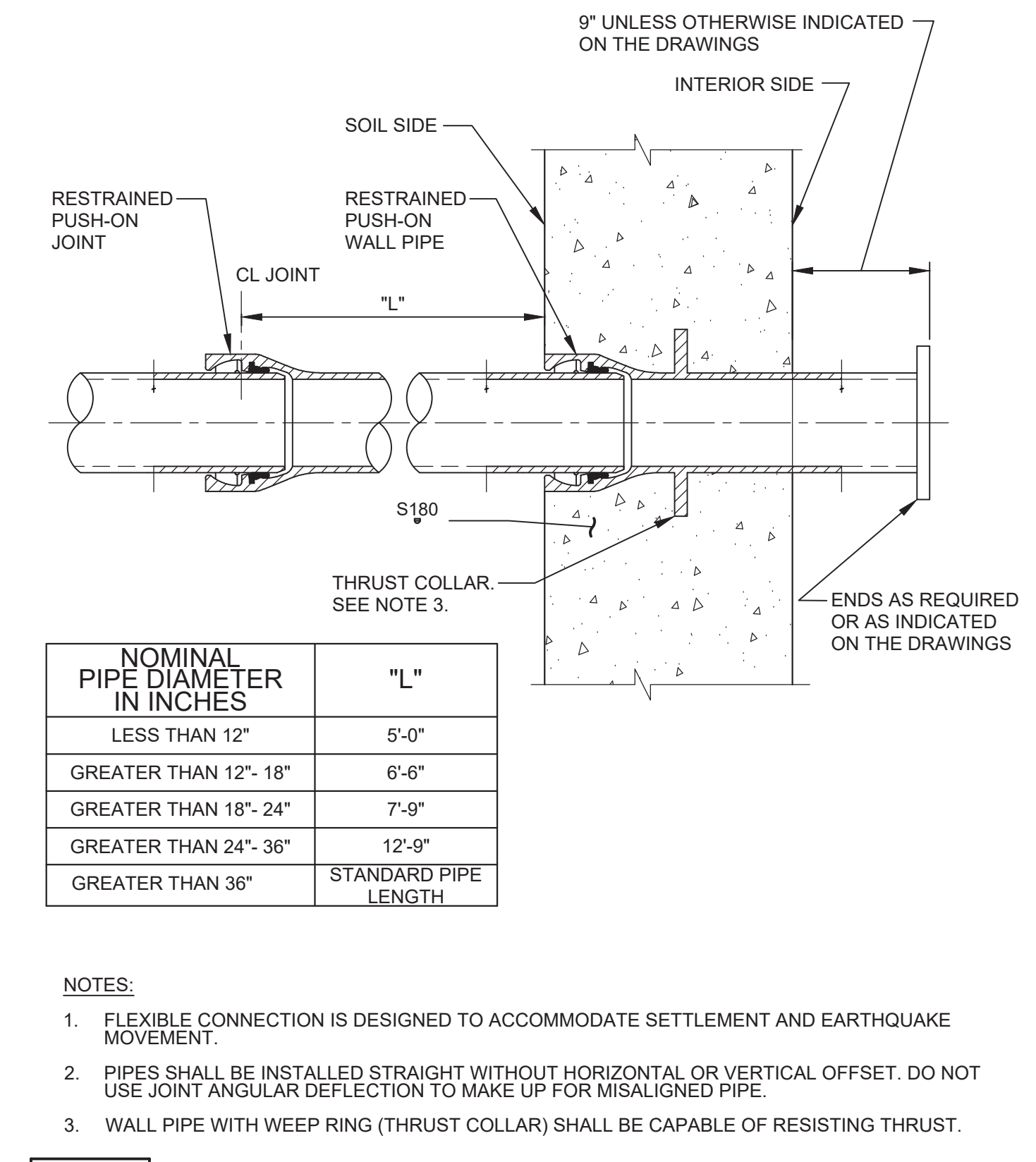
P040 CONCRETE ENCASEMENT OF PIPE
TYP



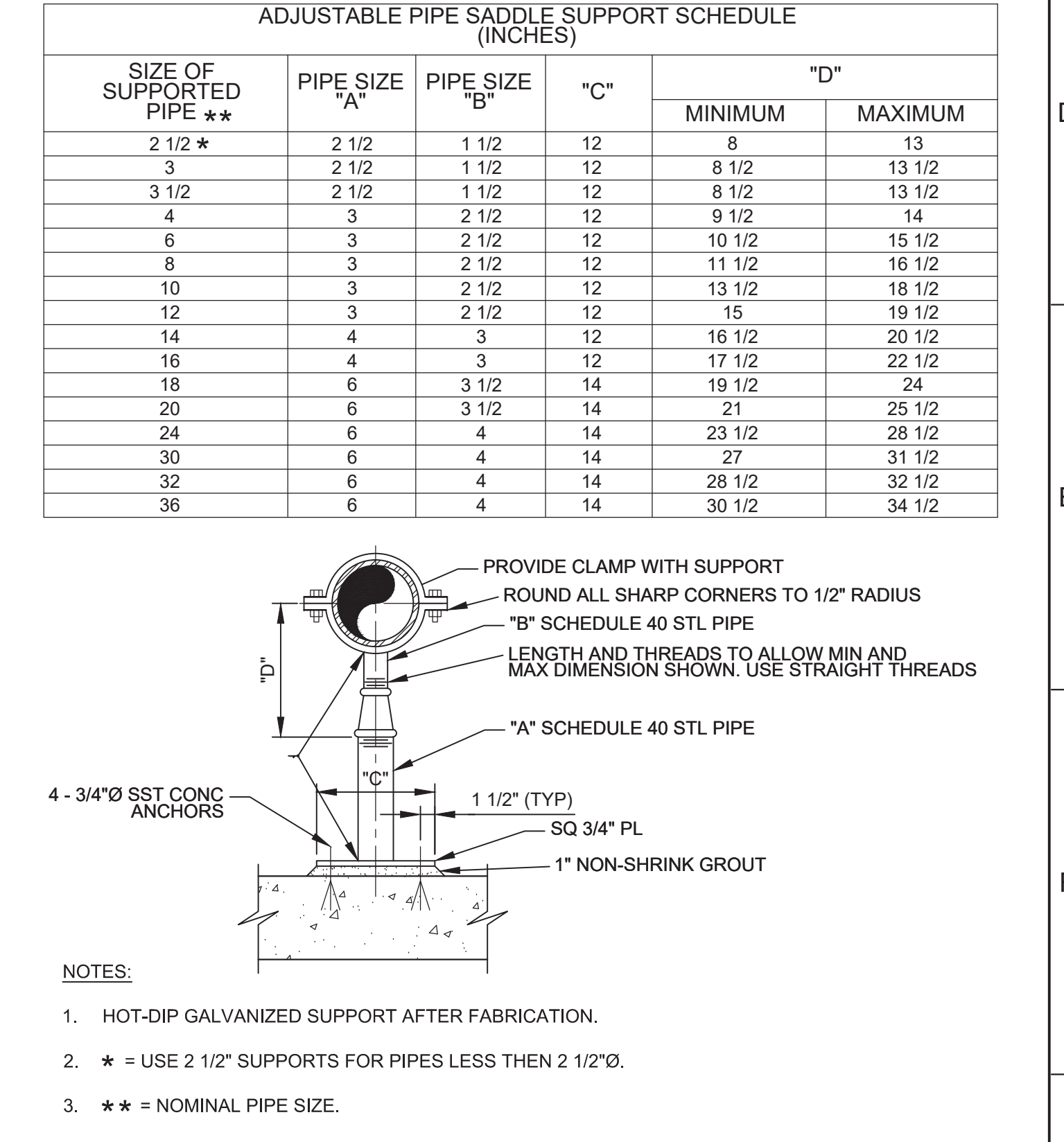
P048 PIPE SUPPORT ACROSS TRENCH
TYP



P240 AIR VACUUM AND AIR RELEASE FOR 3" AND SMALLER VALVE ASSEMBLY
TYP



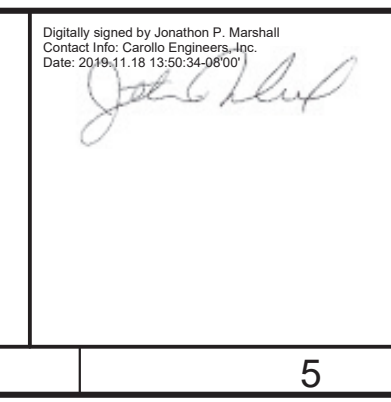
P342 RESTRAINED DIP FLEXIBLE CONNECTION AT WALL PENETRATION
TYP



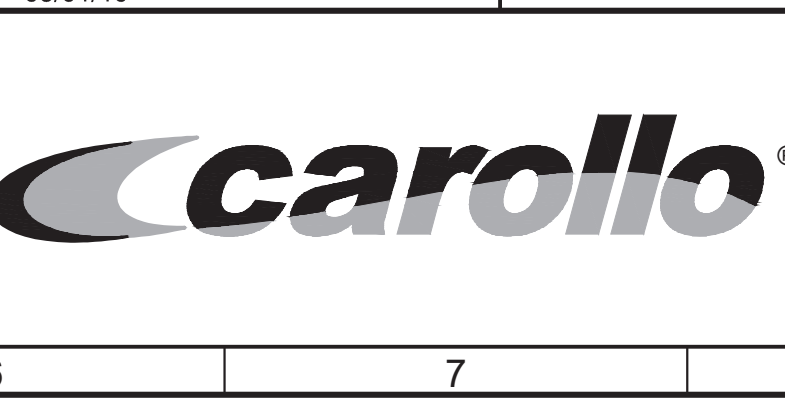
P624 ADJUSTABLE PIPE SUPPORT
TYP

REV	DATE	BY	DESCRIPTION
1	11-15-19	JPM	CHANGED PER ADDENDUM NO. 1

DESIGNED JPM
 DRAWN TLR
 CHECKED
 DATE OCTOBER 2019



Digitally signed by Jonathan P. Marotta
 Contact info: Carollo Engineers, Inc.
 Date: 2019.11.15 13:50:36 -0800



REGIONAL URBAN WATER AUGMENTATION PROJECT
 RECYCLED WATER DISTRIBUTION MAINS
 TYPICAL
PIPING TYPICAL DETAILS - 1

VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWING
 0 1"
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 7568C.10
 DRAWING NO. TP01
 SHEET NO. 11 OF 66

Plot Date: 11/15/2019 9:47:01 AM

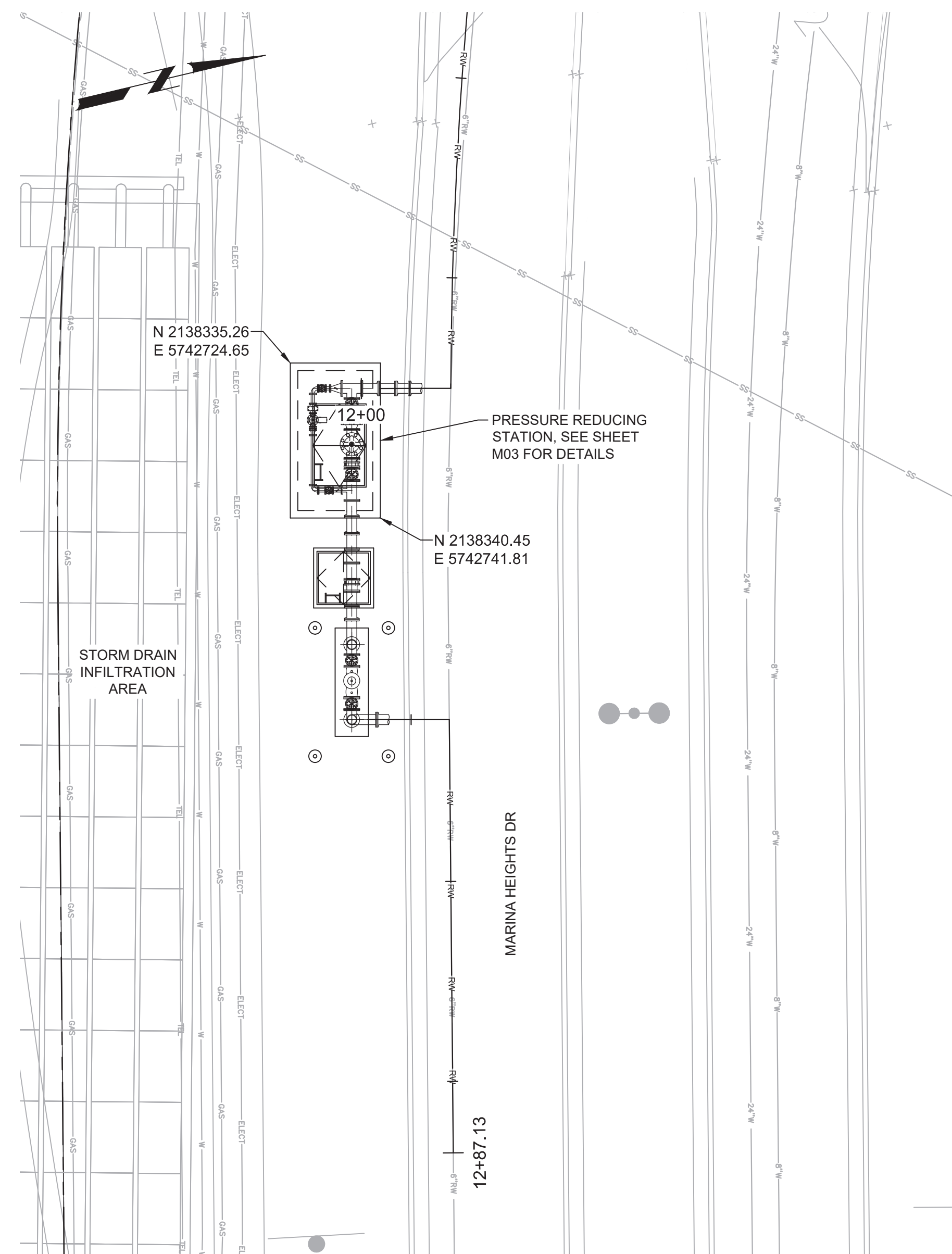
FILE NAME: 7568C10CD02.dwg

PROJECT NO. 7568C10

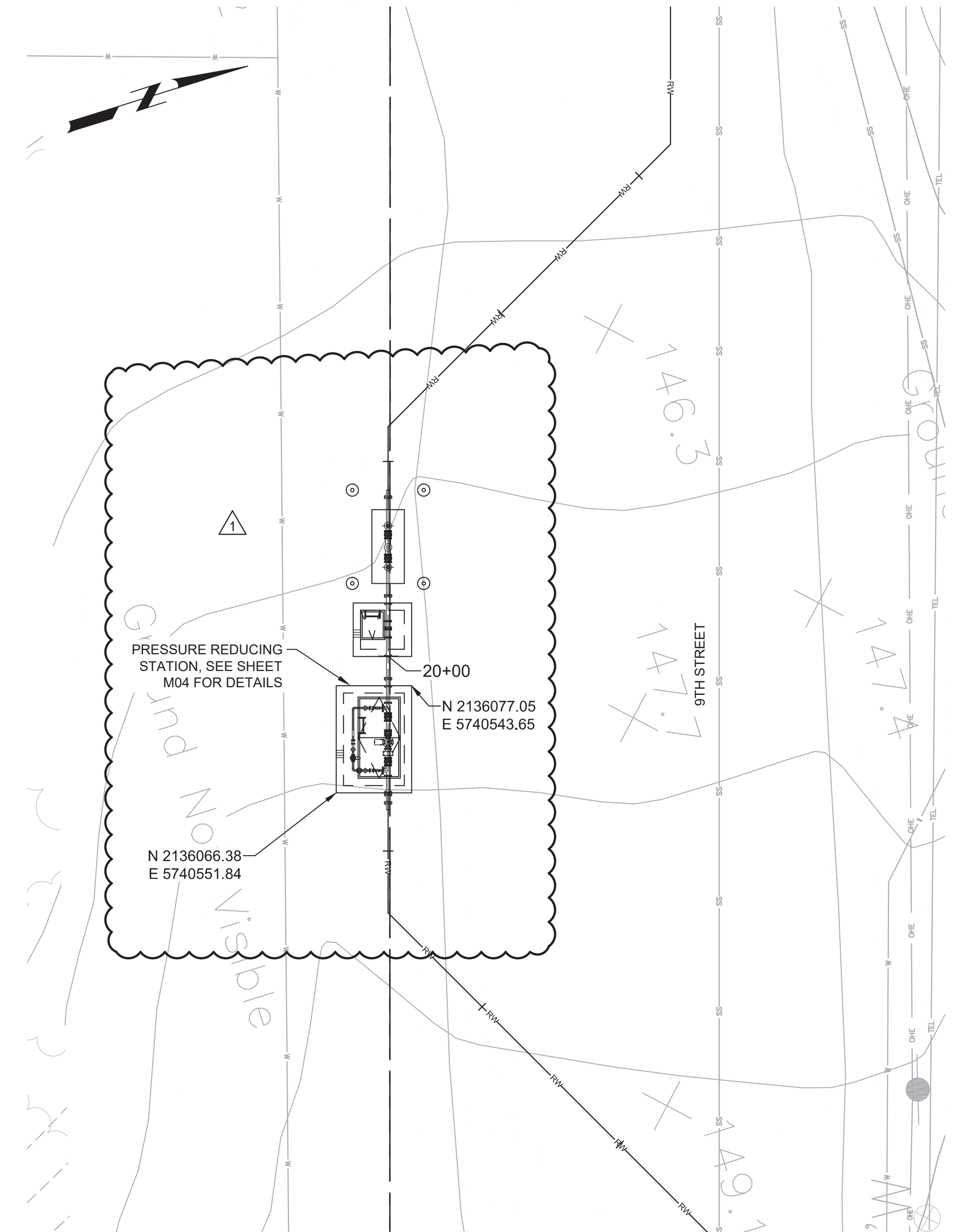
LAST SAVED BY: bhwaves

GENERAL NOTES:

- FIELD SURVEY AND MARK CORNERS OF ALL VAULTS / CONCRETE PADS. CONFIRM WITH OWNER AND ENGINEER IN THE FIELD THE FINAL LOCATION OF THE STATIONS PRIOR TO INSTALLING STATIONS OR ADJACENT FACILITIES.



A PRESSURE REDUCING STATION (MARINA HEIGHTS DR)
 P08 SCALE: 1"=10'
 FILE: 7568C10C105

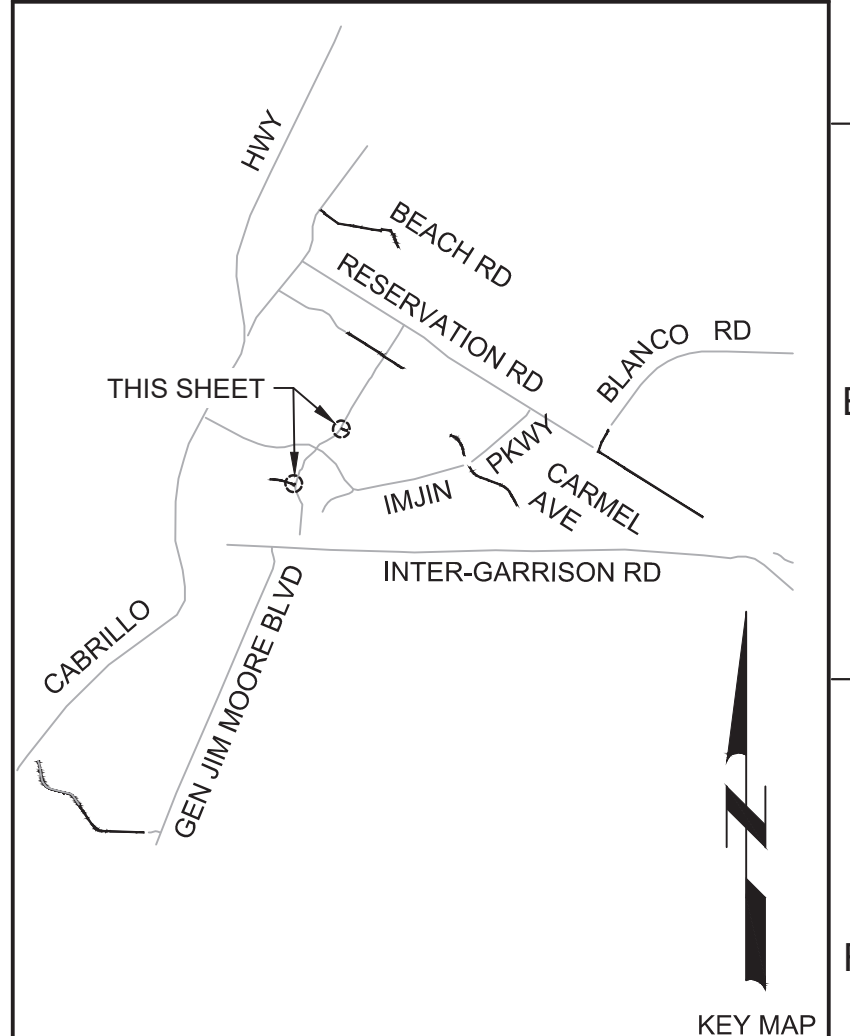


B PRESSURE REDUCING STATION (9TH STREET)
 P05 SCALE: 1"=10'
 FILE: 7568C10C105



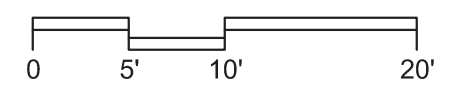
Know what's below.
 Call before you dig.

KEY MAP



KEY MAP NORTH

SCALE



REV	DATE	BY	DESCRIPTION
1	11-15-19	JPM	CHANGED PER ADDENDUM NO. 1

DESIGNED
JPM/KMM
 DRAWN
BWH
 CHECKED
 DATE
OCTOBER 2019



Digitally signed by Jonathan P. Marshall
 Contact info: Carollo Engineers, Inc.
 Date: 2019.11.15 13:50:09-0800



Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT
 RECYCLED WATER DISTRIBUTION MAINS
 CIVIL
 YARD PIPING PLANS - 2

VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWING
 0 1" 1"
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

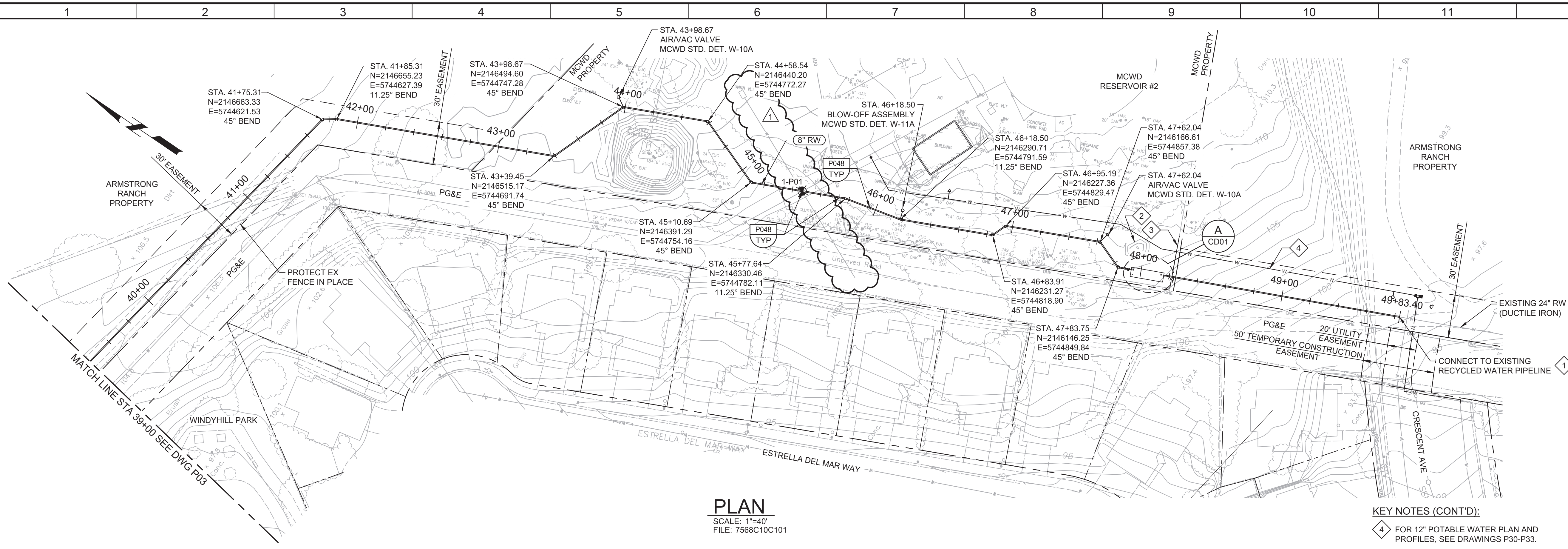
JOB NO. 7568C.10
 DRAWING NO. CD02
 SHEET NO. 16 OF 66

Plot Date: 11/13/2019 3:37:58 PM

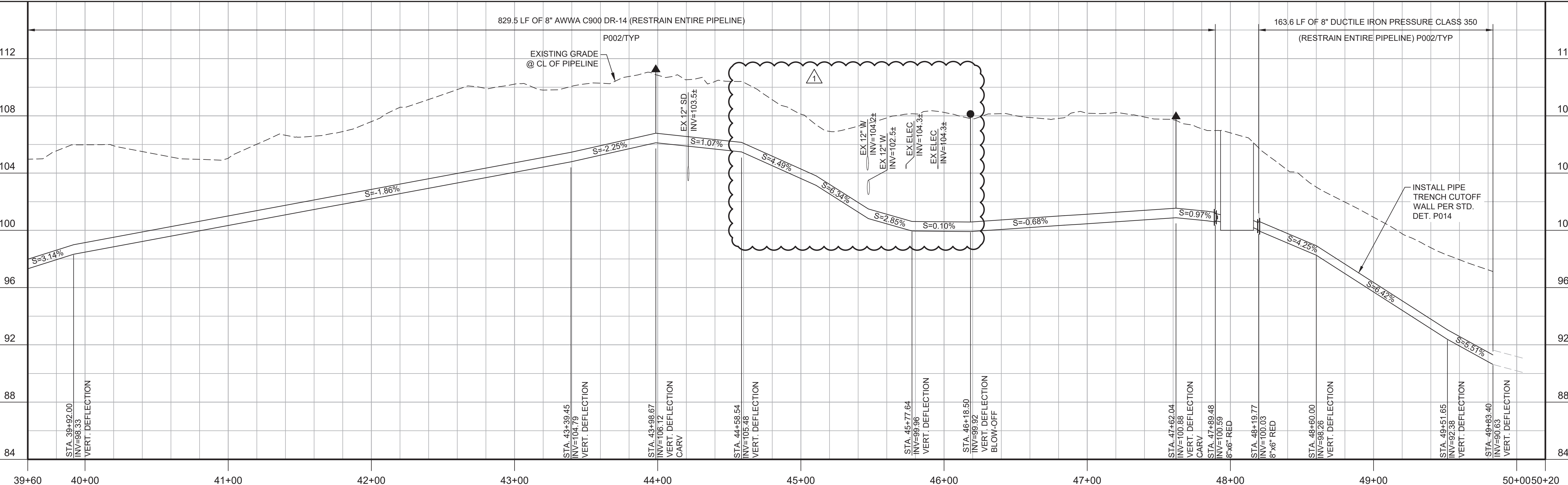
FILE NAME: 7568C10P04.dwg

PROJECT NO. 7568C10

LAST SAVED BY: bbraves



- GENERAL NOTES:**
- CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SPECIFICALLY CALLED OUT TO BE LESS THAN 4'. IN AREAS WHERE THE ARBORIST DETERMINES THAT TREE ROOT EXCAVATION WILL DAMAGE NEARBY TREES, CONSTRUCT PIPE WITH A CONCRETE ENCASEMENT PER P040/TP01. AT THE MAXIMUM ALLOWABLE DEPTH. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL ADDITIONAL APPURTENANCES REQUIRED BY CHANGES TO THE PIPE PROFILE.
 - CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS TO WINDYHILL PARK AT ALL TIMES.
 - REPAIR ALL DAMAGED FACILITIES, INCLUDING FENCES AND LANDSCAPING, TO THEIR ORIGINAL CONDITION.
 - ARBORIST SHALL BE PRESENT FOR ALL WORK NEAR TREES PER SPECIFICATION SECTION 01562.
 - DEFLECTIONS (CHANGES IN DIRECTION) OF PVC PIPE SHALL BE ACHIEVED BY BENDING ONE OR MORE PIPE BARRELS. DO NOT EXCEED THE ALLOWABLE JOINT OR PIPE BARREL DEFLECTION PER THE SPECIFICATIONS.
- KEY NOTES:**
- APPROXIMATE TIE-IN LOCATION. EXISTING PIPELINE IS APPROXIMATELY 4 FT DEEP. CONTRACTOR TO POTHOLE TO VERIFY. REMOVE EXISTING PIPE CAP AND CONNECT TO THE EXISTING PIPE WITH 12" X 24" MJ REDUCER THEN A 8" X 12" MJ REDUCER WITH MECHANICAL WEDGE ACTION JOINT RESTRAINTS.
 - REMOVE EXISTING DIRT PILE AND MATCH AREA GRADE TO SURROUNDING AREA.
 - INSTALL 30" WIDE GATE PER C190/TC-01.
- KEY NOTES (CONT'D):**
- FOR 12" POTABLE WATER PLAN AND PROFILES, SEE DRAWINGS P30-P33.



811
Know what's below.
Call before you dig.

KEY MAP

SCALE

HORIZONTAL: 0 20' 40' 80'

VERTICAL: 0 4' 8' 16'

KEY MAP NORTH

REV	DATE	BY	DESCRIPTION
1	11-15-19	JPM	CHANGED PER ADDENDUM NO. 1

DESIGNED JPM/KMM	
DRAWN AL/BWH	
CHECKED	
DATE OCTOBER 2019	

Digitally signed by Jonathan P. Marshall
Contact Info: Carollo Engineers, Inc.
Date: 2019.11.15 13:52:29 -0800

REGIONAL URBAN WATER AUGMENTATION PROJECT

RECYCLED WATER DISTRIBUTION MAINS

CIVIL DISTRIBUTION MAIN
BEACH ROAD
STA 39+60 TO 49+83.40

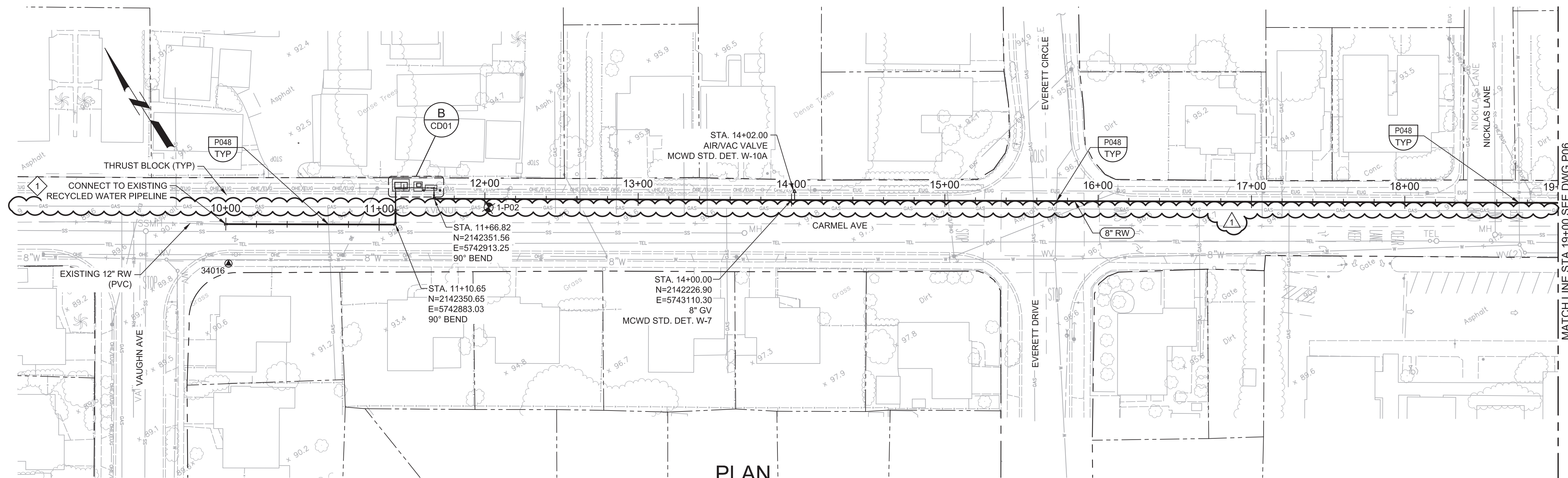
VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING	JOB NO. 7568C.10
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	DRAWING NO. P04
	SHEET NO. 26 OF 66

Plot Date: 11/13/2019 11:50:51 AM

FILE NAME: 7568C10P05.dwg

PROJECT NO. 7568C10

LAST SAVED BY: bhawes



PLAN
SCALE: 1"=40'
FILE: 7568C10C101

GENERAL NOTES:

1. CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SPECIFICALLY CALLED OUT TO BE LESS THAN 4'.
2. DEFLECTIONS (CHANGES IN DIRECTION) OF PVC PIPE SHALL BE ACHIEVED BY BENDING ONE OR MORE PIPE BARRELS. DO NOT EXCEED THE ALLOWABLE JOINT OR PIPE BARREL DEFLECTION PER THE SPECIFICATIONS.

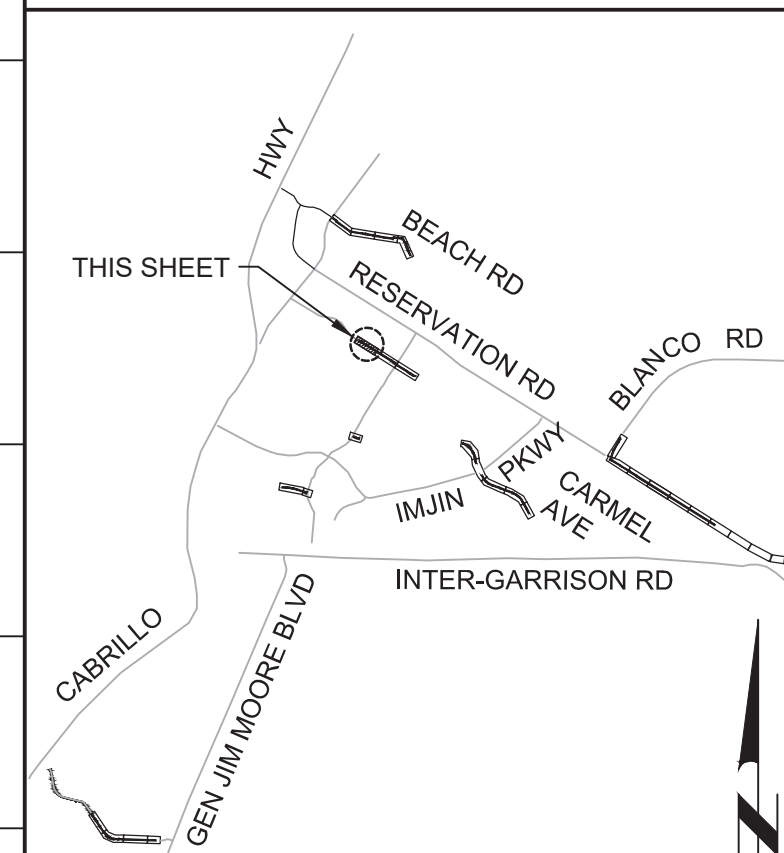
KEY NOTES:

1. APPROXIMATE TIE-IN LOCATION. EXISTING PIPELINE IS APPROXIMATELY 4 FT DEEP. CONTRACTOR TO POTHOLE TO VERIFY. REMOVE EXISTING PIPE CAP AND CONNECT TO THE EXISTING PIPE WITH 8"x12" MECHANICAL JOINT ACTION RESTRAINTS.



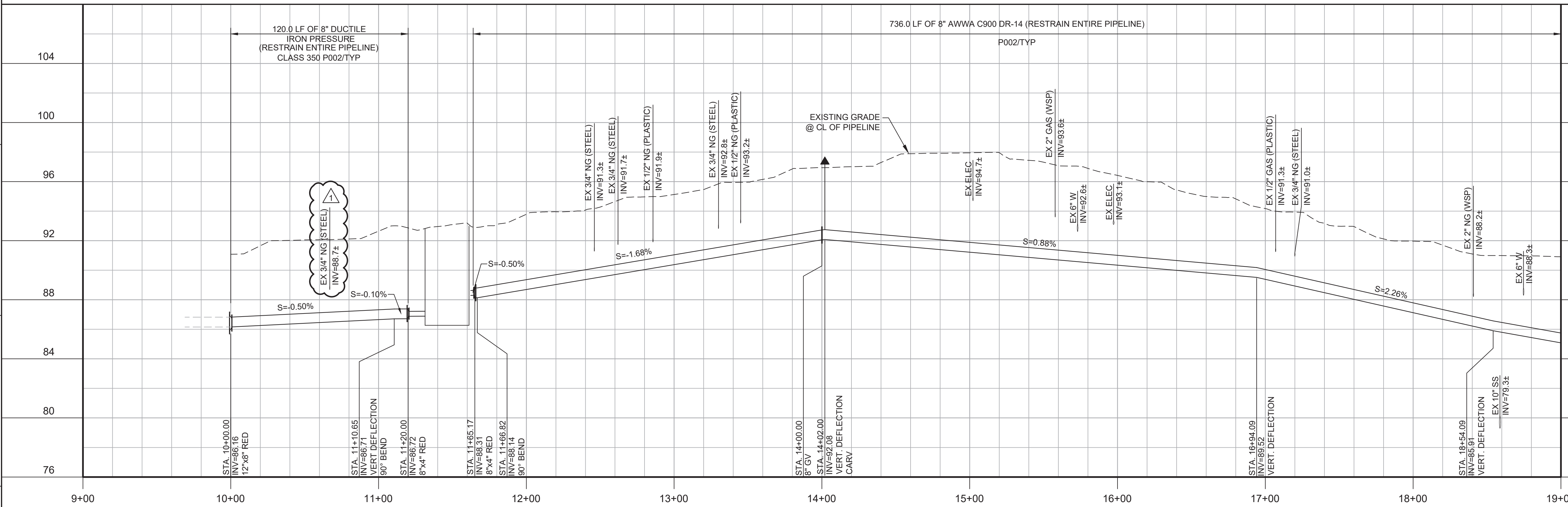
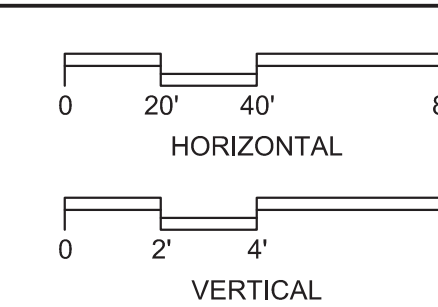
Know what's below.
Call before you dig.

KEY MAP



KEY MAP NORTH

SCALE



PROFILE
HORIZ SCALE: 1"=40'
VERT SCALE: 1"=4'
FILE: 7568C10C101

REV	DATE	BY	DESCRIPTION
1	11-15-19	JPM	CHANGED PER ADDENDUM NO. 1

DESIGNED	JPM/KMM
DRAWN	AL/BWH
CHECKED	
DATE	OCTOBER 2019



Digitally signed by Jonathan P. Marshall
Contact info: Carollo Engineers, Inc.
Date: 2019.11.15 13:02:06 -0800



Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT
RECYCLED WATER DISTRIBUTION MAINS
CIVIL DISTRIBUTION MAIN
CARMEL AVENUE
STA 10+00 TO 19+00

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1" 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

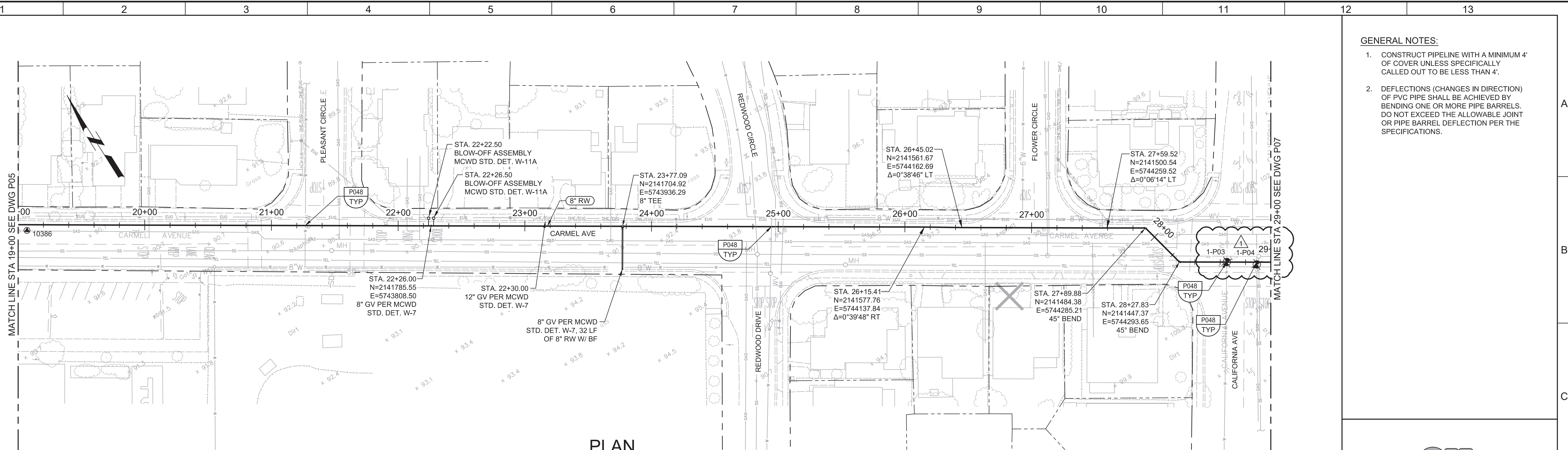
JOB NO. 7568C.10
DRAWING NO. P05
SHEET NO. 27 OF 66

Plot Date: 11/13/2019 12:10:04 PM

FILE NAME: 7568C10P06.dwg

PROJECT NO. 7568C10

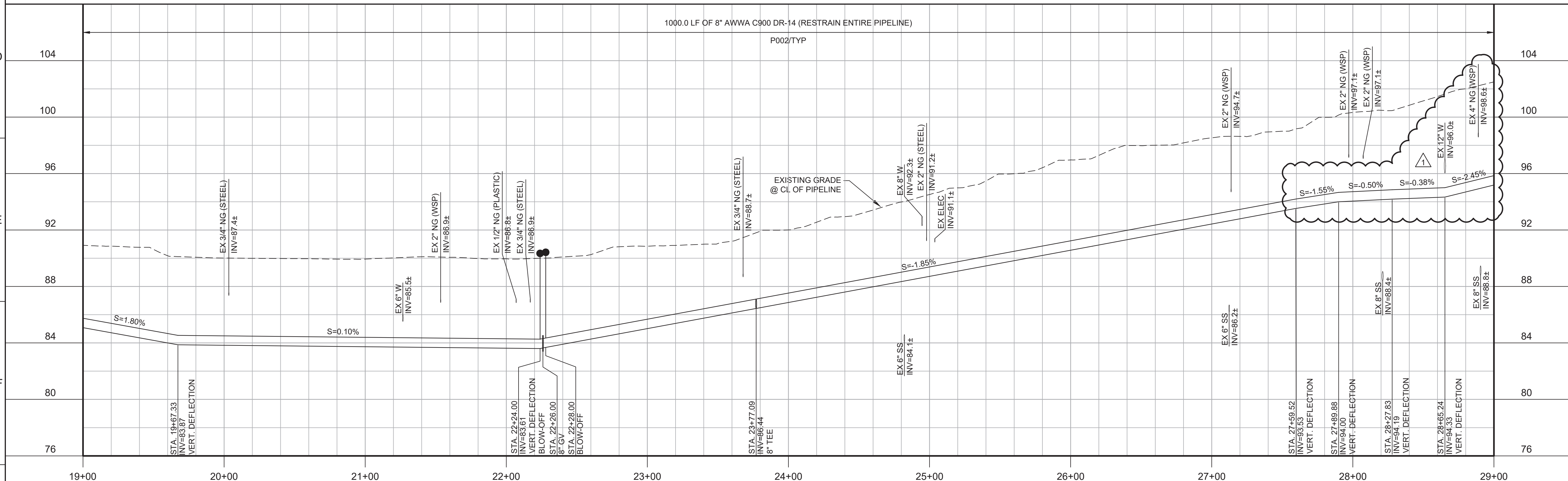
LAST SAVED BY: bhaves



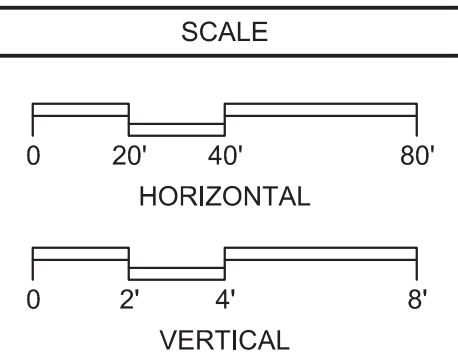
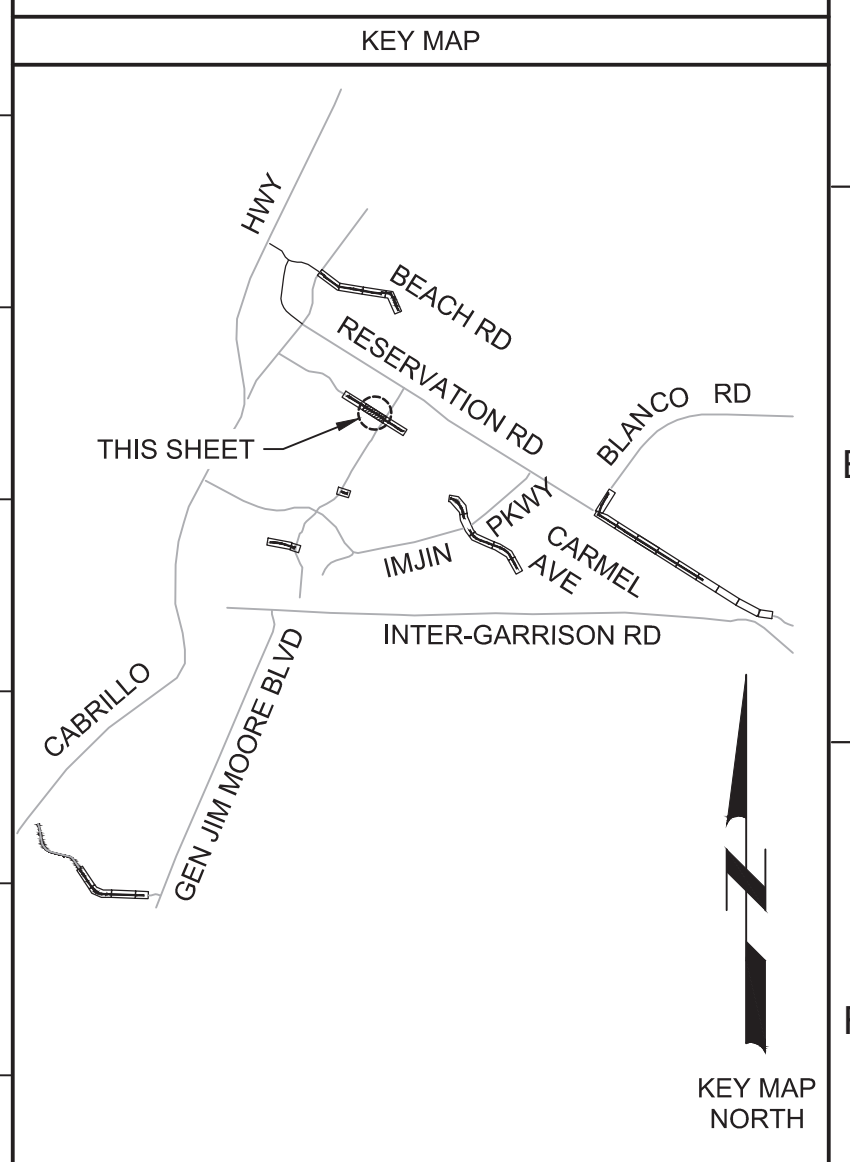
- GENERAL NOTES:**
- CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SPECIFICALLY CALLED OUT TO BE LESS THAN 4'.
 - DEFLECTIONS (CHANGES IN DIRECTION) OF PVC PIPE SHALL BE ACHIEVED BY BENDING ONE OR MORE PIPE BARRELS. DO NOT EXCEED THE ALLOWABLE JOINT OR PIPE BARREL DEFLECTION PER THE SPECIFICATIONS.



Know what's below.
Call before you dig.



PROFILE
HORIZ SCALE: 1"=40'
VERT SCALE: 1"=4'
FILE: 7568C10C101



REV	DATE	BY	DESCRIPTION
1	11-15-19	JPM	CHANGED PER ADDENDUM NO. 1

DESIGNED
JPM/KMM

DRAWN
AL/BWH

CHECKED

DATE
OCTOBER 2019



Digitally signed by Jonathan P. Marshall
Contact info: Carollo Engineering, Inc.
Date: 2019.11.13 13:02:06 -0800



Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT

RECYCLED WATER DISTRIBUTION MAINS

CIVIL DISTRIBUTION MAIN
CARMEL AVENUE
STA 19+00 TO 29+00

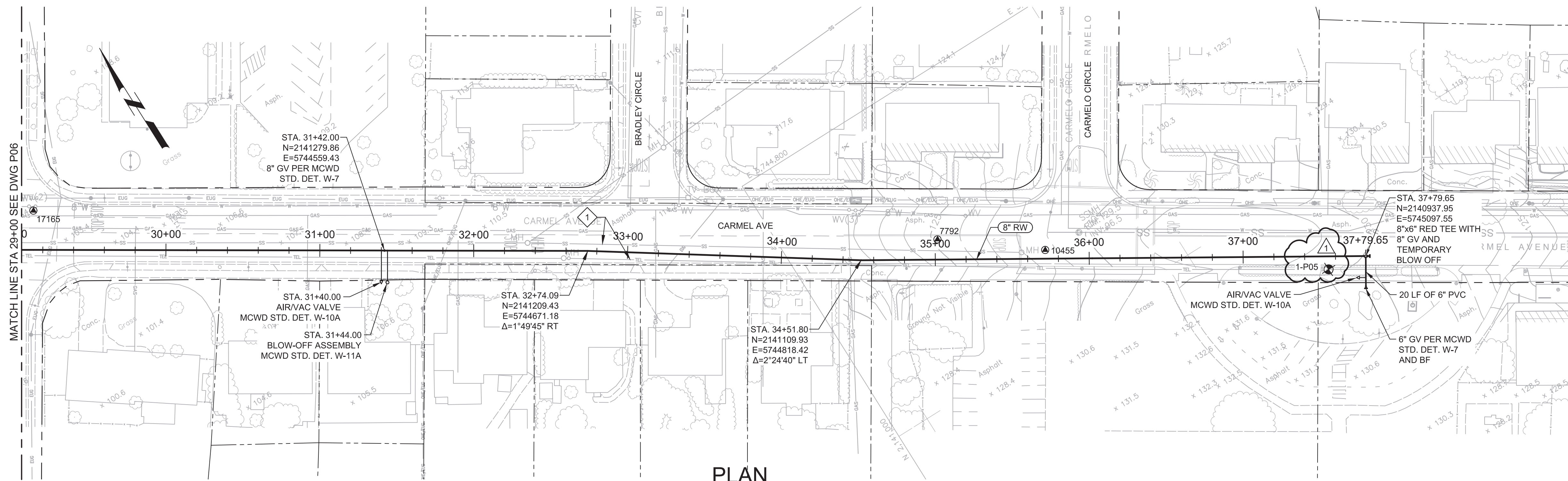
VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	JOB NO. 7568C.10
	DRAWING NO. P06
	SHEET NO. 28 OF 66

Plot Date: 11/13/2019 12:16:00 PM

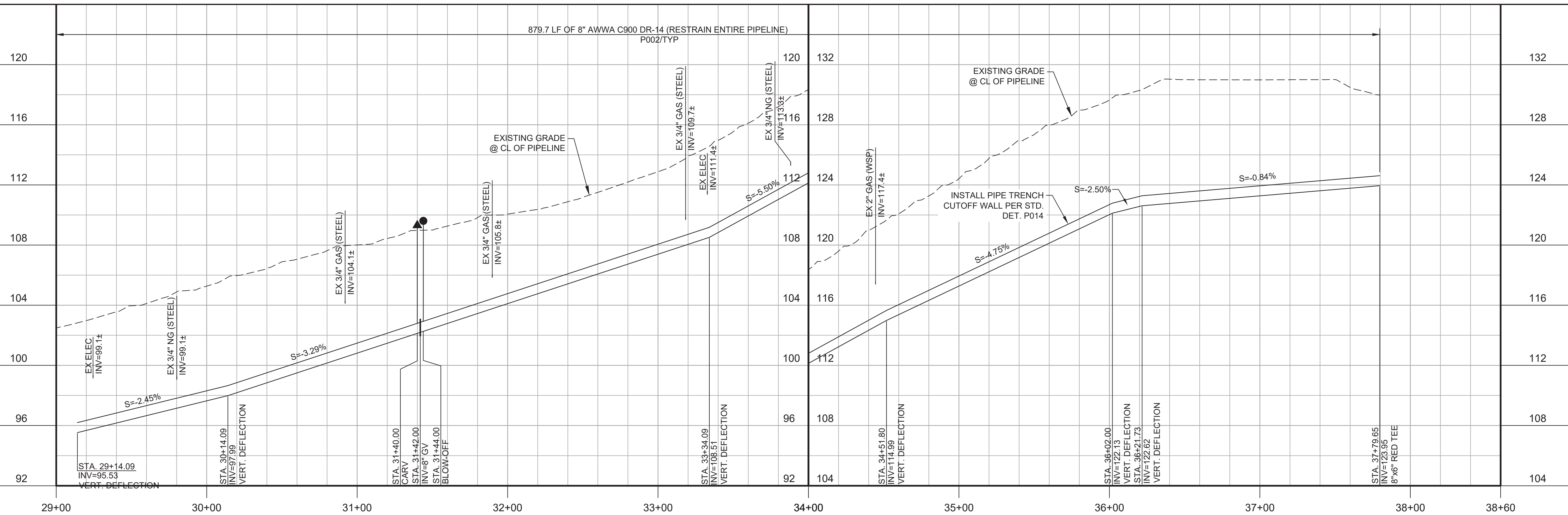
FILE NAME: 7568C10P07.dwg

PROJECT NO. 7568C10

LAST SAVED BY: bbraves



PLAN
SCALE: 1"=40'
FILE: 7568C10C101



PROFILE
HORIZ SCALE: 1"=40'
VERT SCALE: 1"=4'
FILE: 7568C10C101

GENERAL NOTES:

1. CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SPECIFICALLY CALLED OUT TO BE LESS THAN 4'.
2. REPAIR ALL DAMAGED FACILITIES, INCLUDING FENCES AND LANDSCAPING, TO THEIR ORIGINAL CONDITION.
3. DEFLECTIONS (CHANGES IN DIRECTION) OF PVC PIPE SHALL BE ACHIEVED BY BENDING ONE OR MORE PIPE BARRELS. DO NOT EXCEED THE ALLOWABLE JOINT OR PIPE BARREL DEFLECTION PER THE SPECIFICATIONS.

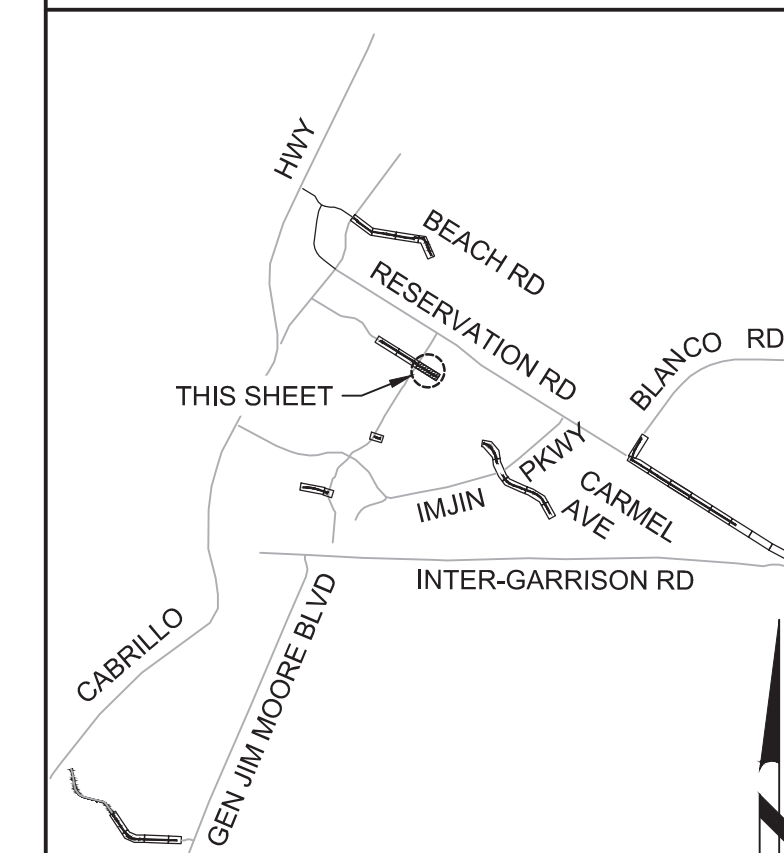
KEY NOTES:

1. CONTRACTOR TO LOCATE AND PROTECT IN PLACE EXISTING SANITARY SEWER AND TELEPHONE LINES, USING APPROPRIATE SHORING AS NECESSARY.

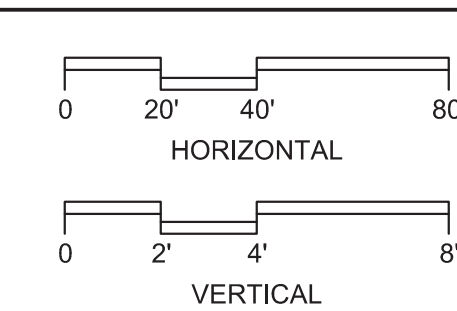


Know what's below.
Call before you dig.

KEY MAP



SCALE



REV	DATE	BY	DESCRIPTION
1	11-15-19	JPM	CHANGED PER ADDENDUM NO. 1

DESIGNED	JPM/KMM
DRAWN	AL/BWH
CHECKED	
DATE	OCTOBER 2019



Digitally signed by Jonathan P. Marshall
Contact Info: Carollo Engineers, Inc.
Date: 2019.11.18 13:50:06-0800



Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT
RECYCLED WATER DISTRIBUTION MAINS
CIVIL DISTRIBUTION MAIN
CARMEL AVENUE
STA 29+00 TO 37+79.5

VERIFY SCALES	JOB NO. 7568C10
BAR IS ONE INCH ON ORIGINAL DRAWING	DRAWING NO. P07
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	SHEET NO. 29 OF 66

Plot Date: 11/18/2019 6:48:55 AM

FILE NAME: 7568C10P08.dwg

PROJECT NO. 7568C10

LAST SAVED BY: bhwaves

1 2 3 4 5 6 7 8 9 10 11 12 13

A

B

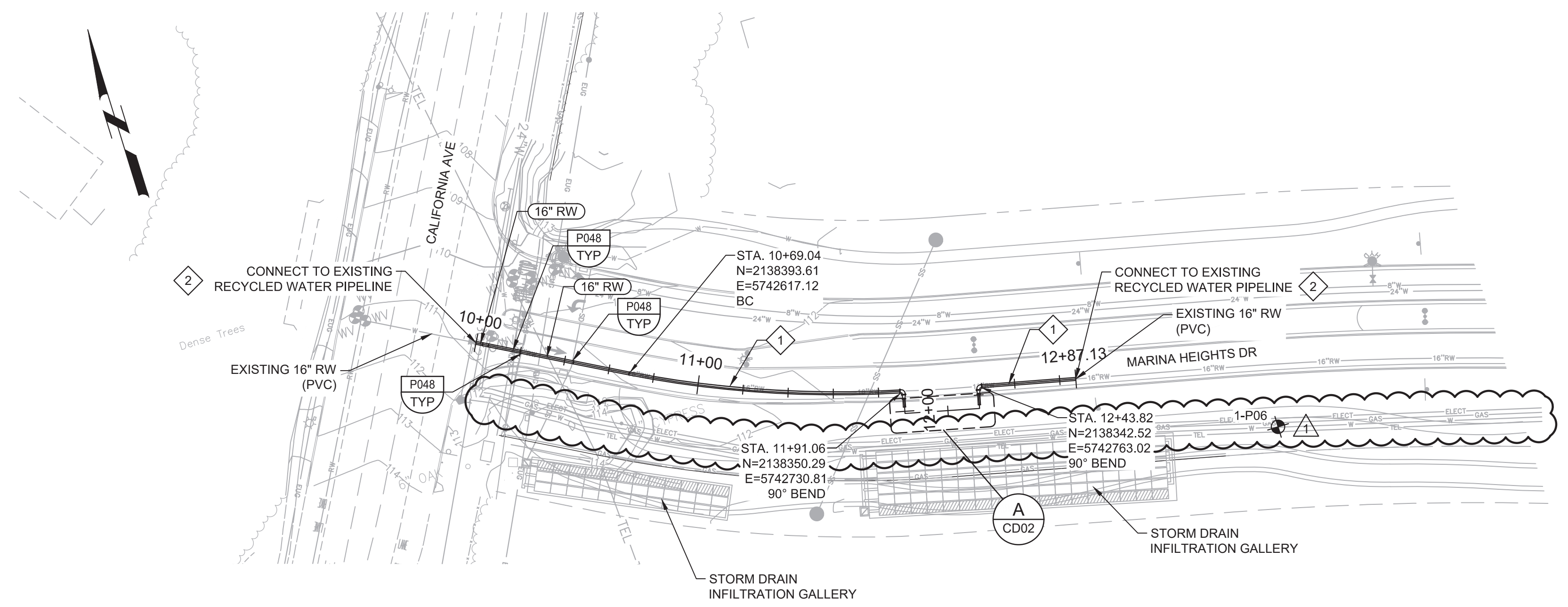
C

D

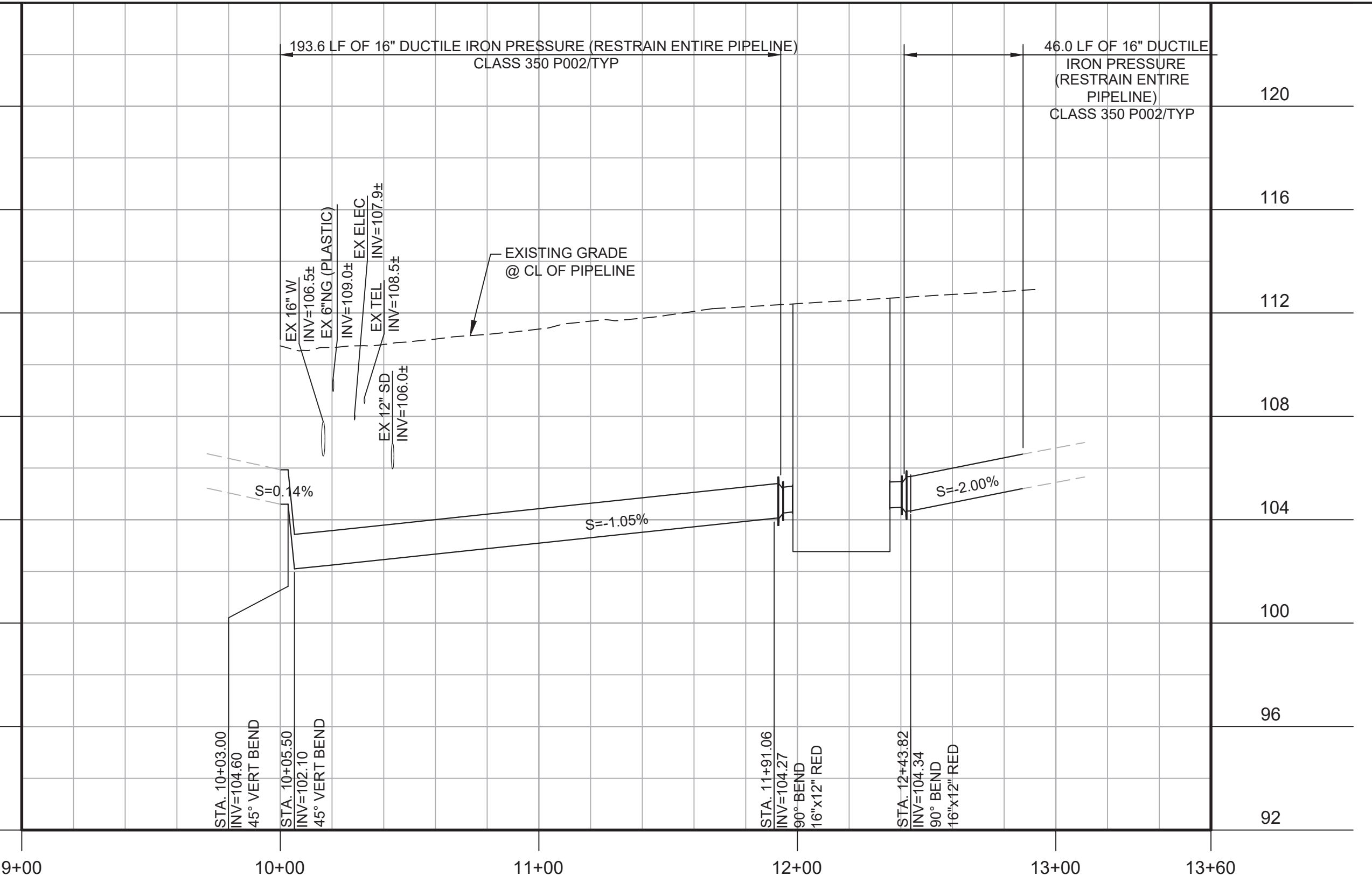
F

F

G



PLAN
SCALE: 1"=40'
FILE: 7568C10C101



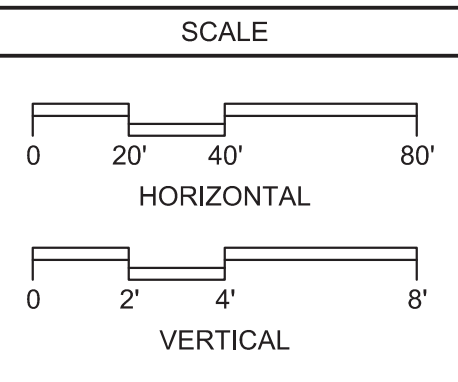
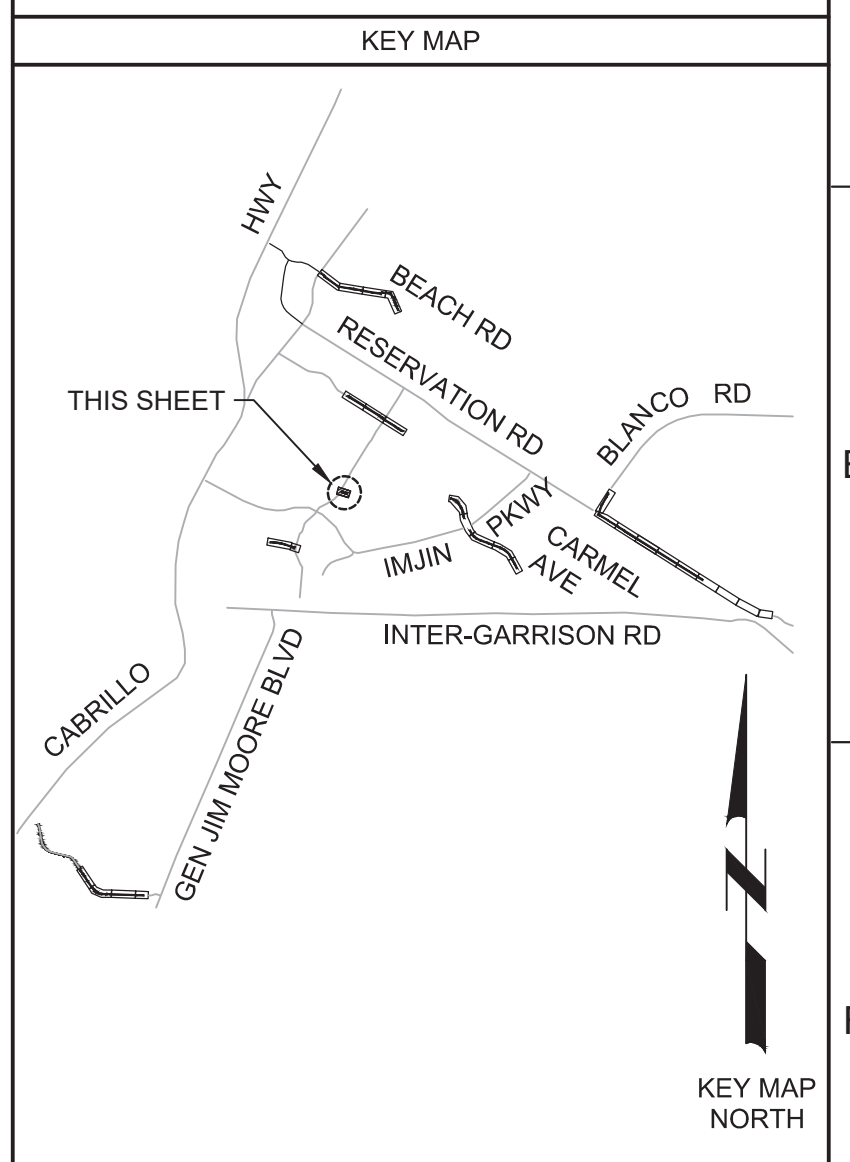
PROFILE
HORIZ SCALE: 1"=40'
VERT SCALE: 1"=4'
FILE: 7568C10C101

- GENERAL NOTES:**
- CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SPECIFICALLY CALLED OUT TO BE LESS THAN 4'.
 - REPAIR ALL DAMAGED FACILITIES, INCLUDING FENCES AND LANDSCAPING, TO THEIR ORIGINAL CONDITION.

- KEY NOTES:**
- REMOVE ALL EXISTING 16" RECYCLED WATER PIPELINE BETWEEN TIE IN LOCATIONS AT STA 10+00 AND STA 12+87.28.
 - APPROXIMATE TIE-IN LOCATION. EXISTING PIPELINE IS APPROXIMATELY 4 FT DEEP. CONTRACTOR TO POTHOLE TO VERIFY. REMOVE EXISTING PIPE CAP AND CONNECT TO THE EXISTING PIPE WITH RESTRAINED TRANSITION COUPLING.



Know what's below.
Call before you dig.



REV	DATE	BY	DESCRIPTION
1	11-15-19	JPM	CHANGED PER ADDENDUM NO. 1

DESIGNED
JPM/KMM

DRAWN
AL/BWH

CHECKED

DATE
OCTOBER 2019



Digitally signed by Jonathan P. Marshall
Contact info: Carollo Engineers, Inc.
Date: 2019.11.18 13:54:46-0800



Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT

RECYCLED WATER DISTRIBUTION MAINS

CIVIL DISTRIBUTION MAIN

MARINA HEIGHTS DRIVE PRV VAULT
STA 10+00 TO 12+87.13

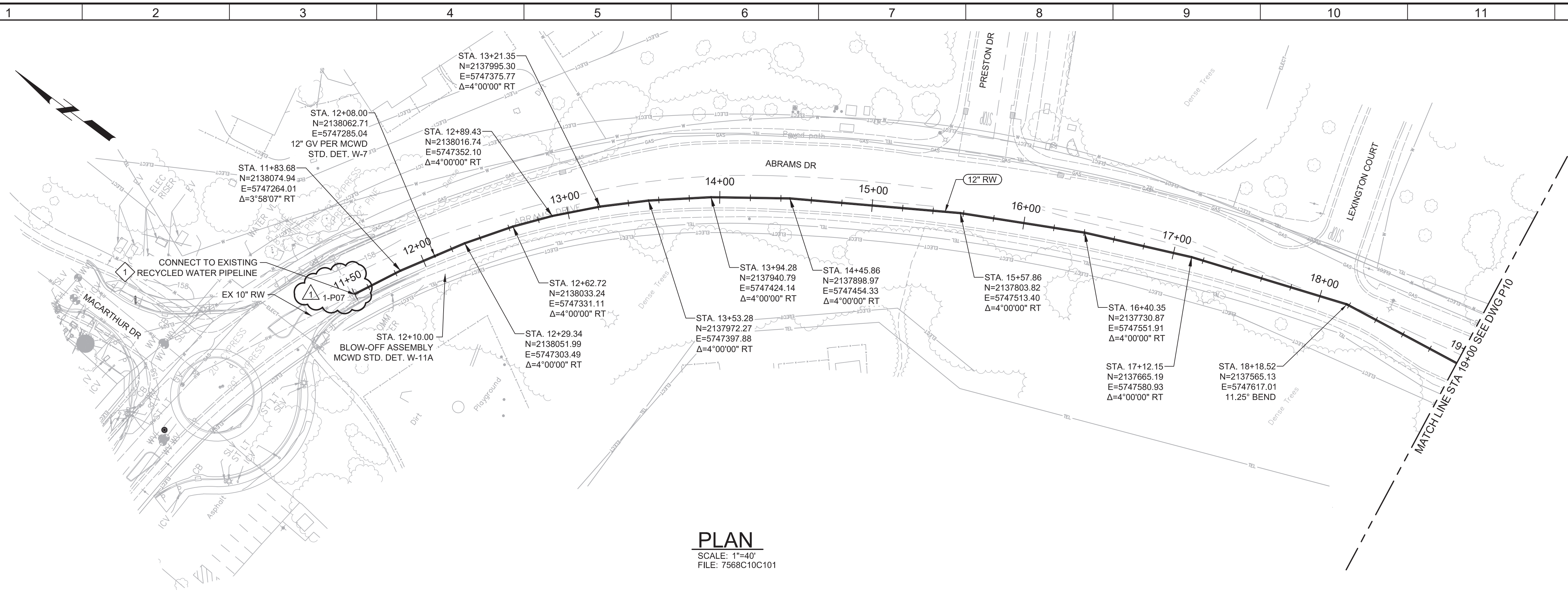
VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	JOB NO. 7568C.10
	DRAWING NO. P08
	SHEET NO. 30 OF 66

Plot Date: 11/13/2019 1:28:54 PM

FILE NAME: 7568C10P09.dwg

PROJECT NO. 7568C10

LAST SAVED BY: bhawes



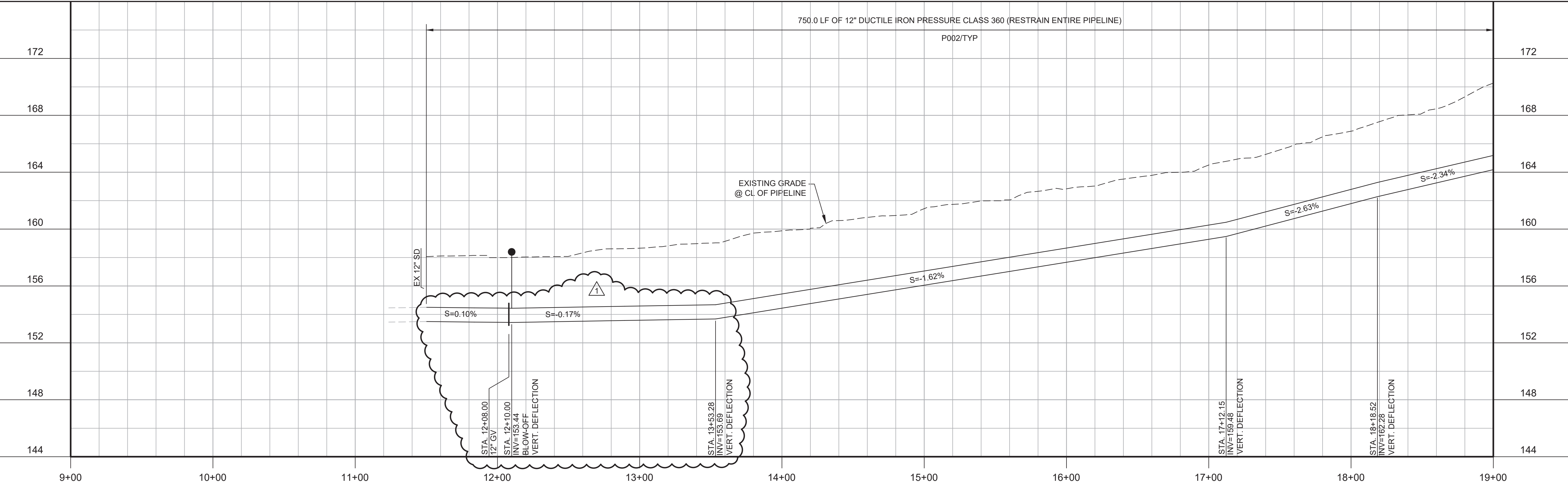
PLAN
SCALE: 1"=40'
FILE: 7568C10C101

GENERAL NOTES:
1. CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SPECIFICALLY CALLED OUT TO BE LESS THAN 4'.

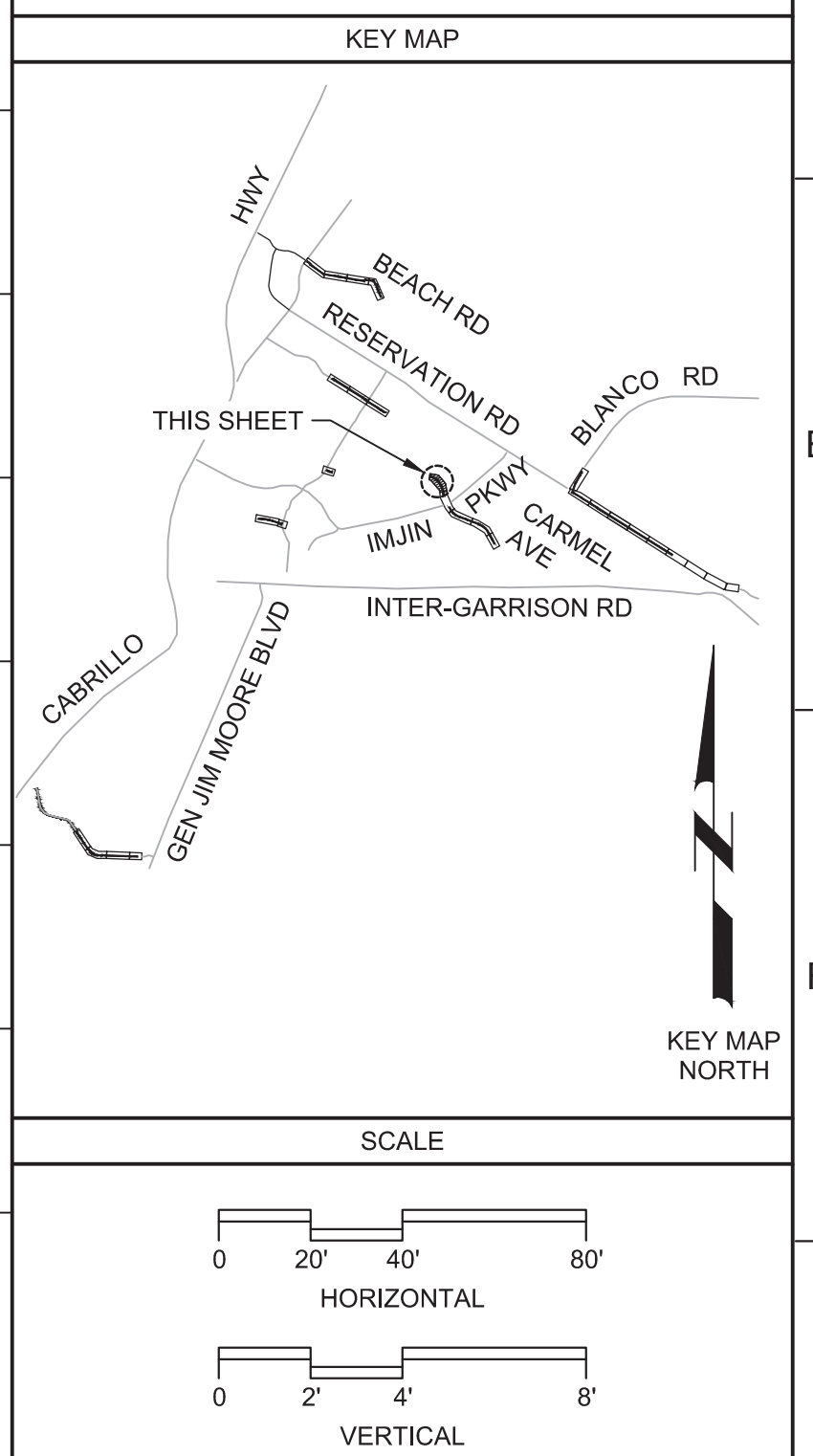
KEY NOTES:
1. APPROXIMATE TIE-IN LOCATION. EXISTING PIPELINE IS APPROXIMATELY 3'-6" DEEP. CONTRACTOR TO POTHOLE TO VERIFY. REMOVE EXISTING PIPE CAP AND CONNECT TO THE EXISTING PIPE WITH 10" X 12" MECHANICAL JOINT REDUCER WITH MECHANICAL WEDGE ACTION JOINT RESTRAINTS.



Know what's below.
Call before you dig.



PROFILE
HORIZ SCALE: 1"=40'
VERT SCALE: 1"=4'
FILE: 7568C10C101



REV	DATE	BY	DESCRIPTION
1	11-15-19	JPM	CHANGED PER ADDENDUM NO. 1

DESIGNED	JPM/KMM
DRAWN	AL/BWH
CHECKED	
DATE	OCTOBER 2019



Digitally signed by Jonathan P. Marshall
Contact info: Carollo Engineers, Inc.
Date: 2019.11.15 13:52:00 -0800



Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT
RECYCLED WATER DISTRIBUTION MAINS
CIVIL DISTRIBUTION MAIN
ABRAMS DRIVE
STA 11+50 TO 19+00

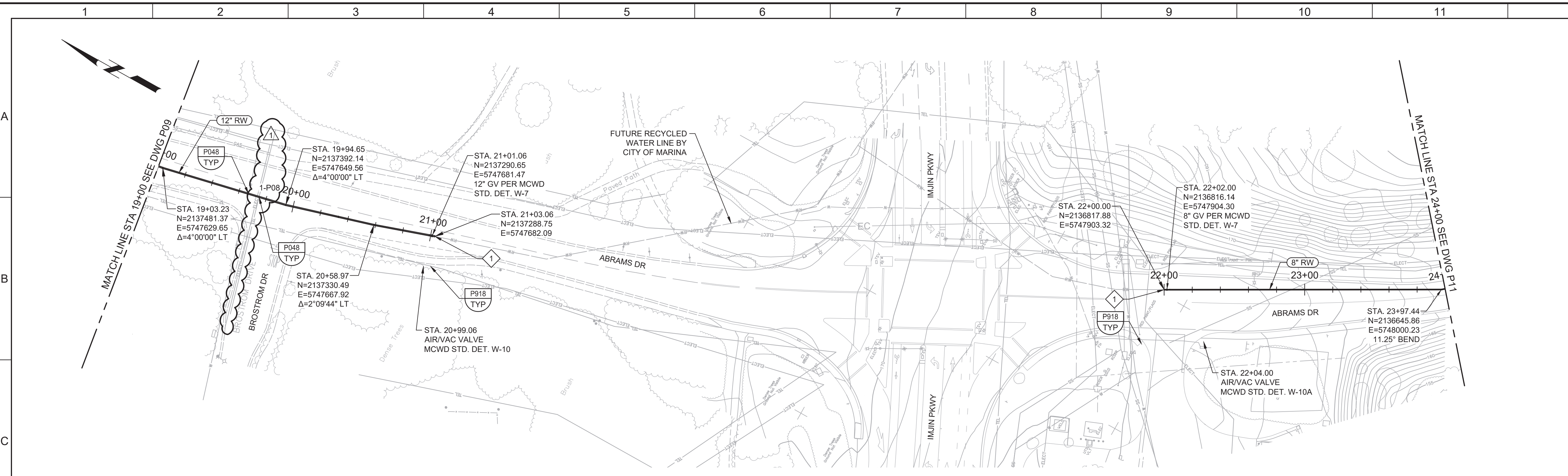
VERIFY SCALES	JOB NO.
BAR IS ONE INCH ON ORIGINAL DRAWING	7568C.10
0 1" 1"	DRAWING NO.
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	P09
	SHEET NO.
	31 OF 66

Plot Date: 11/13/2019 2:23:36 PM

FILE NAME: 7568C10P10.dwg

PROJECT NO. 7568C10

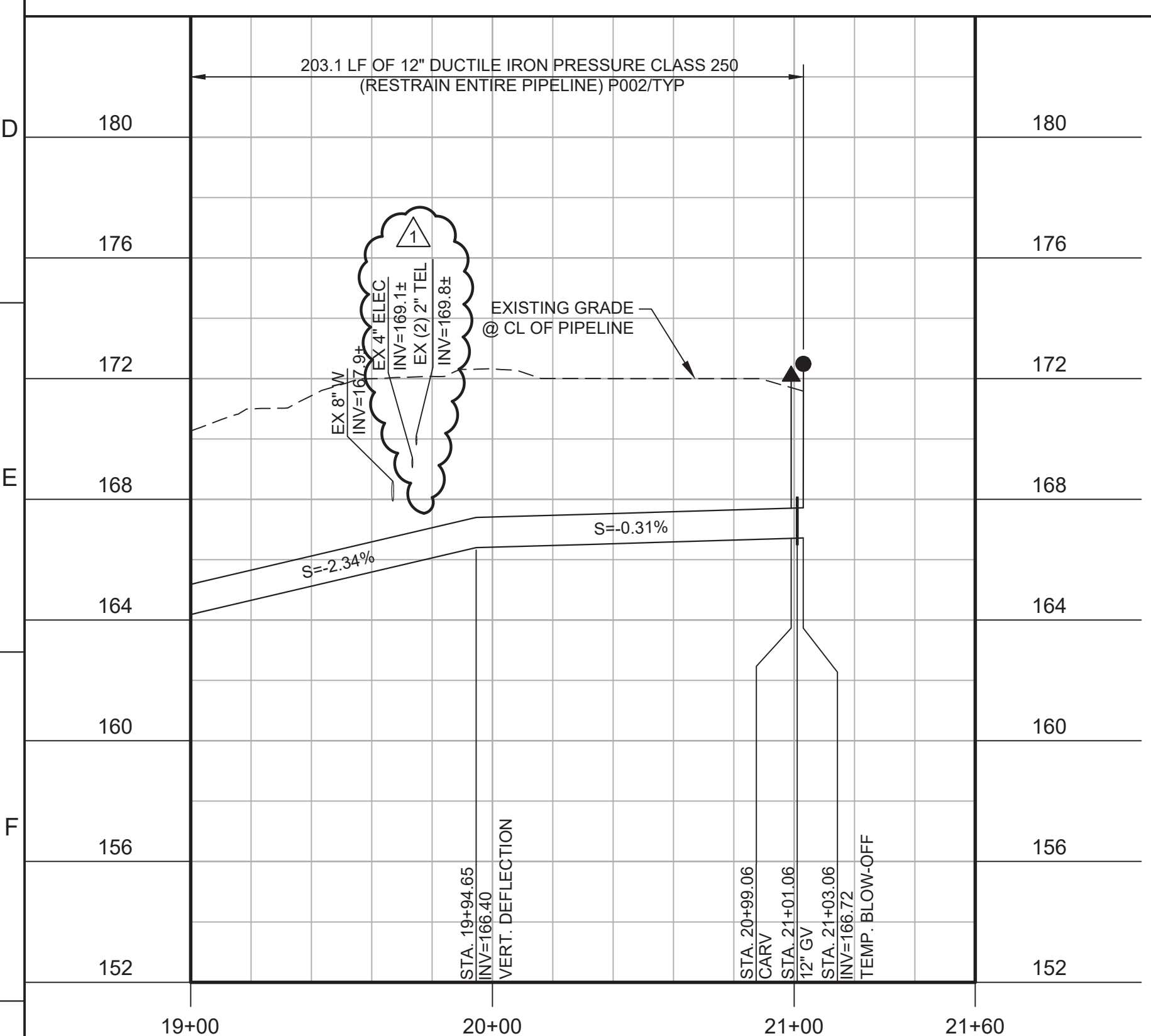
LAST SAVED BY: bhaves



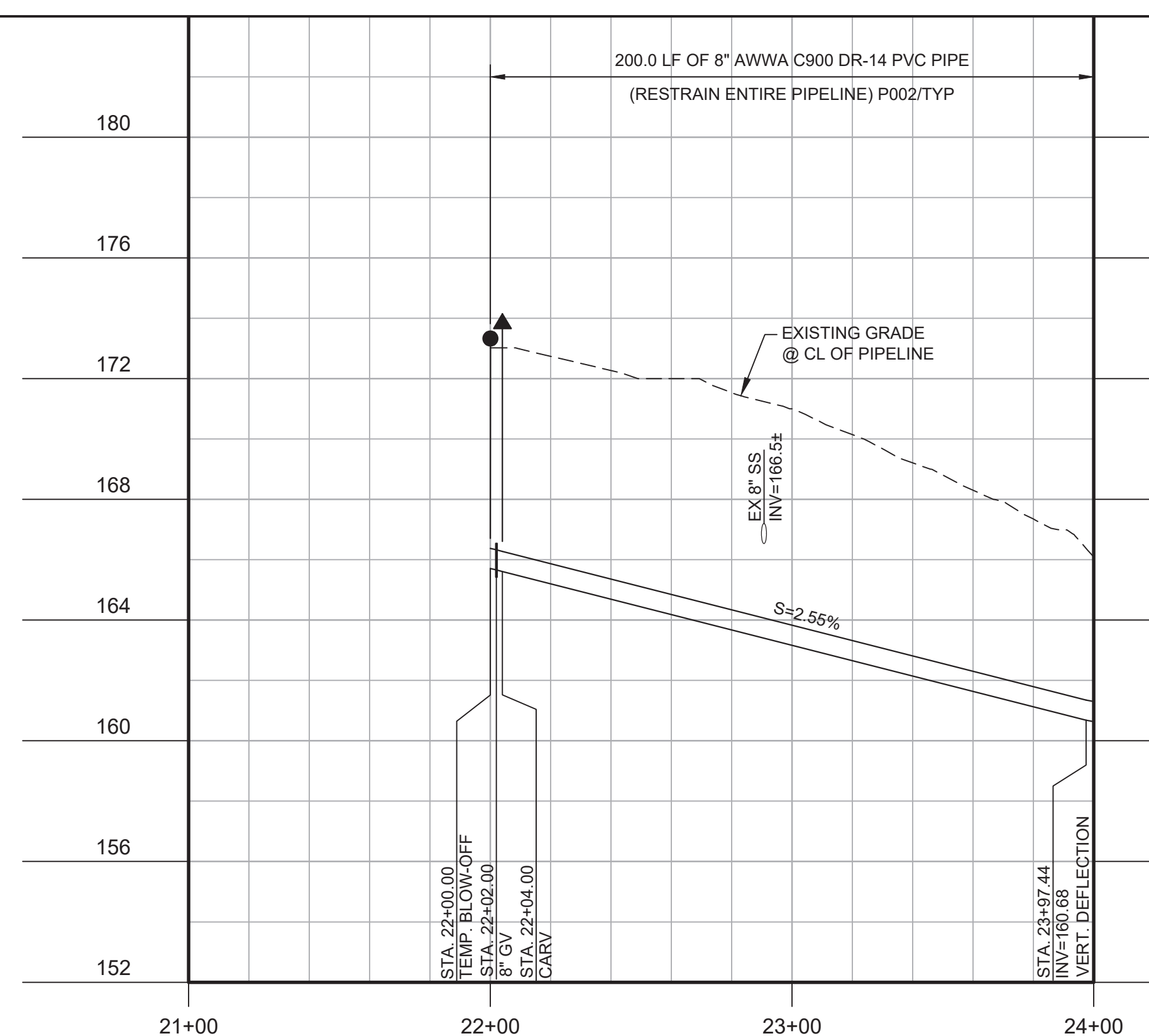
PLAN
 SCALE: 1"=40'
 FILE: 7568C10C101

- GENERAL NOTES:**
- CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SPECIFICALLY CALLED OUT TO BE LESS THAN 4'.
 - DEFLECTIONS (CHANGES IN DIRECTION) OF PVC PIPE SHALL BE ACHIEVED BY BENDING ONE OR MORE PIPE BARRELS. DO NOT EXCEED THE ALLOWABLE JOINT OR PIPE BARREL DEFLECTION PER THE SPECIFICATIONS.

- KEY NOTES:**
- 1 INSTALL TEMPORARY CAP AND BLOW-OFF.



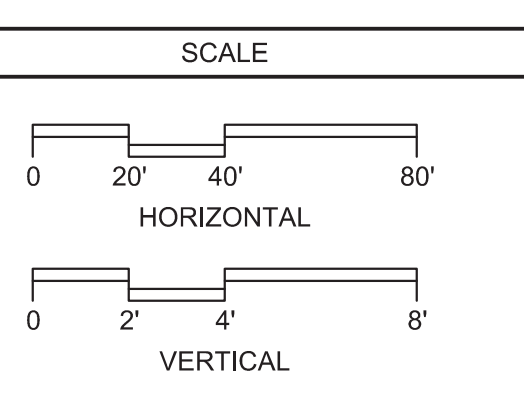
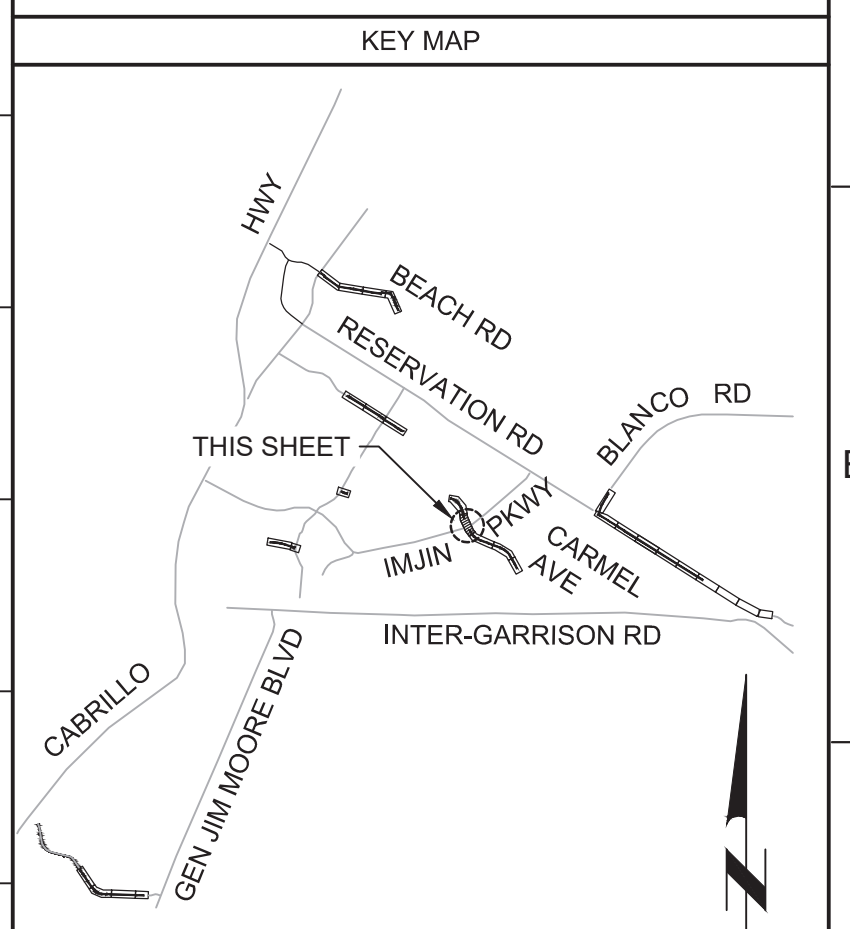
PROFILE
 HORIZ SCALE: 1"=40'
 VERT SCALE: 1"=4'
 FILE: 7568C10C101



PROFILE
 HORIZ SCALE: 1"=40'
 VERT SCALE: 1"=4'
 FILE: 7568C10C101



Know what's below.
 Call before you dig.



REV	DATE	BY	DESCRIPTION
1	11-15-19	JPM	CHANGED PER ADDENDUM NO. 1

DESIGNED	JPM/KMM
DRAWN	AL/BWH
CHECKED	
DATE	OCTOBER 2019



Digitally signed by Jonathan P. Marshall
 Contact info: Carollo Engineering, Inc.
 Date: 2019.11.15 13:52:06 -0800



Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT
RECYCLED WATER DISTRIBUTION MAINS
 CIVIL DISTRIBUTION MAIN
ABRAMS DRIVE
STA 19+00 TO 21+03.06 AND STA 22+00 TO 24+00

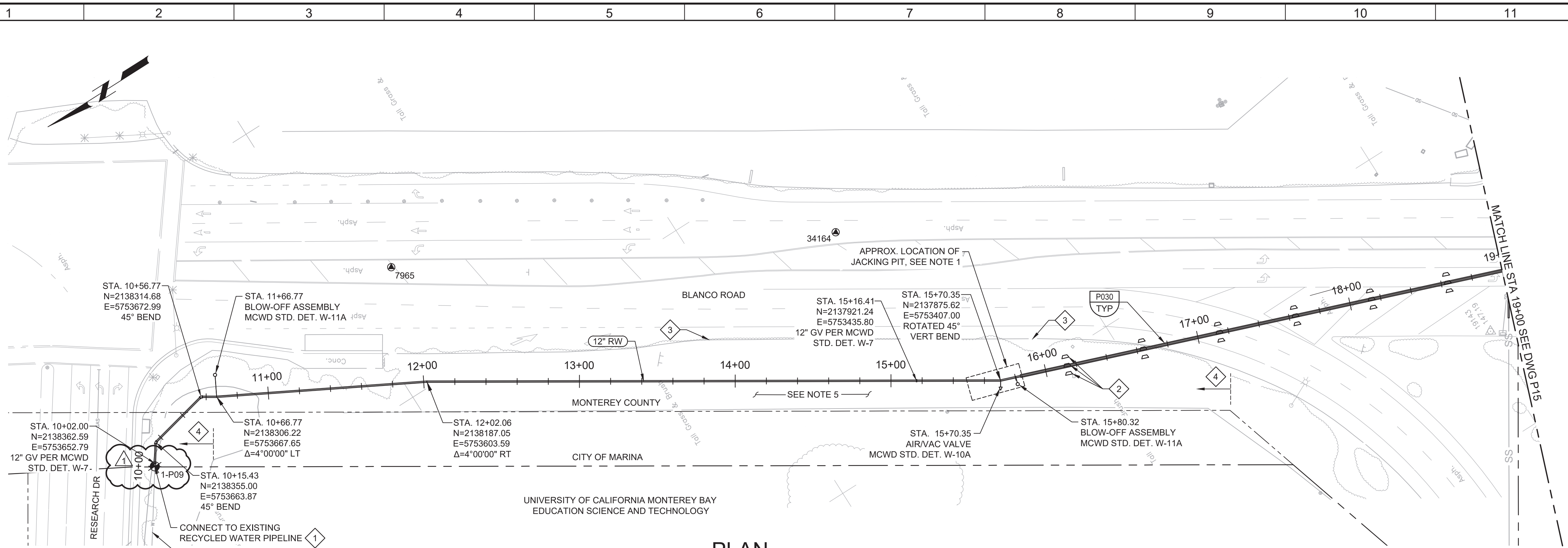
VERIFY SCALES	JOB NO. 7568C.10
BAR IS ONE INCH ON ORIGINAL DRAWING	DRAWING NO. P10
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	SHEET NO. 32 OF 66

Plot Date: 11/13/2019 2:38:36 PM

FILE NAME: 7568C10P14.dwg

PROJECT NO. 7568C10

LAST SAVED BY: bbraves



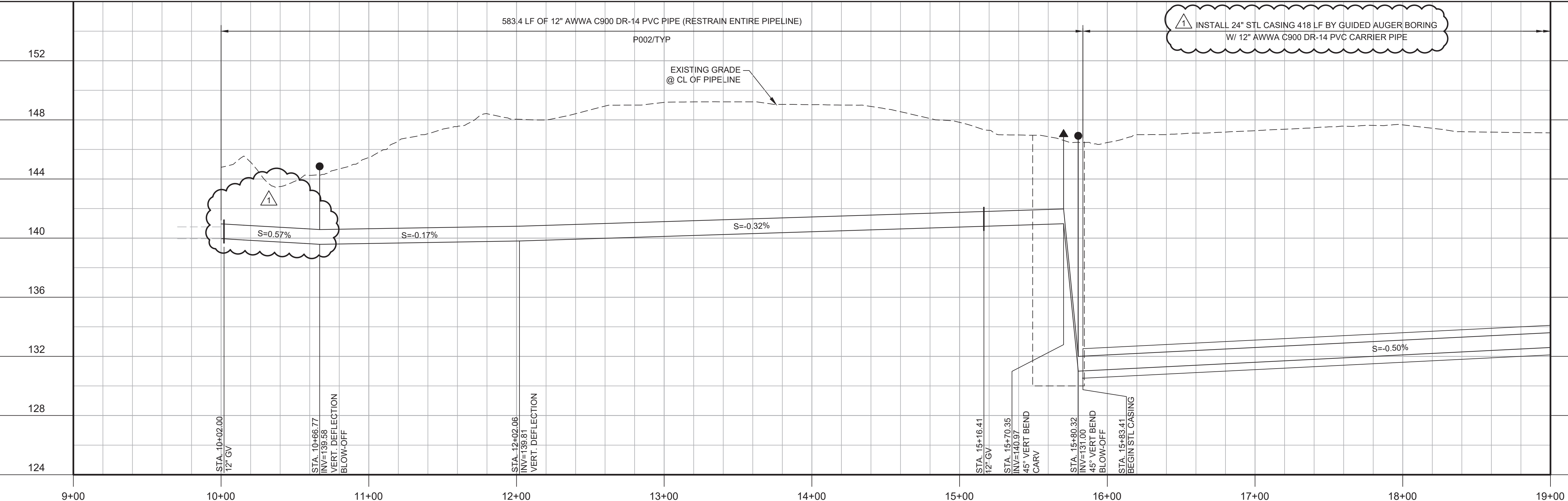
PLAN
SCALE: 1"=40'
FILE: 7568C10C101

- GENERAL NOTES:**
- EXACT LOCATIONS AND DIMENSIONS OF JACKING PIT TO BE DETERMINED BY CONTRACTOR AND SUBMITTED TO ENGINEER FOR REVIEW
 - CONSTRUCT PIPELINE WITH A MINIMUM OF 4' COVER UNLESS SPECIFICALLY CALLED OUT TO BE LESS THAN 4'.
 - CLEAR AND GRUB AS REQUIRED TO FACILITATE INSTALLATION OF PIPE AND APPURTENANCES.
 - ARBORIST SHALL BE PRESENT FOR ALL TREE PRUNING PER SPECIFICATION SECTION 01562.
 - SEE BID ITEM FOR RARE PLANT RESTORATION.
 - DEFLECTIONS (CHANGES IN DIRECTION) OF PVC PIPE SHALL BE ACHIEVED BY BENDING ONE OR MORE PIPE BARRELS. DO NOT EXCEED THE ALLOWABLE JOINT OR PIPE BARREL DEFLECTION PER THE SPECIFICATIONS.

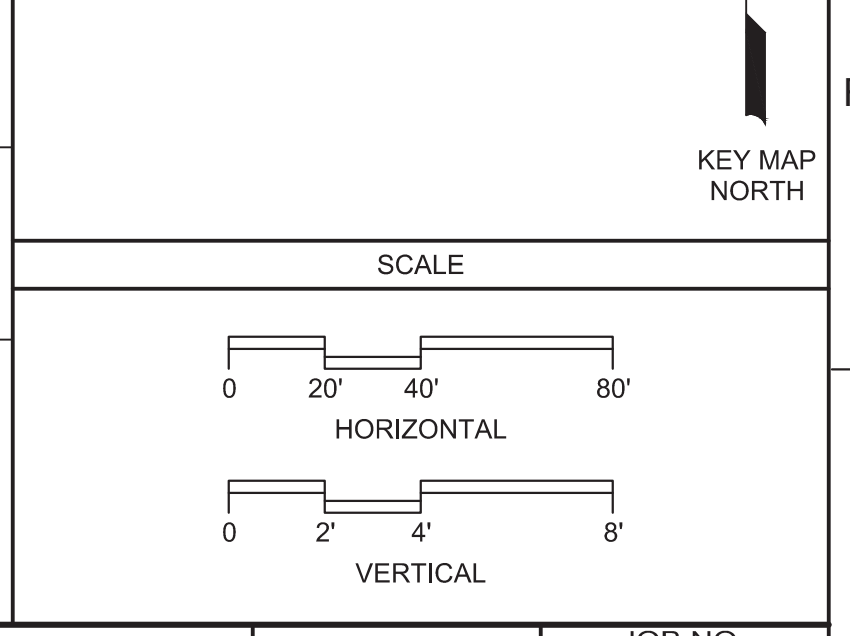
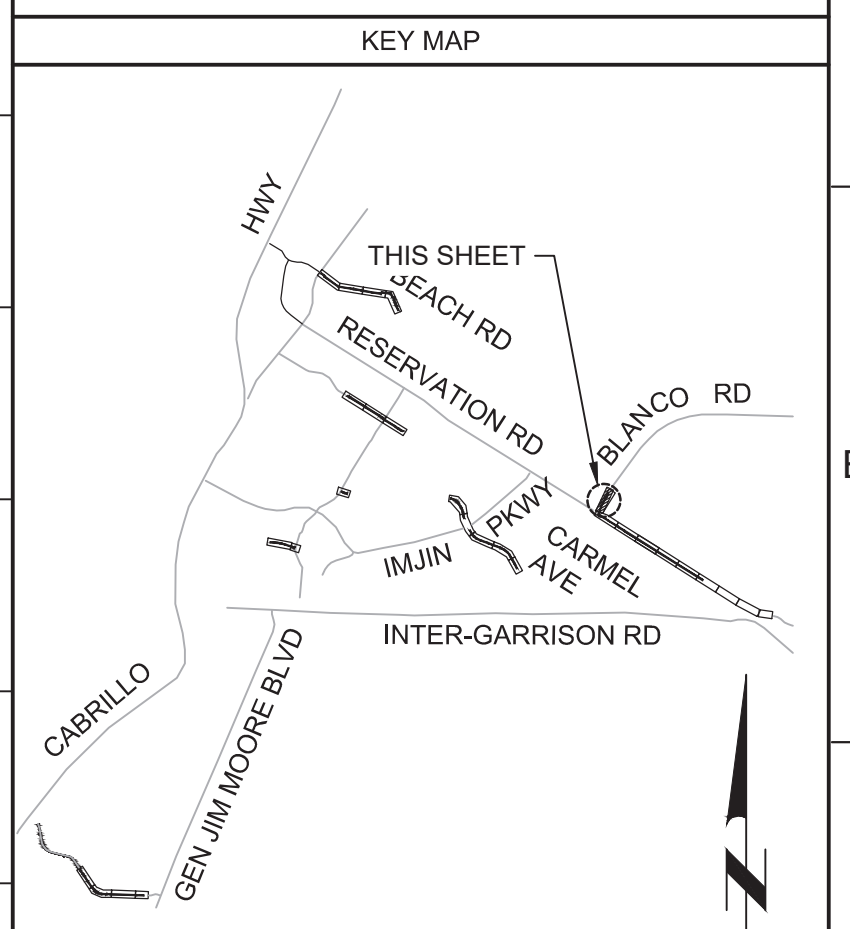
- KEY NOTES:**
- APPROXIMATE TIE-IN LOCATION. EXISTING PIPELINE IS APPROXIMATELY 6'-10" DEEP. CONTRACTOR TO POTHOLE TO VERIFY. REMOVE EXISTING PIPE CAP AND BLOW-OFF AND CONNECT TO THE EXISTING PIPE WITH 10" X 12" MECHANICAL JOINT REDUCER WITH MECHANICAL WEDGE ACTION JOINT RESTRAINTS.
 - SETTLEMENT MONITORING LOCATION. SEE SPECIFICATION FOR MONITORING REQUIREMENTS.
 - INSTALL TEMPORARY TYPE K TRAFFIC GUARDRAIL BEYOND EDGE OF PAVEMENT.
 - WORK AREA LIMITED TO UNPAVED AREA IN MONTEREY COUNTY AND 40' STRIP OF MARINA AREA.



Know what's below.
Call before you dig.



PROFILE
HORIZ SCALE: 1"=40'
VERT SCALE: 1"=8'
FILE: 7568C10C101



REV	DATE	BY	DESCRIPTION
1	11-15-19	JPM	CHANGED PER ADDENDUM NO. 1

DESIGNED JPM/KMM	
DRAWN AL/BWH	
CHECKED	
DATE OCTOBER 2019	

Digitally signed by Jonathan P. Marshall
Contact info: Carollo Engineers, Inc.
Date: 2019.11.15 13:17:26 -0800

Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT

RECYCLED WATER DISTRIBUTION MAINS

CIVIL DISTRIBUTION MAIN

BLANCO RD & RESERVATION RD

STA 10+00 TO 19+00

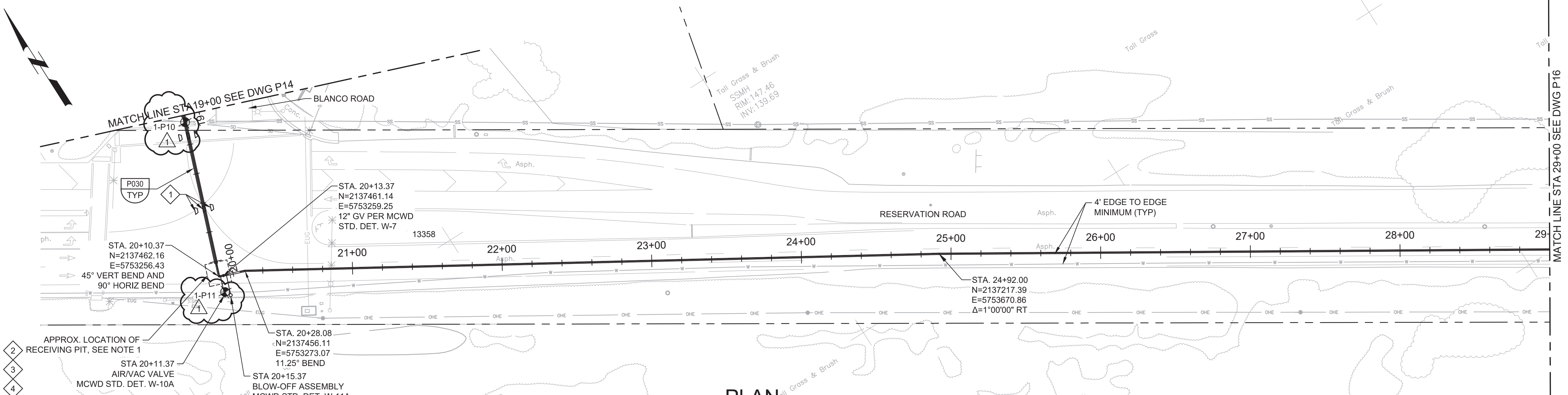
VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING	JOB NO. 7568C.10
0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	DRAWING NO. P14
	SHEET NO. 36 OF 66

11/13/2019 3:33:57 PM

FILE NAME: 7568C10P15.dwg

PROJECT NO. 7568C10

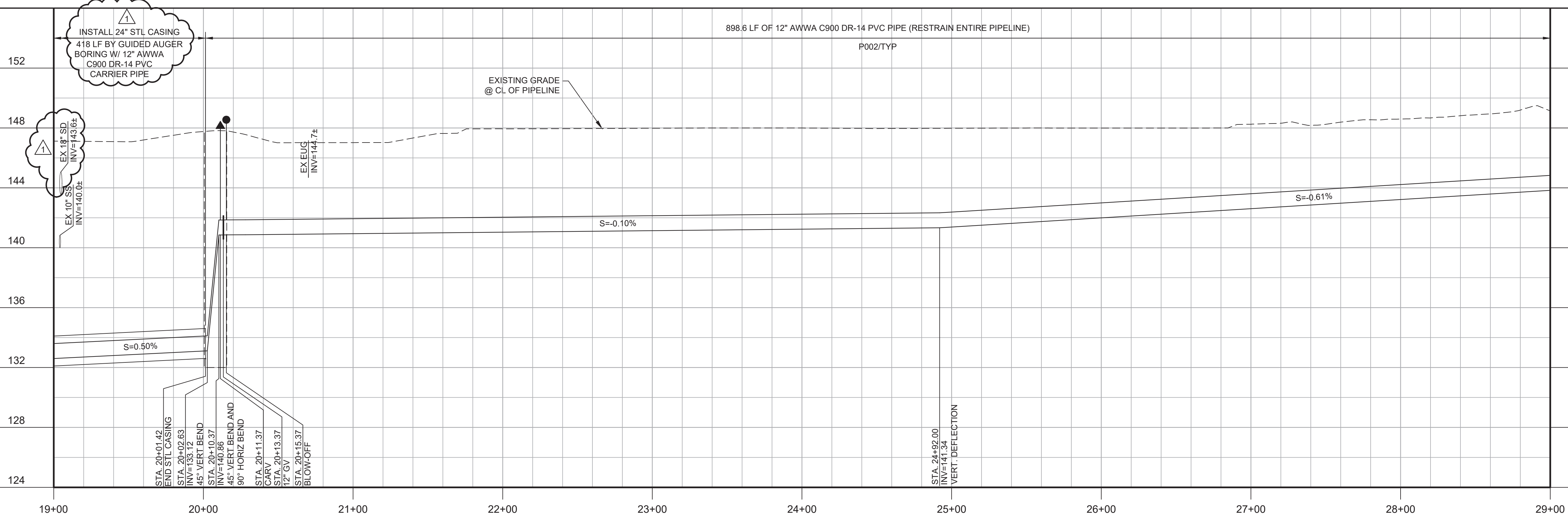
LAST SAVED BY: bhwaves



- GENERAL NOTES:**
- EXACT LOCATIONS AND DIMENSIONS OF RECEIVING PIT TO BE DETERMINED BY CONTRACTOR AND SUBMITTED TO ENGINEER FOR REVIEW. CONTRACTOR MAY PROPOSE AND ENGINEER WILL CONSIDER, AT NO COST OR TIME IMPACT, EXTENDING THE BORE AND LOCATING THE RECEIVING PIT SOUTH, BEYOND THE PAVEMENT, TO MINIMIZE THE EXTENT OF WORK IN THE STREET. THIS WOULD REQUIRE RELOCATING A COUNTY ELECTRICAL CABLE AND COUNTY APPROVAL.
 - CONSTRUCT PIPELINE WITH A MINIMUM OF 4' COVER UNLESS SPECIFICALLY CALLED OUT TO BE LESS THAN 4'.
 - REPAIR ALL DAMAGED FACILITIES, INCLUDING FENCES AND LANDSCAPING, TO THEIR ORIGINAL CONDITION.
 - CLEAR AND GRUB AS REQUIRED TO FACILITATE INSTALLATION OF PIPE AND APPURTENANCES.
 - ARBORIST SHALL PRESENT FOR ALL WORK NEAR TREES PER SPECIFICATION SECTION 01562.
 - DEFLECTIONS (CHANGES IN DIRECTION) OF PVC PIPE SHALL BE ACHIEVED BY BENDING ONE OR MORE PIPE BARRELS. DO NOT EXCEED THE ALLOWABLE JOINT OR PIPE BARREL DEFLECTION PER THE SPECIFICATIONS.
- KEY NOTES:**
- SETTLEMENT MONITORING LOCATION. SEE SPECIFICATION FOR MONITORING REQUIREMENTS.
 - INSTALL TEMPORARY TYPE K TRAFFIC GUARDRAIL AROUND RECEIVING PIT.
 - SEE SECTION 02261 FOR TIME RESTRICTIONS ON RECEIVING SHAFT CONSTRUCTION.
 - SEE SECTION 01550 FOR SPECIAL TRAFFIC CONTROL REQUIREMENTS AT INTERSECTION.



Know what's below.
Call before you dig.



KEY MAP

SCALE

HORIZONTAL
VERTICAL

KEY MAP NORTH

REV	DATE	BY	DESCRIPTION
1	11-15-19	JPM	CHANGED PER ADDENDUM NO. 1

DESIGNED JPM/KMM	
DRAWN AL/BWH	
CHECKED	
DATE OCTOBER 2019	

Digitally signed by Jonathan P. Marshall
Contact info: Carollo Engineers, Inc.
Date: 2019.10.18 13:52:06 -0700



Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT
RECYCLED WATER DISTRIBUTION MAINS
CIVIL DISTRIBUTION MAIN
**BLANCO RD & RESERVATION RD
STA 19+00 TO 29+00**

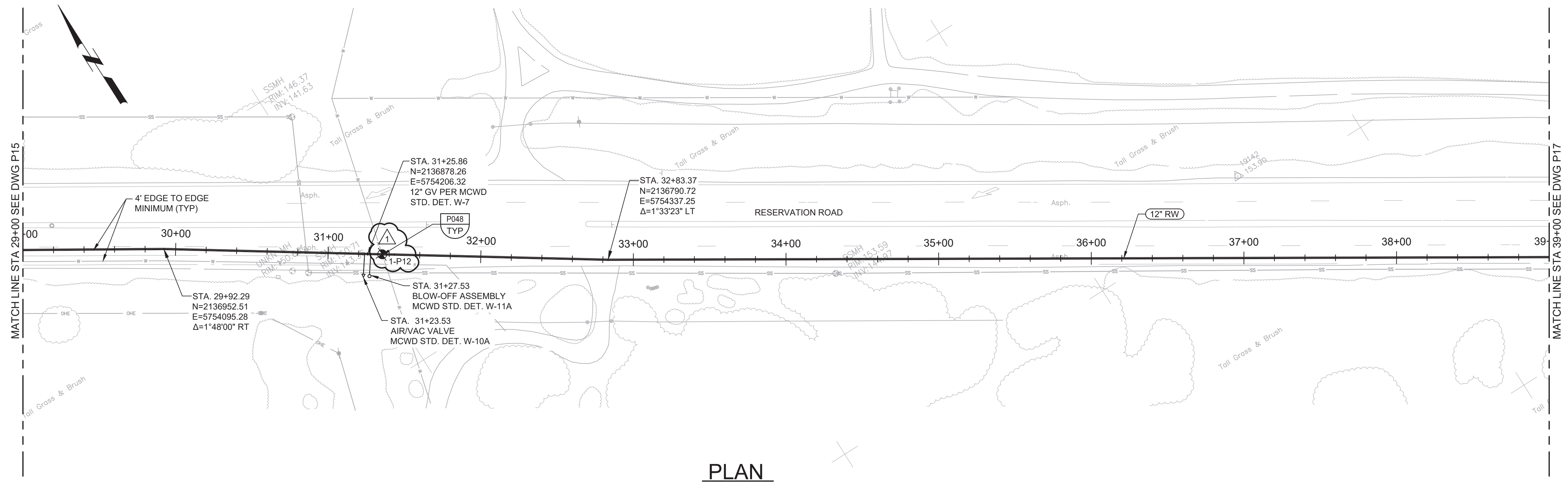
VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	JOB NO. 7568C.10 DRAWING NO. P15 SHEET NO. 37 OF 66
---	---

Plot Date: 11/13/2019 7:07:47 PM

FILE NAME: 7568C10F16.dwg

PROJECT NO. 7568C10

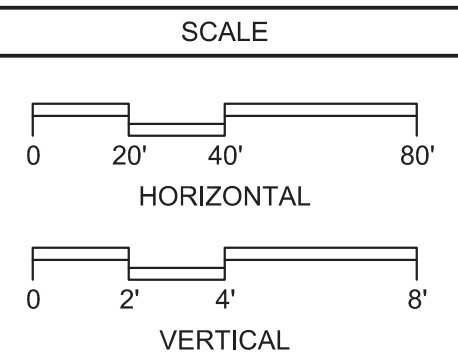
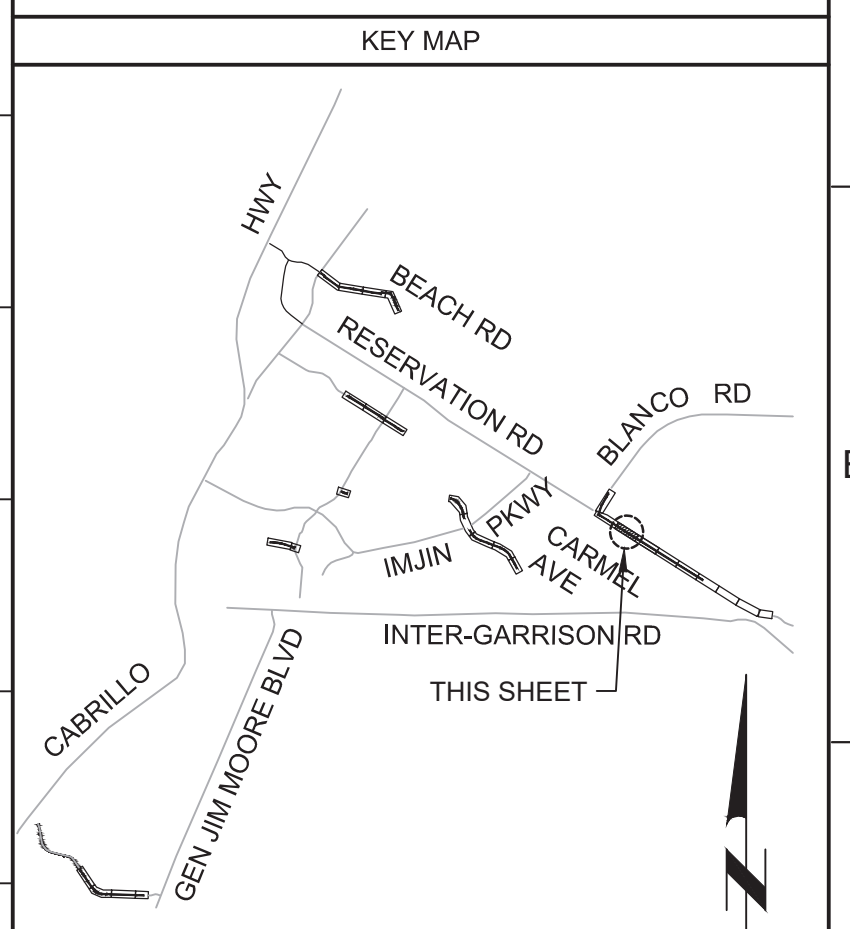
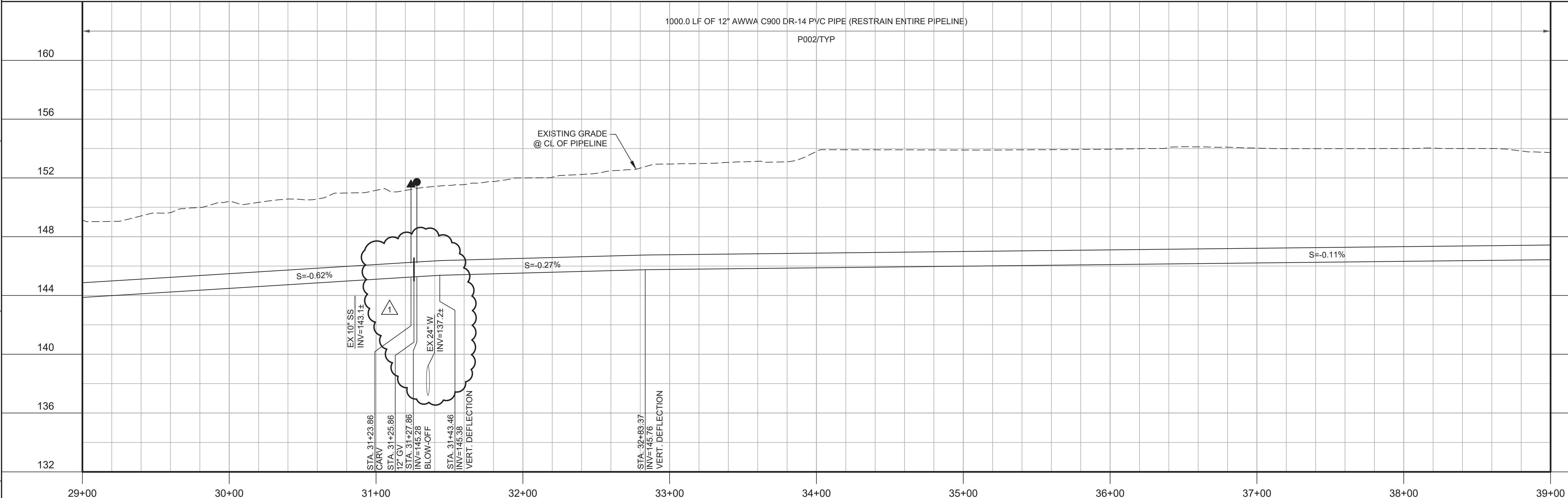
LAST SAVED BY: bhwaves



- GENERAL NOTES:**
- CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SPECIFICALLY CALLED OUT TO BE LESS THAN 4'.
 - DEFLECTIONS (CHANGES IN DIRECTION) OF PVC PIPE SHALL BE ACHIEVED BY BENDING ONE OR MORE PIPE BARRELS. DO NOT EXCEED THE ALLOWABLE JOINT OR PIPE BARREL DEFLECTION PER THE SPECIFICATIONS.



Know what's below.
Call before you dig.



REV	DATE	BY	DESCRIPTION
1	11-15-19	JPM	CHANGED PER ADDENDUM NO. 1

DESIGNED
JPM/KMM
DRAWN
AL/BWH
CHECKED

DATE
OCTOBER 2019



Digitally signed by Jonathan P. Marshall
Contact info: Carollo Engineers, Inc.
Date: 2019.11.14 13:50:09-0800



Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT
RECYCLED WATER DISTRIBUTION MAINS
CIVIL DISTRIBUTION MAIN
BLANCO RD & RESERVATION RD
STA 29+00 TO 39+00

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1" 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

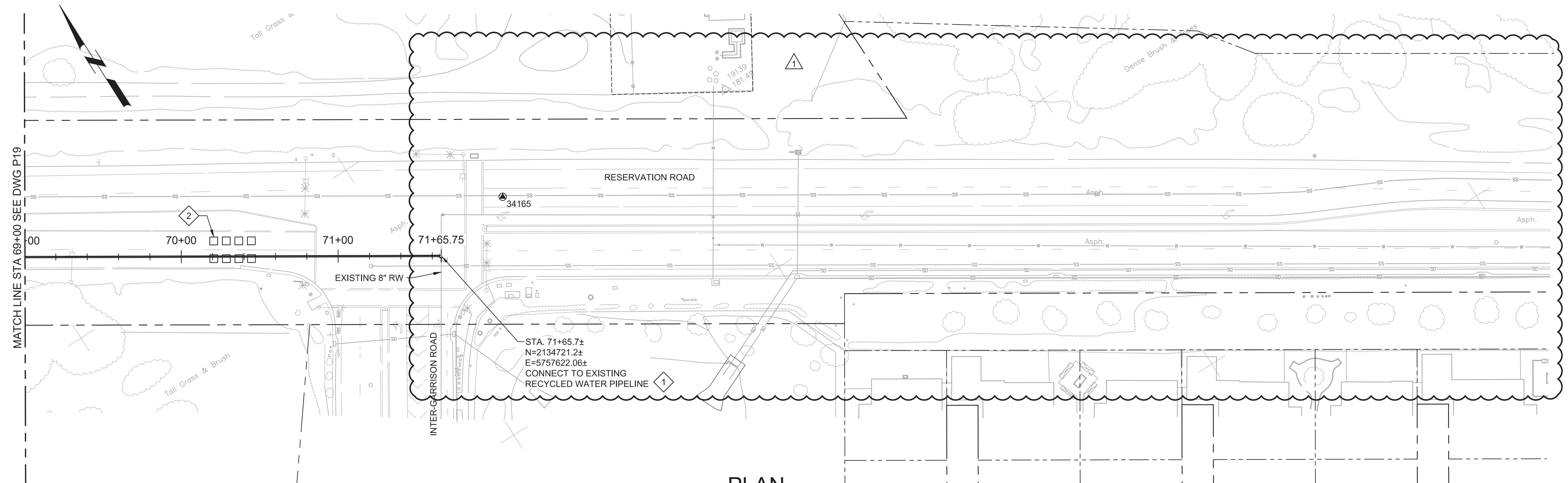
JOB NO. 7568C.10
DRAWING NO. P16
SHEET NO. 38 OF 66

Plot Date: 11/13/2019 7:46:30 PM

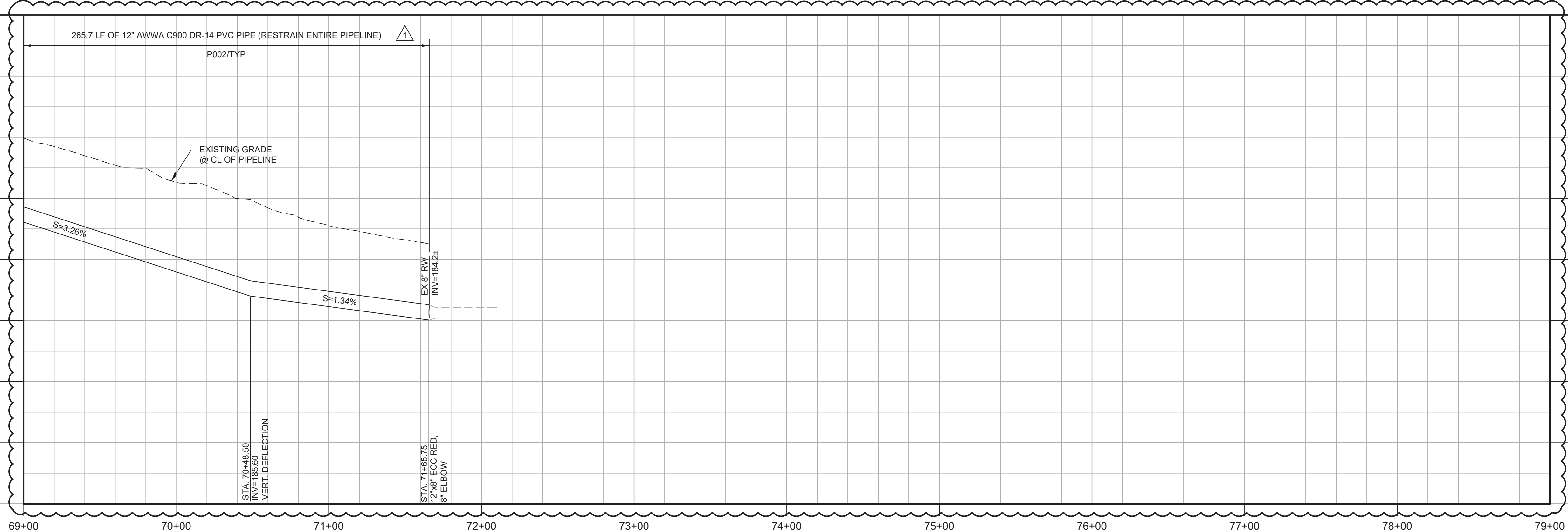
FILE NAME: 7568C10P20.dwg

PROJECT NO. 7568C10

LAST SAVED BY: bhwaves



PLAN
SCALE: 1"=40'
FILE: 7568C10C101



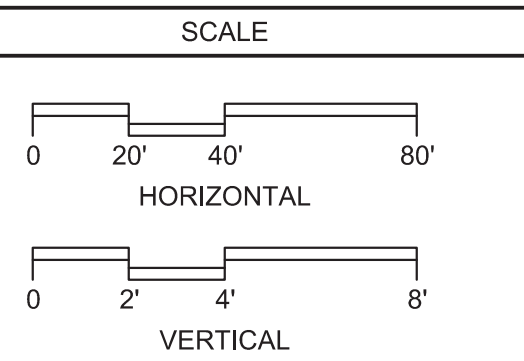
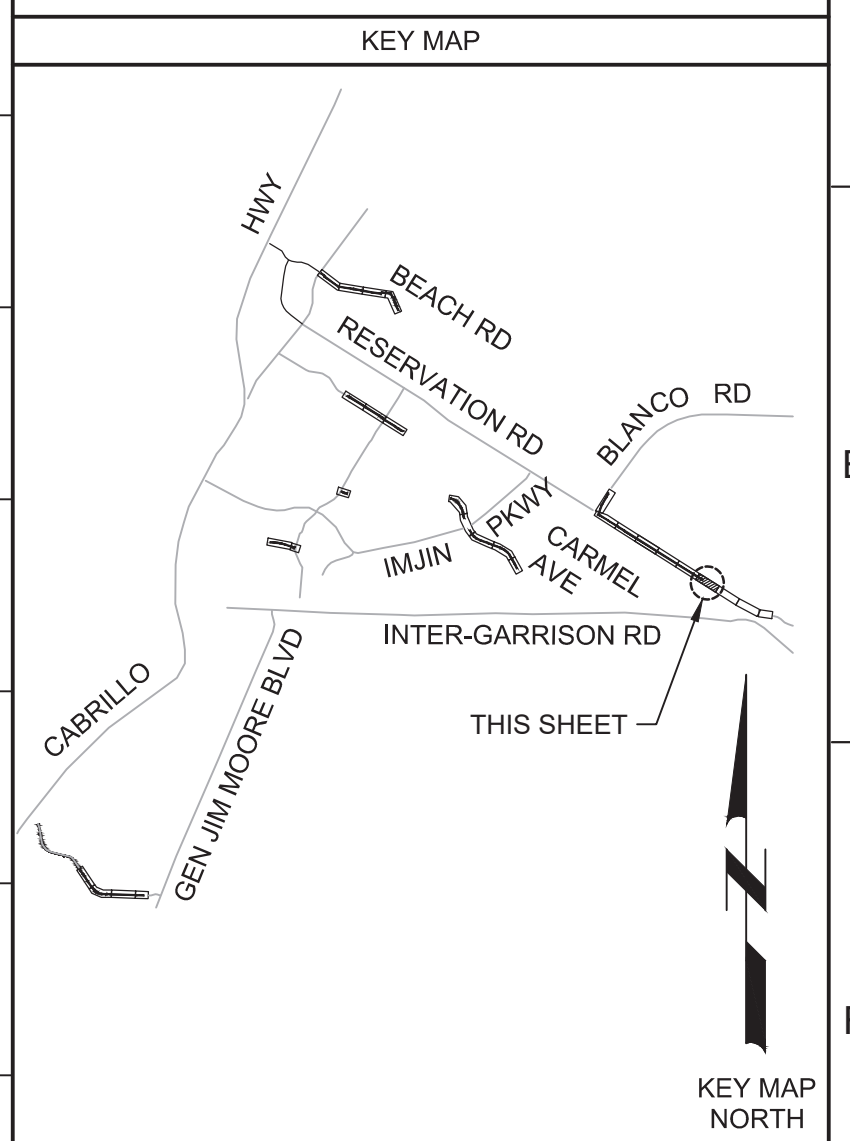
PROFILE
HORIZ SCALE: 1"=40'
VERT SCALE: 1"=4'
FILE: 7568C10C101

- GENERAL NOTES:**
- CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SPECIFICALLY CALLED OUT TO BE LESS THAN 4'.
 - DEFLECTIONS (CHANGES IN DIRECTION) OF PVC PIPE SHALL BE ACHIEVED BY BENDING ONE OR MORE PIPE BARRELS. DO NOT EXCEED THE ALLOWABLE JOINT OR PIPE BARREL DEFLECTION PER THE SPECIFICATIONS.

- KEY NOTES:**
- APPROXIMATE TIE-IN LOCATION. EXISTING PIPELINE IS APPROXIMATELY 4 FT DEEP. CONTRACTOR TO POTHOLE TO VERIFY. 12" FLANGE X MJ ADAPTOR, 8" X 12" REDUCER (FLANGE X FLANGE), 8" ELBOW (MJ X FLANGE).
 - SEE SECTION 01140 FOR TRAFFIC SIGNAL REPAIRS.



Know what's below.
Call before you dig.



REV	DATE	BY	DESCRIPTION
1	11-15-19	JPM	CHANGED PER ADDENDUM NO. 1

DESIGNED JPM/KMM	
DRAWN	
CHECKED AL/BWH	
DATE OCTOBER 2019	

Digitally signed by Jonathan P. Marshall
Contact info: Carollo Engineers, Inc.
Date: 2019.11.15 13:52:39 -0800



Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT
RECYCLED WATER DISTRIBUTION MAINS
CIVIL DISTRIBUTION MAIN
BLANCO RD & RESERVATION RD
STA 69+00 TO 79+00

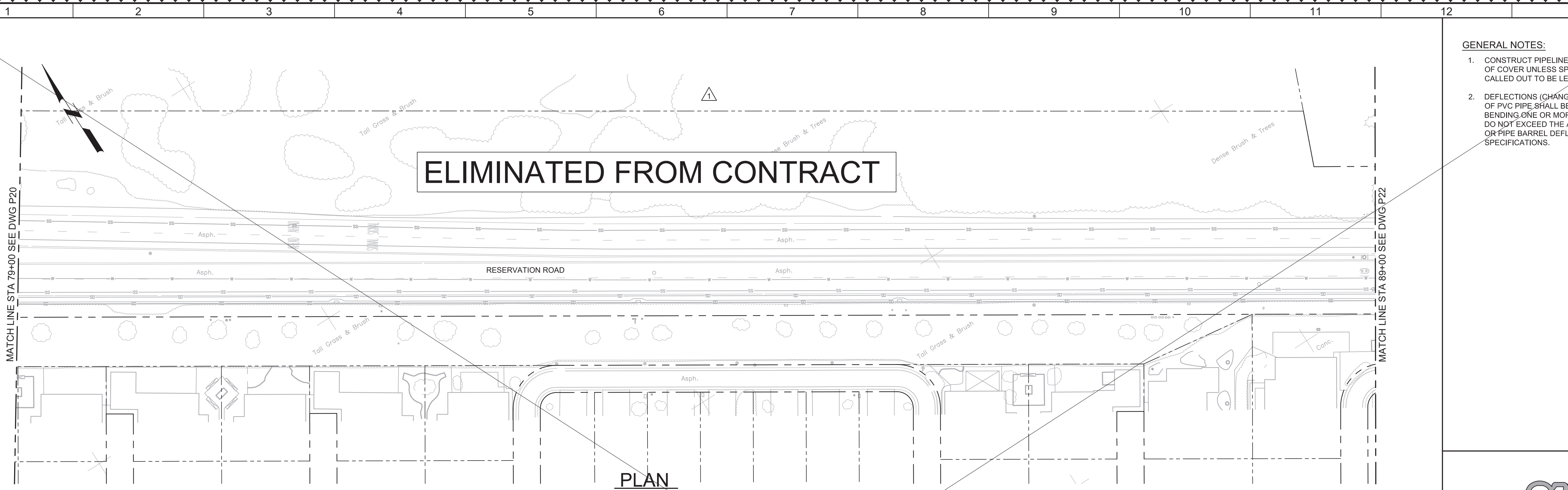
VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0 1"	JOB NO. 7568C.10
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	DRAWING NO. P20
	SHEET NO. 42 OF 66

Plot Date: 11/13/2019 8:03:19 PM

FILE NAME: 7568C10P21.dwg

PROJECT NO. 7568C10

LAST SAVED BY: lbhaves



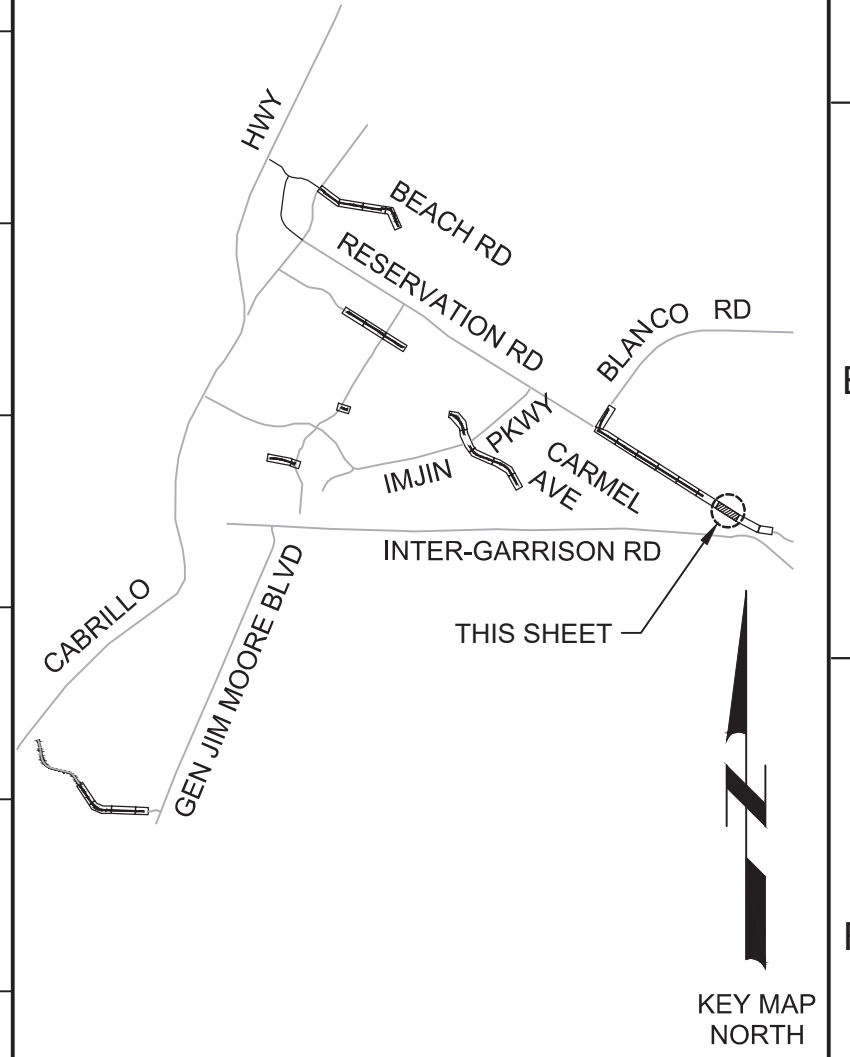
PLAN
 SCALE: 1"=40'
 FILE: 7568C10C101

- GENERAL NOTES:**
1. CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SPECIFICALLY CALLED OUT TO BE LESS THAN 4'.
 2. DEFLECTIONS (CHANGES IN DIRECTION) OF PVC PIPE SHALL BE ACHIEVED BY BENDING ONE OR MORE PIPE BARRELS. DO NOT EXCEED THE ALLOWABLE JOINT OR PIPE BARREL DEFLECTION PER THE SPECIFICATIONS.

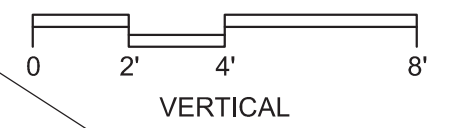
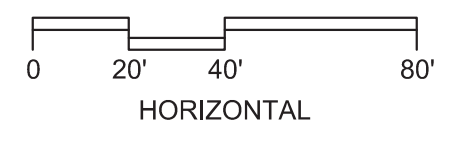


Know what's below.
 Call before you dig.

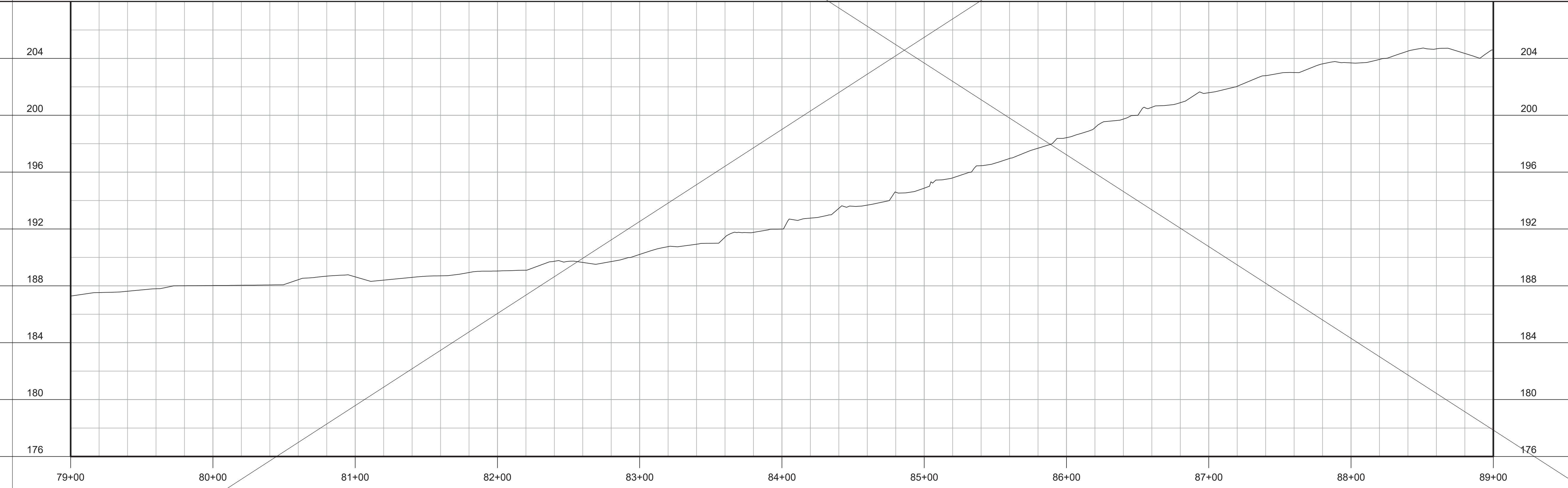
KEY MAP



SCALE



PROFILE
 HORIZ SCALE: 1"=40'
 VERT SCALE: 1"=4'
 FILE: 7568C10C101



REV	DATE	BY	DESCRIPTION
1	11-15-19	JPM	CHANGED PER ADDENDUM NO. 1

DESIGNED	JPM/KMM
DRAWN	AL/BWH
CHECKED	
DATE	OCTOBER 2019



Digitally signed by Jonathan P. Marshall
 Contact info: Carollo Engineers, Inc.
 Date: 2019.11.15 13:17:29 -0800



Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT
RECYCLED WATER DISTRIBUTION MAINS
 CIVIL DISTRIBUTION MAIN
BLANCO RD & RESERVATION RD
 STA 79+00 TO 89+00

VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWING
 0 1" 1"
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO.
7568C.10
DRAWING NO.
P21
SHEET NO.
43 OF 66

Plot Date: 11/13/2019 8:15:14 PM

FILE NAME: 7568C10P22.dwg

PROJECT NO.: 7568C10

LAST SAVED BY: lbhaves

ELIMINATED FROM CONTRACT

MATCH LINE STA 89+00 SEE DWG P21

MATCH LINE STA 99+00 SEE DWG P23

RESERVATION ROAD

PLAN
SCALE: 1"=40'
FILE: 7568C10C101

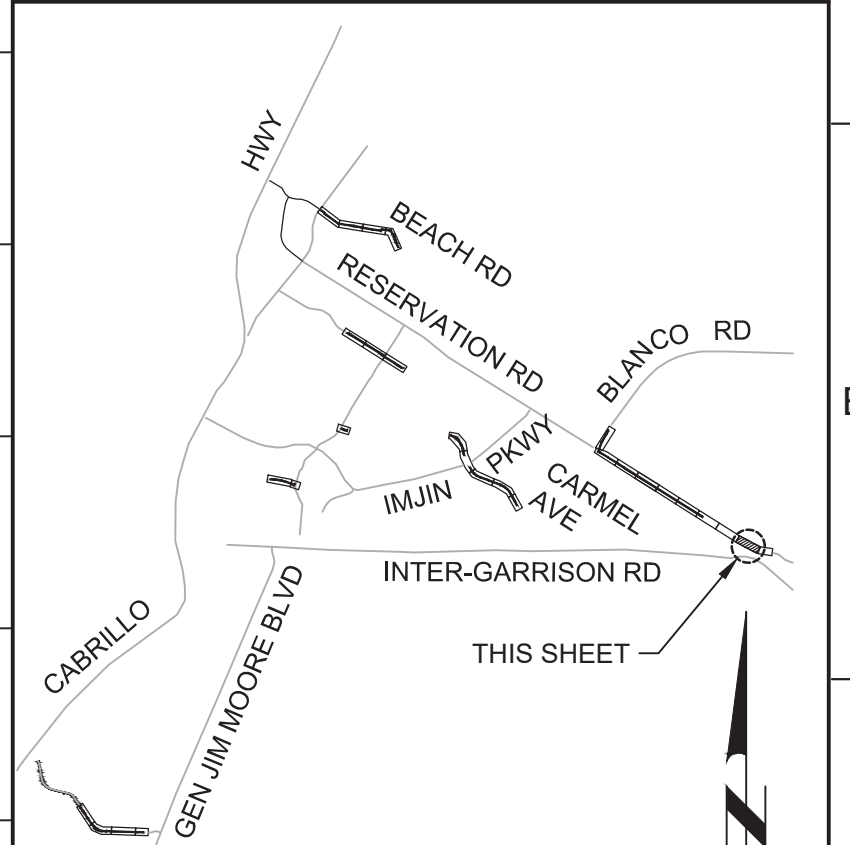
PROFILE
HORIZ SCALE: 1"=40'
VERT SCALE: 1"=8'
FILE: 7568C10C101

- GENERAL NOTES:**
1. CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SPECIFICALLY CALLED OUT TO BE LESS THAN 4'.
 2. DEFLECTIONS (CHANGES IN DIRECTION) OF PVC PIPE SHALL BE ACHIEVED BY BENDING ONE OR MORE PIPE BARRELS. DO NOT EXCEED THE ALLOWABLE JOINT OR PIPE BARREL DEFLECTION PER THE SPECIFICATIONS.



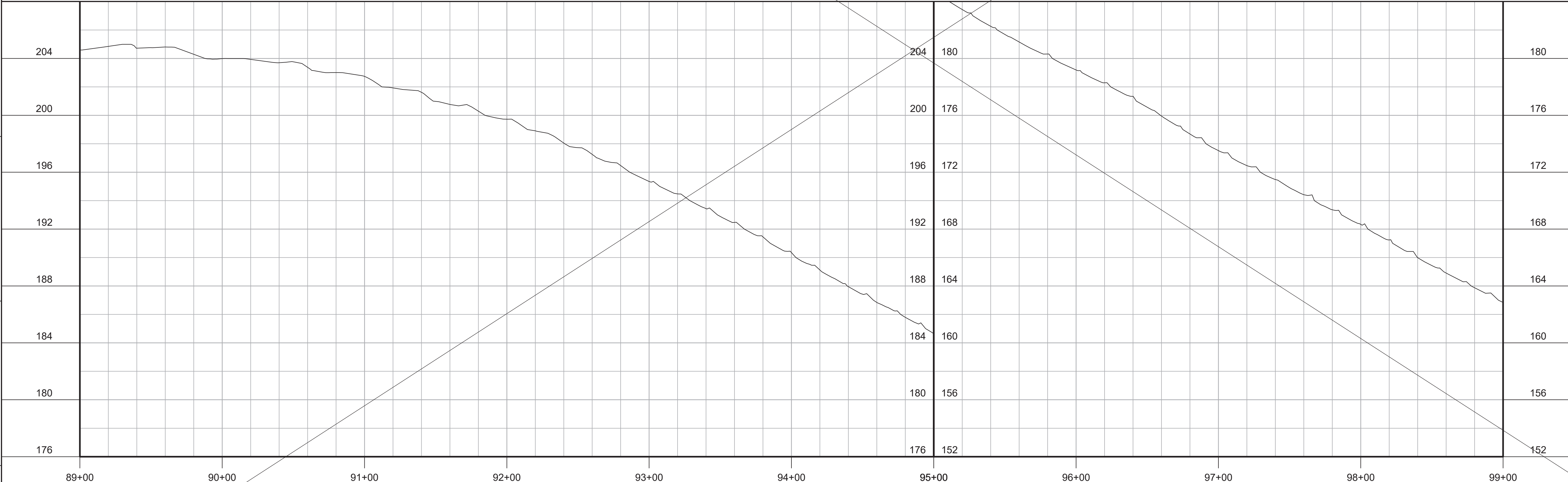
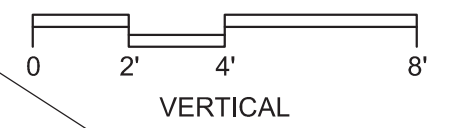
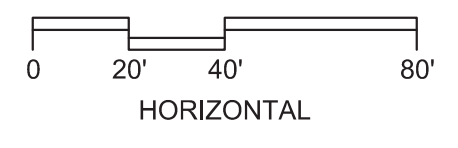
Know what's below.
Call before you dig.

KEY MAP



KEY MAP NORTH

SCALE



REV	DATE	BY	DESCRIPTION
1	11-15-19	JPM	CHANGED PER ADDENDUM NO. 1

DESIGNED
JPM/KMM
DRAWN
AL/BWH
CHECKED

DATE
OCTOBER 2019



Digitally signed by Jonathan P. Marshall
Contact info: Carollo Engineers, Inc.
Date: 2019.11.15 13:00:00 -0800



Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT

RECYCLED WATER DISTRIBUTION MAINS

CIVIL DISTRIBUTION MAIN

BLANCO RD & RESERVATION RD

STA 89+00 TO 99+00

VERIFY SCALES

BAR IS ONE INCH ON ORIGINAL DRAWINGS

0 1"

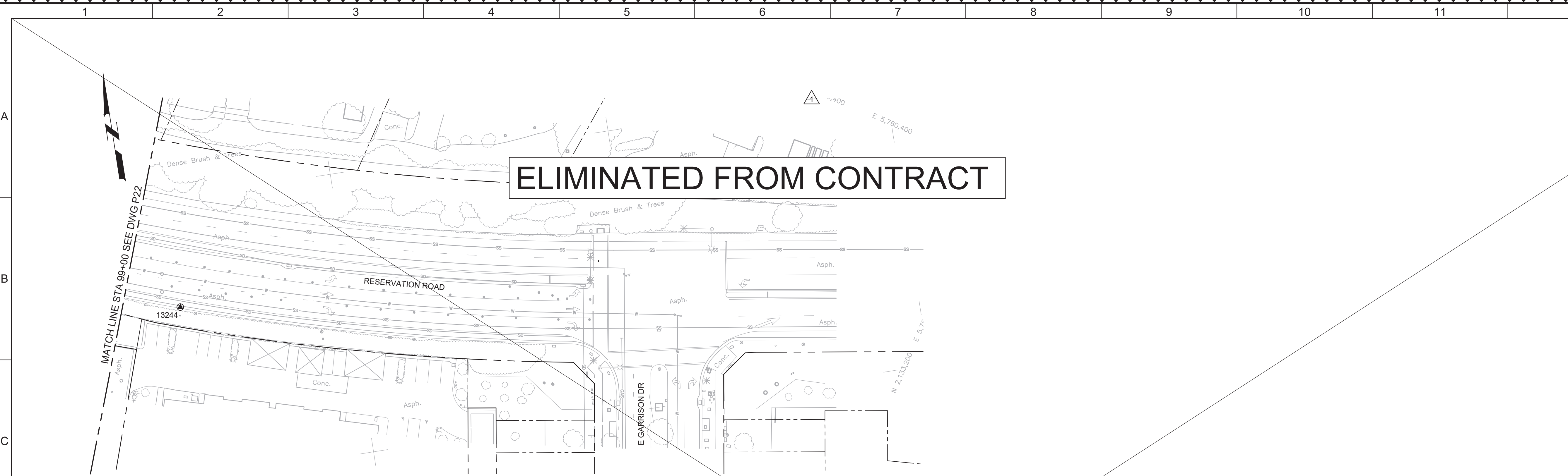
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO.
7568C.10

DRAWING NO.
P22

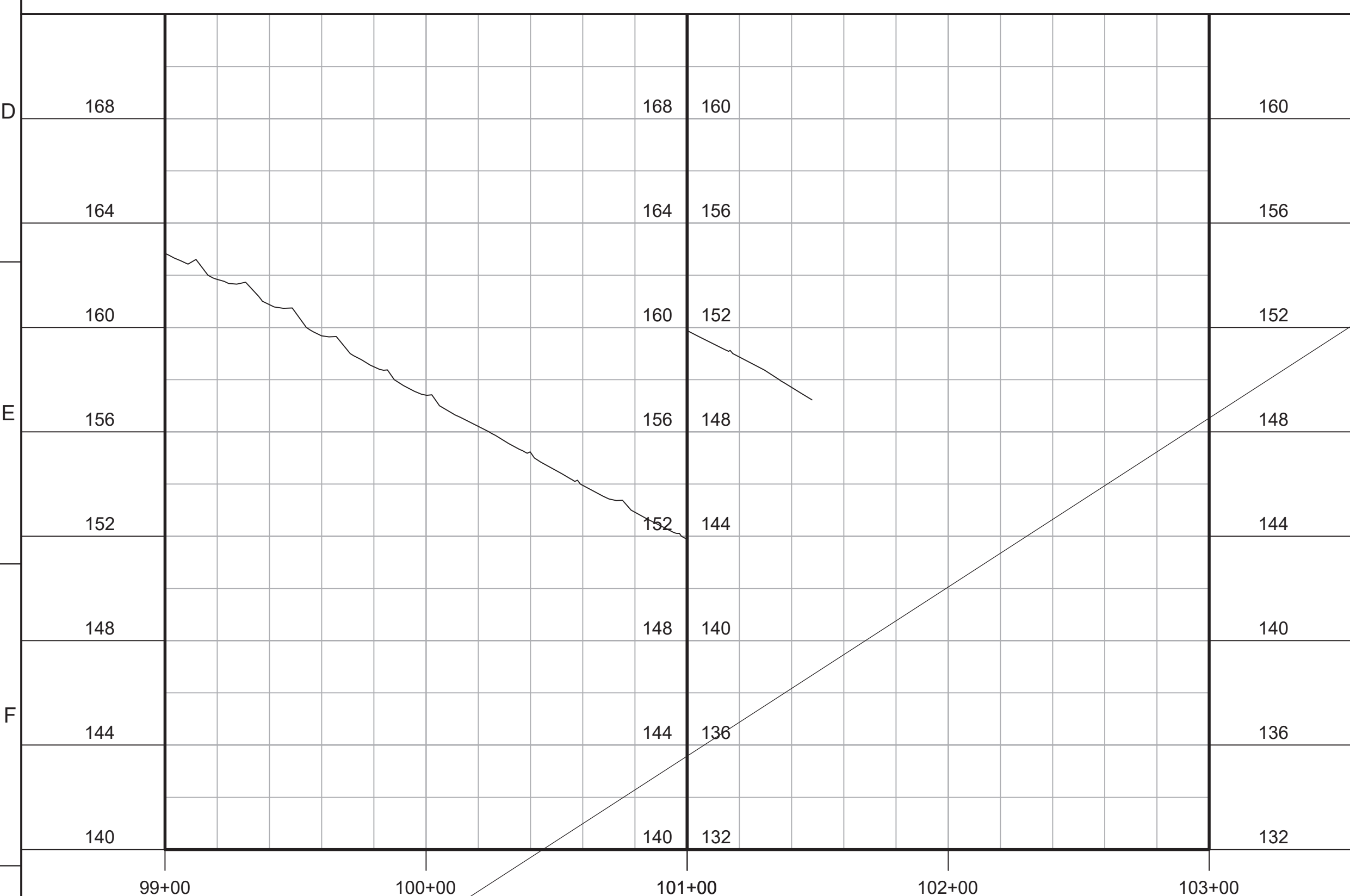
SHEET NO.
44 OF 66

Plot Date: 11/13/2019 8:24:02 PM
 FILE NAME: 7568C10P23.dwg
 PROJECT NO. 7568C10
 LAST SAVED BY: lbraves



ELIMINATED FROM CONTRACT

PLAN
 SCALE: 1"=40'
 FILE: 7568C10C101

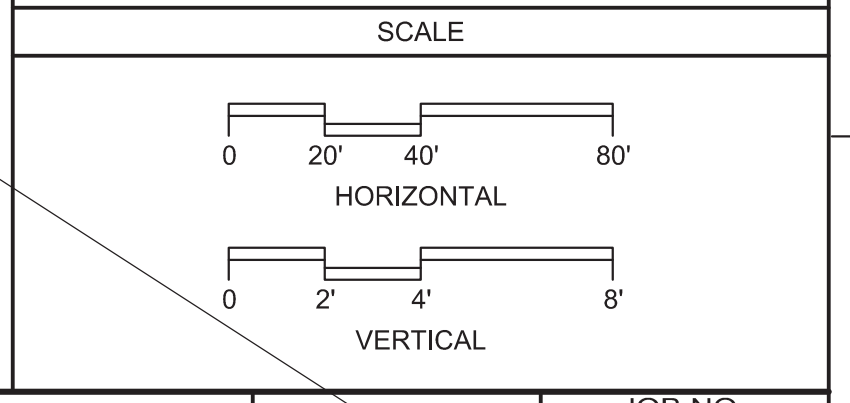
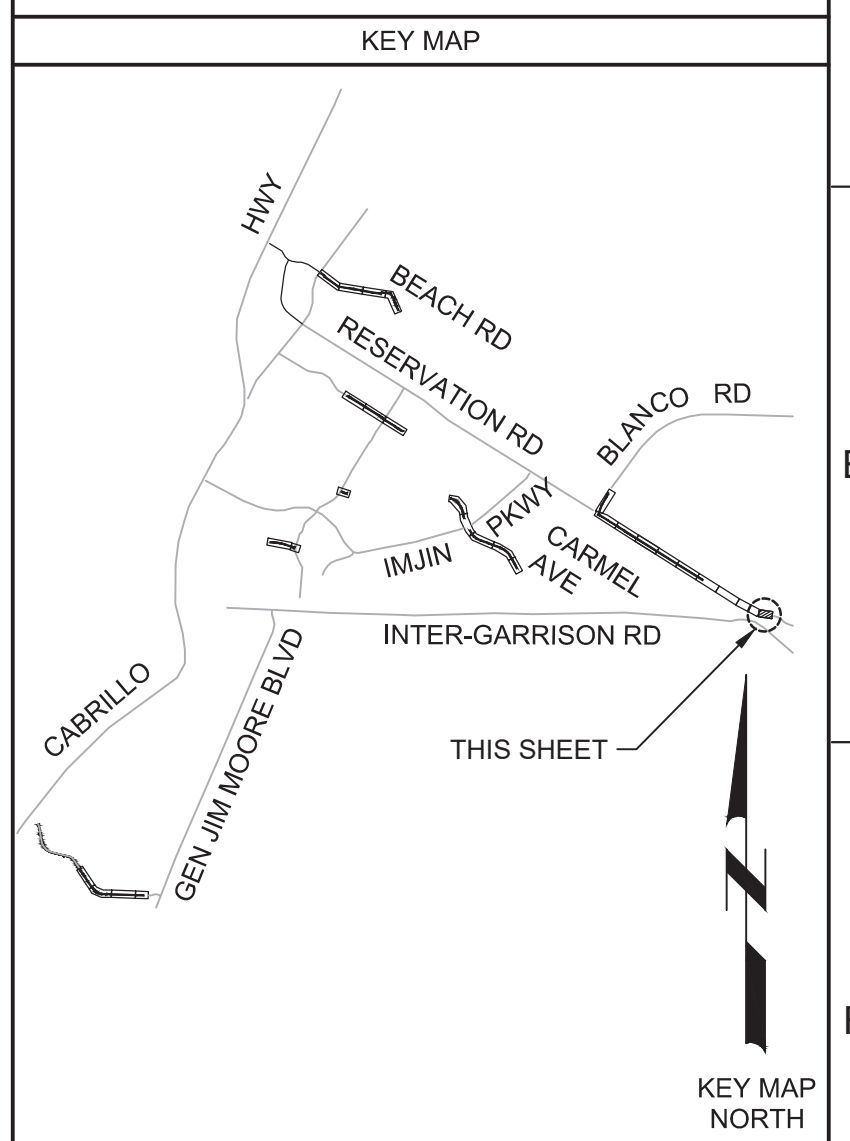


PROFILE
 HORIZ SCALE: 1"=40'
 VERT SCALE: 1"=4'
 FILE: 7568C10C101

- GENERAL NOTES:**
- CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SPECIFICALLY CALLED OUT TO BE LESS THAN 4'.
 - DEFLECTIONS (CHANGES IN DIRECTION) OF PVC PIPE SHALL BE ACHIEVED BY BENDING ONE OR MORE PIPE BARRELS. DO NOT EXCEED THE ALLOWABLE JOINT OR PIPE BARREL DEFLECTION PER THE SPECIFICATIONS.
- KEY NOTES:**
- APPROXIMATE TIE-IN LOCATION. EXISTING PIPELINE IS APPROXIMATELY 4 FT DEEP. CONTRACTOR TO POT HOLE TO VERIFY. REMOVE EXISTING PIPE CAP AND CONNECT TO THE EXISTING PIPE AND BLOW-OFF WITH A 90° ELBOW AND MECHANICAL WEDGE ACTION RESTRAINTS.



**Know what's below.
 Call before you dig.**



REV	DATE	BY	DESCRIPTION
1	11-15-19	JPM	CHANGED PER ADDENDUM NO. 1

DESIGNED
JPM/KMM
DRAWN

CHECKED

DATE
OCTOBER 2019



Digitally signed by Jonathan P. Marshall
 DN: cn=Jonathan P. Marshall, o=Carollo Engineering, Inc., ou=Carollo Engineering, Inc., email=jmarshall@carollo.com, c=US



**Marina
 Coast
 Water
 District**

REGIONAL URBAN WATER AUGMENTATION PROJECT

RECYCLED WATER DISTRIBUTION MAINS

CIVIL DISTRIBUTION MAIN

**BLANCO RD & RESERVATION RD
 STA 99+00 TO 101+47.83**

VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWINGS

0 1" 1"

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO.
7568C.10

DRAWING NO.
P23

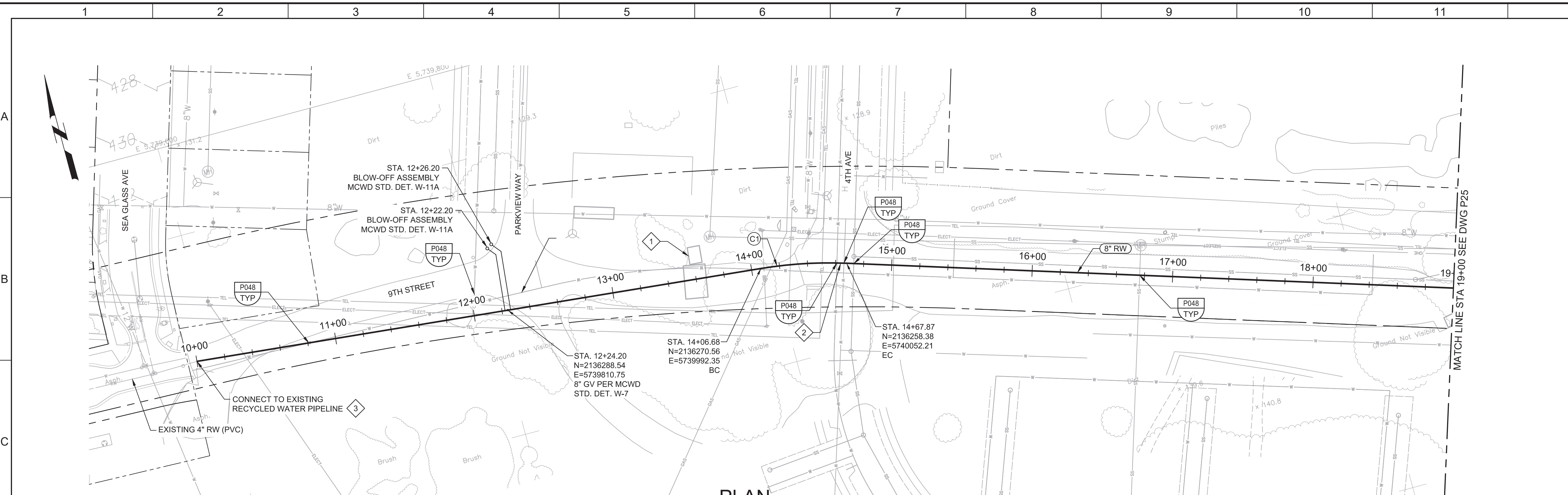
SHEET NO.
45 OF 66

Plot Date: 11/15/2019 9:22:14 AM

FILE NAME: 7568C10P24.dwg

PROJECT NO. 7568C10

LAST SAVED BY: bhawes



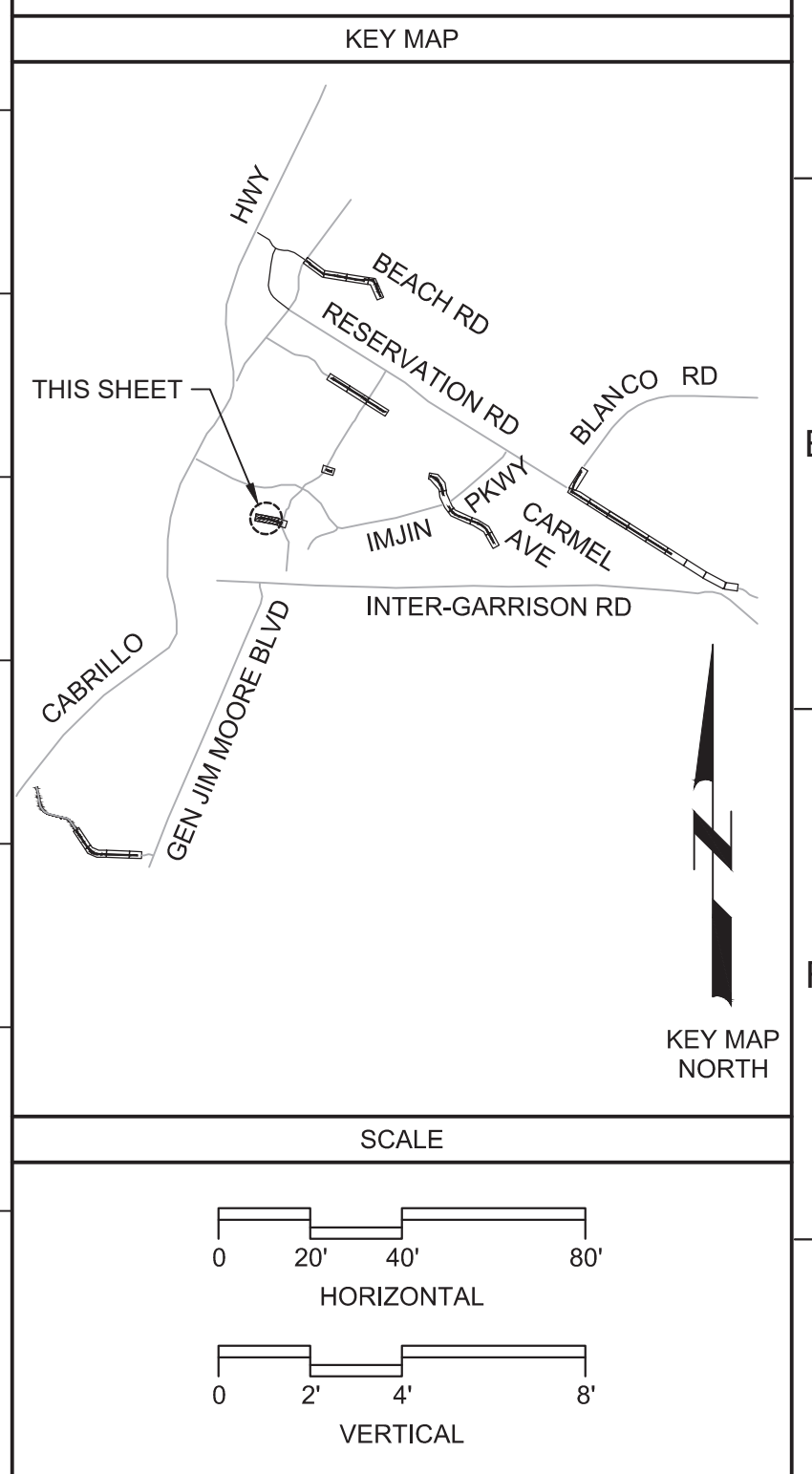
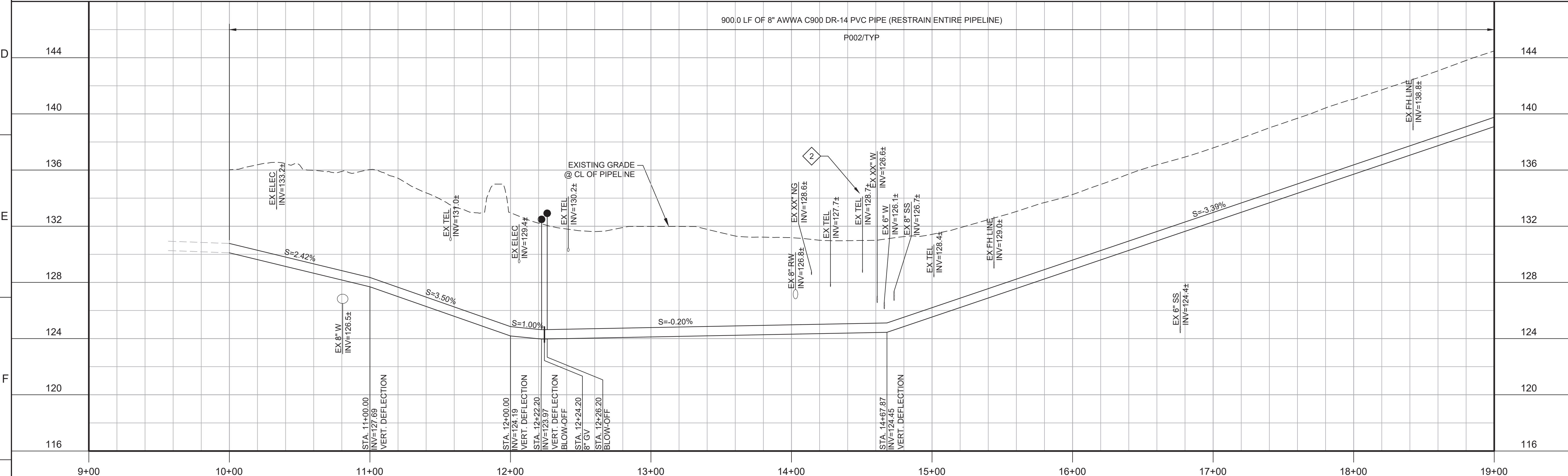
- GENERAL NOTES:**
- CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SPECIFICALLY CALLED OUT TO BE LESS THAN 4'.
 - DEFLECTIONS (CHANGES IN DIRECTION) OF PVC PIPE SHALL BE ACHIEVED BY BENDING ONE OR MORE PIPE BARRELS. DO NOT EXCEED THE ALLOWABLE JOINT OR PIPE BARREL DEFLECTION PER THE SPECIFICATIONS.

- KEY NOTES:**
- COORDINATE WITH RESIDENTIAL CONTRACTOR FOR TEMPORARY RELOCATION OF STORMWATER POLLUTION PREVENTION CONSTRUCTION ENTRANCE. CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH TEMPORARY RELOCATION DURING CONSTRUCTION AND PLACING OF EQUIPMENT BACK TO ITS ORIGINAL LOCATION AFTER CONSTRUCTION IS COMPLETE.
 - CONTRACTOR MAY PROPOSE TRENCHLESS INSTALLATION SIMILAR TO TRENCHLESS CONSTRUCTION AT BLANCO ROAD AND RESERVATION ROAD INTERSECTION AT NO ADDITIONAL COST OR TIME IMPACT TO THE OWNER.
 - APPROXIMATE TIE-IN LOCATION. EXISTING PIPELINE IS APPROXIMATELY 4 FT DEEP. CONTRACTOR TO POTHOLE TO VERIFY. REMOVE EXISTING PIPE CAP AND CONNECT TO THE EXISTING PIPE WITH A 4" x 8" MECHANICAL JOINT REDUCER WITH MECHANICAL WEDGE ACTION JOINT RESTRAINTS.

CURVE TABLE				
NO.(XX)	LENGTH	RADIUS	DELTA	TANGENT
C1	61.20'	300.00'	11°41'15"	30.70'



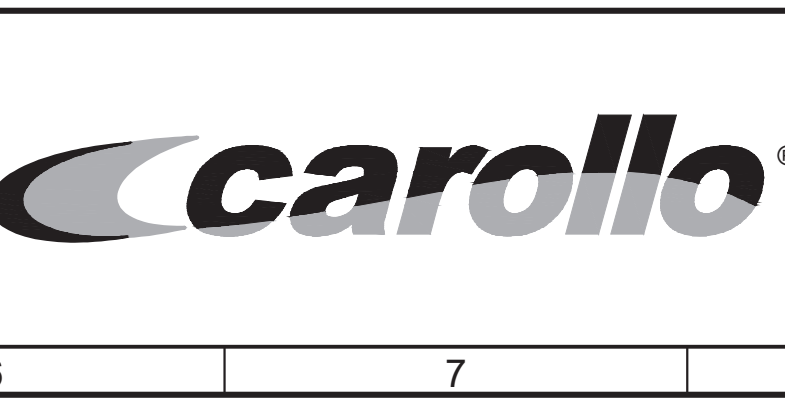
Know what's below.
Call before you dig.



REV	DATE	BY	DESCRIPTION
1	11-15-19	JPM	CHANGED PER ADDENDUM NO. 1

DESIGNED JPM/KMM	
DRAWN AL/BWH	
CHECKED	
DATE OCTOBER 2019	

Digitally signed by Jonathan P. Marshall
Contact info: Carollo Engineers, Inc.
Date: 2019.11.15 13:50:29 -0800



REGIONAL URBAN WATER AUGMENTATION PROJECT

RECYCLED WATER DISTRIBUTION MAINS

CIVIL DISTRIBUTION MAIN

9TH STREET
STA 10+00 TO 19+00

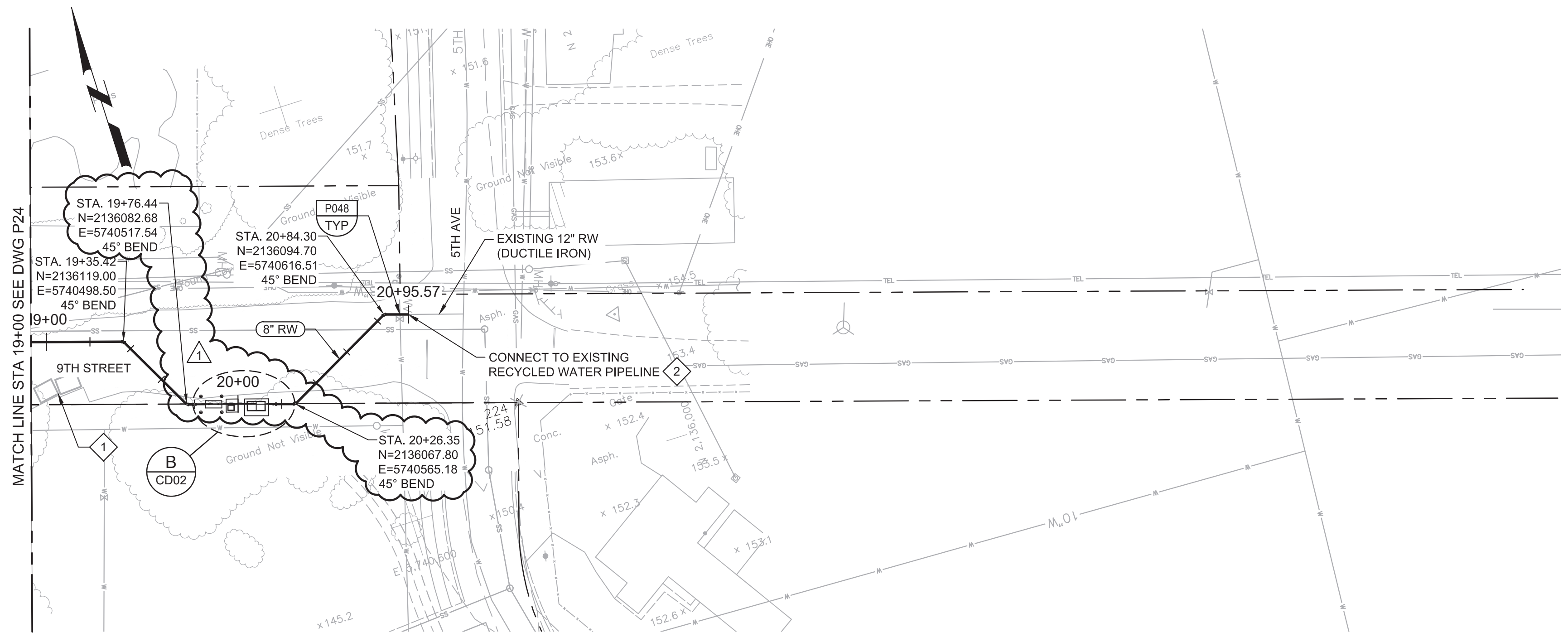
VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING	JOB NO. 7568C.10
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	DRAWING NO. P24
	SHEET NO. 46 OF 66

Plot Date: 11/13/2019 8:32:18 PM

FILE NAME: 7568C10P25.dwg

PROJECT NO. 7568C10

LAST SAVED BY: bhwaves



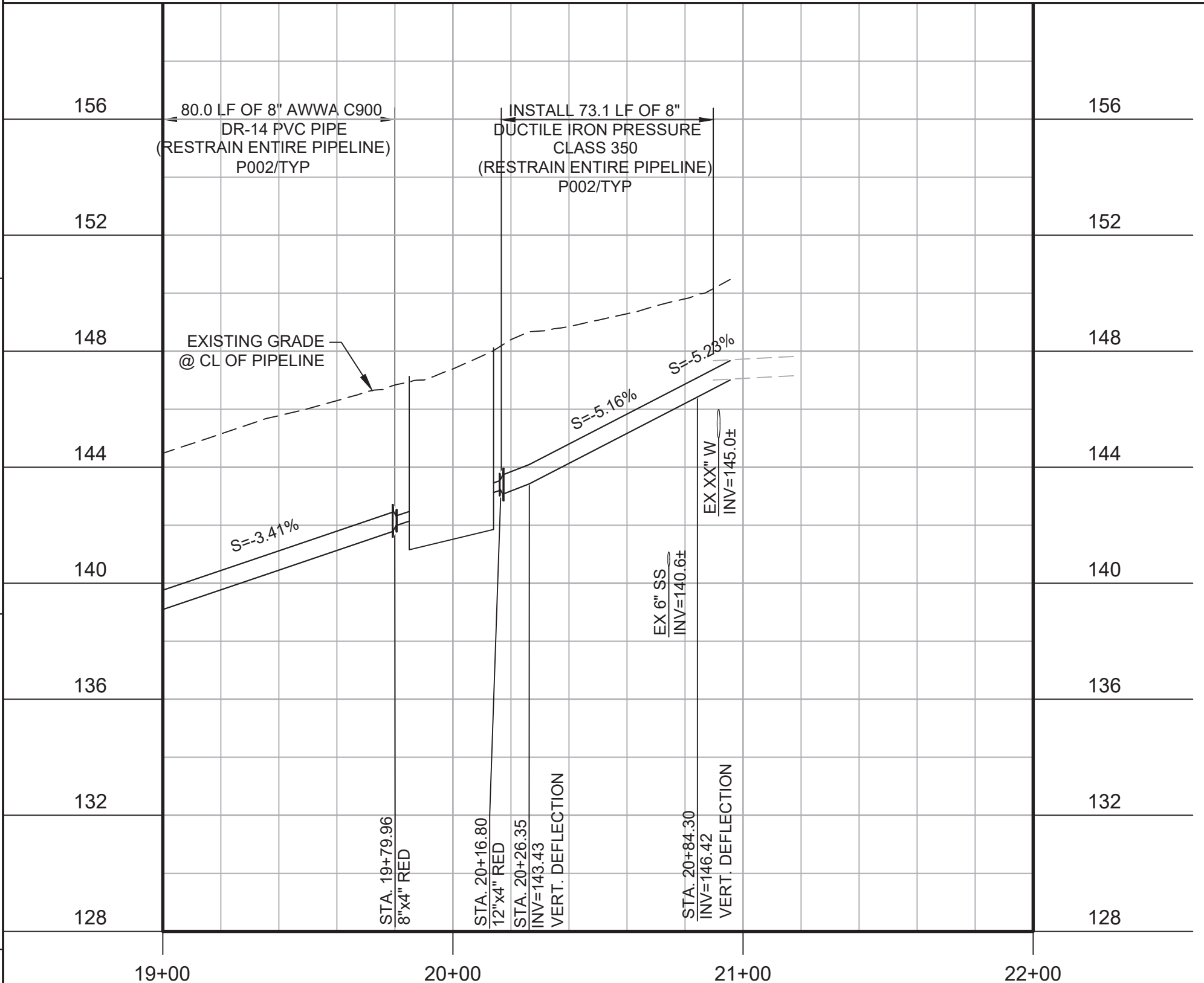
PLAN
 SCALE: 1"=40'
 FILE: 7568C10C101

- GENERAL NOTES:**
- CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SPECIFICALLY CALLED OUT TO BE LESS THAN 4'.
 - REPAIR ALL DAMAGED FACILITIES, INCLUDING FENCES AND LANDSCAPING, TO THEIR ORIGINAL CONDITION.
 - CLEAR AND GRUB AS REQUIRED TO FACILITATE INSTALLATION OF PIPE AND APPURTENANCES.
 - ARBORIST SHALL BE PRESENT FOR ALL WORK NEAR TREES PER SPECIFICATION SECTION 01562.
 - DEFLECTIONS (CHANGES IN DIRECTION) OF PVC PIPE SHALL BE ACHIEVED BY BENDING ONE OR MORE PIPE BARRELS. DO NOT EXCEED THE ALLOWABLE JOINT OR PIPE BARREL DEFLECTION PER THE SPECIFICATIONS.

- KEY NOTES:**
- COORDINATE WITH RESIDENTIAL CONTRACTOR FOR TEMPORARY RELOCATION OF STORMWATER POLLUTION PREVENTION CONSTRUCTION ENTRANCE.
 - APPROXIMATE TIE-IN LOCATION. EXISTING PIPELINE IS APPROXIMATELY 4 FT DEEP. CONTRACTOR TO POTHOLE TO VERIFY. REMOVE EXISTING PIPE CAP AND CONNECT TO THE EXISTING PIPE WITH AN 8" x 12" MECHANICAL JOINT REDUCER WITH MECHANICAL WEDGE ACTION RESTRAINTS.



Know what's below.
 Call before you dig.



PROFILE
 HORIZ SCALE: 1"=40'
 VERT SCALE: 1"=4'
 FILE: 7568C10C101

KEY MAP

SCALE

REV	DATE	BY	DESCRIPTION
1	11-15-19	JPM	CHANGED PER ADDENDUM NO. 1

DESIGNED	JPM/KMM
DRAWN	AL/BWH
CHECKED	
DATE	OCTOBER 2019



Digitally signed by Jonathan P. Marshall
 DN: cn=Jonathan P. Marshall, o=Carollo Engineering, Inc., ou=Carollo Engineering, Inc., email=jmarshall@carollo.com, c=US



Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT
 RECYCLED WATER DISTRIBUTION MAINS
 CIVIL DISTRIBUTION MAIN
 9TH STREET
 STA 19+00 TO 20+89.77

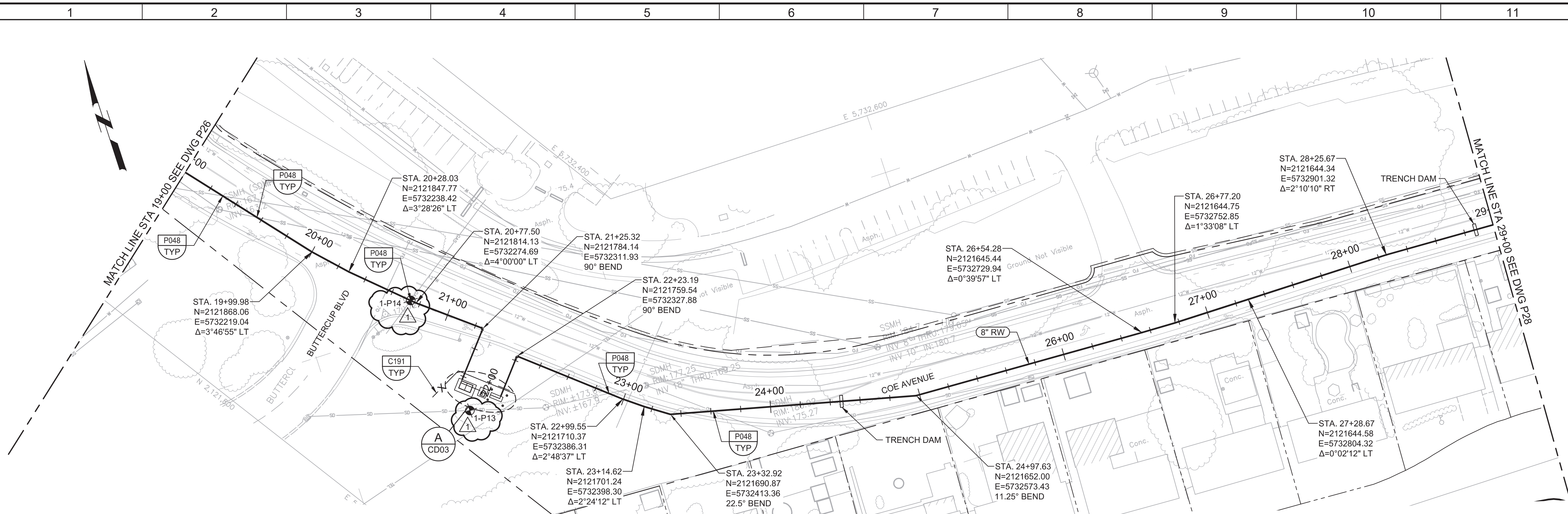
VERIFY SCALES	JOB NO. 7568C.10
BAR IS ONE INCH ON ORIGINAL DRAWING	DRAWING NO. P25
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	SHEET NO. 47 OF 66

Plot Date: 11/13/2019 8:39:36 PM

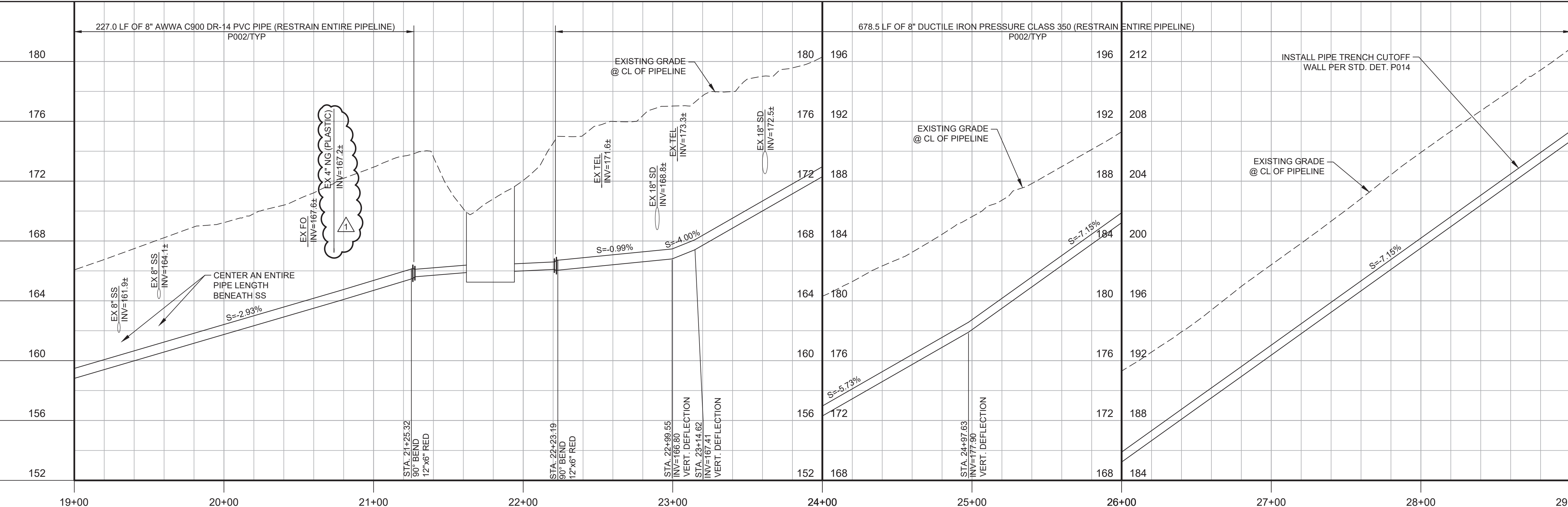
FILE NAME: 7568C10P27.dwg

PROJECT NO. 7568C10

LAST SAVED BY: bbraves



PLAN
SCALE: 1"=40'
FILE: 7568C10C101

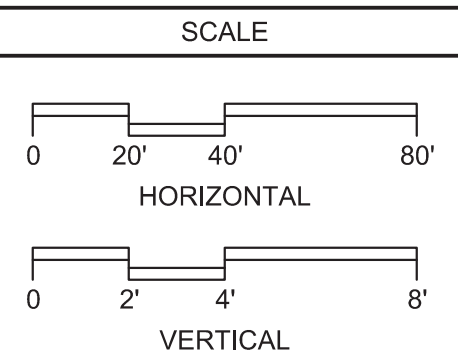
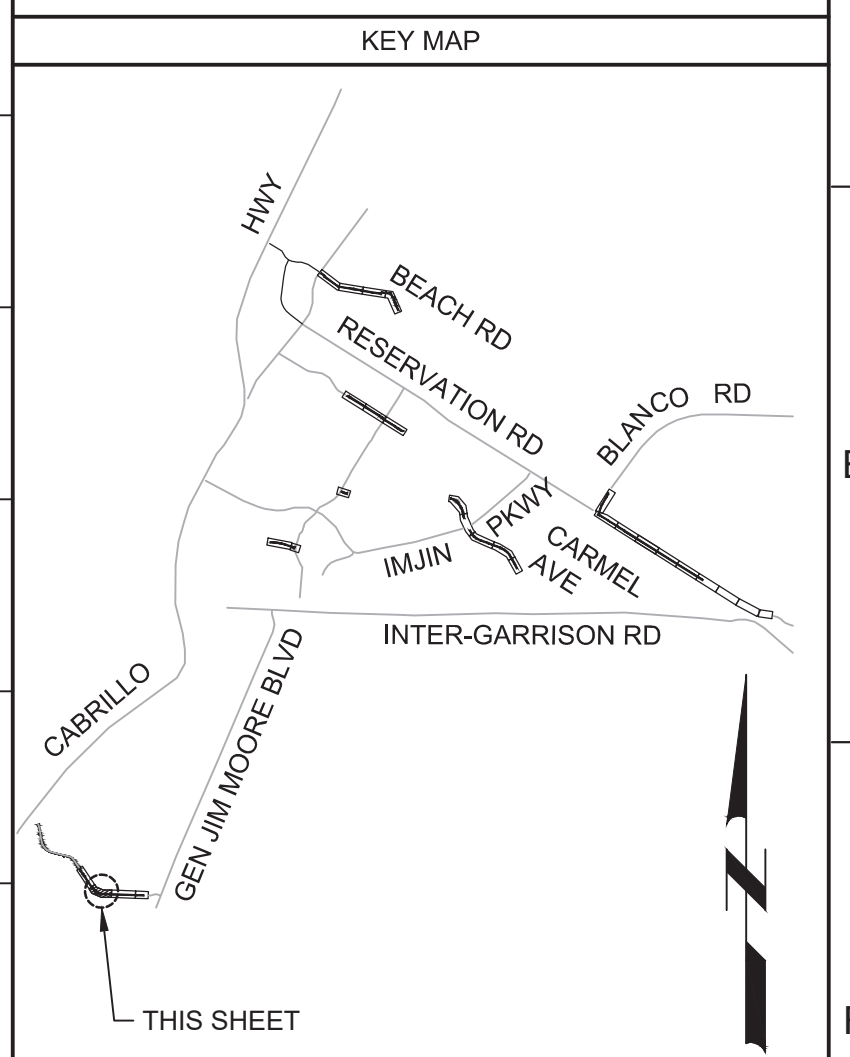


PROFILE
HORIZ SCALE: 1"=40'
VERT SCALE: 1"=4'
FILE: 7568C10C101

- GENERAL NOTES:**
1. CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SPECIFICALLY CALLED OUT TO BE LESS THAN 4'.
 2. CONTRACTOR SHALL CCTV ALL STORM DRAIN CROSSINGS BEFORE AND AFTER CONSTRUCTION. CCTV INFORMATION SHALL BE PROVIDED TO THE DISTRICT FOR REVIEW WITHIN TWO WEEKS FROM THE DATE OF THE FINAL PAVING. CONTRACTOR IS RESPONSIBLE FOR THE REPAIR OF ANY DAMAGES TO THE STORM DRAIN PIPE AND APPURTENANCES AS DETERMINED BY THE DISTRICT.
 3. REPAIR ALL DAMAGED FACILITIES, INCLUDING FENCES AND LANDSCAPING, TO THEIR ORIGINAL CONDITION.
 4. DEFLECTIONS (CHANGES IN DIRECTION) OF PVC PIPE SHALL BE ACHIEVED BY BENDING ONE OR MORE PIPE BARRELS. DO NOT EXCEED THE ALLOWABLE JOINT OR PIPE BARREL DEFLECTION PER THE SPECIFICATIONS.



Know what's below.
Call before you dig.



REV	DATE	BY	DESCRIPTION
1	11-15-19	JPM	CHANGED PER ADDENDUM NO. 1

DESIGNED
JPM/KMM
DRAWN
AL/BWH
CHECKED

DATE
OCTOBER 2019



Digitally signed by Jonathan P. Marshall
DN: cn=Jonathan P. Marshall, o=Carollo Engineering, ou=Carollo Engineering, email=jmarshall@carollo.com, c=US
Date: 2019.11.15 13:42:06 -0800



Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT
RECYCLED WATER DISTRIBUTION MAINS
CIVIL DISTRIBUTION MAIN
COE AVENUE
STA 19+00 TO 29+00

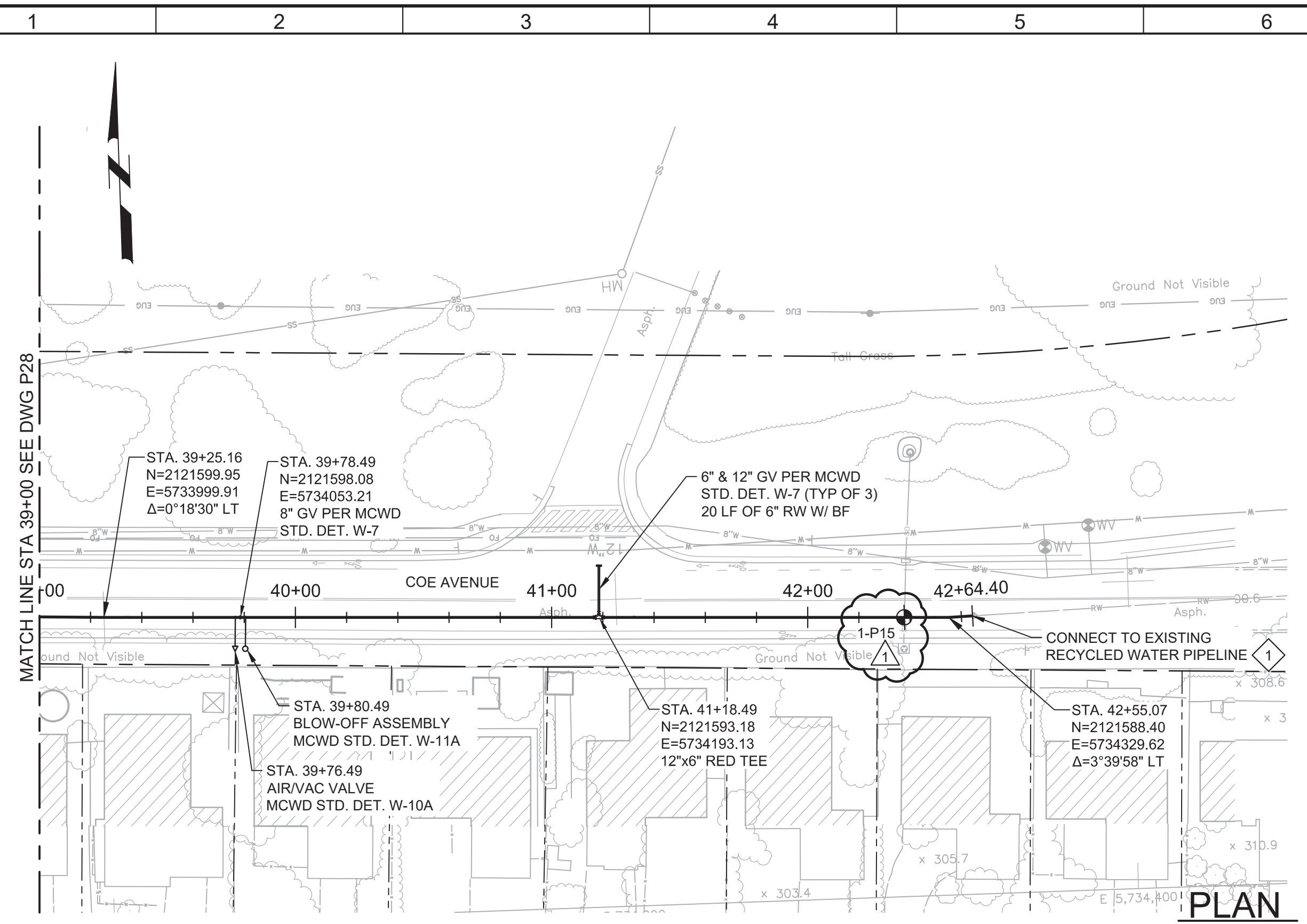
VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	JOB NO. 7568C.10 DRAWING NO. P27 SHEET NO. 49 OF 66
---	---

Plot Date: 11/13/2019 8:50:17 PM

FILE NAME: 7568C10P29.dwg

PROJECT NO. 7568C10

LAST SAVED BY: bhwaves



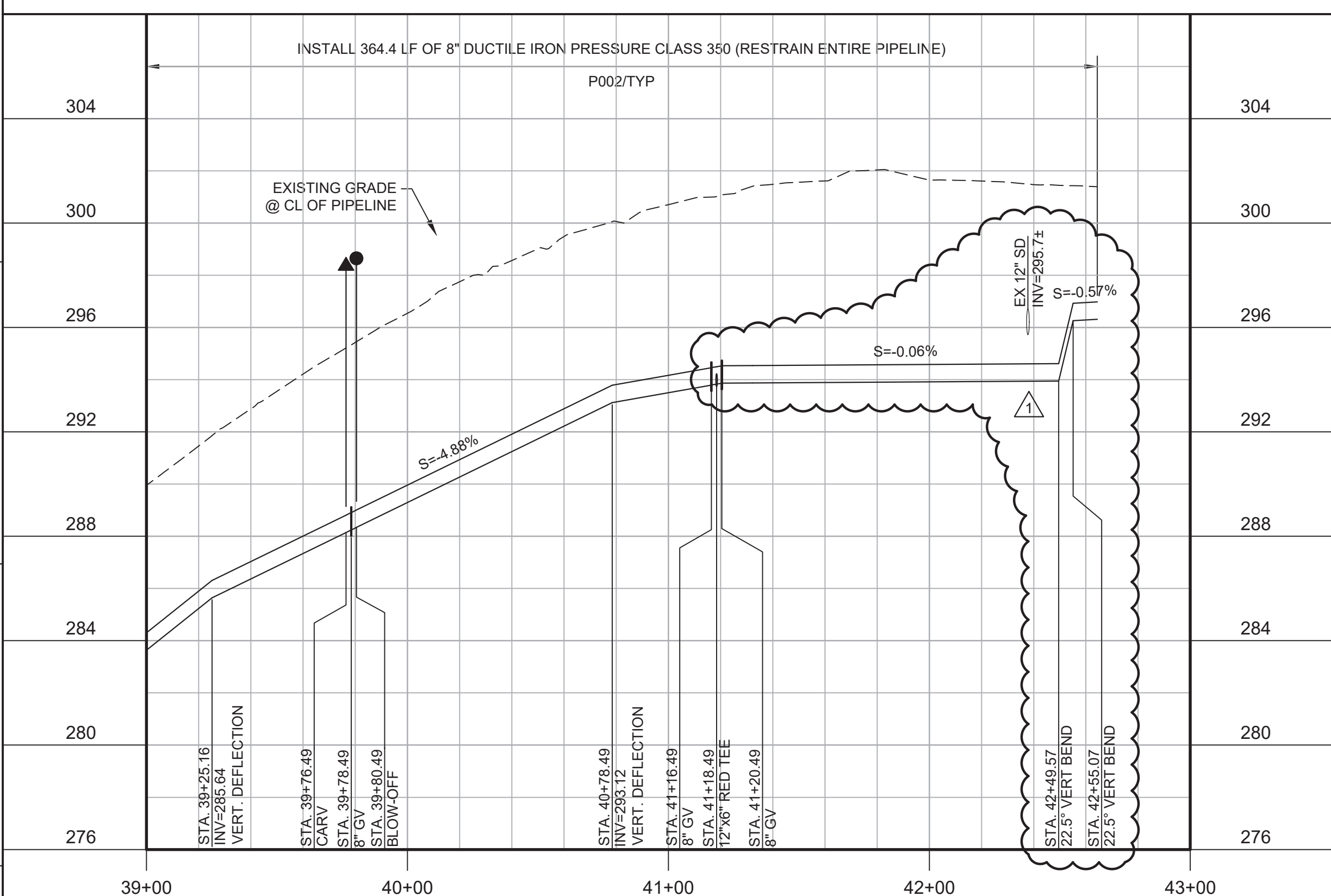
PLAN
SCALE: 1"=40'
FILE: 7568C10C101

- GENERAL NOTES:**
- CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SPECIFICALLY CALLED OUT TO BE LESS THAN 4'.
 - CONTRACTOR SHALL CCTV ALL STORM DRAIN CROSSINGS BEFORE AND AFTER CONSTRUCTION. CCTV INFORMATION SHALL BE PROVIDED TO THE DISTRICT FOR REVIEW WITHIN TWO WEEKS FROM THE DATE OF THE FINAL PAVING. CONTRACTOR IS RESPONSIBLE FOR THE REPAIR OF ANY DAMAGES TO THE STORM DRAIN PIPE AND APPURTENANCES AS DETERMINED BY THE DISTRICT.

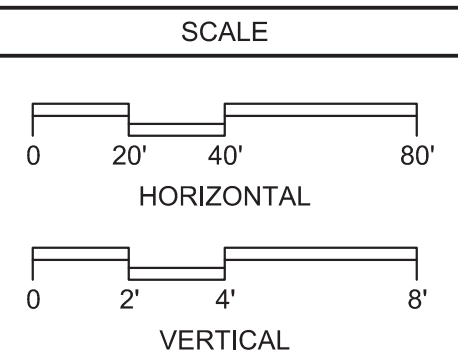
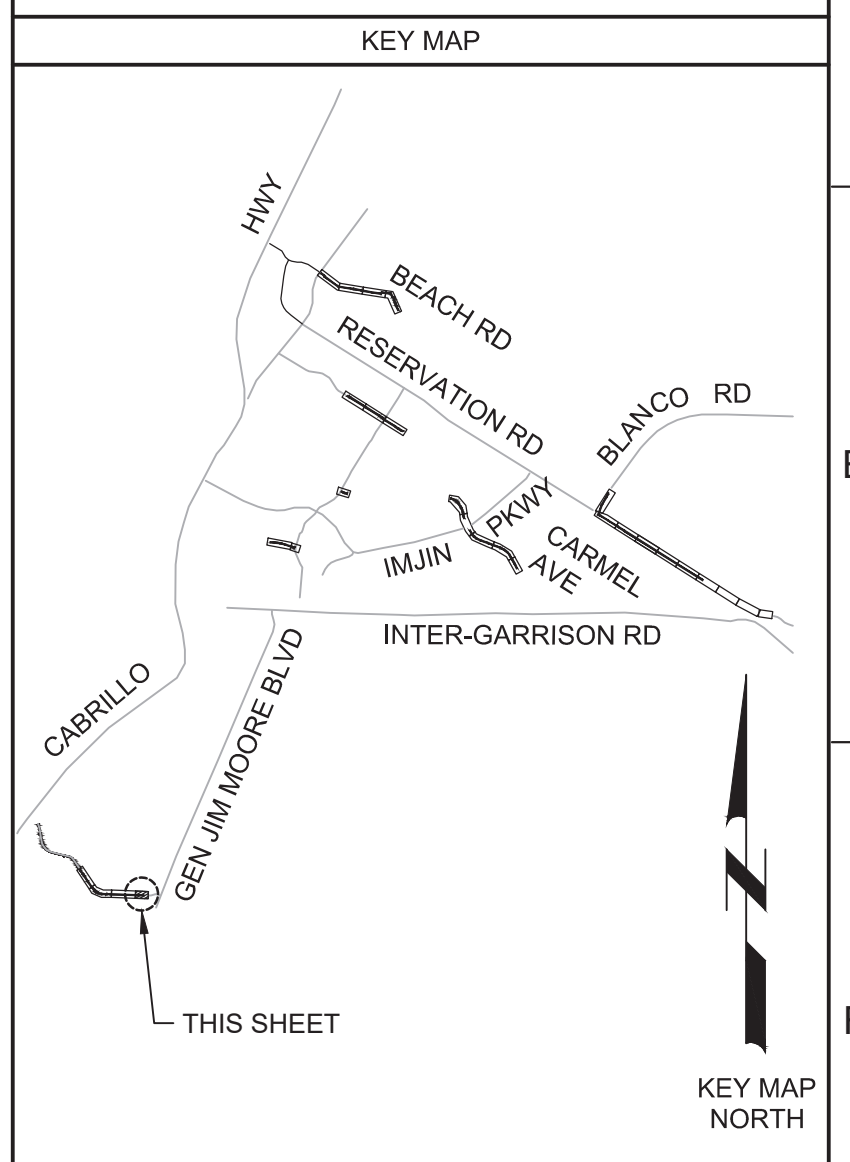
- KEY NOTES:**
- ① APPROXIMATE TIE-IN LOCATION. EXISTING PIPELINE IS APPROXIMATELY 4 FT DEEP. CONTRACTOR TO POTHOLE TO VERIFY. REMOVE EXISTING PIPE, CAP AND CONNECT TO THE EXISTING PIPE WITH AN 8" x 12" MECHANICAL JOINT REDUCER WITH MECHANICAL WEDGE ACTION RESTRAINTS.



Know what's below.
Call before you dig.



PROFILE
HORIZ SCALE: 1"=40'
VERT SCALE: 1"=4'
FILE: 7568C10C101



REV	DATE	BY	DESCRIPTION
1	11-15-19	JPM	CHANGED PER ADDENDUM NO. 1

DESIGNED	JPM/KMM
DRAWN	
CHECKED	
DATE	OCTOBER 2019



Digitally signed by Jonathan P. Marshall
Contact info: Carollo Engineers, Inc.
Date: 2019.11.15 13:44:09 -0800



Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT
RECYCLED WATER DISTRIBUTION MAINS
CIVIL DISTRIBUTION MAIN
COE AVENUE
STA 39+00 TO 42+64.40

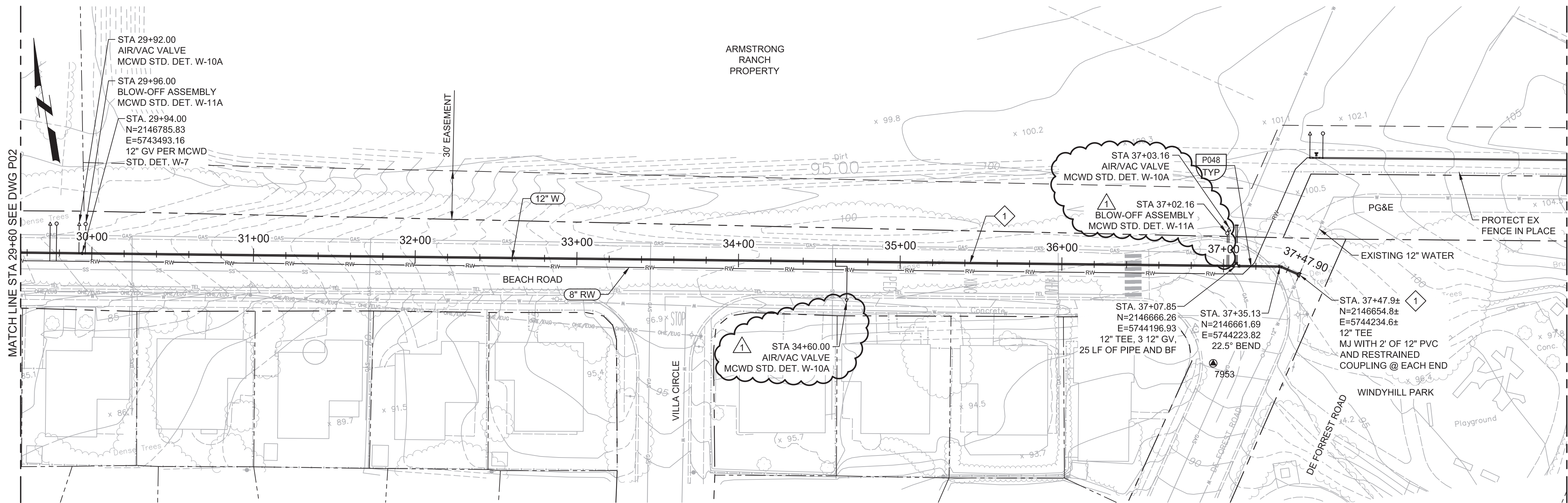
VERIFY SCALES	JOB NO. 7568C.10
BAR IS ONE INCH ON ORIGINAL DRAWING	DRAWING NO. P29
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	SHEET NO. 51 OF 66

Plot Date: 11/18/2019 11:23:12 AM

FILE NAME: 7568C10P32.dwg

PROJECT NO. 7568C10

LAST SAVED BY: bhawes



PLAN
SCALE: 1"=40'
FILE: 7568C10C101

GENERAL NOTES:

1. CONSTRUCT PIPELINE WITH A MINIMUM 4' OF COVER UNLESS SPECIFICALLY CALLED OUT TO BE LESS THAN 4'.
2. CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS TO WINDYHILL PARK AT ALL TIMES.
3. REPAIR ALL DAMAGED FACILITIES, INCLUDING FENCES AND LANDSCAPING, TO THEIR ORIGINAL CONDITION.
4. ARBORIST SHALL BE PRESENT FOR ALL WORK NEAR TREES PER SPECIFICATION SECTION 01562. PIPE SHALL BE INSTALLED TO THE DEPTH SHOWN ON THE DRAWINGS AS BEST POSSIBLE. IN AREAS WHERE THE ARBORIST DETERMINES THAT THE REQUIRED DEPTH CANNOT BE ACHIEVED DUE TO CONFLICTS WITH ROOTS, CONTRACTOR SHALL INSTALL THE PIPE SHALLOWER WITH A CONCRETE ENCASEMENT. THE CONTRACTOR SHALL CONFER WITH THE CONSTRUCTION MANAGER PRIOR TO ANY DESIGN CHANGES BEING MADE.
3. MAINTAIN MINIMUM 4' HORIZONTAL CLEARANCE BETWEEN POTABLE WATER AND RECYCLED WATER LINES. INSTALL RECYCLED WATER LINES 1' LOWER THAN POTABLE WATER LINE.
4. DEFLECTIONS (CHANGES IN DIRECTION) OF PVC PIPE SHALL BE ACHIEVED BY BENDING ONE OR MORE PIPE BARRELS. DO NOT EXCEED THE ALLOWABLE JOINT OR PIPE BARREL DEFLECTION PER THE SPECIFICATIONS.

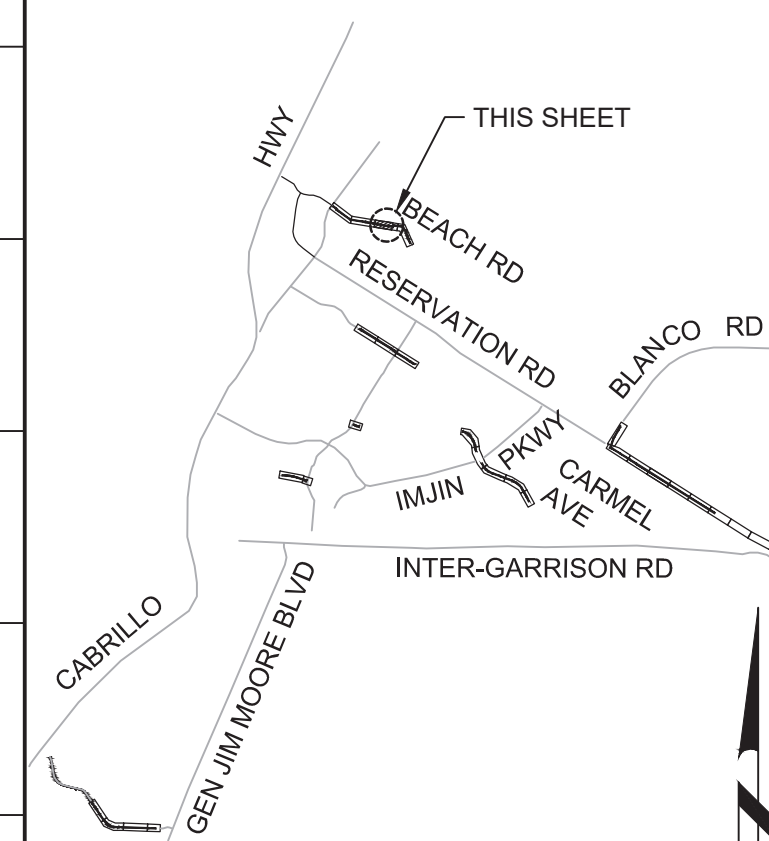
KEY NOTES:

- 1 APPROXIMATE TIE-IN LOCATION. EXISTING PIPELINE IS APPROXIMATELY 4 FT DEEP. CONTRACTOR TO POTHOLE TO VERIFY. CONNECT TO THE EXISTING PIPE.
- 2 CONTRACTOR TO PROTECT NG PIPELINE IN PLACE.

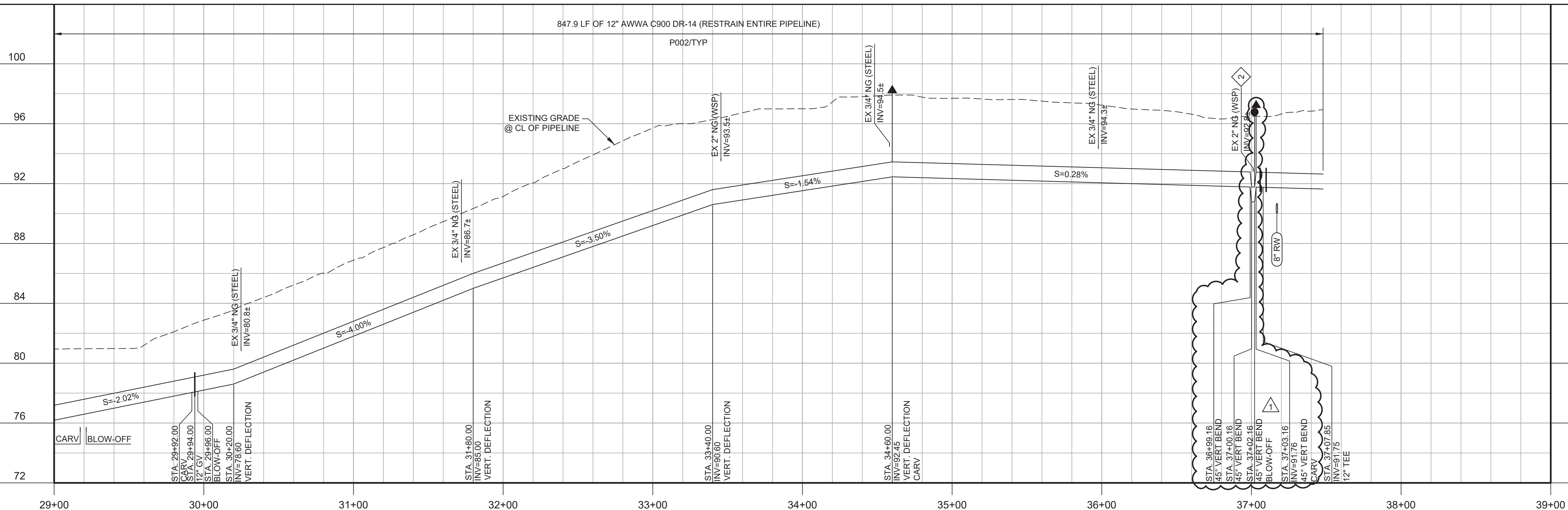
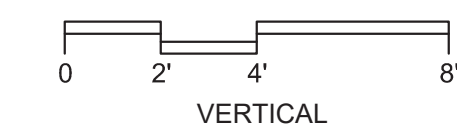


Know what's below.
Call before you dig.

KEY MAP



SCALE



PROFILE
HORIZ SCALE: 1"=40'
VERT SCALE: 1"=4'
FILE: 7568C10C101

1	11-15-19	JPM	CHANGED PER ADDENDUM NO. 1
2			
3			

DESIGNED	JPM/KMM
DRAWN	AL/BWH
CHECKED	
DATE	OCTOBER 2019



Digitally signed by Jonathan P. Marshall
DN: cn=Jonathan P. Marshall, o=Carollo Engineering, Inc., ou=Carollo Engineering, Inc., email=jmarshall@carollo.com, c=US



Marina Coast Water District

CAPITAL IMPROVEMENT PROGRAM
POTABLE WATER MAINS
CIVIL WL DISTRIBUTION MAIN
BEACH ROAD
STA 29+00 TO 37+47.90

VERIFY SCALES	JOB NO. 7568C10
BAR IS ONE INCH ON ORIGINAL DRAWING	DRAWING NO. P32
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	SHEET NO. 54 OF 66

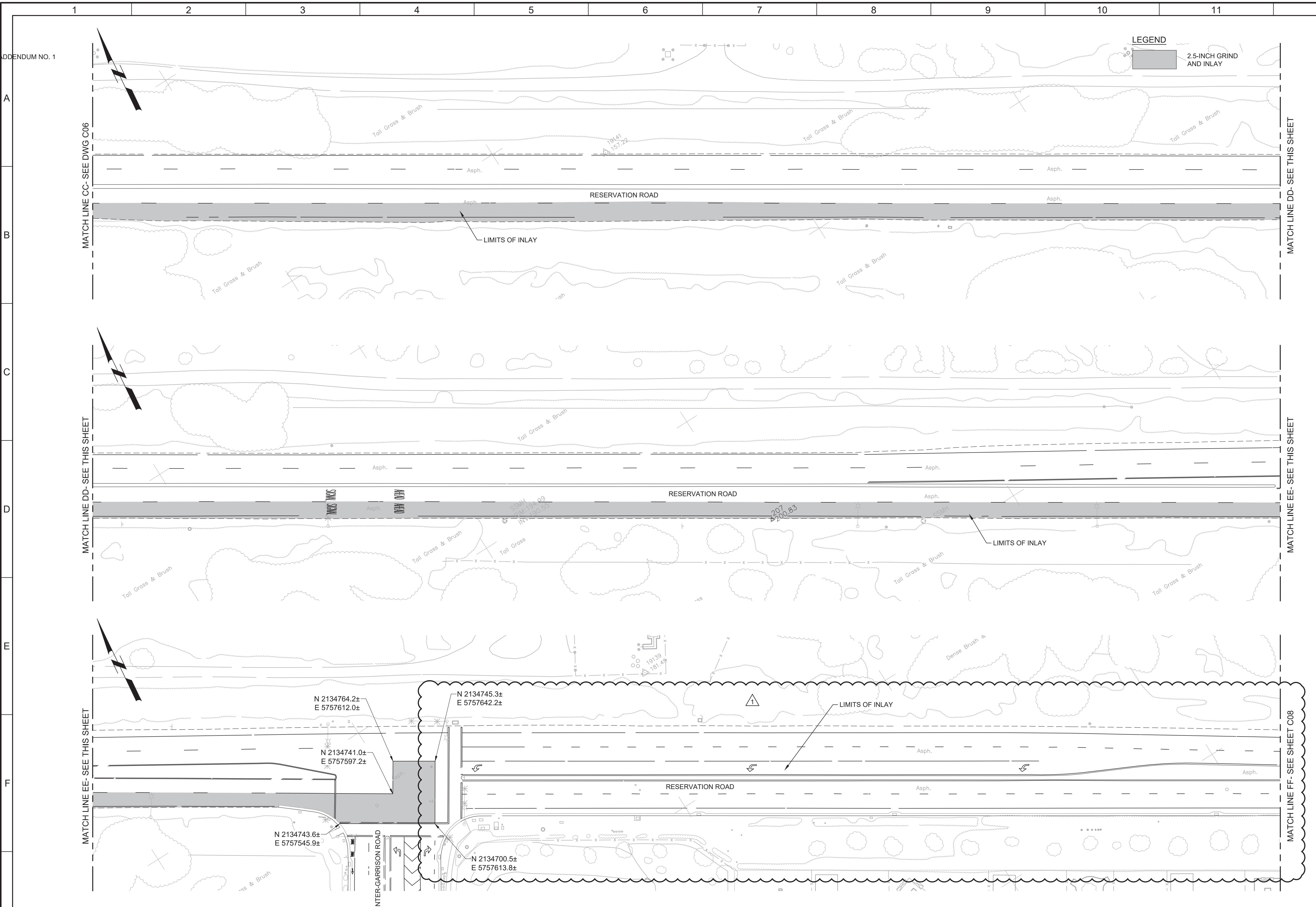
CHANGED PER ADDENDUM NO. 1

Plot Date: 11/13/2019 9:03:56 PM

FILE NAME: 7568C10C07.dwg

PROJECT NO. 7568C10

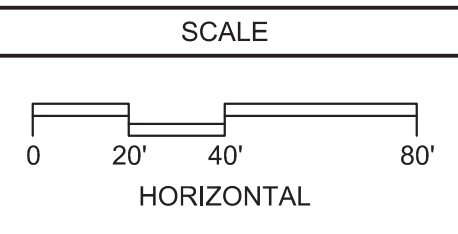
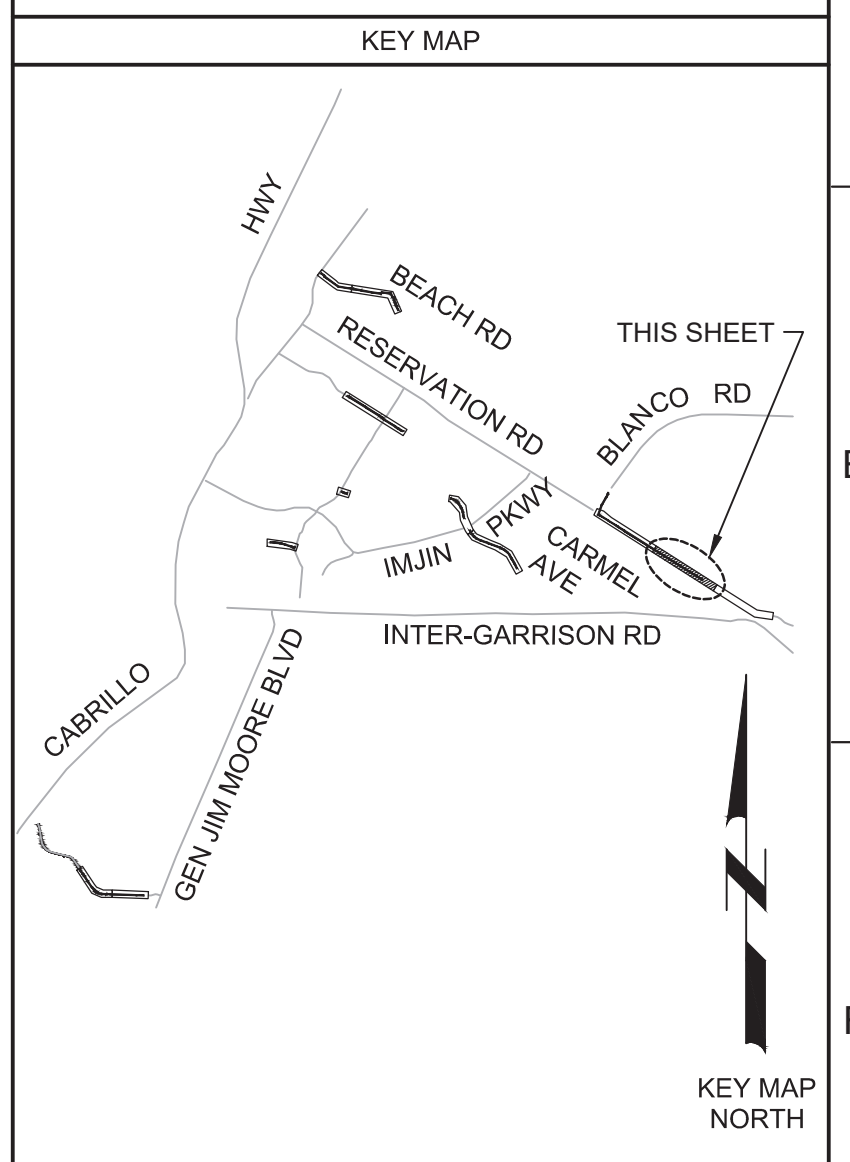
LAST SAVED BY: bbraves



- GENERAL NOTES:**
1. INSTALL 2.5-INCH GRIND AND INLAY IN LOCATIONS SHOWN AND IN ACCORDANCE WITH MONTEREY COUNTY STANDARD SPECIFICATIONS AND PLANS.
 2. PRIOR TO REMOVAL OR RESURFACING, ALL CITY MONUMENT LOCATIONS SHALL BE RECORDED AND AFTER RESURFACING ALL CITY MONUMENTS SHALL BE RAISED TO GRADE BY A LAND SURVEYOR LICENSED IN THE STATE OF CALIFORNIA.
 3. PRIOR TO REMOVING ANY STRIPING, CONTRACTOR SHALL RECORD ALL EXISTING STRIPING LOCATIONS, DEVELOP A PAVEMENT STRIPING AND MARKINGS PLAN TO MATCH EXISTING STRIPING, SUBMIT THE PLAN TO OBTAIN APPROVAL. CONTRACTOR SHALL REMOVE ALL EXISTING STRIPING AND PAVEMENT MARKERS PRIOR TO INSTALLING INLAY. PROVIDE TEMPORARY DELINEATION AS NECESSARY TO CONVEY TRAFFIC IN A SAFE MANNER. REPLACE ALL EXISTING TRAFFIC STRIPES, PAVEMENT MARKERS, AND BLUE HYDRANT MARKERS IN KIND AFTER WORK IS COMPLETE.
 4. ANY DAMAGE TO CONCRETE SUCH AS CURB, GUTTER OR SIDEWALK SHALL BE REPAIRED IN ACCORDANCE WITH MONTEREY COUNTY STANDARDS. WHERE DAMAGED BY WORK, REPLACE AC DIKES PER CALTRANS STANDARDS.



Know what's below.
Call before you dig.



REV	DATE	BY	DESCRIPTION
1	11-15-19	JPM	CHANGED PER ADDENDUM NO. 1

DESIGNED
JPM
DRAWN
EH
CHECKED
AP
DATE
OCTOBER 2019



Digitally signed by Jonathan P. Marshall
Contact info: Carollo Engineers, Inc.
Date: 2019.10.18 13:52:09 -0700
Jonathan P. Marshall



Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT
RECYCLED WATER DISTRIBUTION MAINS
CIVIL
PAVING PLAN - RESERVATION ROAD 2

VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	JOB NO. 7568C.10 DRAWING NO. C07 SHEET NO. 62 OF 66
---	---

Plot Date: 11/13/2019 9:06:03 PM

FILE NAME: 7568C10C08.dwg

PROJECT NO. 7568C10

LAST SAVED BY: lbhaves

ELIMINATED FROM CONTRACT

LEGEND

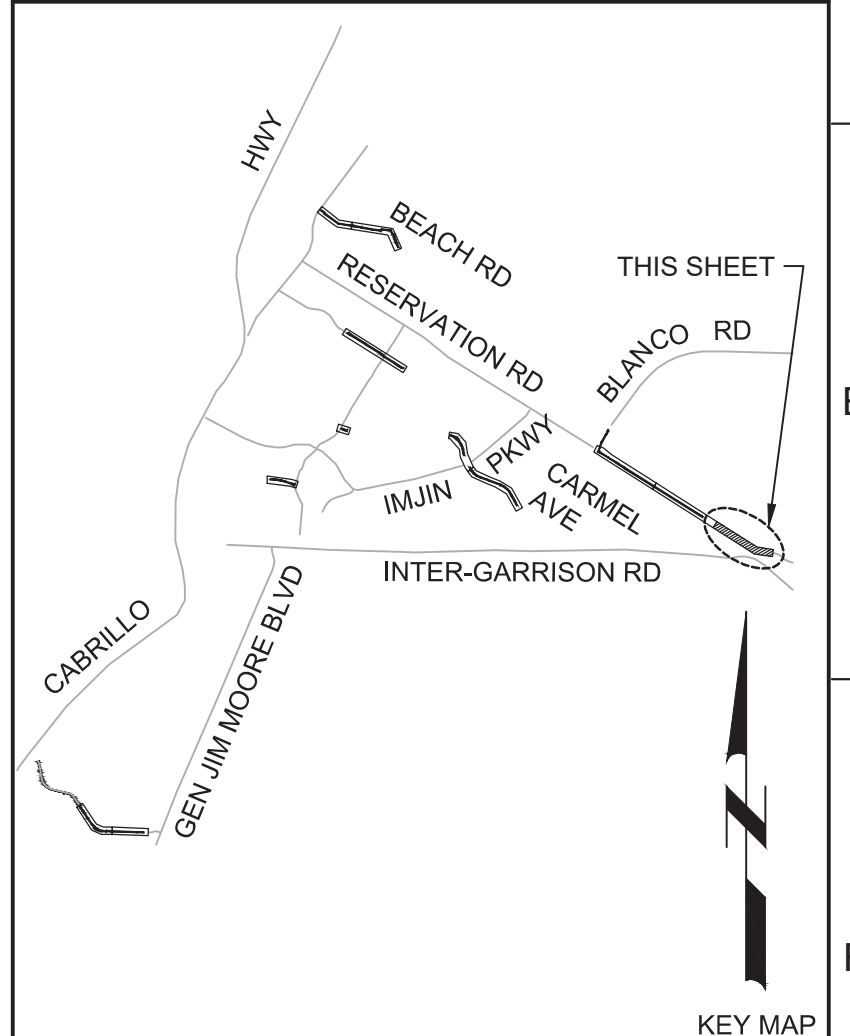
2.5-INCH GRIND AND INLAY

- GENERAL NOTES:**
1. INSTALL 2.5-INCH GRIND AND INLAY IN LOCATIONS SHOWN AND IN ACCORDANCE WITH MONTEREY COUNTY STANDARD SPECIFICATIONS AND PLANS.
 2. PRIOR TO REMOVAL OR RESURFACING, ALL CITY MONUMENT LOCATIONS SHALL BE RECORDED AND AFTER RESURFACING ALL CITY MONUMENTS SHALL BE RAISED TO GRADE BY A LAND SURVEYOR LICENSED IN THE STATE OF CALIFORNIA.
 3. PRIOR TO REMOVING ANY STRIPING, CONTRACTOR SHALL RECORD ALL EXISTING STRIPING LOCATIONS, DEVELOP A PAVEMENT STRIPING AND MARKINGS PLAN TO MATCH EXISTING STRIPING, SUBMIT THE PLAN TO OBTAIN APPROVAL. CONTRACTOR SHALL REMOVE ALL EXISTING STRIPING AND PAVEMENT MARKERS PRIOR TO INSTALLING INLAY. PROVIDE TEMPORARY DELINEATION AS NECESSARY TO CONVEY TRAFFIC IN A SAFE MANNER. REPLACE ALL EXISTING TRAFFIC STRIPES, PAVEMENT MARKERS, AND BLUE HYDRANT MARKERS IN KIND AFTER WORK IS COMPLETE.
 4. ANY DAMAGE TO CONCRETE SUCH AS CURB, GUTTER OR SIDEWALK SHALL BE REPAIRED IN ACCORDANCE WITH MONTEREY COUNTY STANDARDS. WHERE DAMAGED BY WORK, REPLACE AC DIKES PER CALTRANS STANDARDS.



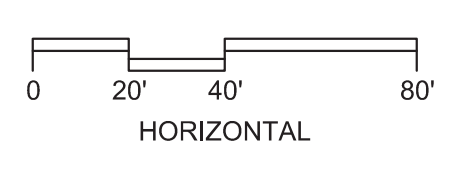
Know what's below.
Call before you dig.

KEY MAP



KEY MAP NORTH

SCALE



REV	DATE	BY	DESCRIPTION
1	11-15-19	JPM	CHANGED PER ADDENDUM NO. 1

DESIGNED
JPM
DRAWN
EH
CHECKED
AP
DATE
OCTOBER 2019



Digitally signed by Jonathan P. Marshall
Contact info: Carollo Engineers, Inc.
Date: 2019.11.15 13:22:46 PST



Marina Coast Water District

REGIONAL URBAN WATER AUGMENTATION PROJECT
RECYCLED WATER DISTRIBUTION MAINS
CIVIL
PAVING PLAN - RESERVATION ROAD 3

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1" 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO.
7568C.10
DRAWING NO.
C08
SHEET NO.
63 OF 66