NACIMIENTO WATER PROJECT
DRAFT Preliminary Design Report Drawing List

BID PACKAGE 3

General

Drawing no	Title
G001	Units A, B, and F2 Pump Stations Cover Sheet
G602	Units A, B, and F2 General System Schematic
G603	Units A, B, and F2 General SCADA System Block Diagram

UNIT A: Intake Pump Station

Drawing no	Title
A-A301	Intake Pump Station Architectural Elevations
A-C101	Intake Pump Station Site Plan
A-C102	Intake Pump Station Grading and Paving Plan
A-C105	Intake Microtunnel Construction - Plan
A-C106	Intake Fish Screen Plan and Sections
A-C301	Intake Tunnel Construction - Section
A-S104	Intake Pump Station Structural Floor Plan
A-S105	Intake Pump Station Structural Roof Plan
A-M101	Intake Pump Station Mechanical Equipment and Piping Plan
A-M301	Intake Pump Station Mechanical Equipment and Piping Section
A-M302	Intake Pump Station Mechanical Equipment and Piping Section
A-E102	Intake Pump Station Electrical Floor Plan
A-E602	Intake Pump Station Power Distribution Functional Diagram
A-E604	Intake Pump Station MCC and Miscellaneous One-Line Diagrams
A-I602	Intake Pump Station P&ID – Pumps
A-I604	Intake Pump Station P&ID – Surge Tank Compressed Air System
A-I606	Intake Pump Station Hydraulic Control Schematic

UNIT B: Camp Roberts Pump Station

Drawing no	Title
B-A301	Camp Roberts Pump Station Architectural Elevations
B-C101	Camp Roberts Pump Station Site Plan
B-C102	Camp Roberts Pump Station Grading and Paving Plan
B-M101	Camp Roberts Pump Station Mechanical Equipment and Piping Plan
B-M301	Camp Roberts Pump Station Mechanical Equipment and Piping Layout Sections
B-E102	Camp Roberts Pump Station Electrical Floor Plan
B-E602	Camp Roberts Pump Station Power Distribution Functional Diagram
B-E604	Camp Roberts Pump Station MCC and Miscellaneous One-Line Diagram
B-I602	Camp Roberts Pump Station P&ID – Pumps
B-I603	Camp Roberts Pump Station P&ID – Compressed Air System
B-I604	Camp Roberts Pump Station P&ID – Surge Tank Compressed Air System

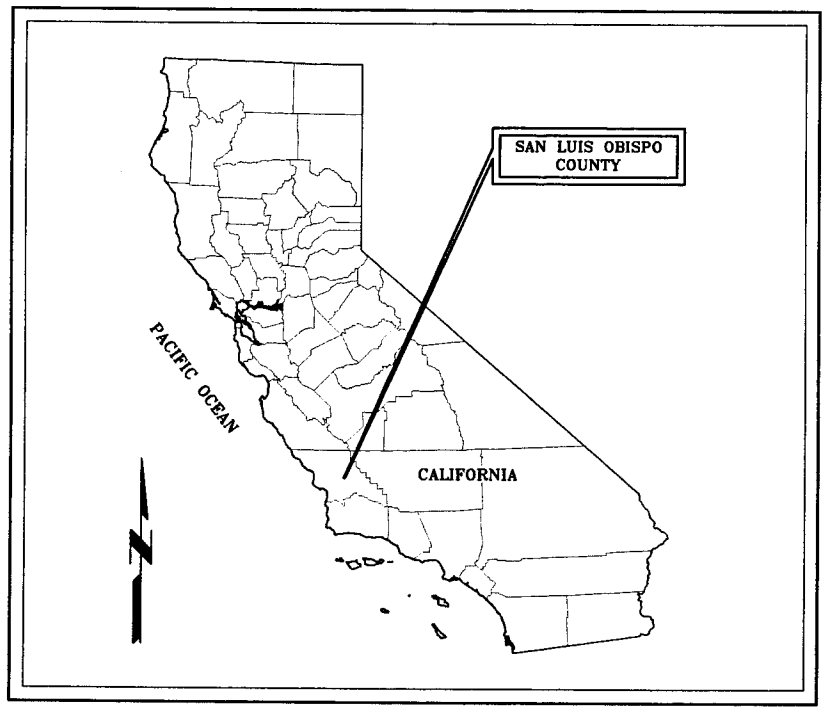
UNIT F2: Rocky Canyon Pump Station

Drawing no	Title
F2-A301	Rocky Canyon Pump Architectural Elevations
F2-C101	Rocky Canyon Pump Station Site Plan
F2-C102	Rocky Canyon Pump Station Grading and Paving Plan
F2-M101	Rocky Canyon Pump Station Mechanical Equipment and Piping Plan
F2-M301	Rocky Canyon Pump Station Mechanical Equipment and Piping Layout Sections
F2-E102	Rocky Canyon Pump Station Electrical Floor Plan
F2-E602	Rocky Canyon Pump Station Power Distribution Functional Diagram
F2-I602	Rocky Canyon Pump Station P&ID - Pumps
F2-I603	Rocky Canyon Pump Station P&ID - Compressed Air System
F2-I604	Rocky Canyon Pump Station P&ID - Surge Tank Compressed Air System

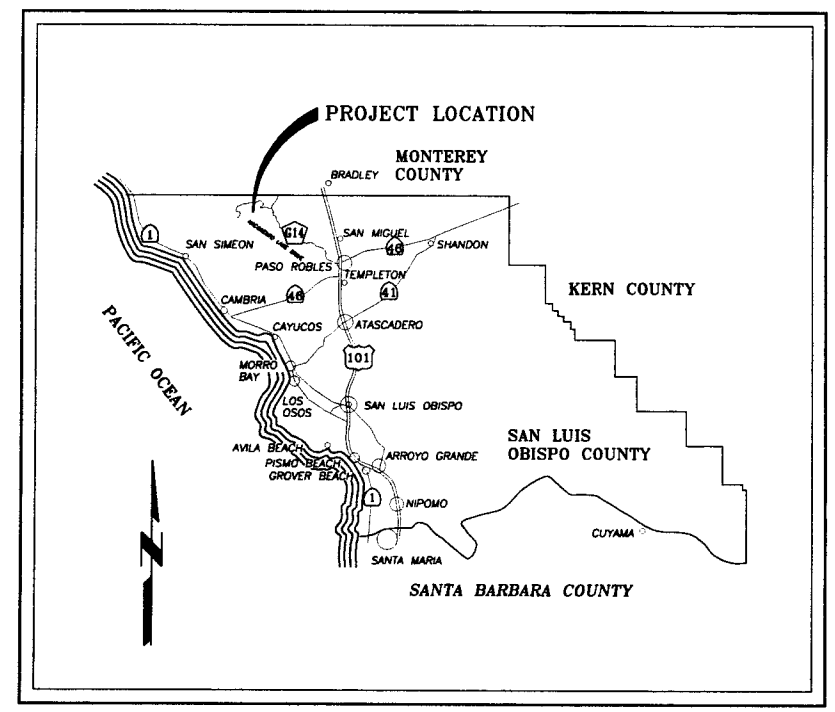
COUNTY OF SAN LUIS OBISPO, CALIFORNIA
FLOOD CONTROL AND WATER CONSERVATION DISTRICT
PLANS FOR THE CONSTRUCTION OF

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

B&V PROJECT NO. 137522
COUNTY CONTRACT NO. 300187.08
SPECIFICATION 03
UNITS A, B, AND F2 PUMP STATIONS



VICINITY MAP
NO SCALE



LOCATION MAP
NO SCALE

PRELIMINARY - NOT FOR CONSTRUCTION

THESE DOCUMENTS REPRESENT A 30% PERCENT COMPLETE DESIGN, ARE PRELIMINARY AND ARE NOT FOR CONSTRUCTION OR BIDDING PURPOSES. THESE DOCUMENTS WILL BE FURTHER REVISED BEFORE A FINAL DESIGN IS ACCOMPLISHED. THEY HAVE NOT RECEIVED REGULATORY REVIEW AND DO NOT HAVE FINAL APPROVAL OR ACCEPTANCE OF THE GOVERNING REGULATORY AGENCIES. THESE DOCUMENTS ARE PREPARED WITH THE STANDARD OF CARE FOR THE TIME, LOCALE, AND SYSTEM AS GIVEN IN THE DOCUMENTS. THESE DOCUMENTS ARE THE COPYRIGHTED PROPERTY OF BLACK & VEATCH AND ARE NOT TO BE REPRODUCED OR DISTRIBUTED WITHOUT THE EXPRESS PERMISSION OF BLACK & VEATCH AND THEIR CLIENT, SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT.

SURVEYOR'S STATEMENT

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE LAND SURVEYOR'S ACT AT THE REQUEST OF COUNTY OF SAN LUIS OBISPO, IN _____, _____.

L.S. XXXX (EXP. XX-XX-XXXX)

APPROVED:

NACIMIENTO PROJECT MANAGER
RPE C59001 (EXP 6-30-2007)

APPROVED BY:
BLACK & VEATCH CORPORATION

STEVE FOELLMI, P.E.
PROJECT MANAGER

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

F0137522
D137522

DATE	REVISIONS AND RECORD OF ISSUE	NO.	BY	CK.	APP.

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PLOTTED: MCC10764, 2/10/2006 11:42:53 AM XREF4:
USER: MCC10764 DWG VER: 1.2 XREF5:

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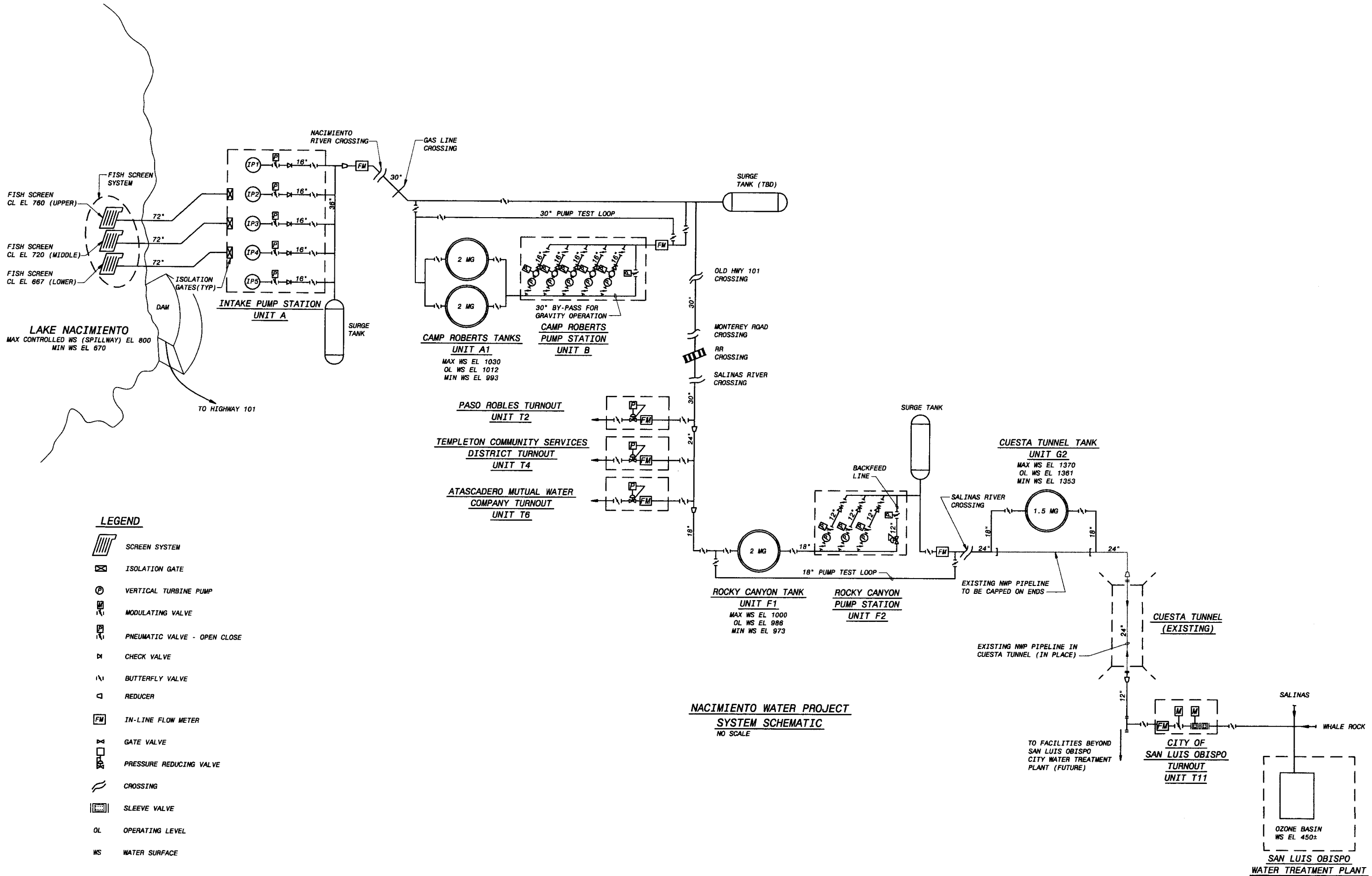
ENERGY WATER INFORMATION GOVERNMENT
BOYLE ENGINEERING CORPORATION

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

UNITS A, B AND F2 PUMP STATIONS
COVER SHEET

DESIGNED:
DETAILED: S. McCARTY
CHECKED:
APPROVED:
DATE: 2/22/06
BV PROJECT NO. 137522
NWP PROJECT NO. 3000187.08
SPEC 03
G001
SHEET OF



NACIMIENTO WATER PROJECT
SYSTEM SCHEMATIC
NO SCALE

LEGEND

- SCREEN SYSTEM
- ISOLATION GATE
- VERTICAL TURBINE PUMP
- MODULATING VALVE
- PNEUMATIC VALVE - OPEN CLOSE
- CHECK VALVE
- BUTTERFLY VALVE
- REDUCER
- FM — IN-LINE FLOW METER
- GATE VALVE
- PRESSURE REDUCING VALVE
- CROSSING
- SLEEVE VALVE
- OL — OPERATING LEVEL
- WS — WATER SURFACE

PRELIMINARY - NOT FOR CONSTRUCTION

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

DATE	REVISIONS AND RECORD OF ISSUE	NO.	BY	CK	APP

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WF: 16.1s (LMS Tech)
XREF2:
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XREF3:
PLOTTED: 2/17/2006 6:54:16 PM, Batch Plot
XREF4:
USER: gut45251
DWG VER: 1.7
XREF5:

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BOYLE ENGINEERING CORPORATION

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

UNITS A, B AND F2 PUMP STATIONS
GENERAL
SYSTEM SCHEMATIC

DESIGNED: RWT, PRK
DETAILED: WAS
CHECKED:
APPROVED:
DATE: 2/22/06

BV PROJECT NO.
137522

NWP PROJECT NO.
3000187.08

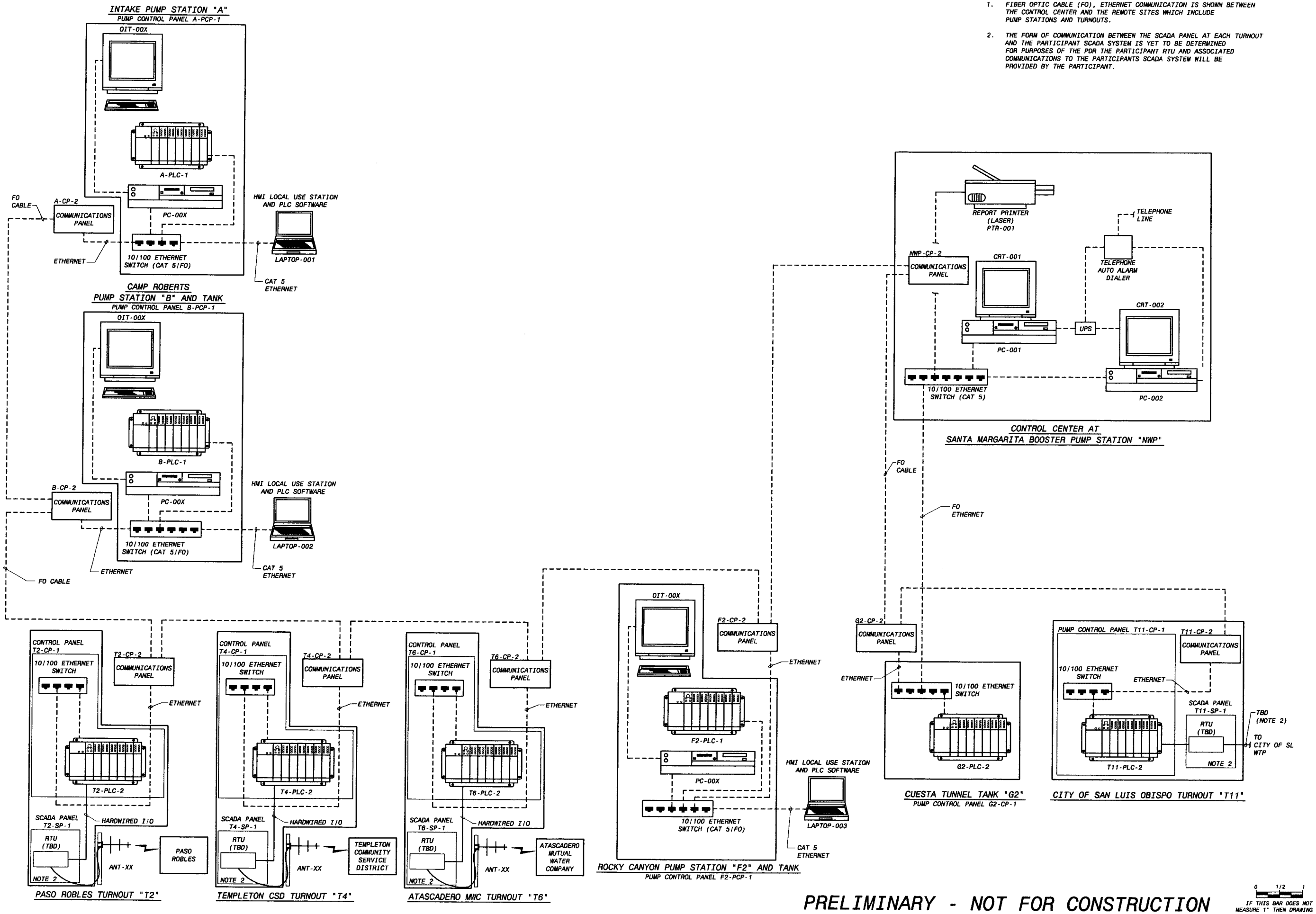
SPEC
03

G602
SHEET
OF

FD137522
D137522

NOTES:

1. FIBER OPTIC CABLE (FO), ETHERNET COMMUNICATION IS SHOWN BETWEEN THE CONTROL CENTER AND THE REMOTE SITES WHICH INCLUDE PUMP STATIONS AND TURNOUTS.
2. THE FORM OF COMMUNICATION BETWEEN THE SCADA PANEL AT EACH TURNOUT AND THE PARTICIPANT SCADA SYSTEM IS YET TO BE DETERMINED FOR PURPOSES OF THE PDR THE PARTICIPANT RTU AND ASSOCIATED COMMUNICATIONS TO THE PARTICIPANTS SCADA SYSTEM WILL BE PROVIDED BY THE PARTICIPANT.



PRELIMINARY - NOT FOR CONSTRUCTION

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

NO.	BY	CK	APP

DATE	REVISIONS AND RECORD OF ISSUE
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USER: GUT45251	DWG VER: 1.8

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BOYLE ENGINEERING CORPORATION

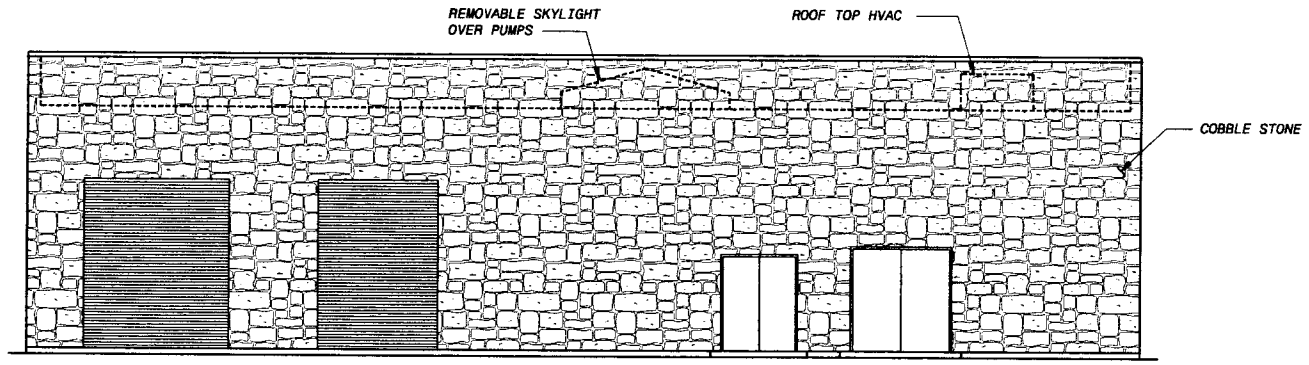
NWP NACIMIENTO WATER PROJECT
San Luis Obispo County Flood Control & Water Conservation District

UNITS A, B, AND F2 PUMP STATIONS
GENERAL
SCADA SYSTEM BLOCK DIAGRAM

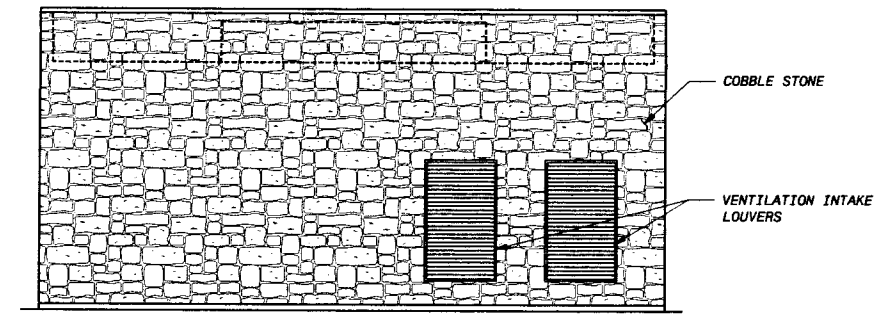
DESIGNED: XL, BEB
DETAILED: TVL
CHECKED:
APPROVED:
DATE: 2/22/06

BV PROJECT NO. 137522
NWP PROJECT NO. 3000187.08
SPEC 03
G603
SHEET OF

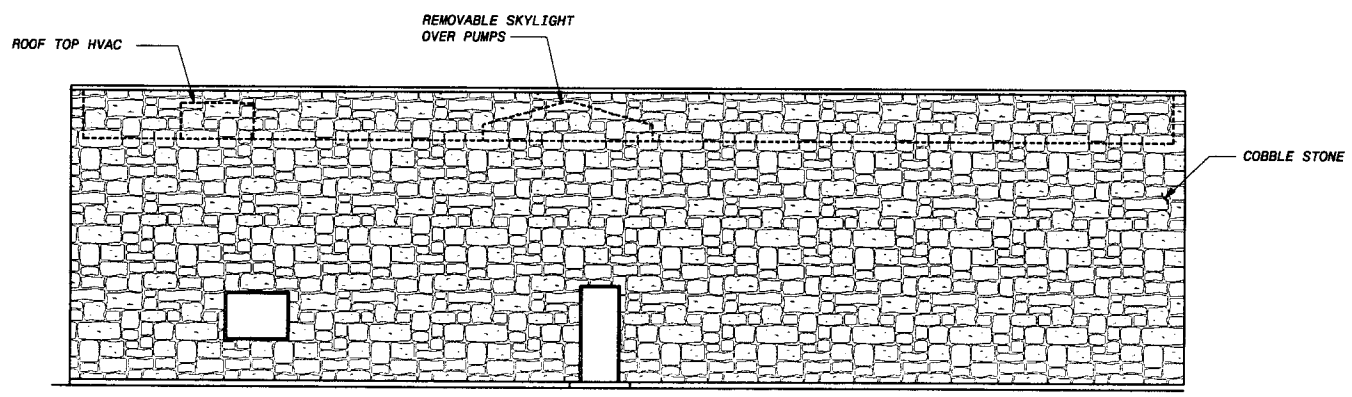
FD137522
D137522



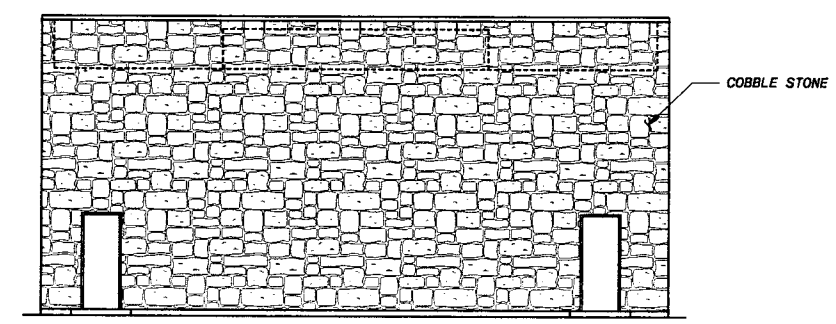
NORTH ELEVATION
1/8" = 1'-0"



EAST ELEVATION
1/8" = 1'-0"



SOUTH ELEVATION
1/8" = 1'-0"



WEST ELEVATION
1/8" = 1'-0"

PRELIMINARY - NOT FOR CONSTRUCTION

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

NO.	BY	CK	APP

DATE	REVISIONS AND RECORD OF ISSUE
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PLOTTED: GUT45251, 2/17/2006 4:14:13 PM	XREF4:
USER: GUT45251	DWG VER: 1.10

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BOYLE
ENGINEERING CORPORATION

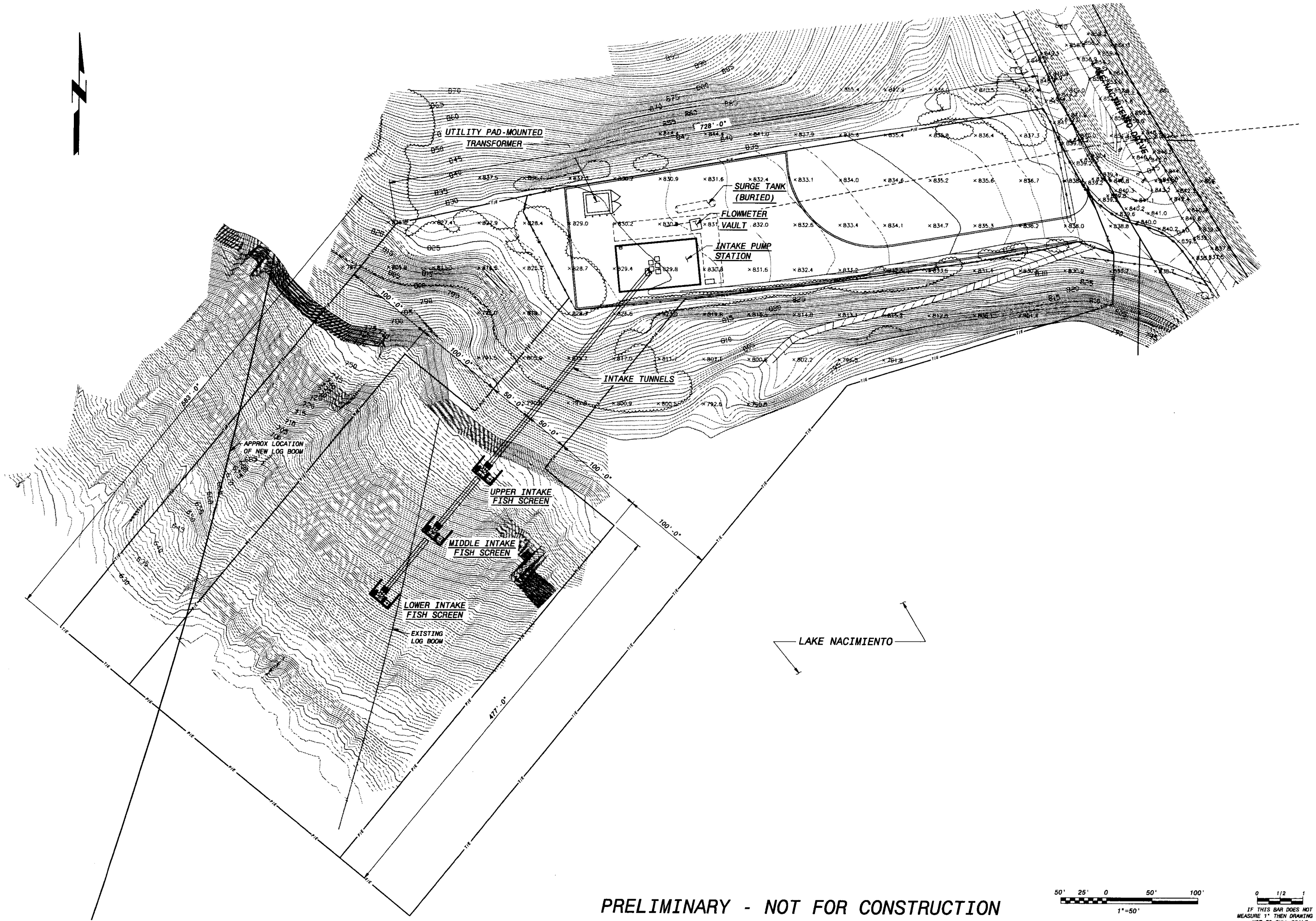
NWP NACIMIENTO WATER PROJECT
San Luis Obispo County Flood Control & Water Conservation District

UNIT A - INTAKE PUMP STATION
ARCHITECTURAL
ELEVATIONS

DESIGNED: MAJ
DETAILED: LRL
CHECKED:
APPROVED:
DATE: 2/22/06
BV PROJECT NO. 137522
NWP PROJECT NO. 3000187.08
SPEC 03
A-A301
SHEET OF

FD137522
D137522

Date/Time



PRELIMINARY - NOT FOR CONSTRUCTION

50' 25' 0 50' 100'
1"=50'

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

DATE	REVISIONS AND RECORD OF ISSUE	NO.	BY	CK	APP

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XREF3: C-CNTY-PARC.dwg
XREF4: A-C-PRTL.dwg
XREF5: A-C-SITE-PIPE.dwg

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BOYLE ENGINEERING CORPORATION

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

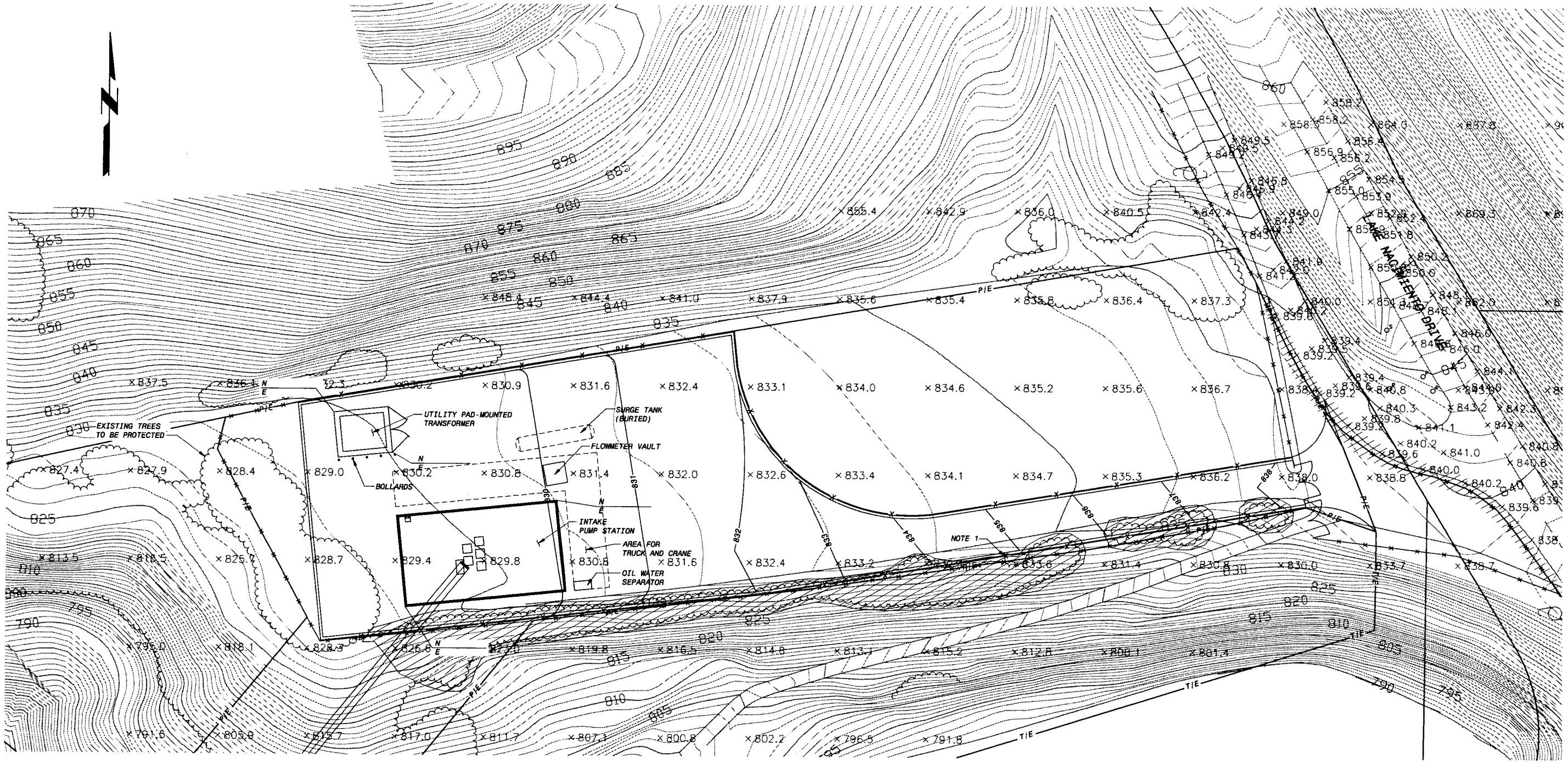
UNIT A - INTAKE PUMP STATION
CIVIL
SITE PLAN

DESIGNED: RWT
DETAILED: DSW
CHECKED:
APPROVED:
DATE: 2/22/06

BV PROJECT NO. 137522
NWP PROJECT NO. 3000187.08
SPEC 03

A-C101
SHEET
OF

FD137522
D137522



NOTE:

1. PROTECT EXISTING FENCE DURING CONSTRUCTION. ONCE CONSTRUCTION IS COMPLETE, REPLACE EXISTING FENCE WITH NEW FENCE.

PRELIMINARY - NOT FOR CONSTRUCTION

30' 20' 10' 0 30' 60'
1"=30'

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

NO.	BY	CK	APP	DATE	REVISIONS AND RECORD OF ISSUE

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XREF4: A-C-SITE-PIPE.dwg
XREF5: A-C-SITE-BPAD.dwg
DWG VER: 1.13

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

UNIT A - INTAKE PUMP STATION
CIVIL
GRADING AND PAVING PLAN

DESIGNED: RWT
DETAILED: JMM
CHECKED:
APPROVED:
DATE: 2/22/06

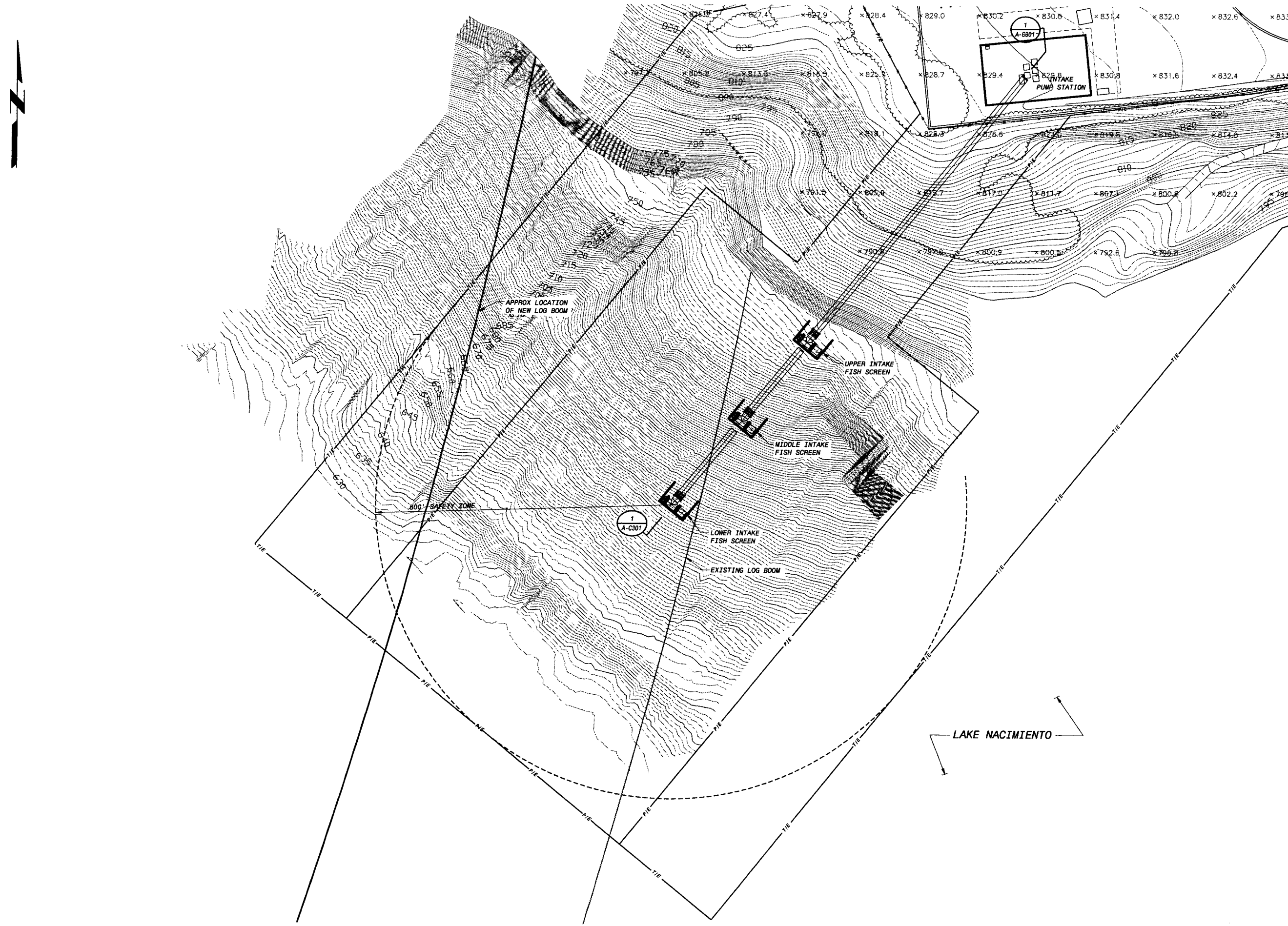
BV PROJECT NO.
137522

NWP PROJECT NO.
3000187.08

SPEC
03

A-C102
SHEET
OF

FD137522
D137522



PRELIMINARY - NOT FOR CONSTRUCTION

40' 20' 0 40' 80'
1"=40'

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

NO.	BY	CK	APP	DATE	REVISIONS AND RECORD OF ISSUE

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XREF2:C-CNTY-PARC.dwg
XREF3:A-C-PRTL.dwg
XREF4:A-C-SITE-PIPE.dwg
XREF5:A-C-SITE-BRAD.dwg
DWG VER: 1.11

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

UNIT A - INTAKE PUMP STATION
CIVIL
INTAKE MICROTUNNEL CONSTRUCTION - PLAN

DESIGNED: RWT
DETAILED: DSW
CHECKED:
APPROVED:
DATE: 2/22/06

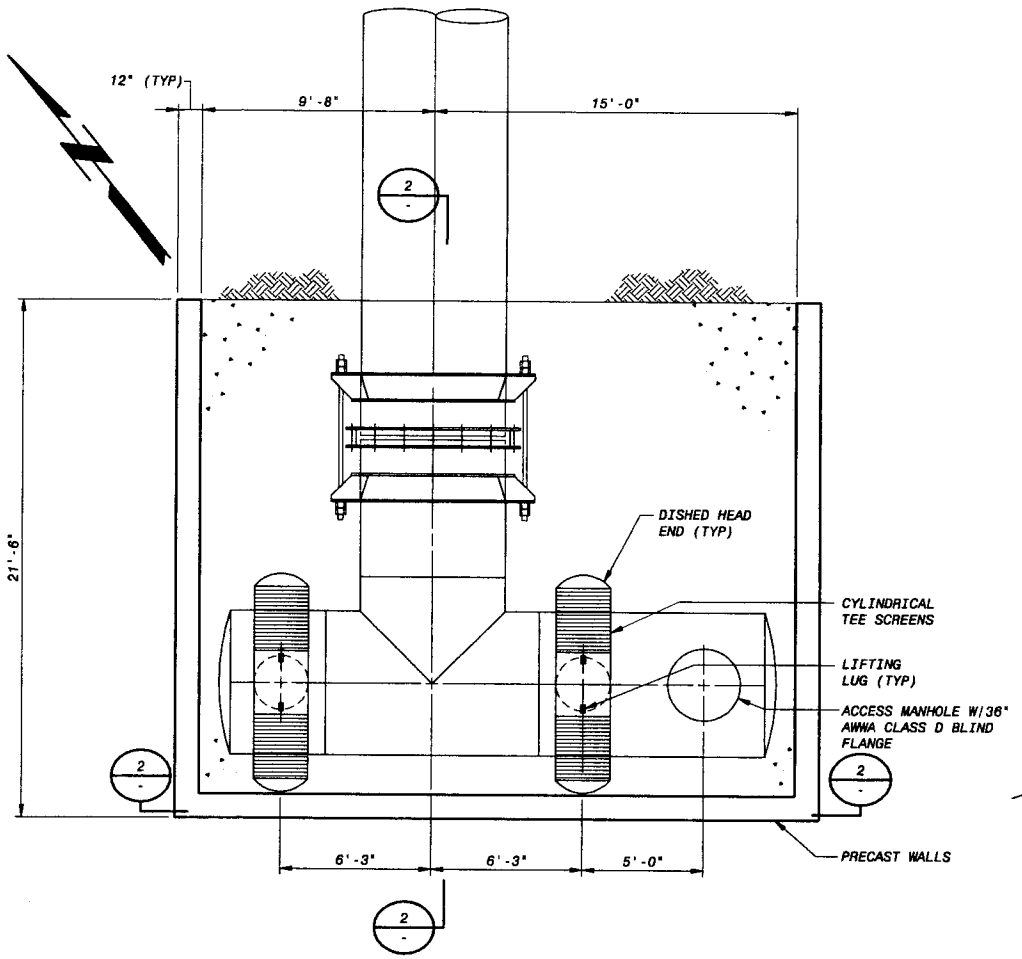
BV PROJECT NO.
137522

NWP PROJECT NO.
3000187.08

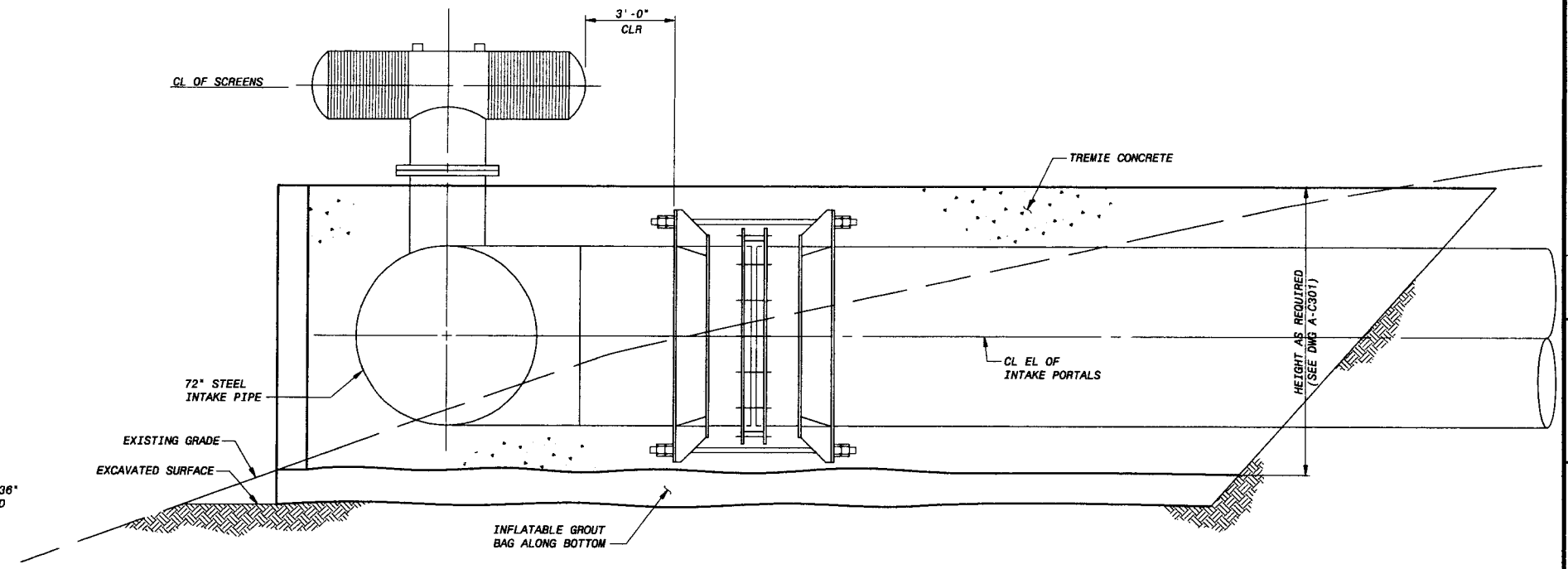
SPEC
03

A-C105
SHEET
OF

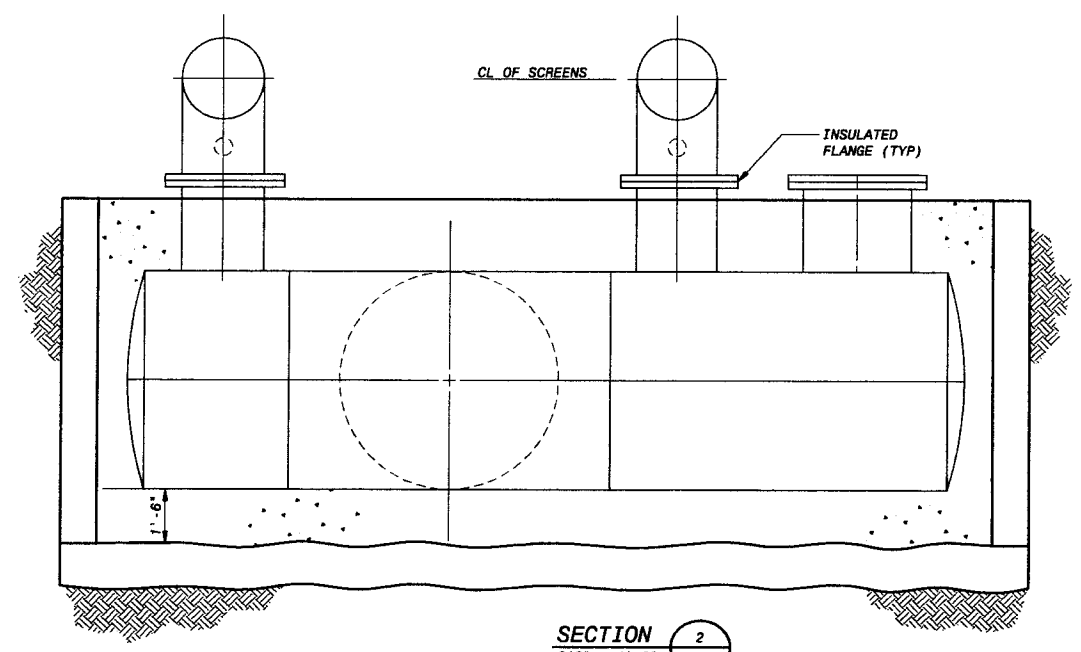
FD137522
D137522



PLAN
1/4" = 1'-0"



SECTION 1
3/8" = 1'-0"



SECTION 2
3/8" = 1'-0"

PRELIMINARY - NOT FOR CONSTRUCTION

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

NO.	BY	CK	APP

DATE	REVISIONS AND RECORD OF ISSUE
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USER: GUT45251	DWG VER: 1.15
	XREF5:

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BOYLE ENGINEERING CORPORATION

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

UNIT A - INTAKE PUMP STATION
CIVIL
FISH SCREEN PLAN AND SECTIONS

DESIGNED: RWT
DETAILED: DSW
CHECKED:
APPROVED:
DATE: 2/22/06

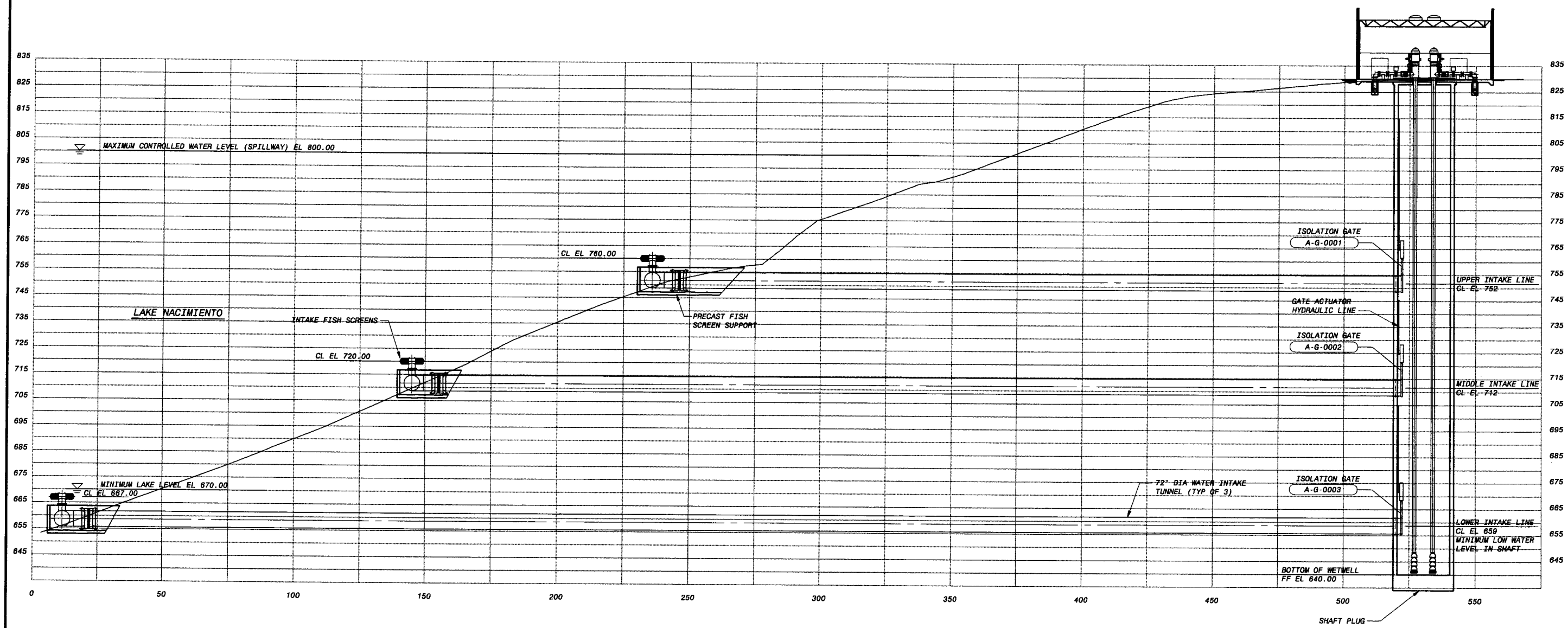
BV PROJECT NO.
137522

NWP PROJECT NO.
3000187.08

SPEC
03

A-C106
SHEET
OF

FD137522
D137522



SECTION
1" = 20'-0"

PRELIMINARY - NOT FOR CONSTRUCTION

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

NO.	BY	CK	APP

REVISIONS AND RECORD OF ISSUE

DATE	
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USER: GUT42551	XREF5:A-W-SECT.dwg
DWG VER: 1.19	

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BOYLE ENGINEERING CORPORATION

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

UNIT A-INTAKE PUMP STATION
CIVIL
INTAKE TUNNEL CONSTRUCTION - SECTION

DESIGNED: RWT
DETAILED: DSW
CHECKED:
APPROVED:
DATE: 2/22/06

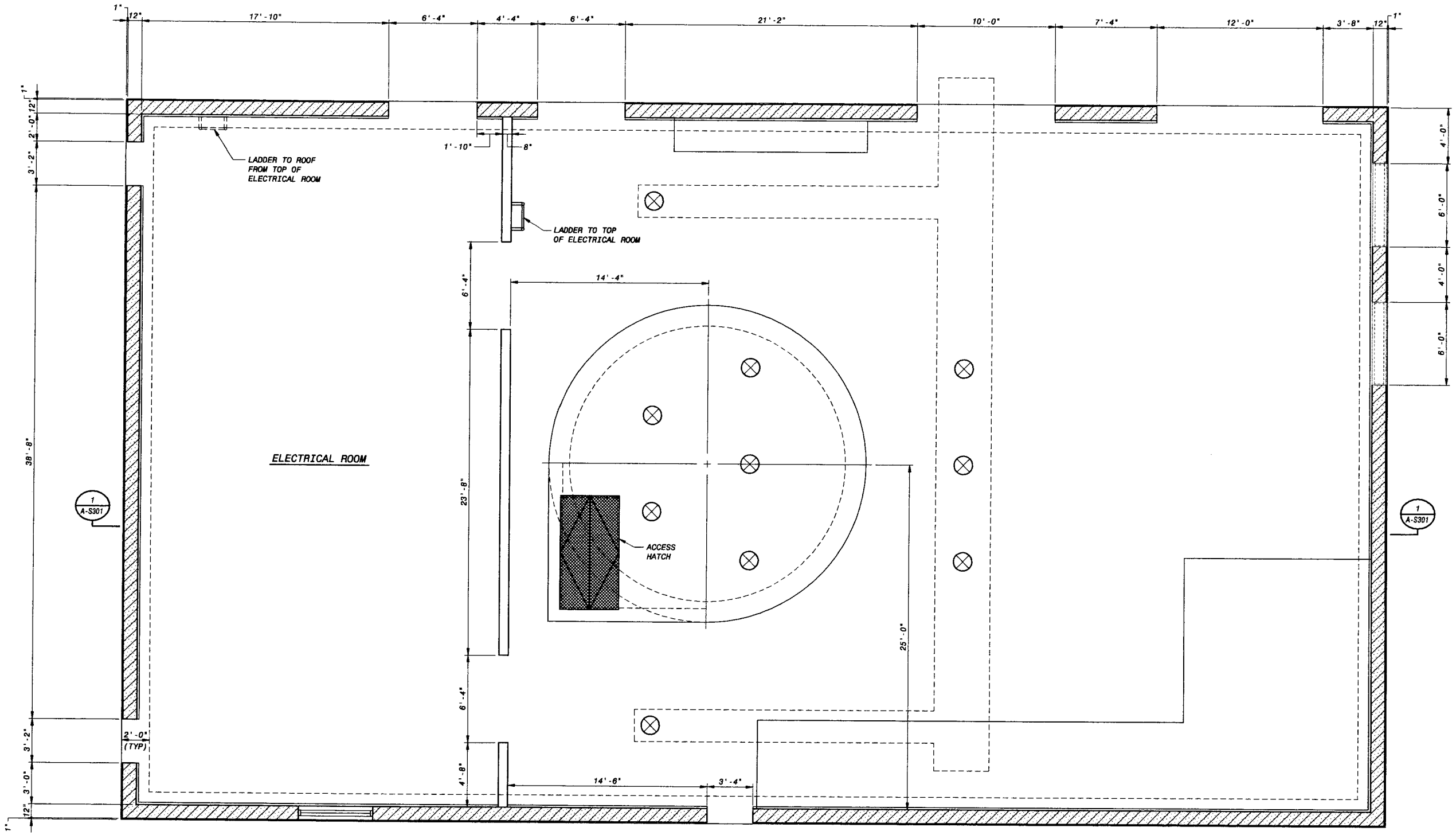
BV PROJECT NO.
137522

NWP PROJECT NO.
3000187.08

SPEC
03

A-C301
SHEET
OF

F0137522
D137522



PLAN
1/4" = 1'-0"

PRELIMINARY - NOT FOR CONSTRUCTION

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

NO.	BY	CK	APP

REVISIONS AND RECORD OF ISSUE

DATE	
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USER: GUT46351	XREF5:
	DWG VER: 1.10

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ENERGY WATER INFORMATION GOVERNMENT

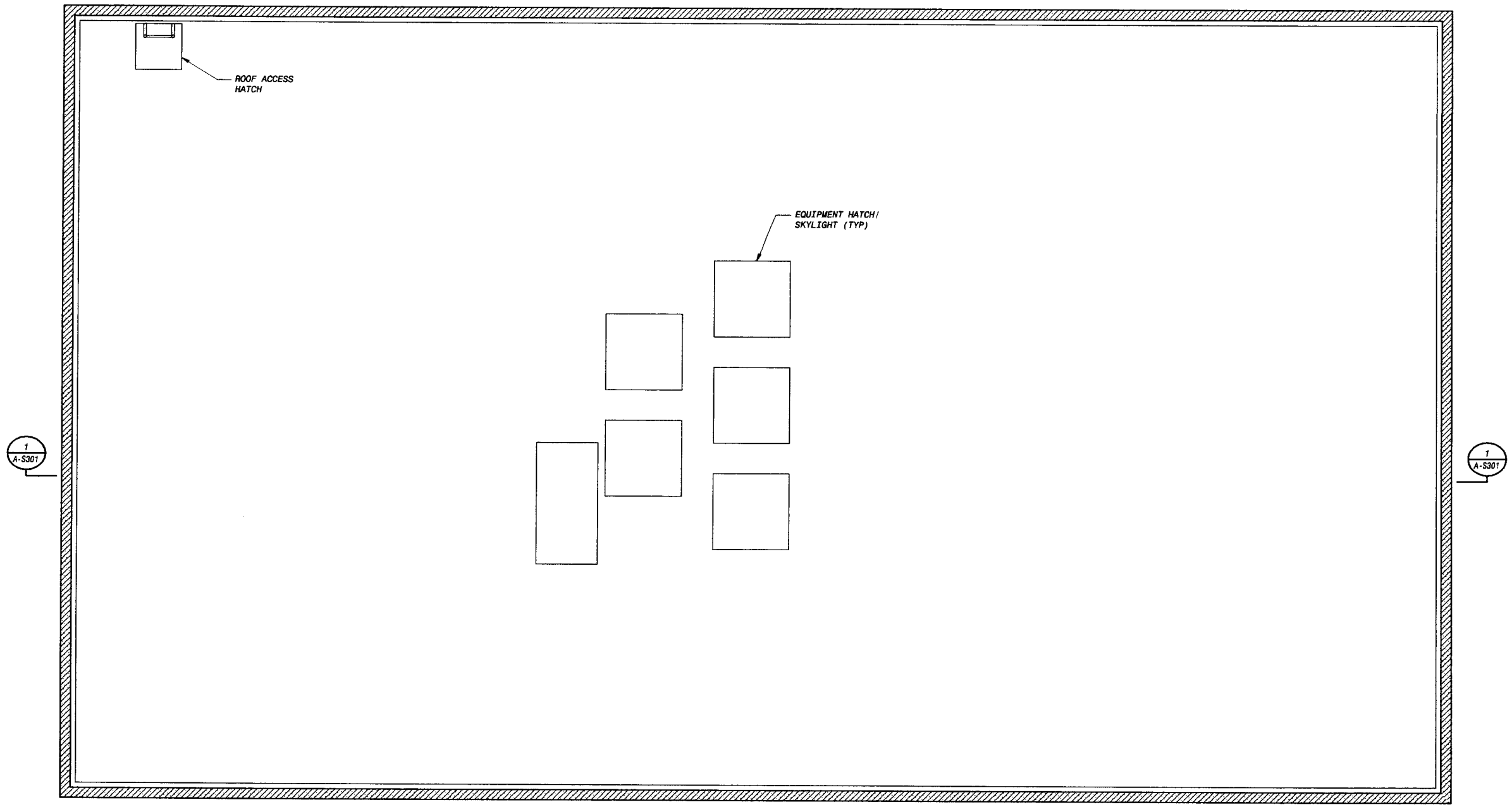
BOYLE ENGINEERING CORPORATION

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

UNIT A - INTAKE PUMP STATION
STRUCTURAL
FLOOR PLAN

DESIGNED:	RWT, SUP
DETAILED:	DSW
CHECKED:	
APPROVED:	
DATE:	2/22/06
BV PROJECT NO.	137522
NWP PROJECT NO.	3000187.08
SPEC	03
	A-S104
SHEET OF	

FD137522
D137522



PLAN
1/4" = 1'-0"

PRELIMINARY - NOT FOR CONSTRUCTION

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

NO.	BY	CK	APP

DATE | REVISIONS AND RECORD OF ISSUE

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WF: BP3-A-S105.dwg
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PLOTTED: GUT45251, 2/17/2006 4:19:11 PM
USER: GUT45251
DWG VER: 1.6
XREF1: A-M-PIPE.dwg
XREF2: A-S-ROOF.dwg
XREF3: A-S-FLOR.dwg
XREF4:
XREF5:

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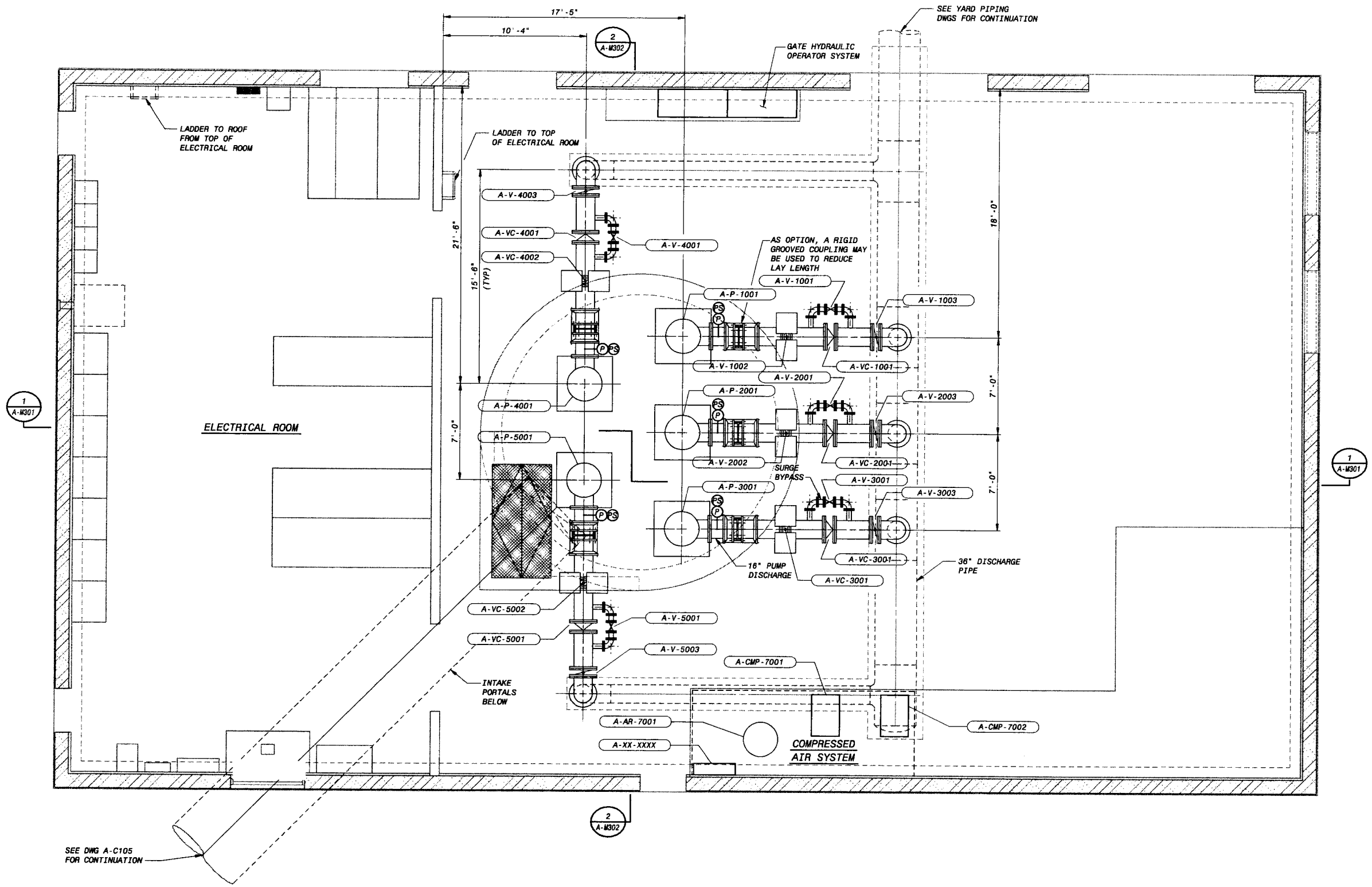
BOYLE ENGINEERING CORPORATION

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

UNIT A - INTAKE PUMP STATION
STRUCTURAL
ROOF PLAN

DESIGNED: RWT, SUP
DETAILED: DSW
CHECKED:
APPROVED:
DATE: 2/22/06
BV PROJECT NO. 137522
NWP PROJECT NO. 3000187.08
SPEC 03
A-S105
SHEET
OF

FD137522
D137522



PLAN
1/4" = 1'-0"

PRELIMINARY - NOT FOR CONSTRUCTION

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

DATE	REVISIONS AND RECORD OF ISSUE	NO.	BY	CK	APP
CYGNET TD: 137522-M-BP3-E00007MMP	XREF1:A-C-SITE-PIPE.Dwg				
WF: BP3-A-M101.Dwg	XREF2:A-E-POWR.Dwg				
SAVED: GUT46251, 2/17/2006 4:19:54 PM	XREF3:A-M-PIPE.Dwg				
PLOTTED: GUT46251, 2/17/2006 4:19:47 PM	XREF4:A-S-GRID.Dwg				
USER: GUT46251	DWG VER: 1.12				

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

UNIT A - INTAKE PUMP STATION
MECHANICAL
EQUIPMENT AND PIPING PLAN

DESIGNED: RWT
DETAILED: DSW
CHECKED:
APPROVED:
DATE: 2/22/06

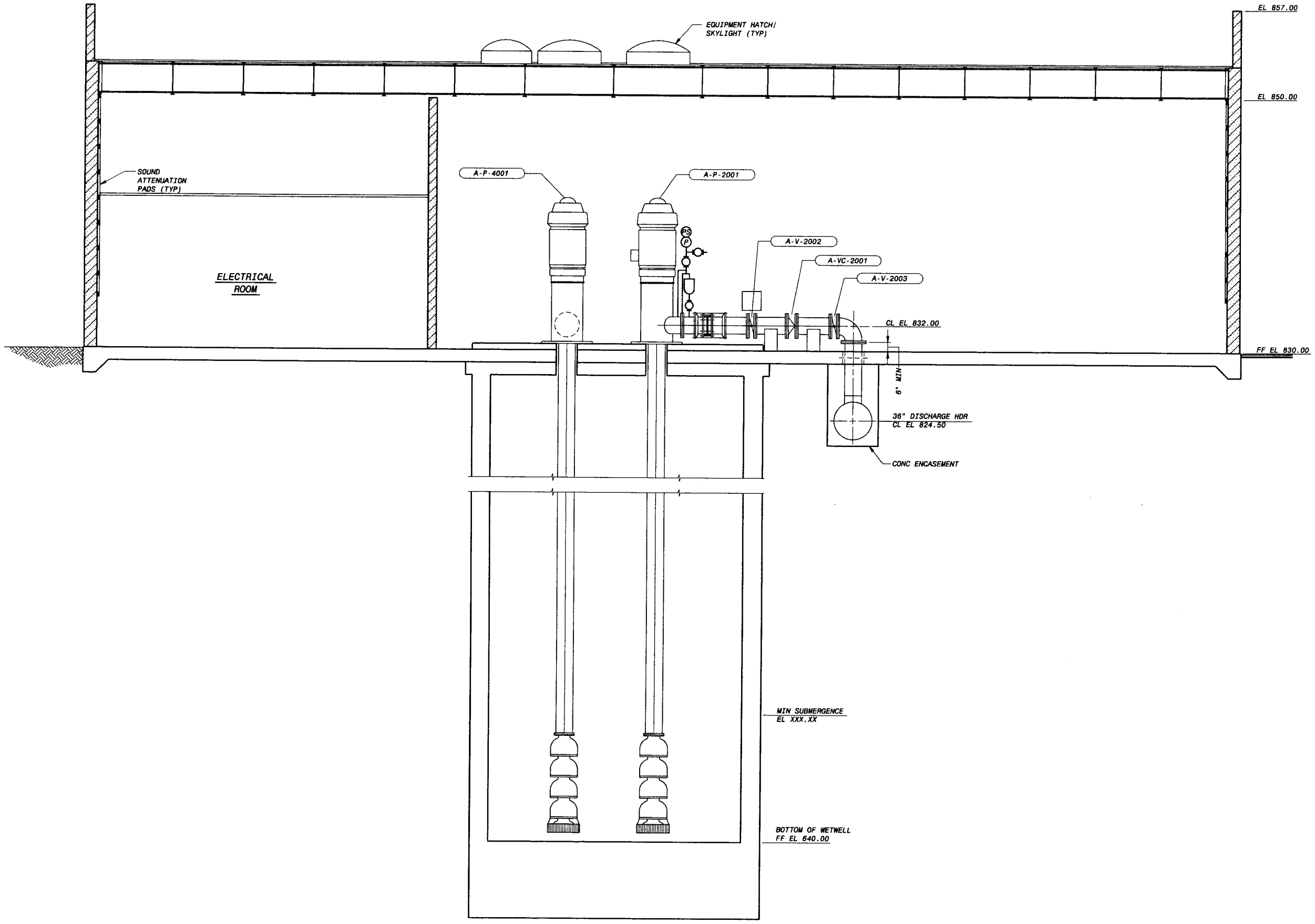
BV PROJECT NO.
137522

NWP PROJECT NO.
30001187.08

SPEC
03

A-M101
SHEET
OF

FD137522
D137522



SECTION 1/A-M101
1/4" = 1'-0"

PRELIMINARY - NOT FOR CONSTRUCTION

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

DATE	REVISIONS AND RECORD OF ISSUE	NO.	BY	CK	APP

CYGNET ID: 137522-M-BP3-E00007YTT
WF: BP3-A-M301.dwg
SAVED: GUT45251, 2/17/2006 4:20:29 PM
PLOTTED: GUT45251, 2/17/2006 4:20:19 PM
USER: GUT45251
DWG VER: 1.10
XREF1: A-M-SECT.dwg
XREF2: A-S-SECT.dwg
XREF3:
XREF4:
XREF5:

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

UNIT A - INTAKE PUMP STATION
MECHANICAL
EQUIPMENT AND PIPING SECTION

DESIGNED: RWT
DETAILED: JMM
CHECKED:
APPROVED:
DATE: 2/22/06

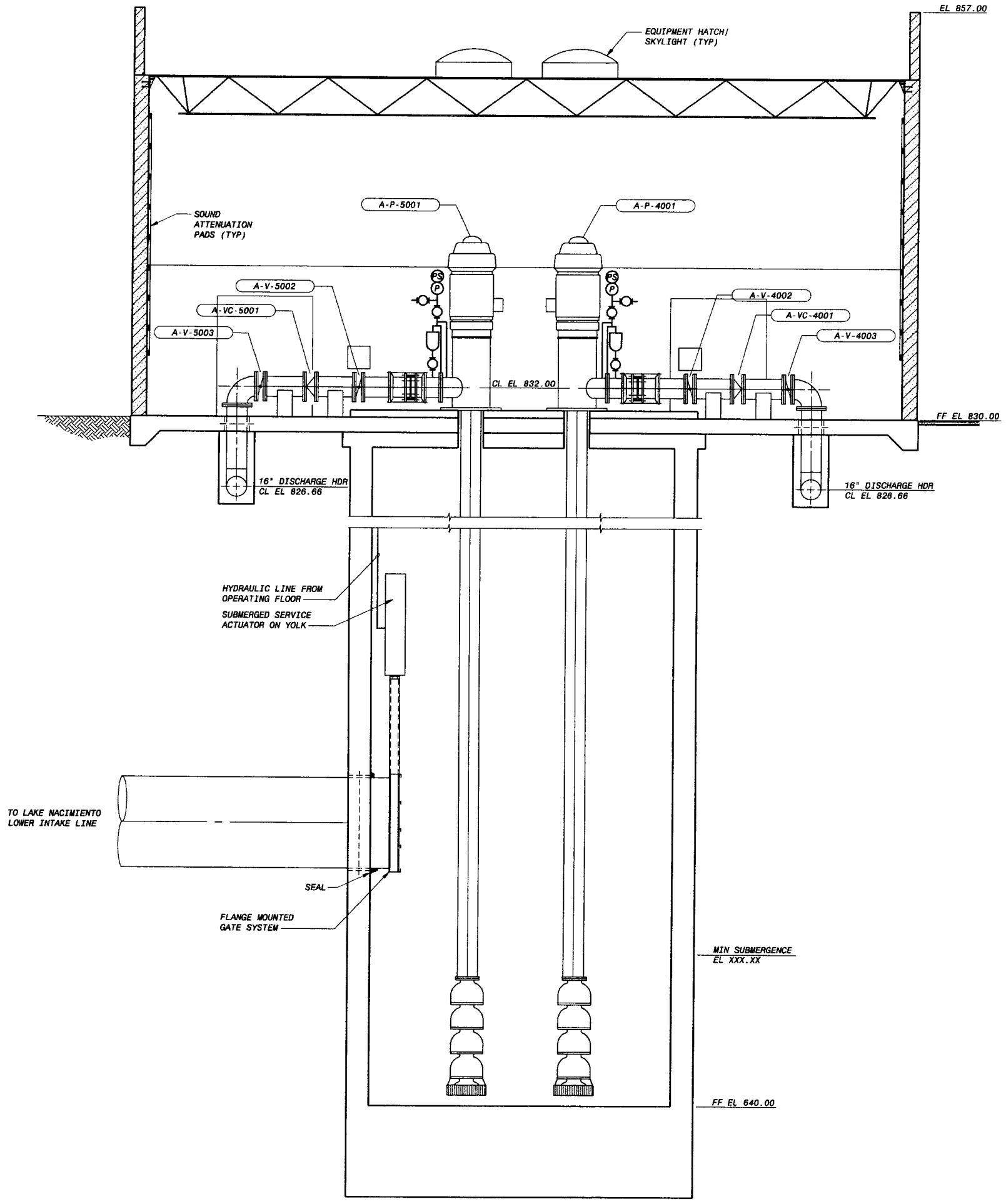
BV PROJECT NO.
137522

NWP PROJECT NO.
3000187.08

SPEC
03

A-M301
SHEET
OF

FD137522
D137522



SECTION 2 / A-M101
1/4" = 1'-0"

PRELIMINARY - NOT FOR CONSTRUCTION

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

DATE	REVISIONS AND RECORD OF ISSUE	NO.	BY	CK	APP

CYGNET ID: 137522-M-BP3-E00007YQ6
WF: BP3-A-M302.dwg
SAVED: GUT45251, 2/17/2006 4:21:32 PM
PLOTTED: GUT45251, 2/17/2006 4:21:22 PM
USER: GUT45251
DWG VER: 1.7
XREF1: A-M-SECT.dwg
XREF2: A-C-TUNL-SECT.dwg
XREF3: A-S-SECT.dwg
XREF4:
XREF5:

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

UNIT A - INTAKE PUMP STATION
MECHANICAL
EQUIPMENT AND PIPING SECTION

DESIGNED: RWT
DETAILED: JMM
CHECKED:
APPROVED:
DATE: 2/22/06

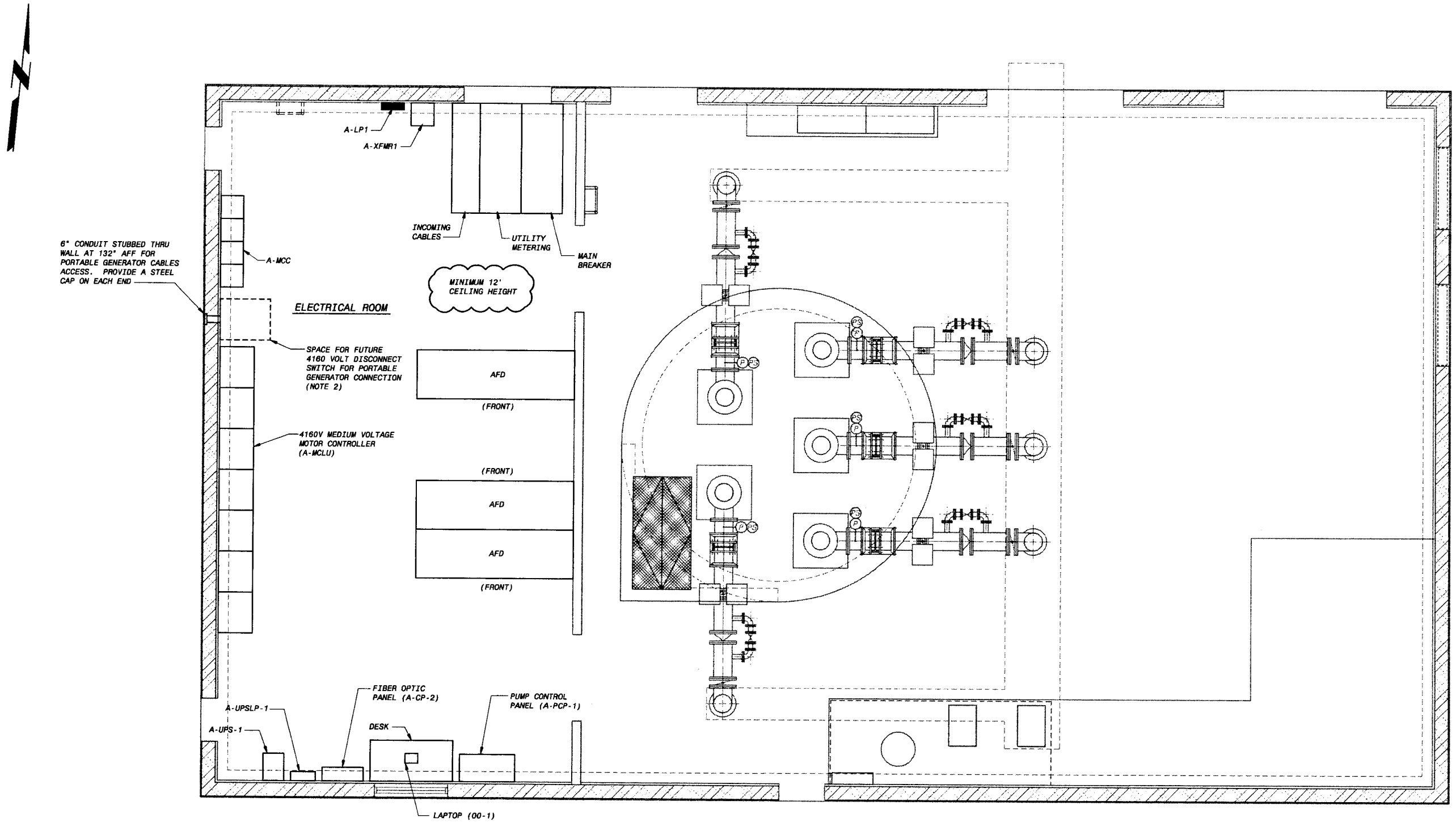
BV PROJECT NO.
137522

NWP PROJECT NO.
3000187.08

SPEC
03

A-M302
SHEET
OF

FD137522
D137522



PLAN

1/4" = 1'-0"

NOTES:

1. SEE STD-G023 THROUGH STD-G032 FOR LEGEND.
2. DISCONNECT SWITCH SHOULD HAVE FRONT ACCESS SO IT CAN BE PLACED AGAINST THE WALL AND RATED FOR 5KV, 600 AMPERE, NON-FUSED, SIMILAR TO SIEMENS 44" DEEP UNIT.

PRELIMINARY - NOT FOR CONSTRUCTION

0 1/2 1

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

NO.	BY	CK	APP

REVISIONS AND RECORD OF ISSUE

DATE

CYGNET ID: 137522-W-BP3-E00007XZN

WF: BP3-A-E102.dwg

SAVED: QUT45351, 2/17/2006 4:22:02 PM

PLOTTED: QUT45351, 2/17/2006 4:21:58 PM

USER: QUT45351

XREF1: A-E-POWR.dwg

XREF2: A-W-PIPE.dwg

XREF3: A-S-FLOR.dwg

XREF4:

XREF5:

DWG VER: 1.15

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BOYLE ENGINEERING CORPORATION

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

UNIT A - INTAKE PUMP STATION ELECTRICAL FLOOR PLAN

DESIGNED:	JJW
DETAILED:	JCP
CHECKED:	
APPROVED:	
DATE:	2/22/06

BV PROJECT NO. 137522

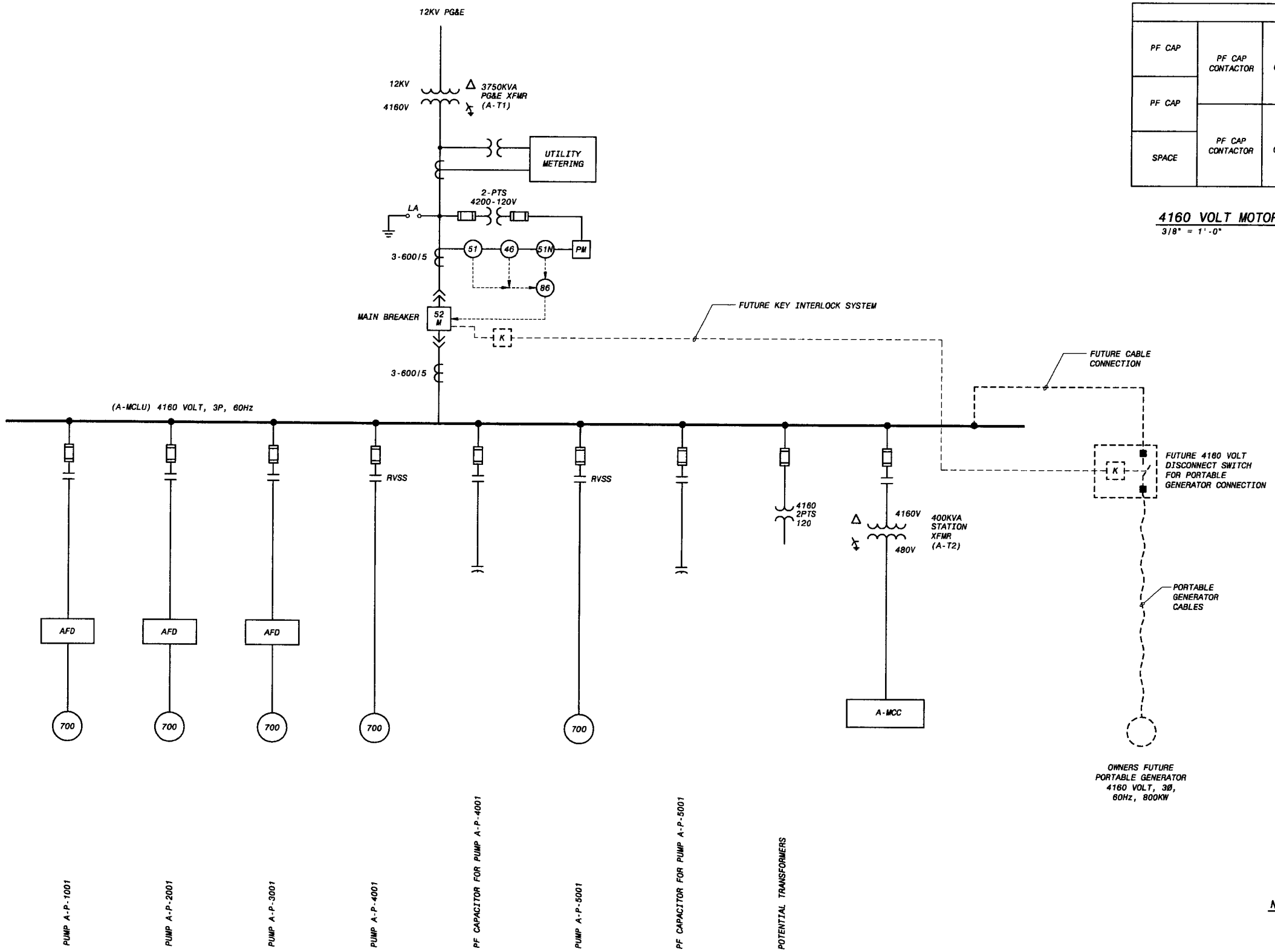
NWP PROJECT NO. 3000187.08

SPEC 03

A-E102

SHEET OF

F0137522
D137522



POWER DISTRIBUTION FUNCTIONAL DIAGRAM

NO SCALE

PF CAP	PF CAP CONTACTOR	AFD CONTACTOR	AFD CONTACTOR	SOLID STATE STARTER RVSS	SOLID STATE STARTER RVSS	2-PT'S
PF CAP						
SPACE	PF CAP CONTACTOR	AFD CONTACTOR	XFMR CONTACTOR			SPACE

4160 VOLT MOTOR CONTROL LINEUP (A-MCLU) FRONT VIEW

3/8" = 1'-0"

NOTES:

1. SEE STD-G023 THROUGH STD-G032 FOR LEGEND.

LEGEND:

46	NEGATIVE PHASE SEQUENCE
51	PHASE OVERCURRENT
51N	GROUND OVERCURRENT
86	HAND RESET LOCKOUT RELAY
PM	POWER MONITOR
RVSS	SOLID STATE STARTER (REDUCED VOLTAGE STARTING)
LA	LIGHTNING ARRESTER

PRELIMINARY - NOT FOR CONSTRUCTION

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

NO.	BY	CK	APP

REVISIONS AND RECORD OF ISSUE

DATE

CYGNET ID: 137522-E-BP3-E00007ZXZ — XREF1:
WF: BP3-A-E602.dwg — XREF2:
SAVED: GUT45251, 2/17/2006 4:23:02 PM — XREF3:
PLOTTED: GUT45251, 2/17/2006 4:22:29 PM — XREF4:
USER: GUT45251 — DWG VER: 1.7 — XREF5:

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BOYLE ENGINEERING CORPORATION

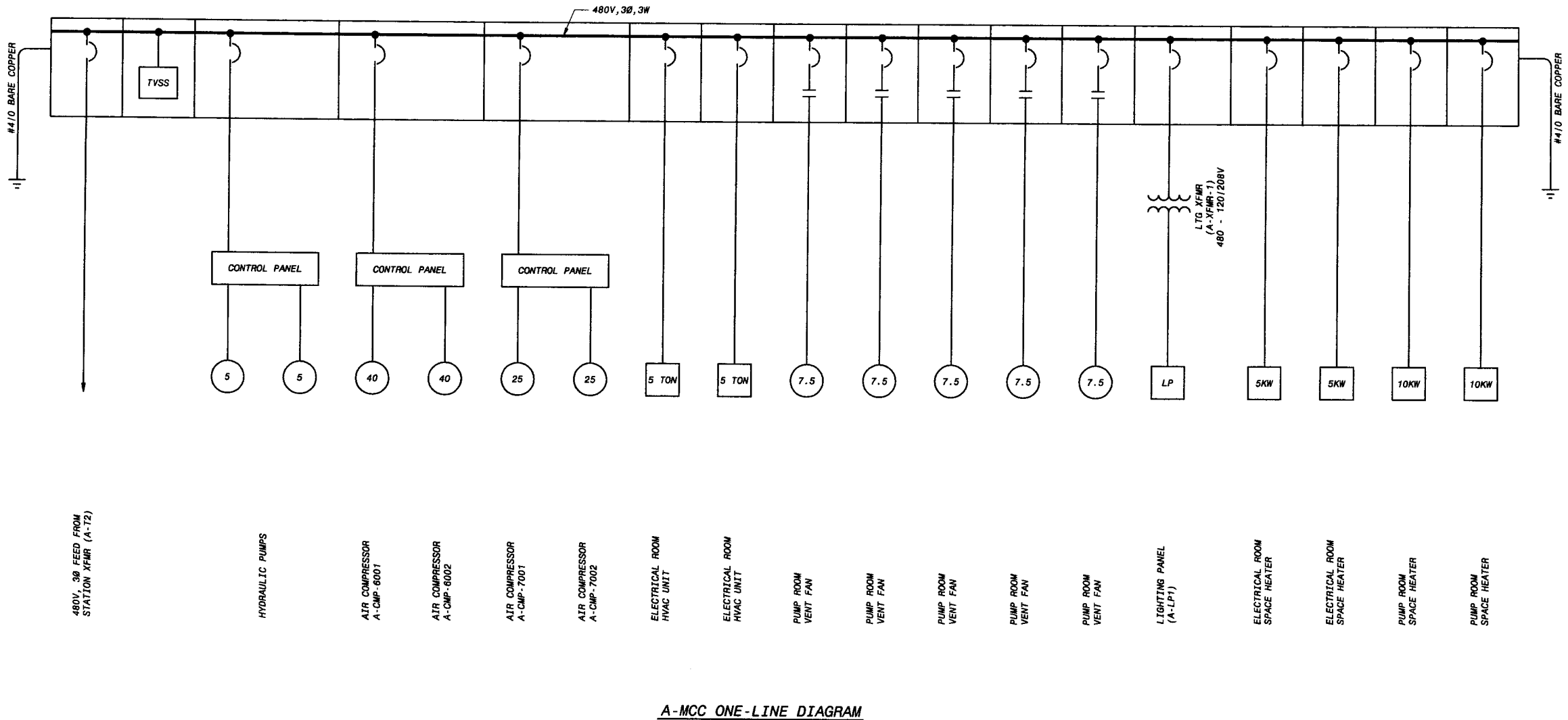
NWP NACIMIENTO WATER PROJECT
San Luis Obispo County Flood Control & Water Conservation District

UNIT A - INTAKE PUMP STATION
ELECTRICAL
POWER DISTRIBUTION FUNCTIONAL DIAGRAM

DESIGNED: JJW
DETAILED: JCP
CHECKED:
APPROVED:
DATE: 2/22/06

BV PROJECT NO. 137522
NWP PROJECT NO. 3000187.08
SPEC 03
A-E602
SHEET OF

F0137522
D137522



A-MCC ONE-LINE DIAGRAM
NO SCALE

NOTES:

1. SEE STD-G023 THROUGH STD-G032 FOR LEGEND.

PRELIMINARY - NOT FOR CONSTRUCTION

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

NO.	BY	CK	APP

DATE REVISIONS AND RECORD OF ISSUE

CYGNET ID: 137522-E-BP3-E0000815F
WF: BP3-A-E604.dwg
SAVED: OUT45251, 2/17/2006 4:23:39 PM
PLOTTED: OUT45251, 2/17/2006 4:23:25 PM
USER: OUT45251
DWG VER: 1.6
XREF1:
XREF2:
XREF3:
XREF4:
XREF5:

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BOYLE
ENGINEERING CORPORATION

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

UNIT A - INTAKE PUMP STATION
ELECTRICAL
MCC AND MISCELLANEOUS ONE-LINE DIAGRAMS

DESIGNED: JJW
DETAILED: JCP
CHECKED:
APPROVED:
DATE: 2/22/06

BV PROJECT NO.
137522

NWP PROJECT NO.
3000187.08

SPEC
03

A-E604
SHEET
OF

F0137522
D137522

DATE	REVISIONS AND RECORD OF ISSUE	NO.	BY	CK	APP

CYGNET ID: 137522-I-BP3-E0000TMZ5 XREF1:
WF: BP3-A-I602.dwg XREF2:
SAVED: GUT45251, 2/17/2006 4:24:28 PM XREF3:
PLOTTED: GUT45251, 2/17/2006 4:24:13 PM XREF4:
USER: GUT45251 DWG VER: 1.13 XREF5:

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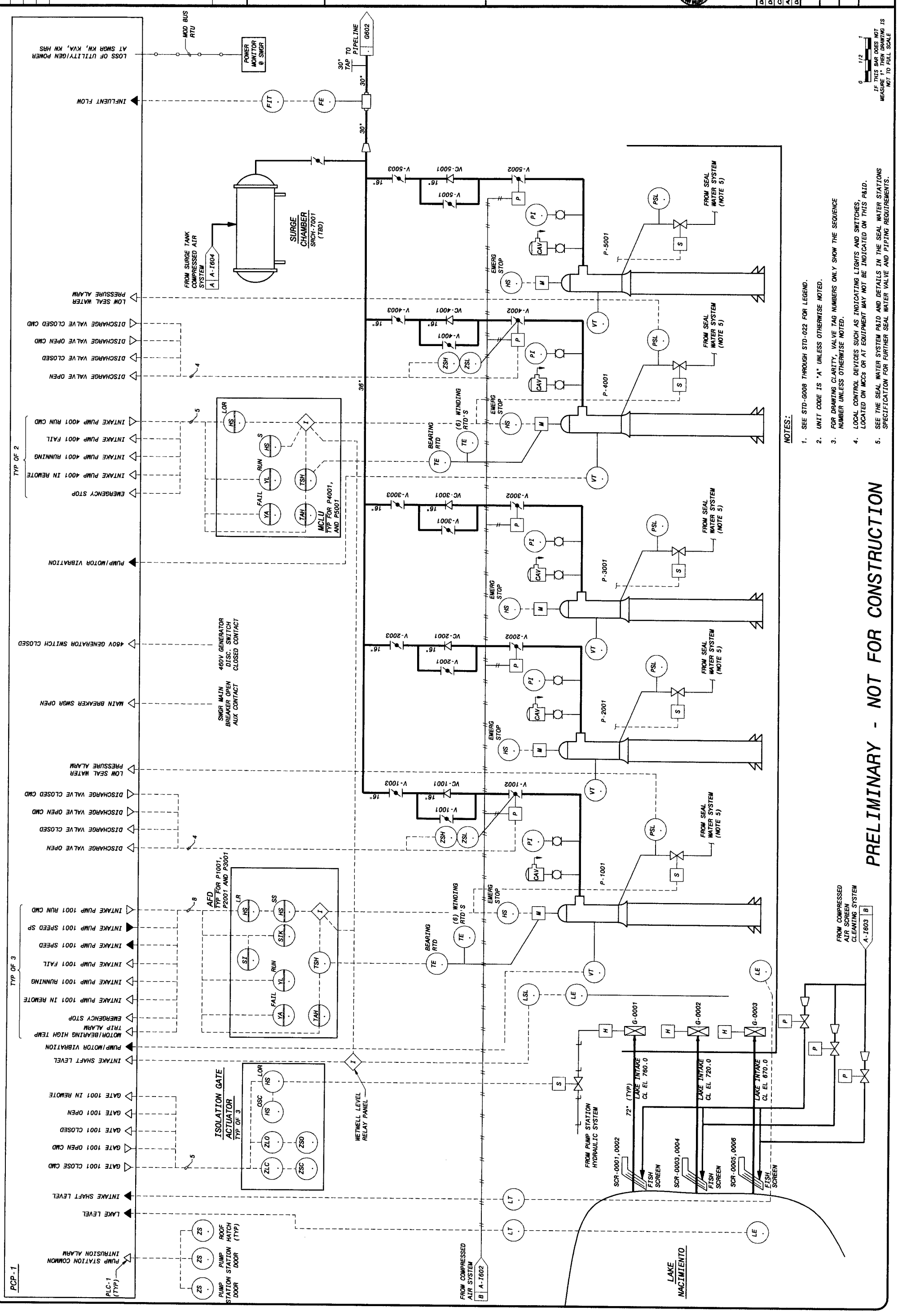
ENERGY WATER INFORMATION GOVERNMENT

NWP NACIMIENTO WATER PROJECT
San Luis Obispo County, Third Lateral & Master Conveyance Delivery

UNIT A - INTAKE PUMP STATION P&ID PUMPS

DESIGNED: WEM
DETAILED: DSW
CHECKED:
APPROVED:
DATE: 2/22/06

BV PROJECT NO. 137522
NWP PROJECT NO. 3000187.08
SPEC 03
A-I602 SHEET OF



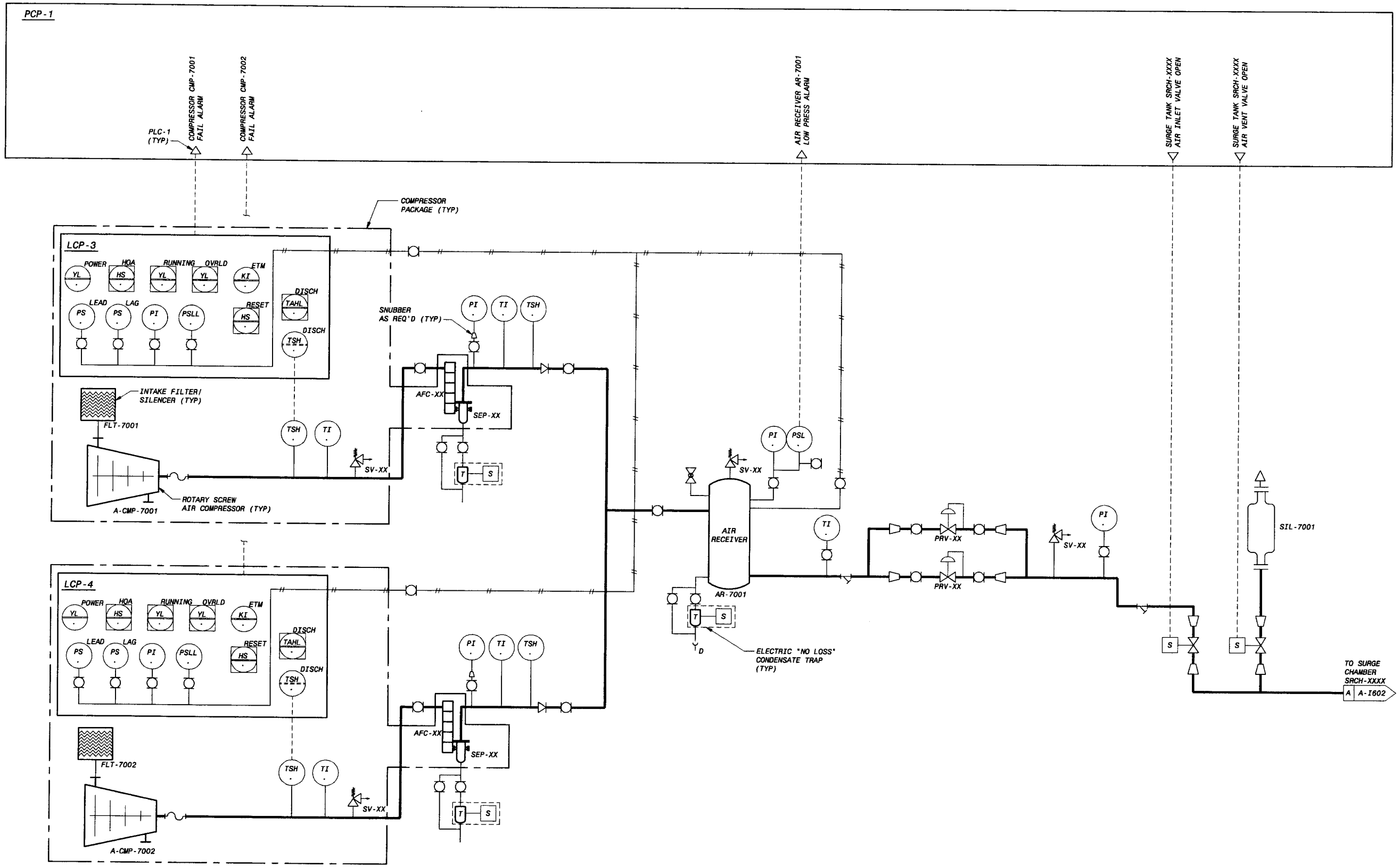
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

NOTES:

1. SEE STD-G008 THROUGH STD-022 FOR LEGEND.
2. UNIT CODE IS "A" UNLESS OTHERWISE NOTED.
3. FOR DRAWING CLARITY, VALVE TAG NUMBERS ONLY SHOW THE SEQUENCE NUMBER UNLESS OTHERWISE NOTED.
4. LOCAL CONTROL DEVICES SUCH AS INDICATING LIGHTS AND SWITCHES, LOCATED ON MCCs OR AT EQUIPMENT MAY NOT BE INDICATED ON THIS P&ID.
5. SEE THE SEAL WATER SYSTEM P&ID AND DETAILS IN THE SEAL WATER STATIONS SPECIFICATION FOR FURTHER SEAL WATER VALVE AND PIPING REQUIREMENTS.

PRELIMINARY - NOT FOR CONSTRUCTION

FD137522
0137522



NOTES:

1. SEE STD-G008 THROUGH STD-022 FOR LEGEND.
2. UNIT CODE IS "A" UNLESS OTHERWISE NOTED.

PRELIMINARY - NOT FOR CONSTRUCTION

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

DATE	REVISIONS AND RECORD OF ISSUE	NO.	BY	CK	APP

CYGNET ID: 137522-1-BP3-E0000815Y
WF: 16.1a (LMS Tech)
SAVED: QUT45251, 2/17/2006 4:25:42 PM
PLOTTED: 2/17/2006 6:51:13 PM, Batch Plot
USER: QUT45251
XREF1:
XREF2:
XREF3:
XREF4:
XREF5:
DWG VER: 1.7

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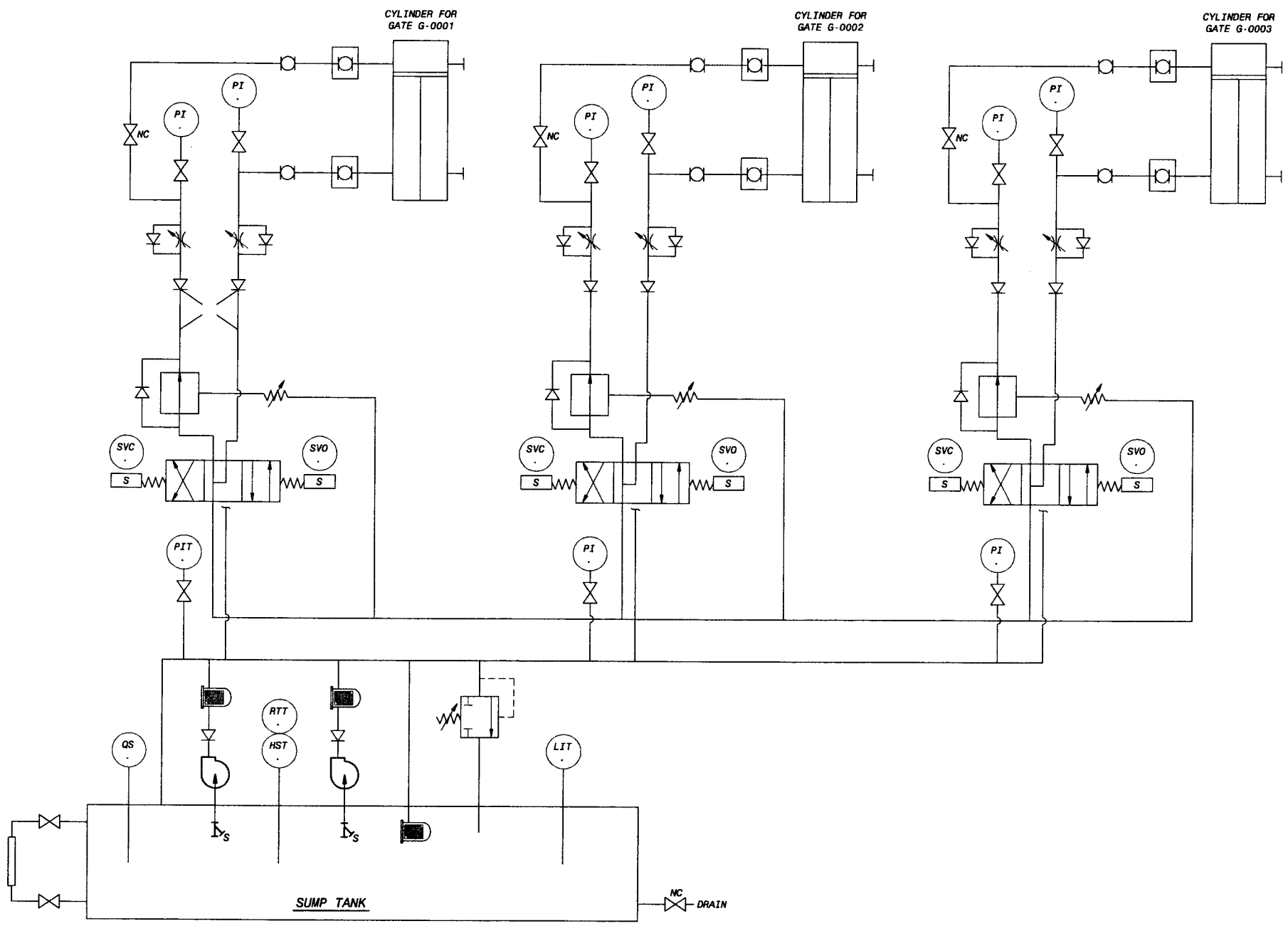
ENERGY WATER INFORMATION GOVERNMENT
BOYLE ENGINEERING CORPORATION
NWP NACIMIENTO WATER PROJECT

UNIT A - INTAKE PUMP STATION INSTRUMENTATION
P&ID - SURGE TANK COMPRESSED AIR SYSTEM

DESIGNED: RWT
DETAILED: DSW
CHECKED:
APPROVED:
DATE: 2/22/06
BV PROJECT NO. 137522
NWP PROJECT NO. 3000187.08
SPEC 03
A-I604
SHEET OF

FD137522
D137522

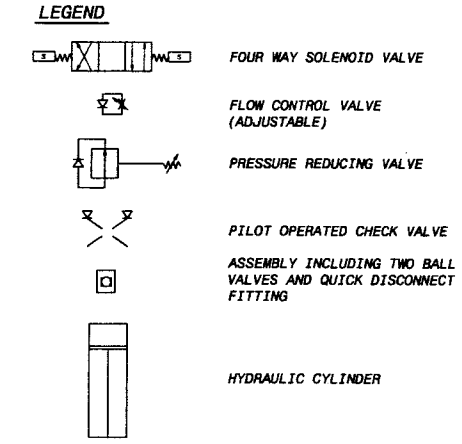
PCP-1



NOTES:

1. UNIT CODE IS "A" UNLESS OTHERWISE NOTED.

LEGEND



PRELIMINARY - NOT FOR CONSTRUCTION

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

DATE	REVISIONS AND RECORD OF ISSUE	NO.	BY	CK	APP

CYGNET ID: 137522-I-BP3-E00008620
WF: 16.1s (LMS Tech)
SAVED: WAG13008, 2/17/2006 10:50:14 AM
PLOTTED: 2/17/2006 6:51:26 PM, Batch Plot
USER: gut45251
DWG VER: 1.2
XREF1:
XREF2:
XREF3:
XREF4:
XREF5:

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ENERGY WATER INFORMATION GOVERNMENT

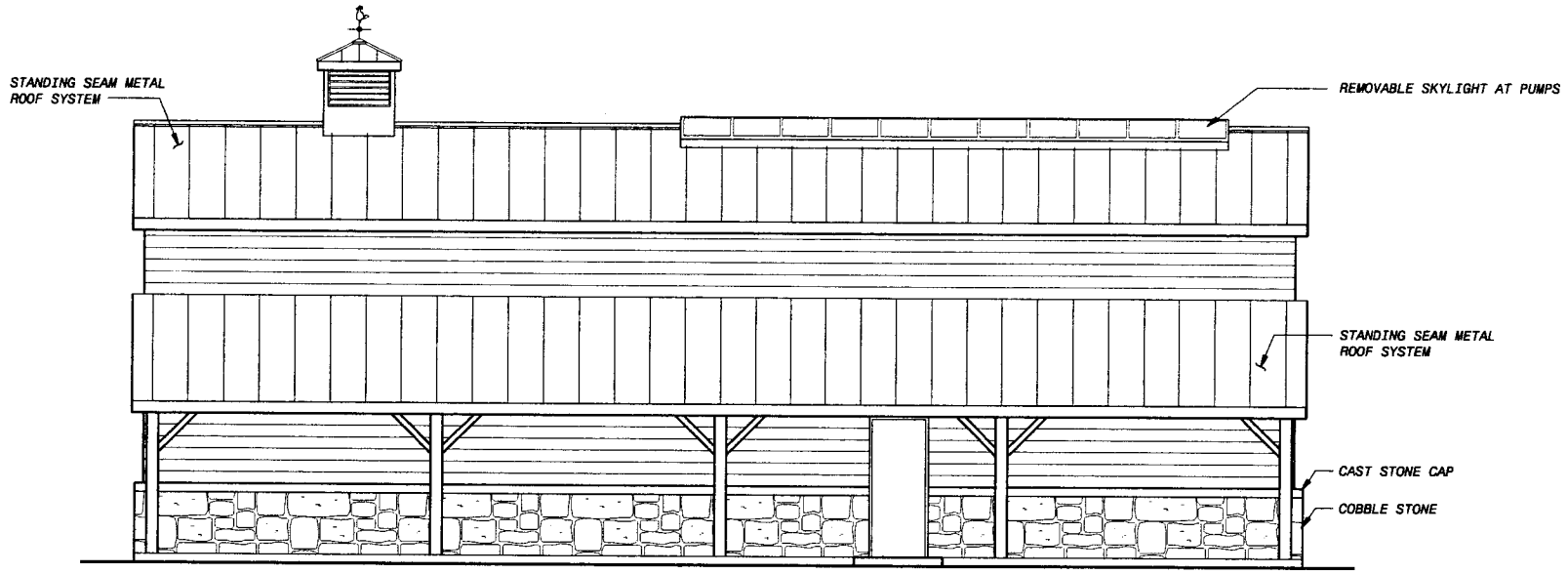
BOYLE ENGINEERING CORPORATION

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

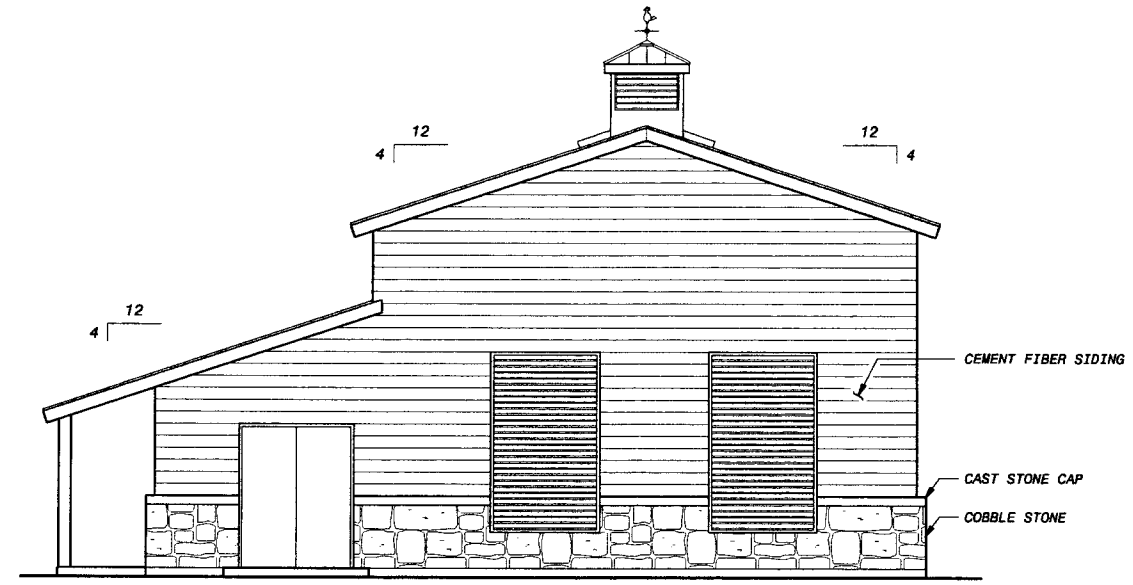
UNIT A - INTAKE PUMP STATION
INSTRUMENTATION
HYDRAULIC CONTROL SCHEMATIC

DESIGNED: RWT
DETAILED: DSW
CHECKED:
APPROVED:
DATE: 2/22/06
BV PROJECT NO. 137522
NWP PROJECT NO. 3000187.08
SPEC 03
A-I606
SHEET OF

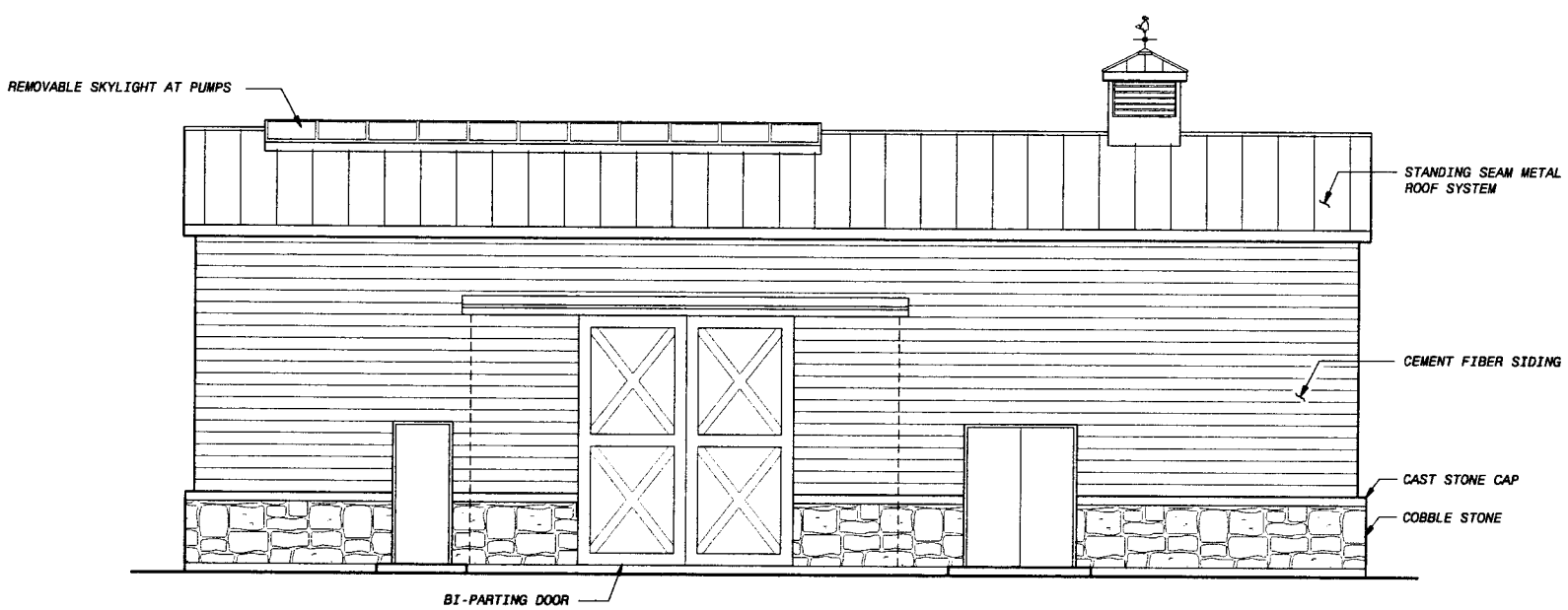
FD137522
D137522



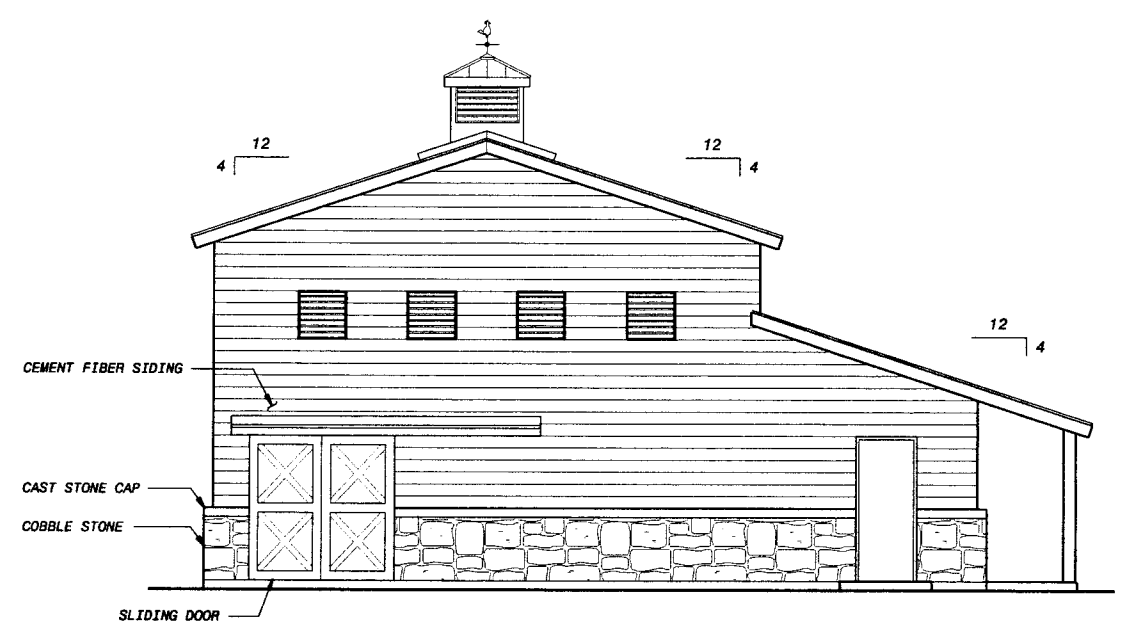
SOUTH ELEVATION
3/16" = 1'-0"



EAST ELEVATION
3/16" = 1'-0"



NORTH ELEVATION
3/16" = 1'-0"



WEST ELEVATION
3/16" = 1'-0"

PRELIMINARY - NOT FOR CONSTRUCTION

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

DATE	REVISIONS AND RECORD OF ISSUE	NO.	BY	CK	APP

CYGNET ID: 137522-A-BP3-M0000MZ50 XREF1:
WF: BP3-B-A301.dwg XREF2:
SAVED: MCC10764, 2/17/2006 3:07:35 PM XREF3:
PLOTTED: LEE01411, 2/14/2006 11:37:47 AM XREF4:
USER: MCC10764 DWG VER: 1.10 XREF5:

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

UNIT B - CAMP ROBERTS PUMP STATION
ARCHITECTURAL
ELEVATIONS

DESIGNED: MAJ
DETAILED: DAY, LRL
CHECKED:
APPROVED:
DATE: 2/22/06

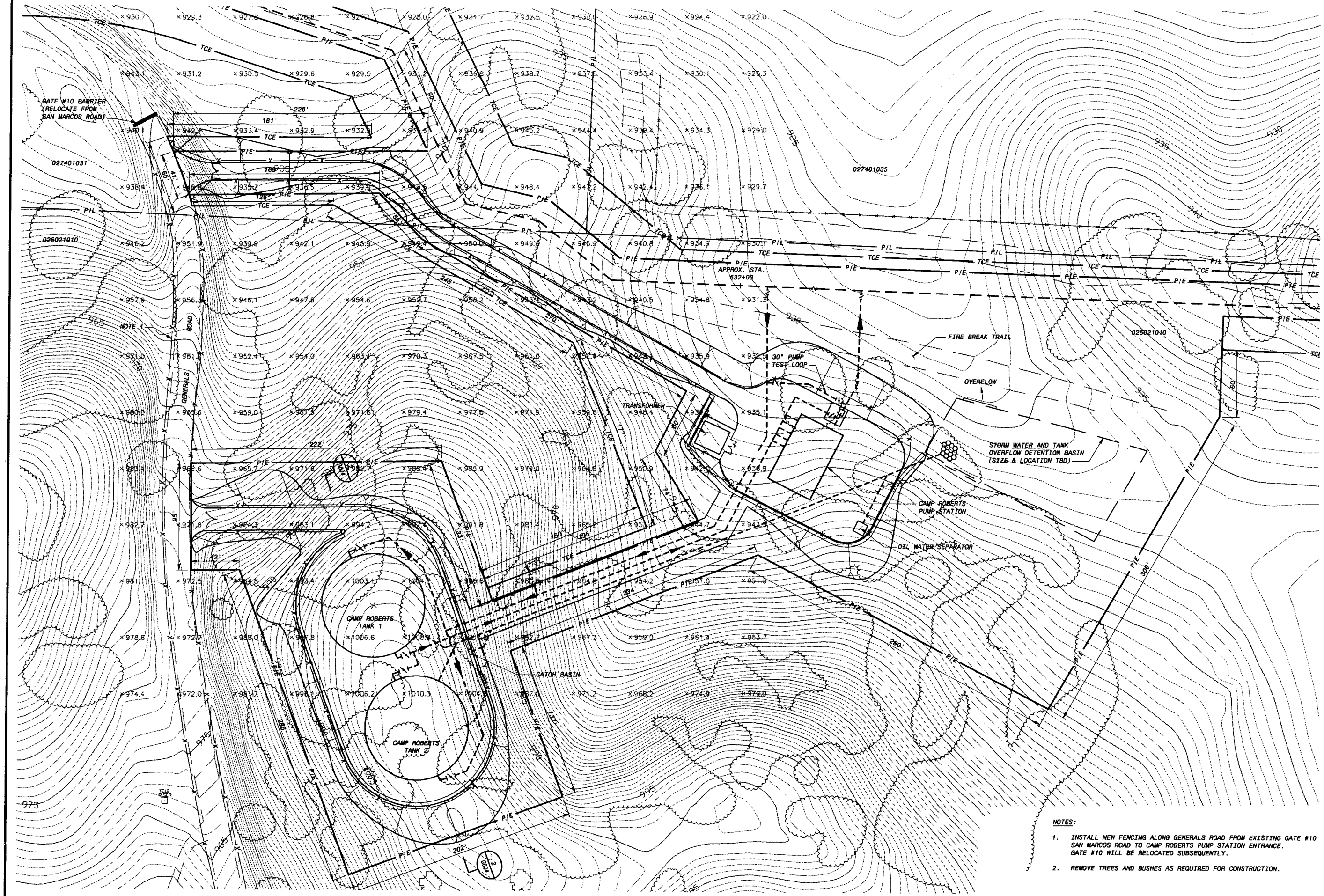
BV PROJECT NO.
137522

NWP PROJECT NO.
3000187.08

SPEC
03

B-A301
SHEET
OF

F0137522
D137522



NOTES:

1. INSTALL NEW FENCING ALONG GENERALS ROAD FROM EXISTING GATE #10 SAN MARCOS ROAD TO CAMP ROBERTS PUMP STATION ENTRANCE. GATE #10 WILL BE RELOCATED SUBSEQUENTLY.
2. REMOVE TREES AND BUSHES AS REQUIRED FOR CONSTRUCTION.

PRELIMINARY - NOT FOR CONSTRUCTION

40' 20' 0 40' 80'
1"=40'

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

NO.	BY	CK	APP	DATE	REVISIONS AND RECORD OF ISSUE

CYBNET ID: 137522-C-BP2-E00007MLL XREF1: BP1-C-HALN01.dwg
WF: BP2-A1-C101.dwg XREF2: BP1-C-CNTY-PARC.dwg
SAVED: MCC10784, 2/16/2006 4:40:35 PM XREF3: C-TOPO10.dwg
PLOTTED: MCC10784, 2/16/2006 4:40:37 PM XREF4: A1-C-TANK.dwg
USER: MCC10784 DWG VER: 1.26 XREF5: B-W-PIPE.dwg

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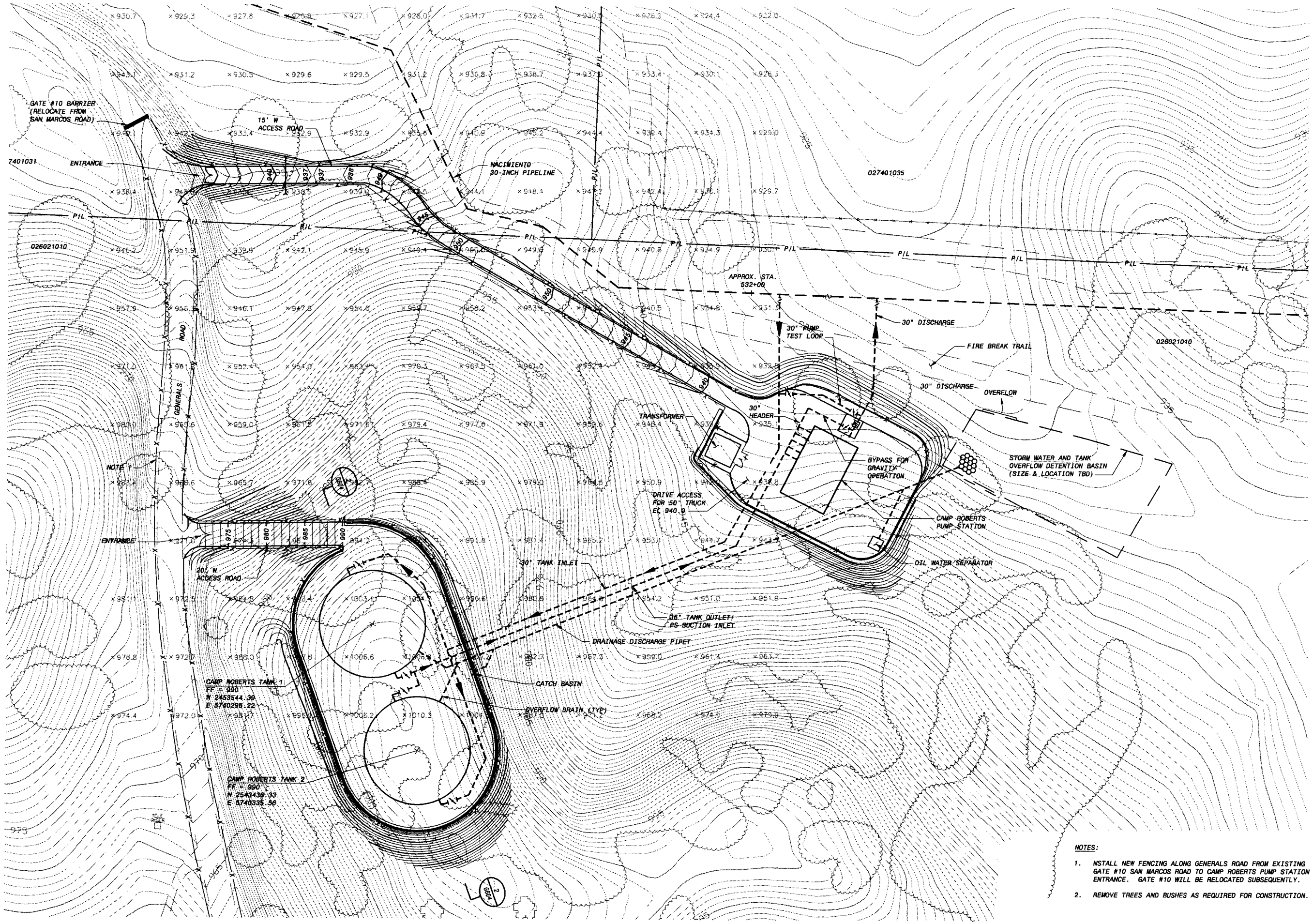
BOYLE ENGINEERING CORPORATION

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

UNIT B - CAMP ROBERTS PUMP STATION CIVIL SITE PLAN

DESIGNED: BEB, VT
DETAILED: TVL, JLK
CHECKED:
APPROVED:
DATE: 2/22/06
BV PROJECT NO. 137522
NWP PROJECT NO. 3000187.08
SPEC 03
B-C101
SHEET OF

FD137522
D137522



NOTES:

1. INSTALL NEW FENCING ALONG GENERALS ROAD FROM EXISTING GATE #10 SAN MARCOS ROAD TO CAMP ROBERTS PUMP STATION ENTRANCE. GATE #10 WILL BE RELOCATED SUBSEQUENTLY.
2. REMOVE TREES AND BUSHES AS REQUIRED FOR CONSTRUCTION.

PRELIMINARY - NOT FOR CONSTRUCTION

40' 20' 0 40' 80'
1"=40'

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

NO.	BY	CK	APP	REVISIONS AND RECORD OF ISSUE	DATE

CYGNET ID: 137522-C-BP3-E00007YK8 XREF1:BP1-C-HALN01.dwg
WF: BP3-B-C102.dwg XREF2:BP1-C-CNTY-PARC.dwg
SAVED: MCC10764, 2/20/2008 9:21:19 AM XREF3:C-TOPO10.dwg
PLOTTED: MCC10764, 2/20/2008 9:21:21 AM XREF4:A1-C-TANK.dwg
USER: MCC10764 DWG VER: 1.0 XREF5:B-S-FLOR.dwg

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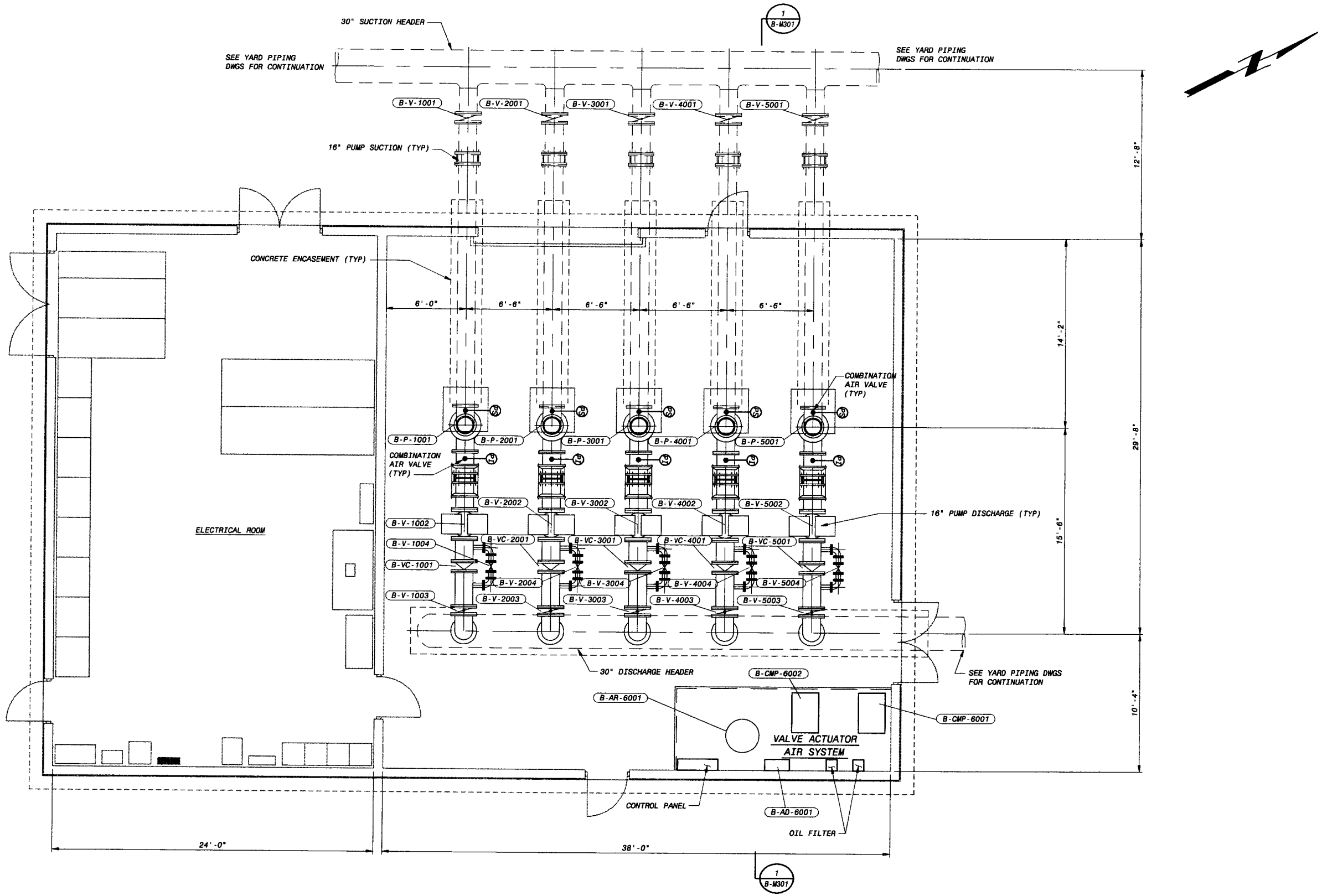
BOYLE ENGINEERING CORPORATION

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

UNIT B - CAMP ROBERTS PUMP STATION
CIVIL
GRADING AND PAVING PLAN

DESIGNED:	BEB, VT
DETAILED:	TVL, JLK
CHECKED:	
APPROVED:	
DATE:	2/22/08
BV PROJECT NO.	137522
NWP PROJECT NO.	3000187.08
SPEC	03
SHEET	B-C102
OF	

FD137522
BV37522



PLAN
1/4" = 1'-0"

PRELIMINARY - NOT FOR CONSTRUCTION

4' 2' 0 4' 8'
1/4"=1'-0"

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

NO.	BY	CK	APP

REVISIONS AND RECORD OF ISSUE

DATE	
CYGNET ID: 137522-M-BP3-E00007WNV	XREF1:B-E-PDWR.dwg
WF: BP3-B-M101.dwg	XREF2:B-M-PIPE.dwg
SAVED: MCC10784, 2/17/2006 3:10:23 PM	XREF3:B-S-FLOR.dwg
PLOTTED: MCC10784, 2/16/2006 2:19:17 PM	XREF4:
USER: MCC10784	XREF5:
DWG VER: 1.17	

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ENERGY WATER INFORMATION GOVERNMENT

BOYLE ENGINEERING CORPORATION

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

UNIT B - CAMP ROBERTS PUMP STATION
MECHANICAL
EQUIPMENT AND PIPING PLAN

DESIGNED: MKJ
DETAILED: SMM
CHECKED:
APPROVED:
DATE: 2/22/06

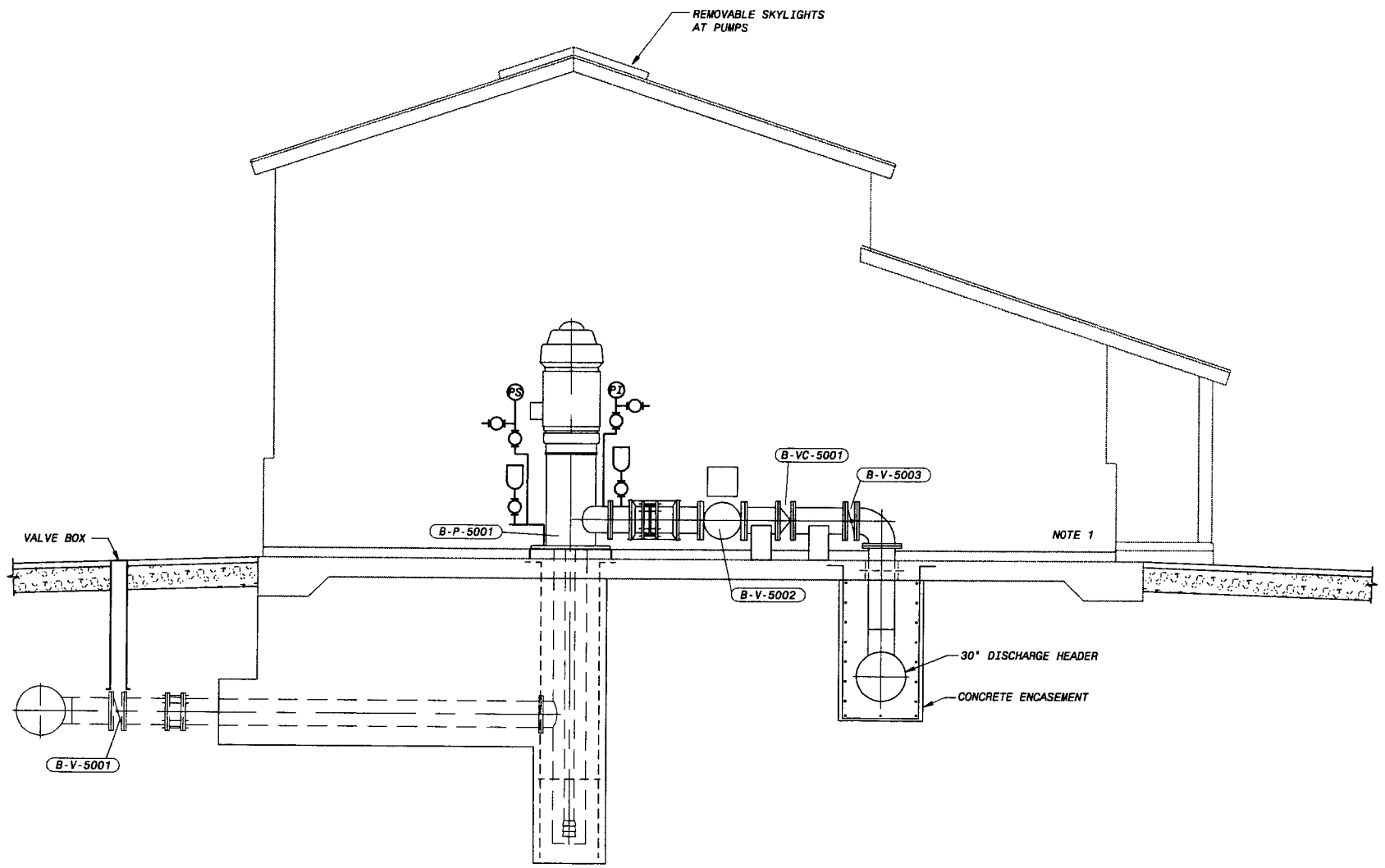
BV PROJECT NO.
137522

NWP PROJECT NO.
3000187.08

SPEC
03

B-M101
SHEET
OF

F0137522
D137522



SECTION 1 / B-M101
1/4" = 1'-0"

NOTES:
1. VALVE ACTUATOR AIR SYSTEM DETAILS NOT SHOWN:

PRELIMINARY - NOT FOR CONSTRUCTION

4' 2' 0 4' 8'
1/4"=1'-0"

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

DATE	REVISIONS AND RECORD OF ISSUE	NO.	BY	CK	APP

CYDNET ID: 137522-M-XREF-E0000YQV
XREF1:B-M-SECT01.dwg
WF:BP3-B-M301.dwg
XREF2:F2-S-FLOR.dwg
SAVED: GUT45251, 2/16/2006 10:14:47 AM
XREF3:F2-S-GRID.dwg
PLOTTED: GUT45251, 2/16/2006 10:11:21 AM
XREF4:
USER: GUT45251
DWG VER:1.10
XREF5:

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BOYLE ENGINEERING CORPORATION

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

UNIT B - CAMP ROBERTS PUMP STATION
MECHANICAL
EQUIPMENT AND PIPING LAYOUT-SECTIONS

DESIGNED: MKJ
DETAILED: SMM
CHECKED:
APPROVED:
DATE: 2/22/06

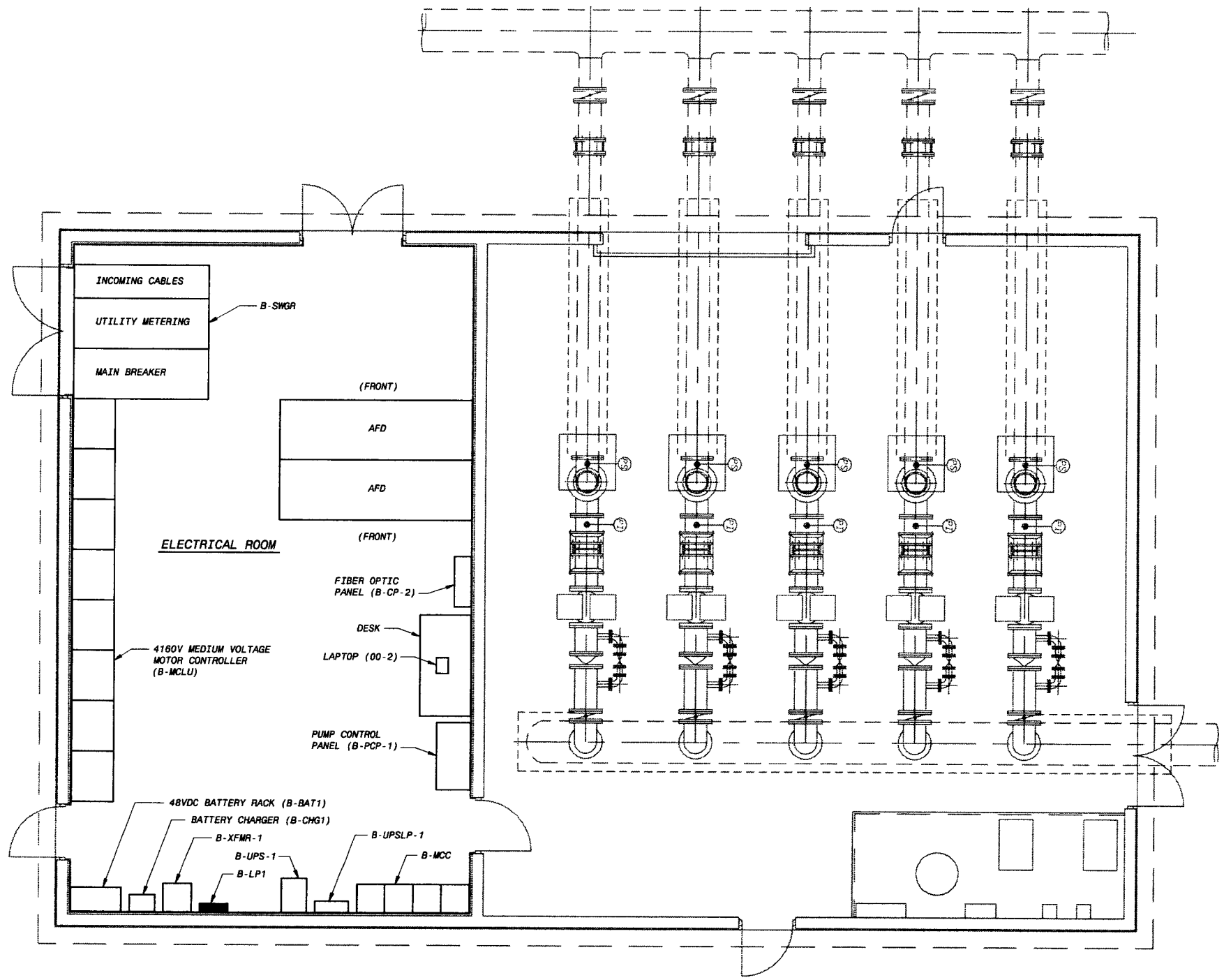
BV PROJECT NO.
137522

NWP PROJECT NO.
3000187.08

SPEC
03

B-M301
SHEET
OF

FD137522
D137522



PLAN
1/4" = 1'-0"

NOTES:
1. SEE STD-G023 THROUGH STD-G032 FOR LEGEND.

PRELIMINARY - NOT FOR CONSTRUCTION

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

DATE	REVISIONS AND RECORD OF ISSUE	NO.	BY	CK	APP

CYGNET ID: 137522-E-BP3-E000072Y0
WF: 16.1s (LMS Tech)
SAVED: MCC10764, 2/17/2006 3:09:58 PM
PLOTTED: 2/17/2006 5:18:59 PM, Batch Plot
USER: mcc10764
DWG VER: 1.11
XREF1: B-E-POWR.dwg
XREF2: B-M-PIPE.dwg
XREF3: B-S-FLOR.dwg
XREF4:
XREF5:

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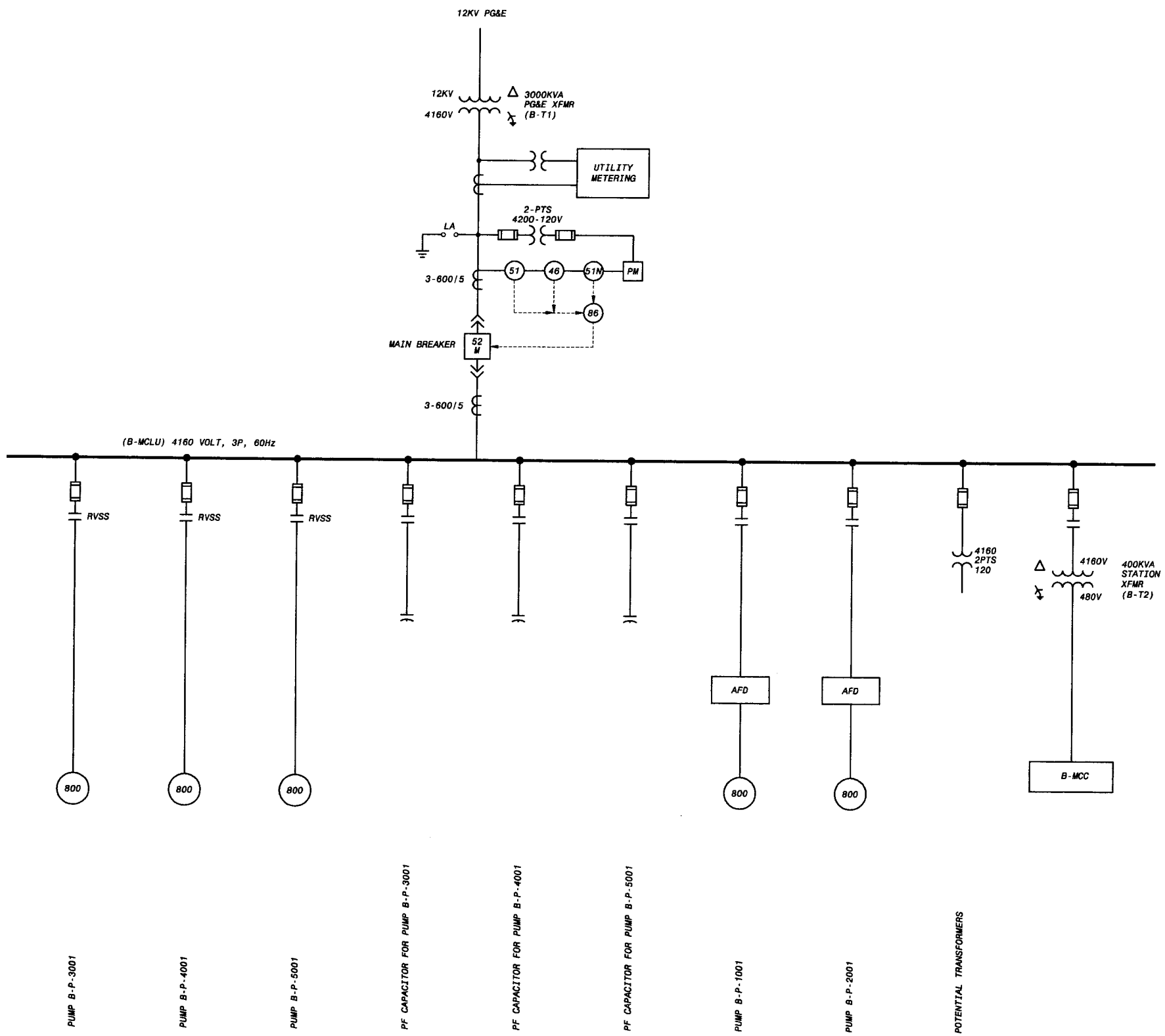
BOYLE ENGINEERING CORPORATION

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

UNIT B - CAMP ROBERTS STATION
ELECTRICAL
FLOOR PLAN

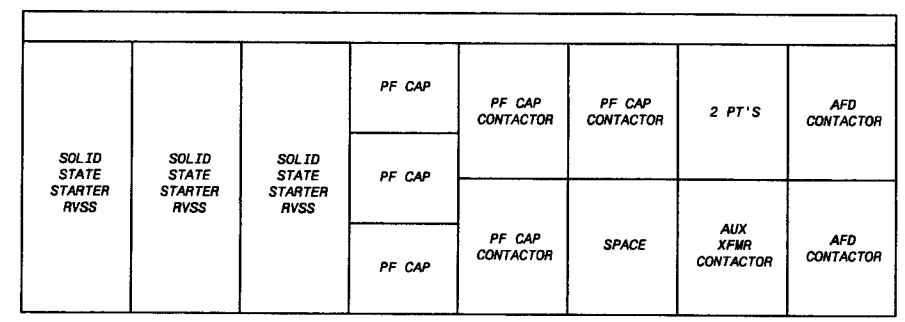
DESIGNED: JJW
DETAILED: JCP
CHECKED:
APPROVED:
DATE: 2/22/06
BV PROJECT NO. 137522
NWP PROJECT NO. 3000187.08
SPEC 03
B-E102
SHEET
OF

FD137522
D137522



POWER DISTRIBUTION FUNCTIONAL DIAGRAM

NO SCALE



4160 VOLT MOTOR CONTROL LINEUP (B-MCLU) FRONT VIEW

3/8" = 1'-0"

NOTES:

1. SEE STD-G023 THROUGH STD-G032 FOR LEGEND.

LEGEND:

46	NEGATIVE PHASE SEQUENCE
51	PHASE OVERCURRENT
51N	GROUND OVERCURRENT
86	HAND RESET LOCKOUT RELAY
PM	POWER MONITOR
RVSS	SOLID STATE STARTER (REDUCED VOLTAGE STARTING)
LA	LIGHTNING ARRESTER

PRELIMINARY - NOT FOR CONSTRUCTION

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

NO.	BY	CK	APP

REVISIONS AND RECORD OF ISSUE

DATE

CYDNET ID: 137522-E-BP3-E000072Y1 XREF1:
WF: BP3-B-E602.dwg XREF2:
SAVED: GUT45251, 2/17/2006 4:26:15 PM XREF3:
PLOTTED: GUT45251, 2/17/2006 4:26:05 PM XREF4:
USER: GUT45251 DWG VER: 1.6 XREF5:

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BOYLE ENGINEERING CORPORATION

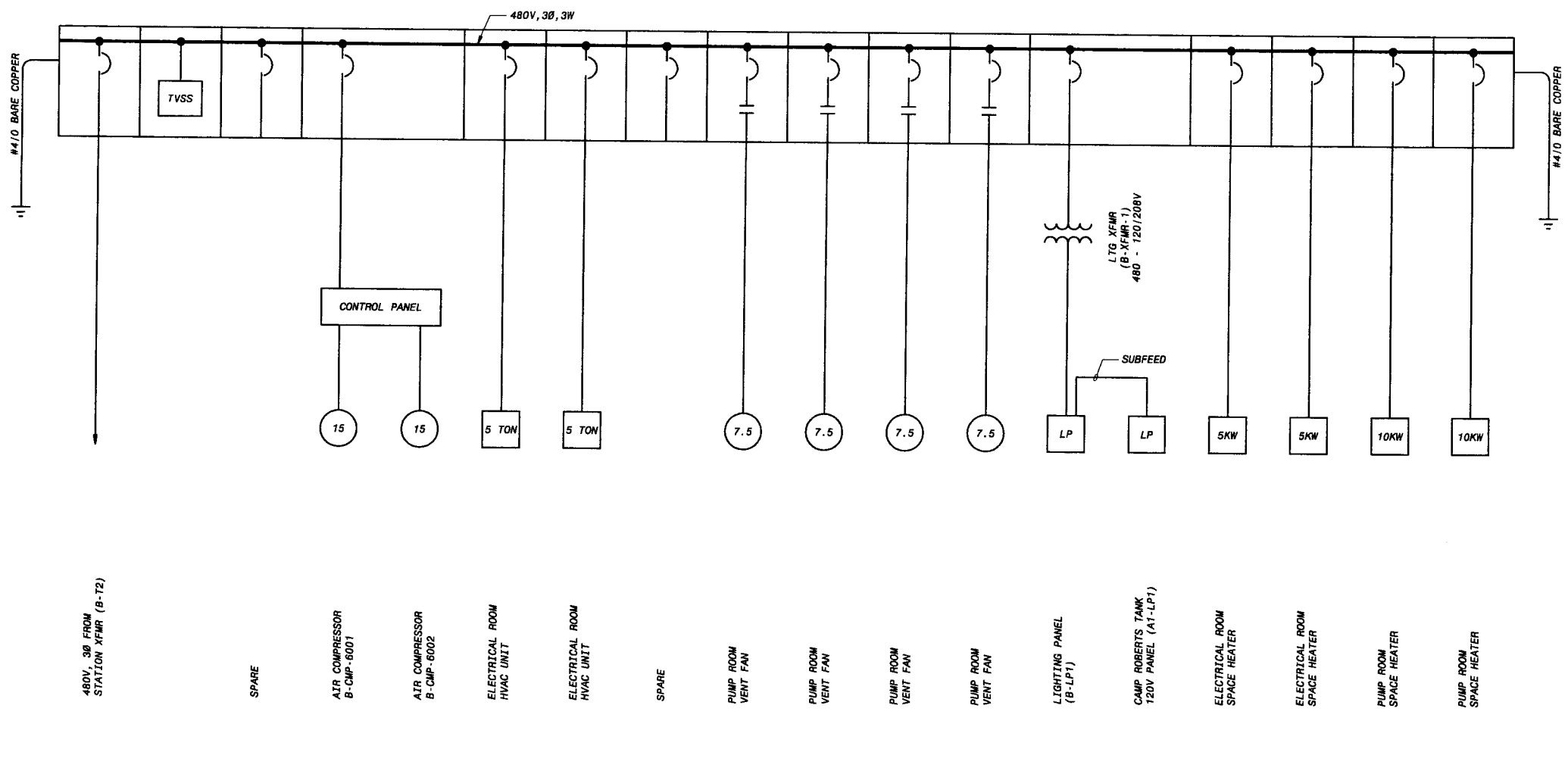
NWP NACIMIENTO WATER PROJECT
San Luis Obispo County Local Coastal & Water Conservation District

UNIT B - CAMP ROBERTS PUMP STATION
ELECTRICAL
POWER DISTRIBUTION FUNCTIONAL DIAGRAM

DESIGNED: JJW
DETAILED: JCP
CHECKED:
APPROVED:
DATE: 2/22/06

BV PROJECT NO. 137522
NWP PROJECT NO. 3000187.08
SPEC 03
B-E602
SHEET OF

FD137522
D137522



B-MCC ONE-LINE DIAGRAM
NO SCALE

NOTES:

1. SEE STD-G023 THROUGH STD-G032 FOR LEGEND.

PRELIMINARY - NOT FOR CONSTRUCTION

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

DATE	REVISIONS AND RECORD OF ISSUE	NO.	BY	CK	APP

CYGNET ID: 137522-E-BP3-E0000815H | XREF1:
WF: BP3-B-E604.dwg | XREF2:
SAVED: GUT45351, 2/17/2006 4:27:00 PM | XREF3:
PLOTTED: GUT45351, 2/17/2006 4:28:48 PM | XREF4:
USER: GUT45351 | DWG VER: 1.7 | XREF5:

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ENERGY WATER INFORMATION GOVERNMENT

BOYLE
ENGINEERING CORPORATION

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

UNIT B - CAMP ROBERTS PUMP STATION
ELECTRICAL
MCC AND MISCELLANEOUS ONE-LINE DIAGRAM

DESIGNED: JJN
DETAILED: JCP
CHECKED:
APPROVED:
DATE: 2/22/06

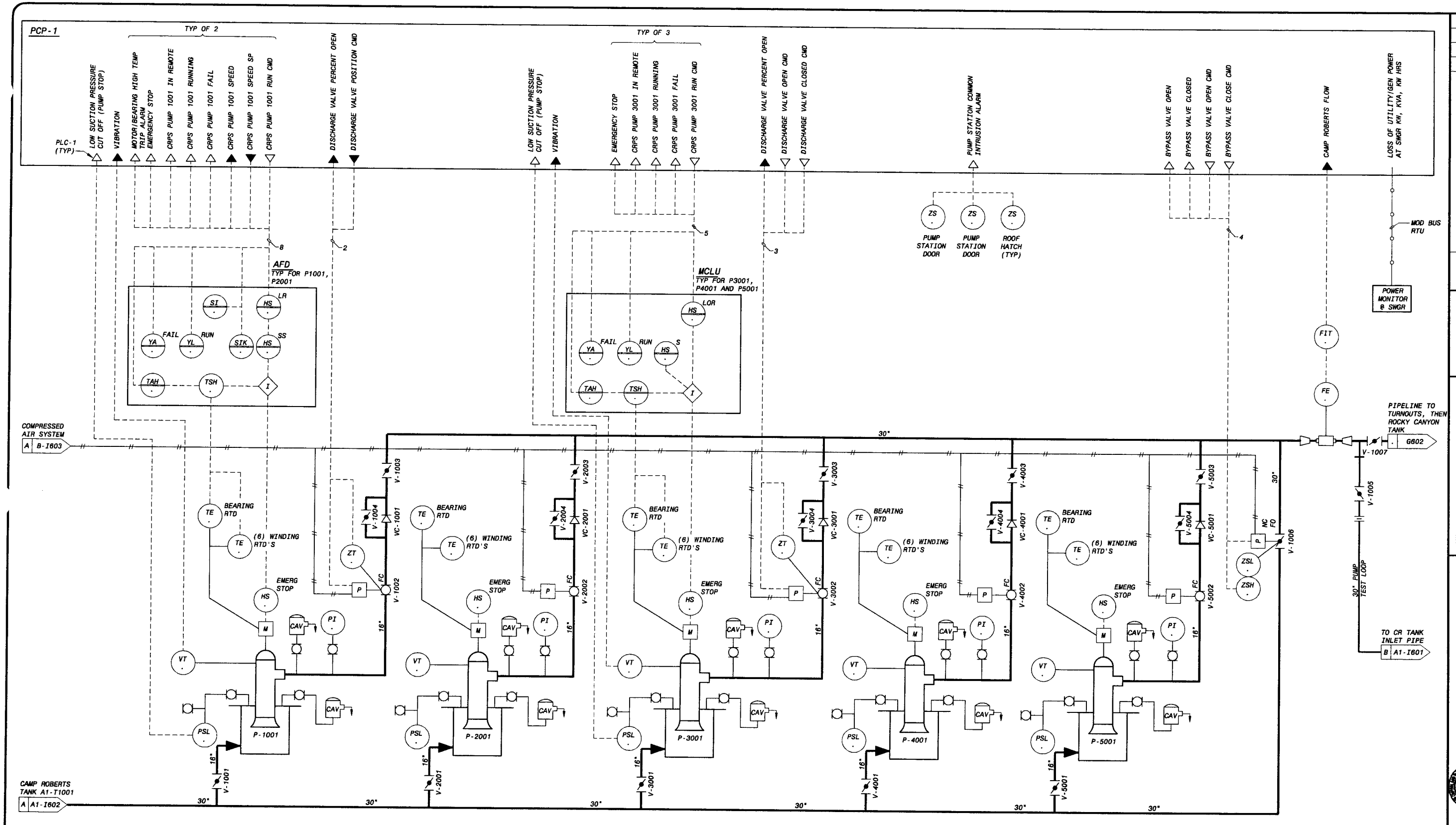
BV PROJECT NO.
137522

NWP PROJECT NO.
3000187.08

SPEC
03

B-E604
SHEET
OF

F0137522
D137522



NOTES:

1. SEE STD-G008 THROUGH STD-022 FOR LEGEND.
2. UNIT CODE IS "B" UNLESS OTHERWISE NOTED.
3. FOR DRAWING CLARITY, VALVE TAG NUMBERS ONLY SHOW THE SEQUENCE NUMBER UNLESS OTHERWISE NOTED.
4. LOCAL CONTROL DEVICES SUCH AS INDICATING LIGHTS AND SWITCHES, LOCATED ON MCC'S MAY NOT BE INDICATED ON THIS P&ID.

PRELIMINARY - NOT FOR CONSTRUCTION

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

DATE	REVISIONS AND RECORD OF ISSUE	NO.	BY	CK	APP

CYGNET ID: 137522-I-BP3-E00007WZG
WF: BP3-B-I602.dwg
SAVED: MCC10764, 2/20/2006 9:21:58 AM
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USER: MCC10764
DWG VER: 1.16
XREF1:
XREF2:
XREF3:
XREF4:
XREF5:

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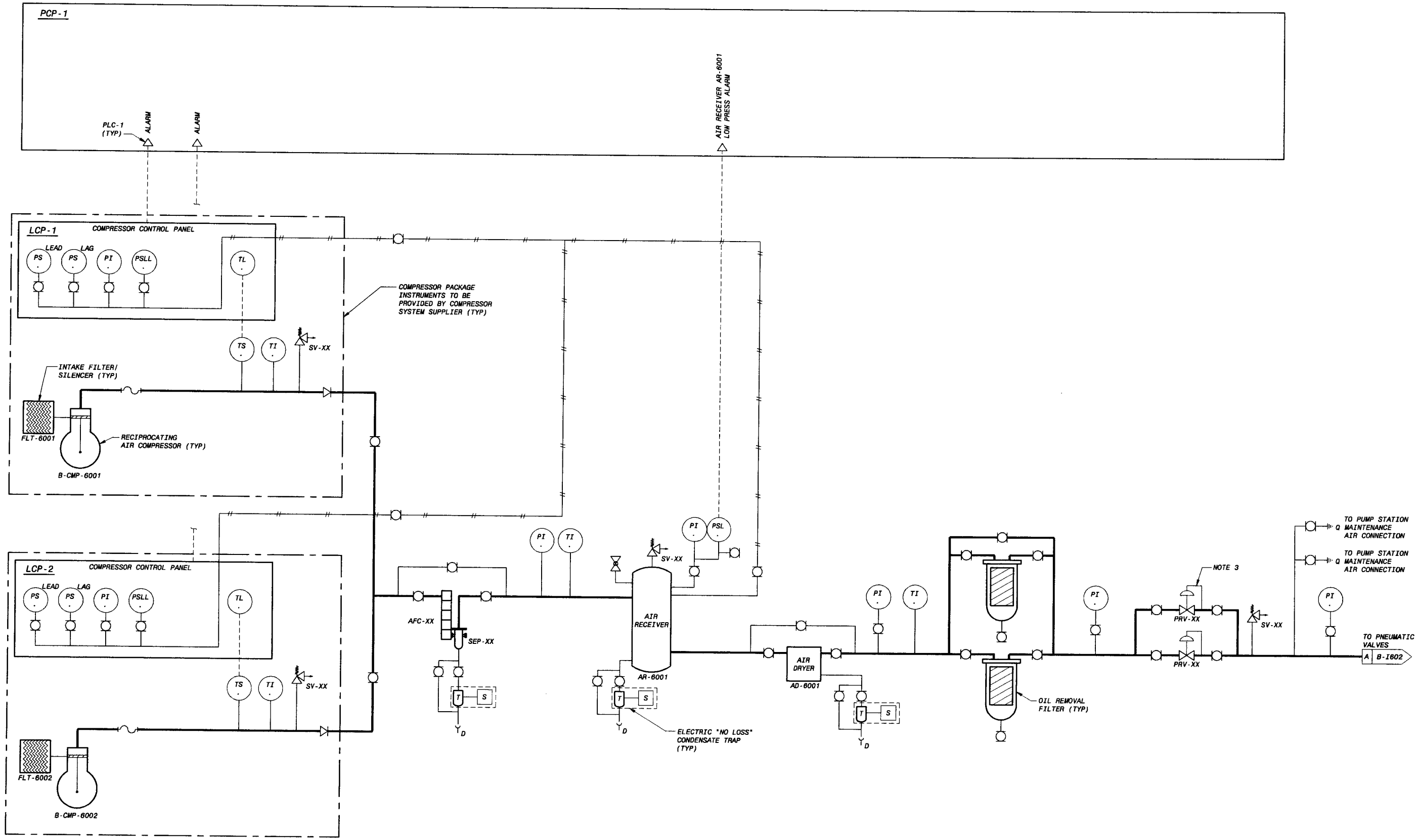
BOYLE ENGINEERING CORPORATION

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

UNIT B - CAMP ROBERTS PUMP STATION
P&ID
PUMPS

DESIGNED: WEM
DETAILED: DSW
CHECKED:
APPROVED:
DATE: 2/22/06
BV PROJECT NO. 137522
NWP PROJECT NO. 3000187.08
SPEC 03
B-I602
SHEET OF

FD137522
D137522



NOTES:

1. SEE STD-G008 THROUGH STD-022 FOR LEGEND.
2. UNIT CODE IS "B" UNLESS OTHERWISE NOTED.
3. FOR DRAWING CLARITY, VALVE TAG NUMBERS ONLY SHOW THE SEQUENCE NUMBER UNLESS OTHERWISE NOTED.
4. PRESSURE REDUCING VALVE SIZE TO BE DETERMINED BY SUPPLIER. SIZE IS NORMALLY SMALLER THAN LINE SIZE. ISOLATION VALVES TO BE LINE SIZE.
5. LOCAL CONTROL DEVICES SUCH AS INDICATING LIGHTS AND SWITCHES, LOCATED ON MCCs OR AT EQUIPMENT MAY NOT BE INDICATED ON THIS P&ID.

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

PRELIMINARY - NOT FOR CONSTRUCTION

NO.	BY	CK	APP

DATE | REVISIONS AND RECORD OF ISSUE

CYGNET ID: 137522-I-BP3-E0000816R
WF: BP3-B-I603.dwg
SAVED: GUT45251, 2/17/2006 4:28:07 PM
PLOTTED: MCC10764, 2/20/2006 9:31:04 AM
USER: MCC10764
DWG VER: 1.11
XREF1:
XREF2:
XREF3:
XREF4:
XREF5:

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BOYLE ENGINEERING CORPORATION

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

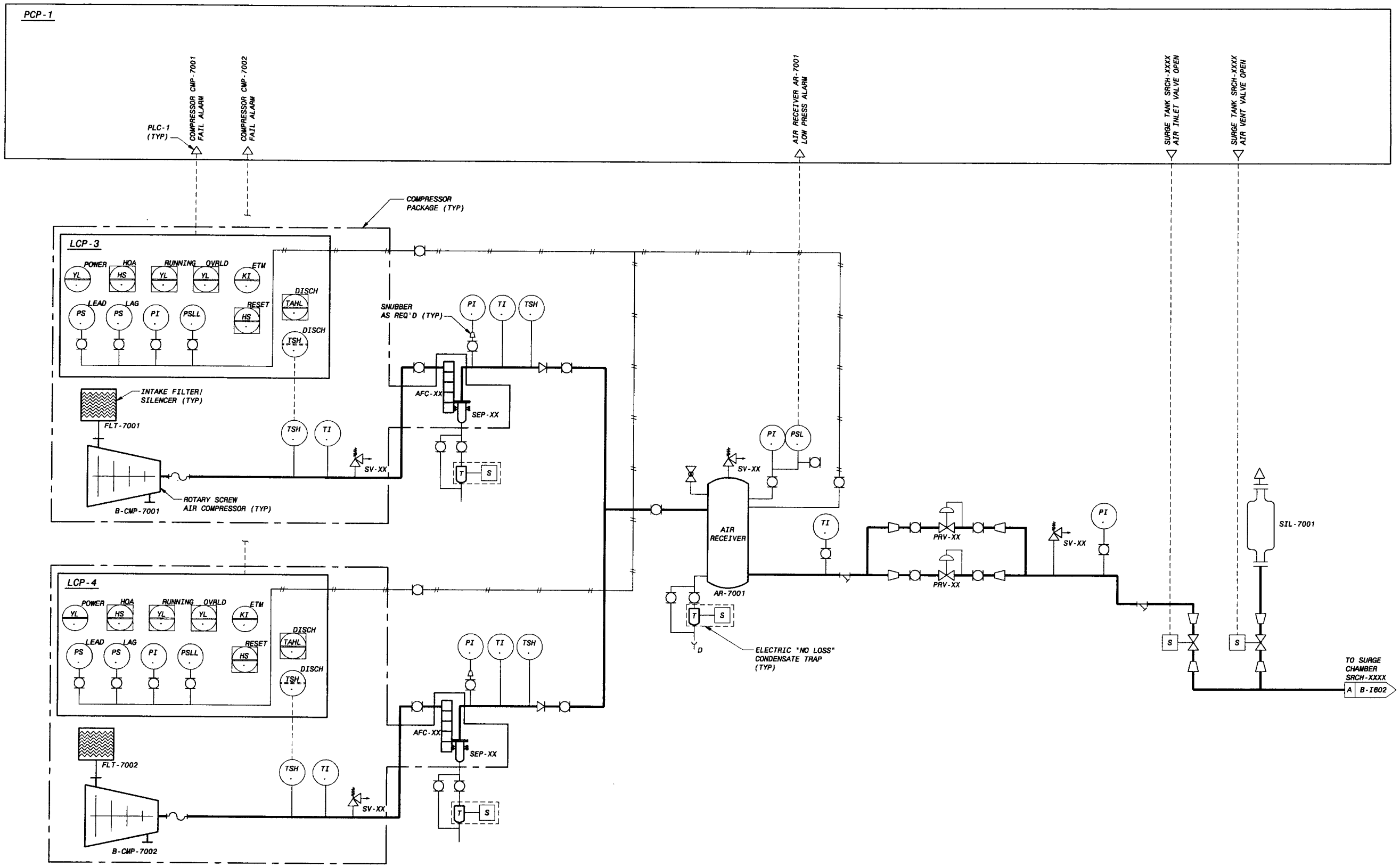
UNIT B - CAMP ROBERTS PUMP STATION INSTRUMENTATION
P&ID - COMPRESSED AIR SYSTEM

DESIGNED: WEM
DETAILED: DSW
CHECKED:
APPROVED:
DATE: 2/22/06

BV PROJECT NO. 137522
NWP PROJECT NO. 3000187.08
SPEC 03

B-I603
SHEET
OF

FD137522
D137522



NOTES:

1. SEE STD-G008 THROUGH STD-022 FOR LEGEND.
2. UNIT CODE IS "B" UNLESS OTHERWISE NOTED.

PRELIMINARY - NOT FOR CONSTRUCTION

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

NO.	BY	CK	APP

REVISIONS AND RECORD OF ISSUE

DATE
CYGNET ID: 137522-1-BP3-E0000916S
WF: BP3-B-1604.dwg
SAVED: MCC10784, 2/20/2006 11:35:44 AM
PLOTTED: MCC10784, 2/20/2006 11:35:45 AM
USER: MCC10784
DWG VER: 1.5
XREF1:
XREF2:
XREF3:
XREF4:
XREF5:

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BOYLE ENGINEERING CORPORATION

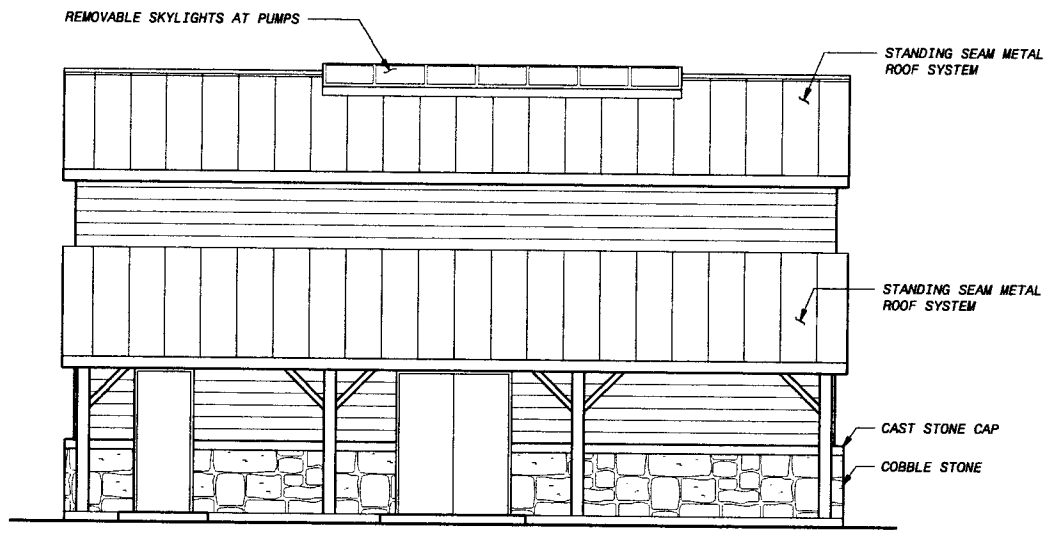
NWP NACIMIENTO WATER PROJECT
San Luis Obispo County Flood Control & Water Conservation District

UNIT B - CAMP ROBERTS PUMP STATION
INSTRUMENTATION
P&ID - SURGE TANK COMPRESSED AIR SYSTEM

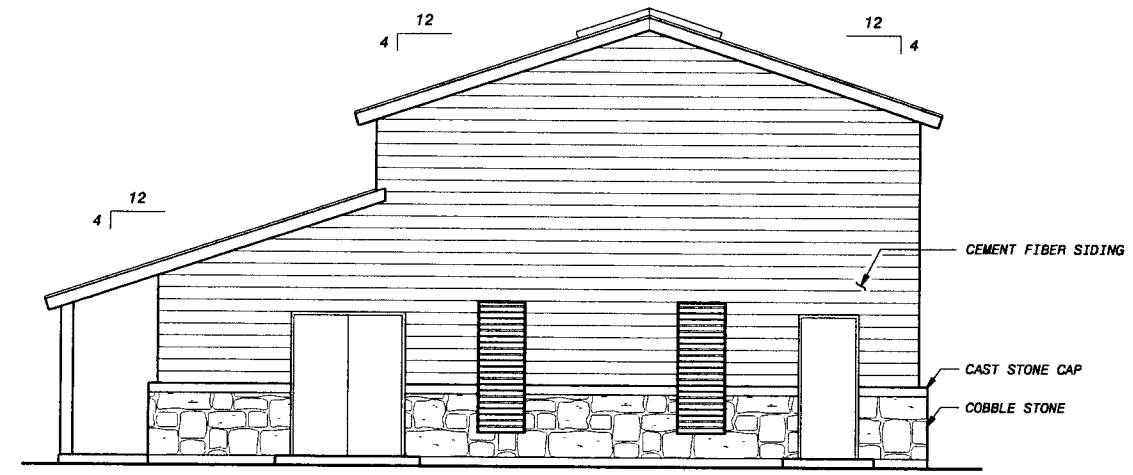
DESIGNED:
DETAILED:
CHECKED:
APPROVED:
DATE: 2/22/06

BV PROJECT NO. 137522
NWP PROJECT NO. 3000187.08
SPEC 03
B-I604
SHEET OF

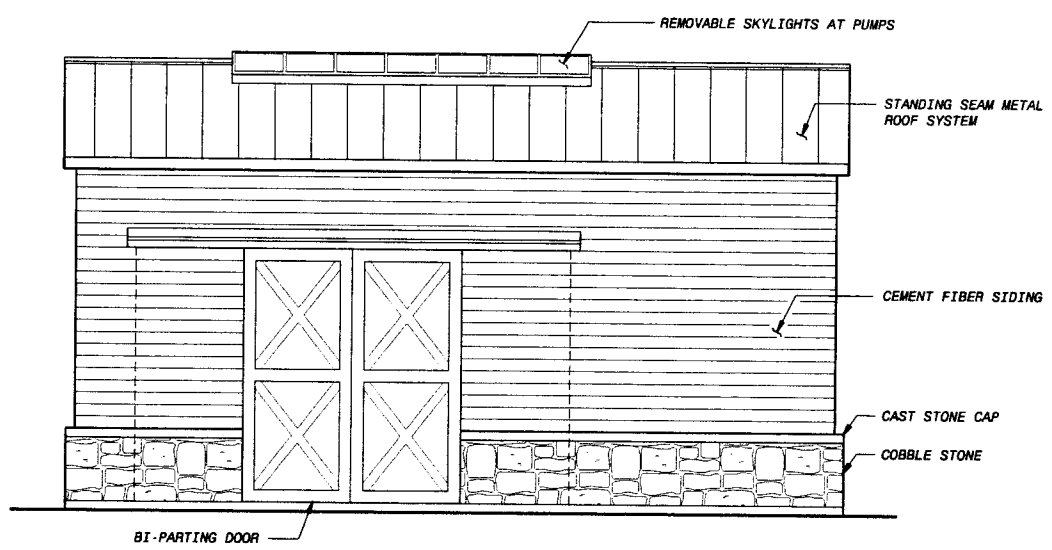
FD137522
D137522



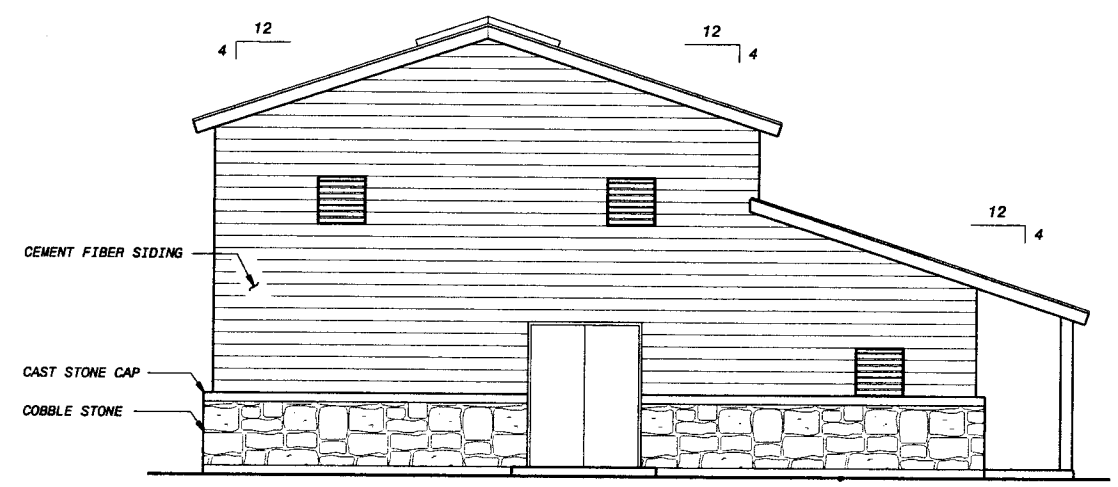
NORTH ELEVATION
3/16" = 1'-0"



WEST ELEVATION
3/16" = 1'-0"



SOUTH ELEVATION
3/16" = 1'-0"



EAST ELEVATION
3/16" = 1'-0"

PRELIMINARY - NOT FOR CONSTRUCTION

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

DATE	REVISIONS AND RECORD OF ISSUE	NO.	BY	CK	APP

CYGNET ID: 137522-A-BP3-N0000N36V
WF: BP3-F2-A301.dwg
SAVED: GUT45251, 2/17/2006 4:28:40 PM
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USER: GUT45251 DWG VER: 1.10
XREF1:
XREF2:
XREF3:
XREF4:
XREF5:

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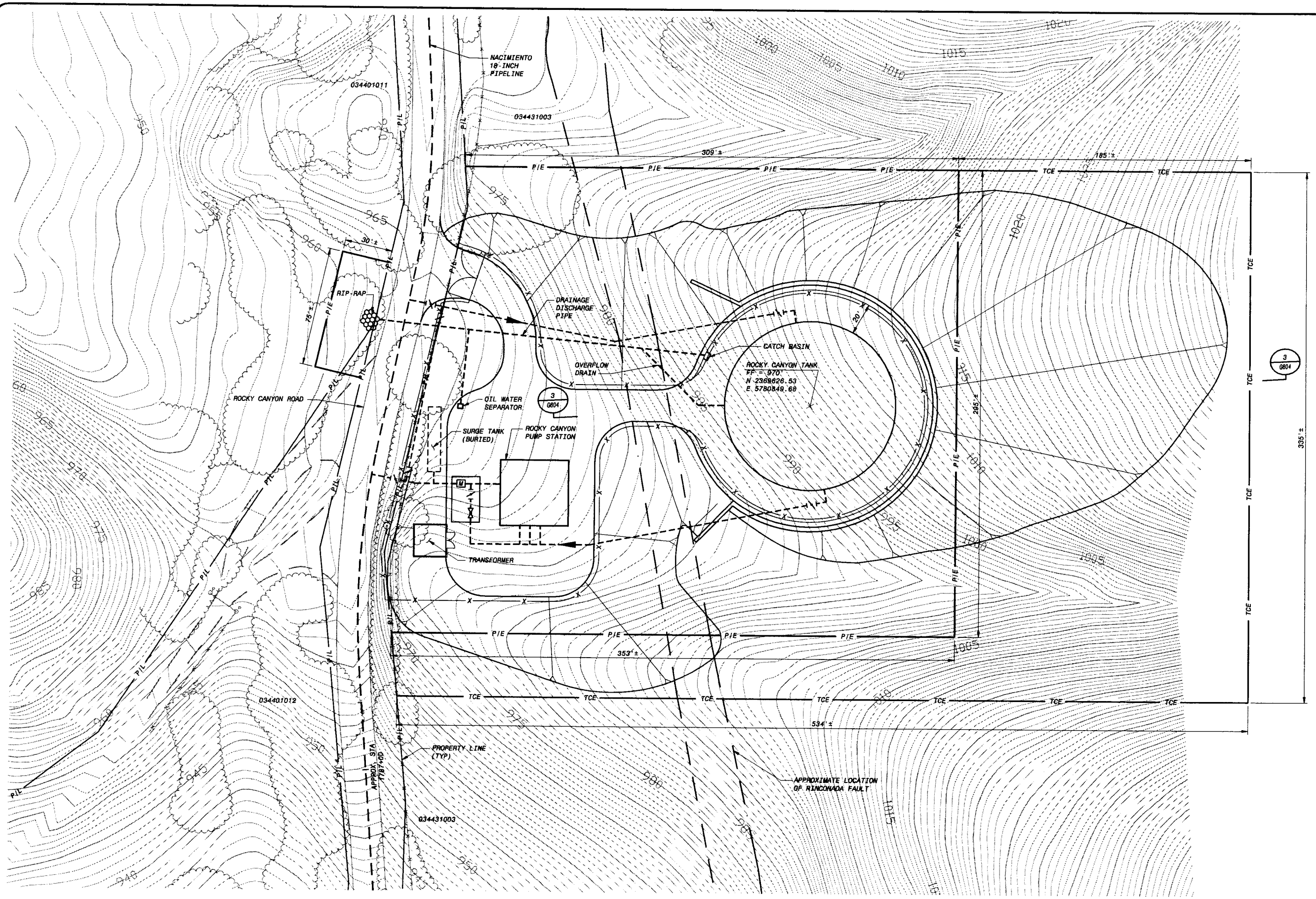
BOYLE ENGINEERING CORPORATION

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

UNIT F2 - ROCKY CANYON PUMP STATION
ARCHITECTUARL
ELEVATIONS

DESIGNED: MAJ
DETAILED: DAY, LRL
CHECKED:
APPROVED:
DATE: 2/22/06
BV PROJECT NO. 137522
NWP PROJECT NO. 3000187.08
SPEC 03
F2-A301
SHEET OF

FD137522
D137522
Date/Time



NOTES:

1. PROTECT EXISTING FENCE DURING CONSTRUCTION. ONCE CONSTRUCTION IS COMPLETE, REPLACE EXISTING FENCE WITH NEW FENCE.
2. REMOVE TREES AND BUSHES AS REQUIRED FOR CONSTRUCTION.

30' 20' 10' 0 30' 60'
1"=30'

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

PRELIMINARY - NOT FOR CONSTRUCTION

NO.	BY	CK	APP

DATE	REVISIONS AND RECORD OF ISSUE
CYGNET ID: 137522-C-BP3-E00007WXH	XREF1:C-TOPO31.dwg
WF: BP3-F2-C101.dwg	XREF2:F1-C-TANK.dwg
SAVED: MCC10784, 2/20/2006 9:22:42 AM	XREF3:BP6-C-HALM01.dwg
PLOTTED: MCC10784, 2/20/2006 9:22:44 AM	XREF4:BP6-C-PARC.dwg
USER: MCC10784	DWG VER: 1.13 XREF5:BP7-C-HALM01.dwg

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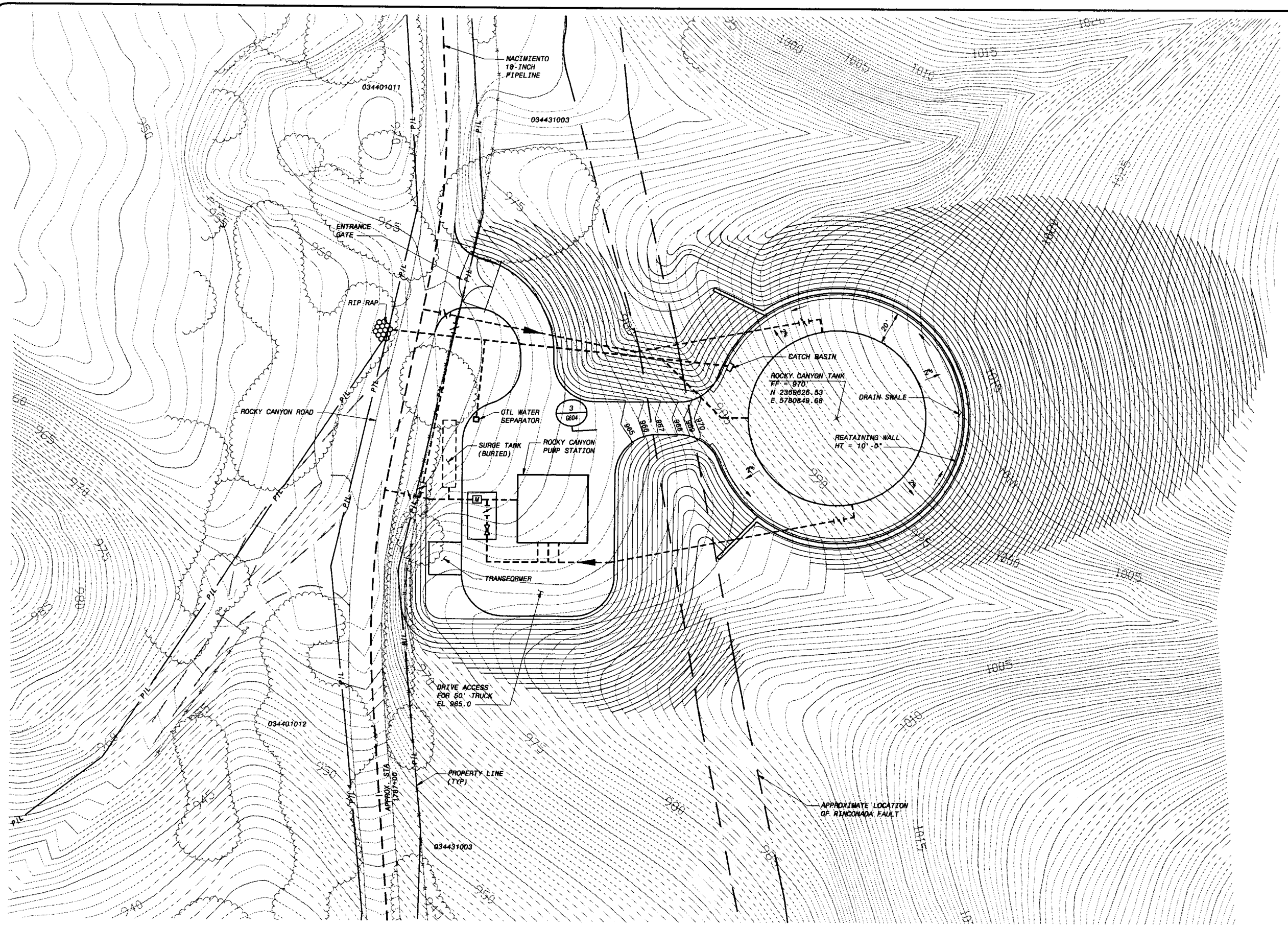
BOYLE ENGINEERING CORPORATION

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

UNIT F2 - ROCKY CANYON PUMP STATION
CIVIL
SITE PLAN

DESIGNED:	BEB, VT
DETAILED:	TVL, JLK
CHECKED:	
APPROVED:	
DATE:	2/22/06
BV PROJECT NO.	137522
NWP PROJECT NO.	3000187.08
SPEC	03
SHEET	F2-C101
OF	

FD137522
D137522



NOTES:

1. PROTECT EXISTING FENCE DURING CONSTRUCTION. ONCE CONSTRUCTION IS COMPLETE, REPLACE EXISTING FENCE WITH NEW FENCE.
2. REMOVE TREES AND BUSHES AS REQUIRED FOR CONSTRUCTION.

30' 20' 10' 0 30' 60'
1"=30'

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

PRELIMINARY - NOT FOR CONSTRUCTION

NO.	BY	CK	APP

REVISIONS AND RECORD OF ISSUE

DATE	
CYGNET ID: 137522-C-BP3-E00007Y07	XREF1:C-TOPO01.dwg
WF: BP3-F2-C102.dwg	XREF2:F1-C-TANK.dwg
SAVED: MCC10784, 2/20/2008 9:23:13 AM	XREF3:BP6-C-HALN01.dwg
PLOTTED: MCC10784, 2/20/2008 9:23:15 AM	XREF4:BP6-C-PARC.dwg
USER: MCC10784	XREF5:BP7-C-HALN01.dwg
DWG VER: 1.9	

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BOYLE ENGINEERING CORPORATION

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

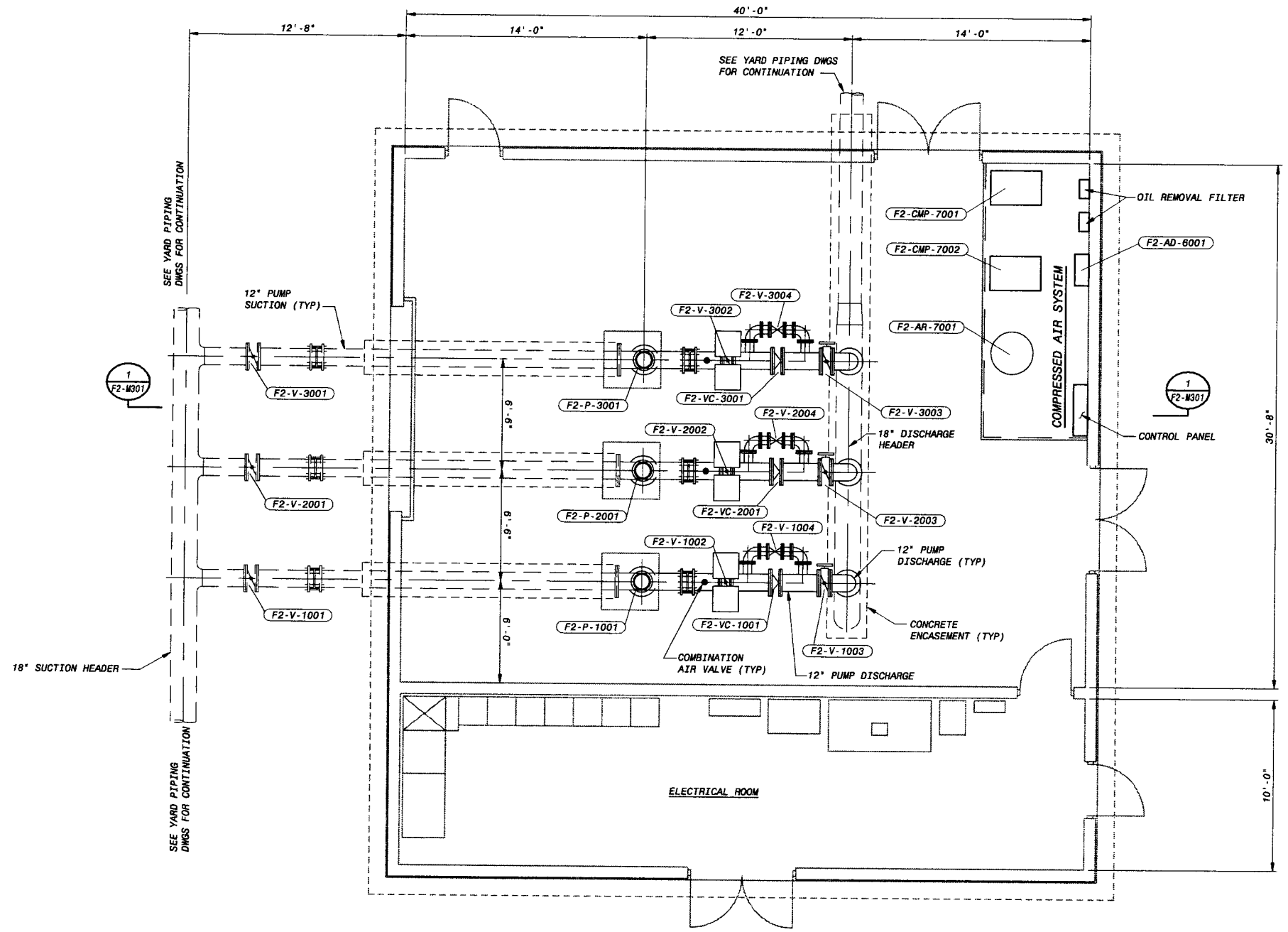
UNIT F2 - ROCKY CANYON PUMP STATION
CIVIL
GRADING AND PAVING PLAN

DESIGNED: BEB, VT
DETAILED: TVL, JLK
CHECKED:
APPROVED:
DATE: 2/22/08

BV PROJECT NO. 137522
NWP PROJECT NO. 3000187.08
SPEC 03

F2-C102
SHEET OF

F0137522
D137522



PLAN
1/4" = 1'-0"

PRELIMINARY - NOT FOR CONSTRUCTION

4' 2' 0 4' 8'
1/4"=1'-0"

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

NO.	BY	CK	APP

REVISIONS AND RECORD OF ISSUE

DATE	
CYGNET ID: 137522-W-BP3-E00007WGS	XREF1: F2-E-POWR.dwg
WF: BP3-F2-M101.dwg	XREF2: F2-M-PIPE.dwg
SAVED: WCC10784, 2/17/2006 9:49:46 AM	XREF3: F2-S-FLOR.dwg
PLOTTED: WCC10784, 2/17/2006 9:55:55 AM	XREF4:
USER: WCC10784	XREF5:
DWG VER: 1.14	

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BOYLE ENGINEERING CORPORATION

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

UNIT F2 - ROCKY CANYON PUMP STATION
MECHANICAL
EQUIPMENT AND PIPING PLAN

DESIGNED: MKJ
DETAILED: SMM
CHECKED:
APPROVED:
DATE: 2/22/06

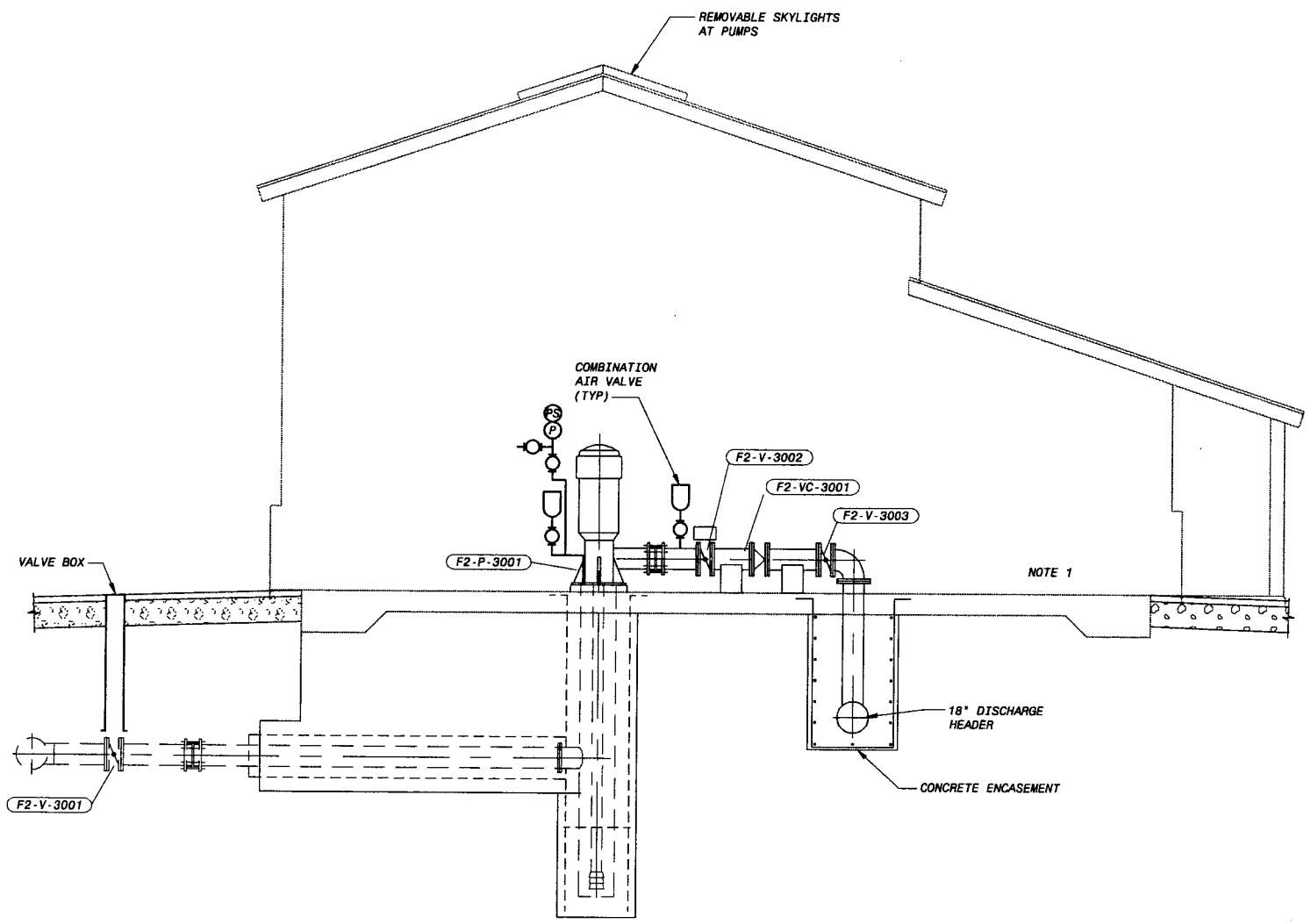
BV PROJECT NO.
137522

NWP PROJECT NO.
3000187.08

SPEC
03

F2-M101
SHEET
OF

FD137522
D137522



SECTION 1 / F2-M101
1/4" = 1'-0"

NOTES:

1. COMPRESSED AIR SYSTEM DETAILS NOT SHOWN.

PRELIMINARY - NOT FOR CONSTRUCTION

4' 2' 0 4' 8'
1/4"=1'-0"

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

NO.	BY	CK	APP

REVISIONS AND RECORD OF ISSUE

DATE

CYGNET ID: 137522-M-XREF-E0000TYON
WF: BP3-F2-M001.dwg
SAVED: MCC10784, 2/17/2006 9:21:09 AM
PLOTTED: MCC10784, 2/17/2006 9:21:10 AM
USER: MCC10784

XREF1: F2-M-SECT01.dwg
XREF2: F2-S-FLOR.dwg
XREF3: F2-S-GRID.dwg
XREF4:
XREF5:
DWG VER: 1.10

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BOYLE
ENGINEERING CORPORATION

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

UNIT F2 - ROCKY CANYON PUMP STATION
MECHANICAL
EQUIPMENT AND PIPING LAYOUT-SECTIONS

DESIGNED: MKJ
DETAILED: SMM
CHECKED:
APPROVED:
DATE: 2/22/06

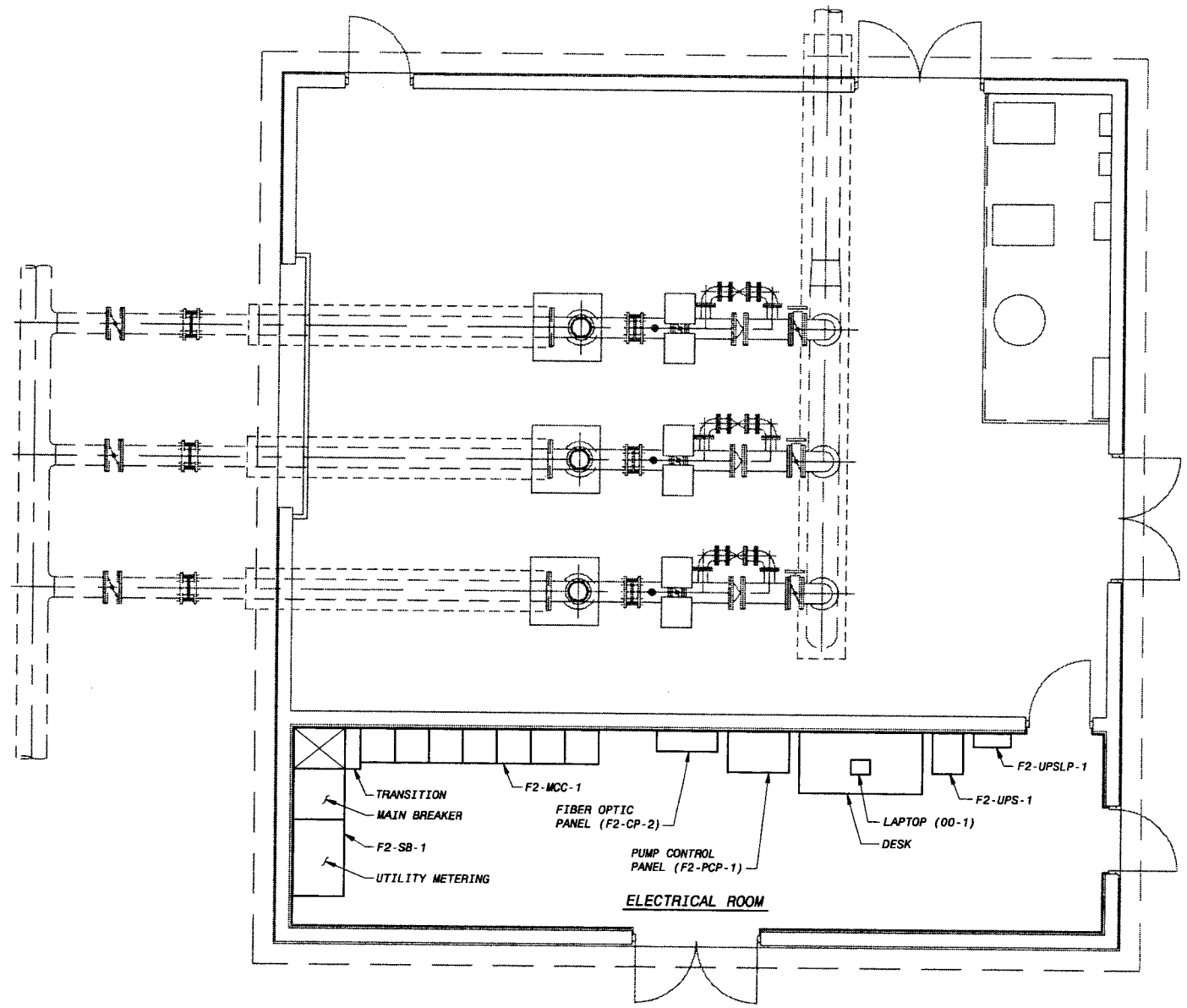
BV PROJECT NO.
137522

NWP PROJECT NO.
3000187.08

SPEC
03

F2-M301
SHEET
OF

FD137522
D137522



PLAN
1/4" = 1'-0"

NOTES:

1. SEE STD-G023 THROUGH STD-G032 FOR LEGEND.

PRELIMINARY - NOT FOR CONSTRUCTION

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

DATE	REVISIONS AND RECORD OF ISSUE	NO.	BY	CK	APP

CYGNET ID: 137522-E-BP3-E0000808J
WF: 16.1a (LMS Tech)
SAVED: 8/17/2006 10:17:08 AM
PLOTTED: 2/17/2006 6:26:46 PM, Batch Plot
USER: mcc10794
DWG VER: 1.11
XREF1: F2-E-POWR.dwg
XREF2: F2-M-PIPE.dwg
XREF3: F2-S-FLOR.dwg
XREF4:
XREF5:

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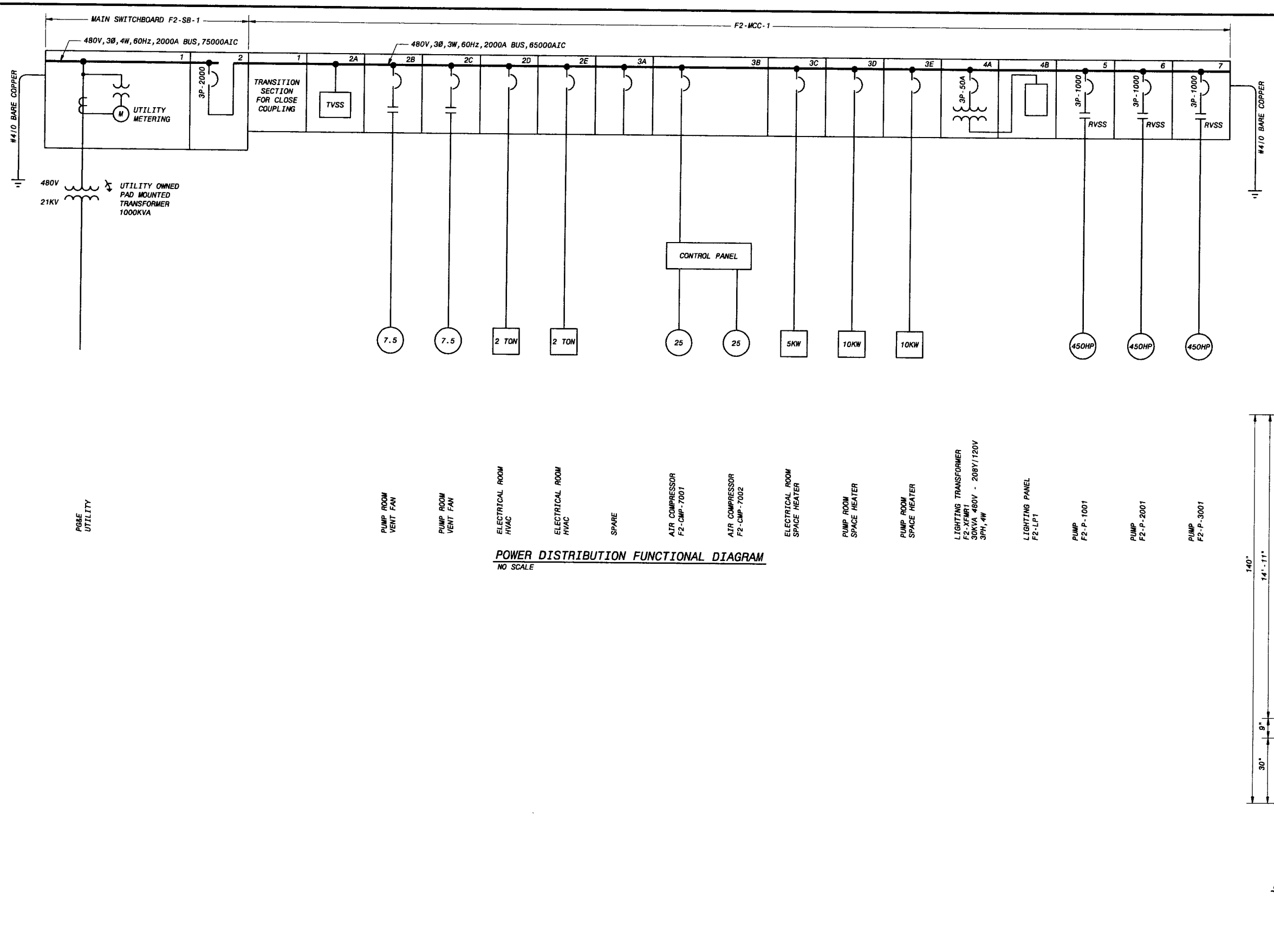
ENGINEERING CORPORATION

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

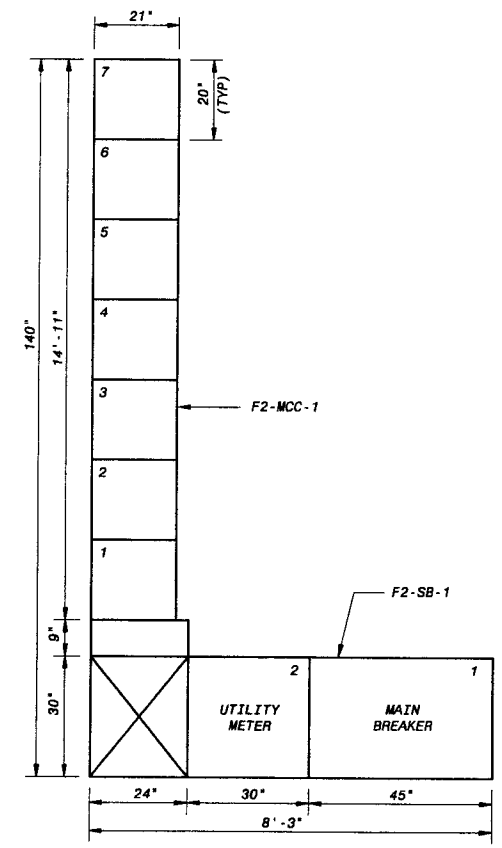
UNIT F2 - ROCKY CANYON PUMP STATION
ELECTRICAL
FLOOR PLAN

DESIGNED: FK
DETAILED: JCP
CHECKED:
APPROVED:
DATE: 2/22/06
BV PROJECT NO. 137522
NWP PROJECT NO. 3000187.08
SPEC 03
F2-E102
SHEET OF

F0137522
D137522



POWER DISTRIBUTION FUNCTIONAL DIAGRAM
NO SCALE



F2-SB-1 & F2-MCC-1 PLAN
1/2" = 1'-0"

NOTES:

1. SEE STD-G023 THROUGH STD-G032 FOR LEGEND.

LEGEND

RVSS REDUCED VOLTAGE SOLID STATE STARTER
TVSS TRANSIENT VOLTAGE SURGE SUPPRESSER

PRELIMINARY - NOT FOR CONSTRUCTION

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

DATE	REVISIONS AND RECORD OF ISSUE	NO.	BY	CK	APP

CYGNET ID: 137522-E-BP3-E00008090 XREF1:
WF: BP3-F2-E602.dwg XREF2:
SAVED: OUT45251, 2/18/2006 1:03:35 PM XREF3:
PLOTTED: OUT45251, 2/18/2006 11:40:17 AM XREF4:
USER: OUT45251 DWG VER: 1.11 XREF5:

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

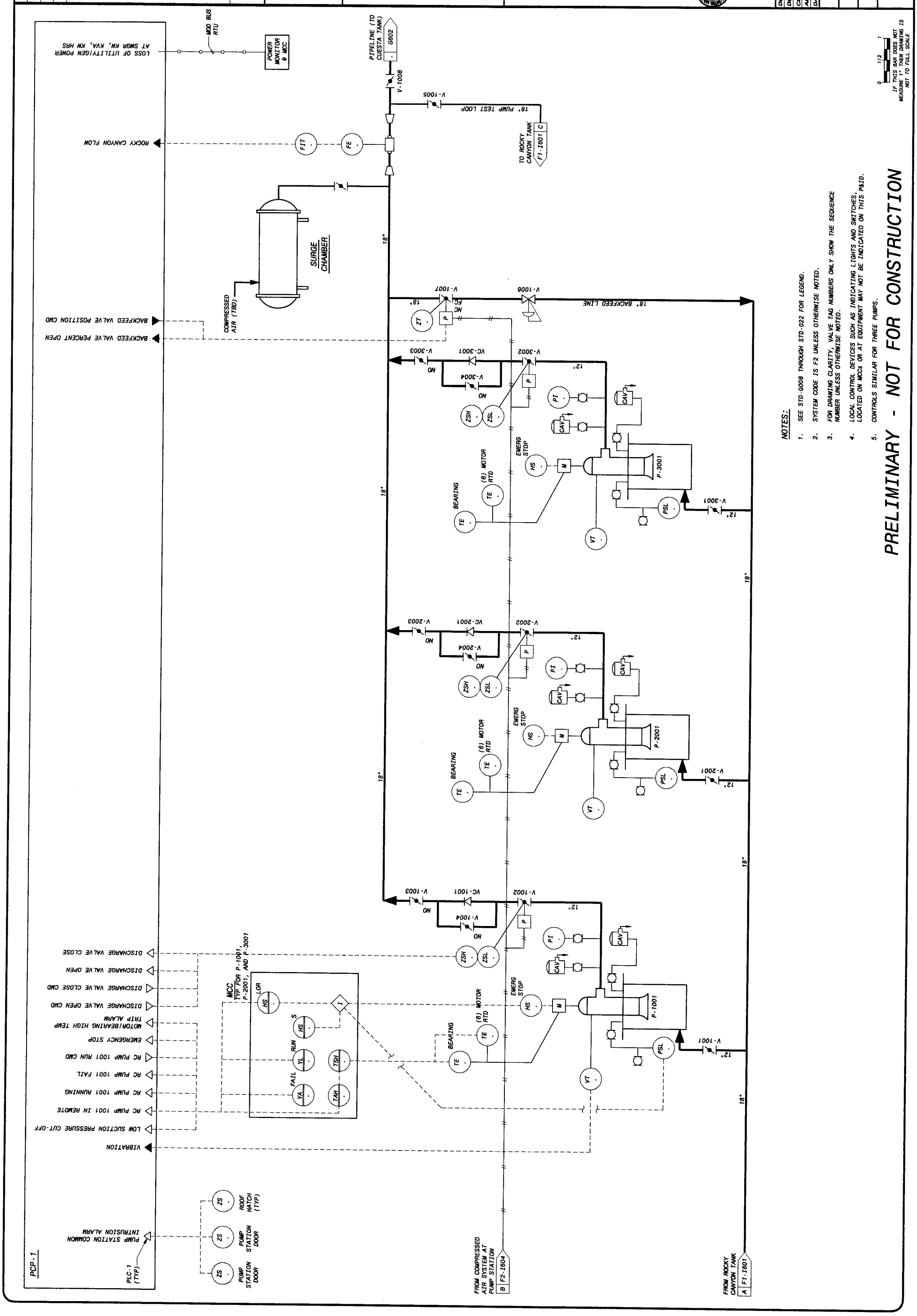
UNIT F2 - ROCKY CANYON PUMP STATION
ELECTRICAL
POWER DISTRIBUTION FUNCTIONAL DIAGRAM

DESIGNED: FK
DETAILED: JCP
CHECKED:
APPROVED:
DATE: 2/22/06

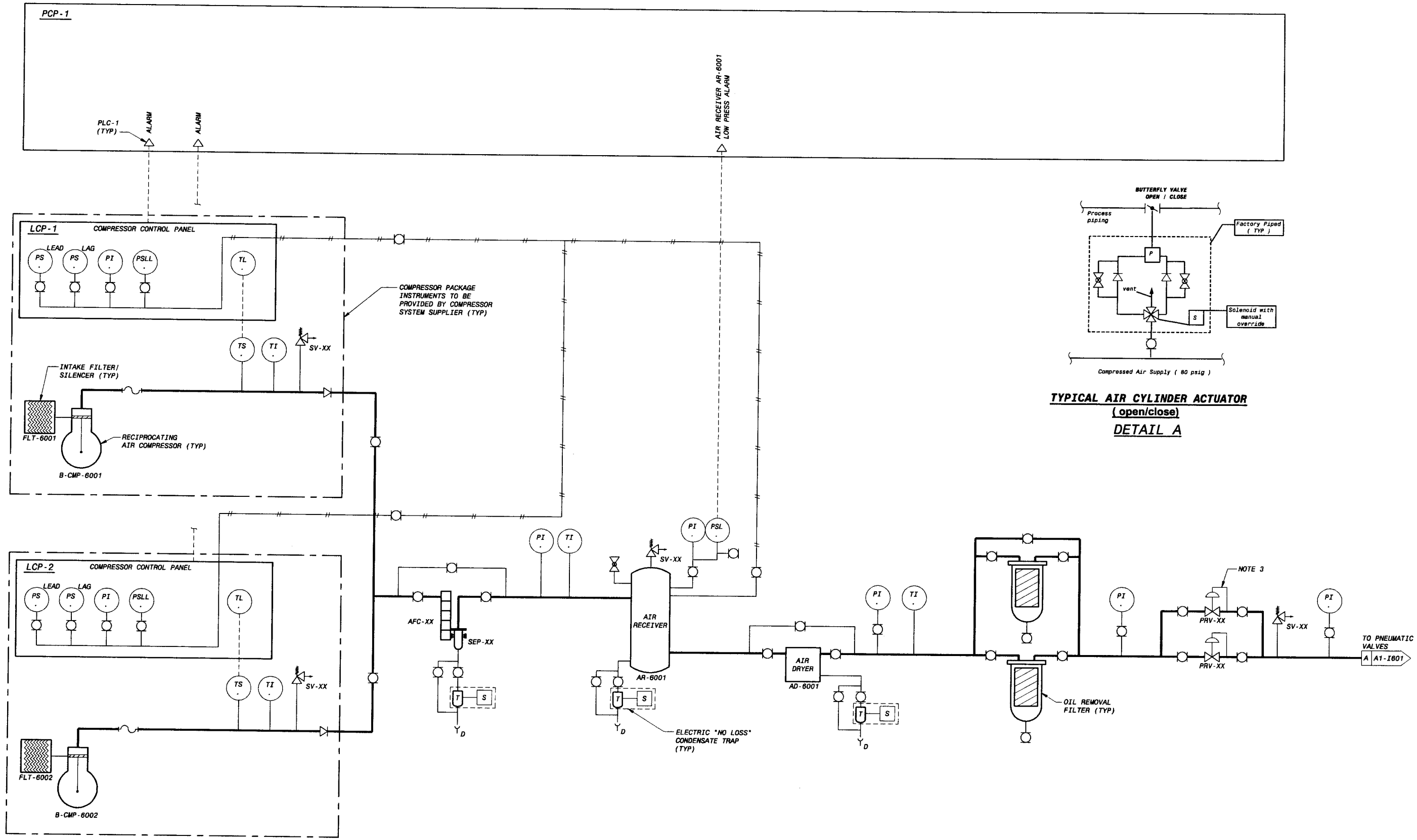
BV PROJECT NO. 137522
NWP PROJECT NO. 3000187.08
SPEC 03

F2-E602
SHEET
OF

FD137522
D137522



FD137522
D137522



TYPICAL AIR CYLINDER ACTUATOR
(open/close)
DETAIL A

NOTES:

1. SEE STD-G008 THROUGH STD-022 FOR LEGEND.
2. UNIT CODE IS "F2" UNLESS OTHERWISE NOTED.
3. FOR DRAWING CLARITY, VALVE TAG NUMBERS ONLY SHOW THE SEQUENCE NUMBER UNLESS OTHERWISE NOTED.
4. PRESSURE REDUCING VALVE SIZE TO BE DETERMINED BY SUPPLIER. SIZE IS NORMALLY SMALLER THAN LINE SIZE. ISOLATION VALVES TO BE LINE SIZE.
5. LOCAL CONTROL DEVICES SUCH AS INDICATING LIGHTS AND SWITCHES, LOCATED ON MCCs OR AT EQUIPMENT MAY NOT BE INDICATED ON THIS P&ID.

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEM DRAWING IS NOT TO FULL SCALE

PRELIMINARY - NOT FOR CONSTRUCTION

NO.	BY	CK	APP	DATE	REVISIONS AND RECORD OF ISSUE

CYDNET ID: 137522-I-BP3-E00008192 XREF1:
WF: BP3-F2-I603.dwg XREF2:
SAVED: MCC10764, 2/20/2006 11:41:39 AM XREF3:
PLOTTED: MCC10764, 2/20/2006 11:41:40 AM XREF4:
USER: MCC10764 DWG VER: 1.4 XREF5:

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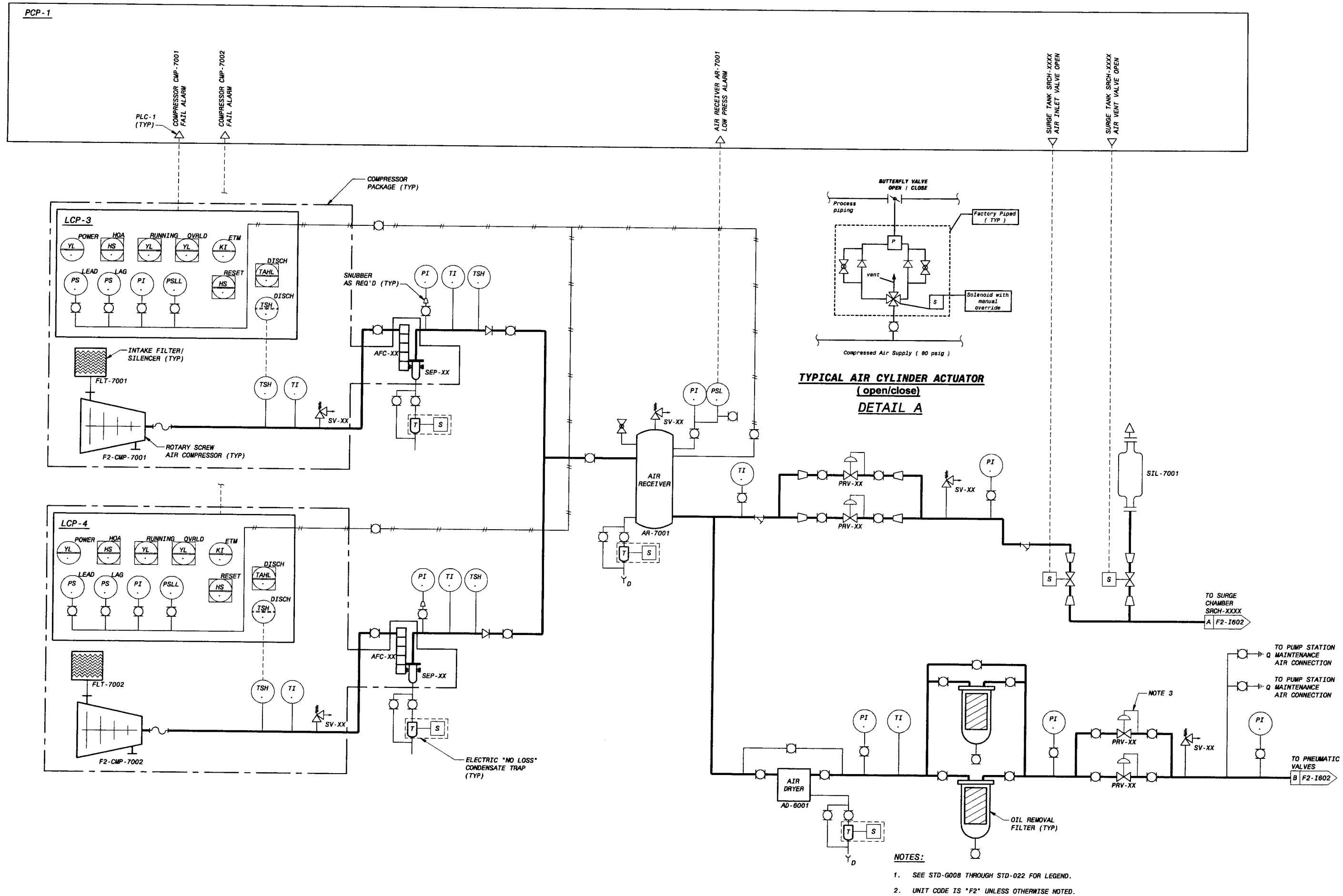
BOYLE ENGINEERING CORPORATION
NWP NACIMIENTO WATER PROJECT San Luis Obispo County Flood Control & Water Conservation District

UNIT F2 - ROCKY CANYON PUMP STATION
INSTRUMENTATION
P&ID - COMPRESSED AIR SYSTEM

DESIGNED:
DETAILED:
CHECKED:
APPROVED:
DATE: 2/22/06
BV PROJECT NO. 137522
NWP PROJECT NO. 3000187.08
SPEC 03
F2-I603
SHEET OF

FD137522
D137522



NOTES:

1. SEE STD-G008 THROUGH STD-022 FOR LEGEND.
2. UNIT CODE IS "F2" UNLESS OTHERWISE NOTED.

PRELIMINARY - NOT FOR CONSTRUCTION

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

DATE	REVISIONS AND RECORD OF ISSUE	NO.	BY	CK	APP

CYGNET ID: 137522-1-BP3-E000006180 XREF1:
WF: BP3-F2-I604.dwg XREF2:
SAVED: WA013008, 2/14/2006 2:35:05 PM XREF3:
PLOTTED: WC010784, 1/19/2006 11:31:04 AM XREF4:
USER: GUT45251 DWG VER: 1.7 XREF5:

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BOYLE ENGINEERING CORPORATION

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

UNIT F2 - ROCKY CANYON PUMP STATION
INSTRUMENTATION
P&ID - SURGE TANK COMPRESSED AIR SYSTEM

DESIGNED: WEM
DETAILED: DSW
CHECKED:
APPROVED:
DATE: 2/22/06

BV PROJECT NO. 137522
NWP PROJECT NO. 3000187.08
SPEC 03
F2-I604
SHEET OF

FD137522
D137522