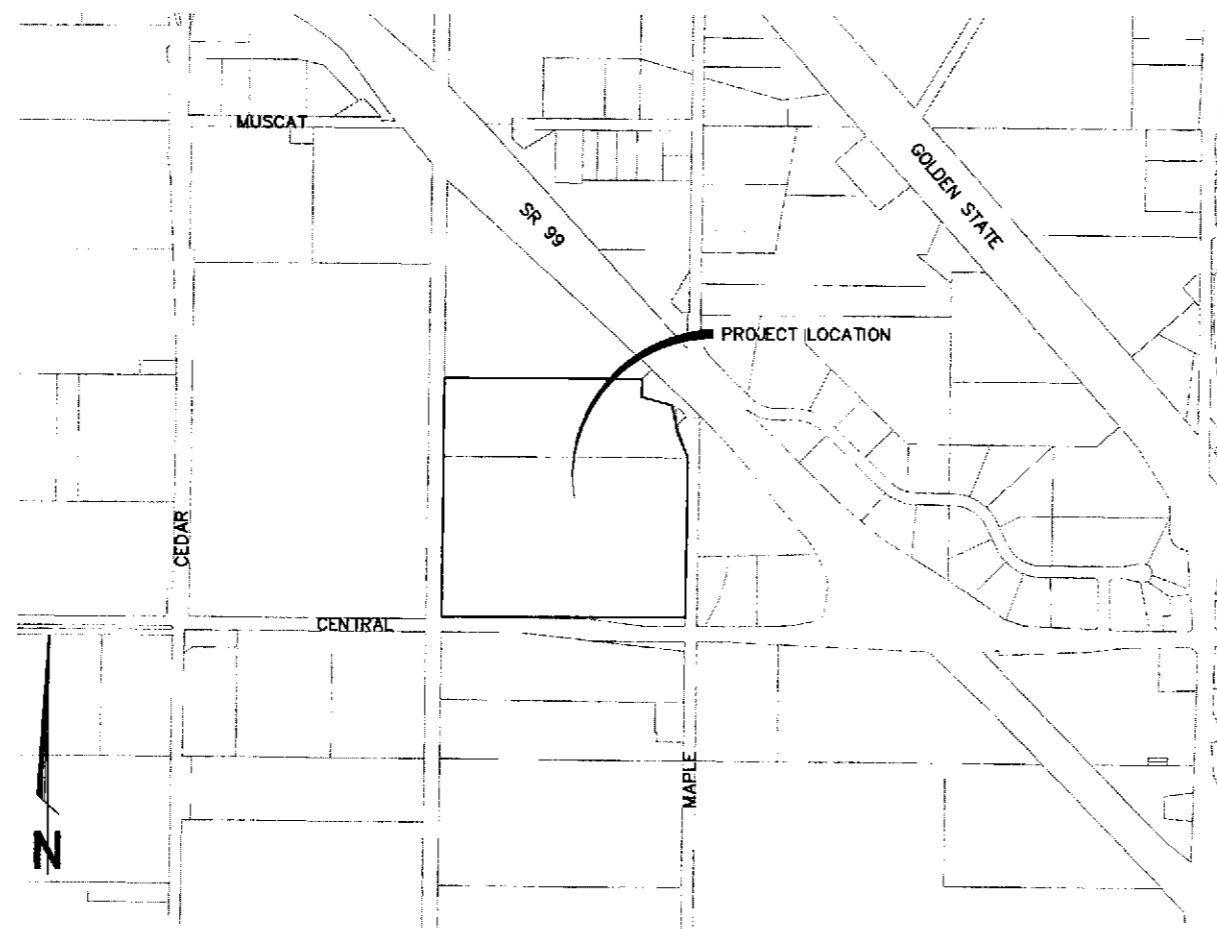
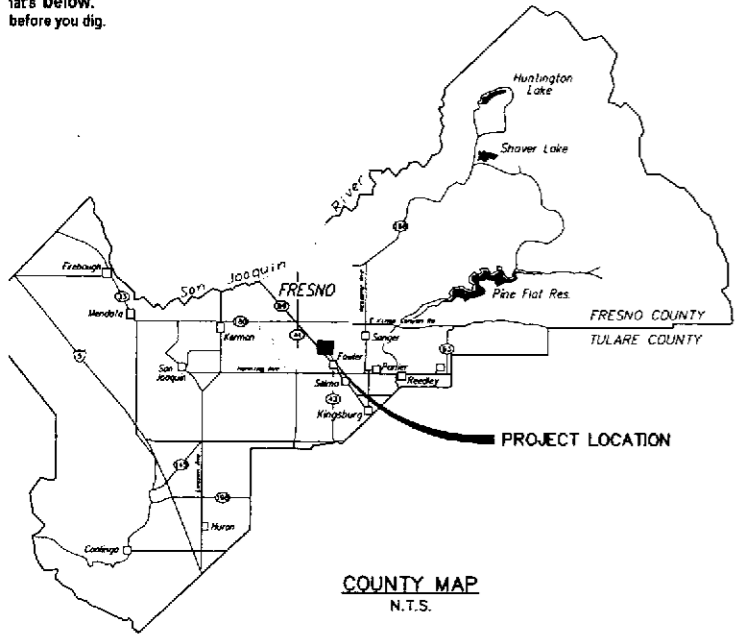




MALAGA COUNTY WATER DISTRICT FRESNO COUNTY



MALAGA WWTP MONITORING AND SLUDGE BED IMPROVEMENTS CDBG NO. 09451



VICINITY MAP
1"=500'

GENERAL LEGEND

NOTE: ALL LEGEND ITEMS NOT IDENTIFIED AS PROPOSED FACILITIES INDICATE EXISTING FACILITIES

BFP	BACK FLOW PREVENTER	□	SIGN
BO	BOLLARD	○	SEWER MANHOLE
CIP	CAST-IN-PLACE CONCRETE PIPE	○	WATER METER
CNS	COMPACTED NATIVE SOIL	○	MONUMENT (SURFACE)
CO	SEWER CLEAN OUT	—	EMBANKMENT
DI	STORM DRAIN INLET	→	FLOW DIRECTION
DO	DISSOLVED OXYGEN	—	EXISTING PAVEMENT
DS	DIGESTED SLUDGE	—	ELECTRIC LINE (AERIAL)
DW	DRIVEWAY	—	GAS LINE, SIZE AS NOTED
EC	ELECTROCONDUCTIVITY	—	STORM DRAIN LINE, SIZE AS NOTED
EM	ELECTRIC METER	—	SANITARY SEWER LINE, SIZE AS NOTED
EPB	ELECTRIC PULL BOX	—	TELEPHONE LINE (UNDERGROUND)
FL	FLOW LINE	—	TELEPHONE LINE (AERIAL)
FM	FLOWMETER	—	WATER LINE, SIZE AS NOTED
HP	HINGE POINT	—	CHAIN LINK FENCE
INF	INFLUENT	—	EDGE OF A.C. PAVEMENT
MCC	MOTOR CONTROL CENTER		
MCWD	MALAGA COUNTY WATER DISTRICT		
MH	MANHOLE		
MJ	MECHANICAL JOINT		
NIC	NOT IN CONTRACT		
OH	OVERHEAD		
PB	PULL BOX		
PL	PROPERTY LINE		
PP	POWER POLE		
RAS	RETURN ACTIVATED SLUDGE		
SDB	SLUDGE DRYING BED		
SE	SECONDARY EFFLUENT		
SFM	SLUDGE FLOW METER		
SLP	SLUDGE PUMP		
SND	SUPERNATANT RETURN		
STP	STAND PIPE		
T	TEMPORARY SURVEY CONTROL		
TBM	TEMPORARY BENCHMARK		
TS	TOP OF STRUCTURE		
TSB	TELEPHONE SPLICE BOX		
UE	UNDERGROUND ELECTRIC		
UG	UNDERGROUND		
WAS	WASTE ACTIVATED SLUDGE		
WM	WATER METER		
WS	WATER SERVICE		
WV	WATER VALVE		

GENERAL NOTES

- MALAGA COUNTY WATER DISTRICT (559-485-7353) SHALL BE CONTACTED AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF WORK ON OR NEAR EXISTING DISTRICT FACILITIES.
- USED MATERIAL, REJECTS, MISFITS, OR SECONDS, ETC. ARE NOT ACCEPTABLE FOR USE ON MALAGA COUNTY WATER DISTRICT FACILITIES.
- ALL CONSTRUCTION SHALL BE IN CONFORMANCE WITH THESE PLANS, PROJECT SPECIFICATIONS AND MALAGA COUNTY WATER DISTRICT SPECIFICATIONS.
- CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING FACILITIES PRIOR TO COMMENCING WORK. CALL UNDERGROUND SERVICE ALERT (USA) AT 1-800-227-2600. CONTRACTOR SHALL MAKE ENGINEER AWARE OF ANY DISCREPANCIES.
- CONCRETE DESIGN MIX SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL. ALL CONCRETE SHALL HAVE A 28-DAY MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI UNLESS OTHERWISE SPECIFIED.
- ALL STEEL PIPE AND FITTINGS SHALL BE FURNISHED WITH A SHOP APPLIED HIGH SOLIDS EPOXY COATING ON THE INTERIOR AND EXTERIOR, UNLESS OTHERWISE INDICATED. ALL OTHER EXPOSED STEEL SHALL BE PAINTED WITH A PRE-TREATMENT PRIMER, AN UNDERCOAT AND A FINAL COAT OF PAINT IN ACCORDANCE WITH MALAGA COUNTY WATER DISTRICT SPECIFICATIONS.
- ALL NUTS, BOLTS, AND WASHERS USED TO SECURE UNDERGROUND FITTINGS SHALL BE STAINLESS STEEL. AFTER INSTALLATION, ALL STEEL HARDWARE SHALL BE COATED WITH A RUST PREVENTATIVE, WRAPPED WITH 4 MIL POLYETHYLENE SHEETING, AND SECURE WITH PVC TAPE.
- ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE HEALTH AND SAFETY LAWS OF THE STATE OF CALIFORNIA AND CAL/OSHA STANDARDS.
- CONTRACTOR WILL BE RESPONSIBLE FOR THE REPAIR OF ALL PIPELINE CRACKS, WHICH DEVELOP DURING CONSTRUCTION OF IMPROVEMENTS AFFECTING EXISTING FACILITIES.
- ALL EXCESS MATERIAL AND/OR DEBRIS SHALL BE REMOVED UPON COMPLETION OF INSTALLATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE DUST CONTROL AT ALL TIMES.

REGISTERED ENGINEERS AND LAND SURVEYORS OF CALIFORNIA
CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, AND REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY LIABILITY, REAL AND ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE PROFESSIONAL.

GENERAL NOTE
UNDERGROUND AND SURFACE STRUCTURES ARE SHOWN ON THE PLANS, THE DEPTHS, AND DIMENSIONS OF STRUCTURES ARE BELIEVED TO BE REASONABLY ACCURATE, BUT ARE NOT GUARANTEED. SUCH STRUCTURES ARE SHOWN FOR THE INFORMATION OF THE CONTRACTOR, BUT INFORMATION SO GIVEN IS NOT TO BE USED AS A REPRESENTATION THAT SUCH STRUCTURES WILL, IN ALL CASES, BE WHERE SHOWN, OR THAT THEY REPRESENT ALL OF THE STRUCTURES WHICH MAY EXIST.

SAFETY AND PROTECTION NOTES

CONTRACTOR SHALL HAVE AT THE WORK SITE, COPIES OR SUITABLE EXTRACTS OF CONSTRUCTION SAFETY LAWS, ORDINANCES AND REGULATIONS. THE CONTRACTOR MUST COMPLY WITH PROVISIONS OF CALIFORNIA LABOR CODE AND HEALTH REGULATIONS FOR CONSTRUCTION, PROMULGATED BY THE SECRETARY OF LABOR UNDER TITLE 107 OF THE CONTRACT WORK HOURS AND SAFETY STANDARDS ACT, AS SET FORTH IN TITLE 107.

CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY, EFFICIENCY, AND ADEQUACY OF HIS APPLIANCES, AND METHODS AND FOR ANY DAMAGE, WHICH MAY RESULT FROM THEIR FAILURE OR IMPROPER CONSTRUCTION, MAINTENANCE OR OPERATION.

CONTRACTOR AGREES THAT IT SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE SAFETY DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, AND THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER, PROVOST & PRITCHARD CONSULTING GROUP, INC., AND THEIR RESPECTIVE AGENTS HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF OWNER, ENGINEER, OR THEIR RESPECTIVE AGENTS.

CONTRACTOR'S METHODS OF WORK, SUPERINTENDENCE AND THE CONTRACTOR'S EMPLOYEES, AND SEQUENCING OF CONSTRUCTION SHALL BE THE SOLE AND EXCLUSIVE RESPONSIBILITIES OF THE CONTRACTOR ALONE.

SHEET INDEX	
SHEET NO.	DESCRIPTION
1	COVER SHEET
2	PROCESS AND INSTRUMENTATION
3	WWTP PIPING PLAN
4	AERATION TANK MONITORING
5	AERATION TANK SECTION
6	SLUDGE MONITORING
7	SLUDGE MONITORING DETAILS
8	SLUDGE BED PLAN
9	SLUDGE BED DETAILS
10	ELECTRICAL
11	ELECTRICAL

APPROVALS

MALAGA COUNTY WATER DISTRICT	DATE
------------------------------	------

DATE: 09-01-2009
SHEET: 1 OF 11
JOB NO: 10570904
DWM MGT
SCALE: 1" = 15'
DESIGN ENGINEER: MGT
LICENSE NO: 39,961
DRAFTED BY: DWM
CHECKED BY: MGT
DATE: 09-01-2009
JOB NO: 10570904
DWM NO:
SHEET

PROVOST & PRITCHARD CONSULTING GROUP
EST. 1938
An Employee Owned Company
288 WEST ORWELL AVENUE
FRESNO, CALIFORNIA 93711-6167
559/449-2700 FAX 559/449-2715
www.provost.com

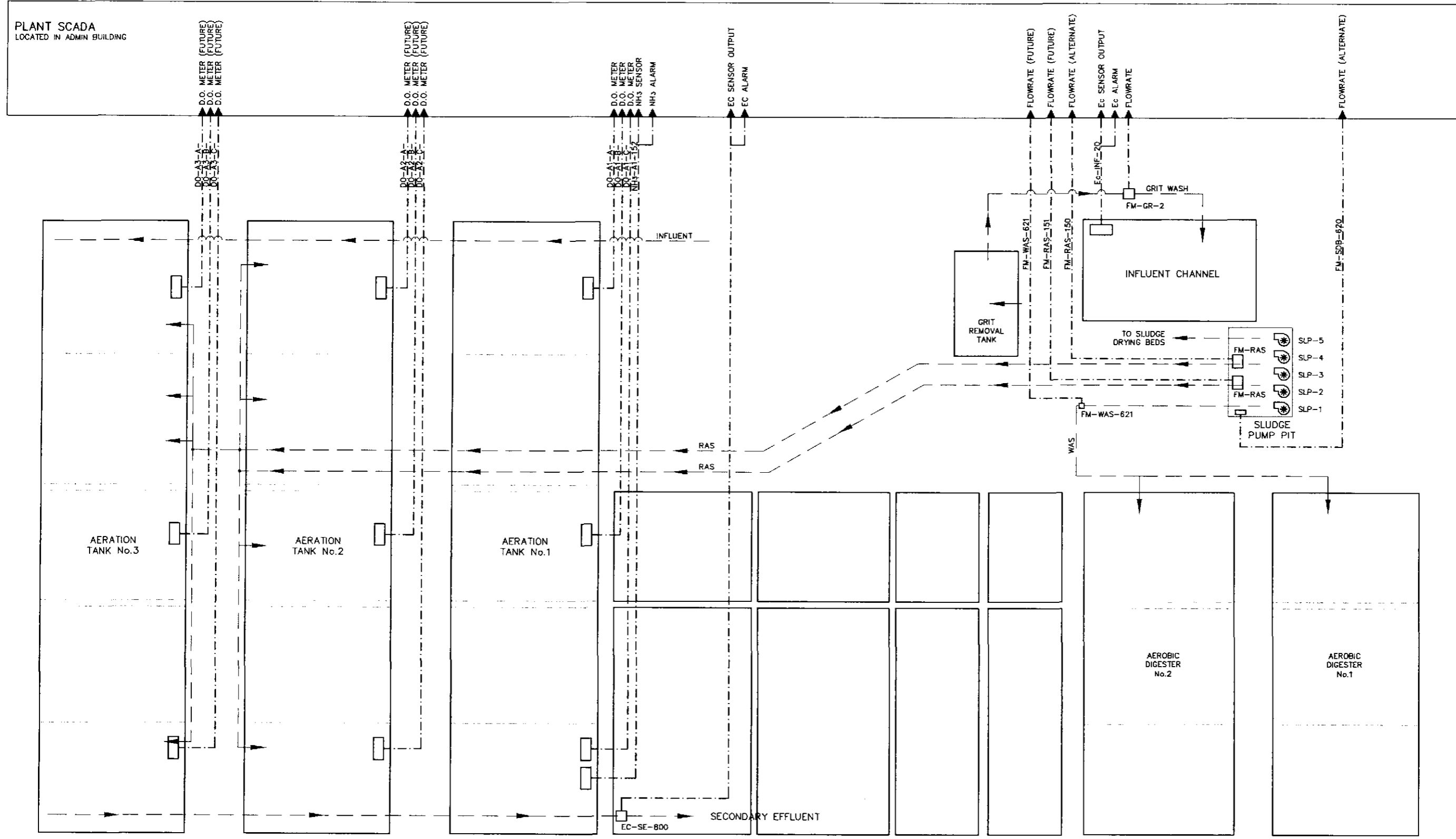
MALAGA WWTP
MONITORING AND SLUDGE BED
MALAGA COUNTY WATER DISTRICT
FRESNO COUNTY

COVER SHEET

DATE: 09-01-2009
BY: MGT
REVISION: 33 HD



↑ DIRECTION OF ARROW DENOTES INPUT (I) OR OUTPUT (O)
 ▼ COLOR OF ARROW DENOTES ANALOG (A) OR DISCRETE (D)
 DO ▲ DI ▼ AO ▲ NO ▼



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NO.	REVISION	BY	DATE
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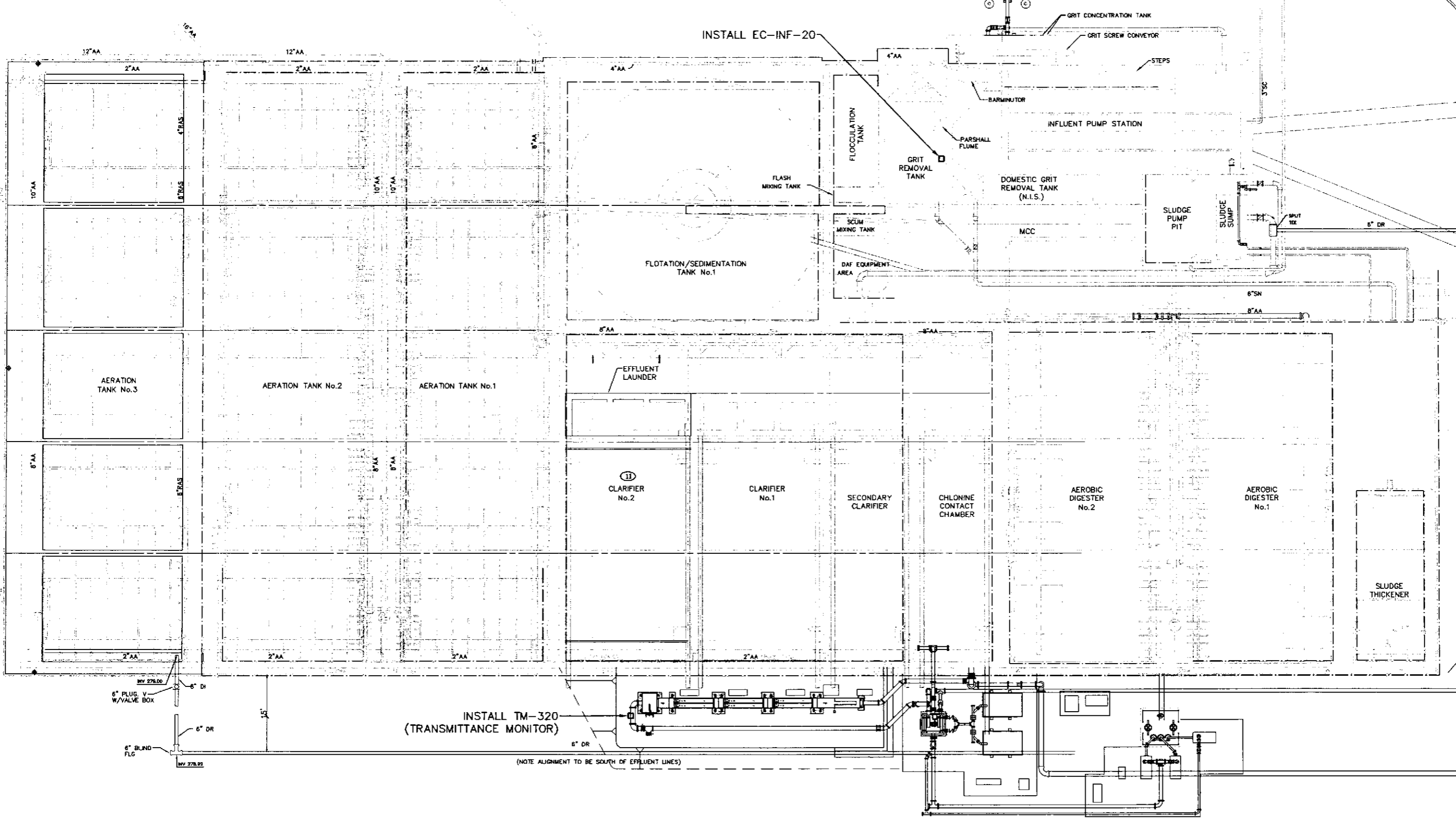
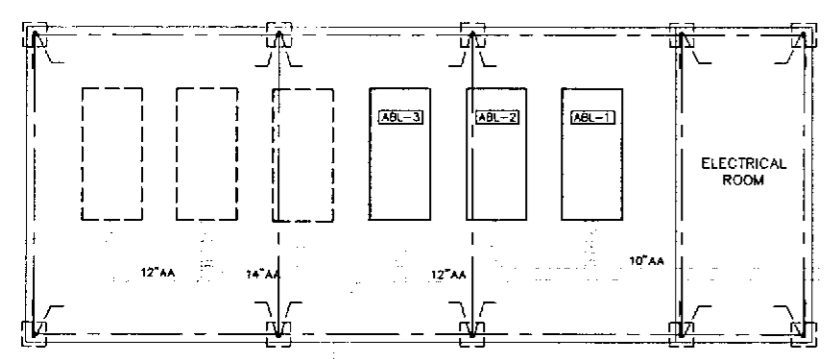
MALAGA WWTP
 MONITORING AND SLUDGE BED
 MALAGA COUNTY WATER DISTRICT
 FRESNO COUNTY
 PROCESS AND INSTRUMENTATION

EST. 1968
PROVOST & PRITCHARD
 CONSULTING GROUP
 All Employees Owned Company
 1500 WEST CONNER
 FRESNO, CALIFORNIA 93711-5152
 559/449-2700 FAX 559/449-2715
 www.pprinc.com

DESIGN ENGINEER:	MGT
LICENSE NO:	39,961
DRAFTED BY:	DWM
CHECKED BY:	MGT
SCALE:	AS SHOWN
DATE:	09-01-2009
JOB NO:	10570904
DWG. NO:	
SHEET	



SCALE IN FEET
0 4 8 16



INSTALL EC-INF-20

INSTALL TM-320
(TRANSMITTANCE MONITOR)

(NOTE ALIGNMENT TO BE SOUTH OF EFFLUENT LINES)

PROVOST & PRITCHARD CONSULTING GROUP, INC. 10071 10570904-Monitoring & Sludge Bed Piping Plan.dwg - Doug McNeill 3/21/2010 3:42 PM G:\Clients\Malaga_CWD - 10071\10570904-Monitoring & Sludge Bed Piping Plan.dwg

NO.	REVISION	BY	DATE
1	ISSUED FOR PERMIT	DJM	09-01-2009
2	REVISED	DJM	09-01-2009
3	REVISED	DJM	09-01-2009

MALAGA WWTP
MONITORING AND SLUDGE BED
MALAGA COUNTY WATER DISTRICT
FRESNO COUNTY

REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA
NO. 51107
DATE SIGNED: 03/21/2010

EST. 1968
PROVOST & PRITCHARD
CONSULTING GROUP
An Engineers Owned Company
1818 WEST BONNIE AVENUE
FRESNO, CALIFORNIA 93711-4162
559/449-2700 FAX 559/449-2715
www.ppieng.com

DESIGN ENGINEER: MGT	
LICENSE NO: 39,961	
DRAFTED BY: DWM	CHECKED BY: MGT
SCALE: AS SHOWN	
DATE: 09-01-2009	
JOB NO: 10570904	
DWG. NO:	
SHEET	
3 OF 11	



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 INC. THE THIRD PARTY SHALL HOLD THE FIRM OF PROVOST &
 PRITCHARD ENGINEERING, INC. HARMLESS FROM ALL
 CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING
 REASONABLE ATTORNEY'S FEES, ARISING OUT OF OR
 RESULTING FROM THE USE OF THESE PLANS BY A THIRD PARTY.
 GROUP, INC.'S LEGAL FEES ASSOCIATED WITH
 ENFORCEMENT OF THESE RIGHTS.

AERATION TANK No.3

DO-A3-C- (FUTURE)

DO-A3-B- (FUTURE)

DO-A3-A- (FUTURE)

DO-A2-C- (FUTURE)

DO-A2-B- (FUTURE)

DO-A2-A- (FUTURE)

AERATION TANK No.2

DIFFUSER ASSEMBLY

AERATION TANK No.1

DIFFUSER ASSEMBLY

INSTALL NH3-A1-152 DO-A1-C-

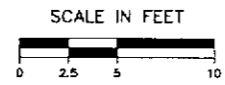
INSTALL DO-A1-B-

INSTALL DO-A1-A-

EC-SE-800

CLARIFIER No.2

FLOTATION/SEDIMENTATION TANK No.1



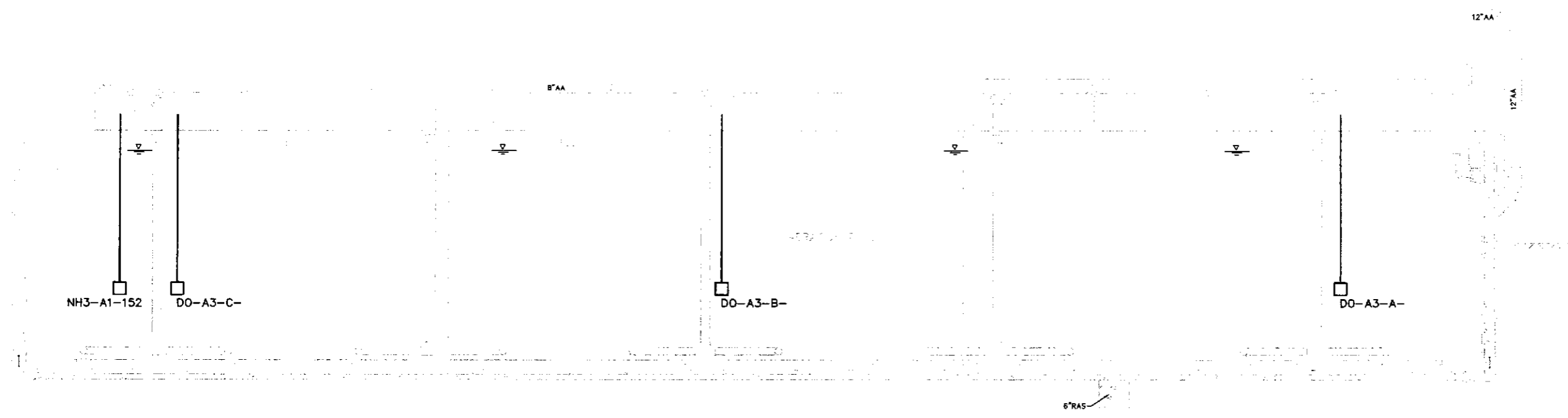
PLAN

DATE SIGNED: 5-27-10	DATE
NO. 3-31-B	BY
DATE SIGNED: 5-27-10	REVISION
<p>MALAGA WWTP MONITORING AND SLUDGE BED MALAGA COUNTY WATER DISTRICT FRESNO COUNTY</p> <p>AERATION TANK MONITORING</p>	
<p>EST. 1968 PROVOST & PRITCHARD CONSULTING GROUP An Employee Owned Company 286 WEST CROWELL AVENUE FRESNO, CALIFORNIA 93711-6162 557/449-7700 FAX 557/469-2715 www.pandp.com</p>	
DESIGN ENGINEER: MGT	LICENSE NO: 39,961
DRAFTED BY: DWM	CHECKED BY: MGT
SCALE: AS SHOWN	DATE: 09-01-2009
JOB NO: 10570904	DWG. NO:
SHEET	
4	OF 11

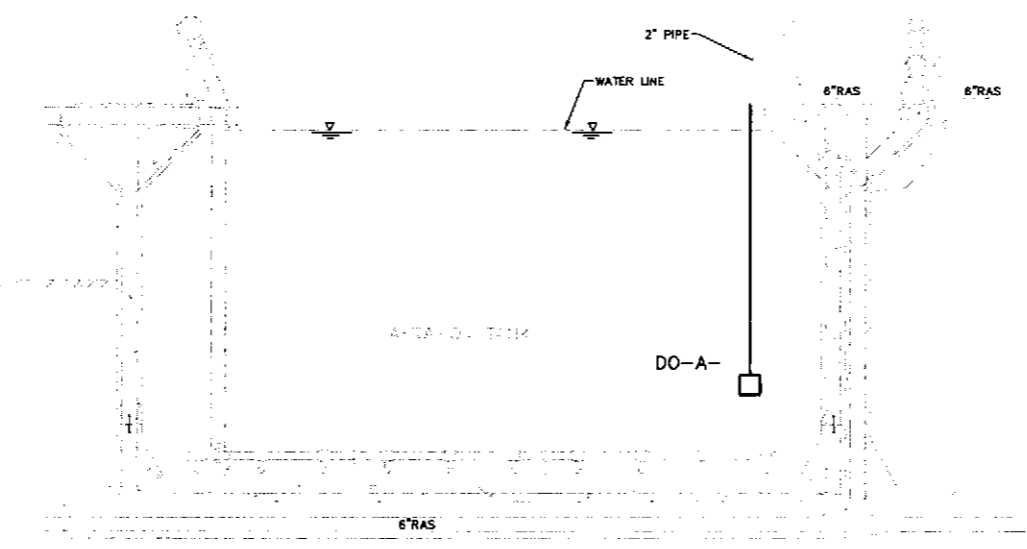
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what's below.
Dig before you dig.



1 SECTION
5 1/4"=1'-0"



2 SECTION
5 1/4"=1'-0"

NOTE: D.O., Ec, AND AMMONIA SENSORS TO BE INSTALLED WITH A RAIL MOUNT INSTALLATION. THE MOUNTING FACILITIES SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. ABOVE WATER IMPROVEMENTS SHALL BE UV RESISTANT (STAINLESS STEEL OR APPROVED EQUIVALENT). AMMONIUM SENSOR SHALL INCLUDE A COMPRESSOR AND CLEANING UNIT. ALL SENSORS SHALL ALLOW RETRIEVAL BY THE OPERATOR.

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DATE	BY	REVISION	No.
DATE ORDER: 3-24-10			

MALAGA WWTP
MONITORING AND SLUDGE BED
MALAGA COUNTY WATER DISTRICT
FRESNO COUNTY

AERATION TANK SECTION

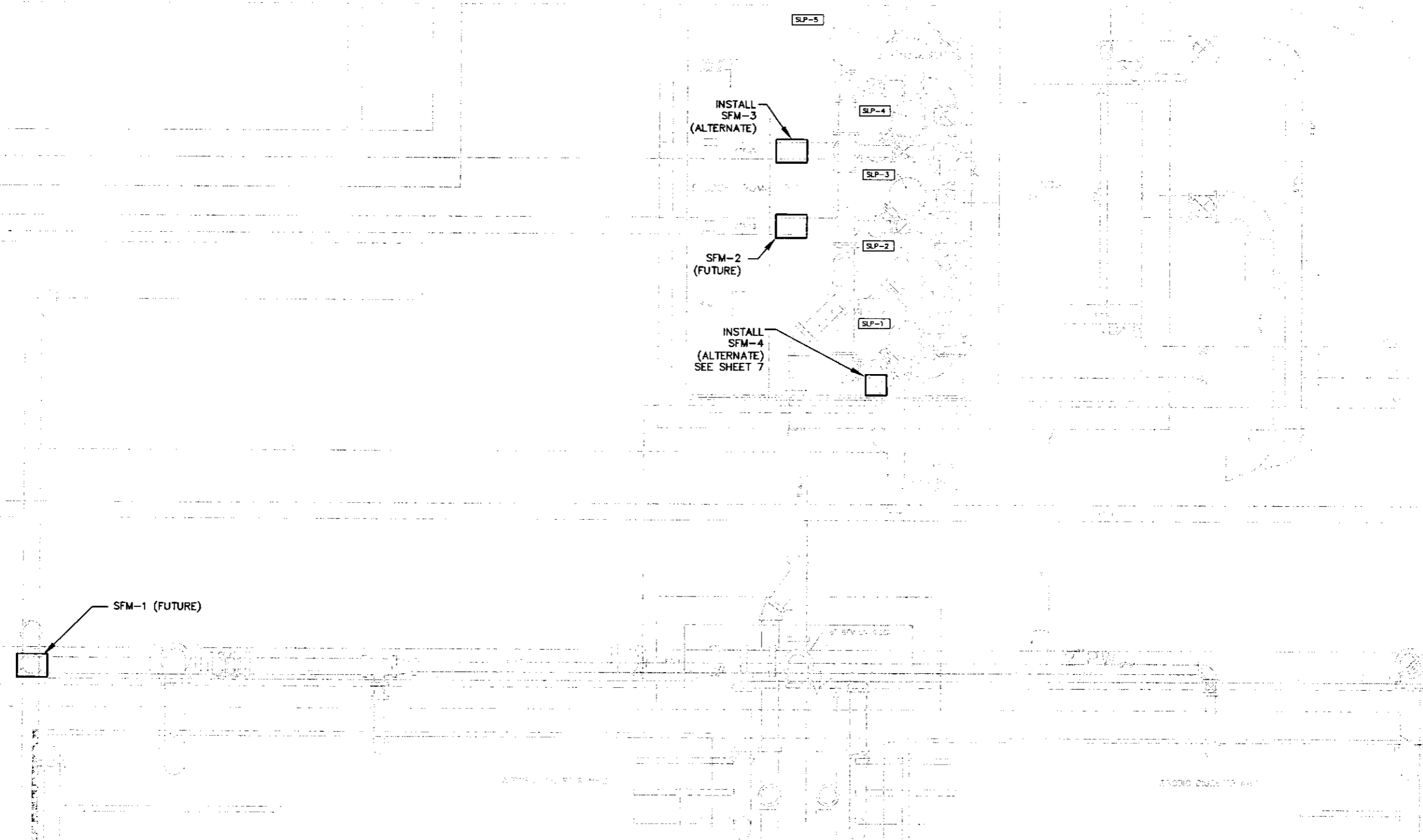
EST. 1982
PROVOST & PRITCHARD
CONSULTING GROUP
An Employee Owned Company
288 WEST ORCHARD AVENUE
FRESNO, CALIFORNIA 93711-6182
559/449-2000 FAX 559/493-2715
www.ppg.com

DESIGN ENGINEER:	MGT
LICENSE NO:	39,981
DRAFTED BY:	DWM
CHECKED BY:	MGT
SCALE:	AS SHOWN
DATE:	09-01-2009
JOB NO:	10570904
DWG. NO:	
SHEET	



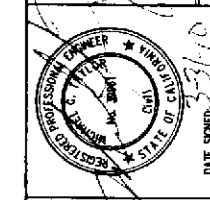
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PLAN
1/2"=1'-0"

NO.	REVISION	BY	DATE



MALAGA WWTP
MONITORING AND SLUDGE BED
MONITORING AND SLUDGE BED
MALAGA COUNTY WATER DISTRICT
FRESNO COUNTY

SLUDGE MONITORING

EST. 1984
PROVOST & PRITCHARD
CONSULTING GROUP
An Employee Owned Company
286 WEST CROMWELL AVENUE
FRESNO, CALIFORNIA 93711-6182
509/449-2700 FAX 509/449-3715
www.jpeng.com

DESIGN ENGINEER:
MGT

LICENSE NO:
39,961

DRAFTED BY: CHECKED BY:
DWM MGT

SCALE: AS SHOWN

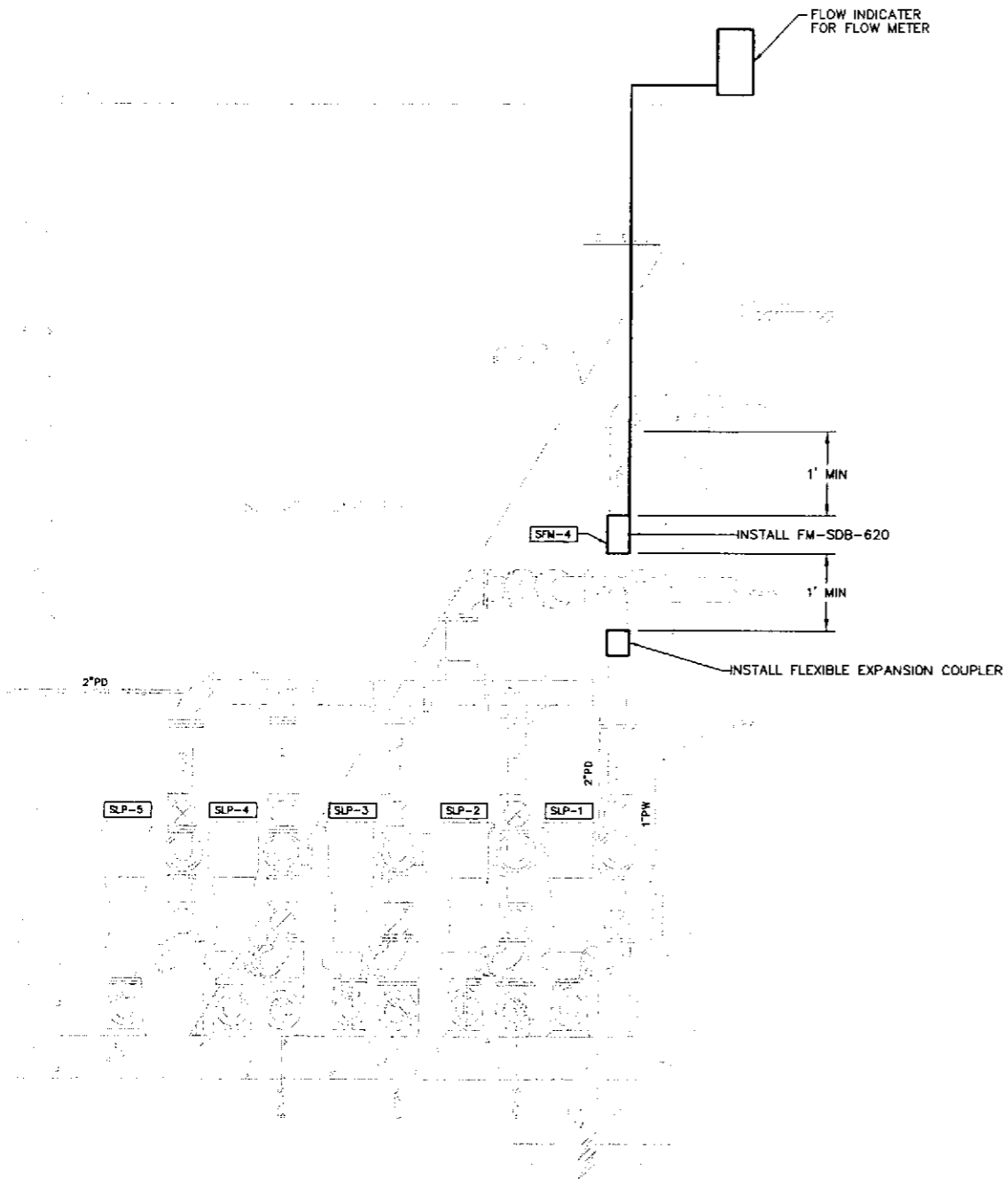
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JOB NO: 10570904

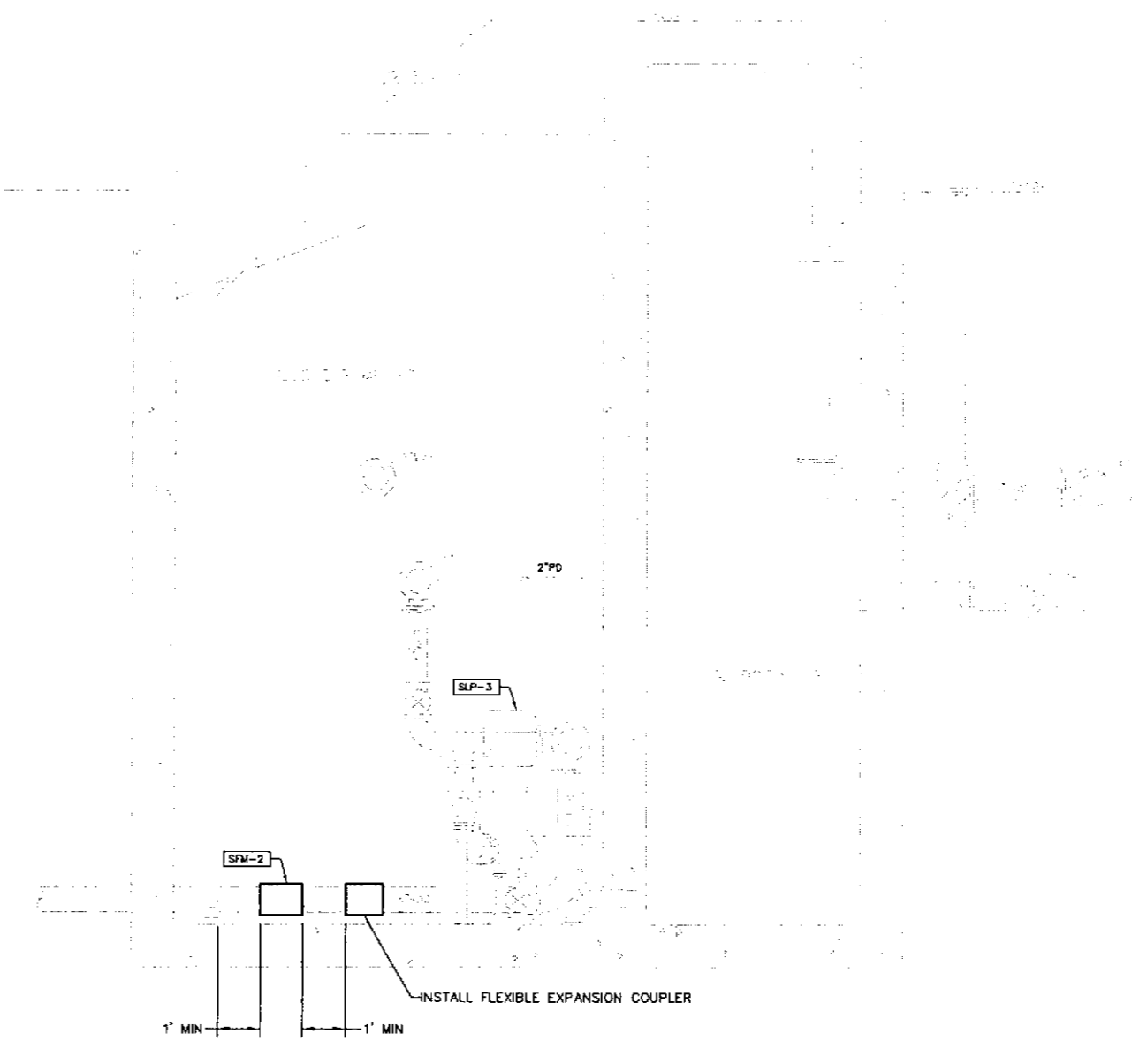
DWG. NO:
SHEET



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SECTION
1/2"=1'-0"



SECTION
1/2"=1'-0"

NOTE: FLOW INDICATOR FOR RAS FLOWMETER SHALL BE LOCATED ADJACENT TO THE FLOW INDICATOR FOR THE WAS FLOWMETER.

NO.	REVISION	BY	DATE
1			
2			
3			
4			
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8			
9			
10			

MALAGA WWTP
MONITORING AND SLUDGE BED
MALAGA COUNTY WATER DISTRICT
FRESNO COUNTY

SLUDGE MONITORING DETAILS

EST. 1928
PROVOST & PRITCHARD
CONSULTING GROUP
An Employee Owned Company
286 WEST ORWELL AVENUE
FRESNO, CALIFORNIA 93711-6152
559/449-2100 FAX 559/449-2715
www.ppv.com

DESIGN ENGINEER: MGT	
LICENSE NO: 39,961	
DRAFTED BY: DWM	CHECKED BY: MGT
SCALE: AS SHOWN	
DATE: 09-01-2009	
JOB NO: 10570904	
DWG. NO:	
SHEET	

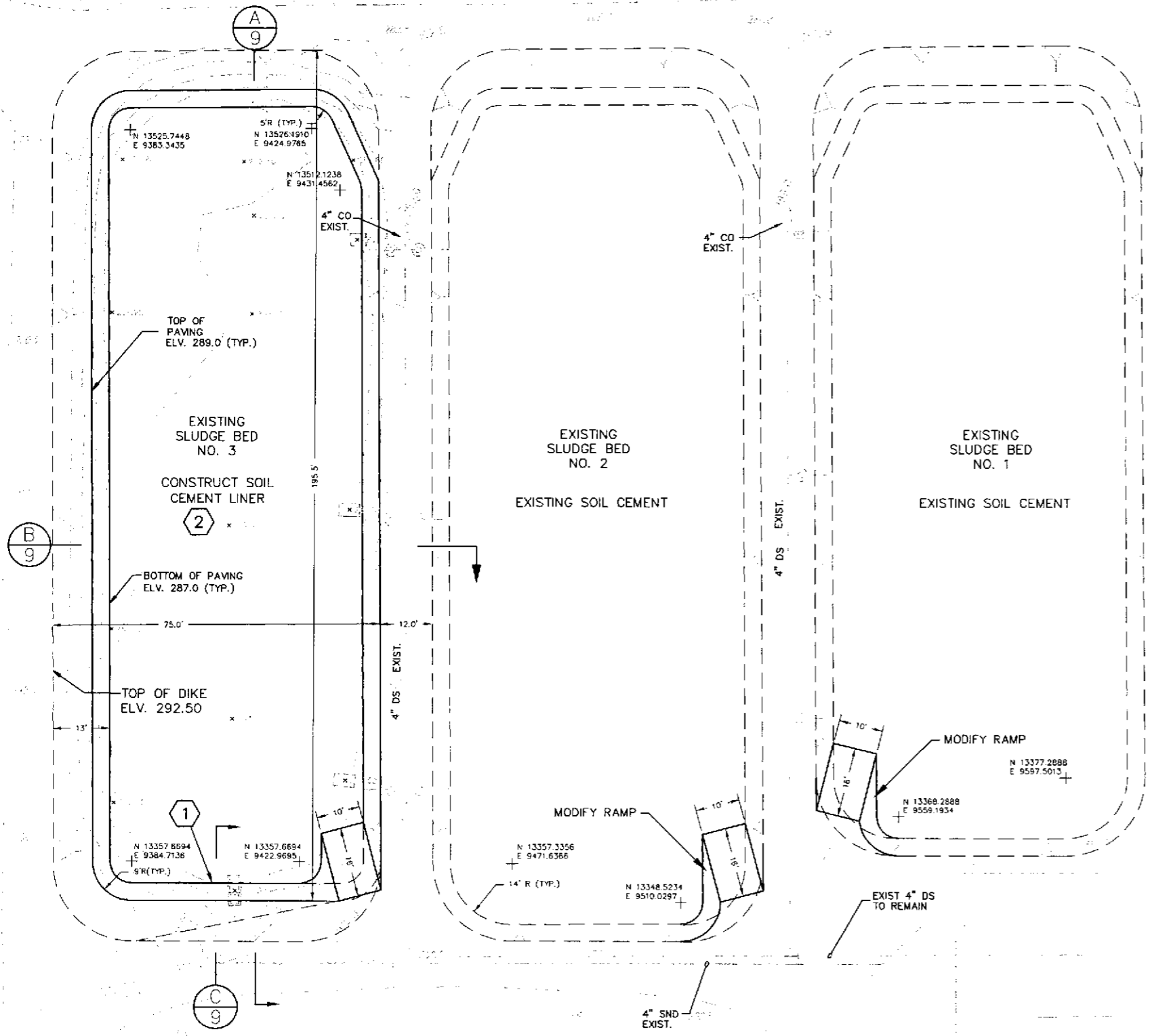


at's below.
before you dig.



Know what's below.
Call before you dig.

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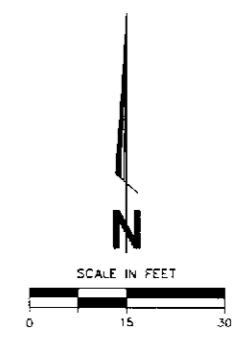


- XX NOTES:
- 1 EXISTING DECANT STRUCTURE TO REMAIN.
 - 2 CONSTRUCT 12" SOIL CEMENT IN BOTTOM AND SIDE OF SLUDGE BEDS, SEE SHEET 9.

LEGEND

--- EXIST. ELEVATION

x 286.5 PROPOSED ELEVATION



NO.	REVISION	BY	DATE

MALAGA WWTP
MONITORING AND SLUDGE BED
MALAGA COUNTY WATER DISTRICT
FRESNO COUNTY

SLUDGE BED PLAN

EST. 1984
PROVOST & PRITCHARD
CONSULTING GROUP
An Employee Owned Company
288 WEST GRAMMILL AVENUE
FRESNO, CALIFORNIA 93711-9162
557/449-4949
www.ppgc.com

DESIGN ENGINEER:
MGT

LICENSE NO:
39,961

DRAFTED BY: DWM CHECKED BY: MGT

SCALE: 1" = 15'

DATE: 09-01-2009

JOB NO: 10570904

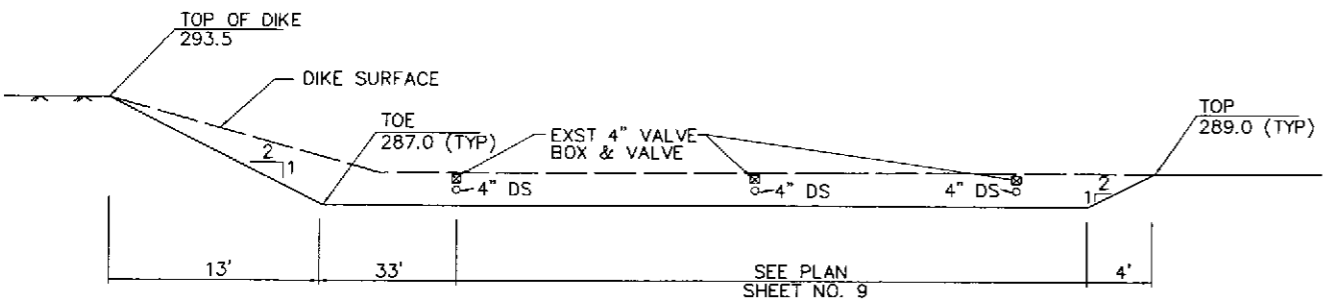
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SHEET



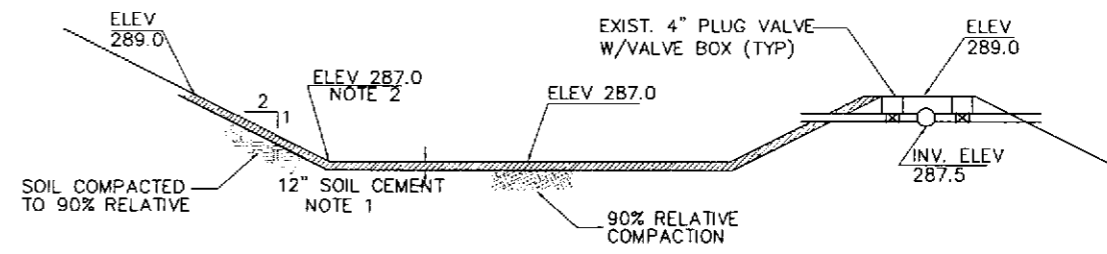
hat's below.
before you dig.



Know what's below.
Call before you dig.



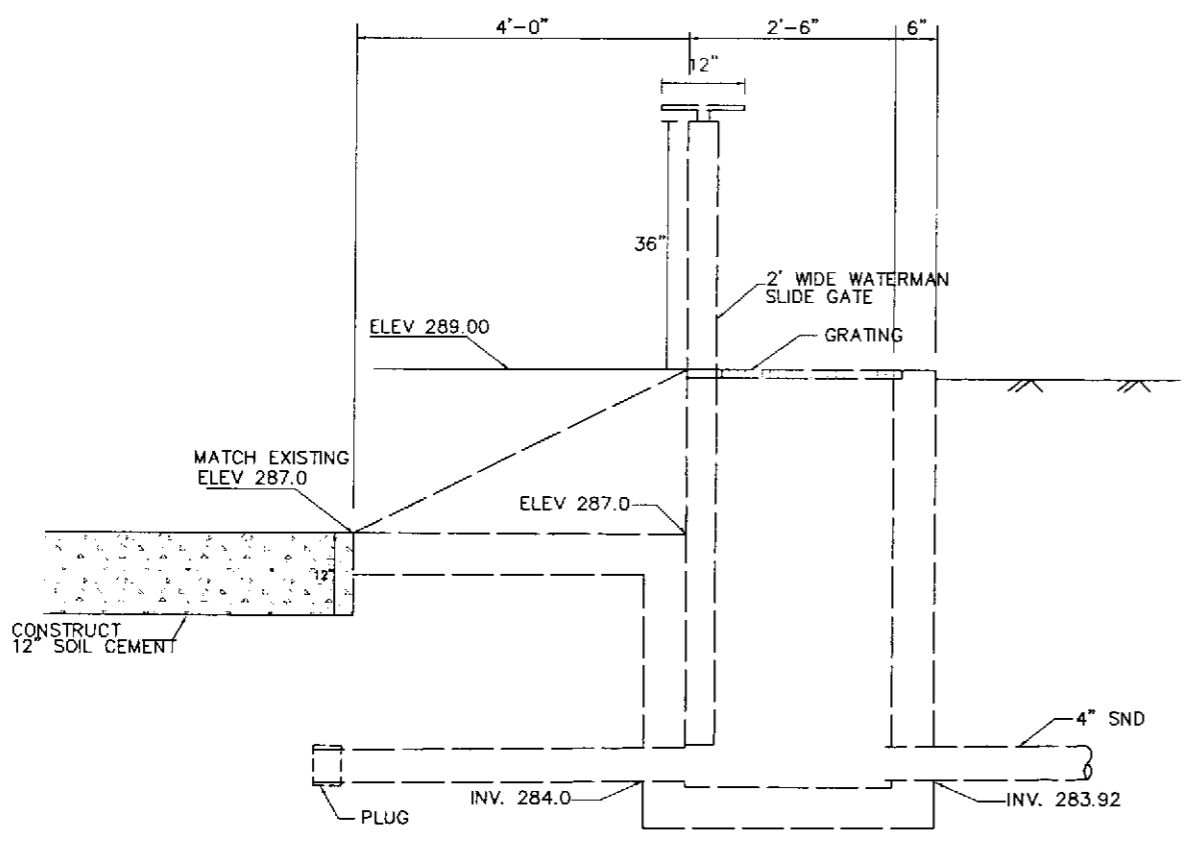
A SECTION
N.T.S.



B SECTION
N.T.S.

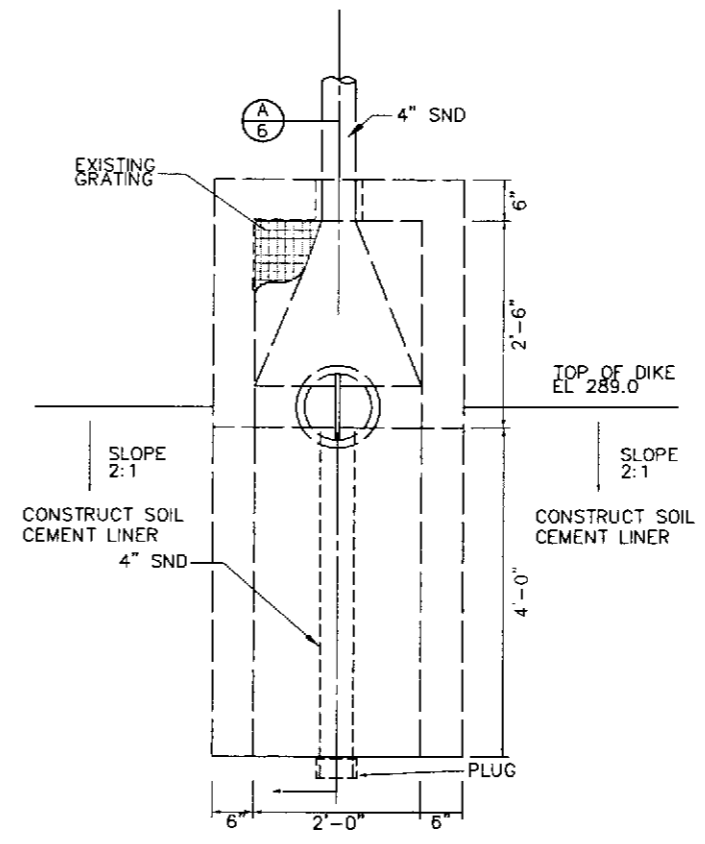
SLUDGE BED

- NOTES:
1. LINE EXISTING SLUDGE DRYING BEDS WITH 12" SOIL CEMENT.
 2. ELEVATIONS WITHIN DRYING BEDS ARE TOP OF SOIL CEMENT LINING—REMOVE SOIL AS NECESSARY. SPREAD REMOVED SOIL ON OPEN SPACE EAST OF THE DRYING BEDS.
 3. REMOVE EXISTING SLUDGE FROM DRYING BED. STOCKPILE SLUDGE IN OPEN AREA EAST OF THE DRYING BEDS. KEEP SLUDGE AND REMOVED SOIL SEPARATE.
 4. COMPACTION REQUIREMENTS ARE TO EXTEND 2 FEET BELOW SOIL CEMENT BOTTOM.



C SECTION
N.T.S.

EXISTING DECANT STRUCTURE



D PLAN
N.T.S.

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NO.	REVISION	BY	DATE

MALAGA WWTP
MONITORING AND SLUDGE BED
MALAGA COUNTY WATER DISTRICT
FRESNO COUNTY

SLUDGE BED DETAILS

EST. 1908
PROVOST & PRITCHARD
CONSULTING GROUP
AN Employee Owned Company
286 WEST CRAWFORD AVENUE
FRESNO, CALIFORNIA 93711-6162
509/449-2700 FAX 509/449-7715
www.ppg.com

DESIGN ENGINEER:	MGT
LICENSE NO:	39,961
DRAFTED BY:	DWM
CHECKED BY:	MGT
SCALE:	1" = 15'
DATE:	09-01-2009
JOB NO:	10570904
DWG. NO:	
SHEET	



CONDUIT CONSTRUCTION MATERIAL NOTES:

THREADED METAL RIGID PVC COATED:
ALL METALLIC CONDUITS INSTALLED IN CONTACT WITH CONCRETE OR IN CONTACT WITH EARTH, SHALL BE COATED WITH A MINIMUM 40 MIL PVC COATING, FACTORY APPLIED ON ALL CONDUIT AND FITTINGS. COATING SHALL EXTEND TO FIRST DEVICE OR TERMINATION POINT OF CONDUIT.

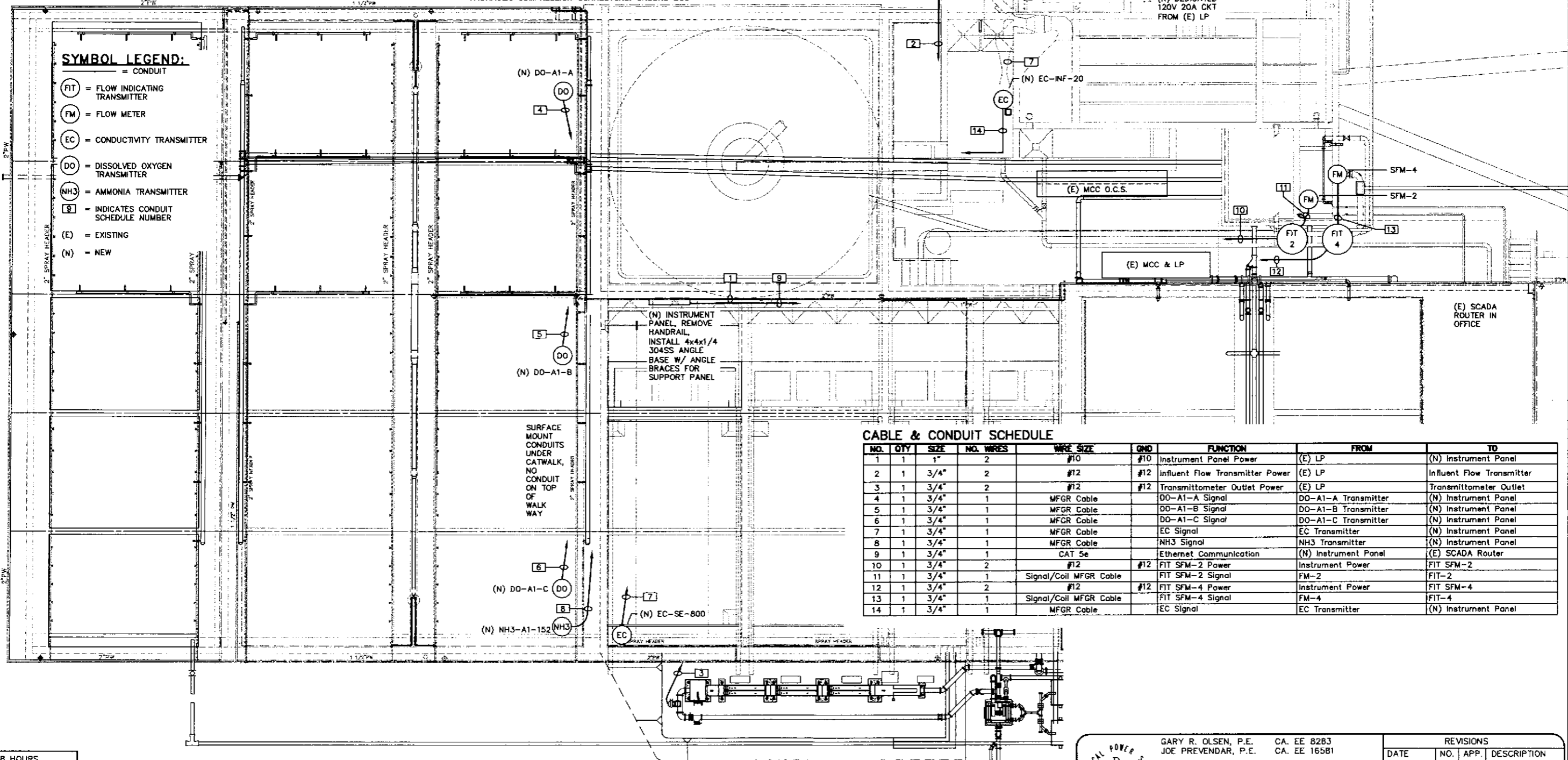
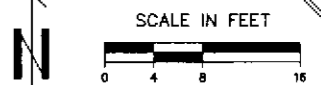
FLEXIBLE LIQUID TIGHT METALLIC CONDUIT:
CONNECTIONS TO MACHINERY. CONDUIT SHALL BE FLEXIBLE INTERLOCKING SINGLE STRIP STEEL CONDUIT WITH LIQUID TIGHT EXTERIOR COVER, WITH ALL CONNECTIONS MADE WITH GALVANIZED STEEL LIQUID TIGHT WITH "O" RING GASKETS, AND WITH COPPER GROUND WIRE (MAXIMUM LENGTH 30"), AMERICAN BRASS SEAL TIGHT OR EQUIVALENT, CONFORMING TO UL 1. NYLON INSULATED THROAT.

JUNCTION BOXES:
MINIMUM SIZE PER NEC. EXPOSED LOCATION, 1 AND 2 GANG TO BE CAST IRON DEVICE BOXES TYPE FS/FD SUITABLE FOR WET LOCATIONS. EXPOSED LOCATION LARGER SIZES STEEL CONTINUOUS HINGE TYPE 4. CORROSIVE LOCATIONS CONTINUOUS HINGE TYPE 4X STAINLESS STEEL. ALL BOXES USED MUST BE SUBMITTED FOR APPROVAL.

GROUND CONNECTIONS:
GROUND CONNECTIONS TO BE EXOTHERMIC CADWELD OR BURNDY HYDRAULIC COMPRESSION CONNECTORS. GROUND BUS

CONNECTIONS TO BE CRIMP LUG TYPE WITH BOLTED CONNECTION TO GROUND BUS.

*** CONTACT EPS TO SCHEDULE AN ELECTRICAL PRE-CONSTRUCTION MEETING PRIOR TO COMMENCING CONSTRUCTION ***



SYMBOL LEGEND:

- () = CONDUIT
- (FIT) = FLOW INDICATING TRANSMITTER
- (FM) = FLOW METER
- (EC) = CONDUCTIVITY TRANSMITTER
- (DO) = DISSOLVED OXYGEN TRANSMITTER
- (NH3) = AMMONIA TRANSMITTER
- [9] = INDICATES CONDUIT SCHEDULE NUMBER
- (E) = EXISTING
- (N) = NEW

CABLE & CONDUIT SCHEDULE

NO.	QTY	SIZE	NO. WIRES	WIRE SIZE	GRD	FUNCTION	FROM	TO
1	1	1"	2	#10	#10	Instrument Panel Power	(E) LP	(N) Instrument Panel
2	1	3/4"	2	#12	#12	Influent Flow Transmitter Power	(E) LP	Influent Flow Transmitter
3	1	3/4"	2	#12	#12	Transmittometer Outlet Power	(E) LP	Transmittometer Outlet
4	1	3/4"	1	MFR Cable		DO-A1-A Signal	DO-A1-A Transmitter	(N) Instrument Panel
5	1	3/4"	1	MFR Cable		DO-A1-B Signal	DO-A1-B Transmitter	(N) Instrument Panel
6	1	3/4"	1	MFR Cable		DO-A1-C Signal	DO-A1-C Transmitter	(N) Instrument Panel
7	1	3/4"	1	MFR Cable		EC Signal	EC Transmitter	(N) Instrument Panel
8	1	3/4"	1	MFR Cable		NH3 Signal	NH3 Transmitter	(N) Instrument Panel
9	1	3/4"	1	CAT 5e		Ethernet Communication	(N) Instrument Panel	(E) SCADA Router
10	1	3/4"	2	#12	#12	FIT SFM-2 Power	Instrument Power	FIT SFM-2
11	1	3/4"	1	Signal/Coil MFR Cable		FIT SFM-2 Signal	FM-2	FIT-2
12	1	3/4"	2	#12	#12	FIT SFM-4 Power	Instrument Power	FIT SFM-4
13	1	3/4"	1	Signal/Coil MFR Cable		FIT SFM-4 Signal	FM-4	FIT-4
14	1	3/4"	1	MFR Cable		EC Signal	EC Transmitter	(N) Instrument Panel

48 HOURS
ORE EXCAVATING
LL "USA" TOLL FREE
800-227-2600
ER GROUND SERVICE
ALERT

EPS IS RESPONSIBLE FOR ELECTRICAL SYSTEMS DESIGN ONLY. EPS IS NOT RESPONSIBLE FOR ELECTRICAL SAFETY WORK PROCEDURES AND/OR USE OF REQUIRED PERSONAL PROTECTIVE EQUIPMENT. SEE NFPA 70E "STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE" AND OSHA 29 CFR.

CONTRACTOR MUST READ SPECIFICATIONS AND INSTALL MATERIAL AS PER SPECIFICATIONS AND/OR PLANS OR AS PER EPS APPROVAL

<p>GARY R. OLSEN, P.E. CA. EE 8283 JOE PREVENDAR, P.E. CA. EE 16581</p> <p>4049 N. FRESNO ST FRESNO, CA 93726 (559) 221-7230 FAX: 221-0507 gory@epsfresno.com joe@epsfresno.com</p>	REVISIONS DATE NO. APP. DESCRIPTION		
	DATE: Apr 2010		
	JOB #: PP-10-173		
	DWG. #: PP173-SP1		
	DRWN. BY: CRT		
	DSGN. BY: JPP		

EST. 1988
PROVOST & PRITCHARD
CONSULTING GROUP
An Employee Owned Company
FRESNO, CALIFORNIA 93702
559/448-2700 FAX 559/448-2715
www.ppsgr.com

DESIGN ENGINEER:
MGT

LICENSE NO:
39,961

DRAFTED BY: DWM
CHECKED BY: MGT

SCALE: AS SHOWN

DATE: 09-01-2009

JOB NO: 10570904

DWG. NO:

SHEET

E1 OF 11

MALAGA WWTP
MONITORING AND SLUDGE BED
MALAGA COUNTY WATER DISTRICT
FRESNO COUNTY

ELECTRICAL SITE PLAN

NO. BY DATE REVISION

