Appendix C: Borel Project 30% Design Plans

PAGE INTENTIONALLY LEFT BLANK

CAUTION! THE LOCATION OF EXISTING UTILITIES SHOWN IS APPROXIMATE. ALL EXISTING UTILITIES SHALL BE POTHOLED PRIOR TO CONSTRUCTION.

* CALL BEFORE YOU DIG *
CONTACT UNDERGROUND SERVICE ALERT (USA)
1-800-227-2600
PRIOR TO ANY CONSTRUCTION WORK

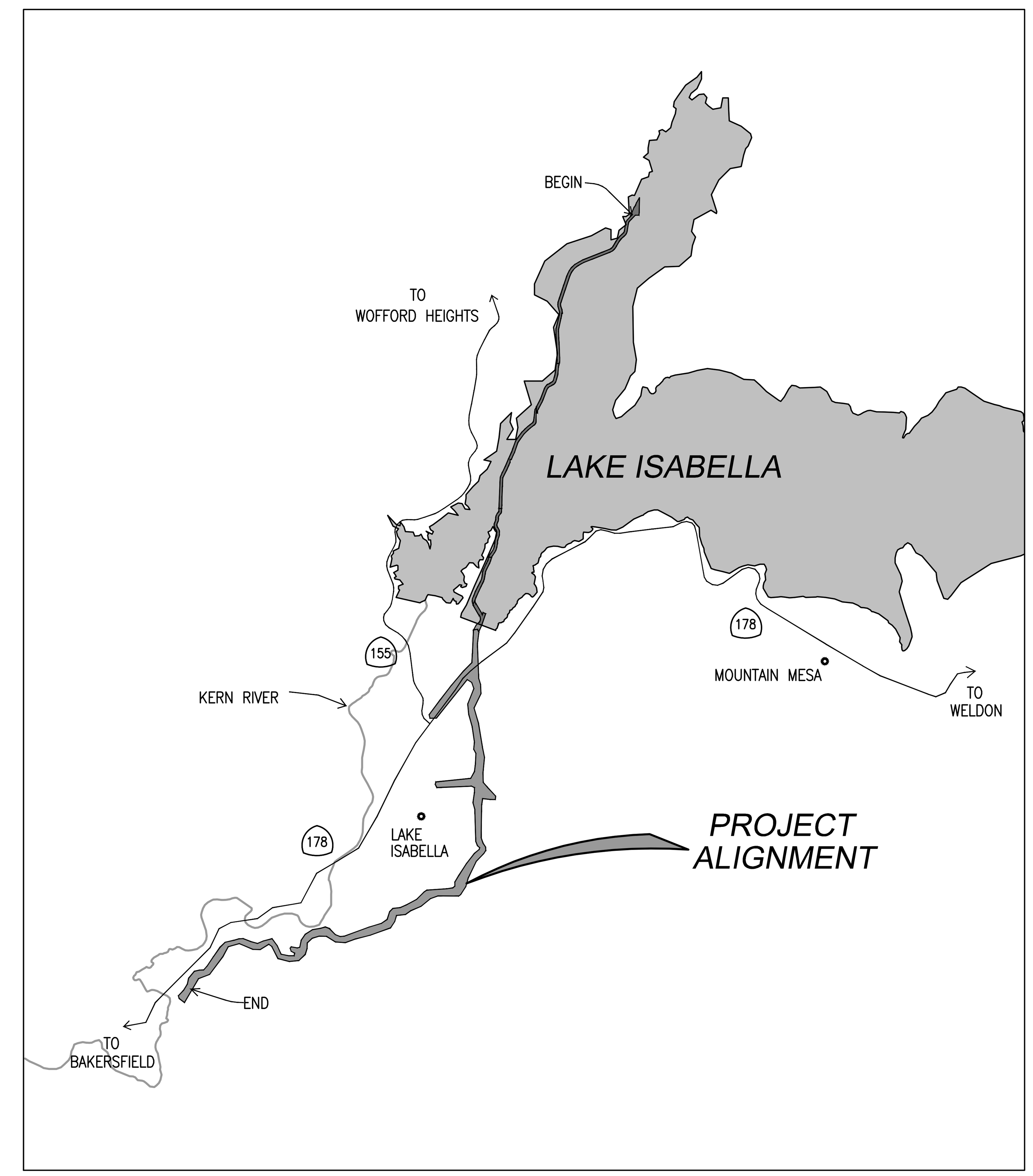
SOUTHERN CALIFORNIA EDISON
APPLICATION FOR SURRENDER OF LICENSE
BOREL HYDROELECTRIC PROJECT - FERC PROJECT NO. 382

DRAFT 30% PLAN

LAKE ISABELLA, CA

MAY 2023

STATE OF CALIFORNIA
N.T.S.



ISABELLA LAKE MAP
N.T.S.

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

COVER SHEET

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

SCALE
D/L

G-001

SOUTHERN CALIFORNIA EDISON
2012 – 4 SIZE

DWG NO.	SHT ORDR	DESCRIPTION
G-001	1	COVER SHEET
G-002	2	SHEET INDEX
G-003	3	NOTES, ABBREVIATIONS, LEGEND
V-101	4	AERIAL PHOTO AND PROPERTY OWNERSHIP - STA 30+00 TO STA 108+00
V-102	5	AERIAL PHOTO AND PROPERTY OWNERSHIP - STA 108+00 TO STA 190+00
V-103	6	AERIAL PHOTO AND PROPERTY OWNERSHIP - STA 190+00 TO STA 269+00
V-104	7	AERIAL PHOTO AND PROPERTY OWNERSHIP - STA 269+00 TO STA 349+00
V-105	8	AERIAL PHOTO AND PROPERTY OWNERSHIP - STA 349+00 TO STA 434+00
V-106	9	AERIAL PHOTO AND PROPERTY OWNERSHIP - STA 434+00 TO STA 529+00
V-107	10	AERIAL PHOTO AND PROPERTY OWNERSHIP - STA 529+00 TO STA 628+74
C-100	11	CIVIL KEY MAP
C-101	12	DECOMMISSIONING PLAN - STA 30+00 TO STA 56+00
C-102	13	DECOMMISSIONING PLAN - STA 56+00 TO STA 81+50
C-103	14	DECOMMISSIONING PLAN - STA 81+50 TO STA 108+00
C-104	15	DECOMMISSIONING PLAN - STA 108+00 TO STA 134+00
C-105	16	DECOMMISSIONING PLAN - STA 134+00 TO STA 160+00
C-106	17	DECOMMISSIONING PLAN - STA 160+00 TO STA 187+00
C-107	18	DECOMMISSIONING PLAN - STA 187+00 TO STA 213+50
C-108	19	DECOMMISSIONING PLAN - STA 213+50 TO STA 240+50
C-109	20	DECOMMISSIONING PLAN - STA 240+50 TO STA 266+00
C-110	21	DECOMMISSIONING PLAN - STA 266+00 TO STA 287+00
C-111	22	DECOMMISSIONING PLAN - STA 287+00 TO STA 311+00
C-112	23	DECOMMISSIONING PLAN - STA 311+00 TO STA 335+50
C-113	24	DECOMMISSIONING PLAN - STA 335+50 TO STA 360+00
C-114	25	DECOMMISSIONING PLAN - STA 360+00 TO STA 384+50
C-115	26	DECOMMISSIONING PLAN - STA 384+50 TO STA 410+50
C-116	27	DECOMMISSIONING PLAN - STA 410+50 TO STA 435+00
C-117	28	DECOMMISSIONING PLAN - STA 435+00 TO STA 460+00
C-118	29	DECOMMISSIONING PLAN - STA 460+00 TO STA 486+50
C-119	30	DECOMMISSIONING PLAN - STA 486+50 TO STA 511+50
C-120	31	DECOMMISSIONING PLAN - STA 511+50 TO STA 541+00
C-121	32	DECOMMISSIONING PLAN - STA 541+00 TO STA 568+00
C-122	33	DECOMMISSIONING PLAN - STA 568+00 TO STA 593+50
C-123	34	DECOMMISSIONING PLAN - STA 593+50 TO STA 619+00
C-124	35	DECOMMISSIONING PLAN - STA 619+00 TO STA 628+74
C-150	36	DECOMMISSIONING PLAN - ISLAND
C-151	37	DECOMMISSIONING PLAN - POWERHOUSE
C-301	38	TYPICAL CANAL SECTIONS (1 OF 2)
C-302	39	TYPICAL CANAL SECTIONS (2 OF 2)
C-501	40	DETAILS - TYPICAL CONDUIT SECTIONS
C-502	41	DETAILS - CANAL INLET STRUCTURES
C-503	42	DETAILS - TILLEY NO. 1 CONCRETE FLUME
C-504	43	DETAILS - TILLEY NO. 2 CONCRETE FLUME
C-505	44	DETAILS - TILLEY NO. 3 CONCRETE FLUME
C-506	45	DETAILS - REFUGIO CONCRETE BOX FLUME
C-507	46	DETAILS - RICH GULCH CONCRETE SIPHON
C-508	47	DETAILS - KERN RIVER CONCRETE SIPHON
C-509	48	DETAILS - SCHOOL HOUSE NO. 1 CONCRETE FLUME AND SCHOOL HOUSE CUT FLUME
C-510	49	DETAILS - ERSKINE STEEL FLUME
C-511	50	DETAILS - BODFISH SIPHON
C-512	51	DETAILS - PIONEER STEEL SIPHON
C-513	52	DETAILS - FLUME NO. 623
C-514	53	DETAILS - PROFANITY STEEL FLUME
C-515	54	DETAILS - FOREBAY STRUCTURE
C-516	55	DETAILS - PENSTOCKS
C-517	56	DETAILS - POWERHOUSE SECTIONS

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

SHEET INDEX

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

SCALE
D/L

G-002

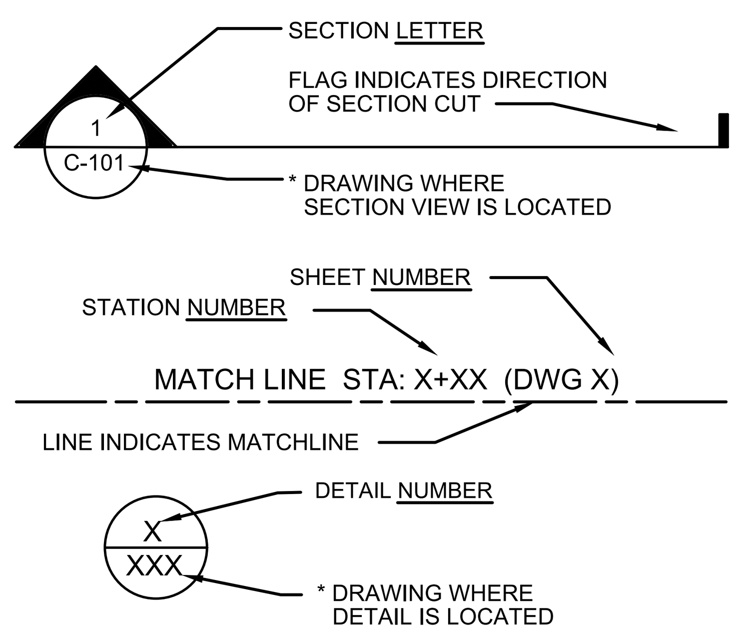
SOUTHERN CALIFORNIA EDISON
2012 – 4 SIZE

PLAN SHEET LEGEND

—— — — ——	PARCEL PROPERTY LINE
————	EXISTING CONTOUR (5' INTERVAL)
————	EXISTING CANAL EDGE
—— —— —	EXISTING EDGE OF PAVEMENT
— — — —	FERC BOUNDARY
hatch	STAGING AREA
hatch	DEMOLITION
hatch	SLURRY PLUG
hatch	EARTH

PLAN VIEW

1/4" = 1'-0"



ELEVATION, SECTION CUT, AND DETAIL MARKER

KEYNOTE DESIGNATION

ABBREVIATIONS

APPROX	APPROXIMATE, APPROXIMATELY
AVE	AVENUE
BEG	BEGIN
BLM	BUREAU OF LAND MANAGEMENT
BLVD	BOULEVARD
COMM	COMMUNICATION
CONC	CONCRETE
DR	DRIVE
(E)	EXISTING
E	EAST
FERC	FEDERAL ENERGY REGULATORY COMMISSION
FL	FLOW LINE
HORZ	HORIZONTAL
HP	HIGH POINT
LP	LOW POINT
MAX	MAXIMUM
MIN	MINIMUM
N.T.S	NOT TO SCALE
O&M	OPERATION AND MAINTENANCE
PIP	PROTECT IN PLACE
RD	ROAD
RSP	ROCK SLOPE PROTECTION
R/W	RIGHT OF WAY
SCE	SOUTHERN CALIFORNIA EDISON
ST	STREET
STA	STATION
TYP	TYPICAL
U.S.A	UNDERGROUND SERVICE ALERT
USFS	UNITED STATES FOREST SERVICE
VERT	VERTICAL

PROJECT CONTACT LIST

PUBLIC/ UTILITY SERVICE	RESPONSIBLE ENTITY	REPRESENTATIVE	PHONE
U.S.A.	--	--	(800) 642-2444
PROJECT MANAGER	SCE	MARY M. RICHARDSON "MEG"	(626) 238-2902
PROJECT MANAGER	HDR	JARVIS CALDWELL	(916) 679-8875
CIVIL ENGINEER	HDR	KEVIN FELLOWS	(916) 337-8348
ROADS	KERN COUNTY PUBLIC WORKS DEPARTMENT	YOLANDA ALCANTAR	(661) 862-5292
DISTRICT RANGER	USFS	ALFRED WATSON	760-376-7381
WATER	ERSKINE CREEK WATER COMPANY	JUSTIN SLINKARD	(760) 349-3232

GENERAL NOTES:

1. TOPOGRAPHIC AND PROPERTY SURVEYS WILL BE COMPLETED AT THE 65% LEVEL DESIGN. THE LIMITS OF THE FERC BOUNDARY, INCLUDING DESIGNATED FERC PROJECT ACCESS ROADS, WILL BE FINALIZED AT THAT TIME. THE LIMITS OF TEMPORARY CONSTRUCTION EASEMENTS (TCE'S) REQUIRED FOR ACCESS ROADS OR STAGING AREAS MAY BE REVISED AT THE 65% LEVEL DESIGN DEPENDING UPON THE SUPPLEMENTAL SURVEY INFORMATION PROVIDED.

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

NOTES, ABBREVIATIONS, LEGEND

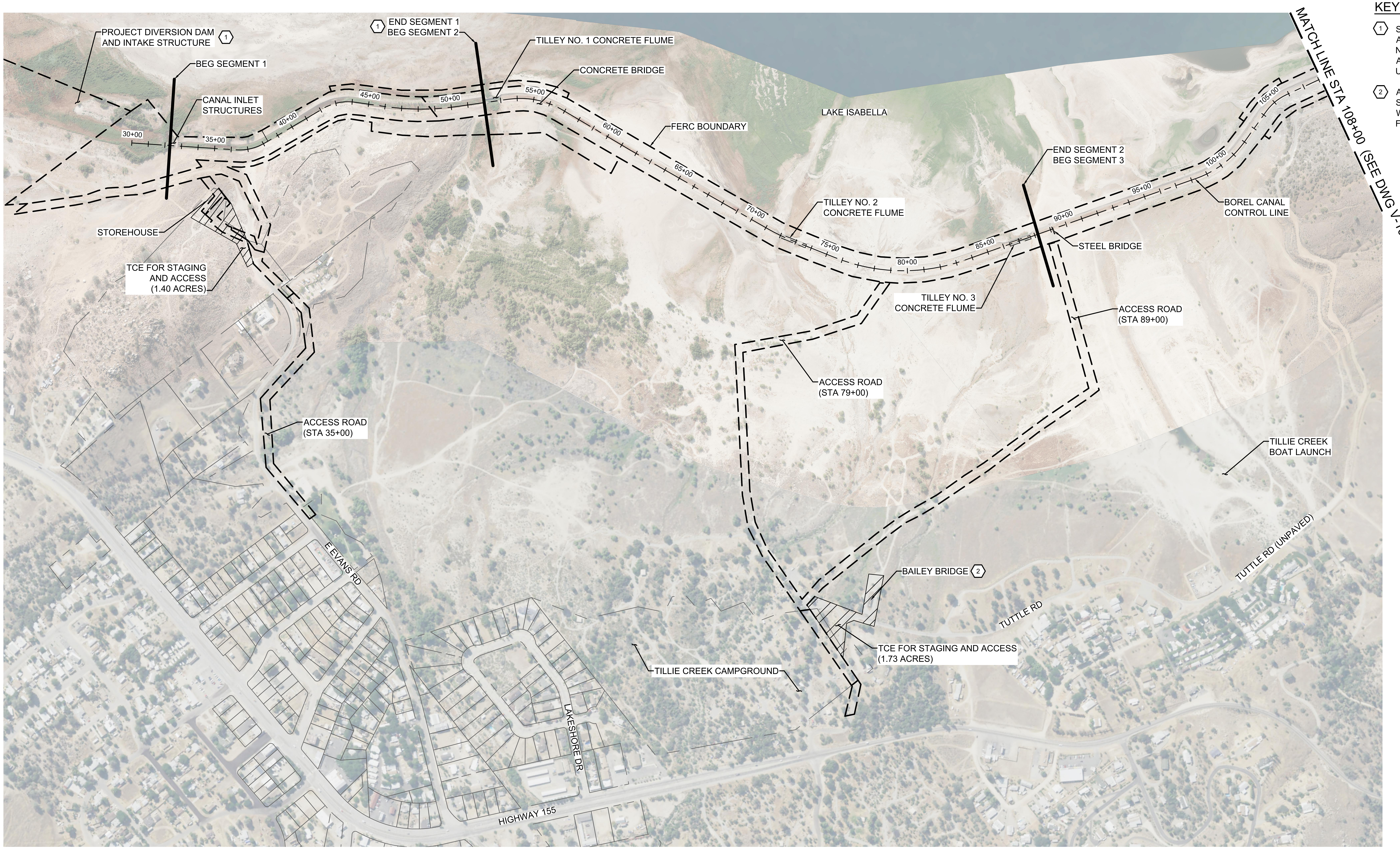
SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company

HDR

SCALE D/L

G-003

1 2 3 4 5 6 7 8 9 10 11 12



KEY NOTES:

1. SEGMENT 1 BEGINS AT PROJECT DIVERSION DAM AND INTAKE STRUCTURE, WHICH IS NOT SHOWN. NO WORK IS PROPOSED AT THE DIVERSION DAM AND INTAKE STRUCTURE OR ANYWHERE UPSTREAM OF THE CANAL INLET STRUCTURES.
2. ABANDON BAILEY BRIDGE IN PLACE. THE BRIDGE STRUCTURE, BRIDGE SUPPORTS, AND FENCING WILL BE LEFT IN PLACE AT THE REQUEST OF THE FOREST SERVICE.

PLAN STA 30+00 TO STA 108+00

SCALE: 1"=300'

0 300 600

A B C D E F G H

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

AERIAL PHOTO AND PROPERTY OWNERSHIP
STA 30+00 TO STA 108+00

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company HDR

SCALE
D/L

V-101

SOUTHERN CALIFORNIA EDISON
2012 – 4 SIZE

PLAN STA 108+00 TO STA 190+00

SCALE: 1"=300'

0 300 600

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

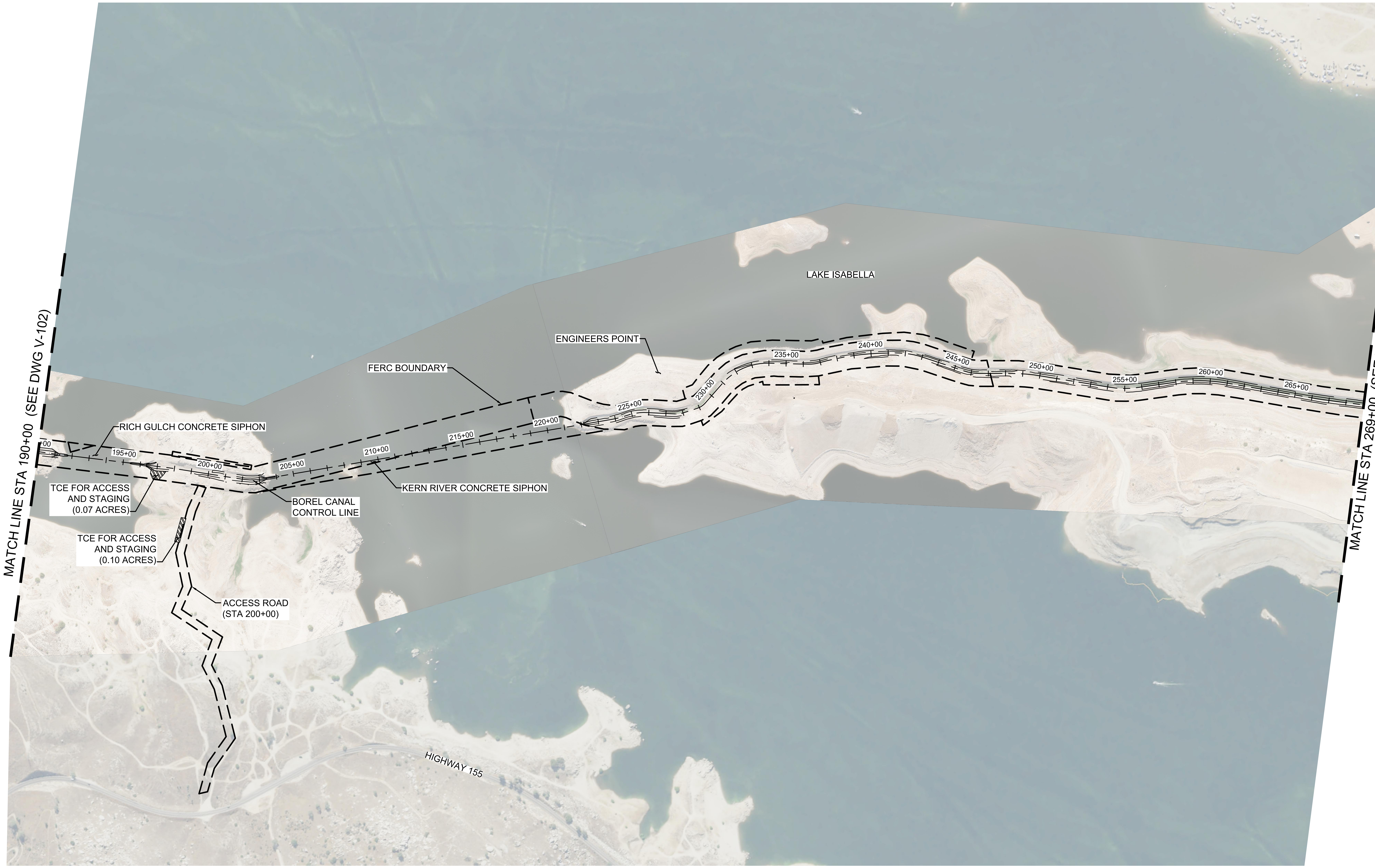
AERIAL PHOTO AND PROPERTY OWNERSHIP
STA 108+00 TO STA 190+00

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company

HDR

SCALE D/L

V-102



PLAN STA 190+00 TO STA 269+00

SCALE: 1"=300'

0 300 600

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

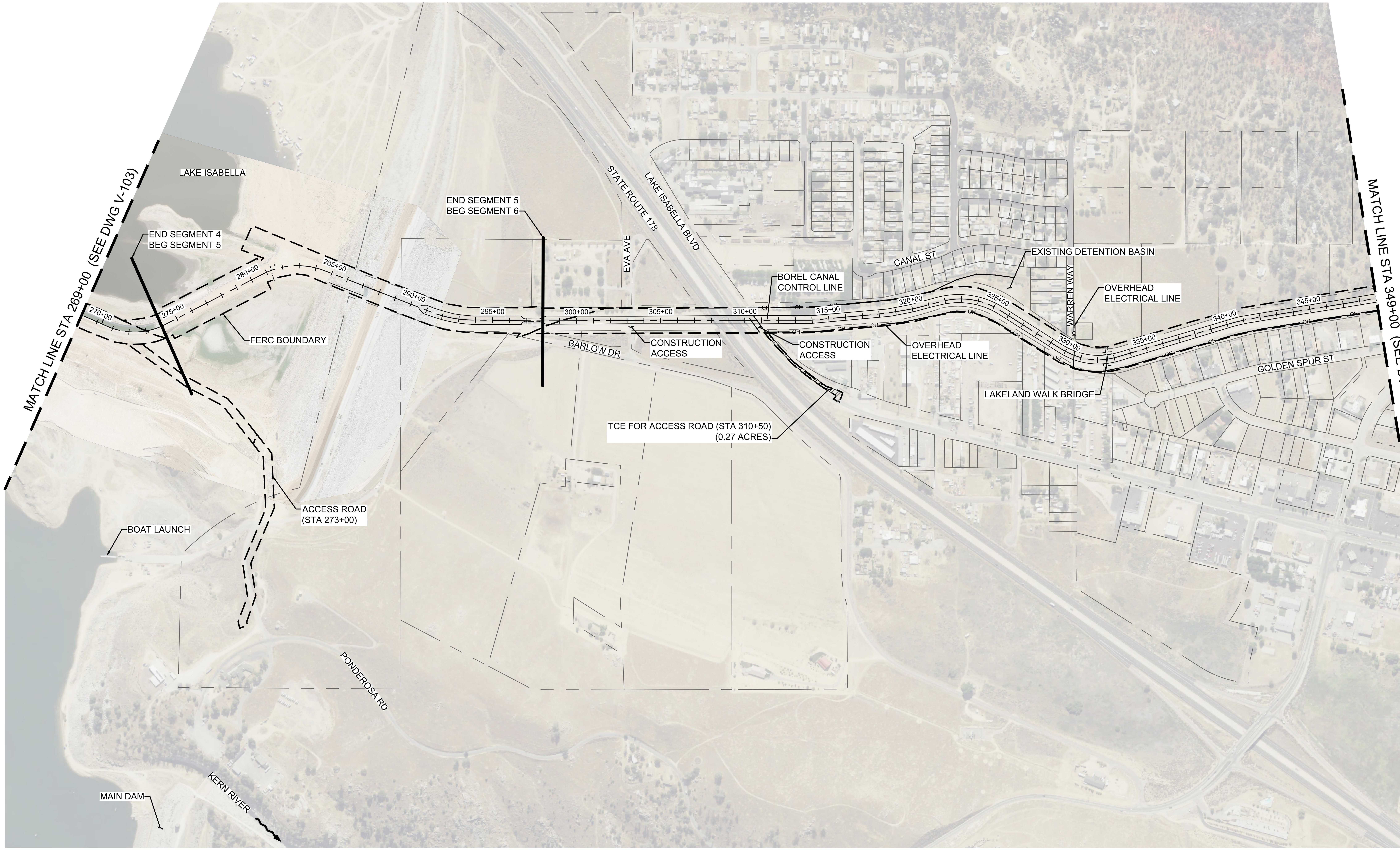
AERIAL PHOTO AND PROPERTY OWNERSHIP
STA 190+00 TO STA 269+00

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

SCALE D/L

V-103

SOUTHERN CALIFORNIA EDISON
2012 - 4 SIZE



PLAN STA 269+00 TO STA 349+00

SCALE: 1"=300'

0 300 600

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

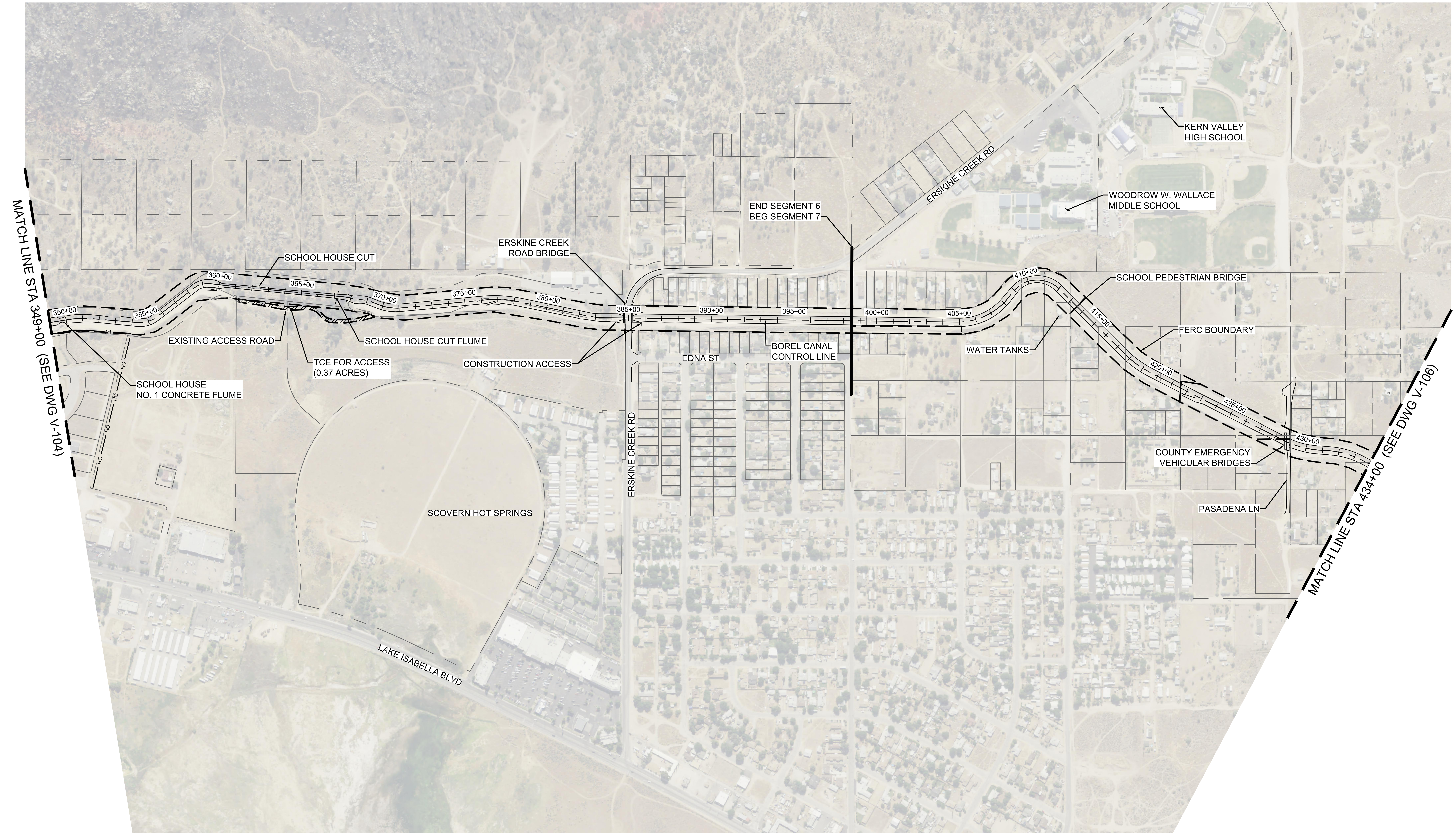
AERIAL PHOTO AND PROPERTY OWNERSHIP
STA 269+00 TO STA 349+00

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

SCALE D/L

V-104

SOUTHERN CALIFORNIA EDISON
2012 – 4 SIZE



PLAN STA 349+00 TO STA 434+00

SCALE: 1"=300'

0 300 600

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

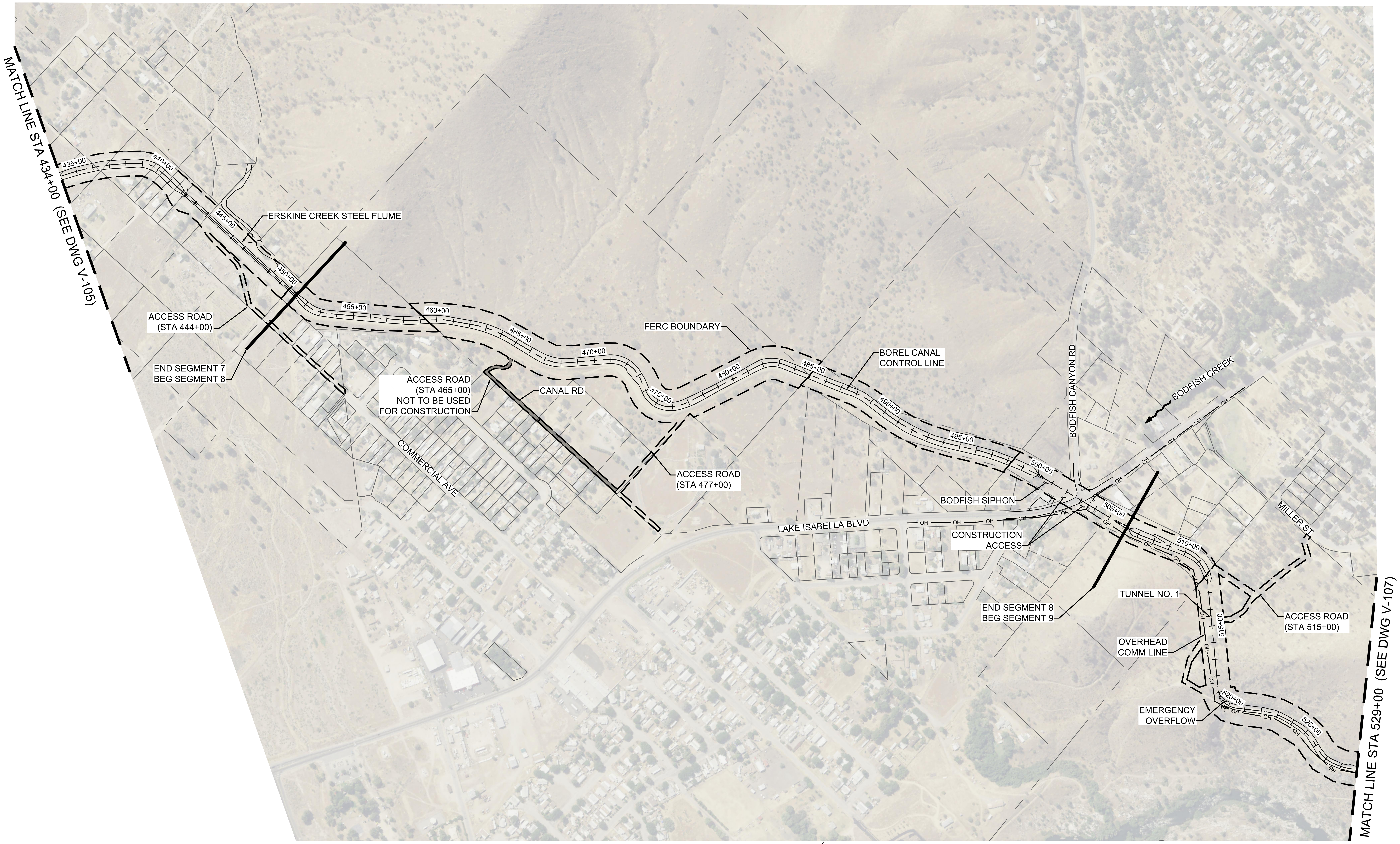
AERIAL PHOTO AND PROPERTY OWNERSHIP
STA 349+00 TO STA 434+00

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company

HDR

SCALE D/L

V-105



PLAN STA 434+00 TO STA 529+00

SCALE: 1"=300'

0 300 600

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

AERIAL PHOTO AND PROPERTY OWNERSHIP
STA 434+00 TO STA 529+00

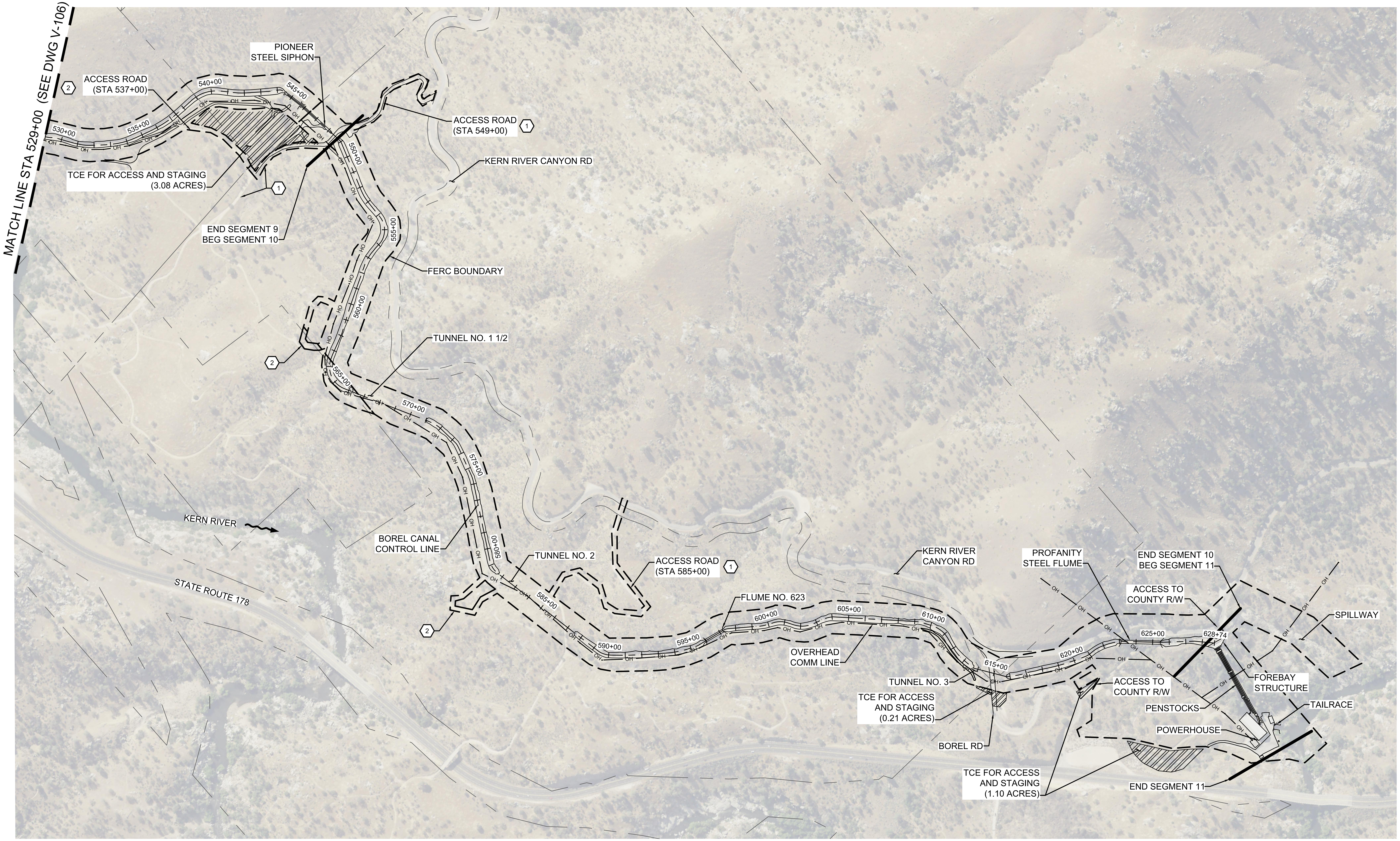
SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

SCALE D/L

V-106

SOUTHERN CALIFORNIA EDISON
2012 – 4 SIZE

1 2 3 4 5 6 7 8 9 10 11 12



KEY NOTES:

1. USFS ROADWAY. CONTRACTOR MUST MAINTAIN ACCESS THROUGH THE FERC BOUNDARY DURING CONSTRUCTION AND REPAIR TO MATCH PREPROJECT CONDITIONS UPON COMPLETION OF WORK.
2. NON-USFS ROADWAY, CONTRACTOR MUST ABANDON UPON COMPLETION OF WORK (GRADE TO PROMOTE POSITIVE DRAINAGE DOWN SLOPE, SCARIFY, AND HYDROSEED).

A B C D E F G H

PLAN STA 529+00 TO STA 628+74

SCALE: 1"=300'

0 300 600

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

AERIAL PHOTO AND PROPERTY OWNERSHIP
STA 529+00 TO STA 628+74

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company | HDR

SCALE D/L

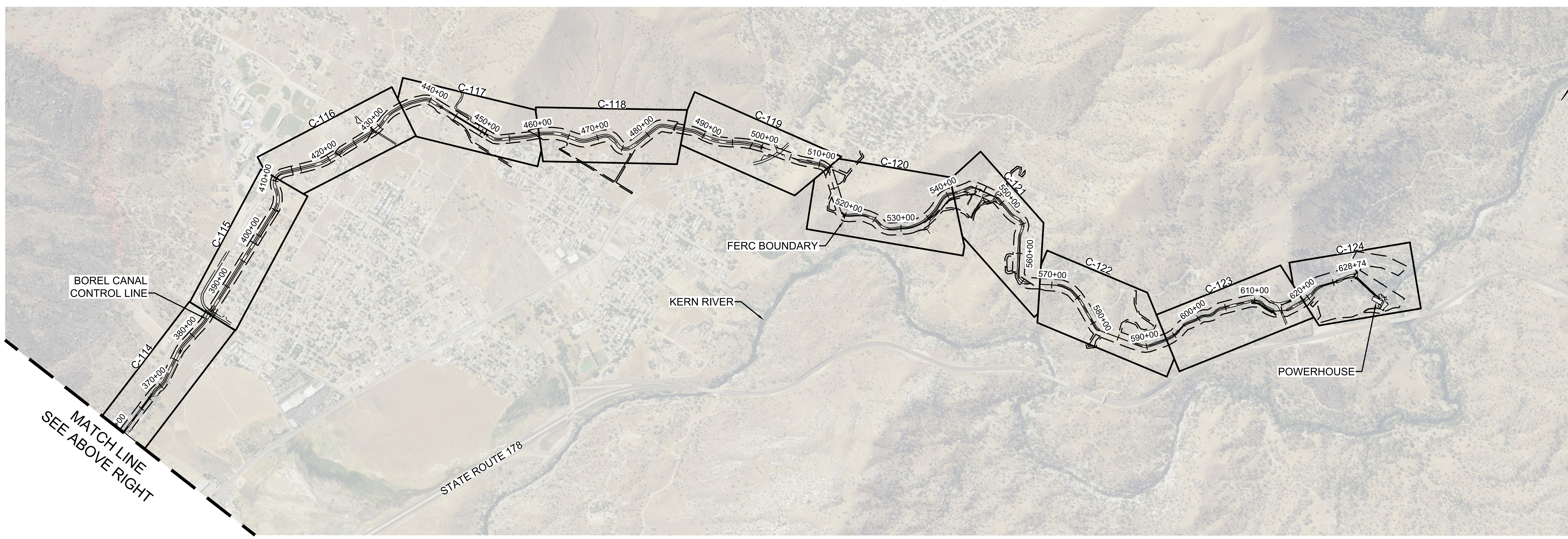
V-107

SOUTHERN CALIFORNIA EDISON
2012 – 4 SIZE

PLAN

SCALE: 1"=1000'

0 1000 2000



PLAN

SCALE: 1"=1000'

0 1000 2000

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

CIVIL KEY MAP

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

HDR

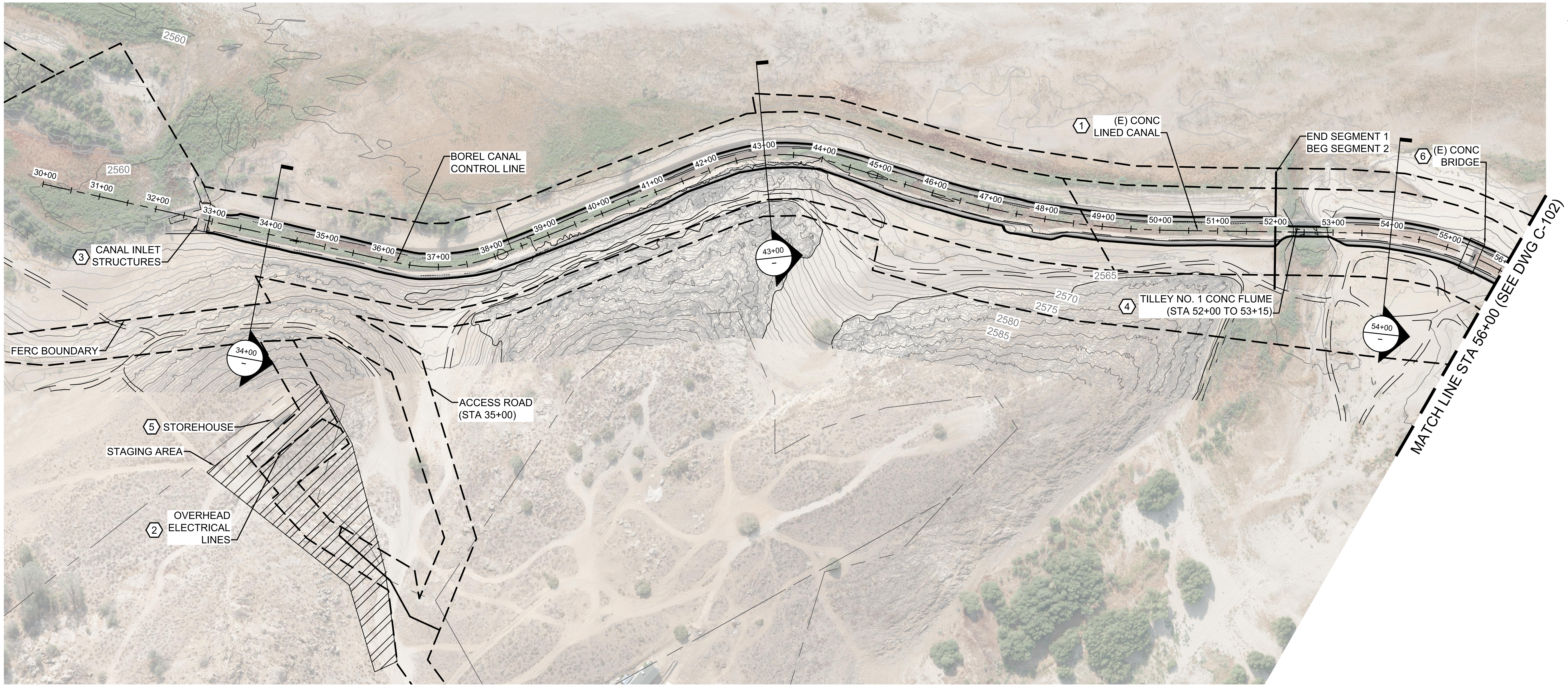
SCALE D/L

C-100

SOUTHERN CALIFORNIA EDISON
2012 - 4 SIZE

KEY NOTES:

1. ABANDON EXISTING CONCRETE LINER IN PLACE AND BACKFILL CANAL WITH CLEAN IMPORTED FILL WHILE MINIMIZING DISTURBANCE OF ADJACENT SURFACES (STA 33+00 TO 74+00).
2. PROTECT EXISTING OVERHEAD LINES AND POLES IN PLACE. COORDINATE WITH UTILITY TO ABANDON SERVICE TO STOREHOUSE.
3. REMOVE SLIDE GATES, RADIAL GATES, ACTUATORS, AND MECHANICAL FEATURES. DISPOSE OF THESE MATERIALS AT AN APPROVED WASTE FACILITY. CONCRETE WALLS AND FOOTINGS TO REMAIN. PLACE IMPORTED FILL ON DOWNSTREAM/CANAL SIDE OF THE STRUCTURE. MAX 3H:1V SLOPE. SEE C-502.
4. BACKFILL CONCRETE FLUME AND WINGWALLS WITH CLEAN IMPORTED FILL. GRADE TO PROVIDE SMOOTH TRANSITIONS AND CONFORM TO ADJACENT SURFACES (3:1 MAX). SEE C-503.
5. REMOVE AND DISPOSE OF CHAIN LINK FENCING, GATE, AND ALL MATERIAL STORED INSIDE THE LIMITS OF FENCING. DEMOLISH AND REMOVE STRUCTURE ABOVE GROUND, FOUNDATION TO REMAIN. RE-GRADE TO CONFORM TO ADJACENT SURFACES AND PROVIDE POSITIVE DRAINAGE.
6. REMOVE EXISTING CONCRETE BRIDGE AND ABUTMENTS. PROTECT BRIDGE FOOTING IN PLACE AND BACKFILL CANAL WITH CLEAN IMPORTED FILL. GRADE TO PROVIDE SMOOTH TRANSITIONS AND CONFORM TO ADJACENT SURFACES (3:1 MAX).



PLAN STA 30+00 TO STA 56+00

SCALE: 1"=100'

0 100 200

SECTION VIEWS

HORZ SCALE: 1"=20', VERT SCALE: 1"=20'

0 20 40

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

DECOMMISSIONING PLAN
STA 30+00 TO STA 56+00

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company

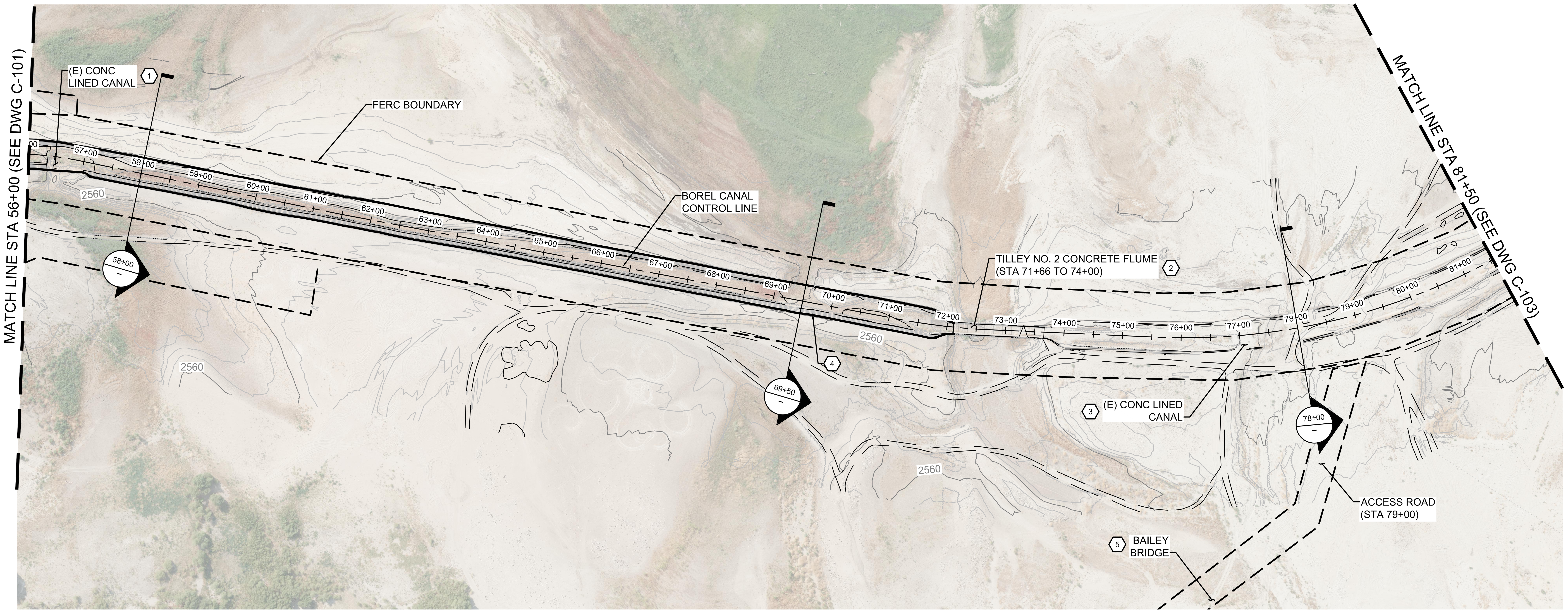
HDR

SCALE D/L

C-101

KEY NOTES:

1. ABANDON EXISTING CONCRETE LINER IN PLACE AND BACKFILL CANAL WITH CLEAN IMPORTED FILL WHILE MINIMIZING DISTURBANCE OF ADJACENT SURFACES (STA 33+00 TO 74+00).
2. BACKFILL CONCRETE FLUME AND WINGWALLS WITH CLEAN IMPORTED FILL. GRADE TO PROVIDE SMOOTH TRANSITIONS AND CONFORM TO ADJACENT SURFACES (3:1). SEE C-504.
3. EXISTING CONCRETE LINER HAS COLLAPSED IN THIS REACH (STA 74+00 TO 86+00) AND SEDIMENT HAS NATURALLY BACKFILLED THE CHANNEL. NO CONSTRUCTION REQUIRED IN THIS REACH.
4. EXISTING CONCRETE CHANNEL LINER WASHED IN AT THIS LOCATION. ABANDON INTACT AND DAMAGED LINER IN PLACE. BACKFILL AND GRADING OF CHANNEL IN THIS AREA TO NATURALLY CONFORM.
5. BAILEY BRIDGE IS LOCATED OUTSIDE THE LIMITS SHOWN HEREIN. SEE SHEET V-101 FOR LOCATION. ABANDON BAILEY BRIDGE IN PLACE. THE BRIDGE STRUCTURE, BRIDGE SUPPORTS, AND FENCING WILL BE LEFT IN PLACE AT THE REQUEST OF THE FOREST SERVICE.



PLAN STA 56+00 TO STA 81+50

SCALE: 1"=100'

0 100 200

SECTION VIEWS

HORZ SCALE: 1"=20', VERT SCALE: 1"=20'

0 20 40

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

DECOMMISSIONING PLAN
STA 56+00 TO STA 81+50

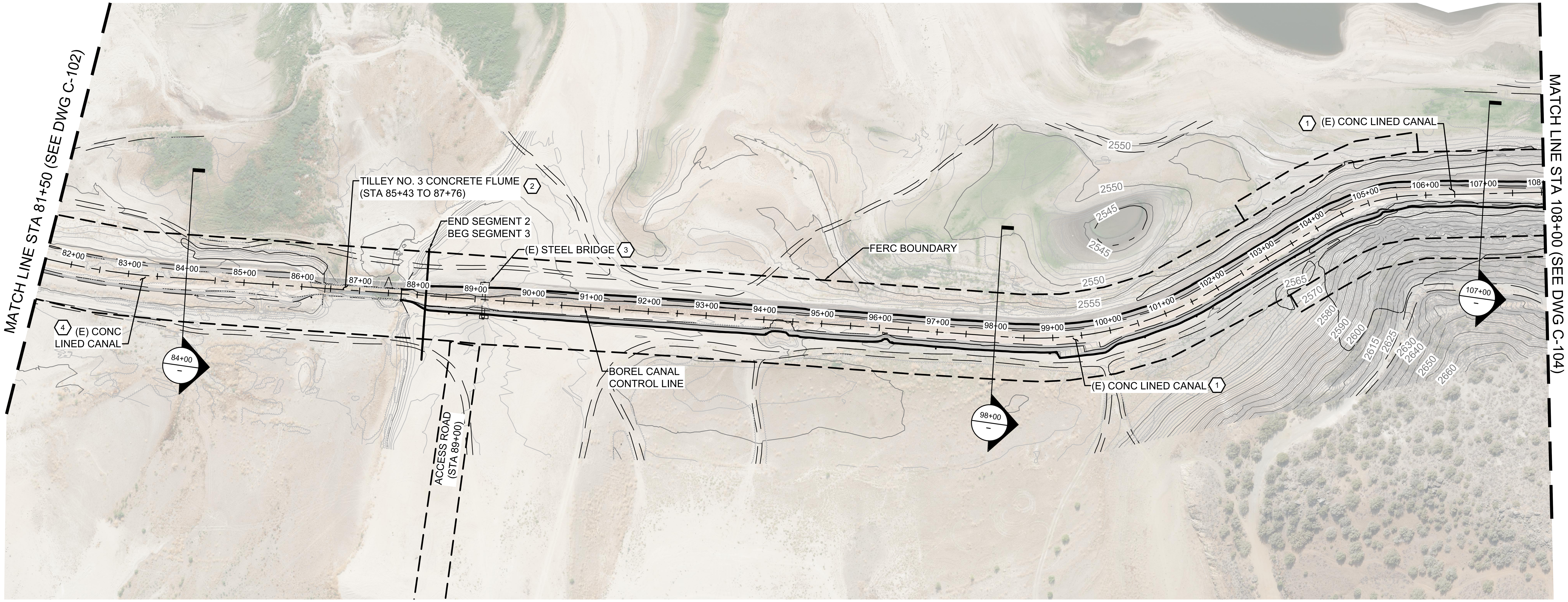
SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company — HDR

SCALE D/L

C-102

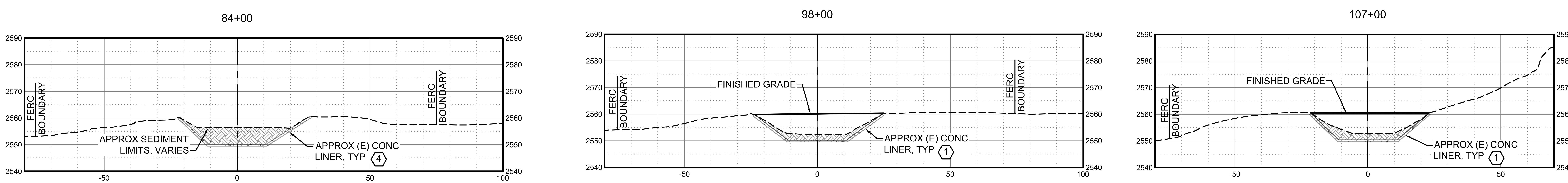
KEY NOTES:

1. ABANDON EXISTING CONCRETE LINER IN PLACE AND BACKFILL CANAL WITH CLEAN IMPORTED FILL WHILE MINIMIZING DISTURBANCE OF ADJACENT SURFACES (STA 86+00 TO 118+00).
2. BACKFILL CONCRETE FLUME AND WINGWALLS WITH CLEAN IMPORTED FILL. GRADE TO PROVIDE SMOOTH TRANSITIONS AND CONFORM TO ADJACENT SURFACES (3:1 MAX). SEE C-505.
3. REMOVE STEEL BRIDGE, ABUTMENTS TO REMAIN. BACKFILL AREA AROUND ABUTMENTS TO NATURALLY CONFORM TO ADJACENT TOPOGRAPHY (3:1 MAX SLOPE). NO BRIDGE AS-BUILT DRAWINGS AVAILABLE.
4. EXISTING CONCRETE LINER HAS COLLAPSED IN THIS REACH (STA 74+00 TO 86+00) AND SEDIMENT HAS NATURALLY BACKFILLED THE CHANNEL. NO CONSTRUCTION REQUIRED IN THIS REACH.



PLAN STA 81+50 TO STA 108+00
SCALE: 1"=100'

0 100 200



SECTION VIEWS
HORZ SCALE: 1"=20', VERT SCALE: 1"=20'

0 20 40

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

DECOMMISSIONING PLAN
STA 81+50 TO STA 108+00

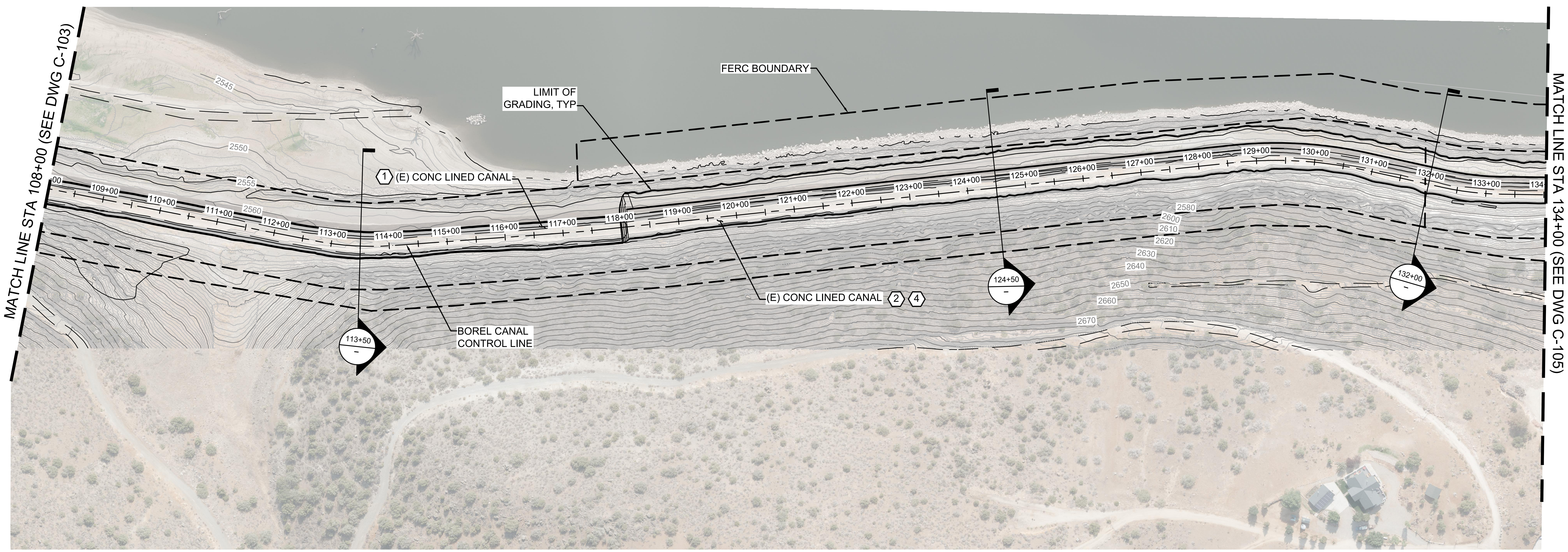
SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

SCALE D/L

C-103

KEY NOTES:

1. ABANDON EXISTING CONCRETE LINER IN PLACE AND BACKFILL CANAL WITH CLEAN IMPORTED FILL WHILE MINIMIZING DISTURBANCE OF ADJACENT SURFACES (STA 86+00 TO 118+00).
2. SAWCUT EXPOSED METAL FLUSH TO CONCRETE FACE. REMOVE ALL DEBRIS AND DISPOSE IN AN APPROVED WASTE FACILITY.
3. REMOVE EXISTING RIP RAP FROM LIMITS OF CUT SLOPE, STOCKPILE, THEN PLACE AS EROSION CONTROL BARRIER ON FINISHED SLOPES.
4. REMOVE UPPER PORTION OF CONCRETE LINER. PROCESS CONCRETE DEBRIS TO A MAXIMUM PARTICLE SIZE OF 6 IN. BLEND PROCESSED CONCRETE WITH EXCAVATED SOIL AND PLACE IN CANAL BOTTOM. SEE C-301 FOR TYPICAL SECTION (STA 118+00 TO 168+00)



PLAN STA 108+00 TO STA 134+00

SCALE: 1"=100'

SECTION VIEWS

HORZ SCALE: 1"=20', VERT SCALE: 1"=20'

* REVISE ON AUTOCAD SYSTEM ONLY *

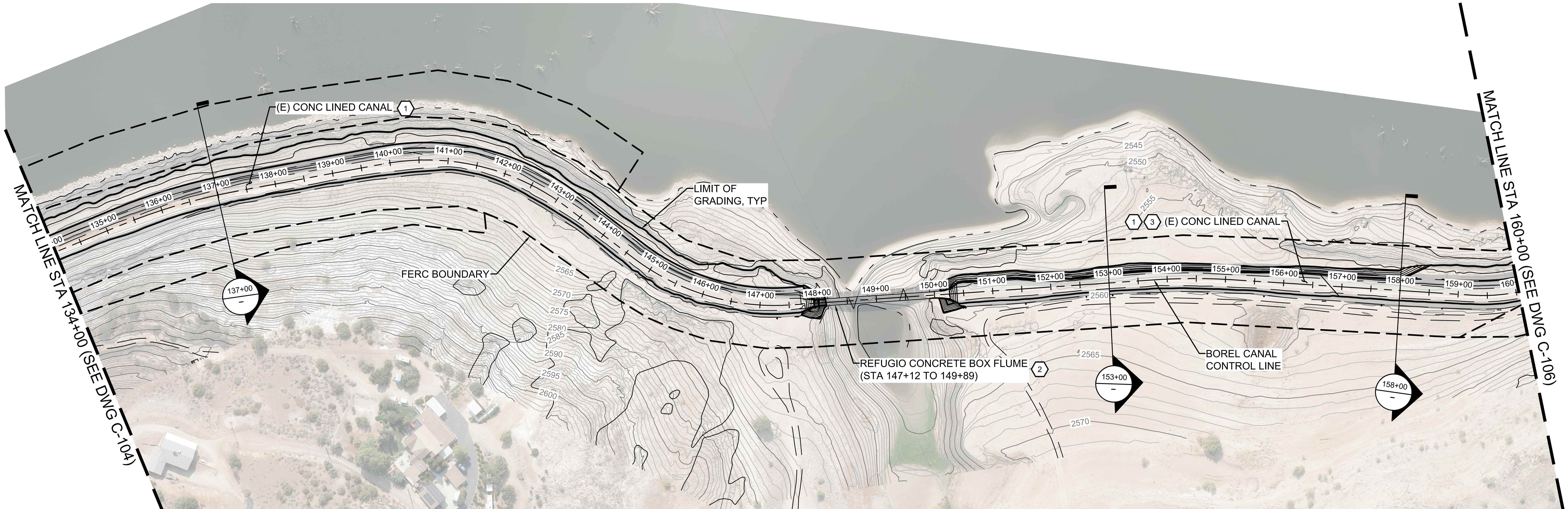
LOCATION	BOREL HYDRO SURRENDER
	DECOMMISSIONING PLAN STA 108+00 TO STA 134+00
SCALE	D/L
	C-104

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company — HDR

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

KEY NOTES:

1. REMOVE UPPER PORTION OF CONCRETE LINER. PROCESS CONCRETE DEBRIS TO A MAXIMUM PARTICLE SIZE OF 6 IN. BLEND PROCESSED CONCRETE WITH EXCAVATED SOIL AND PLACE IN CANAL BOTTOM. SEE C-301 FOR TYPICAL SECTION. (STA 118+00 TO 168+00)
2. REMOVE CONCRETE FLUME, HEADWALLS, AND CONCRETE PIERS TO A DEPTH OF 2-FT BELOW EXISTING GRADE. PROCESS CONCRETE DEBRIS AND PLACE WITHIN CANAL. SEE C-506 FOR AS-BUILT DRAWINGS OF REFUGIO CONCRETE BOX FLUME.
3. REMOVE EXISTING RIP RAP FROM LIMITS OF CUT SLOPE, STOCKPILE, THEN PLACE AS EROSION CONTROL BARRIER ON FINISHED SLOPES.



PLAN STA 134+00 TO STA 160+00

SCALE: 1"=100'

SECTION VIEWS

HORZ SCALE: 1"=20', VERT SCALE: 1"=20'

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION: BOREL HYDRO SURRENDER

DECOMMISSIONING PLAN
STA 134+00 TO STA 160+00

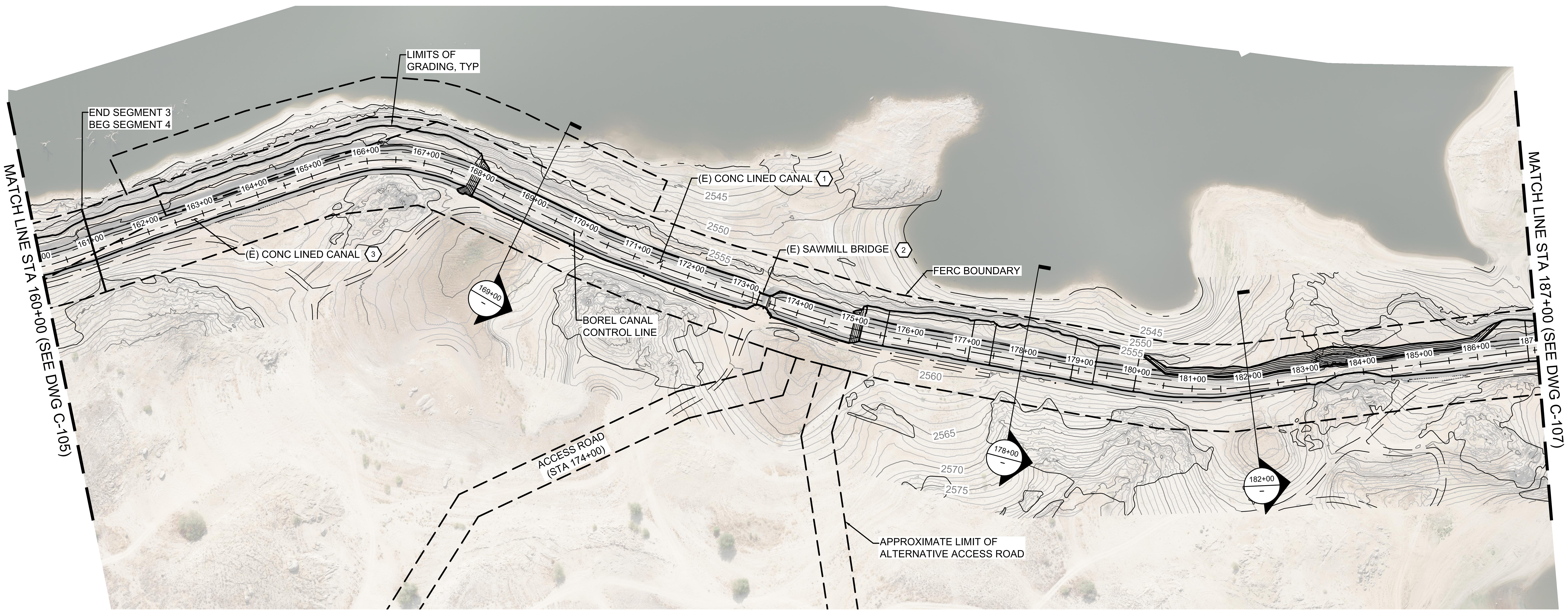
SOUTHERN CALIFORNIA EDISON — An EDISON INTERNATIONAL Company | HDR

SCALE: D/L

C-105

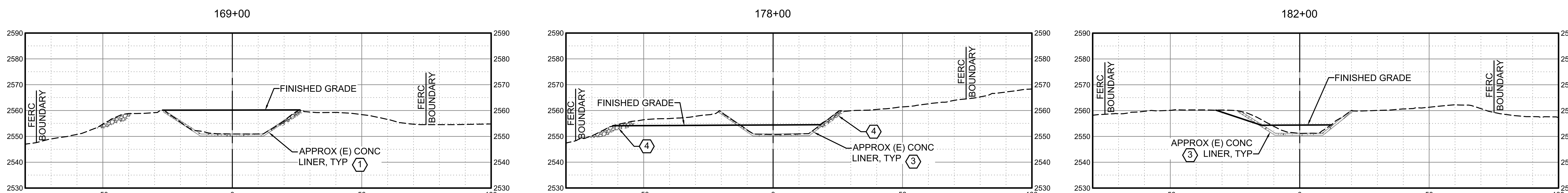
KEY NOTES:

1. ABANDON EXISTING CONCRETE LINER IN PLACE AND BACKFILL CANAL WITH CLEAN IMPORTED FILL WHILE MINIMIZING DISTURBANCES TO ADJACENT SURFACES (STA 168+00 TO 175+00).
2. REMOVE BRIDGE. ABUTMENTS AND FOUNDATION TO REMAIN IN PLACE. PROCESS CONCRETE AND PLACE WITHIN CANAL. NO BRIDGE AS-BUILT DRAWINGS AVAILABLE.
3. REMOVE UPPER PORTION OF CONCRETE LINER. PROCESS CONCRETE DEBRIS TO A MAXIMUM PARTICLE SIZE OF 6 IN. BLEND PROCESSED CONCRETE WITH EXCAVATED SOIL AND PLACE IN CANAL BOTTOM. SEE C-301 FOR TYPICAL SECTION. (STA 118+00 TO 168+00 AND STA 175+00 TO 191+00).
4. REMOVE EXISTING RIP RAP FROM LIMITS OF CUT, STOCKPILE, THEN PLACE AS EROSION CONTROL BARRIER ON FINISHED SLOPES.



PLAN STA 160+00 TO STA 187+00

SCALE: 1"=100'



SECTION VIEWS

HORZ SCALE: 1"=20', VERT SCALE: 1"=20'

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION: BOREL HYDRO SURRENDER

DECOMMISSIONING PLAN
STA 160+00 TO STA 187+00

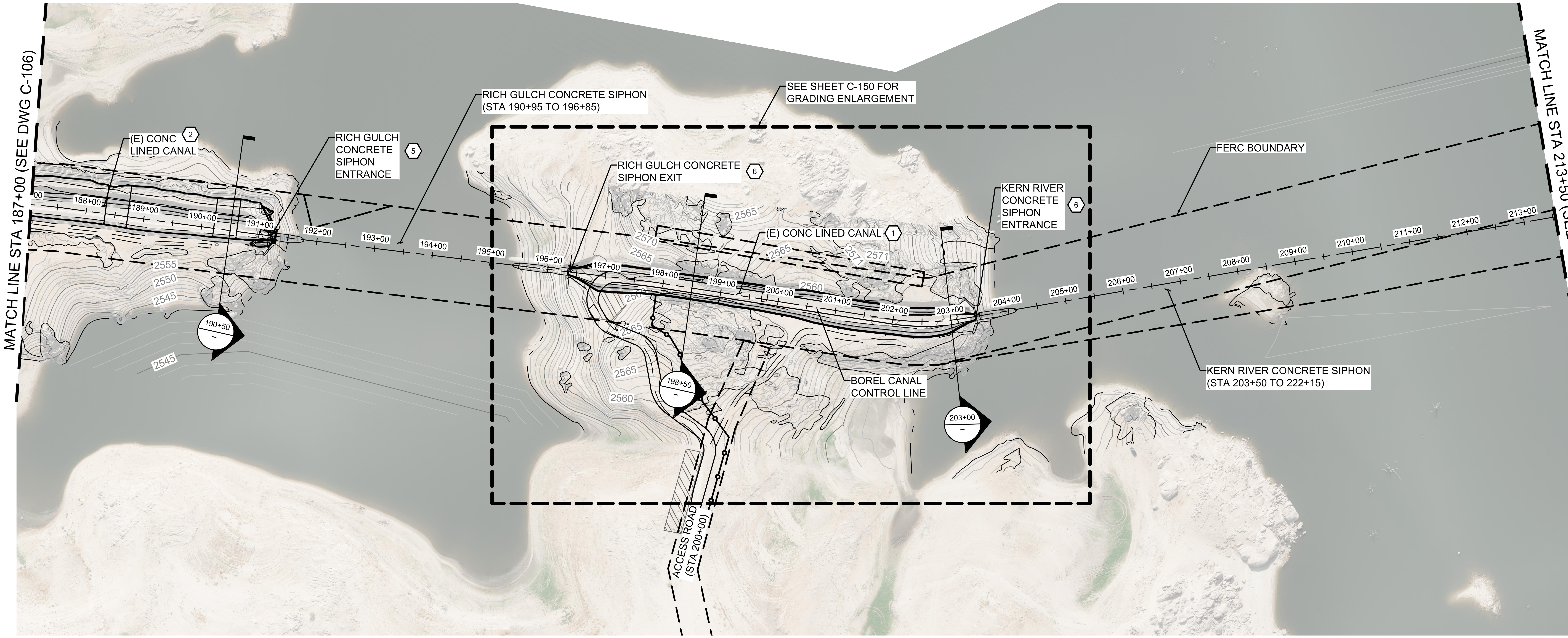
SOUTHERN CALIFORNIA EDISON — An EDISON INTERNATIONAL Company | HDR

SCALE: D/L

C-106

KEY NOTES:

1. ABANDON EXISTING CONCRETE LINER IN PLACE AND BACKFILL CANAL WITH CLEAN IMPORTED FILL WHILE MINIMIZING DISTURBANCE OF ADJACENT SURFACES (STA 196+50 TO 203+50).
2. REMOVE UPPER PORTION OF CONCRETE LINER. PROCESS CONCRETE DEBRIS TO A MAXIMUM PARTICLE SIZE OF 6 IN. BLEND PROCESSED CONCRETE WITH EXCAVATED SOIL AND PLACE IN CANAL BOTTOM. SEE C-301 FOR TYPICAL SECTION. (STA 175+00 TO 191+00)
3. REMOVE AND DISPOSE OF FENCING. PLACE SLURRY PLUG AT ENTRANCE AND EXIT OF SIPHON, MIN 20 FEET FROM END OF SIPHON.
4. REMOVE EXISTING RIP RAP FROM LIMITS OF CUT, STOCKPILE, THEN PLACE AS EROSION CONTROL BARRIER ON FINISHED SLOPES.
5. COLLAPSE WING WALLS INTO CANAL AND BACKFILL HEADWALLS WITH BLENDED FILL (3:1 MAX). SEE C-507 AND 508 FOR AS-BUILT DRAWINGS OF SIPHONS.
6. BACKFILL HEADWALLS AND WING WALLS WITH CLEAN IMPORTED FILL AND GRADE TO TRANSITION TO ADJACENT SURFACES (3:1 MAX).

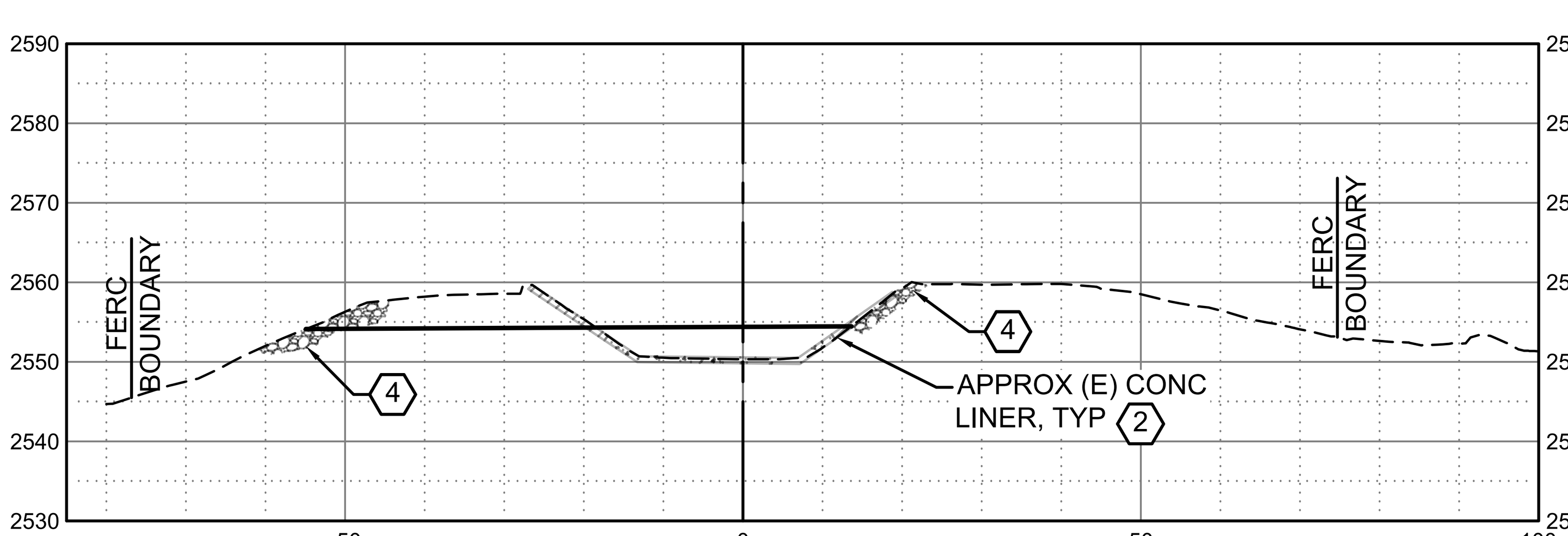


PLAN STA 187+00 TO STA 213+50

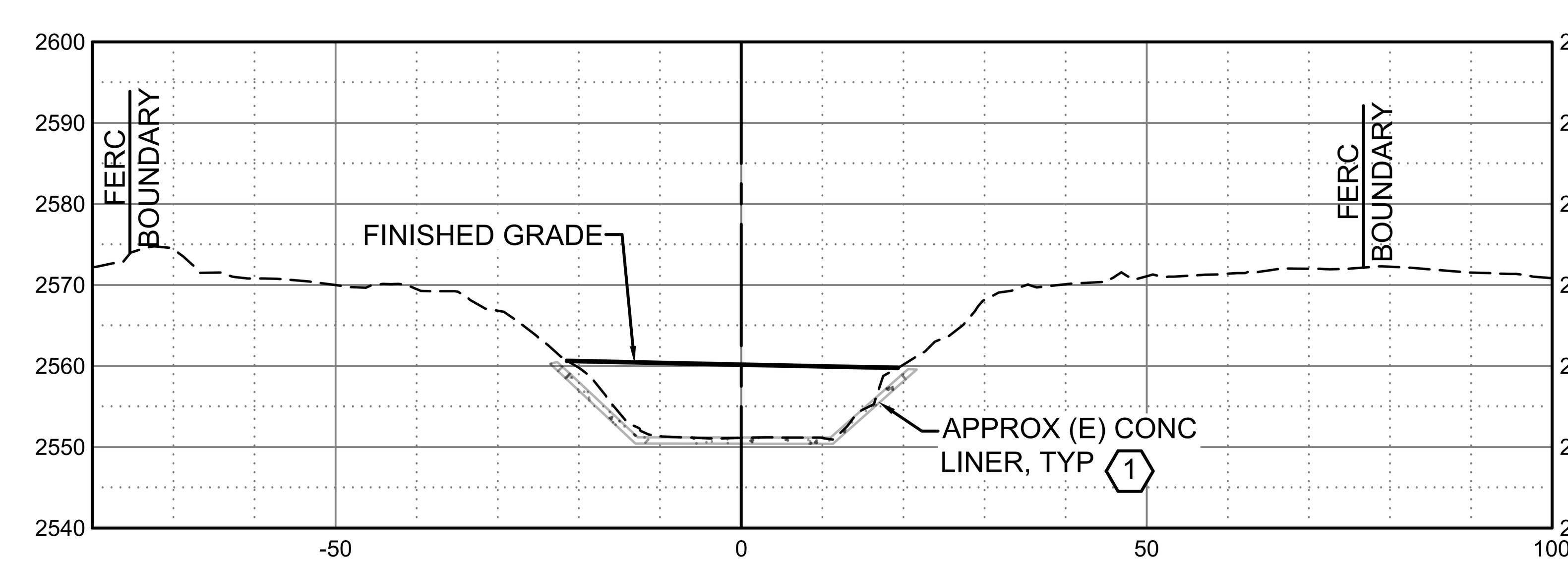
SCALE: 1"=100'

0 100 200

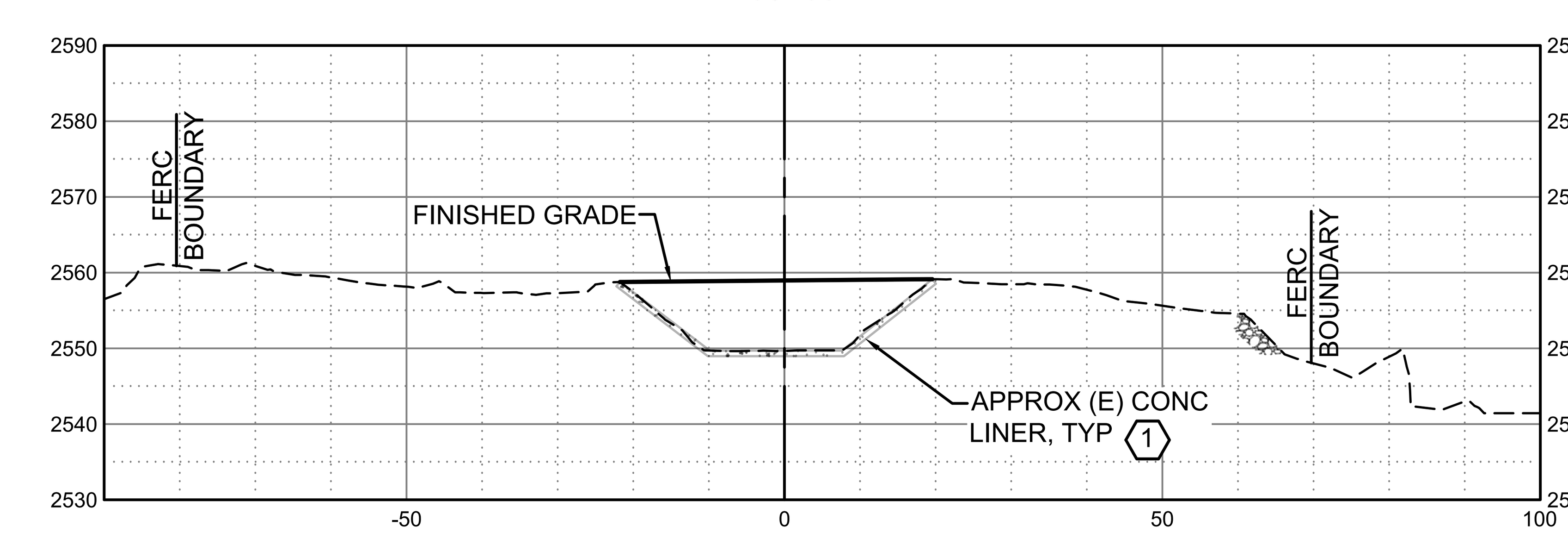
190+50



198+50



203+00



SECTION VIEWS

HORZ SCALE: 1"=20', VERT SCALE: 1"=20'

0 20 40

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

DECOMMISSIONING PLAN
STA 187+00 TO STA 213+50

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company

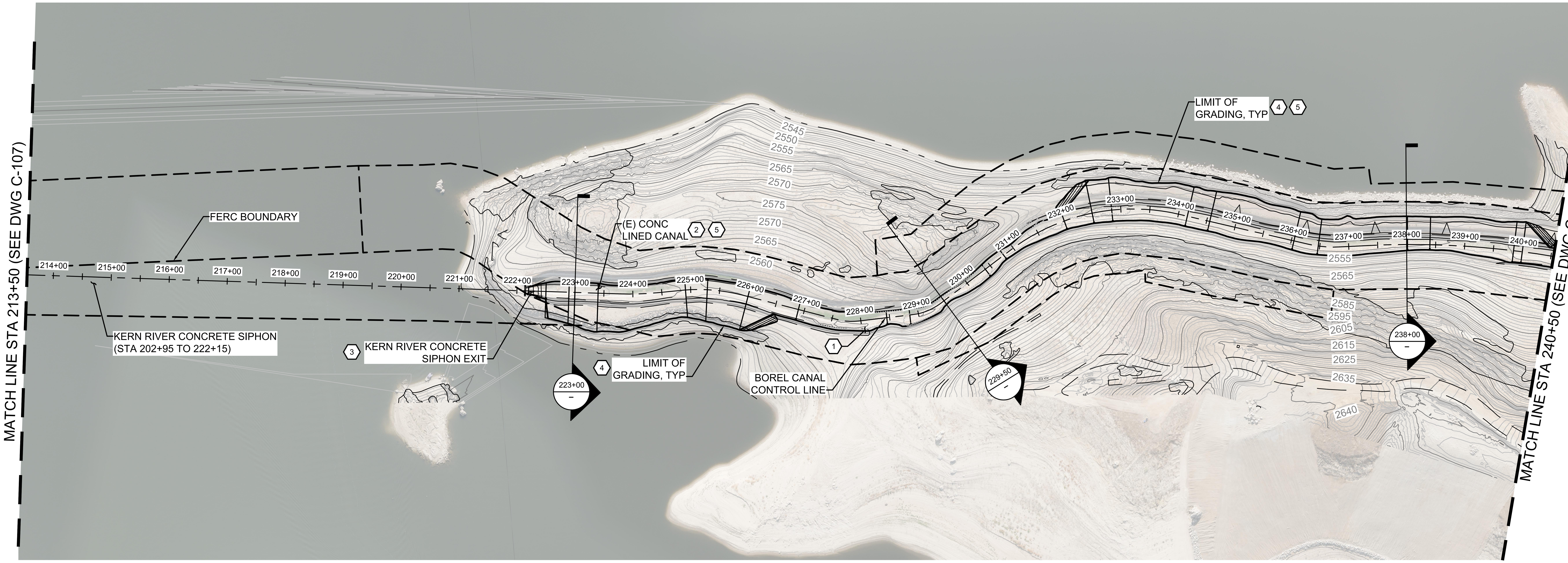
HDR

SCALE D/L

C-107

KEY NOTES:

1. PROVIDE TEMPORARY ACCESS ALONG CANAL BANK WITHIN FERC BOUNDARY.
2. SAWCUT EXPOSED METAL FLUSH TO CONCRETE FACE. REMOVE ALL DEBRIS AND DISPOSE IN AN APPROVED WASTE FACILITY.
3. REMOVE FENCING AND METAL HAZARDS. PLACE SLURRY PLUG AT EXIT OF SIPHON, MIN 20 FEET FROM THE END OF SIPHON. COLLAPSE WING WALLS INTO CANAL AND BURY WITH CLEAN FILL. SEE C-508 FOR AS BUILT DRAWINGS OF SIPHON.
4. REMOVE EXISTING RIP RAP FROM LIMITS OF CUT SLOPE, STOCKPILE, THEN PLACE AS EROSION CONTROL BARRIER ON FINISHED SLOPE.
5. REMOVE UPPER PORTION OF CONCRETE LINER. PROCESS CONCRETE DEBRIS TO A MAXIMUM PARTICLE SIZE OF 6 IN. BLEND PROCESSED CONCRETE WITH EXCAVATED SOIL AND PLACE IN CANAL BOTTOM. SEE C-301 FOR TYPICAL SECTION. (STA 222+20 TO 273+80).



PLAN STA 213+50 TO STA 240+50

SCALE: 1"=100'

0 100 200

SECTION VIEWS

HORZ SCALE: 1"=20', VERT SCALE: 1"=20'

0 20 40

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

DECOMMISSIONING PLAN
STA 213+50 TO STA 240+50

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company

HDR

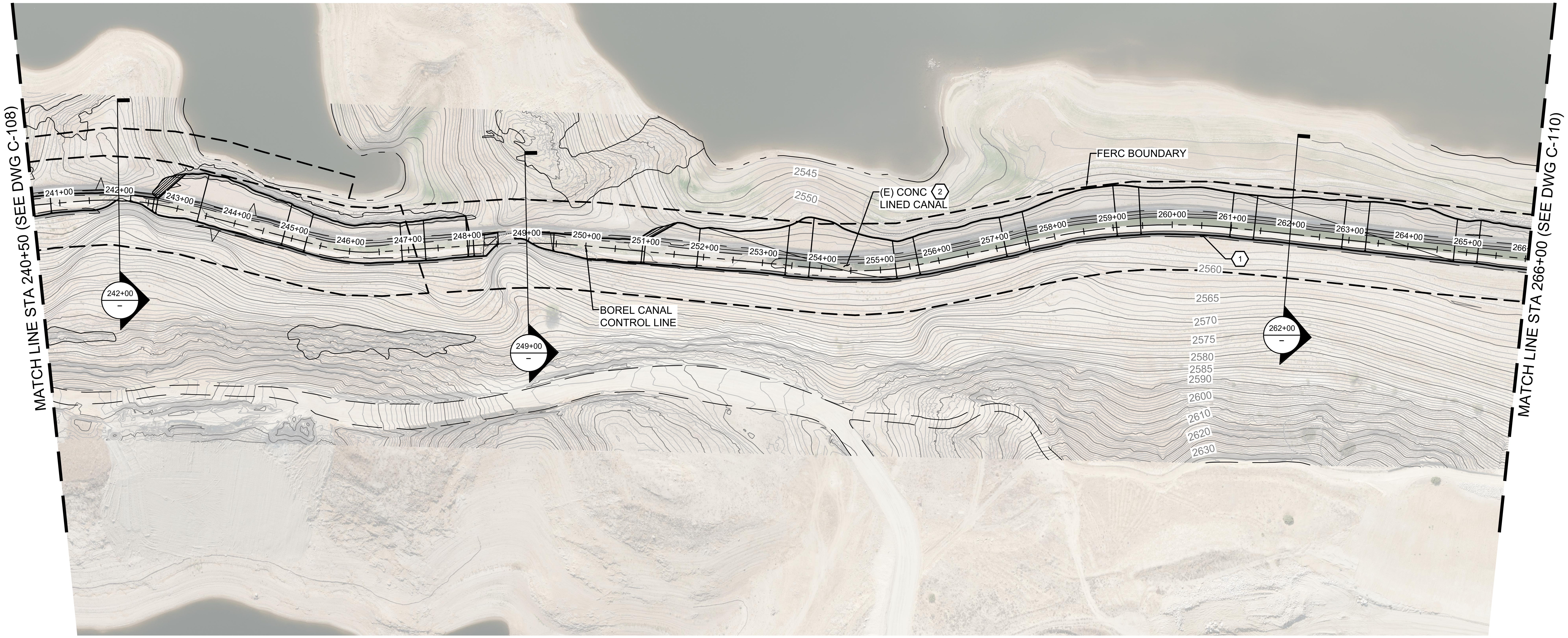
SCALE D/L

C-108

SOUTHERN CALIFORNIA EDISON
2012 – 4 SIZE

KEY NOTES:

1. PROVIDE TEMPORARY ACCESS ALONG CANAL BANK WITHIN FERC BOUNDARY.
2. REMOVE UPPER PORTION OF CONCRETE LINER. PROCESS CONCRETE DEBRIS TO A MAXIMUM PARTICLE SIZE OF 6 IN. BLEND PROCESSED CONCRETE WITH EXCAVATED SOIL AND PLACE IN CANAL BOTTOM. SEE C-301 FOR TYPICAL SECTION (STA 222+20 TO 273+80)
3. IN AREAS WHERE CANAL IS ALREADY FILLED IN LIMIT GRADING TO NATURALLY CONFORM TO ADJACENT SURFACE. CONCRETE DEMOLITION IS NOT REQUIRED IN AREAS WHERE IT IS BURIED PRIOR TO START OF WORK.



PLAN STA 240+50 TO STA 266+00

SCALE: 1"=100'

SECTION VIEWS

HORZ SCALE: 1"=20', VERT SCALE: 1"=20'

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION: BOREL HYDRO SURRENDER

DECOMMISSIONING PLAN
STA 240+50 TO STA 266+00

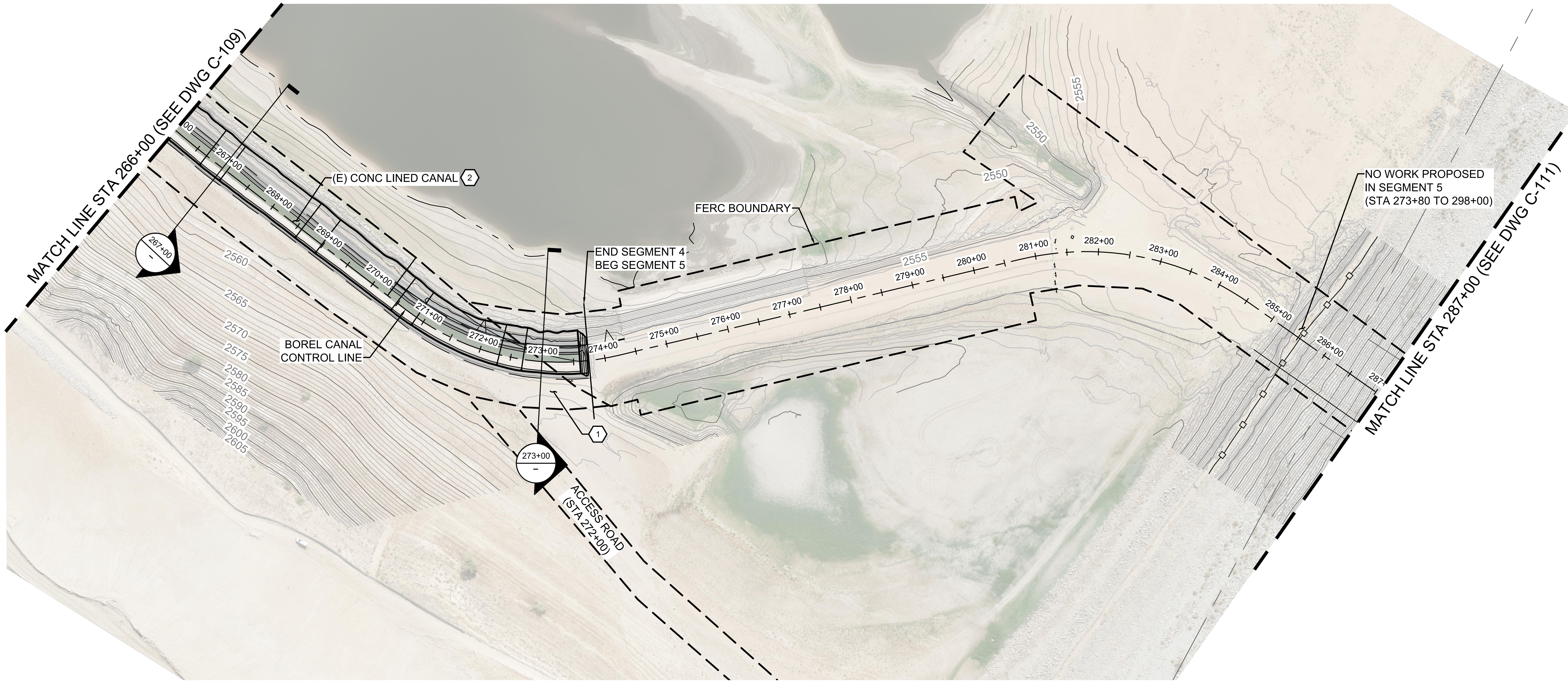
SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company | HDR

SCALE: D/L

C-109

KEY NOTES:

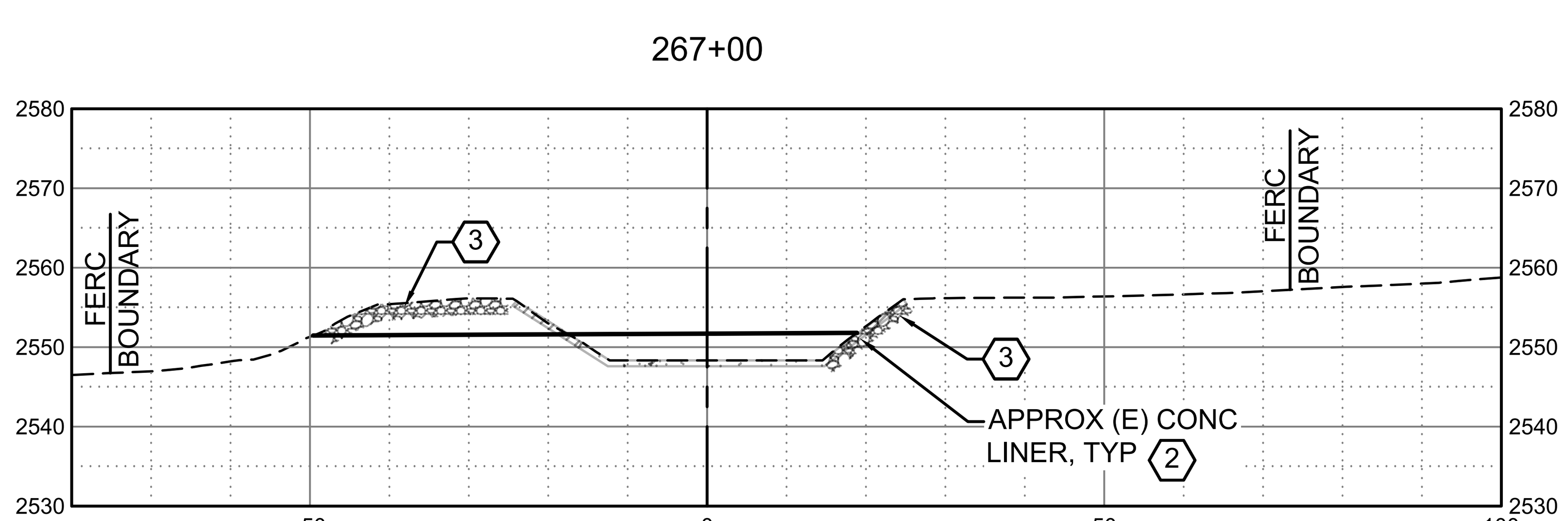
1. PROVIDE TEMPORARY ACCESS ALONG CANAL BANK WITHIN FERC BOUNDARY.
2. REMOVE UPPER PORTION OF CONCRETE LINER. PROCESS CONCRETE DEBRIS TO A MAXIMUM PARTICLE SIZE OF 6 IN. BLEND PROCESSED CONCRETE WITH EXCAVATED SOIL AND PLACE IN CANAL BOTTOM. SEE C-301 FOR TYPICAL SECTION (STA 222+20 TO 273+80)
3. REMOVE EXISTING RIP RAP FROM LIMITS OF CUT SLOPE, STOCKPILE, THEN PLACE AS EROSION CONTROL BARRIER ON FINISHED SLOPES.

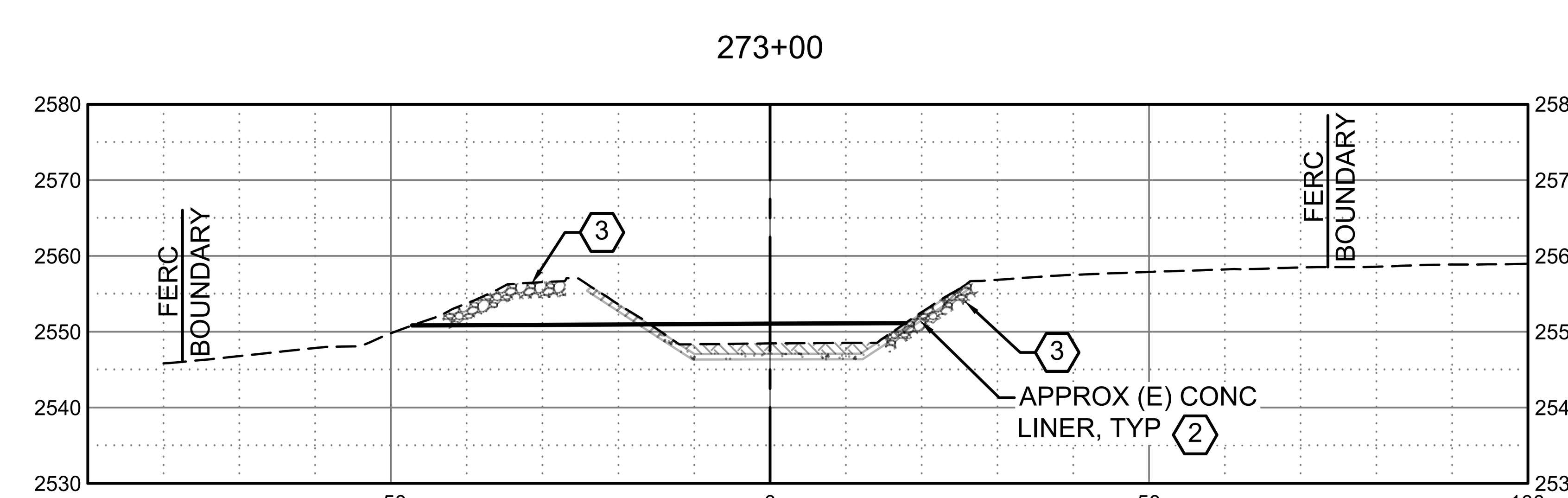


PLAN STA 266+00 TO STA 287+00

SCALE: 1"=100'

0 100 200





SECTION VIEWS

HORZ SCALE: 1"=20', VERT SCALE: 1"=20'

0 20 40

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

DECOMMISSIONING PLAN
STA 266+00 TO STA 287+00

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

HDR

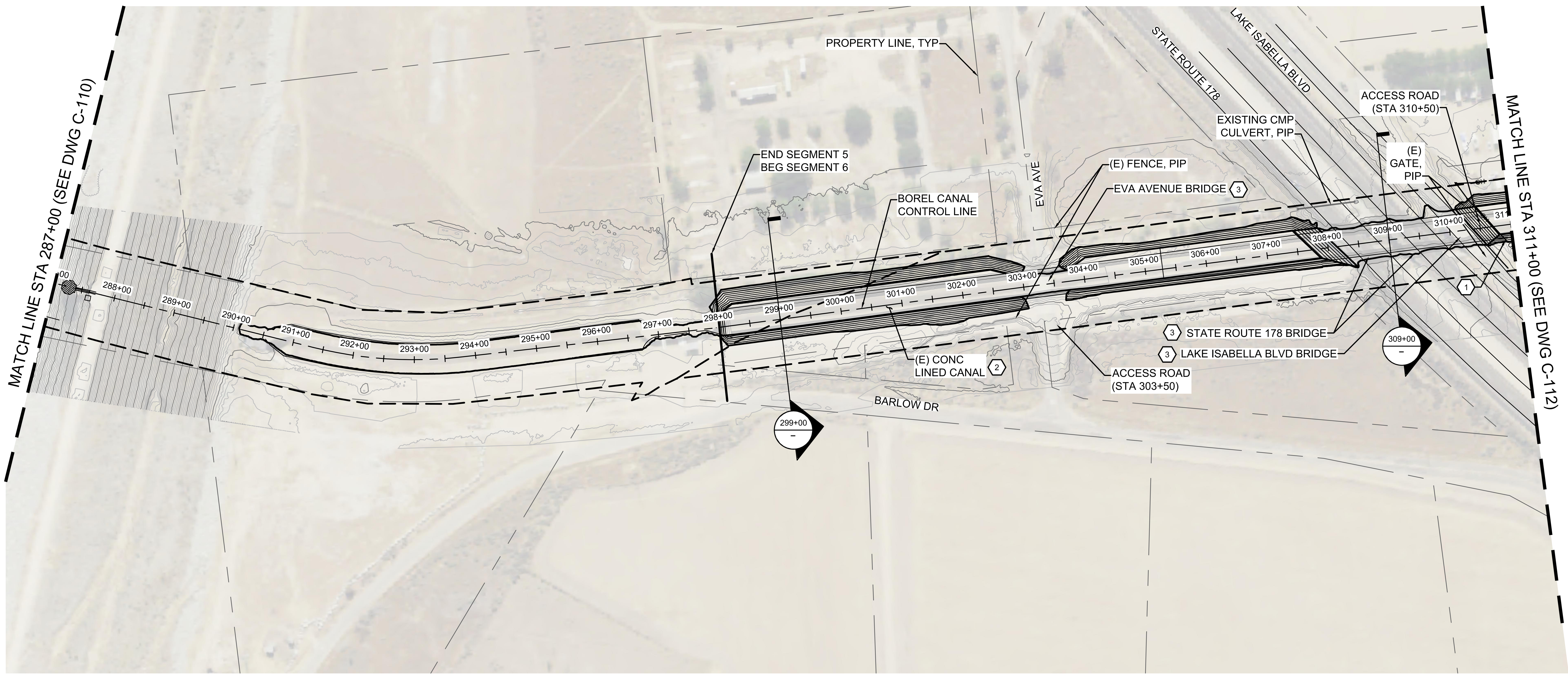
SCALE D/L

C-110

SOUTHERN CALIFORNIA EDISON
2012 – 4 SIZE

KEY NOTES:

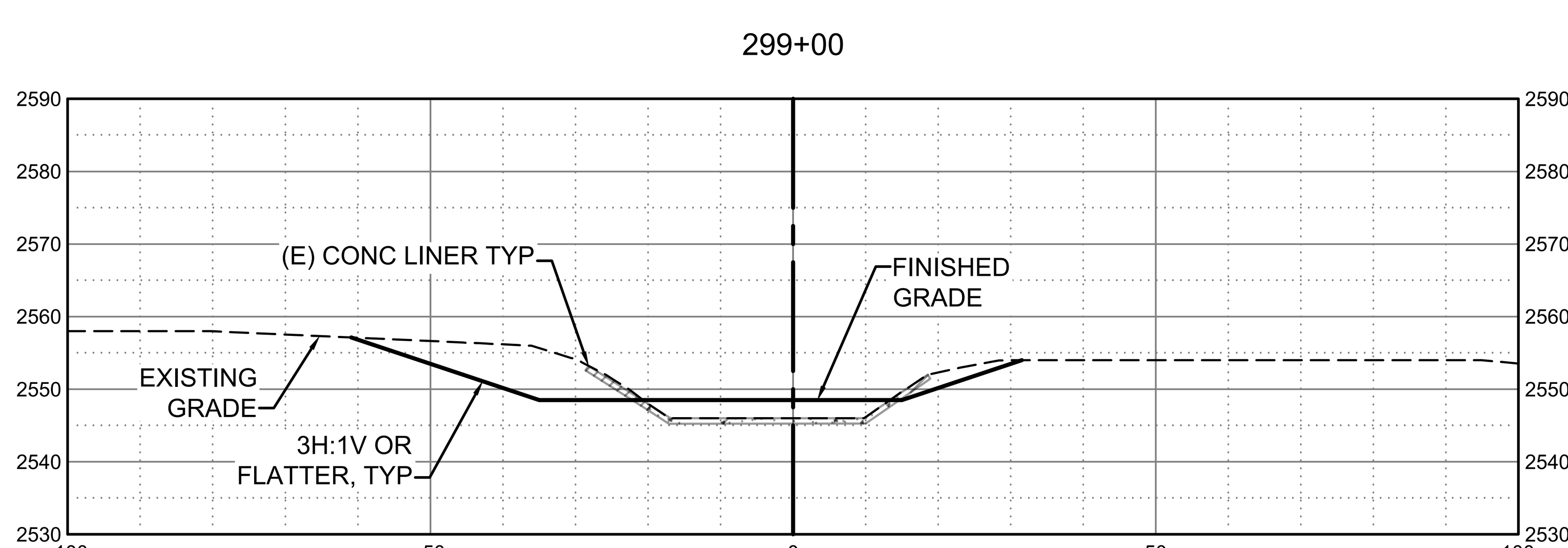
1. PROTECT EXISTING OVERHEAD COMM/ELECTRICAL UTILITIES IN PLACE.
2. REMOVE UPPER PORTION OF CONCRETE LINER. PULVERIZE REMAINING CONCRETE LINER ON BOTTOM OF CANAL. PROCESS CONCRETE DEBRIS TO A MAXIMUM PARTICLE SIZE OF 6-IN. BLEND PROCESSED CONCRETE WITH EXCAVATED SOIL AND PLACE IN CANAL BOTTOM.
3. PROTECT EXISTING BRIDGE IN PLACE. CONCRETE LINER TO REMAIN UNDER BRIDGE TO A DISTANCE OF 20 FEET BEYOND THE FOOTING. PLACE LIGHTWEIGHT CELLULAR CONCRETE FILL ON TOP OF CONCRETE LINER TO FINISHED GRADE ELEVATIONS.

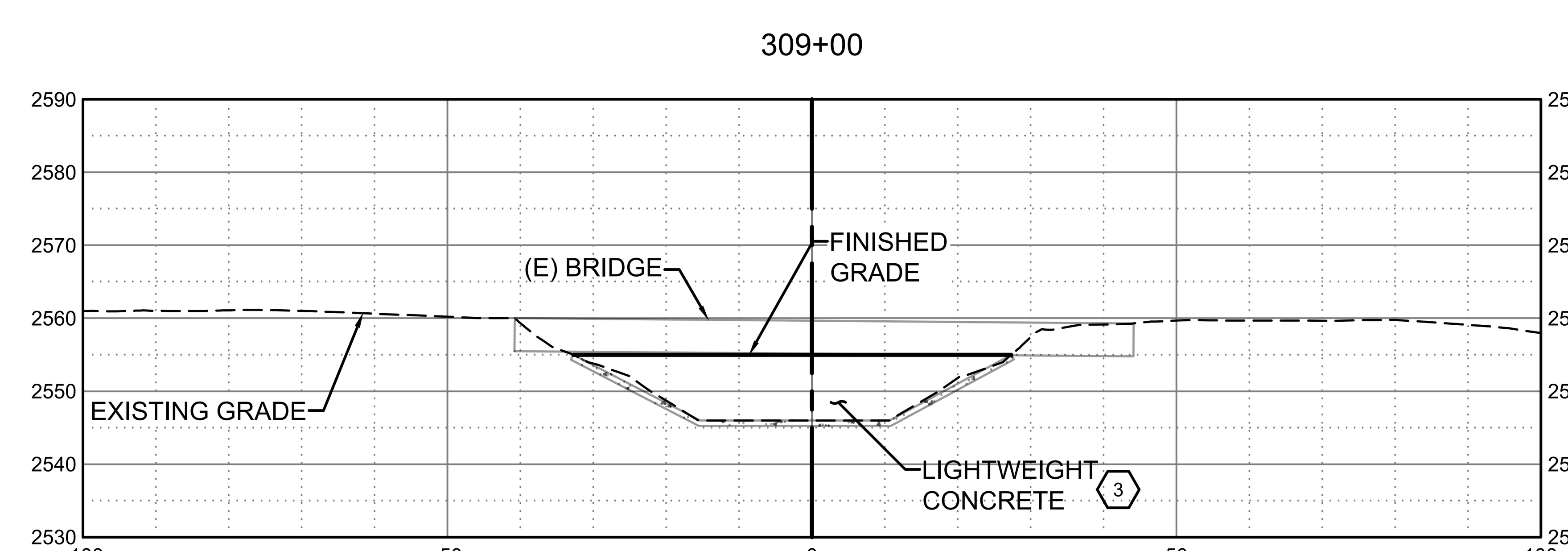


PLAN STA 287+00 TO STA 311+00

SCALE: 1"=100'

0 100 200





SECTION VIEWS

HORZ SCALE: 1"=20', VERT SCALE: 1"=20'

0 20 40

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

DECOMMISSIONING PLAN
STA 287+00 TO STA 311+00

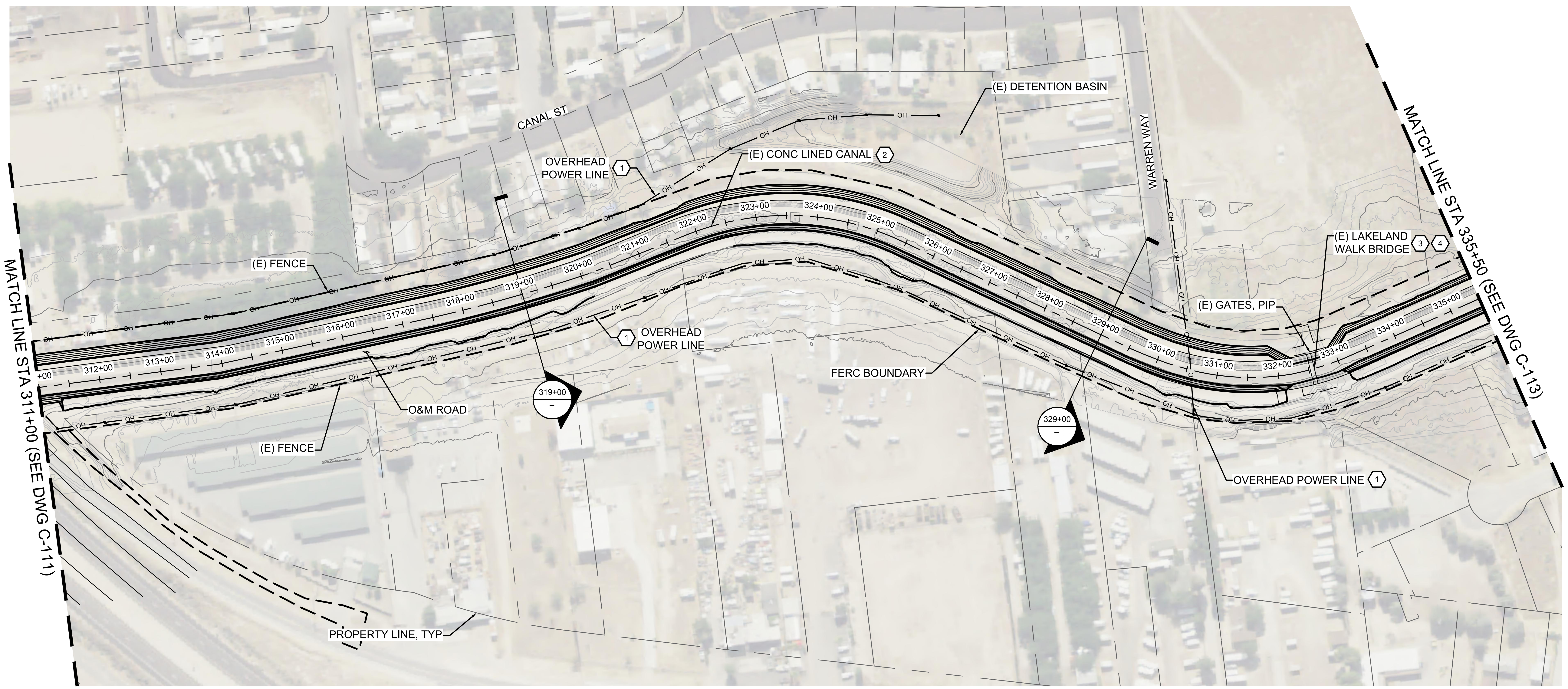
SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company

SCALE D/L

C-111

KEY NOTES:

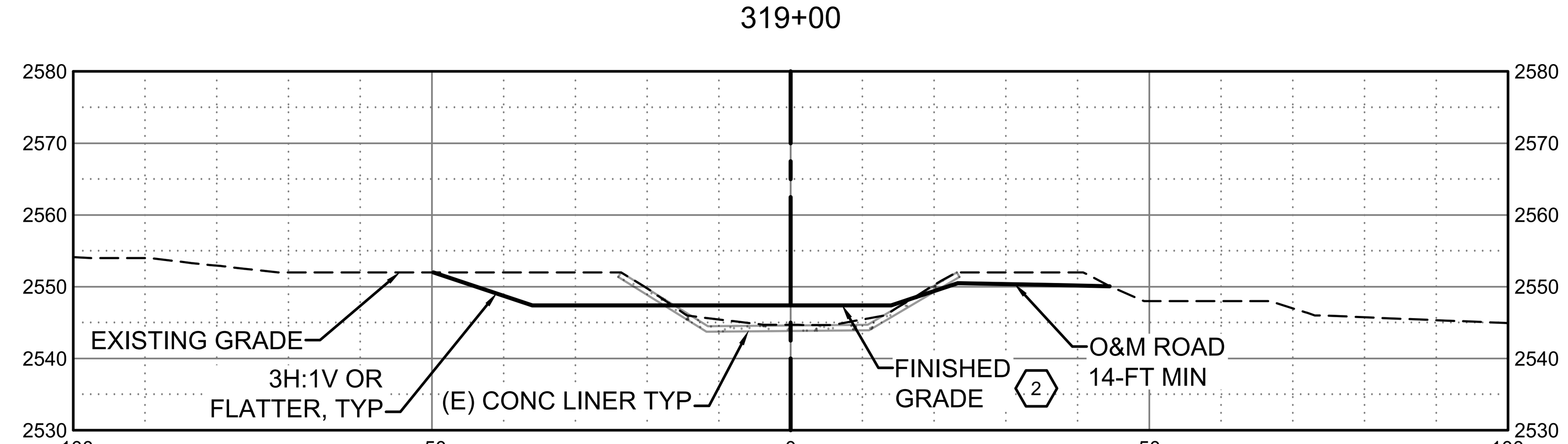
1. PROTECT EXISTING OVERHEAD COMM/ELECTRICAL UTILITIES IN PLACE.
2. REMOVE UPPER PORTION OF CONCRETE LINER AND EXCAVATE BANK. PROCESS CONCRETE DEBRIS TO A MAXIMUM PARTICLE SIZE OF 6 INCHES. BLEND PROCESSED CONCRETE AND EXCAVATED MATERIAL AND PLACE WITHIN CANAL.
3. PROTECT EXISTING BRIDGE IN PLACE. CONCRETE LINER TO REMAIN UNDER BRIDGE TO A DISTANCE OF 20 FEET BEYOND THE FOOTING. PLACE LIGHTWEIGHT CELLULAR CONCRETE FILL ON TOP OF CONCRETE LINER TO FINISHED GRADE ELEVATIONS.
4. CONTRACTOR MUST COORDINATE BRIDGE CLOSURE WITH KERN COUNTY, IF NEEDED. IF CLOSURE IS REQUIRED IT MUST OCCUR ON DAYS WHEN SCHOOL IS NOT IN SESSION.

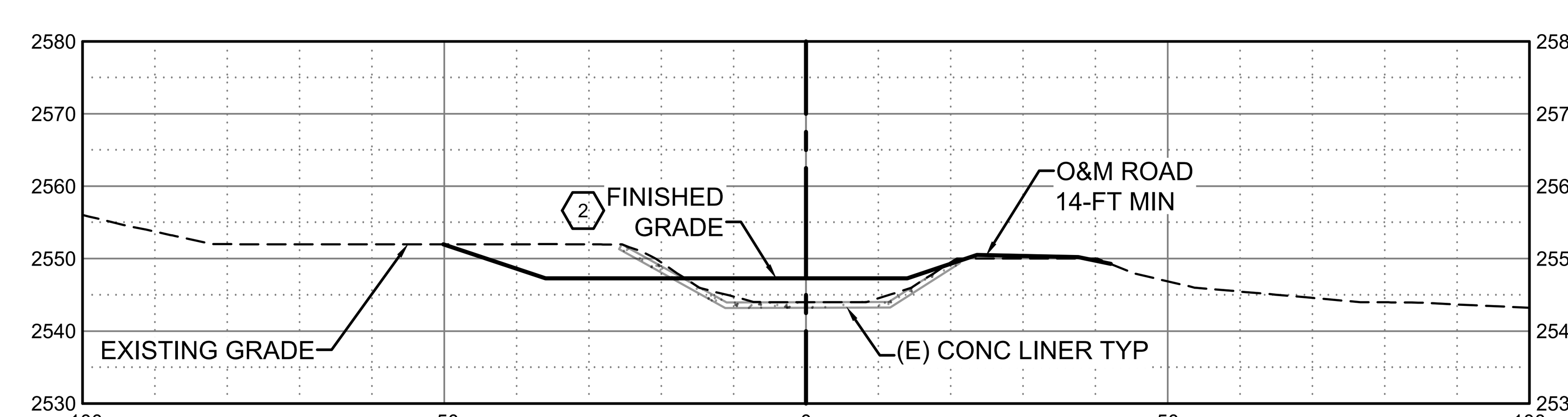


PLAN STA 311+00 TO STA 335+50

SCALE: 1"=100'

0 100 200





SECTION VIEWS

HORZ SCALE: 1"=20', VERT SCALE: 1"=20'

0 20 40

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

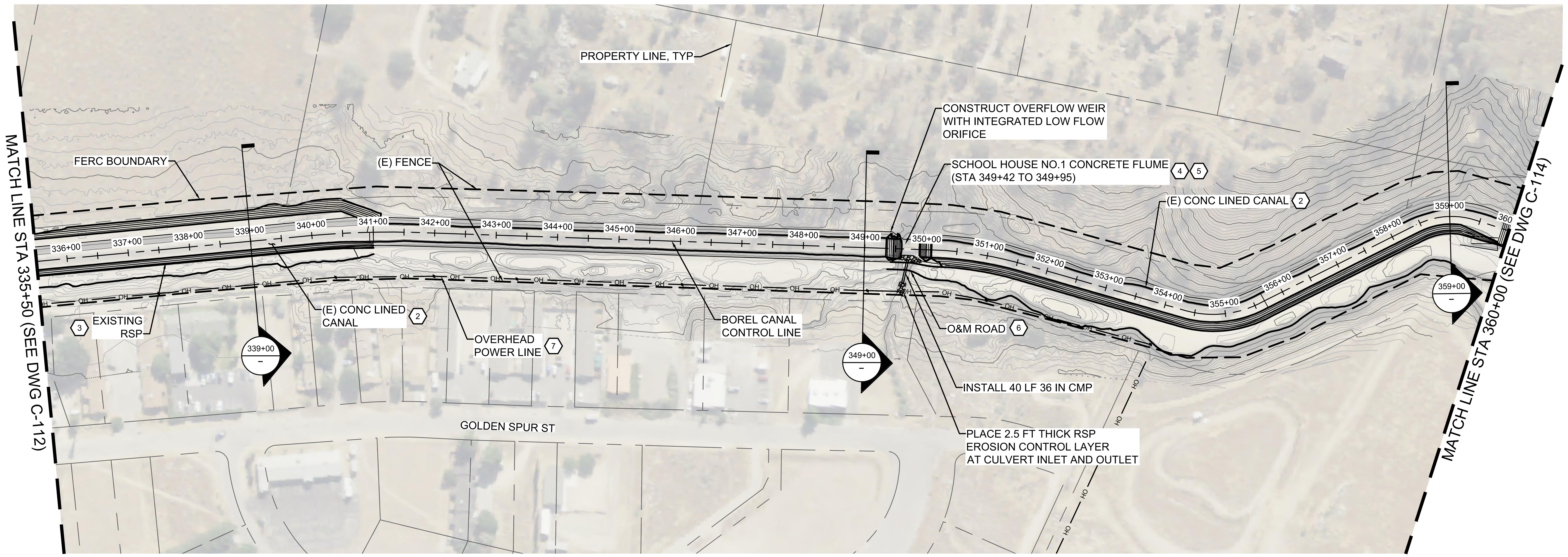
LOCATION BOREL HYDRO SURRENDER

DECOMMISSIONING PLAN
STA 311+00 TO STA 335+50

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company — HDR

SCALE D/L

C-112



PLAN STA 335+50 TO STA 360+00
SCALE: 1"=100'

KEY NOTES:

1. PROTECT EXISTING OVERHEAD COMM/ELECTRICAL UTILITIES IN PLACE.
2. REMOVE UPPER PORTION OF CONCRETE LINER. PULVERIZE REMAINING CONCRETE LINER ON BOTTOM OF CANAL. PROCESS CONCRETE DEBRIS TO A MAXIMUM PARTICLE SIZE OF 6-IN. BLEND PROCESSED CONCRETE WITH EXCAVATED SOIL AND PLACE IN CANAL BOTTOM.
3. REMOVE AND STOCKPILE RSP FROM CANAL BANK WITHIN CONSTRUCTION LIMITS FOR REUSE.
4. REMOVE AND DISPOSE CONCRETE FLUME. PLACE RSP AT TRANSITIONS AND ALONG THE FINISHED SLOPES OF THE NATURAL CHANNEL AFTER REMOVAL OF THE FLUME.
5. GRADED CHANNEL TO CONFORM TO EXISTING DOWNSTREAM SECTION AND PLACE RSP.
6. CONSTRUCT O&M ROAD OVER 36 IN CULVERT WITH ARIZONA CROSSING FOR HIGH FLOW EVENTS.
7. PROTECT EXISTING OVERHEAD COMM/ELECTRICAL UTILITIES IN PLACE.

SECTION VIEWS
HORZ SCALE: 1"=20', VERT SCALE: 1'=20"

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

DECOMMISSIONING PLAN
STA 335+50 TO STA 360+00

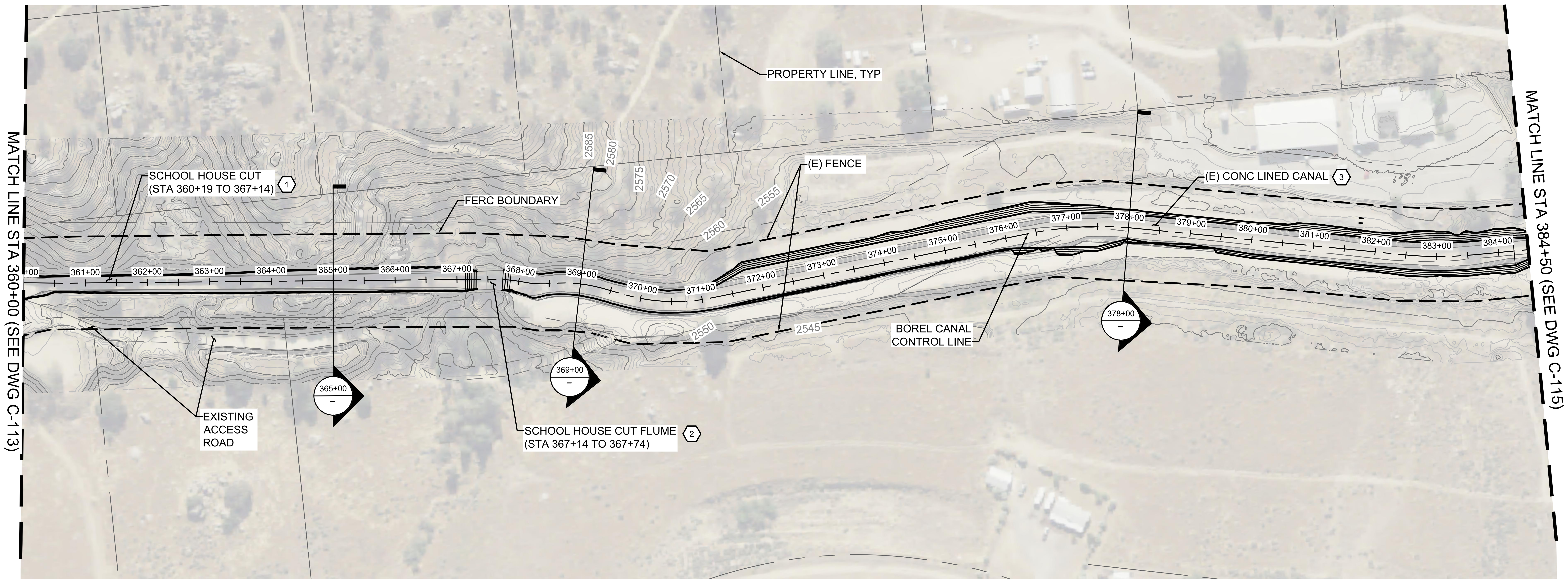
SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company | HDR

SCALE D/L

C-113

KEY NOTES:

1. ABANDON EXISTING CONCRETE LINER IN PLACE AND BACKFILL CANAL WHILE MINIMIZING DISTURBANCE OF ADJACENT SURFACES.
2. REMOVE AND DISPOSE OF CONCRETE FLUME. PLACE RSP AT TRANSITION.
3. REMOVE UPPER PORTION OF CONCRETE LINER. PULVERIZE REMAINING CONCRETE LINER ON THE BOTTOM OF THE CANAL. PROCESS CONCRETE DEBRIS TO A MAXIMUM PARTICLE SIZE OF 6 IN. BLEND PROCESSED CONCRETE WITH EXCAVATED SOIL AND PLACE IN CANAL BOTTOM.



PLAN STA 360+00 TO STA 384+50

SCALE: 1"=100'

SECTION VIEWS

HORZ SCALE: 1"=20', VERT SCALE: 1"=20'

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION: BOREL HYDRO SURRENDER

DECOMMSIONING PLAN
STA 360+00 TO STA 384+50

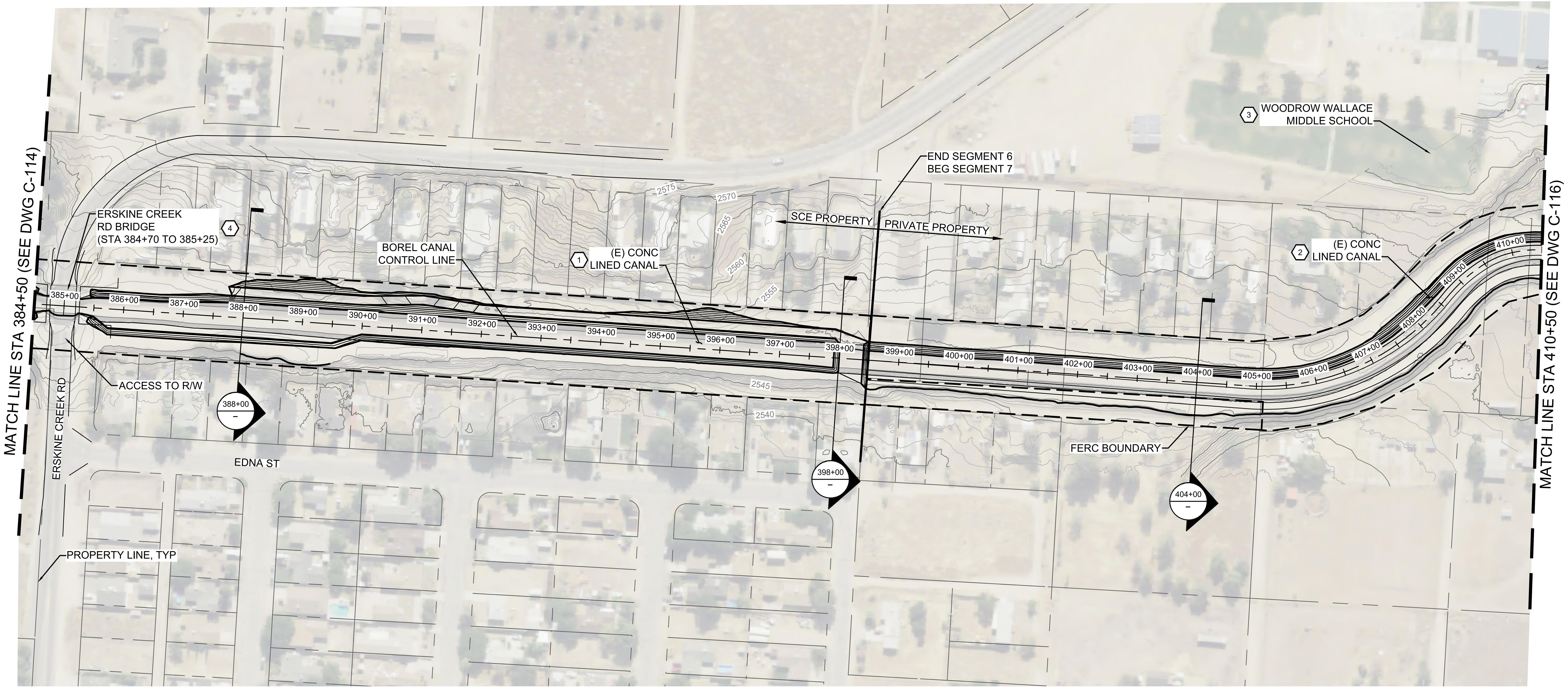
SOUTHERN CALIFORNIA EDISON — An EDISON INTERNATIONAL Company | HDR

SCALE: D/L

C-114

KEY NOTES:

1. REMOVE UPPER PORTION OF CONCRETE LINER. PULVERIZE REMAINING CONCRETE LINER ON THE BOTTOM OF THE CANAL. PROCESS CONCRETE DEBRIS TO A MAXIMUM PARTICLE SIZE OF 6 IN. BLEND PROCESSED CONCRETE WITH EXCAVATED SOIL AND PLACE IN CANAL BOTTOM.
2. FROM 398+45 TO 421+50 REMOVE ENTIRE CONCRETE LINER, PROCESS AND PLACE WITHIN NON-PRIVATE PARCELS. EXCAVATE BANK AND PLACE FILL IN CANAL.
3. CONSTRUCTION ACTIVITIES LIMITED TO SUMMER MONTHS WHEN SCHOOL IS NOT IN SESSION (STA 400+00 TO 420+00).
4. PROTECT EXISTING BRIDGE IN PLACE. CONCRETE LINER TO REMAIN UNDER BRIDGE TO A DISTANCE OF 20 FEET BEYOND THE FOOTING. PLACE LIGHTWEIGHT CELLULAR CONCRETE FILL ON TOP OF CONCRETE LINER TO FINISHED GRADE ELEVATIONS.



PLAN STA 384+50 TO STA 410+50

SCALE: 1"=100'

SECTION VIEWS

HORZ SCALE: 1"=20', VERT SCALE: 1"=20'

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION: BOREL HYDRO SURRENDER

DECOMMISSIONING PLAN
STA 384+50 TO STA 410+50

SOUTHERN CALIFORNIA EDISON — An EDISON INTERNATIONAL Company | HDR

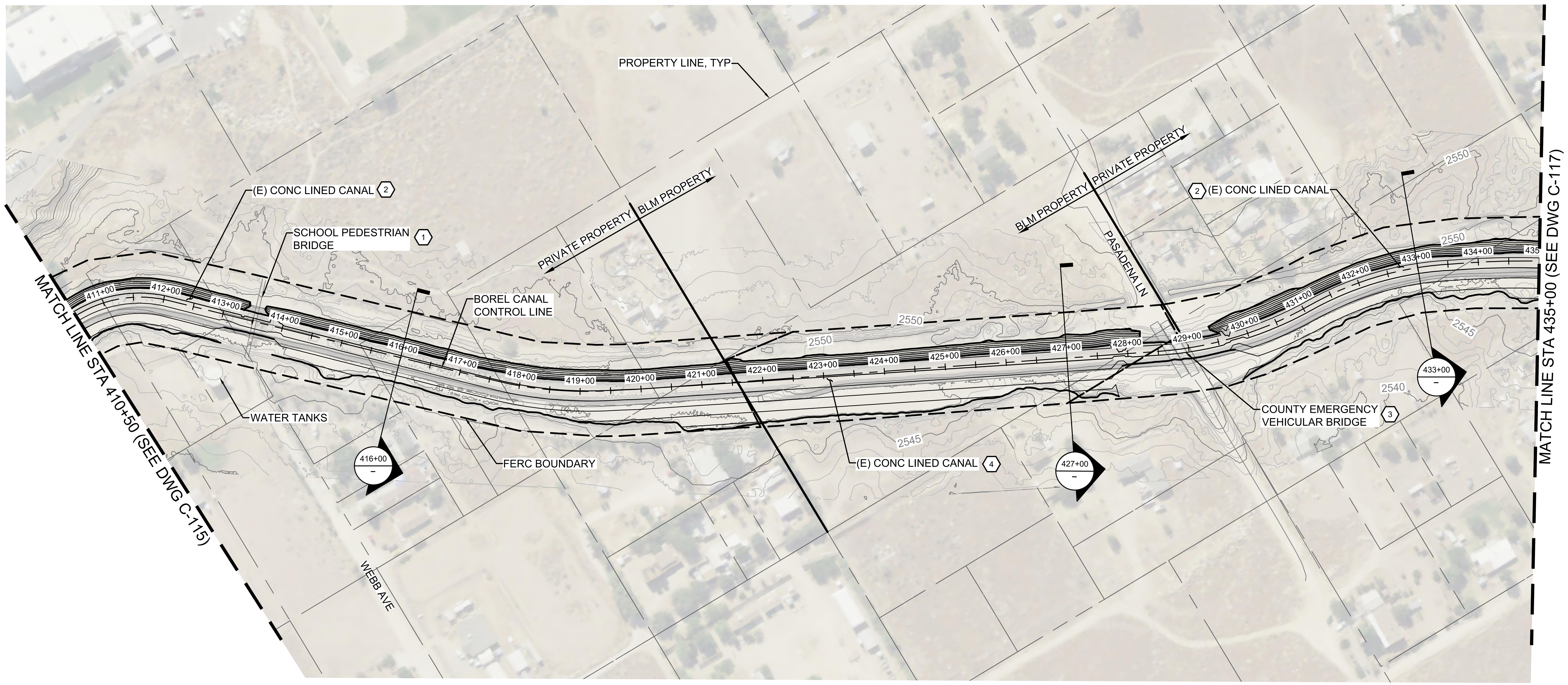
SCALE: D/L

C-115

SOUTHERN CALIFORNIA EDISON
2012 – 4 SIZE

KEY NOTES:

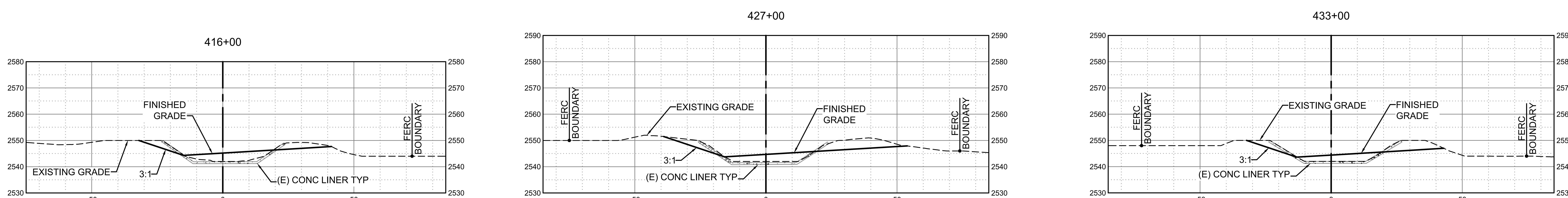
1. EXISTING SCHOOL PEDESTRIAN BRIDGE. DEMOLISH AND HAUL OFF SITE TO AN APPROVED RECYCLING FACILITY. BRIDGE ABUTMENTS MUST BE REMOVED TO EXISTING GRADE AND HAULED AWAY.
2. FROM 398+45 TO 421+50 AND FROM 428+95 TO 445+25, REMOVE ENTIRE CONCRETE LINER, PROCESS AND PLACE WITHIN NON-PRIVATE PARCELS. EXCAVATE NATIVE MATERIAL FROM BANK PLACE FILL IN CANAL.
3. PROTECT EXISTING BRIDGES IN PLACE. CONCRETE LINER TO REMAIN UNDER BRIDGES TO A DISTANCE OF 20 FEET BEYOND THE FOOTING. PLACE LIGHTWEIGHT CELLULAR CONCRETE FILL ON TOP OF CONCRETE LINER TO FINISHED GRADE ELEVATIONS.
4. REMOVE UPPER PORTION OF CONCRETE LINER. PULVERIZE REMAINING CONCRETE LINER ON THE BOTTOM OF THE CANAL. PROCESS CONCRETE DEBRIS TO A MAXIMUM PARTICLE SIZE OF 6 IN. BLEND CRUSHED CONCRETE WITH EXCAVATED SOIL AND PLACE IN CANAL BOTTOM (STA 421+50 TO 429+00).



PLAN STA 410+50 TO STA 435+00

SCALE: 1"=100'

0 100 200



SECTION VIEWS

HORZ SCALE: 1"=20', VERT SCALE: 1"=20'

0 20 40

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION: BOREL HYDRO SURRENDER

DECOMMISSIONING PLAN
STA 410+50 TO STA 435+00

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

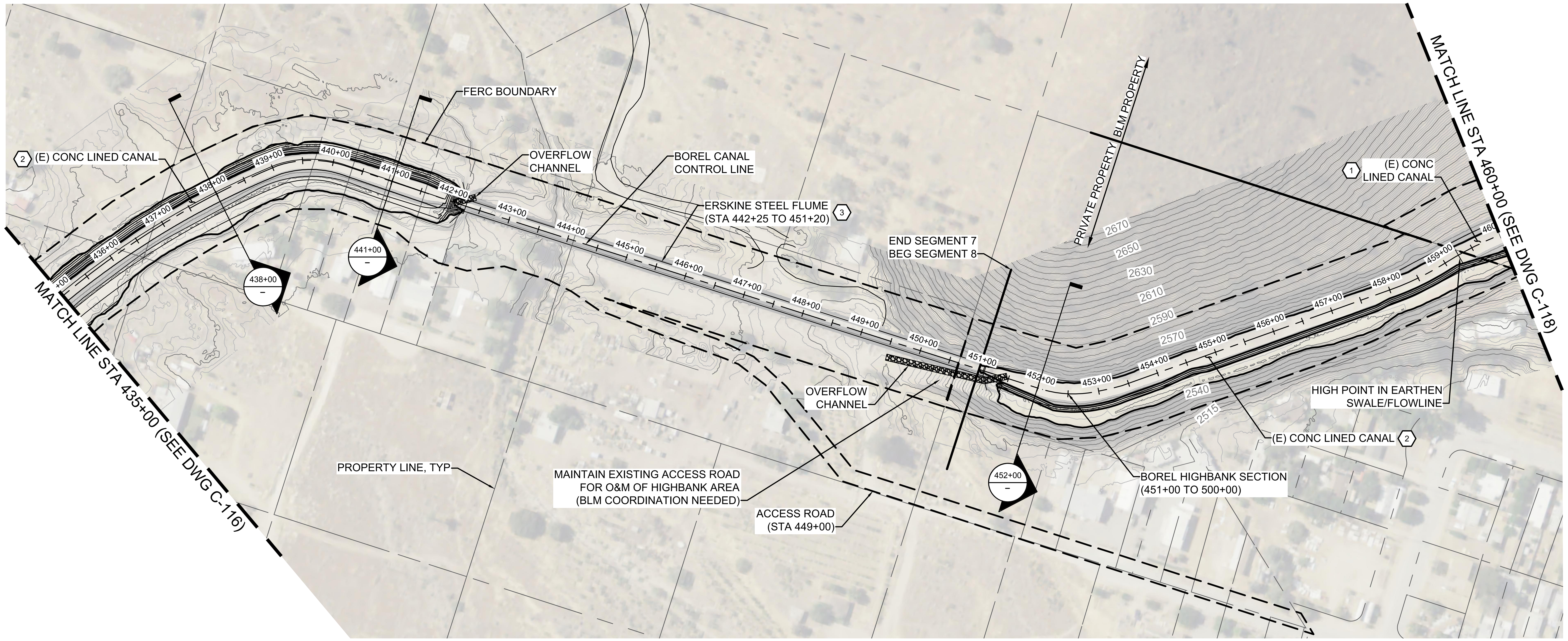
HDR

SCALE: D/L

C-116

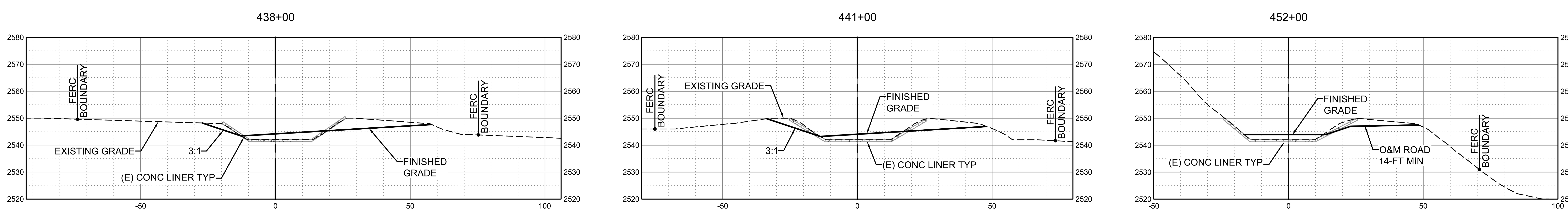
KEY NOTES:

1. REMOVE UPPER PORTION OF CONCRETE LINER PULVERIZE REMAINING CONCRETE LINER ON THE BOTTOM OF THE CANAL. PROCESS CONCRETE DEBRIS TO A MAXIMUM PARTICLE SIZE OF 6 IN. BLEND CRUSHED CONCRETE WITH EXCAVATED SOIL AND PLACE IN CANAL BOTTOM.
2. FROM 428+95 TO 442+25 AND STA 451+00 TO 459+20 REMOVE ENTIRE CONCRETE LINER, PROCESS AND PLACE WITHIN NON-PRIVATE PARCELS. EXCAVATE NATIVE MATERIAL FROM BANK AND PLACE FILL IN CANAL.
3. REMOVE AND RECYCLE STRUCTURAL STEEL AND STEEL SHEETING. REMOVE AND DISPOSE CONCRETE FOOTINGS. GRADE TO MATCH ADJACENT NATURAL TOPOGRAPHY. PLACE RSP AT TRANSITIONS SEE C-501.



PLAN STA 435+00 TO STA 460+00

SCALE: 1"=100'



SECTION VIEWS

HORZ SCALE: 1"=20', VERT SCALE: 1"=20'

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

DECOMMISSIONING PLAN
STA 435+00 TO STA 460+00

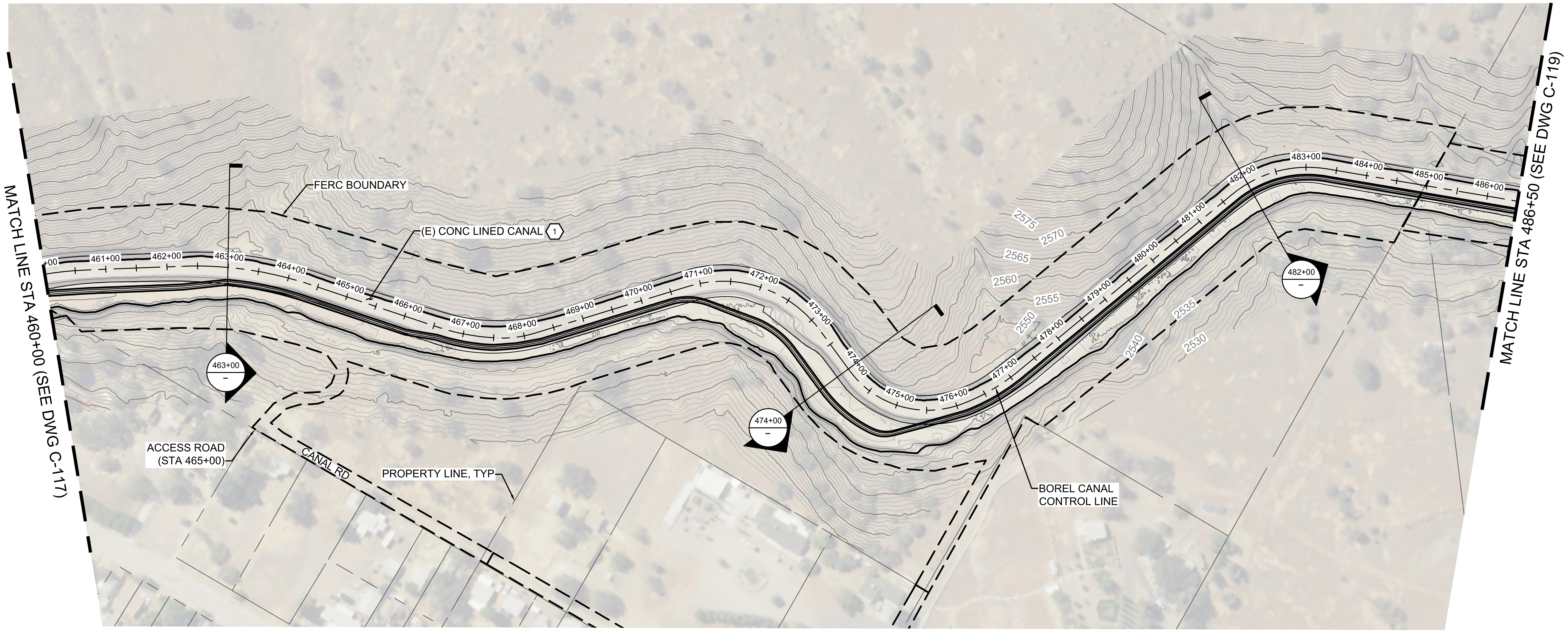
SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company
HDR

SCALE D/L

C-117

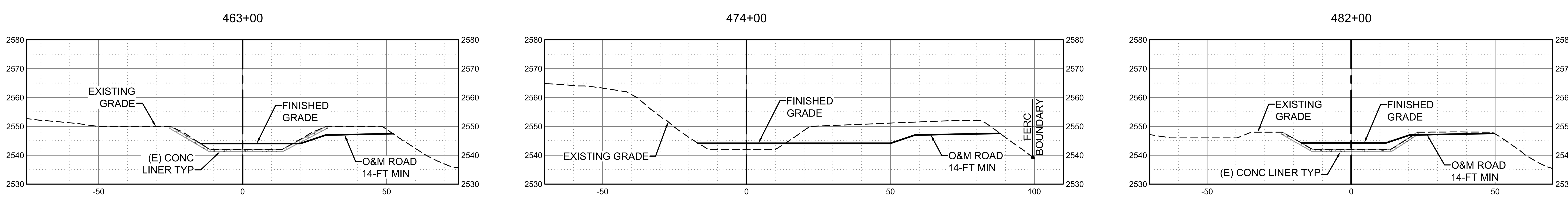
KEY NOTES:

1. REMOVE UPPER PORTION OF CONCRETE LINER. PULVERIZE REMAINING CONCRETE LINER ON THE BOTTOM OF THE CANAL. PROCESS CONCRETE DEBRIS TO A MAXIMUM PARTICLE SIZE OF 6 IN. BLEND PROCESSED CONCRETE WITH EXCAVATED SOIL AND PLACE IN CANAL BOTTOM.



PLAN STA 460+00 TO STA 486+50

SCALE: 1"=100'



SECTION VIEWS

HORZ SCALE: 1"=20', VERT SCALE: 1"=20'

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION: BOREL HYDRO SURRENDER

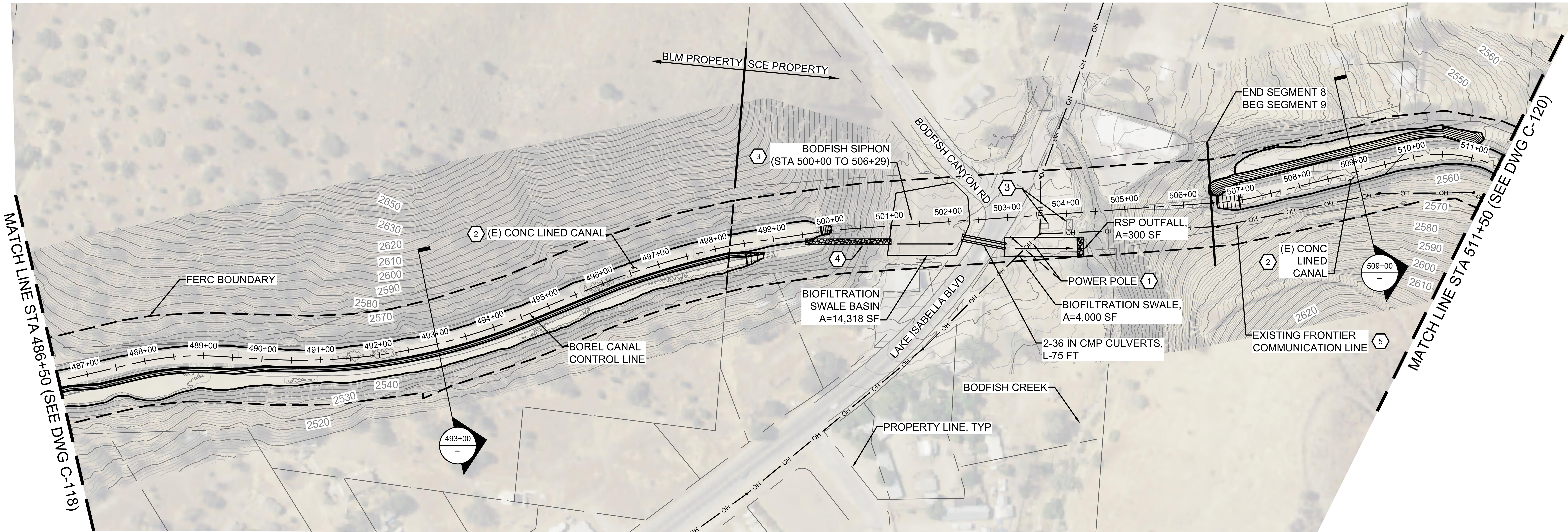
DECOMMISSIONING PLAN
STA 460+00 TO STA 486+50

SOUTHERN CALIFORNIA EDISON — An EDISON INTERNATIONAL Company | HDR

SCALE: D/L

C-118

1	2	3	4	5	6	7	8	9	10	11	12



KEY NOTES:

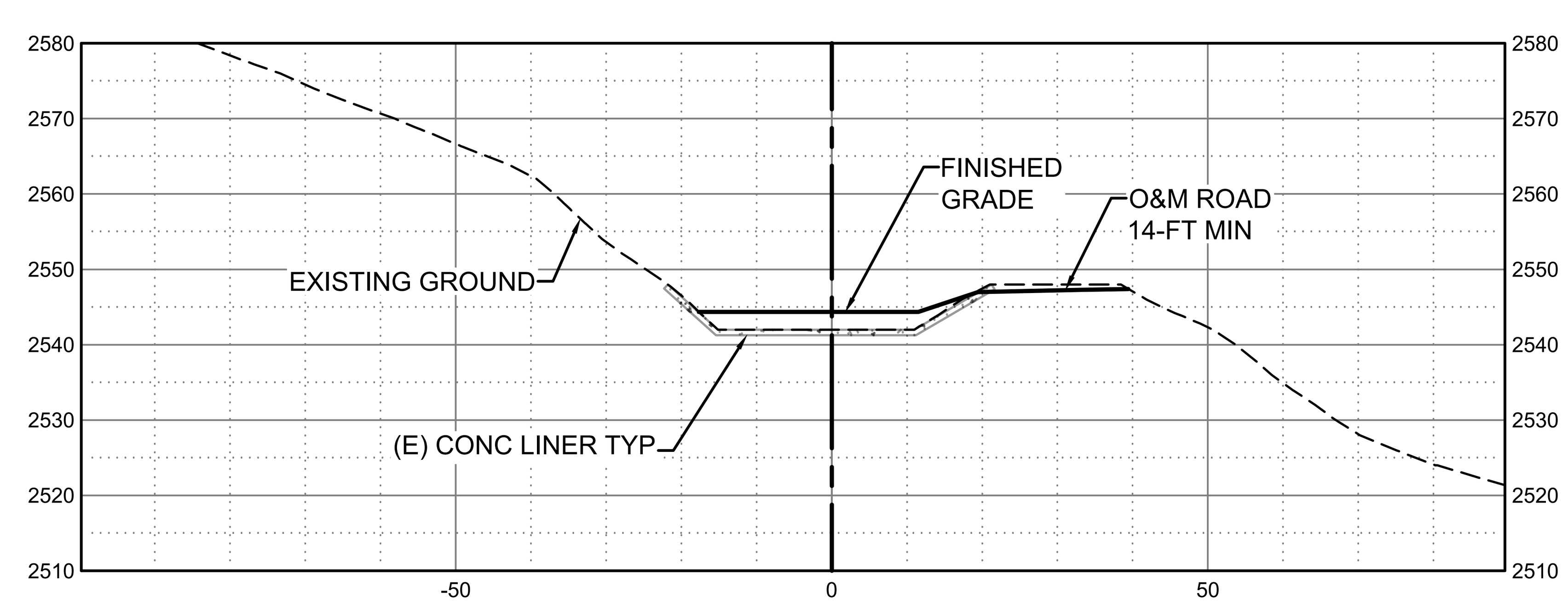
1. RELOCATE POWER POLE
2. REMOVE UPPER PORTION OF CONCRETE LINER. PULVERIZE REMAINING CONCRETE LINER ON THE BOTTOM OF THE CANAL. PROCESS CONCRETE DEBRIS TO A MAXIMUM PARTICLE SIZE OF 6 IN. BLEND PROCESSED CONCRETE WITH EXCAVATED SOIL AND PLACE IN CANAL BOTTOM.
3. BODFISH SIPHON DEMOLISH WINGWALLS, GAUGING STATION, AND DRAIN VAULTS. PROTECT HEADWALLS IN PLACE. DEWATER AND FILL SIPHON WITH CONCRETE SLURRY.
4. RSP DOWNDRAIN, W=10 FT, L=120 FT.
5. EXISTING FRONTIER COMMUNICATION LINES TO BE RELOCATED BY OTHERS PRIOR TO START OF WORK.

PLAN STA 486+50 TO STA 511+50

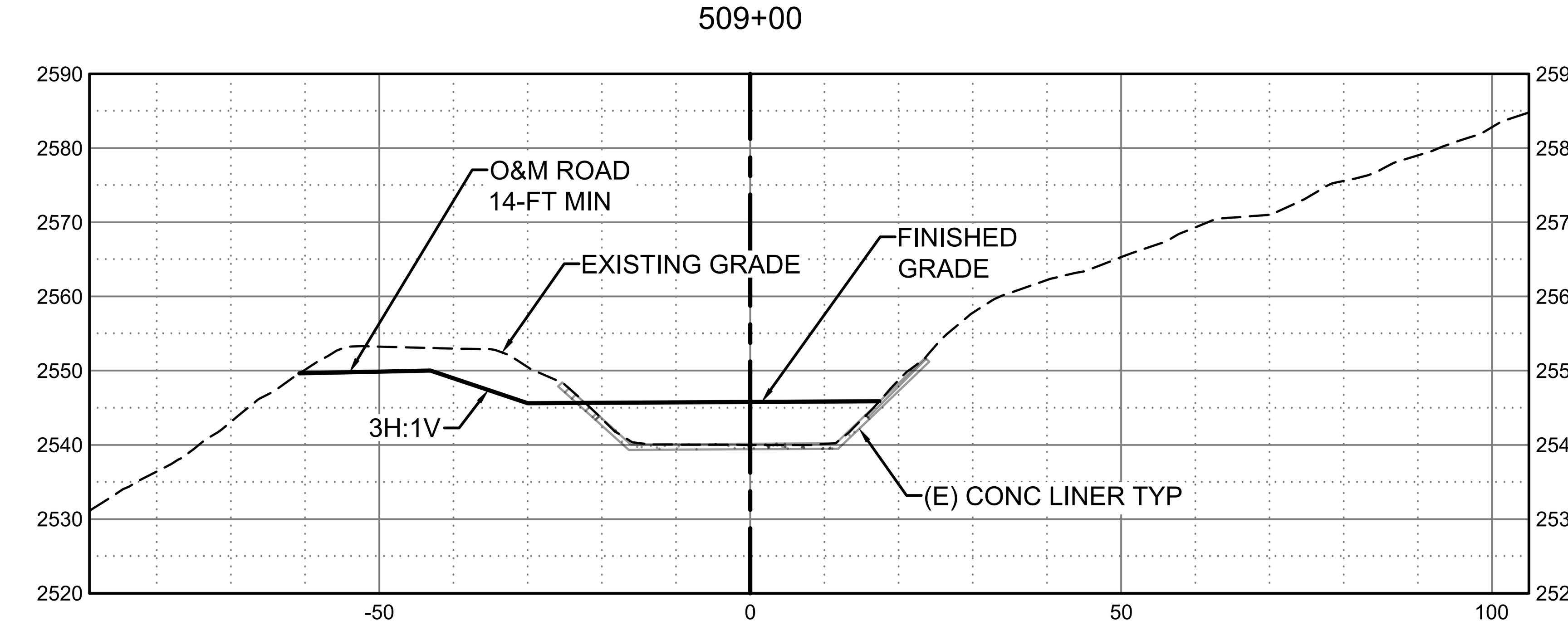
SCALE: 1"=100'

0 100 200

493+00



509+00



SECTION VIEWS

HORZ SCALE: 1"=20', VERT SCALE: 1"=20'

0 20 40

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

DECOMMISSIONING PLAN
STA 486+50 TO STA 511+50

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

HDR

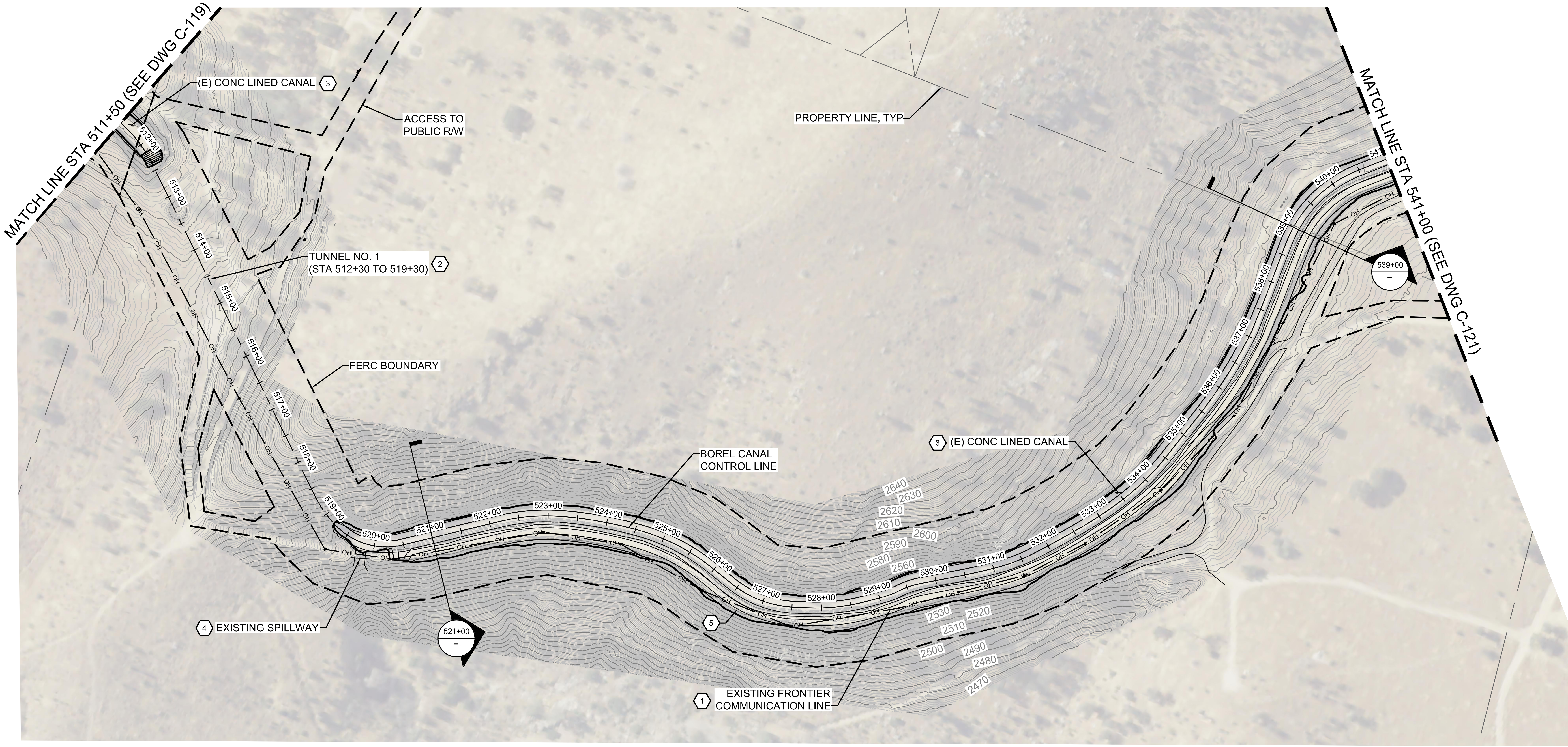
SCALE D/L

C-119

SOUTHERN CALIFORNIA EDISON
2012 – 4 SIZE

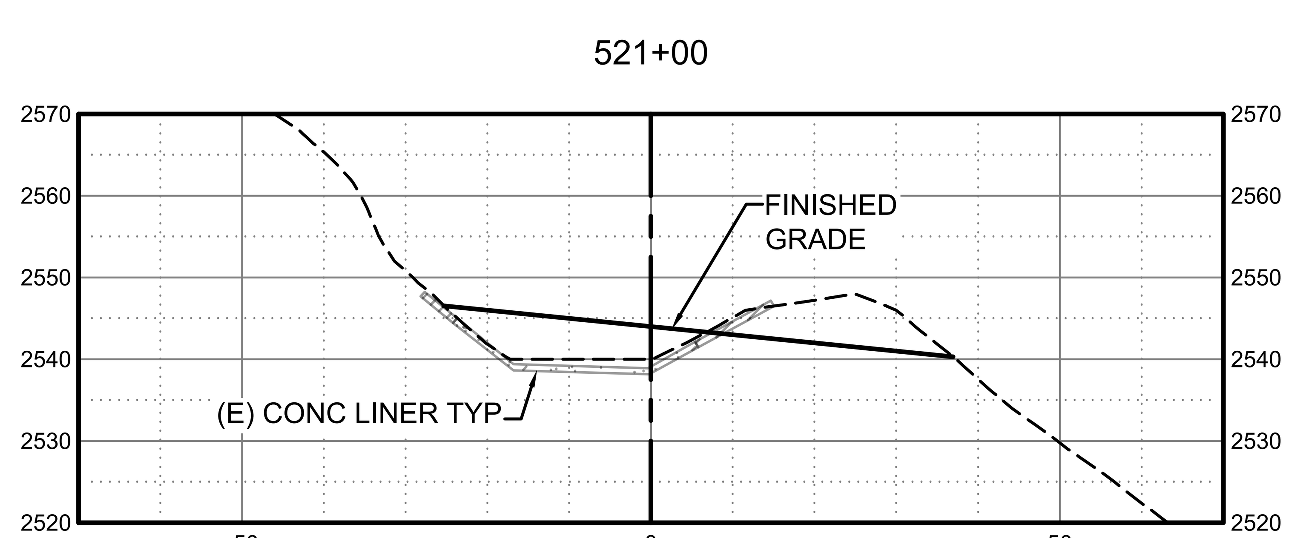
KEY NOTES:

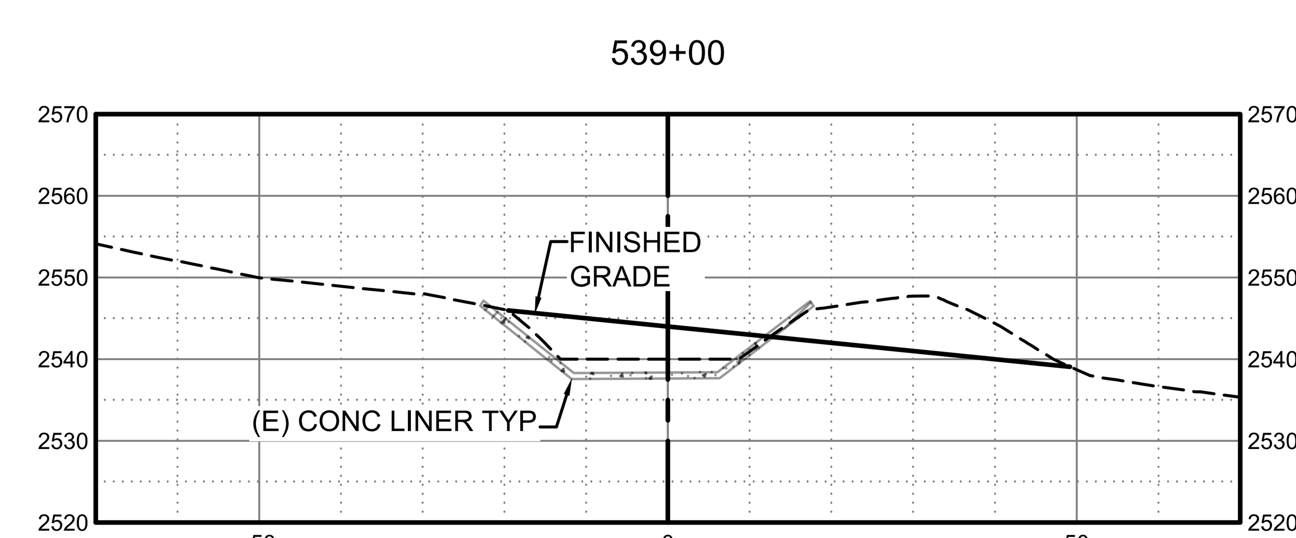
1. EXISTING FRONTIER COMMUNICATION LINES TO BE RELOCATED BY OTHERS PRIOR TO START OF WORK.
2. BACKFILL TUNNEL WITH 50% FLOWABLE FILL AND 50% FILL MIXED WITH DEMOLISHED CONCRETE. AT TUNNEL ENTRANCE AND EXIT BACKFILL HEADWALLS WITH NATIVE SOIL TO NATURALLY CONFORM GRADING SURFACE TO ADJACENT TOPOGRAPHY. SEE SHEET C-501 FOR TYPICAL TUNNEL PORTAL DIMENSIONS.
3. REMOVE UPPER PORTION OF CONCRETE LINER. PROCESS CONCRETE DEBRIS TO A MAXIMUM PARTICLE SIZE OF 6 IN. BLEND PROCESSED CONCRETE WITH EXCAVATED SOIL AND PLACE IN CANAL BOTTOM.
4. REMOVE GATES AND CROSSING MATERIALS BACKFILL STRUCTURE WALLS AND FOOTING WITH CHANNEL BACKFILL OPERATIONS. SEE SHEET C-501 FOR DIMENSIONS.
5. EXISTING H-PILES AND RETAINING WALL (STA 526+50 TO 527+50). REMOVE AND DISPOSE.



PLAN STA 511+50 TO STA 541+00

SCALE: 1"=100'





SECTION VIEWS

HORZ SCALE: 1"=20', VERT SCALE: 1"=20'

0 20 40

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

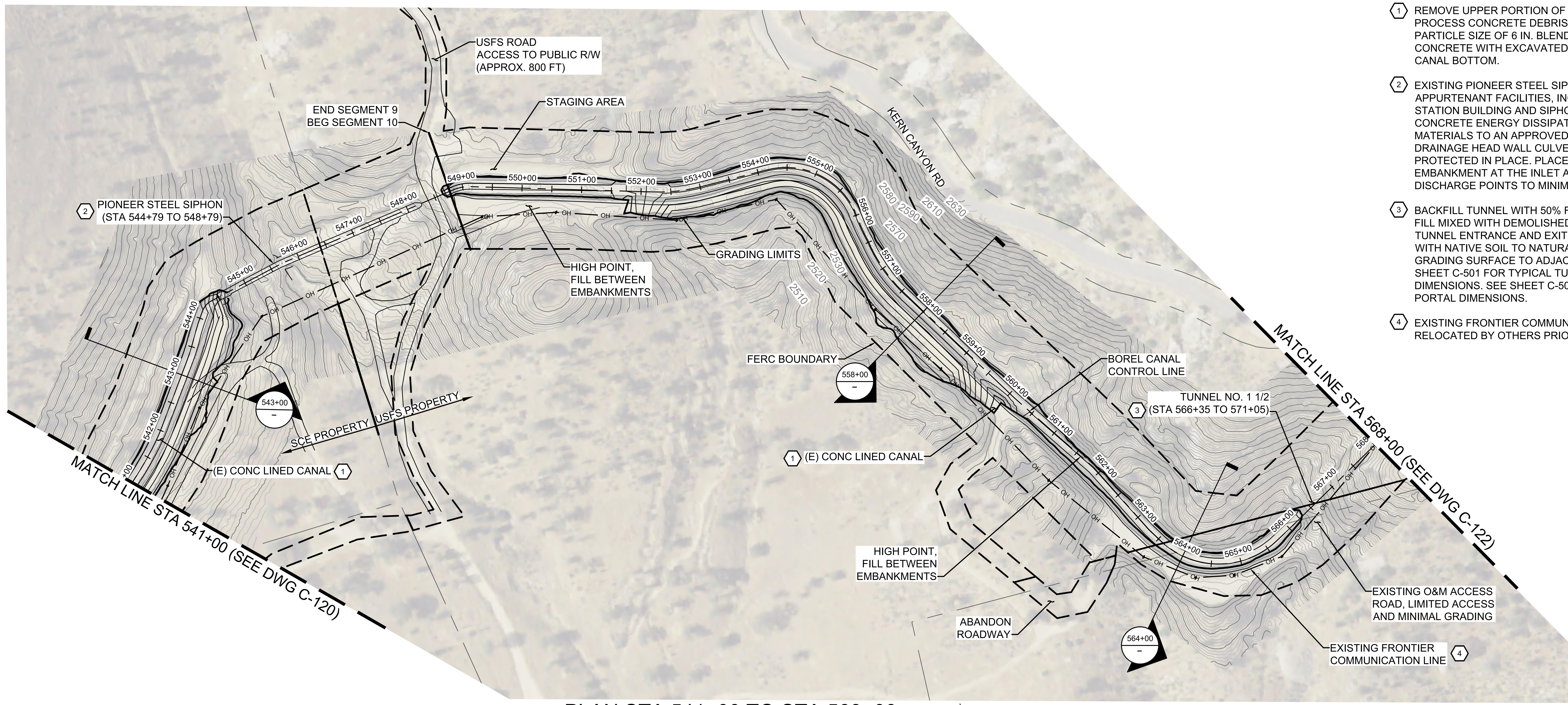
DECOMMISSIONING PLAN
STA 511+50 TO STA 541+00

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company — HDR

SCALE D/L

C-120

SOUTHERN CALIFORNIA EDISON
2012 – 4 SIZE



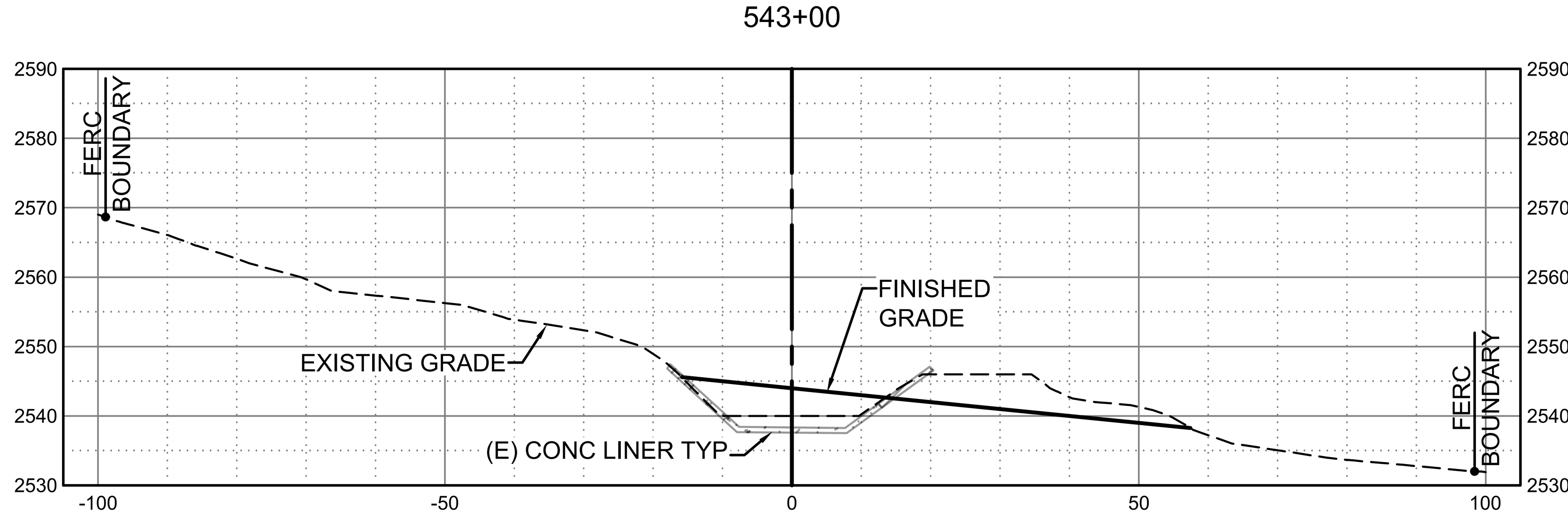
KEY NOTES:

1. REMOVE UPPER PORTION OF CONCRETE LINER. PROCESS CONCRETE DEBRIS TO A MAXIMUM PARTICLE SIZE OF 6 IN. BLEND PROCESSED CONCRETE WITH EXCAVATED SOIL AND PLACE IN CANAL BOTTOM.
2. EXISTING PIONEER STEEL SIPHON. REMOVE APPURTENANT FACILITIES, INCLUDING THE GAUGING STATION BUILDING AND SIPHON, DRAINPIPE, AND CONCRETE ENERGY DISSIPATION STRUCTURE. HAUL MATERIALS TO AN APPROVED LOCATION. THE STORM DRAINAGE HEAD WALL CULVERTS WILL BE PROTECTED IN PLACE. PLACE RSP ALONG THE EMBANKMENT AT THE INLET AND AT THE PIPE DISCHARGE POINTS TO MINIMIZE EROSION.
3. BACKFILL TUNNEL WITH 50% FLOWABLE FILL AND 50% FILL MIXED WITH DEMOLISHED CONCRETE. AT TUNNEL ENTRANCE AND EXIT BACKFILL HEADWALLS WITH NATIVE SOIL TO NATURALLY CONFORM GRADING SURFACE TO ADJACENT TOPOGRAPHY SEE SHEET C-501 FOR TYPICAL TUNNEL PORTAL DIMENSIONS. SEE SHEET C-501 FOR TYPICAL TUNNEL PORTAL DIMENSIONS.
4. EXISTING FRONTIER COMMUNICATION LINES TO BE RELOCATED BY OTHERS PRIOR TO START OF WORK.

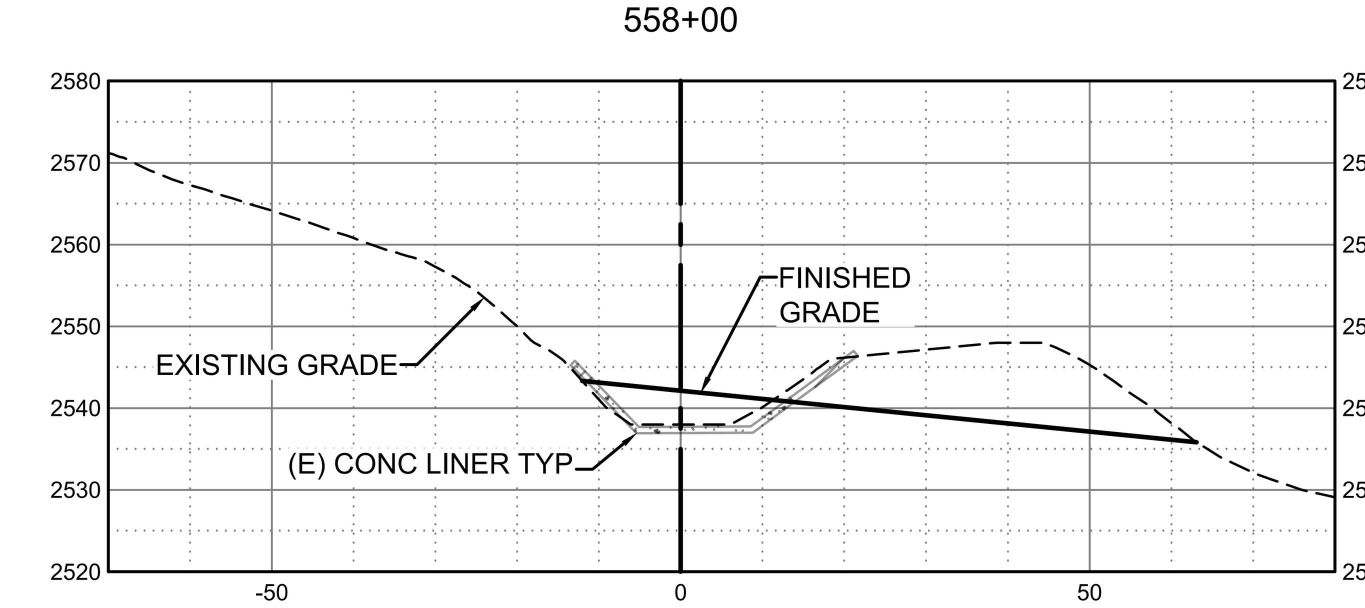
PLAN STA 541+00 TO STA 568+00

SCALE: 1"=100'

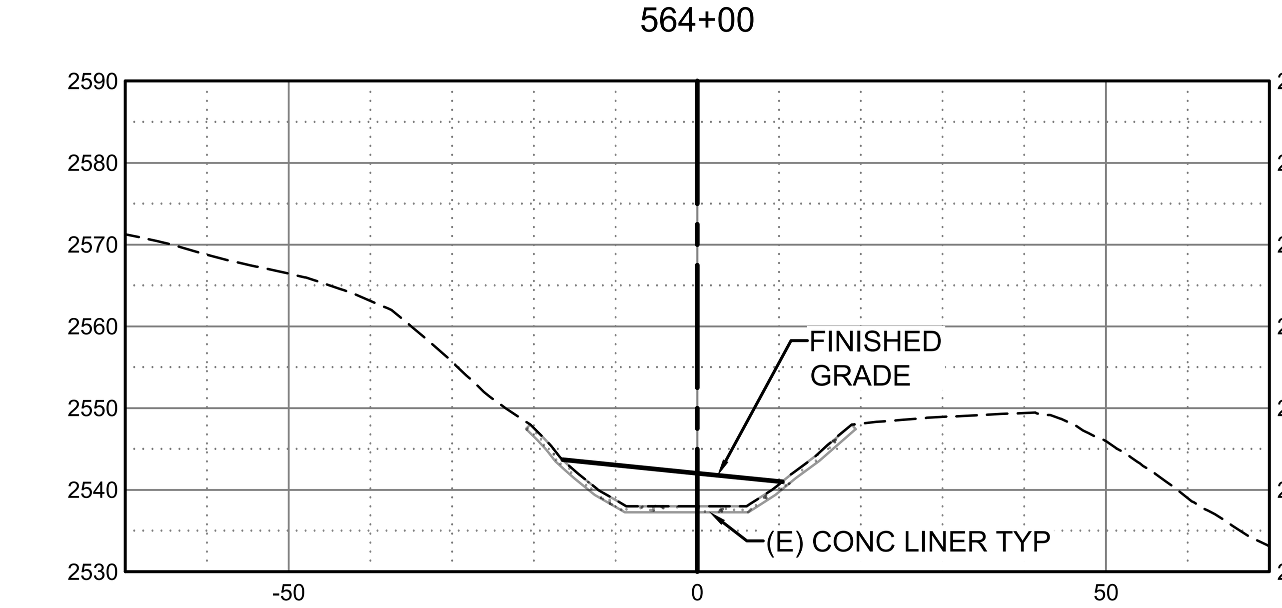
543+00



558+00



564+00



SECTION VIEWS

HORZ SCALE: 1"=20', VERT SCALE: 1"=20'

0 20 40

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BORREL HYDRO SURRENDER

DECOMMISSIONING PLAN
STA 541+00 TO STA 568+00

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

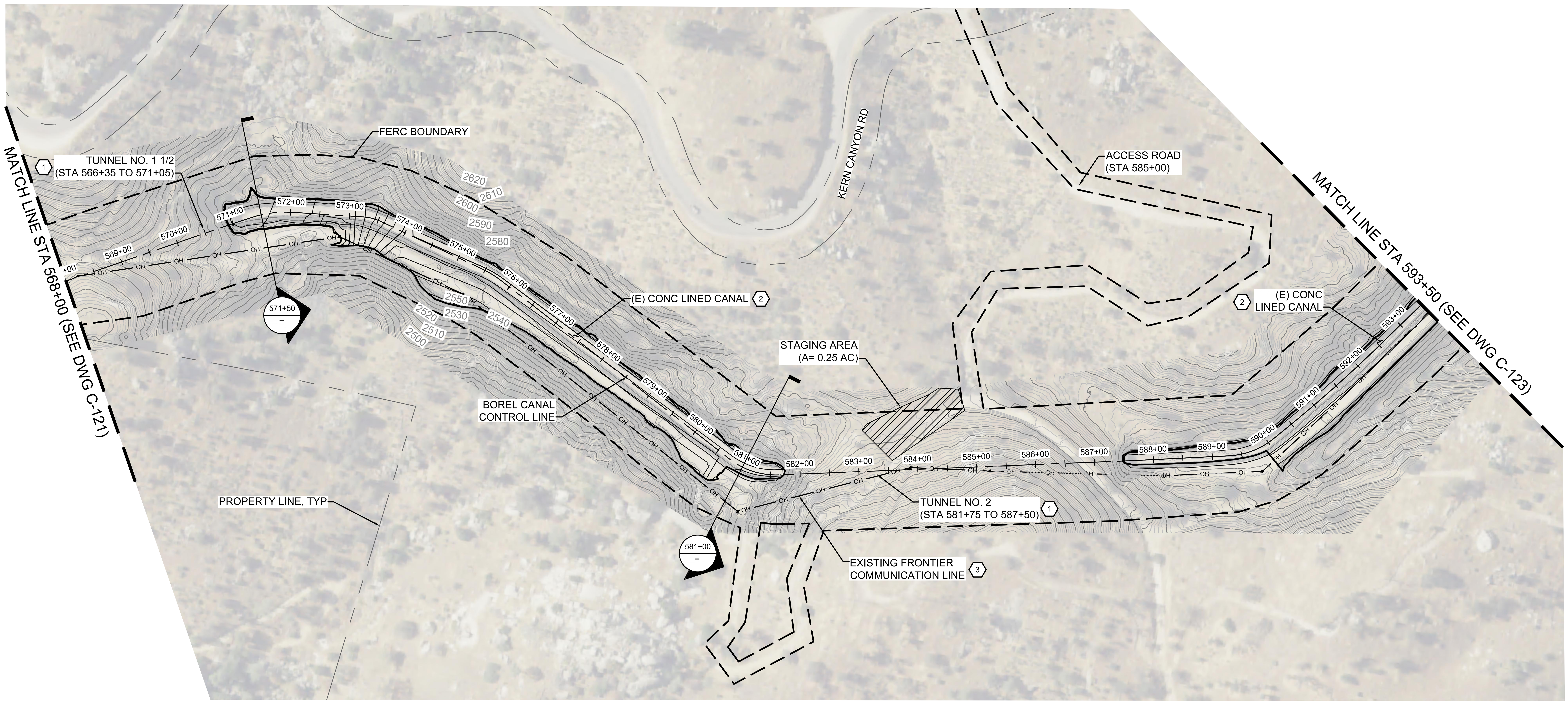
HDR

SCALE
D/L

C-121

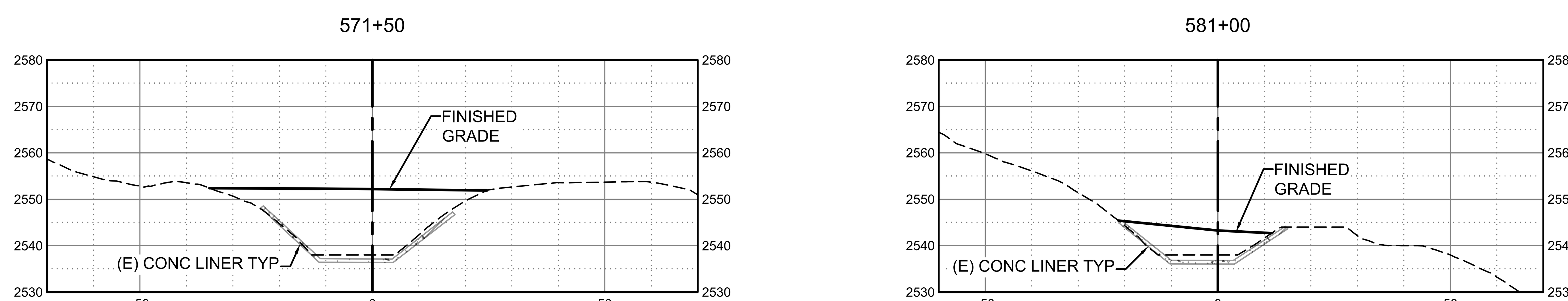
KEY NOTES:

1. BACKFILL TUNNEL WITH 50% FLOWABLE FILL AND 50% FILL MIXED WITH DEMOLISHED CONCRETE. AT TUNNEL ENTRANCE AND EXIT BACKFILL HEADWALLS WITH NATIVE SOIL TO NATURALLY CONFORM GRADING SURFACE TO ADJACENT TOPOGRAPHY SEE SHEET C-501 FOR TYPICAL TUNNEL PORTAL DIMENSIONS.
2. REMOVE UPPER PORTION OF CONCRETE LINER. PROCESS CONCRETE DEBRIS TO A MAXIMUM PARTICLE SIZE OF 6 IN. BLEND PROCESSED CONCRETE WITH EXCAVATED SOIL AND PLACE IN CANAL BOTTOM.
3. EXISTING FRONTIER COMMUNICATION LINES TO BE RELOCATED BY OTHERS PRIOR TO START OF WORK.



PLAN STA 568+00 TO STA 593+50

SCALE: 1"=100'



SECTION VIEWS

HORZ SCALE: 1"=20', VERT SCALE: 1"=20'

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION: BOREL HYDRO SURRENDER

DECOMMISSIONING PLAN
STA 568+00 TO STA 593+50

SOUTHERN CALIFORNIA EDISON — An EDISON INTERNATIONAL Company | HDR

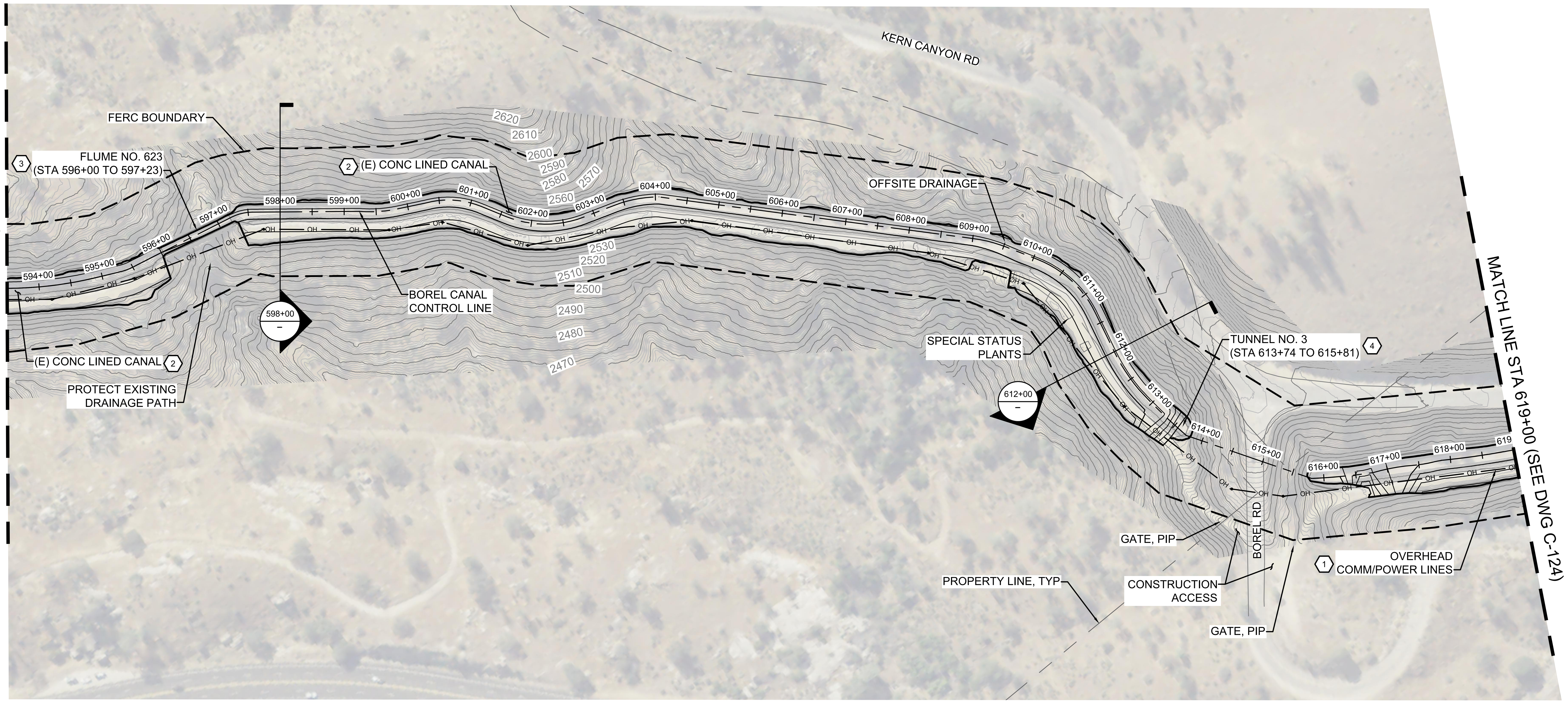
SCALE: D/L

C-122

SOUTHERN CALIFORNIA EDISON
2012 – 4 SIZE

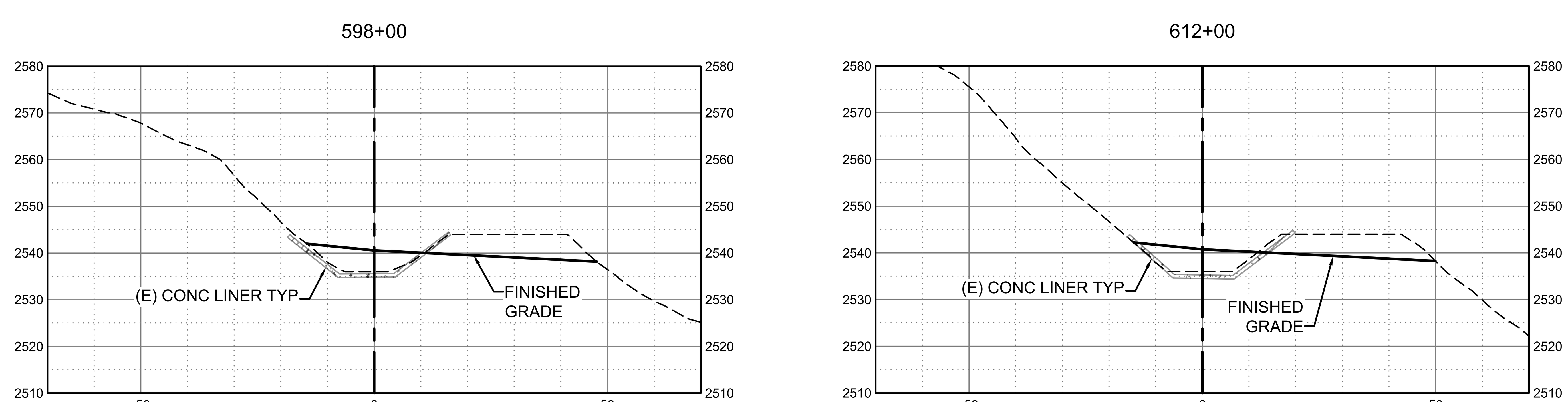
KEY NOTES:

1. PROTECT EXISTING OVERHEAD COMM/ELECTRICAL UTILITIES IN PLACE.
2. REMOVE UPPER PORTION OF CONCRETE LINER. PROCESS CONCRETE DEBRIS TO A MAXIMUM PARTICLE SIZE OF 6 IN. BLEND PROCESSED CONCRETE WITH EXCAVATED SOIL AND PLACE IN CANAL BOTTOM.
3. REMOVE AND RECYCLE STRUCTURAL STEEL AND STEEL SHEETING. CONCRETE HEADWALLS AND FOOTINGS TO REMAIN.
4. BACKFILL TUNNEL WITH 50% FLOWABLE FILL AND 50% FILL MIXED WITH DEMOLISHED CONCRETE. AT TUNNEL ENTRANCE AND EXIT BACKFILL HEADWALLS WITH NATIVE SOIL TO NATURALLY CONFORM GRADING SURFACE TO ADJACENT TOPOGRAPHY SEE SHEET C-501 FOR TYPICAL TUNNEL PORTAL DIMENSIONS. SEE SHEET C-501 FOR TYPICAL TUNNEL PORTAL DIMENSIONS.



PLAN STA 593+50 TO STA 619+00

SCALE: 1"=100'



SECTION VIEWS

HORZ SCALE: 1"=20', VERT SCALE: 1"=20'

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION: BOREL HYDRO SURRENDER

DECOMMISSIONING PLAN
STA 593+50 TO STA 619+00

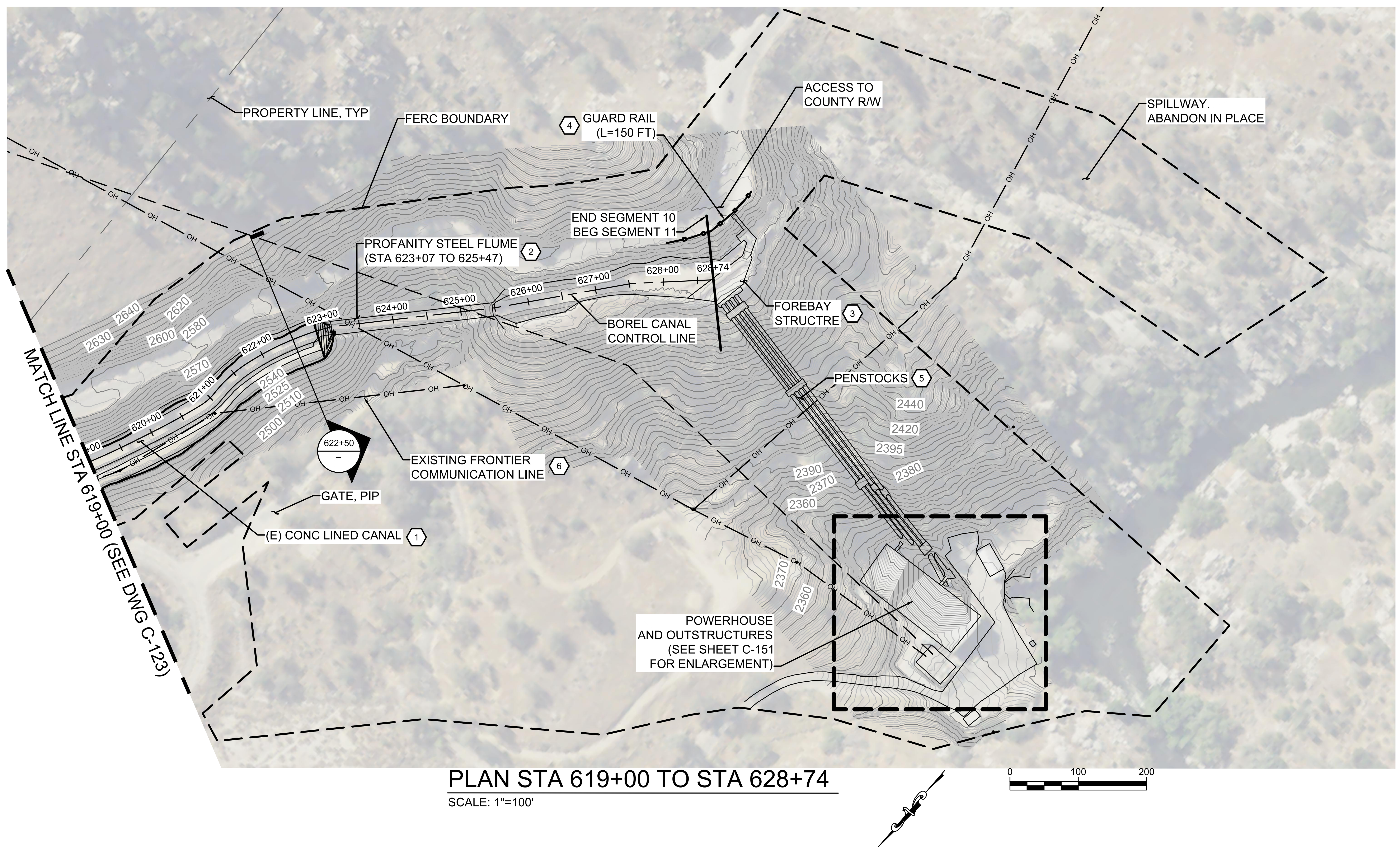
SOUTHERN CALIFORNIA EDISON — An EDISON INTERNATIONAL Company

HDR

SCALE: D/L

C-123

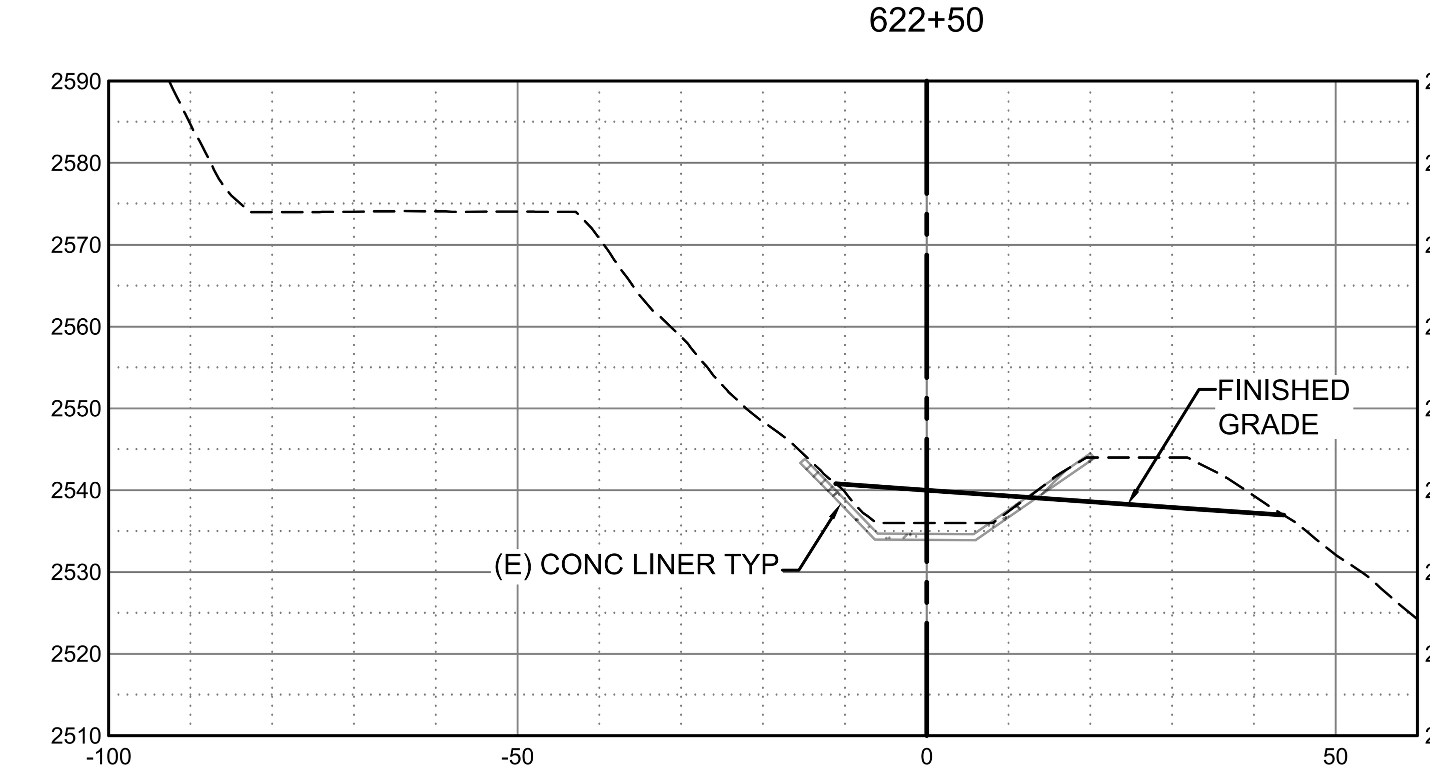
SOUTHERN CALIFORNIA EDISON
2012 – 4 SIZE



PLAN STA 619+00 TO STA 628+74

SCALE: 1"=100'

622+50



SECTION VIEWS

HORZ SCALE: 1"=20', VERT SCALE: 1"=20'

KEY NOTES:

1. REMOVE UPPER PORTION OF CONCRETE LINER. PROCESS CONCRETE DEBRIS TO A MAXIMUM PARTICLE SIZE OF 6 IN. BLEND PROCESSED CONCRETE WITH EXCAVATED SOIL AND USE BLENDED MATERIALS TO BACKFILL CANAL AND FOREBAY STRUCTURE PLACE IN CANAL BOTTOM.
2. REMOVE AND RECYCLE STRUCTURAL STEEL AND STEEL SHEETING. CONCRETE HEADWALLS AND FOOTINGS TO REMAIN.
3. REMOVE ELECTRICAL AND CONTROL EQUIPMENT, TRASH RACK, GATES, BELT SYSTEM, CONTROL BUILDING, AND STAIRS. DEMOLISH CONCRETE WALLS, PROCESS CONCRETE, MIX NATIVE SOIL AND BACKFILL THE AREA (3:1 MAX SLOPE). CONCRETE NOT USED IN BACKFILL MUST BE REMOVED, PROCESSED AND MIXED WITH NATIVE SOIL FOR BACKFILL IN OTHER AREAS OF THE PROJECT.
4. INSTALL GUARDRAIL AFTER DEMOLITION AND REMOVAL OF CHAIN LINK FENCING AND GATES
5. REMOVE PENSTOCKS AND RECYCLE OFFSITE. DEMOLISH AND REMOVE ANCHOR BLOCKS AND FOOTINGS.
6. EXISTING FRONTIER COMMUNICATION LINES TO BE RELOCATED BY OTHERS PRIOR TO START OF WORK.

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

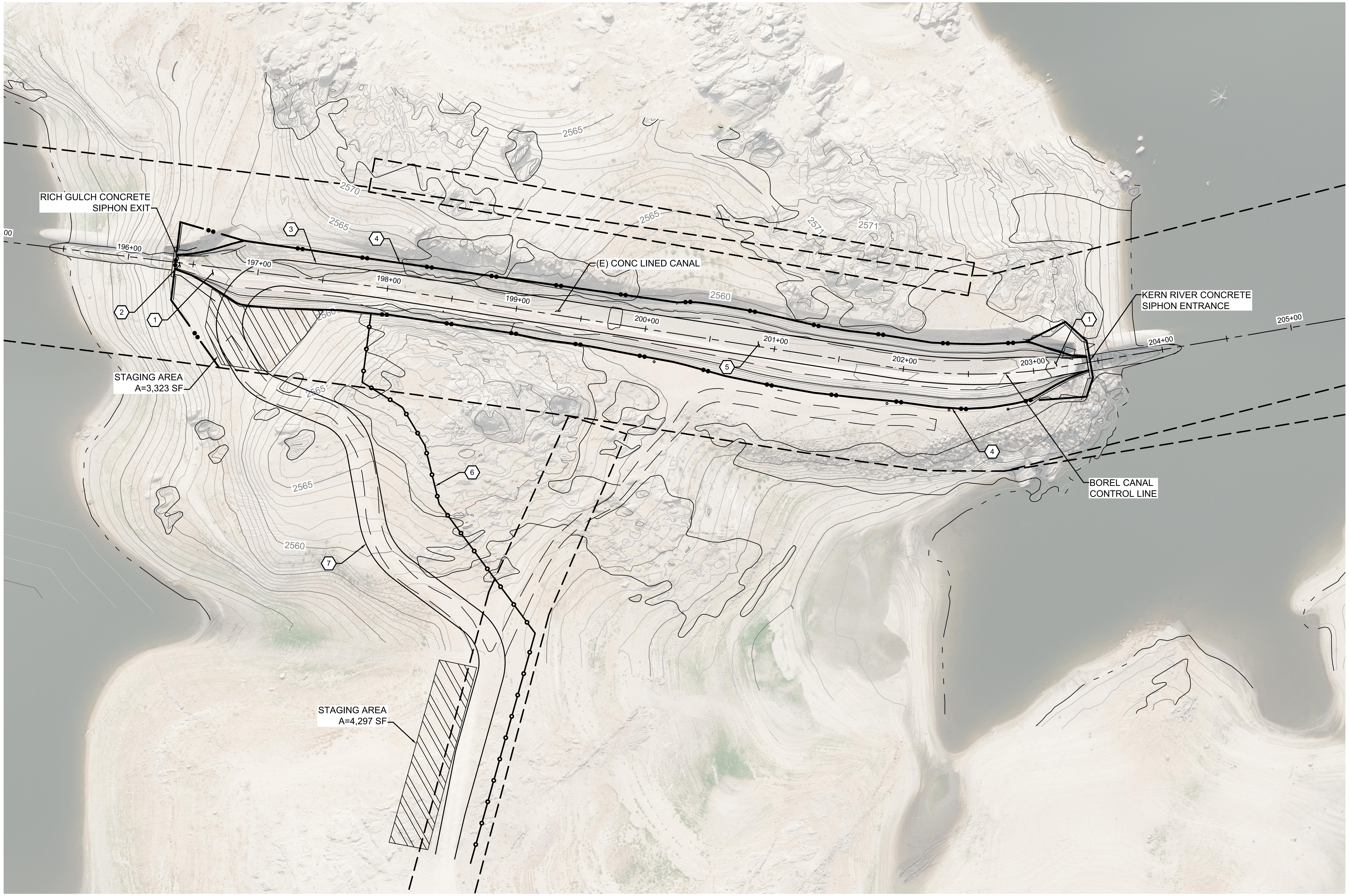
LOCATION BOREL HYDRO SURRENDER

DECOMMISSIONING PLAN
STA 619+00 TO STA 628+74

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company | HDR

SCALE D/L

C-124



PLAN

SCALE: 1"=40'

GENERAL NOTES:

1. CONTRACTOR MUST LIMIT DISTURBANCE OF NATIVE MATERIAL TO THE ACCESS ROAD AND STAGING AREA
2. ALL OF THE CONTRACTORS EMPLOYEES MUST ATTEND CULTURAL EDUCATION/TRAINING PRIOR TO START OF WORK.

KEY NOTES:

1. ABANDON CANAL IN PLACE
2. REMOVE FENCING, INSTALL CONCRETE PLUG AT END OF SIPHON AND BACKFILL HEADWALLS WITH CLEAN IMPORTED SOIL (3:1 MAX SLOPE)
3. CONTRACTOR MUST CONSTRUCT ACCESS RAMP INTO CANAL USING CLEAN IMPORTED SOIL
4. CONSTRUCTION LIMIT ON PLANS WILL STOP AT THE TOP OF THE CONCRETE LINING ON EAST SIDE OF CANAL. CONTRACTOR WILL NOT BE ALLOWED TO ACCESS OR DISTURB ANYTHING BEYOND THAT POINT
5. CONSTRUCTION ACCESS TO THE KERN RIVER SIPHON HEADWALL MUST REMAIN WITHIN THE LIMITS OF THE CONCRETE LINED CHANNEL (BOTTOM WIDTH OF THE CANAL APPROX. 24 FT WIDE)
6. PRIOR TO START OF WORK, CONTRACTOR MUST CONSULT WITH CULTURAL AND ENVIRONMENTAL MONITORING LEADS PRIOR TO INSTALLING HIGH VISIBILITY ORANGE FENCING.
7. APPROXIMATE LOCATION OF ACCESS ROAD.

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

DECOMMISSIONING PLAN
ISLAND

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company

HDR

SCALE D/L

C-150

PLAN

SCALE: 1"=30'

0 30 60

KEY NOTES:

1. REMOVE AND DISPOSE ALL EQUIPMENT, MACHINERY, GENERATORS, TURBINES, AND FURNITURE FROM CONTROL ROOM, MACHINERY ROOM, AND LUNCH ROOM. SEE SHEET C-517 FOR AS-BUILT INFORMATION FOR THE POWERHOUSE AND INTERNAL FEATURES.
2. BACKFILL DRAFT TUBES, AND TUNNELS, WITH FLOWABLE FILL. COLLAPSE TAILRACE OUTLET AND COVER WITH CLEAN FILL. GRADE TO MATCH ADJACENT BANK GRADES PLACE CLEAN RSP ON FINISHED SURFACE OF TAILRACE BACKFILL ALONG THE RIVER BANK.
3. PROTECT EXISTING SWITCHYARD AND SECURITY FENCING IN PLACE
4. DEMOLISH RESTROOM OUT STRUCTURE TO FOUNDATION AND DISPOSE OF DEBRIS OFFSITE
5. DEMOLISH PUMPHOUSE STRUCTURE TO FOUNDATION, REMOVE AND DISPOSE OF CONTROLS AND ELECTRICAL SERVICE
6. REMOVE AND DISPOSE OF MATERIALS REMAINING IN STORAGE OUTSTRUCTURE. DEMOLISH STORAGE OUTSTRUCTURE TO FOUNDATION AND DISPOSE OF OFFSITE
7. REMOVE PENSTOCKS AND RECYCLE OFFSITE. DEMOLISH AND REMOVE ANCHOR BLOCKS AND FOOTINGS.
8. EXISTING FRONTIER COMMUNICATION LINES TO BE RELOCATED BY OTHERS PRIOR TO START OF WORK.

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

DECOMMISSIONING PLAN
POWERHOUSE

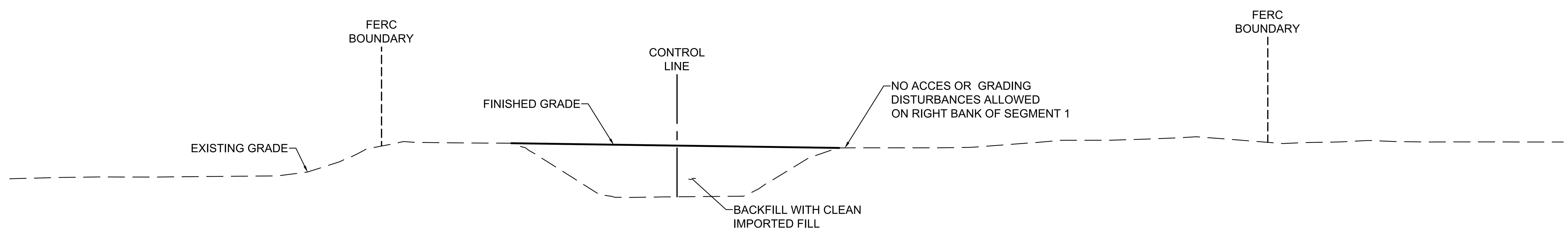
SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company | HDR

SCALE D/L

C-151

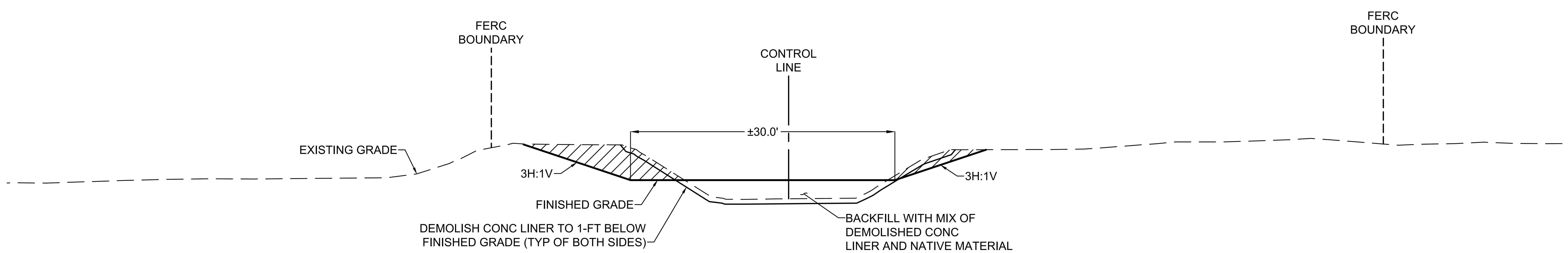
GENERAL NOTES:

1. SEE DECOMMISSIONING PLAN SHEETS FOR LOCATION OF CANAL WITHIN FERC BOUNDARY.



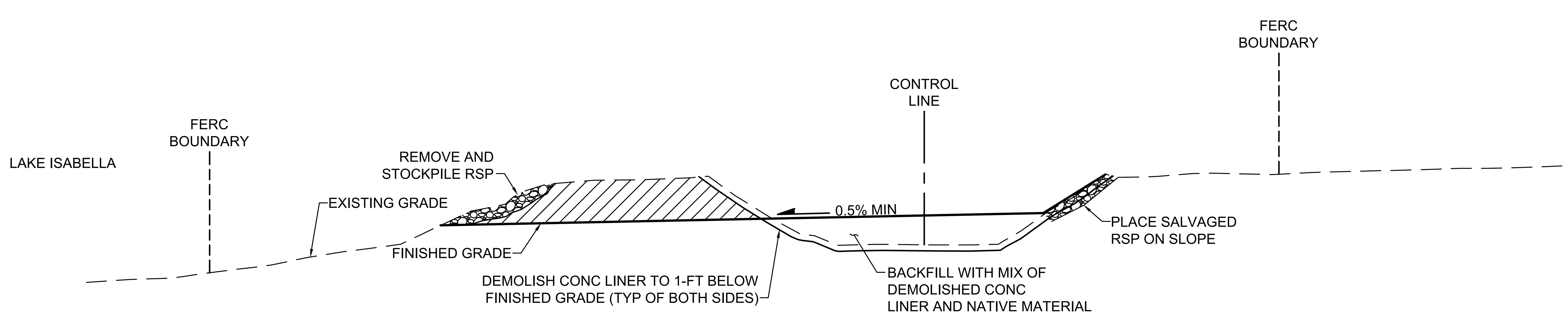
TYPICAL SECTION (SEGMENT 1 AND 2)

SCALE: 1"=10'



TYPICAL SECTION (SEGMENT 3)

SCALE: 1"=10'



TYPICAL SECTION (SEGMENT 3 AND 4)

SCALE: 1"=10'

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

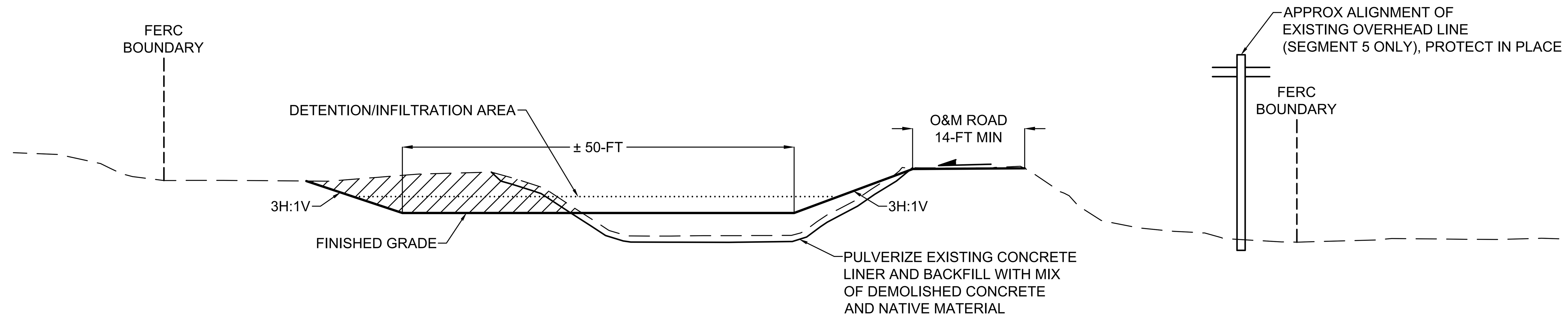
TYPICAL CANAL SECTIONS
(1 OF 2)

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company

HDR

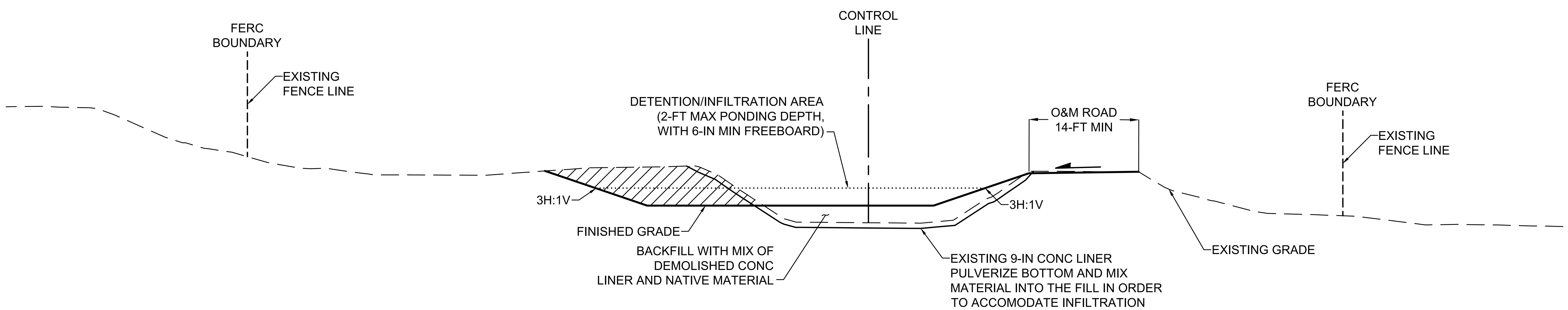
SCALE D/L

C-301



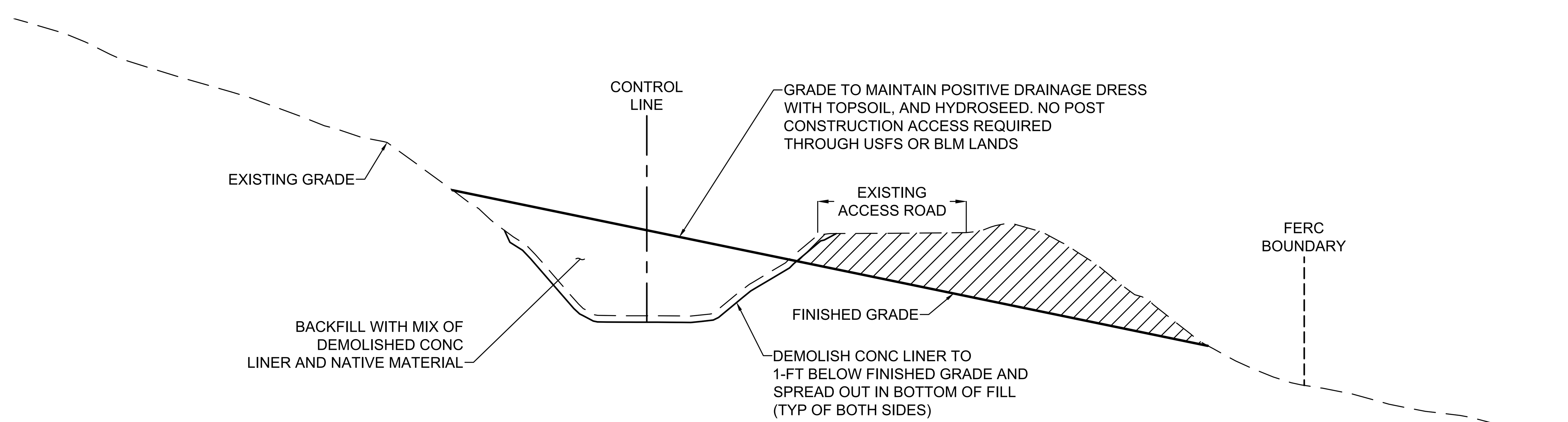
TYPICAL SECTION (SEGMENT 6 AND 7)

SCALE: 1"=10'



TYPICAL SECTION (SEGMENT 8)

SCALE: 1"=10'



TYPICAL SECTION (SEGMENT 9 AND 10)

SCALE: 1"=10'

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

TYPICAL CANAL SECTIONS
(2 OF 2)

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

HDR

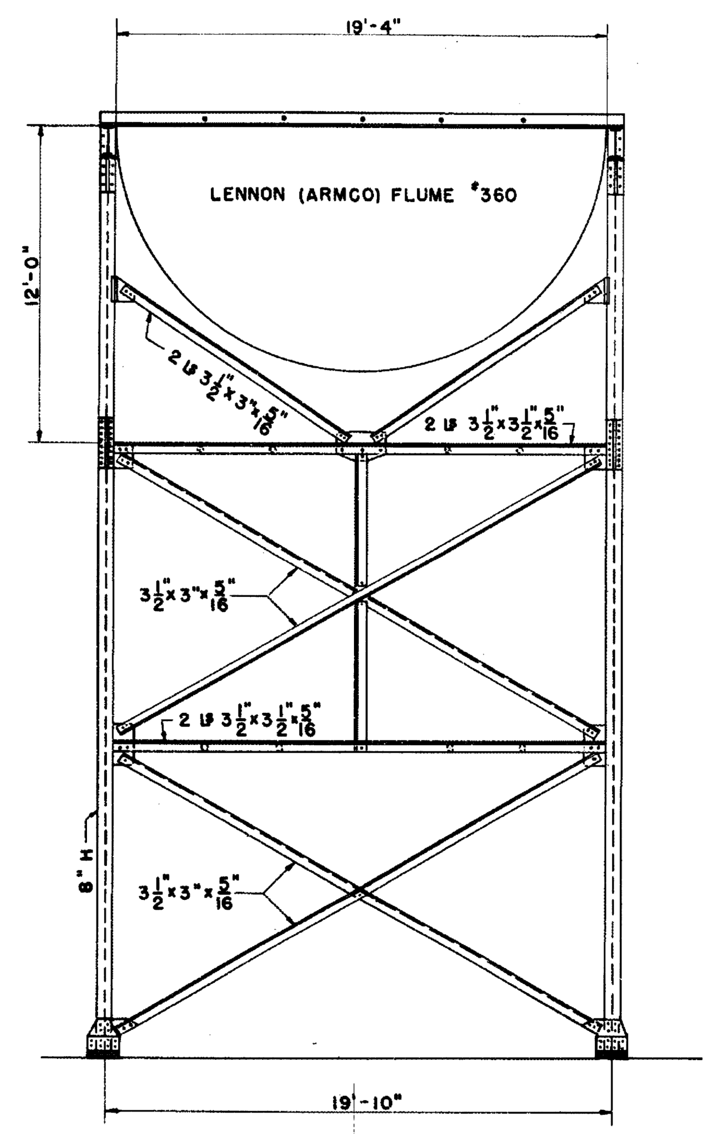
SCALE
D/L

C-302

SOUTHERN CALIFORNIA EDISON
2012 – 4 SIZE

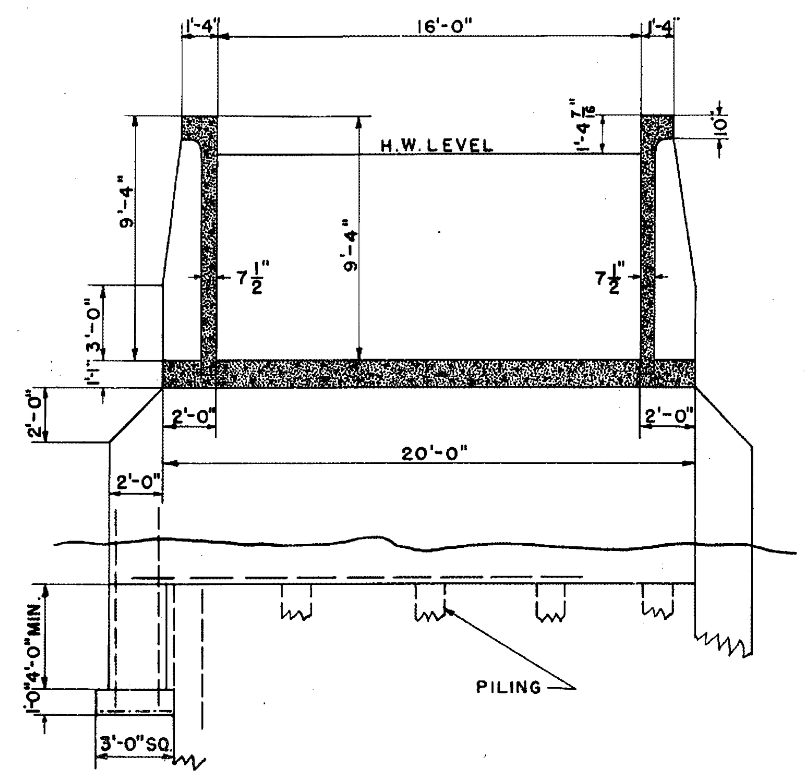
GENERAL NOTES:

1. AS-BUILT DRAWING TAKEN FROM DRAWING NUMBER 5106483-1, INDEX ID 382-1018.



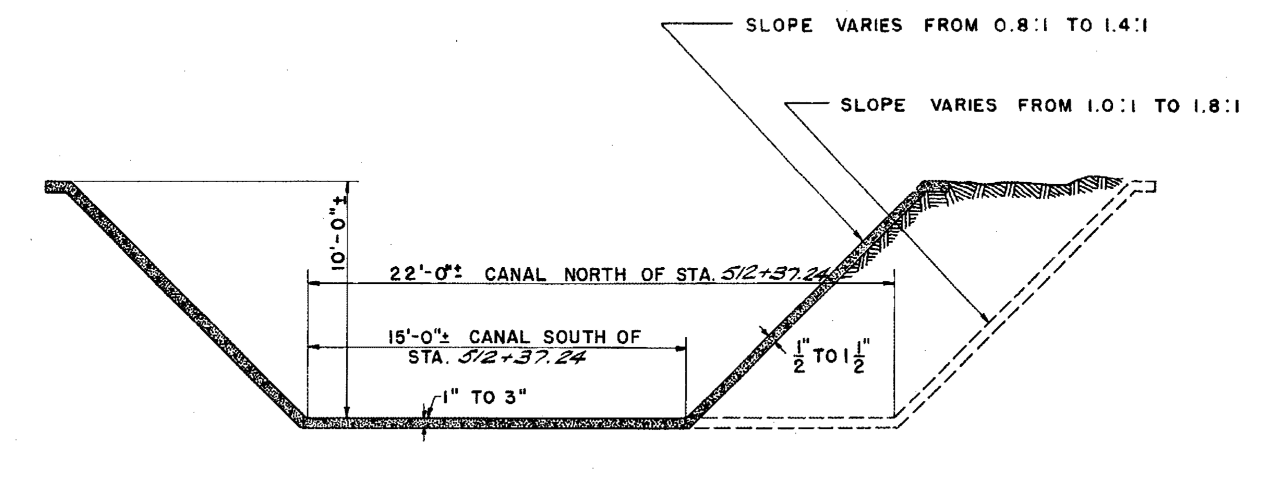
TYPICAL STEEL SUPPORTED SECTION

SCALE ¼"=1'-0"



TYPICAL CONCRETE SECTION

SCALE ¼"=1'-0"



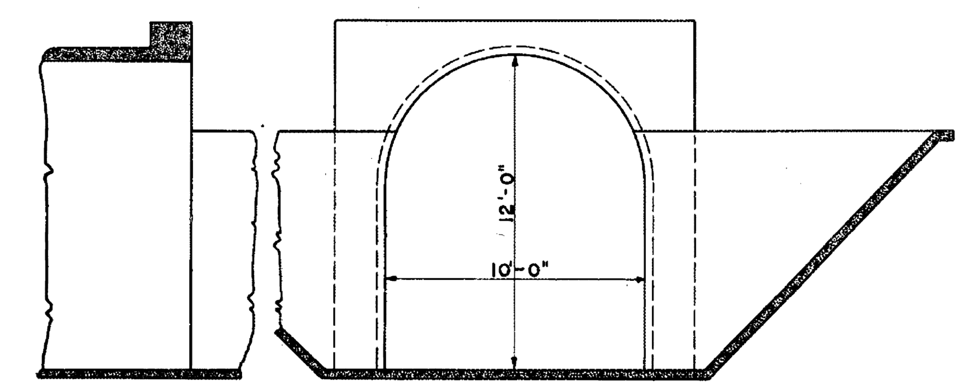
TYPICAL CANAL SECTION

SCALE ¼"=1'-0"

MAJOR CANAL REPAIRS	
— 1937 —	
NEW 1½" GUNITE LINING PLACED BETWEEN:	
STA. 481+39.91	AND STA. 498+54.86
" 143+62.62 "	" 147+62.62
" 149+34.06 "	" 156+28.12
NEW 1½" GUNITE FLOOR PLACED BETWEEN:	
STA. 368+45.77	AND STA. 378+45.77
— 1945 —	
3" CONCRETE FLOOR & 1½" GUNITE SIDES REINFORCED WITH WIRE-MESH	
THESE ITEMS PLACED BETWEEN THE FOLLOWING STATIONS:	
STA. 104+14.62	AND STA. 110+14.62
" 225+27.47 "	" 249+27.47
" 332+44.59 "	" 337+44.59
" 348+80.36 "	" 350+36.34
" 403+89.86 "	" 409+89.86
" 442+16.11 "	" 439+66.11
" 450+39.81 "	" 471+39.81
" 519+27.94 "	" 544+71.06
" 553+64.19 "	" 567+49.95
" 571+04.70 "	" 581+76.30
" 589+81.15 "	" 589+22.15
" 597+24.93 "	" 613+74.24
" 615+79.25 "	" 623+06.62

SINCE 1949

STATIONS	TYPE	YEAR
483+02.24/500+02.24	GUNITED SECTION	1963
531+70.89/544+71.06	GUNITED SECTION	1963
311+34.79/312+34.79	GUNITED BANK ONLY	1967
367+18.59/367+73.59	R/C PATCH BOTTOM ONLY	1967
387+19.91/388+19.91	GUNITED BANK ONLY	1967
480+76.91/481+76.91	R/C PATCH BOTTOM ONLY	1967
571+04.70/581+76.30	GUNITED SECTION	1967
603+00.33/613+74.24	GUNITED SECTION	1968
519+27.94/529+22.30	GUNITED SECTION	1970
190+70.72/195+79.22	FLUME REPLACED BY SIPHON	1950
202+89.42/221+62.93	FLUME REPLACED BY SIPHON	1950
442+16.11/451+01.81	FLUME SUBSTRUCT. REPLACED	1957
543+49.06/549+24.32	FLUME SUBSTRUCT. REPLACED	1967
598+08.24/597+29.93	FLUME SUBSTRUCT. REPLACED	1971
623+06.62/625+43.83	FLUME SUBSTRUCT. REPLACED	1971
0+00/290+55.51	INUNDATED BY ISABELLA RESERVOIR	



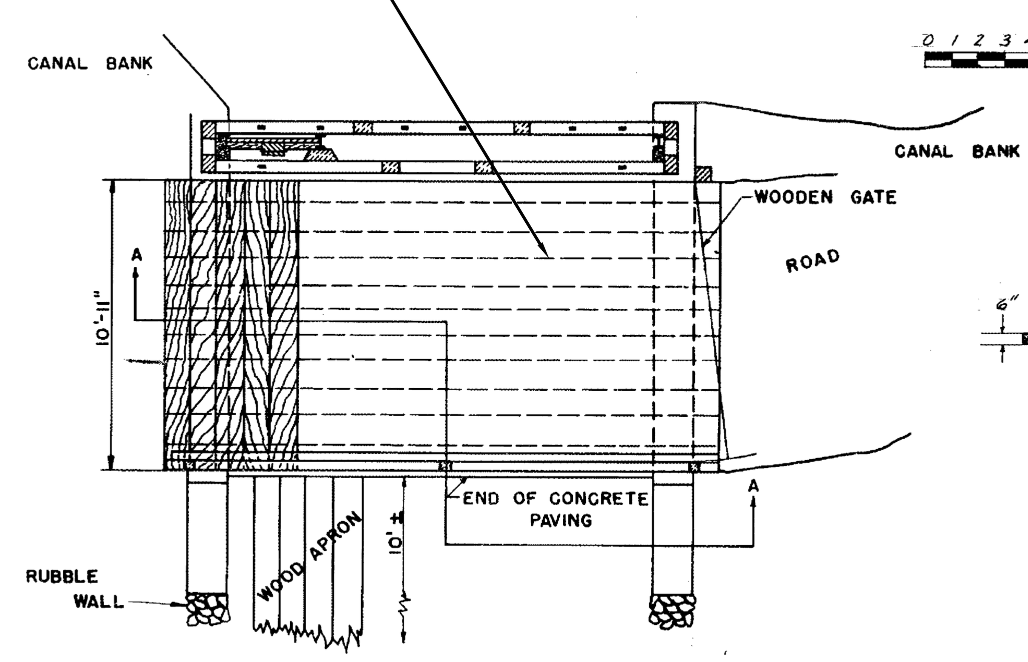
LONGITUDINAL SECTION

ELEVATION

TUNNEL PORTAL

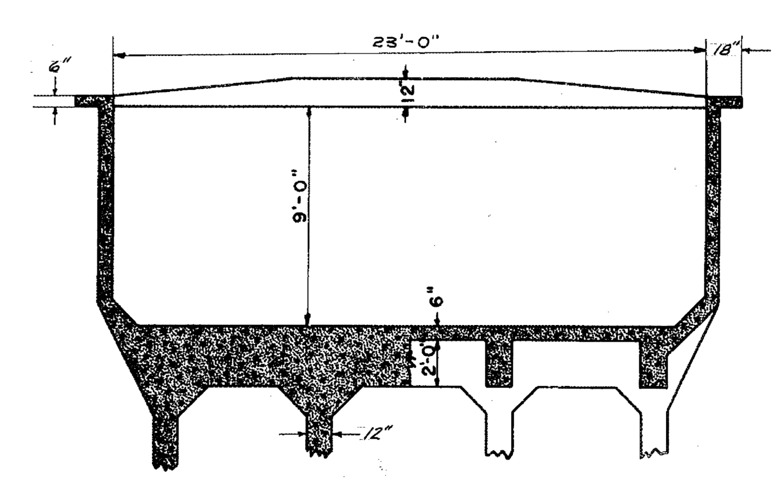
SCALE ⅛"=1'-0"

DEMOLISH AND REMOVE WOOD BRIDGE, GATES, ABOVE GROUND RAILING AND BEAMS. BACKFILL CONCRETE FOOTINGS/WALLS WITH NATIVE MATERIAL



PLAN

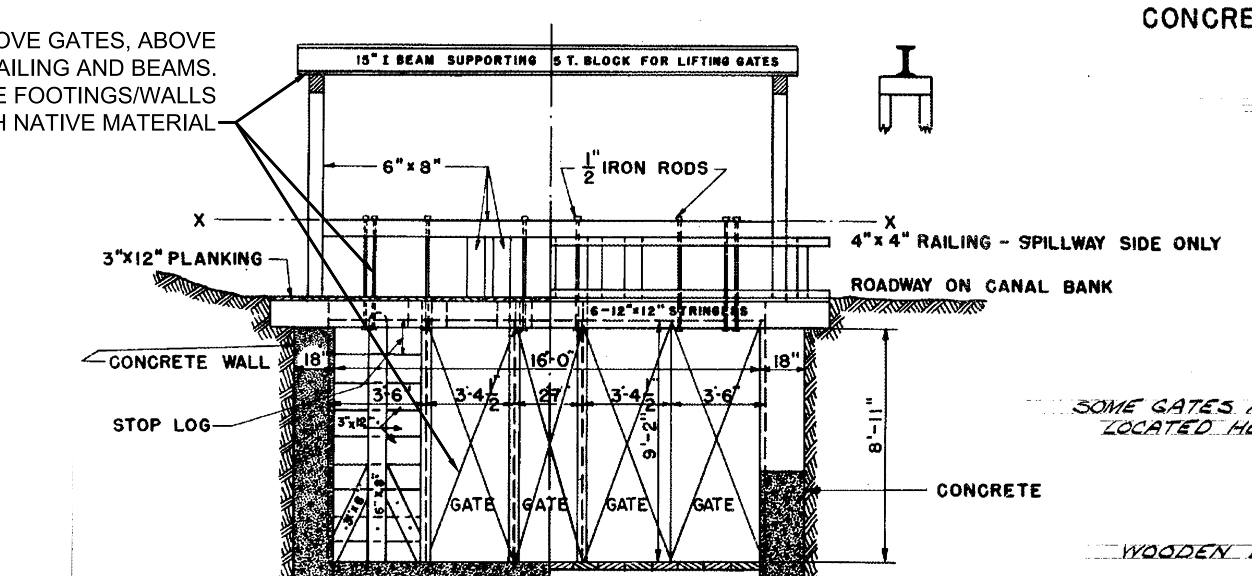
BELOW X-X



CONCRETE FLUME AT STATION 367+18.59

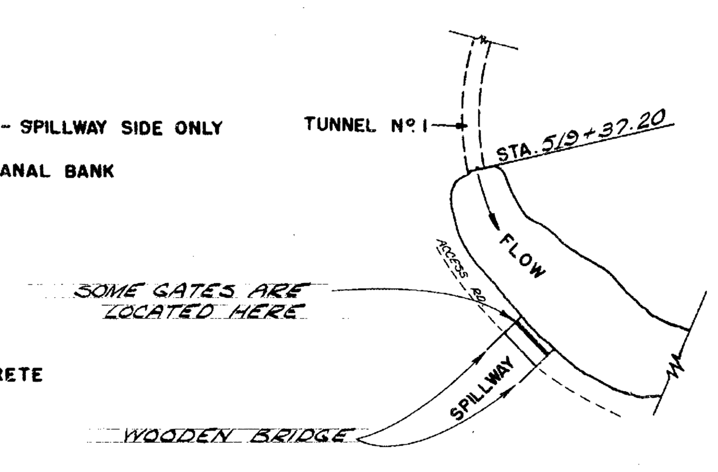
SCALE ¼"=1'-0"

DEMOLISH AND REMOVE GATES, ABOVE GROUND RAILING AND BEAMS. BACKFILL CONCRETE FOOTINGS/WALLS WITH NATIVE MATERIAL



SECTION A-A

SPILLWAY GATES BELOW TUNNEL NO. 1
BOREL CONDUIT
SCALE ¼"=1'-0"



PLAN

CONTAINS CRITICAL ENERGY INFRASTRUCTURE INFORMATION
-DO NOT RELEASE-

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

DETAILS
TYPICAL CONDUIT SECTIONS

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

HDR

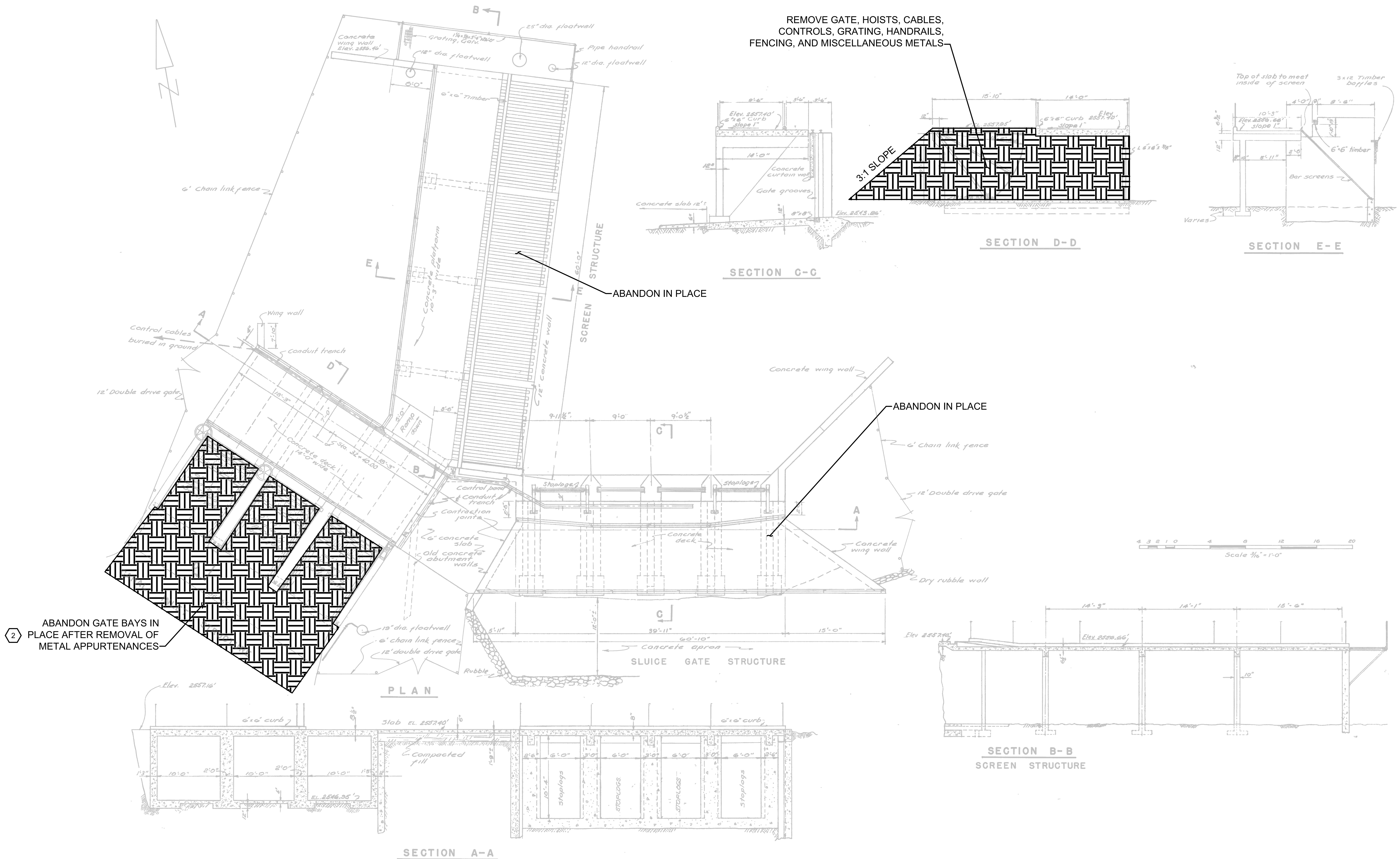
SCALE D/L

C-501

SOUTHERN CALIFORNIA EDISON
2012 - 4 SIZE

GENERAL NOTES:

1. AS-BUILT DRAWING TAKEN FROM DRAWING NUMBER 5106469-1, INDEX ID 382-1004.
2. FILL TO TOP OF STRUCTURE WITH IMPORTED FILL. 3H:1V SLOPE FOR FILL ON CANAL SIDE.



* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION: BOREL HYDRO SURRENDER

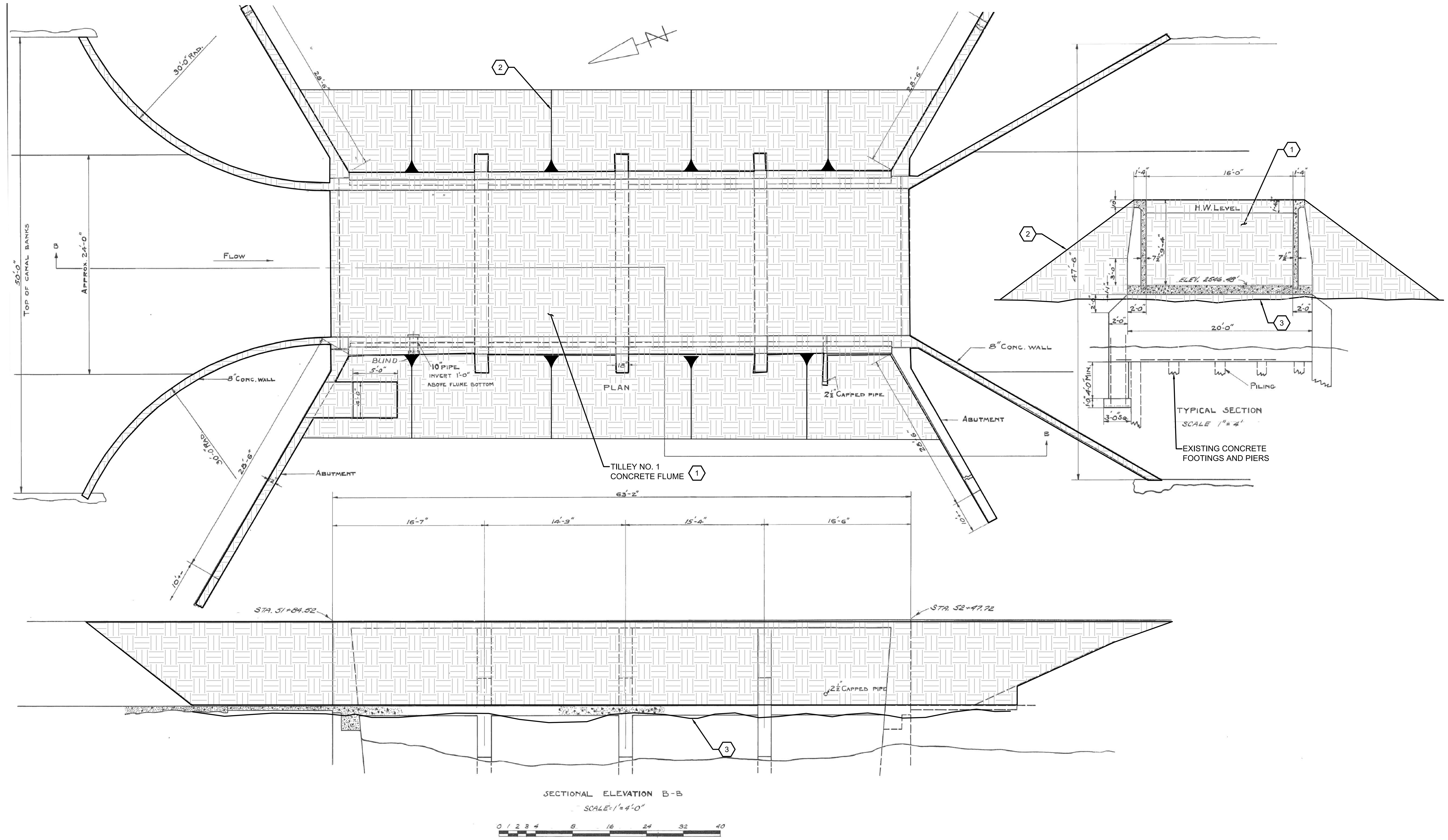
DETAILS
CANAL INLET STRUCTURES

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

HDR

SCALE: D/L

C-502



CONTAINS CRITICAL ENERGY INFRASTRUCTURE INFORMATION -DO NOT RELEASE-

GENERAL NOTES:

1. AS-BUILT DRAWING TAKEN FROM DRAWING NUMBER 5106470-1, INDEX ID 382-1005.

KEY NOTES:

1. BACKFILL CONCRETE FLUME, HEADWALLS AND ABUTMENTS.
2. BACKFILL(3:1 MAX) TO PROVIDE SMOOTH TRANSITIONS AND NATURALLY CONFORM TO ADJACENT TOPOGRAPHY.
3. APPROXIMATE EXISTING GROUND SURFACE.

* REVISE ON AUTOCAD SYSTEM ONLY *

LOCATION BOREL HYDRO SURRENDER

DETAILS
TILLEY NO. 1 CONCRETE FLUME

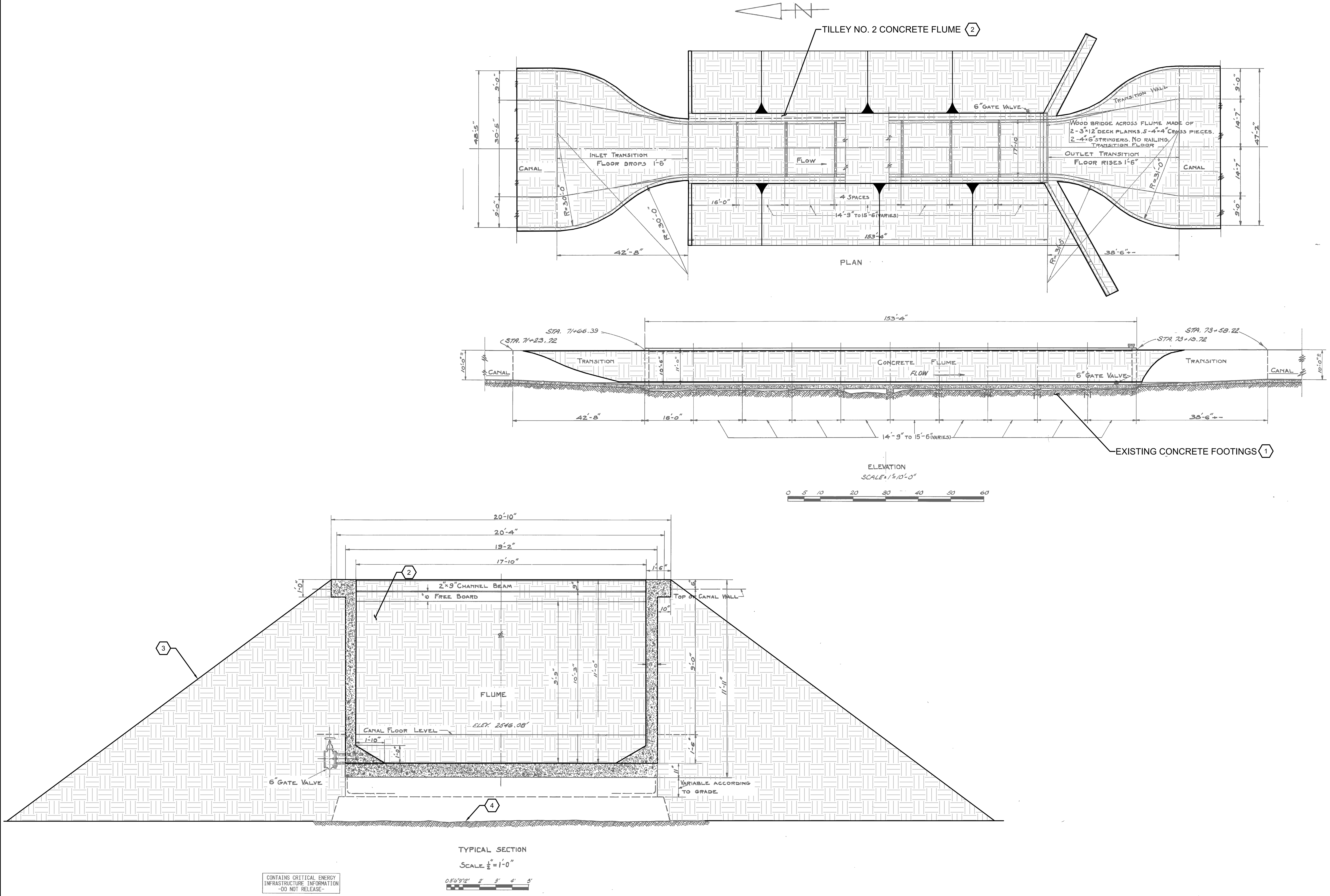
SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

SCALE D/L

C-503

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

SOUTHERN CALIFORNIA EDISON
2012 – 4 SIZE



GENERAL NOTES:

1. AS-BUILT DRAWING TAKEN FROM DRAWING NUMBER 5106471-1, INDEX ID 382-1006.

KEY NOTES:

1. LEAVE CONCRETE FLOOR AND FOOTINGS IN PLACE. BACKFILL TO PROVIDE SMOOTH TRANSITIONS AND NATURALLY CONFORM TO ADJACENT TOPOGRAPHY.
2. BACKFILL CONCRETE FLUME, HEADWALLS AND ABUTMENTS.
3. BACKFILL(3:1 MAX) TO PROVIDE SMOOTH TRANSITIONS AND NATURALLY CONFORM TO ADJACENT TOPOGRAPHY.
4. APPROXIMATE EXISTING GROUND SURFACE.

CONTAINS CRITICAL ENERGY INFRASTRUCTURE INFORMATION -DO NOT RELEASE-

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

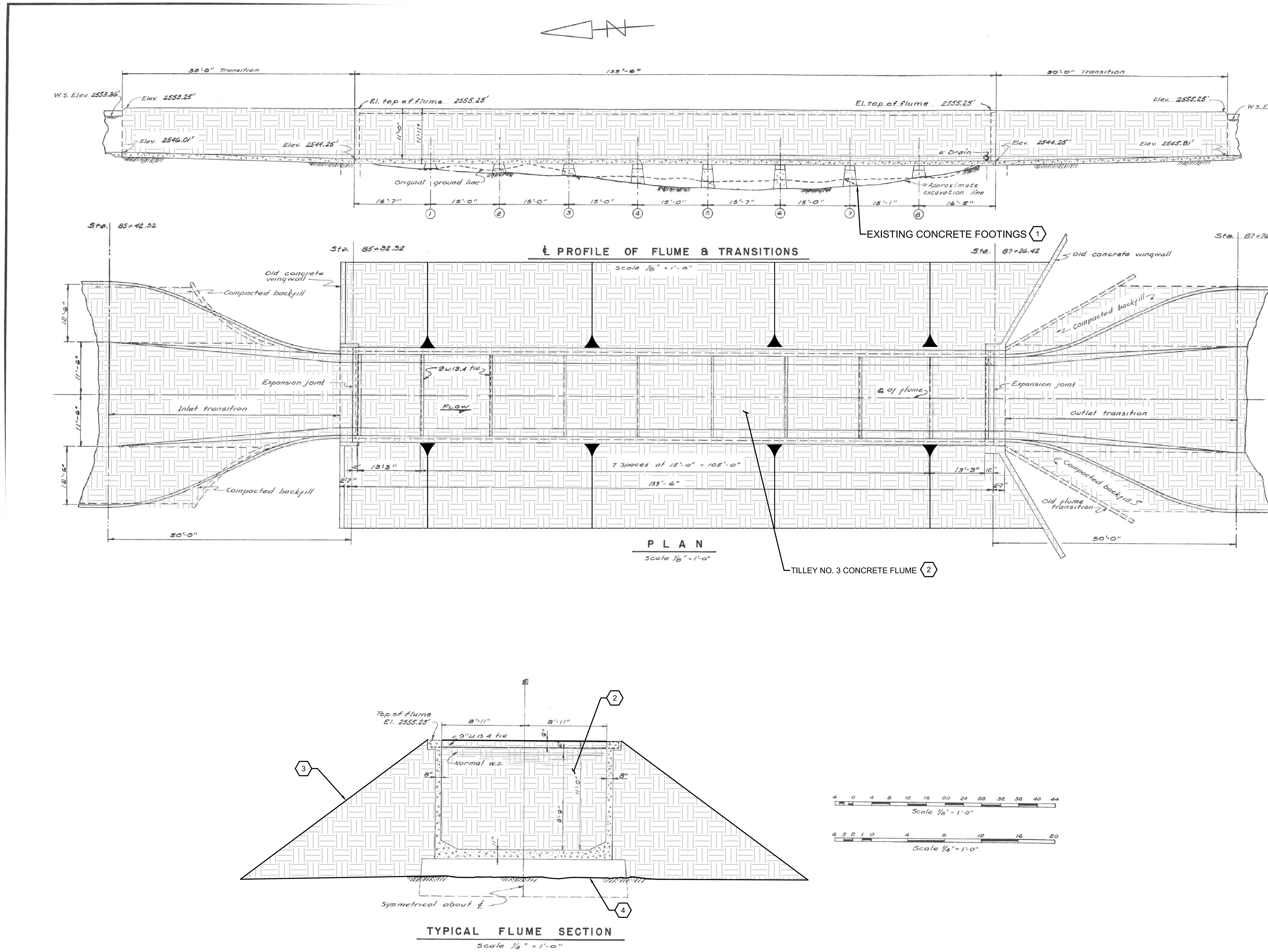
DETAILS
TILLEY NO. 2 CONCRETE FLUME

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company | HDR

SCALE D/L

C-504

SOUTHERN CALIFORNIA EDISON
2012 – 4 SIZE



GENERAL NOTES:

1. AS-BUILT DRAWING TAKEN FROM DRAWING NUMBER 5106472-1, INDEX ID 382-1007.

KEY NOTES:

(1) LEAVE CONCRETE FLOOR AND FOOTINGS IN PLACE. BACKFILL TO PROVIDE SMOOTH TRANSITIONS AND NATURALLY CONFORM TO ADJACENT TOPOGRAPHY.

(2) BACKFILL CONCRETE FLUME, HEADWALLS AND ABUTMENTS.

(3) BACKFILL(3:1 MAX) TO PROVIDE SMOOTH TRANSITIONS AND NATURALLY CONFORM TO ADJACENT TOPOGRAPHY.

(4) APPROXIMATE EXISTING GROUND SURFACE.

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

DETAILS
TILLEY NO. 3 CONCRETE FLUME

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company

SCALE D/L

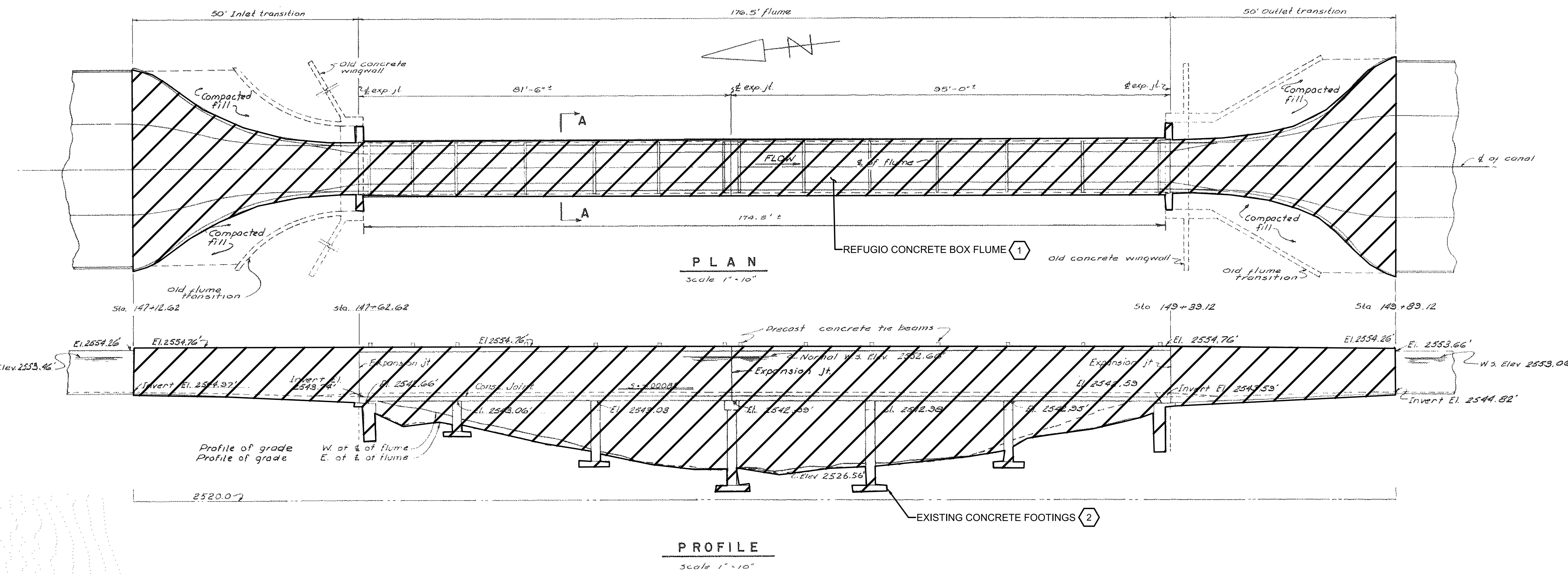
C-505

GENERAL NOTES:

1. AS-BUILT DRAWING TAKEN FROM DRAWING NUMBER 5106473-1, INDEX ID 382-1008.

KEY NOTES:

1. REMOVE CONCRETE FLUME, HEADWALLS AND ABUTMENTS. PROCESS CONCRETE DEBRIS AND PLACE WITHIN CANAL.
2. REMOVE CONCRETE PIERS TO A DEPTH OF 2 FT BELOW EXISTING GRADE. BACKFILL TO NATURALLY CONFORM TO ADJACENT TOPOGRAPHY



REFERENCE DRAWINGS		REFERENCE DRAWINGS		NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

DETAILS
REFUGIO CONCRETE BOX FLUME

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company | HDR

SCALE D/L

C-506

* REVISE ON AUTOCAD SYSTEM ONLY *

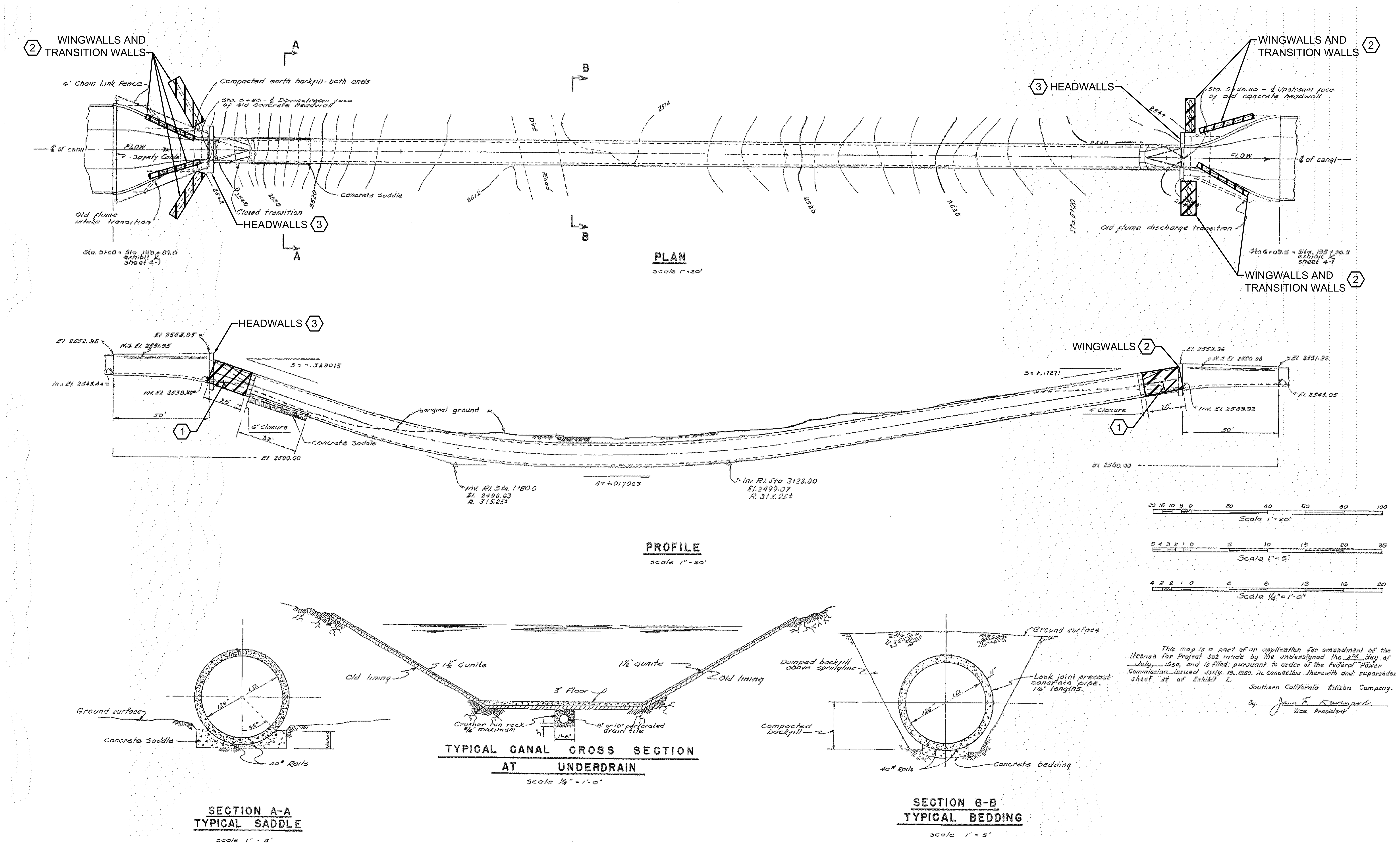
SOUTHERN CALIFORNIA EDISON
2012 – 4 SIZE

GENERAL NOTES:

1. AS-BUILT DRAWING TAKEN FROM DRAWING NUMBER 5106474-1.

KEY NOTES:

1. PLACE SLURRY PLUG AT ENTRY AND EXIT TO SIPHON, MIN 20-FT.
2. DEMOLISH WINGWALLS AND TRANSITION WALLS
3. LEAVE HEADWALLS IN PLACE. BACKFILL WITH NATIVE MATERIAL 3:1 MAXIMUM TO NATURALLY CONFORM TO ADJACENT TOPOGRAPHY



* REVISE ON AUTOCAD SYSTEM ONLY *

	REFERENCE DRAWINGS		REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

DETAILS
RICH GULCH CONCRETE SIPHON

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company

SCALE D/L

C-507

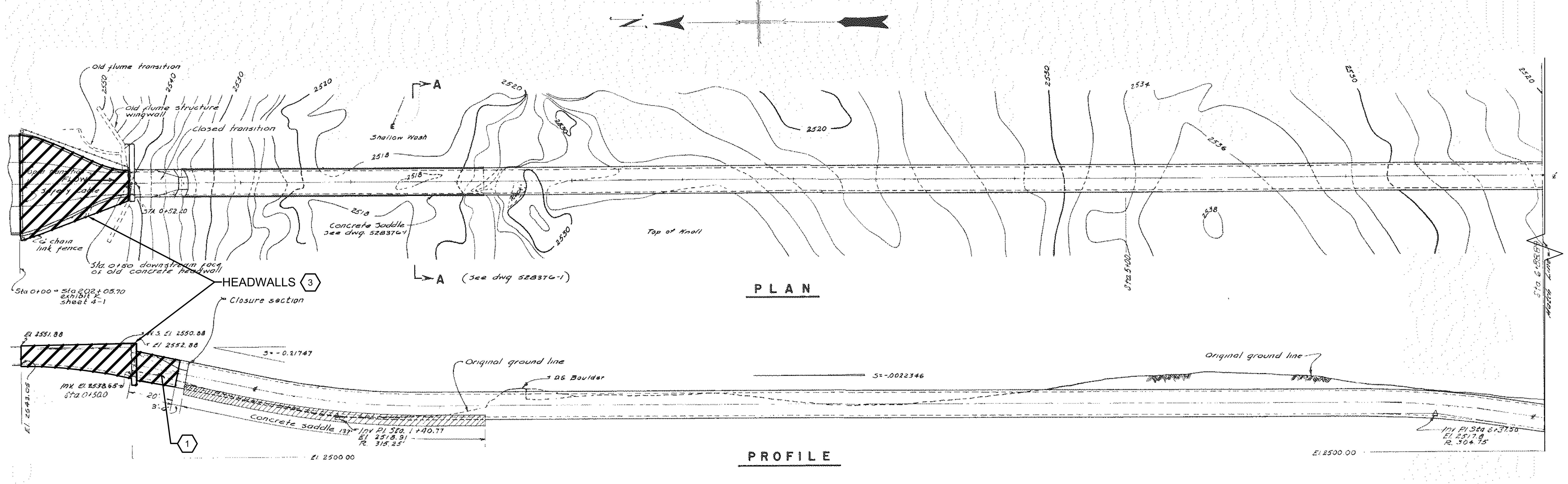
SOUTHERN CALIFORNIA EDISON
2012 – 4 SIZE

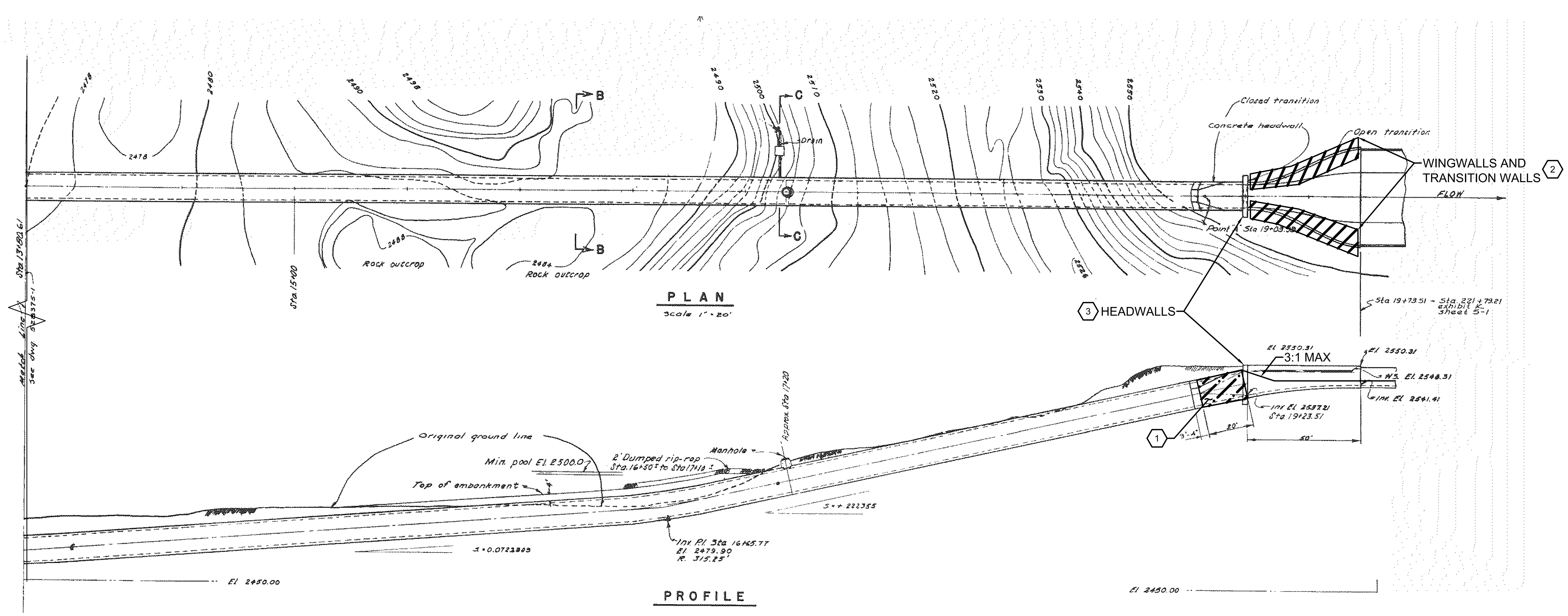
GENERAL NOTES:

1. AS-BUILT DRAWING TAKEN FROM DRAWING NUMBER 5106474-1.

KEY NOTES:

1. PLACE SLURRY PLUG AT ENTRY AND EXIT TO SIPHON, MIN 20-FT LONG.
2. DEMOLISH WINGWALLS AND TRANSITION WALLS.
3. LEAVE HEADWALLS IN PLACE. BACKFILL WITH NATIVE MATERIAL 3:1 MAXIMUM TO NATURALLY CONFORM TO ADJACENT TOPOGRAPHY.





REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.		

NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	

LOCATION BOREL HYDRO SURRENDER

DETAILS
KERN RIVER CONCRETE SIPHON

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company

SCALE D/L

C-508

* REVISE ON AUTOCAD SYSTEM ONLY *

SOUTHERN CALIFORNIA EDISON
2012 – 4 SIZE

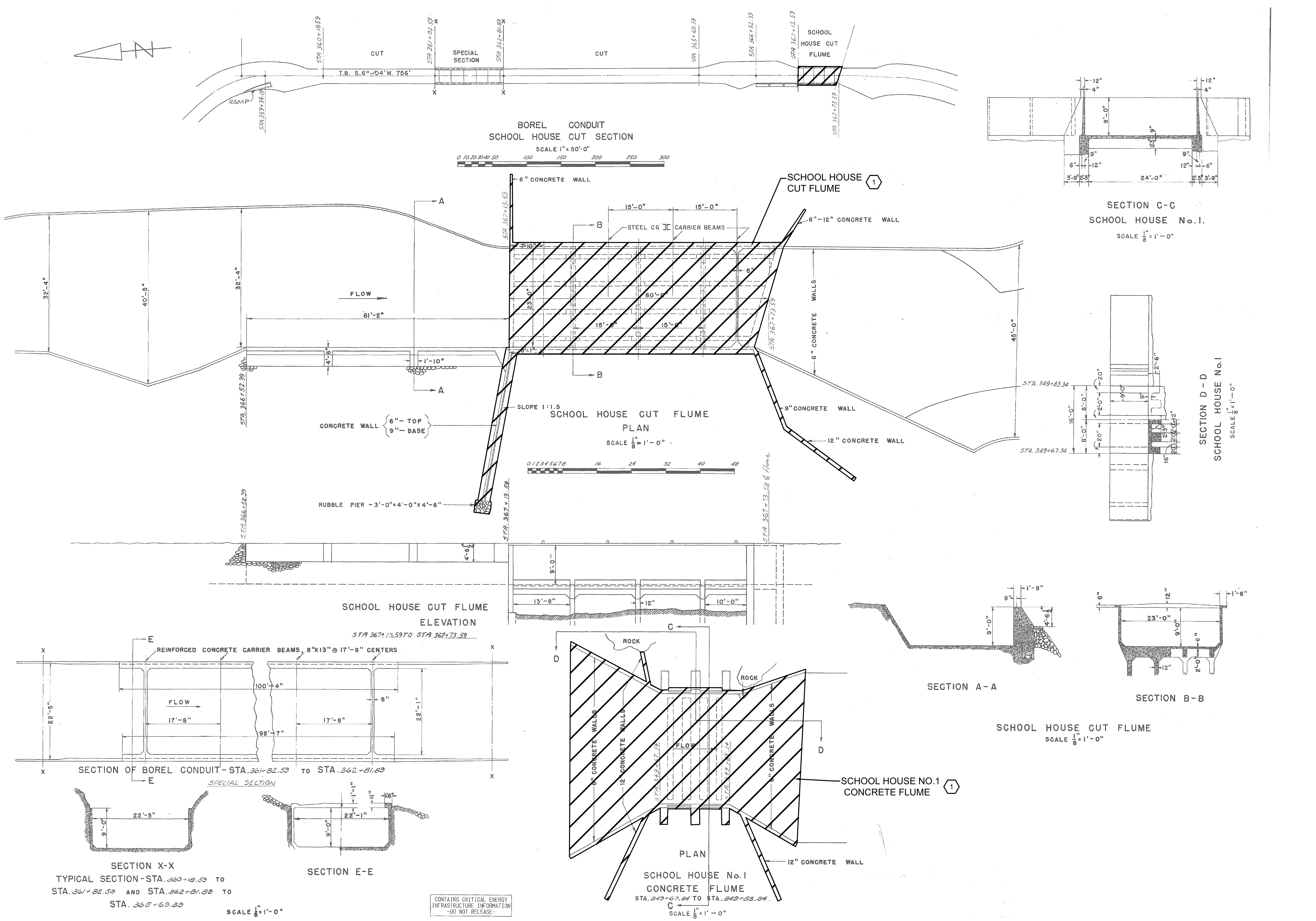
GENERAL NOTES:

1. AS-BUILT DRAWING TAKEN FROM DRAWING NUMBER 5106477-2, INDEX ID 382-1012.

KEY NOTES:

(1) REMOVE AND DISPOSE OF CONCRETE FLUME. PLACE RSP AT TRANSITION.

(2) BACKFILL AND GRADE TO NATURALLY CONFORM TO ADJACENT TOPOGRAPHY.



* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

DETAILS
SCHOOL HOUSE NO. 1 CONCRETE FLUME
AND SCHOOL HOUSE CUT FLUME

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company

HDR

SCALE D/L

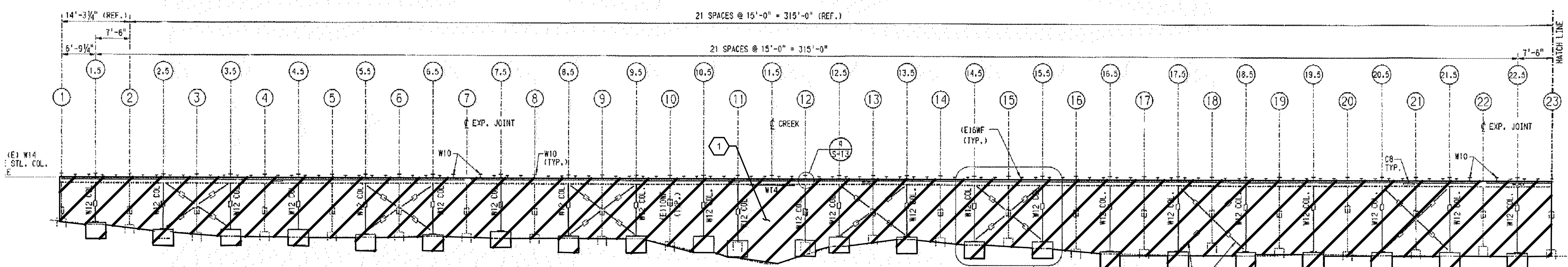
C-509

GENERAL NOTES:

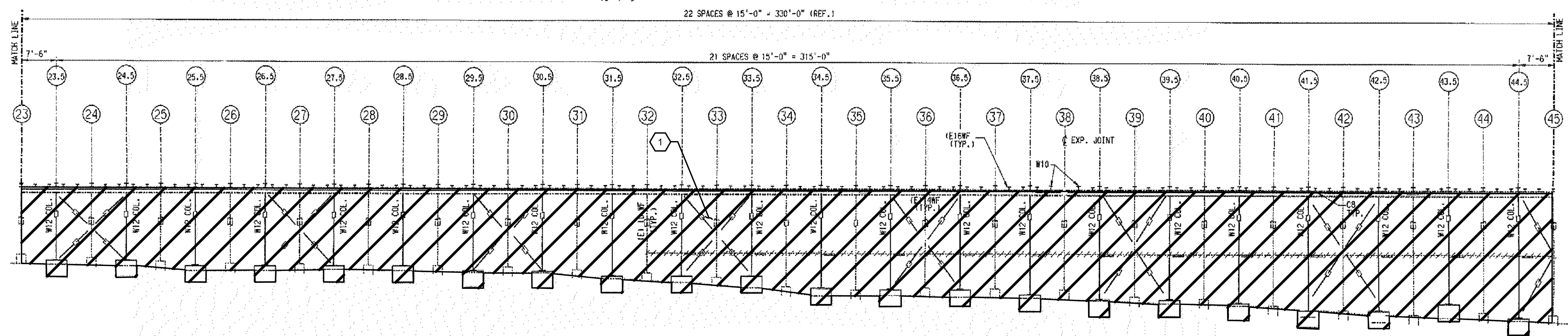
1. AS-BUILT DRAWING TAKEN FROM DRAWING NUMBER 5249463-4 AND 5249463-5.

KEY NOTES:

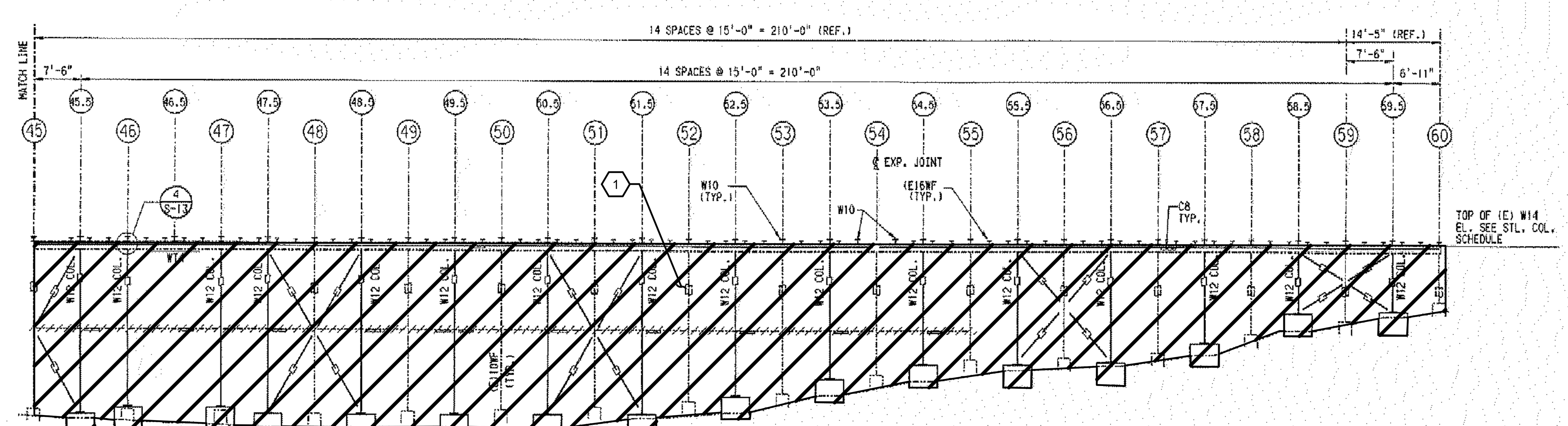
1. REMOVE AND RECYCLE STRUCTURAL STEEL AND STEEL SHEETING. REMOVE AND DISPOSE CONCRETE FOOTINGS TO A DEPTH OF 2 FEET BELOW GRADE. GRADE TO CONFORM TO ADJACENT NATURAL TOPOGRAPHY. PLACE ROCK SLOPE PROTECTION AT TRANSITIONS.



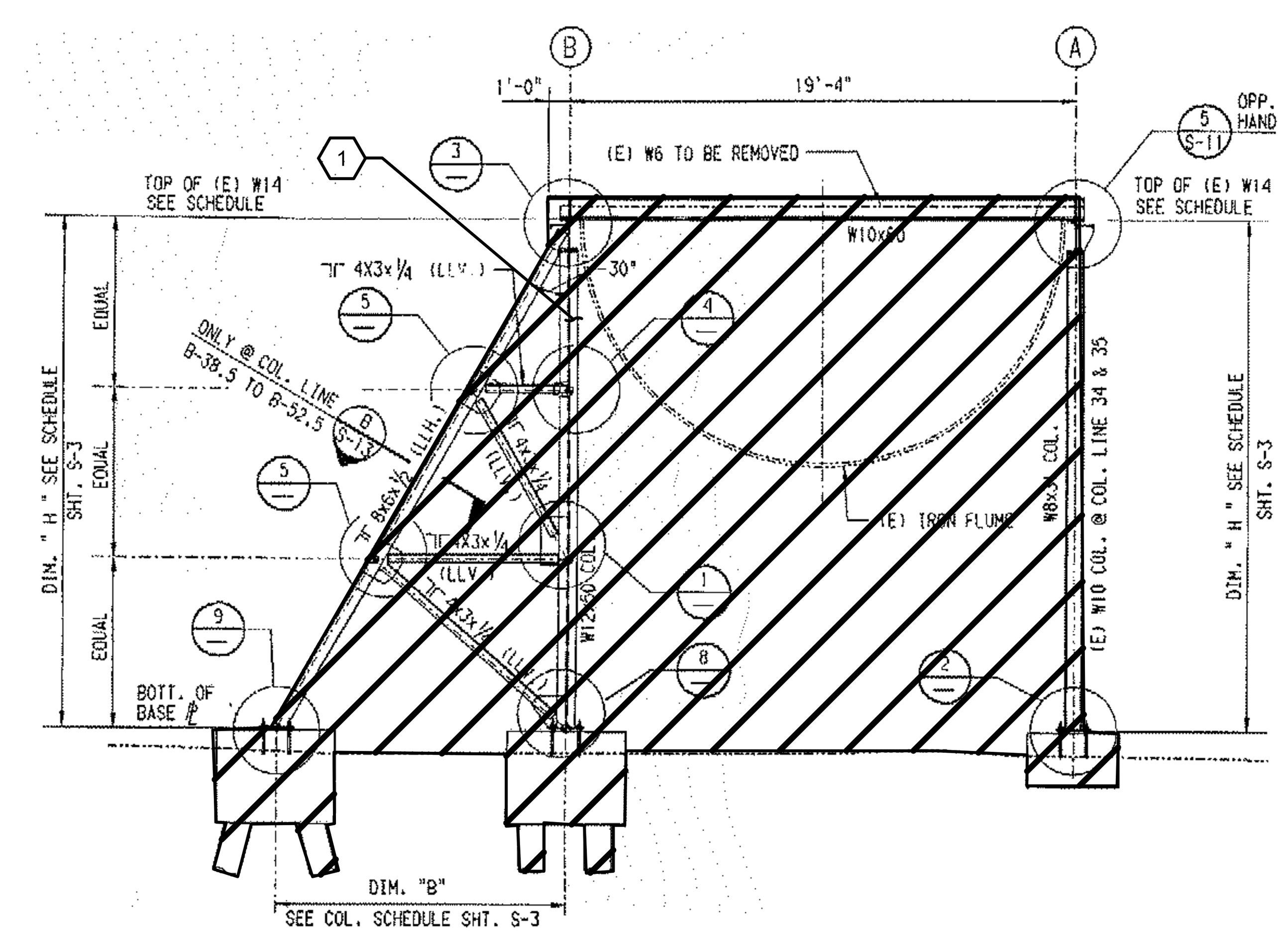
ELEVATION @ COL.LINE (B) LOOKING SOUTH
10'=1'-0"



ELEVATION @ COL.LINE (B) LOOKING SOUTH
10'=1'-0"



ELEVATION @ COL.LINE (B) LOOKING SOUTH
10'=1'-0"



BENT ELEVATION @ COL. LINE B-31.5 THRU B-52.5 AND B-46 & B-47

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

DETAILS
ERSKINE STEEL FLUME

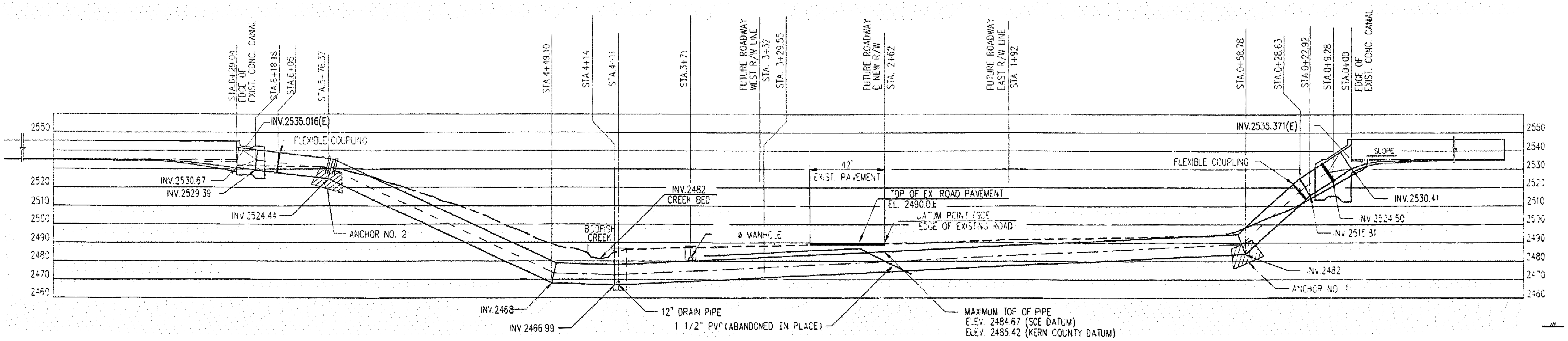
SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company | HDR

SCALE D/L

C-510

GENERAL NOTES:

1. AS-BUILT DRAWING TAKEN FROM DRAWING NUMBER 5251354-8.



SECTION (A)
1" = 30'

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

DETAILS
BODFISH SIPHON

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company

HDR

SCALE D/L

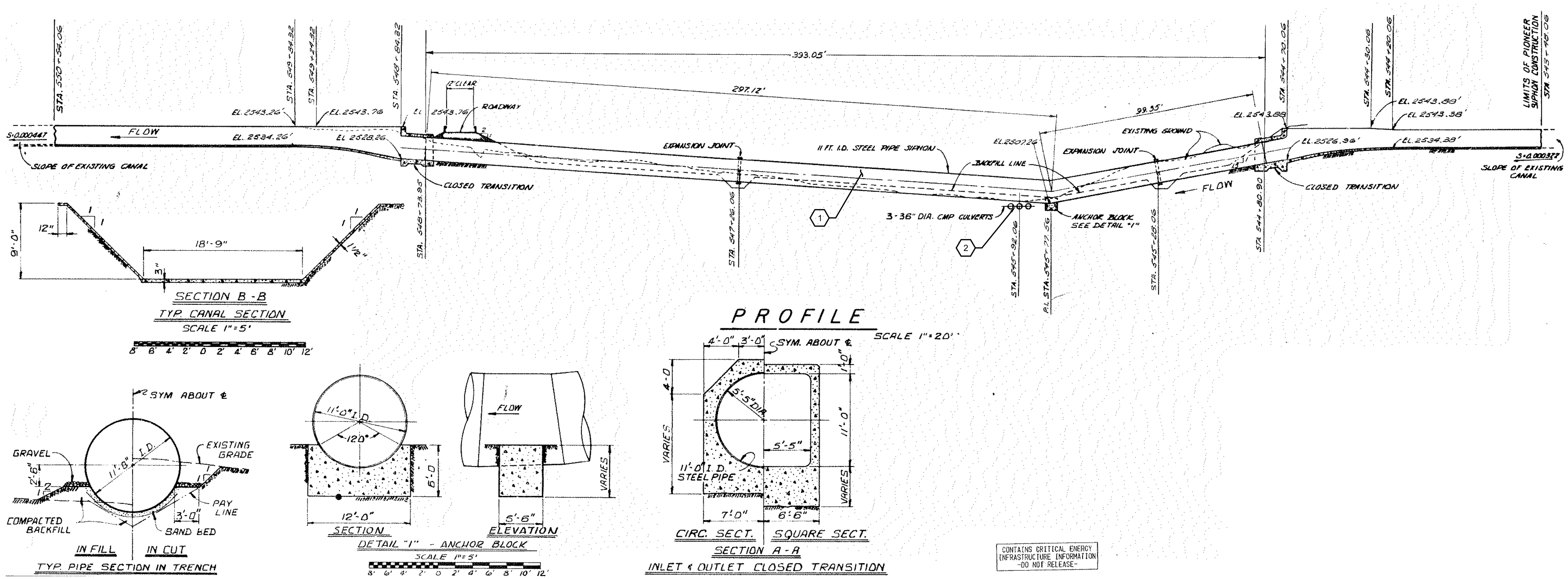
C-511

GENERAL NOTES:

1. AS-BUILT DRAWING TAKEN FROM DRAWING NUMBER 5106480-2, SHEET ID 382-1015.

KEY NOTES:

1. DEMOLISH AND REMOVE STEEL PIPE CONTROL BUILDING AND POWER SERVICE. HEADWALLS AND FOOTINGS TO REMAIN.
2. PROTECT EMBANKMENT AND EXISTING 36 IN CULVERTS AND HEADWALL
3. GRADE DISTURBED AREAS TO NATURALLY CONFORM TO ADJACENT TOPOGRAPHY



CONTAINS CRITICAL ENERGY INFRASTRUCTURE INFORMATION -DO NOT RELEASE-

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

DETAILS
PIONEER STEEL SIPHON

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company

HDR

SCALE D/L

C-512

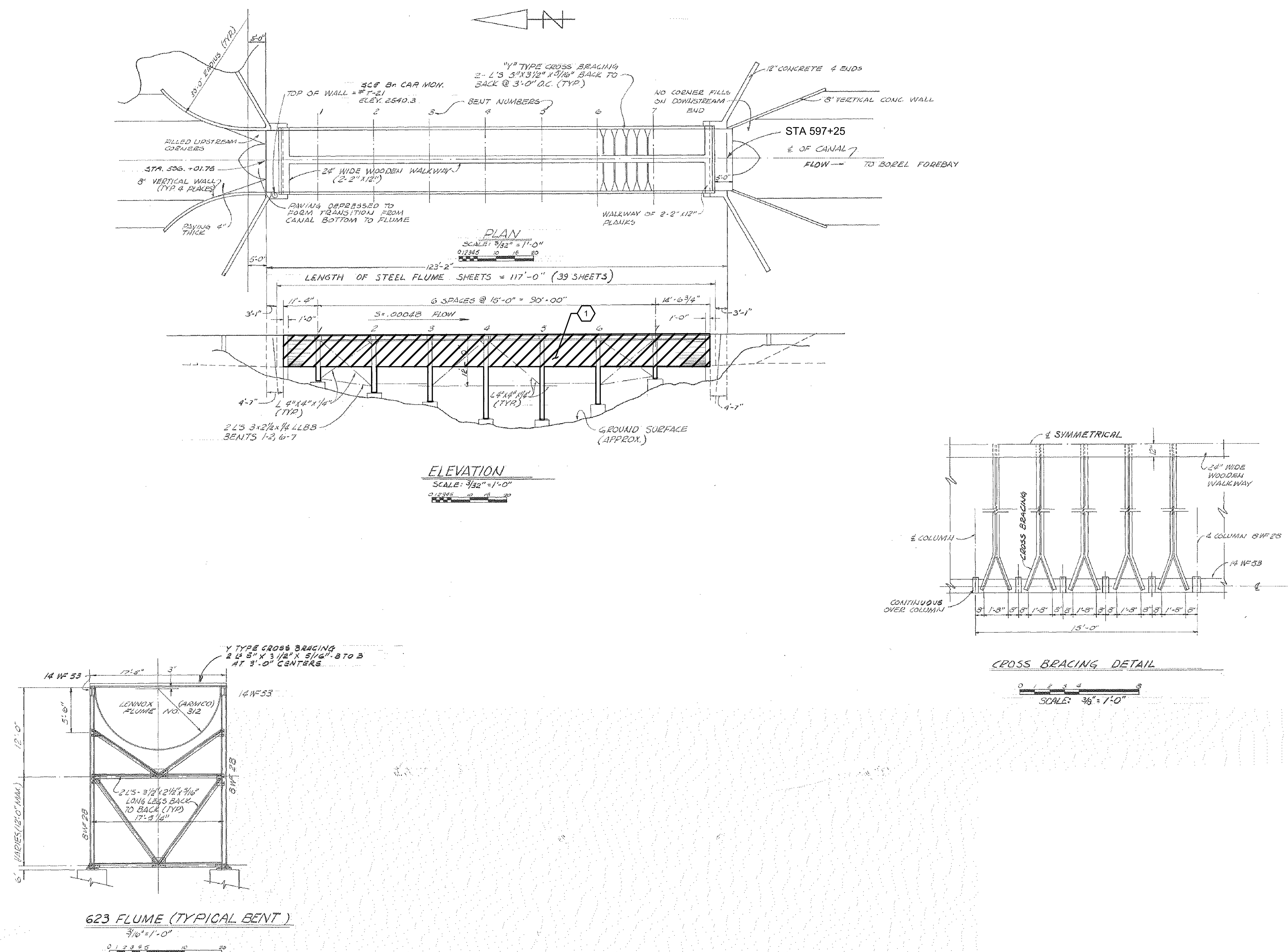
SOUTHERN CALIFORNIA EDISON
2012 - 4 SIZE

GENERAL NOTES:

1. AS-BUILT DRAWING TAKEN FROM DRAWING NUMBER 5106481-1, SHEET ID 382-1016.

KEY NOTES:

1 REMOVE AND RECYCLE STRUCTURAL STEEL AND STEEL SHEETING. CONCRETE HEADWALLS AND FOOTINGS TO REMAIN.



* REVISE ON AUTOCAD SYSTEM ONLY *

NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

REFERENCE DRAWINGS

REFERENCE DRAWINGS

LOCATION BOREL HYDRO SURRENDER

DETAILS
FLUME NO. 623

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company

SCALE D/L

C-513

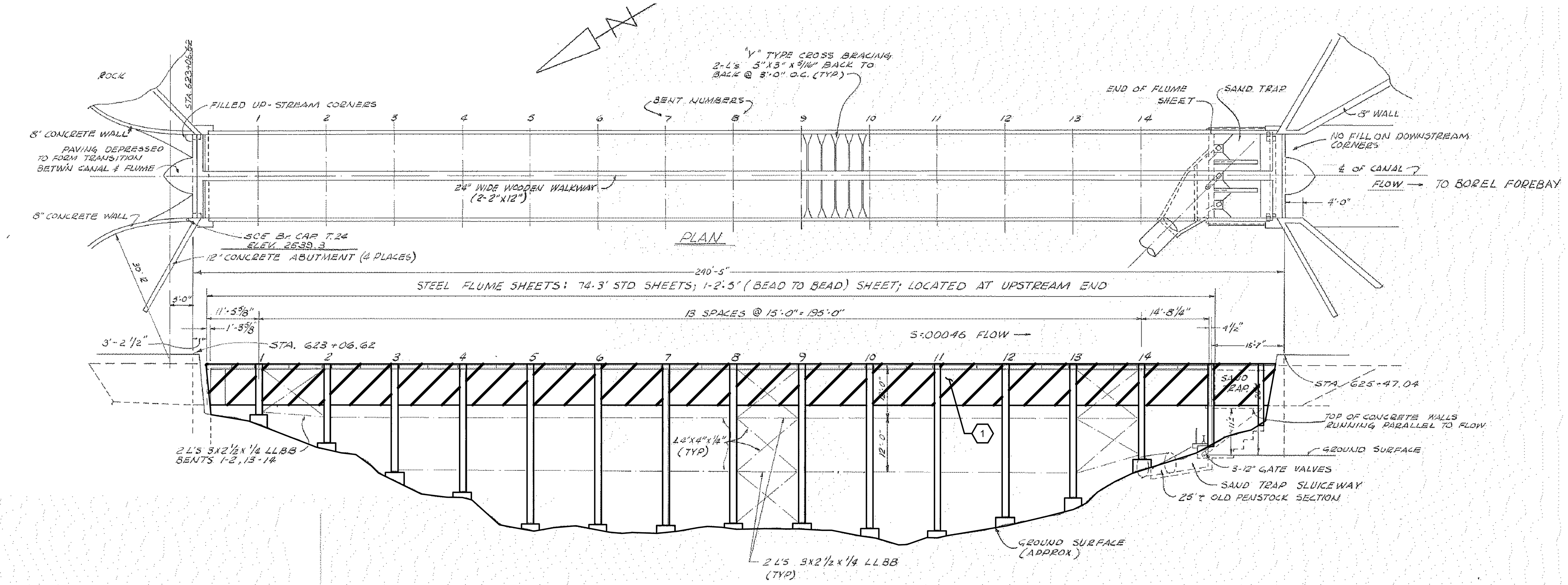
SOUTHERN CALIFORNIA EDISON
2012 – 4 SIZE

GENERAL NOTES:

1. AS-BUILT DRAWING TAKEN FROM DRAWING NUMBER 5106482-1, SHEET ID 382-1017.

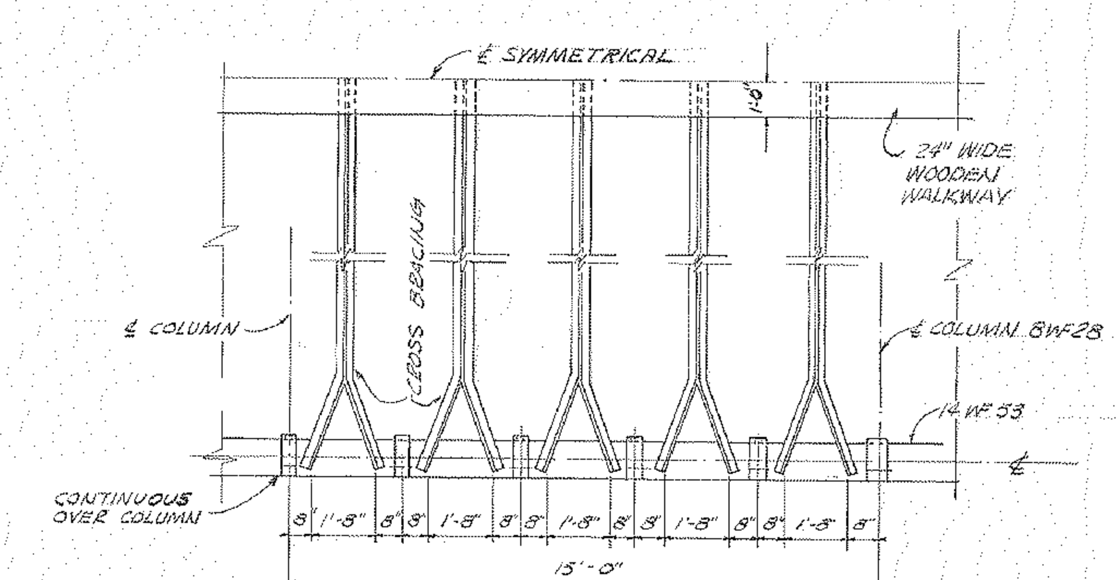
KEY NOTES:

(1) REMOVE AND RECYCLE STRUCTURAL STEEL AND STEEL SHEETING. CONCRETE HEADWALLS AND FOOTINGS TO REMAIN.



ELEVATION - PROFANITY FLUME

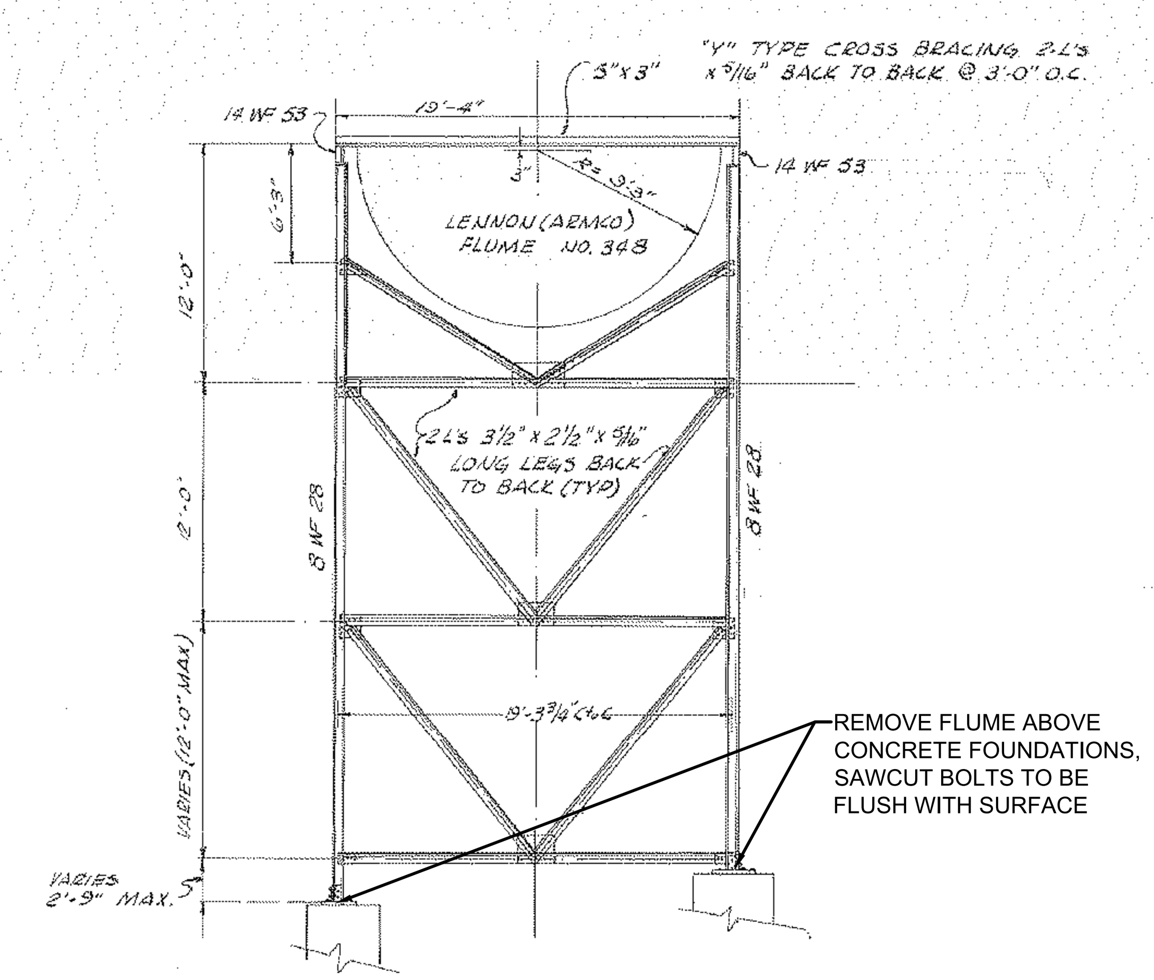
SCALE 3/32"=1'-0"



CROSS BRACING DETAIL

(DOES NOT APPLY TO EXPANSION JOINT)

SCALE 3/8" = 1'-0"



TYPICAL SECTION OF PROFANITY FLUME

SCALE 3/16"=1'-0"

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

DETAILS
PROFANITY STEEL FLUME

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company | HDR

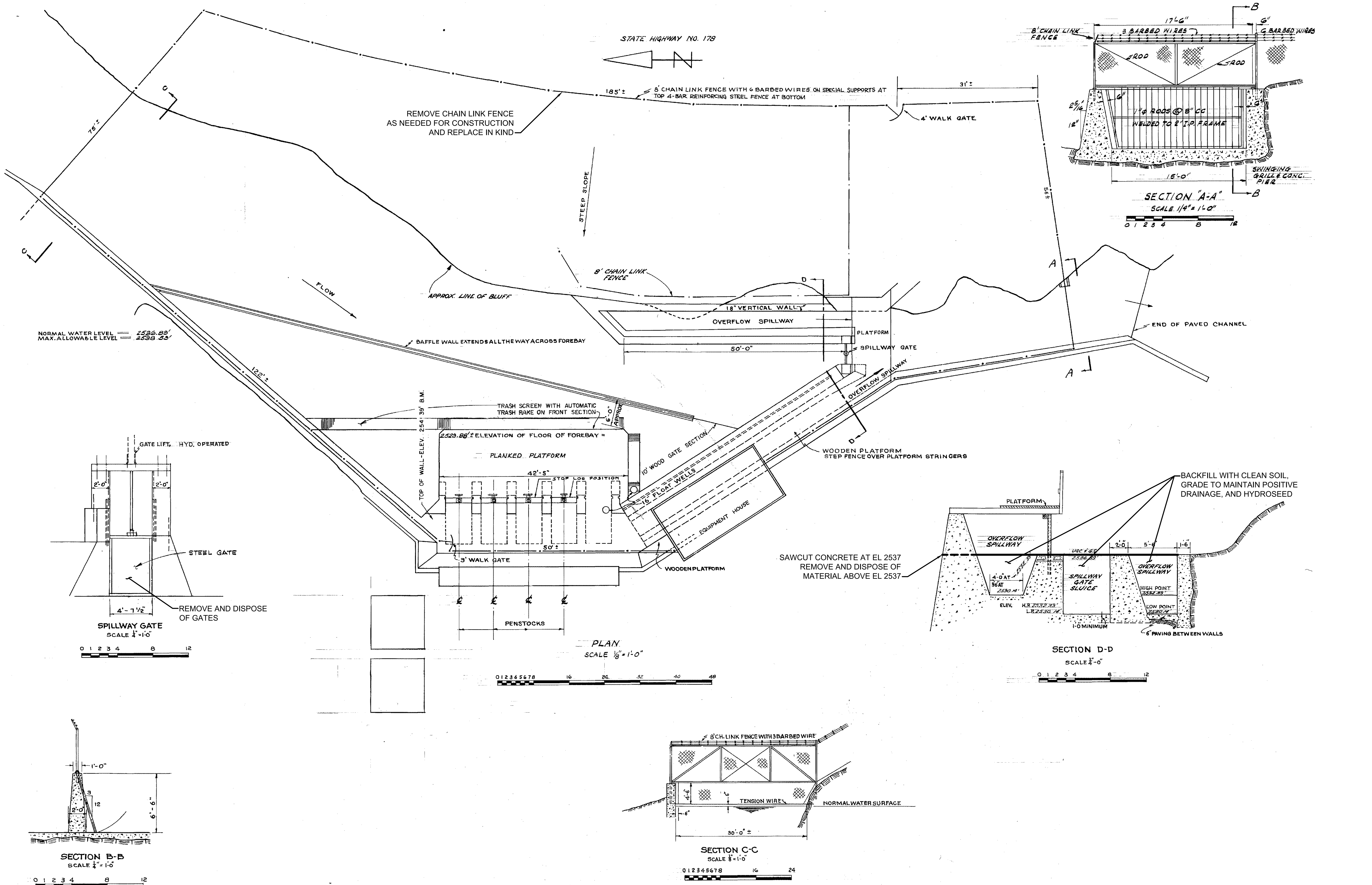
SCALE D/L

C-514

SOUTHERN CALIFORNIA EDISON
2012 - 4 SIZE

GENERAL NOTES:

1. AS-BUILT DRAWING TAKEN FROM DRAWING NUMBER 5106484-2, SHEET ID 382-1019.



CONTAINS CRITICAL ENERGY INFRASTRUCTURE INFORMATION -DO NOT RELEASE-

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

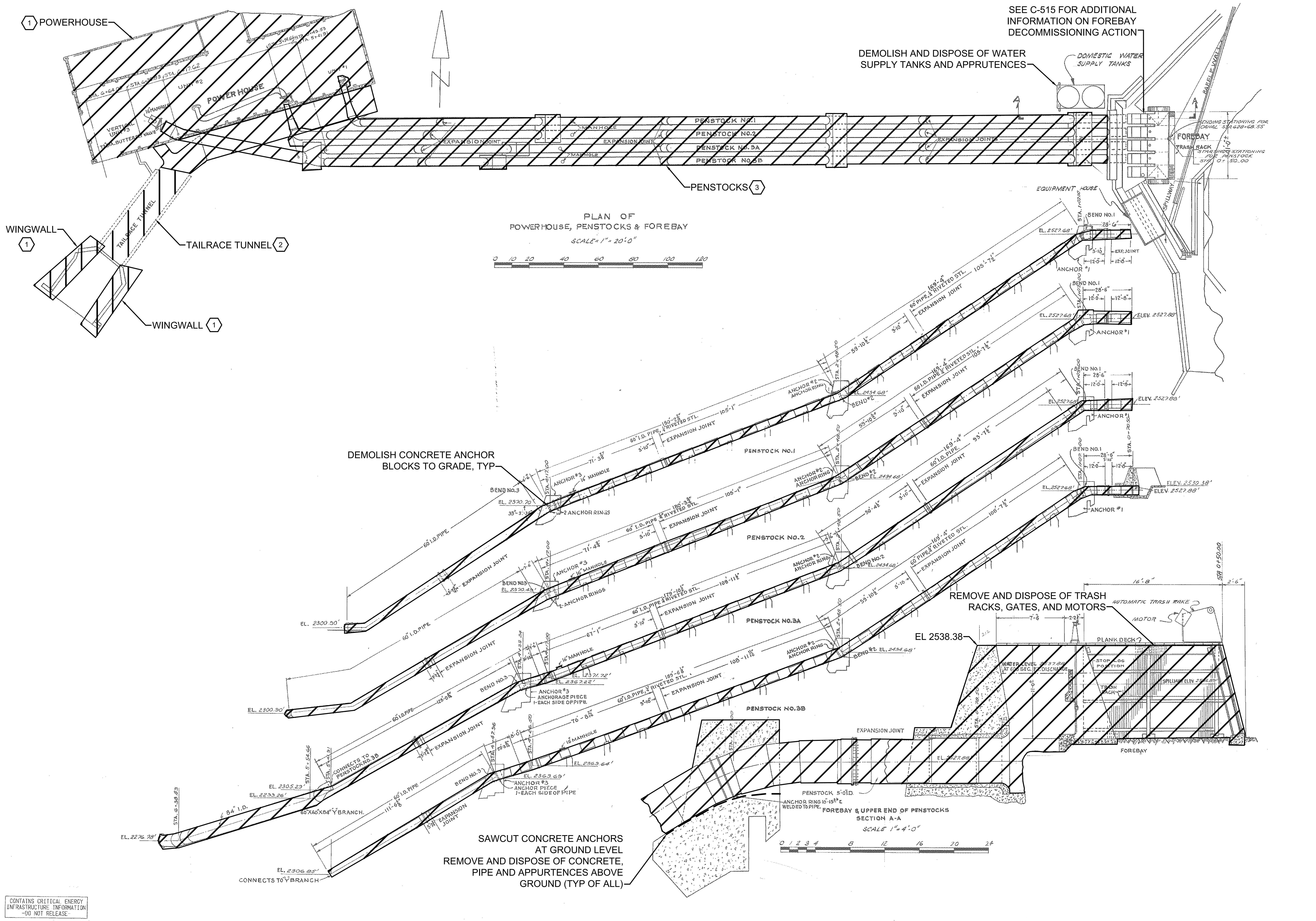
LOCATION: BOREL HYDRO SURRENDER

DETAILS
FOREBAY

SOUTHERN CALIFORNIA EDISON — An EDISON INTERNATIONAL Company
HDR

SCALE: D/L

C-515



GENERAL NOTES:

1. AS-BUILT DRAWING TAKEN FROM DRAWING NUMBER 5106485-1, SHEET ID 382-1020.

KEY NOTES:

1. DEMOLISH POWERHOUSE AND DISPOSE OFFSITE. REFER TO C-517 FOR ADDITIONAL DETAIL.
2. CONTRACTOR MUST PROVIDE A FIRE PROTECTION PLAN FOR APPROVAL AND INSTALL FIRE PROTECTION SYSTEM PRIOR TO ANY WORK IN THIS AREA
3. REMOVE PENSTOCK PIPES AND DISPOSE OFFSITE. CONCRETE FOOTING AND ANCHOR REMOVAL LIMITED TO THAT NEEDED TO REMOVE PIPE

* REVISE ON AUTOCAD SYSTEM ONLY *

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

DETAILS
PENSTOCKS

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company

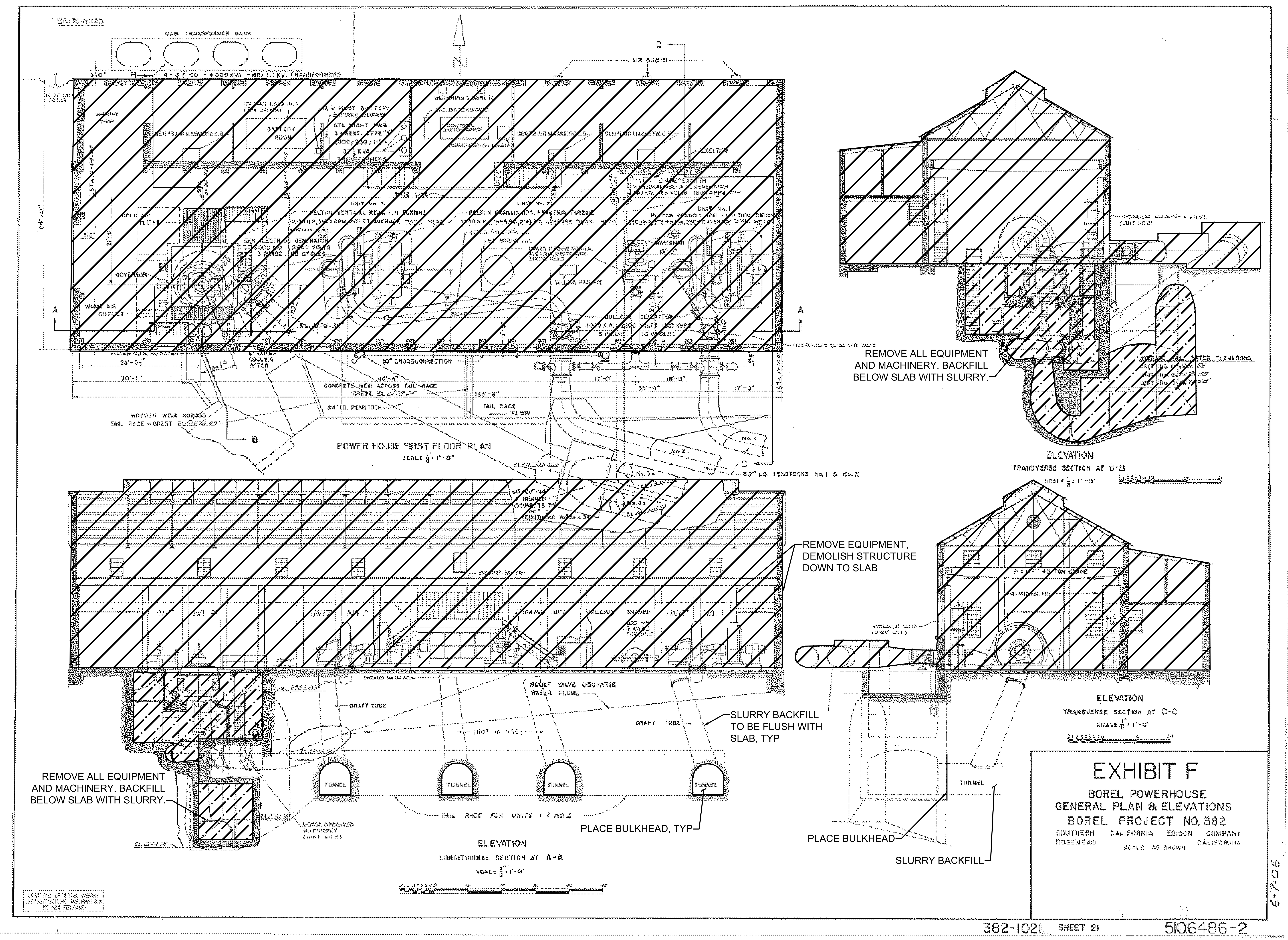
SCALE D/L

C-516

SOUTHERN CALIFORNIA EDISON
2012 – 4 SIZE

GENERAL NOTES:

1. AS-BUILT DRAWING TAKEN FROM DRAWING NUMBER 5106486-2, SHEET ID 382-1021.



∗ REVISE ON AUTOCAD SYSTEM ONLY ∗

REFERENCE DRAWINGS	REFERENCE DRAWINGS	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.	NO	REVISIONS	DATE	SAP WO	SUPV	APPROVED	ENGR	CK'D	MADE	P.E.

LOCATION BOREL HYDRO SURRENDER

DETAILS
POWERHOUSE SECTIONS

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company — HDR

SCALE D/L

C-517

SOUTHERN CALIFORNIA EDISON
2012 – 4 SIZE