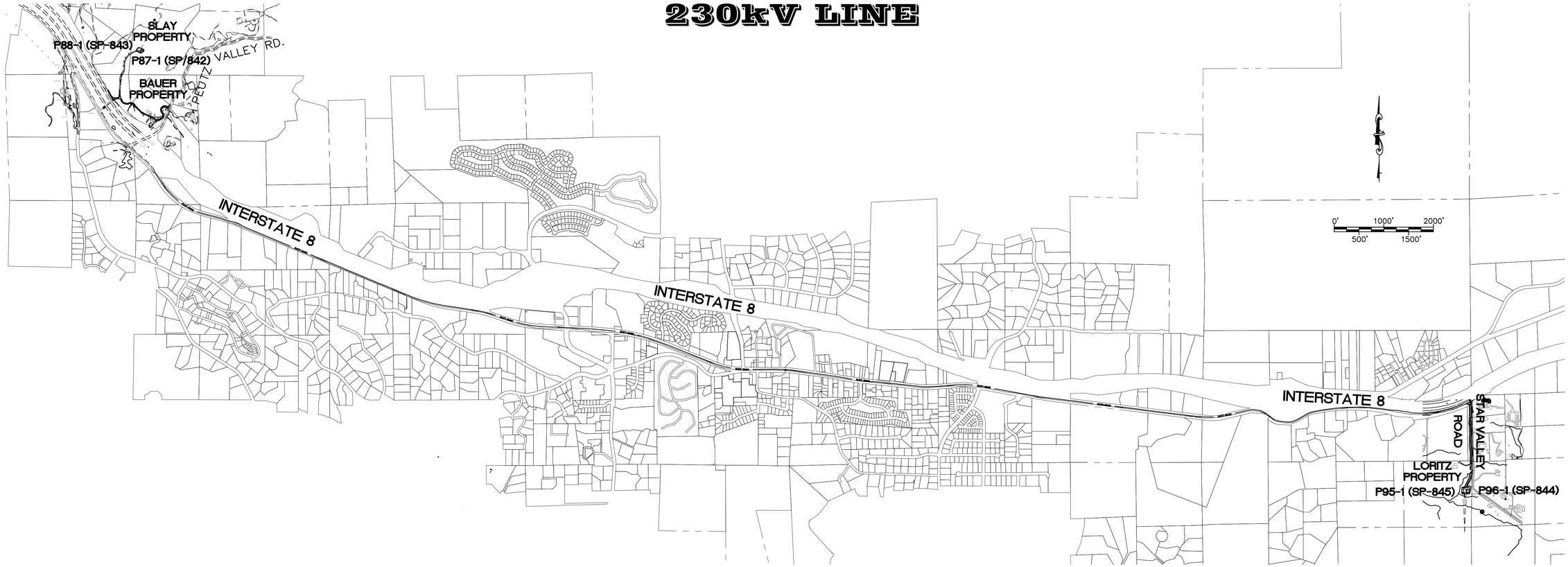
SUNRISE POWERLINK PROJECT

SECTION 6 (LINK 4)

230kV LINE



ON-SITE WORK TO BE DONE

SITE / ACCESS ROAD	SHEET NUMBER
TITLE SHEET	SPL-06-001
LEGEND AND GENERAL NOTES	SPL-06-002
DETAIL SHEET 1 OF 3	SPL-06-003
DETAIL SHEET 2 OF 3	SPL-06-004
DETAIL SHEET 3 OF 3	SPL-06-005
ACCESS ROAD TO SITES P-87-1 & P-88-1	06-P87-1 & P88-1-R1
ACCESS ROAD TO SITES P-87-1 & P-88-1	06-P87-1 & P88-1-R2
ACCESS ROAD TO SITES P-87-1 & P-88-1	06-P87-1 & P88-1-R3
ACCESS ROAD TO SITES P-87-1 & P-88-1	06-P87-1 & P88-1-R4
ACCESS ROAD TO SITES P-87-1 & P-88-1	06-P87-1 & P88-1-R5
SITES P87-1 & P88-1	06-P87-1 & P88-1-S1
ACCESS ROAD TO SITES P-95-1 & P-96-1	06-P-95-1 & P96-1-R1
ACCESS ROAD TO SITES P-95-1 & P-96-1	06-P-95-1 & P96-1-R2
SITES P-95-1 & P-96-1	06-P-95-1 & P96-1-S1
SITES P-95-1 & P-96-1	06-P-95-1 & P96-1-S2

PULL-SITE WORK TO BE DONE

SITE / ACCESS ROAD	SHEET NUMBER
PULL SITE P87-1 & P88-1	06-P87-1-P88-1-PS
PULL SITE P95-1 & P96-1	06-P95-1 & P96-1-PS

NOTE:

P-87-1=(SP-842)
P-88-1=(SP-843)
P-95-1=(SP-845)
P-96-1=(SP-844)

BAUER OFF-SITE IMPROVEMENTS

SITE / ACCESS ROAD	SHEET NUMBER
PLOT PLAN	SPL 06-BC01
SITE PLAN	SPL 06-BC02
LEGEND AND GENERAL NOTES	SPL 06-BC03
BAUER BRIDGE PLAN AND PROFILE	06-P87-P88-B1
BAUER BRIDGE WEST ABUTMENT DETAILS	06-P87-P88-B2
BAUER BRIDGE EAST ABUTMENT DETAILS	06-P87-P88-B3
BAUER BRIDGE ANCHOR BOLT LAYOUT	06-P87-P88-B4
BAUER BRIDGE GENERAL NOTES, BRIDGE ELEVATIONS & PLAN	06-P87-P88-B5
BAUER BRIDGE BRIDGE SECTION, RAILING	
SECTION, AND BRIDGE PLANK DETAILS	06-P87-P88-B6
BAUER BRIDGE BRIDGE BEARING DETAILS	06-P87-P88-B7
BAUER WALL PLAN & PROFILE	06-P87-1-P88-1-W1
BAUER MSE WALL DETAILS	06-P87-P88-W2
BAUER MSE WALL DETAILS	06-P87-P88-W3
BAUER MSE WALL DETAILS	06-P87-P88-W4
EROSION CONTROL PLAN - WALL	SPL 06-BEC01
EROSION CONTROL PLAN - BRIDGE	SPL 06-BEC02

SLAY OFF-SITE IMPROVEMENTS

SITE / ACCESS ROAD	SHEET NUMBER
PLOT PLAN	SPL 06-SC01
SITE PLAN	SPL 06-SC02
LEGEND AND GENERAL NOTES	SPL 06-SC03
SITES P87-1 & P88-1 WALL PLAN	SPL 06-SC04
MSE WALL DETAILS	SPL 06-SC05
MSE WALL DETAILS	SPL 06-SC06
MSE WALL DETAILS	SPL 06-SC07
EROSION CONTROL PLAN	SPL 06-SEC08

LORITZ OFF-SITE - NORTH WALL IMPROVEMENTS

SITE / ACCESS ROAD	SHEET NUMBER
PLOT PLAN	SPL 06-LC01
SITE PLAN	SPL 06-LC02
LEGEND AND GENERAL NOTES	SPL 06-LC03
GRAVITY WALL PLAN & PROFILE	SPL 06-LC04
GRAVITY WALL DETAILS	SPL 06-LC05
EROSION CONTROL PLAN	SPL 06-LEC06

LORITZ OFF-SITE - SOUTH WALL IMPROVEMENTS

SITE / ACCESS ROAD	SHEET NUMBER
PLOT PLAN	SPL 06-LC100
SITE PLAN	SPL 06-LC101
LEGEND AND GENERAL NOTES	SPL 06-LC102
MSE WALL PLAN & PROFILE	SPL 06-LC103
MSE WALL DETAILS	SPL 06-LC104
MSE WALL DETAILS	SPL 06-LC105
MSE WALL DETAILS	SPL 06-LC106
EROSION CONTROL PLAN	SPL 06-LEC107

PRIVATE ROADWAY / DRIVEWAY PLANS

SITE / ACCESS ROAD	SHEET NUMBER
TITLE SHEET	06-DWY-01
NOTES & DETAIL	06-DWY-02
TRAFFIC CONTROL PLANS	06-DWY-03
PERMIT 06-1	06-DWY-04
PERMIT 06-2	06-DWY-05

DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH THE CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY SDG&E IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR PROJECT DESIGN.

STEPHEN K. SMITH
R.C.E. NO. 29708 EXP. 03-31-11

DATE

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REGISTERED PROFESSIONAL ENGINEER
STEPHEN K. SMITH
RCE 29708
Exp. 3-31-11
CIVIL
STATE OF CALIFORNIA

REVISIONS

NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:

SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-06 (LINK 4)
TITLE SHEET

DRAWN BY:	DATE:	SCALE: NA	W.O.	REV. 0	SPL-06-001
CHECKED BY:	DATE:				
APPROVED BY:	DATE:				
CAD NO.:	PLOT SCALE: 1 = 1				

GENERAL NOTES

THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTION TO THE CONTRACTOR BY THE ENGINEER OF WORK:

1. ALL WORK SHALL COMPLY WITH ALL APPLICABLE PORTIONS OF THE PROJECT SPECIFICATIONS:
2. NEITHER THE OWNER, NOR THE ENGINEER OF WORK WILL ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE, SPREAD, WATER AND COMPACT ALL FILL IN STRICT ACCORDANCE WITH PROJECT'S SPECIFICATIONS. A GEOTECHNICAL ENGINEER WILL BE THE OWNER'S REPRESENTATIVE TO INSPECT THE CONSTRUCTION OF FILLS. THE EXCAVATION AND THE PLACEMENT OF FILL WILL BE UNDER THE DIRECT INSPECTION OF THE GEOTECHNICAL ENGINEER, AND HE WILL GIVE WRITTEN NOTICE OF CONFORMANCE WITH THE SPECIFICATIONS UPON COMPLETION OF GRADING. DEVIATIONS FROM PROJECT'S SPECIFICATIONS WILL BE PERMITTED ONLY UPON WRITTEN AUTHORIZATION FROM THE GEOTECHNICAL ENGINEER OR THE SDG&E REPRESENTATIVE.
4. OBSERVATIONS AND COMPACTION TESTS WILL BE MADE BY THE GEOTECHNICAL ENGINEER DURING THE FILLING AND COMPACTING OPERATIONS SO THAT HE CAN STATE HIS OPINION THAT THE FILL WAS CONSTRUCTED IN ACCORDANCE WITH PROJECT'S SPECIFICATIONS.
5. DURING CONSTRUCTION: THE CONTRACTOR SHALL GRADE ALL EXCAVATED AND FILLED SURFACES TO PROVIDE POSITIVE DRAINAGE AND PREVENT PONDING OF WATER. HE SHALL CONTROL SURFACE WATER TO AVOID DAMAGE TO ADJOINING PROPERTIES OR TO FINISH WORK ON THE SITE. THE CONTRACTOR SHALL TAKE REMEDIAL MEASURES TO PREVENT EROSION OF FRESHLY GRADED AREAS, AND UNTIL SUCH TIME AS PERMANENT DRAINAGE AND EROSION CONTROL MEASURES HAVE BEEN INSTALLED. AFTER GRADING IS COMPLETED AND THE GEOTECHNICAL ENGINEER HAS FINISHED HIS OBSERVATIONS OF THE WORK, NO FURTHER EXCAVATION OR FILLING SHALL BE DONE, EXCEPT UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER.
6. CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS REQUIRED TO PROTECT ADJACENT PROPERTIES DURING THE GRADING OPERATIONS.
7. BRUSH AND TREES SHALL BE REMOVED ONLY WITHIN THE AREA TO BE GRADED. WHEN TREES ARE REMOVED, THE ROOT SYSTEMS SHALL ALSO BE REMOVED AND THE RESULTING EXCAVATION FILLED WITH PROPERLY COMPACTED FILL SOILS.
8. CUT AND FILL SLOPES SHALL BE TRIMMED TO THE FINISH GRADE TO PRODUCE A SMOOTH AND UNIFORM SURFACE OR CROSS-SECTION. THE SLOPES OF EXCAVATIONS OR EMBANKMENTS SHALL BE SHAPED AND TRIMMED AS DIRECTED BY THE SDG&E REPRESENTATIVE AND LEFT IN A NEAT AND ORDERLY CONDITION. ALL STONES, ROOTS, OR OTHER WASTE MATTER EXPOSED ON EXCAVATION OR EMBANKMENT SLOPE SHALL BE REMOVED AND DISPOSED OF.
9. GRADING SHALL BE DONE WITHIN A TOLERANCE OF ±0.1' OF THE GRADES AND ELEVATIONS SHOWN ON THESE PLANS AND ALL SLOPES SHALL BE CONSTRUCTED WITHIN ±0.5' OF THE LOCATION SHOWN ON THESE PLANS. IN NO WAY SHALL THE ABOVE TOLERANCES RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF PROVIDING A FINISH THAT WILL NOT POND WATER.
10. ANY QUANTITIES INDICATED ON THESE PLANS ARE ENGINEERS' ESTIMATES ONLY AND ARE NOT TO BE USED BY CONTRACTOR FOR BIDDING PURPOSES.
11. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN THE FIELD AND BRING DISCREPANCIES TO THE ATTENTION OF THE SDG&E REPRESENTATIVE PRIOR TO STARTING CONSTRUCTION.
12. CONTRACTOR SHALL REFER TO GEOTECHNICAL REPORT TITLED "GEOTECHNICAL EVALUATION – ACCESS ROADS AND STRUCTURAL PADS SUNRISE POWERLINK PROJECT"
    BY URS, DATED, OCTOBER 16, 2009. URS
    PROJECT No.27669019.0002
13. THERE ARE ENVIRONMENTALLY SENSITIVE AREAS THROUGHOUT THE PROJECT THAT ARE NOT SHOWN ON THESE PLANS. YOU ARE RESPONSIBLE FOR KNOWING WHERE THESE AREAS ARE. REFER TO YOUR ENVIROMENTAL MAPBOOK AND ONE TOUCH FOR UP TO DATE INFORMATION.

EROSION CONTROL NOTES

1. ALL POLE & TOWER MAINTENANCE PADS TO BE DIKED AND THE DIKES MAINTAINED TO PREVENT WATER FROM FLOWING FROM THE PADS WITHOUT CAUSING EROSION, OR CONSTRUCT DRAINAGE FACILITIES TO THE SATISFACTION OF THE COUNTY DEPARTMENT OF PUBLIC WORKS THAT WILL ALLOW WATER TO DRAIN FROM THE PAD WITHOUT CAUSING EROSION.
2. TOPS OF ALL SLOPES TO BE DIKED OR TRENCHED TO PREVENT WATER FROM FLOWING OVER THE CREST OF SLOPES.
3. ALL GRADED CUT OR FILL SLOPES SHALL BE HYDROSEEDED TO PROTECT THE SLOPE FROM EROSION AND INSTABILITY IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
4. FIBER ROLLS SHALL BE PLACED AT TOP, TOE AND FACE (15 FOOT INTERVALS) OF GRADED ALL CUT AND FILL SLOPES TO INTERCEPT RUNOFF AND REDUCE EROSION IN ACCORDANCE WITH PROJECT SPECIFICATIONS.

COUNTY OF SAN DIEGO CONSTRUCTION NOTES

1. ALL ASPHALT CONCRETE SHALL CONFORM TO CALTRANS STANDARD SPECIFICATIONS. 2006 SECTION 39 AND SHALL HAVE A BASE COURSE OF TYPE A 3/4" MAXIMUM COURSE AND A 2" FINAL LIFT (OR 2" OVERLAY) USING TYPE B, 1/2" MAXIMUM, MEDIUM GRADATION
2. AGGREGATE BASE SHALL CONFORM TO CALTRANS SECTION 26 CLASS II AGGREGATE BASE
3. ALL OTHER WORK IN COUNTY OF SAN DIEGO PUBLIC RIGHT OF WAY SHALL CONFORM TO CALTRANS STANDARD SPECIFICATIONS OR STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION WITH REGIONAL SUPPLEMENT AMENDMENTS (LATEST ADOPTED EDITION)
4. WORK WITHIN COUNTY RIGHT OF WAY IS SUBJECT TO COUNTY CONSTRUCTION/ ENCROACHMENT PROCESS AND MAY REQUIRE CONSTRUCTION TRAFFIC CONTROL TO MITIGATE SIGHT DISTANCE AND CONSTRUCTION WITHIN THE COUNTY RIGHT OF WAY

ABBREVIATIONS

(EG)	EXISTING GRADE
FG	FINISHED GRADE
TW	TOP OF WALL
BW	BOTTOM OF WALL AT FINISHED GROUND
FL	FLOW LINE
U/S	UP STREAM
D/S	DOWN STREAM
CMP	CORRUGATED METAL PIPE
RC	RELATIVE COMPACTION

LEGEND

A — A	SECTION
	INDICATES NEW TOWER
	INDICATES EXISTING STEEL POLE
	WATER BAR PER SDGE STD DR-1
	BROW DITCH PER 3/3
422.1 / 415.8	VERTICAL PROFILE F.G. ELEV. ABOVE / VERTICAL PROFILE E.G. ELEV. BELOW
	NEW TRANSMISSION LINE
440	(F.G.) FINISH GRADE CONTOURS
440	(E.G.) EXISTING GRADE CONTOURS
(206.2)	EXISTING GROUND ELEVATION
TOP / TOE	FILL SLOPE 2:1 UNLESS SHOWN OTHERWISE
TOP / TOE	CUT SLOPE 2:1 UNLESS SHOWN OTHERWISE
R	RIDGE LINE
	DAYLIGHT LINE
	DIRECTION OF FLOW
CUT / FILL	CUT/FILL LINE
	CONCRETE DOWN DRAIN, SEE DETAIL 1/3
	RIPRAP ENERGY DISSIPATOR, SEE DETAIL 2/3
	CORRUGATED METAL PIPE WITH FLARED END SECTIONS, SEE PLANS FOR, PIPE SIZES, AND ENERGY DISSIPATOR. 6/4
	DROP OUTLET PER SDRSD D-16 TYPE B, INLET PIPE 24" AND OUTLET PIPE 12" DIAMETER
	CONCRETE DRAINAGE DITCH, SEE DETAIL 3/3
	DRAINAGE DITCH BEHIND MASONRY CUT RETAINING WALL, SEE DETAIL 4&5/4
3'	RETAINING WALL, FILL 8/5
	RETAINING WALL, CUT 7/4
X / XX	DETAIL LABEL (DETAIL # / SHEET #)

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REGISTERED PROFESSIONAL ENGINEER — STEPHEN K. SMITH — RCE 29708 — Exp.3-31-11 — CIVIL — STATE OF CALIFORNIA

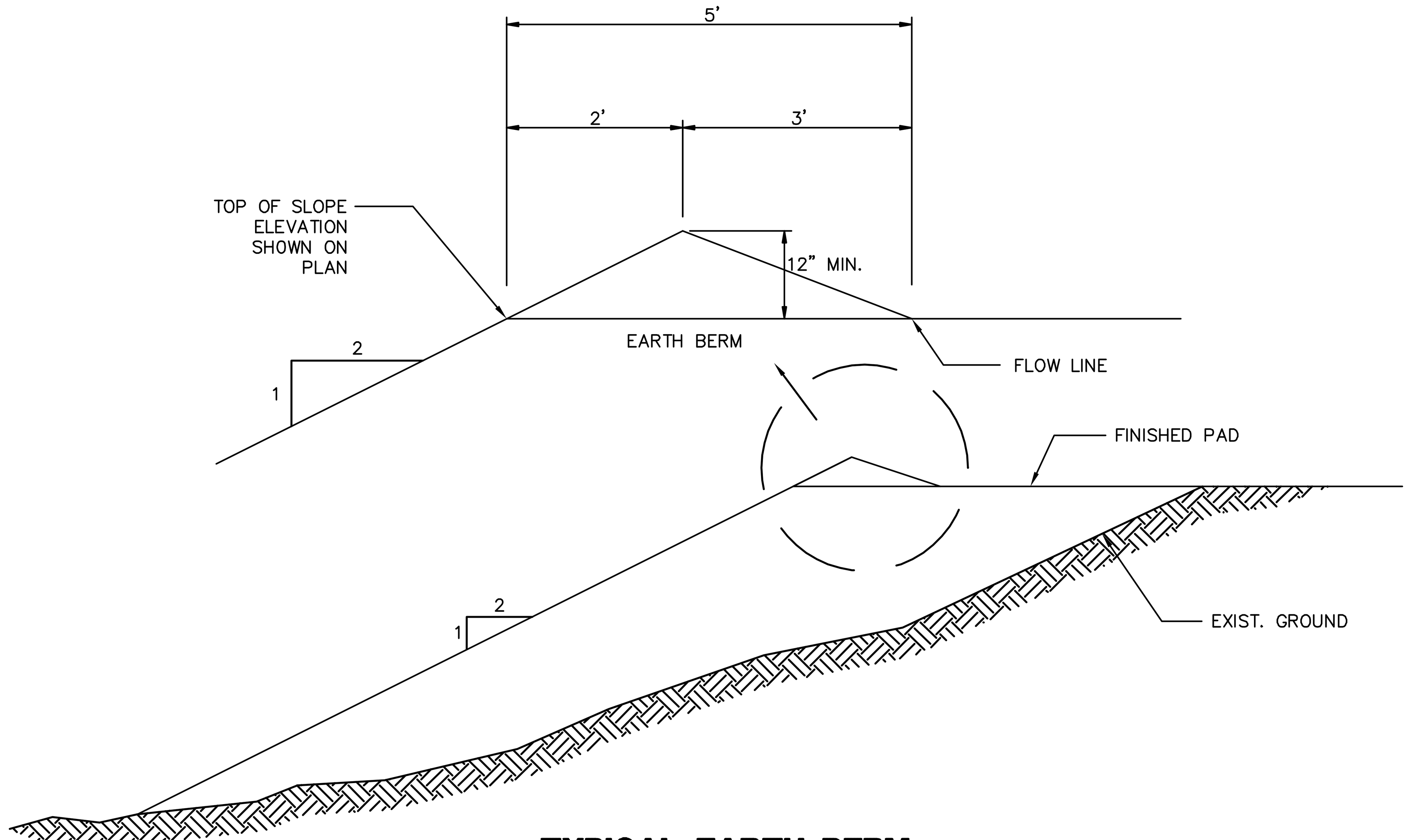
REVISIONS

NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:

SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-06 (LINK 4)
LEGEND & GENERAL NOTES

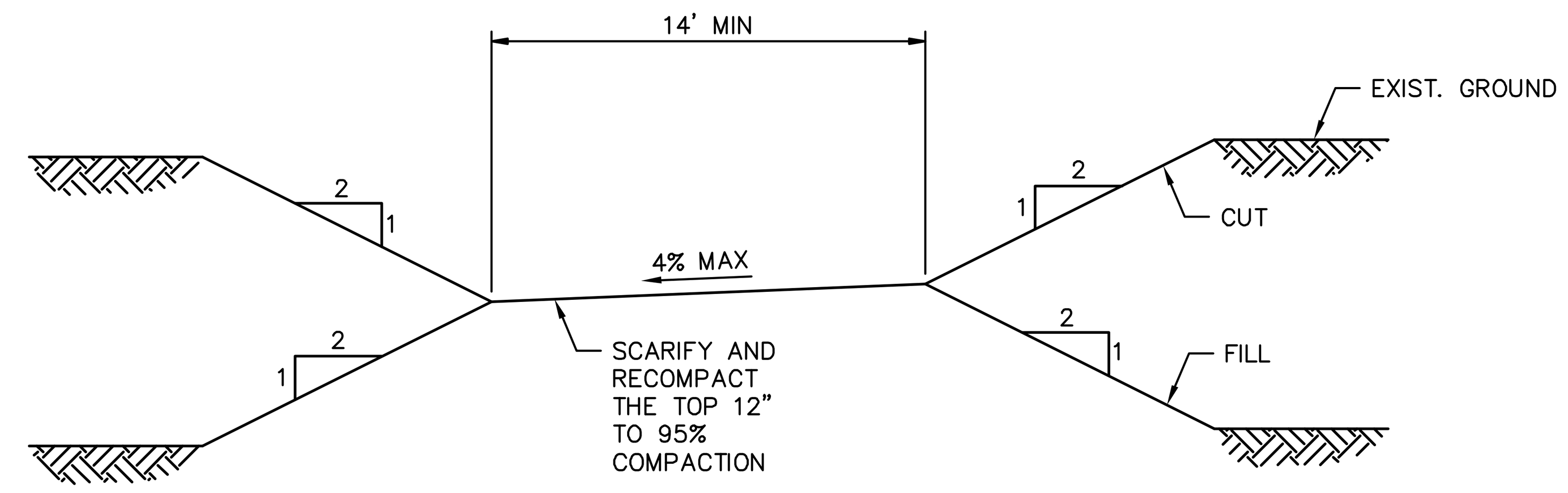
DRAWN BY: JJP	DATE: -/-/-	SCALE: AS NOTED	W.O.	REV. 0	SPL-06-002
CHECKED BY:	DATE:				
APPROVED BY:	DATE:				
CAD NO.:	PLOT SCALE: 1=1				



TYPICAL EARTH BERM

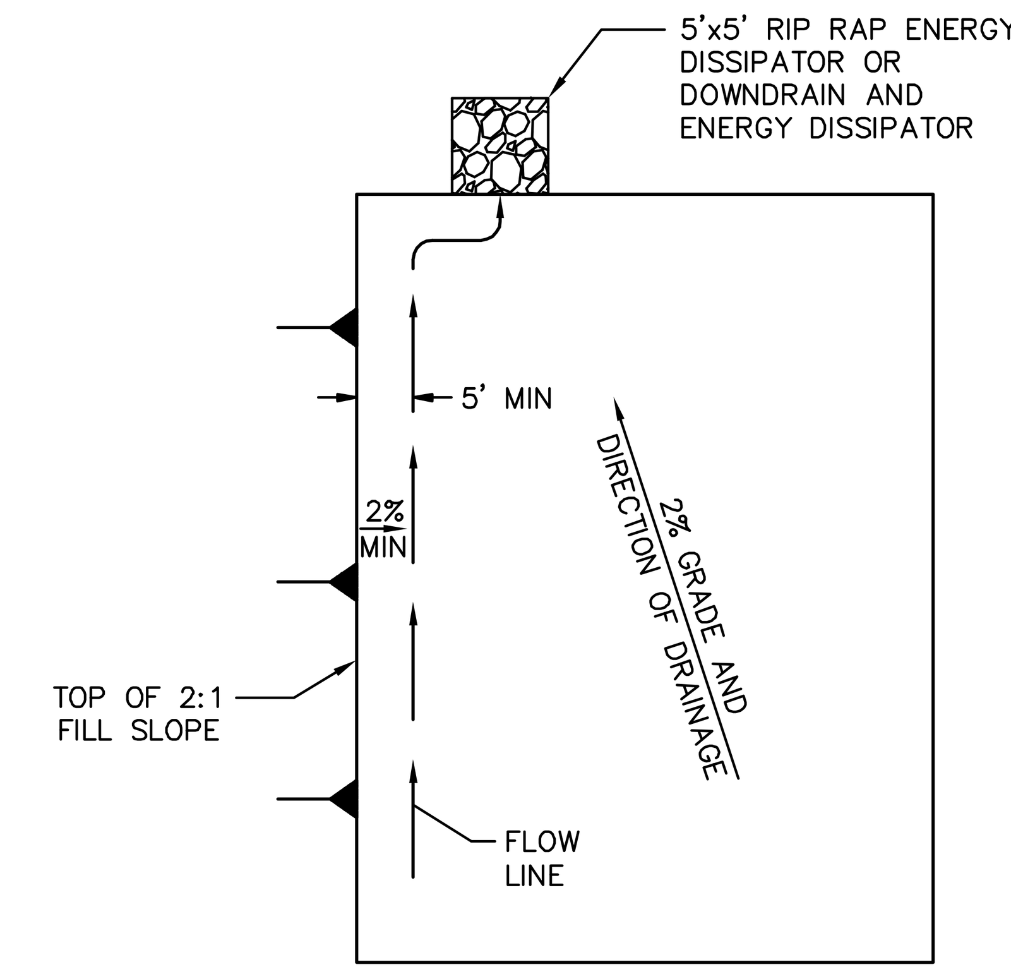
NTS

TO BE PLACED ON TOP OF ALL FILL SLOPES.



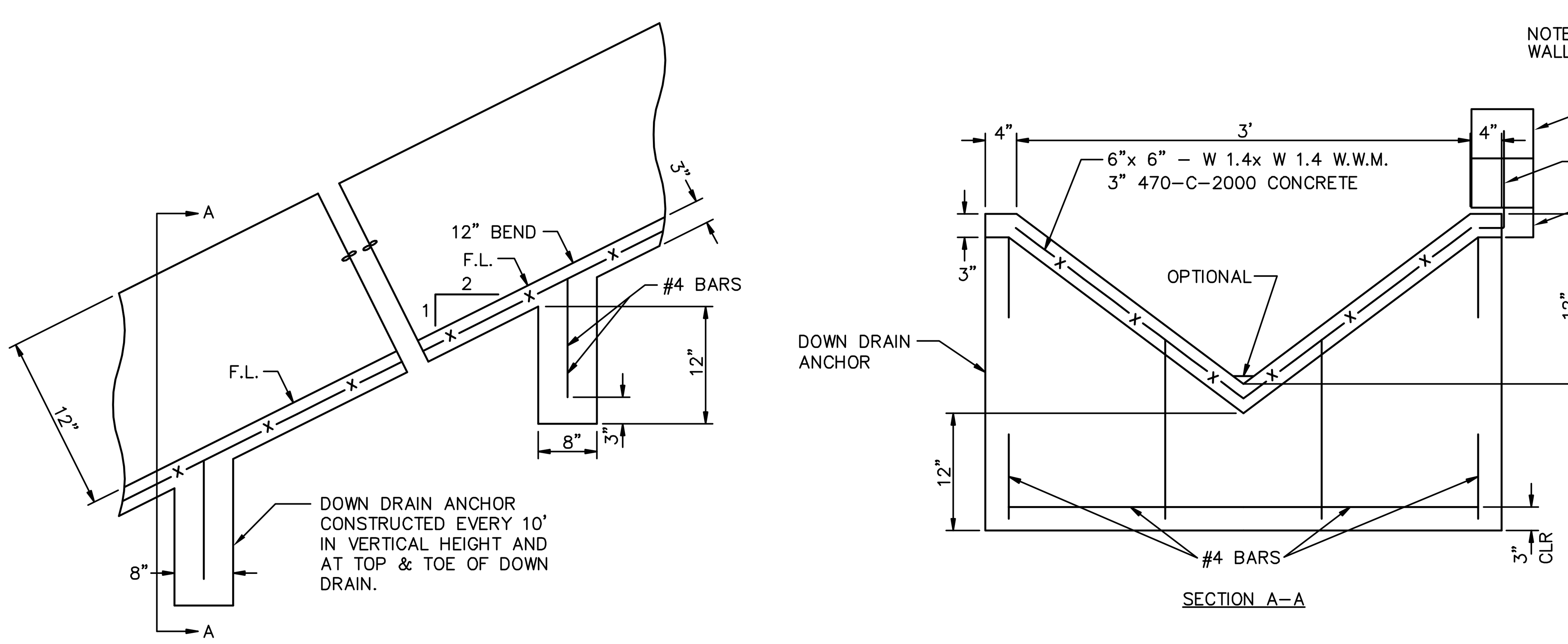
TYPICAL ACCESS ROAD SECTION

NTS



TYPICAL PAD DRAINAGE LAYOUT

NTS



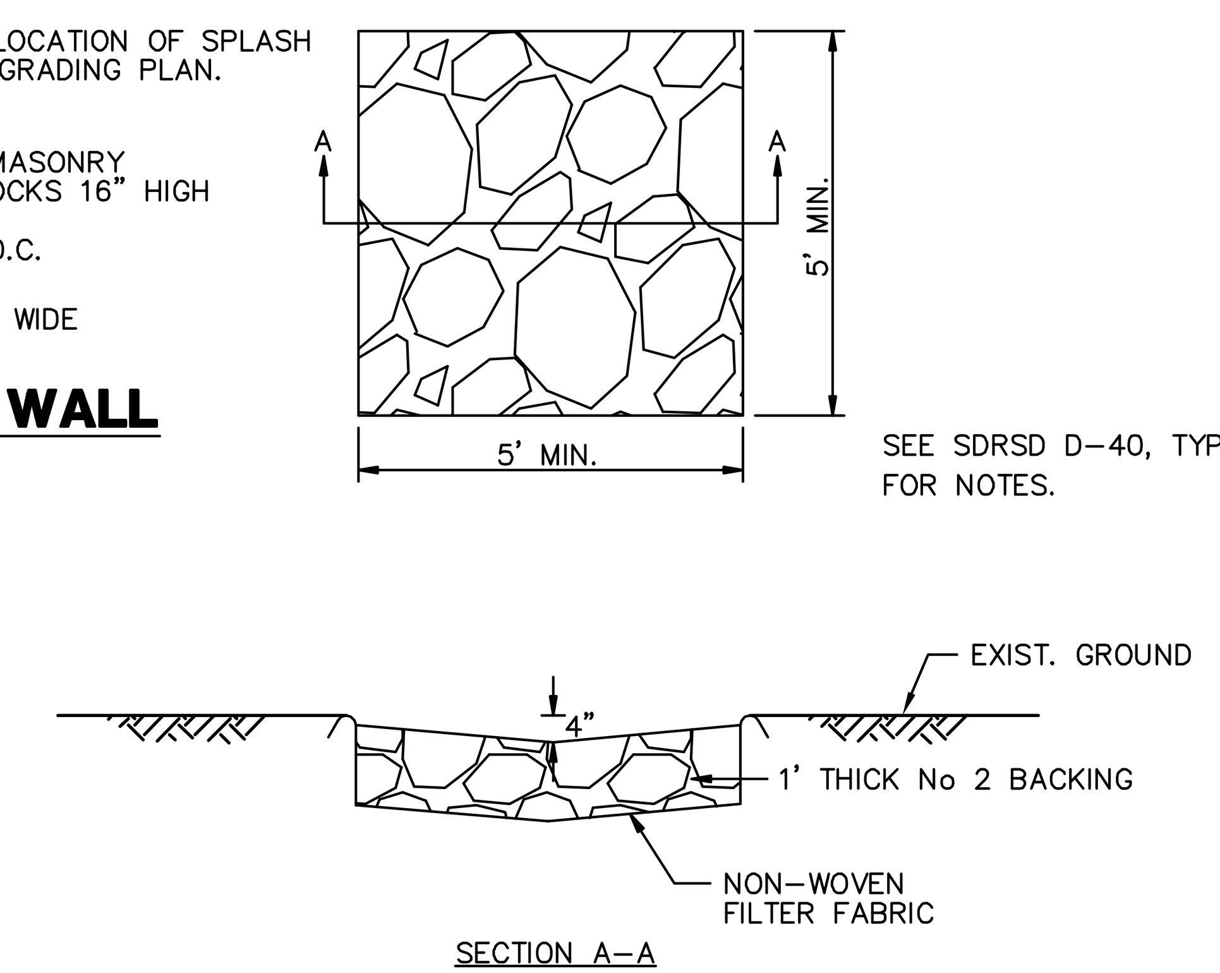
NOTE: THE LENGTH AND LOCATION OF SPLASH WALL IS SHOWN ON SITE GRADING PLAN.

SPLASH WALL

NTS

DOWN DRAIN (1/3)

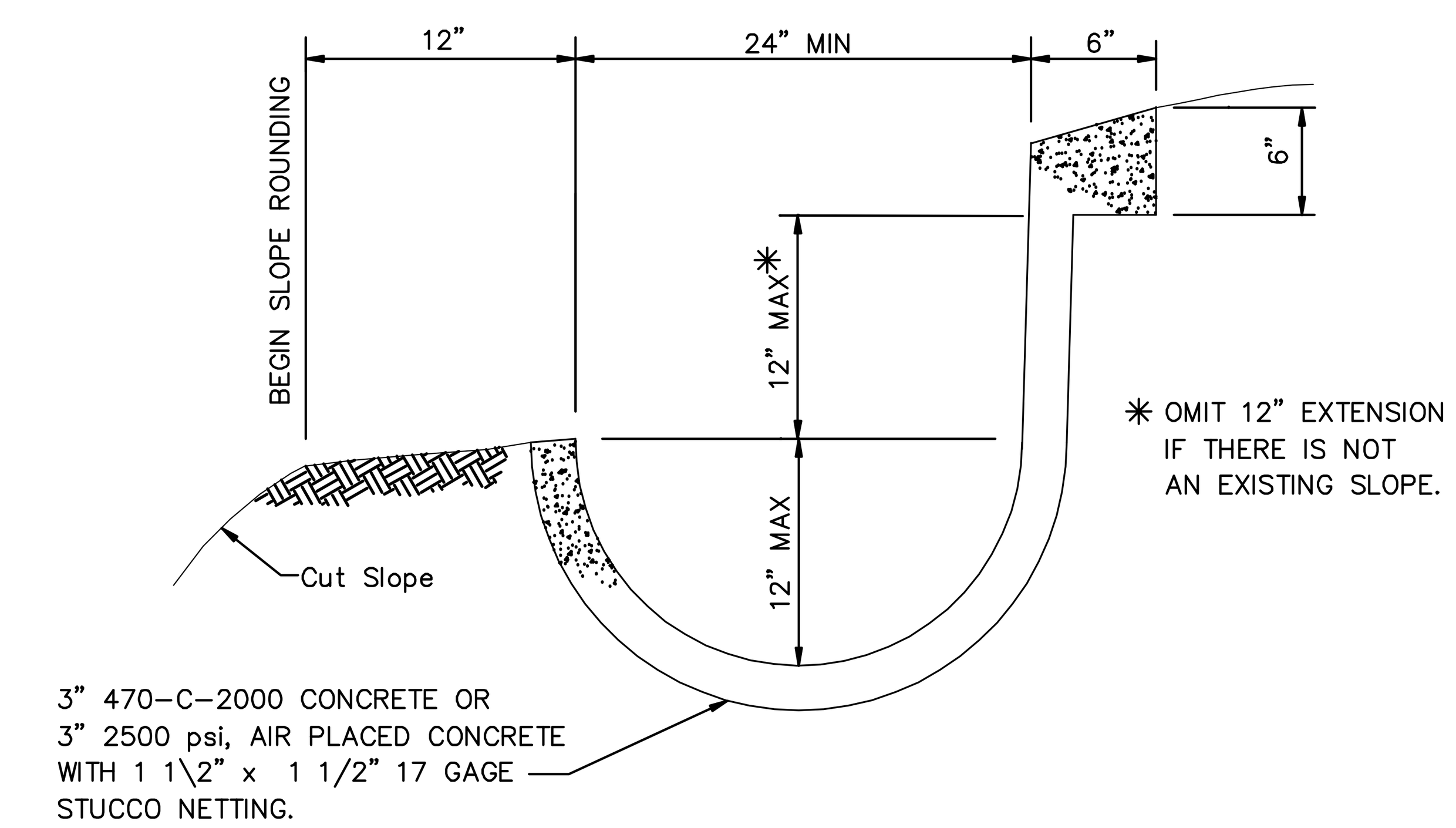
NTS



SEE SDRSD D–40, TYPE 2 FOR NOTES.

RIPRAP ENERGY DISSIPATOR (2/3)

NT



BROW AND/OR DRAINAGE DITCH (3/3)

NTS

LONGITUDINAL SLOPE OF LINED DITCH SHALL BE 2% MINIMUM.

GENERAL DETAILS

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REVISIONS

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SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL–06 (LINK 4)
DETAIL SHEET 1 OF 3

DRAWN BY: 00	DATE:	SCALE: NTS	W.O.	REV. 0
CHECKED BY:	DATE:		SPL–06–003	
APPROVED BY:	DATE:			
CAD NO.:		PLOT SCALE: 1 = 1		

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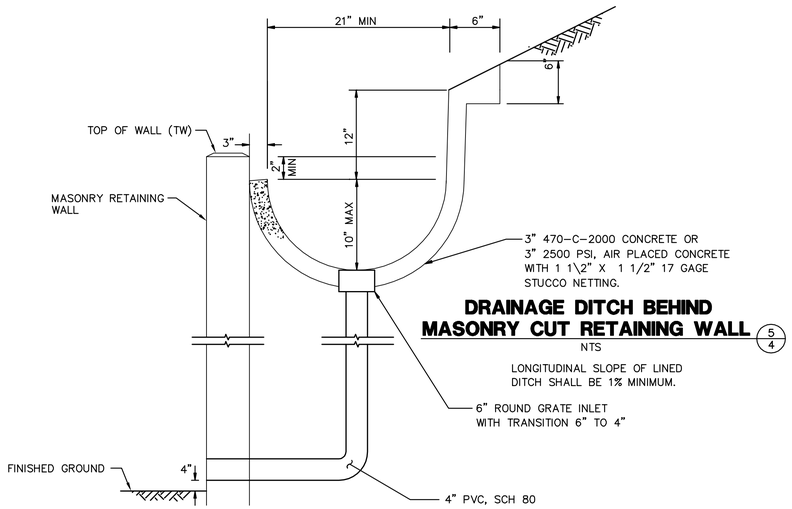


DRAINAGE DITCH BEHIND MASONRY CUT RETAINING WALL (5/4)

NTS

LONGITUDINAL SLOPE OF LINED DITCH SHALL BE 1% MINIMUM.

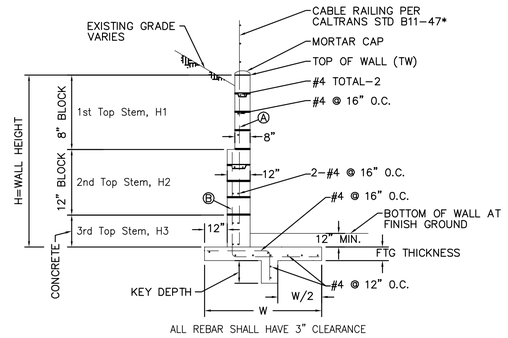
DRAINAGE DITCH DRAIN (4/4)

NTS

NOTE: DRAIN SHALL BE ADDED TO DRAINAGE DITCH AT THE LOCATIONS SHOWN ON DRAWINGS.

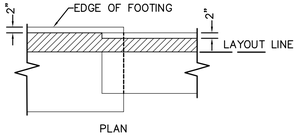
Wall Height	Ftg Width	Key Width	Key Depth	Ftg Thickness	1st Top Stem (masonry)			2nd Top Stem (masonry)			3rd Top Stem (concrete)		
H (ft)	W (ft)	(ft)	(ft)	(in)	H1(ft)	Thickness(in)	Reinf. Steel	H2(ft)	Thickness(in)	Reinf. Steel	H3(ft)	Thickness(in)	Reinf. Steel
13	9	1	3.5	16	6	8	#6@16	4	12	#6@8	3	12	#6@8
12	7.5	1	3	12	6	8	#6@16	4	12	#6@8	2	12	#6@8
11	7	1	2.5	12	6	8	#6@16	4	12	#6@8	1	12	#6@8
10	5.5	1	2	12	6	8	#6@16	4	12	#6@8			
9	5	1	1.5	12	6	8	#6@16	3	12	#6@16			
8	4.5	1	1.5	12	5.33	8	#5@16	2.667	12	#5@16			
7	4	1	1	10	4.33	8	#5@16	2.667	12	#5@16			
6	3.5	0	0	10	6	8	#5@16						
5	2.5	0	0	10	5	8	#4@16						
4	2	0	0	10	4	8	#4@16						

*NOTE: ALL CUT MASONRY RETAINING WALLS ABOVE 3'-8" SHALL HAVE A CONTINUOUS CABLE RAILING.



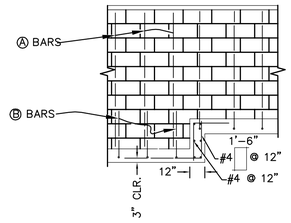
ALL REBAR SHALL HAVE 3" CLEARANCE

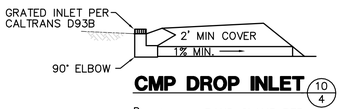
TYPICAL SECTION



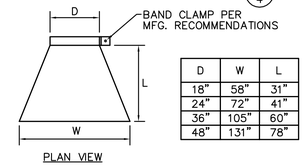
PLAN

NOTES:
FILL ALL BLOCK CELLS WITH GROUT.





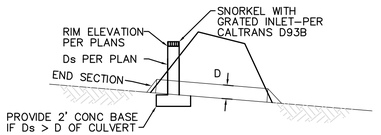
CMP DROP INLET (10/4)



PLAN VIEW

D	W	L
18"	58"	31"
24"	72"	41"
36"	105"	60"
48"	131"	78"

CULVERT END SECTION INLET AND/OR OUTLET

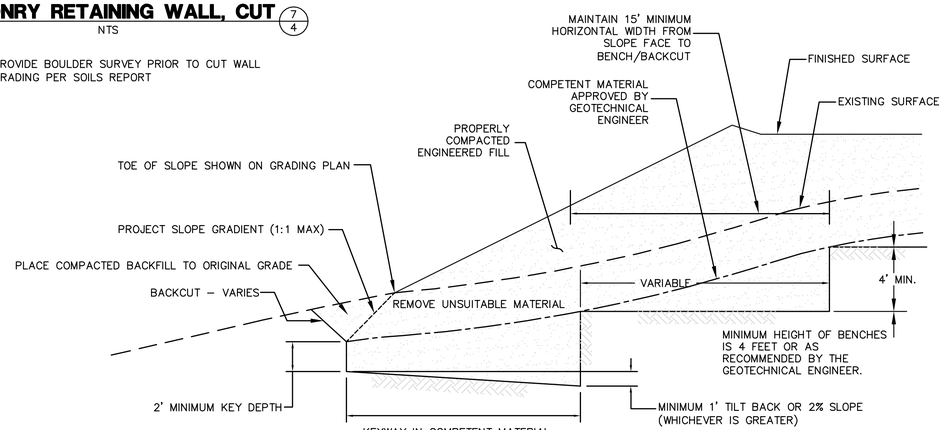


SNORKEL INLET (8/4)

MASONRY RETAINING WALL, CUT (7/4)

NTS

*NOTE: PROVIDE BOULDER SURVEY PRIOR TO CUT WALL GRADING PER SOILS REPORT

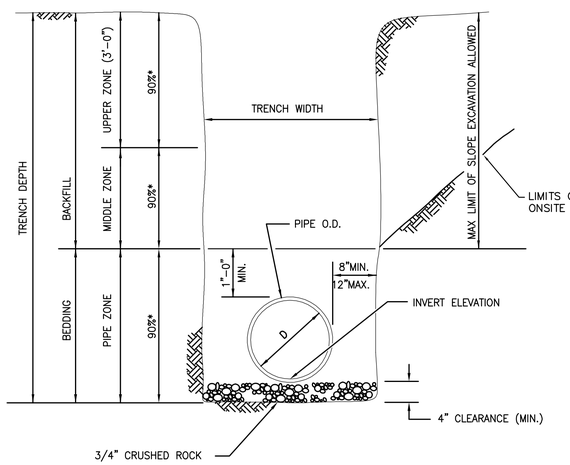


NOTES:
BENCHING SHALL BE REQUIRED WHEN NATURAL SLOPES ARE EQUAL TO OR STEEPER THAN 5:1 OR WHEN RECOMMENDED BY THE GEOTECHNICAL ENGINEER.

WHERE THE NATURAL SLOPE APPROACHES OR EXCEEDS THE DESIGN SLOPE RATIO, SPECIAL RECOMMENDATIONS WILL BE PROVIDED BY THE GEOTECHNICAL ENGINEER

FILL SLOPE BENCHING

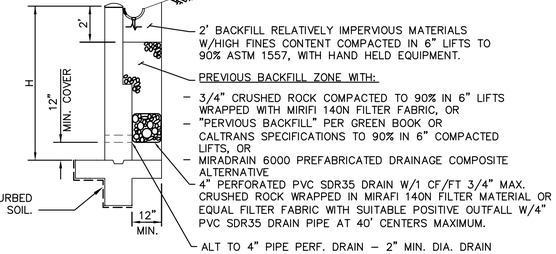
NT



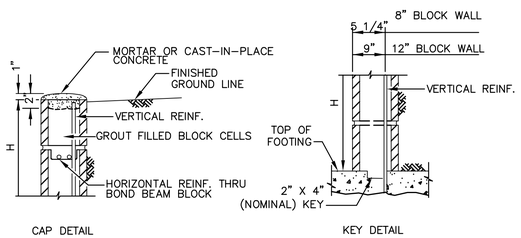
(*) INDICATES MINIMUM RELATIVE COMPACTION.

PIPE BEDDING AND TRENCH BACKFILL FOR STORM DRAINS (6/4)

NTS



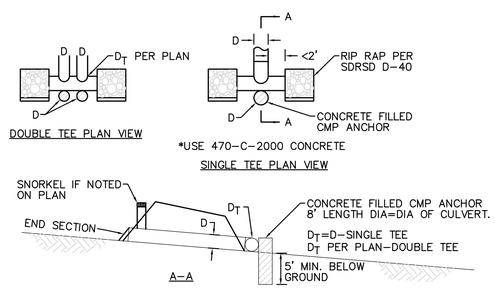
TYPICAL SECTION



NOTES
1. ALL MASONRY RETAINING WALLS SHALL BE CONSTRUCTED WITH CAP, KEY AND DRAINAGE DETAILS AS SHOWN HEREON.

MASONRY RETAINING DETAILS (7/4)

NTS



TEE OUTLET (9/4)

P:\16919 SDG&E SPL\CADD\06\dwg\plan\006-DETAIL 2OF3.dwg[]Jun-02-20101011

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11590 West Bernardo Court Suite 100
San Diego, CA 92127-1624
Tel: (858) 451-6100 Fax: (858) 451-2846
www.us.bureauveritas.com

REGISTERED PROFESSIONAL ENGINEER — STEPHEN K. SMITH — NO. 29708 — Exp. 3-31-11 — CIVIL — STATE OF CALIFORNIA

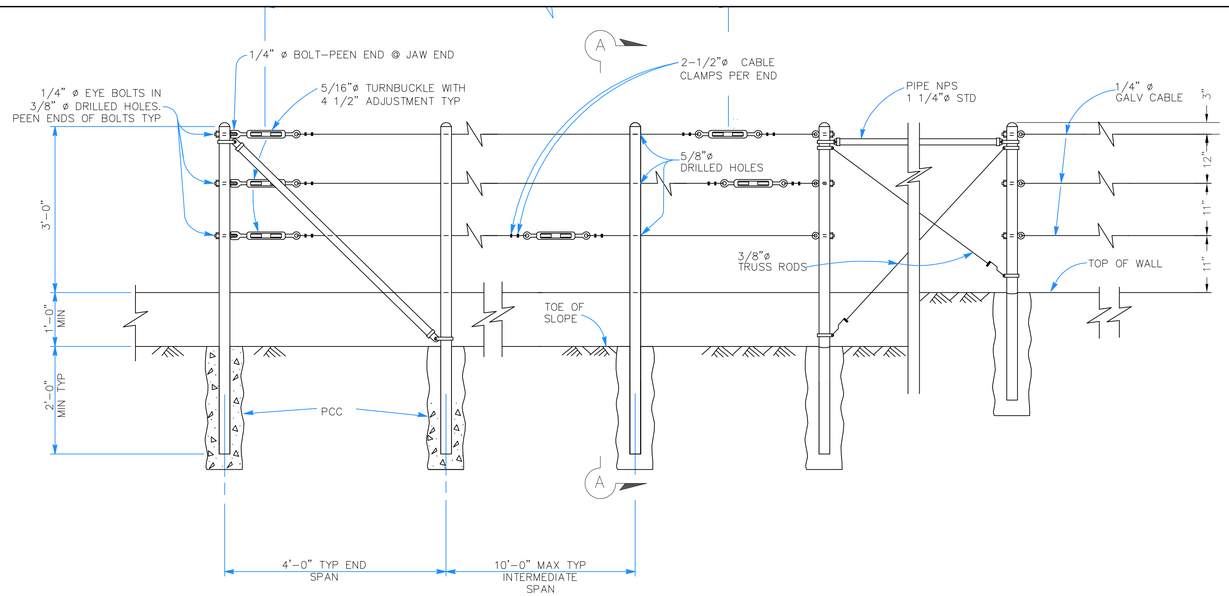
REVISIONS

NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:

SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-06 (LINK 4)
DETAIL SHEET 2 OF 3

DRAWN BY: 00	DATE:	SCALE: NONE	W.O. REV. 0
CHECKED BY:	DATE:		
APPROVED BY:	DATE:		
CAD NO.:	PLOT SCALE: 1 = 1		SPL-06-004

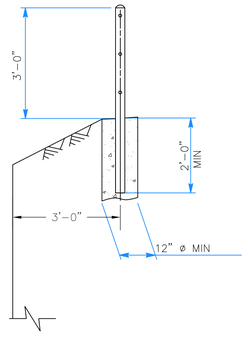


NEW WALL (WITHOUT GUTTER)

NTS

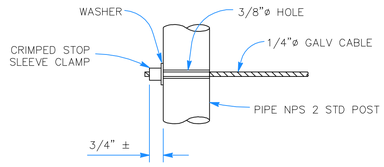
NOTES:

1. MAXIMUM DISTANCE BETWEEN TURNBUCKLES SHALL BE 200'-0".
2. INTERMEDIATE TURNBUCKLES TO BE PLACED IN ADJACENT SPANS.
3. CABLE SHALL NOT BE SPLICED BETWEEN INTERMEDIATE TURNBUCKLES AND END POSTS.
4. ALL POSTS, CABLE, AND HARDWARE TO BE GALVANIZED.
5. POSTS TO BE VERTICAL.
6. ALIGNMENT OF HOLES IN POSTS MAY VARY TO CONFORM TO SLOPE OF TOP OF RETAINING WALL.
7. THE CONTRACTOR SHALL VERIFY ALL DEPENDENT DIMENSIONS IN THE FIELD BEFORE ORDERING OR FABRICATING ANY MATERIAL.
8. ALTERNATIVE DETAILS MAY BE SUBMITTED BY THE CONTRACTOR FOR APPROVAL BY THE ENGINEER.
9. LINE POSTS SHALL BE BRACED HORIZONTALLY AND TRUSSED DIAGONALLY IN BOTH DIRECTIONS AT INTERVALS NOT TO EXCEED 1000'.
10. POST POCKETS TO BE CENTERED IN TOP OF WALL.
11. TYPICAL END SPANS, BRACED IN BOTH DIRECTIONS, SHALL BE CONSTRUCTED AT CHANGES IN LINE WHERE THE ANGLE OF DEFLECTION IS 15° OR MORE.
12. PROVIDE THIMBLES AT ALL CABLE LOOPS.



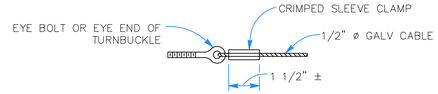
SECTION A-A

NEW CONSTRUCTION



ALTERNATIVE DEAD END ANCHORAGE

NTS



ALTERNATIVE CABLE CONNECTION

NTS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CABLE RAILING

NO SCALE

B11-47 (MOD)

P:\16919 SDG&E SPL\CADD\06\dwg\plan\006-DETAIL 3DF3.dwg Mon-26-2010@8:23

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REGISTERED PROFESSIONAL ENGINEER — STEPHEN K. SMITH — RCE 25708 — Exp.3-31-11 — CIVIL — STATE OF CALIFORNIA

REVISIONS

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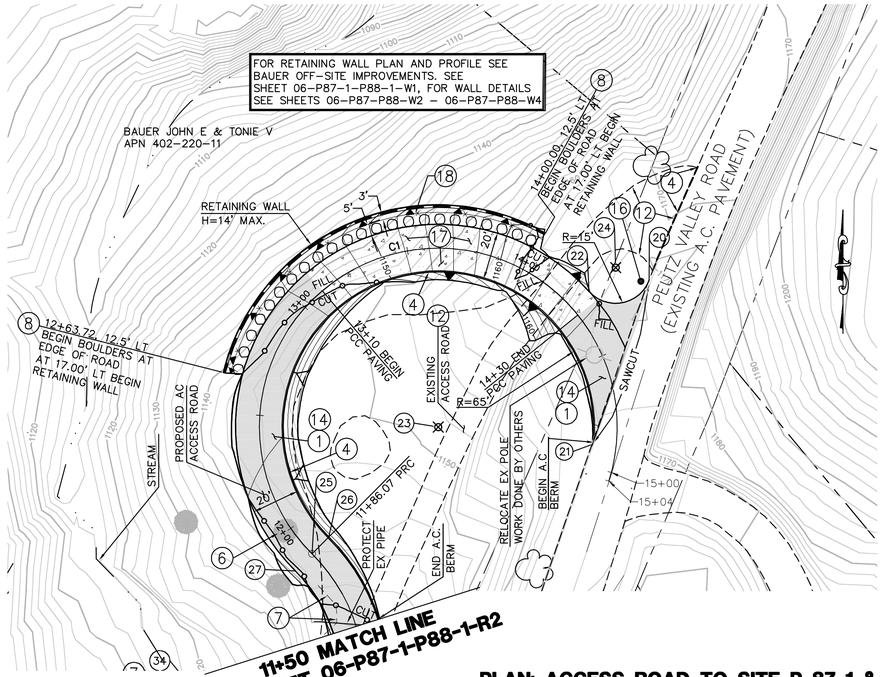
SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-06 (LINK 4)
DETAIL SHEET 3 OF 3

DRAWN BY: DD	DATE:	SCALE: NONE	W.O.	REV. 0	SPL-06-005
CHECKED BY:	DATE:				
APPROVED BY:	DATE:				
CAD NO.:	PLOT SCALE: 1 = 1				



PLAN: ACCESS ROAD TO SITE P-87-1 & P-88-1

SCALE: 1" = 30'

NOTE: FLAGGER OPERATION REQUIRED (DUE TO SIGHT DISTANCE ISSUES) DURING CONSTRUCTION AND HEAVY EQUIPMENT MOBILIZATION AND DEMOBILIZATION

GRAPHIC SCALE
30 0 30 60
1"=30'

EARTH QUANTITIES:
CUT: 353 CY.
FILL: 775 CY.
NET: 422 CY.

DISTURBED AREA:
ROAD: 9,152 SF

QUANTITIES:
AC PAVEMENT: 4075 SF
6" A.C. BERM: 305 LF
PCC PAVING: 2401 SF
TYPE 1 AC SLURRY SEAL: 4075 SF
LENGTH OF ACCESS ROAD: 361 LF
REMOVAL AC PAVEMENT: 1198 SF
BOULDER PLACED EDGE: 135 LF
CABLE RAILING: 163 LF
DOUBLE MAIL BOX: 1 EA
RELOCATE/REPLANT TREE: 1 EA

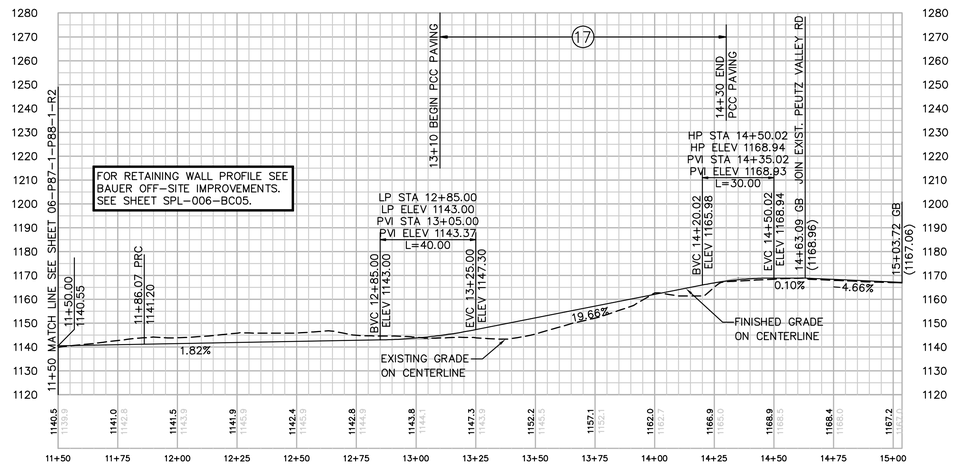
CENTERLINE DATA			
NUMBER	RADIUS	LENGTH	BEARING/DELTA ANGLE
C1	75.00	317.66	242°40'17"

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
20	1889453.79	6391393.66	(1169.83)	EG
21	1889385.22	6391369.94	(1167.55)	EG
22	1889449.27	6391368.55	1167.18	FG
23	1889392.45	6391305.34		RP
24	1889459.30	6391379.71		RP
25	1889339.32	6391252.40	1141.20	PRC/CL
26	1889346.41	6391259.46	1141.00	PRC
27	1889332.17	6391245.41	1141.40	PRC

CONSTRUCTION NOTES

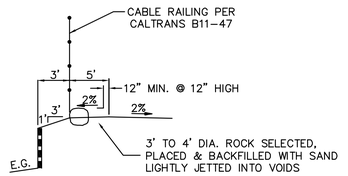
1. CONSTRUCT 4" AC ON 6" CLASS 2 AGGREGATE BASE (CAB) OVER 6" 95% COMPACTED NATIVE SUBGRADE
3. CONSTRUCT 2" AC OVERLAY ON EXISTING AC
4. CONSTRUCT 6" AC BERM PER SDRSD G-5, TYPE A
6. RELOCATE/REPLANT YOUNG TREE
7. REMOVE PORTIONS OF EXISTING TREE
8. CONSTRUCT BOULDER PLACED NATURAL ROAD EDGE AFTER CONSTRUCT PLACE 3'-4' DIA. BOULDER W/ 2'-4' ROCK ABOVE ROAD SURFACE AT OUTSIDE EDGE OF PAVEMENT PRIOR TO FINAL PAVING. SEE DETAIL & SECTION HERE ON (A/R1)
12. REMOVE PORTION OF EXISTING PAVEMENT
14. SLURRY NEW & OLD AC PAVING AFTER CONSTRUCTION TRAFFIC COMPLETION WITH TYPE I AC SLURRY SEAL
16. CONSTRUCT DOUBLE MAILBOX , 1/8" THICK ALUMINUM POWDER COAT WITH LOCKING MAIL SLOT, NEWSPAPER HOLDER AND ADDRESS NUMERALS.
17. CONSTRUCT 6" PCC PAVING ON 95% COMPACTED 4" CLASS 2 AGGREGATE BASE (CAB) OVER 6" 95% COMPACTED NATIVE SUBGRADE. PROVIDE HEAVY CROSS GROOVED FINISH TO CONCRETE SURFACE FOR MAXIMUM TRACTION.
18. CONSTRUCT 36" HIGH CABLE RAILING PER CALTRANS B11-47 (MOD) W/ 12" DIA. BY 2' DEEP CONC. POSTS SEE DETAIL SHEET SPL-006-005.

GRIND & FEATHER OVERLAY
AC OVERLAY
NEW AC ON CAB
PCC PAVING



PROFILE: ACCESS ROAD TO SITE P-87-1 & P-88-1

HORIZ. & VERT. SCALE: 1" = 30'



SECTION
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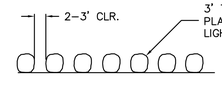
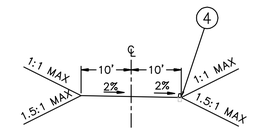


PLAN
NTS.



TYPICAL ACCESS ROAD CROSS SECTION
STA 11+50.00 TO 14+63.09

A/R1 BOULDER PLACED NATURAL ROAD EDGE
NTS

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REGISTERED PROFESSIONAL ENGINEER — STEPHEN K. SMITH — RCE 29708 — Exp.3-31-11 — CIVIL — STATE OF CALIFORNIA

REVISIONS

NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:

SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-06 (LINK 4)
ACCESS ROAD TO SITES P-87-1 & P-88-1

DRAWN BY: 00	DATE:	SCALE: 1" = 30'	W.O.	REV. 0
CHECKED BY:	DATE:			
APPROVED BY:	DATE:			
CAD NO.:		PLOT SCALE: 1 = 1		

06-P87-1-P88-1-R1

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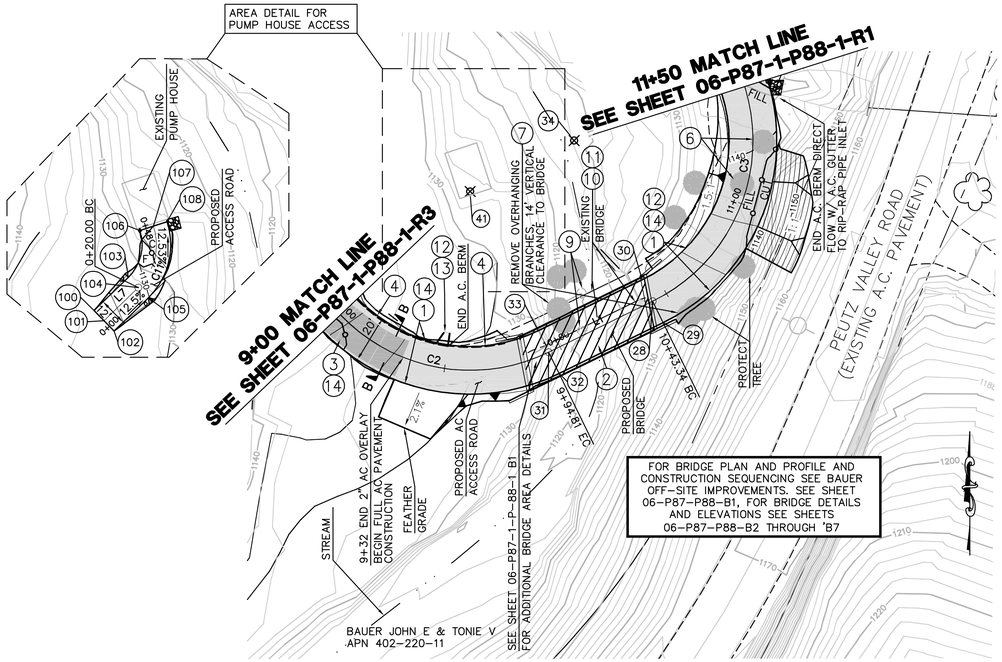


PLAN: ACCESS ROAD TO SITE P-87-1 & P-88-1

SCALE: 1" = 30'

GRAPHIC SCALE
30 0 30 60
1"=30'

EARTH QUANTITIES:
CUT: 172 CY.
FILL: 945 CY.
NET: 773 CY.

DISTURBED AREA:
ROAD: 7,614 SF

QUANTITIES:
AC PAVEMENT: 3311 SF
BRIDGE AC PAVEMENT: 1144 SF
6" A.C. BERM: 44 LF
BRIDGE : LUMP SUM
LENGTH OF ACCESS ROAD: 240 LF
2" A.C. OVERLAY: 528 SF

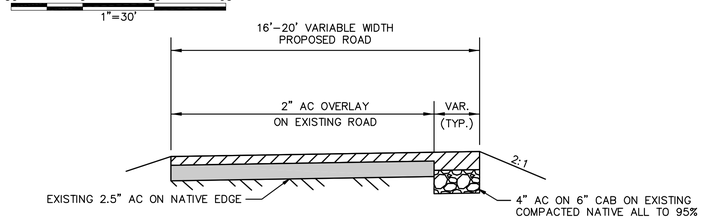
RELOCATE/PLANT TREE: 2 EA
TRIM TREE: 3 EA
TYPE 1 AC SLURRY SEAL: 3839 SF
RIP RAP: 25 SF

CENTERLINE DATA			
NUMBER	RADIUS	LENGTH	BEARING/DELTA ANGLE
L7		20.00	N45°53'26"E
C11	25.00	27.93	64°01'11"

CENTERLINE DATA			
NUMBER	RADIUS	LENGTH	BEARING/DELTA ANGLE
C3	75.00	142.72	109°02'00"
L1		48.54	N63°56'05"E
C2	75.00	100.02	76°24'38"

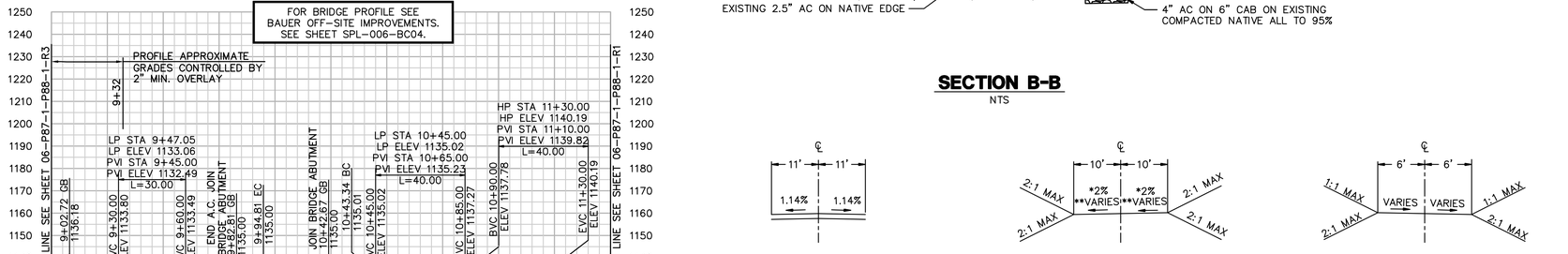
NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
28	1889218.83	6391232.41	1135.01	BC/CL
29	1889209.85	6391236.80	1134.81	BC
30	1889227.81	6391228.02	1135.21	BC
31	1889197.50	6391188.81	1135.00	EC/CL
32	1889188.52	6391193.20	1134.86	EC
33	1889206.48	6391184.42	1134.86	EC
34	1889286.20	6391199.46		RP

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
100	1889227.72	6391133.58	(1133.38)	EG
101	1889223.41	6391137.76	(1133.01)	CL
102	1889219.10	6391141.94	(1132.72)	EG
103	1889241.64	6391147.94	1130.87	BC
104	1889237.33	6391152.12	1130.51	CL/BC
105	1889233.02	6391156.30	1130.07	BC
106	1889261.19	6391152.78	(1127.55)	EC
107	1889263.06	6391158.48	(1127.01)	CL/EC
108	1889264.93	6391164.18	(1126.91)	EC



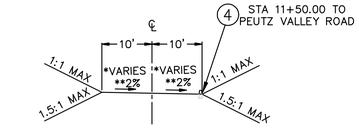
SECTION B-B

NTS



PROFILE: ACCESS ROAD TO SITE P-87-1 & P-88-1

HORIZ. & VERT. SCALE: 1" = 30'



TYPICAL BAUER BRIDGE CROSS SECTION
(SEE BAUER BRIDGE PLANS FOR DETAILS)
STA 9+82.81 TO 10+42.67

TYPICAL ACCESS ROAD CROSS SECTION
*STA 9+32.00 TO 9+70.00
**STA 9+70.00 TO 9+82.81

TYPICAL ACCESS ROAD CROSS SECTION
PUMP HOUSE ACCESS
STA 0+00.00 TO 1+48.00

TYPICAL ACCESS ROAD CROSS SECTION
*STA 10+42.67 TO 10+80.00
**STA 10+80.00 TO 11+50.00

CONSTRUCTION NOTES

1. CONSTRUCT 4" AC ON 6" CLASS 2 AGGREGATE BASE (CAB) OVER 6" 95% COMPACTED NATIVE SUBGRADE
2. CONSTRUCT AC ON BRIDGE DECK PER SHEETS B5 & B6
3. CONSTRUCT 2" AC OVERLAY ON EXISTING AC
4. CONSTRUCT 6" AC BERM PER SDRSD G-5, TYPE A
6. RELOCATE/REPLANT YOUNG TREE
7. REMOVE PORTIONS OF EXISTING TREE
9. REMOVE EXISTING BRIDGE COLUMNS ABOVE FOUNDATION
10. REMOVE INTERFERING PORTIONS OF BRIDGE ABUTMENT AND SUPERSTRUCTURE ONLY
11. PROTECT EXISTING BRIDGE ABUTMENTS BELOW PROPOSED SUPERSTRUCTURE
12. REMOVE PORTION OF EXISTING PAVEMENT
13. PROTECT EXISTING DRAIN INLET
14. SLURRY NEW & OLD AC PAVING AFTER CONSTRUCTION TRAFFIC COMPLETION WITH TYPE I AC SLURRY SEAL

GRIND & FEATHER OVERLAY

AC OVERLAY

NEW AC ON CAB

AC BRIDGE PAVEMENT

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REGISTERED PROFESSIONAL ENGINEER
STEPHEN K. SMITH
NO. 29708
Exp. 3-31-11
CIVIL
STATE OF CALIFORNIA

REVISIONS

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SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-06 (LINK 4)

ACCESS ROAD TO SITES P-87-1 & P-88-1

DRAWN BY: 00	DATE:	SCALE: 1" = 30'	W.O.
CHECKED BY:	DATE:		REV. 0
APPROVED BY:	DATE:		06-P87-1-P88-1-R2
CAD NO.:	PLOT SCALE: 1 = 1		

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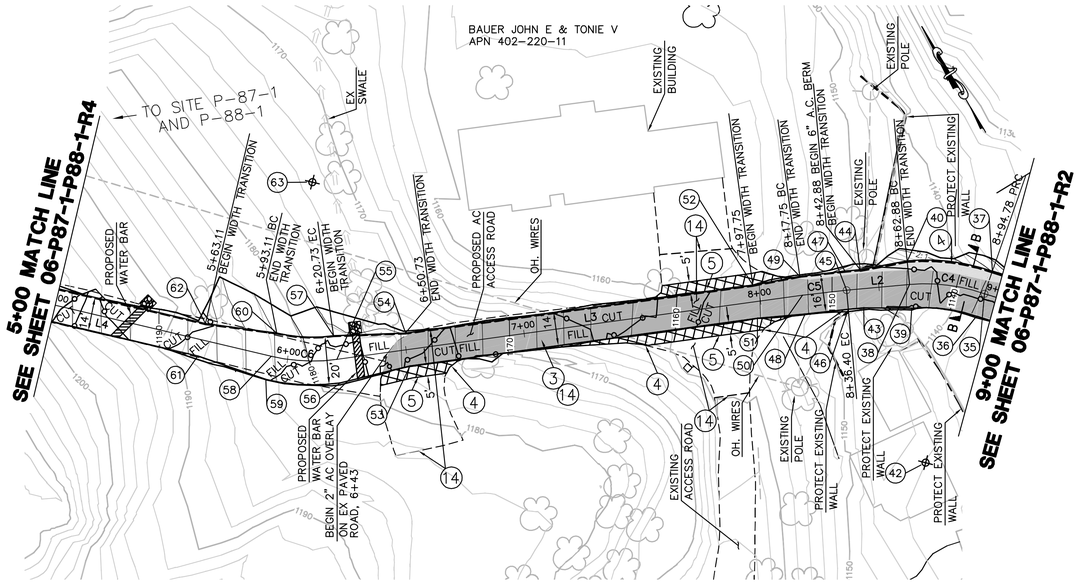
SDGE SPL



PLAN: ACCESS ROAD TO SITE P-87-1 & P-88-1

SCALE: 1" = 30'

GRAPHIC SCALE
30 0 30 60
1"=30'

EARTH QUANTITIES:
CUT: 25 CY.
FILL: 48 CY.
NET: 23 CY.

DISTURBED AREA:
ROAD: 7,051 SF

QUANTITIES:
AC PAVEMENT: 264 SF
RIPRAP: 50 SF
6" AC BERM: 61 LF
GRIND AND OVERLAY: 750 SF
LENGTH OF ACCESS ROAD: 400 LF
TYPE I SLURRY SEAL: 6646 SF
2" A.C. OVERLAY: 3700 SF

CENTERLINE DATA			
NUMBER	RADIUS	LENGTH	BEARING/DELTA ANGLE
C4	75.00	31.90	24°22'15"
L2		26.48	S64°01'32"E
C5	405.00	18.64	2°38'16"
L3		197.02	S66°42'39"E
C6	75.00	27.63	21°06'16"
L4		145.43	S45°36'22"E

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
35	1889217.01	6391098.11	1137.70	PRC/CL
36	1889210.63	6391090.41	1137.50	PRC
37	1889223.39	6391105.81	1137.90	PRC
38	1889236.57	6391073.22	1143.78	BC/CL
39	1889227.58	6391068.84	1143.58	BC
40	1889245.56	6391077.60	1143.98	BC
41	1889264.87	6391155.86		RP
42	1889169.15	6391040.37		RP
43	1889238.14	6391051.73	1147.43	FG
44	1889252.52	6391058.74	1147.75	FG
45	1889248.17	6391049.41	1148.83	EC/CL
46	1889240.98	6391045.91	1148.67	EC
47	1889255.37	6391052.91	1148.99	EC
48	1889248.59	6391029.30	1152.30	BC
49	1889263.28	6391035.62	1152.62	BC
50	1889255.94	6391032.46	1152.46	BC/CL
51	1889257.41	6391011.32	1156.26	FG
52	1889270.27	6391016.86	1156.54	FG
53	1889315.54	6390876.28	1177.38	FG
54	1889328.45	6390881.86	1177.66	FG
55	1889333.83	6390851.49	1178.83	EC/CL
56	1889324.65	6390847.54	1179.23	EC
57	1889343.02	6390855.44	1178.43	EC
58	1889349.13	6390828.67	1182.24	BC/CL
59	1889341.99	6390821.68	1182.64	BC
60	1889356.28	6390835.67	1181.84	BC
61	1889365.12	6390802.34	1187.33	FG
62	1889375.12	6390812.13	1186.77	FG
63	1889402.72	6390881.14		RP

CONSTRUCTION NOTES

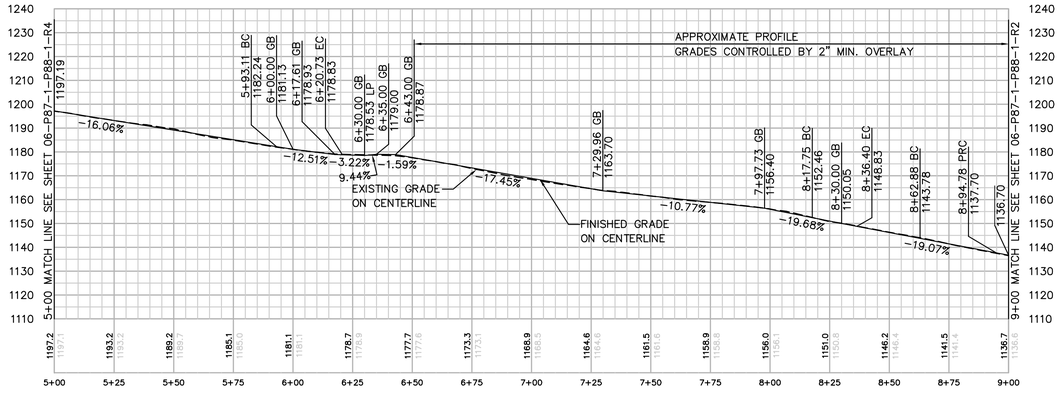
1. CONSTRUCT 4" AC ON 6" CLASS 2 AGGREGATE BASE (CAB) OVER 6" 95% COMPACTED NATIVE SUBGRADE
2. CONSTRUCT AC ON BRIDGE DECK PER SHEETS B5 & B6
3. CONSTRUCT 2" AC OVERLAY ON EXISTING AC
4. CONSTRUCT 6" AC BERM PER SDRSD G-5, TYPE A
5. CONSTRUCT 5' EDGE/GRIND 1" DEEP & FEATHER AC TO JOIN EXISTING
6. RELOCATE/REPLANT YOUNG TREE
7. REMOVE PORTIONS OF EXISTING TREE
8. CONSTRUCT BOULDER PLACED NATURAL ROAD EDGE AFTER CONSTRUCT PLACE 3'-6' DIA. BOULDER W/ 2'-4' ROCK ABOVE ROAD SURFACE AT OUTSIDE EDGE OF PAVEMENT PRIOR TO FINAL PAVING. SEE DETAIL & SECTION HERE ON A/R1
9. REMOVE EXISTING BRIDGE COLUMNS ABOVE FOUNDATION
10. REMOVE INTERFERING PORTIONS OF BRIDGE ABUTMENT AND SUPERSTRUCTURE ONLY
11. PROTECT EXISTING BRIDGE ABUTMENTS BELOW PROPOSED SUPERSTRUCTURE
12. REMOVE PORTION OF EXISTING PAVEMENT
13. PROTECT EXISTING DRAIN INLET
14. SLURRY NEW & OLD AC PAVING AFTER CONSTRUCTION TRAFFIC COMPLETION WITH TYPE I AC SLURRY SEAL

GRIND & FEATHER OVERLAY

AC OVERLAY

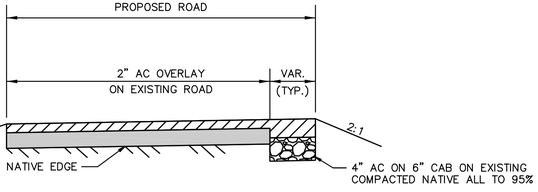
NEW AC ON CAB

AC BRIDGE PAVEMENT



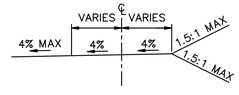
PROFILE: ACCESS ROAD TO SITE P-87-1 & P-88-1

HORIZ. & VERT. SCALE: 1" = 30'



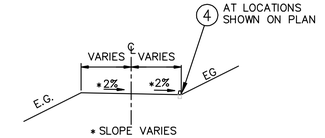
SECTION B-B

NTS



TYPICAL ACCESS ROAD CROSS SECTION

STA 5+00.00 TO 6+42.00



TYPICAL OVERLAY CROSS SECTION

STA 6+42.00 TO 9+00.00

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REGISTERED PROFESSIONAL ENGINEER STEPHEN K. SMITH RCE 29708 Exp.3-31-11 CIVIL STATE OF CALIFORNIA

REVISIONS

NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:

SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-06 (LINK 4)
ACCESS ROAD TO SITES P-87-1 & P-88-1

DRAWN BY: 00	DATE:	SCALE: 1" = 30'	W.O.	REV. 0	06-P87-1-P88-1-R3
CHECKED BY:	DATE:				
APPROVED BY:	DATE:				
CAD NO.:	PLOT SCALE: 1 = 1				

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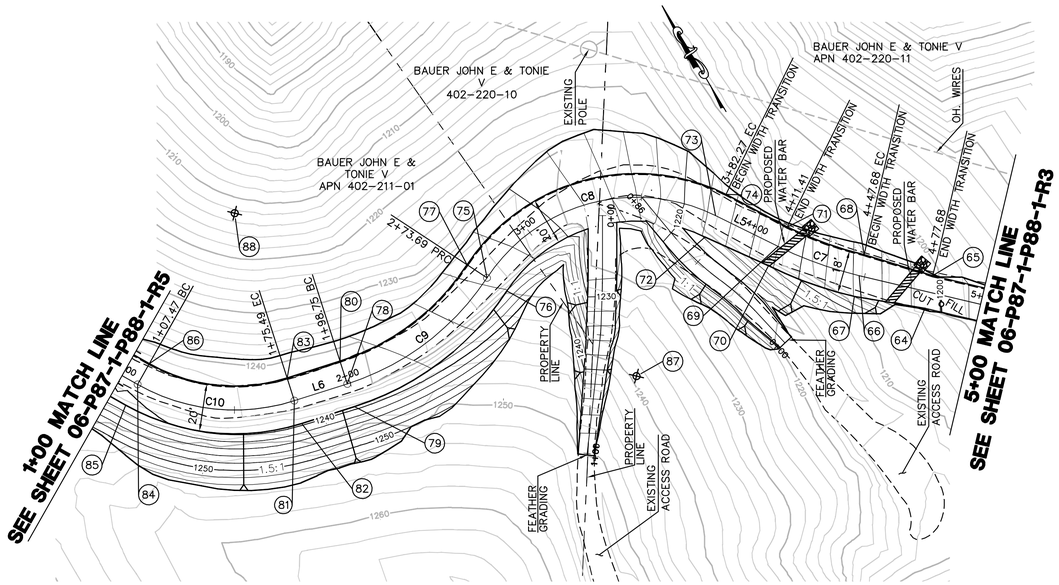
SDGE SPL



CENTERLINE DATA			
NUMBER	RADIUS	LENGTH	BEARING/DELTA ANGLE
C7	160.00	36.27	12°59'21"
L5		29.14	S32°37'02"E
C8	75.00	108.58	82°56'47"
C9	110.00	74.94	39°02'12"
L6		23.26	S76°31'37"E
C10	82.50	68.02	47°14'19"

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
64	1889424.88	6390741.30	1201.05	FG
65	1889434.88	6390751.09	1200.49	FG
66	1889450.87	6390724.76	1205.59	EC/CL
67	1889444.44	6390718.46	1205.95	EC
68	1889457.30	6390731.05	1205.23	EC
69	1889478.95	6390701.93	1212.02	BC/CL
70	1889474.10	6390694.35	1212.38	BC
71	1889483.80	6390709.51	1211.66	BC
72	1889498.11	6390677.80	1217.72	EC
73	1889503.50	6390686.22	1217.32	EC/CL
74	1889508.89	6390694.64	1216.92	EC
75	1889530.73	6390590.68	1233.66	PRC/CL
76	1889521.71	6390595.00	1234.06	PRC
77	1889539.75	6390586.37	1233.26	PRC
78	1889522.99	6390517.59	1238.77	BC/CL
79	1889513.26	6390515.26	1239.17	BC
80	1889532.71	6390519.92	1238.37	BC
81	1889528.41	6390494.97	1239.04	EC/CL
82	1889518.68	6390492.64	1239.44	EC
83	1889538.13	6390497.30	1238.64	EC
84	1889568.28	6390442.24	1239.80	BC/CL
85	1889563.39	6390433.52	1240.20	BC
86	1889573.17	6390450.96	1239.40	BC
87	1889463.07	6390623.05		RP
88	1889608.64	6390514.19		RP

EARTH QUANTITIES:
CUT: 1614 CY.
FILL: 3 CY.
NET: 1611 CY.

DISTURBED AREA:
ROAD: 18,410 SF

QUANTITIES:
RIPRAP: 50 SF
LENGTH OF ACCESS ROAD: 400 LF

PLAN: ACCESS ROAD TO SITE P-87-1 & P-88-1

SCALE: 1" = 30'

GRAPHIC SCALE
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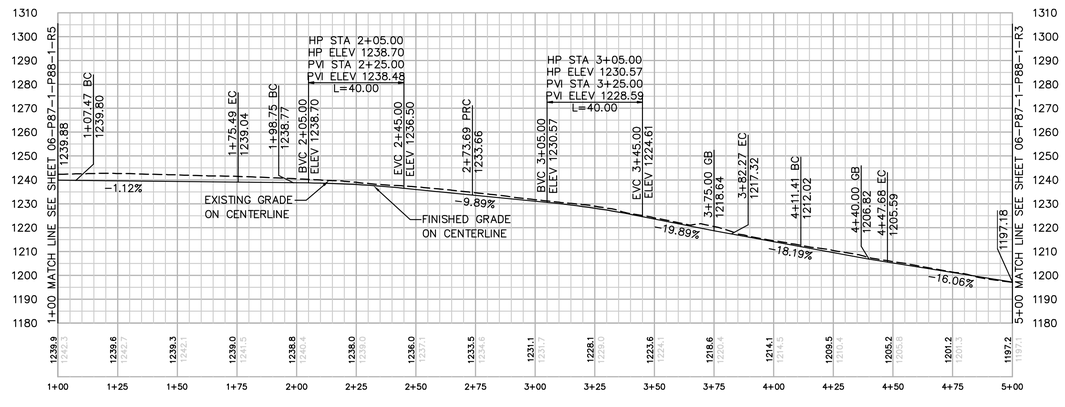
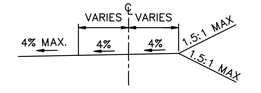
1"=30'



PROFILE: ACCESS ROAD TO SITE P-87-1 & P-88-1

HORIZ. & VERT. SCALE: 1" = 30'



TYPICAL ACCESS ROAD CROSS SECTION
STA 1+00.00 TO 5+00.00

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REGISTERED PROFESSIONAL ENGINEER
STEPHEN K. SMITH
RCE 29708
Exp.3-31-11
CIVIL
STATE OF CALIFORNIA

REVISIONS

NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:

SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-06 (LINK 4)
ACCESS ROAD TO SITES P-87-1 & P-88-1

DRAWN BY: 00	DATE:	SCALE: 1" = 30'	W.O.	REV. 0	06-P87-1-P88-1-R4
CHECKED BY:	DATE:				
APPROVED BY:	DATE:				
CAD NO.:	PLOT SCALE: 1 = 1				

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SDGE SPL

CENTERLINE DATA			
NUMBER	RADIUS	LENGTH	BEARING/DELTA ANGLE
C1	75.00	98.06	74°54'36"
C2	410.00	92.00	12°51'25"
C3	225.00	69.16	17°36'43"
C4	218.00	99.72	26°12'31"
C5	256.00	46.68	10°26'49"
C6	205.00	122.71	34°17'44"
C26	75.00	23.92	18°16'31"
L1		30.00	N73°40'24"E
L2		108.74	N1°14'12"W
L3		48.11	N20°13'01"E
L13		33.43	S29°17'18"E
L14		42.65	S47°33'50"E

ROADWAY EDGE DATA			
NUMBER	RADIUS	LENGTH	BEARING/DELTA ANGLE
L4		3.22	S81°21'32"E
C7	65.00	28.33	24°58'04"
C8	63.00	82.37	74°54'36"
L5		108.74	N1°14'12"W
C9	422.00	94.80	12°52'16"
C10	212.00	74.57	20°09'13"
C11	190.00	95.29	28°44'11"
C14	190.00	95.29	28°44'11"
L6		30.83	N20°13'01"E
C15	268.00	60.36	12°54'14"
C16	193.00	123.80	36°45'08"
C17	398.00	89.41	12°52'16"
C18	236.00	67.75	16°26'50"
C19	206.00	89.99	25°01'48"
L7		68.28	N20°13'01"E
C20	240.00	36.05	8°36'24"
C21	217.00	124.54	32°52'56"

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
17	1889618.50	6390345.06	1233.80	FG
18	1889630.02	6390341.68	1233.56	CL
19	1889641.54	6390338.31	1233.32	FG
20	1889703.87	6390407.58	1244.15	FG
21	1889703.61	6390395.58	1243.91	CL
22	1889703.35	6390383.58	1243.67	FG
23	1889812.59	6390405.23	1243.05	FG/TB
24	1889812.33	6390393.23	1241.87	CL
25	1889812.07	6390381.24	1241.63	FG
26	1889901.44	6390413.32	1239.66	FG/TB
27	1889903.77	6390401.54	1238.49	CL
28	1889906.28	6390389.81	1238.24	FG
29	1889968.84	6390417.33	1232.22	FG/TB
30	1889972.57	6390404.92	1230.43	CL
31	1889980.44	6390391.82	1229.07	FG
32	1890013.73	6390418.46	1226.75	FG/TB
33	1890027.95	6390390.72	1224.55	FG
34	1890057.31	6390429.30	1225.07	FG/TB
35	1890070.66	6390417.16	1223.59	CL

EARTH QUANTITIES:
CUT: 595 CY.
FILL: 530 CY.
NET: 65 CY.

QUANTITIES:
RIP RAP: 75 SF
DOWNDRAIN: 18 LF

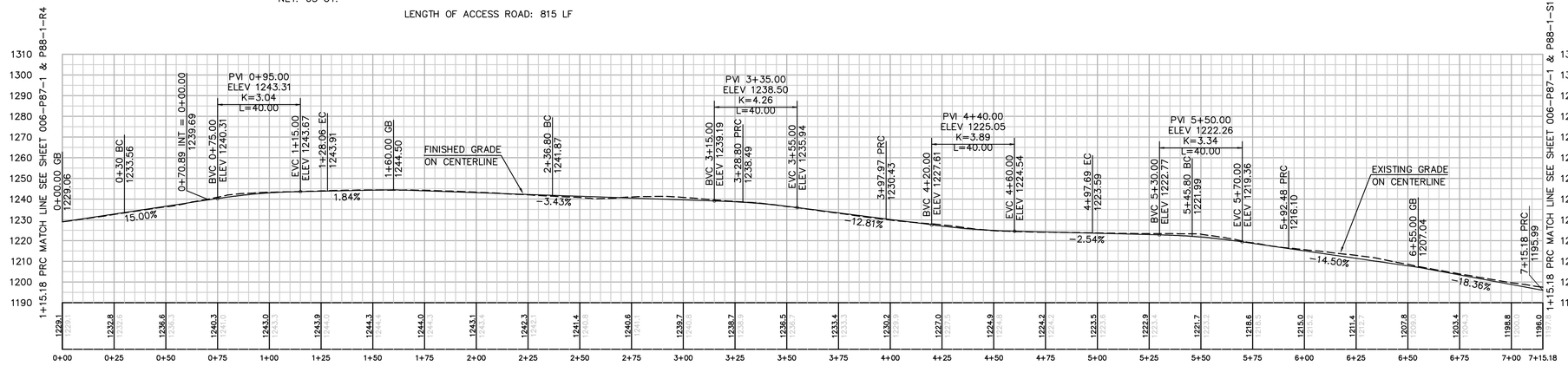
DISTURBED AREA:
ROAD: 27,248 SF

LENGTH OF ACCESS ROAD: 815 LF

PLAN: ACCESS ROAD TO SITE P-87-1 & P-88-1

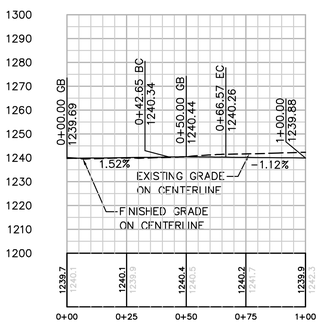
SCALE: 1" = 30'

GRAPHIC SCALE
30 0 30 60
1"=30'



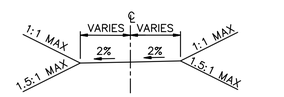
PROFILE: ACCESS ROAD TO SITE P-87-1 & P-88-1

HORIZ. & VERT. SCALE: 1" = 30'

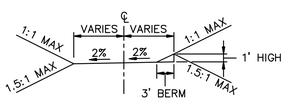


PROFILE: ACCESS ROAD TO PEUTZ VALLEY ROAD

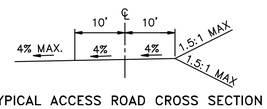
HORIZ. & VERT. SCALE: 1" = 30'



TYPICAL ACCESS ROAD CROSS SECTION
STA 0+00.00 TO TO 1+00.00
STA 6+50.00 TO TO 7+15.18
N.T.S.



TYPICAL ACCESS ROAD CROSS SECTION
STA 1+00.00 TO 6+50.00
N.T.S.



TYPICAL ACCESS ROAD CROSS SECTION
ACCESS TO PEUTZ VALLEY ROAD
STA 0+66.57 TO 1+00.00
N.T.S.

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
62	1889556.04	6390363.05		RP
63	1889665.87	6390473.41		RP

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
36	1890074.25	6390401.43	1223.32	FG
37	1890138.05	6390459.75	1219.50	FG/TB
38	1890115.81	6390433.79	1221.99	CL
39	1890130.85	6390424.09	1220.81	FG
40	1890154.16	6390467.84	1216.79	FG/TB
41	1890157.91	6390453.81	1216.10	CL
42	1890157.00	6390439.12	1217.00	FG
43	1890274.13	6390494.18	1196.59	PRC
44	1889621.59	6390312.89	(1229.06)	CL

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REGISTERED PROFESSIONAL ENGINEER
STEPHEN K. SMITH
RCE 29708
Exp.3-31-YR
CIVIL
STATE OF CALIFORNIA

REVISIONS

NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:

SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-6 (LINK 4)
ACCESS ROAD TO SITE P-87-1 & P-88-1

DRAWN BY: 00	DATE:	SCALE: 1" = 30'	W.O. / REV. 0
CHECKED BY:	DATE:		
APPROVED BY:	DATE:		006-P87-1 & P88-1-R5
CAD NO.:	PLOT SCALE: 1 = 1		

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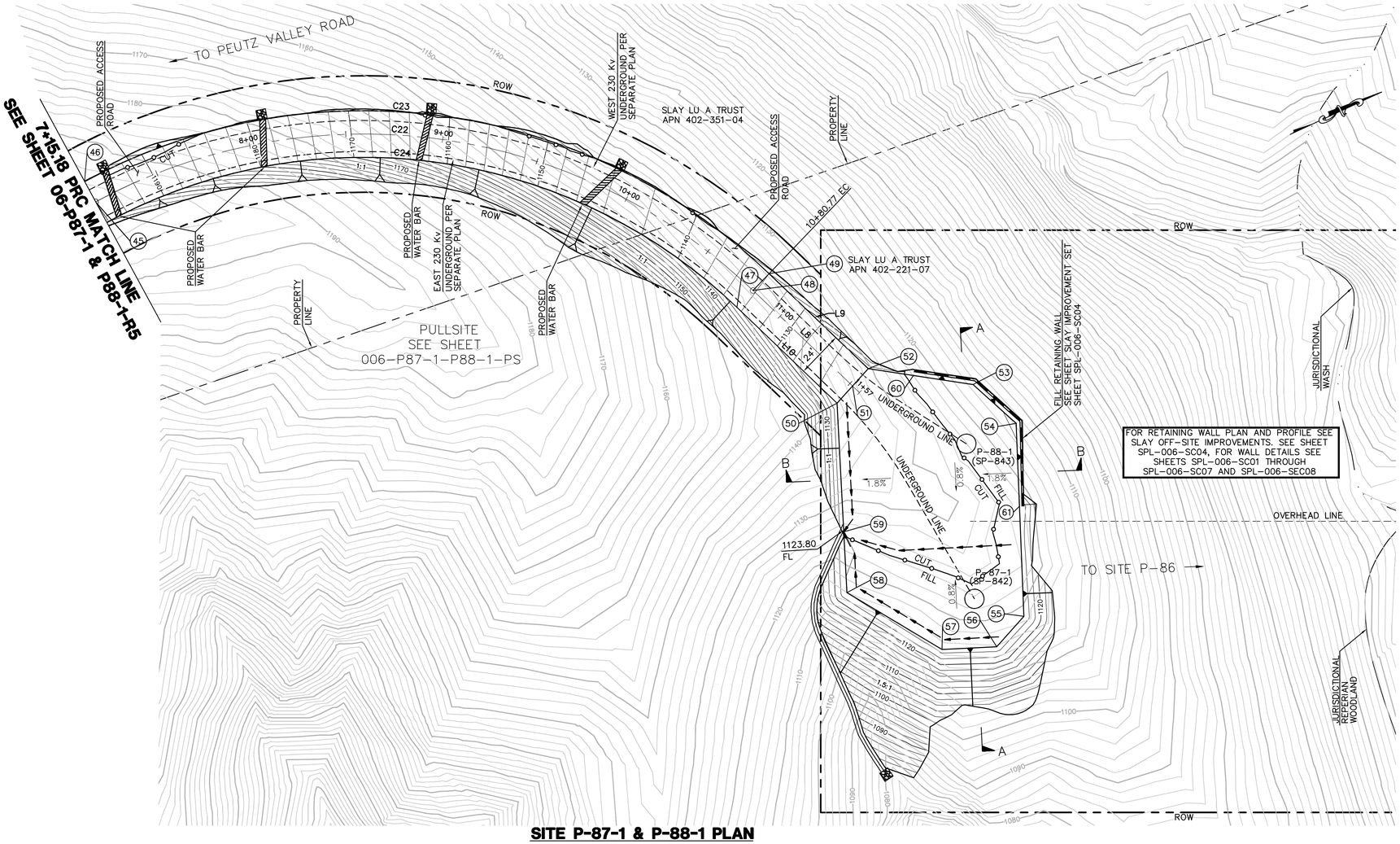
SDGE SPL



SITE P-87-1 & P-88-1 PLAN

SCALE: 1" = 30'

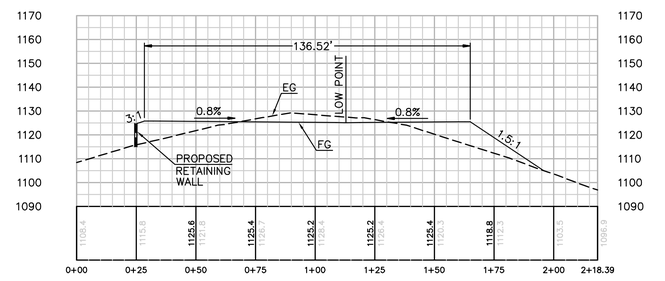
STRUCTURE NUMBER	STRUCTURE TYPE	STRUCTURE LINE ANGLE	TOWER HEIGHT
P-87-1 (CP-1)	230 Kv Riser Pole	0.00	158.00
P-88-1 (CP-2)	230 Kv Riser Pole	0.00	158.00

NUMBER	NORTHING	EASTING	ELEVATION
P-87-1 (CP-1)	1890600.69	6390857.74	(1125.32) 1124.06
P-88-1 (CP-2)	1890630.44	6390783.47	(1125.53) 1123.67

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
45	1890275.44	6390482.07	1195.99	PRC/CL
46	1890274.68	6390470.09	1195.75	PRC
47	1890552.64	6390670.04	1134.47	EC
48	1890563.81	6390665.66	1134.23	EC/CL
49	1890574.99	6390661.29	1133.99	EC
50	1890578.70	6390736.53	1125.09	FG
51	1890589.74	6390731.82	1125.21	CL
52	1890600.78	6390727.11	1125.33	FG
53	1890646.41	6390757.25	1125.85	FG
54	1890658.14	6390784.66	1126.07	FG
55	1890620.05	6390876.65	1125.86	FG
56	1890600.75	6390884.91	1125.70	FG
57	1890574.59	6390874.44	1125.18	FG
58	1890542.39	6390827.20	1124.06	FG
59	1890554.04	6390798.12	1123.80	FG
60	1890620.47	6390740.11	1125.33	FG
61	1890641.79	6390824.14	1125.51	FG

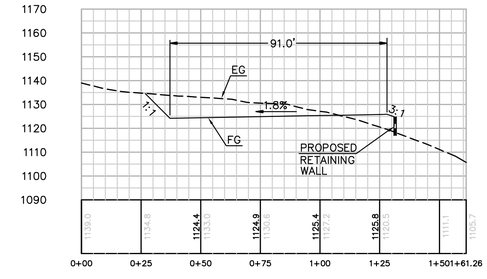
CENTERLINE DATA			
NUMBER	RADIUS	LENGTH	BEARING/DELTA ANGLE
C22	290.00	365.59	72°13'48"
L8		75.94	N68°35'55"E

ROADWAY EDGE DATA			
NUMBER	RADIUS	LENGTH	BEARING/DELTA ANGLE
C23	302.00	380.72	72°13'48"
L9		70.70	N68°35'55"E
C24	278.00	352.53	72°39'26"
L10		71.41	N68°35'55"E



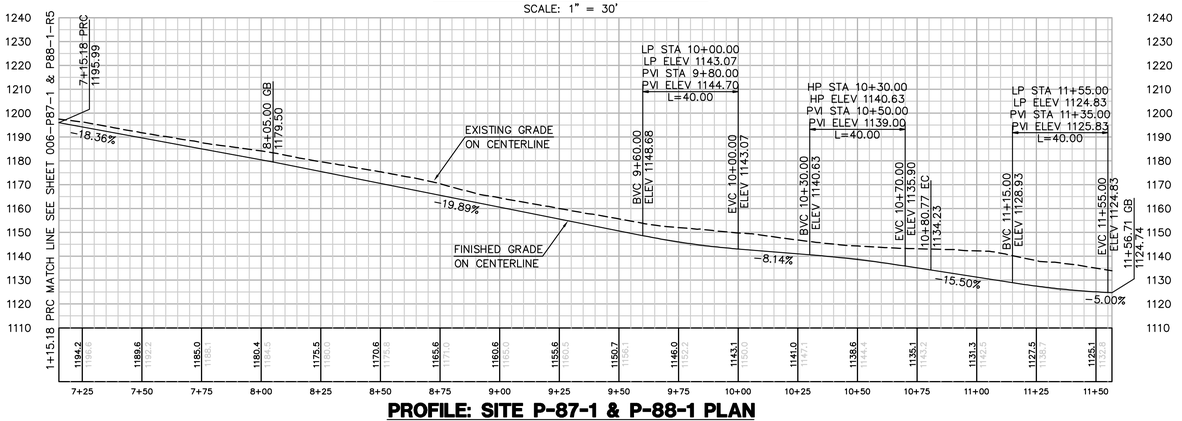
SECTION A-A

HORIZ. & VERT. SCALE: 1" = 30'



SECTION B-B

HORIZ. & VERT. SCALE: 1" = 30'



PROFILE: SITE P-87-1 & P-88-1 PLAN

HORIZ. & VERT. SCALE: 1" = 30'

GRAPHIC SCALE
30 0 30 60
1"=30'

EARTH QUANTITIES:

CUT: 4471 CY.
FILL: 2082 CY.
NET: 2389 CY.

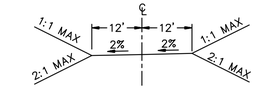
QUANTITIES:

RIP RAP: 125 SF
DOWN DRAIN: 136 LF

DISTURBED AREA:

PAD: 17,714 SF
ROAD: 17,602 SF
TOTAL: 35,316 SF

LENGTH OF ACCESS ROAD: 439 LF



TYPICAL ACCESS ROAD CROSS SECTION

STA 7+15.18 TO TO 11+56.71

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REVISIONS

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SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-6 (LINK 4)

SITE P-87-1 & P-88-1

DRAWN BY: 00	DATE:	SCALE: 1" = 30'	W.O.	REV. 0	06-P87-1 & P88-1-S1
CHECKED BY:	DATE:				
APPROVED BY:	DATE:				
CAD NO.:	PLOT SCALE: 1 = 1				

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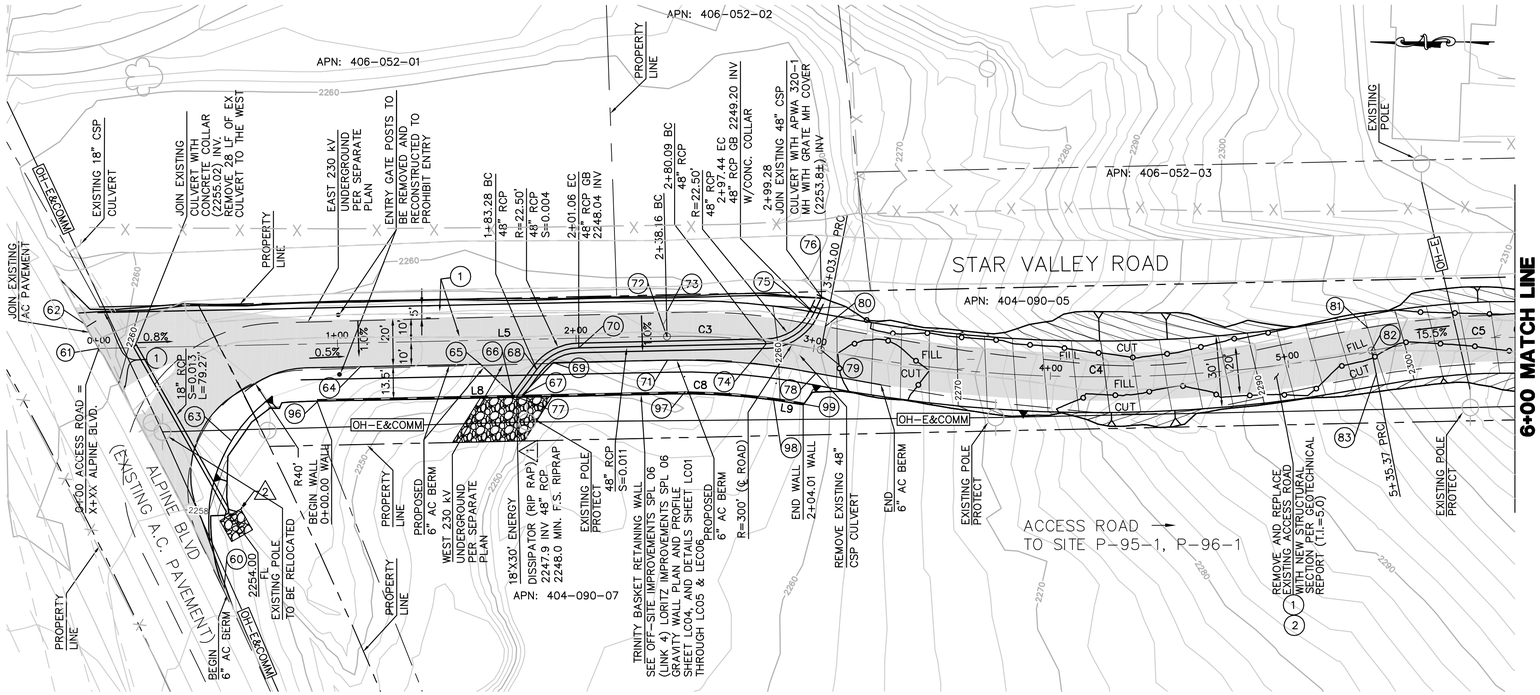
SDGE SPL



EARTH QUANTITIES:
CUT: 265 CY.
FILL: 1839 CY.
NET: 1576 CY.

DISTURBED AREA:
ROAD: 24,477 SF
TOTAL: 24,477 SF

LENGTH OF ACCESS ROAD: 600 LF

QUANTITIES:
18" RCP PIPE (D-2000): 79 LF
PIPE FLARED END SECTION: 1 EA
18" CONC. PIPE COLLAR: 1 EA
48" RCP W/BEVELED PIPE: 140 EA
SD MH-APWA 320-1 W/GRATE MH SHAFT: 1 EA
AC PAVEMENT: 14,167 SF
CLASS 2 AGGREGATE BASE (CAB): 15,330 SF
REMOVE EXISTING AC PAVEMENT: 7376 SF
6" AC BERM: PER SDRSD G-5, TYPE A: 238 LF

PLAN: ACCESS ROAD TO SITES P-95-1, P-96-1

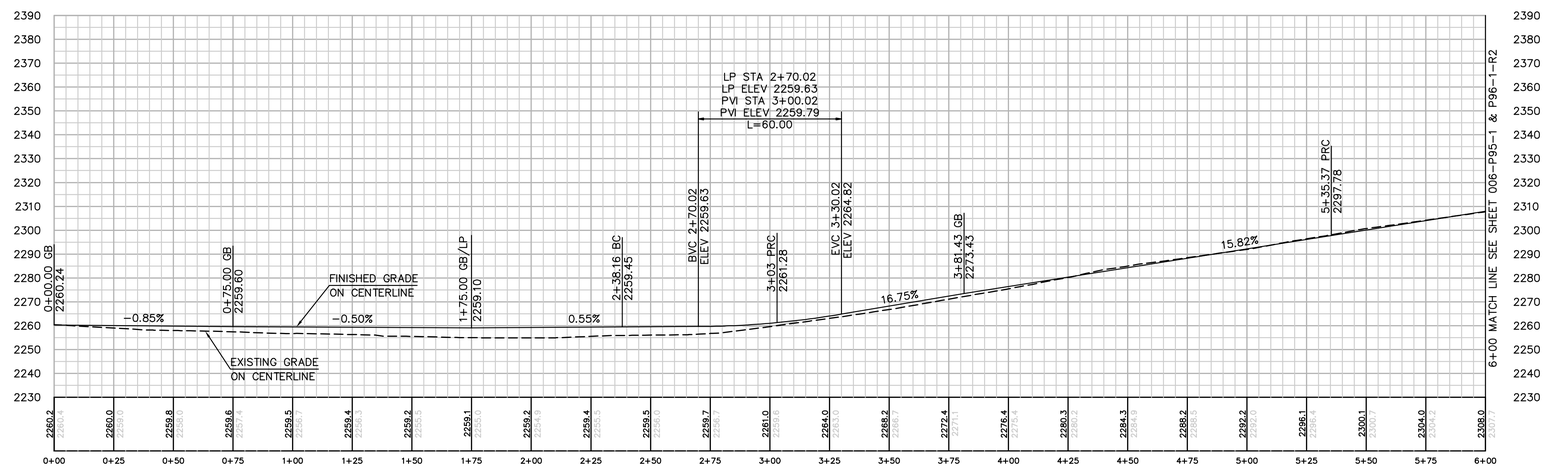
SCALE: 1" = 30'

GRAPHIC SCALE
30 0 30 60
1"=30'

(1) QUANTITIES:
ENERGY DISSIPATOR - 18'x30'x5' THICK
1/4 TON-500 LB STONE D50=22"± - 540 S.F.
ON 12" THICK BACKING STONE

(2) MODIFIED ENERGY DISSIPATOR
PER SDRSD D-40, TYPE 1:
1/4 TON ROCK, L=10',
TOTAL W=10', T=2.7'-100 S.F.
FILTER BLANKET:
UPPER LAYER= 3/4" CRUSHED ROCK, T=1.0'
LOWER LAYER=SAND

FOR RETAINING WALL PLAN AND PROFILE SEE LORITZ OFF-SITE IMPROVEMENTS, SEE SHEET SPL-006-LC04, FOR WALL DETAILS SEE SHEET SPL-006-LC05



PROFILE: ACCESS ROAD TO SITES P-95-1, P-96-1

HORIZ. & VERT. SCALE: 1" = 30'

CONSTRUCTION NOTES

(1) REMOVE EXISTING PAVEMENT

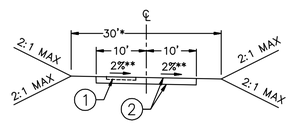
(2) CONSTRUCT ±4" AC ON 5" CAB COMPACTED TO 95% ON 90% COMPACTED NATIVE SOIL, VERIFY R-VALUE WITH ENGINEER AFTER GRADING

NEW AC ON CLASS 2 AGGREGATE BASE (CAB)

CENTERLINE DATA			
NUMBER	RADIUS	LENGTH	BEARING/DELTA ANGLE
L5		238.16	S1°12'54"E
C3	300.00	64.84	12°23'02"
C4	600.00	232.37	22°11'23"
C5	300.00	70.71	13°30'16"

FACE OF WALL DATA			
NUMBER	RADIUS	LENGTH	BEARING/DELTA ANGLE
L8		154.18	S1°29'55"E
C8	186.50	37.26	11°26'43"
L9		12.57	S9°56'45"W

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
60	1883465.84	6417524.83	(2256.50)	BC
61	1883518.32	6417625.87	(2260.41)	CL
62	1883524.25	6417636.04	(2260.93)	FG
63	1883462.81	6417587.12	2259.48	FG/MOC
64	1883408.74	6417618.19	2259.33	EC
65	1883358.45	6417619.26	2259.08	FG
66	1883344.87	6417606.24	2257.50	FG
67	1883340.87	6417606.33	2257.50	FG
68	1883334.81	6417617.03		BC/RCP
69	1883327.85	6417619.90	2259.08	FG
70	1883317.22	6417626.14		EC/RCP
71	1883280.01	6417620.92	2259.35	BC
72	1883280.22	6417630.92	2259.45	BC/CL
73	1883280.43	6417640.92	2259.55	BC
74	1883238.49	6417627.85		BC/RCP
75	1883218.64	6417640.72		EC/RCP
76	1883215.43	6417647.50		RCP
77	1883343.30	6417605.57		RCP
78	1883217.69	6417615.49	2261.08	PRC
79	1883215.75	6417625.30	2261.28	PRC/CL
80	1883213.81	6417635.11	2261.48	PRC
81	1882986.74	6417634.82	2297.98	PRC
82	1882984.83	6417625.01	2297.78	PRC/CL
83	1882982.92	6417615.19	2297.58	PRC
96	1883426.83	6417603.51		WALL
97	1883272.70	6417607.55		WALL
98	1883235.61	6417604.81		WALL
99	1883223.23	6417602.64		WALL



TYPICAL ACCESS ROAD CROSS SECTION
0+00 TO 6+00
* AND VARIES
** 1% 1+00 TO 2+38.16

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REGISTERED PROFESSIONAL ENGINEER STEPHEN K. SMITH RCE 29108 Exp.3-31-11 CIVIL STATE OF CALIFORNIA

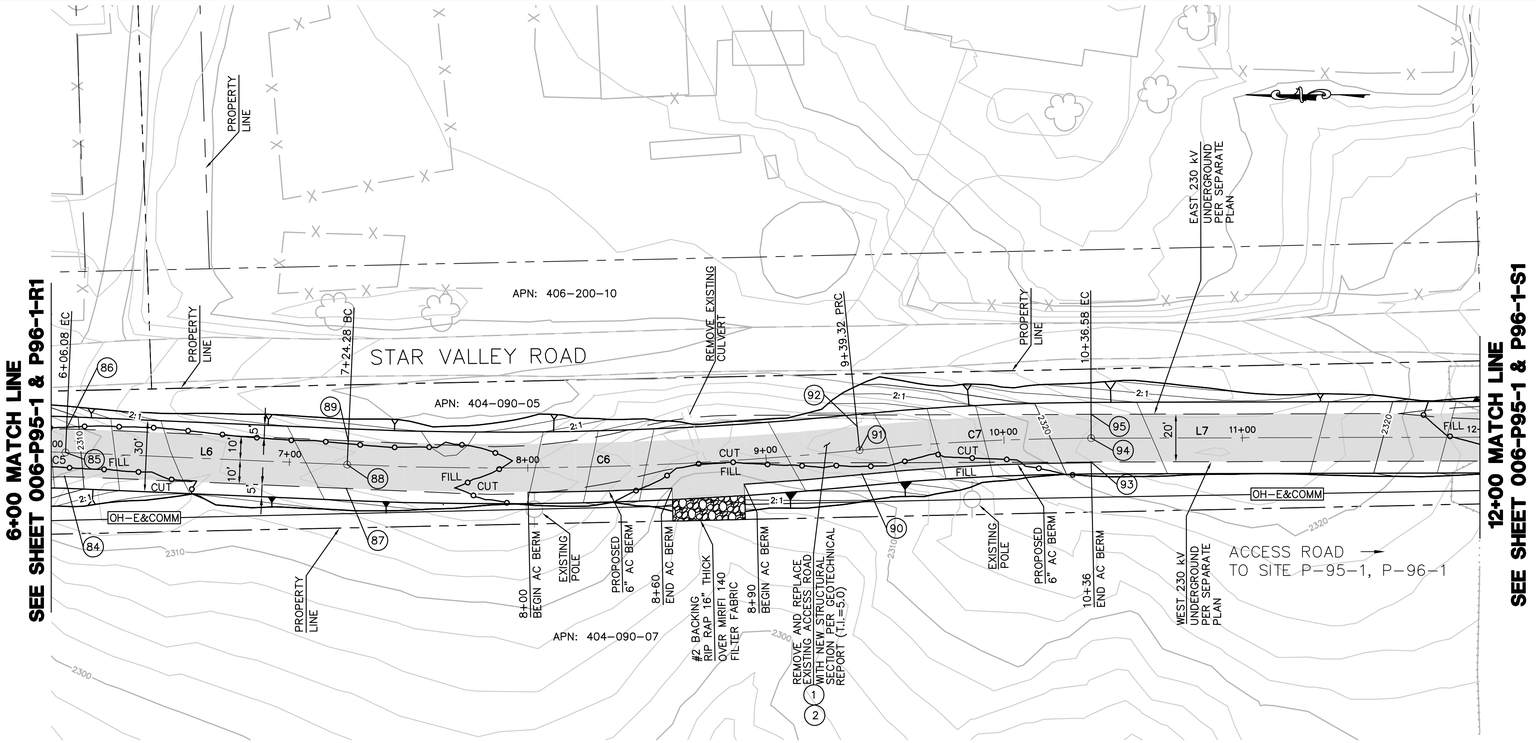
REVISIONS

NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:

SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-06 (LINK 4)
ACCESS ROAD TO SITE P-95-1 & P-96-1

DRAWN BY: 00	DATE:	SCALE: 1" = 30'	W.O.	REV. 0	06-P95-1 & P96-1-R1
CHECKED BY:	DATE:				
APPROVED BY:	DATE:				
CAD NO.:	PLOT SCALE: 1 = 1				



CONSTRUCTION NOTES

1. REMOVE EXISTING PAVEMENT
2. CONSTRUCT ±4" AC ON 5" CAB COMPACTED TO 95% ON 90% COMPACTED NATIVE SOIL, VERIFY R-VALUE WITH ENGINEER AFTER GRADING

NEW AC ON CLASS 2 AGGREGATE BASE (CAB)

CENTERLINE DATA			
NUMBER	RADIUS	LENGTH	BEARING/DELTA ANGLE
C5	300.00	70.71	13°30'16"
L6		118.20	S2°29'00"W
C6	1500.00	215.04	8°12'49"
C7	1000.00	97.26	5°34'22"
L7		162.59	S0°09'27"E

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
84	1882914.91	6417620.27	2308.76	EC
85	1882914.48	6417630.26	2308.96	EC/CL
86	1882914.04	6417640.25	2309.16	EC
87	1882796.82	6417615.14	2316.41	BC
88	1882796.38	6417625.13	2316.61	BC/CL
89	1882795.95	6417635.13	2316.81	BC
90	1882580.62	6417621.27	2313.18	PRC
91	1882581.62	6417631.22	2313.38	PRC/CL
92	1882582.62	6417641.17	2313.58	PRC
93	1882484.49	6417626.21	2320.60	EC
94	1882484.52	6417636.21	2320.80	EC/CL
95	1882484.55	6417646.21	2321.00	EC

EARTH QUANTITIES:
CUT: 493 CY.
FILL: 200 CY.
NET: 293 CY.

DISTURBED AREA:
ROAD: 11,893 SF
TOTAL: 11,893 SF

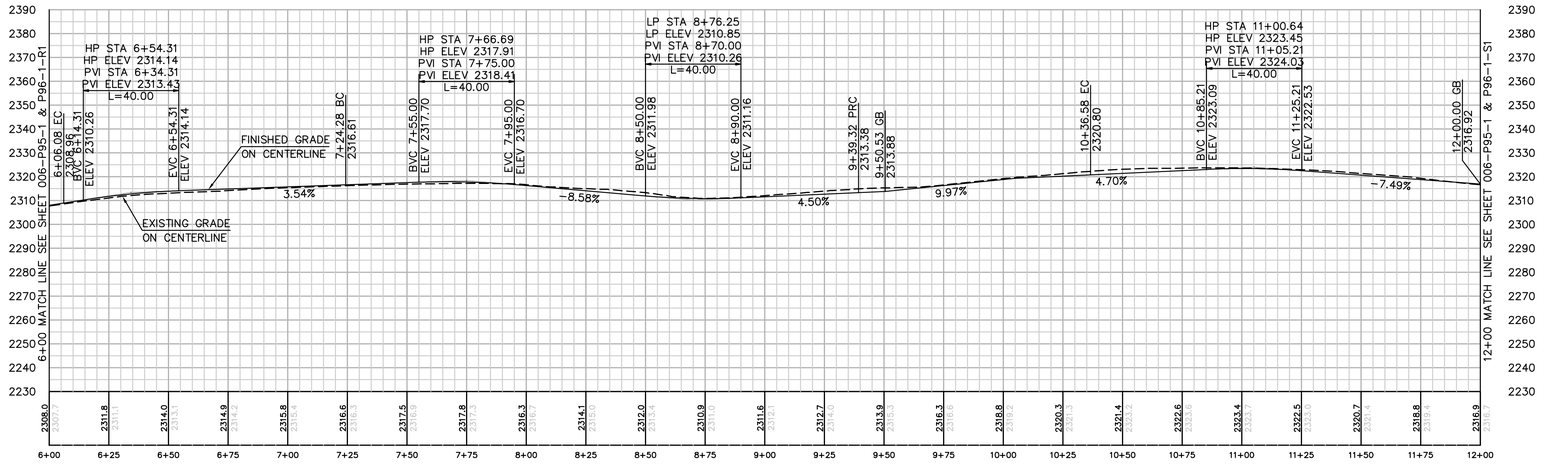
LENGTH OF ACCESS ROAD: 600 LF

QUANTITIES:
REMOVE EXISTING AC PAVEMENT: 9,115 SF
AC PAVEMENT: 12,000 SF
CLASS 2 AGGREGATE BASE (CAB): 12,000 SF
#2 BACKING RIP-RAP 16" THICK: 287 SF
6" AC BERM PER SDRSD G-5 TYPE A: 207 LF

PLAN: ACCESS ROAD TO SITE P-95-1 & P-96-1

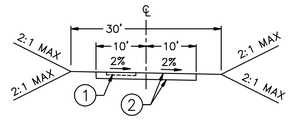
SCALE: 1" = 30'

GRAPHIC SCALE
30 0 30 60
1"=30'



PROFILE: ACCESS ROAD TO SITES P-95-1, P-96-1

HORIZ. & VERT. SCALE: 1" = 30'



TYPICAL ACCESS ROAD CROSS SECTION
STA 6+00.00 TO 12+00.00

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REGISTERED PROFESSIONAL ENGINEER — STEPHEN K. SMITH — NO. 29708 — Exp. 3-31-11 — CIVIL — STATE OF CALIFORNIA

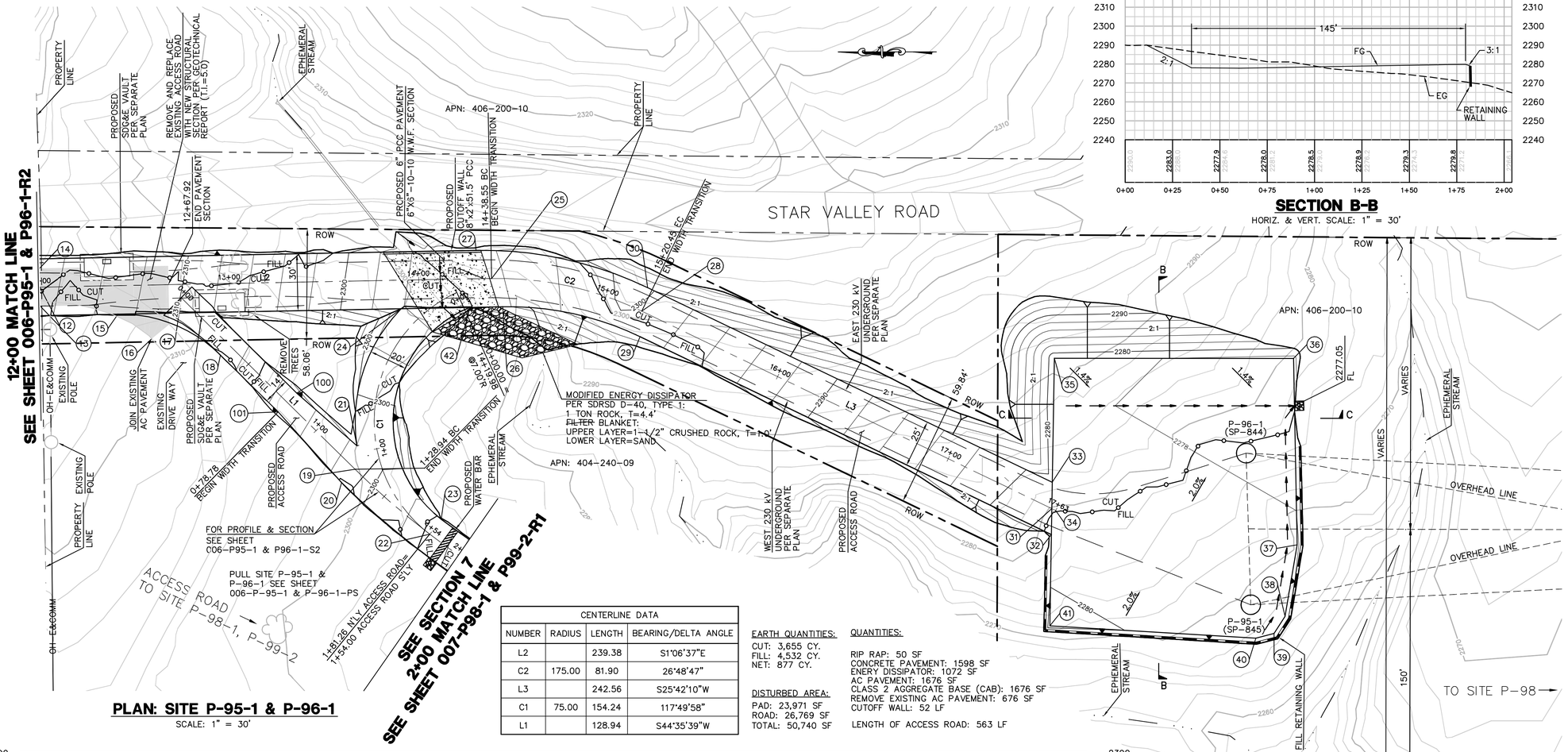
REVISIONS

NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:

SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-06 (LINK 4)
ACCESS ROAD TO SITE P-95-1 & P-96-1

DRAWN BY: 00	DATE:	SCALE: 1" = 30' W.O.	REV. 0
CHECKED BY:	DATE:		
APPROVED BY:	DATE:		06-P95-1 & P96-1-R2
CAD NO.:	PLOT SCALE: 1 = 1		



PLAN: SITE P-95-1 & P-96-1

SCALE: 1" = 30'

SECTION B-B

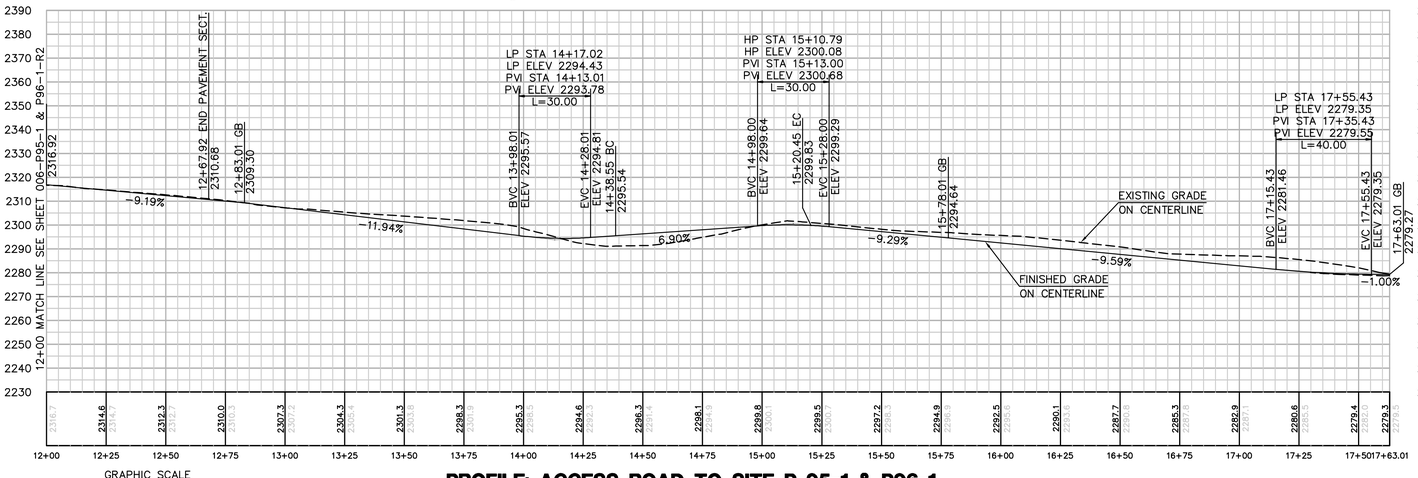
HORIZ. & VERT. SCALE: 1" = 30'

CENTERLINE DATA			
NUMBER	RADIUS	LENGTH	BEARING/DELTA ANGLE
L2		239.38	S1°06'37"E
C2	175.00	81.90	26°48'47"
L3		242.56	S25°42'10"W
C1	75.00	154.24	117°49'58"
L1		128.94	S44°35'39"W

EARTH QUANTITIES:
CUT: 3,655 CY.
FILL: 4,532 CY.
NET: 877 CY.

DISTURBED AREA:
PAD: 23,971 SF
ROAD: 26,769 SF
TOTAL: 50,740 SF

QUANTITIES:
RIP RAP: 50 SF
CONCRETE PAVEMENT: 1598 SF
ENERY DISSIPATOR: 1072 SF
AC PAVEMENT: 1676 SF
CLASS 2 AGGREGATE BASE (CAB): 1676 SF
REMOVE EXISTING AC PAVEMENT: 676 SF
CUTOFF WALL: 52 LF
LENGTH OF ACCESS ROAD: 563 LF

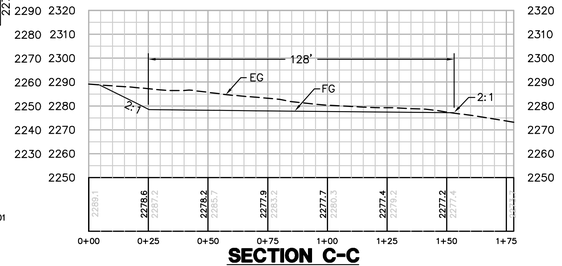


PROFILE: ACCESS ROAD TO SITE P-95-1 & P96-1

HORIZ. & VERT. SCALE: 1" = 30'

FOR RETAINING WALL PLAN AND PROFILE SEE LORITZ OFF-SITE IMPROVEMENTS, SEE SHEET SPL-006-LC103, FOR WALL DETAILS SEE SHEETS SPL-006-LC100 THROUGH SPL-006-LEC107

NUMBER	NORTHING	EASTING	ELEVATION
P-95-1	1881681.73	6417469.05	2279.10
P-96-1	1881684.19	6417549.05	2277.74



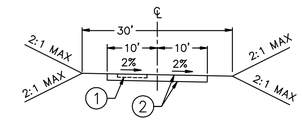
SECTION C-C

HORIZ. & VERT. SCALE: 1" = 30'

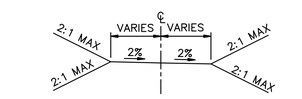
CONSTRUCTION NOTES

1. REMOVE EXISTING PAVEMENT
2. CONSTRUCT 4" AC ON 5" CAB COMPACTED TO 95% ON 90% COMPACTED NATIVE SOIL

AC



TYPICAL ACCESS ROAD CROSS SECTION
STA 12+00.00 TO 12+67.92



TYPICAL ACCESS ROAD CROSS SECTION
STA 12+67.92 TO 17+63.01

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
12	1882321.10	6417636.68	2316.92	CL
13	1882320.91	6417626.68	2316.72	FG
14	1882321.30	6417646.68	2317.12	FG
15	1882279.93	6417622.47	2313.15	BC
16	1882262.11	6417609.46	2311.24	EG
17	1882246.56	6417631.12	2309.95	CL
18	1882225.80	6417600.87	2308.78	EC
19	1882154.74	6417540.59	2301.58	BC/CL
20	1882161.87	6417533.59	2301.80	BC
21	1882153.70	6417552.96	2302.03	EC
22	1882115.29	6417506.27	2296.68	EC/CL
23	1882109.21	6417514.21	2296.48	PCC
24	1882130.32	6417625.37	2296.16	BC
25	1882082.60	6417641.30	2295.54	BC/CL
26	1882076.77	6417626.41	2295.66	BC
27	1882090.82	6417656.14	2295.29	BC
28	1882003.31	6417624.02	2299.83	EC/CL
29	1882004.27	6417610.61	2299.26	EC
30	1882000.26	6417636.42	2300.18	EC
31	1881786.83	6417519.82	2279.27	CL
32	1881787.06	6417506.06	2279.52	FG
33	1881786.64	6417533.69	2279.04	FG
34	1881784.75	6417518.82	2279.27	CL
35	1881785.48	6417599.12	2278.57	FG
36	1881659.20	6417599.05	2277.31	FG
37	1881657.31	6417500.69	2278.31	FG
38	1881663.70	6417462.86	2279.03	FG
39	1881669.51	6417453.88	2279.24	FG
40	1881679.11	6417451.43	2279.38	FG
41	1881787.87	6417457.92	2280.36	FG
42	1882094.03	6417626.08	2294.45	BC
100	1882185.53	6417580.81	2305.46	FG
101	1882195.36	6417570.84	2305.74	FG

STRUCTURE NUMBER	STRUCTURE TYPE	STRUCTURE LINE ANGLE	TOWER HEIGHT
P-95-1	230 KV Riser Pole	0.00	158.00
P-96-1	230 KV Riser Pole	0.00	158.00

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REGISTERED PROFESSIONAL ENGINEER STEPHEN K. SMITH PE# 29706 Exp.3-31-17 CIVIL STATE OF CALIFORNIA

REVISIONS

NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:

SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-06 (LINK 4)
SITE P-95-1 & P-96-1

DRAWN BY: 00	DATE:	SCALE: 1" = 30' W.O.	REV. 0
CHECKED BY:	DATE:		
APPROVED BY:	DATE:		
CAD NO.:	PLOT SCALE: 1 = 1		06-P95-1 & P96-1-S1

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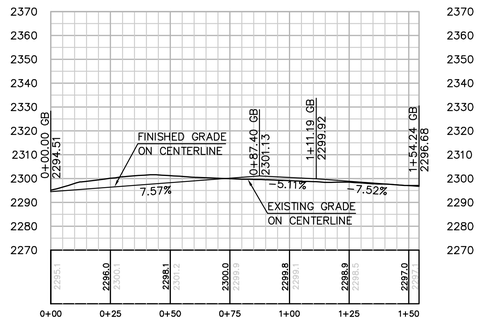
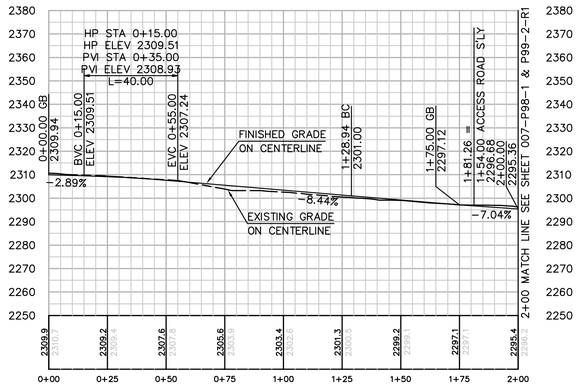
SDGE SPL



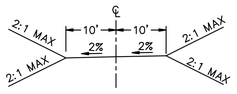
SOUTHERLY ACCESS ROAD

HORIZ. & VERT. SCALE: 1" = 30'

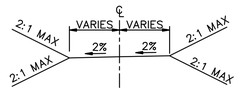


NORTHERLY ACCESS ROAD

HORIZ. & VERT. SCALE: 1" = 30'



SOUTHERLY ACCESS ROAD
STA 0+00 TO 1+54



NORTHERLY ACCESS ROAD
STA 0+00 TO 2+00

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REGISTERED PROFESSIONAL ENGINEER
STEPHEN K. SMITH
REG. NO. 29708
Exp. 3-31-11
CIVIL
STATE OF CALIFORNIA

REVISIONS

NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:

SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-06 (LINK 4)
SITE P-95-1 & P-96-1

DRAWN BY: 00	DATE:	SCALE: 1" = 30'	W.O.	REV. 0	06-P95-1 & P96-1-S2
CHECKED BY:	DATE:				
APPROVED BY:	DATE:				
CAD NO.:	PLOT SCALE: 1 = 1				

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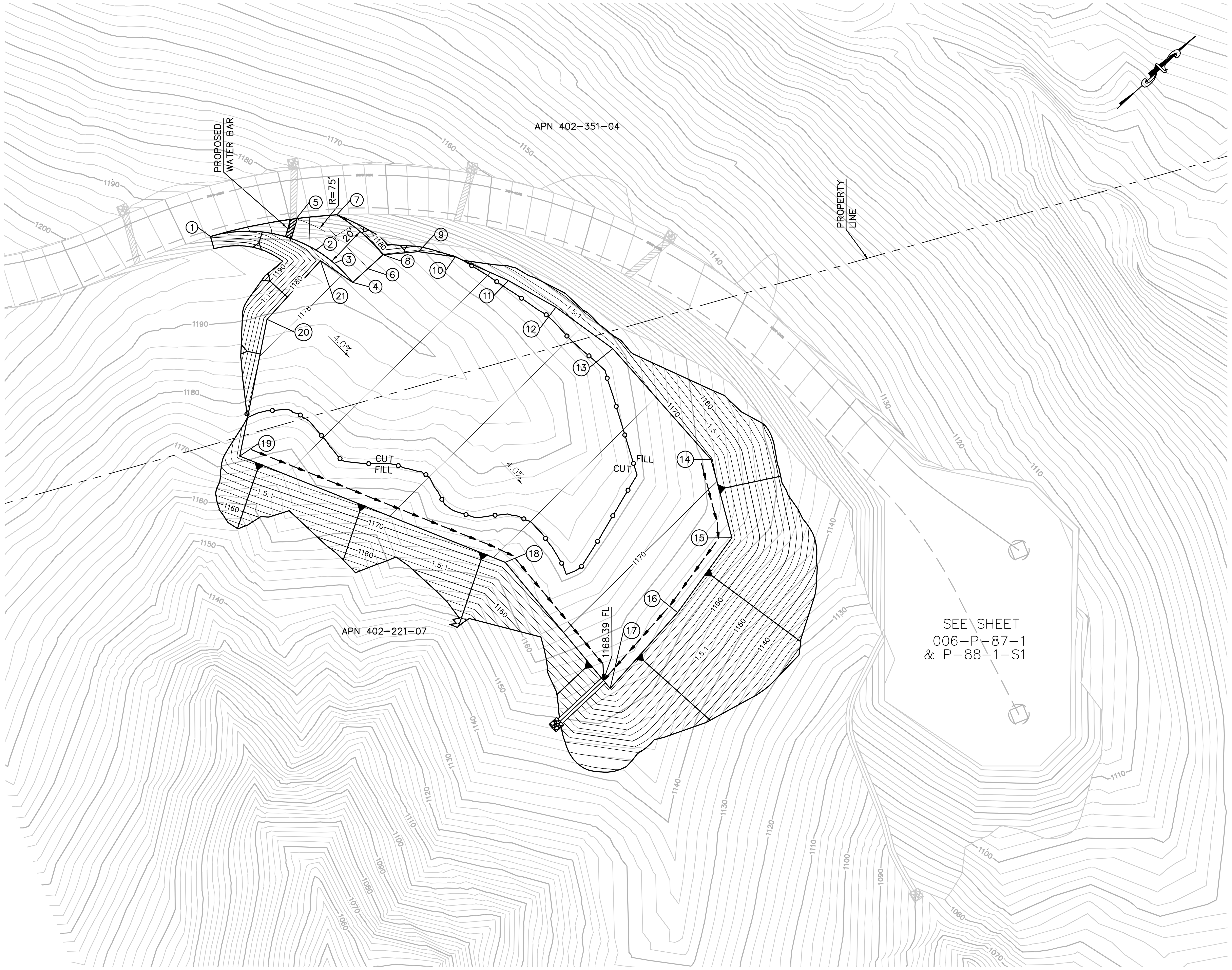

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	1890321.29	6390494.85	1187.58	FG
2	1890366.56	6390520.13	1177.23	GB
3	1890372.50	6390529.47	1177.00	GB
4	1890377.30	6390541.44	1177.75	FG
5	1890363.39	6390502.34	1179.36	CL
6	1890386.69	6390537.95	1177.74	CL
7	1890382.47	6390508.00	1175.23	FG
8	1890396.09	6390534.46	1177.72	FG
9	1890412.60	6390539.37	1177.28	FG
10	1890428.39	6390548.45	1176.70	FG
11	1890448.26	6390568.84	1175.65	FG
12	1890464.82	6390589.49	1174.63	FG
13	1890483.06	6390618.62	1173.27	FG
14	1890507.52	6390686.46	1170.39	FG
15	1890502.72	6390725.75	1169.01	FG
16	1890464.59	6390749.74	1168.72	FG
17	1890420.28	6390771.89	1168.59	FG
18	1890395.67	6390695.77	1171.78	FG
19	1890294.77	6390599.56	1176.89	FG
20	1890331.79	6390542.64	1178.41	FG
21	1890366.71	6390525.73	1178.50	FG

EARTH QUANTITIES:
CUT: 4,970 CY.
FILL: 5,257 CY.
NET: 287 CY.

DISTURBED AREA:
ROAD: 0 SF
PULLSITE: 45,853 SF
TOTAL: 45,853 SF

QUANTITIES:
RIP RAP: 25 SF
DOWNDRAIN: 29 LF

PULL SITE P-87-1 & P-88-1 PLAN (TEMPORARY)

SCALE: 1" = 30'

GRAPHIC SCALE
30 0 30 60
1"=30'

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REGISTERED PROFESSIONAL ENGINEER
STEPHEN K. SMITH
RCE 29708
Exp.3-31-11
CIVIL
STATE OF CALIFORNIA

REVISIONS

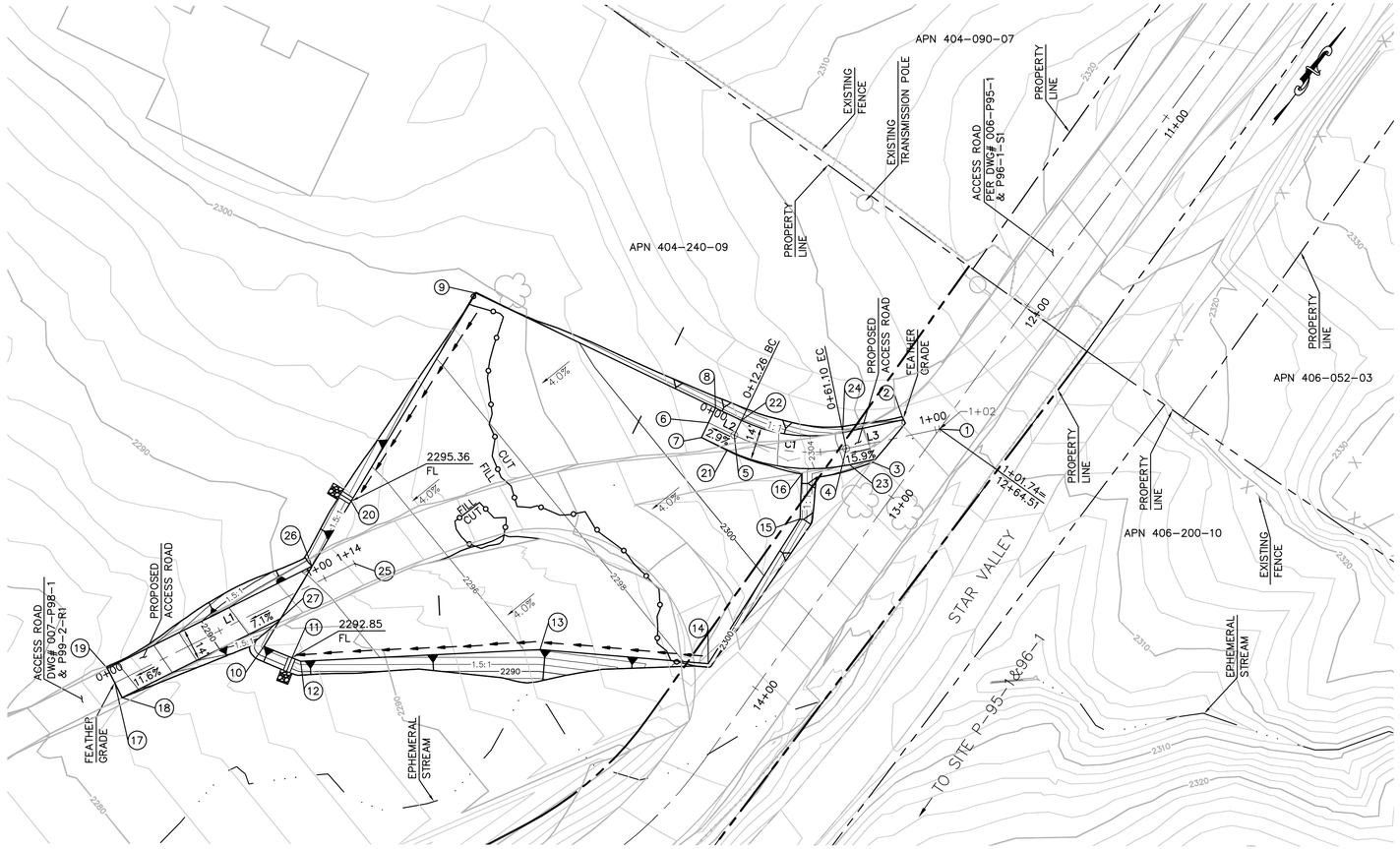
NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:

SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-06 (LINK 4)

PULL SITE P-87-1 & P-88-1

DRAWN BY: 00	DATE:	SCALE: 1" = 30'	W.O.	REV. 0
CHECKED BY:	DATE:		06-P87-1-P88-1-PS	
APPROVED BY:	DATE:			
CAD NO.:	PLOT SCALE: 1 = 1			



CENTERLINE DATA			
NUMBER	RADIUS	LENGTH	BEARING/DELTA ANGLE
C1	75.00	48.84	37°18'32"
L1		114.20	N26°59'47"E
L2		12.26	N78°59'32"E
L3		40.64	N41°41'00"E

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	1882256.61	6417637.93	2311.00	CL
2	1882251.37	6417621.98	2311.42	EG
3	1882228.29	6417623.47	2307.86	EG
4	1882226.26	6417610.90	2306.46	EC/CL
5	1882202.51	6417569.21	2301.15	BC/CL
6	1882200.17	6417557.17	2300.86	CL
7	1882193.30	6417558.51	2311.00	FG
8	1882207.04	6417555.84	2301.01	FG
9	1882185.62	6417444.68	2299.22	FG
10	1882010.80	6417461.64	2292.66	FG
11	1882014.06	6417474.10	2292.85	FG
12	1882015.09	6417478.04	2292.91	FG
13	1882079.79	6417557.04	2296.22	FG
14	1882117.65	6417618.22	2298.31	FG
15	1882190.41	6417612.93	2301.09	FG
16	1882206.21	6417602.18	2301.60	FG
17	1881960.50	6417419.82	2283.48	CL
18	1881957.33	6417426.06	2283.34	EG
19	1881963.68	6417413.58	2283.62	EG
20	1882082.83	6417454.66	2295.36	FG
21	1882195.64	6417570.54	2301.01	BC
22	1882209.38	6417567.87	2301.29	BC
23	1882221.60	6417616.13	2306.32	EC
24	1882230.91	6417605.67	2306.60	EC
25	1882062.26	6417471.66	2294.68	CL
26	1882050.47	6417457.80	2294.15	FG
27	1882024.56	6417460.31	2293.18	FG

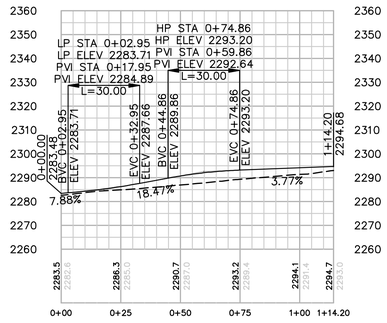
EARTH QUANTITIES:
CUT: 945 CY.
FILL: 972 CY.
NET: 27 CY.

DISTURBED AREA:
PULL SITE: 24,937 SF
ROAD: 2,172 SF
TOTAL: 27,109 SF

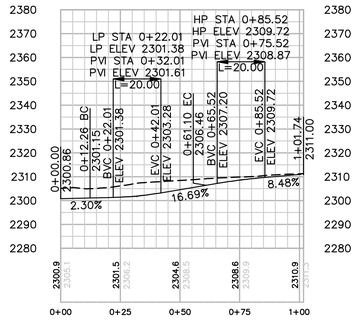
QUANTITIES:
DOWN DRAIN: 12 LF
RIP RAP: 50 SF

PULL SITE P-95-1 & P-96-1 PLAN (TEMPORARY)
SCALE: 1" = 30'

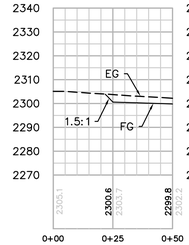
GRAPHIC SCALE
30 0 30 60
1"=30'



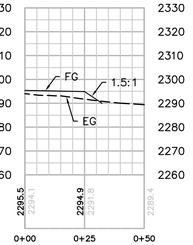
PROFILE: PULL SITE SW ACCESS ROAD
HORIZ. & VERT. SCALE: 1" = 30'



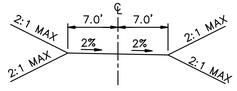
PROFILE: PULL SITE NE ACCESS ROAD
HORIZ. & VERT. SCALE: 1" = 30'



SECTION A-A
HORIZ. & VERT. SCALE: 1" = 30'



SECTION B-B
HORIZ. & VERT. SCALE: 1" = 30'



TYPICAL ACCESS ROAD CROSS SECTION
STA 0+00.00 TO 1+14.20 SW
STA 0+00.00 TO 1+01.74 NE

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11590 West Bernardo Court Suite 100
San Diego, CA 92127-1624
Tel: (858) 451-6100 Fax: (858) 451-2846
www.us.bureauveritas.com

REGISTERED PROFESSIONAL ENGINEER
STEPHEN K. SMITH
RCE 29708
Exp.3-31-11
CIVIL
STATE OF CALIFORNIA

REVISIONS

NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:

SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-06 (LINK 4)
PULL SITE P-95-1 & P-96-1

DRAWN BY: 00	DATE:	SCALE: 1" = 30'	W.O.	REV. 0	
CHECKED BY:	DATE:				
APPROVED BY:	DATE:				06-P-95-1 & P-96-1-PS
CAD NO.:	PLOT SCALE: 1 = 1				

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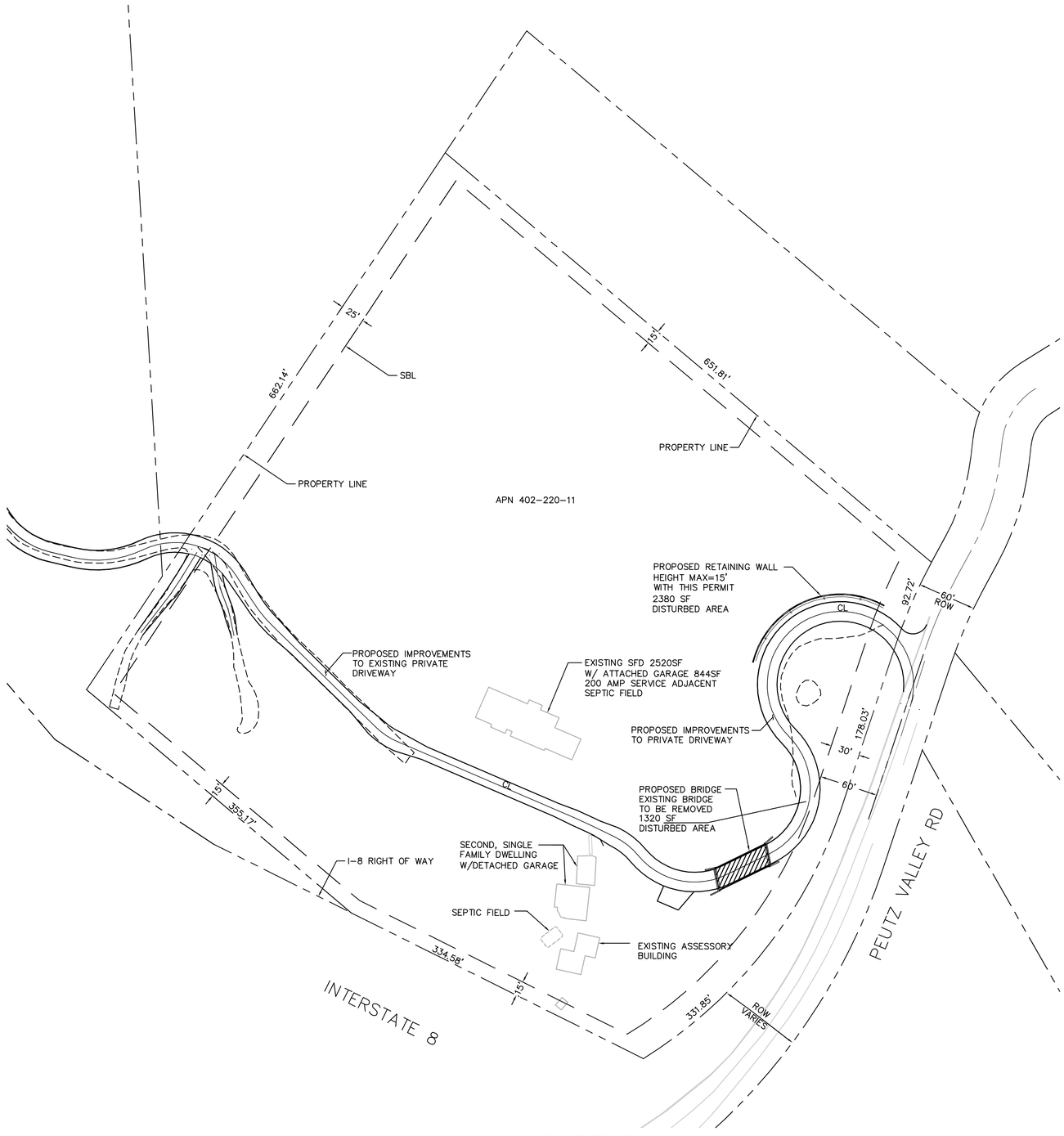
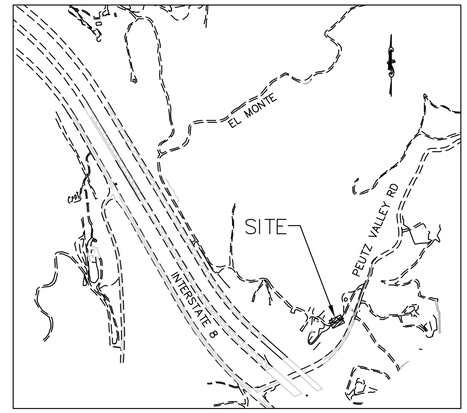


PLOT PLAN

1"=60'



VICINITY MAP

NOT TO SCALE

APPLICANT
SAN DIEGO GAS & ELECTRIC
MS.MOLLY FRISBIE
(858)650-4078

PROPOSED
BRIDGE DEMO AND
CONSTRUCTION OF NEW BRIDGE
CONSTRUCTION OF RETAINING WALL

OWNER
MR & MRS. JOHN BAUER
450 PEUTZ VALLEY RD.
ALPINE, CA 91901

CONTACT
RICHARD J. WILSON OR LUIS ALARCON
BUREAU VERITAS
11590 W. BERNARDO COURT, SUITE 100
SAN DIEGO, CA 92127
(858) 451-6100

LEGEND

— — — PROPERTY LINE
— — — BUILDING SETBACK LINE (SBL)

ABBREVIATIONS

APN	ASSESSORS PARCEL NO.
CL	CENTER LINE
CPUC	CALIFORNIA PUBLIC UTILITY COMMISSION
EX.	EXISTING
ROW	RIGHT OF WAY
RD	ROAD
SBL	SET BACK LINE
EX.	EXISTING
SF	SQUIRE FOOT
SFD	SINGLE FAMILY DWELLING

GRAPHIC SCALE
60 0 60 120
1"=60'

NOTE:
SPECIAL INSPECTION IS REQUIRED
PLEASE SEE SPECIAL INSPECTION FORM ON SHEET SPL-06-BC03

REGISTERED PROFESSIONAL ENGINEER
STEPHEN K. SMITH
No. 29706
Exp.3-31-11
CIVIL
STATE OF CALIFORNIA

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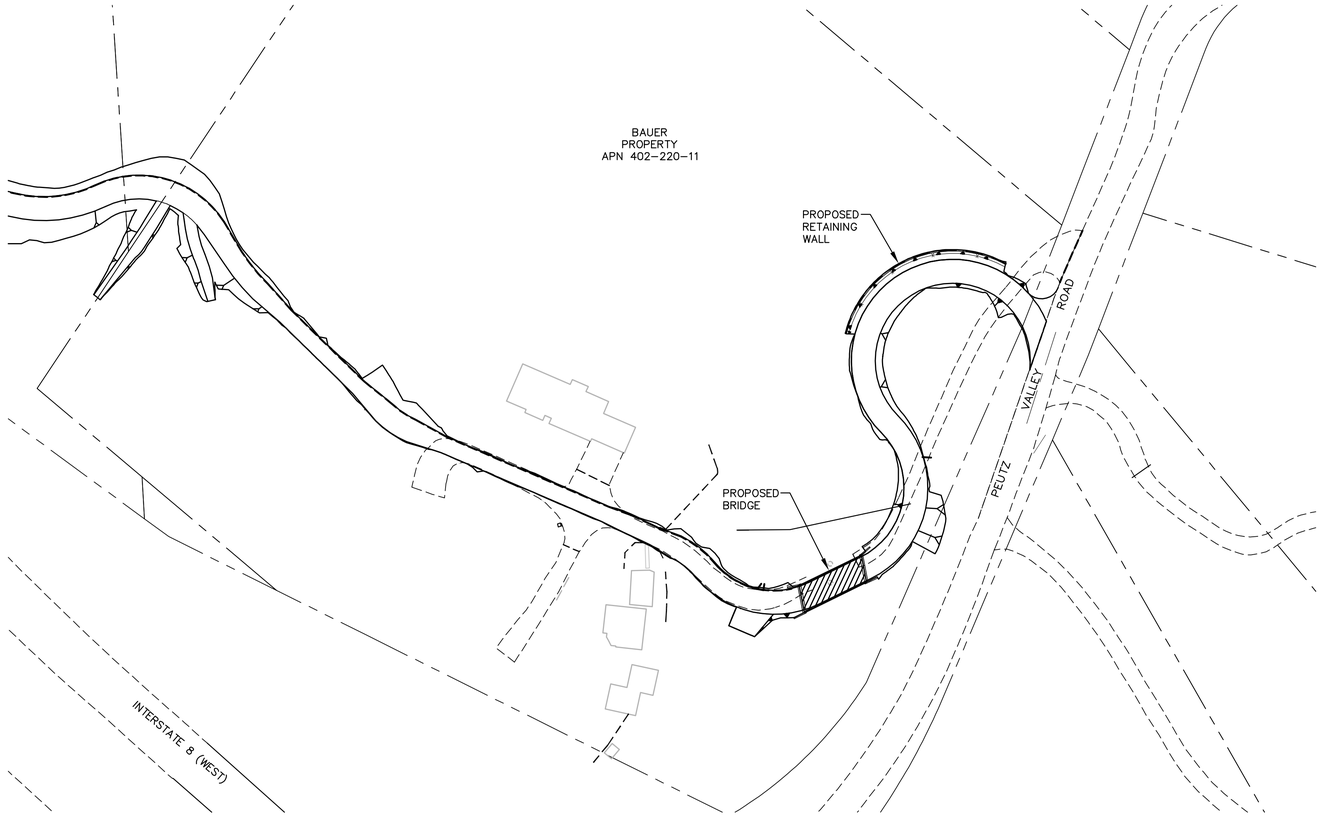
BAUER IMPROVEMENTS - APN 402-220-11
SAN DIEGO COUNTY BUILDING PERMIT SET



0' 60' 120'
30' 90'

ON-SITE WORK TO BE DONE

SITE / ACCESS ROAD	SHEET NUMBER
PLOT PLAN	SPL 06-BC01
SITE PLAN	SPL 06-BC02
LEGEND AND GENERAL NOTES	SPL 06-BC03
BAUER BRIDGE PLAN AND PROFILE	06-P87-P88-B1
BAUER BRIDGE WEST ABUTMENT DETAILS	06-P87-P88-B2
BAUER BRIDGE EAST ABUTMENT DETAILS	06-P87-P88-B3
BAUER BRIDGE ANCHOR BOLT LAYOUT	06-P87-P88-B4
BAUER BRIDGE GENERAL NOTES WITH BRIDGE ELEVATIONS	06-P87-P88-B5
BAUER BRIDGE BRIDGE SECTION, RAILING SECTION, AND BRIDGE PLANK DETAILS	06-P87-P88-B6
BAUER BRIDGE BRIDGE BEARING DETAILS	06-P87-P88-B7
BAUER WALL PLAN AND PROFILE	06-P87-P88-W1
BAUER MSE WALL DETAILS	06-P87-P88-W2
BAUER MSE WALL DETAILS	06-P87-P88-W3
BAUER MSE WALL DETAILS	06-P87-P88-W4
EROSION CONTROL PLAN - WALL	SPL 06-BEC01
EROSION CONTROL PLAN - BRIDGE	SPL 06-BEC02

UNDERGROUND SERVICE ALERT

CALL:TOLL FREE
1-800
422-4133

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REGISTERED PROFESSIONAL ENGINEER
STEPHEN K. SMITH
NO. 29708
Exp. 3-31-11
CIVIL
STATE OF CALIFORNIA

REVISIONS

NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:

SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-06 (LINK 4) BAUER BRIDGE
SITE PLAN

DRAWN BY: JPIORKOWSKI	DATE:	SCALE: NA	W.O.	REV. 0	SPL-06-BC02
CHECKED BY:	DATE:				
APPROVED BY:	DATE:				
CAD NO.:	PLOT SCALE: 1 = 1				

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BAUER BR

GENERAL NOTES

THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTION TO THE CONTRACTOR BY THE ENGINEER OF WORK:

1. ALL WORK SHALL COMPLY WITH ALL APPLICABLE PORTIONS OF THE FOLLOWING PROJECT SPECIFICATIONS.
2. NEITHER THE OWNER, NOR THE ENGINEER OF WORK WILL ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE, SPREAD, WATER AND COMPACT ALL FILL IN STRICT ACCORDANCE WITH SDG&E'S SPECIFICATIONS. A GEOTECHNICAL ENGINEER WILL BE THE OWNER'S REPRESENTATIVE TO INSPECT THE CONSTRUCTION OF FILLS. THE EXCAVATION AND THE PLACEMENT OF FILL WILL BE UNDER THE DIRECT INSPECTION OF THE GEOTECHNICAL ENGINEER, AND HE WILL GIVE WRITTEN NOTICE OF CONFORMANCE WITH THE SPECIFICATIONS UPON COMPLETION OF GRADING. DEVIATIONS FROM SDG&E'S SPECIFICATIONS WILL BE PERMITTED ONLY UPON WRITTEN AUTHORIZATION FROM THE GEOTECHNICAL ENGINEER OR THE SDG&E REPRESENTATIVE.
4. OBSERVATIONS AND COMPACTION TESTS WILL BE MADE BY THE GEOTECHNICAL ENGINEER DURING THE FILLING AND COMPACTING OPERATIONS SO THAT HE CAN STATE HIS OPINION THAT THE FILL WAS CONSTRUCTED IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
5. DURING CONSTRUCTION: THE CONTRACTOR SHALL GRADE ALL EXCAVATED AND FILLED SURFACES TO PROVIDE POSITIVE DRAINAGE AND PREVENT PONDING OF WATER. HE SHALL CONTROL SURFACE WATER TO AVOID DAMAGE TO ADJOINING PROPERTIES OR TO FINISH WORK ON THE SITE. THE CONTRACTOR SHALL TAKE REMEDIAL MEASURES TO PREVENT EROSION OF FRESHLY GRADED AREAS, AND UNTIL SUCH TIME AS PERMANENT DRAINAGE AND EROSION CONTROL MEASURES HAVE BEEN INSTALLED. AFTER GRADING IS COMPLETED AND THE GEOTECHNICAL ENGINEER HAS FINISHED HIS OBSERVATIONS OF THE WORK, NO FURTHER EXCAVATION OR FILLING SHALL BE DONE, EXCEPT UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER.
6. CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS REQUIRED TO PROTECT ADJACENT PROPERTIES DURING THE GRADING OPERATIONS.
7. BRUSH AND TREES SHALL BE REMOVED ONLY WITHIN THE AREA TO BE GRADED. WHEN TREES ARE REMOVED, THE ROOT SYSTEMS SHALL ALSO BE REMOVED AND THE RESULTING EXCAVATION FILLED WITH PROPERLY COMPACTED FILL SOILS.
8. CUT AND FILL SLOPES SHALL BE TRIMMED TO THE FINISH GRADE TO PRODUCE A SMOOTH AND UNIFORM SURFACE OR CROSS-SECTION. THE SLOPES OF EXCAVATIONS OR EMBANKMENTS SHALL BE SHAPED AND TRIMMED AS DIRECTED BY THE SDG&E REPRESENTATIVE AND LEFT IN A NEAT AND ORDERLY CONDITION. ALL STONES, ROOTS, OR OTHER WASTE MATTER EXPOSED ON EXCAVATION OR EMBANKMENT SLOPE SHALL BE REMOVED AND DISPOSED OF.
9. GRADING SHALL BE DONE WITHIN A TOLERANCE OF ±0.1' OF THE GRADES AND ELEVATIONS SHOWN ON THESE PLANS AND ALL SLOPES SHALL BE CONSTRUCTED WITHIN ±0.5' OF THE LOCATION SHOWN ON THESE PLANS. IN NO WAY SHALL THE ABOVE TOLERANCES RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF PROVIDING A FINISH THAT WILL NOT POND WATER.
10. ANY QUANTITIES INDICATED ON THESE PLANS ARE ENGINEERS' ESTIMATES ONLY AND ARE NOT TO BE USED BY CONTRACTOR FOR BIDDING PURPOSES.
11. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN THE FIELD AND BRING DISCREPANCIES TO THE ATTENTION OF THE SDG&E REPRESENTATIVE PRIOR TO STARTING CONSTRUCTION.
12. CONTRACTOR SHALL REFER TO GEOTECHNICAL REPORT TITLED "GEOTECHNICAL EVALUATION – ACCESS ROADS AND STRUCTURAL PADS SUNRISE POWERLINK PROJECT"
    BY URS, DATED, OCTOBER 16, 2009. URS
    PROJECT No.27669019.0002

EROSION CONTROL NOTES

1. ALL POLE & TOWER MAINTENANCE PADS TO BE DIKED AND THE DIKES MAINTAINED TO PREVENT WATER FROM FLOWING FROM THE PADS WITHOUT CAUSING EROSION, OR CONSTRUCT DRAINAGE FACILITIES TO THE SATISFACTION OF THE COUNTY DEPARTMENT OF PUBLIC WORKS THAT WILL ALLOW WATER TO DRAIN FROM THE PAD WITHOUT CAUSING EROSION.
2. TOPS OF ALL SLOPES TO BE DIKED OR TRENCHED TO PREVENT WATER FROM FLOWING OVER THE CREST OF SLOPES.
3. ALL GRADED CUT OR FILL SLOPES SHALL BE HYDROSEEDED TO PROTECT THE SLOPE FROM EROSION AND INSTABILITY IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
4. FIBER ROLLS SHALL BE PLACED AT TOP, TOE AND FACE (15 FOOT INTERVALS) OF GRADED ALL CUT AND FILL SLOPES TO INTERCEPT RUNOFF AND REDUCE EROSION IN ACCORDANCE WITH PROJECT SPECIFICATIONS.

COUNTY OF SAN DIEGO CONSTRUCTION NOTES

1. ALL ASPHALT CONCRETE SHALL CONFORM TO CALTRANS STANDARD SPECIFICATIONS. 2006 SECTION 39 AND SHALL HAVE A BASE COURSE OF TYPE A 3/4" MAXIMUM COURSE AND A 2" FINAL LIFT (OR 2" OVERLAY) USING TYPE B, 1/2" MAXIMUM, MEDIUM GRADATION
2. AGGREGATE BASE SHALL CONFORM TO CALTRANS SECTION 26 CLASS II AGGREGATE BASE
3. ALL OTHER WORK IN COUNTY OF SAN DIEGO PUBLIC RIGHT OF WAY SHALL CONFORM TO CALTRANS STANDARD SPECIFICATIONS OR STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION WITH REGIONAL SUPPLEMENT AMENDMENTS (LATEST ADOPTED EDITION)
4. WORK WITHIN COUNTY RIGHT OF WAY IS SUBJECT TO COUNTY CONSTRUCTION/ ENCROACHMENT PROCESS AND MAY REQUIRE CONSTRUCTION TRAFFIC CONTROL TO MITIGATE SIGHT DISTANCE AND CONSTRUCTION WITHIN THE COUNTY RIGHT OF WAY

COUNTY OF SAN DIEGO BUILDING DIVISION NOTES

1. THE APPROVAL OF PLANS AND SPECIFICATIONS DOES NOT PERMIT THE VIOLATION OF ANY SECTION OF THE BUILDING CODE, COUNTY ORDINANCES, OR STATE LAW. THE FOLLOWING LIST DOES NOT NECESSARILY INCLUDE ALL ERRORS AND OMISSIONS. (SEE THE 2007 CALIFORNIA BUILDING CODE, APPENDIX CHAPTER 1, SECTION 105.4)
2. TWO (2) COPIES OF THE FINAL COMPACTION REPORT SHALL BE SUBMITTED TO THE INSPECTOR PRIOR TO FINAL INSPECTION.

COUNTY OF SAN DIEGO • DEPARTMENT OF PLANNING AND LAND USE
BUILDING DIVISION

NOTICE OF REQUIREMENT FOR SPECIAL INSPECTION

You are hereby notified that, in addition to the inspection of construction provided by the Department of Planning and Land Use, Building Division, an approved registered special inspector is required to provide special inspection and/or structural observation during construction of the proposed project as indicated on this form. This form shall be completed. All work requiring special inspection must be identified as well as the name and phone number of the special inspector identified to perform the special inspections.

The registered special inspector shall be approved by the Building Offical prior to the issuance of the building permit. Special inspectors having a current certification from the City of San Diego are approved as special inspectors for the type of construction for which they are certified.

Special inspection and/or structural observation requirements and reports shall be in compliance with the 2007 California Building Code, Chapter 17.

The inspections required to be performed by a special inspector are in addition to and do not change the requirements for the inspections normally required by the 2007 California Building Code as amended and adopted by the County of San Diego and performed by the Building Division inspection personnel.

The special inspector is not authorized to inspect and approve any work other than that for which they are certified. The special inspector is not authorized to accept alternate materials, structural changes, or any requests for plan changes. The special inspector is required to submit to the building inspector in the field written reports of all work that they inspected and approved. Approval of final inspection will not be granted by the Department of Planning and Land Use, Building Division, until a last and final report documenting required special inspections and correction of any discrepancies noted in the inspection reports has been submitted to the building inspector in the field and approved by the Building Division.

For occupancies in Group R-3 and occupancies in Group U that are accessory to a residential occupancy, some exceptions are permitted per the Department of Planning and Land Use, Building Division special inspection policy to not require special inspection or to allow structural observation in lieu of the required special inspections. These exceptions are noted in the table on page two of this form. In cases where the design engineer of record has specified a more restrictive requirement for special inspection and/or structural observation, the project shall comply with the requirements of the engineer of record.

Structural observation is the visual observation of the structural system by a registered design professional. A letter shall be provided describing the results of structural observation prior to approval of final inspection. The letter shall be submitted to the building inspector in the field and approved by the Building Division.

THIS COMPLETED FORM MUST BE MADE A PERMANENT, PRINTED PART OF THE PLANS.
(Taped, glued, stapled, etc. copies will not be accepted)

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DPLU #306 REV 06/01/2009 Page 1 of 2

WORK REQUIRING SPECIAL INSPECTION	ITEM DESCRIPTION AND LOCATION	DESIGN STRENGTH	NAME OF SPECIAL INSPECTOR	PHONE NUMBER OF SPECIAL INSPECTOR
SPECIAL INSPECTIONS REQUIRED BY CBC SECTION 1704				
*FOR R-3 AND U OCCUPANCIES ACCESSORY TO RESIDENTIAL OCCUPANCIES SPECIAL INSPECTION IS NOT REQUIRED FOR: ITEMS 1b, 2a (WHEN f'c ≤ 3,000 psi), 2c, 3a (WHEN f'm ≤ 1,500 psi), 3b (WHEN WALL HEIGHT IS ≤ 10 FT.), 6, 7, 8, & 9. *STRUCTURAL OBSERVATION IS PERMITTED IN LIEU OF SPECIAL INSPECTION FOR ITEMS 3a, 3b (WHEN WALL HEIGHT IS > 10 FT.), AND 4a.*				
1.) Steel Construction				
a.) Field welding			GARY HEINBACH (951) 840-5920	
b.) Steel frame*	N/A			
c.) High-strength bolts	PER PLAN		GARY HEINBACH (951) 840-5920	
2.) Concrete Construction				
a.) f'c [ ]	PER PLAN	4,500 psi	GARY HEINBACH (951) 840-5920	
b.) Anchors	PER PLAN	PER PLAN	GARY HEINBACH (951) 840-5920	
c.) Structural slabs*	N/A			
d.) Pre-stressed / post-tensioned slabs	N/A			
3.) Masonry Construction	N/A			
a.) Masonry construction*	N/A			
b.) Site walls other than County Standard plans*				
4.) Wood Construction	N/A			
a.) High-load diaphragms*				
5.) Foundations				
a.) Pile foundations	N/A			
b.) Pier foundations	PER PLAN	4,500 psi	GARY HEINBACH (951) 840-5920	
6.) Sprayed fire-resistant materials*	N/A			
7.) Mastic and intumescent fire-resistant coatings*	N/A			
8.) Exterior insulation and finish systems (EIFS)*	N/A			
9.) Smoke control systems*	N/A			
10.) Special cases				
a.) MSE WALL CONSTUCTION	PER PLAN		GARY HEINBACH (951) 840-5920	
b.)				
SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE REQUIRED BY CBC SECTION 1707				
*R-3 AND U OCCUPANCIES ACCESSORY TO RESIDENTIAL OCCUPANCIES *STRUCTURAL OBSERVATION IS PERMITTED IN LIEU OF SPECIAL INSPECTION FOR ITEMS C AND D*				
A.) Field welding				
B.) Structural wood: field gluing of elements of the seismic-force-resisting system	N/A			
C.) Structural wood: nailing, bolting, anchoring and other fastening of components within the seismic-force-resisting system where fastener spacing of sheathing is 4 inches o.c. or less*	N/A			
D.) Cold-formed steel framing*	N/A			
E.) Pier foundations	N/A			
F.) Storage racks and access floors	N/A			
G.) Architectural components for structures greater than 30 feet in height	N/A			
H.) Designated seismic system verifications	N/A			
I.) Designated seismic system verifications	N/A			
J.) Seismic isolation system	N/A			

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DPLU #306 REV 06/01/2009 Page 2 of 2

LEGEND

SECTION A ◣ SECTION A ◢

- INDICATES NEW TOWER
- INDICATES EXISTING STEEL POLE
- 422.1 / 415.9 — VERTICAL PROFILE F.G. ELEV. ABOVE / VERTICAL PROFILE E.G. ELEV. BELOW
- NEW TRANSMISSION LINE
- 440 — (F.G.) FINISH GRADE CONTOURS
- 440 — (E.G.) EXISTING GRADE CONTOURS
- (206.2) — EXISTING GROUND ELEVATION
- TOP / TOE — FILL SLOPE 2:1 UNLESS SHOWN OTHERWISE
- TOP / TOE — CUT SLOPE 2:1 UNLESS SHOWN OTHERWISE
- R — RIDGE LINE
- DAYLIGHT LINE
- DIRECTION OF FLOW
- CUT / FILL — CUT/FILL LINE
- CONCRETE DOWN DRAIN, SEE DETAIL
- RIPRAP ENERGY DISSIPATOR, SEE DETAIL
- CORRUGATED METAL PIPE WITH FLARED END SECTIONS, SEE PLANS FOR, PIPE SIZES, AND ENERGY DISSIPATOR.
- DROP OUTLET PER SDRSD D-16 TYPE B, INLET PIPE 24'" AND OUTLET PIPE 12" DIAMETER
- CONCRETE DRAINAGE DITCH, SEE DETAIL
- DRAINAGE DITCH BEHIND MASONRY CUT RETAINING WALL, SEE DETAIL
- RETAINING WALL, FILL
- 3' — RETAINING WALL, CUT
- X / XX — DETAIL LABEL (DETAIL # / SHEET #)

ABBREVIATIONS

(EG)	EXISTING GRADE
FG	FINISHED GRADE
TW	TOP OF WALL
BW	BOTTOM OF WALL AT FINISHED GROUND
FL	FLOW LINE
U/S	UP STREAM
D/S	DOWN STREAM
CMP	CORRUGATED METAL PIPE
RC	RELATIVE COMPACTION

UNDERGROUND SERVICE ALERT

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Tel: (858) 451-6100 Fax: (858) 451-2846
www.us.bureauveritas.com

REGISTERED PROFESSIONAL ENGINEER — STEPHEN K. SMITH — REE 29708 — Exp.3-31-11 — CIVIL — STATE OF CALIFORNIA

REVISIONS

NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:

SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-06 (LINK 4) BAUER BRIDGE
LEGEND & GENERAL NOTES

DRAWN BY: JJP	DATE: -/-/-	SCALE: AS NOTED	W.O.	REV. 0	SPL-06-BC03
CHECKED BY:	DATE:				
APPROVED BY:	DATE:				
CAD NO.:	PLOT SCALE: 1=1				

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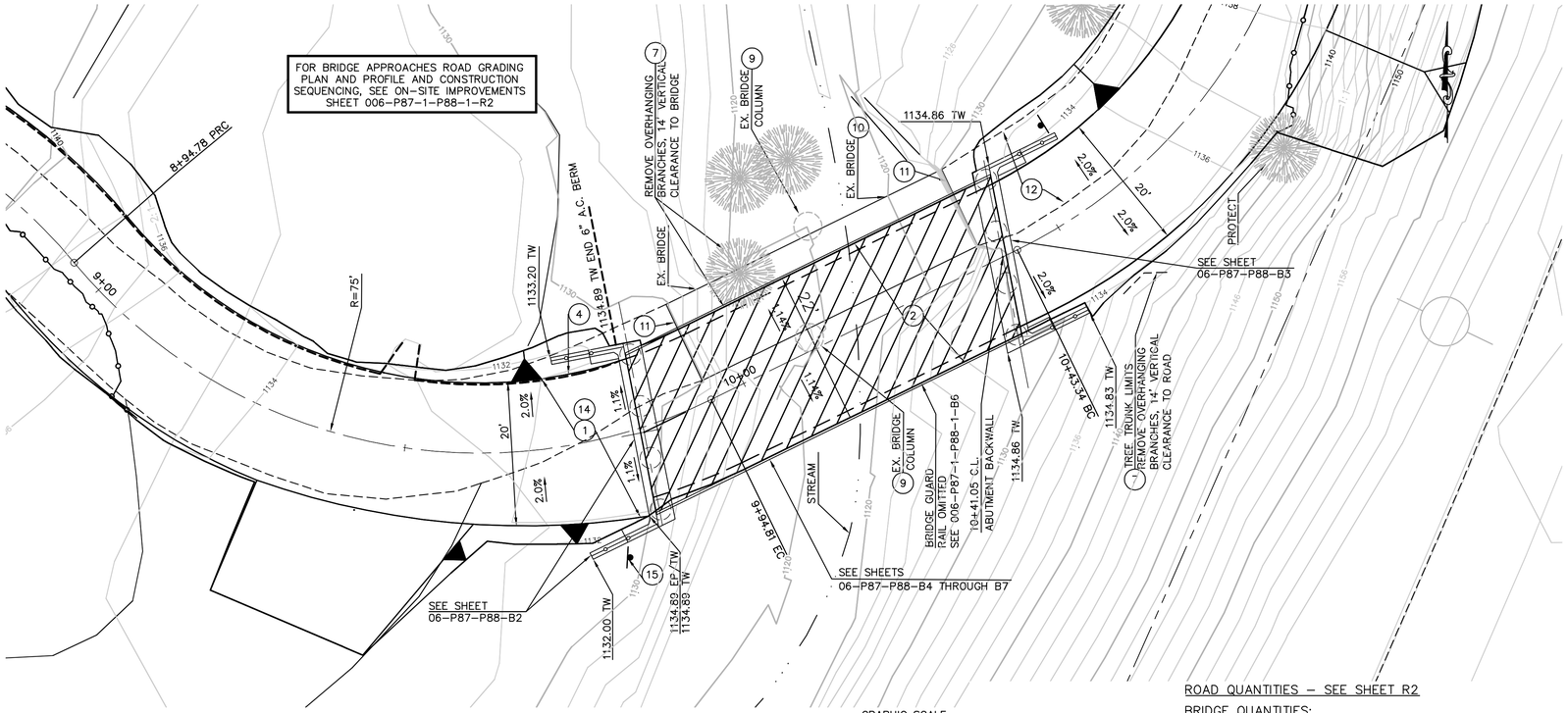
BAUER BR



BRIDGE AREA PLAN

SCALE: 1" = 10'

GRAPHIC SCALE
10 0 10 20
1"=10'

NOTE: FOR BRIDGE ABUTMENTS SEE SHEET B2, B3 AND B4 FOR BRIDGE SUPER STRUCTURE SEE SHEETS B4 THROUGH B7

NOTE: BRIDGE DESIGNED FOR HS-20 LOADING, CONDOR 180-1, AND GROVE GMK 5240, OR 6300B AFTER DECK OS ONSTALLED.

ROAD QUANTITIES – SEE SHEET R2

BRIDGE QUANTITIES:
BRIDGE: (SEE SHEET B2-B7): LUMP SUM
REMOVE EXISTING BRIDGE COLUMNS: 2 EA
PROTECT EXISTING BRIDGE ABUTMENTS: 2 EA
REMOVE INTERFERING PORTIONS OF EXISTING BRIDGE ABUTMENTS/APPROACH SLAB: LUMP SUM
REMOVE LOOSE MISC. CONCRETE/DEBRIS IN CHANNEL UNDER/ADJACENT TO EXISTING BRIDGE UNDER SUPERVISION OF ENGINEER: LUMP SUM

CONSTRUCTION SEQUENCING NOTES

(A) MAINTAIN 24-7 VEHICLE ACCESS ACROSS THE CREEK. COORDINATE CONSTRUCTION ACTIVITIES IN ADVANCE WITH SDG&E AND PROPERTY OWNER. BRIDGE AND ACCESS ROADS NOT TO BE USED FOR STORAGE OR LAY DOWN AREA.

(B) CONFIRM ENVIRONMENTAL CLEARANCE PRIOR TO CONSTRUCTION

(C) PROTECT EXISTING CREEK BED AND EXISTING ABUTMENTS TO THE EXTENT POSSIBLE AS NEW CONSTRUCTION INTERFERES

(D) SECURE BIOLOGICAL MONITOR AND TRIM EXISTING TREES

(E) REMOVE ONLY INTERFERING PORTIONS OF EXISTING ABUTMENTS AS NECESSARY

(F) DEMO PORTIONS OF EXISTING BRIDGE FOUNDATION/APPROACH SLAB-EAST AND WEST SIDE

(G) ABUTMENT FOUNDATION EXCAVATION AND CONSTRUCTION-SOUTHERLY TWO-THIRDS-EAST AND WEST SIDE

(H) ABUTMENT CURING-EAST AND WEST SIDE

(I) BRIDGE SUPERSTRUCTURE-SOUTHERY TWO-THIRDS INSTALLATION WITH SOUTHERLY GUARDRAIL

(J) CONSTRUCT TEMPORARY BRIDGE RAILING PROTECTION ON NORTH SIDE OF NEW CONSTRUCTION

(K) LAY ROUGH 4"X4" IN DECK PLATE TROUGHS AND4"x12" PLANKS LENGGTHWISE TO ALLOW FOR TEMPORARY PASSENGER VEHICLE AND PEDESTRIAN ACCESS OVER NEW BRIDGE. CONTRACTOR TO COORDINATE WITH CONTECH ENGINEER FOR CONSTRUCTION TRAFFIC OVER BRIDGE.

(L) COMPLETE TEMPORARY APPROACH GRADING SOUTH TWO-THIRDS OF BRIDGE-EAST AND WEST SIDE

(M) LIGHT PASSENGER VEHICLE AND PEDESTRIAN TRAFFIC TRANSFERED TO THE NEW BRIDGE

(N) CONSTRUCT ABUTMENT BACK WALL OF FINAL ONE-THIRD OF THE BRIDGE ABOVE GROUND AND CURE

(O) REMOVE EXISTING BRIDGE DECK AND THREE BEAMS-PROTECT EXISTING ABUTMENT THAT CAN REMAIN

(P) REMOVE TWO EXISTING BRIDGE CENTER PIERS-PROTECT EXISTING FOUNDATION BELOW GROUND IN CREEK

(Q) BRIDGE SUPERSTRUCTURE INSTALLATION-FINAL ONE-THIRD AND PLACE AC PAVING ON BRIDGE.

(R) COMPLETE FINAL APPROACH GRADING AND ENTIRE ROAD GRADING AT THIS TIME

(S) PLACE BRIDGE AND ROAD CRUSHED AGGREGATE BASE AND ASPHALT PAVING

(T) MISC. BRIDGE PUNCH LIST WORK

AC BRIDGE PAVEMENT

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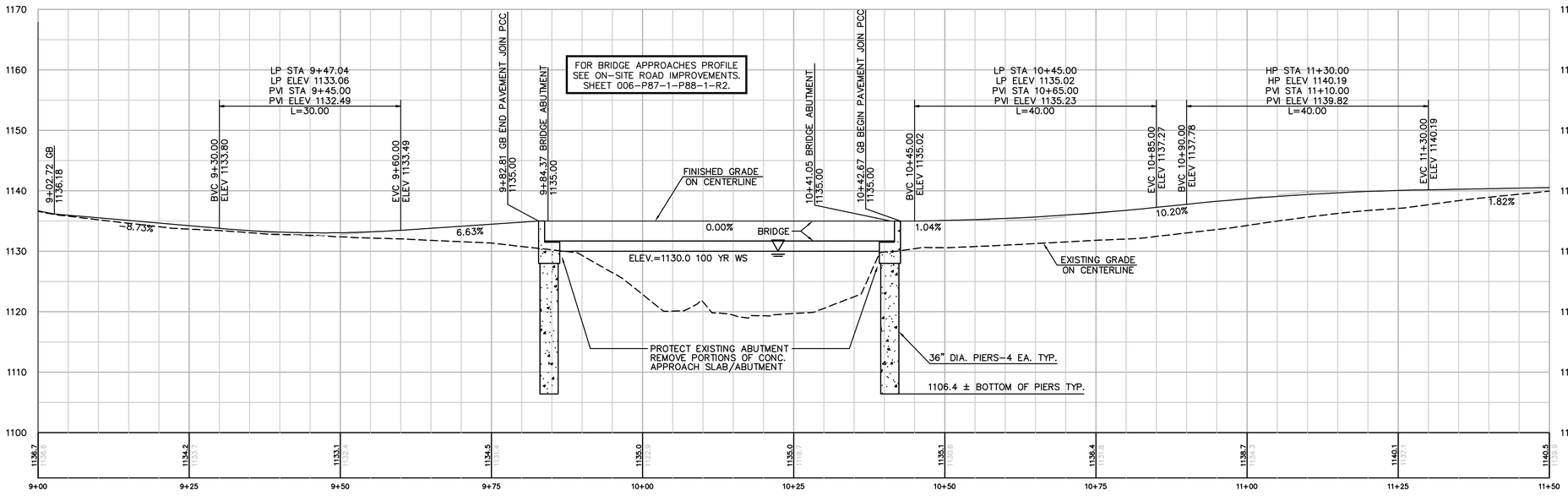
CALL: TOLL FREE 1-800 422-4133

"CAUTION": TWO WORKING DAYS BEFORE YOU DIG REMEMBER THAT THE USA CENTER NOTIFIES ONLY THOSE UTILITIES BELONGING TO THE CENTER. THERE COULD BE OTHER UTILITIES PRESENT AT THE WORK SITE. THE CENTER WILL INFORM YOU OF WHOM THEY WILL NOTIFY. NOTIFIES ONLY THOSE UTILITIES BELONGING TO



PROFILE: BAUER BRIDGE

HORIZ. & VERT. SCALE: 1" = 10'

CONSTRUCTION NOTES

(1) CONSTRUCT 4" AC ON 6" CLASS 2 AGGREGATE BASE (CAB) OVER 6" 95% COMPACTED NATIVE SUBGRADE

(2) CONSTRUCT AC ON BRIDGE DECK PER SHEETS B5 & B6

(3) CONSTRUCT 2" AC OVERLAY ON EXISTING AC

(4) CONSTRUCT 6" AC BERM PER SDRSD G-5, TYPE A

(7) REMOVE PORTIONS OF EXISTING TREE

(9) REMOVE EXISTING BRIDGE COLUMNS ABOVE FOUNDATION

(10) REMOVE INTERFERING PORTIONS OF EXISTING BRIDGE ABUTMENT AND SUPERSTRUCTURE ONLY

(11) PROTECT EXISTING BRIDGE ABUTMENTS BELOW PROPOSED SUPERSTRUCTURE

(12) REMOVE PORTION OF EXISTING PAVEMENT

(13) PROTECT EXISTING DRAIN INLET

(14) SLURRY NEW & OLD AC PAVING AFTER CONSTRUCTION TRAFFIC COMPLETION WITH TYPE I AC SLURRY SEAL

(15) INSTALL SIGN-R12-4("16 TON"-"36 TON")

Bureau Veritas North America
11590 West Bernardo Court Suite 100
San Diego, CA 92127-1624
Tel: (858) 451-6100 Fax: (858) 451-2846
www.us.bureauveritas.com

REGISTERED PROFESSIONAL ENGINEER STEPHEN K. SMITH No. 29708 Exp. 3-31-11 CIVIL STATE OF CALIFORNIA

REVISIONS

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SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-06 (LINK 4) BAUER BRIDGE
BAUER BRIDGE PLAN AND PROFILE

DRAWN BY: 00	DATE:	SCALE: 1" = 30'	W.O. / REV. 0
CHECKED BY:	DATE:		
APPROVED BY:	DATE:		
CAD NO.:	PLOT SCALE: 1 = 1		06-P87-P88-B1

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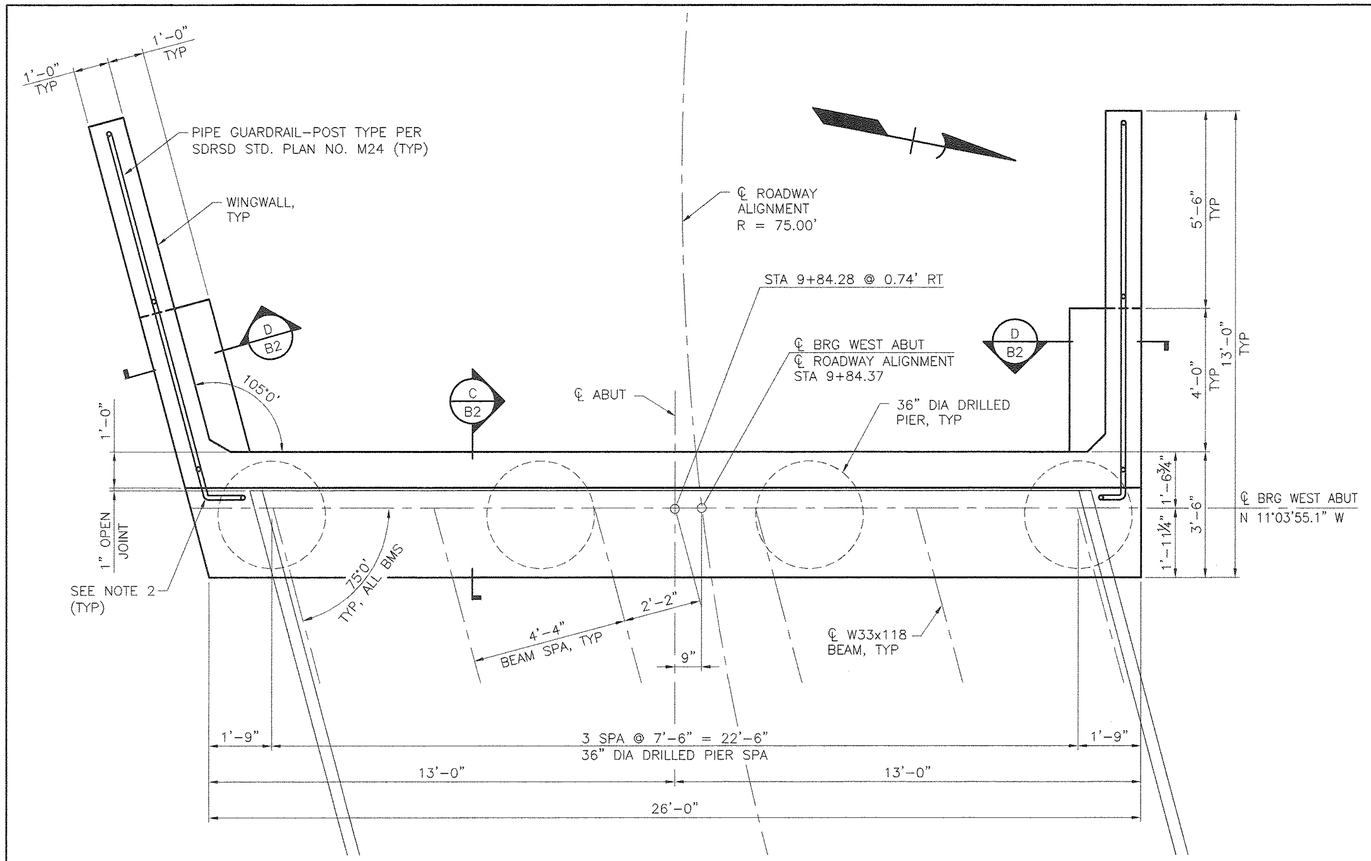
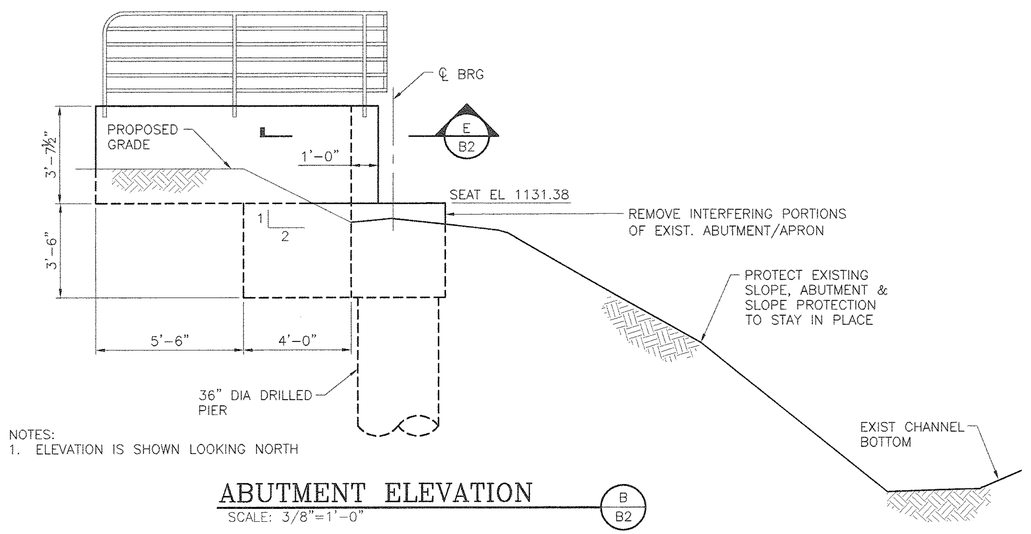
BAUER BR

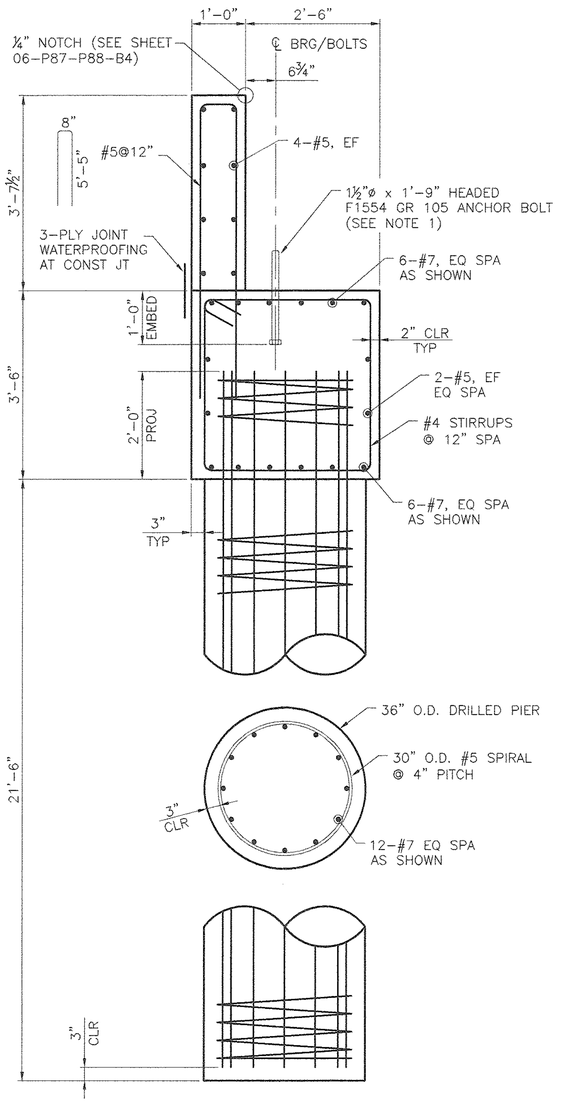


ABUTMENT PLAN
SCALE: 1/2"=1'-0" (A B2)



NOTES:
1. ELEVATION IS SHOWN LOOKING NORTH

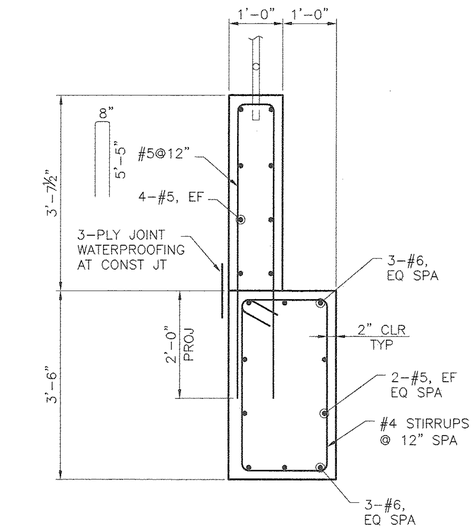
ABUTMENT ELEVATION
SCALE: 3/8"=1'-0" (B B2)



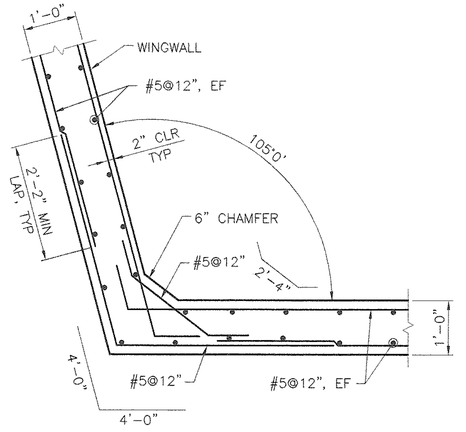
ABUTMENT SECTION
SCALE: 3/4"=1'-0" (C B2)

GENERAL NOTES:

1. DESIGN CRITERIA: ACI 318-05, AASHTO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION".
2. DESIGN LIVE LOAD IS AASHTO HS20-44 TRUCK LOADING AND CONDOR MAINTENANCE VEHICLE (MODEL 1751).
3. PORTLAND CEMENT SHALL CONFORM TO ASTM C-150, TYPE V AGGREGATE SHALL CONFORM TO ASTM C-33.
4. ALL STRUCTURAL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 4500 PSI AT 28 DAYS.
5. ALL REINFORCEMENT STEEL SHALL ASTM DESIGNATION A615 GRADE 60. PROVIDE STANDARD ACI HOOKS ON HOOKED BARS, UNO.
6. COVERAGE FOR REINFORCING BARS, EXCEPT WHERE OTHERWISE SHOWN, SHALL BE: 3" FOR CONCRETE PLACED AGAINST EARTH; 2" FOR OTHERS.
7. USE 3/4" CHAMFER ON ALL EXPOSED CORNERS.
8. ALL REINFORCING BAR LAP SPLICES SHALL CONFORM TO ACI 318-05.
9. PRIOR TO CONSTRUCTION, GEOTECHNICAL CONSULTANT TO PROVIDE BORING AND CONFIRMATION OF SOIL PARAMETERS AT BRIDGE ABUTMENTS.



WINGWALL SECTION
SCALE: 3/4"=1'-0" (D B2)



NOTE: SOUTH CORNER SHOWN; NORTH CORNER IS SIMILAR

SECTION
SCALE: 3/4"=1'-0" (E B2)

NOTES:

1. SEE SHEET 06-P87-P88-B4 FOR ANCHOR BOLT LAYOUT AND DETAILS.
2. TURN RAIL AS REQUIRED AND TERMINATE WITHIN 3" OF BRIDGE GUARD RAIL.

DPLU BUILDING DIVISION
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17150 VIA DEL CAMPO, SUITE 306
SAN DIEGO, CA 92127
PHONE (858) 673-8416
FAX (858) 673-8418

REGISTERED PROFESSIONAL ENGINEER — KEVIN A. BROWN — No. 35467 — Exp. 06/30/10 — STRUCTURAL — STATE OF CALIFORNIA

REVISIONS

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SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL 06

BAUER BRIDGE WEST ABUTMENT DETAILS

DRAWN BY:	DATE:	SCALE: AS SHOWN	W.O. / REV.
CHECKED BY:	DATE:		
APPROVED BY:	DATE:		06-P87-P88-B2
CAD NO.:	PLOT SCALE: 1 = 1		

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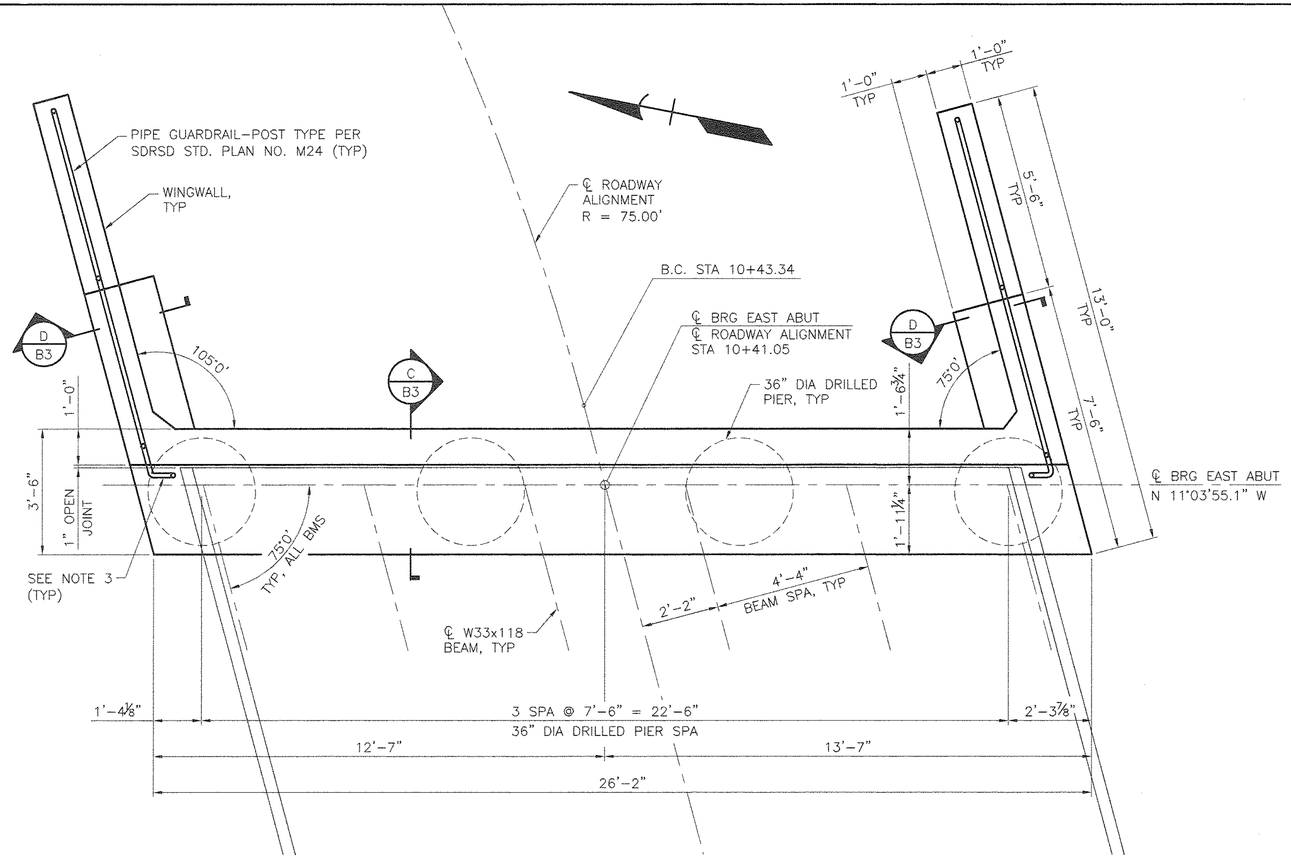
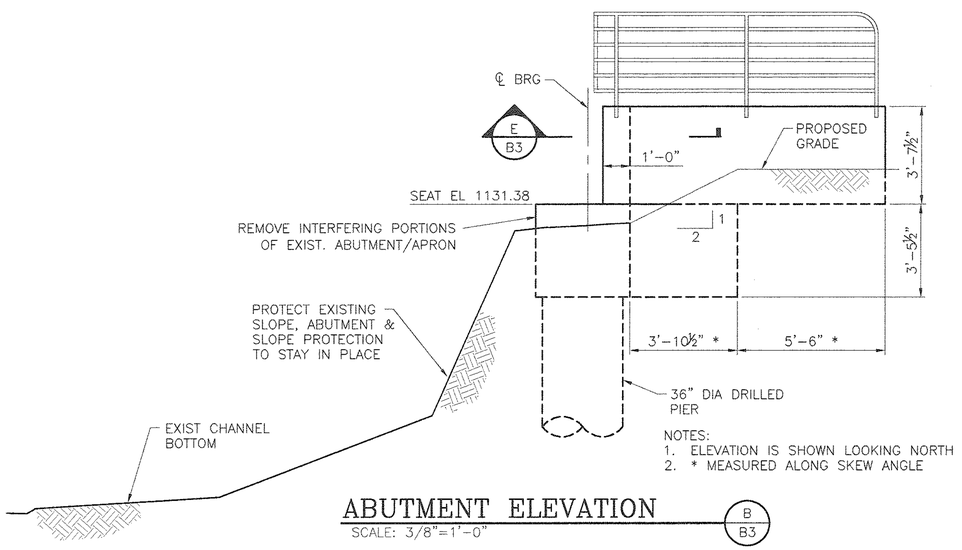
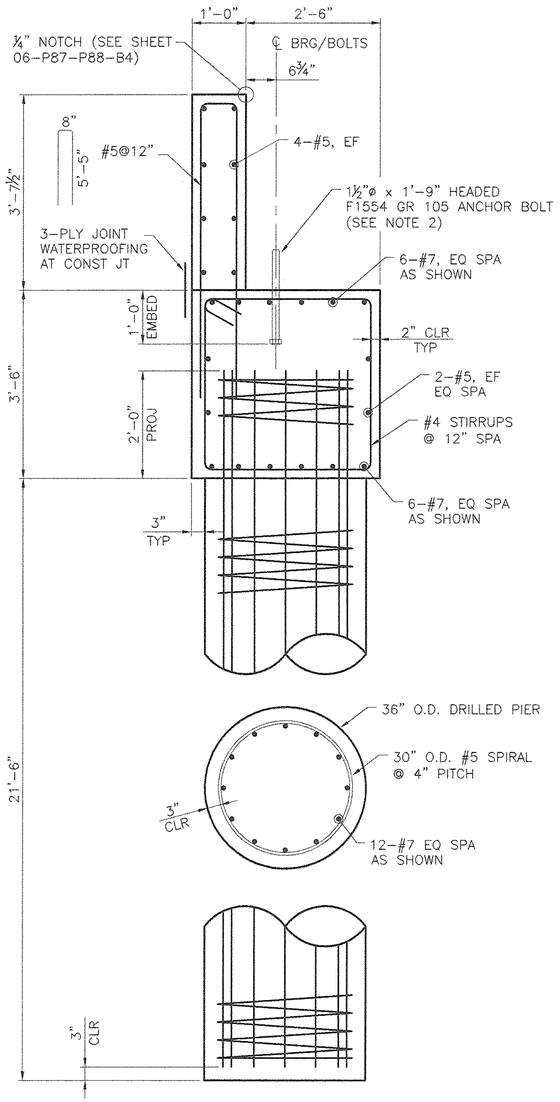


ABUTMENT PLAN
SCALE: 1/2"=1'-0" (A B3)

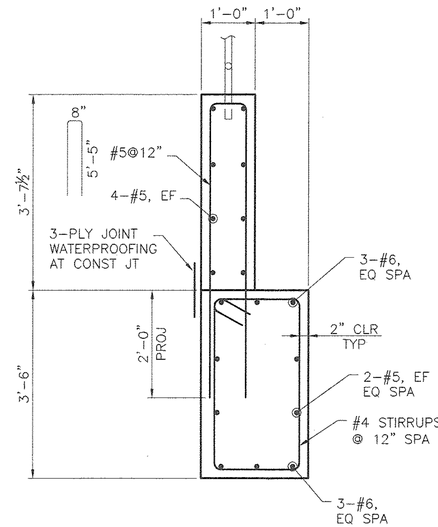


NOTES:
1. ELEVATION IS SHOWN LOOKING NORTH
2. * MEASURED ALONG SKEW ANGLE

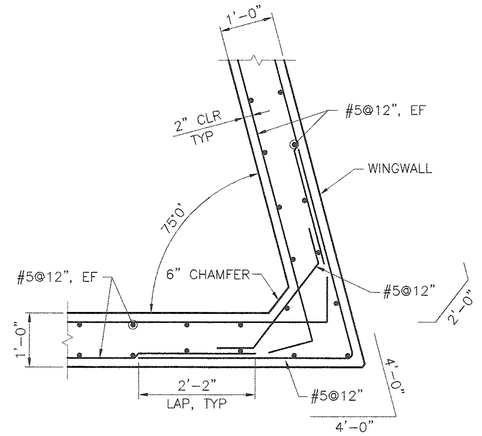
ABUTMENT ELEVATION
SCALE: 3/8"=1'-0" (B B3)



ABUTMENT SECTION
SCALE: 3/4"=1'-0" (C B3)



WINGWALL SECTION
SCALE: 3/4"=1'-0" (D B3)



NOTE: SOUTH CORNER SHOWN; NORTH CORNER IS SIMILAR

SECTION
SCALE: 3/4"=1'-0" (E B3)

NOTES:

1. SEE SHEET 06-P87-P88-B2 FOR GENERAL NOTES.
2. SEE SHEET 06-P87-P88-B4 FOR ANCHOR BOLT LAYOUT AND DETAILS.
3. TURN RAIL AS REQUIRED AND TERMINATE WITHIN 3" OF BRIDGE GUARD RAIL.

ENGINEERING DIVISION
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REGISTERED PROFESSIONAL ENGINEER — DEWN A. BROWN — Exp. 06/30/10 — STRUCTURAL — STATE OF CALIFORNIA

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SPL 06

BAUER BRIDGE EAST ABUTMENT DETAILS

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CHECKED BY:	DATE:		
APPROVED BY:	DATE:		06-P87-P88-B3
CAD NO.:	PLOT SCALE: 1 = 1		

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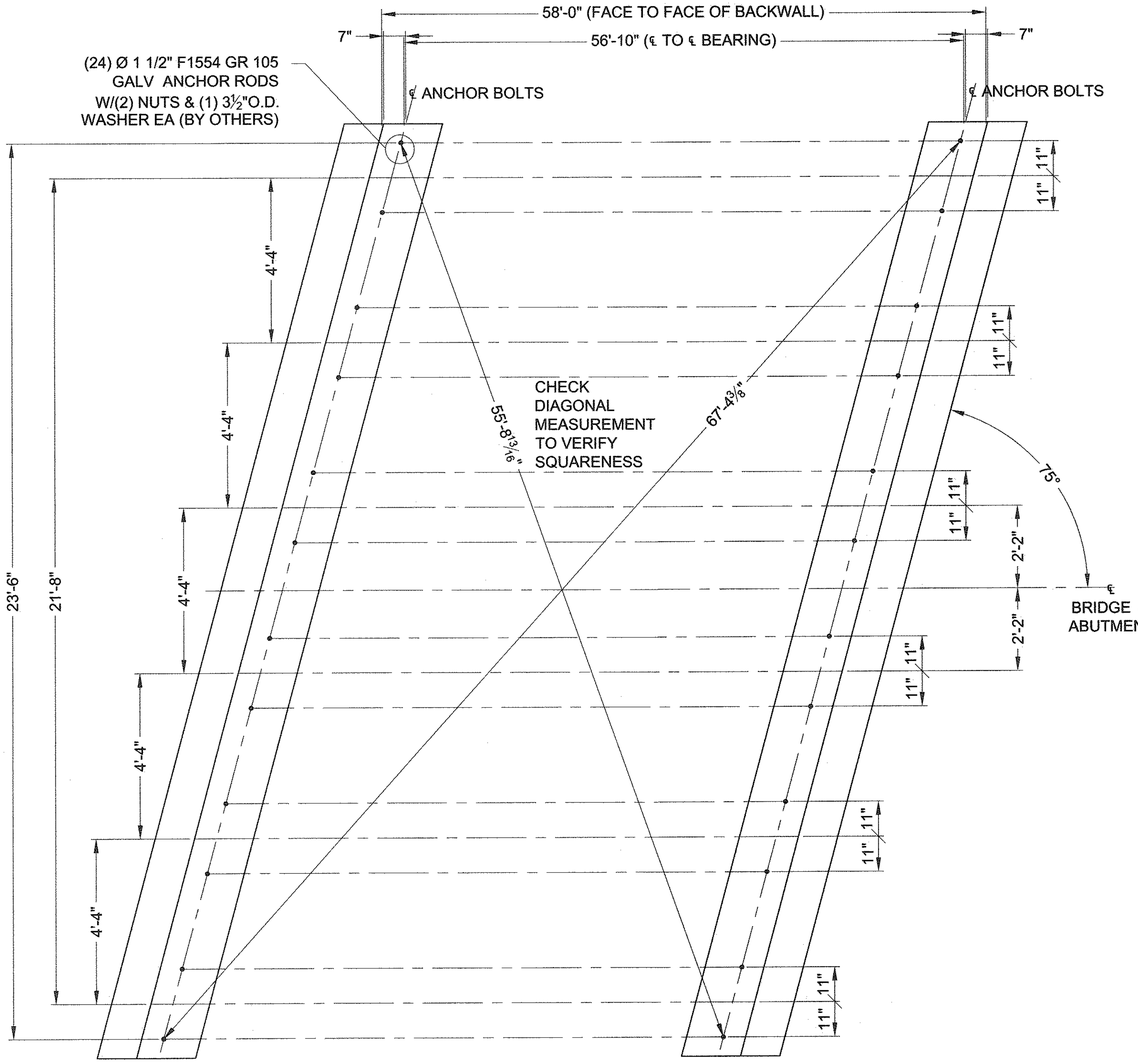
ABUTMENT REACTIONS (EXPANSION END)	
VERTICAL DEAD LOAD	92 KIPS
VERTICAL LIVE LOAD W/O/ IMPACT	120.8 KIPS
HORIZONTAL LOAD (WIND)	13.1 KIPS
THERMAL LOAD (LONGITUDINAL)	13.7 KIPS
HORIZONTAL LOAD (SEISMIC)	SEE NOTE

ABUTMENT REACTIONS (FIXED END)	
VERTICAL DEAD LOAD	92 KIPS
VERTICAL LIVE LOAD W/O/ IMPACT	120.8 KIPS
HORIZONTAL LOAD (WIND)	13.1 KIPS
THERMAL LOAD (LONGITUDINAL)	13.7 KIPS
HORIZONTAL LOAD (SEISMIC)	SEE NOTE
LONGITUDINAL LOAD (SEISMIC)	SEE NOTE

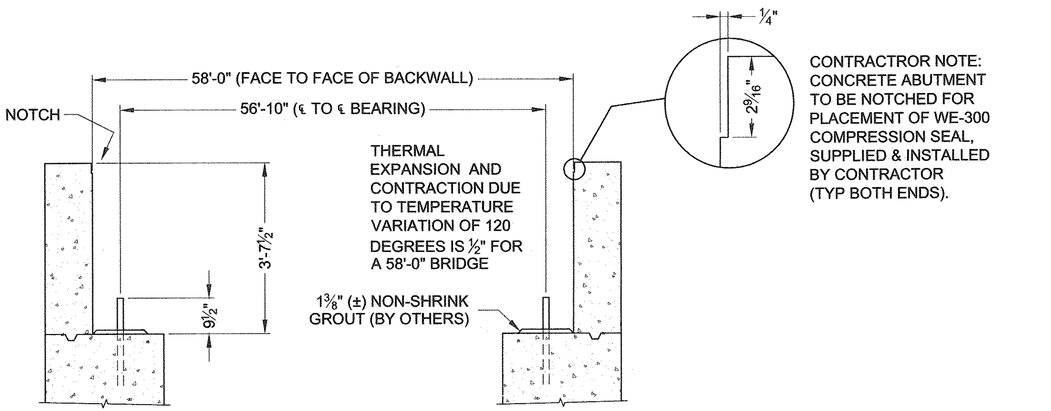
BRIDGE TOTAL WEIGHT = 184,000 LBS (INCLUDES ASPHALT)

MAXIMUM LIFTING WEIGHT = 25,400 LBS / PIECE

NOTE:
THIS BRIDGE HAS BEEN DESIGNED FOR SEISMIC FORCES BASED ON THE AASHTO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES: 17th EDITION." ASSUME SEISMIC PERFORMANCE CATEGORY D, AN ACCELERATION COEFFICIENT OF 0.4 AND A SOIL PROFILE TYPE III (S=1.5). IT SHALL BE THE RESPONSIBILITY OF THE FOUNDATION ENGINEER TO DETERMINE THE FORCES WHICH ARE USED FOR FOUNDATION DESIGN, VERIFICATION OF ANCHOR BOLT SIZES, AND DESIGN OF ANCHOR BOLT EMBEDMENTS IN THE FOUNDATION. THESE FORCES ARE DETERMINED BASED ON LOCAL SITE CONDITIONS, THE FOUNDATION SYSTEM USED AND THE BRIDGE DEAD LOAD. IT IS ASSUMED THAT THE ENTIRE LONGITUDINAL SEISMIC LOAD IS RESISTED AT THE FIXED END ONLY.



ANCHOR BOLT PLAN



CONTRACTROR NOTE:
CONCRETE ABUTMENT TO BE NOTCHED FOR PLACEMENT OF WE-300 COMPRESSION SEAL, SUPPLIED & INSTALLED BY CONTRACTOR (TYP BOTH ENDS).

ANCHOR BOLT ELEVATION

REGISTERED PROFESSIONAL ENGINEER STEVEN J. HERRIN No. C040130 Exp. 6-30-10 CIVIL STATE OF CALIFORNIA 2/24/10

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1	REVISED STEP HEIGHT & STRINGER SIZE	11/12/03	MDM	SJH
2	REVISED BEARING PAD	2/24/10	MDM	SJH

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BAUER BRIDGE
ANCHOR BOLT LAYOUT

DRAWN BY: MDM	DATE: 10/12/09	SCALE:	W.O.	REV.
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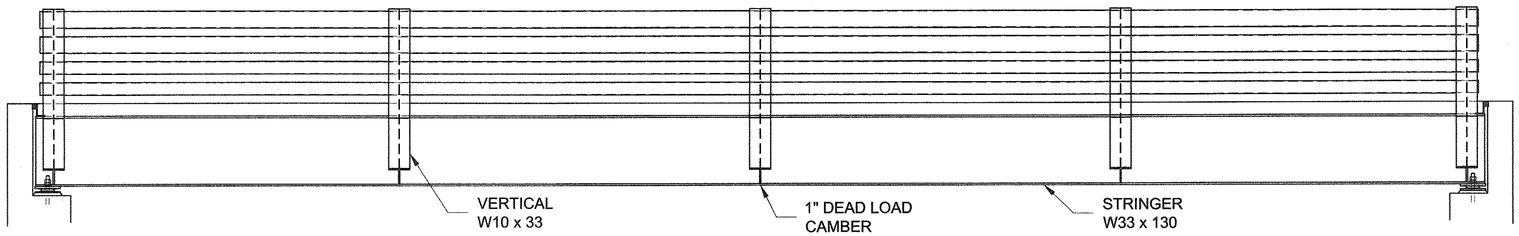
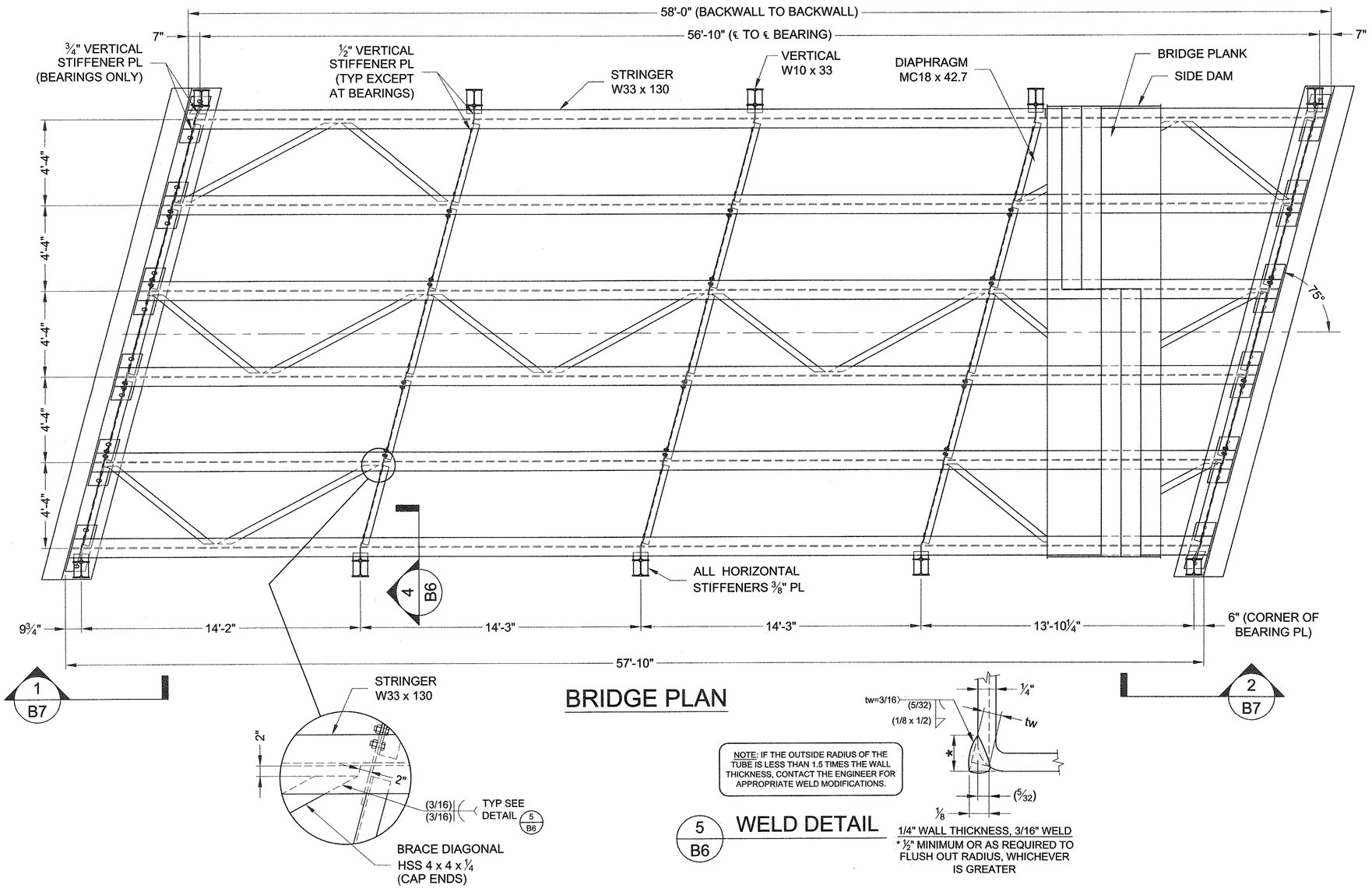


BRIDGE ELEVATION



BRIDGE PLAN

NOTE: IF THE OUTSIDE RADIUS OF THE TUBE IS LESS THAN 1.5 TIMES THE WALL THICKNESS, CONTACT THE ENGINEER FOR APPROPRIATE WELD MODIFICATIONS.

5 B6 WELD DETAIL

1/4" WALL THICKNESS, 3/16" WELD
* ½" MINIMUM OR AS REQUIRED TO FLUSH OUT RADIUS, WHICHEVER IS GREATER

GENERAL NOTES

1. ALL DESIGN STRESSES ARE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION (HB-17), USING ALLOWABLE STRESS DESIGN.

2. WELDING TO CONFORM WITH THE AMERICAN WELDING SOCIETY (AWS) STRUCTURAL WELDING CODE, D1.1 FOR TUBULAR MEMBERS AND ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE FOR STRUCTURAL MEMBERS, LATEST REVISION. WELDING TO BE PERFORMED BY EXPERIENCED WELDERS QUALIFIED IN ACCORDANCE WITH A.W.S. PROCEDURES. WELDING ELECTRODES TO BE AWS E81T-X SERIES. SHOP WELD PROCESS TO BE FCAW. STRUCTURAL WELDS TO BE A MINIMUM OF 1/4" FILLET UNLESS SHOWN OTHERWISE. MINIMUM WELD SIZE DOES NOT APPLY TO SEAL WELDS. FILLER METAL TO COMPLY WITH AWS D1.5, TABLE 4.3.

3. ALL STRUCTURAL STEEL, PLATES, ANGLES AND OTHER CONNECTION MATERIAL TO BE ASTM A588 (A709, (AASHTO M270), GRADE 50W). CHARPY V-NOTCH TESTING REQUIRED FOR ALL MAIN STRINGER MEMBERS IN ACCORDANCE WITH ASTM 370, ZONE 2 FOR NON-FRACTURE CRITICAL.

4. ALL CONNECTION BOLTS SHALL BE ⅞" A325-SC TYPE 3 WITH A563 GR DH3 HEAVY HEX NUTS AND F436 TYPE 3 WASHERS UNLESS NOTED. FIELD CONNECTIONS SHALL BE MADE USING THE TURN-OF-NUT TIGHTENING METHOD IN ACCORDANCE WITH AISC, "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS".

5. EXPOSED STEEL SURFACES SHALL BE SHOP SAND BLASTED TO STEEL STRUCTURES PAINTING COUNCIL #7 'COMMERCIAL SANDBLAST FINISH'. EXPOSED SURFACES SHALL BE DEFINED AS THOSE SURFACES VISIBLE FROM THE DECK AND FROM EITHER SIDE OF THE STRUCTURE. AFTER CLEANING, CARE SHALL BE TAKEN TO KEEP SURFACES FREE OF OIL, GREASE, ASPHALT AND ALL OTHER FOREIGN MATERIAL TO ALLOW THE WEATHERING STEEL TO RUST EVENLY AFTER FABRICATION.

6. ANCHOR BOLTS TO BE GALVANIZED ASTM F1554 GRADE 105 WITH A563 NUTS AND F436 WASHERS. THE MINIMUM DISTANCE TO THE EDGE OF CONCRETE SHALL BE DETERMINED BY THE FOUNDATION ENGINEER. ANCHOR BOLTS MAY BE CAST IN PLACE OR EPOXY GROUTED IN DRILLED HOLES. ANCHOR BOLTS ARE PROVIDED BY OTHERS.

7. SETTING PLATES SHALL BE PLACED ON SHIMS. THE PREFORMED BEARING PADS AND THE BRIDGE SHALL THEN BE PLACED RESPECTIVELY ON THE SETTING PLATES. GROUTING SHOULD BE PERFORMED AFTER THE BRIDGE HAS BEEN PLACED TO ALLOW FOR FINAL VERTICAL ADJUSTMENT.

8. LENGTH OF ANCHOR BOLTS AND FOUNDATION DETAILS ARE FOR GENERAL ARRANGEMENT PURPOSES ONLY. ACTUAL FOUNDATION AND SUBSTRUCTURE DESIGN, APPROACH RAILING, GROUNDING AND CLEARANCES, (FLOOD PLAIN, ROADWAY, AND WATERWAY) ARE THE RESPONSIBILITY OF OTHERS.

9. THE BRIDGE SHALL BE SUPPLIED WITH 4 1/4" DEEP 7 GAGE GALVANIZED BRIDGE PLANKING AND 1/4" PLATE, GALVANIZED SIDE DAMS.

10. BRIDGE SHALL BE FABRICATED BY A FABRICATOR WHO IS CURRENTLY CERTIFIED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION TO HAVE THE PERSONNEL, ORGANIZATION, EXPERIENCE, CAPACITY, AND COMMITMENT TO PRODUCE FABRICATED STRUCTURAL STEEL FOR THE CATEGORY "MAJOR STEEL BRIDGES" AS SET FORTH IN THE AISC CERTIFICATION PROGRAM WITH FRACTURE CRITICAL ENDORSEMENT. QUALITY CONTROL SHALL BE IN ACCORDANCE WITH PROCEDURES OUTLINED FOR AISC CERTIFICATION.

DESIGN CRITERIA

(1) DEAD LOAD CONSISTING OF STEEL SELFWEIGHT, BRIDGE PLANKING AND ASPHALT DECK WITH A UNIT WEIGHT OF 135 PCF.

(2) HS20 AASHTO LIVE LOADING WITH IMPACT, (2 LANES) OR (1)158,353 LB SIX AXLE VEHICLE.

(3) 450 PLF WIND LOADING.

(4) SEISMIC LOADING IN ACCORDANCE WITH AASHTO (ACCELERATION COEFFICIENT (A) = 0.4, SITE COEFFICIENT (S) = 1.5).

(5) AASHTO DAILY TRUCK TRAFFIC, (ADTT), OF 2500 OR LESS WITH 100,000 CYCLES OF MAXIMUM STRESS.

(6)12 PSF DEAD LOAD ALLOWABLE FOR 1" FUTURE ASPHALT OVERLAY.

REGISTERED PROFESSIONAL ENGINEER STEVEN J. HERTH No. C040130 Exp 6-30-10 CIVIL STATE OF CALIFORNIA

6/13/10

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1	REVISED STEP HEIGHT, & STRINGER SIZE	11/12/03	MDM	SJH
2	REVISED BEARING PAD	2/24/10	MDM	SJH
3	REVISED CRANE LOAD NOTE	4/9/10	MDM	SJH

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SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

BAUER BRIDGE
BRIDGE GENERAL NOTES, ELEVATION & PLAN

DRAWN BY: MDM	DATE: 10/12/09	SCALE:	W.O.	REV.
CHECKED BY:	DATE:			
APPROVED BY:	DATE:			
CAD NO.:	PLOT SCALE:			

06-P87-P88-B5

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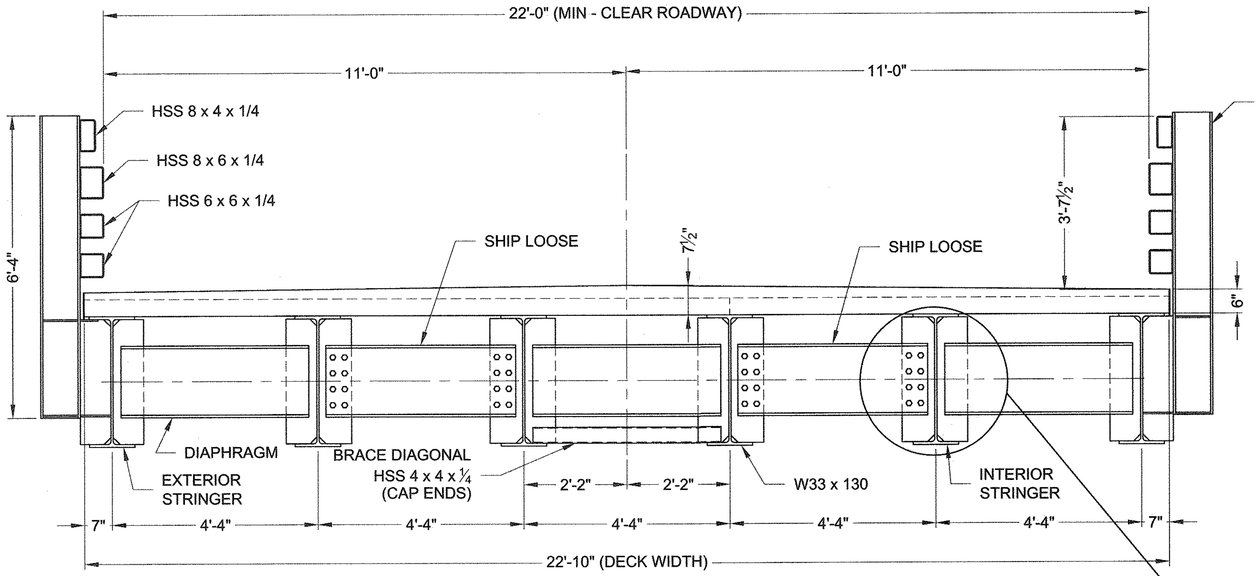
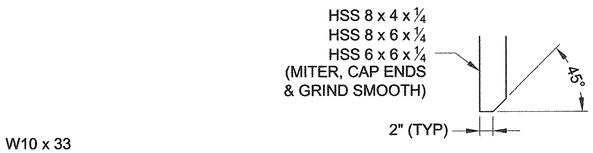
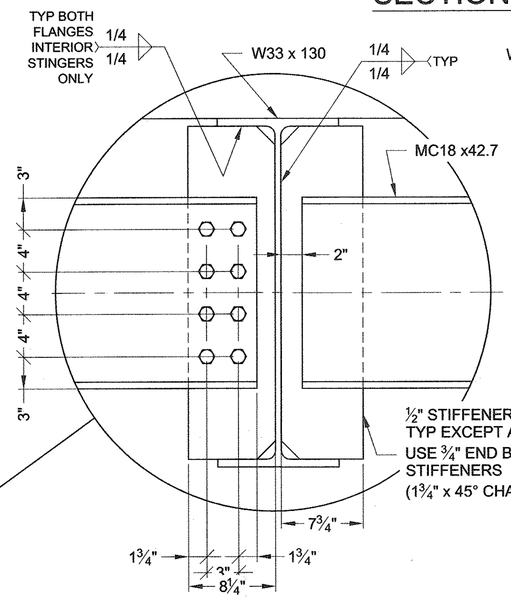
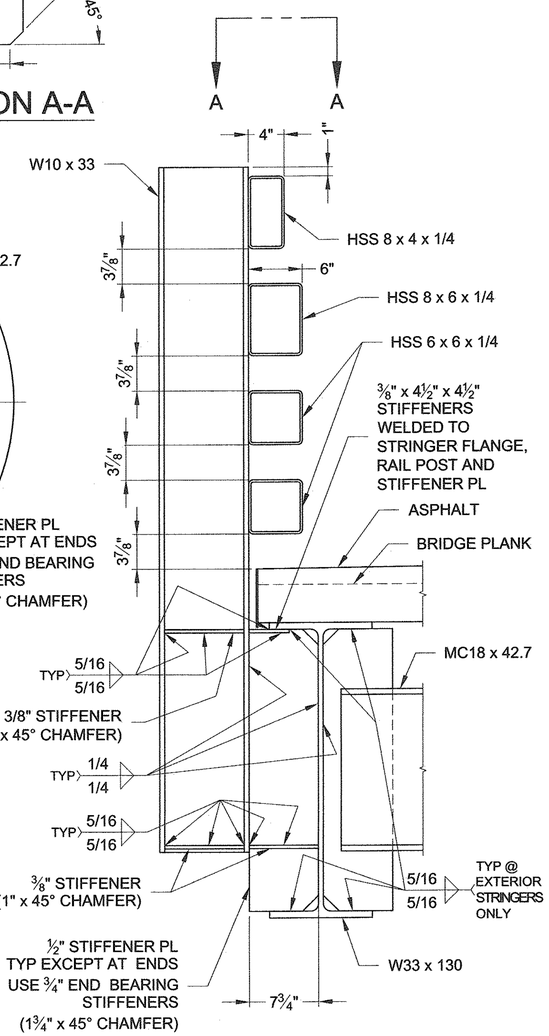


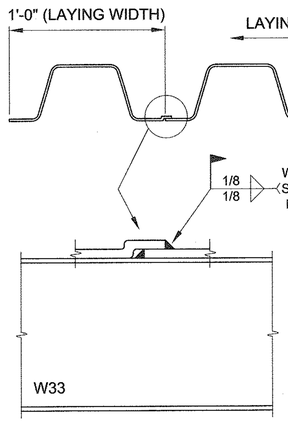
BRIDGE SECTION

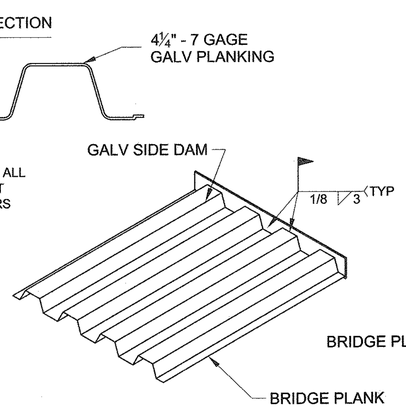


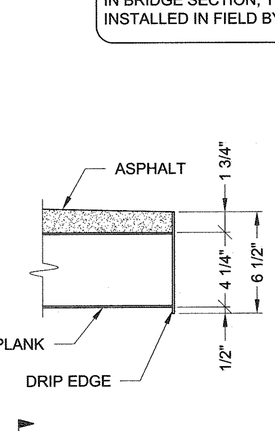
SECTION A-A

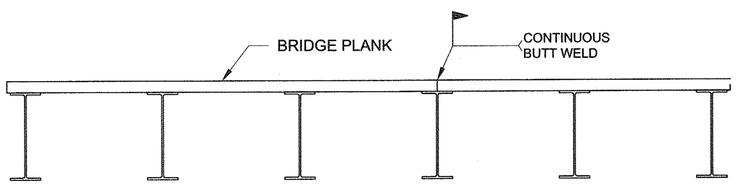










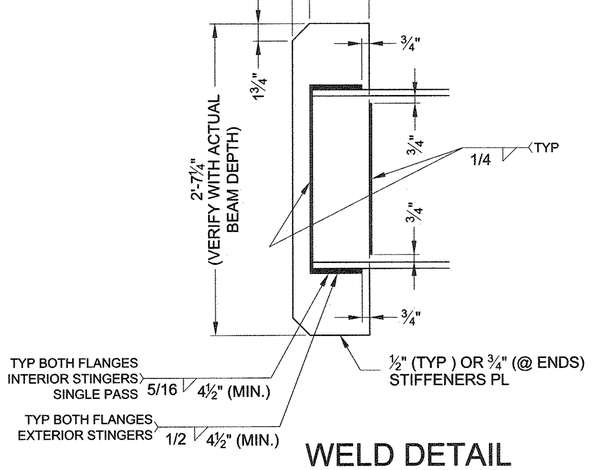


CONTRACTOR NOTE:
INSTALLATION SHALL BE IN ACCORDANCE WITH THE PLANS & SPECIFICATIONS AND MANUFACUTRER'S RECOMMENDATIONS.
WELD HOLES SHALL BE REQUIRED AT ALL STRINGERS WITH WEEP HOLES LOCATED AT THE ¼ POINTS OF THE SPAN BETWEEN EACH STRINGER

BRIDGE PLANK DETAILS

BRIDGE PLANKS SHIPPED LOOSE AND INSTALLED IN FIELD BY OTHERS

SHIP LOOSE MC 18 x 42.7, AS SHOWN IN BRIDGE SECTION, TO BE INSTALLED IN FIELD BY CONTRACTOR



WELD DETAIL

TEMPORARY WOOD RUNNING PLANKS AND GUARD RAILS REQUIRED DURING DEMOLITION OF THE EXISTING BRIDGE TO BE THE RESPONSIBILITY OF THE CONTRACTOR

4 / B5 VERTICAL CONNECTION

FULL PENETRATION WELD REQ'D ON BOTTOM EDGE OF STRINGER STIFFENER AT BEARING LOCATIONS ONLY (SEE SIDE VIEW BEARING DETAIL)

DPLU/BUILDING DIVISION
MAR 3 0 2010
County of San Diego
Plant Check

REGISTERED PROFESSIONAL ENGINEER
STEVEN J. HERTZ
No. C040130
Exp. 6-30-10
CIVIL
STATE OF CALIFORNIA
3/21/10

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REVISIONS

NO.	WORK DONE	DATE	BY:	APP'D:
1	REVISED STEP HEIGHT & STRINGER SIZE	11/12/03	MDM	SJH
2	REVISED BEARING PAD	2/24/10	MDM	SJH

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SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

BAUER BRIDGE
BRIDGE SECTION, RAILING SECTION & BRIDGE PLANK DETAILS

DRAWN BY: MDM	DATE: 10/12/09	SCALE:	W.O.	REV.
CHECKED BY:	DATE:		06-P87-P88-B6	
APPROVED BY:	DATE:			
CAD NO.:	PLOT SCALE:			

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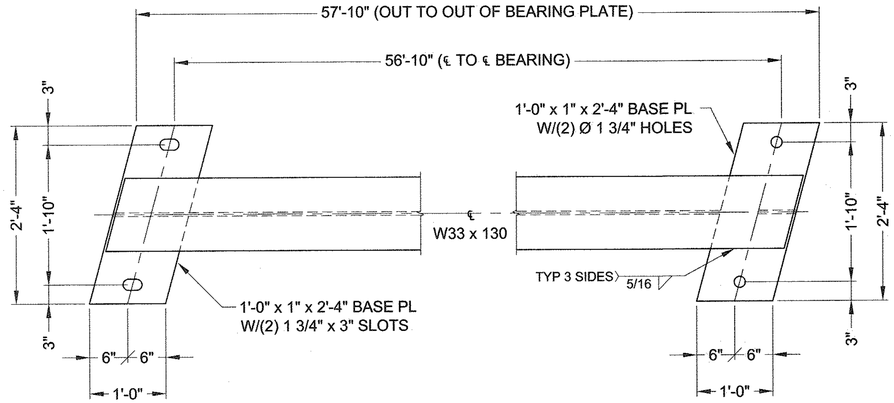
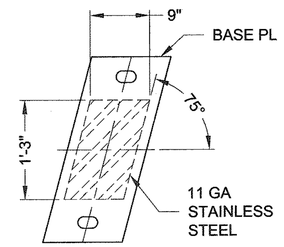
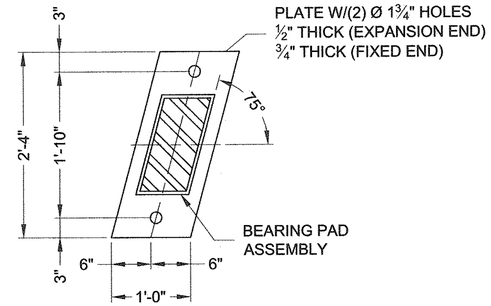


EXPANSION END FIXED END

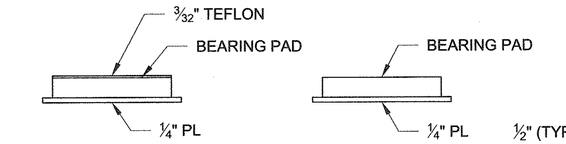
TYPICAL STRINGER BEARING



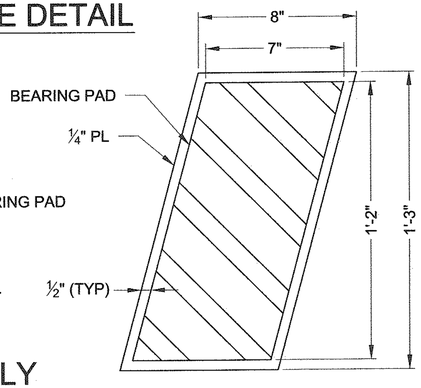
STAINLESS STEEL DETAIL



SETTING PLATE DETAIL



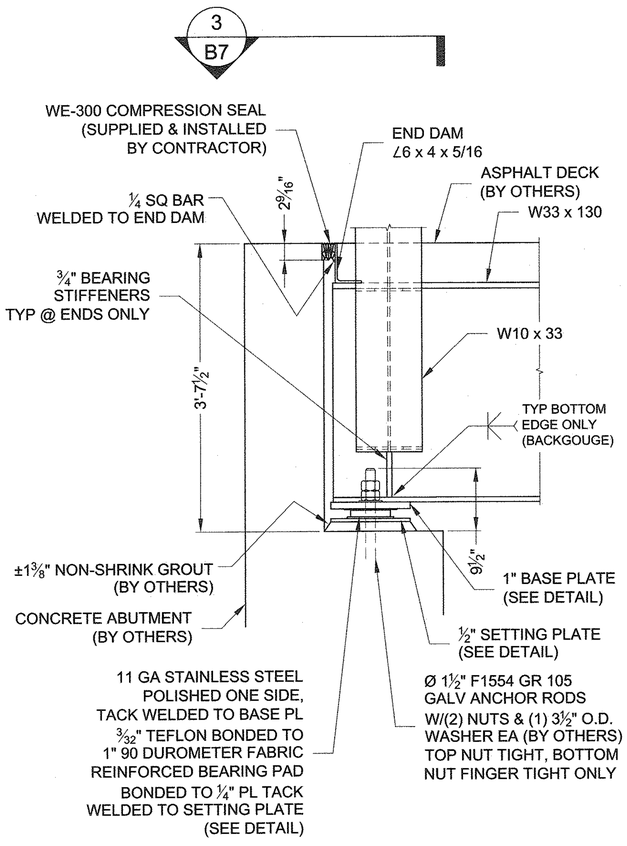
EXPANSION END FIXED END



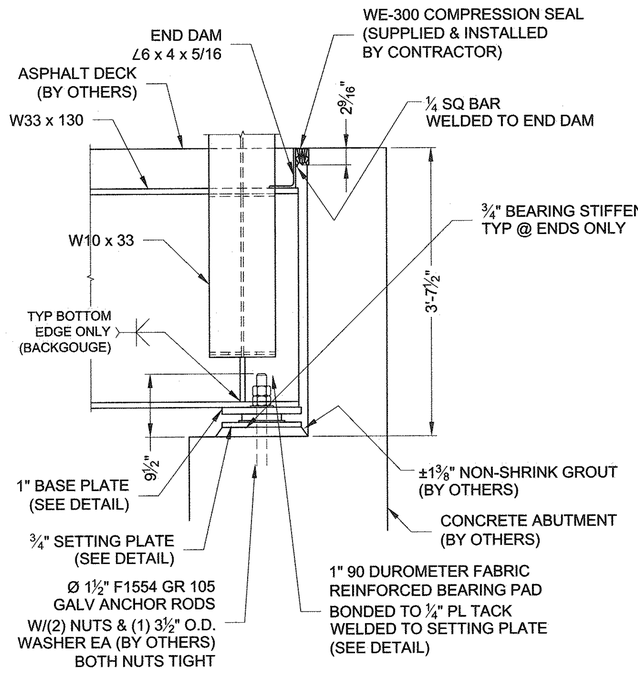
PLAN

BEARING PAD ASSEMBLY

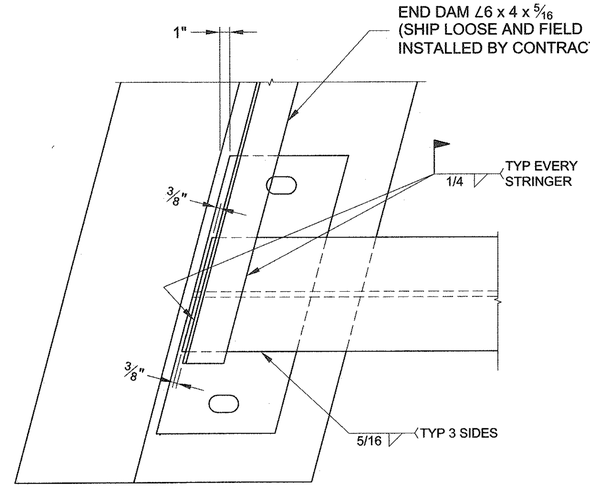
1" 90 DUROMETER AASHTO GRADE
FABRIC REINFORCED BEARING
PAD BONDED TO ¼" PLATE



1 / B5 SIDE VIEW BEARING
EXPANSION END



2 / B5 SIDE VIEW BEARING
FIXED END



3 / B7 END DAM DETAIL

DPLU-BUILDING DIVISION
MAR 30 2010
County of San Diego
Plan Check

REGISTERED PROFESSIONAL ENGINEER
STEVEN J. HERTZ
No. C040130
Exp. 6/30-10
CIVIL
STATE OF CALIFORNIA
3/24/10

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REVISIONS

NO.	WORK DONE	DATE	BY:	APP'D:
1	REVISED STEP HEIGHT & STRINGER SIZE	11/12/03	MDM	SJH
2	REVISED BEARING PAD	2/24/10	MDM	SJH

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BAUER BRIDGE
BRIDGE BEARING DETAILS

DRAWN BY: MDM	DATE: 10/12/09	SCALE:	W.O. / REV.
CHECKED BY:	DATE:		
APPROVED BY:	DATE:		
CAD NO.:	PLOT SCALE:		06-P87-P88-B7

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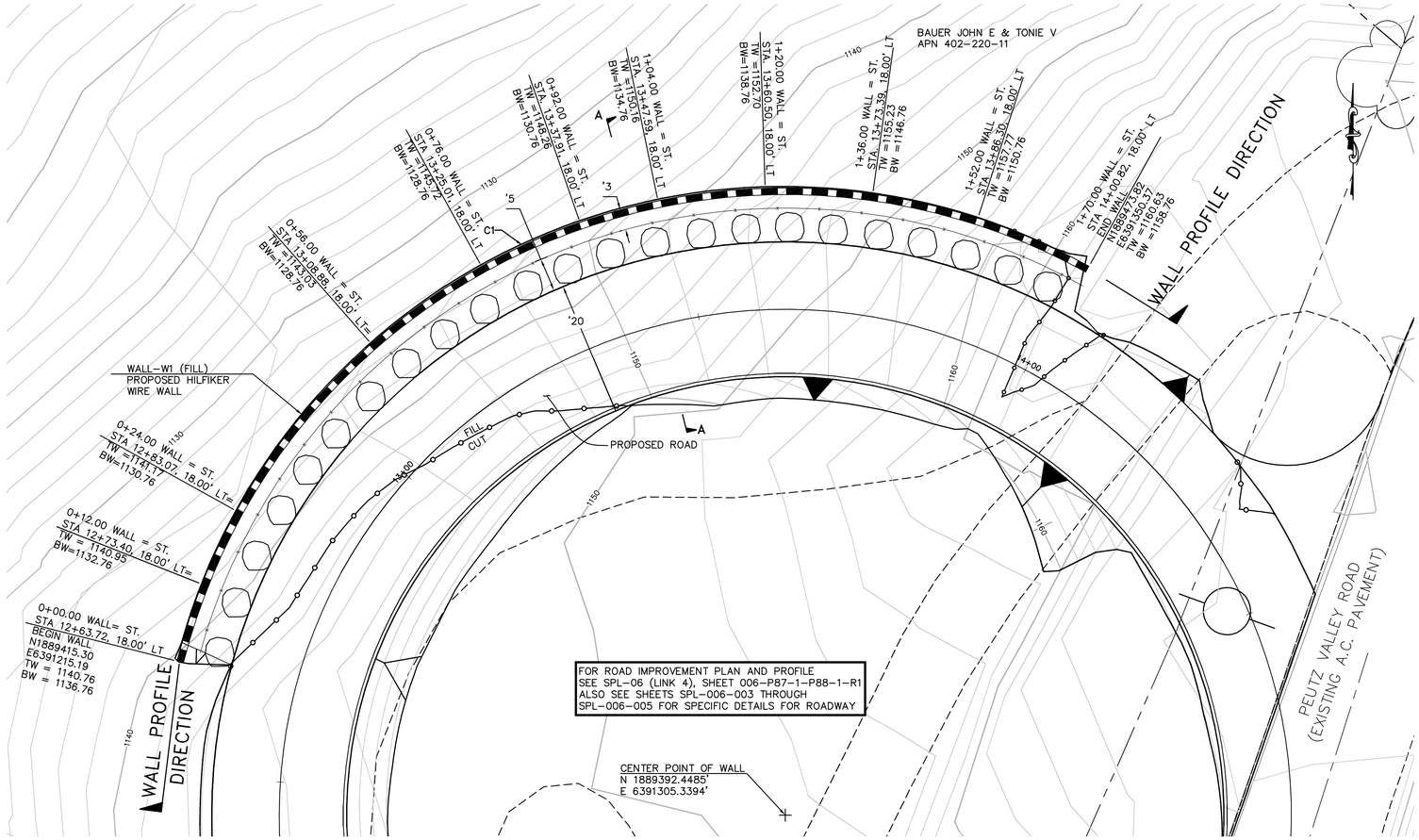
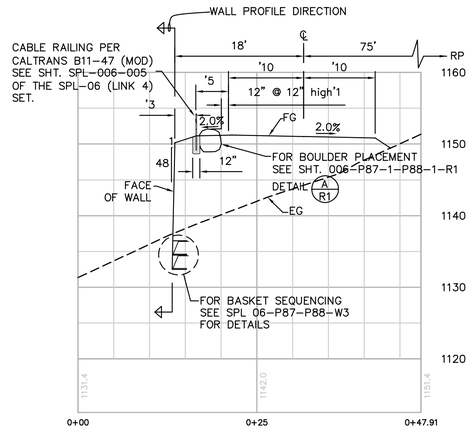


SITE P-87-1 & P-88-1 WALL PLAN

SCALE: 1" = 10'

CENTERLINE DATA			
NUMBER	RADIUS	LENGTH	BEARING/DELTA ANGLE
C1	93.00	170.00	104°44'14"

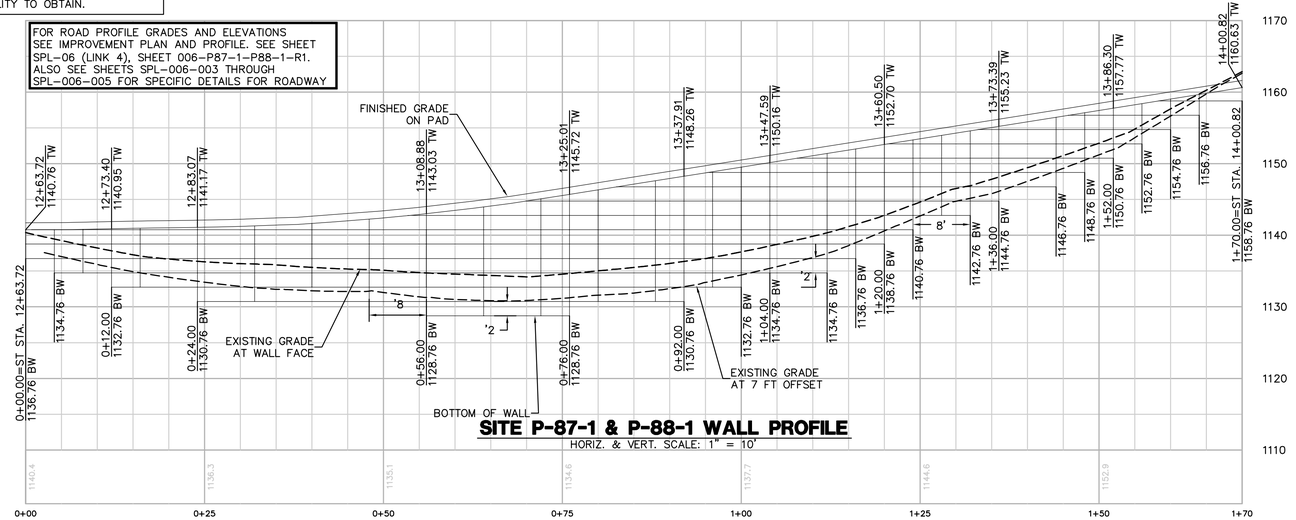


SITE P-87-1 & P-88-1 WALL SECTION AA

HORIZ. & VERT. SCALE: 1" = 10'

ALL QUANTITIES RELATED TO RETAINING WALLS WILL BE THE CONTRACTORS RESPONSIBILITY TO OBTAIN.

FOR ROAD PROFILE GRADES AND ELEVATIONS
SEE IMPROVEMENT PLAN AND PROFILE. SEE SHEET
SPL-06 (LINK 4), SHEET 006-P87-1-P88-1-R1.
ALSO SEE SHEETS SPL-006-003 THROUGH
SPL-006-005 FOR SPECIFIC DETAILS FOR ROADWAY



SITE P-87-1 & P-88-1 WALL PROFILE

HORIZ. & VERT. SCALE: 1" = 10'

REVISIONS

NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:

Bureau Veritas North America
11590 West Bernardo Court Suite 100
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www.us.bureauveritas.com

REGISTERED PROFESSIONAL ENGINEER
STEPHEN K. SMITH
NO. E 29708
Exp. 3-31-11
CIVIL
STATE OF CALIFORNIA

SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-06 (LINK 4) BAUER BRIDGE

SITE P-87-1 & P-88-1 WALL PLAN

DRAWN BY: 00	DATE:	SCALE: 1" = 30'	W.O.	REV. 0
CHECKED BY:	DATE:			
APPROVED BY:	DATE:			
CAD NO.:	PLOT SCALE: 1 = 1			

06-P87-P88-W1

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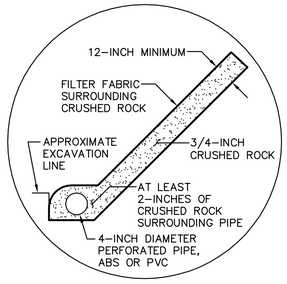
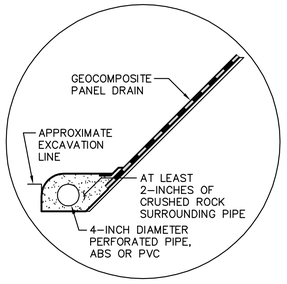


ROCK BLANKET ALTERNATIVE



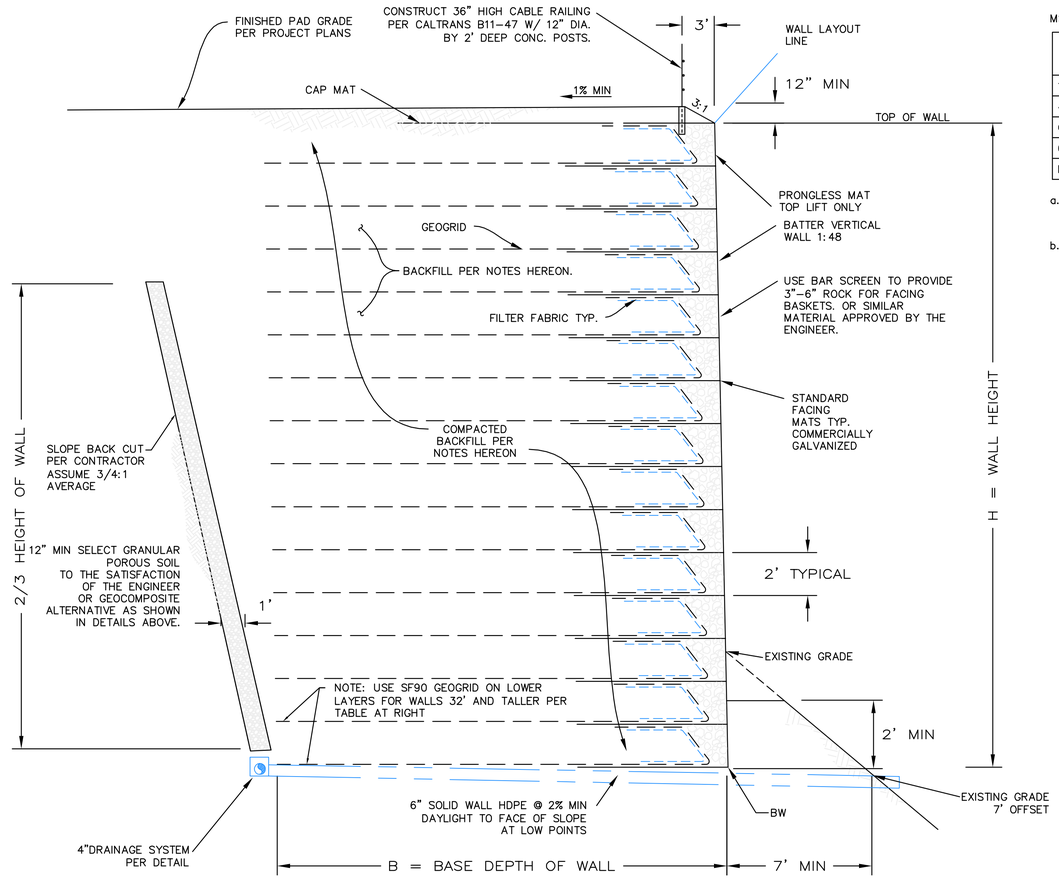
GEOCOMPOSITE PANEL ALTERNATIVE

WALL BACK DRAINAGE NOTES:

1. PERFORATED PIPE SHOULD OUTLET THROUGH A SOLID PIPE TO A FREE GRAVITY OUTFALL AT MAX 100' SPACING. PERFORATED PIPE AND OUTLET PIPE SHOULD HAVE A FALL OF AT LEAST 2%.
2. FILTER FABRIC SHOULD CONSIST OF MIRAFI 140N, OR SIMILAR APPROVED PRODUCT. FILTER FABRIC SHOULD BE OVERLAPPED PER MANUFACTURES INSTRUCTIONS.
3. DRAIN INSTALLATION SHOULD BE OBSERVED BY THE GEOTECHNICAL ENGINEER PRIOR TO BACK FILLING.
4. SUBSURFACE BACK DRAINAGE MAY BE REDUCED IF THE SOILS USED IN THE REINFORCED AND RETAINED ZONES ARE RELATIVELY "FREE DRAINING" AS APPROVED BY GEOTECHNICAL ENGINEER. **CONTRACTOR TO ASSUME 20 PERCENT OF WALL SQUARE FOOTAGE REQUIRES BACK DRAINAGE.**
5. IF ROCK BLANKET BACK DRAIN ROCK IS SUBSTITUTED WITH CALTRANS CLASS II PERMEABLE AGGREGATE THE FILTER FABRIC CAN BE ELIMINATED.

MSE WALL BACKFILL NOTES:

1. CONTRACTOR IS ADVISED THAT MOST ONSITE SOILS WILL BE VIABLE FOR MSE WALL BACKFILL UTILIZING 3" TO 4" BAR SCREEN TO CONFORM SOILS TO FOLLOWING TABLE BELOW CARE SHOULD BE TAKEN TO SELECT BACKFILL MATERIAL THAT IS FREE OF EXCESSIVE FINES AND ORGANIC MATERIAL.
2. CONTRACTOR TO OBTAIN GEOTECHNICAL APPROVAL OF BOTTOM CUT AND 7' OFFSET FROM SLOPE FACE PRIOR TO PLACEMENT OF ANY GEOGRID OR WIRE MATS. MSE RETAINING WALLS SHOULD BE FOUNDED ON PROPERLY COMPACTED OR RELATIVELY UNDISTURBED WEATHERED GRANITIC ROCK MATERIALS AS APPROVED BY THE GEOTECHNICAL ENGINEER.
3. GEOTECH ENGINEER AND MANUFACTURER'S REPRESENTATIVE SHALL OBSERVE AND APPROVE BACKFILL MATERIALS AND PROCEDURES DURING BACKFILL AND CONSTRUCTION



TYPICAL HILFIKER WELDED WIRE WALL SECTION

NTS

MSE WALL BACKFILL GRADATION REQUIREMENTS

SEIVE SIZE	RECOMMENDED GRADATION PERCENT PASSING BY WEIGHT
100mm (4 INCH)	100–75
4.76mm (NO. 4)	20–100
0.425mm (NO. 40)	0–60
0.075mm (NO. 200)	0–35
PLASTICITY INDEX (PI)	< 20

a. A PI < 8 IS RECOMMENDED TO MINIMIZE EXPANSIVE POTENTIAL AND PROVIDE SUITABLE DRAINAGE CHARACTERISTICS

b. mm – MILLIMETERS

MSE WALL GEOGRID LENGTHS

PRELIMINARY MIN. SOIL DESIGN PARAMETERS Ø =|35° DENSITY < 130 PCF	
HEIGHT (FT)	B= BASE DEPTH OF WALL
8'	9'
10'	10'
12'	10'
14'	12'
16'	13'
18'	15'
20'	16'
22'	18'
24'	20'
26'	21'
28'	23'
30'	24'
32'	26'–2–14*

* B DIST. – BOTTOM GRIDS WITH SF90 GEOGRID
– TOP REMAINING GRIDS WITH SF65 GEOGRID

MSE WALL GEOGRID SPECIFICATIONS

WWW.SYNTEEN.COM, OR EQUAL APPROVED BY ENGINEER

SF 90
SOIL REINFORCEMENT GEOGRID
UNIAXIAL GEOGRID
THE STRENGTH IS IN THE LENGTH DIRECTION

SF 90 IS COMPOSED OF HIGH MOLECULAR WEIGHT, HIGH TENACITY MULTIFILAMENT POLYESTER YARNS THAT ARE WOVEN INTO A STABLE NETWORK PLACED UNDER TENSION. THE HIGH STRENGTH POLYESTER YARNS ARE COATED WITH A PVC MATERIAL. SF SERIES GEOGRIDS ARE INERT TO BIOLOGICAL DEGRADATION AND ARE RESISTANT TO NATURALLY ENCOUNTERED CHEMICALS, ALKALIS AND ACIDS. SF SERIES GEOGRIDS ARE TYPICALLY USED FOR SOIL REINFORCEMENT APPLICATIONS SUCH AS RETAINING WALLS, STEEPENED SLOPES, EMBANKMENTS, SUBGRADE STABILIZATION, AND EMBANKMENTS OVER SOFT SOILS AND WASTE CONTAINMENT APPLICATIONS.

TENSILE PROPERTIES	TEST METHOD	MARV VALUES (LBS/FT)
ULTIMATE STRENGTH	ASTM D 6637	8500
CREEP LIMITED STRENGTH	ASTM D 5262	5483
T_{AL} = LONG TERM DESIGN STRENGTH	NCMA 97 *	4747
APERTURE SIZE (INS.)	MEASURED	0.75 x 0.75 OR SITE SPECIFIC AS REQUIRED

REDUCTION FACTOR FOR CREEP 1.55, REDUCTION FACTOR FOR DURABILITY 1.10 REDUCTION FACTOR FOR INSTALLATION DAMAGE (TYPE 3 SOIL) 1.05

FHWA/AASHTO REDUCTION FACTOR FOR CREEP 1.55, REDUCTION FACTOR FOR DURABILITY 1.15, REDUCTION FACTOR FOR INSTALLATION DAMAGE (TYPE 3 SOIL) 1.03

GRI GG4B REDUCTION FACTOR FOR CREEP 1.75, REDUCTION FACTOR FOR DURABILITY 1.10 REDUCTION FACTOR FOR INSTALLATION DAMAGE (TYPE 3 SOIL) 1.05

WWW.SYNTEEN.COM, OR EQUAL APPROVED BY ENGINEER

SF 65
SOIL REINFORCEMENT GEOGRID
UNIAXIAL GEOGRID
THE STRENGTH IS IN THE LENGTH DIRECTION

SF 65 IS COMPOSED OF HIGH MOLECULAR WEIGHT, HIGH TENACITY MULTIFILAMENT POLYESTER YARNS THAT ARE WOVEN INTO A STABLE NETWORK PLACED UNDER TENSION. THE HIGH STRENGTH POLYESTER YARNS ARE COATED WITH A PVC MATERIAL. SF SERIES GEOGRIDS ARE INERT TO BIOLOGICAL DEGRADATION AND ARE RESISTANT TO NATURALLY ENCOUNTERED CHEMICALS, ALKALIS AND ACIDS. SF SERIES GEOGRIDS ARE TYPICALLY USED FOR SOIL REINFORCEMENT APPLICATIONS SUCH AS RETAINING WALLS, STEEPENED SLOPES, EMBANKMENTS, SUBGRADE STABILIZATION, AND EMBANKMENTS OVER SOFT SOILS AND WASTE CONTAINMENT APPLICATIONS.

FEBRUARY, 2006

TENSILE PROPERTIES	TEST METHOD	MARV VALUES (LBS/FT)
ULTIMATE STRENGTH	ASTM D 6637	6000
CREEP LIMITED STRENGTH	ASTM D 5262	3871
T_{AL} = LONG TERM DESIGN STRENGTH	NCMA 97	3373
APERTURE SIZE (INS.)	MEASURED	0.75 x 0.75

RF CREEP – 1.55
RF DURABILITY – 1.10
RF INSTALLATION DAMAGE (SOIL TYPE 3) – 1.05

NOTE: SEE ADDITIONAL DETAILS ON SHEETS W3 & W4

P:\16919 SDG&E SPL\CADD\06\dwg\plan\006 BAUER BR\06-BC06 DETAIL.dwg[JMay-26-20100918

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REGISTERED PROFESSIONAL ENGINEER STEPHEN K. SMITH NO. 29708 Exp. 3-31-11 CIVIL STATE OF CALIFORNIA

REVISIONS

NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:	NO.	WORK DONE	DATE	BY:	APP'D:

SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL–06 (LINK 4) BAUER BRIDGE
Detail Sheet

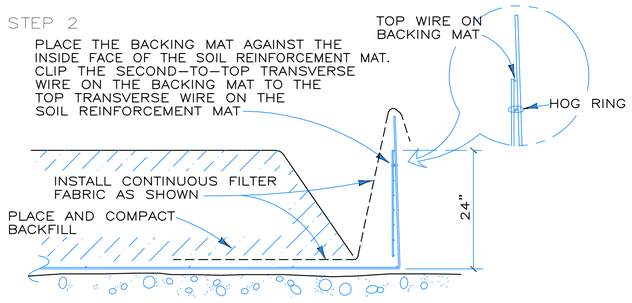
DRAWN BY: 00	DATE:	SCALE: NTS	W.O.	REV. 0	06–P87–P88–W2
CHECKED BY:	DATE:				
APPROVED BY:	DATE:				
CAD NO.:	PLOT SCALE: 1 = 1				

STEP 1

PLACE THE FIRST COURSE OF SOIL REINFORCEMENT MATS ON PREPARED FOUNDATION

STEP 2

PLACE THE BACKING MAT AGAINST THE INSIDE FACE OF THE SOIL REINFORCEMENT MAT. CLIP THE SECOND–TO–TOP TRANSVERSE WIRE ON THE BACKING MAT TO THE TOP TRANSVERSE WIRE ON THE SOIL REINFORCEMENT MAT

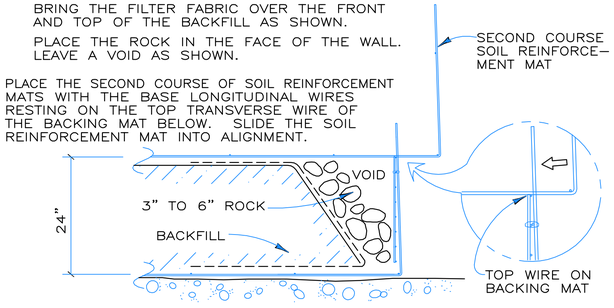


STEP 3

BRING THE FILTER FABRIC OVER THE FRONT AND TOP OF THE BACKFILL AS SHOWN.

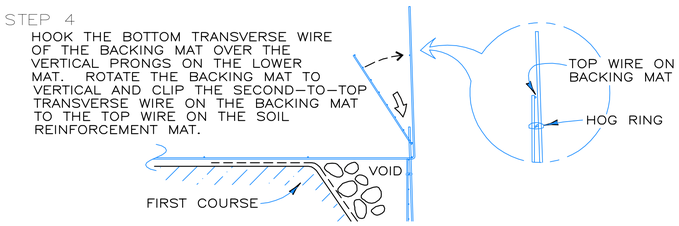
PLACE THE ROCK IN THE FACE OF THE WALL. LEAVE A VOID AS SHOWN.

PLACE THE SECOND COURSE OF SOIL REINFORCEMENT MATS WITH THE BASE LONGITUDINAL WIRES RESTING ON THE TOP TRANSVERSE WIRE OF THE BACKING MAT BELOW. SLIDE THE SOIL REINFORCEMENT MAT INTO ALIGNMENT.



STEP 4

HOOK THE BOTTOM TRANSVERSE WIRE OF THE BACKING MAT OVER THE VERTICAL PRONGS ON THE LOWER MAT. ROTATE THE BACKING MAT TO VERTICAL AND CLIP THE SECOND–TO–TOP TRANSVERSE WIRE ON THE BACKING MAT TO THE TOP WIRE ON THE SOIL REINFORCEMENT MAT.

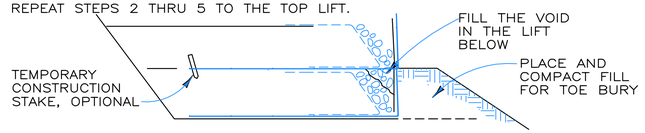


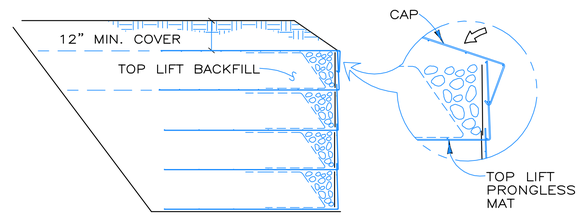
STEP 5

INSTALL THE FILTER FABRIC AS IN STEPS 2 AND 3.

PLACE AND COMPACT THE BACKFILL AND ROCK TO THE BASE ELEVATION OF THE NEXT MAT.

REPEAT STEPS 2 THRU 5 TO THE TOP LIFT.





STEP 6: TOP LIFT

PLACE THE TOP LIFT PRONGLESS MAT, BACKING MAT AND FILTER FABRIC.

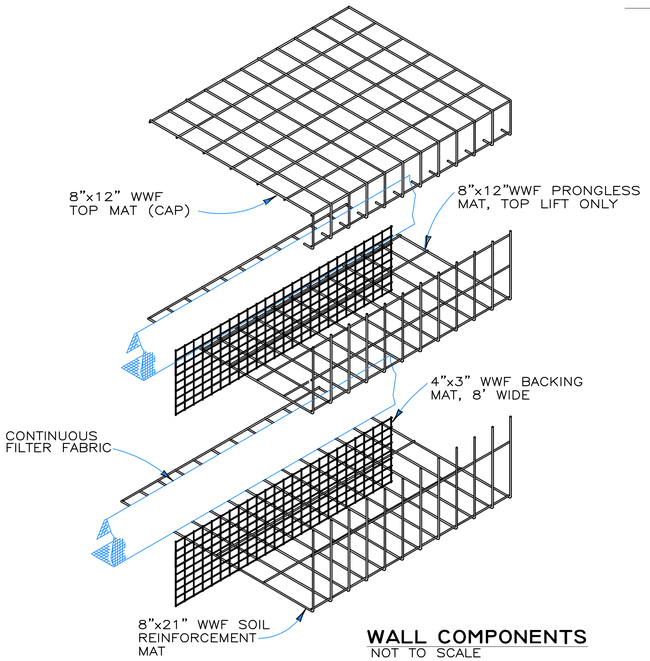
PLACE AND COMPACT BACKFILL AND ROCK IN THE TOP LIFT.

HOOK THE CAP OVER THE MIDDLE TRANSVERSE WIRE ON THE PRONGLESS MAT, AND ROTATE INTO PLACE

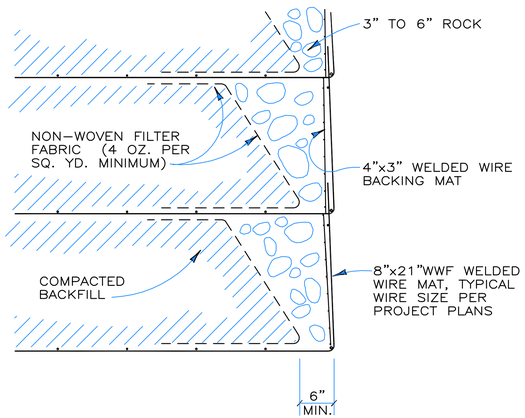
PLACE AND COMPACT COVER OVER TOP MAT TO 12" MINIMUM DEPTH.

CONSTRUCTION SEQUENCE

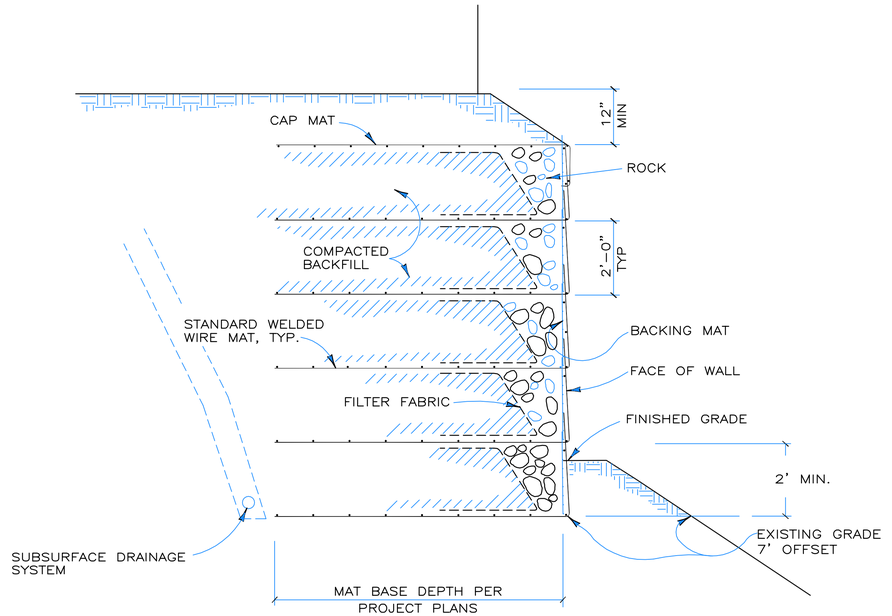
NOT TO SCALE



WALL COMPONENTS
NOT TO SCALE



ROCK–FACE DETAIL
NOT TO SCALE



TYPICAL SECTION

HILFIKER RETAINING WALLS

1902 Hilfiker Lane
Eureka, CA 95503-5711
TOLL-FREE **800.762.8962**
PH **707.443.5093** FAX **707.443.2891**
WEB SITE www.hilfiker.com E-MAIL info@hilfiker.com

SINCE 1902 QUALITY PRODUCTS

Bureau Veritas North America
11590 West Bernardo Court Suite 100
San Diego, CA 92127-1624
Tel: (858) 451-6100 Fax: (858) 451-2846
www.us.bureauveritas.com

REGISTERED PROFESSIONAL ENGINEER — STEPHEN K. SMITH — RCE 29108 — Exp.3-31-11 — CIVIL — STATE OF CALIFORNIA

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SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL–06 (LINK 4) BAUER BRIDGE
Detail Sheet

DRAWN BY: 00	DATE:	SCALE: NTS	W.O.	REV. 0	06–P87–P88–W3
CHECKED BY:	DATE:				
APPROVED BY:	DATE:				
CAD NO.:	PLOT SCALE: 1 = 1				

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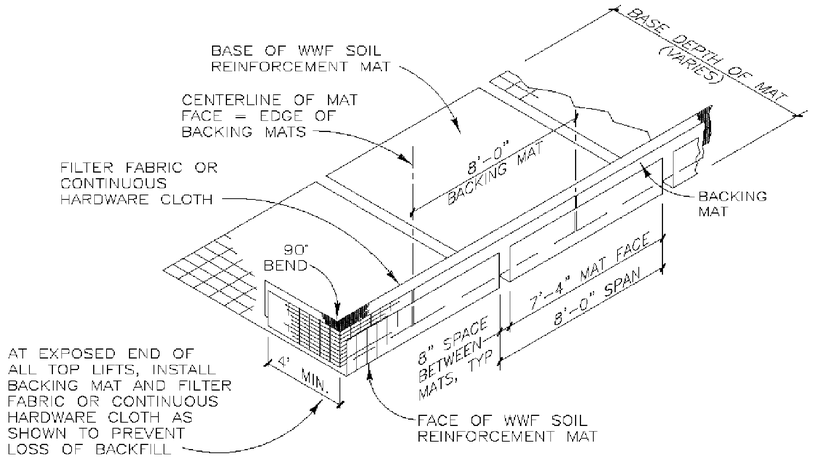
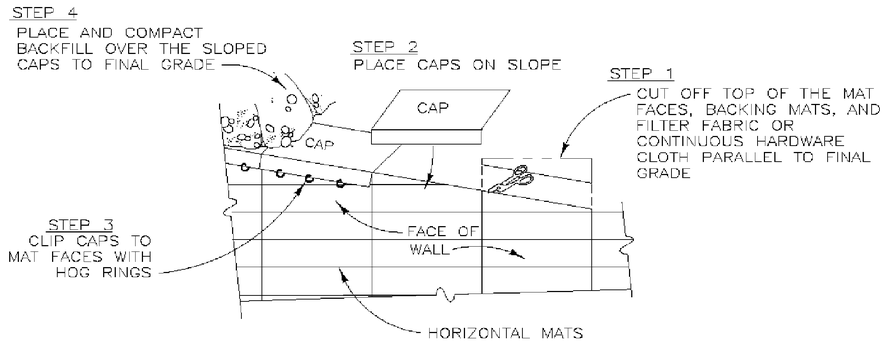


ISOMETRIC VIEW

WELDED WIRE WALL COMPONENTS WITH RETURN MAT

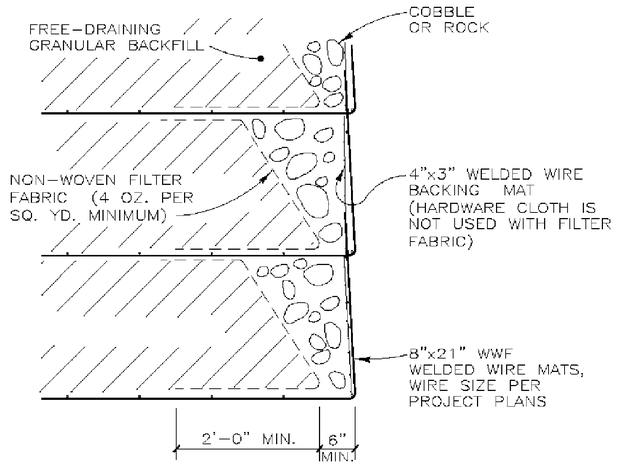
NOT TO SCALE



PICTORIAL ELEVATION

SLOPED CAP MAT DETAIL

NOT TO SCALE



SECTION

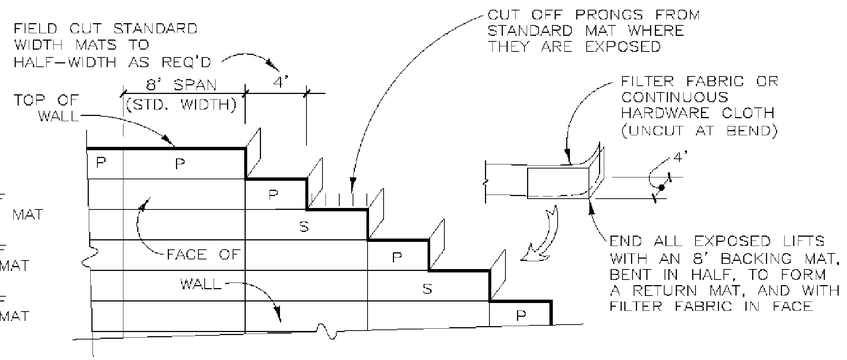
ROCK FACING DETAIL

NOT TO SCALE

LEGEND

(THIS DETAIL ONLY)

P	8"x12" WWF PRONGLESS MAT
S	8"X12" WWF STANDARD MAT
	8"X21" WWF STANDARD MAT



RETURN MATS AND TOP OF WALL DETAIL

NOT TO SCALE

HILFIKER RETAINING WALLS

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Eureka, CA 95503-5711
TOLL-FREE **800.762.8962**
PH **707.443.5093** FAX **707.443.2891**
WEB SITE www.hilfiker.com E-MAIL info@hilfiker.com

P:\16919 SDG&E SPL\CADD\06\dwg\plan\006 BAUER BR\06-BC08 DETAIL.dwg DMoy-26-20100916

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REGISTERED PROFESSIONAL ENGINEER — STEPHEN K. SMITH — RCE 29708 — Exp.3-31-11 — CIVIL — STATE OF CALIFORNIA

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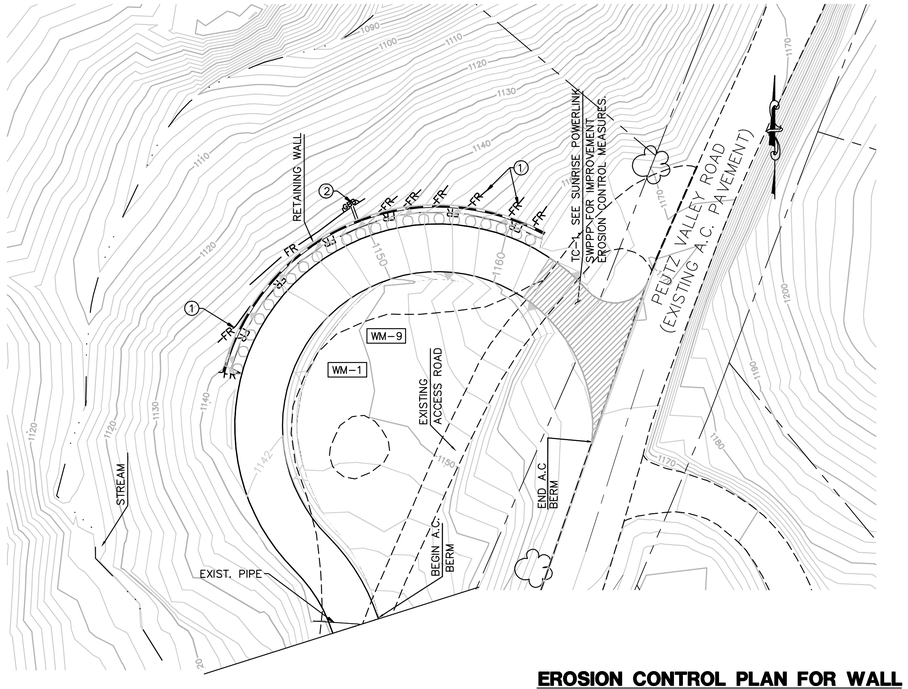
SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-06 (LINK 4) BAUER BRIDGE
Detail Sheet

DRAWN BY: OO	DATE:	SCALE: NTS	W.O.	REV. 0	06-P87-P88-W4
CHECKED BY:	DATE:				
APPROVED BY:	DATE:				
CAD NO.:	PLOT SCALE: 1 = 1				

LEGEND

DESCRIPTION	SEE CON. NOTE #	CALTRANS/ SDG&E WATER QUALITY CONSTRUCTION BMP MANUAL STD. DWG.	SYMBOL
GRADED SWALE			
FIBER ROLLS	1	SC-5/BMP 1-03	FR
GRAVEL BAG BERM	2	SC-6/BMP 1-04	GBB
MATERIAL DELIVERY & STORAGE		WM-1	WM-1
SANITARY WASTE MANAGEMENT		WM-9	WM-9



EROSION CONTROL PLAN FOR WALL

SCALE: 1" = 30'

GRAPHIC SCALE

30 0 30 60

1"=30'

CONSTRUCTION NOTES

1. INSTALL FIBER ROLLS. SEE BMP SHEETS SC-5/BMP 1-03 FOR INSTALLATION, MAINTENANCE, AND INSPECTION INSTRUCTIONS AND PROCEDURES.
2. INSTALL GRAVEL BAG BERM, TWO BAGS HIGH AT SUBDRAIN OUTLET PIPE. SEE BMP SHEETS SC-6/BMP 1-04 FOR INSTALLATION, MAINTENANCE, AND INSPECTION INSTRUCTIONS AND PROCEDURES.

EROSION AND SEDIMENT CONTROL NOTES:

1. FOR BMP SHEETS REFER TO CALTRANS (MARCH 2003) AND SDG&E WATER QUALITY CONSTRUCTION BEST MANAGEMENT PRACTICES MANUAL (DECEMBER 2002) AND PROJECT'S FINAL APPROVED SWPPP.
2. CONTRACTOR TO IMPLEMENT STREET SWEEPING AND VACUUMING (PER BMP SHEET SC-7/BMP 1-07) ALONG ALL AREAS OF SOIL DISTURBANCE ALONG THE EXISTING ROADWAY.
3. VEHICLE AND EQUIPMENT CLEANING, FUELING, AND/OR MAINTENANCE (PER BMP SHEETS NS-8/BMP 3-03, NS-9/BMP 3-04, AND NS-10 RESPECTIVELY) SHALL NOT BE PERFORMED ON SITE.
4. IF DISCHARGES FROM IRRIGATION LINES, POTABLE WATER LINES, OR HYDRANT FLUSHING OCCUR ONSITE, CONTRACTOR MUST IMPLEMENT POTABLE WATER/IRRIGATION PER BMP SHEET NS-7, AS NECESSARY.
5. CONTRACTOR ALSO TO IMPLEMENT THE FOLLOWING CONSTRUCTION BMPS, AS NECESSARY:
   - SCHEDULING, PER BMP SHEETS EC-1/BMP 1-01
   - WIND EROSION CONTROL, PER BMP SHEETS WE-1/BMP 4-08
   - WATER CONSERVATION PRACTICES, PER BMP SHEET NS-1
   - ILLICIT CONNECTION/DISCHARGE, PER BMP SHEETS NS-6/BMP 2-06
6. NO WORK HAVING THE POTENTIAL TO CAUSE WATER POLLUTION, AS DETERMINED BY THE ENGINEER, SHALL BE PERFORMED UNTIL THE SWPPP HAS BEEN SUBMITTED TO THE ENGINEER BY THE CONTRACTOR, AND APPROVED.
7. THE CONTRACTOR SHALL CONSIDER OTHER CONTROL MEASURES, AS NECESSARY, TO SUPPLEMENT THE CRITICAL TEMPORARY CONTROL MEASURES SHOWN ON THESE PLANS, IN ORDER TO MEET THE POLLUTION CONTROL OBJECTIVES OF THE SWPPP.

P:\16919 SDG&E SPL\CADD\06\dwg\plan\006 BAUER BR\06-BC09 EC1.dwg[]May-26-2010:0916

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REVISIONS

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SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

EROSION CONTROL PLANS FOR SPL-06 (LINK 4)
ACCESS ROAD TO SITES P-87-1 & P-88-1

DRAWN BY: 00	DATE:	SCALE: 1" = 30'	W.O.	REV. 0	SPL 06-BEC01
CHECKED BY:	DATE:				
APPROVED BY:	DATE:				
CAD NO.:	PLOT SCALE: 1 = 1				

LEGEND

DESCRIPTION	SEE CON. NOTE #	CALTRANS/ SDG&E WATER QUALITY CONSTRUCTION BMP MANUAL STD. DWG.	SYMBOL
GRADED SWALE			
GRAVEL BAG BERM	(2)	SC-6/BMP 1-04	GBB
STREAMBANK STABILIZATION	(3)	SS-12	
STRUCTURE DEMOLITION/REMOVAL OVER OR ADJACENT TO WATERS	(4)	NS-15	
OVER-WATER PROTECTION	(5)	BMP 3-08	
CLEAR WATER DIVERSION	(6)	NS-5	
MATERIAL DELIVERY & STORAGE		WM-1	WM-1
SPILL PREVENTION AND CONTROL		WM-4	WM-4
CONCRETE WASTE MANAGEMENT		WM-8	WM-8
SANITARY WASTE MANAGEMENT		WM-9	WM-9

CONSTRUCTION NOTES

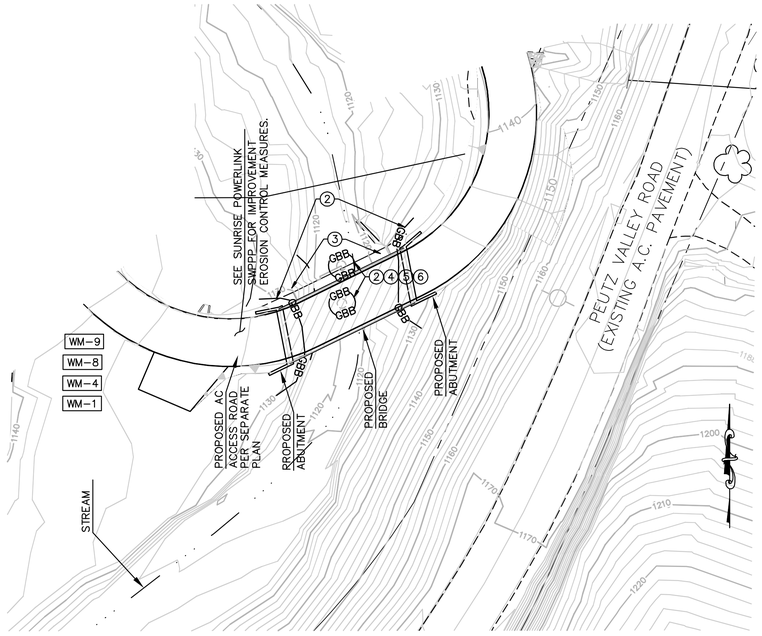
(2) INSTALL GRAVEL BAG BERM, TWO BAGS HIGH. SEE BMP SHEETS SC-6/BMP 1-04 FOR INSTALLATION, MAINTENANCE, AND INSPECTION INSTRUCTIONS AND PROCEDURES.

(3) INSTALL STREAMBANK STABILIZATION. SEE BMP SHEET SS-12 FOR APPLICATION, MAINTENANCE, AND INSPECTION INSTRUCTIONS AND PROCEDURES.

(4) PERFORM STRUCTURE DEMOLITION/REMOVAL OVER OR ADJACENT TO WATERS. SEE BMP SHEET NS-15 FOR APPLICATION, MAINTENANCE, AND INSPECTION INSTRUCTIONS AND PROCEDURES.

(5) INSTALL OVER-WATER PROTECTION. SEE BMP SHEET BMP 3-08 FOR APPLICATION, MAINTENANCE, AND INSPECTION INSTRUCTIONS AND PROCEDURES.

(6) INSTALL CLEAR WATER DIVERSION. SEE BMP SHEET NS-5 FOR APPLICATION, MAINTENANCE, AND INSPECTION INSTRUCTIONS AND PROCEDURES.



EROSION CONTROL PLAN FOR BRIDGE
SCALE: 1" = 30'

GRAPHIC SCALE
30 0 30 60
1"=30'

EROSION AND SEDIMENT CONTROL NOTES:

1. FOR BMP SHEETS REFER TO CALTRANS (MARCH 2003) AND SDG&E WATER QUALITY CONSTRUCTION BEST MANAGEMENT PRACTICES MANUAL (DECEMBER 2002) AND PROJECT'S FINAL APPROVED SWPPP.
2. CONTRACTOR TO IMPLEMENT STREET SWEEPING AND VACUUMING (PER BMP SHEET SC-7/BMP 1-07) ALONG ALL AREAS OF SOIL DISTURBANCE ALONG THE EXISTING ROADWAY.
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4. IF DISCHARGES FROM IRRIGATION LINES, POTABLE WATER LINES, OR HYDRANT FLUSHING OCCUR ONSITE, CONTRACTOR MUST IMPLEMENT POTABLE WATER/IRRIGATION PER BMP SHEET NS-7, AS NECESSARY.
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   - WIND EROSION CONTROL, PER BMP SHEETS WE-1/BMP 4-08
   - WATER CONSERVATION PRACTICES, PER BMP SHEET NS-1
   - ILLICIT CONNECTION/DISCHARGE, PER BMP SHEETS NS-6/BMP 2-06
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7. THE CONTRACTOR SHALL CONSIDER OTHER CONTROL MEASURES, AS NECESSARY, TO SUPPLEMENT THE CRITICAL TEMPORARY CONTROL MEASURES SHOWN ON THESE PLANS, IN ORDER TO MEET THE POLLUTION CONTROL OBJECTIVES OF THE SWPPP.

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SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

EROSION CONTROL PLANS FOR
SPL-06 (LINK 4) BAUER BRIDGE
ACCESS ROAD TO SITES P-87-1 & P-88-1

DRAWN BY: 00	DATE:	SCALE: 1" = 30'	W.O.	REV. 0	SPL 06-BEC02
CHECKED BY:	DATE:				
APPROVED BY:	DATE:				
CAD NO.:	PLOT SCALE: 1 = 1				

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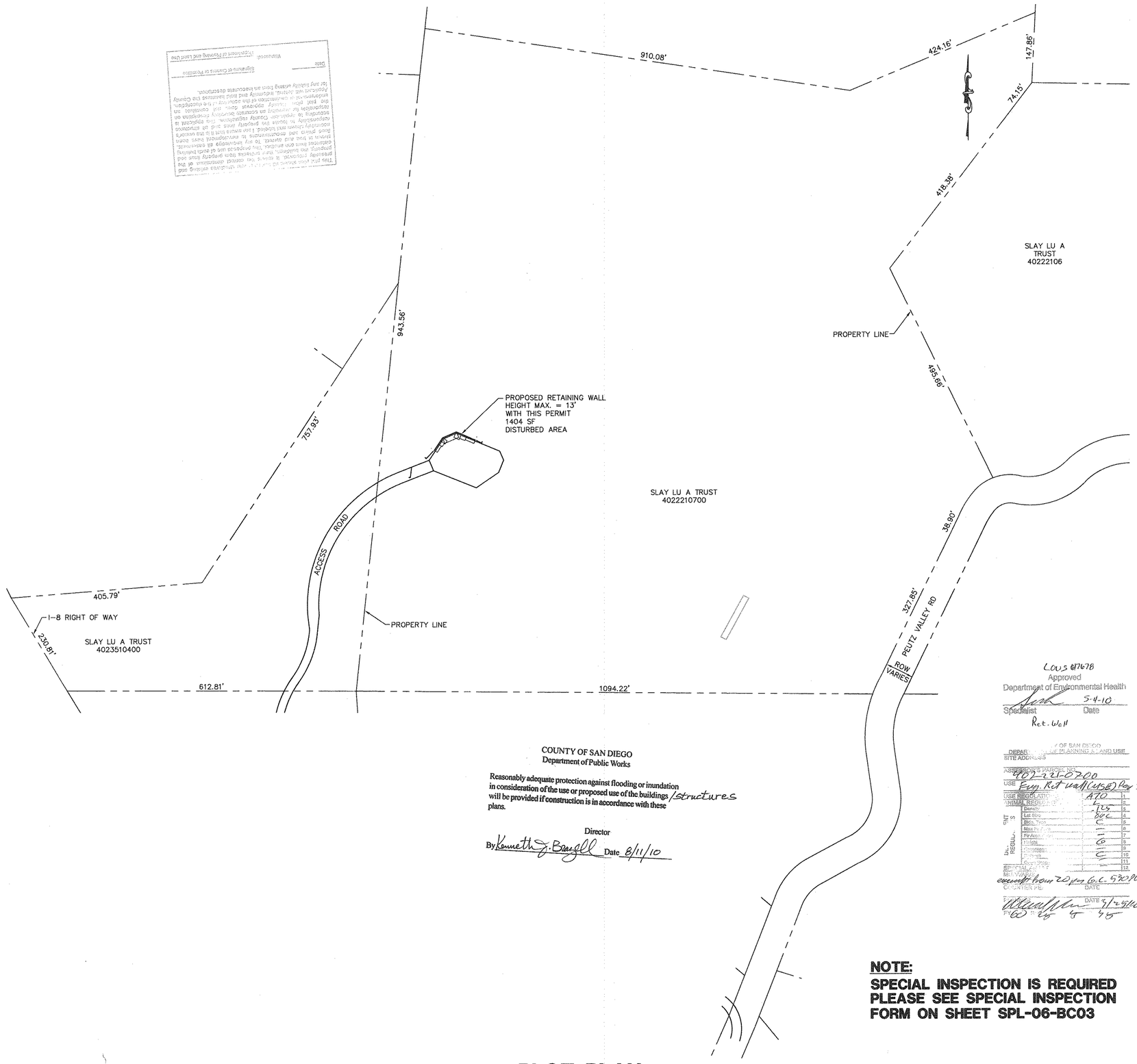

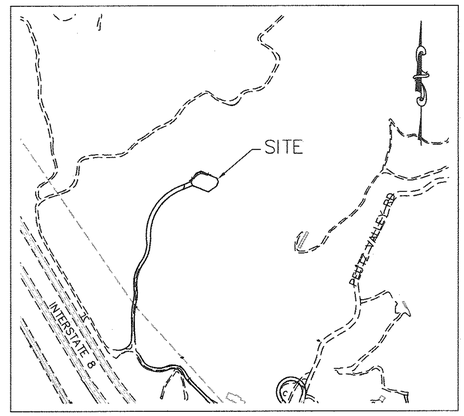

VICINITY MAP

NOT TO SCALE

APPLICANT
SAN DIEGO GAS & ELECTRIC
MS. MOLLY FRISBIE
(858)650-4078

PROPOSED
CONSTRUCTION OF RETAINING WALL

OWNER
LU ANN SLAY REVOCABLE TRUST
682 PEUTZ VALLEY ROAD
ALPINE, CA 91901

CONTACT
RICHARD J. WILSON OR LUIS ALARCON
BUREAU VERITAS
11590 W. BERNARDO COURT, SUITE 100
SAN DIEGO, CA 92127
(858) 451-6100

LEGEND
- - - - - PROPERTY LINE
— — — BUILDING SETBACK LINE (SBL)

ABBREVIATIONS

APN	ASSESSORS PARCEL NO.
CL	CENTER LINE
CPUC	CALIFORNIA PUBLIC UTILITY COMMISSION
EX.	EXISTING
ROW	RIGHT OF WAY
RD	ROAD
SBL	SET BACK LINE
EX.	EXISTING
SF	SQURE FOOT
SFD	SINGLE FAMILY DWELLING

LOUIS 87678
Approved
Department of Environmental Health
Specialist 5-4-10 Date
Ret. Wall

DEPARTMENT OF PLANNING AND LAND USE
SITE ADDRESS
ASSESSOR'S PARCEL NO. 402-221-07-00
USE Exp. Ret. Wall (LUEB) Pmt
USE REGULATION: ANIMAL REGULATIONS: Density, Lot Size, Bldg. Type, Max. Floor Area, Floor Area Ratio, Height, Coverage, Setback, Open Space, SPECIAL AREA REGULATIONS: Mobilehome Park, Coastal Zone, Design Review, Community, Airport Land Use Compatibility Plan
ZONE A70 4 | RS 5 | B-C 6 | C 7 | — 8 | C 9 | C 10 | — 11 | — 12
Surface Mounted Limbs
MINIMUM YARDS: FRONT 20 REAR 6 SIDES 5 STREET SIDE 10
OTHER REQUIREMENTS: DATE
APPROVED: DATE 7/29/10
FEES: 60 25 45 35

DPLU-BUILDING DIVISION
MAY. 07 2010
County of San Diego Plan Check

DPLU-BUILDING DIVISION
MAY. 04 2010
County of San Diego Plan Check

DPLU-BUILDING DIVISION
MAY. 10 2010
County of San Diego Plan Check

GRAPHIC SCALE
100 0 100 200
1"=100'

COUNTY OF SAN DIEGO
Department of Public Works

Reasonably adequate protection against flooding or inundation in consideration of the use or proposed use of the buildings /structures will be provided if construction is in accordance with these plans.

Director
By Kenneth J. Brazell Date 8/11/10

NOTE:
SPECIAL INSPECTION IS REQUIRED PLEASE SEE SPECIAL INSPECTION FORM ON SHEET SPL-06-BC03

REGISTERED PROFESSIONAL ENGINEER
RICHARD J. WILSON
C29834
Exp. 3-31-11
CIVIL
STATE OF CALIFORNIA

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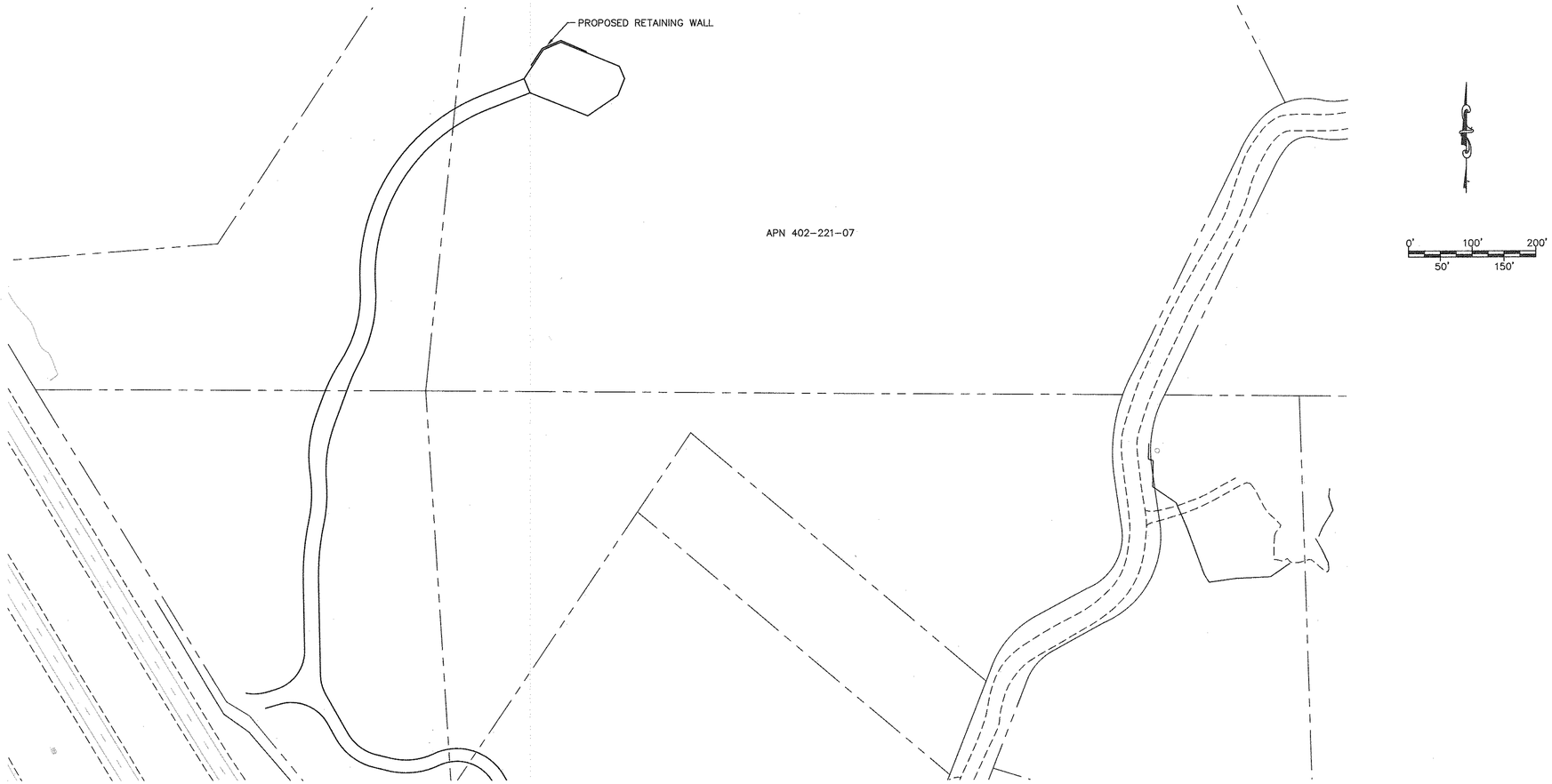
PLOT PLAN

SCALE: 1" = 100'

P:\16919 SDG&E SPL\CADD\06\dwg\plan\006 SLAY IMPS\006-SC01.dwg Mar-17-2010 09:43

SLAY IMPROVEMENT PLAN - APN 402-221-07
SAN DIEGO COUNTY BUILDING PERMIT SET



ON-SITE WORK TO BE DONE

SITE / ACCESS ROAD

PLOT PLAN
SITE PLAN
LEGEND AND GENERAL NOTES
SITES P87-1 & P88-1 WALL PLAN
MSE WALL DETAILS
MSE WALL DETAILS
MSE WALL DETAILS
EROSION CONTROL PLAN

SHEET NUMBER

SPL 06-SC01
SPL 06-SC02
SPL 06-SC03
SPL 06-SC04
SPL 06-SC05
SPL 06-SC06
SPL 06-SC07
SPL 06-SC08

J-BUILDING DIVISION
MAY 07 2010
County of San Diego
Plan Check

REGISTERED PROFESSIONAL ENGINEER
RICHARD J. WILSON
C29834
Exp. 3-31-11
CIVIL
STATE OF CALIFORNIA

DPLU-BUILDING DIVISION
MAY 04 2010
County of San Diego
Plan Check

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SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-06 (LINK 4) SLAY IMPROVEMENTS
TITLE SHEET

DRAWN BY: JPIORKOWSKI	DATE:	SCALE: NA	W.O. REV. 0
CHECKED BY:	DATE:		
APPROVED BY:	DATE:		SPL-06-SC02
CAD NO.:	PLOT SCALE: 1 = 1		

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SLAY 87-88

GENERAL NOTES

THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTION TO THE CONTRACTOR BY THE ENGINEER OF WORK:

1. ALL WORK SHALL COMPLY WITH ALL APPLICABLE PORTIONS OF THE PROJECT SPECIFICATIONS:
2. NEITHER THE OWNER, NOR THE ENGINEER OF WORK WILL ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE, SPREAD, WATER AND COMPACT ALL FILL IN STRICT ACCORDANCE WITH SDG&E'S SPECIFICATIONS. A GEOTECHNICAL ENGINEER WILL BE THE OWNER'S REPRESENTATIVE TO INSPECT THE CONSTRUCTION OF FILLS. THE EXCAVATION AND THE PLACEMENT OF FILL WILL BE UNDER THE DIRECT INSPECTION OF THE GEOTECHNICAL ENGINEER, AND HE WILL GIVE WRITTEN NOTICE OF CONFORMANCE WITH THE SPECIFICATIONS UPON COMPLETION OF GRADING. DEVIATIONS FROM SDG&E'S SPECIFICATIONS WILL BE PERMITTED ONLY UPON WRITTEN AUTHORIZATION FROM THE GEOTECHNICAL ENGINEER OR THE SDG&E REPRESENTATIVE.
4. OBSERVATIONS AND COMPACTION TESTS WILL BE MADE BY THE GEOTECHNICAL ENGINEER DURING THE FILLING AND COMPACTING OPERATIONS SO THAT HE CAN STATE HIS OPINION THAT THE FILL WAS CONSTRUCTED IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
5. DURING CONSTRUCTION: THE CONTRACTOR SHALL GRADE ALL EXCAVATED AND FILLED SURFACES TO PROVIDE POSITIVE DRAINAGE AND PREVENT PONDING OF WATER. HE SHALL CONTROL SURFACE WATER TO AVOID DAMAGE TO ADJOINING PROPERTIES OR TO FINISH WORK ON THE SITE. THE CONTRACTOR SHALL TAKE REMEDIAL MEASURES TO PREVENT EROSION OF FRESHLY GRADED AREAS, AND UNTIL SUCH TIME AS PERMANENT DRAINAGE AND EROSION CONTROL MEASURES HAVE BEEN INSTALLED. AFTER GRADING IS COMPLETED AND THE GEOTECHNICAL ENGINEER HAS FINISHED HIS OBSERVATIONS OF THE WORK, NO FURTHER EXCAVATION OR FILLING SHALL BE DONE, EXCEPT UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER.
6. CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS REQUIRED TO PROTECT ADJACENT PROPERTIES DURING THE GRADING OPERATIONS.
7. BRUSH AND TREES SHALL BE REMOVED ONLY WITHIN THE AREA TO BE GRADED. WHEN TREES ARE REMOVED, THE ROOT SYSTEMS SHALL ALSO BE REMOVED AND THE RESULTING EXCAVATION FILLED WITH PROPERLY COMPACTED FILL SOILS.
8. CUT AND FILL SLOPES SHALL BE TRIMMED TO THE FINISH GRADE TO PRODUCE A SMOOTH AND UNIFORM SURFACE OR CROSS-SECTION. THE SLOPES OF EXCAVATIONS OR EMBANKMENTS SHALL BE SHAPED AND TRIMMED AS DIRECTED BY THE SDG&E REPRESENTATIVE AND LEFT IN A NEAT AND ORDERLY CONDITION. ALL STONES, ROOTS, OR OTHER WASTE MATTER EXPOSED ON EXCAVATION OR EMBANKMENT SLOPE SHALL BE REMOVED AND DISPOSED OF.
9. GRADING SHALL BE DONE WITHIN A TOLERANCE OF ±0.1' OF THE GRADES AND ELEVATIONS SHOWN ON THESE PLANS AND ALL SLOPES SHALL BE CONSTRUCTED WITHIN ±0.5' OF THE LOCATION SHOWN ON THESE PLANS. IN NO WAY SHALL THE ABOVE TOLERANCES RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF PROVIDING A FINISH THAT WILL NOT POND WATER.
10. ANY QUANTITIES INDICATED ON THESE PLANS ARE ENGINEERS' ESTIMATES ONLY AND ARE NOT TO BE USED BY CONTRACTOR FOR BIDDING PURPOSES.
11. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN THE FIELD AND BRING DISCREPANCIES TO THE ATTENTION OF THE SDG&E REPRESENTATIVE PRIOR TO STARTING CONSTRUCTION.
12. CONTRACTOR SHALL REFER TO GEOTECHNICAL REPORT TITLED "GEOTECHNICAL EVALUATION – ACCESS ROADS AND STRUCTURAL PADS SUNRISE POWERLINK PROJECT" BY URS, DATED, OCTOBER 16, 2009. URS PROJECT No.27669019.0002

EROSION CONTROL NOTES

1. ALL POLE & TOWER MAINTENANCE PADS TO BE DIKED AND THE DIKES MAINTAINED TO PREVENT WATER FROM FLOWING FROM THE PADS WITHOUT CAUSING EROSION, OR CONSTRUCT DRAINAGE FACILITIES TO THE SATISFACTION OF THE COUNTY DEPARTMENT OF PUBLIC WORKS THAT WILL ALLOW WATER TO DRAIN FROM THE PAD WITHOUT CAUSING EROSION.
2. TOPS OF ALL SLOPES TO BE DIKED OR TRENCHED TO PREVENT WATER FROM FLOWING OVER THE CREST OF SLOPES.
3. ALL GRADED CUT OR FILL SLOPES SHALL BE HYDROSEEDED TO PROTECT THE SLOPE FROM EROSION AND INSTABILITY IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
4. FIBER ROLLS SHALL BE PLACED AT TOP, TOE AND FACE (15 FOOT INTERVALS) OF GRADED ALL CUT AND FILL SLOPES TO INTERCEPT RUNOFF AND REDUCE EROSION IN ACCORDANCE WITH PROJECT SPECIFICATIONS.

COUNTY OF SAN DIEGO CONSTRUCTION NOTES

1. ALL ASPHALT CONCRETE SHALL CONFORM TO CALTRANS STANDARD SPECIFICATIONS. 2006 SECTION 39 AND SHALL HAVE A BASE COURSE OF TYPE A 3/4" MAXIMUM COURSE AND A 2" FINAL LIFT (OR 2" OVERLAY) USING TYPE B, 1/2" MAXIMUM, MEDIUM GRADATION
2. AGGREGATE BASE SHALL CONFORM TO CALTRANS SECTION 26 CLASS II AGGREGATE BASE
3. ALL OTHER WORK IN COUNTY OF SAN DIEGO PUBLIC RIGHT OF WAY SHALL CONFORM TO CALTRANS STANDARD SPECIFICATIONS OR STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION WITH REGIONAL SUPPLEMENT AMENDMENTS (LATEST ADOPTED EDITION)
4. WORK WITHIN COUNTY RIGHT OF WAY IS SUBJECT TO COUNTY CONSTRUCTION/ ENCROACHMENT PROCESS AND MAY REQUIRE CONSTRUCTION TRAFFIC CONTROL TO MITIGATE SIGHT DISTANCE AND CONSTRUCTION WITHIN THE COUNTY RIGHT OF WAY

COUNTY OF SAN DIEGO BUILDING DIVISION NOTES

1. THE APPROVAL OF PLANS AND SPECIFICATIONS DOES NOT PERMIT THE VIOLATION OF ANY SECTION OF THE BUILDING CODE, COUNTY ORDINANCES, OR STATE LAW. THE FOLLOWING LIST DOES NOT NECESSARILY INCLUDE ALL ERRORS AND OMISSIONS. (SEE THE 2007 CALIFORNIA BUILDING CODE, APPENDIX CHAPTER 1, SECTION 105.4)
2. TWO (2) COPIES OF THE FINAL COMPACTION REPORT SHALL BE SUBMITTED TO THE INSPECTOR PRIOR TO FINAL INSPECTION.

COUNTY OF SAN DIEGO • DEPARTMENT OF PLANNING AND LAND USE
BUILDING DIVISION

NOTICE OF REQUIREMENT FOR SPECIAL INSPECTION

You are hereby notified that, in addition to the inspection of construction provided by the Department of Planning and Land Use, Building Division, an approved registered special inspector is required to provide special inspection and/or structural observation during construction of the proposed project as indicated on this form. This form shall be completed. All work requiring special inspection must be identified as well as the name and phone number of the special inspector identified to perform the special inspections.

The registered special inspector shall be approved by the Building Official prior to the issuance of the building permit. Special inspectors having a current certification from the City of San Diego are approved as special inspectors for the type of construction for which they are certified.

Special inspection and/or structural observation requirements and reports shall be in compliance with the 2007 California Building Code, Chapter 17.

The inspections required to be performed by a special inspector are in addition to and do not change the requirements for the inspections normally required by the 2007 California Building Code as amended and adopted by the County of San Diego and performed by the Building Division inspection personnel.

The special inspector is not authorized to inspect and approve any work other than that for which they are certified. The special inspector is not authorized to accept alternate materials, structural changes, or any requests for plan changes. The special inspector is required to submit to the building inspector in the field written reports of all work that they inspected and approved. Approval of final inspection will not be granted by the Department of Planning and Land Use, Building Division, until a last and final report documenting required special inspections and correction of any discrepancies noted in the inspection reports has been submitted to the building inspector in the field and approved by the Building Division.

For occupancies in Group R-3 and occupancies in Group U that are accessory to a residential occupancy, some exceptions are permitted per the Department of Planning and Land Use, Building Division special inspection policy to not require special inspection or to allow structural observation in lieu of the required special inspections. These exceptions are noted in the table on page two of this form. In cases where the design engineer of record has specified a more restrictive requirement for special inspection and/or structural observation, the project shall comply with the requirements of the engineer of record.

Structural observation is the visual observation of the structural system by a registered design professional. A letter shall be provided describing the results of structural observation prior to approval of final inspection. The letter shall be submitted to the building inspector in the field and approved by the Building Division.

THIS COMPLETED FORM MUST BE MADE A PERMANENT, PRINTED PART OF THE PLANS.
(Taped, glued, stapled, etc. copies will not be accepted)

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HTTP://WWW.SDCDPLU.ORG

DPLU #006 REV 06/01/2009 Page 1 of 2

WORK REQUIRING SPECIAL INSPECTION	ITEM DESCRIPTION AND LOCATION	DESIGN STRENGTH	NAME OF SPECIAL INSPECTOR	PHONE NUMBER OF SPECIAL INSPECTOR
SPECIAL INSPECTIONS REQUIRED BY CBC SECTION 1704				
*FOR R-3 AND U OCCUPANCIES ACCESSORY TO RESIDENTIAL OCCUPANCIES SPECIAL INSPECTION IS NOT REQUIRED FOR: ITEMS 1b, 2e (WHEN f'c ≤ 5,000 psi), 2c, 3a (WHEN f'm ≤ 1,500 psi), 3b (WHEN WALL HEIGHT IS ≤ 10 FT.), 6, 7, 8, & 9. STRUCTURAL OBSERVATION IS PERMITTED IN LIEU OF SPECIAL INSPECTION FOR ITEMS 3a, 3b (WHEN WALL HEIGHT IS > 10 FT.), AND 4a				
1.) Steel Construction				
a.) Field welding				
b.) Steel frame*	N/A			
c.) High-strength bolts				
2.) Concrete Construction				
a.) f'c > 2,500 psi*				
b.) Anchors				
c.) Structural slabs*	N/A			
d.) Pre-stressed/ post-tensioned slabs	N/A			
3.) Masonry Construction	N/A			
a.) Masonry construction*	N/A			
b.) Site walls other than County Standard plans*				
4.) Wood Construction	N/A			
a.) High-load diaphragms*				
5.) Foundations				
a.) Pile foundations	N/A			
b.) Pier foundations				
6.) Sprayed fire-resistant materials*	N/A			
7.) Mastic and intumescent fire-resistant coatings*	N/A			
8.) Exterior insulation and finish systems (EIFS)*	N/A			
9.) Smoke control systems*	N/A			
10.) Special cases				
a.) MSE WALL CONSTUCTION			GARY HEINBACH	(951) 840-5920
b.)				
SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE REQUIRED BY CBC SECTION 1707				
*R-3 AND U OCCUPANCIES ACCESSORY TO RESIDENTIAL OCCUPANCIES STRUCTURAL OBSERVATION IS PERMITTED IN LIEU OF SPECIAL INSPECTION FOR ITEMS C AND D				
A.) Field welding				
B.) Structural wood: field gluing of elements of the seismic-force-resisting system	N/A			
C.) Structural wood: nailing, bolting, anchoring and other fastening of components within the seismic-force-resisting system where fastener spacing of sheathing is 4 inches o.c. or less*	N/A			
D.) Cold-formed steel framing*	N/A			
E.) Pier foundations	N/A			
F.) Storage racks and access floors	N/A			
G.) Architectural components for structures greater than 30 feet in height	N/A			
H.) Designated seismic system verifications	N/A			
I.) Designated seismic system verifications	N/A			
J.) Seismic isolation system	N/A			

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DPLU #006 REV 06/01/2009 Page 2 of 2

LEGEND

- SECTION A / A SECTION
- INDICATES NEW TOWER
- INDICATES EXISTING STEEL POLE
- 422.1 / 415.9 — VERTICAL PROFILE F.G. ELEV. ABOVE / VERTICAL PROFILE E.G. ELEV. BELOW
- NEW TRANSMISSION LINE
- 440 — (F.G.) FINISH GRADE CONTOURS
- 440 — (E.G.) EXISTING GRADE CONTOURS
- (206.2) EXISTING GROUND ELEVATION
- TOP / TOE — FILL SLOPE 2:1 UNLESS SHOWN OTHERWISE
- TOP / TOE — CUT SLOPE 2:1 UNLESS SHOWN OTHERWISE
- R — RIDGE LINE
- DAYLIGHT LINE
- DIRECTION OF FLOW
- CUT / FILL — CUT/FILL LINE
- CONCRETE DOWN DRAIN, SEE DETAIL
- RIPRAP ENERGY DISSIPATOR, SEE DETAIL
- CORRUGATED METAL PIPE WITH FLARED END SECTIONS, SEE PLANS FOR, PIPE SIZES, AND ENERGY DISSIPATOR.
- DROP OUTLET PER SDRSD D-16 TYPE B, INLET PIPE 24'" AND OUTLET PIPE 12" DIAMETER
- CONCRETE DRAINAGE DITCH, SEE DETAIL
- 3' — DRAINAGE DITCH BEHIND MASONRY CUT RETAINING WALL, SEE DETAIL
- RETAINING WALL, FILL (8/5)
- RETAINING WALL, CUT
- X / XX — DETAIL LABEL (DETAIL # / SHEET #)

ABBREVIATIONS

(EG)	EXISTING GRADE
FG	FINISHED GRADE
TW	TOP OF WALL
BW	BOTTOM OF WALL AT FINISHED GROUND
FL	FLOW LINE
U/S	UP STREAM
D/S	DOWN STREAM
CMP	CORRUGATED METAL PIPE
RC	RELATIVE COMPACTION

DPLU-BUILDING DIVISION
MAY 07 2010
County of San Diego Plan Check

REGISTERED PROFESSIONAL ENGINEER RICHARD J. WILSON C29834 Exp. 3-31-11 CIVIL STATE OF CALIFORNIA

DPLU-BUILDING DIVISION
MAY 04 2010
County of San Diego Plan Check

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SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-06 (LINK 4) SLAY IMPROVEMENTS
SLAY RETAINING WALL

DRAWN BY: JJP	DATE: -/-/-	SCALE: AS NOTED	W.O.	REV. 0	SPL-06-SC03
CHECKED BY:	DATE:				
APPROVED BY:	DATE:				
CAD NO.:	PLOT SCALE: 1=1				

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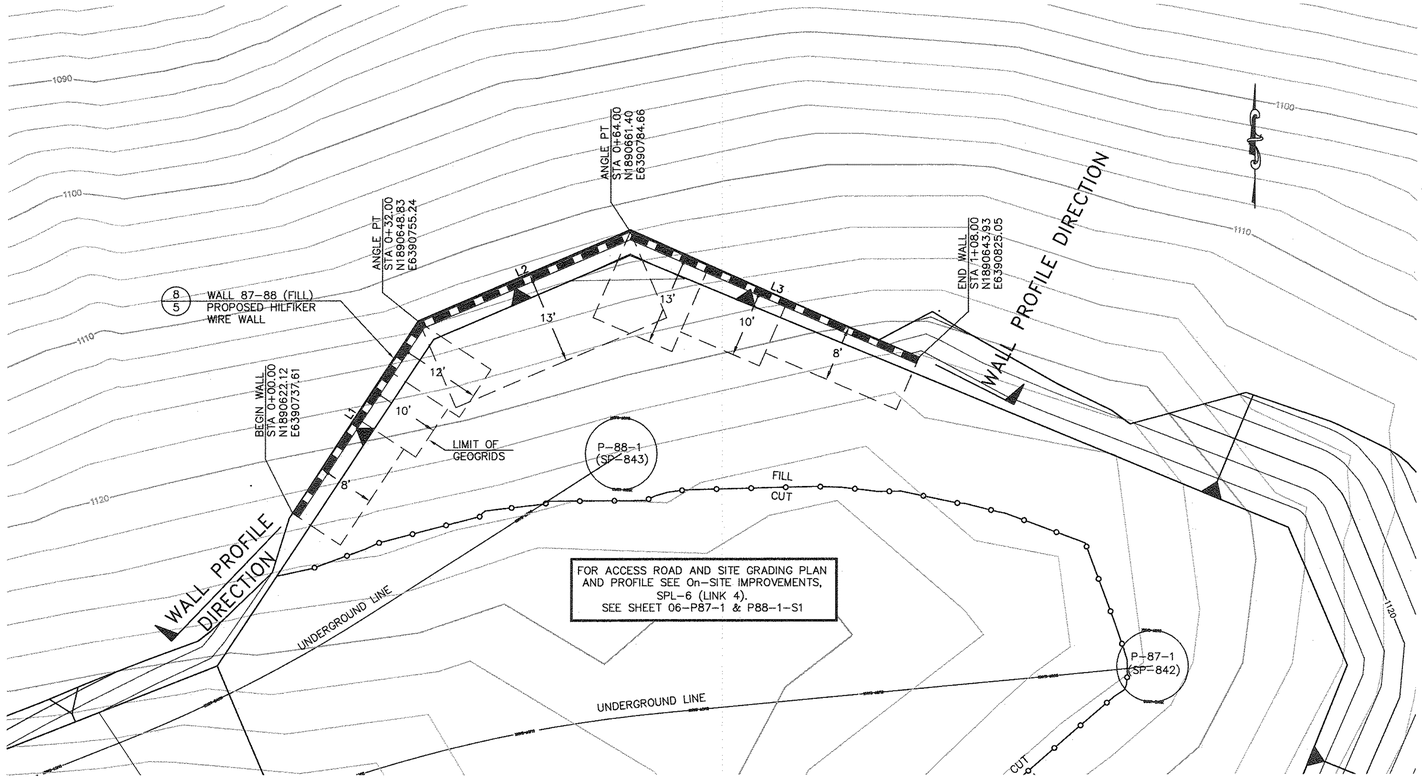


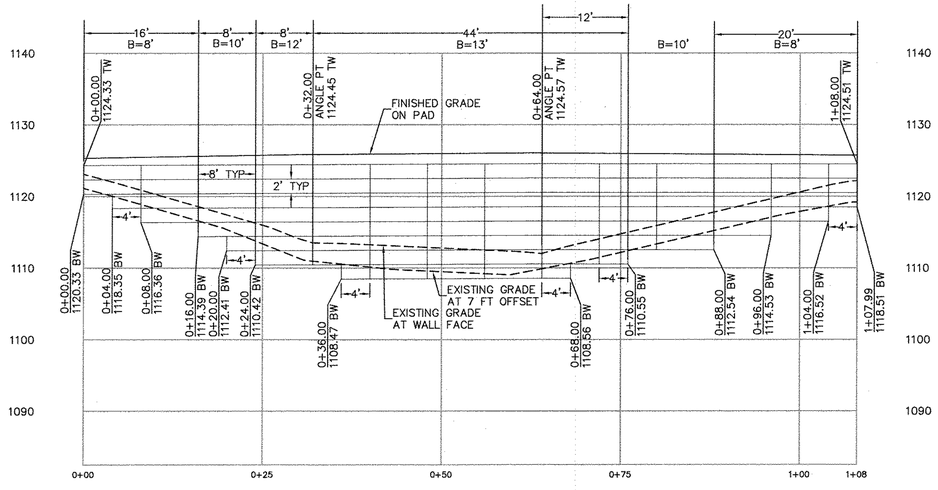
FACE OF WALL DATA			
NUMBER	RADIUS	LENGTH	BEARING/DELTA ANGLE
L1		32.00	N33°25'40.94"E
L2		32.00	N66°51'24.04"E
L3		44.00	S66°36'00.83"E

ALL QUANTITIES RELATED TO RETAINING WALLS WILL BE THE CONTRACTORS RESPONSIBILITY TO OBTAIN.

SITE P-87-1 & P-88-1 WALL PLAN

SCALE: 1" = 10'

GRAPHIC SCALE
10 0 10 20
1"=10'



SITE P-87-1 & P-88-1 WALL PROFILE

HORIZ. & VERT. SCALE: 1" = 10'

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MAY. 07 2010
County of San Diego
Plan Check

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SAN DIEGO, CALIFORNIA

SPL-6 (LINK 4) SLAY IMPROVEMENTS

SITE P-87-1 & P-88-1 WALL PLAN

DRAWN BY: 00	DATE:	SCALE: 1" = 30'	W.O. REV. 0
CHECKED BY:	DATE:		
APPROVED BY:	DATE:		SPL-06-SC04
CAD NO.:	PLOT SCALE: 1 = 1		

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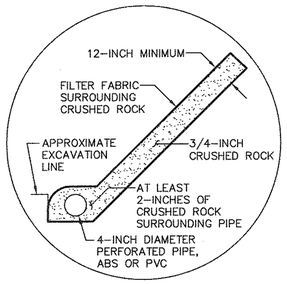
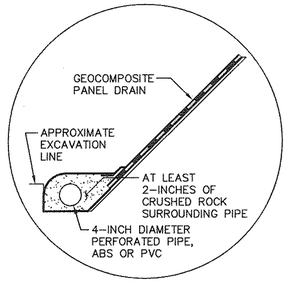
SLAY 87-88



ROCK BLANKET ALTERNATIVE



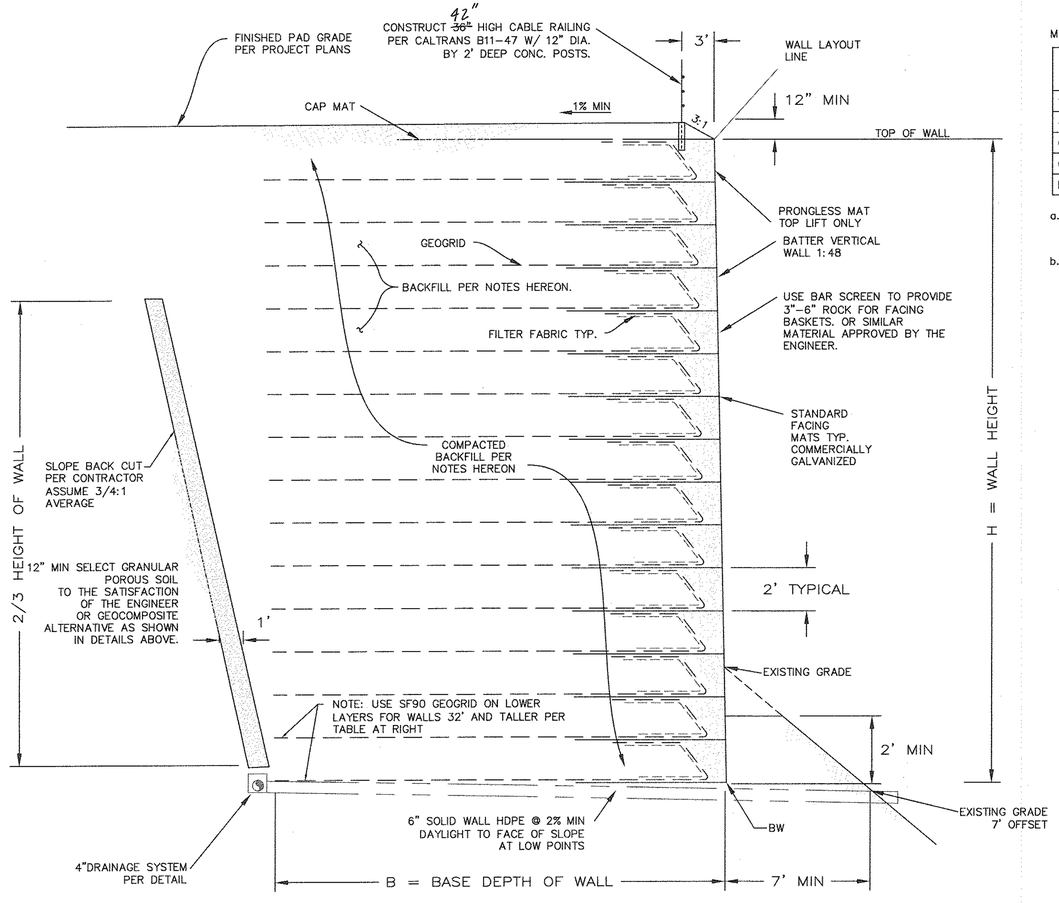
GEOCOMPOSITE PANEL ALTERNATIVE

WALL BACK DRAINAGE NOTES:

1. PERFORATED PIPE SHOULD OUTLET THROUGH A SOLID PIPE TO A FREE GRAVITY OUTFALL AT MAX 100' SPACING. PERFORATED PIPE AND OUTLET PIPE SHOULD HAVE A FALL OF AT LEAST 2%.
2. FILTER FABRIC SHOULD CONSIST OF MIRAFI 140N, OR SIMILAR APPROVED PRODUCT. FILTER FABRIC SHOULD BE OVERLAPPED PER MANUFACTURES INSTRUCTIONS.
3. DRAIN INSTALLATION SHOULD BE OBSERVED BY THE GEOTECHNICAL ENGINEER PRIOR TO BACK FILLING.
4. SUBSURFACE BACK DRAINAGE MAY BE REDUCED IF THE SOILS USED IN THE REINFORCED AND RETAINED ZONES ARE RELATIVELY "FREE DRAINING" AS APPROVED BY GEOTECHNICAL ENGINEER. **CONTRACTOR TO ASSUME 20 PERCENT OF WALL SQUARE FOOTAGE REQUIRES BACK DRAINAGE.**
5. IF ROCK BLANKET BACK DRAIN ROCK IS SUBSTITUTED WITH CALTRANS CLASS II PERMEABLE AGGREGATE THE FILTER FABRIC CAN BE ELIMINATED.

MSE WALL BACKFILL NOTES:

1. CONTRACTOR IS ADVISED THAT MOST ONSITE SOILS WILL BE VIABLE FOR MSE WALL BACKFILL UTILIZING 3" TO 4" BAR SCREEN TO CONFORM SOILS TO FOLLOWING TABLE BELOW CARE SHOULD BE TAKEN TO SELECT BACKFILL MATERIAL THAT IS FREE OF EXCESSIVE FINES AND ORGANIC MATERIAL.
2. CONTRACTOR TO OBTAIN GEOTECHNICAL APPROVAL OF BOTTOM CUT AND 7' OFFSET FROM SLOPE FACE PRIOR TO PLACEMENT OF ANY GEOGRID OR WIRE MATS. MSE RETAINING WALLS SHOULD BE FOUNDED ON PROPERLY COMPACTED OR RELATIVELY UNDISTURBED WEATHERED GRANITIC ROCK MATERIALS AS APPROVED BY THE GEOTECHNICAL ENGINEER.
3. GEOTECH ENGINEER AND MANUFACTURER'S REPRESENTATIVE SHALL OBSERVE AND APPROVE BACKFILL MATERIALS AND PROCEDURES DURING BACKFILL AND CONSTRUCTION



TYPICAL HILFIKER WELDED WIRE WALL SECTION (8/5)

NTS

MSE WALL BACKFILL GRADATION REQUIREMENTS

SEIVE SIZE	RECOMMENDED GRADATION PERCENT PASSING BY WEIGHT
100mm (4 INCH)	100–75
4.76mm (NO. 4)	20–100
0.425mm (NO. 40)	0–60
0.075mm (NO. 200)	0–35
PLASTICITY INDEX (PI)	< 20

a. A PI < 8 IS RECOMMENDED TO MINIMIZE EXPANSIVE POTENTIAL AND PROVIDE SUITABLE DRAINAGE CHARACTERISTICS

b. mm – MILLIMETERS

MSE WALL GEOGRID LENGTHS

PRELIMINARY MIN. SOIL DESIGN PARAMETERS Ø =|35° DENSITY < 130 PCF	
HEIGHT (FT)	B= BASE DEPTH OF WALL
8'	9'
10'	10'
12'	10'
14'	12'
16'	13'
18'	15'
20'	16'
22'	18'
24'	20'
26'	21'
28'	23'
30'	24'
32'	26'–2–14*

* B DIST. – BOTTOM GRIDS WITH SF90 GEOGRID – TOP REMAINING GRIDS WITH SF65 GEOGRID

MSE WALL GEOGRID SPECIFICATIONS

WWW.SYNTEEN.COM, OR EQUAL APPROVED BY ENGINEER

SF 90
SOIL REINFORCEMENT GEOGRID
UNIAXIAL GEOGRID
THE STRENGTH IS IN THE LENGTH DIRECTION

SF 90 IS COMPOSED OF HIGH MOLECULAR WEIGHT, HIGH TENACITY MULTIFILAMENT POLYESTER YARNS THAT ARE WOVEN INTO A STABLE NETWORK PLACED UNDER TENSION. THE HIGH STRENGTH POLYESTER YARNS ARE COATED WITH A PVC MATERIAL. SF SERIES GEOGRIDS ARE INERT TO BIOLOGICAL DEGRADATION AND ARE RESISTANT TO NATURALLY ENCOUNTERED CHEMICALS, ALKALIS AND ACIDS. SF SERIES GEOGRIDS ARE TYPICALLY USED FOR SOIL REINFORCEMENT APPLICATIONS SUCH AS RETAINING WALLS, STEEPENED SLOPES, EMBANKMENTS, SUBGRADE STABILIZATION, AND EMBANKMENTS OVER SOFT SOILS AND WASTE CONTAINMENT APPLICATIONS.

TENSILE PROPERTIES	TEST METHOD	MARV VALUES (LBS/FT)
ULTIMATE STRENGTH	ASTM D 6637	8500
CREEP LIMITED STRENGTH	ASTM D 5262	5483
T_{AL} = LONG TERM DESIGN STRENGTH	NCMA 97 *	4747
APERTURE SIZE (INS.)	MEASURED	0.75 x 0.75 OR SITE SPECIFIC AS REQUIRED

REDUCTION FACTOR FOR CREEP 1.55, REDUCTION FACTOR FOR DURABILITY 1.10 REDUCTION FACTOR FOR INSTALLATION DAMAGE (TYPE 3 SOIL) 1.05

FHWA/AASHTO REDUCTION FACTOR FOR CREEP 1.55, REDUCTION FACTOR FOR DURABILITY 1.15, REDUCTION FACTOR FOR INSTALLATION DAMAGE (TYPE 3 SOIL) 1.03

GRI GG4B REDUCTION FACTOR FOR CREEP 1.75, REDUCTION FACTOR FOR DURABILITY 1.10 REDUCTION FACTOR FOR INSTALLATION DAMAGE (TYPE 3 SOIL) 1.05

WWW.SYNTEEN.COM, OR EQUAL APPROVED BY ENGINEER

SF 65
SOIL REINFORCEMENT GEOGRID
UNIAXIAL GEOGRID
THE STRENGTH IS IN THE LENGTH DIRECTION

SF 65 IS COMPOSED OF HIGH MOLECULAR WEIGHT, HIGH TENACITY MULTIFILAMENT POLYESTER YARNS THAT ARE WOVEN INTO A STABLE NETWORK PLACED UNDER TENSION. THE HIGH STRENGTH POLYESTER YARNS ARE COATED WITH A PVC MATERIAL. SF SERIES GEOGRIDS ARE INERT TO BIOLOGICAL DEGRADATION AND ARE RESISTANT TO NATURALLY ENCOUNTERED CHEMICALS, ALKALIS AND ACIDS. SF SERIES GEOGRIDS ARE TYPICALLY USED FOR SOIL REINFORCEMENT APPLICATIONS SUCH AS RETAINING WALLS, STEEPENED SLOPES, EMBANKMENTS, SUBGRADE STABILIZATION, AND EMBANKMENTS OVER SOFT SOILS AND WASTE CONTAINMENT APPLICATIONS.

FEBRUARY, 2006

TENSILE PROPERTIES	TEST METHOD	MARV VALUES (LBS/FT)
ULTIMATE STRENGTH	ASTM D 6637	6000
CREEP LIMITED STRENGTH	ASTM D 5262	3871
T_{AL} = LONG TERM DESIGN STRENGTH	NCMA 97	3373
APERTURE SIZE (INS.)	MEASURED	0.75 x 0.75

RF CREEP – 1.55
RF DURABILITY – 1.10
RF INSTALLATION DAMAGE (SOIL TYPE 3) – 1.05

NOTE: SEE ADDITIONAL DETAILS ON SHEETS 6 & 7

DPLU-BUILDING DIVISION
MAY. 07 2010
County of San Diego Plan Check

REGISTERED PROFESSIONAL ENGINEER RICHARD J. WILSON C29834 Exp. 3-31-11 CIVIL STATE OF CALIFORNIA

DPLU-BUILDING DIVISION
MAY. 04 2010
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SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL–06 (LINK 4) SLAY IMPROVEMENTS
Detail Sheet

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CHECKED BY:	DATE:		
APPROVED BY:	DATE:		
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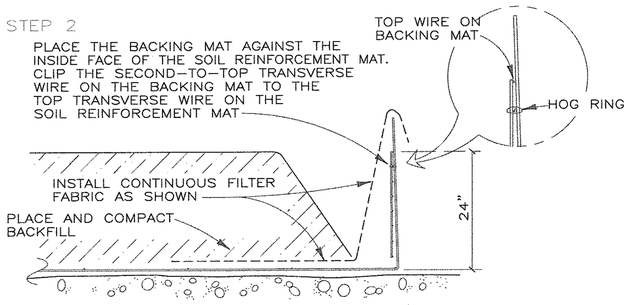
STEP 1

PLACE THE FIRST COURSE OF SOIL REINFORCEMENT MATS ON PREPARED FOUNDATION

STEP 2

PLACE THE BACKING MAT AGAINST THE INSIDE FACE OF THE SOIL REINFORCEMENT MAT. CLIP THE SECOND–TO–TOP TRANSVERSE WIRE ON THE BACKING MAT TO THE TOP TRANSVERSE WIRE ON THE SOIL REINFORCEMENT MAT

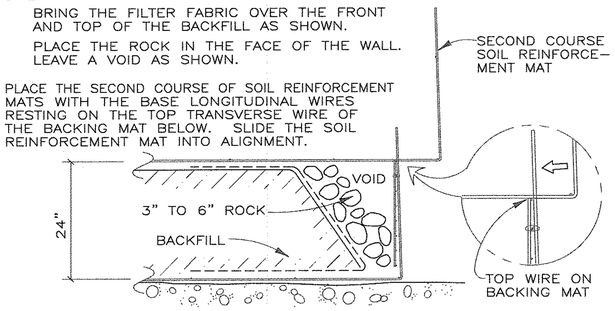


STEP 3

BRING THE FILTER FABRIC OVER THE FRONT AND TOP OF THE BACKFILL AS SHOWN.

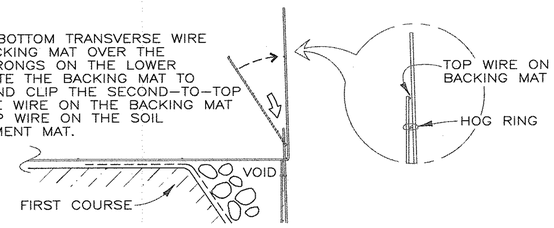
PLACE THE ROCK IN THE FACE OF THE WALL. LEAVE A VOID AS SHOWN.

PLACE THE SECOND COURSE OF SOIL REINFORCEMENT MATS WITH THE BASE LONGITUDINAL WIRES RESTING ON THE TOP TRANSVERSE WIRE OF THE BACKING MAT BELOW. SLIDE THE SOIL REINFORCEMENT MAT INTO ALIGNMENT.



STEP 4

HOOK THE BOTTOM TRANSVERSE WIRE OF THE BACKING MAT OVER THE VERTICAL PRONGS ON THE LOWER MAT. ROTATE THE BACKING MAT TO VERTICAL AND CLIP THE SECOND–TO–TOP TRANSVERSE WIRE ON THE BACKING MAT TO THE TOP WIRE ON THE SOIL REINFORCEMENT MAT.

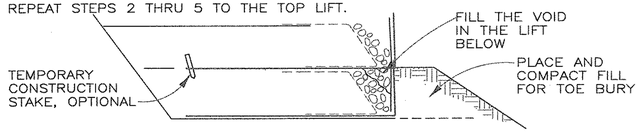


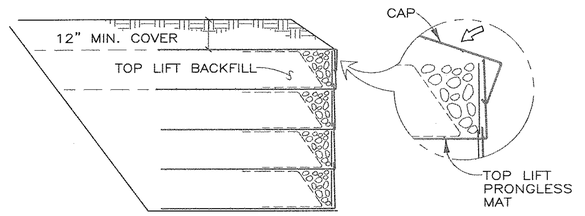
STEP 5

INSTALL THE FILTER FABRIC AS IN STEPS 2 AND 3.

PLACE AND COMPACT THE BACKFILL AND ROCK TO THE BASE ELEVATION OF THE NEXT MAT.

REPEAT STEPS 2 THRU 5 TO THE TOP LIFT.





STEP 6: TOP LIFT

PLACE THE TOP LIFT PRONGLESS MAT, BACKING MAT AND FILTER FABRIC.

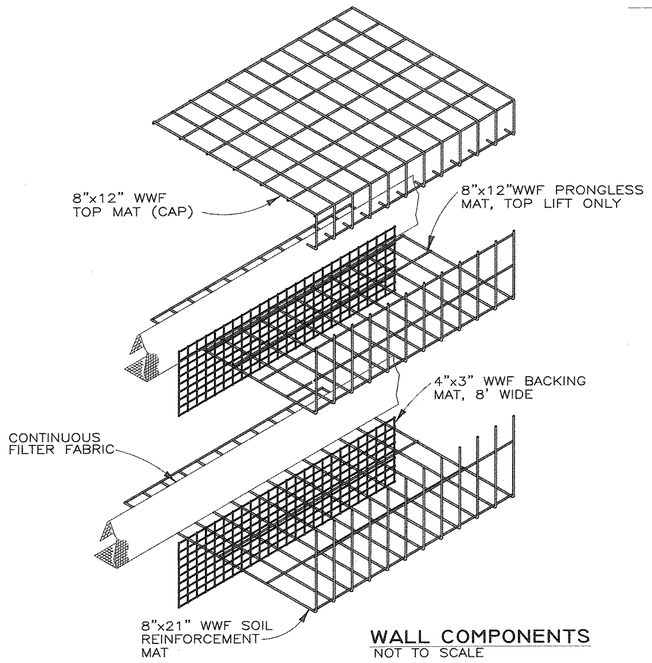
PLACE AND COMPACT BACKFILL AND ROCK IN THE TOP LIFT.

HOOK THE CAP OVER THE MIDDLE TRANSVERSE WIRE ON THE PRONGLESS MAT, AND ROTATE INTO PLACE

PLACE AND COMPACT COVER OVER TOP MAT TO 12" MINIMUM DEPTH.

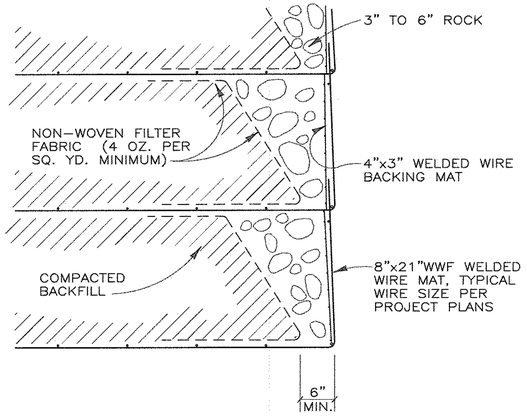
CONSTRUCTION SEQUENCE

NOT TO SCALE



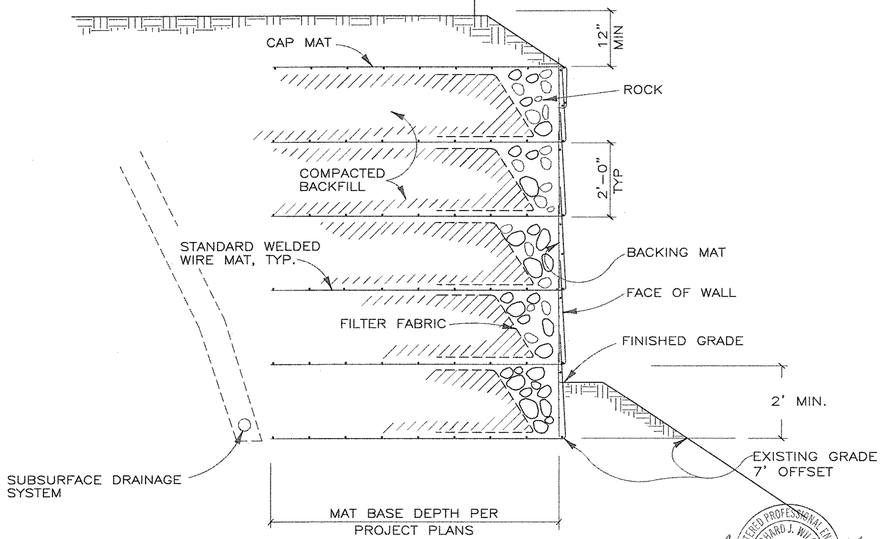
WALL COMPONENTS

NOT TO SCALE



ROCK-FACE DETAIL

NOT TO SCALE



TYPICAL SECTION

REGISTERED PROFESSIONAL ENGINEER RICHARD J. WILSON 29834 3-31-11 CIVIL

DPLU-BUILDING DIVISION MAY 07 2010 County of San Diego Plan Check

DPLU-BUILDING DIVISION MAY 04 2010 County of San Diego Plan Check

HILFIKER RETAINING WALLS

1902 Hilfiker Lane
Eureka, CA 95503-5711
TOLL-FREE **800.762.8962**
PH **707.443.5093** FAX **707.443.2891**
WEB SITE www.hilfiker.com E-MAIL info@hilfiker.com

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San Diego, CA 92127-1624
Tel: (858) 451-6100 Fax: (858) 451-2846
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SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL–06 (LINK 4) SLAY IMPROVEMENTS

Detail Sheet

DRAWN BY: 00	DATE:	SCALE: NTS	W.O.	REV. 0	SPL–06–SC06
CHECKED BY:	DATE:				
APPROVED BY:	DATE:				
CAD NO.:	PLOT SCALE: 1 = 1				

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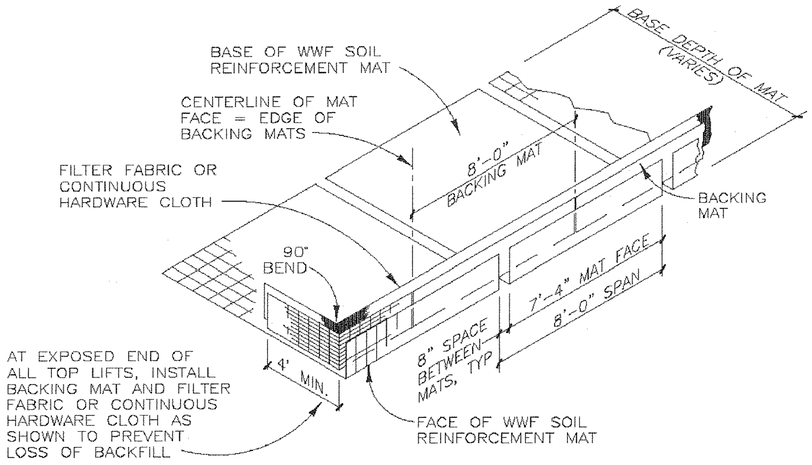
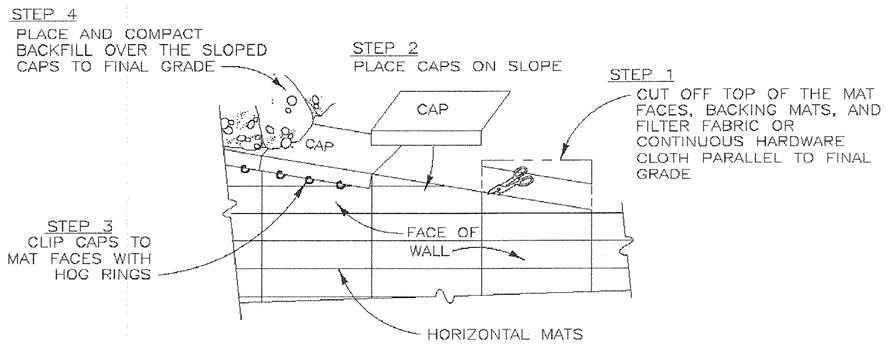


ISOMETRIC VIEW

WELDED WIRE WALL COMPONENTS WITH RETURN MAT

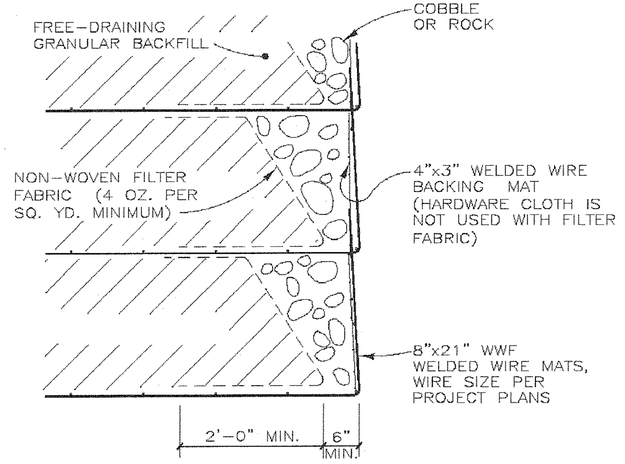
NOT TO SCALE



PICTORIAL ELEVATION

SLOPED CAP MAT DETAIL

NOT TO SCALE



SECTION

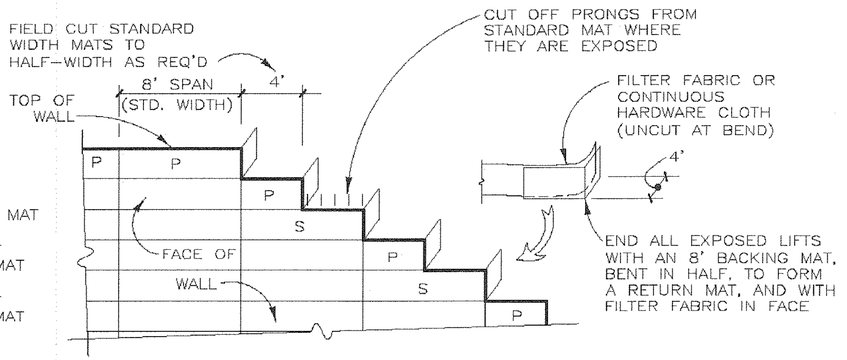
ROCK FACING DETAIL

NOT TO SCALE

LEGEND

(THIS DETAIL ONLY)

P	8"x12" WWF PRONGLESS MAT
S	8"X12" WWF STANDARD MAT
	8"X21" WWF STANDARD MAT



RETURN MATS AND TOP OF WALL DETAIL

NOT TO SCALE

HILFIKER RETAINING WALLS

1902 Hilfiker Lane
Eureka, CA 95503-5711
TOLL-FREE **800.762.8962**
PH **707.443.5093** FAX **707.443.2891**
WEB SITE www.hilfiker.com E-MAIL info@hilfiker.com

SINCE 1902 QUALITY PRODUCTS

DPLU-BUILDING DIVISION
MAY. 07 2010
County of San Diego Plan Check

REGISTERED PROFESSIONAL ENGINEER
RICHARD J. WILSON
029834
Exp. 3-31-11
CIVIL
STATE OF CALIFORNIA

DPLU-BUILDING DIVISION
MAY. 04 2010
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SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-06 (LINK 4) SLAY IMPROVEMENTS
Detail Sheet

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CAD NO.:	PLOT SCALE: 1 = 1				

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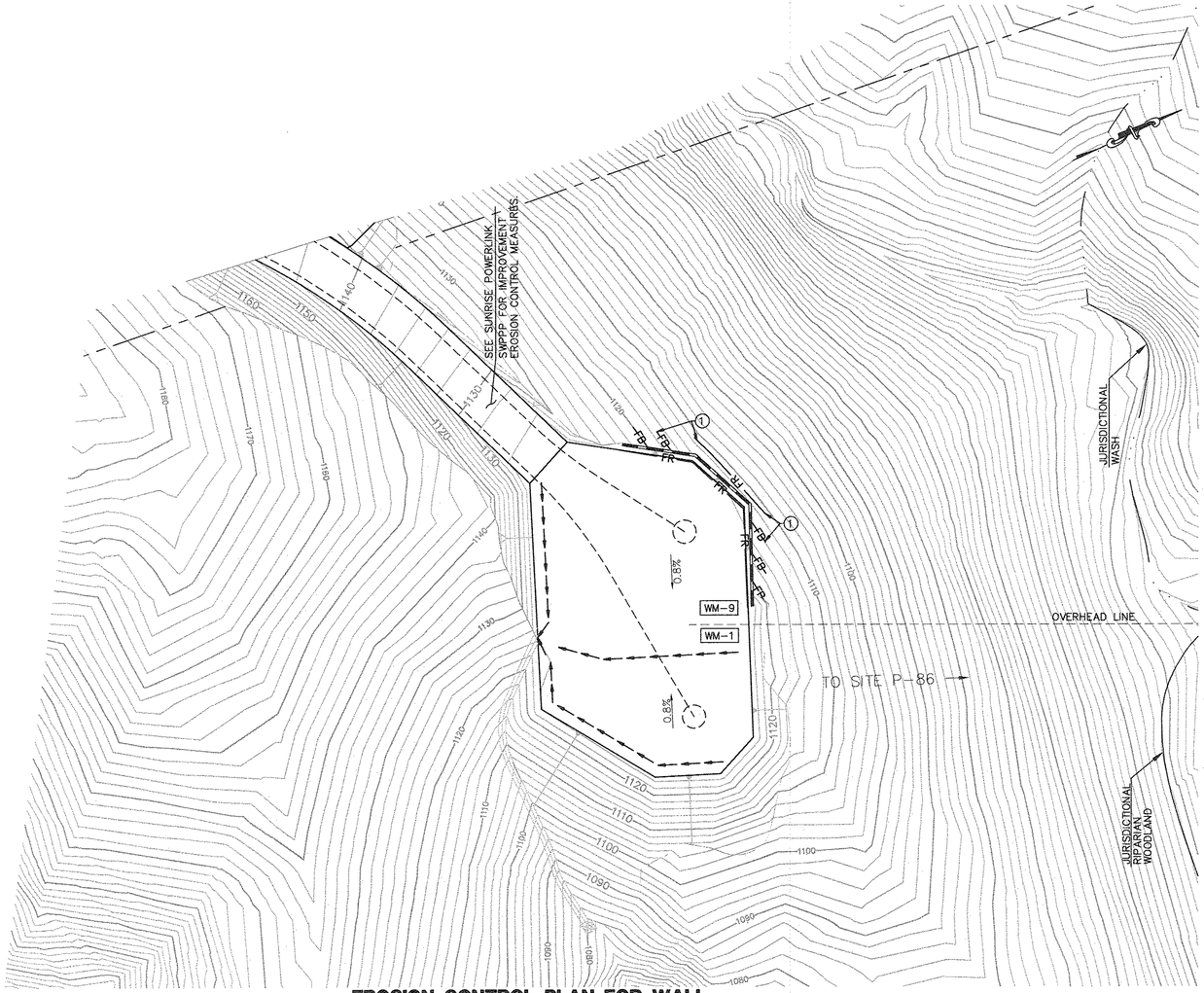

EROSION CONTROL PLAN FOR WALL

SCALE: 1" = 30'

GRAPHIC SCALE

30 0 30 60

1"=30'

LEGEND

DESCRIPTION	SEE CON. NOTE #	CALTRANS/ SDG&E WATER QUALITY CONSTRUCTION BMP MANUAL STD. DWG.	SYMBOL
GRADED SWALE			
FIBER ROLLS	1	SC-5/BMP 1-03	FR
MATERIAL DELIVERY & STORAGE		WM-1	WM-1
SANITARY WASTE MANAGEMENT		WM-9	WM-9

CONSTRUCTION NOTES

1. INSTALL FIBER ROLLS. SEE BMP SHEETS SC-5/BMP 1-03 FOR INSTALLATION, MAINTENANCE, AND INSPECTION INSTRUCTIONS AND PROCEDURES.

EROSION AND SEDIMENT CONTROL NOTES:

1. FOR BMP SHEETS REFER TO CALTRANS (MARCH 2003) AND SDG&E WATER QUALITY CONSTRUCTION BEST MANAGEMENT PRACTICES MANUAL (DECEMBER 2002) AND PROJECT'S FINAL APPROVED SWPPP.
2. CONTRACTOR TO IMPLEMENT STREET SWEEPING AND VACUUMING (PER BMP SHEET SC-7/BMP 1-07) ALONG ALL AREAS OF SOIL DISTURBANCE ALONG THE EXISTING ROADWAY.
3. VEHICLE AND EQUIPMENT CLEANING, FUELING, AND/OR MAINTENANCE (PER BMP SHEETS NS-8/BMP 3-03, NS-9/BMP 3-04, AND NS-10 RESPECTIVELY) SHALL NOT BE PERFORMED ON SITE.
4. IF DISCHARGES FROM IRRIGATION LINES, POTABLE WATER LINES, OR HYDRANT FLUSHING OCCUR ONSITE, CONTRACTOR MUST IMPLEMENT POTABLE WATER/IRRIGATION PER BMP SHEET NS-7, AS NECESSARY.
5. CONTRACTOR ALSO TO IMPLEMENT THE FOLLOWING CONSTRUCTION BMPS, AS NECESSARY:
   - SCHEDULING, PER BMP SHEETS EC-1/BMP 1-01
   - WIND EROSION CONTROL, PER BMP SHEETS WE-1/BMP 4-08
   - WATER CONSERVATION PRACTICES, PER BMP SHEET NS-1
   - ILLICIT CONNECTION/DISCHARGE, PER BMP SHEETS NS-6/BMP 2-06
6. NO WORK HAVING THE POTENTIAL TO CAUSE WATER POLLUTION, AS DETERMINED BY THE ENGINEER, SHALL BE PERFORMED UNTIL THE SWPPP HAS BEEN SUBMITTED TO THE ENGINEER BY THE CONTRACTOR, AND APPROVED.
7. THE CONTRACTOR SHALL CONSIDER OTHER CONTROL MEASURES, AS NECESSARY, TO SUPPLEMENT THE CRITICAL TEMPORARY CONTROL MEASURES SHOWN ON THESE PLANS, IN ORDER TO MEET THE POLLUTION CONTROL OBJECTIVES OF THE SWPPP.

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MAY. 07 2010
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REGISTERED PROFESSIONAL ENGINEER RICHARD J. WILSON C26834 Exp. 6-31-11 CIVIL STATE OF CALIFORNIA

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MAY. 04 2010
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SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

EROSION CONTROL PLANS FOR
SPL-6 (LINK 4) SLAY IMPROVEMENTS
EROSION CONTROL PLAN

DRAWN BY: 00	DATE:	SCALE: 1" = 30'	W.O. / REV. 0
CHECKED BY:	DATE:		
APPROVED BY:	DATE:		SPL-06-SEC-08
CAD NO.:	PLOT SCALE: 1 = 1		

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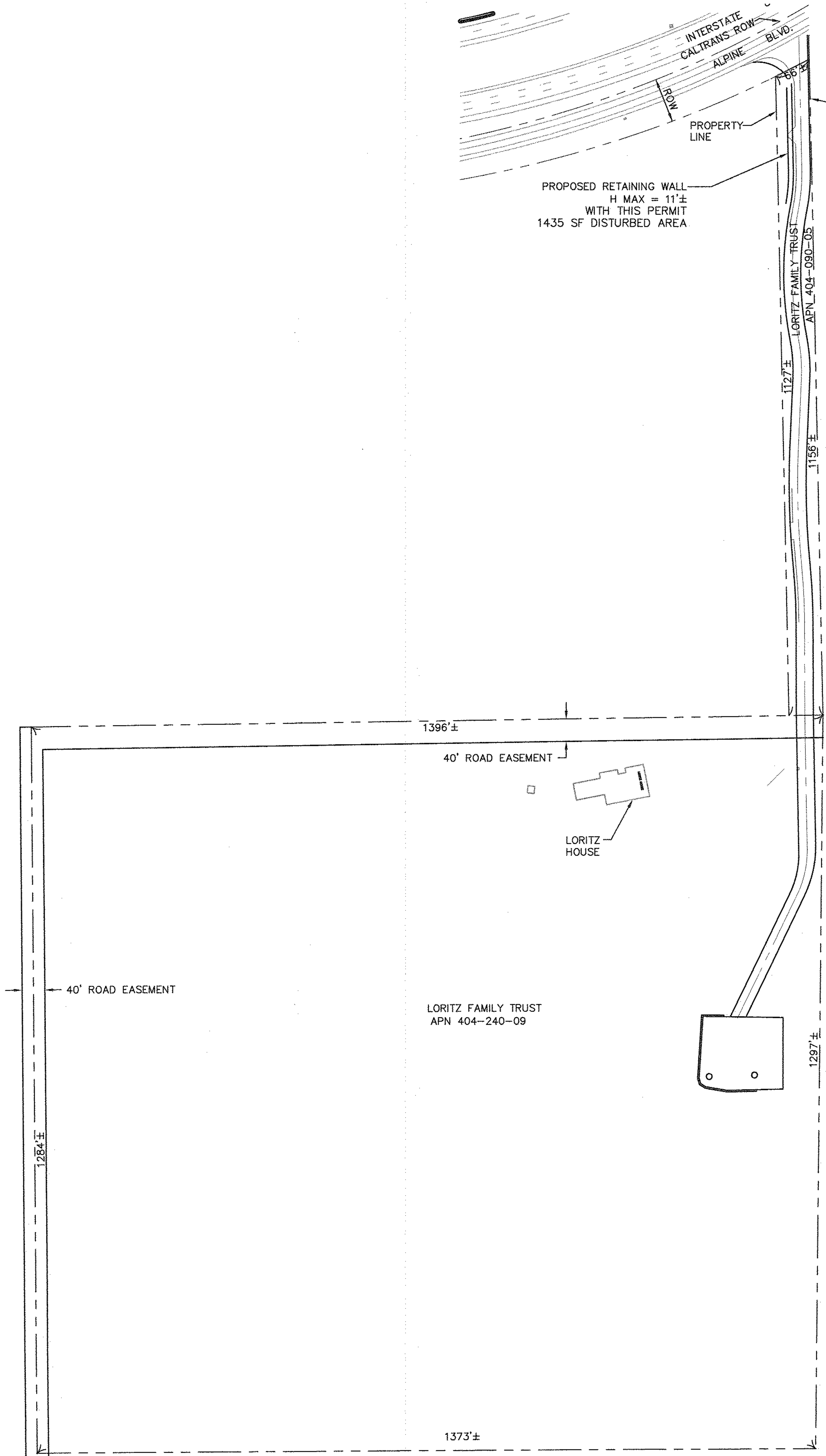
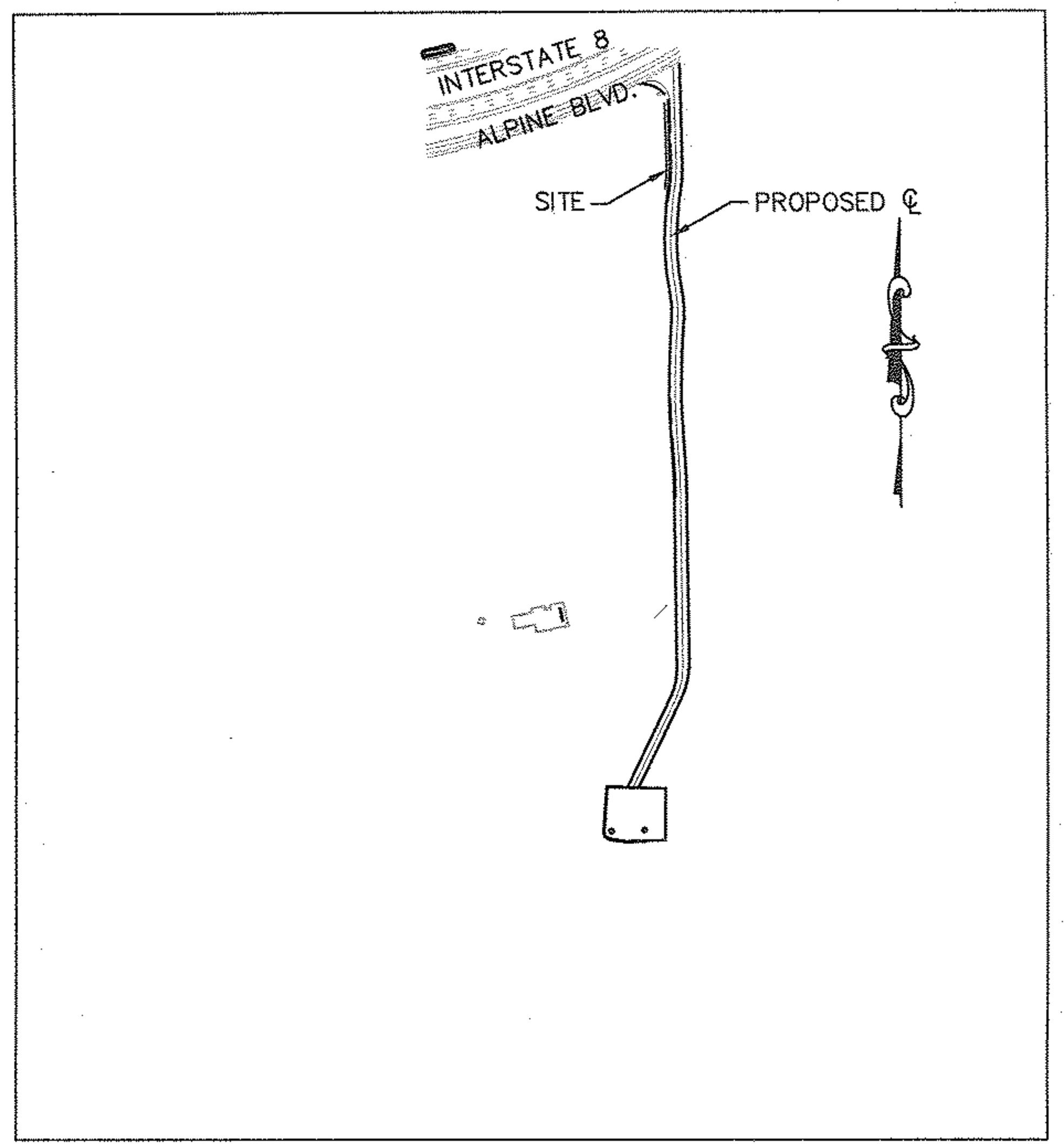


PLOT PLAN

SCALE: 1" = 120'



VICINITY MAP

NOT TO SCALE

APPLICANT
SAN DIEGO GAS & ELECTRIC
MS.MOLLY FRISBIE
(858)650-4078

PROPOSED
CONSTRUCTION OF RETAINING WALL
NO BUILDING ON THIS PARCEL

OWNER
LORITZ FAMILY TRUST
STREET ADDRESS:
4353 ALPINE BLVD.
ALPINE, CA. 91901
MAILING ADDRESS:
3686 COTTAGE STONE CT.
LAUGHLIN, NV 89029

CONTACT
RICHARD J. WILSON OR LUIS ALARCON
BUREAU VERITAS
11590 W. BERNARDO COURT, SUITE 100
SAN DIEGO, CA 92127
(858) 451-6100

LEGEND
—— – – —— PROPERTY LINE
—— —— —— BUILDING SETBACK LINE (SBL)

ABBREVIATIONS

APN	ASSESSORS PARCEL NO.
CL	CENTER LINE
CPUC	CALIFORNIA PUBLIC UTILITY COMMISSION
EX.	EXISTING
ROW	RIGHT OF WAY
RD	ROAD
SBL	SET BACK LINE
EX.	EXISTING
SF	SQURE FOOT
SFD	SINGLE FAMILY DWELLING

LOUS 17677
Approved
Department of Environmental Health
Specialist Ret-Wall Date 5-4-10

* exempt fum ZO. 53090 - 53097.5
COUNTY OF SAN DIEGO
DEPARTMENT OF PLANNING & LAND USE
SITE ADDRESS
ASSESSOR'S PARCEL NO. 404-090-05
Eng. Ret wall for Sunrise Powerlink
A70
* transmission
COUNTER PERSON DATE
PLANNER DATE 5/4/10

Minimum Construction Specifications (DPL #81) are attached to these plans and are made a part thereof.

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FOR YAH
MAY. 07 2010
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DPLU-BUILDING DIVISION
MAY 04 2010
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NOTE:
SPECIAL INSPECTION IS REQUIRED PLEASE SEE SPECIAL INSPECTION FORM ON SHEET SPL-06-BC03

REGISTERED PROFESSIONAL ENGINEER
RICHARD J. WILSON
C29834
Exp. 3-31-11
CIVIL
STATE OF CALIFORNIA

GRAPHIC SCALE
120 0 120 240
1"=120'

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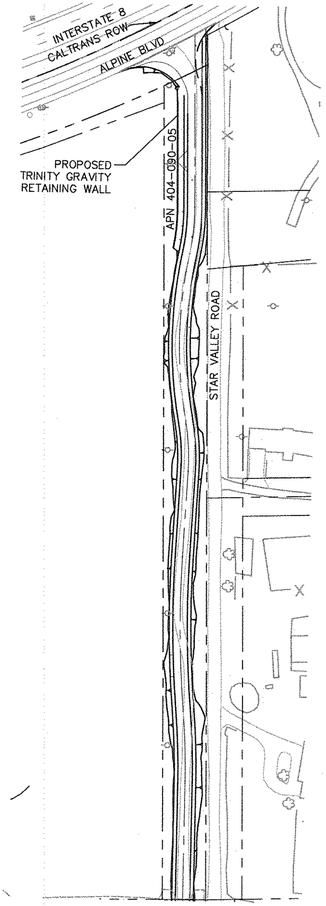
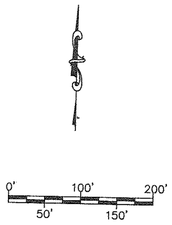
LORITZ IMPROVEMENT PLAN - APN 404-240-09
SAN DIEGO COUNTY BUILDING PERMIT SET





ON-SITE WORK TO BE DONE

SITE / ACCESS ROAD

PLOT PLAN
SITE PLAN
LEGEND AND GENERAL NOTES
GRAVITY WALL PLAN & PROFILE
GRAVITY WALL DETAILS
EROSION CONTROL PLAN

SHEET NUMBER

SPL 006-LC01
SPL 006-LC02
SPL 006-LC03
SPL 006-LC04
SPL 006-LC05
SPL 006-LEC06

DPLU-BUILDING DIVISION
MAY 07 2010
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REGISTERED PROFESSIONAL ENGINEER
RICHARD J. WILLSON
C29834
Exp. 3-31-11
CIVIL
STATE OF CALIFORNIA

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SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-06 (LINK 4) LORITZ IMPROVEMENTS
SITE PLAN

DRAWN BY: J.PIORKOWSKI	DATE:	SCALE: NA	W.O. REV. 0
CHECKED BY:	DATE:		
APPROVED BY:	DATE:		
CAD NO.:	PLOT SCALE: 1 = 1		SPL-06-LC02

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LORITZ W1

GENERAL NOTES

THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTION TO THE CONTRACTOR BY THE ENGINEER OF WORK:

1. ALL WORK SHALL COMPLY WITH ALL APPLICABLE PORTIONS OF THE PROJECT SPECIFICATIONS:
2. NEITHER THE OWNER, NOR THE ENGINEER OF WORK WILL ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE, SPREAD, WATER AND COMPACT ALL FILL IN STRICT ACCORDANCE WITH SDG&E'S SPECIFICATIONS. A GEOTECHNICAL ENGINEER WILL BE THE OWNER'S REPRESENTATIVE TO INSPECT THE CONSTRUCTION OF FILLS. THE EXCAVATION AND THE PLACEMENT OF FILL WILL BE UNDER THE DIRECT INSPECTION OF THE GEOTECHNICAL ENGINEER, AND HE WILL GIVE WRITTEN NOTICE OF CONFORMANCE WITH THE SPECIFICATIONS UPON COMPLETION OF GRADING. DEVIATIONS FROM SDG&E'S SPECIFICATIONS WILL BE PERMITTED ONLY UPON WRITTEN AUTHORIZATION FROM THE GEOTECHNICAL ENGINEER OR THE SDG&E REPRESENTATIVE.
4. OBSERVATIONS AND COMPACTION TESTS WILL BE MADE BY THE GEOTECHNICAL ENGINEER DURING THE FILLING AND COMPACTING OPERATIONS SO THAT HE CAN STATE HIS OPINION THAT THE FILL WAS CONSTRUCTED IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
5. DURING CONSTRUCTION: THE CONTRACTOR SHALL GRADE ALL EXCAVATED AND FILLED SURFACES TO PROVIDE POSITIVE DRAINAGE AND PREVENT PONDING OF WATER. HE SHALL CONTROL SURFACE WATER TO AVOID DAMAGE TO ADJOINING PROPERTIES OR TO FINISH WORK ON THE SITE. THE CONTRACTOR SHALL TAKE REMEDIAL MEASURES TO PREVENT EROSION OF FRESHLY GRADED AREAS, AND UNTIL SUCH TIME AS PERMANENT DRAINAGE AND EROSION CONTROL MEASURES HAVE BEEN INSTALLED. AFTER GRADING IS COMPLETED AND THE GEOTECHNICAL ENGINEER HAS FINISHED HIS OBSERVATIONS OF THE WORK, NO FURTHER EXCAVATION OR FILLING SHALL BE DONE, EXCEPT UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER.
6. CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS REQUIRED TO PROTECT ADJACENT PROPERTIES DURING THE GRADING OPERATIONS.
7. BRUSH AND TREES SHALL BE REMOVED ONLY WITHIN THE AREA TO BE GRADED. WHEN TREES ARE REMOVED, THE ROOT SYSTEMS SHALL ALSO BE REMOVED AND THE RESULTING EXCAVATION FILLED WITH PROPERLY COMPACTED FILL SOILS.
8. CUT AND FILL SLOPES SHALL BE TRIMMED TO THE FINISH GRADE TO PRODUCE A SMOOTH AND UNIFORM SURFACE OR CROSS-SECTION. THE SLOPES OF EXCAVATIONS OR EMBANKMENTS SHALL BE SHAPED AND TRIMMED AS DIRECTED BY THE SDG&E REPRESENTATIVE AND LEFT IN A NEAT AND ORDERLY CONDITION. ALL STONES, ROOTS, OR OTHER WASTE MATTER EXPOSED ON EXCAVATION OR EMBANKMENT SLOPE SHALL BE REMOVED AND DISPOSED OF.
9. GRADING SHALL BE DONE WITHIN A TOLERANCE OF ±0.1' OF THE GRADES AND ELEVATIONS SHOWN ON THESE PLANS AND ALL SLOPES SHALL BE CONSTRUCTED WITHIN ±0.5' OF THE LOCATION SHOWN ON THESE PLANS. IN NO WAY SHALL THE ABOVE TOLERANCES RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF PROVIDING A FINISH THAT WILL NOT POND WATER.
10. ANY QUANTITIES INDICATED ON THESE PLANS ARE ENGINEERS' ESTIMATES ONLY AND ARE NOT TO BE USED BY CONTRACTOR FOR BIDDING PURPOSES.
11. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN THE FIELD AND BRING DISCREPANCIES TO THE ATTENTION OF THE SDG&E REPRESENTATIVE PRIOR TO STARTING CONSTRUCTION.
12. CONTRACTOR SHALL REFER TO GEOTECHNICAL REPORT TITLED "GEOTECHNICAL EVALUATION – ACCESS ROADS AND STRUCTURAL PADS SUNRISE POWERLINK PROJECT"
    BY URS, DATED, OCTOBER 16, 2009. URS
    PROJECT No.27669019.0002

EROSION CONTROL NOTES

1. ALL POLE & TOWER MAINTENANCE PADS TO BE DIKED AND THE DIKES MAINTAINED TO PREVENT WATER FROM FLOWING FROM THE PADS WITHOUT CAUSING EROSION, OR CONSTRUCT DRAINAGE FACILITIES TO THE SATISFACTION OF THE COUNTY DEPARTMENT OF PUBLIC WORKS THAT WILL ALLOW WATER TO DRAIN FROM THE PAD WITHOUT CAUSING EROSION.
2. TOPS OF ALL SLOPES TO BE DIKED OR TRENCHED TO PREVENT WATER FROM FLOWING OVER THE CREST OF SLOPES.
3. ALL GRADED CUT OR FILL SLOPES SHALL BE HYDROSEEDED TO PROTECT THE SLOPE FROM EROSION AND INSTABILITY IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
4. FIBER ROLLS SHALL BE PLACED AT TOP, TOE AND FACE (15 FOOT INTERVALS) OF GRADED ALL CUT AND FILL SLOPES TO INTERCEPT RUNOFF AND REDUCE EROSION IN ACCORDANCE WITH PROJECT SPECIFICATIONS.

COUNTY OF SAN DIEGO CONSTRUCTION NOTES

1. ALL ASPHALT CONCRETE SHALL CONFORM TO CALTRANS STANDARD SPECIFICATIONS. 2006 SECTION 39 AND SHALL HAVE A BASE COURSE OF TYPE A 3/4" MAXIMUM COURSE AND A 2" FINAL LIFT (OR 2" OVERLAY) USING TYPE B, 1/2" MAXIMUM, MEDIUM GRADATION
2. AGGREGATE BASE SHALL CONFORM TO CALTRANS SECTION 26 CLASS II AGGREGATE BASE
3. ALL OTHER WORK IN COUNTY OF SAN DIEGO PUBLIC RIGHT OF WAY SHALL CONFORM TO CALTRANS STANDARD SPECIFICATIONS OR STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION WITH REGIONAL SUPPLEMENT AMENDMENTS (LATEST ADOPTED EDITION)
4. WORK WITHIN COUNTY RIGHT OF WAY IS SUBJECT TO COUNTY CONSTRUCTION/ ENCROACHMENT PROCESS AND MAY REQUIRE CONSTRUCTION TRAFFIC CONTROL TO MITIGATE SIGHT DISTANCE AND CONSTRUCTION WITHIN THE COUNTY RIGHT OF WAY

COUNTY OF SAN DIEGO BUILDING DIVISION NOTES

1. THE APPROVAL OF PLANS AND SPECIFICATIONS DOES NOT PERMIT THE VIOLATION OF ANY SECTION OF THE BUILDING CODE, COUNTY ORDINANCES, OR STATE LAW. THE FOLLOWING LIST DOES NOT NECESSARILY INCLUDE ALL ERRORS AND OMISSIONS. (SEE THE 2007 CALIFORNIA BUILDING CODE, APPENDIX CHAPTER 1, SECTION 105.4)
2. TWO (2) COPIES OF THE FINAL COMPACTION REPORT SHALL BE SUBMITTED TO THE INSPECTOR PRIOR TO FINAL INSPECTION.

COUNTY OF SAN DIEGO • DEPARTMENT OF PLANNING AND LAND USE
BUILDING DIVISION

NOTICE OF REQUIREMENT FOR SPECIAL INSPECTION

You are hereby notified that, in addition to the inspection of construction provided by the Department of Planning and Land Use, Building Division, an approved registered special inspector is required to provide special inspection and/or structural observation during construction of the proposed project as indicated on this form. This form shall be completed. All work requiring special inspection must be identified as well as the name and phone number of the special inspector identified to perform the special inspections.

The registered special inspector shall be approved by the Building Official prior to the issuance of the building permit. Special inspectors having a current certification from the City of San Diego are approved as special inspectors for the type of construction for which they are certified.

Special inspection and/or structural observation requirements and reports shall be in compliance with the 2007 California Building Code, Chapter 17.

This inspections required to be performed by a special inspector are in addition to and do not change the requirements for the inspections normally required by the 2007 California Building Code as amended and adopted by the County of San Diego and performed by the Building Division inspection personnel.

The special inspector is not authorized to inspect and approve any work other than that for which they are certified. The special inspector is not authorized to accept alternate materials, structural changes, or any requests for plan changes. The special inspector is required to submit to the building inspector in the field written reports of all work that they inspected and approved. Approval of final inspection will not be granted by the Department of Planning and Land Use, Building Division, until a last and final report documenting required special inspections and correction of any discrepancies noted in the inspection reports has been submitted to the building inspector in the field and approved by the Building Division.

For occupancies in Group R-3 and occupancies in Group U that are accessory to a residential occupancy, some exceptions are permitted per the Department of Planning and Land Use, Building Division special inspection policy to not require special inspection or to allow structural observation in lieu of the required special inspections. These exceptions are noted in the table on page two of this form. In cases where the design engineer of record has specified a more restrictive requirement for special inspection and/or structural observation, the project shall comply with the requirements of the engineer of record.

Structural observation is the visual observation of the structural system by a registered design professional. A letter shall be provided describing the results of structural observation prior to approval of final inspection. The letter shall be submitted to the building inspector in the field and approved by the Building Division.

THIS COMPLETED FORM MUST BE MADE A PERMANENT, PRINTED PART OF THE PLANS.
(Taped, glued, stapled, etc. copies will not be accepted)

5201 RUFFIN ROAD, SUITE B, SAN DIEGO, CA 92123 • (858) 565-5920 • (888) 336-7553
HTTP://WWW.SDCDPLU.ORG

DPLU #008 REV 09/01/2009 Page 1 of 2

WORK REQUIRING SPECIAL INSPECTION	ITEM DESCRIPTION AND LOCATION	DESIGN STRENGTH	NAME OF SPECIAL INSPECTOR	PHONE NUMBER OF SPECIAL INSPECTOR
SPECIAL INSPECTIONS REQUIRED BY CBC SECTION 1704				
*FOR R-3 AND U OCCUPANCIES ACCESSORY TO RESIDENTIAL OCCUPANCIES SPECIAL INSPECTION IS NOT REQUIRED FOR: ITEMS 1b, 2a (WHEN f'c ≤ 2,000 psi), 2c, 3a (WHEN fm ≤ 1,500 psi), 3b (WHEN WALL HEIGHT IS ≤ 10 FT.), 6, 7, 8, & 9 STRUCTURAL OBSERVATION IS PERMITTED IN LIEU OF SPECIAL INSPECTION FOR ITEMS 3a, 3b (WHEN WALL HEIGHT IS > 10 FT.), AND 4a				
1.) Steel Construction				
a.) Field welding				
b.) Steel frame*	N/A			
c.) High-strength bolts				
2.) Concrete Construction				
a.) f'c > 2,500 psi*				
b.) Anchors				
c.) Structural slabs*	N/A			
d.) Pre-stressed / post-tensioned slabs	N/A			
3.) Masonry Construction	N/A			
a.) Masonry construction*	N/A			
b.) Site work other than County Standard plans*				
4.) Wood Construction	N/A			
a.) High-load diaphragms*				
5.) Foundations				
a.) Pile foundations	N/A			
b.) Pier foundations				
6.) Sprayed fire-resistant materials*	N/A			
7.) Mastic and intumescent fire-resistant coatings*	N/A			
8.) Exterior insulation and finish systems (EIFS)*	N/A			
9.) Smoke control systems*	N/A			
10.) Special cases				
a.) GRAVITY (TRINITY) WALL CONSTRUCTION			GARY HEINBACH	(951) 840-5920
b.)				
SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE REQUIRED BY CBC SECTION 1707				
*R-3 AND U OCCUPANCIES ACCESSORY TO RESIDENTIAL OCCUPANCIES STRUCTURAL OBSERVATION IS PERMITTED IN LIEU OF SPECIAL INSPECTION FOR ITEMS C AND D				
A.) Field welding				
B.) Structural wood: field gluing of elements of the seismic force-resisting system	N/A			
C.) Structural wood: nailing, bolting, anchoring and other fastening of components within the seismic-force-resisting system where fastener spacing of sheathing is 4 inches o.c. or less*	N/A			
D.) Cold-formed steel framing*	N/A			
E.) Pier foundations	N/A			
F.) Storage racks and access floors	N/A			
G.) Architectural components for structures greater than 30 feet in height	N/A			
H.) Designated seismic system verifications	N/A			
I.) Designated seismic system verifications	N/A			
J.) Seismic isolation system	N/A			

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DPLU #006 REV 09/01/2009 Page 2 of 2

LEGEND

- SECTION A — A SECTION — INDICATES NEW TOWER
- INDICATES EXISTING STEEL POLE
- 422.1 / 415.9 — VERTICAL PROFILE F.G. ELEV. ABOVE / VERTICAL PROFILE E.G. ELEV. BELOW
- NEW TRANSMISSION LINE
- 440 — (F.G.) FINISH GRADE CONTOURS
- 440 — (E.G.) EXISTING GRADE CONTOURS
- (206.2) — EXISTING GROUND ELEVATION
- TOP / TOE — FILL SLOPE 2:1 UNLESS SHOWN OTHERWISE
- TOP / TOE — CUT SLOPE 2:1 UNLESS SHOWN OTHERWISE
- R — RIDGE LINE
- DAYLIGHT LINE
- DIRECTION OF FLOW
- CUT / FILL — CUT/FILL LINE
- CONCRETE DOWN DRAIN, SEE DETAIL
- RIPRAP ENERGY DISSIPATOR, SEE DETAIL
- CORRUGATED METAL PIPE WITH FLARED END SECTIONS, SEE PLANS FOR, PIPE SIZES, AND ENERGY DISSIPATOR.
- DROP OUTLET PER SDRSD D-16 TYPE B, INLET PIPE 24"" AND OUTLET PIPE 12" DIAMETER
- CONCRETE DRAINAGE DITCH, SEE DETAIL
- DRAINAGE DITCH BEHIND MASONRY CUT RETAINING WALL, SEE DETAIL
- RETAINING WALL, FILL
- 3' — RETAINING WALL, CUT
- X / XX — DETAIL LABEL (DETAIL # / SHEET #)

ABBREVIATIONS

(EG)	EXISTING GRADE
FG	FINISHED GRADE
TW	TOP OF WALL
BW	BOTTOM OF WALL AT FINISHED GROUND
FL	FLOW LINE
U/S	UP STREAM
D/S	DOWN STREAM
CMP	CORRUGATED METAL PIPE
RC	RELATIVE COMPACTION

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REGISTERED PROFESSIONAL ENGINEER RICHARD J. WILSON C29934 Exp. 3-31-11 CIVIL STATE OF CALIFORNIA

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MAY. 04 2010
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SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL–06 (LINK 4) LORITZ IMPROVEMENTS
LEGEND AND GENERAL NOTES

DRAWN BY: JJP	DATE: –/–/–	SCALE: AS NOTED	W.O.	REV. 0	SPL–06–LC03
CHECKED BY:	DATE:				
APPROVED BY:	DATE:				
CAD NO.:	PLOT SCALE: 1=1				

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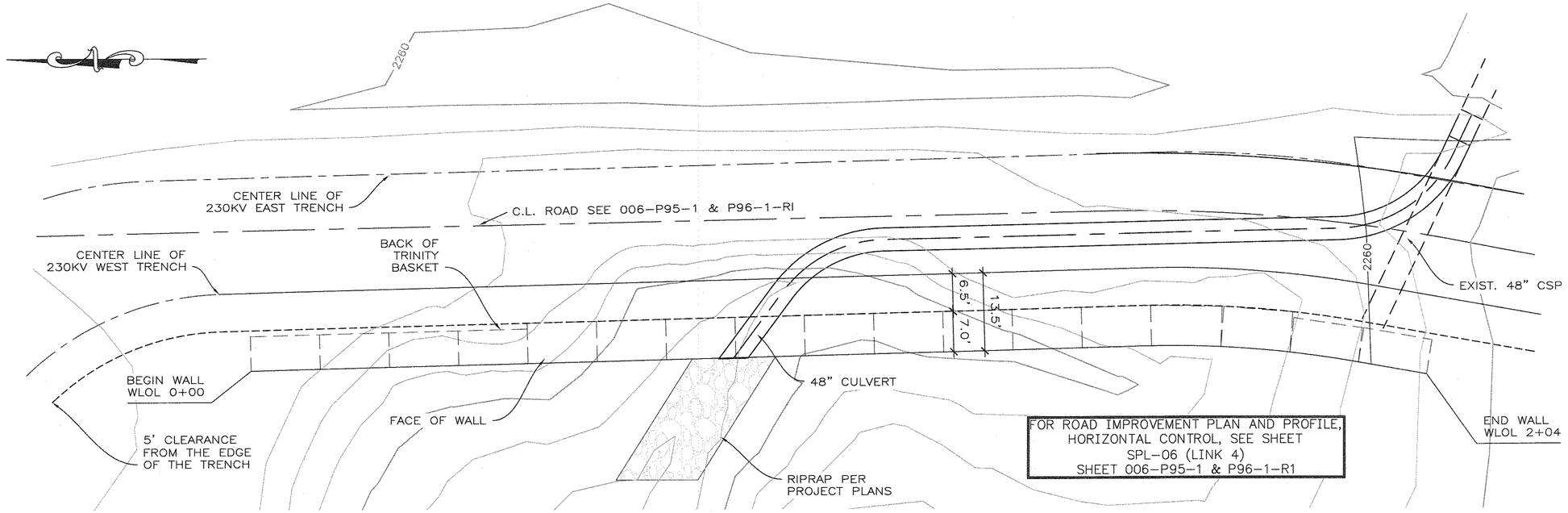
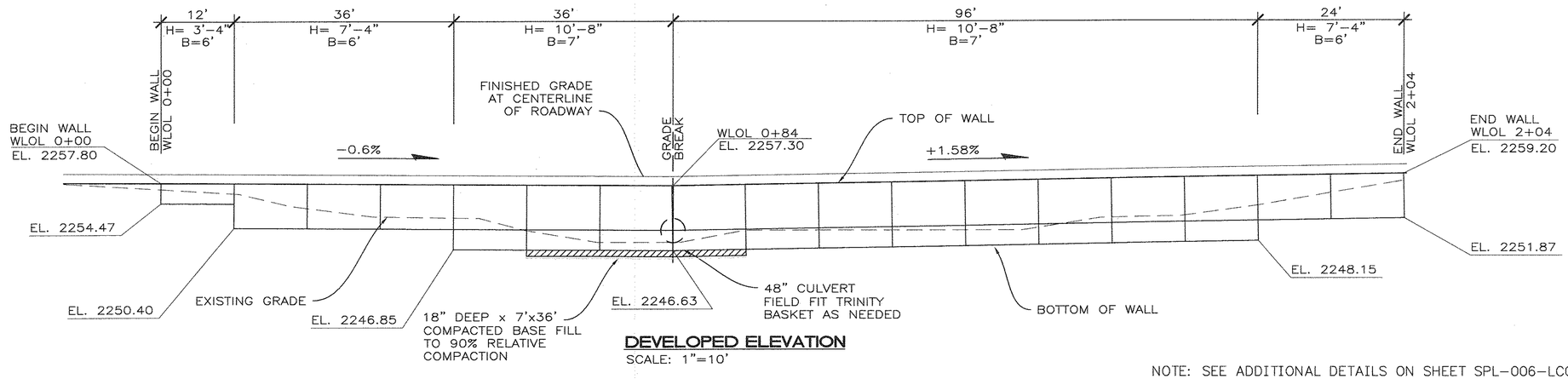
LORITZ W1



PLAN VIEW
SCALE: 1"=10'



DEVELOPED ELEVATION
SCALE: 1"=10'

NOTE: SEE ADDITIONAL DETAILS ON SHEET SPL-006-LC05

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TRINITY WALL DETAILS

GRAPHIC SCALE
10 0 10 20
1"=10'

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1902 Hilfiker Lane
Eureka, CA 95503-5711
TOLL-FREE **800.762.8962**
PH **707.443.5093** FAX **707.443.2891**
WEB SITE www.hilfiker.com E-MAIL info@hilfiker.com
SINCE 1902 QUALITY PRODUCTS

REGISTERED PROFESSIONAL ENGINEER
RICHARD J. WILSON
C23934
Exp. 3-31-11
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SPL-06 (LINK 4) LORITZ IMPROVEMENTS
GRAVITY WALL PLAN AND PROFILE

DRAWN BY: JPIORKOWSKI	DATE:	SCALE: NA	W.O. / REV. 0
CHECKED BY:	DATE:		
APPROVED BY:	DATE:		
CAD NO.:	PLOT SCALE: 1 = 1		SPL-06-LC04

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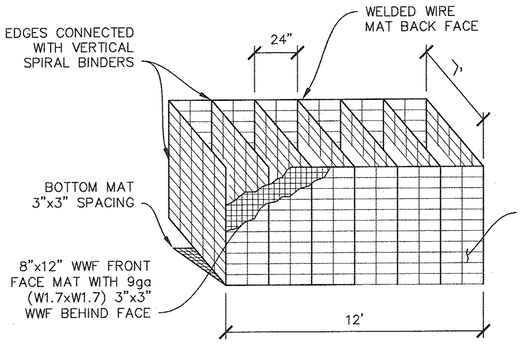
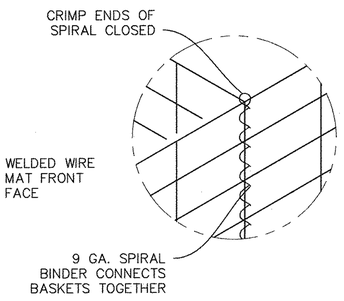
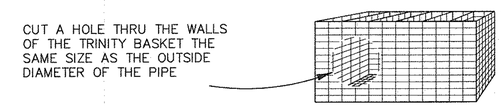
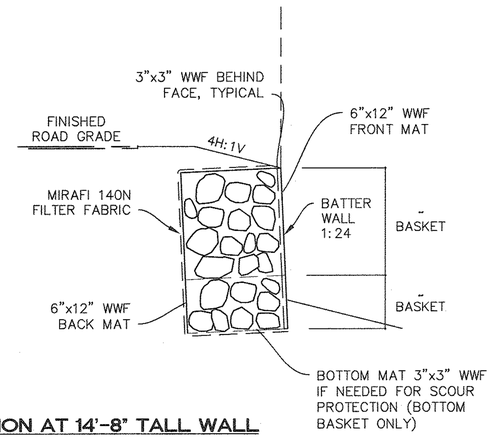


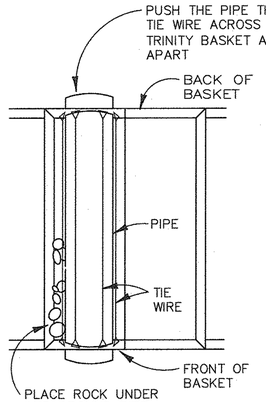
SHOP ASSEMBLY
NOT TO SCALE



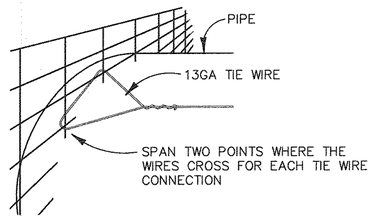




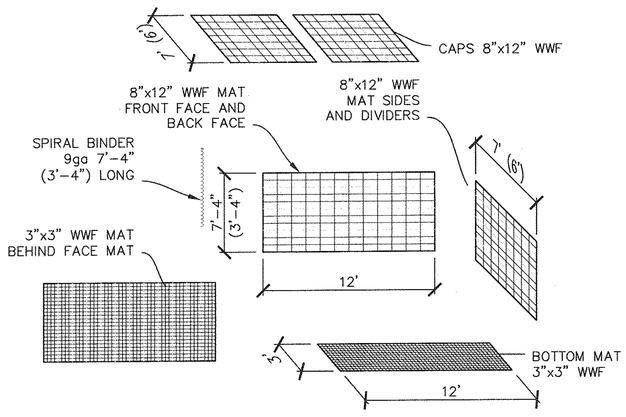
SECTION AT 14'-8" TALL WALL
SCALE: 1"=10'



PIPE THRU TRINITY BASKET DETAIL
NOT TO SCALE



TIE WIRE DETAIL



WALL COMPONENT DIMENSIONS
NOT TO SCALE

SUPPLIED QUANTITIES:

FACE AREA:	1,886.88 SQ. FT.
FULL HEIGHT BASKETS:	16
HALF HEIGHT BASKETS:	12

TRINITY WALL PRODUCT SPECIFICATION

TRINITY WALL–THIS WORK SHALL CONSIST OF HILFIKER TRINITY WALLS (WELDED WIRE MESH BINS) AND FILLING THE ASSEMBLED BINS WITH ROCK IN ACCORDANCE WITH THE DETAILS SHOW ON PROJECT PLANS AND SPECIAL PROVISION.

WIRE FOR THE MANUFACTURE AND ASSEMBLY OF TRINITY WALL SHALL MEET OR EXCEED ANY COMBINATION OF THE FOLLOWING REQUIREMENTS:

DECRIPTION	REQUIREMENT
1. 6"X9" OR 6"X12" WELDED WIRE FABRIC–COMMERCIAL GALVANIZED (WIRE SIZES SHALL CONSIST OF W4.5XW3.5, W7.0XW3.5, OR W9.5XW4.0)	ASTM A185, A–82
2. 3"X3" (7.62 CM X 7.62 CM), 9 GA. –0.144 IN. MIN. (3.66 MM) WELDED WIRE FABRIC	ASTM A185, A370 EXCEPTION: WELD SHEAR AT 800 LBS. MIN.
3. 9 GA. GALVANIZED SPIRAL BINDER (MIN. 0.144IN. [3.66 MM])	ASTM A641, A90

MATERIALS–THE TRINITY WALL SHALL BE OF A SINGLE UNIT CONSTRUCTION. THE BOTTOM MAT, SIDES, DIVIDERS, BACK FACE, FRONT FACE, ALL SHALL BE CONNECTED AND SPIRALED INTO RECTANGULAR BINS OF THE SPECIFIED SIZES.

ROCK–ROCK FOR FILLING THE BIN SHALL BE AS LISTED:
. 100% PASSING 18 INCHES (30.5 CM), 0–5% PASSING 3 INCHES (10.2 CM)

CONSTRUCTION–THE TRINITY WALL BIN SHALL FIRST BE ASSEMBLED INDIVIDUALLY AS EMPTY UNITS. EACH BIN SHALL BE MANUFACTURED WITH THE NECESSARY PANELS.

WHEN 9–GAUGE SPIRAL BINDERS ARE USED, THE SPIRAL SHALL BE SCREWED INTO POSITION SUCH THAT IT PASSES THROUGH EACH MESH OPENING ALONG THE JOINT.

TEMPORARY FASTENERS MAY BE USED TO HOLD PANELS WHEREVER BIN JOINTS ARE CONSTRUCTED. TEMPORARY FASTENERS MAY REMAIN IN PLACE.

MEASUREMENT–QUANTITIES OF THE TRINITY WALL TO BE PAID FOR WILL BE MEASURED BY THE SQUARE FOOT (PROFILE) AND WILL BE DETERMINED FROM THE DIMENSIONS SHOWN ON THE PLANS FOR THE DIMENSIONS DIRECTED BY THE ENGINEER.

PAYMENT– THE CONTRACT PRICE PAID PER SQUARE FOOT FOR THE TRINITY WALL SHALL INCLUDE FULL COMPENSATION FOR FURNISHING ALL LABOR, MATERIALS (INCLUDING FOUNDATION RE–COMPACTION, EXCAVATION, AND BACKFILL), AS SHOWN ON THE PLANS, THESE SPECIAL PROVISIONS, AND AS DIRECTED BY THE ENGINEER.

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MAY 04 2010
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REGISTERED PROFESSIONAL ENGINEER
RICHARD J. WILSON
C29834
Exp. 3-31-11
CIVIL
STATE OF CALIFORNIA

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Eureka, CA 95503-5711
TOLL-FREE **800.762.8962**
PH **707.443.5093** FAX **707.443.2891**
WEB SITE www.hilfiker.com E-MAIL info@hilfiker.com
SINCE 1902 QUALITY PRODUCTS

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SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL–06 (LINK 4) LORITZ IMPROVEMENTS
GRAVITY WALL DETAILS

DRAWN BY: J.PIORKOWSKI	DATE:	SCALE: NA	W.O.	REV. 0	SPL–06–LC05
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APPROVED BY:	DATE:				
CAD NO.:	PLOT SCALE: 1 = 1				

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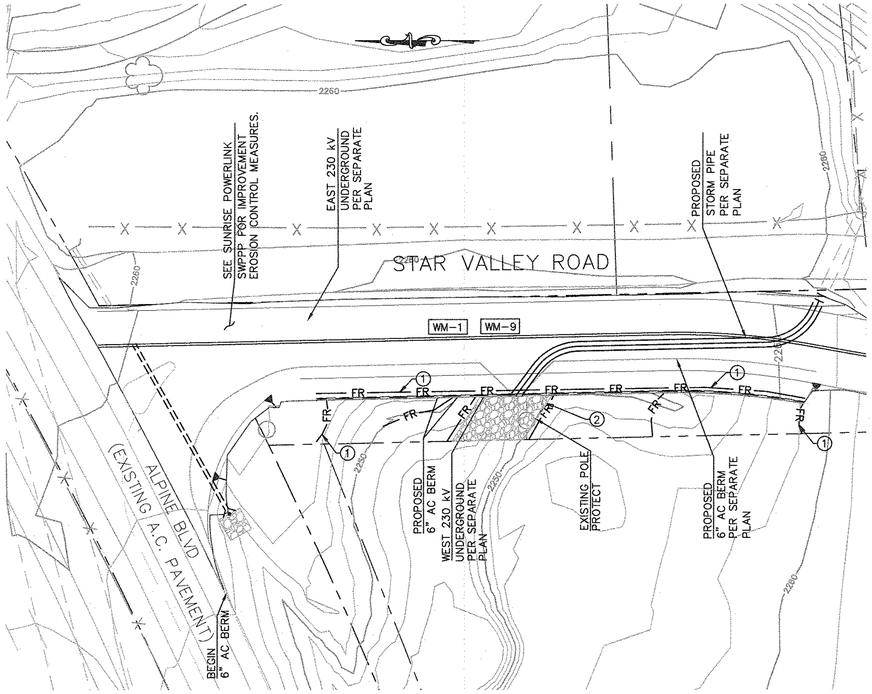
LEGEND

DESCRIPTION	SEE CON. NOTE #	CALTRANS/ SDG&E WATER QUALITY CONSTRUCTION BMP MANUAL STD. DWG.	SYMBOL
GRADED SWALE			
FIBER ROLLS	(1)	SC-5/BMP 1-03	FR
ENERGY DISSIPATOR	(2)	SS-10	
MATERIAL DELIVERY & STORAGE		WM-1	WM-1
SANITARY WASTE MANAGEMENT		WM-9	WM-9



EROSION CONTROL PLAN FOR WALL

SCALE: 1" = 30'

GRAPHIC SCALE
30 0 30 60
1"=30'

CONSTRUCTION NOTES

(1) INSTALL FIBER ROLLS. SEE BMP SHEETS SC-5/BMP 1-03 FOR INSTALLATION, MAINTENANCE, AND INSPECTION INSTRUCTIONS AND PROCEDURES.

(2) INSTALL VELOCITY DISSIPATION DEVICES SEE BMP SHEET SS-10 FOR APPLICATION, MAINTENANCE, AND INSPECTION INSTRUCTIONS AND PROCEDURES.

EROSION AND SEDIMENT CONTROL NOTES:

1. FOR BMP SHEETS REFER TO CALTRANS (MARCH 2003) AND SDG&E WATER QUALITY CONSTRUCTION BEST MANAGEMENT PRACTICES MANUAL (DECEMBER 2002) AND PROJECT'S FINAL APPROVED SWPPP.
2. CONTRACTOR TO IMPLEMENT STREET SWEEPING AND VACUUMING (PER BMP SHEET SC-7/BMP 1-07) ALONG ALL AREAS OF SOIL DISTURBANCE ALONG THE EXISTING ROADWAY.
3. VEHICLE AND EQUIPMENT CLEANING, FUELING, AND/OR MAINTENANCE (PER BMP SHEETS NS-8/BMP 3-03, NS-9/BMP 3-04, AND NS-10 RESPECTIVELY) SHALL NOT BE PERFORMED ON SITE.
4. IF DISCHARGES FROM IRRIGATION LINES, POTABLE WATER LINES, OR HYDRANT FLUSHING OCCUR ONSITE, CONTRACTOR MUST IMPLEMENT POTABLE WATER/IRRIGATION PER BMP SHEET NS-7, AS NECESSARY.
5. CONTRACTOR ALSO TO IMPLEMENT THE FOLLOWING CONSTRUCTION BMPS, AS NECESSARY:
   - SCHEDULING, PER BMP SHEETS EC-1/BMP 1-01
   - WIND EROSION CONTROL, PER BMP SHEETS WE-1/BMP 4-08
   - WATER CONSERVATION PRACTICES, PER BMP SHEET NS-1
   - ILLICIT CONNECTION/DISCHARGE, PER BMP SHEETS NS-6/BMP 2-06
6. NO WORK HAVING THE POTENTIAL TO CAUSE WATER POLLUTION, AS DETERMINED BY THE ENGINEER, SHALL BE PERFORMED UNTIL THE SWPPP HAS BEEN SUBMITTED TO THE ENGINEER BY THE CONTRACTOR, AND APPROVED.
7. THE CONTRACTOR SHALL CONSIDER OTHER CONTROL MEASURES, AS NECESSARY, TO SUPPLEMENT THE CRITICAL TEMPORARY CONTROL MEASURES SHOWN ON THESE PLANS, IN ORDER TO MEET THE POLLUTION CONTROL OBJECTIVES OF THE SWPPP.

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MAY. 07 2010
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RICHARD J. WILSON
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STATE OF CALIFORNIA

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MAY. 04 2010
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SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

EROSION CONTROL PLANS FOR
SPL-06 (LINK 4) LORITZ IMPROVVEMENTS
EROSION CONTROL PLAN

DRAWN BY: 00	DATE:	SCALE: 1" = 30'	W.O. REV. 0
CHECKED BY:	DATE:		
APPROVED BY:	DATE:		SPL-06-LEC06
CAD NO.:	PLOT SCALE: 1 = 1		

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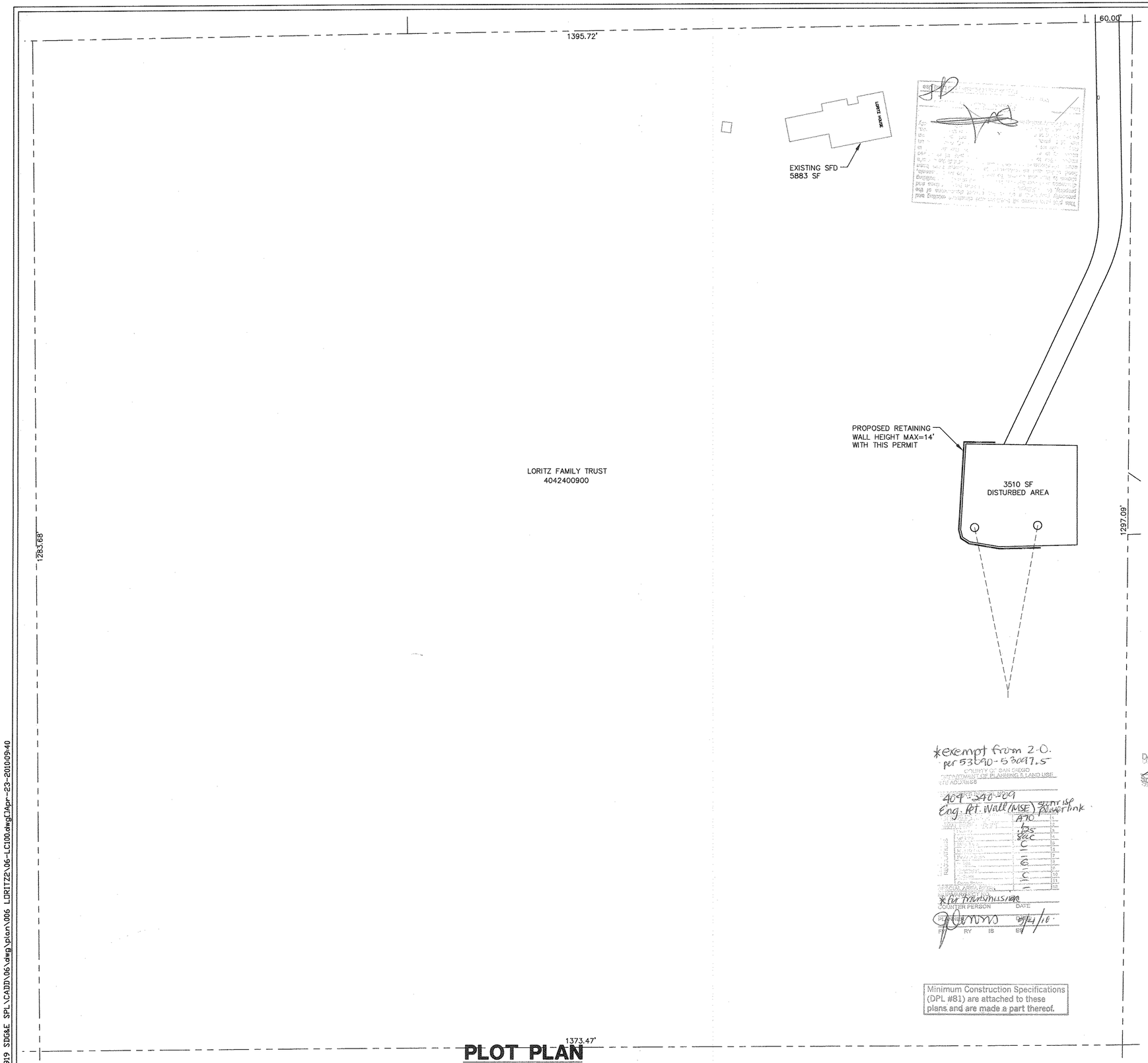
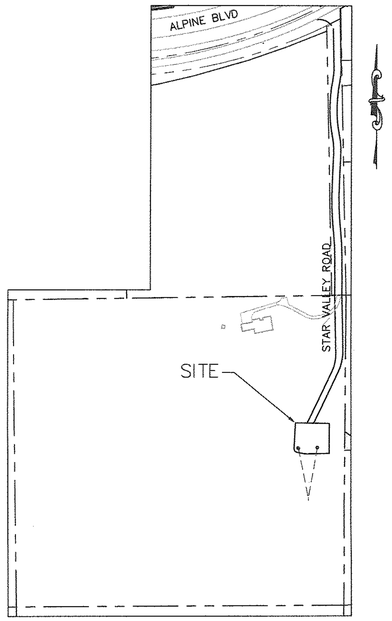


PLOT PLAN

SCALE: 1" = 60'



VICINITY MAP

NOT TO SCALE

APPLICANT
SAN DIEGO GAS & ELECTRIC
MS. MOLLY FRISBIE
(858)650-4078

PROPOSED
CONSTRUCTION OF RETAINING WALL

OWNER
LORITZ FAMILY TRUST
4353 ALPINE BLVD.
ALPINE, CA 91901

MAILING ADDRESS:
3686 COTTAGE STONE CT.
LAUGHLIN, NV 89029

CONTACT
RICHARD J. WILSON OR LUIS ALARCON
BUREAU VERITAS
11590 W. BERNARDO COURT, SUITE 100
SAN DIEGO, CA 92127
(858) 451-6100

LEGEND
— — — PROPERTY LINE
— — — BUILDING SETBACK LINE (SBL)

ABBREVIATIONS

APN	ASSESSORS PARCEL NO.
CL	CENTER LINE
CPUC	CALIFORNIA PUBLIC UTILITY COMMISSION
EX.	EXISTING
ROW	RIGHT OF WAY
RD	ROAD
SBL	SET BACK LINE
EX.	EXISTING
SF	SQURE FOOT
SFD	SINGLE FAMILY DWELLING

*exempt from 2-0.
per 53890-53917.5
COUNTY OF SAN DIEGO
DEPARTMENT OF PLANNING & LAND USE
APPLICATION ACCEPTED
409-340-209
Eng. Rt. Wall (MSE) powerlink
A70
425
sec
for transmission
COUNTER PERSON DATE
PLANNER
FEE RY IS EX

Minimum Construction Specifications
(DPL #81) are attached to these
plans and are made a part thereof.

LOWS 17679
Approved
Department of Environmental Health
5-4-10
Date
Ret. Wall

DPLU-BUILDING DIVISION
FOR YAH
MAY, 07 2010
County of San Diego
Plan Check

REGISTERED PROFESSIONAL ENGINEER
RICHARD J. WILSON
C29834
Exp. 3-31-11
CIVIL
STATE OF CALIFORNIA

DPLU-BUILDING DIVISION
MAY, 04 2010
County of San Diego
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NOTE:
SPECIAL INSPECTION IS REQUIRED
PLEASE SEE SPECIAL INSPECTION
FORM ON SHEET SPL-06-BC03

GRAPHIC SCALE
60 0 60 120
1"=60'

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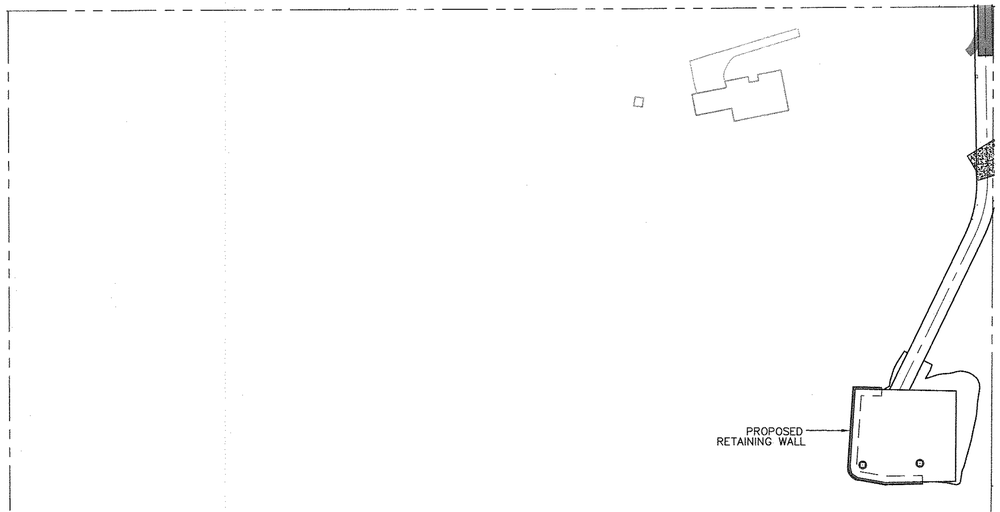
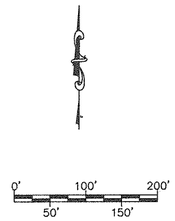
LORITZ IMPROVEMENT PLAN - APN 404-240-09
SAN DIEGO COUNTY BUILDING PERMIT SET





ON-SITE WORK TO BE DONE

SITE / ACCESS ROAD

PLOT PLAN
SITE PLAN
LEGEND AND GENERAL NOTES
MSE WALL PLAN & PROFILE
MSE WALL DETAILS
MSE WALL DETAILS
MSE WALL DETAILS
EROSION CONTROL PLAN

SHEET NUMBER

SPL 06-LC100
SPL 06-LC101
SPL 06-LC102
SPL 06-LC103
SPL 06-LC104
SPL 06-LC105
SPL 06-LC106
SPL 06-LC107

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SAN DIEGO, CALIFORNIA

SPL-006 (LINK 4) LORITZ IMPROVEMENTS
SITE PLAN

DRAWN BY: JPIORKOWSKI	DATE:	SCALE: NA	W.O. / REV. 0
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APPROVED BY:	DATE:		SPL-06-LC101
CAD NO.:	PLOT SCALE: 1 = 1		

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GENERAL NOTES

THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTION TO THE CONTRACTOR BY THE ENGINEER OF WORK:

1. ALL WORK SHALL COMPLY WITH ALL APPLICABLE PORTIONS OF THE PROJECT'S SPECIFICATIONS.
2. NEITHER THE OWNER, NOR THE ENGINEER OF WORK WILL ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE, SPREAD, WATER AND COMPACT ALL FILL IN STRICT ACCORDANCE WITH SDG&E'S SPECIFICATIONS. A GEOTECHNICAL ENGINEER WILL BE THE OWNER'S REPRESENTATIVE TO INSPECT THE CONSTRUCTION OF FILLS. THE EXCAVATION AND THE PLACEMENT OF FILL WILL BE UNDER THE DIRECT INSPECTION OF THE GEOTECHNICAL ENGINEER, AND HE WILL GIVE WRITTEN NOTICE OF CONFORMANCE WITH THE SPECIFICATIONS UPON COMPLETION OF GRADING. DEVIATIONS FROM THE PROJECT'S SPECIFICATIONS WILL BE PERMITTED ONLY UPON WRITTEN AUTHORIZATION FROM THE GEOTECHNICAL ENGINEER OR THE SDG&E REPRESENTATIVE.
4. OBSERVATIONS AND COMPACTION TESTS WILL BE MADE BY THE GEOTECHNICAL ENGINEER DURING THE FILLING AND COMPACTING OPERATIONS SO THAT HE CAN STATE HIS OPINION THAT THE FILL WAS CONSTRUCTED IN ACCORDANCE WITH SDG&E'S SPECIFICATIONS.
5. DURING CONSTRUCTION: THE CONTRACTOR SHALL GRADE ALL EXCAVATED AND FILLED SURFACES TO PROVIDE POSITIVE DRAINAGE AND PREVENT PONDING OF WATER. HE SHALL CONTROL SURFACE WATER TO AVOID DAMAGE TO ADJOINING PROPERTIES OR TO FINISH WORK ON THE SITE. THE CONTRACTOR SHALL TAKE REMEDIAL MEASURES TO PREVENT EROSION OF FRESHLY GRADED AREAS, AND UNTIL SUCH TIME AS PERMANENT DRAINAGE AND EROSION CONTROL MEASURES HAVE BEEN INSTALLED. AFTER GRADING IS COMPLETED AND THE GEOTECHNICAL ENGINEER HAS FINISHED HIS OBSERVATIONS OF THE WORK, NO FURTHER EXCAVATION OR FILLING SHALL BE DONE, EXCEPT UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER.
6. CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS REQUIRED TO PROTECT ADJACENT PROPERTIES DURING THE GRADING OPERATIONS.
7. BRUSH AND TREES SHALL BE REMOVED ONLY WITHIN THE AREA TO BE GRADED. WHEN TREES ARE REMOVED, THE ROOT SYSTEMS SHALL ALSO BE REMOVED AND THE RESULTING EXCAVATION FILLED WITH PROPERLY COMPACTED FILL SOILS.
8. CUT AND FILL SLOPES SHALL BE TRIMMED TO THE FINISH GRADE TO PRODUCE A SMOOTH AND UNIFORM SURFACE OR CROSS-SECTION. THE SLOPES OF EXCAVATIONS OR EMBANKMENTS SHALL BE SHAPED AND TRIMMED AS DIRECTED BY THE SDG&E REPRESENTATIVE AND LEFT IN A NEAT AND ORDERLY CONDITION. ALL STONES, ROOTS, OR OTHER WASTE MATTER EXPOSED ON EXCAVATION OR EMBANKMENT SLOPE SHALL BE REMOVED AND DISPOSED OF.
9. GRADING SHALL BE DONE WITHIN A TOLERANCE OF ±0.1' OF THE GRADES AND ELEVATIONS SHOWN ON THESE PLANS AND ALL SLOPES SHALL BE CONSTRUCTED WITHIN ±0.5' OF THE LOCATION SHOWN ON THESE PLANS. IN NO WAY SHALL THE ABOVE TOLERANCES RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF PROVIDING A FINISH THAT WILL NOT POND WATER.
10. ANY QUANTITIES INDICATED ON THESE PLANS ARE ENGINEERS' ESTIMATES ONLY AND ARE NOT TO BE USED BY CONTRACTOR FOR BIDDING PURPOSES.
11. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN THE FIELD AND BRING DISCREPANCIES TO THE ATTENTION OF THE SDG&E REPRESENTATIVE PRIOR TO STARTING CONSTRUCTION.
12. CONTRACTOR SHALL REFER TO GEOTECHNICAL REPORT TITLED "GEOTECHNICAL EVALUATION – ACCESS ROADS AND STRUCTURAL PADS SUNRISE POWERLINK PROJECT"
BY URS, DATED, OCTOBER 16, 2009. URS
PROJECT No.27669019.0002

EROSION CONTROL NOTES

1. ALL POLE & TOWER MAINTENANCE PADS TO BE DIKED AND THE DIKES MAINTAINED TO PREVENT WATER FROM FLOWING FROM THE PADS WITHOUT CAUSING EROSION, OR CONSTRUCT DRAINAGE FACILITIES TO THE SATISFACTION OF THE COUNTY DEPARTMENT OF PUBLIC WORKS THAT WILL ALLOW WATER TO DRAIN FROM THE PAD WITHOUT CAUSING EROSION.
2. TOPS OF ALL SLOPES TO BE DIKED OR TRENCHED TO PREVENT WATER FROM FLOWING OVER THE CREST OF SLOPES.
3. ALL GRADED CUT OR FILL SLOPES SHALL BE HYDROSEEDED TO PROTECT THE SLOPE FROM EROSION AND INSTABILITY IN ACCORDANCE WITH THE PROJECT'S SPECIFICATIONS.
4. FIBER ROLLS SHALL BE PLACED AT TOP, TOE AND FACE (15 FOOT INTERVALS) OF GRADED ALL CUT AND FILL SLOPES TO INTERCEPT RUNOFF AND REDUCE EROSION IN ACCORDANCE WITH THE PROJECT'S SPECIFICATIONS.

COUNTY OF SAN DIEGO CONSTRUCTION NOTES

1. ALL ASPHALT CONCRETE SHALL CONFORM TO CALTRANS STANDARD SPECIFICATIONS. 2006 SECTION 39 AND SHALL HAVE A BASE COURSE OF TYPE A 3/4" MAXIMUM COURSE AND A 2" FINAL LIFT (OR 2" OVERLAY) USING TYPE B, 1/2" MAXIMUM, MEDIUM GRADATION
2. AGGREGATE BASE SHALL CONFORM TO CALTRANS SECTION 26 CLASS II AGGREGATE BASE
3. ALL OTHER WORK IN COUNTY OF SAN DIEGO PUBLIC RIGHT OF WAY SHALL CONFORM TO CALTRANS STANDARD SPECIFICATIONS OR STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION WITH REGIONAL SUPPLEMENT AMENDMENTS (LATEST ADOPTED EDITION)
4. WORK WITHIN COUNTY RIGHT OF WAY IS SUBJECT TO COUNTY CONSTRUCTION/ ENCROACHMENT PROCESS AND MAY REQUIRE CONSTRUCTION TRAFFIC CONTROL TO MITIGATE SIGHT DISTANCE AND CONSTRUCTION WITHIN THE COUNTY RIGHT OF WAY

COUNTY OF SAN DIEGO BUILDING DIVISION NOTES

1. THE APPROVAL OF PLANS AND SPECIFICATIONS DOES NOT PERMIT THE VIOLATION OF ANY SECTION OF THE BUILDING CODE, COUNTY ORDINANCES, OR STATE LAW. THE FOLLOWING LIST DOES NOT NECESSARILY INCLUDE ALL ERRORS AND OMISSIONS. (SEE THE 2007 CALIFORNIA BUILDING CODE, APPENDIX CHAPTER 1, SECTION 105.4)
2. TWO (2) COPIES OF THE FINAL COMPACTION REPORT SHALL BE SUBMITTED TO THE INSPECTOR PRIOR TO FINAL INSPECTION.

COUNTY OF SAN DIEGO • DEPARTMENT OF PLANNING AND LAND USE
BUILDING DIVISION

NOTICE OF REQUIREMENT FOR SPECIAL INSPECTION

You are hereby notified that, in addition to the inspection of construction provided by the Department of Planning and Land Use, Building Division, an approved registered special inspector is required to provide special inspection and/or structural observation during construction of the proposed project as indicated on this form. This form shall be completed. All work requiring special inspection must be identified as well as the name and phone number of the special inspector identified to perform the special inspections.

The registered special inspector shall be approved by the Building Official prior to the issuance of the building permit. Special inspectors having a current certification from the City of San Diego are approved as special inspectors for the type of construction for which they are certified.

Special inspection and/or structural observation requirements and reports shall be in compliance with the 2007 California Building Code, Chapter 17.

The inspections required to be performed by a special inspector are in addition to and do not change the requirements for the inspections normally required by the 2007 California Building Code as amended and adopted by the County of San Diego and performed by the Building Division inspection personnel.

The special inspector is not authorized to inspect and approve any work other than that for which they are certified. The special inspector is not authorized to accept alternate materials, structural changes, or any requests for plan changes. The special inspector is required to submit to the building inspector in the field written reports of all work that they inspected and approved. Approval of final inspection will not be granted by the Department of Planning and Land Use, Building Division, until a last and final report documenting required special inspections and correction of any discrepancies noted in the inspection reports has been submitted to the building inspector in the field and approved by the Building Division.

For occupancies in Group R-3 and occupancies in Group U that are accessory to a residential occupancy, some exceptions are permitted per the Department of Planning and Land Use, Building Division special inspection policy to not require special inspection or to allow structural observation in lieu of the required special inspections. These exceptions are noted in the table on page two of this form. In cases where the design engineer of record has specified a more restrictive requirement for special inspection and/or structural observation, the project shall comply with the requirements of the engineer of record.

Structural observation is the visual observation of the structural system by a registered design professional. A letter shall be provided describing the results of structural observation prior to approval of final inspection. The letter shall be submitted to the building inspector in the field and approved by the Building Division.

THIS COMPLETED FORM MUST BE MADE A PERMANENT, PRINTED PART OF THE PLANS.
(Taped, glued, stapled, etc. copies will not be accepted)

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DPLU #008 REV 06/01/2009 Page 1 of 2

WORK REQUIRING SPECIAL INSPECTION	ITEM DESCRIPTION AND LOCATION	DESIGN STRENGTH	NAME OF SPECIAL INSPECTOR	PHONE NUMBER OF SPECIAL INSPECTOR
SPECIAL INSPECTIONS REQUIRED BY CBC SECTION 1704				
*FOR R-3 AND U OCCUPANCIES ACCESSORY TO RESIDENTIAL OCCUPANCIES SPECIAL INSPECTION IS NOT REQUIRED FOR: (ITEMS 1b, 2a (WHEN f'c ≤ 3,000 psi), 2b, 3a (WHEN f'm ≤ 1,500 psi), 3b (WHEN WALL HEIGHT ≤ 10 FT.), 6, 7, 8, & 9. STRUCTURAL OBSERVATION IS PERMITTED IN LIEU OF SPECIAL INSPECTION FOR ITEMS 3a, 3b (WHEN WALL HEIGHT IS > 10 FT.), AND 4a.				
1) Steel Construction				
a.) Field welding				
b.) Steel frame*	N/A			
c.) High-strength bolts				
2) Concrete Construction				
a.) f'c > 2,000 psi*				
b.) Anchors				
c.) Structural slabs*	N/A			
d.) Pre-stressed/ post-tensioned slabs	N/A			
3) Masonry Construction	N/A			
a.) Masonry construction*	N/A			
b.) Site walls other than County Standard plans*				
4) Wood Construction	N/A			
a.) High-load diaphragms*				
5.) Foundations				
a.) Pile foundations	N/A			
b.) Pier foundations				
6) Sprayed fire-resistant materials*	N/A			
7.) Mastic and intumescent fire-resistant coatings*	N/A			
8.) Exterior insulation and finish systems (EIFS)*	N/A			
9.) Smoke control systems*	N/A			
10.) Special cases				
a.) MSE WALL CONSTUCTION			GARY HEINBACH	(951) 840-5920
b.)				
SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE REQUIRED BY CBC SECTION 1707				
*R-3 AND U OCCUPANCIES ACCESSORY TO RESIDENTIAL OCCUPANCIES STRUCTURAL OBSERVATION IS PERMITTED IN LIEU OF SPECIAL INSPECTION FOR ITEMS C AND D.				
A.) Field welding				
B.) Structural wood: field gluing of elements of the seismic-force-resisting system	N/A			
C.) Structural wood: nailing, bolting, anchoring and other fastening of components within the seismic-force-resisting system where fastener spacing of sheathing is 4 inches o.c. or less*	N/A			
D.) Cold-formed steel framing*	N/A			
E.) Pier foundations	N/A			
F.) Storage racks and access floors	N/A			
G.) Architectural components for structures greater than 30 feet in height	N/A			
H.) Designated seismic system verifications	N/A			
I.) Designated seismic system verifications	N/A			
J.) Seismic isolation system	N/A			

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DPLU #008 REV 06/01/2009 Page 2 of 2

LEGEND

BEGIN STATION — A

SECTION — A

INDICATES NEW TOWER

INDICATES EXISTING STEEL POLE

422.1 / 415.9 — VERTICAL PROFILE F.G. ELEV. ABOVE / VERTICAL PROFILE E.G. ELEV. BELOW

NEW TRANSMISSION LINE

440 — (F.G.) FINISH GRADE CONTOURS

440 — (E.G.) EXISTING GRADE CONTOURS

(206.2) EXISTING GROUND ELEVATION

TOP / TOE — FILL SLOPE 2:1 UNLESS SHOWN OTHERWISE

TOP / TOE — CUT SLOPE 2:1 UNLESS SHOWN OTHERWISE

R — RIDGE LINE

DAYLIGHT LINE

DIRECTION OF FLOW

CUT / FILL — CUT/FILL LINE

CONCRETE DOWN DRAIN, SEE DETAIL

RIPRAP ENERGY DISSIPATOR, SEE DETAIL

CORRUGATED METAL PIPE WITH FLARED END SECTIONS, SEE PLANS FOR, PIPE SIZES, AND ENERGY DISSIPATOR.

DROP OUTLET PER SDRSD D-16 TYPE B, INLET PIPE 24'" AND OUTLET PIPE 12" DIAMETER

CONCRETE DRAINAGE DITCH, SEE DETAIL

DRAINAGE DITCH BEHIND MASONRY CUT RETAINING WALL, SEE DETAIL

RETAINING WALL, FILL (8/4)

3' RETAINING WALL, CUT

X / XX — DETAIL LABEL (DETAIL # / SHEET #)

ABBREVIATIONS

(EG)	EXISTING GRADE
FG	FINISHED GRADE
TW	TOP OF WALL
BW	BOTTOM OF WALL AT FINISHED GROUND
FL	FLOW LINE
U/S	UP STREAM
D/S	DOWN STREAM
CMP	CORRUGATED METAL PIPE
RC	RELATIVE COMPACTION

DPLU-BUILDING DIVISION
MAY. 07 2010
County of San Diego Plan Check

REGISTERED PROFESSIONAL ENGINEER — RICHARD J. WILSON — C29834 — Exp. 3-31-11 — CIVIL — STATE OF CALIFORNIA

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SPL-06 (LINK 4) LORITZ IMPROVEMENTS
GENERAL NOTES AND LEGENDS

DRAWN BY: JJP	DATE: --/--/--	SCALE: AS NOTED	W.O.	REV. 0	SPL-06-LC102
CHECKED BY:	DATE:				
APPROVED BY:	DATE:				
CAD NO.:	PLOT SCALE: 1 = 1				

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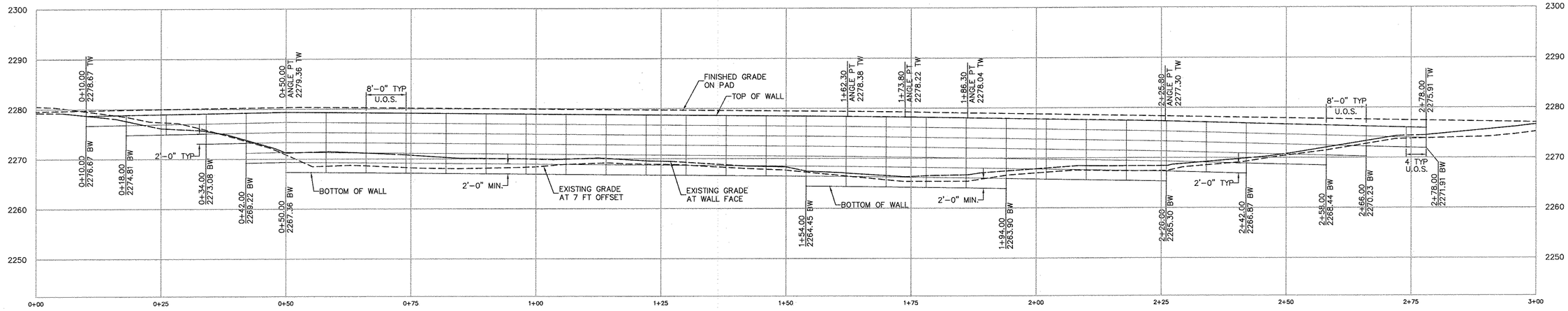
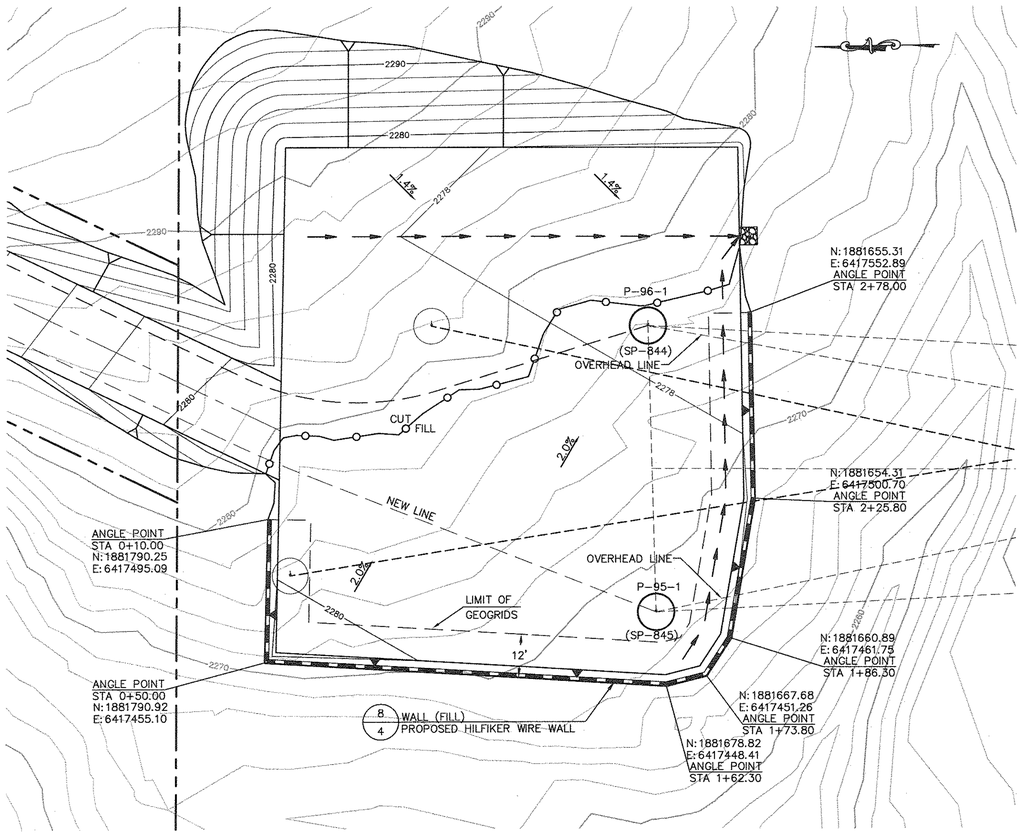
LORITZ 95-96



SITE P95-1 & P96-1 WALL PROFILE

SCALE: 1" = 10' HORIZ. & VERT.
U.O.S. = UNLESS OTHERWISE SHOWN



SEE SHEET 07-P95-1 & P96-1-S1 FOR PAD AND ROAD DETAILS

SITE P95-1 & P96-1 WALL PLAN

SCALE: 1" = 20'

GRAPHIC SCALE
20 0 20 40
1"=20'

FACE OF WALL DATA			
NUMBER	RADIUS	LENGTH	BEARING/DELTA ANGLE
L5		40.00'	N89°01'49"W
L6		112.30'	S3°25'02"W
L7		11.50'	S14°20'56"E
L8		12.50'	S57°06'21"E
L9		39.50'	S80°24'29"E
L10		52.20'	N88°53'50"E

FOR SITE GRADING AND ACCESS ROAD PLAN AND PROFILE. SEE ON-SITE IMPROVEMENTS, SEE SHEET SPL-06 (LINK 4) SHT. No. 006-P95-1 & P96-1-S1

ALL QUANTITIES RELATED TO RETAINING WALLS WILL BE THE CONTRACTORS RESPONSIBILITY TO OBTAIN.

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SPL-6 (LINK 5) LORITZ IMPROVEMENTS
MSE WALL PLAN AND PROFILE

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SPL-06-LC103

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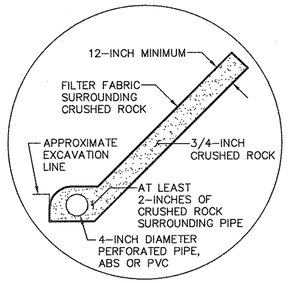
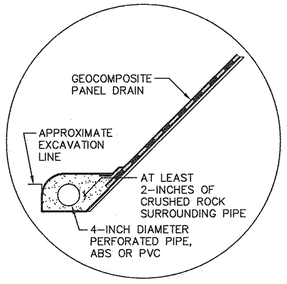


ROCK BLANKET ALTERNATIVE



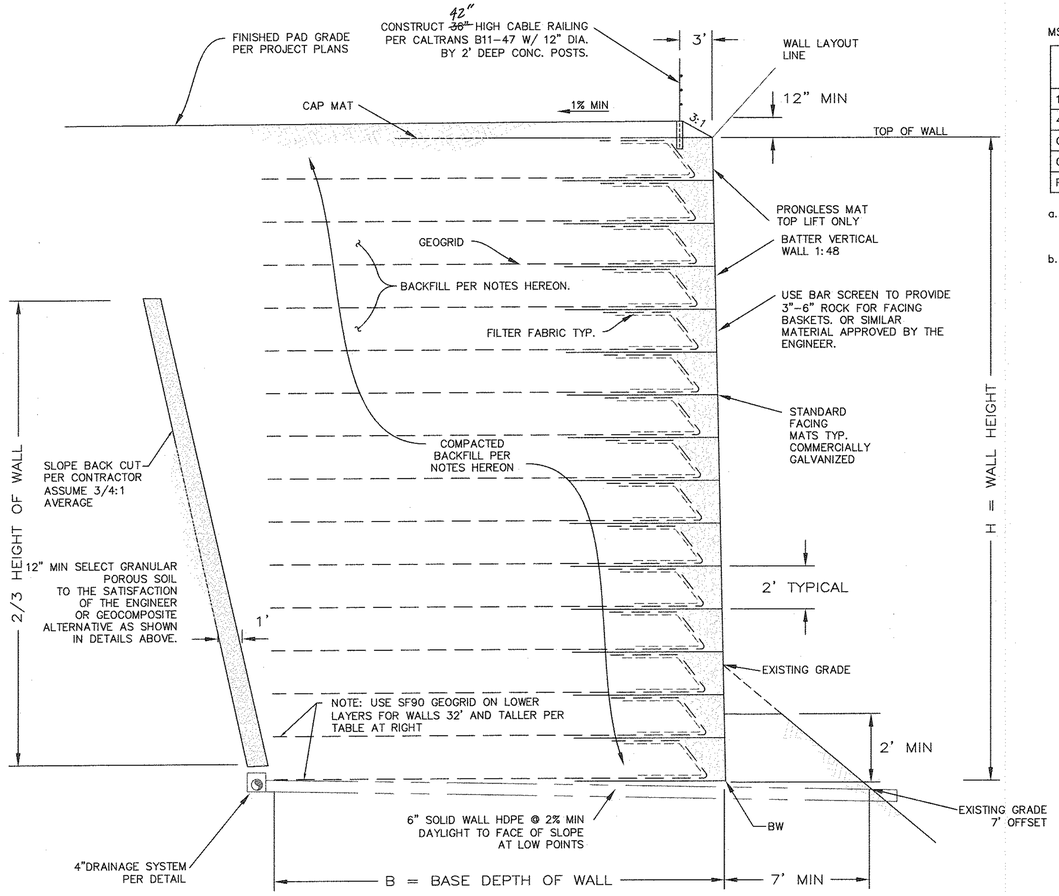
GEOCOMPOSITE PANEL ALTERNATIVE

WALL BACK DRAINAGE NOTES:

1. PERFORATED PIPE SHOULD OUTLET THROUGH A SOLID PIPE TO A FREE GRAVITY OUTFALL AT MAX 100' SPACING. PERFORATED PIPE AND OUTLET PIPE SHOULD HAVE A FALL OF AT LEAST 2%.
2. FILTER FABRIC SHOULD CONSIST OF MIRAFI 140N, OR SIMILAR APPROVED PRODUCT. FILTER FABRIC SHOULD BE OVERLAPPED PER MANUFACTURES INSTRUCTIONS.
3. DRAIN INSTALLATION SHOULD BE OBSERVED BY THE GEOTECHNICAL ENGINEER PRIOR TO BACK FILLING.
4. SUBSURFACE BACK DRAINAGE MAY BE REDUCED IF THE SOILS USED IN THE REINFORCED AND RETAINED ZONES ARE RELATIVELY "FREE DRAINING" AS APPROVED BY GEOTECHNICAL ENGINEER. **CONTRACTOR TO ASSUME 20 PERCENT OF WALL SQUARE FOOTAGE REQUIRES BACK DRAINAGE.**
5. IF ROCK BLANKET BACK DRAIN ROCK IS SUBSTITUTED WITH CALTRANS CLASS II PERMEABLE AGGREGATE THE FILTER FABRIC CAN BE ELIMINATED.

MSE WALL BACKFILL NOTES:

1. CONTRACTOR IS ADVISED THAT MOST ONSITE SOILS WILL BE VIABLE FOR MSE WALL BACKFILL UTILIZING 3" TO 4" BAR SCREEN TO CONFORM SOILS TO FOLLOWING TABLE BELOW CARE SHOULD BE TAKEN TO SELECT BACKFILL MATERIAL THAT IS FREE OF EXCESSIVE FINES AND ORGANIC MATERIAL.
2. CONTRACTOR TO OBTAIN GEOTECHNICAL APPROVAL OF BOTTOM CUT AND 7' OFFSET FROM SLOPE FACE PRIOR TO PLACEMENT OF ANY GEOGRID OR WIRE MATS. MSE RETAINING WALLS SHOULD BE FOUNDED ON PROPERLY COMPACTED OR RELATIVELY UNDISTURBED WEATHERED GRANITIC ROCK MATERIALS AS APPROVED BY THE GEOTECHNICAL ENGINEER.
3. GEOTECH ENGINEER AND MANUFACTURER'S REPRESENTATIVE SHALL OBSERVE AND APPROVE BACKFILL MATERIALS AND PROCEDURES DURING BACKFILL AND CONSTRUCTION



TYPICAL HILFIKER WELDED WIRE WALL SECTION (8/4)

NTS

MSE WALL BACKFILL GRADATION REQUIREMENTS

SEIVE SIZE	RECOMMENDED GRADATION PERCENT PASSING BY WEIGHT
100mm (4 INCH)	100–75
4.76mm (NO. 4)	20–100
0.425mm (NO. 40)	0–60
0.075mm (NO. 200)	0–35
PLASTICITY INDEX (PI)	< 20

a. A PI < 8 IS RECOMMENDED TO MINIMIZE EXPANSIVE POTENTIAL AND PROVIDE SUITABLE DRAINAGE CHARACTERISTICS

b. mm – MILLIMETERS

MSE WALL GEOGRID LENGTHS

PRELIMINARY MIN. SOIL DESIGN PARAMETERS ϕ = 35° DENSITY < 130 PCF	
HEIGHT (FT)	B= BASE DEPTH OF WALL
8'	9'
10'	10'
12'	10'
14'	12'
16'	13'
18'	15'
20'	16'
22'	18'
24'	20'
26'	21'
28'	23'
30'	24'
32'	26'–2–14*

* B DIST. – BOTTOM GRIDS WITH SF90 GEOGRID
– TOP REMAINING GRIDS WITH SF65 GEOGRID

MSE WALL GEOGRID SPECIFICATIONS

WWW.SYNTEEN.COM, OR EQUAL APPROVED BY ENGINEER

SF 90
SOIL REINFORCEMENT GEOGRID
UNIAXIAL GEOGRID
THE STRENGTH IS IN THE LENGTH DIRECTION

SF 90 IS COMPOSED OF HIGH MOLECULAR WEIGHT, HIGH TENACITY MULTIFILAMENT POLYESTER YARNS THAT ARE WOVEN INTO A STABLE NETWORK PLACED UNDER TENSION. THE HIGH STRENGTH POLYESTER YARNS ARE COATED WITH A PVC MATERIAL. SF SERIES GEOGRIDS ARE INERT TO BIOLOGICAL DEGRADATION AND ARE RESISTANT TO NATURALLY ENCOUNTERED CHEMICALS, ALKALIS AND ACIDS. SF SERIES GEOGRIDS ARE TYPICALLY USED FOR SOIL REINFORCEMENT APPLICATIONS SUCH AS RETAINING WALLS, STEEPENED SLOPES, EMBANKMENTS, SUBGRADE STABILIZATION, AND EMBANKMENTS OVER SOFT SOILS AND WASTE CONTAINMENT APPLICATIONS.

TENSILE PROPERTIES	TEST METHOD	MARV VALUES (LBS/FT)
ULTIMATE STRENGTH	ASTM D 6637	8500
CREEP LIMITED STRENGTH	ASTM D 5262	5483
T_{al} = LONG TERM DESIGN STRENGTH	NCMA 97 *	4747
APERTURE SIZE (INS.)	MEASURED	0.75 x 0.75 OR SITE SPECIFIC AS REQUIRED

REDUCTION FACTOR FOR CREEP 1.55, REDUCTION FACTOR FOR DURABILITY 1.10 REDUCTION FACTOR FOR INSTALLATION DAMAGE (TYPE 3 SOIL) 1.05

FHWA/AASHTO REDUCTION FACTOR FOR CREEP 1.55, REDUCTION FACTOR FOR DURABILITY 1.15, REDUCTION FACTOR FOR INSTALLATION DAMAGE (TYPE 3 SOIL) 1.03

GRI GG4B REDUCTION FACTOR FOR CREEP 1.75, REDUCTION FACTOR FOR DURABILITY 1.10 REDUCTION FACTOR FOR INSTALLATION DAMAGE (TYPE 3 SOIL) 1.05

WWW.SYNTEEN.COM, OR EQUAL APPROVED BY ENGINEER

SF 65
SOIL REINFORCEMENT GEOGRID
UNIAXIAL GEOGRID
THE STRENGTH IS IN THE LENGTH DIRECTION

SF 65 IS COMPOSED OF HIGH MOLECULAR WEIGHT, HIGH TENACITY MULTIFILAMENT POLYESTER YARNS THAT ARE WOVEN INTO A STABLE NETWORK PLACED UNDER TENSION. THE HIGH STRENGTH POLYESTER YARNS ARE COATED WITH A PVC MATERIAL. SF SERIES GEOGRIDS ARE INERT TO BIOLOGICAL DEGRADATION AND ARE RESISTANT TO NATURALLY ENCOUNTERED CHEMICALS, ALKALIS AND ACIDS. SF SERIES GEOGRIDS ARE TYPICALLY USED FOR SOIL REINFORCEMENT APPLICATIONS SUCH AS RETAINING WALLS, STEEPENED SLOPES, EMBANKMENTS, SUBGRADE STABILIZATION, AND EMBANKMENTS OVER SOFT SOILS AND WASTE CONTAINMENT APPLICATIONS.

FEBRUARY, 2006

TENSILE PROPERTIES	TEST METHOD	MARV VALUES (LBS/FT)
ULTIMATE STRENGTH	ASTM D 6637	6000
CREEP LIMITED STRENGTH	ASTM D 5262	3871
T_{al} = LONG TERM DESIGN STRENGTH	NCMA 97	3373
APERTURE SIZE (INS.)	MEASURED	0.75 x 0.75

RF CREEP – 1.55
RF DURABILITY – 1.10
RF INSTALLATION DAMAGE (SOIL TYPE 3) – 1.05

NOTE: SEE ADDITIONAL DETAILS ON SHEETS 5 & 6

DPLU-BUILDING DIVISION
MAY. 07 2010
County of San Diego Plan Check

DPLU-BUILDING DIVISION
MAY. 04 2010
County of San Diego Plan Check

REGISTERED PROFESSIONAL ENGINEER GERARD J. WILSON C29634 Exp. 3-31-11 CIVIL STATE OF CALIFORNIA

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SAN DIEGO, CALIFORNIA

SPL–06 (LINK 4) LORITZ IMPROVEMENTS
DETAIL SHEET

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SPL–06–LC104

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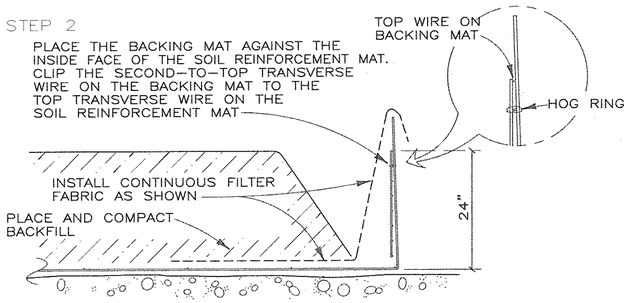
STEP 1

PLACE THE FIRST COURSE OF SOIL REINFORCEMENT MATS ON PREPARED FOUNDATION

STEP 2

PLACE THE BACKING MAT AGAINST THE INSIDE FACE OF THE SOIL REINFORCEMENT MAT. CLIP THE SECOND-TO-TOP TRANSVERSE WIRE ON THE BACKING MAT TO THE TOP TRANSVERSE WIRE ON THE SOIL REINFORCEMENT MAT

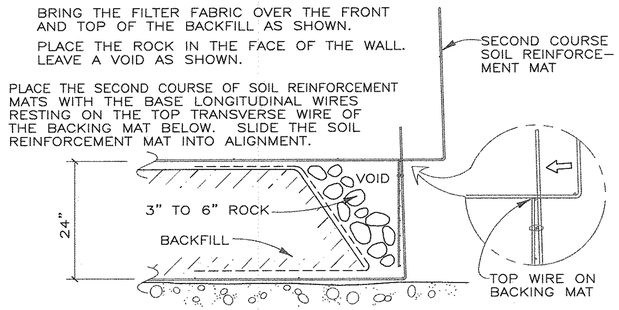


STEP 3

BRING THE FILTER FABRIC OVER THE FRONT AND TOP OF THE BACKFILL AS SHOWN.

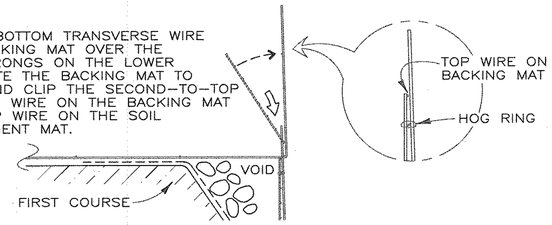
PLACE THE ROCK IN THE FACE OF THE WALL. LEAVE A VOID AS SHOWN.

PLACE THE SECOND COURSE OF SOIL REINFORCEMENT MATS WITH THE BASE LONGITUDINAL WIRES RESTING ON THE TOP TRANSVERSE WIRE OF THE BACKING MAT BELOW. SLIDE THE SOIL REINFORCEMENT MAT INTO ALIGNMENT.



STEP 4

HOOK THE BOTTOM TRANSVERSE WIRE OF THE BACKING MAT OVER THE VERTICAL PRONGS ON THE LOWER MAT. ROTATE THE BACKING MAT TO VERTICAL AND CLIP THE SECOND-TO-TOP TRANSVERSE WIRE ON THE BACKING MAT TO THE TOP WIRE ON THE SOIL REINFORCEMENT MAT.

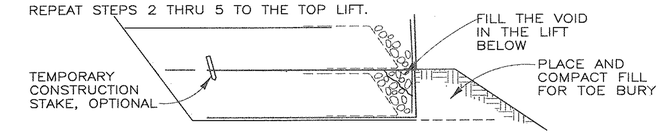


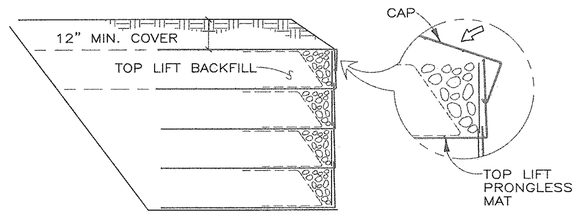
STEP 5

INSTALL THE FILTER FABRIC AS IN STEPS 2 AND 3.

PLACE AND COMPACT THE BACKFILL AND ROCK TO THE BASE ELEVATION OF THE NEXT MAT.

REPEAT STEPS 2 THRU 5 TO THE TOP LIFT.





STEP 6: TOP LIFT

PLACE THE TOP LIFT PRONGLESS MAT, BACKING MAT AND FILTER FABRIC.

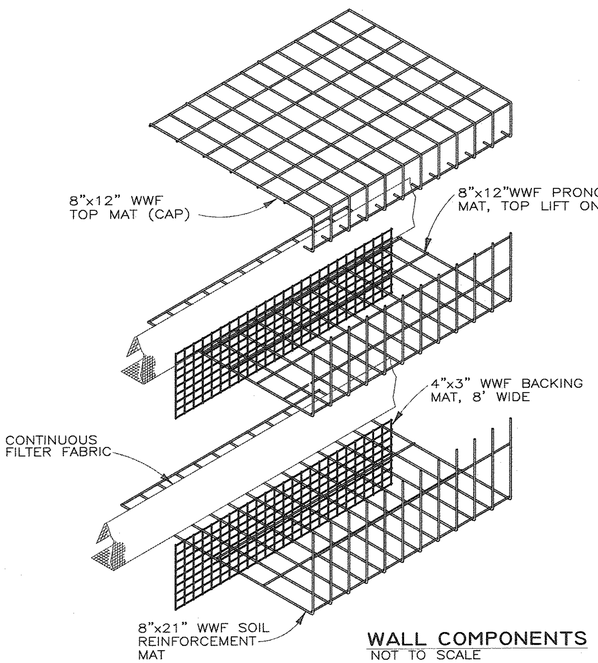
PLACE AND COMPACT BACKFILL AND ROCK IN THE TOP LIFT.

HOOK THE CAP OVER THE MIDDLE TRANSVERSE WIRE ON THE PRONGLESS MAT, AND ROTATE INTO PLACE

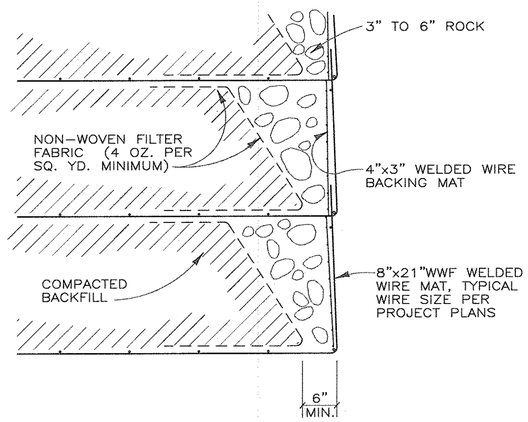
PLACE AND COMPACT COVER OVER TOP MAT TO 12" MINIMUM DEPTH.

CONSTRUCTION SEQUENCE

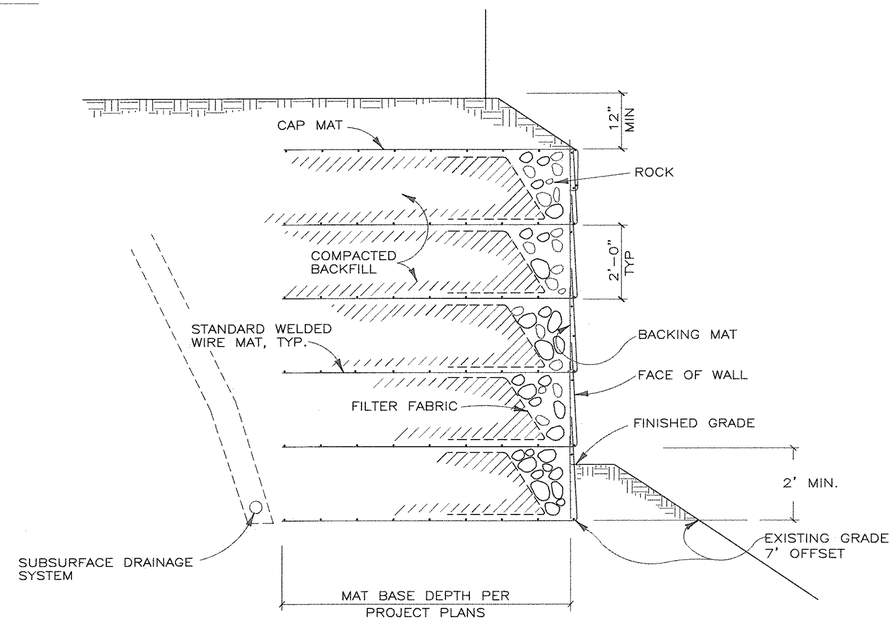
NOT TO SCALE



WALL COMPONENTS
NOT TO SCALE



ROCK-FACE DETAIL
NOT TO SCALE



TYPICAL SECTION

HILFIKER RETAINING WALLS

1902 Hilfiker Lane
Eureka, CA 95503-5711
TOLL-FREE **800.762.8962**
PH **707.443.5093** FAX **707.443.2891**
WEB SITE www.hilfiker.com E-MAIL info@hilfiker.com

SINCE 1902 QUALITY PRODUCTS

DPLU-BUILDING DIVISION
MAY. 07 2010
County of San Diego Plan Check

REGISTERED PROFESSIONAL ENGINEER RICHARD J. WILSON C29834 Exp. 3-31-11 CIVIL STATE OF CALIFORNIA

DPLU-BUILDING DIVISION
MAY. 04 2010
County of San Diego Plan Check

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11590 West Bernardo Court Suite 100
San Diego, CA 92127-1624
Tel: (858) 451-6100 Fax: (858) 451-2846
www.us.bureauveritas.com

SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SPL-06 (LINK 4) LORITZ IMPROVEMENTS
DETAIL SHEET

DRAWN BY: OO	DATE:	SCALE: NTS	W.O.	REV. 0	SPL-06-LC105
CHECKED BY:	DATE:				
APPROVED BY:	DATE:				
CAD NO.:	PLOT SCALE: 1 = 1				

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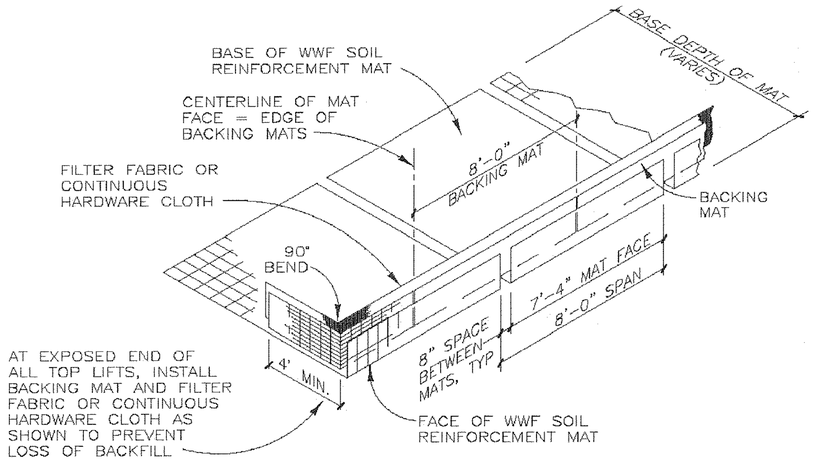
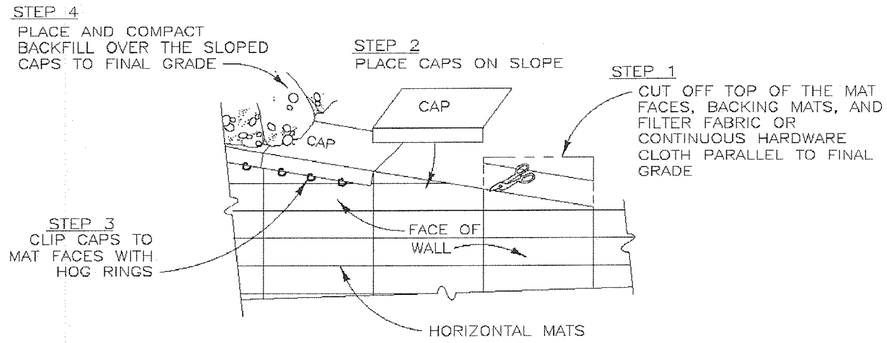


ISOMETRIC VIEW

WELDED WIRE WALL COMPONENTS WITH RETURN MAT

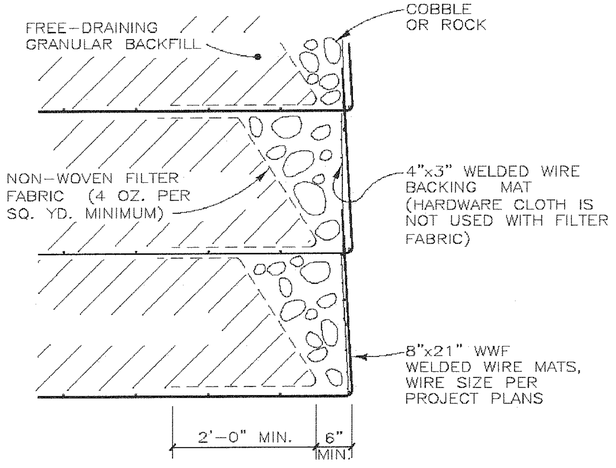
NOT TO SCALE



PICTORIAL ELEVATION

SLOPED CAP MAT DETAIL

NOT TO SCALE



SECTION

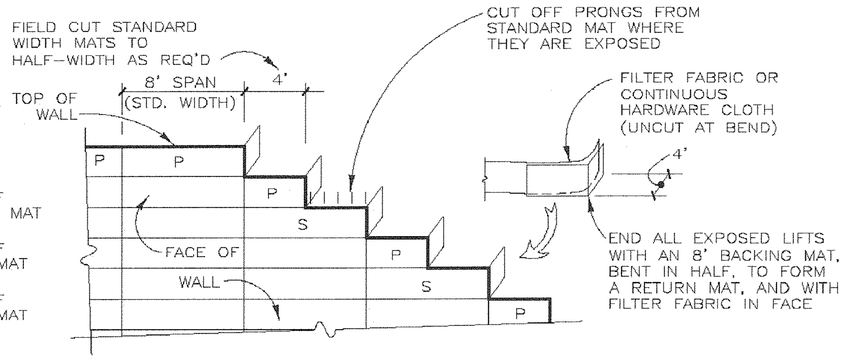
ROCK FACING DETAIL

NOT TO SCALE

LEGEND

(THIS DETAIL ONLY)

P	8"x12" WWF PRONGLESS MAT
S	8"X12" WWF STANDARD MAT
	8"X21" WWF STANDARD MAT



RETURN MATS AND TOP OF WALL DETAIL

NOT TO SCALE

HILFIKER RETAINING WALLS

1902 Hilfiker Lane
Eureka, CA 95503-5711
TOLL-FREE **800.762.8962**
PH **707.443.5093** FAX **707.443.2891**
WEB SITE www.hilfiker.com E-MAIL info@hilfiker.com

REGISTERED PROFESSIONAL ENGINEER RICHARD J. WILSON C29834 exp. 3-31-11 STATE OF CALIFORNIA

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SAN DIEGO, CALIFORNIA

SPL-06 (LINK 4) LORITZ IMPROVEMENTS

DETAIL SHEET

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CHECKED BY:	DATE:		
APPROVED BY:	DATE:		SPL-06-LC106
CAD NO.:	PLOT SCALE: 1 = 1		

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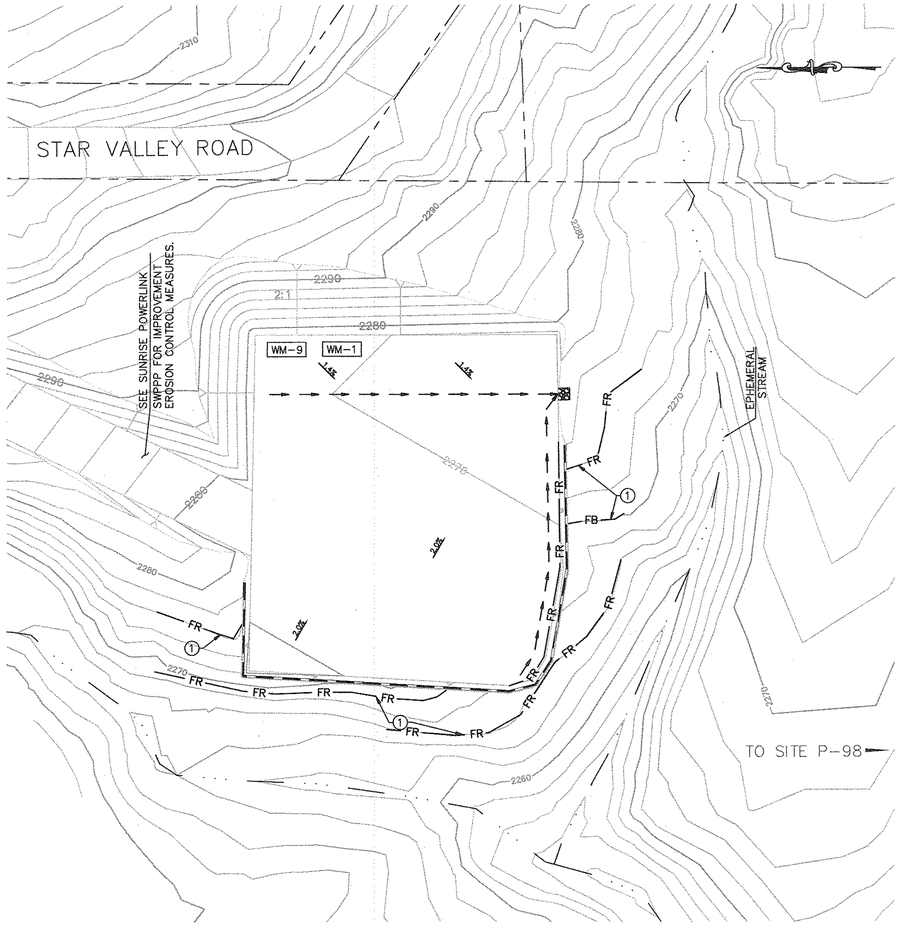
LEGEND

DESCRIPTION	SEE CON. NOTE #	CALTRANS/ SDG&E WATER QUALITY CONSTRUCTION BMP MANUAL STD. DWG.	SYMBOL
GRADED SWALE			
FIBER ROLLS	1	SC-5/BMP 1-03	FR
MATERIAL DELIVERY & STORAGE		WM-1	WM-1
SANITARY WASTE MANAGEMENT		WM-9	WM-9



EROSION CONTROL PLAN FOR WALL
SCALE: 1" = 30'

GRAPHIC SCALE
30 0 30 60
1"=30'

CONSTRUCTION NOTES

(1) INSTALL FIBER ROLLS. SEE BMP SHEETS SC-5/BMP 1-03 FOR INSTALLATION, MAINTENANCE, AND INSPECTION INSTRUCTIONS AND PROCEDURES.

EROSION AND SEDIMENT CONTROL NOTES:

1. FOR BMP SHEETS REFER TO CALTRANS (MARCH 2003) AND SDG&E WATER QUALITY CONSTRUCTION BEST MANAGEMENT PRACTICES MANUAL (DECEMBER 2002) AND PROJECT'S FINAL APPROVED SWPPP.
2. CONTRACTOR TO IMPLEMENT STREET SWEEPING AND VACUUMING (PER BMP SHEET SC-7/BMP 1-07) ALONG ALL AREAS OF SOIL DISTURBANCE ALONG THE EXISTING ROADWAY.
3. VEHICLE AND EQUIPMENT CLEANING, FUELING, AND/OR MAINTENANCE (PER BMP SHEETS NS-8/BMP 3-03, NS-9/BMP 3-04, AND NS-10 RESPECTIVELY) SHALL NOT BE PERFORMED ON SITE.
4. IF DISCHARGES FROM IRRIGATION LINES, POTABLE WATER LINES, OR HYDRANT FLUSHING OCCUR ONSITE, CONTRACTOR MUST IMPLEMENT POTABLE WATER/IRRIGATION PER BMP SHEET NS-7, AS NECESSARY.
5. CONTRACTOR ALSO TO IMPLEMENT THE FOLLOWING CONSTRUCTION BMPS, AS NECESSARY:
   - SCHEDULING, PER BMP SHEETS EC-1/BMP 1-01
   - WIND EROSION CONTROL, PER BMP SHEETS WE-1/BMP 4-08
   - WATER CONSERVATION PRACTICES, PER BMP SHEET NS-1
   - ILLICIT CONNECTION/DISCHARGE, PER BMP SHEETS NS-6/BMP 2-06
6. NO WORK HAVING THE POTENTIAL TO CAUSE WATER POLLUTION, AS DETERMINED BY THE ENGINEER, SHALL BE PERFORMED UNTIL THE SWPPP HAS BEEN SUBMITTED TO THE ENGINEER BY THE CONTRACTOR, AND APPROVED.
7. THE CONTRACTOR SHALL CONSIDER OTHER CONTROL MEASURES, AS NECESSARY, TO SUPPLEMENT THE CRITICAL TEMPORARY CONTROL MEASURES SHOWN ON THESE PLANS, IN ORDER TO MEET THE POLLUTION CONTROL OBJECTIVES OF THE SWPPP.

DPLU-BUILDING DIVISION
MAY 07 2010
County of San Diego Plan Check

REGISTERED PROFESSIONAL ENGINEER
RICHARD J. WILSON
C29934
Exp. 3-31-11
CIVIL
STATE OF CALIFORNIA

DPLU-BUILDING DIVISION
MAY 04 2010
County of San Diego Plan Check

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SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

EROSION CONTROL PLANS FOR
SPL-06 (LINK 4) LORITZ IMPROVEMENTS
EROSION CONTROL PLAN

DRAWN BY:	DATE:	SCALE: 1" = 30'	W.O.	REV.	SPL-06-LEC107
CHECKED BY:	DATE:				
APPROVED BY:	DATE:				
CAD NO.:	PLOT SCALE: 1 = 1				

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SUNRISE POWERLINK PROJECT

SECTION 6 (LINK 4)

230kV LINE

2. THE STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH SAN DIEGO COUNTY STANDARDS AND AS APPROVED BY THE COUNTY'S MATERIALS LABORATORY.
3. APPROVAL OF THESE IMPROVEMENT PLANS AS SHOWN DOES NOT CONSTITUTE APPROVAL OF ANY CONSTRUCTION OUTSIDE THE PROJECT BOUNDARY.
4. IMPORT MATERIAL SHALL BE OBTAINED FROM A LEGAL SITE.
5. ALL UNDERGROUND UTILITIES WITHIN THE STREET RIGHT-OF-WAY SHALL BE CONSTRUCTED, CONNECTED AND TESTED PRIOR TO CONSTRUCTION OF BERM, CURB, CROSS GUTTER AND PAVING.
6. ALL SLOPES OVER THREE FEET IN HEIGHT WILL BE PLANTED IN ACCORDANCE WITH SAN DIEGO COUNTY SPECIFICATIONS.
7. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO CONTACT THE UTILITY AGENCIES, ADVISE THEM OF THE PROPOSED IMPROVEMENTS AND BEAR THE COST OF RELOCATIONS, IF NEEDED.
8. THE CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK. NOTICE OF PROPOSED WORK SHALL BE GIVEN TO THE FOLLOWING AGENCIES: SAN DIEGO GAS & ELECTRIC, PACIFIC BELL, CABLE TV, WATER DISTRICT, AND SANITATION DISTRICT.
9. A SOILS REPORT MAY BE REQUIRED PRIOR TO THE ISSUANCE OF A BUILDING PERMIT.
10. LOCATION AND ELEVATION OF IMPROVEMENTS TO BE MET BY WORK TO BE DONE SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF NEW WORK. CONTRACTOR WILL MAKE EXPLORATORY EXCAVATIONS AND LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY BECAUSE OF ACTUAL LOCATION OF EXISTING FACILITIES.
11. ALL MAJOR SLOPES SHALL BE ROUNDED INTO EXISTING TERRAIN TO PRODUCE A CONTOURED TRANSITION FROM CUT OR FILL FACES TO NATURAL GROUND AND ABUTTING CUT OR FILL SURFACES.
12. NOTWITHSTANDING THE MINIMUM STANDARDS SET FORTH IN THE GRADING ORDINANCE AND NOTWITHSTANDING THE APPROVAL OF THESE GRADING PLANS, THE PERMITTEE IS RESPONSIBLE FOR THE PREVENTION OF DAMAGE TO ADJACENT PROPERTY. NO PERSON SHALL EXCAVATE ON LAND SO CLOSE TO THE PROPERTY LINE AS TO ENDANGER ANY ADJOINING PUBLIC STREET, SIDEWALK ALLEY, FUNCTION OF ANY SEWAGE DISPOSAL SYSTEM, OR ANY OTHER PUBLIC OR PRIVATE PROPERTY WITHOUT SUPPORTING AND PROTECTING SUCH PROPERTY FROM SETTLING, CRACKING, EROSION SILTING, SCOUR OR OTHER DAMAGE WHICH MIGHT RESULT FROM THE GRADING DESCRIBED ON THIS PLAN. THE COUNTY WILL HOLD THE PERMITTEE RESPONSIBLE FOR CORRECTION OF NON-DEPICTED IMPROVEMENTS WHICH DAMAGE ADJACENT PROPERTY.
13. POWER SOURCES AND RUNS SERVING STREET LIGHTS SHALL BE SHOWN ON THE "AS-BUILT " IMPROVEMENT DRAWINGS. ALL SOURCES SHALL BE LOCATED WITHIN THE DEDICATED RIGHT-OF-WAY, OR WITHIN EASEMENTS DEDICATED TO THE COUNTY OF SAN DIEGO.
14. SPECIAL CONDITION: IF ANY ARCHEOLOGICAL RESOURCES ARE DISCOVERED ON THE SITE OF THIS GRADING DURING GRADING OPERATIONS, SUCH OPERATIONS WILL CEASE IMMEDIATELY, AND THE PERMITTEE WILL NOTIFY THE DIRECTOR OF PUBLIC WORKS OF THE DISCOVERY. GRADING OPERATIONS WILL NOT RECOMMENCE UNTIL THE PERMITTEE HAS RECIEVED WRITTEN AUTHORITY FROM THE DIRECTOR OF PUBLIC WORKS.
15. NO PAVING SHALL BE DONE UNTIL EXISTING POWER POLES ARE RELOCATED OUTSIDE THE AREAS TO BE PAVED.

GENERAL NOTES (CONTINUED)

16. PRIVATE ROAD IMPROVEMENTS SHOWN HEREON ARE FOR INFORMATION ONLY. COUNTY OFFICIALS SIGNATURE HEREON DOES NOT CONSTITUTE APPROVAL OR RESPONSIBILITY OF ANY KIND FOR THE DESIGN OR CONSTRUCTION OF THESE PRIVATE IMPROVEMENTS. (IF APPLICABLE)
17. FINISHED GRADING SHALL BE CERTIFIED BY A REGISTERED CIVIL ENGINEER AND INSPECTED BY THE COUNTY ENGINEER FOR DRAINAGE CLEARANCE.

CONTRACTOR'S NOTE

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRATOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD COUNTY OF SAN DIEGO HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF COUNTY OF SAN DIEGO PROFESSIONALS.

ENGINEER'S NOTE

UNAUTHORIZED CHANGES & USES: THE ENGINEER OF WORK PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

BASIS OF COORDINATES

THE BASIS OF COORDINATES OF THIS SURVEY IS THE CALIFORNIA COORDINATE SYSTEM, ZONE 6, NAD 83 (1992). THE COORDINATES ARE DISPLAYED IN US SURVEY FEET. THE BASIS OF ELEVATIONS IS NAVD 88. ELEVATIONS ARE DISPLAYED IN US SURVEY FEET.

PLAN SHEET INDEX:

UNDERGROUND SERVICE ALERT

CALL: TOLL FREE 1-800 422-4133

"CAUTION": TWO WORKING DAYS BEFORE YOU DIG REMEMBER THAT THE USA CENTER NOTIFIES ONLY THOSE UTILITIES BELONGING TO THE CENTER. THERE COULD BE OTHER UTILITIES PRESENT AT THE WORK SITE. THE CENTER WILL INFORM YOU OF WHOM THEY WILL NOTIFY. NOTIFIES ONLY THOSE UTILITIES BELONGING TO

WITH REGARD ONLY TO THE WORK SHOWN ON THESE PLANS, THE DEPARTMENT OF PUBLIC WORKS (DPW) FOR THE COUNTY OF SAN DIEGO ACKNOWLEDGES THAT SAN DIEGO GAS & ELECTRIC (SDG&E) HAS CONSULTED WITH DPW REGARDING THOSE LAND USE MATTERS WITHIN SCOPE OF DPW'S REVIEW AUTHORITY IN THE MANNER REQUIRED BY SECTION XIV(B) OF CALIFORNIA PUBLIC UTILITIES COMMISSION, GENERAL ORDER 131-D, DECISION 94-06-14 AS MODIFIED BY DECISION 95-08-038.

_____
FOR DIRECTOR OF PUBLIC WORKS DATE

LEGAL DESCRIPTION	LEGAL DESCRIPTION	ENGINEER OF WORK	PERMITS
ASSESSORS PARCEL NO. _____	ASSESSORS PARCEL NO. _____	REGISTERED PROFESSIONAL ENGINEER STEPHEN K. SMITH RCE 29708 Exp.3-31-11 CIVIL STATE OF CALIFORNIA	REZONE PERMIT NO. _____
RECORD PLAN	RECORD PLAN	NAME: STEPHEN K. SMITH	SPECIAL USE PERMIT NO. _____
NAME: _____	NAME: _____	PHONE NO. (858)451-6100	GRADING PERMIT NO. _____
R.C.E. _____	R.C.E. _____	ADDRESS: 11590 W. BERNARDO CT. SUITE 100 SAN DIEGO, CA 92127	COUNTY APPROVED CHANGES
DATE: _____	DATE: _____		NO. / DESCRIPTION / APPROVED BY / DATE

Bureau Veritas North America
11590 West Bernardo Court Suite 100
San Diego, CA 92127-1624
Tel: (858) 451-6100 Fax: (858) 451-2846
www.us.bureauveritas.com

BENCH MARK	PRIVATE CONTRACT
NAME: GPS 32	SHEET 1 / COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS / 5 SHEETS
LOCATION: N 1959223.231 E 6351466.260	IMPROVEMENT PLAN FOR: SDG&E SUNRISE POWERLINK
DESCRIPTION: SURVEY DISK	PRIVATE ROADWAY / DRIVEWAY PLANS SECTION 06 IMPROVEMENTS TITLE SHEET
ELEVATION: 1373.160' DATUM: NAVD 88	ENGINEER OF WORK STEPHEN K. SMITH R.C.E. 29708 / CHECKED BY: / APPROVAL DATE: / IMPROVEMENT PLAN NO.
NAME: 941T	SPL-06 (LINK 4) / 06-DWY-01
LOCATION: N 1896129.627 E 6253306.866	
DESCRIPTION: NGS MONUMENT	
ELEVATION: 30.522' DATUM: NAVD 88	
NAME: _____	
LOCATION: _____	
DESCRIPTION: _____	
ELEVATION: _____ DATUM: _____	

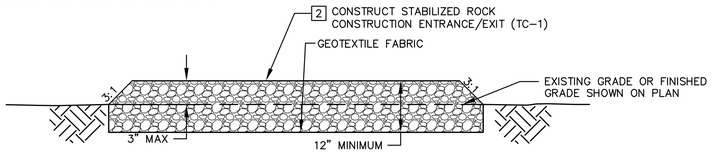
p:\16919 sdg&e sp\vagency permit list\exhibits\cadd\06\plan\1-06 cover.dwg 7/1/2010 8:43 AM

CONSTRUCTION NOTE:

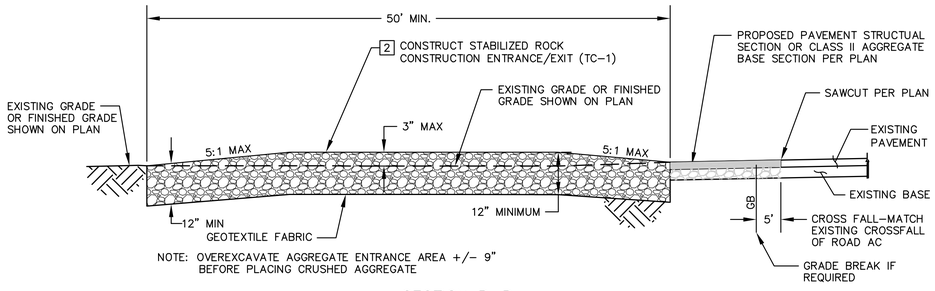
1. CONSTRUCT * ASPHALT CONCRETE OVER * CLASS II AGGREGATE BASE
2. CONSTRUCT STABILIZED CONSTRUCTION APPROACH AT CONSTRUCTION ENTRANCE PER DETAILS ON SHEET 2.
3. SAWCUT AND JOIN EXISTING PAVEMENT
4. CONSTRUCT 8" CLASS II AGGREGATE BASE ROAD ENTRANCE, DETAILS ON SHEET 2.
5. INSTALL SIGN W11-10 (TRUCK) WITH W13-IP (XX MPH).
6. PROVIDE CONSTRUCTION TRAFFIC CONTROL AS APPROPRIATE TA-6, TA-10 OR TA-11 RESTORE TO TWO LANE OPERATION AT NIGHT WITH TA-1,TA-3 OR TA-6 AT NIGHT AS APPROPRIATE PER DETAIL ON SHEET 3
7. CONSTRUCT 6" AC BERM PER COUNTY STD G-5, TYPE A.
8. CONSTRUCT FENCE AND/OR GATE PER SDG&E.
9. CONSTRUCT 2" AC OVERLAY
10. CONSTRUCT CULVERT. (SIZE TO MATCH EXISTING)
11. CONSTRUCT COLLAR

NOTE:

1. * STRUCTURAL SECTION IS SHOWN ON PLANS
2. ** THE PAVEMENT STRUCTURAL SECTION SUBGRADE SHALL BE PREPARED AS FOLLOWS: 12 INCHES OF SUBGRADE SHALL BE REMOVED AND RECOMPACTED TO 95% RELATIVE COMPACTION PER ASTM D1557. IN ADDITION THE SUBGRADE SHOULD BE PROOF ROLLED TO ELIMINATE PUMPING OF SUBGRADE.
3. STABILIZED ROCK SHALL BE CRUSHED AGGREGATE GREATER THAN 3" BUT SMALLER THAN 6". COMPACT TO FILL VOID SPACES TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
4. TC-1 PER STORM WATER BMP HAND BOOK. ROCK SHALL BE COMPACTED PER NOTE ABOVE.



SECTION A-A
NOT TO SCALE



SECTION B-B
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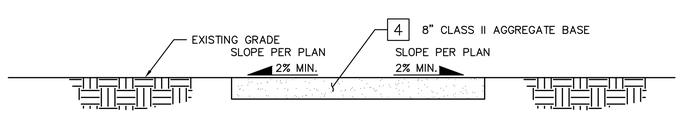
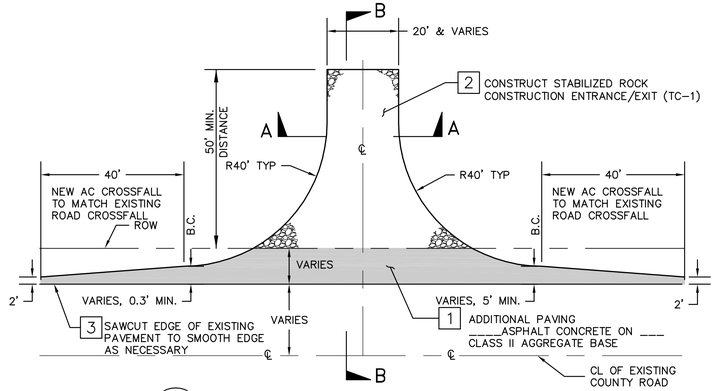
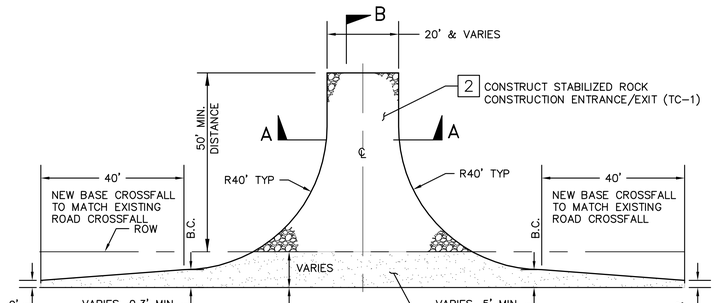


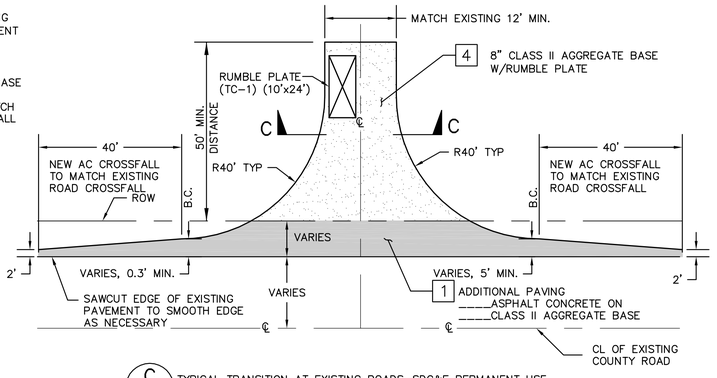
SECTION C-C



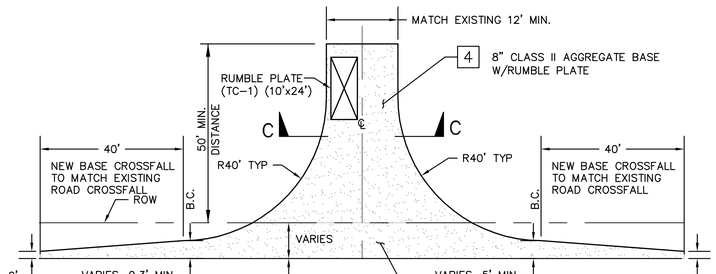
A
—
TYPICAL TRANSITION AT NEW SDG&E PRIVATE ROAD CONNECTION
NOT TO SCALE



B
—
TYPICAL TRANSITION AT SDG&E-TEMPORARY ACCESS ROAD
NOT TO SCALE



C
—
TYPICAL TRANSITION AT EXISTING ROADS-SDG&E PERMANENT USE
NOT TO SCALE



D
—
TYPICAL TRANSITION AT EXISTING ROADS/DRIVEWAY-SDG&E TEMPORARY USE
NOT TO SCALE

ABBREVIATIONS

AC	ASPHALT CONCRETE PAVING
BW	BOTTOM OF WALL AT FINISHED GROUND
CMP	CORRUGATED METAL PIPE
D/S	DOWN STREAM
(EG)	EXISTING GRADE
FG	FINISHED GRADE
FL	FLOW LINE
GB	GRADE BREAK
PP	POWER POLE
RC	RELATIVE COMPACTION
RD	ROAD
TW	TOP OF WALL
U/S	UP STREAM
EA	EACH
LS	LUMP SUM

LEGEND

- PROPOSED ASPHALT
- STABILIZED ROCK
- CLASS II AGGREGATE BASE
- A / A — SECTION
- INDICATES NEW TOWER
- INDICATES EXISTING STEEL POLE
- NEW POWER LINE
- RIGHT-OF-WAY LINE
- X / XX — DETAIL LABEL (DETAIL # / SHEET #)
- TRAFFIC SIGN

WITH REGARD ONLY TO THE WORK SHOWN ON THESE PLANS, THE DEPARTMENT OF PUBLIC WORKS (DPW) FOR THE COUNTY OF SAN DIEGO ACKNOWLEDGES THAT SAN DIEGO GAS & ELECTRIC (SDG&E) HAS CONSULTED WITH DPW REGARDING THOSE LAND USE MATTERS WITHIN SCOPE OF DPW'S REVIEW AUTHORITY IN THE MANNER REQUIRED BY SECTION XIV(B) OF CALIFORNIA PUBLIC UTILITIES COMMISSION, GENERAL ORDER 131-D, DECISION 94-06-14 AS MODIFIED BY DECISION 95-08-038.

_____
FOR DIRECTOR OF PUBLIC WORKS DATE

Bureau Veritas North America
11590 West Bernardo Court Suite 100
San Diego, CA 92127-1624
Tel: (858) 451-6100 Fax: (858) 451-2846
www.us.bureauveritas.com

LEGAL DESCRIPTION	LEGAL DESCRIPTION	ENGINEER OF WORK	PERMITS
ASSESSORS PARCEL NO. _____	ASSESSORS PARCEL NO. _____	REGISTERED PROFESSIONAL ENGINEER STEPHEN K. SMITH RCE 29708 Exp.3-31-19 CIVIL STATE OF CALIFORNIA	REZONE PERMIT NO. _____
RECORD PLAN	RECORD PLAN	NAME: STEPHEN K. SMITH	SPECIAL USE PERMIT NO. _____
NAME: _____	NAME: _____	PHONE NO. (858)451-6100	GRADING PERMIT NO. _____
R.C.E. _____	R.C.E. _____	ADDRESS: 11590 W. BERNARDO CT. SUITE 100 SAN DIEGO, CA 92127	
DATE: _____	DATE: _____		

COUNTY APPROVED CHANGES

NO.	DESCRIPTION	APPROVED BY	DATE

BENCH MARK

NAME: GPS 32
LOCATION: N 1959223.231 E 6351466.260
DESCRIPTION: SURVEY DISK
ELEVATION: 1373.160' DATUM: NAVD 88

NAME: 941T
LOCATION: N 1896129.627 E 6253306.866
DESCRIPTION: NGS MONUMENT
ELEVATION: 30.522' DATUM: NAVD 88

NAME: _____
LOCATION: _____
DESCRIPTION: _____
ELEVATION: _____ DATUM: _____

PRIVATE CONTRACT

SHEET 2	COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS	5 SHEETS

IMPROVEMENT PLAN FOR: SDG&E SUNRISE POWERLINK

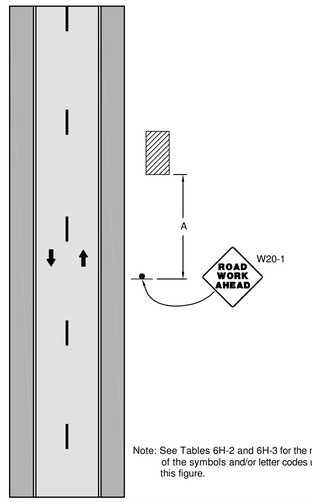
CONSTRUCTION NOTES, DETAILS, ABBREVIATIONS AND LEGEND

ENGINEER OF WORK STEPHEN K. SMITH R.C.E. 29708	CHECKED BY:	IMPROVEMENT PLAN NO.
	APPROVAL DATE:	

SPL-06 (LINK 4) | 06-DWY-02

p:\16919 sdg&e sp\\ggeasy\permit\trials\exhibits\exhibit2\16919-08-exhibit2.dwg / 2016, 8:29:9 AM

FIGURE 6H-1. WORK BEYOND THE SHOULDER (TA-1)



Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used this figure.

Notes for Figure 6H-1—Typical Application 1
Work Beyond the Shoulder

Guidance:

1. *If the work space is in the median of a divided highway, an advance warning sign should also be placed on the left side of the directional roadway.*

Option:

2. The ROAD WORK AHEAD sign may be replaced with other appropriate signs such as the SHOULDER WORK sign. The SHOULDER WORK sign may be used for work adjacent to the shoulder.
3. The ROAD WORK AHEAD sign may be omitted where the work space is behind a barrier, more than 24 inches behind the curb, or 15 feet or more from the edge of any roadway.
4. For short-term, short duration or mobile operation, all signs and channelizing devices may be eliminated if a vehicle with activated high-intensity rotating, flashing, oscillating, or strobe lights is used.
5. Vehicle hazard warning signals may be used to supplement high-intensity rotating, flashing, oscillating, or strobe lights.

Standard:

6. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.

Table 6H-2. Meaning of Symbols on Typical Application Diagrams

Arrow board	Shadow vehicle
Arrow board support or trailer (shown facing down)	Sign (shown facing left)
Changeable message sign or support trailer	Surveyor
Channelizing device	Temporary barrier
Crash cushion	Temporary barrier with warning light
Direction of temporary traffic detour	Traffic or pedestrian signal
Direction of traffic	Truck-mounted attenuator
Flagger	Type 3 barricade
High-level warning device (Flag tree)	Warning light
Longitudinal channelizing device	Work space
Luminaire	Work vehicle
Pavement markings that should be removed for a long-term project	

Table 6H-3. Meaning of Letter Codes on Typical Application Diagrams

Road Type	Distance Between Signs**		
	A	B	C
Urban (low speed)*	100 feet	100 feet	100 feet
Urban (high speed)*	300 feet	350 feet	350 feet
Rural	500 feet	500 feet	500 feet
Expressway / Freeway	1,000 feet	1,500 feet	2,640 feet

← RECOMMENDED

* Speed category to be determined by highway agency

** The column headings A, B, and C are the dimensions shown in Figures 6H-1 through 6H-46. The A dimension is the distance from the transition or point of restriction to the first sign. The B dimension is the distance between the first and second signs. The C dimension is the distance between the second and third signs. (The "first sign" is the sign in a three-sign series that is closest to the TTC zone. The "third sign" is the sign that is furthest upstream from the TTC zone.)

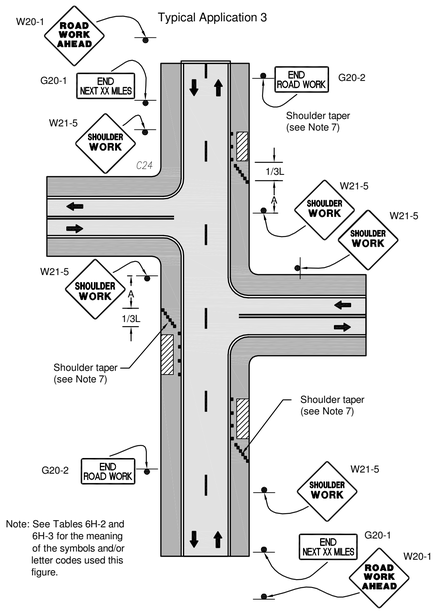
Table 6H-4. Formulas for Determining Taper Length

Speed (S)	Taper Length (L) in feet
40 mph or less	$L = \frac{WS^2}{60}$
45 mph or more	$L = WS$

Where: L = taper length in feet
W = width of offset in feet
S = posted speed limit, or off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

FIGURE 6H-3. WORK ON THE SHOULDERS (TA-3)

Typical Application 3



Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used this figure.

Notes for Figure 6H-3—Typical Application 3
Work on the Shoulders

Guidance:

1. *A SHOULDER WORK sign should be placed on the left side of the roadway for a divided or one-way street only if the left shoulder is affected.*

Option:

2. The Workers symbol signs may be used instead of SHOULDER WORK signs.
3. The SHOULDER WORK AHEAD sign on an intersecting roadway may be omitted where drivers emerging from that roadway will encounter another advance warning sign prior to this activity area.
4. For short duration operations of 60 minutes or less, all signs and channelizing devices may be eliminated if a vehicle with activated high-intensity rotating, flashing, oscillating, or strobe lights is used.
5. Vehicle hazard warning signals may be used to supplement high-intensity rotating, flashing, oscillating, or strobe lights.

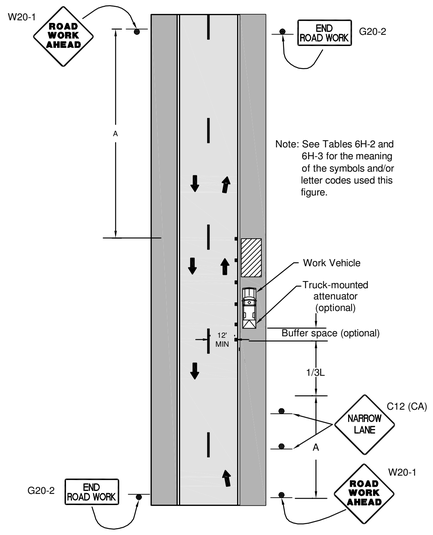
Standard:

6. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.

7. When paved shoulders having a width of 8 feet or more are closed, at least one advance warning sign shall be used. In addition, channelizing devices shall be used to close the shoulder in advance to delineate the beginning of the work space and direct vehicular traffic to remain within the traveled way.

FIGURE 6H-6. SHOULDER WORK WITH MINOR ENCROACHMENT (TA-6)

Typical Application 6



Notes for Figure 6H-6—Typical Application 6
Shoulder Work with Minor Encroachment

Guidance:

1. *All lanes should be a minimum of 10 feet in width as measured to the near face of the channelizing devices.*
2. *The treatment shown should be used on a minor road having low speeds. For higher-speed traffic conditions, a lane closure should be used.*

Option:

3. For short-term use on low-volume, low-speed roadways with vehicular traffic that does not include longer and wider heavy commercial vehicles, a minimum lane width of 9 feet may be used.
4. Where the opposite shoulder is suitable for carrying vehicular traffic and of adequate width, lanes may be shifted by use of closely-spaced channelizing devices, provided that the minimum lane width of 10 feet is maintained.
5. Additional advance warning may be appropriate, such as a ROAD NARROWS sign.
6. Temporary traffic barriers may be used along the work space.
7. The shadow vehicle may be omitted if a taper and channelizing devices are used.
8. A truck-mounted attenuator may be used on the shadow vehicle.
9. For short-duration work, the taper and channelizing devices may be omitted if a shadow vehicle with activated high-intensity rotating, flashing, oscillating, or strobe lights is used.
10. Vehicle hazard warning signals may be used to supplement high-intensity rotating, flashing, oscillating, or strobe lights.

Standard:

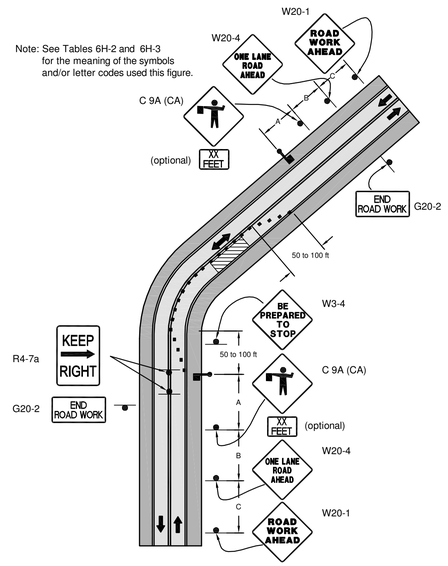
11. Vehicle-mounted signs shall be mounted in a manner such that they are not obscured by equipment or supplies. Sign legends on vehicle-mounted signs shall be covered or turned from view when work is not in progress.

12. Shadow and work vehicles shall display high-intensity rotating, flashing, oscillating, or strobe lights.

13. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.

FIGURE 6H-10. LANE CLOSURE ON A TWO LANE ROAD USING FLAGGERS (TA-10)

Typical Application 10



Notes for Figure 6H-10—Typical Application 10
Lane Closure on a Two-Lane Road Using Flaggers

Option:

1. For low-volume situations with short work zones on straight roadways where the flagger is visible to road users approaching from both directions, a single flagger, positioned to be visible to road users approaching from both directions, may be used (see Chapter 6E).
2. The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short-duration operations.
3. Flashing warning lights and/or flags may be used to call attention to the advance warning signs. A BE PREPARED TO STOP sign may be added to the sign series.

Guidance:

4. *The buffer space should be extended so that the two-way traffic taper is placed before a horizontal (or crest vertical) curve to provide adequate sight distance for the flagger and a queue of stopped vehicles.*

Standard:

5. At night, flagger stations shall be illuminated, except in emergencies.

Guidance:

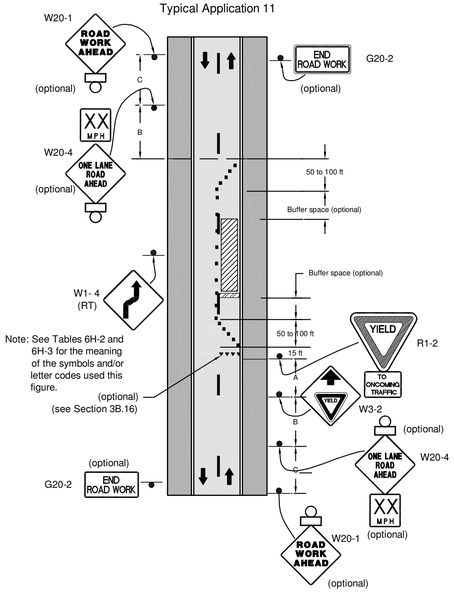
6. *When used, the BE PREPARED TO STOP sign should be located between the Flagger sign and the ONE LANE ROAD sign.*
7. *When a grade crossing exists within or upstream of the transition area and it is anticipated that queues resulting from the lane closure might extend through the grade crossing, the TTC zone should be extended so that the transition area precedes the grade crossing.*
8. *When a grade crossing equipped with active warning devices exists within the activity area, provisions should be made for keeping flaggers informed as to the activation status of these warning devices.*
9. *When a grade crossing exists within the activity area, drivers operating on the left-hand side of the normal center line should be provided with comparable warning devices as for drivers operating on the right-hand side of the normal center line.*
10. *Early coordination with the railroad company or light rail transit agency should occur before work starts.*

Option:

11. A flagger or a uniformed law enforcement officer may be used at the grade crossing to minimize the probability that vehicles are stopped within 15 feet of the grade crossing, measured from both sides of the outside rails.

FIGURE 6H-11. LANE CLOSURE ON A TWO-LANE ROAD WITH LOW TRAFFIC VOLUMES (TA-11)

Typical Application 11



Notes for Figure 6H-11—Typical Application 11
Lane Closure on a Two-Lane Road with Low Traffic Volumes

Option:

1. This TTC zone application may be used as an alternate to the TTC application shown in Figure 6H-10 (using flaggers) when the following conditions exist:
   a. Vehicular traffic volume is such that sufficient gaps exist for vehicular traffic that must yield.
   b. Road users from both directions are able to see approaching vehicular traffic through and beyond the worksite and have sufficient visibility of approaching vehicles.
2. The Type B flashing warning lights may be placed on the ROAD WORK AHEAD and the ONE LANE ROAD AHEAD signs whenever a night lane closure is necessary.

NOTE: TRAFFIC CONTROL PER ATTACHED TYPICAL APPLICATIONS (AASHTO) IS FOR DRIVEWAY/PRIVATE ROAD CONSTRUCTION IN COUNTY RIGHT-OF-WAY

WITH REGARD ONLY TO THE WORK SHOWN ON THESE PLANS, THE DEPARTMENT OF PUBLIC WORKS (DPW) FOR THE COUNTY OF SAN DIEGO ACKNOWLEDGES THAT SAN DIEGO GAS & ELECTRIC (SDG&E) HAS CONSULTED WITH DPW REGARDING THOSE LAND USE MATTERS WITHIN SCOPE OF DPW'S REVIEW AUTHORITY IN THE MANNER REQUIRED BY SECTION XIV(B) OF CALIFORNIA PUBLIC UTILITIES COMMISSION, GENERAL ORDER 131-D, DECISION 94-06-14 AS MODIFIED BY DECISION 95-08-038.

_____
FOR DIRECTOR OF PUBLIC WORKS DATE

Bureau Veritas North America
11590 West Bernardo Court Suite 100
San Diego, CA 92127-1624
Tel: (858) 451-6100 Fax: (858) 451-2846
www.us.bureauveritas.com

LEGAL DESCRIPTION
ASSESSORS PARCEL NO. _____
RECORD PLAN
NAME: _____
R.C.E. _____
DATE: _____

LEGAL DESCRIPTION
ASSESSORS PARCEL NO. _____
RECORD PLAN
NAME: _____
R.C.E. _____
DATE: _____

ENGINEER OF WORK
REGISTERED PROFESSIONAL ENGINEER — STEPHEN K. SMITH — No. 29706 — Exp. 3-31-11 — CIVIL — STATE OF CALIFORNIA
NAME: STEPHEN K. SMITH
PHONE NO. (858)451-6100
ADDRESS: 11590 W. BERNARDO CT. SUITE 100 SAN DIEGO, CA 92127

PERMITS
REZONE PERMIT NO. _____
SPECIAL USE PERMIT NO. _____
GRADING PERMIT NO. _____

COUNTY APPROVED CHANGES

NO.	DESCRIPTION	APPROVED BY	DATE

BENCH MARK
NAME: GPS 32
LOCATION: N 1959223.231 E 6351466.260
DESCRIPTION: SURVEY DISK
ELEVATION: 1373.160' DATUM: NAVD 88

NAME: 941T
LOCATION: N 1896129.627 E 6253306.866
DESCRIPTION: NGS MONUMENT
ELEVATION: 30.522' DATUM: NAVD 88

NAME: _____
LOCATION: _____
DESCRIPTION: _____
ELEVATION: _____ DATUM: _____

PRIVATE CONTRACT

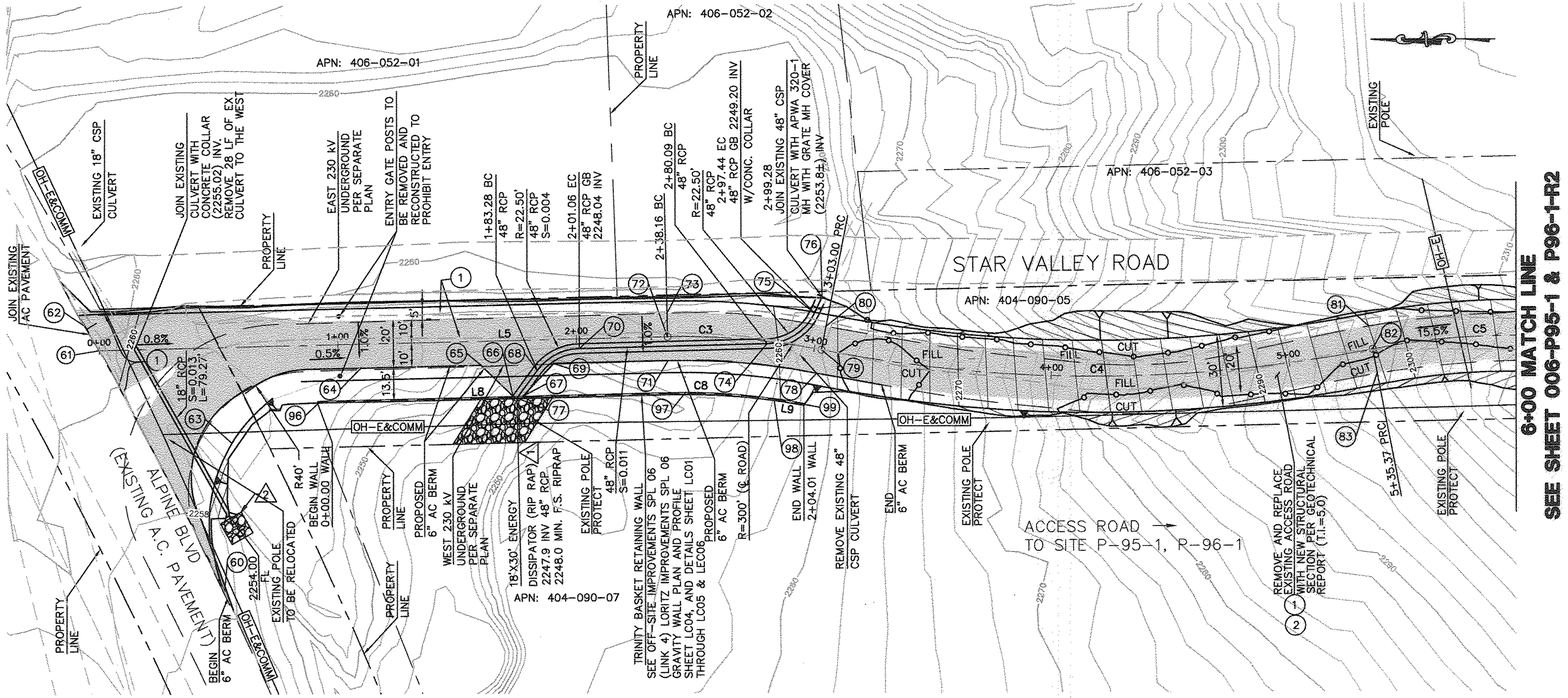
SHEET	COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS	SHEETS
3		5

IMPROVEMENT PLAN FOR: SDG&E SUNRISE POWERLINK

TRAFFIC CONTROL DETAILS

ENGINEER OF WORK: STEPHEN K. SMITH, R.C.E. 29706	CHECKED BY:	IMPROVEMENT PLAN NO.
	APPROVAL DATE:	
SPL-06 (LINK 4)		06-DWY-03

p:\16919 sdg&e sp\agency permit list\exhibits\cadd\06\plan\3-06 tc details.dwg 7/1/2010 8:46 AM



EARTH QUANTITIES:
CUT: 265 CY.
FILL: 1839 CY.
NET: 1576 CY.

DISTURBED AREA:
ROAD: 24,477 SF
TOTAL: 24,477 SF

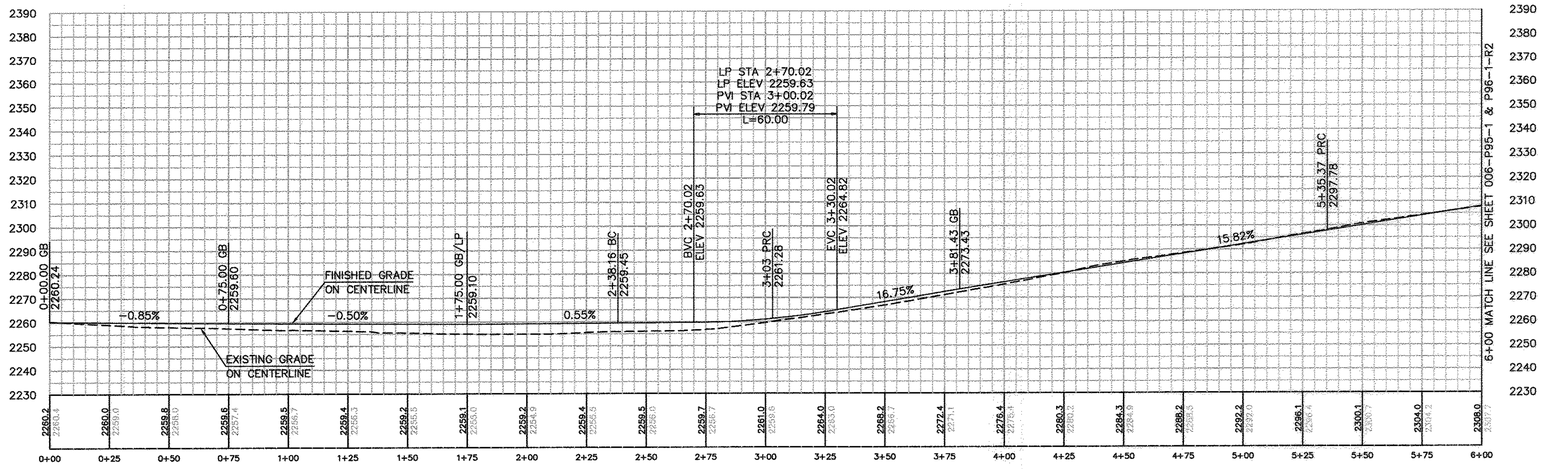
LENGTH OF ACCESS ROAD: 600 LF

PLAN: ACCESS ROAD TO SITES P-95-1, P-96-1 (PERMIT 6-1)

SCALE: 1" = 30'

GRAPHIC SCALE
30 0 30 60
1"=30'

FOR RETAINING WALL PLAN AND PROFILE SEE LORITZ OFF-SITE IMPROVEMENTS. SEE SHEET SPL-006-LC04, FOR WALL DETAILS SEE SHEET SPL-006-LC05



PROFILE: ACCESS ROAD TO SITES P-95-1, P-96-1

HORIZ. & VERT. SCALE: 1" = 30'

CONSTRUCTION NOTES

1. REMOVE EXISTING PAVEMENT
2. CONSTRUCT ±4" AC ON 5" CAB COMPACTED TO 95% ON 90% COMPACTED NATIVE SOIL, VERIFY R-VALUE WITH ENGINEER AFTER GRADING

NEW AC ON CLASS 2 AGGREGATE BASE (CAB)

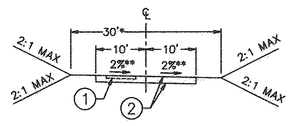
CENTERLINE DATA			
NUMBER	RADIUS	LENGTH	BEARING/DELTA ANGLE
L5		238.16	S1°12'54"E
C3	300.00	64.84	12°23'02"
C4	600.00	232.37	22°11'23"
C5	300.00	70.71	13°30'16"

FACE OF WALL DATA			
NUMBER	RADIUS	LENGTH	BEARING/DELTA ANGLE
L8		154.18	S1°29'55"E
C8	186.50	37.26	11°26'43"
L9		12.57	S9°56'45"W

QUANTITIES:
18" RCP PIPE (D-2000): 79 LF
PIPE FLARED END SECTION: 1 EA
18" CONC. PIPE COLLAR: 1 EA
48" RCP W/BEVELED PIPE: 140 EA
SD MH-APWA 320-1 W/GRATE MH SHAFT: 1 EA
AC PAVEMENT: 14,167 SF
CLASS 2 AGGREGATE BASE (CAB): 15,330 SF
REMOVE EXISTING AC PAVEMENT: 7376 SF
6" AC BERM: PER SDRSD G-5, TYPE A: 238 LF

1 QUANTITIES:
ENERGY DISSIPATOR - 18'x30'x5' THICK
1/4 TON-500 LB STONE D50=22"± - 540 S.F.
ON 12" THICK BACKING STONE

2 MODIFIED ENERGY DISSIPATOR
PER SDRSD D-40, TYPE 1:
1/4 TON ROCK, L=10',
TOTAL W=10', T=2.7'-100 S.F.
FILTER BLANKET:
UPPER LAYER= 3/4" CRUSHED ROCK, T=1.0'
LOWER LAYER=SAND



TYPICAL ACCESS ROAD CROSS SECTION
0+00 TO 6+00
* AND VARIES
** 1% 1+00 TO 2+38.16

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
60	1883465.84	6417524.83	(2256.50)	BC
61	1883518.32	6417625.87	(2260.41)	CL
62	1883524.25	6417636.04	(2260.93)	FG
63	1883462.81	6417587.12	2259.48	FG/MOC
64	1883408.74	6417618.19	2259.33	EC
65	1883358.45	6417619.26	2259.08	FG
66	1883344.87	6417606.24	2257.50	FG
67	1883340.87	6417606.33	2257.50	FG
68	1883334.81	6417617.03		BC/RCP
69	1883327.85	6417619.90	2259.08	FG
70	1883317.22	6417626.14		EC/RCP
71	1883280.01	6417620.92	2259.35	BC
72	1883280.22	6417630.92	2259.45	BC/CL
73	1883280.43	6417640.92	2259.55	BC
74	1883238.49	6417627.85		BC/RCP
75	1883218.64	6417640.72		EC/RCP
76	1883215.43	6417647.50		RCP
77	1883343.30	6417605.57		RCP
78	1883217.69	6417615.49	2261.08	PRC
79	1883215.75	6417625.30	2261.28	PRC/CL
80	1883213.81	6417635.11	2261.48	PRC
81	1882986.74	6417634.82	2297.98	PRC
82	1882984.83	6417625.01	2297.78	PRC/CL
83	1882982.92	6417615.19	2297.58	PRC
96	1883426.83	6417603.51		WALL
97	1883272.70	6417607.55		WALL
98	1883235.61	6417604.81		WALL
99	1883223.23	6417602.64		WALL

INSPECTIONS
TO REQUEST AN INSPECTION, CALL PRIVATE DEVELOPMENT CONSTRUCTION INSPECTION DURING NORMAL BUSINESS HOURS AT (858) 694-3165 AT LEAST 24 HOURS BEFORE START AND FINISH OF WORK. WHEN CALLING FOR AN INSPECTION, REFER TO THE COMPUTER GENERATED TRAFFIC PERMIT NUMBER AND THE JOB SITE ADDRESS OF YOUR SITE. IN MOST CASES, CONSTRUCTION INSPECTION REQUIRES ONE (1) WORKING DAY NOTICE FOR INSPECTIONS. WE MAY NOT BE ABLE TO PROVIDE NEXT DAY INSPECTIONS IN SOME OF THE MORE REMOTE AREAS OF THE COUNTY OF SAN DIEGO. PLEASE VERIFY WITH THE PERSON TAKING THE INSPECTION REQUEST WHAT DAY THE INSPECTOR WILL BE OUT TO THE SITE.

WITH REGARD ONLY TO THE WORK SHOWN ON THESE PLANS FOR THE SDG&E SUNRISE POWERLINK DRIVEWAY IMPROVEMENTS (ACCESS FROM ALPINE BOULEVARD) ON APN 404-090-05, THE DEPARTMENT OF PUBLIC WORKS (DPW) FOR THE COUNTY OF SAN DIEGO ACKNOWLEDGES THAT SAN DIEGO GAS & ELECTRIC (SDG&E) HAS CONSULTED WITH DPW REGARDING THOSE LAND USE MATTERS WITHIN SCOPE OF DPW'S REVIEW AUTHORITY IN THE MANNER REQUIRED BY SECTION XIV(B) OF CALIFORNIA PUBLIC UTILITIES COMMISSION, GENERAL ORDER 131-D, DECISION 94-06-14 AS MODIFIED BY DECISION 95-08-038.

Kenneth J. Brazell — 7-02-10
FOR DIRECTOR OF PUBLIC WORKS — DATE

LEGAL DESCRIPTION	LEGAL DESCRIPTION	ENGINEER OF WORK	PERMITS
ASSESSORS PARCEL NO. 404-090-05	ASSESSORS PARCEL NO.	REGISTERED PROFESSIONAL ENGINEER STEPHEN K. SMITH No. 29708 Exp:3-31-11 CIVIL STATE OF CALIFORNIA	REZONE PERMIT NO.
RECORD PLAN	RECORD PLAN	NAME: STEPHEN K. SMITH	SPECIAL USE PERMIT NO.
NAME:	NAME:	PHONE NO. (858)451-6100	GRADING PERMIT NO.
R.C.E.	R.C.E.	ADDRESS: 11590 W. BERNARDO CT. SUITE 100 SAN DIEGO, CA. 92127	
DATE:	DATE:		

COUNTY APPROVED CHANGES

NO.	DESCRIPTION	APPROVED BY	DATE

Bureau Veritas North America
11590 West Bernardo Court Suite 100
San Diego, CA 92127-1624
Tel: (858) 451-6100 Fax: (858) 451-2846
www.us.bureauveritas.com

BENCH MARK

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LOCATION: N 1959223.231 E 6351466.260
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ELEVATION: 1373.160' DATUM: NAVD 88

NAME: 941T
LOCATION: N 1896129.627 E 6253306.866
DESCRIPTION: NGS MONUMENT
ELEVATION: 30.522' DATUM: NAVD 88

NAME:
LOCATION:
DESCRIPTION:
ELEVATION: DATUM:

PRIVATE CONTRACT

SHEET 4	COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS	5 SHEETS

IMPROVEMENT PLAN FOR: SDG&E SUNRISE POWERLINK

ACCESS ROAD IMPROVEMENTS ON ALPINE BLVD.
PERMIT 06-1

ENGINEER OF WORK: STEPHEN K. SMITH R.C.E. 29708	CHECKED BY:	IMPROVEMENT PLAN NO.
	APPROVAL DATE:	
SPL-06 (LINK 4)	06-DWY-04	

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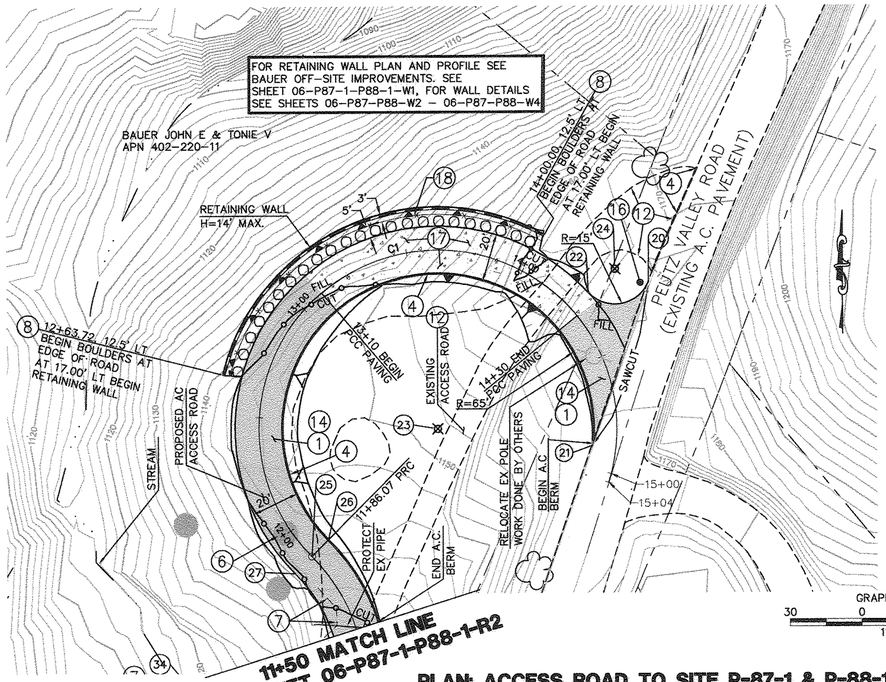


PLAN: ACCESS ROAD TO SITE P-87-1 & P-88-1 (PERMIT 6-2)

SCALE: 1" = 30'

NOTE: FLAGGER OPERATION REQUIRED (DUE TO SIGHT DISTANCE ISSUES) DURING CONSTRUCTION AND HEAVY EQUIPMENT MOBILIZATION AND DEMOBILIZATION

GRAPHIC SCALE
30 0 30 60
1"=30'

CENTERLINE DATA			
NUMBER	RADIUS	LENGTH	BEARING/DELTA ANGLE
C1	75.00	317.66	242°40'17"

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
20	1889453.79	6391393.66	(1169.83)	EG
21	1889385.22	6391369.94	(1167.55)	EG
22	1889449.27	6391368.55	1167.18	FG
23	1889392.45	6391305.34		RP
24	1889459.30	6391379.71		RP
25	1889339.32	6391252.40	1141.20	PRC/CL
26	1889346.41	6391259.46	1141.00	PRC
27	1889332.17	6391245.41	1141.40	PRC

EARTH QUANTITIES:
CUT: 353 CY.
FILL: 775 CY.
NET: 422 CY.

DISTURBED AREA:
ROAD: 9,152 SF

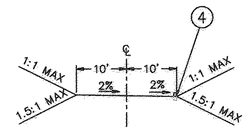
QUANTITIES:
AC PAVEMENT: 4075 SF
6" A.C. BERM: 305 LF
PCC PAVING: 2401 SF
TYPE 1 AC SLURRY SEAL: 4075 SF
LENGTH OF ACCESS ROAD: 361 LF

REMOVAL AC PAVEMENT: 1198 SF
BOULDER PLACED EDGE: 135 LF
CABLE RAILING: 163 LF
DOUBLE MAIL BOX: 1 EA
RELOCATE/REPLANT TREE: 1 EA

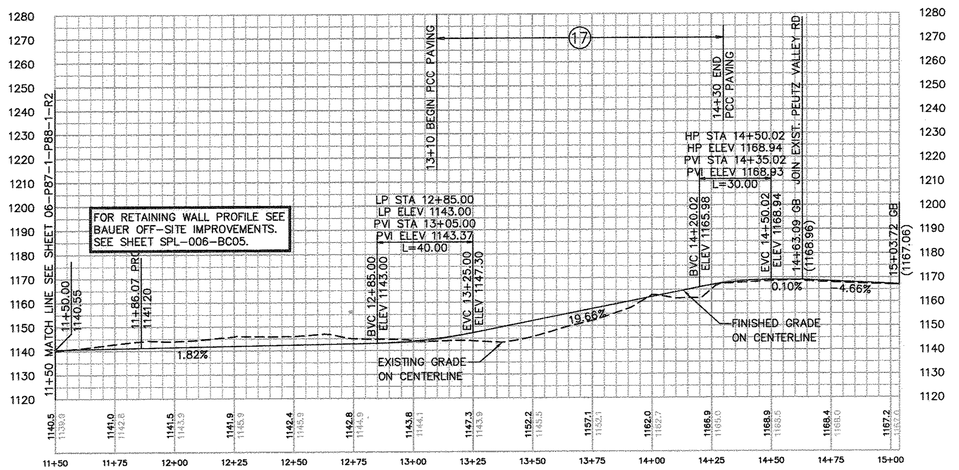
CONSTRUCTION NOTES

1. CONSTRUCT 4" AC ON 6" CLASS 2 AGGREGATE BASE (CAB) OVER 6" 95% COMPACTED NATIVE SUBGRADE
3. CONSTRUCT 2" AC OVERLAY ON EXISTING AC
4. CONSTRUCT 6" AC BERM PER SDRSD G-5, TYPE A
6. RELOCATE/REPLANT YOUNG TREE
7. REMOVE PORTIONS OF EXISTING TREE
8. CONSTRUCT BOULDER PLACED NATURAL ROAD EDGE AFTER CONSTRUCT PLACE 3'-4' DIA. BOULDER W/ 2'-4' ROCK ABOVE ROAD SURFACE AT OUTSIDE EDGE OF PAVEMENT PRIOR TO FINAL PAVING. SEE DETAIL & SECTION HERE ON (A/R1)
12. REMOVE PORTION OF EXISTING PAVEMENT
14. SLURRY NEW & OLD AC PAVING AFTER CONSTRUCTION TRAFFIC COMPLETION WITH TYPE I AC SLURRY SEAL
16. CONSTRUCT DOUBLE MAILBOX , 1/8" THICK ALUMINUM POWDER COAT WITH LOCKING MAIL SLOT, NEWSPAPER HOLDER AND ADDRESS NUMERALS.
17. CONSTRUCT 6" PCC PAVING ON 95% COMPACTED 4" CLASS 2 AGGREGATE BASE (CAB) OVER 6" 95% COMPACTED NATIVE SUBGRADE. PROVIDE HEAVY CROSS GROOVED FINISH TO CONCRETE SURFACE FOR MAXIMUM TRACTION.
18. CONSTRUCT 36" HIGH CABLE RAILING PER CALTRANS B11-47 (MOD) W/ 12" DIA. BY 2' DEEP CONC. POSTS SEE DETAIL SHEET SPL-006-005.

GRIND & FEATHER OVERLAY
AC OVERLAY
NEW AC ON CAB
PCC PAVING

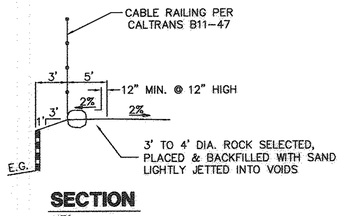


TYPICAL ACCESS ROAD CROSS SECTION
STA 11+50.00 TO 14+63.09

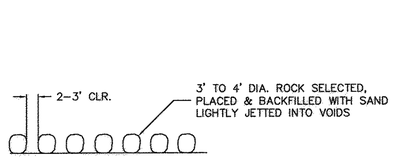


PROFILE: ACCESS ROAD TO SITE P-87-1 & P-88-1

HORIZ. & VERT. SCALE: 1" = 30'



SECTION
NTS.



PLAN
NTS.

A/R1 BOULDER PLACED NATURAL ROAD EDGE
NTS

INSPECTIONS
TO REQUEST AN INSPECTION, CALL PRIVATE DEVELOPMENT CONSTRUCTION INSPECTION DURING NORMAL BUSINESS HOURS AT (858) 694-3165 AT LEAST 24 HOURS BEFORE START AND FINISH OF WORK. WHEN CALLING FOR AN INSPECTION, REFER TO THE COMPUTER GENERATED TRAFFIC PERMIT NUMBER AND THE JOB SITE ADDRESS OF YOUR SITE. IN MOST CASES, CONSTRUCTION INSPECTION REQUIRES ONE (1) WORKING DAY NOTICE FOR INSPECTIONS. WE MAY NOT BE ABLE TO PROVIDE NEXT DAY INSPECTIONS IN SOME OF THE MORE REMOTE AREAS OF THE COUNTY OF SAN DIEGO. PLEASE VERIFY WITH THE PERSON TAKING THE INSPECTION REQUEST WHAT DAY THE INSPECTOR WILL BE OUT TO THE SITE.

WITH REGARD ONLY TO THE WORK SHOWN ON THESE PLANS FOR THE SDG&E SUNRISE POWERLINK DRIVEWAY IMPROVEMENTS (ACCESS FROM PEUTZ VALLEY ROAD) ON APN 402-220-11, THE DEPARTMENT OF PUBLIC WORKS (DPW) FOR THE COUNTY OF SAN DIEGO ACKNOWLEDGES THAT SAN DIEGO GAS & ELECTRIC (SDG&E) HAS CONSULTED WITH DPW REGARDING THOSE LAND USE MATTERS WITHIN SCOPE OF DPW'S REVIEW AUTHORITY IN THE MANNER REQUIRED BY SECTION XIV(B) OF CALIFORNIA PUBLIC UTILITIES COMMISSION, GENERAL ORDER 131-D, DECISION 94-06-14 AS MODIFIED BY DECISION 95-08-038.

Kenneth J. Bragell 7-02-10
FOR DIRECTOR OF PUBLIC WORKS DATE

Bureau Veritas North America
11580 West Bernardo Court Suite 100
San Diego, CA 92127-1624
Tel: (858) 451-6100 Fax: (858) 451-2846
www.us.bureauveritas.com

LEGAL DESCRIPTION	LEGAL DESCRIPTION
ASSESSORS PARCEL NO. 402-220-11	ASSESSORS PARCEL NO.
RECORD PLAN	RECORD PLAN
NAME:	NAME:
R.C.E.	R.C.E.
DATE:	DATE:

ENGINEER OF WORK
REGISTERED PROFESSIONAL ENGINEER STEPHEN K. SMITH No. 29708 EXP. 3-31-11 CIVIL STATE OF CALIFORNIA
NAME: STEPHEN K. SMITH
PHONE NO. (858)451-6100
ADDRESS: 11590 W. BERNARDO CT. SUITE 100 SAN DIEGO, CA 92127

PERMITS
REZONE PERMIT NO.
SPECIAL USE PERMIT NO.
GRADING PERMIT NO.

COUNTY APPROVED CHANGES

NO.	DESCRIPTION	APPROVED BY	DATE

BENCH MARK
NAME: GPS 32
LOCATION: N 1959223.231 E 6351466.260
DESCRIPTION: SURVEY DISK
ELEVATION: 1373.160' DATUM: NAVD 88
NAME: 941T
LOCATION: N 1896129.627 E 6253306.866
DESCRIPTION: NGS MONUMENT
ELEVATION: 30.522' DATUM: NAVD 88
NAME:
LOCATION:
DESCRIPTION:
ELEVATION: DATUM:

PRIVATE CONTRACT

SHEET 5	COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS	5 SHEETS

IMPROVEMENT PLAN FOR: SDG&E SUNRISE POWERLINK

ACCESS ROAD IMPROVEMENTS ON PEUTZ VALLEY ROAD PERMIT 06-2

ENGINEER OF WORK: STEPHEN K. SMITH R.C.E. 29708	CHECKED BY: APPROVAL DATE:	IMPROVEMENT PLAN NO.
SPL-06 (LINK 4)		06-DWY-05

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