Water-Energy Grant Application
Cross Valley Canal Extension Lining - Pool No. 8

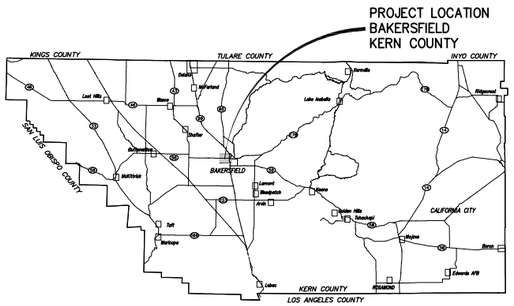
Appendix 3.2 - Preliminary Design Drawings (15%)

KCWA IMPROVEMENT DISTRICT NO. 4

KERN COUNTY, CA

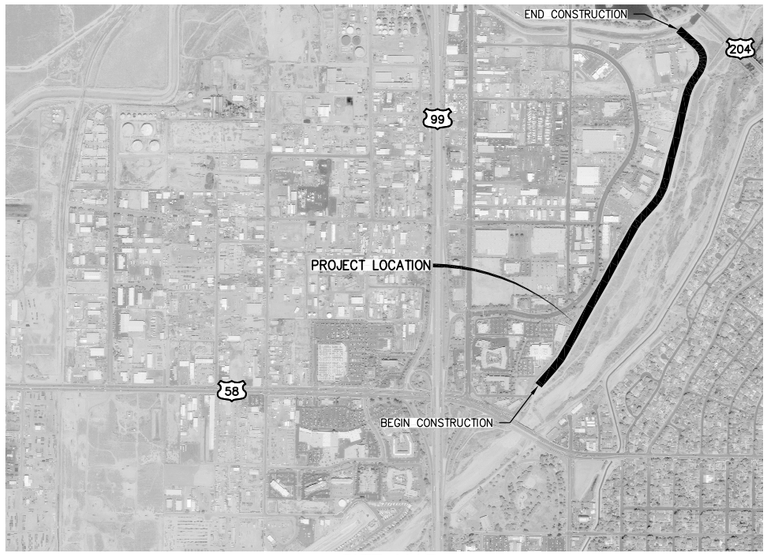
CROSS VALLEY CANAL EXTENSION LINING PROJECT

PHASE 2-POOL NO. 8



VICINITY MAP

NOT TO SCALE



SITE MAP

SCALE IN FEET

0 500 1000 2000

WARNING

POWER LINES OVERHEAD

811 Know what's **below.** **Call** before you dig.

GENERAL NOTES

1. KCWA (661-634-1400) SHALL BE CONTACTED AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF WORK ON OR NEAR EXISTING DISTRICT FACILITIES.
2. USED MATERIAL, REJECTS, MISFITS, OR SECONDS, ETC. ARE NOT ACCEPTABLE FOR USE ON KCWA FACILITIES.
3. ALL CONSTRUCTION SHALL BE IN CONFORMANCE WITH THESE PLANS, PROJECT SPECIFICATIONS AND KCWA SPECIFICATIONS.
4. CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING FACILITIES PRIOR TO COMMENCING WORK. CALL UNDERGROUND SERVICE ALERT (USA) AT 8-1-1. CONTRACTOR SHALL MAKE ENGINEER AWARE OF ANY DISCREPANCIES.
5. ALL CAST-IN-PLACE CONCRETE STRUCTURES SHALL BE FORMED INSIDE AND OUT AND CONCRETE VIBRATED SUFFICIENTLY TO PROVIDE FOR SMOOTH SURFACED WALLS/FLOORS WITHOUT VOIDS AND HONEYCOMBS.
6. KCWA SHALL INSPECT ALL WORK PHASES ON FACILITIES FOR CONFORMANCE TO KCWA SPECIFICATIONS. REINFORCING SHALL NOT BE ENCASED IN CONCRETE WITHOUT PRIOR KCWA INSPECTIONS. LIKEWISE, CONCRETE SHALL NOT BE COVERED WITH EARTH PRIOR TO KCWA INSPECTION.
7. 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.
8. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE HEALTH AND SAFETY LAWS OF THE STATE OF CALIFORNIA AND CAL/OSHA STANDARDS.
9. CANAL EMBANKMENTS SHALL BE COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS AND THE GEOTECHNICAL REPORT CONTAINED IN THE SPECIFICATIONS.
16. ALL EXCESS MATERIAL AND/OR DEBRIS SHALL BE REMOVED UPON COMPLETION OF INSTALLATION.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE DUST CONTROL AT ALL TIMES.

SPECIAL NOTE

WHERE UNDERGROUND AND SURFACE STRUCTURES ARE SHOWN ON THE PLANS, THE LOCATIONS, DEPTH AND DIMENSIONS OF STRUCTURES ARE BELIEVED TO BE REASONABLY CORRECT, BUT ARE NOT GUARANTEED. SUCH STRUCTURES ARE SHOWN FOR THE INFORMATION OF THE CONTRACTOR, BUT INFORMATION SO GIVEN IS NOT TO BE CONSTRUED AS A REPRESENTATION THAT SUCH STRUCTURES WILL, IN ALL CASES, BE FOUND WHERE SHOWN, OR THAT THEY REPRESENT ALL OF THE STRUCTURES WHICH MAY BE ENCOUNTERED.

SITE SAFETY AND PROTECTION NOTES

THE DUTY OF THE ENGINEER, OWNER OR ITS AGENTS TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE AND THE UNDERTAKING OF INSPECTIONS OR THE GIVING OF INSTRUCTIONS AS AUTHORIZED HEREIN IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE CONSTRUCTION SITE AND SHALL NOT BE CONSTRUED AS SUPERVISION OF THE ACTUAL CONSTRUCTION NOR MAKE THE ENGINEER, OWNER OR ITS AGENTS RESPONSIBLE FOR PROVIDING A SAFE PLACE FOR THE PERFORMANCE OF WORK BY THE CONTRACTOR, SUBCONTRACTORS, OR SUPPLIERS, OR FOR ACCESS, VISITS, USE, WORK, TRAVEL OR OCCUPANCY BY ANY PERSON.

THE CONTRACTOR SHALL HAVE AT THE WORK SITE, COPIES OR SUITABLE EXTRACTS OF CONSTRUCTION SAFETY ORDERS, ISSUED BY CAL-OSHA. CONTRACTOR SHALL COMPLY WITH PROVISIONS OF THESE AND ALL OTHER APPLICABLE LAWS, ORDINANCES AND REGULATIONS. THE CONTRACTOR MUST COMPLY WITH PROVISIONS OF THE SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION, PROMULGATED BY THE SECRETARY OF LABOR UNDER SECTION 107 OF THE CONTRACT WORK HOURS AND SAFETY STANDARDS ACT, AS SET FORTH IN TITLE 29 C.F.R.

TO PROTECT THE LIVES AND HEALTH OF CONTRACTOR'S EMPLOYEES UNDER THE CONTRACT, THE CONTRACTOR SHALL COMPLY WITH ALL PERTINENT PROVISIONS OF THE "MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION" ISSUED BY THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA, INC., AND SHALL MAINTAIN AN ACCURATE RECORD OF ALL CASES OF DEATH, OCCUPATIONAL DISEASE, AND INJURY REQUIRING MEDICAL ATTENTION OR CAUSING LOSS OF TIME FROM WORK, ARISING OUT OF AND IN THE COURSE OF EMPLOYMENT OR WORK UNDER THE CONTRACT.

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

THE CONTRACTOR AGREES THAT IT SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; 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, AND THEIR RESPECTIVE AGENTS HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF OWNER, ENGINEER, OR THEIR RESPECTIVE AGENTS.

THE OWNER AND ITS AGENTS' SITE RESPONSIBILITIES ARE LIMITED SOLELY TO THE ACTIVITIES OF THEIR EMPLOYEES ON SITE. THESE RESPONSIBILITIES SHALL NOT BE INFERRED BY ANY PARTY TO MEAN THAT THE OWNER OR ITS AGENTS HAVE RESPONSIBILITY FOR SITE SAFETY. SAFETY IN, ON, OR ABOUT THE SITE IS THE SOLE AND EXCLUSIVE RESPONSIBILITY OF THE CONTRACTOR ALONE. THE CONTRACTOR'S METHODS OF WORK PERFORMANCE, SUPERINTENDENCE AND THE CONTRACTOR'S EMPLOYEES, AND SEQUENCING OF CONSTRUCTION ARE ALSO THE SOLE AND EXCLUSIVE RESPONSIBILITIES OF THE CONTRACTOR ALONE.

APPROVALS

DAVID BEARD — DATE
ID4 MANAGER

MARTIN VARGA — DATE
ENGINEERING AND GROUNDWATER SERVICES MANAGER

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PRELIMINARY 15% PLANS
NOT FOR CONSTRUCTION
11-20-2014

No.	REVISION	BY	DATE

REGISTERED PROFESSIONAL ENGINEER — OEK — STATE OF CALIFORNIA — NOT FOR REVIEW ONLY

DATE SIGNED: _____

CROSS VALLEY CANAL EXTENSION LINING PROJECT
PHASE 2-POOL NO. 8
KCWA IMPROVEMENT DISTRICT NO. 4
KERN COUNTY, CA

1 COVER SHEET

EST. 1968 PROVOST & PRITCHARD CONSULTING GROUP
An Employee Owned Company
1500 30th STREET, SUITE 300
BAKERSFIELD, CALIFORNIA 93301
661/616-5900 FAX 661/616-5890
www.ppeng.com

DESIGN ENGINEER: OEK
LICENSE NO: 47444
DRAFTED BY: PPI | CHECKED BY: CM
DATE: 11-20-2014
JOB NO: 104814B3

0 1
ORIGINAL SCALE SHOWN IS IN INCHES. ADJUST SCALE FOR REDUCED OR ENLARGED PLANS.

SHEET 1 OF 8

12/8/2014 10:48 AM \\evolution\civ clients\clients\kern county water agency\104814b3\dwg\SHEET\P008-R11 COVER SHEET.dwg -Phillip Ramsby

ABBREVIATIONS

AB	AGGREGATE BASE
AC	ASPHALT CONCRETE
ACP	ASBESTOS–CEMENT PIPE
AD	ALUMINUM DISK
AGG	AGGREGATE
AH	AHEAD
ALT	ALTERNATE
AP	ANGLE POINT
APPROX	APPROXIMATE
APN	ASSESSOR'S PARCEL NUMBER
ARV	AIR RELIEF VALVE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AV	AIR VENT
AVE	AVENUE
AWWA	AMERICAN WATER WORKS ASSOCIATION
BAR	BARRIER
BC	BEGIN CURVE
BD	BRASS DISK
BFP	BACKFLOW PREVENTOR
BK	BACK
BLDG	BUILDING
BM	BENCHMARK
BO	BOLLARD
BTM	BOTTOM
BVC	BEGIN VERTICAL CURVATURE
BW	BACK OF WALK
BWL	BACK OF WALL
BWR	BARB WIRE
C, CONC	CONCRETE
CA	CALIFORNIA
CAB	CABINET
CBL	CABLE
CFS	CUBIC FEET PER SECOND
CHK	CHECK
CHLK	CHAINLINK
CI	CAST IRON
CIP	CAST IRON PIPE
CIPCP	CAST–IN–PLACE CONCRETE PIPE
CL	CLASS
CLVT	CULVERT
℄	CENTERLINE
CLF	CHAIN LINK FENCE
CLR	CLEARANCE
CMLC	CEMENT MORTAR LINED & COATED
CMP	CORRUGATED METAL PIPE
CN	CONCRETE NAIL
CNS	COMPACTED NATIVE SOIL
CO	SEWER CLEAN OUT
CONT	CONTINUOUS
CONST	CONSTRUCT/CONSTRUCTION
COR	CORNER
CORP	CORPORATION
COL	COLUMN
COUP	COUPLING
CP	CONTROL POINT
CR	CROWN
CU	CUBIC
CY	CUBIC YARDS
DA	DRIVE APPROACH
DEC	DECIDUOUS
DEMO	DEMOLISH/DEMOLITION
DI	DROP INLET
DIA, ø	DIAMETER
DIM	DIMENSION
DIP	DUCTILE IRON PIPE
D/S	DOWNSTREAM
DW	DRIVEWAY
DWG	DRAWING
(E)	EXISTING
EA	EACH
EC	END CURVE
ECC	ECCENTRIC
EF	EACH FACE
EG	EXISTING GRADE
EL, ELEV	ELEVATION
ELC	EPOXY LINED & COATED
ELEC	ELECTRIC
ELL	ELBOW
EM	ELECTRIC METER
EOL	END OF LINE
EP	EDGE OF PAVEMENT
EQUIV	EQUIVALENT
ESMT	EASEMENT
EUC	EUCALYPTUS
EVC	END VERTICAL CURVE
EW	EACH WAY
EXP	EXPOSED
F&I	FURNISH & INSTALL
FD	FOUND
FDC	FIRE DEPARTMENT CONNECTION
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
F, FL	FLOW LINE
FLG	FLANGE
FLGD	FLANGED
FM	FORCE MAIN
FNC	FENCE
FRP	FIBER REINFORCED POLYESTER PIPE
FT	FOOT/FEET
FW	FRONT OF WALK
FWL	FACE OF WALL
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GB	GRADE BREAK
GM	GAS METER
GPM	GALLONS PER MINUTE
GRVL	GRAVEL
GS	GAS
GSV	GAS VALVE
GUY	GUY WIRE
GV	GATE VALVE
HD	HEAD
HDPE	HIGH DENSITY POLYETHYLENE
HDR	HEADER
HDW	HEADWALL
HGL	HYDRAULIC GRADE LINE
HORIZ	HORIZONTAL
HP	HINGE POINT
HP	HORSEPOWER
HP GAS	HIGH PRESSURE GAS
HPS	HIGH PRESSURE SWITCH
HR	HANDRAIL
H/T	HUB & TACK
HWL	HIGH WATER LEVEL
HYDRO	HYDROPNUEMATIC
ID	INSIDE DIAMETER
IN	INCH
INV	INVERT
IP	IRON PIPE
IRR	IRRIGATION
JP	JUNCTION POLE
LBS	POUNDS
LC	LENGTH OF CURVE
LCW	LONG CRESTED WEIR
LF	LINEAR FEET
LG	LONG
LT	LEFT
LPG	LIQUEFIED PETROLEUM GAS
MAX	MAXIMUM
MB	MAILBOX
MCC	MOTOR CONTROL CENTER
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MJ	MECHANICAL JOINT
MN	MAG NAIL
MP	MEDIUM PRESSURE GAS LINE
MPT	MALE PIPE THREAD
MRKR	MARKER
MS	MILD STEEL
NAVD	NORTH AMERICAN VERTICAL DATUM
NC	NORMALLY CONSOLIDATED
NGVD	NATIONAL GEODETIC VERTICAL DATUM
NIC	NOT IN CONTRACT
NPT	NATIONAL PIPE THREAD
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OH	OVERHEAD
OP	OPERATING
OSHA	OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION
O&M	OPERATIONS & MAINTENANCE
(P)	PROPOSED
PB	PULL BOX
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PE	PERMANENT EASEMENT
PER	PERIMETER
PI	POINT OF INTERSECTION
PIP	PLASTIC IRRIGATION PIPE
PLC	PROGRAMMABLE LOGIC CONTROLLER
P	PROPERTY LINE
PNL	PANEL
POC	POINT ON CURVE
POL	POINT ON LINE
POT	POINT ON TANGENT
PP	POWER POLE
PRC	POINT OF REVERSE CURVATURE
PRV	PRESSURE REDUCING VALVE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
PVCC	POINT OF VERTICAL COMPOUND CURVATURE
PVMT	PAVEMENT
PVRC	POINT OF VERTICAL REVERSE CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
R	RADIUS
RBR	REBAR
RC	RADIUS OF CURVE
RCP	REINFORCED CONCRETE PIPE
RD	RELATIVE DENSITY
RD	ROAD
RE	REFERENCE
REQD	REQUIRED
RET	RETURN
REV	REVISION
RGRCP	RUBBER GASKETED REINFORCED CONCRETE PIPE
RGS	RIGID GALVANIZED STEEL
RP	RADIUS POINT
RR	RAILROAD
RT	RIGHT
RTU	REMOTE TERMINAL UNIT
R/W	RIGHT OF WAY
(S)	SOLVENT WELD
S	SLIP
S=	SLOPE
SCH	SCHEDULE
SCP	STANDARD CONCRETE PIPE
SD	STORM DRAIN
SEC	SECTION
SERV	SERVICE
SF	SQUARE FEET
SP	SERVICE POLE
SPEC	SPECIFICATION
SPNDL	SPINDLE
SQ	SQUARE
SS	SANITARY SEWER
SS OR STS	STAINLESS STEEL
STA	STATION
STD	STANDARD
STL	STEEL
STP	STAND PIPE
STRC	STRUCTURE
STRP	STRIPING
SWL	SWALE
STWL	STILLING WELL
(T)	THREADED
T	THREAD
T&B	TOP & BOTTOM
TB	TOP OF BANK
TBM	TEMPORARY BENCHMARK
TC	TOP OF CURB
TCE	TEMPORARY CONSTRUCTION EASEMENT
TDI	TENSILE DUCTILE IRON
TELE	TELEPHONE
TF	TOP OF FOOTING
TFC	TOP FACE OF CURB
TG	TOP OF GRATE
TH	THREAD
TL	TOP OF LINING
TOE	TOE OF SLOPE
TOP	TOP OF SLOPE
TP	TELEPHONE POLE
TR	TELEPHONE RISER
TRANS	TRANSFORMER
TRFC	TRAFFIC
TS	TOP OF STRUCTURE
TSB	TELEPHONE SPLICE BOX
TYP	TYPICAL
TWL	TOP OF WALL
UG	UNDERGROUND
UP	UTILITY POLE
UT	UTILITY
U/S	UPSTREAM
VCP	VERIFIED CLAY PIPE
VERT	VERTICAL
VG	VALLEY GUTTER
VLT	VAULT
VLV	VALVE
W	WATER
WL	WATER LINE
WM	WATER METER
WS	WATER SERVICE
WV	WATER VALVE
WW	WASTE WATER
W/	WITH
W/O	WITHOUT

LINETYPES

LINETYPE EXISTING	LINETYPE NEW	DESCRIPTION
		WATER LEVEL
		BARRICADE
123	123	CONTOUR (DEPRESSION)
		CONTOUR (MAJOR)
		CONTOUR (MINOR)
		EMBANKMENT TOE
		EMBANKMENT TOP
		FENCE (BLOCK WALL)
		FENCE (CHAIN LINK)
		FENCE (WOOD)
		FENCE (WIRE)
SF	SF	FENCE (SILT)
		GATE SWING
		GRADE BREAK
		GUARDRAIL
		RAILROAD
		RETAINING WALL
		SWALE CENTERLINE
		SWALE W/FLOW ARROWS
		WATER (LAKE/POND)
		WATER (MARSH/SWAMP)
C/C	XX" C/C	COMPUTER/COMM. (BURIED)
E	XX" ELEC (AERIAL)	ELECTRIC (AERIAL)
E	XX" ELEC (BURIED)	ELECTRIC (BURIED)
FO	XX" FO	FIBER–OPTIC
G	XX" GAS	GAS
IRR	XX" IRR	IRRIGATION
O	XX" OIL	OIL
S	XX" SS	SANITARY SEWER
FM	XX" FM	SANITARY SEWER FORCE MAIN
	XX"	SANITARY SEWER LATERAL
S I	XX" SI	SIGNAL INTERCONNECT (BURIED)
	XX" STEAM	STEAM
D	XX" SD	STORM DRAINAGE
T	XX" TELE (AERIAL)	TELEPHONE (AERIAL)
T	XX" TELE (BURIED)	TELEPHONE (BURIED)
TV	XX" TV (AERIAL)	TELEVISION (AERIAL LINE)
TV	XX" TV (BURIED)	TELEVISION (BURIED LINE)
W	XX" W	WATER
		CENTERLINE
		EASEMENT
		MEANDER LINE
		PROPERTY LINE
		RESERVATION/PARK/FOREST
		RIGHT–OF–WAY
		RELINQUISH ACCESS LINE
		SECTION LINE
		STATE/COUNTY/CORPORATE LIMIT
		REVISION CLOUD

HATCHES

HATCH TYPE EXISTING	HATCH TYPE NEW	DESCRIPTION
		AGGREGATE
		CONCRETE
		CONCRETE LINING (PLAN VIEW)
		EARTH
		RIP RAP
		SAND
		GRATING
		EXPANDED METAL

SYMBOLS

SYMBOL EXISTING	SYMBOL NEW	DESCRIPTION
		ELECTRIC METER
		PAD MOUNTED TRANSFORMER
E	E	ELECTRIC VAULT
		UTILITY POLE
		UTILITY POLE ANCHOR
		ELECTRIC MANHOLE
		GAS METER
		GAS VALVE
		SANITARY SEWER CLEAN OUT
S	OR	SANITARY SEWER MANHOLE
		SSMH (ECCENTRIC CONE)
		STORM DRAIN CATCH BASIN
		STORM DRAIN INLET
		STORM DRAIN CULVERT
D		STORM DRAIN MANHOLE
		MAIL BOX
		SIGN
		YARD LIGHT
		GUARD POST
		CONTROL POINT
		BENCH MARK
		IRON PIPE
		MONUMENT
		MONUMENT (OPTIONAL)
		OWNERSHIP TIE
NO.	NO.	LOT NUMBER
		TELEPHONE RISER
T	T	TELEPHONE VAULT
		2–NOZZLE HYDRANT
		3–NOZZLE HYDRANT
FD	FD	FIRE DEPT. CONNECTION
F	F	FIRE VAULT
		WATER METER
W	W	WELL
		WATER VALVE
		BLOW–OFF
		AIR RELIEF VALVE
BFP	BFP	BACK FLOW PREVENTOR
		GATE VALVE HANDLE
		STILLING WELL
		FENCE POST
		FENCE GATE
	XX	REVISION
	X	CONSTRUCTION CALLOUT
# / SHT		DETAIL NUMBER / SHEET NUMBER — DETAIL CALLOUT
		LINE BREAK
		PIPE END (SCHEMATIC)
		PIPE END
		EMBANKMENT ARROW
HWL= XXX.XX		HIGH WATER LINE
XXX.X± FG MATCH (E)		SPOT ELEVATION DESCRIPTION — SPOT ELEVATION
		SECTION VIEW

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PRELIMINARY 15% PLANS
NOT FOR CONSTRUCTION
11-20-2014

No.	REVISION	BY	DATE

REGISTERED PROFESSIONAL ENGINEER — OEK 47444 — STATE OF CALIFORNIA — FOR REVIEW ONLY

DATE SIGNED: ____

CROSS VALLEY CANAL EXTENSION LINING PROJECT
PHASE 2–POOL NO. 8
KCWA IMPROVEMENT DISTRICT NO. 4
KERN COUNTY, CA

LEGEND & ABBREVIATIONS

PROVOST & PRITCHARD ENGINEERING GROUP
An Employee Owned Company
1800 30th STREET, SUITE 280
BAKERSFIELD, CALIFORNIA 93301
661/616-5900 FAX 661/616-5890
www.ppeng.com

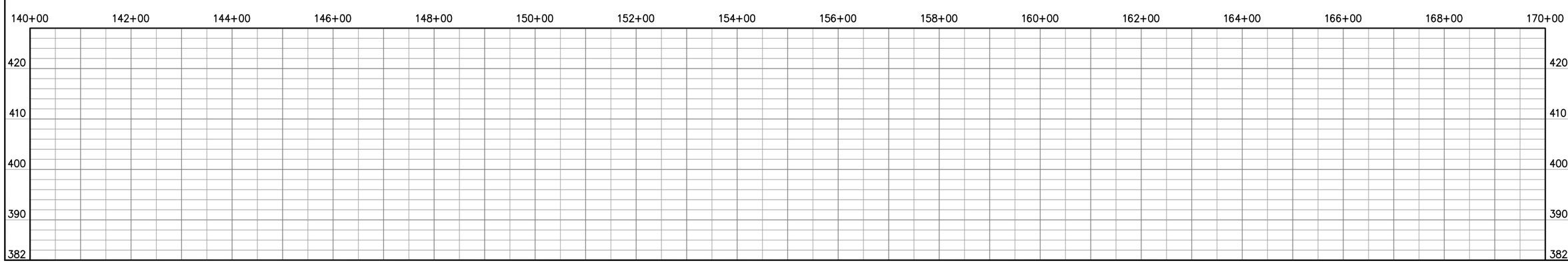
DESIGN ENGINEER: OEK
LICENSE NO: 47444
DRAFTED BY: PPI | CHECKED BY: CM
DATE: 11-20-2014
JOB NO: 104814B3

0 ——— 1
ORIGINAL SCALE SHOWN IS IN INCHES. ADJUST SCALE FOR REDUCED OR ENLARGED PLANS.

SHEET 2 OF 8

NOTES

1. PROPERTY LINES ARE BASED ON KERN COUNTY PARCEL DATA AND ARE SHOWN FOR REFERENCE ONLY.



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11-20-2014

No.	REVISION	BY	DATE

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STATE OF CALIFORNIA

DATE SIGNED: _____

CROSS VALLEY CANAL EXTENSION LINING PROJECT
PHASE 2-POOL NO. 8
KCWA IMPROVEMENT DISTRICT NO. 4
KERN COUNTY, CA

STA 139+97 TO 170+00

PROVOST & PRITCHARD
CONSULTING GROUP
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430 E. State Street, Suite 206
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SHEET 3 OF 8

12/8/2014 10:49 AM \\evolution\civ clients\Clients\kern county water agency-1044\104414b3 cvc extension lining\DWG\SHEET\P001-R\3 STA 139+97.15 TO 169+97.dwg -Phillip Dansby

SC CONSTRUCT STRUCTURE TO CANAL LINING CONNECTION (1/7)

LD F&I CANAL SAFETY LADDER (4/7)

SF F&I SAFETY CABLE & FLOAT ASSEMBLY (5/7)

NOTES

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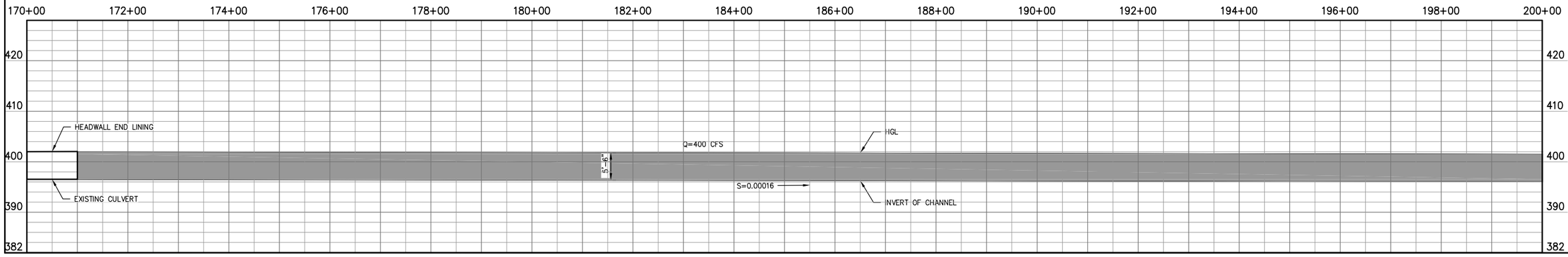

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DATE SIGNED: _____

CROSS VALLEY CANAL EXTENSION LINING PROJECT
PHASE 2-POOL NO. 8
KCWA IMPROVEMENT DISTRICT NO. 4
KERN COUNTY, CA

STA 170+00 TO 200+00

PROVOST & PRITCHARD
CONSULTING GROUP
An Employee Owned Company
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BAKERSFIELD, CALIFORNIA 93301
661/616-5900 FAX 661/616-5890
www.ppeng.com

DESIGN ENGINEER: OEK
LICENSE NO: 47444
DRAFTED BY: PPI | CHECKED BY: CM
DATE: 11-20-2014
JOB NO: 104814B3

0 1
ORIGINAL SCALE SHOWN IS IN INCHES. ADJUST SCALE FOR REDUCED OR ENLARGED PLANS.

SHEET 4 OF 8

12/8/2014 10:49 AM \\evolution\civ clients\Kern county water agency-1044\104414b3 cvc extension lining\TWR\SHEET\P201-R1v4 STA 170+00 TO 200+00.dwn -Phillip Dunaby

WARNING
POWER LINES OVERHEAD

811
Know what's **below.**
Call before you dig.

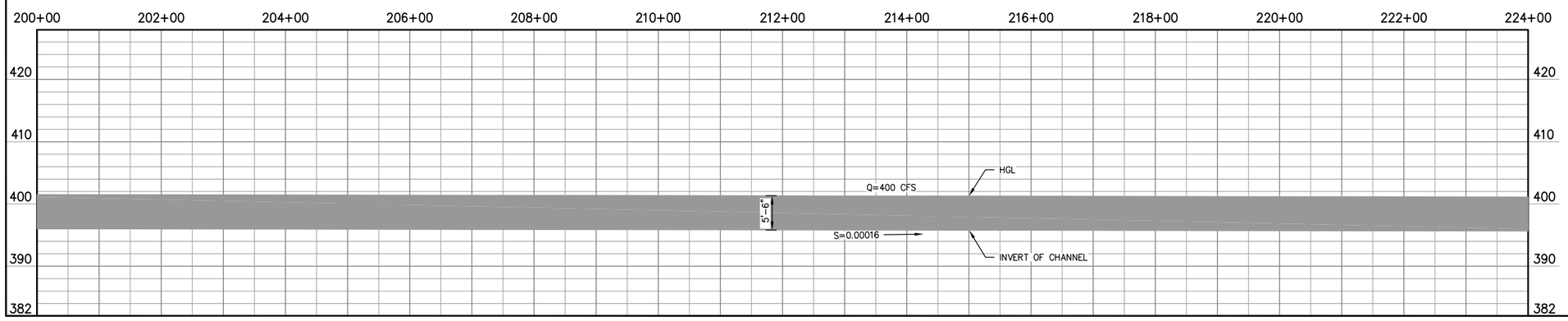
MATCHLINE
STA 200+00
SEE SHEET 3

SCALE IN FEET
0 50 100 200

SC CONSTRUCT STRUCTURE TO CANAL LINING CONNECTION (1/7)

LD F&I CANAL SAFETY LADDER (4/7)

SF F&I SAFETY CABLE & FLOAT ASSEMBLY (5/7)



NOTES

1. PROPERTY LINES ARE BASED ON KERN COUNTY PARCEL DATA AND ARE SHOWN FOR REFERENCE ONLY.

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PRELIMINARY 15% PLANS
NOT FOR CONSTRUCTION
11-20-2014

No.	REVISION	BY	DATE

NOT FOR REGULATORY APPROVAL
REGISTERED PROFESSIONAL ENGINEER
OLIVER E. KROEKER
No. 47444
STATE OF CALIFORNIA
FOR REVIEW ONLY

DATE SIGNED: _____

CROSS VALLEY CANAL EXTENSION LINING PROJECT
PHASE 2–POOL NO. 8
KCWA IMPROVEMENT DISTRICT NO. 4
KERN COUNTY, CA

STA 200+00 TO 224+00

PROVOST & PRITCHARD
CONSULTING GROUP
An Employee Owned Company
1400 30th STREET, SUITE 280
BAKERSFIELD, CALIFORNIA 93301
661/616-5900 FAX 661/616-5890
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LICENSE NO: 47444
DRAFTED BY: PPI
CHECKED BY: CM
DATE: 11-20-2014
JOB NO: 104814B3

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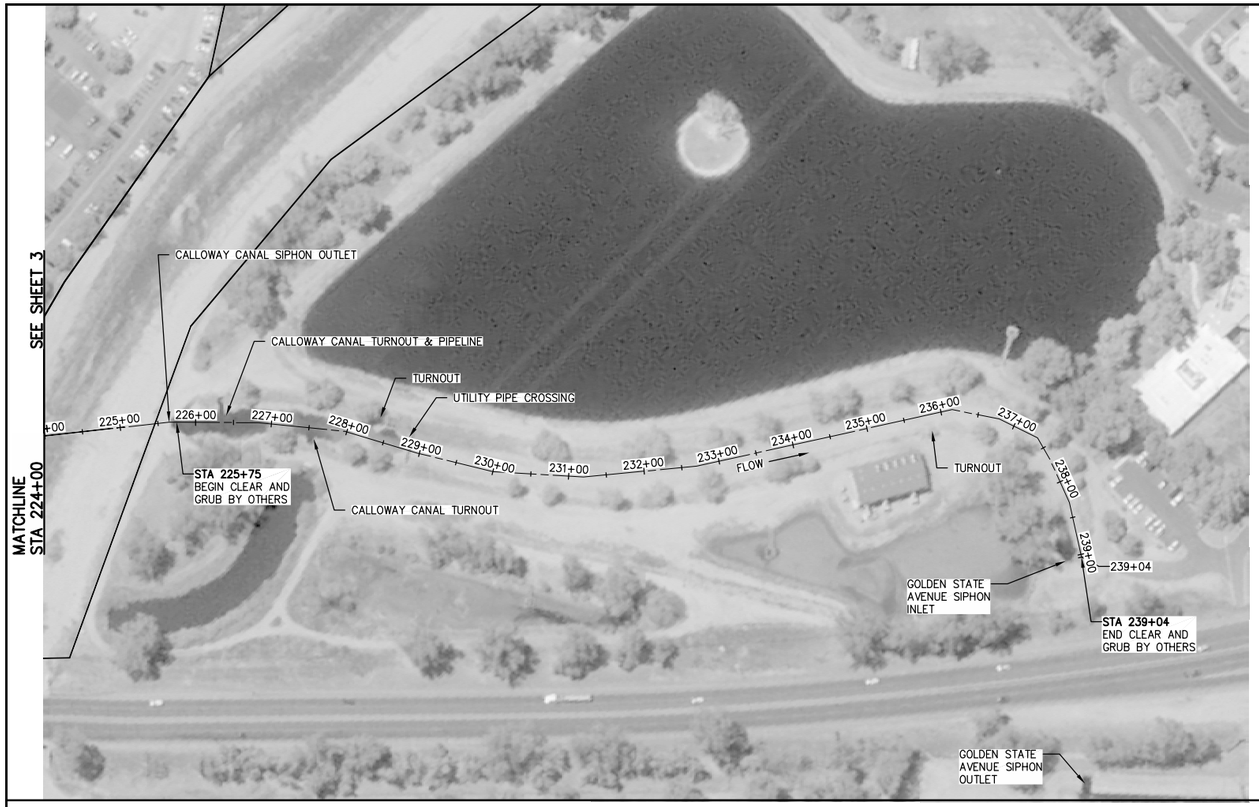
ORIGINAL SCALE SHOWN IS IN INCHES. ADJUST SCALE FOR REDUCED OR ENLARGED PLANS.

SHEET 5 OF 8

11/6/2014 10:50 AM \\evolution\civ clients\Clients\kern county water agency-104A\104414b3 cvc extension lining\DWG\SHEET\P09 -#1.5 STA 200+00 TO FND.dwg -Phillip Donahy



MATCHLINE STA 200+00 SEE SHEET 3

WARNING
POWER LINES OVERHEAD

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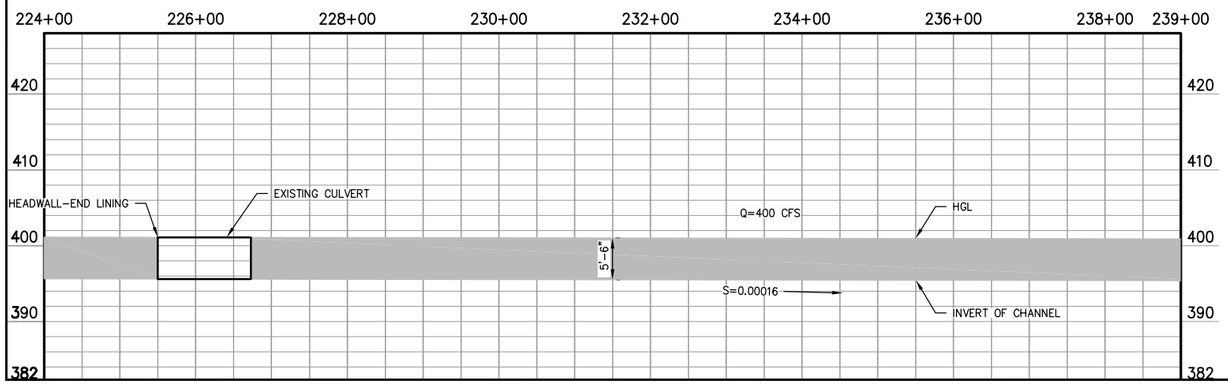
PRELIMINARY 15% PLANS
NOT FOR CONSTRUCTION
11-20-2014

No.	REVISION	BY	DATE

DATE SIGNED: _____

- SC — CONSTRUCT STRUCTURE TO CANAL LINING CONNECTION — 1/7
- LD — F&I CANAL SAFETY LADDER — 4/7
- SF — F&I SAFETY CABLE & FLOAT ASSEMBLY — 5/7



NOTES

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CROSS VALLEY CANAL EXTENSION LINING PROJECT
PHASE 2–POOL NO. 8
KCWA IMPROVEMENT DISTRICT NO. 4
KERN COUNTY, CA

STA 224+00 TO END

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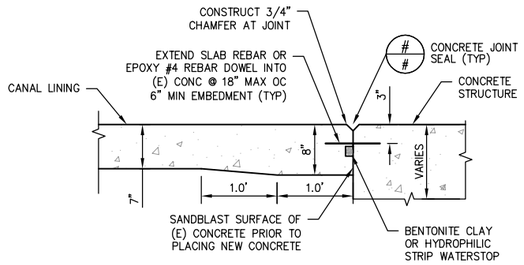
ORIGINAL SCALE SHOWN IS IN INCHES. ADJUST SCALE FOR REDUCED OR ENLARGED PLANS.

SHEET 6 OF 8

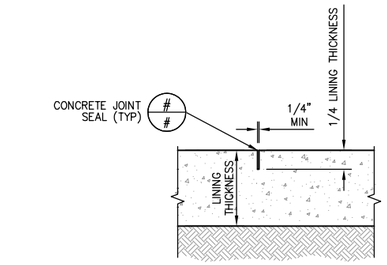
17/8/2014 10:50 AM \\evolution\civ clients\Clients\kern county water agency-1044\104414b3 cvc extension lining\DWG\SHEET\P09 -RVR STA 224+00 TO END.dwg -Phillip Donahy



NOTE:
BENTONITE CLAY & HYDROPHILIC STRIP WATERSTOP TO HAVE MIN 3" OF CONCRETE COVER BOTH SIDES.

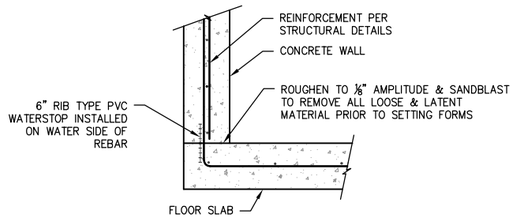
FEET 0 .5 1

1/7 STRUCTURE TO LINING CONNECTION



FEET 0 .5 1

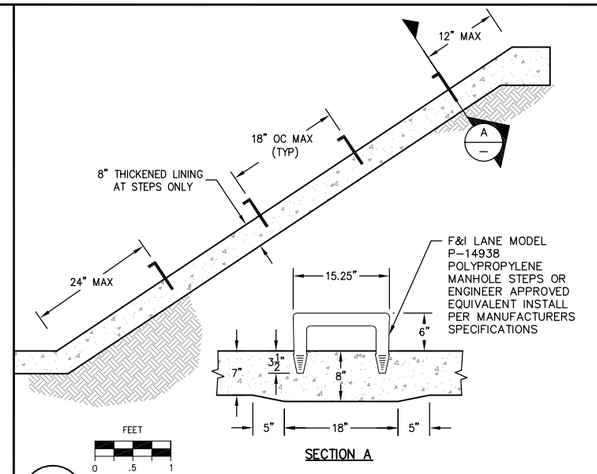
2/7 CONTROL JOINT



NOTE:
ALL FLOOR TO WALL CONSTRUCTION JOINTS SHALL HAVE 6" RIB TYPE PVC WATERSTOP

FEET 0 .5 1

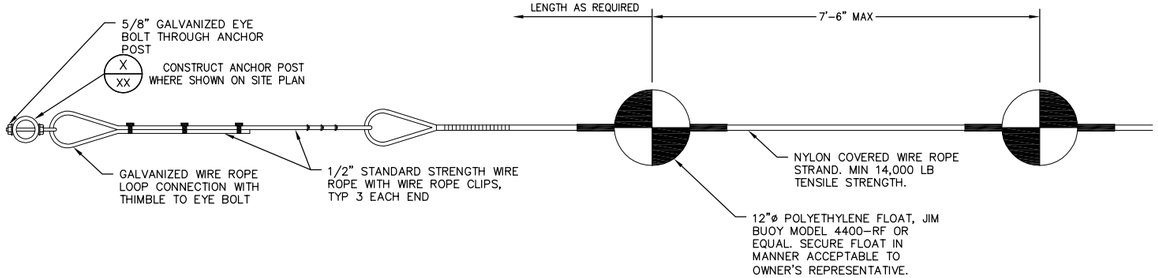
3/7 CONCRETE CONSTRUCTION JOINT



SECTION A

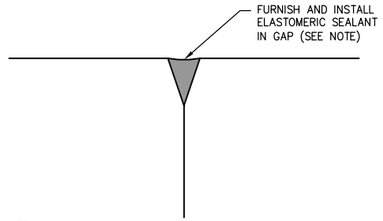
FEET 0 .5 1

4/7 CANAL SAFETY LADDER



NOT TO SCALE

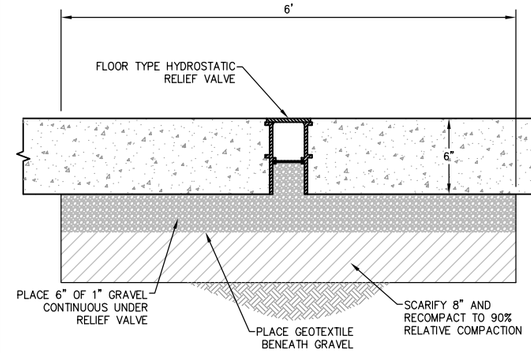
5/7 SAFETY CABLE AND FLOAT ASSEMBLY



SEALANT NOTE:
ALL COLD JOINT INTERFACES BETWEEN CONCRETE SURFACES SHALL BE FILLED WITH "SIKAFLEX 2C" ELASTOMERIC SEALANT OR APPROVED EQUAL. CONCRETE SHALL CURE FOR AT LEAST 72 HOURS PRIOR TO SEALANT PLACEMENT. CLEAN OUT GAP PRIOR TO SEALANT PLACEMENT AND APPLY ACCORDING TO PRODUCT MANUFACTURER REQUIREMENTS. SEALANT SHALL FILL JOINT COMPLETELY.

NOT TO SCALE

6/7 CONCRETE JOINT SEAL



NOT TO SCALE

7/7 FLOOR TYPE HYDROSTATIC RELIEF VALVE

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PRELIMINARY 15% PLANS
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11-20-2014

No.	REVISION	BY	DATE

REGISTERED PROFESSIONAL ENGINEER ★ STATE OF CALIFORNIA ★ NO. 78888 — FOR REVIEW ONLY

DATE SIGNED: ____

CROSS VALLEY CANAL EXTENSION LINING PROJECT
PHASE 2–POOL NO. 8
KCWA IMPROVEMENT DISTRICT NO. 4
KERN COUNTY, CA

CONSTRUCTION DETAILS

PROVOST & PRITCHARD
CONSULTING GROUP
EST. 1961
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1800 30th STREET, SUITE 280
BAKERSFIELD, CALIFORNIA 93301
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DRAFTED BY: PPI | CHECKED BY: CM
DATE: 11-20-2014
JOB NO: 104814B3

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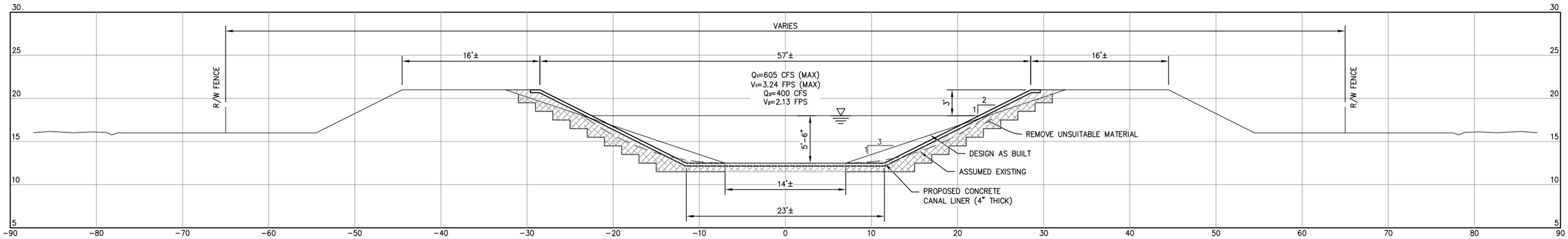
SHEET 7 OF 8

12/8/2014 10:51 AM \\revolution\civ clients\kern county water agency-1044\104414b3 cvc extension lining\DWG\SHEET\D001-R16 CONSTRUCTION DETAILS.dwg -Phillip Tandiw



FEET
0 3 6

1/8

TYPICAL FILL SECTION
L=6,477 LF±

ESTIMATED QUANTITIES

UNSUITABLE MATERIAL	2.85 CY/LF
COMPACTED FILL AREA	3.14 CY/LF
CANAL LINER	63.21 SQ FT/LF

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11-20-2014

No.	REVISION	BY	DATE

REGISTERED PROFESSIONAL ENGINEER
Nicholas Kenneth Gross
No. 47444
STATE OF CALIFORNIA
CIVIL
RELEASED FOR REVIEW ONLY
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CROSS VALLEY CANAL EXTENSION LINING PROJECT
PHASE 2-POOL NO. 8
KCWA IMPROVEMENT DISTRICT NO. 4
KERN COUNTY, CA

TYPICAL CROSS SECTION DETAILS

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SHEET 8 OF 8

12/8/2014 10:58 AM \\evolution\civ clients\Clients\kern county water agency-1044\104414b3 cvc extension lining\DWG\SHEET\POO1 -rk7 TYPICAL CROSS SECTION DETAILS.dwg -Phillip Dansby