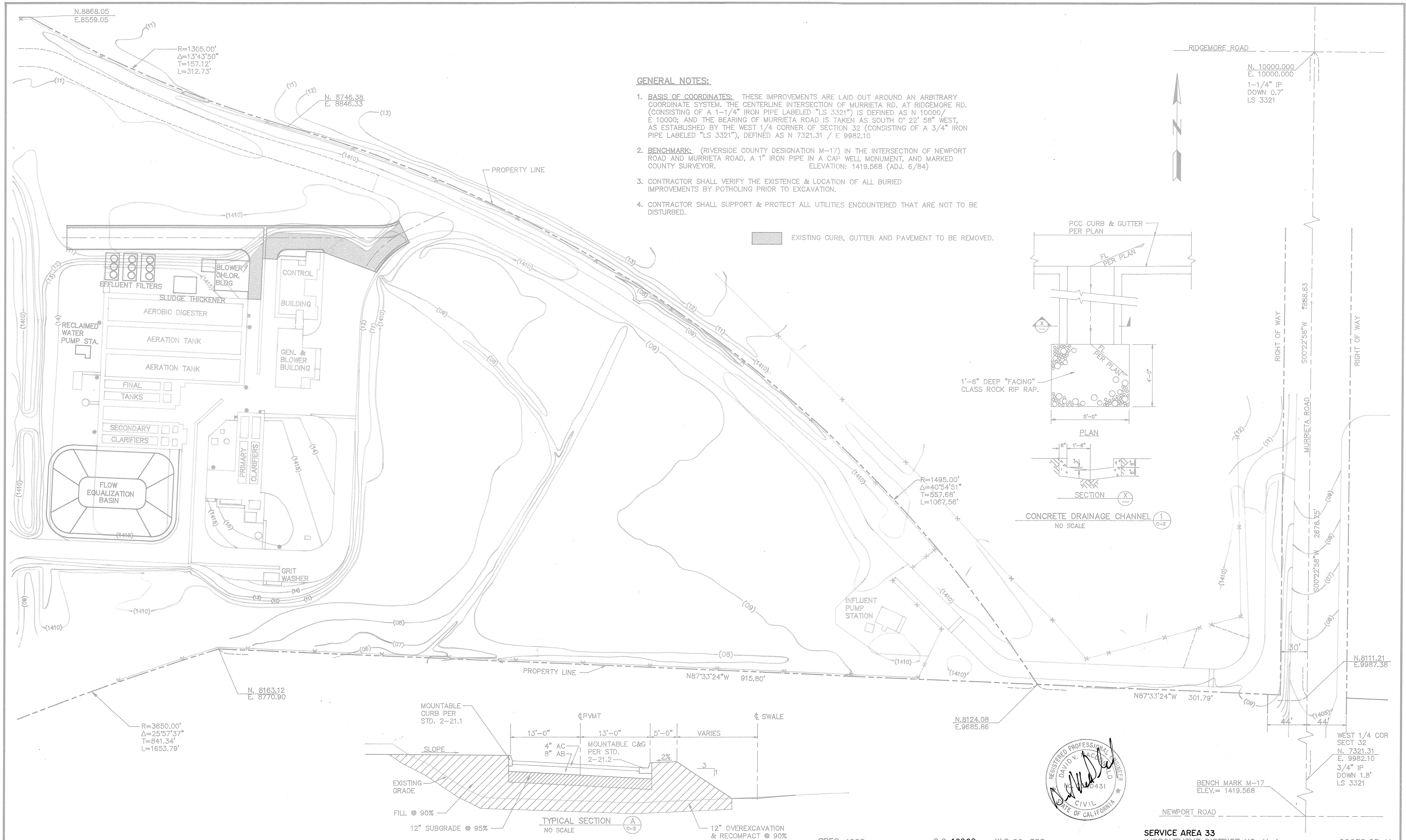


# **APPENDIX N**

**Former Sun City RWRF Flow  
Equalization Basin Drawings  
(For Reference Only)**

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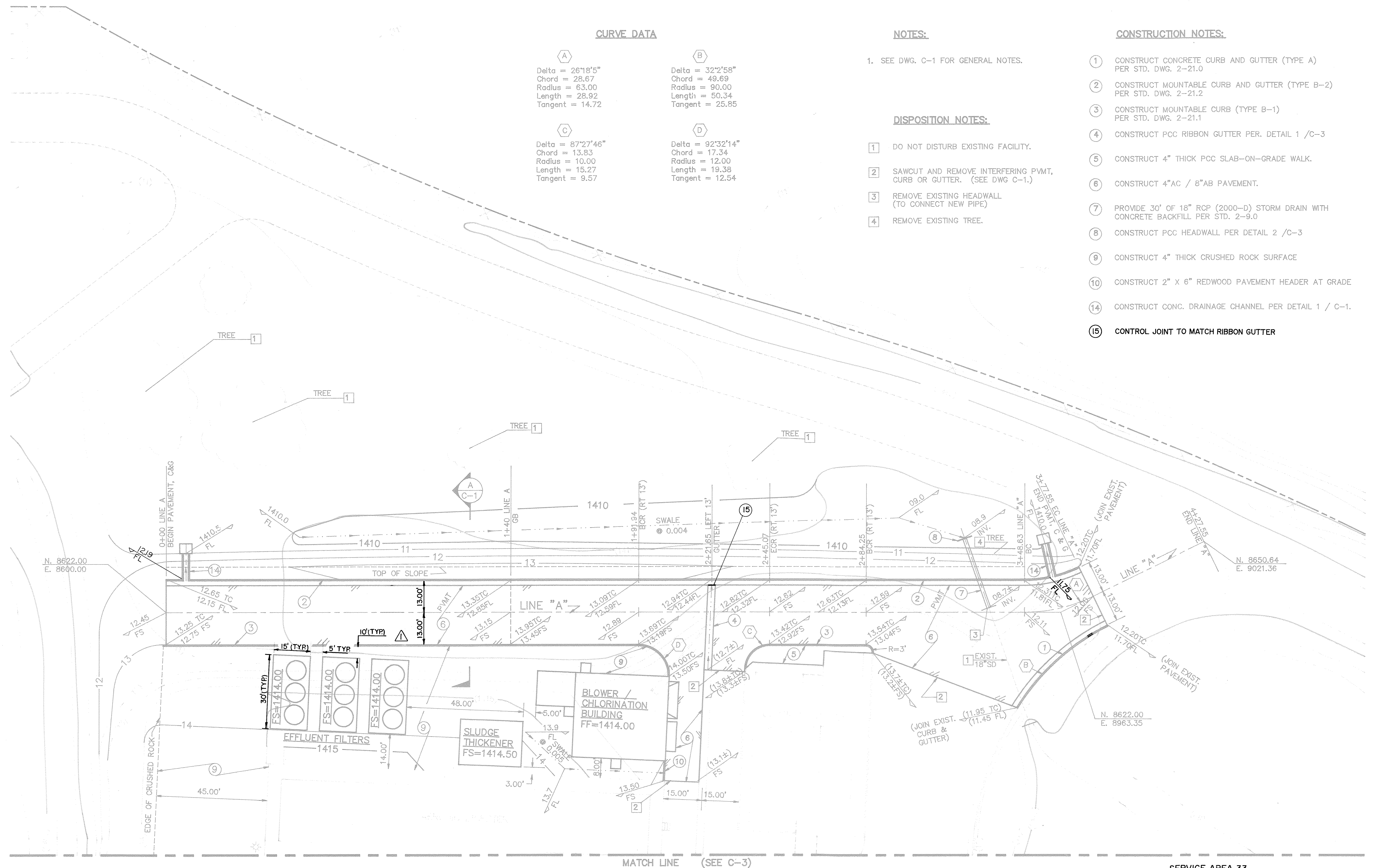


DATE	REVISIONS	BY	PROJECT NO.	DATE	REFERENCE DWGS.
4/93	AS CONSTRUCTED PER C.O. 46260	CD RT	891209	2/90	
			DESIGNED BY J. DWYER	3/90	
			DRAWN BY S. SHARP	5/90	
			CHECKED BY S. ELLIS		
			ENGINEER <i>D. McDonald</i>		
			REGISTRATION NO. C 20431	DATE 5/10/90	

<b>MSE</b> MacDonald-Stephens, Engineers, Inc. 26921 Crown Valley Parkway, Suite 200, Mission Viejo, California 92691 (714) 582-9425	EASTERN MUNICIPAL WATER DISTRICT SAN JACINTO RIVERSIDE COUNTY, CALIFORNIA	SUN CITY REGIONAL WRF OPTIMIZATION PROJECT GENERAL CIVIL SITE PLAN	SCALE 1" = 50' SHEET NO. <b>C-1</b> FILE NO. <b>SD-13772</b> SHEET 40F 41
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# CURVE DATA

<p><b>A</b></p> <p>Delta = 26°18'5"</p> <p>Chord = 28.67</p> <p>Radius = 63.00</p> <p>Length = 28.92</p> <p>Tangent = 14.72</p>	<p><b>B</b></p> <p>Delta = 32°2'58"</p> <p>Chord = 49.69</p> <p>Radius = 90.00</p> <p>Length = 50.34</p> <p>Tangent = 25.85</p>
<p><b>C</b></p> <p>Delta = 87°27'46"</p> <p>Chord = 13.83</p> <p>Radius = 10.00</p> <p>Length = 15.27</p> <p>Tangent = 9.57</p>	<p><b>D</b></p> <p>Delta = 92°32'14"</p> <p>Chord = 17.34</p> <p>Radius = 12.00</p> <p>Length = 19.38</p> <p>Tangent = 12.54</p>

# NOTES:

1. SEE DWG. C-1 FOR GENERAL NOTES.

# DISPOSITION NOTES:

- DO NOT DISTURB EXISTING FACILITY.
- SAWCUT AND REMOVE INTERFERING PVMT, CURB OR GUTTER. (SEE DWG C-1.)
- REMOVE EXISTING HEADWALL (TO CONNECT NEW PIPE)
- REMOVE EXISTING TREE.

# CONSTRUCTION NOTES:

- CONSTRUCT CONCRETE CURB AND GUTTER (TYPE A) PER STD. DWG. 2-21.0
- CONSTRUCT MOUNTABLE CURB AND GUTTER (TYPE B-2) PER STD. DWG. 2-21.2
- CONSTRUCT MOUNTABLE CURB (TYPE B-1) PER STD. DWG. 2-21.1
- CONSTRUCT PCC RIBBON GUTTER PER. DETAIL 1 /C-3
- CONSTRUCT 4" THICK PCC SLAB-ON-GRADE WALK.
- CONSTRUCT 4"AC / 8"AB PAVEMENT.
- PROVIDE 30' OF 18" RCP (2000-D) STORM DRAIN WITH CONCRETE BACKFILL PER STD. 2-9.0
- CONSTRUCT PCC HEADWALL PER DETAIL 2 /C-3
- CONSTRUCT 4" THICK CRUSHED ROCK SURFACE
- CONSTRUCT 2" X 6" REDWOOD PAVEMENT HEADER AT GRADE
- CONSTRUCT CONC. DRAINAGE CHANNEL PER DETAIL 1 / C-1.
- CONTROL JOINT TO MATCH RIBBON GUTTER

DATE	REVISIONS	BY	PROJECT NO.	DATE	REFERENCE DWGS.
4/93	AS CONSTRUCTED PER CO. 46260 C.O. RT		891209	2/90	
			DESIGNED BY J. DWYER	3/90	
			DRAWN BY G. NEGRETE / S. SHARP	5/90	
			CHECKED BY S. ELLIS		
			ENGINEER <i>David MacDonald</i>		
			REGISTRATION NO. C 20431	DATE 5/18/90	

**MSE** MacDonald-Stephens, Engineers, Inc.  
26921 Crown Valley Parkway, Suite 200, Mission Viejo, California 92691 (714) 582-9425

SPEC. 466S C.O. 46260 W.O. 90-388

EASTERN MUNICIPAL WATER DISTRICT  
SAN JACINTO  
RIVERSIDE COUNTY, CALIFORNIA

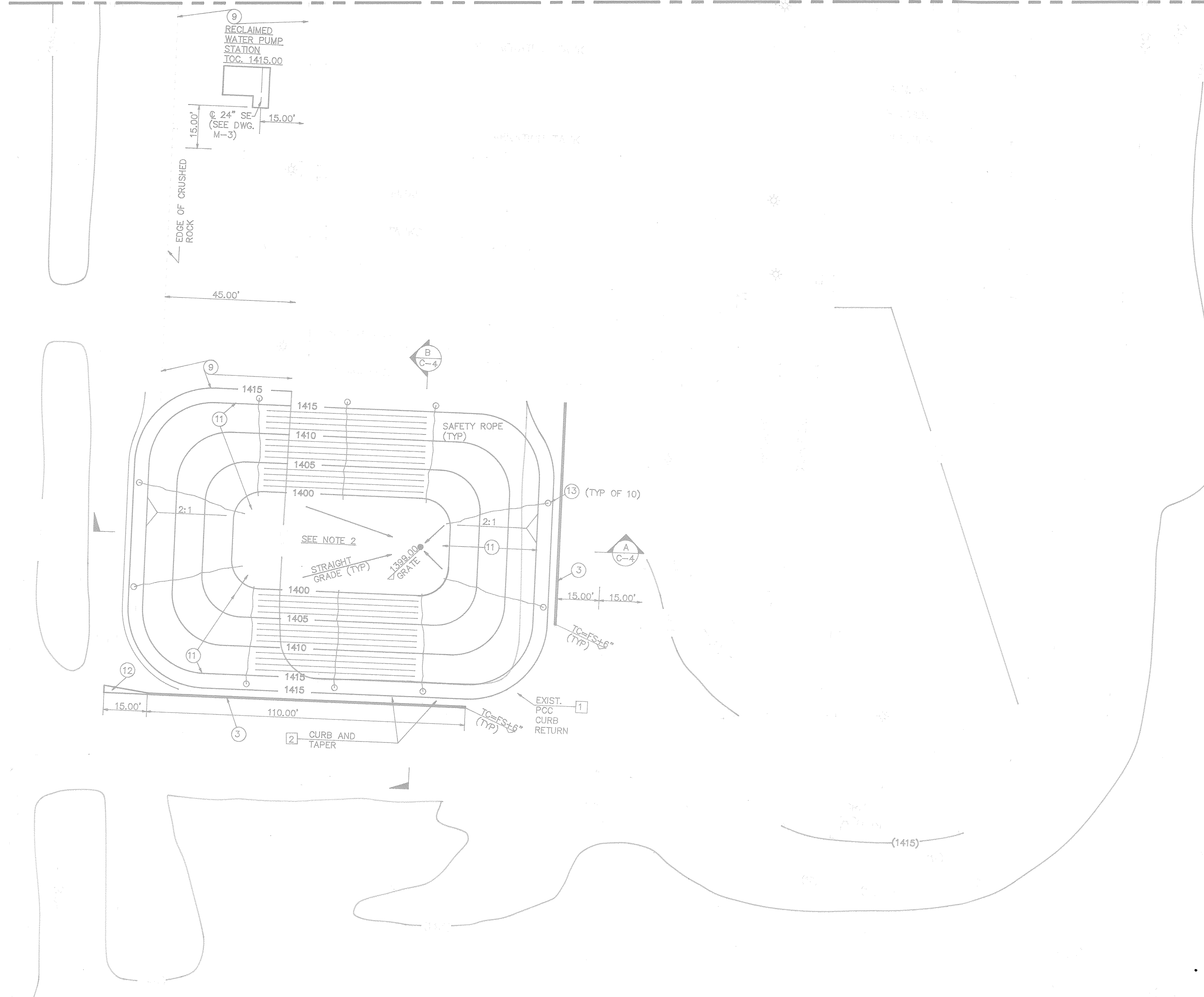
SERVICE AREA 33  
IMPROVEMENT DISTRICT NO. U-1

SUN CITY REGIONAL WRF  
OPTIMIZATION PROJECT  
PAVING AND GRADING  
SITE PLAN

COORD.23-H

SCALE 1"= 20'
SHEET NO. C-2
FILE NO. SD-13773
SHEET 5 OF 41

MATCH LINE (SEE C-2)



**NOTES**

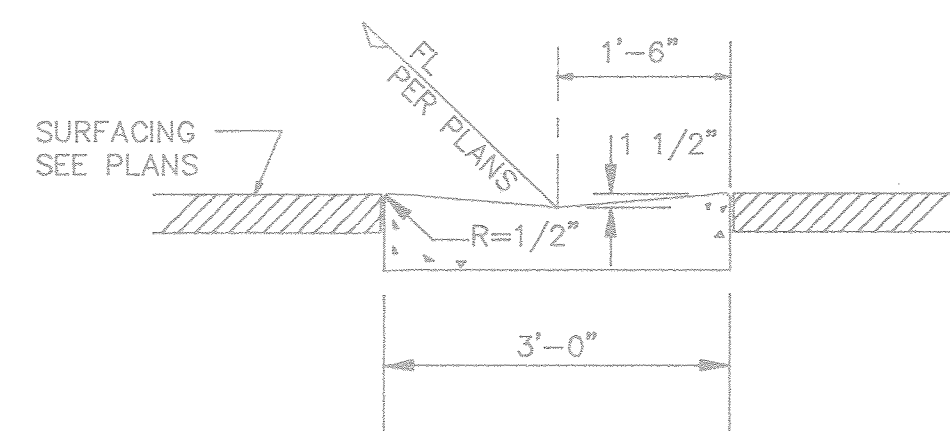
1. SEE DWG. C-1 FOR GENERAL NOTES.
2. SEE DWG. C-4 FOR POND DIMENSIONS.

**DISPOSITION NOTES**

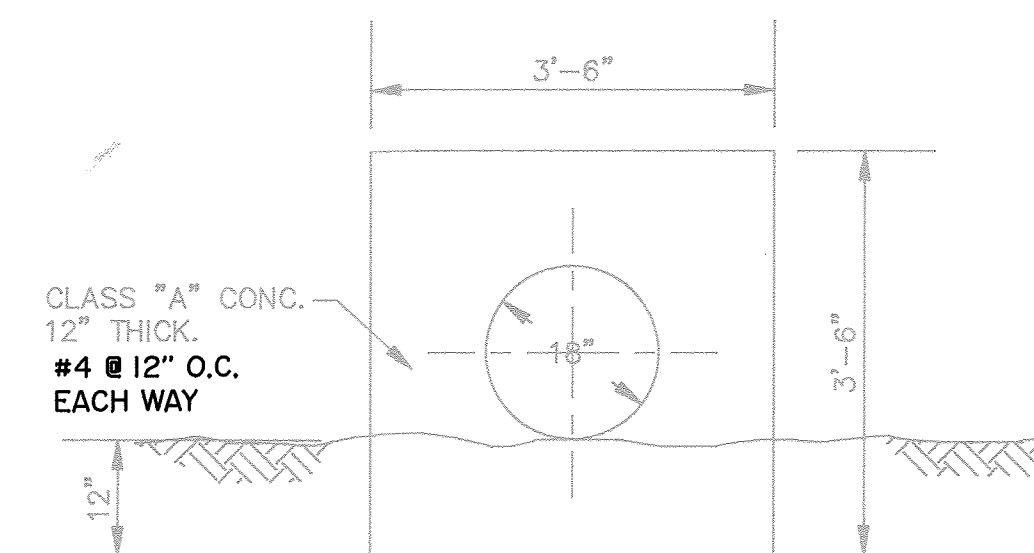
- 1 DO NOT DISTURB EXISTING FACILITY.
- 2 SAWCUT AND REMOVE INTERFERING PVMT. CURB OR GUTTER.

**CONSTRUCTION NOTES**

- 3 CONSTRUCT MOUNTABLE CURB (TYPE B-2) PER STD. DWG. 2-21.1
- 9 CONSTRUCT 4" THICK CRUSHED ROCK SURFACE.
- 11 CONSTRUCT POND WITH HDPE LINER PER SECTIONS A /C-4 AND B /C-4
- 12 CONSTRUCT PCC CURB TAPER TO JOIN EXIST. ROLLED CURB.
- 13 CONSTRUCT SAFETY ROPE AND ANCHOR PER DETAIL 3/ C-4



RIBBON GUTTER DETAIL  
NO SCALE



HEADWALL DETAIL  
NO SCALE



SPEC. 466S

C.O. 46260 W.O. 90-388

SERVICE AREA 33  
IMPROVEMENT DISTRICT NO. U-1

COORD.23-H

NO.	DATE	REVISIONS	BY	PROJECT NO.	DATE	REFERENCE DWGS.
1	4/93	AS CONSTRUCTED PER C.O. 46260	C.D. RT	891209	2/90	
				DESIGNED BY J. DWYER	3/90	
				DRAWN BY S. SHARP	5/90	
				CHECKED BY S. ELLIS		
				ENGINEER <i>David MacDonald</i>		
				REGISTRATION NO. C 20431	DATE 5/18/90	

**MSE** MacDonald-Stephens, Engineers, Inc.  
26921 Crown Valley Parkway, Suite 200, Mission Viejo, California 92691 (714) 582-9425

EASTERN MUNICIPAL WATER DISTRICT  
SAN JACINTO  
RIVERSIDE COUNTY, CALIFORNIA

SUN CITY REGIONAL WRF  
OPTIMIZATION PROJECT  
PAVING AND GRADING  
SITE PLAN

SCALE  
1"= 20'  
SHEET NO.  
**C-3**  
FILE NO.  
**SD-13774**  
SHEET 6 OF 47



3/8" x 3 1/2" 316 SS AB  
W/ SS WASHER AND NUT.  
APPLY BEAD OF CAULK  
AROUND THREADS BEFORE  
APPLYING NUT.

1/4" x 2" 316 SS BAR W/  
7/16" x 3/4" SLOTTED HOLES  
@ 6" OC. APPLY BEAD OF CAULK  
AROUND BOLT BEFORE INSTALLING  
BAR.

1/4" THK NEOPRENE CLOSED CELL  
RUBBER W/ NEOPRENE ADHESIVE  
TOP AND BOTTOM.

1/4" CAULKED FILLET (TYP).

80 MIL HDPE LINER

STEEL TROWEL FINISH.

PLACE AB'S @ 6" OC  
AROUND PERIMETER  
OF CONCRETE.

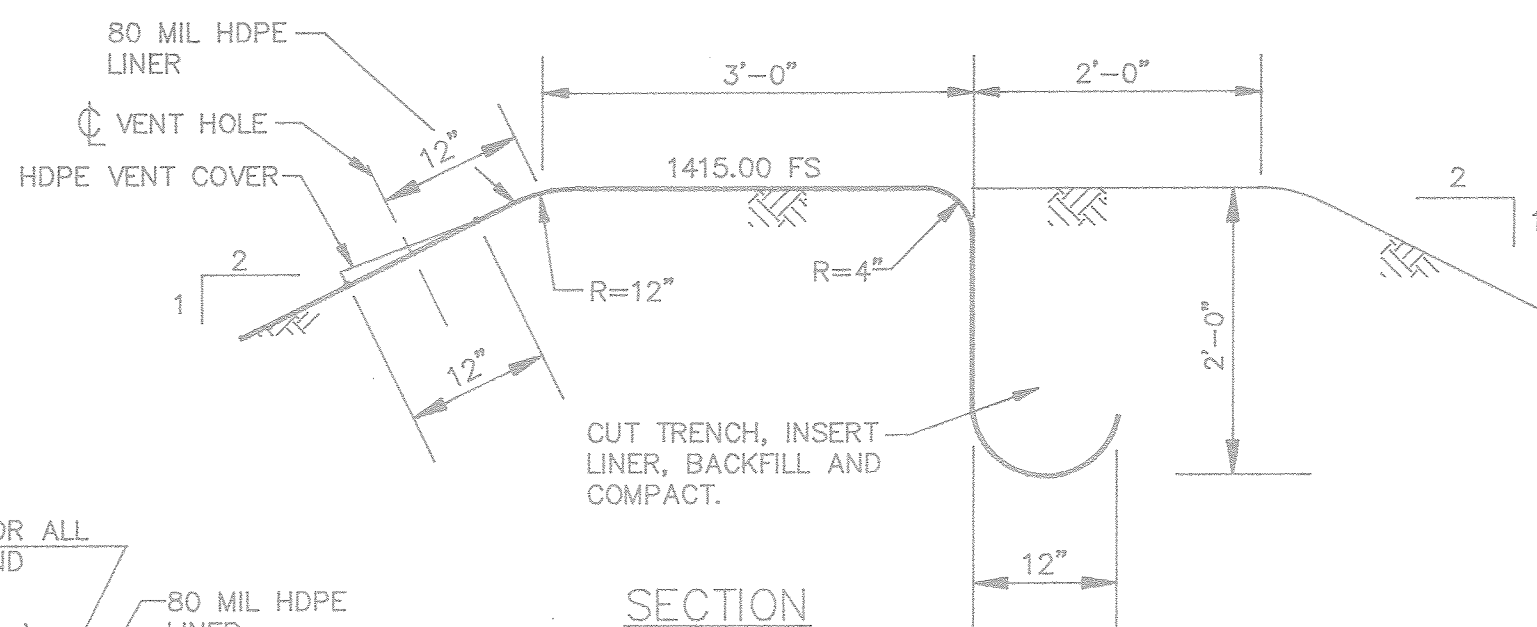
### LINING TO CONCRETE ANCHOR / SEAL DETAIL

SCALE: 3"=1'-0"

80 MIL HDPE VENT COVER  
(SEE NOTE 3)

1" VENT HOLE IN LINING  
EXTRUSION WELD 3 SIDES (TYP)

### PLAN



### AIR / GAS VENT AND LINER DETAIL

SCALE: 3/4"=1'-0"

ANCHOR ALL  
AROUND

80 MIL HDPE  
LINER.

FLEX CPLG.

6" THK x 6" WIDE PCC  
SLAB W/ #4 @ 18" EW  
@ MID DEPTH OF SLAB.

INV. PER SP-2

80 MIL HDPE  
LINER

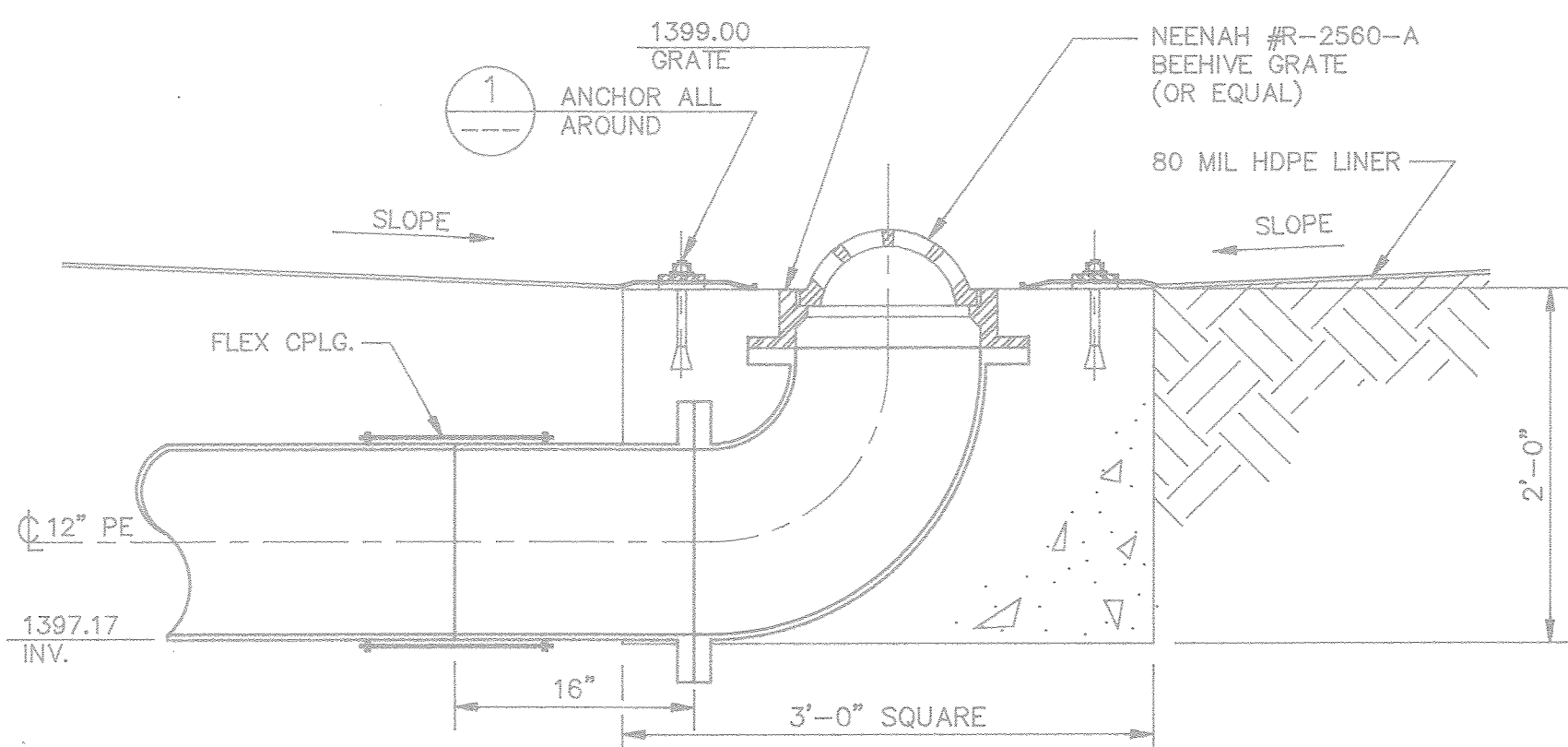
ANCHOR ALL  
AROUND

EL. 1400.00

4'-0"

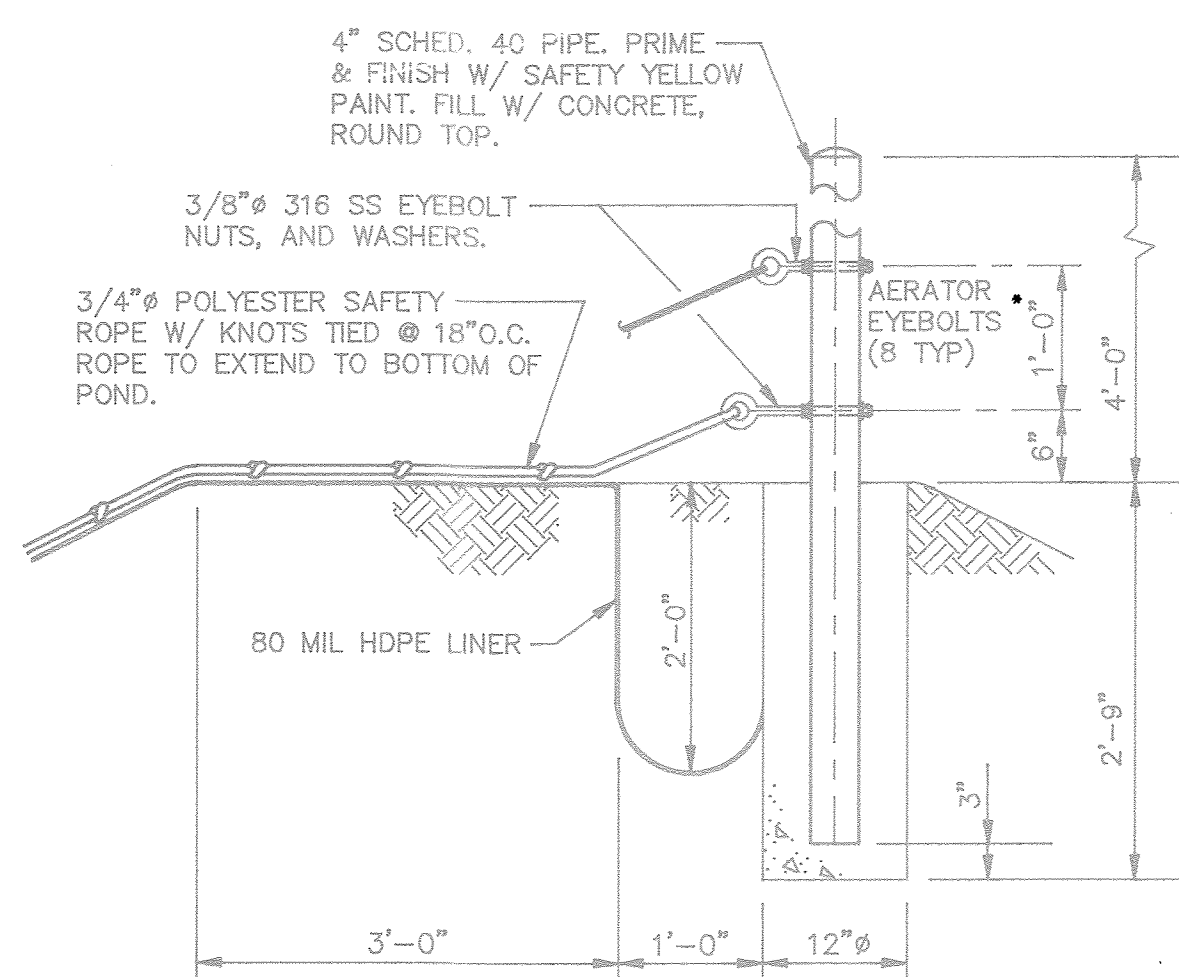
### INLET PENETRATION & SLAB DETAIL

SCALE: NONE



### OUTLET GRATE DETAIL

SCALE: 1"=1'-0"

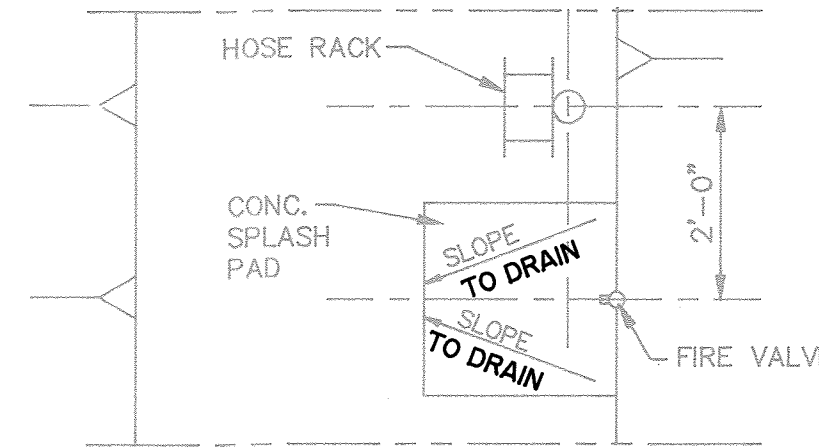


### SAFETY ROPE ANCHOR DETAIL

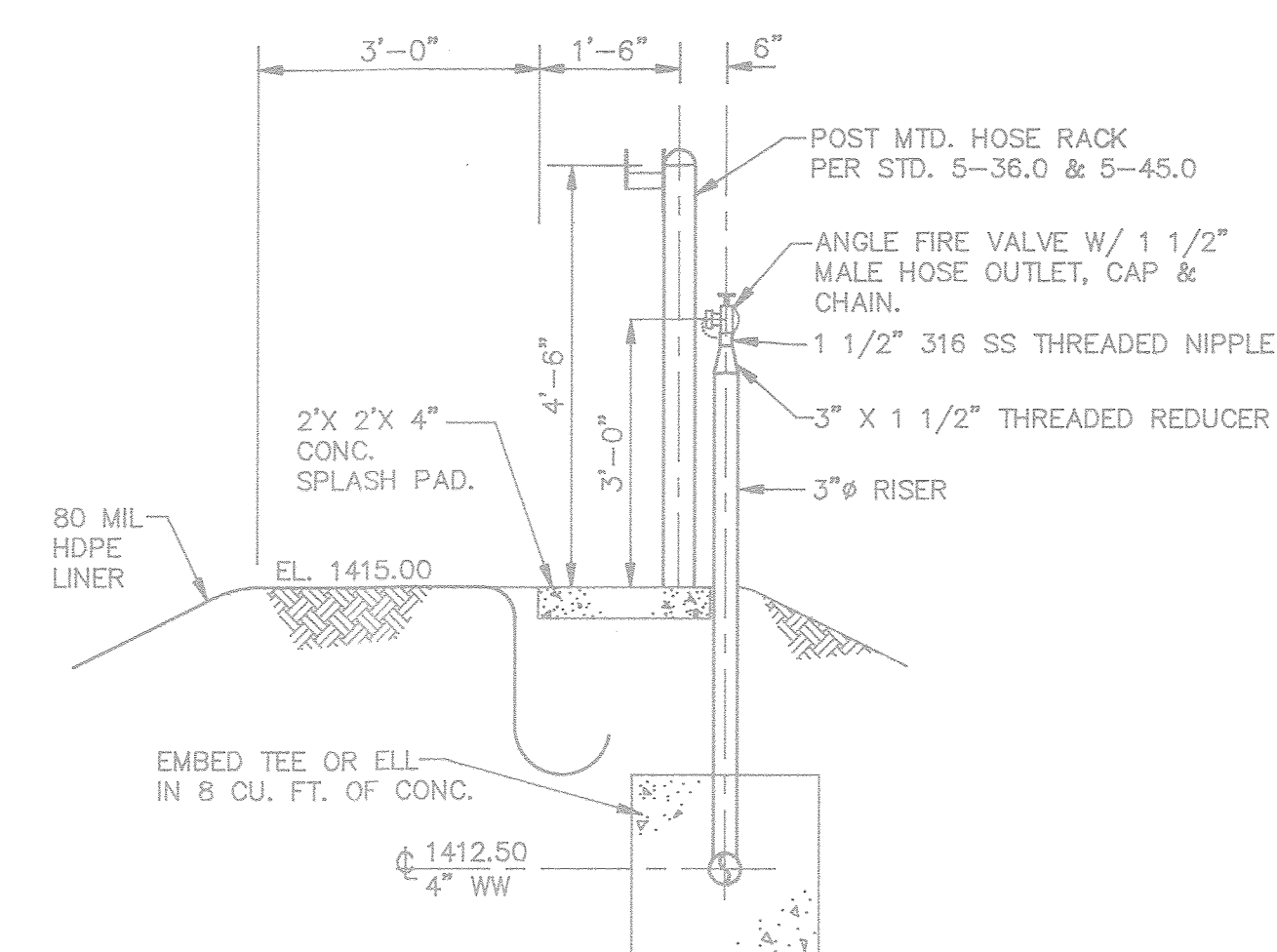
SCALE: 3/4"=1'-0"

C-3

\*SUPPLIER  
TO FIELD  
LOCATION



### PLAN

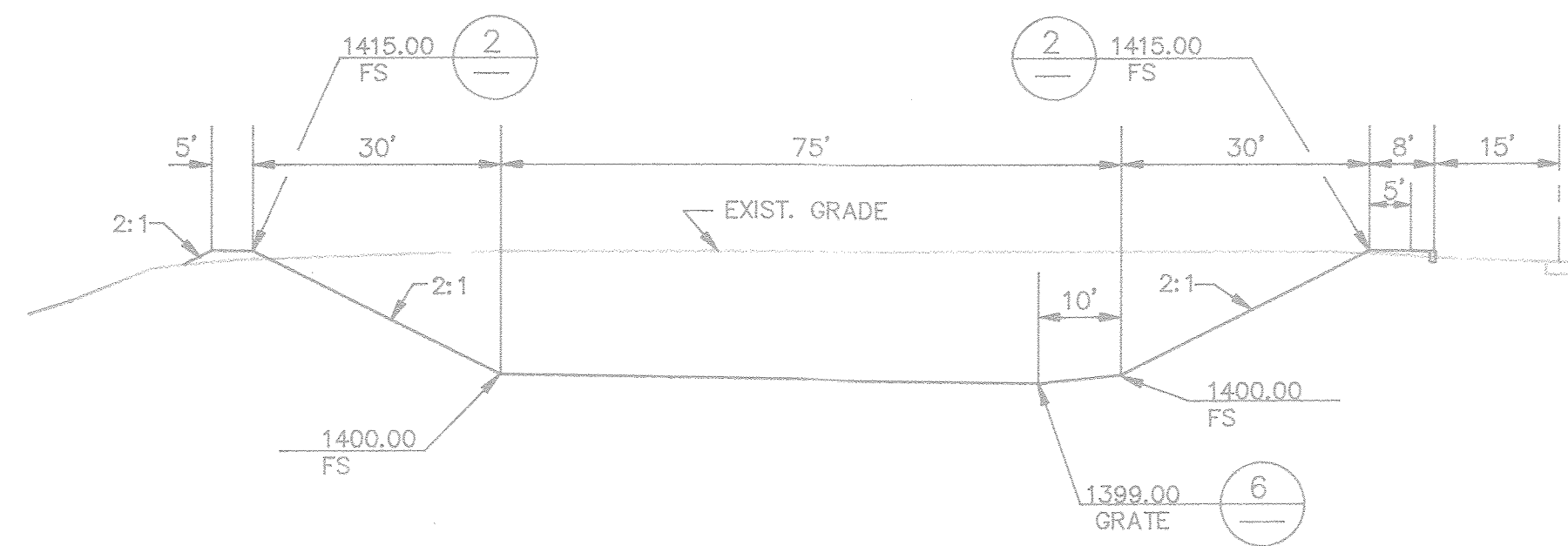


### SECTION

### HOSE BIBB & RACK DETAIL

SCALE: 1/2"=1'-0"

SP-2

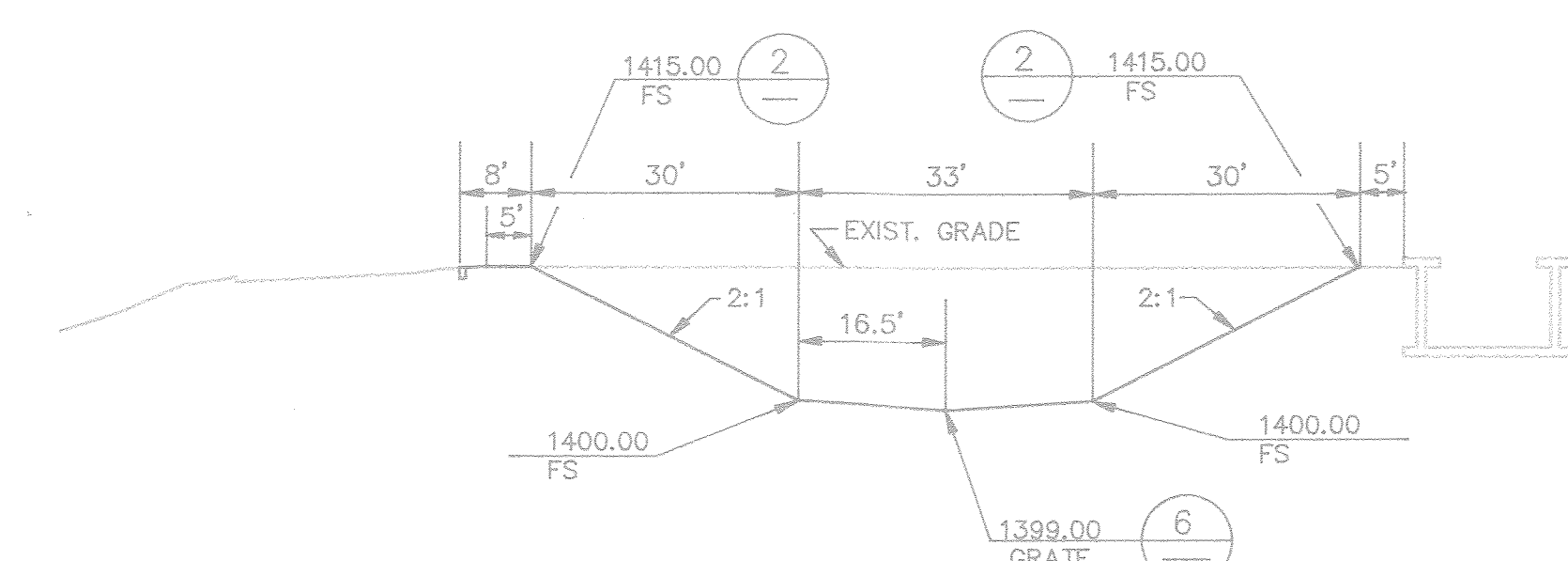


### SECTION

SCALE: 1"=20'-0"

A

C-3



### SECTION

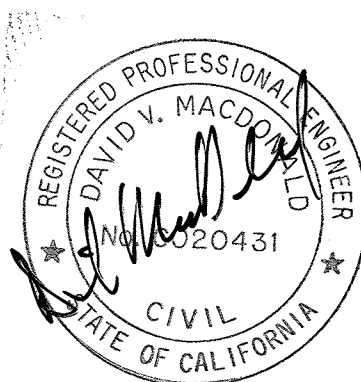
SCALE: 1"=20'-0"

B

C-3

### HDPE POND LINER NOTES:

1. ALL LINING OVERLAPPING A CONCRETE SURFACE SHALL BE ANCHORED PER DETAIL 1, THIS DWG.
2. **TEN** SAFETY ROPES SHALL BE REQUIRED AS SHOWN ON DWG. C- 3 PER DETAIL 3, THIS DWG.
3. AIR / GAS VENTS SHALL BE SPACED 50' OC AROUND THE POND PERIMETER PER DETAIL 2, THIS DWG.
4. **SIX** HOSE BIBBS WITH RACKS SHALL BE REQUIRED AS SHOWN ON DWG. SP-2 PER DETAIL 4, THIS DWG.



DATE	REVISIONS	BY	PROJECT NO.	DATE	REFERENCE DWGS.
4/93	AS CONSTRUCTED PER C.O. 46260	CD	891209	3/90	
			DESIGNED BY J. DWYER	3/90	
			DRAWN BY S. SHARP	3/90	
			CHECKED BY S. ELLIS	5/90	
			ENGINEER <i>David MacDonald</i>		
			REGISTRATION NO. C. 20431	DATE 5/18/90	

**MSE** MacDonald-Stephens, Engineers, Inc.  
26921 Crown Valley Parkway, Suite 200, Mission Viejo, California 92691 (714) 582-9425

SPEC. 466S C.O. 46260 W.O. 90-388

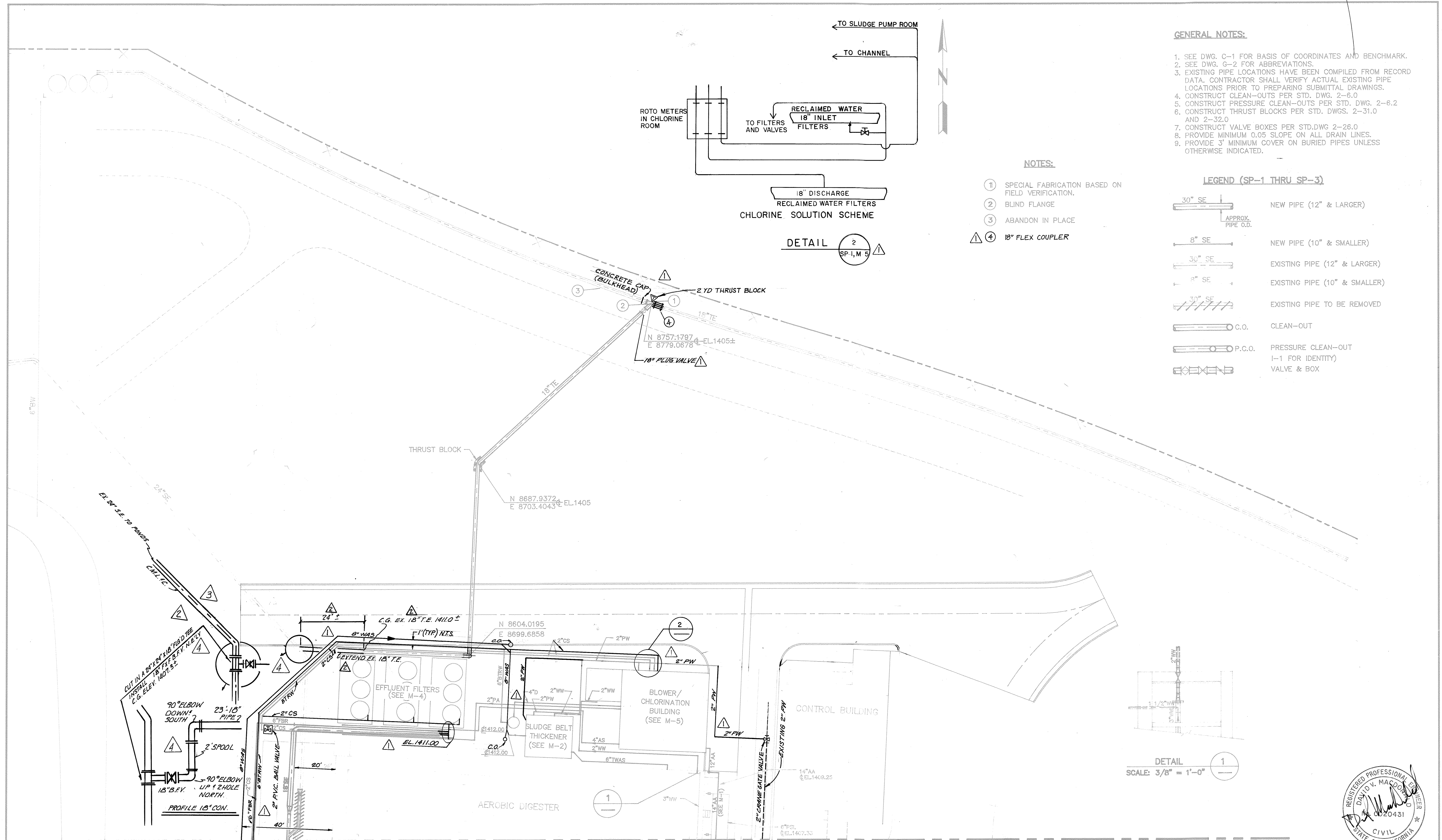
SERVICE AREA 33  
IMPROVEMENT DISTRICT NO. U-1

COORD.23-H

SUN CITY REGIONAL WRF  
OPTIMIZATION PROJECT  
FLOW EQUALIZATION BASIN  
DETAILS

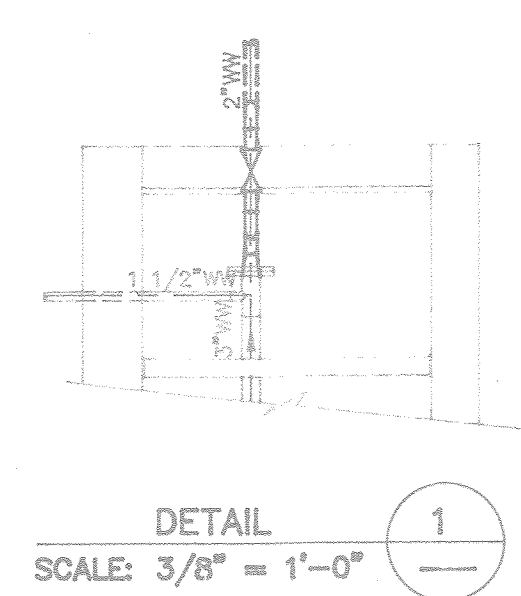
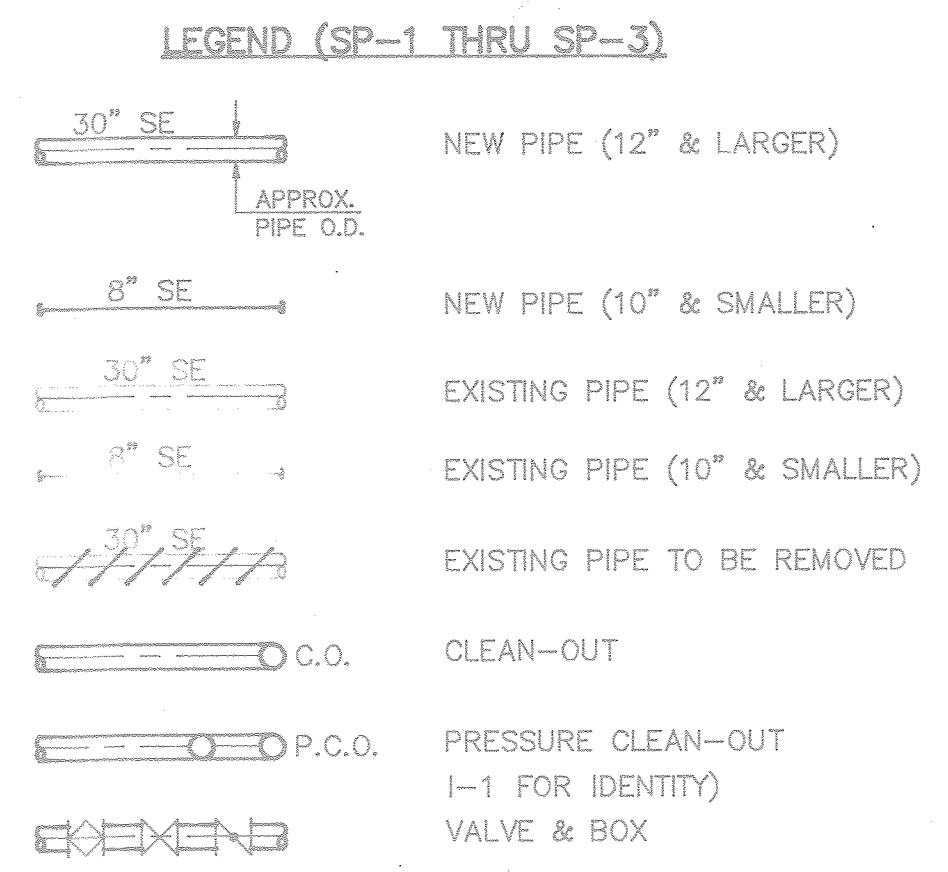
SCALE  
AS SHOWN  
SHEET NO.  
**C-4**  
FILE NO.  
**SD-13775**

SHEET 7 OF 41



- GENERAL NOTES:**
1. SEE DWG. C-1 FOR BASIS OF COORDINATES AND BENCHMARK.
  2. SEE DWG. G-2 FOR ABBREVIATIONS.
  3. EXISTING PIPE LOCATIONS HAVE BEEN COMPILED FROM RECORD DATA. CONTRACTOR SHALL VERIFY ACTUAL EXISTING PIPE LOCATIONS PRIOR TO PREPARING SUBMITTAL DRAWINGS.
  4. CONSTRUCT CLEAN-OUTS PER STD. DWG. 2-6.0
  5. CONSTRUCT PRESSURE CLEAN-OUTS PER STD. DWG. 2-6.2
  6. CONSTRUCT THRUST BLOCKS PER STD. DWGS. 2-31.0 AND 2-32.0
  7. CONSTRUCT VALVE BOXES PER STD. DWG. 2-26.0
  8. PROVIDE MINIMUM 0.05 SLOPE ON ALL DRAIN LINES.
  9. PROVIDE 3' MINIMUM COVER ON BURIED PIPES UNLESS OTHERWISE INDICATED.

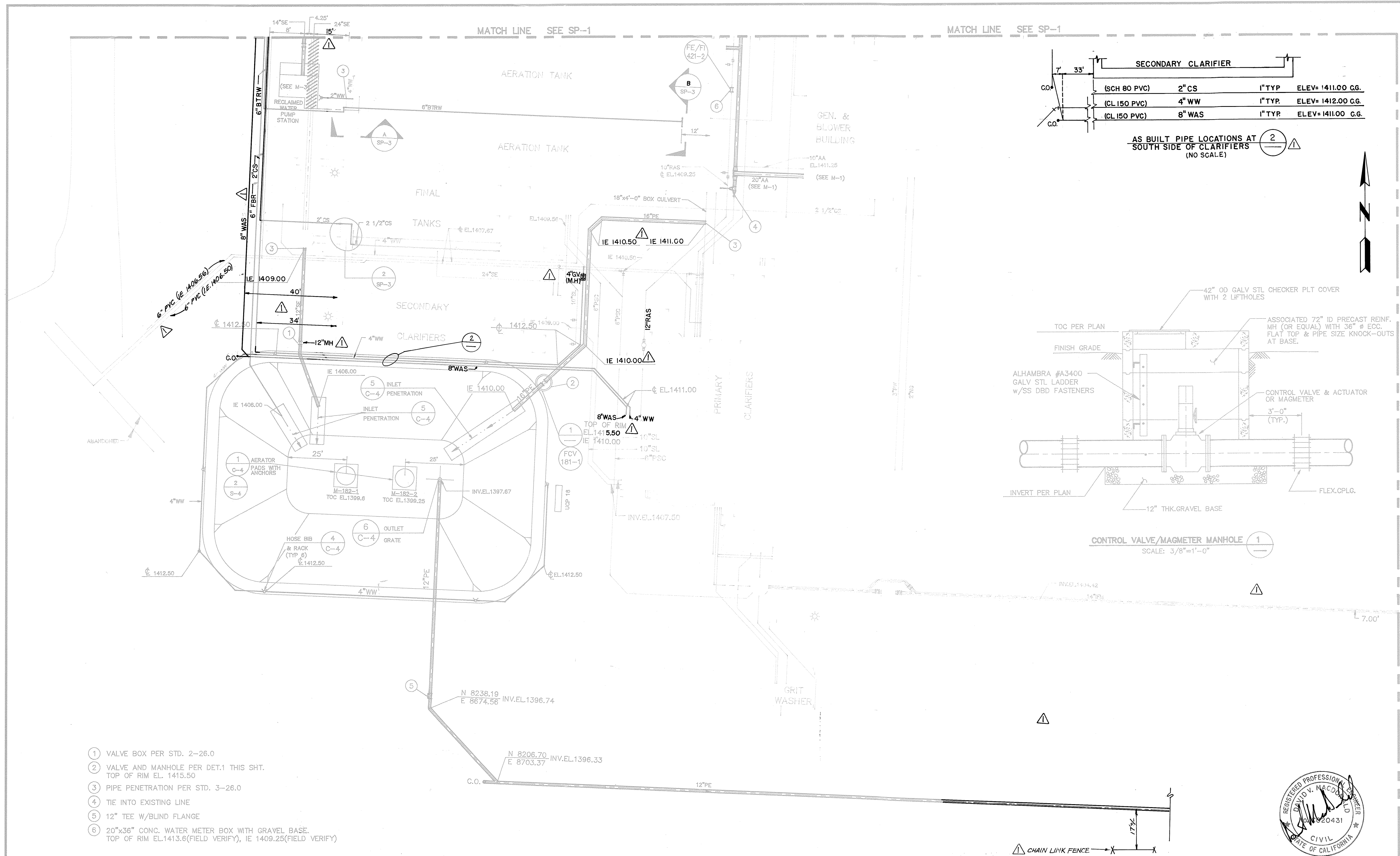
- NOTES:**
- ① SPECIAL FABRICATION BASED ON FIELD VERIFICATION.
  - ② BLIND FLANGE
  - ③ ABANDON IN PLACE
  - ④ 18" FLEX COUPLER



<b>REVISIONS</b> 1. 4/98 AS CONSTRUCTED PER C.O. 46260 C.D. RT 2. 8-20-99 EXTENDED EX. 18" T.E. TO TIE INTO EX. 24" S.E. 3. 9-8-99 REMOVED PROP. 24" B.F.V. ADDED 18" B.F.V. 4. 10-28-99 AS CONST. C.O. 63220 C.C.P. 9-28-99		<b>BY</b> DESIGNED BY P. A. LEE PAL DRAWN BY J. A. MARTINEZ Jm CHECKED BY S. ELLIS SE ENGINEER D. MacDonald REGISTRATION NO. C 20431 DATE 5/18/90		<b>PROJECT NO.</b> 891209 <b>DATE</b> 2/90 <b>REFERENCE DWGS.</b>		<b>SPEC. NO.</b> 466S <b>C.O.</b> 46260 <b>W.O.</b> 90-388		<b>SERVICE AREA 33</b> <b>IMPROVEMENT DISTRICT NO. U-1</b> <b>COORD. 23-H</b>		<b>EASTERN MUNICIPAL WATER DISTRICT</b> <b>SAN JACINTO</b> <b>RIVERSIDE COUNTY, CALIFORNIA</b>		<b>SUN CITY REGIONAL WRF</b> <b>OPTIMIZATION PROJECT</b> <b>SITE PIPING</b>		<b>SCALE</b> 1" = 20' <b>SHEET NO.</b> SP-1 <b>FILE NO.</b> SD-13776 <b>SHEET 8 OF 41</b>
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NO.	DATE	REVISIONS	BY	PROJECT NO.	DATE	REFERENCE DWGS.
1	4/93	AS CONSTRUCTED PER C.O. 46260	C.D.	891209		
				DESIGNED BY P. A. LEE		
				DRAWN BY J. A. MARTINEZ		
				CHECKED BY S. ELLIS		
				ENGINEER David MacDonald		
				REGISTRATION NO. C 20431	DATE 5/18/90	

**MSE** MacDonald-Stephens, Engineers, Inc.  
28921 Crown Valley Parkway, Suite 200, Mission Viejo, California 92691 (714) 582-9425

SPEC. NO. 466S C.O. 46260 W.O. 90-388  
EASTERN MUNICIPAL WATER DISTRICT  
SAN JACINTO  
RIVERSIDE COUNTY, CALIFORNIA

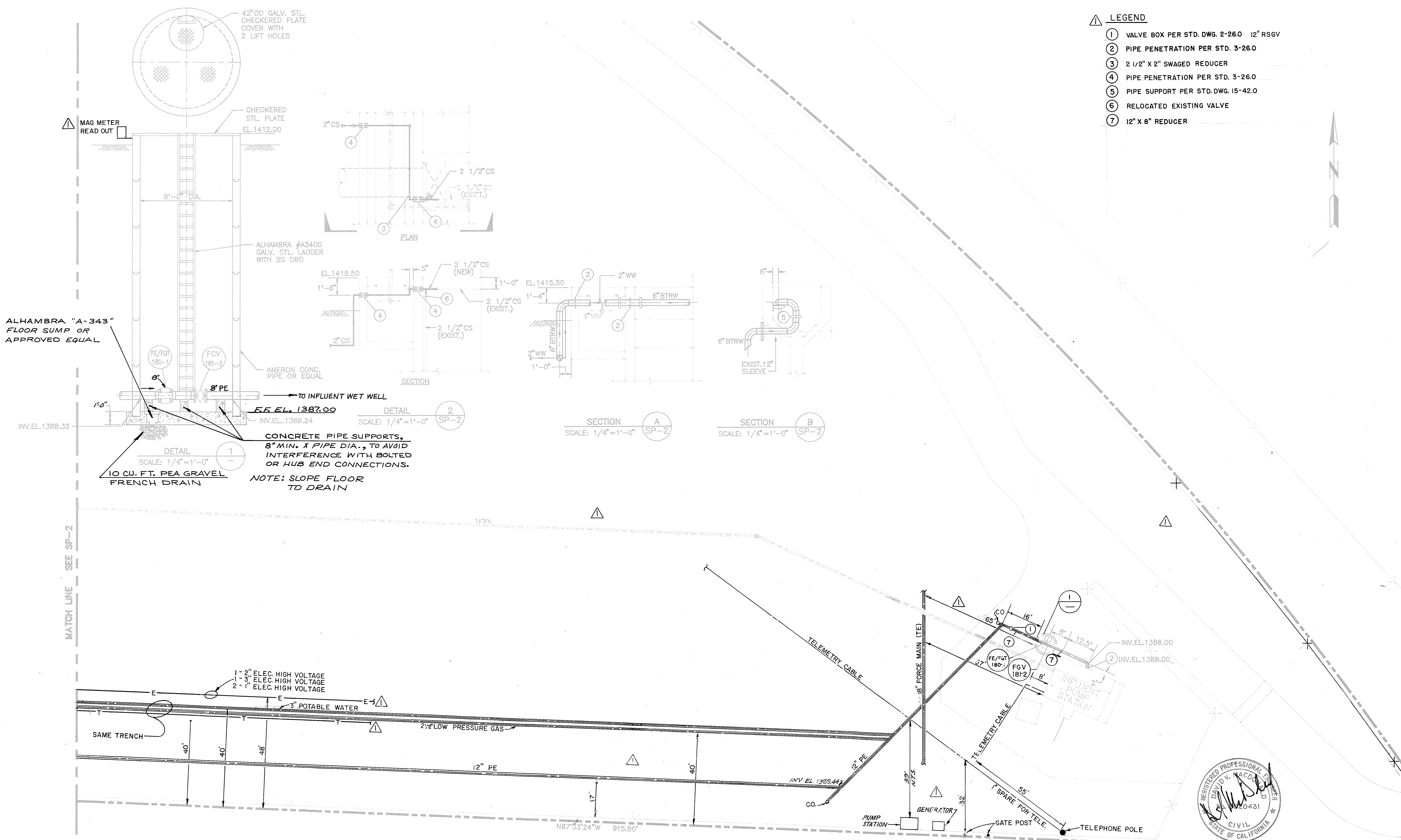
SERVICE AREA 33  
IMPROVEMENT DISTRICT NO. U-1  
COORD.23-H  
SUN CITY REGIONAL WRF  
OPTIMIZATION PROJECT  
SITE PIPING

SCALE 1"= 20'  
SHEET NO. SP-2  
FILE NO. SD-13777  
SHEET 9 OF 41





- LEGEND**
- ① VALVE BOX PER STD. DWG. 2-26.0 12" RSGV
  - ② PIPE PENETRATION PER STD. 3-26.0
  - ③ 2 1/2" X 2" SWAGED REDUCER
  - ④ PIPE PENETRATION PER STD. 3-26.0
  - ⑤ PIPE SUPPORT PER STD. DWG. 15-42.0
  - ⑥ RELOCATED EXISTING VALVE
  - ⑦ 12" X 8" REDUCER



DATE		REVISIONS		BY		PROJECT NO.		DATE		REFERENCE DWGS.	
4/93		AS CONSTRUCTED PER C.O. 46260		C.O. AT		891209					
						DESIGNED BY		P. LEE			
						DRAWN BY		J. A. MARTINEZ			
						CHECKED BY		S. ELLIS			
						ENGINEER		David MacDonald			
						REGISTRATION NO.		C 20431		DATE	
								5/19/90			

**MSE** MacDonald-Stephens, Engineers, Inc.

28921 Crown Valley Parkway, Suite 200, Mission Viejo, California 92691 (714) 582-9425

SPEC. NO. 466S C.O. 46260 W.O. 90-388 SERVICE AREA 33 IMPROVEMENT DISTRICT NO. U-1

EASTERN MUNICIPAL WATER DISTRICT

SAN JACINTO

RIVERSIDE COUNTY, CALIFORNIA

SUN CITY REGIONAL WRF OPTIMIZATION PROJECT

SITE PIPING

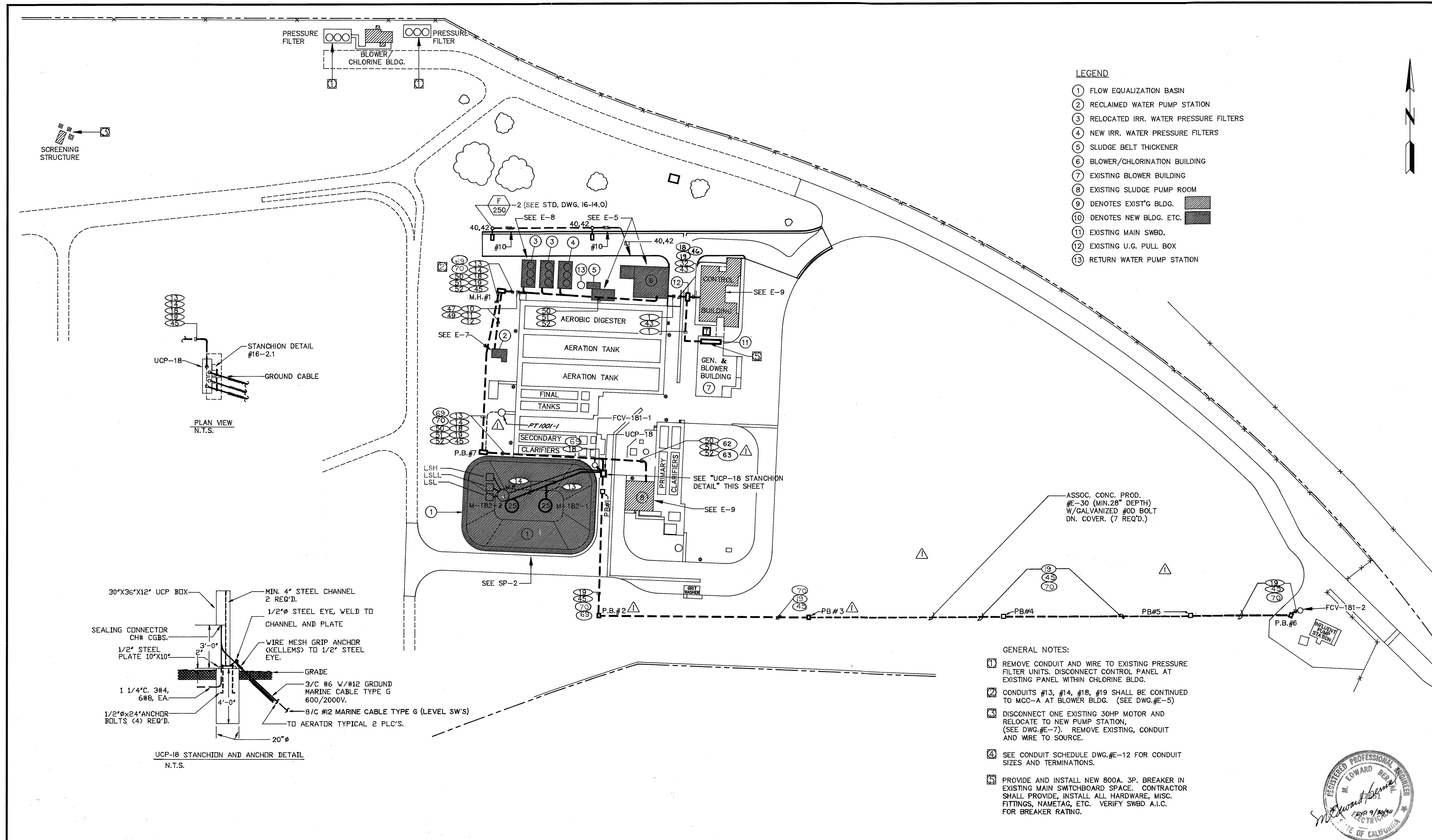
COORD. 23-H

SCALE 1"=20'

SHEET NO. SP-3

FILE NO. SD-13778

SHEET 10 OF 47



DATE	REVISIONS	BY	PROJECT NO.	DATE	REFERENCE DWGS.
4/93	AS CONSTRUCTED PER C.O. 46260	CD RT	891209	2/90	
			DESIGNED BY J. COSTIGAN		
			DRAWN BY J. ODDOU		
			CHECKED BY E. BERNAL		
			ENGINEER <i>Edmund Bernal</i>		
			REGISTRATION NO. E 7651	DATE 3/18/90	

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 26921 Crown Valley Parkway, Suite 200, Mission Viejo, California 92691 (714) 582-9425

SPEC. 466S C.O. 46260 W.O. 90-388  
 EASTERN MUNICIPAL WATER DISTRICT  
 SAN JACINTO  
 RIVERSIDE COUNTY, CALIFORNIA

SERVICE AREA 33  
 IMPROVEMENT DISTRICT NO. U-1  
 COORD.23-H  
 SUN CITY REGIONAL WRF  
 OPTIMIZATION PROJECT  
 GENERAL  
 ELECTRICAL SITE PLAN



SCALE  
 1" = 50'  
 SHEET NO.  
**E-3**  
 FILE NO.  
**SD-13800**  
 SHEET 32 OF 41