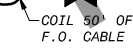


RECORD DRAWING
 THIS DRAWING HAS BEEN CONFORMED TO MATCH CONSTRUCTION RECORD MARKUPS PROVIDED BY CONTRACTOR. ENGINEER AND/OR DESIGNER HAVE NOT VERIFIED ACCURACY OF THIS INFORMATION AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS WHICH MAY BE HEREIN AS A RESULT.

SLO TURNOUT DETAIL "D"
 NO SCALE

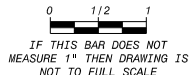


- NOTES:**
- THIS SCHEMATIC DESCRIBES THE GENERAL WORK TO BE PERFORMED FOR THE FIBER OPTIC CONDUIT AND CABLE SYSTEM IN THE FOLLOWING FOUR (4) DISTRICT CONTRACTS:
 300187.08.02 NWP FACILITIES (SPEC 02)
 300187.08.03 PIPELINE NORTH (SPEC 03)
 300187.08.04 PIPELINE CENTRAL (SPEC 04)
 300187.08.05 PIPELINE SOUTH (SPEC 05)
 - REFER TO THE RESPECTIVE PLAN AND PROFILE DRAWINGS AND STANDARD DETAILS FOR EXACT PULLBOX LOCATIONS AND CONDUIT INSTALLATION REQUIREMENTS.
 - STATIONING SHOWN ON THIS DRAWING IS BASED ON THE PIPELINE DRAWINGS WHICH UTILIZE STATION EQUATIONS; STATIONING DOES NOT NECESSARILY DEPICT CORRECT LENGTH OF FIBER SYSTEM.
 - PULLBOX LOCATIONS MAY BE ADJUSTED IN THE FIELD TO SUIT ACTUAL CONDITIONS.
 - CONTRACTOR FOR SPEC 05 SHALL FURNISH, INSTALL, SPLICE AND TEST ALL FIBER OPTIC CONDUIT AND CABLE FROM STA. 1786+00 TO 2308+00 AND FROM DWR CUESTA TUNNEL SOUTH PORTAL PB TO STA. 2509+88; TO THE SLO TURNOUT; AND INSTALL AND TEST FIBER OPTIC CABLE AT THE CUESTA TUNNEL.

- SPLICES AT THE FOLLOWING LOCATIONS SHALL BE MADE BY SPEC 02:
 CP-2 AT ROCKY CANYON PUMP STATION
 SANTA MARGARITA BOOSTER PUMP STATION (SMBPS)
 CP-2 AT CUESTA TUNNEL TANK
 DWR PULLBOX AT CUESTA TUNNEL NORTH PORTAL
 CP-2 AT SLO TURNOUT (T11)
- SPEC 05 CONTRACTOR SHALL PROVIDE EXTRA FIBER OPTIC CABLE IN A NEAT COIL IN THE LENGTHS GIVEN BELOW AT EACH PULLBOX INDICATED, FOR INSTALLATION BY OTHER DISTRICT CONTRACTORS:
 STATION 1786+00 400 FEET
 SMBPS 2 COILS - 300 FEET EACH
 STATION 2308+00 600 FEET
 DWR PB - NORTH 900 FEET
 SLO TURNOUT AS INDICATED
 CONTRACTOR SHALL PROVIDE ADDITIONAL EXTRA FIBER OPTIC CABLE IN PULLBOXES, AS REQUIRED IN THE SPECIFICATIONS.
- ROUTE FIBER OPTIC CONDUIT AND CABLE ACROSS SANTA MARGARITA CREEK ATTACHED TO THE PIPE BRIDGE AS SHOWN ON DRAWING GP-C405.

LEGEND

- 96-CT FIBER OPTIC CABLE PLACED IN (1) OF (2) 1-1/2" CONDUITS PLACED
- PIPELINE STATION MARKERS (SHOWN WITH INTERVAL STATION ID AND PROPOSED FIBER)
- SPECIAL CONSTRUCTION ZONE WITH NOTE SPECIFYING SCENARIO
- PULLBOX LOCATION (TYP)
- PULLBOX LOCATION CONTAINING OPTICAL SPLICE CLOSURE
- NORTH INDICATOR - RELATIVE TO CONDUIT DIRECTION



DATE	12/01/10	CONFORMED TO CONSTRUCTION RECORDS	2	SMI	EVJ	GP
DATE	12/09/08	CONFORMED TO BLOW INSTALL OPTION	1	SMI	EVJ	GP
DATE	04/25/07	AND SEALED				
DATE	04/25/07	REVISED AND RECORD OF ISSUE				
CYMET ID:	137522	G:R3-MODIFIED				
WF:	16.18	(LMS Trcl)				
SAVED:	POU54371_3/31/2011	1:51:19 PM				
PLOTTED:	3/31/2011	4:39:56 PM				
USER:	cyvnteam	OWE VER: 7.0				

THIS DRAWING WAS MADE FOR CONSTRUCTION BY STEVEN N. FOELLIT ON 04/25/07 AND SEALED BY DAVID B. KUBEL A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF CALIFORNIA NO. E014830

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 San Luis Obispo County Flood Control & Water Conservation District

PIPELINE NORTH
 GENERAL - INSTRUMENTATION
 FIBER CONDUIT SCHEMATIC 3

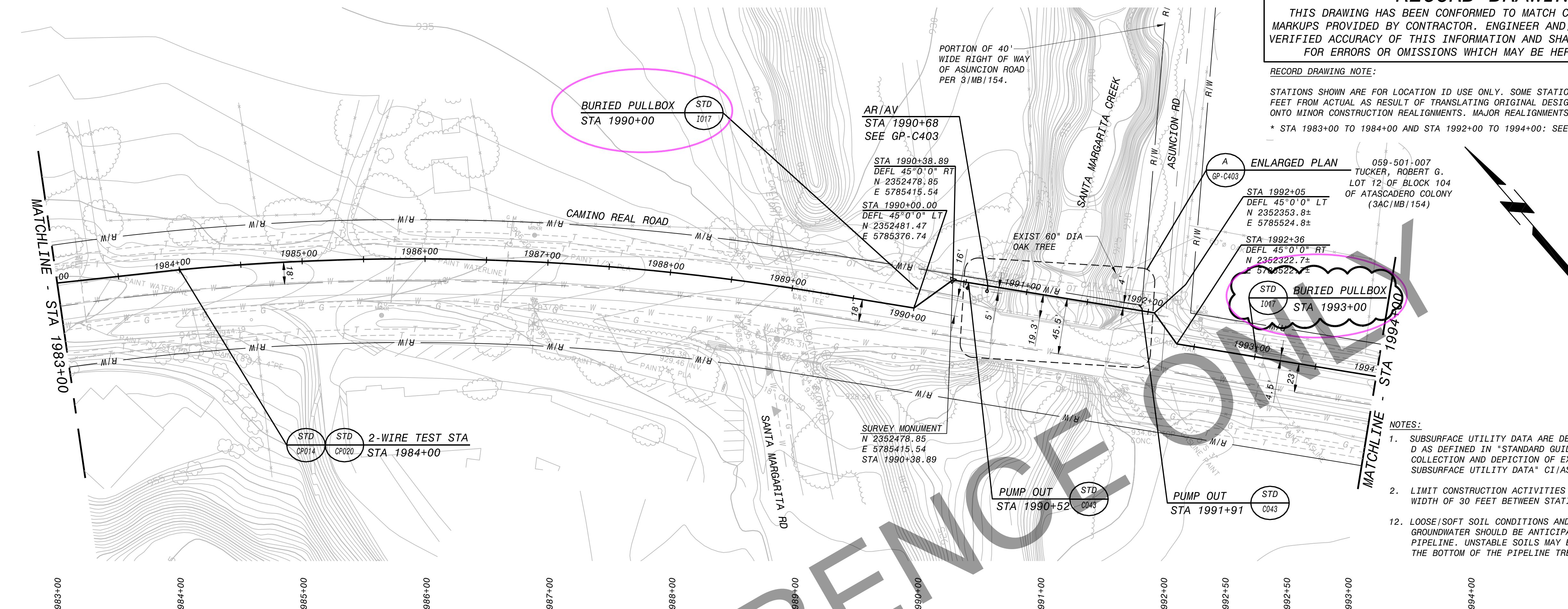
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DETAILED:	DBK
CHECKED:	DBK
APPROVED:	DBK
DATE:	04/27/07
BV PROJECT NO.	137522
NWP PROJECT NO.	300187.08
SPEC	03
G662	
SHEET	220 OF 246

RECORD DRAWING

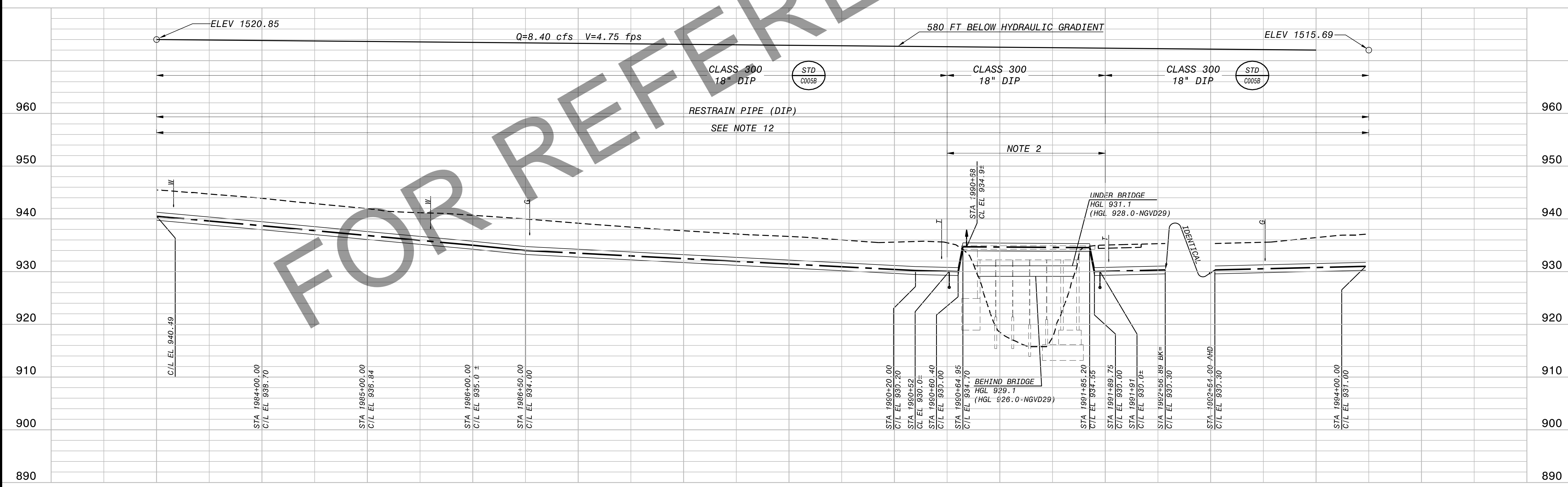
THIS DRAWING HAS BEEN CONFORMED TO MATCH CONSTRUCTION RECORD MARKUPS PROVIDED BY CONTRACTOR. ENGINEER AND/OR DESIGNER HAVE NOT VERIFIED ACCURACY OF THIS INFORMATION AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS WHICH MAY BE HEREIN AS A RESULT.

RECORD DRAWING NOTE:

STATIONS SHOWN ARE FOR LOCATION ID USE ONLY. SOME STATIONS MAY BE +/- SEVERAL FEET FROM ACTUAL AS RESULT OF TRANSLATING ORIGINAL DESIGN ALIGNMENT STATION ONTO MINOR CONSTRUCTION REALIGNMENTS. MAJOR REALIGNMENTS WERE RE-STATIONED.
 * STA 1983+00 TO 1984+00 AND STA 1992+00 TO 1994+00: SEE NOTE 36, DWG 6002.



- NOTES:
- SUBSURFACE UTILITY DATA ARE DEPICTED TO LEVEL D AS DEFINED IN "STANDARD GUIDELINE FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA" CI/ASCE 38-02.
 - LIMIT CONSTRUCTION ACTIVITIES TO A MAXIMUM WIDTH OF 30 FEET BETWEEN STATIONS INDICATED.
 - LOOSE/SOFT SOIL CONDITIONS AND/OR HIGH GROUNDWATER SHOULD BE ANTICIPATED ALONG THE PIPELINE. UNSTABLE SOILS MAY BE EXPOSED IN THE BOTTOM OF THE PIPELINE TRENCH.



DATE	07/21/12	PULLBOX MODIFICATIONS
BY	ANDREW E. ROEHLER	REVISIONS AND RECORD OF ISSUE
CHECKED	ANDREW E. ROEHLER	NO. BY CK APP
DATE	07/21/12	NO. BY CK APP
DATE	07/21/12	NO. BY CK APP
DATE	07/21/12	NO. BY CK APP
DATE	07/21/12	NO. BY CK APP
DATE	07/21/12	NO. BY CK APP
DATE	07/21/12	NO. BY CK APP
DATE	07/21/12	NO. BY CK APP
DATE	07/21/12	NO. BY CK APP

THIS DRAWING WAS ORIGINALLY APPROVED FOR CONSTRUCTION BY STATE OF CALIFORNIA BY ANDREW E. ROEHLER, LICENSED PROFESSIONAL ENGINEER IN THE STATE OF CALIFORNIA NO. C37116

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UNIT G - PIPELINE
CIVIL
PLAN AND PROFILE STA 1983+00 TO 1994+00

DESIGNED	JL
DETAILED	MM
CHECKED	AER
APPROVED	AER
DATE	04/27/07
BV PROJECT NO.	137522
NWP PROJECT NO.	300187.08

SPEC 05
GP-C265
 SHEET
 44 OF 155

FD 157522
D137522

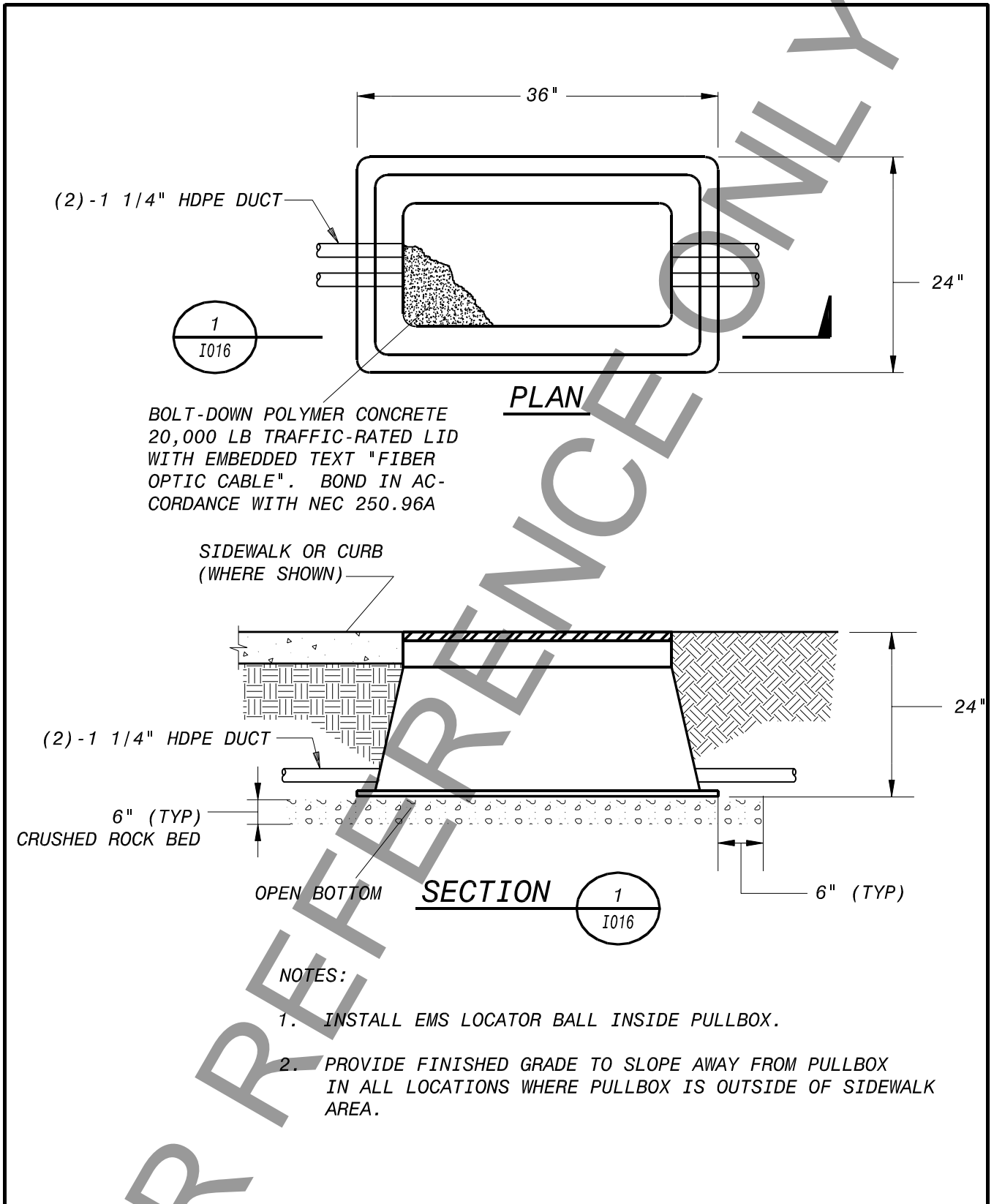
HOR: 1" = 50'
 VER: 1" = 10'




Call Two Working Days Before You Dig!

1-800-227-2600

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

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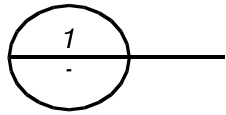


 NWP NACIMIENTO WATER PROJECT <small>San Luis Obispo County Flood Control & Water Conservation District</small> 300187.08	FIBER OPTIC PULLBOX (SPEC 2)			STD I016 SPEC 2
				SCALE NO SCALE
 BLACK & VEATCH 137522	 BOYLE ENGINEERING CORPORATION	DATE	REVISION OR ISSUE	NO BY

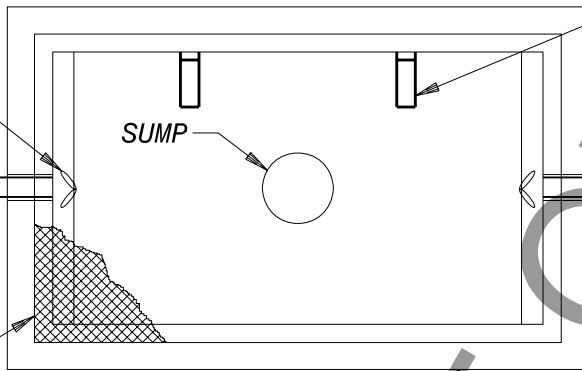
CONFORMED TO CONSTRUCTION RECORDS 02/28/2011

PULLING EYES
CAST IN
CONCRETE

2" HDPE DUCT



TWO PIECE BOLT
DOWN COVER



PORCELAIN SADDLES

SUMP

PLAN

PRECAST CONCRETE PULLBOX
W/TWO PIECE BOLT DOWN
COVER

SIDEWALK OR CURB
(WHERE SHOWN)

1 5/8" STRUCTURAL
CHANNEL

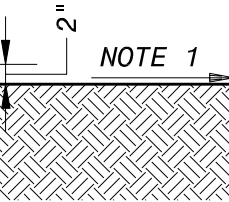
2" HDPE DUCT

EXPANSION
BUSHINGS (TYP)

6" (TYP)

OPEN KNOCKOUT

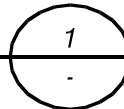
PORCELAIN
SADDLES



6" (TYP)

CRUSHED ROCK

SECTION



NOTE:

1. PROVIDE FINISHED GRADE TO DRAIN AWAY FROM
PULLBOX WHEN PULLBOX IS OUTSIDE OF SIDEWALK AREA.



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San Luis Obispo County Flood Control & Water Conservation District
300187.08

PRECAST CONCRETE PULLBOX
(SPECS 3,4,5)

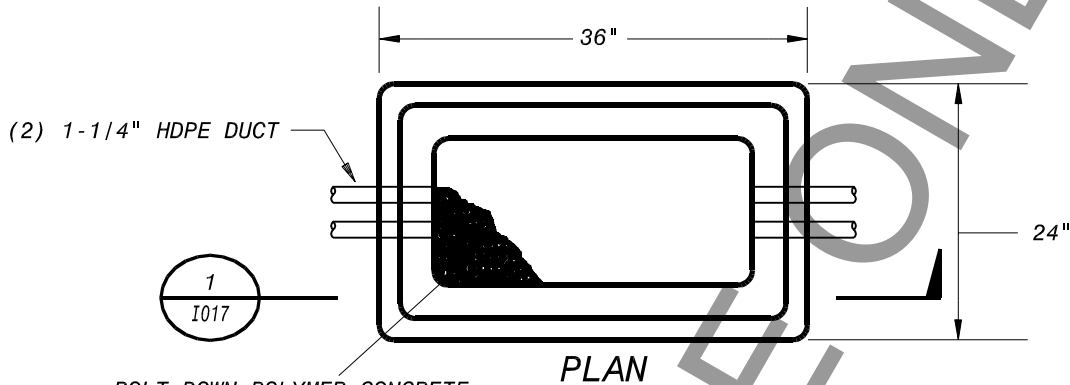
BLACK & VEATCH
137522

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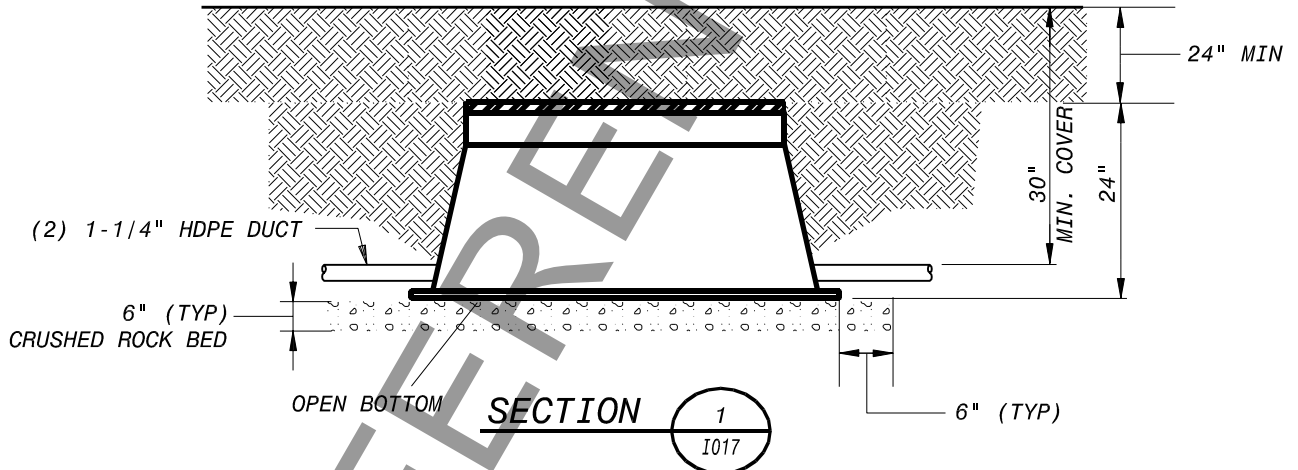
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STD
I016
SPECS 3,4,5
SCALE
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CYGNET ID: 137522-I-STD-E00007W6B
FAP137522
AP137522



BOLT-DOWN POLYMER CONCRETE
20,000 LB TRAFFIC-RATED LID
WITH EMBEDDED TEXT "FIBER
OPTIC CABLE". BOND IN AC-
CORDANCE WITH NEC 250.96A



NOTES:

1. INSTALL EMS LOCATOR BALL INSIDE PULLBOX
2. PROVIDE TEMPORARY TRAFFIC COVER OVER EXCAVATED PULLBOX UNTIL FIBER OPTIC CABLE IS INSTALLED. AFTER INSTALLATION, BACKFILL TRENCH AND REPAIR LANDSCAPING TO ORIGINAL CONDITIONS.
3. REFER TO PLAN/PROFILE DRAWINGS FOR PULLBOX LOCATIONS.
4. LOCATE PULLBOXES MIN 5' AWAY FROM EDGE OF ROADWAY PER THE ENCROACHMENT PERMIT, OR MORE IF SHOWN AS SUCH ON CONTRACT DRAWINGS.



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BURIED FIBER OPTIC PULLBOX

BLACK & VEATCH
137522

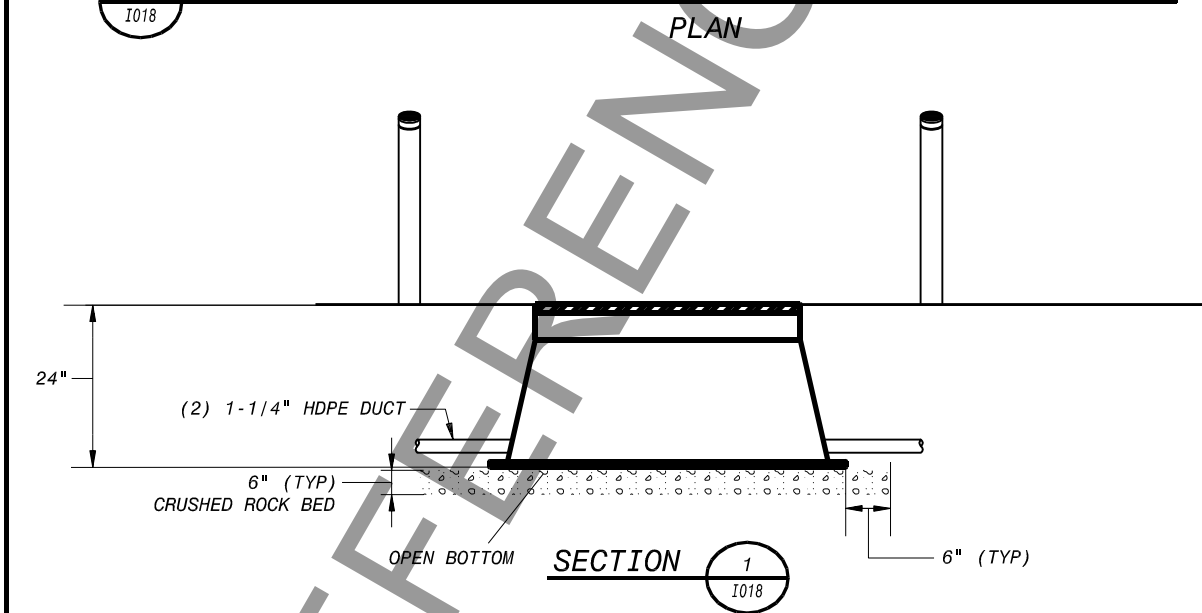
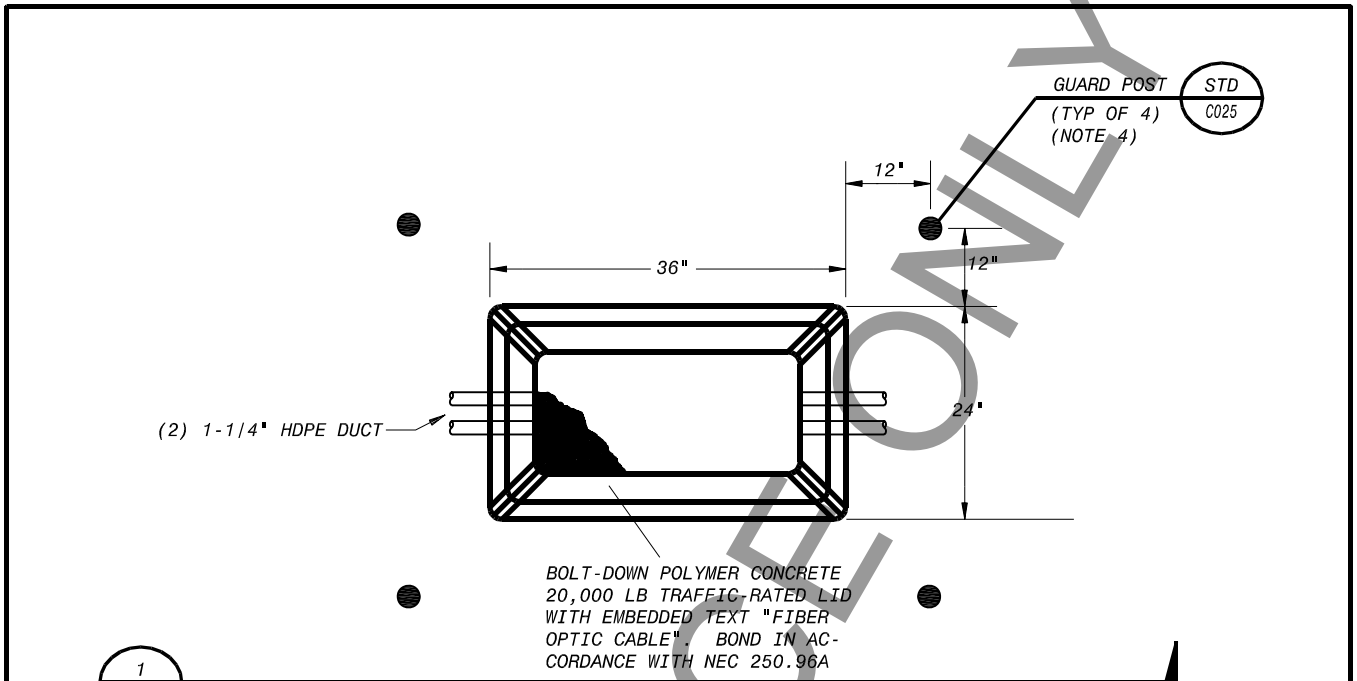
BOYLE
ENGINEERING CORPORATION

DATE	REVISION OR ISSUE	NO	BY	

STD
I017
SCALE
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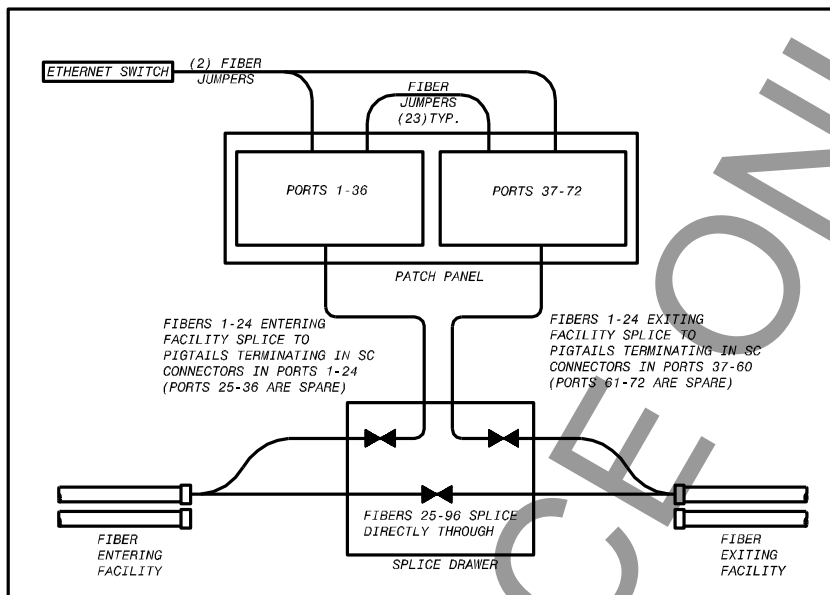


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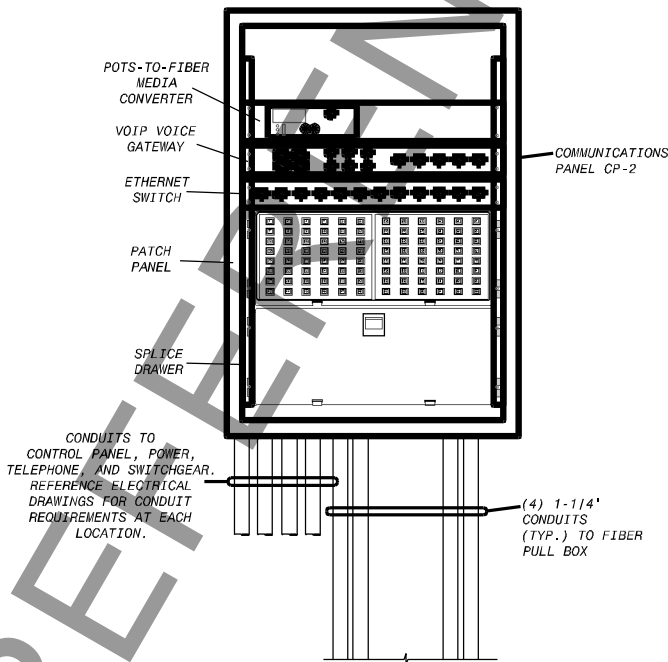
1. INSTALL EMS LOCATOR BALL INSIDE PULLBOX.
2. PROVIDE FINISHED GRADE TO SLOPE AWAY FROM PULLBOX IN ALL LOCATIONS WHERE PULLBOX IS OUTSIDE OF SIDEWALK AREA.
3. REFER TO PLAN/PROFILE DRAWINGS FOR PULLBOX LOCATIONS.
4. WHERE INSTALLED IN PUBLIC RIGHT-OF-WAY, INSTALL 4" CARSONITE "UTILITY ID POSTS" (OR EQUAL) IN LIEU OF STEEL POSTS.

	NWP NACIMIENTO WATER PROJECT <small>San Luis Obispo County Flood Control & Water Conservation District</small> 300187.08	FIBER OPTIC PULLBOX WITH GUARD POSTS			STD
					I018
137522	BLACK & VEATCH	BOYLE <small>ENGINEERING CORPORATION</small>			SCALE
			DATE	REVISION OR ISSUE	NO BY
					NO SCALE

FIBER SCHEMATIC



CABINET ELEVATION (DOOR NOT SHOWN)



- NOTE:
1. VOIP VOICE GATEWAY LOCATED AT LOCATION AS SHOWN ON SCADA BLOCK DIAGRAM G602.
 2. A FIBER OPTIC MEDIA CONVERTER IS USED IN PLACE OF THE ETHERNET SWITCH AND SHALL OCCUPY THAT POSITION ONLY AT THE CAMP ROBERTS TANK LOCATION. REF G602 FOR FURTHER DETAILS.
 3. POTS-TO-FIBER MODEMS FOR PG&E A.M.R. SHALL BE PLACED AT LOCATIONS AS SHOWN ON BLOCK DIAGRAM G604.
 4. A MINIMUM BEND RADIUS OF 24" SHALL BE OBSERVED FOR ALL CONDUIT PLACEMENT.
 5. FOR ANY LOCATION NOT SHOWING AN EXTERNAL TELEPHONE JACK, MOUNT PHONE INSIDE CABINET.



NWP NACIMIENTO WATER PROJECT
 San Luis Chispa County Flood Control & Water Conservation District
 300187.08

TYPICAL COMMUNICATIONS PANEL DIAGRAM

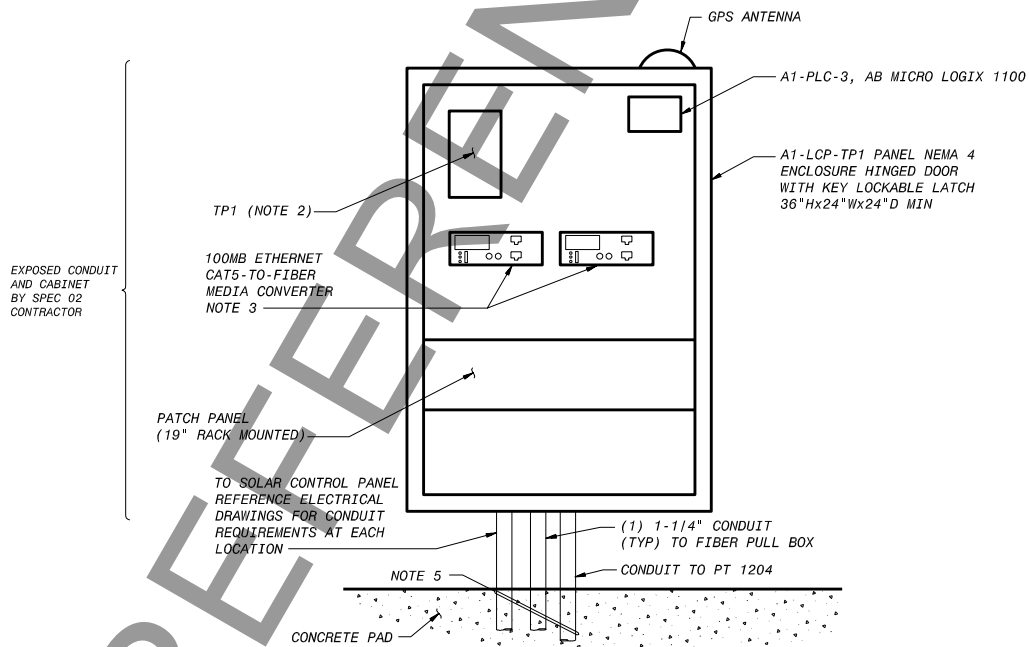
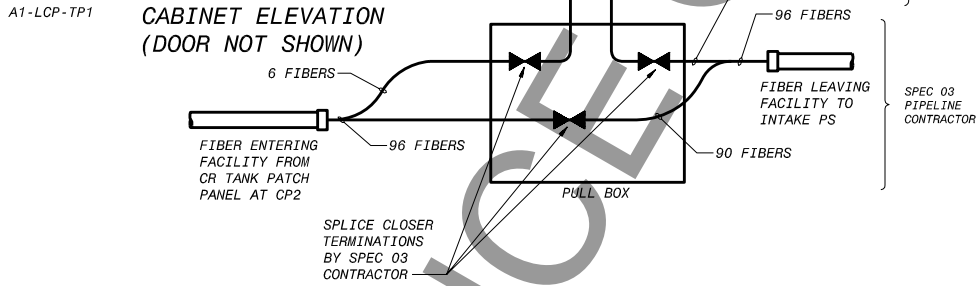
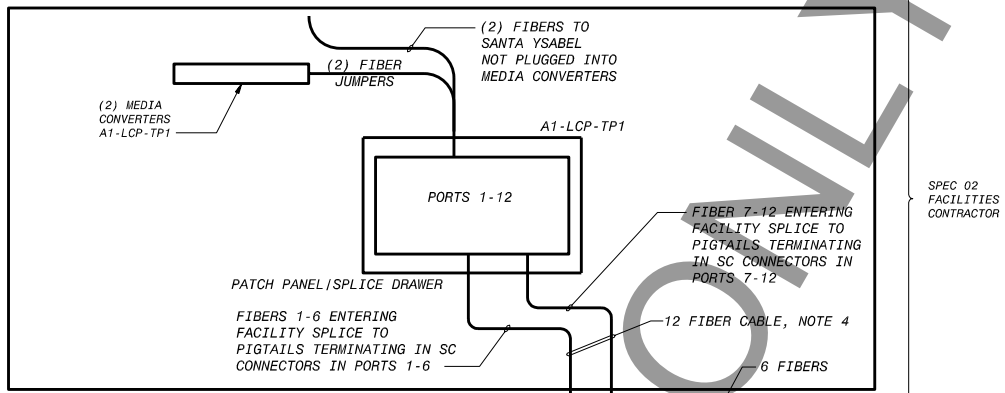


10/29/06	MODIFIED PANEL DETAILS	1	DRP
DATE	REVISION OR ISSUE	NO	BY

STD
I019
SCALE
NO SCALE

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 FAP137522
 AP137522

FIBER SCHEMATIC



- NOTES:
1. A MINIMUM BEND RADIUS SHALL BE OBSERVED FOR ALL CONDUIT PLACEMENT.
 2. COMPONET PROVIDED BY PIPETECH INTERNATIONAL (TP1 SUPPLIER).
 3. ETHERNET MEDIA CONVERTER SHALL BE RATED AT A MINIMUM FOR A 60°C AMBIENT TEMP.
 4. 12 COUNT FO CABLE SUPPLIED BY SPEC 03 CONTRACTOR PULLED INTO CABINET AND TERMINATED AT PATCH PANEL BY SPEC 02 CONTRACTOR.
 5. SPEC 03 CONTRACTOR SHALL STUB OUT CONDUIT IN 7"Wx5"D WINDOW. SPEC 02 CONTRACTOR SHALL PROVIDE 7"Wx5"D WINDOW FOR CONDUIT IN PANEL CENTER BOTTOM.



NWP NACIMIENTO WATER PROJECT
 San Luis Obispo County Flood Control & Water Conservation District
 300187.08

A1-LCP-TP1 PANEL DIAGRAM

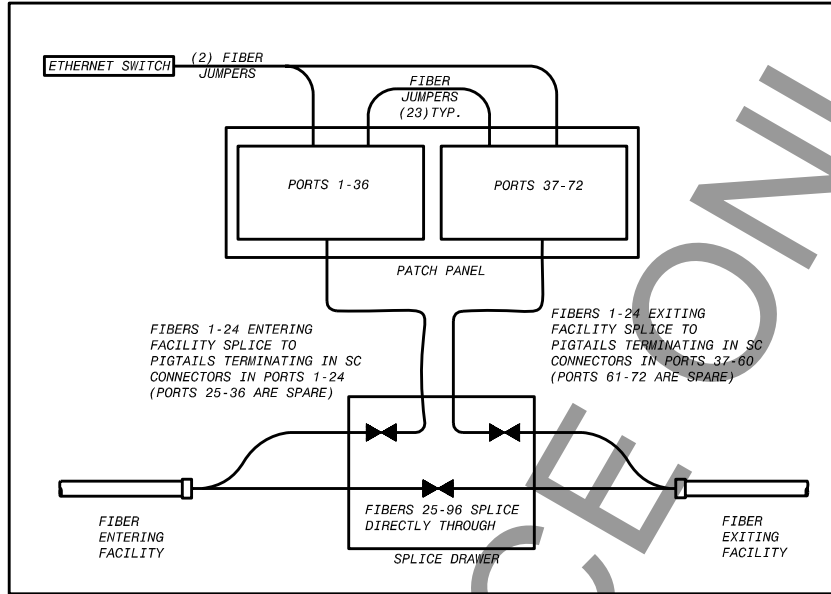
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				I019B
09/14/09	TP1 CHANGE ORDER	2	WEM	SCALE
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DATE	REVISION OR ISSUE	NO	BY	

BLACK & VEATCH
 137522

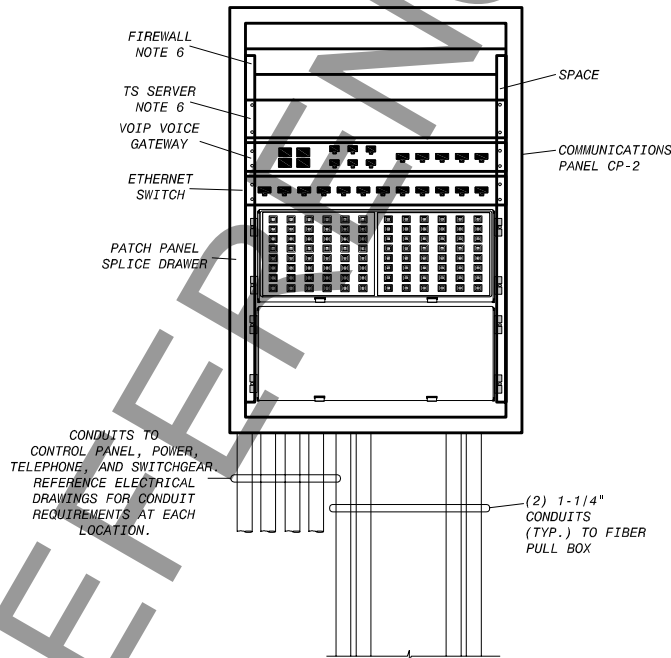
BOYLE
 ENGINEERING CORPORATION

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 AP137522

FIBER SCHEMATIC



CABINET ELEVATION (DOOR NOT SHOWN)



NOTE:

1. VOIP VOICE GATEWAY LOCATED AT LOCATION AS SHOWN ON SCADA BLOCK DIAGRAM G602.
2. A FIBER OPTIC MEDIA CONVERTER IS USED IN PLACE OF THE ETHERNET SWITCH AND SHALL OCCUPY THAT POSITION ONLY AT THE CAMP ROBERTS TANK LOCATION. REF G602 FOR FURTHER DETAILS.
3. POTS-TO-FIBER MODEMS FOR PG&E A.M.R. SHALL BE PLACED AT LOCATIONS AS SHOWN ON BLOCK DIAGRAM G604.
4. A MINIMUM BEND RADIUS OF 24" SHALL BE OBSERVED FOR ALL CONDUIT PLACEMENT.
5. FOR ANY LOCATION NOT SHOWING AN EXTERNAL TELEPHONE JACK, MOUNT PHONE INSIDE CABINET.
6. TS SERVER AND FIREWALL ARE REQUIRED AT SANTA MARGARITA NWP-CP-2 ONLY.



NWP NACIMIENTO WATER PROJECT

San Luis Obispo County Flood Control & Water Conservation District

300187.08



137522



TYPICAL COMMUNICATIONS PANEL DIAGRAM

				STD
				I019C
08/07/09	DATA ACCESS CHANGE ORDER	2		SCALE
10/29/06	MODIFIED PANEL DETAILS	1	DRP	NO SCALE
DATE	REVISION OR ISSUE	NO	BY	

CONFORMED TO CONSTRUCTION RECORDS 02/28/2011

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