SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

DEBRIS BASIN RESTORATION PROJECTS THOMAS FIRE 1-9 DEBRIS FLOW INCIDENT

18STM1

IN THE MONTECITO AND CARPINTERIA AREAS OF SANTA BARBARA COUNTY, CALIFORNIA



DISTRICT BOARD OF DIRECTORS

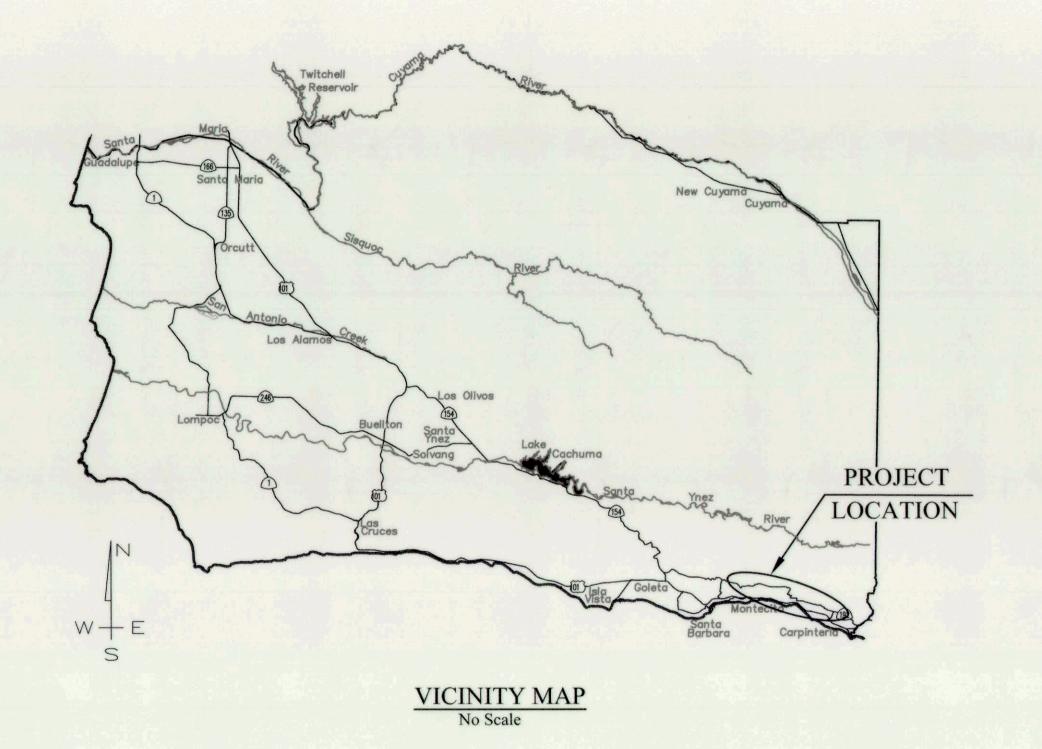
FIRST DISTRICT SECOND DISTRICT THIRD DISTRICT FOURTH DISTRICT FIFTH DISTRICT

Das Williams Janet Wolf Joan Hartmann Peter Adam Steve Lavagnino

CHAIR, BOARD OF DIRECTORS

DESCRIPTION

Das Williams



INDEX TO SHEETS

TITLE SHEET **GENERAL INFORMATION COLD SPRINGS DEBRIS BASIN** MONTECITO DEBRIS BASIN ROMERO DEBRIS BASIN TORO UPPER WEST DEBRIS BASIN SANTA MONICA DEBRIS BASIN GOBERNADOR DEBRIS BASIN **DETAILS**



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SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT 130 E. VICTORIA STREET SANTA BARBARA, CA 93101 (805) 568-3440



DEBRIS BASIN RESTORATION PROJECTS THOMAS FIRE 1-9 DEBRIS FLOW INCIDENT AREAS OF MONTECITO AND CARPINTERIA

SANTA BARBARA COUNTY, CALIFORNIA

TITLE SHEET

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Filename: BASINS REPAIR.DWG

STANDARD DETAILS AND PLANS LIST

STANDARD

DESCRIPTION NO.

STATE DEPARTMENT OF TRANSPORTATION STANDARD PLANS (2015 EDITION)

The Standard Plan sheets applicable to this contract include, but are not limited to those indicated below. The Revised Standard Plans (RSP) and New Standard Plans (NSP) which apply are attached to the contract.

A3A-A3B ACRONYMS AND ABBREVIATIONS A10C-A10E LINES AND SYMBOLS

A85A CHAIN LINK FENCE DETAILS BARBED WIRE AND WIRE MESH FENCES

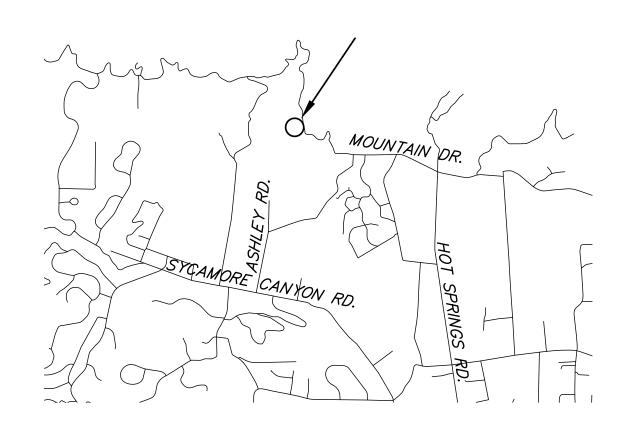
MIDWEST GUARDRAIL SYSTEM STANDARD RAILING SECTION (STEEL POST WITH NOTCHED

WOOD OR NOTCHED RECYCLED PLASTIC BLOCK)
CHAIN LINK RAILING B11-7

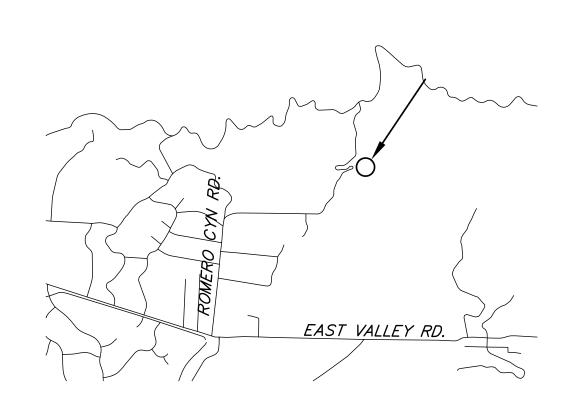
CABLE RAILING *B11-47*

AMERICAN PUBLIC WORKS ASSOCIATION STANDARD PLANS

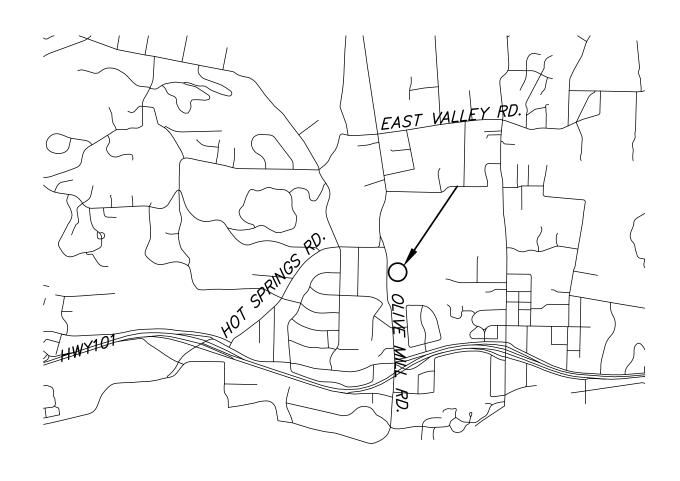
TRASH RACK 635-3 STEEL STEP



COLD SPRINGS DEBRIS BASIN SCALE: 1" = 2000'



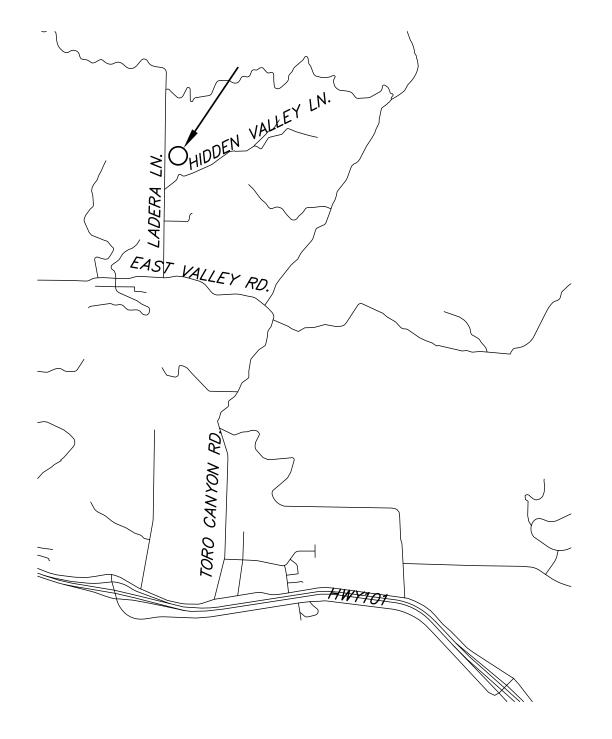
ROMERO DEBRIS BASIN SCALE: 1" = 2000'



MONTECITO DEBRIS BASIN SCALE: 1" = 2000'

ABBREVIATIONS

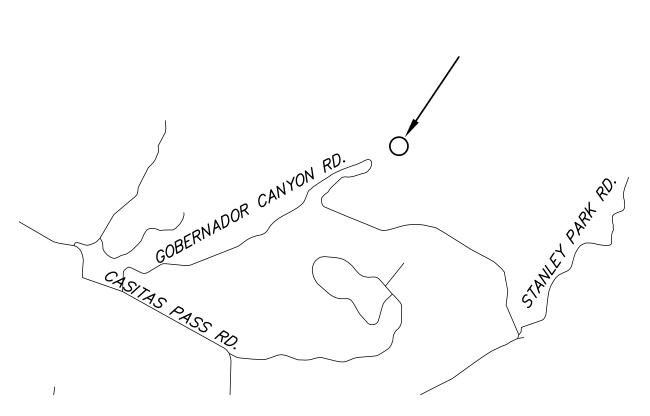
APN APWA AT BW CFS CL or C/L CALTRANS COUNTY CP DI DW E EG EGL EL EP ELEC FD FT G GB HDPE HGL	ASSESSORS PARCEL NUMBER AMERICAN PUBLIC WORKS ASSOC. ARCHITRCTURAL TEXTURE BOTH WAYS CUBIC FEET PER SECOND CENTER LINE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION COUNTY OF SANTA BARBARA CONTROL POINT DUCTILE IRON OR DROP INLET DRIVEWAY EAST OR EASTING EXISTING GROUND ENERGY GRADE LINE ELEVATION EDGE OF PAVEMENT ELECTRIC FOUND FEET GAS LINE GRADE BREAK HIGH DENSITY POLYETHYLENE HYDRAULIC GRADE LINE	IN MJ n N OC PK Q R1 SDMH SH SPK S/W TW or tw TCE TBM TSW TP W or WL WF WWF V	INCH MECHANICAL JOINT MANNING'S COEFFICIENT NORTH OR NORTHING ON CENTER PK NAIL FLOW VELOCITY RECORD PER BOOK NN, PAGE NN OF MAPS SEWER OR SLOPE OR SOUTH STORM DRAIN MANHOLE SHINER SPIKE SIDEWALK TOP OF WALL TEMPORARY CONSTRUCTION EASEMENT TEMPORARY BENCH MARK TOP OF SIDEWALK TOP OF PAVEMENT WATER LINE WALL FACE WELDED WIRE FABRIC VELOCITY
IP	IRON PIPE	VB	VAL VE BOX



TORO UPPER WEST DEBRIS BASIN SCALE: 1" = 2000'



SANTA MONICA DEBRIS BASIN SCALE: 1" = 2000'



GOBERNADOR DEBRIS BASIN SCALE: 1" = 2000'

GRAPHIC SCALE

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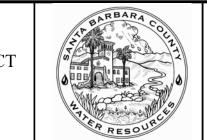
ALL UNDERGROUND UTILITIES SHOWN ARE PLOTTED BASED ON INFORMATION PROVIDED BY OTHERS, AND ARE APPROXIMATE. OVERHEAD UTILITIES ARE NOT SHOWN.

THE SANTA BARBARA COUNTY FLOOD CONTROL DISTRICT IS NOT RESPONSIBLE FOR THE ACCURACY OF THIS INFORMATION. CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT A MINIMUM OF TWO WORKING DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION @ 1-800-422-4133.

UNAUTHORIZED CHANGES OR USES:

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//	DESIGNED BY: Matt Griffin 8/14/2018	SANTA BARBARA COUNTY
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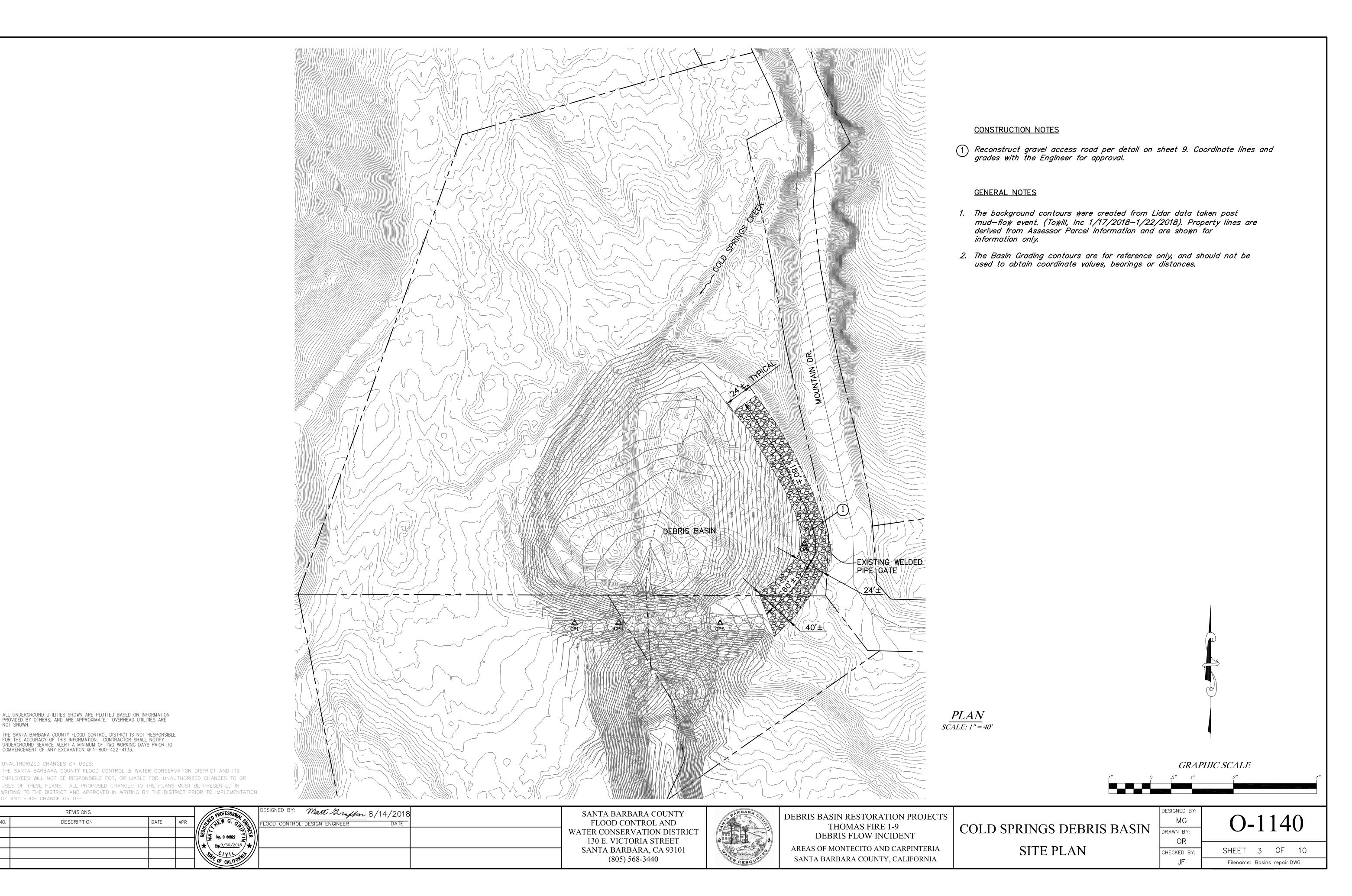
DEBRIS BASIN RESTORATION PROJECTS	
THOMAS FIRE 1-9	
DEBRIS FLOW INCIDENT	

AREAS OF MONTECITO AND CARPINTERIA SANTA BARBARA COUNTY, CALIFORNIA

GENERAL INFORMATION
SHEET

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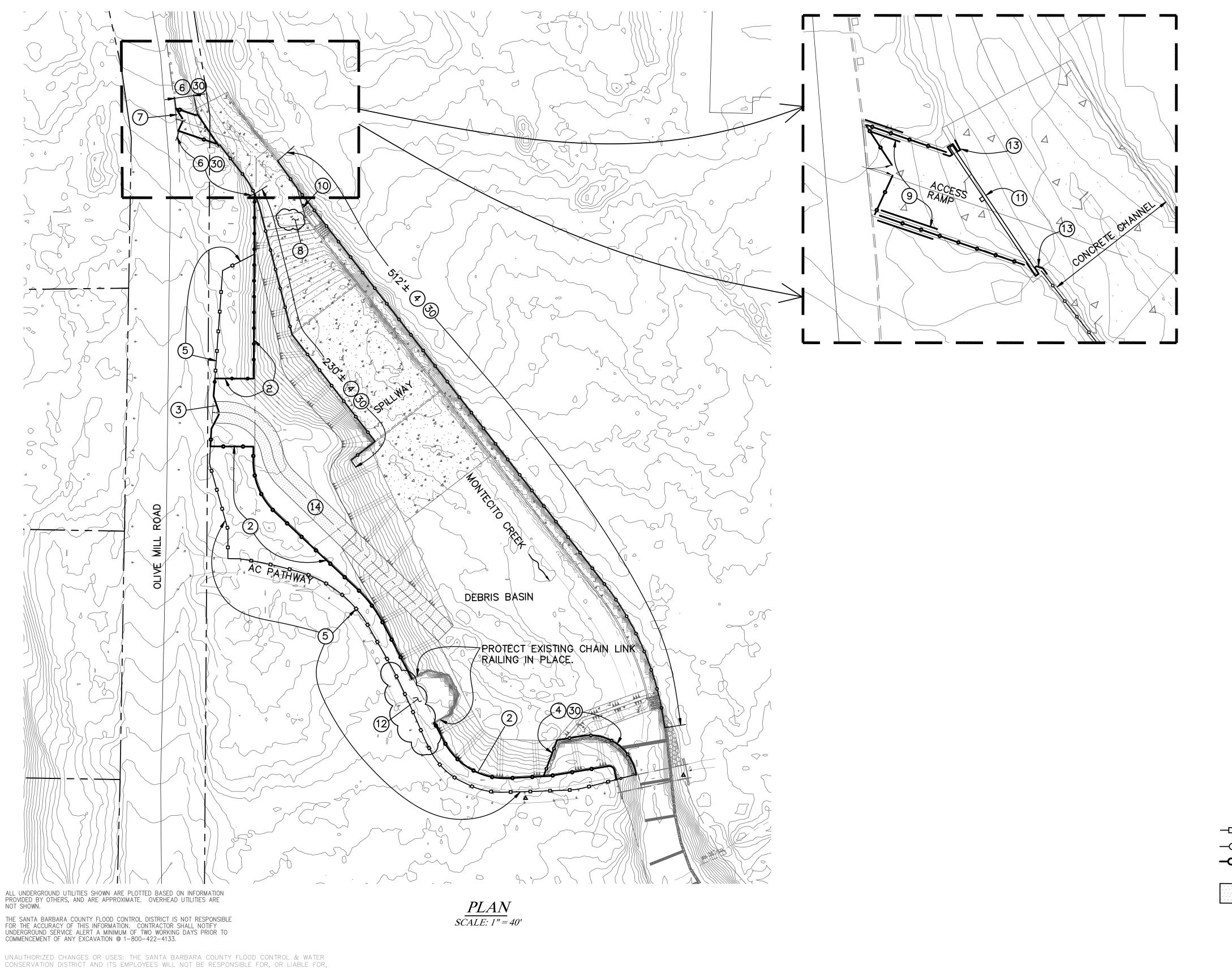
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UNAUTHORIZED CHANGES OR USES:

OF ANY SUCH CHANGE OR USE.



CONSTRUCTION NOTES

- 2) Reconstruct chain link fence (Type CL-6, black vinyl clad) per Caltrans Standard Plan A85.
- Reconstruct 24' wide access road chain link gate (Type CL-6, black vinyl clad) per Caltrans Standard Plan A85. Relocate barrier boulder to boulder pile.
- Reconstruct chain link railing (3'-6" tall, black vinyl clad, 1" mesh) along top of retaining wall per Caltrans Std Plan B11-7. Replace posts near retaining wall expansion joints per detail on sheet FC8 of the Montecito Creeek Debris Basin record drawing (see Information handout).
- Reconstruct wood post and rail fence per details on sheet FC8 of the Montecito Creek Debris Basin record drawings (see information handout).
- Reconstruct chain link railing (black vinyl clad, 1" mesh) along top of retaining wall per Caltrans Std. Plan B11-7. Replace posts near retaining wall expansion joints per detail on sheet FC8 of the Montecito Creek Debris Basin Record Drawings (see Information handout).
- Reconstruct 16' wide access ramp chain link gate (type CL-6, black vinyl clad, 1" mesh) per Caltrans Standard Plan A85. Relocate barrier boulder to boulder pile.
- 8 Repair spillway crest spalled concrete per detail on sheet 9. See photo in the Information handout.
- Repair access ramp wall (both sides) per details on sheet 9. See photos in the information handout.
- Reconstruct resting pool timber stop—logs, intermediate post, timber fillers, and appurtenant hardware per Montecito Creek Debris Basin record drawings, sheets S4 & S5 (see information handout).
- Reconstruct access ramp timber stop logs, intermediate post, timber fillers, and apurtenant hardware per Montecito Creek Debris Basin record drawing, sheet S6 (see Information handout).
- (12) Relocate boulder pile beyond asphalt concrete pathway, as directed by the Engineer.
- Repair creek wall and recesses (both upstream and downstream) per the details on sheet 9, and the details on sheet S6 of the Montecito creek Debris Basin record drawing (See Information handout). See photo in the information handout.
- Reconstruct basin access road (RSP-4" rock, 12" thick) per details on sheet FC12 of the Montecito Creek Debris Basin record drawings (see Information handout). STA 0+67.00 to STA 2+88.62.
- Remove all damaged railing posts from concrete wall. If new railing post locations do not coincide with original post locations, damaged posts must be removed 2" below top of wall and patched with mortar. (mortar must be colored to match existing).

GENERAL NOTES:

- 1. The background contours were created from Lidar data taken post mud-flow event. (Towill, Inc 1/17/2018-1/22/2018). Property lines are derived from Assessor Parcel information and are shown for information only.
- 2. The Basin improvements overlaid on the background contours are for reference only, derived from the Montecito creek record drawings, and should not be used to obtain coordinate values, bearings or distances.
- 3. Remove all damaged fencing and railing materials/rubbish, including post embedded in top of retaining walls, except where noted to protect in place, from the project site.

LEGEND:

- —□——□— Reconstruct wood post and rail fence
- —O—O— Reconstruct 3'-6" tall chain link railing
- -O-O- Reconstruct 6' tall chain link fence or chain link railing (as noted)

Access road



JNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL PROPOSED CHANGES TO THE PLANS MUST BE PRESENTED IN WRITING TO THE DISTRICT AND APPROVED IN WRITING BY THE

DISTRICT PRIOR TO IMPLEMENTATION OF ANY SUCH CHANGE OR USE.

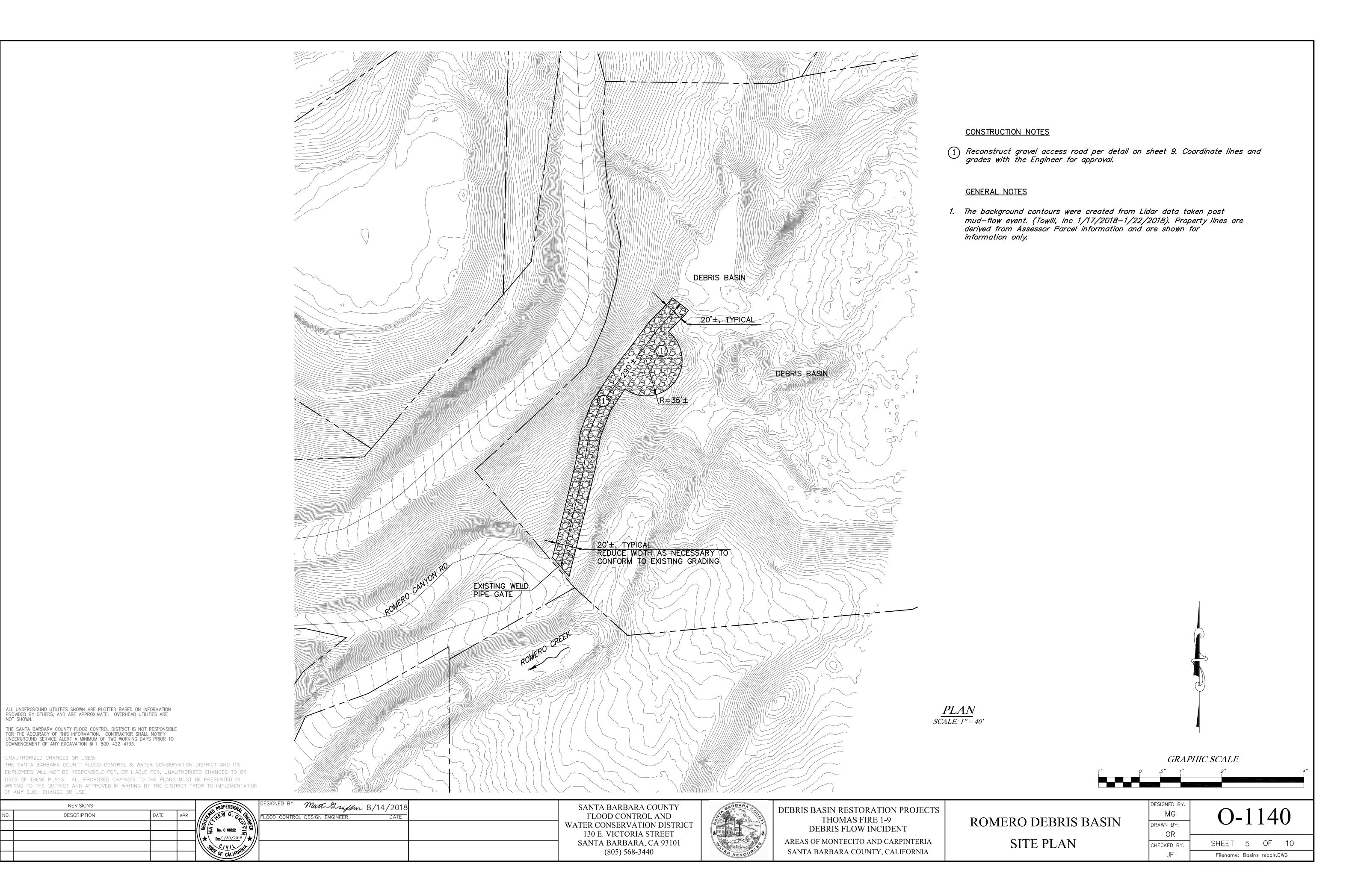


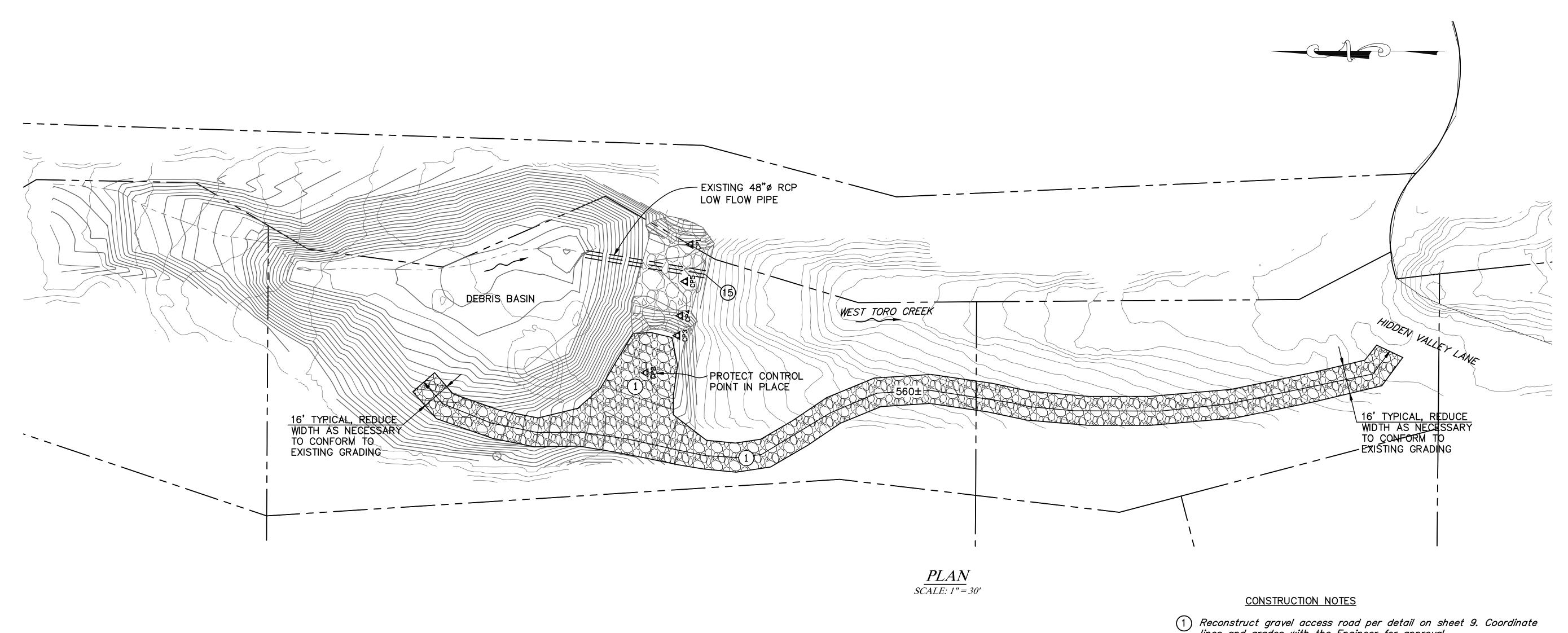
DEBRIS BASIN RESTORATION PROJECTS
THOMAS FIRE 1-9
DEBRIS FLOW INCIDENT

AREAS OF MONTECITO AND CARPINTERIA SANTA BARBARA COUNTY, CALIFORNIA

MONTECITO DEBRIS BASIN SITE PLAN

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- 1) Reconstruct gravel access road per detail on sheet 9. Coordinate lines and grades with the Engineer for approval.
- Repair concrete pipe outlet. Trim exposed wire mesh to transverse wire closest to damaged concrete. Apply concrete adhesive to damaged concrete. Repair damaged concrete with mortar, 1.5 inches cover, min., over wire mesh.

GENERAL NOTES

- 1. The background contours were created from Lidar data taken post mud-flow event. (Towill, Inc 1/17/2018–1/22/2018). Property lines are derived from Assessor Parcel information and are shown for information only.
- 2. The Basin Grading contours are for reference only, and should not be used to obtain coordinate values, bearings or distances.

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UNAUTHORIZED CHANGES OR USES:

THE SANTA BARBARA COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT AND ITS EMPLOYEES WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL PROPOSED CHANGES TO THE PLANS MUST BE PRESENTED IN WRITING TO THE DISTRICT AND APPROVED IN WRITING BY THE DISTRICT PRIOR TO IMPLEMENTATION OF ANY SUCH CHANGE OR USE.

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		No. C 66822 FI		WATER CONSERVATION DISTRIC
		Exp. 9/30/2018		130 E. VICTORIA STREET
				SANTA BARBARA, CA 93101
		SATE OF CALIFORNIA		(805) 568-3440



DEBRIS BASIN RESTORATION PROJECTS THOMAS FIRE 1-9 DEBRIS FLOW INCIDENT

AREAS OF MONTECITO AND CARPINTERIA SANTA BARBARA COUNTY, CALIFORNIA

TORO UPPER WEST **DEBRIS BASIN** SITE PLAN

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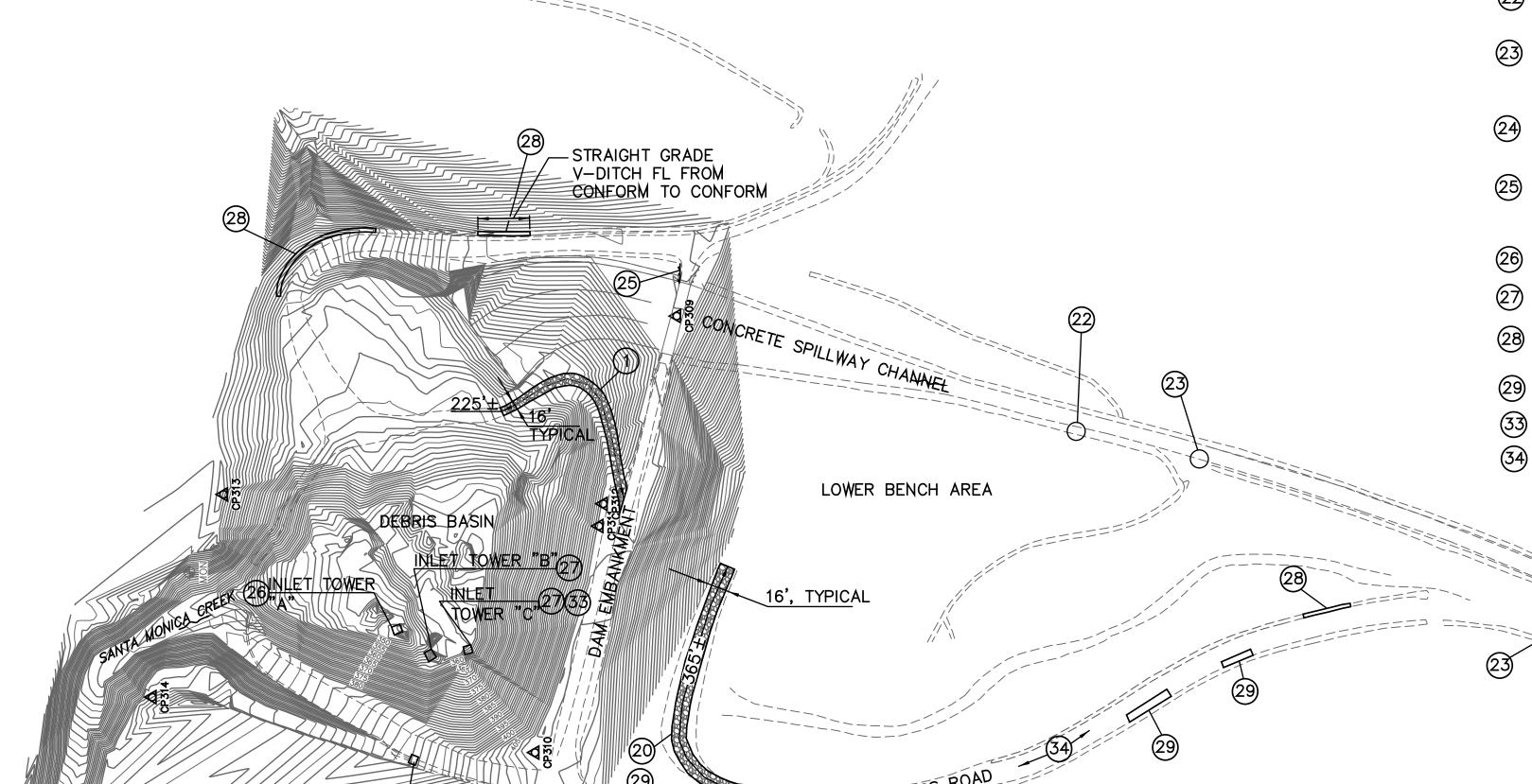
SHEET 6 OF 10

Filename: Basins repair.DWG

GRAPHIC SCALE

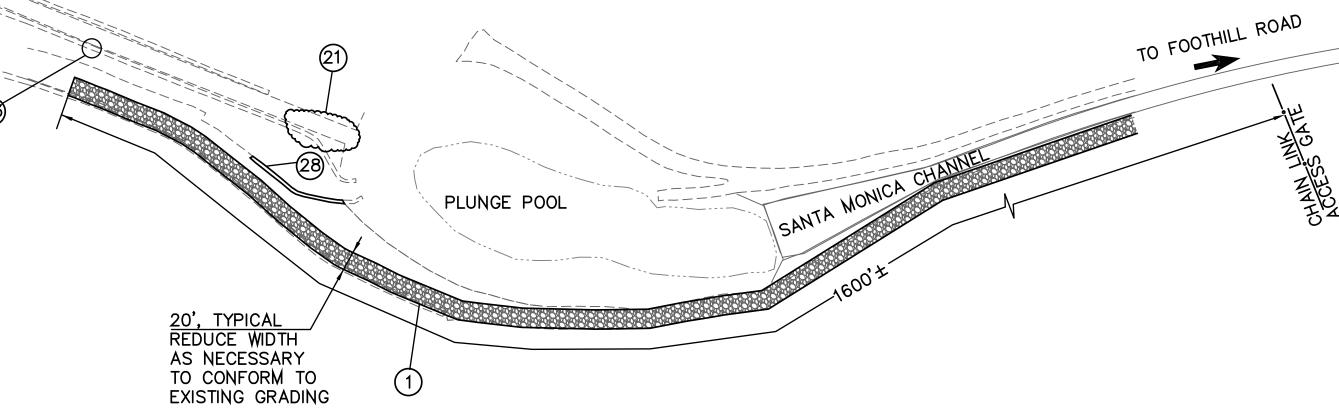
GENERAL NOTES

- 1. The topography and existing basin facilities are derived from the Thomas Fire 1-9 Debris flow incident: Santa Monica Debris Basin Restoration Project Phase 1, Project plans (2018, District drawing No.0-1139).
- 2. A copy of the Santa Monica Creek Debris Basin record drawings, District Drawing No. 0-870 (SMDB record drawing) are included in the Information



GENERAL NOTES

- (1) Reconstruct gravel access road per detail on sheet 9. Coordinate lines and grades with the Engineer for approval.
- Reconstruct gravel access road per detail on sheet 9, except that FG must be graded to drain to the center of the access road, as shown on the "Santa Monica Debris basin access road" record drawing (see Information Handout). Coordinate lines and grades with the Engineer in on the "Santa Monica Debris basin access road" record drawing (see Information Handout). Coordinate lines and grades with the Engineer in the field for approval.
- (21) Remove sediment and debris from spillway channel tail section. See photo in Information Handout.
- Repair spillway wall spalled concrete per detail on sheet 9. (spillway & STA 26+00± of SMDB drawing). See photo in Information Handout. Place 1," thick expansion joint filler.
- Repair spillway channel wall ladder. Remove damaged steel steps. Replace missing and damaged steel steps per APWA SPPWC 635-3. Epoxy steel steps into existing or new drilled holes. (spillway & STA 20+10 and STA 24+90 of SMDB drawing). See photos in Information handout. Mortar fill existing holes that are not utilized by new steel steps.
- (24) Reconstruct trash rack at 24" HDPE pipe inlet structure per APWA SPPWC 361-2. Modify detail to conform to existing V-ditch. PCC support may be omitted.
- Reconstruct Metal Beam Guard Rail extending from northerly bridge corner per Caltrans Standard Plan A77A2 (with end cap Type A) and the original alignment shown on sheet 56 of the SMDB record drawing, or as directed by the Engineer. See Information handout. Remove existing MBGR to bridge corner. Connect MBGR to existing MBGR at bridge corner.
- (26) Reconstruct inlet tower "A" per detail shown on sheet 10.
- (27) Repair inlet towers "B" and "C" per the details shown on sheet 10. See photos in Information Handout.
- Remove and reconstruct concrete V-ditch per the detail shown on sheet 10. Match existing lines and grades, except as noted. See photos in Information Handout.
- (29) Repair damaged asphalt concrete pavement per the detail shown on sheet 10. See photos in Information handout.
- (33) Remove and replace damaged trash rack with modified trash rack per detail on sheet 10.
- (34) Perform crack treatment as directed by the Engineer.



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L	REVISIONS			PROFESSIONAL	DESIGNED BY: Matt Griffin 8/14/2018	SANTA BARBARA COUNTY
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SANTA BARBARA COUNTY, CALIFORNIA

SANTA MONICA DEBRIS BASIN SITE PLAN

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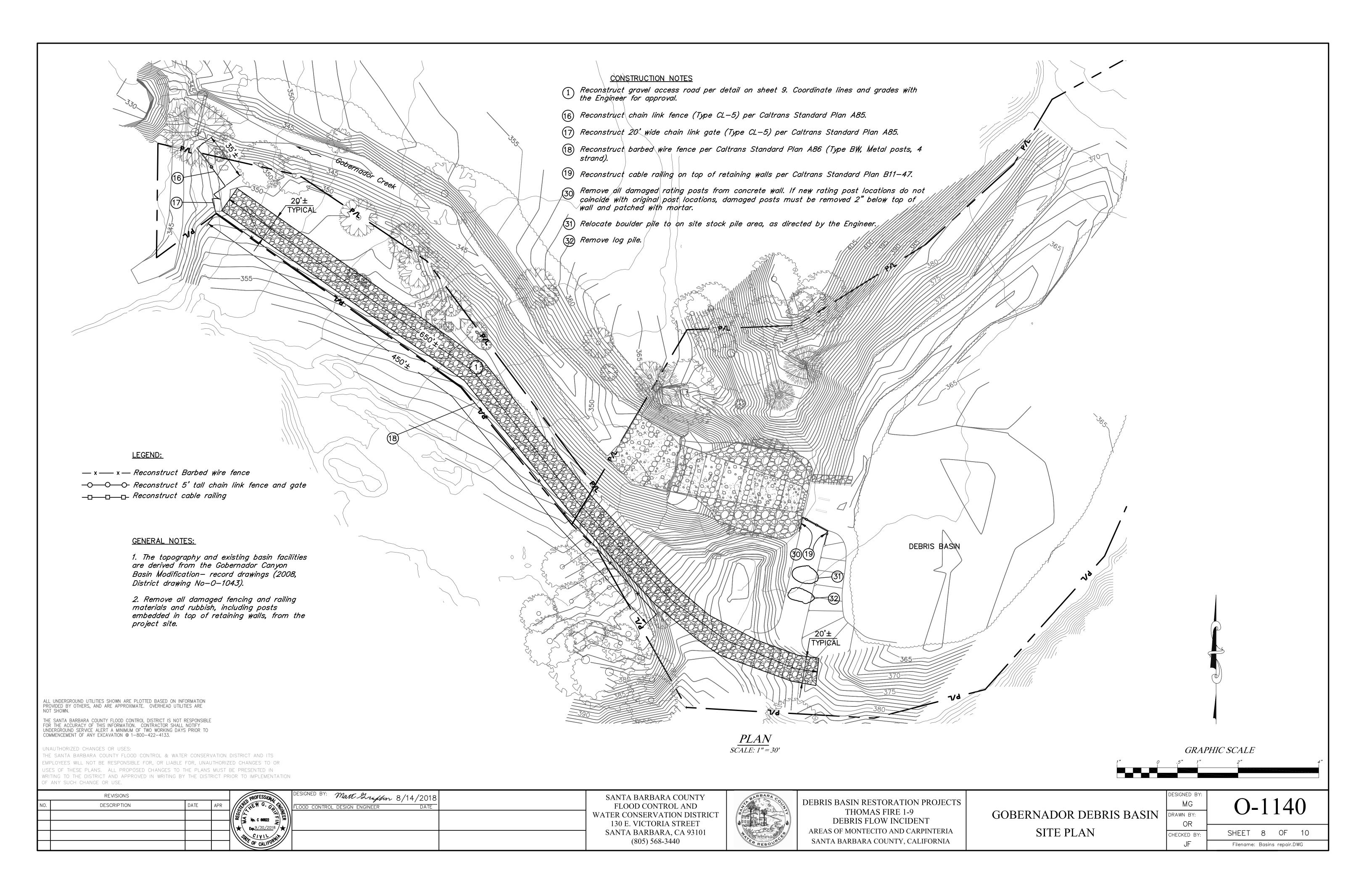
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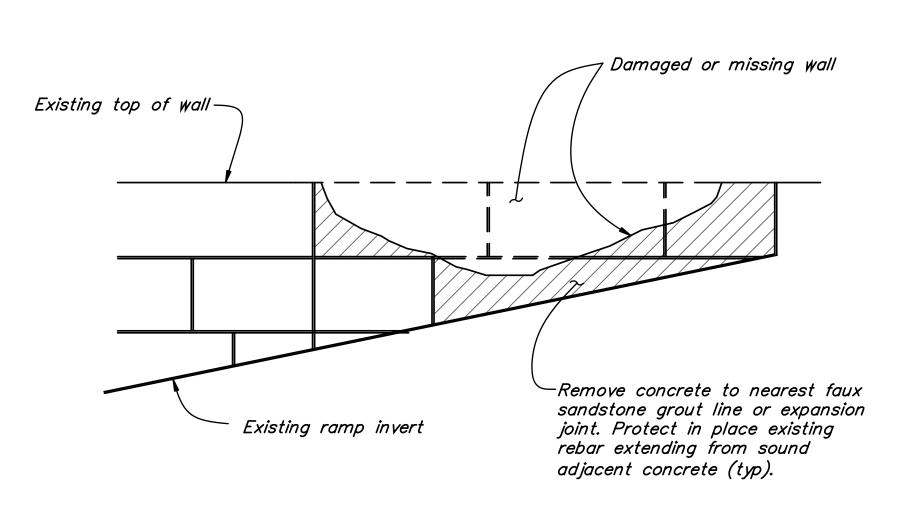
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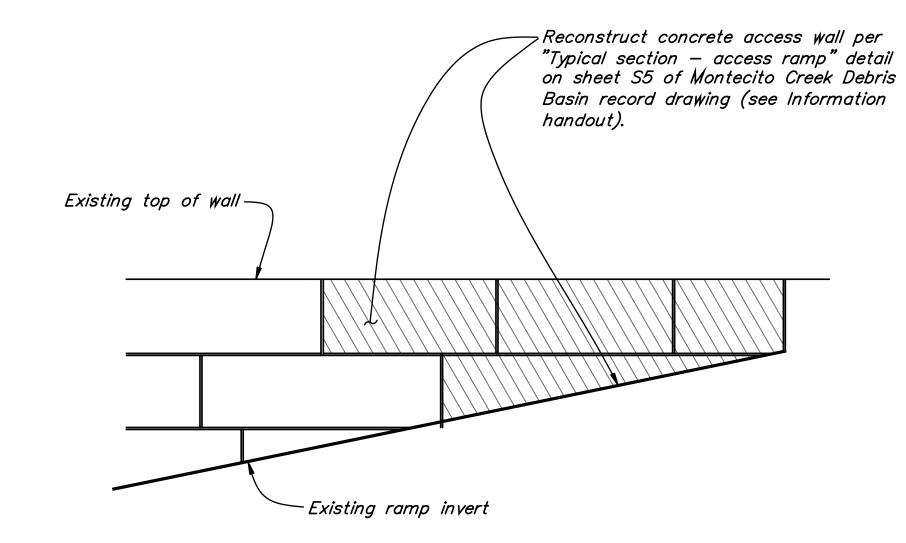
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27	THOMAS FIRE 1-9
	DEBRIS FLOW INCIDENT
	AREAS OF MONTECITO AND CARPINTERIA

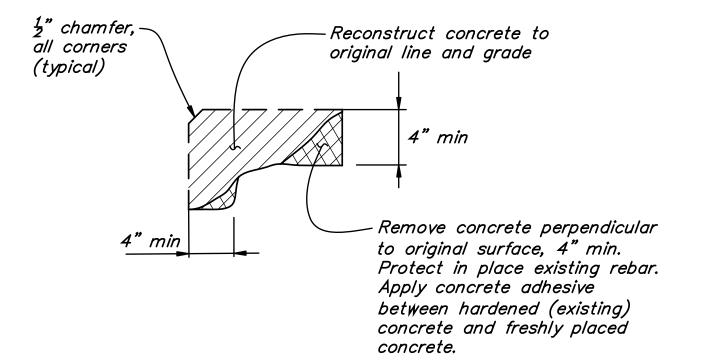






GENERAL NOTES:

- 1. All concrete, except concrete V-ditches, must have a 28-day compressive strength of 4000 psi, minimum.
- 2. Reinforcing bars must be deformed bars complying with ASTM A706.
- 3. Construct $\frac{1}{2}$ " chamfers of all new concrete corners not armored.

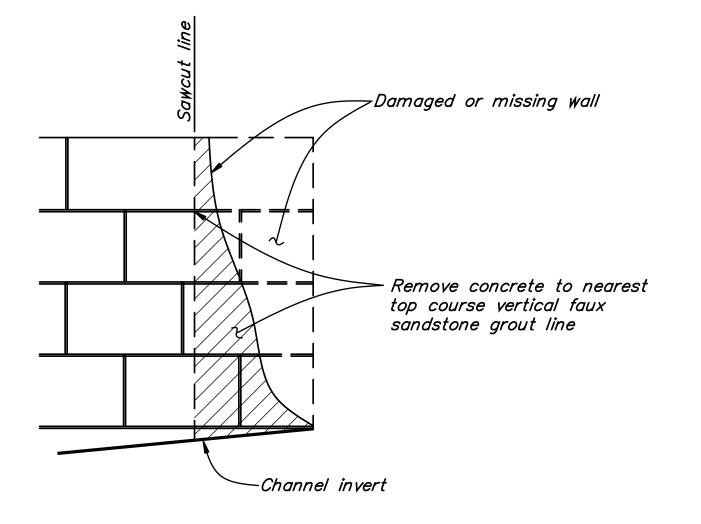


REPAIR ACCESS RAMP WALL NOTES:

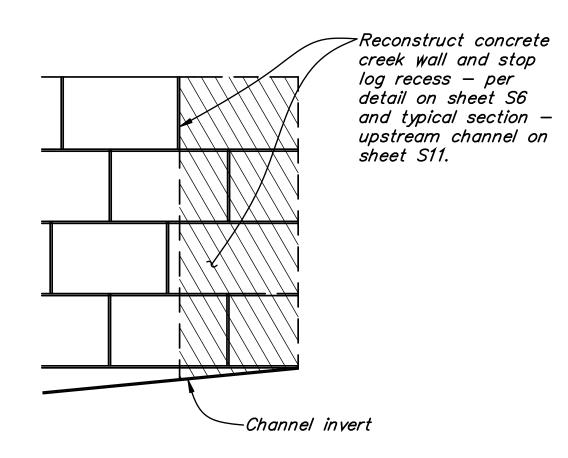
- 1. Apply Architectural Treatment Custom Rock International pattern 1104 to exposed access ramp wall face. Align faux grout lines to match existing.
- 2. All concrete must be integrally colored concrete, Davis-Color "Mesa Buff", or approved equal.
- 3. Drill and epoxy bond rebar (6" embedded min) into adjacent existing wall where existing rebar is missing or damaged, 12" overlap min.
- 4. Apply concrete adhesive between hardened (existing) concrete and freshly placed concrete.

REPAIR ACCESS RAMP WALL DETAIL - REMOVAL (TYPICAL)

REPAIR ACCESS RAMP WALL DETAIL - RECONSTRUCT (TYPICAL)



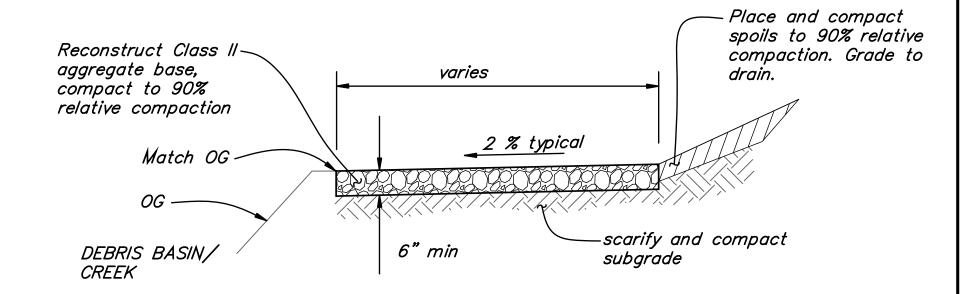
REPAIR CREEK WALL AND RECESS DETAIL - REMOVAL (TYPICAL)



REPAIR CREEK WALL AND RECESS NOTES:

- 1. Apply Architectural Treatment-Custom Rock International pattern 1104 to exposed access ramp wall face. Align faux grout lines to match existing.
- 2. All concrete must be integrally colored concrete, Davis-Color "Mesa Buff", or approved equal.
- 3. Drill and epoxy bond rebar (6" embedded min) into adjacent existing wall where existing rebar is missing or damaged, 12" overlap min.
- 4. Apply concrete adhesive between hardened (existing) concrete and freshly placed concrete.
- 5. Replace downstream recess damaged PL $\frac{1}{2}$ x 6 and damaged or missing eye-bolts (upstream and downstream, matching existing, 4 total); alternatively, contractor may bend damaged PL $\frac{1}{2}$ x 6 and eye-bolts back to their original shape. If alternative is selector, Contractor must submit a shop drawing of proposed means & methods.

REPAIR SPALLED CONCRETE (TYPICAL) *N.T.S.*



RECONSTRUCT GRAVEL ACCESS ROAD DETAIL (TYPICAL)

REPAIR CREEK WALL AND RECESS DETAIL - RECONSTRUCT (TYPICAL) *N.T.S.*

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DETAILS

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