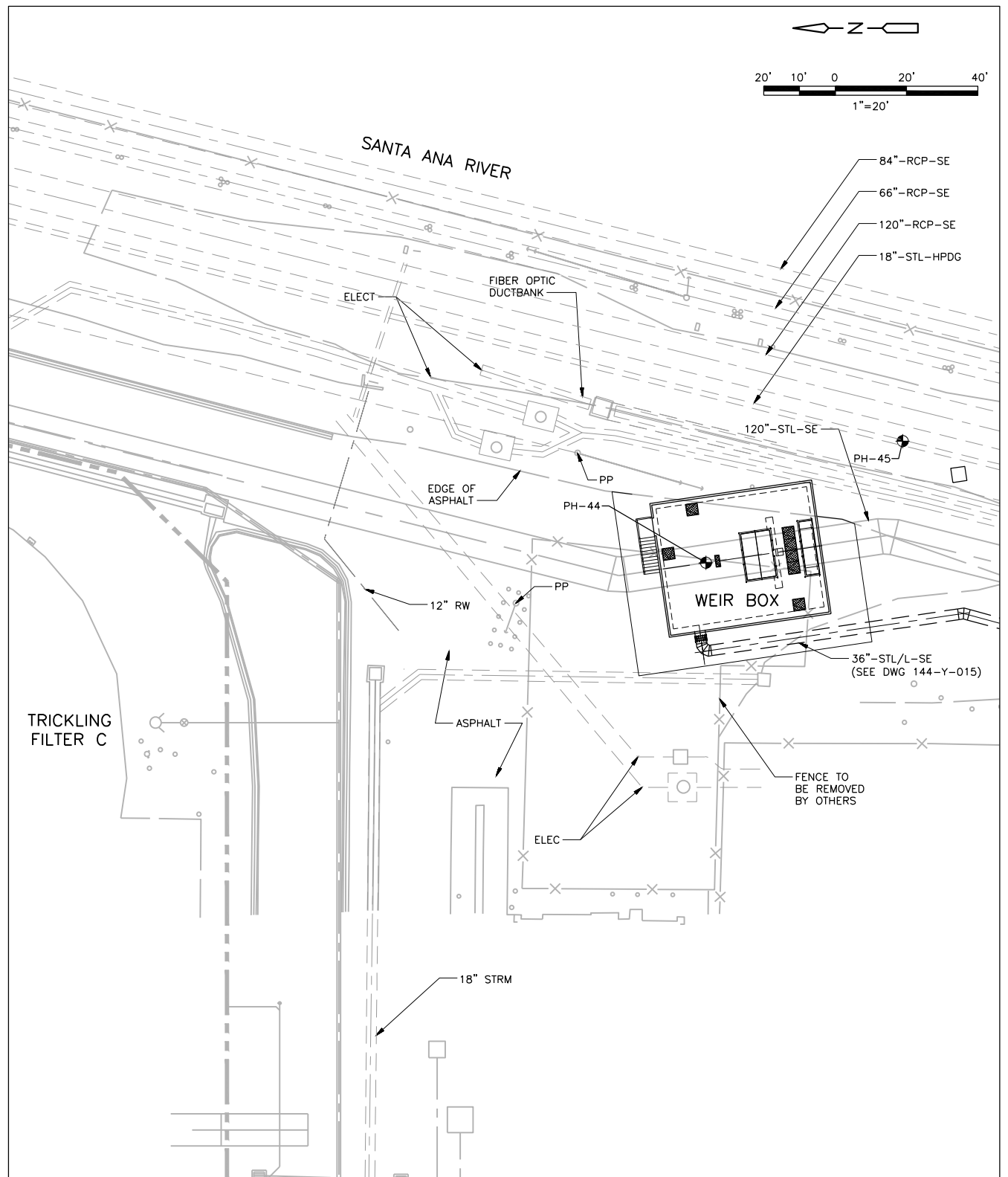


DIVERSION STRUCTURE
1"=20'



WEIR BOX
1"=20'

NOTES:

1. PRIOR TO PIPE OR STRUCTURE FABRICATION CONTRACTOR SHALL POT-HOLE EXISTING UTILITIES WITHIN THE AREA IMPACTED BY THE WORK.
2. REROUTING OF STRM, POTW AND SCUM PIPELINE SHALL BE COMPLETED AND PLACED INTO SERVICE PRIOR TO DIVERSION STRUCTURE WORK.
3. TEMPORARILY RELOCATE EXISTING 8" SCUM ALONG CLARIFIER WALL TO ALLOW INSTALLATION OF STRUCTURE. AFTER COMPLETION OF THE STRUCTURE RELOCATE SCUM PIPE AS SHOWN.
4. PIPE TRENCH SHALL BE ENTIRE DISTANCE TO PUMP STATION. PIPE TRENCH SHALL BE PER DETAIL 5 DWG 100-C-064 AND SHALL CONTAIN 2-1" CPVC HYPO PIPES, WHERE TRENCH CROSSES GUTTERS SEE DETAIL 144-C-064.
5. EXISTING 48" RCP, 6" DG, 4" NG, AND COMM EXTEND FROM THE NORTH PLANT BOUNDARY TO WEIR BOX AREA (DWG 144-Y-012). THESE PIPELINES/UTILITIES ARE ABANDONED IN PLACE.
7. POTABLE WATER PIPE AND STORM WATER PIPE SHOULD BE 3'-0" BELOW GRADE.

Exhibit A-1 OCWD GWRs Contract 1 Project Area

CONFORMED TO BID DOCUMENTS
USER ACKNOWLEDGE THAT, SHOULD THERE BE ANY DISCREPANCY BETWEEN THESE DOCUMENTS AND THE CONTRACT DOCUMENTS AND ANY ADDENDA ISSUED PRIOR TO THE BID, THE CONTRACT DOCUMENTS AND THE ORIGINAL ADDENDA SHALL GOVERN.



REV. NO.	DATE	DRWN	CHKD	REMARKS
8/19				CONFORMED TO BID DOCUMENTS

DESIGNED BY: VM
 DRAWN BY: VK
 SHEET CHK'D BY: RIB
 CROSS CHK'D BY: BF
 APPROVED BY: R. Ten Bosch
 DATE: FEB 2019

BLACK & VEATCH
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 Black & Veatch Corporation
 5 Peters Canyon Rd., Suite 300, Irvine, California 92606
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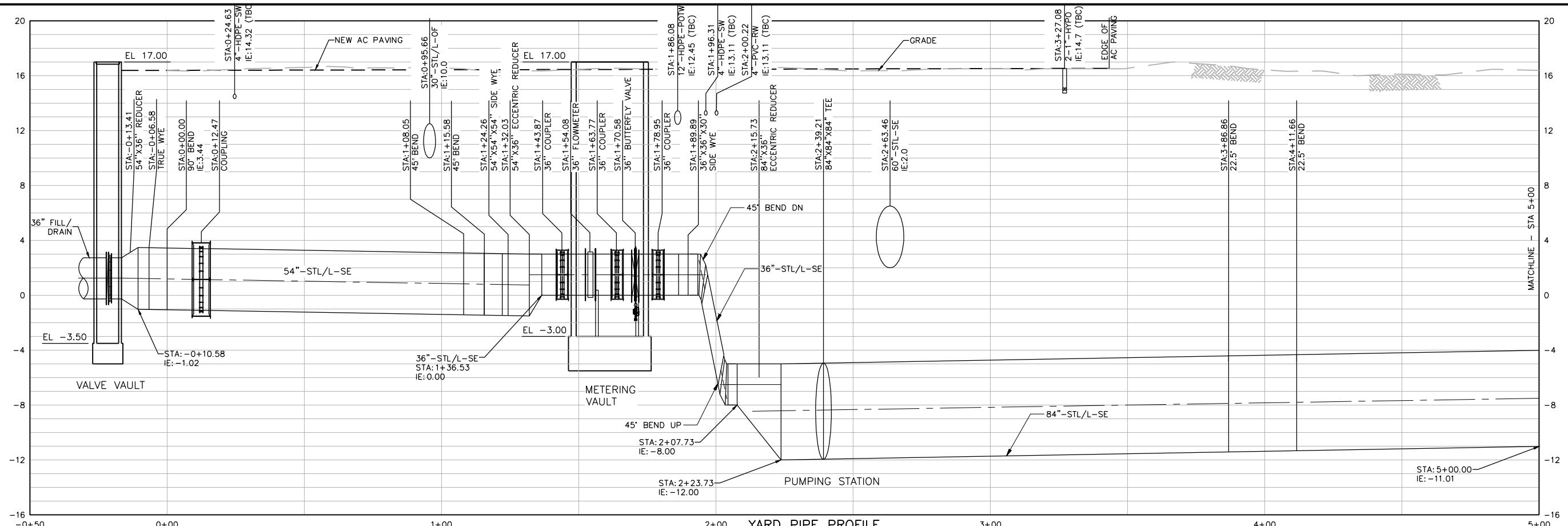
Orange County Water District
 18700 Ward Street
 Fountain Valley, California 92708
 (714) 378-3200

**GROUNDWATER REPLENISHMENT SYSTEM
 FINAL EXPANSION
 SE PUMP STATION AND EQUALIZATION TANKS
 DIVERSION STRUCTURE & WEIR BOX PIPING PLAN**

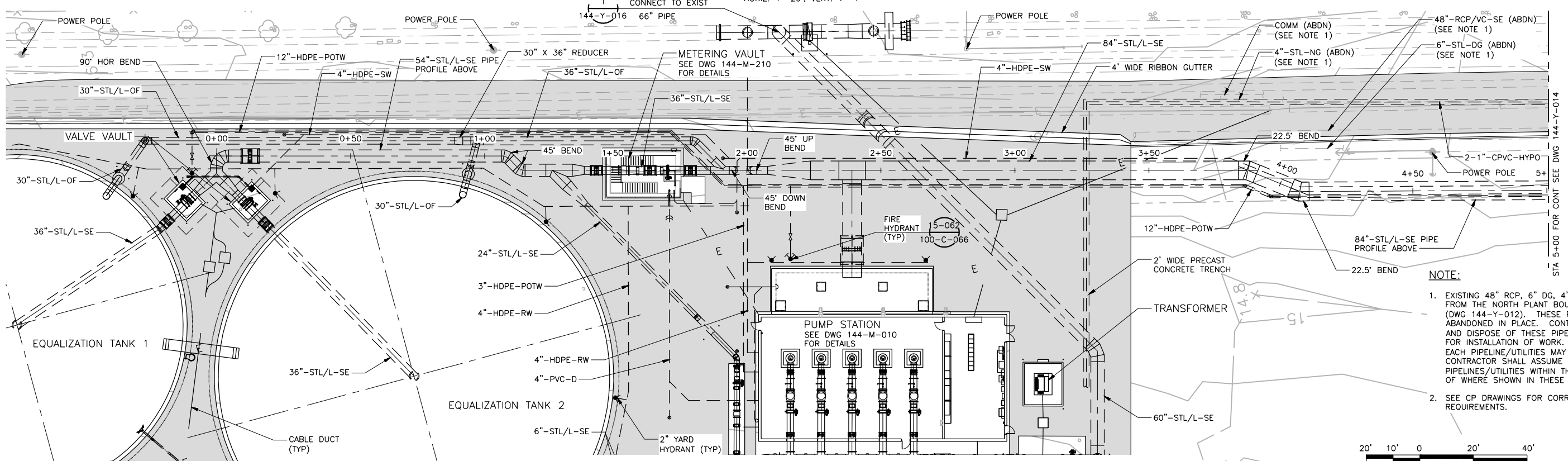
SHEET 78
 OF 890 SHEETS
 DRAWING NO.
144-Y-012

GWRSE-MF-000-C-000

CONFORMED TO BID DOCUMENTS
 USER ACKNOWLEDGE THAT SHOULD THERE BE ANY DISCREPANCY BETWEEN THESE DOCUMENTS AND THE CONTRACT DOCUMENTS AND ANY ADDENDA ISSUED PRIOR TO THE BID, THE CONTRACT DOCUMENTS AND THE ORIGINAL ADDENDA SHALL GOVERN.



YARD PIPE PROFILE
 HORIZ: 1"=20', VERT: 1"=4'



- NOTE:**
- EXISTING 48" RCP, 6" DG, 4" NG, AND COMM EXTEND FROM THE NORTH PLANT BOUNDARY TO WEIR BOX AREA (DWG 144-Y-012). THESE PIPELINES/UTILITIES ARE ABANDONED IN PLACE. CONTRACTOR SHALL REMOVE AND DISPOSE OF THESE PIPELINES/UTILITIES AS REQUIRED FOR INSTALLATION OF WORK. THE EXACT ALIGNMENT OF EACH PIPELINE/UTILITIES MAY VARY HOWEVER THE CONTRACTOR SHALL ASSUME REMOVAL OF THESE PIPELINES/UTILITIES WITHIN THE WORK AREA REGARDLESS OF WHERE SHOWN IN THESE PLANS.
 - SEE CP DRAWINGS FOR CORROSION PROTECTION REQUIREMENTS.

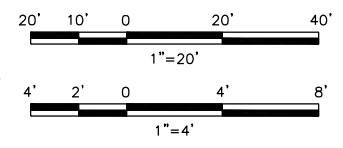


Exhibit A-2 OCWD GWRs Contract 1 Project Area

DESIGNED BY: SM	CONFORMED TO BID DOCUMENTS
DRAWN BY: VK	
SHEET CHK'D BY: RIB	
CROSS CHK'D BY: BF	
APPROVED BY: R. ten BOSCH	
DATE: FEB 2019	

REV. NO.	DATE	DRWN	CHKD	REMARKS
	8/19			

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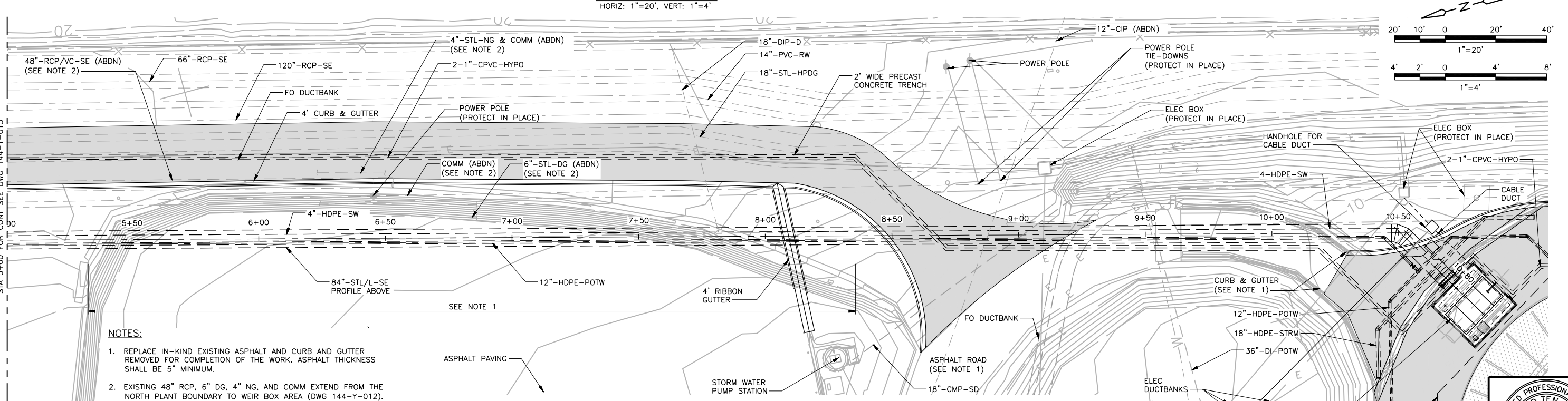
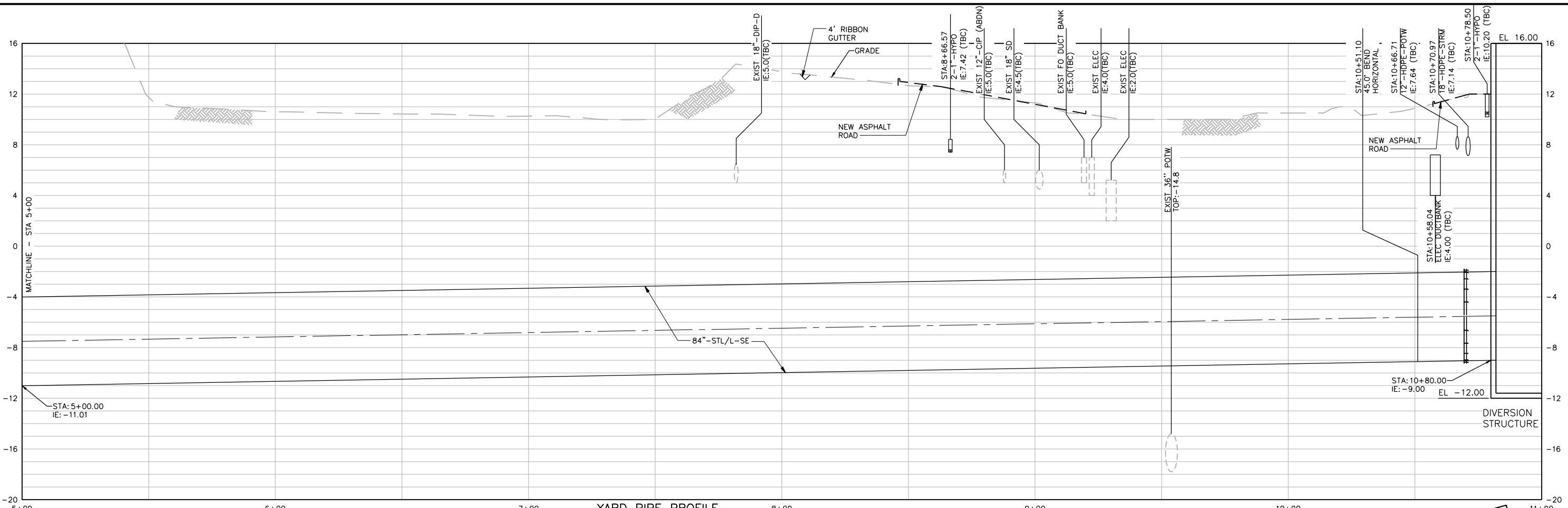


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**GROUNDWATER REPLENISHMENT SYSTEM
 FINAL EXPANSION
 SE PUMP STATION AND EQUALIZATION TANKS
 84-INCH PLAN AND PROFILE 1 OF 2**

REGISTERED PROFESSIONAL ENGINEER
 RICHARD TEN BOSCH
 No. C045340
 Exp. 9-30-20
 CIVIL
 STATE OF CALIFORNIA

SHEET 79 OF 890 SHEETS
 DRAWING NO. 144-Y-013



- NOTES:**
1. REPLACE IN-KIND EXISTING ASPHALT AND CURB AND GUTTER REMOVED FOR COMPLETION OF THE WORK. ASPHALT THICKNESS SHALL BE 5" MINIMUM.
 2. EXISTING 48" RCP, 6" DG, 4" NG, AND COMM EXTEND FROM THE NORTH PLANT BOUNDARY TO WEIR BOX AREA (DWG 144-Y-012). THESE PIPELINES/UTILITIES ARE ABANDONED IN PLACE. CONTRACTOR SHALL REMOVE AND DISPOSE OF THESE PIPELINES/UTILITIES AS REQUIRED FOR INSTALLATION OF WORK. THE EXACT ALIGNMENT OF EACH PIPELINE/UTILITIES MAY VARY HOWEVER THE CONTRACTOR SHALL ASSUME REMOVAL OF THESE PIPELINES/UTILITIES WITHIN THE WORK AREA REGARDLESS OF WHERE SHOWN IN THESE PLANS.
 3. SEE CP DRAWINGS FOR CORROSION PROTECTION REQUIREMENTS.

Exhibit A-3 OCWD GWRs Contract 1 Project Area

REV. NO.	DATE	DRWN	CHKD	REMARKS
8/19				CONFORMED TO BID DOCUMENTS

DESIGNED BY: SM
 DRAWN BY: VK
 SHEET CHK'D BY: RIB
 CROSS CHK'D BY: RF
 APPROVED BY: R. Ten BOSCH
 DATE: FEB 2019

BLACK & VEATCH
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 tel: (949) 753-0500

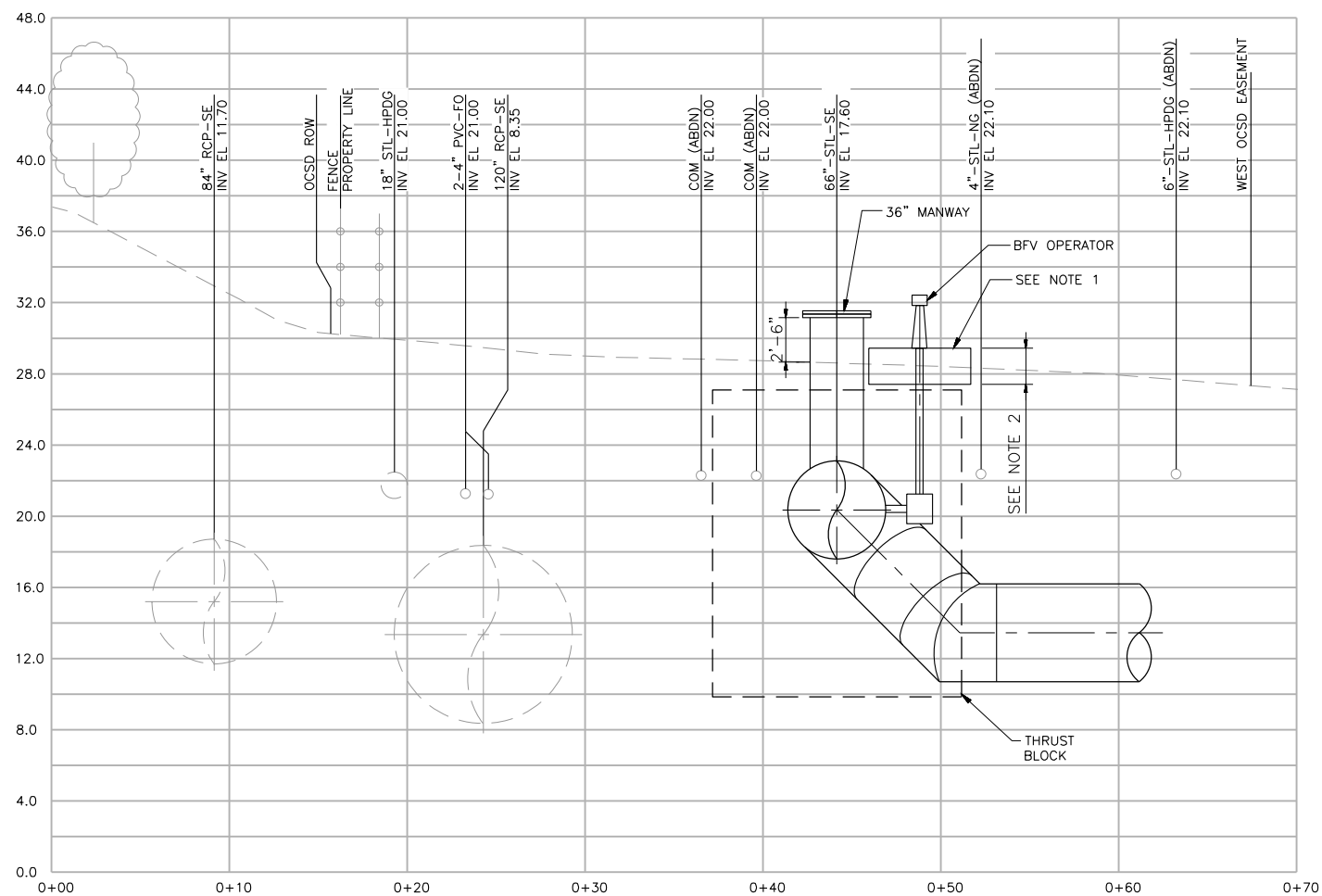
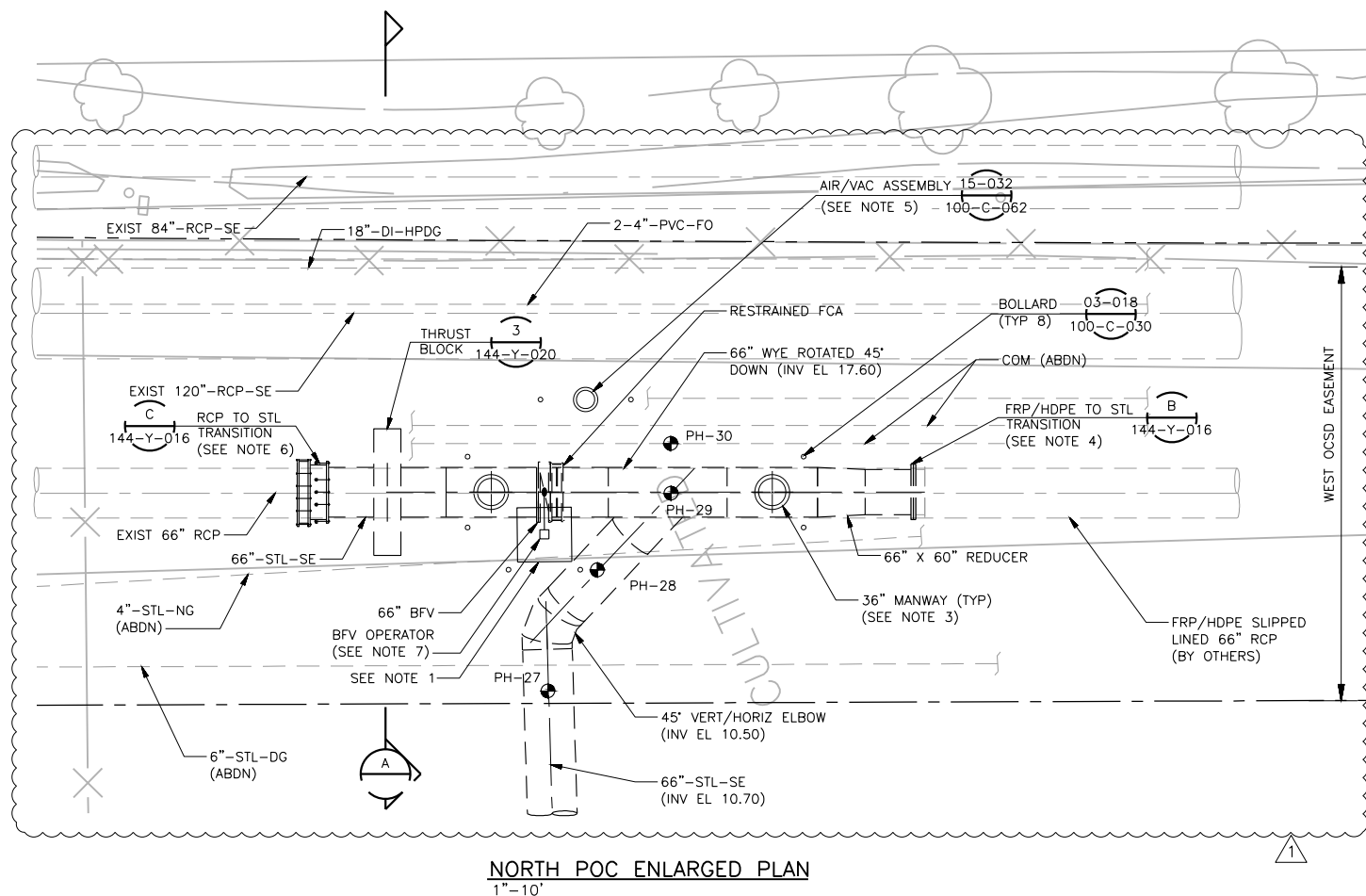
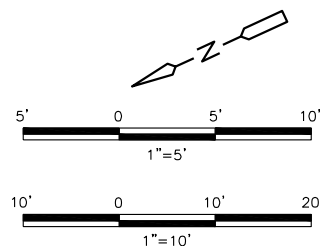


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**GROUNDWATER REPLENISHMENT SYSTEM
 FINAL EXPANSION
 SE PUMP STATION AND EQUALIZATION TANKS
 84-INCH PLAN AND PROFILE 2 OF 2**



SHEET 80 OF 890 SHEETS
 DRAWING NO. 144-Y-014



NOTES:

- 6 FT SQUARE X 2 FT THICK CONCRETE SLAB WITH #5 @ 8" EWT&B
- 6" FROM TOP OF SLAB TO FINISH GRADE AT HIGHER GRADE LOCATION SIDE OF SLAB. CONTRACTOR SHALL FIELD VERIFY EXISTING GRADE AT PAD LOCATION AND COORDINATE WITH BFV MANUFACTURER FOR REQUIRED VALVE STEM AND SLEEVE LENGTHS.
- TOP OF MANWAY SHALL EXTEND 30" ABOVE GRADE.
- REMOVE EXISTING BLIND FLANGE AND CONNECT TO EXISTING FRP OR HDPE FLANGE.
- CONTRACTOR TO FIELD LOCATED AIR/VAC ASSEMBLY WITHIN LANDSCAPED AREA.
- MODEL 415 REDUCER COUPLING AS MANUFACTURED BY SMITH-BLAIR.
- CONTRACTOR SHALL COORDINATE WITH VALVE OPERATOR SUPPLIER TO DESIGN AND INSTALL A STAINLESS STEEL LOCKABLE ROTATED DOWN

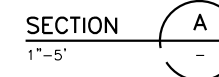


Exhibit A-4 OCWD GWRs Contract 1 Project Area

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DESIGNED BY: SM	CONFORMED TO BID DOCUMENTS
DRAWN BY: VK	ADDENDUM 2
SHEET CHK'D BY: RIB	
CROSS CHK'D BY: BF	
APPROVED BY: R. Ten BOSCH	
DATE: JUNE 2019	

REV. NO.	DATE	DRWN	CHKD	REMARKS
1	6/19	VK	RtB	ADDENDUM 2

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 (714) 378-3200

**GROUNDWATER REPLENISHMENT SYSTEM
 FINAL EXPANSION
 NORTH POC ENLARGED PLAN**

SHEET 74
 OF 890 SHEETS
 DRAWING NO.
100-Y-294