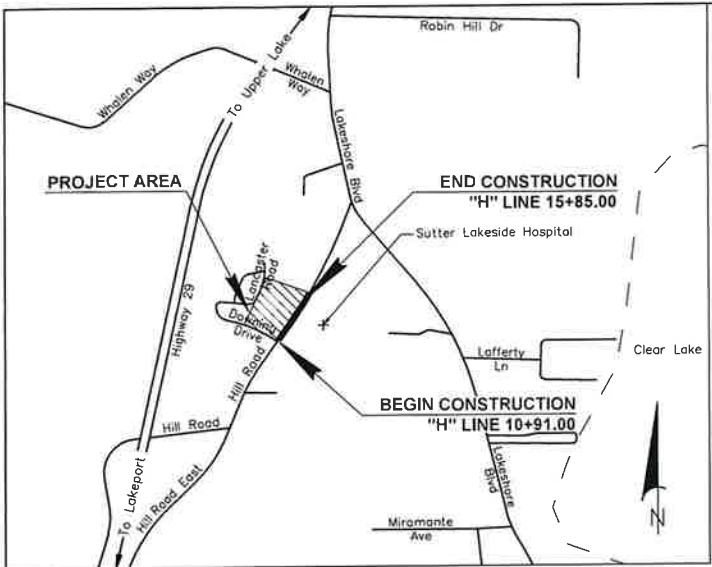




VICINITY MAP

N.T.S

LEGEND

REFER TO CALTRANS STANDARD PLANS FOR
SYMBOLOLOGY NOT SHOWN

EXISTING	PROPOSED
CONTROL POINT (CP)	FIBER ROLL
EXISTING INCLUNOMETER	PROPOSED R/W
10' PUBLIC UTILITY EASEMENT	REMOVE EXISTING STORM DRAIN
EXISTING R/W & PROPERTY LINES	TCE
EXISTING SLIP PLANE	UNDERDRAIN
TREE SYMBOL	EROSION CONTROL (HYDROSEED)
	ROADWAY EXCAVATION
	OVEREXCAVATE AND BACKFILL TO 90% RELATIVE COMPACTION
	MISC HMA AND CLASS 2 AB
	OVEREXCAVATION AREA
	DRAINAGE SYSTEM NUMBER
	DRAINAGE ITEM
	TREE TO BE REMOVED

ABBREVIATIONS

AB	AGGREGATE BASE	Elev	ELEVATION	PPP	PERFORATED PLASTIC PIPE
AC	ASPHALT CONCRETE	ELEC.	ELECTRIC	PRC	POINT OF REVERSE CURVATURE
AGG.	AGGREGATE	EOP	END OF PROFILE	PT	POINT
AP	ANGLE POINT	EP	EDGE OF PAVEMENT	P.U.E.	PUBLIC UTILITY EASEMENT
BC	BEGIN CURVE	ESMT	EASEMENT	PVC	POLYVINYL CHLORIDE PIPE
BCG	BEGIN CROSS GUTTER	EVC	END VERTICAL CURVE	PVI	POINT OF VERTICAL INTERSECTION
BCGSW	BEGIN CURB, GUTTER & SIDEWALK	Exist	EXISTING	R	RADIUS
BCR	BEGIN CURB RETURN	FM	FACE OF CURB	RC	RELATIVE COMPACTION
BCRP	BEGIN CURB RAMP	FF	FINISH FLOOR	REL	RELATIVE
BDDW	BEGIN DEPRESSED DRIVEWAY	FG	FINISH GRADE	ROW	RIGHT OF WAY
BI	BEGIN IMPROVEMENTS	FH	FIRE HYDRANT	RWL	RETAINING WALL LAYOUT LINE
Bldg	BUILDING	FL	FLOWLINE	S	SHEET
BM	BENCHMARK	FL	FORCED MAIN	SCT	SAW-CUT
BOP	BEGINNING OF PROFILE	GB	GRADE BREAK	SD	STORM DRAIN
BRC	BACK ROLLED CURB	GV	GATE VALVE	SDMH	STORM DRAIN MANHOLE
BVC	BEGIN VERTICAL CURVE	HMA	HOT MIX ASPHALT	SH	SLOPE
BW	BACK OF SIDEWALK	HP	HINGE POINT	S.P.	STANDARD PLAN
B/W	BOTH WAYS	HOR	HORIZONTAL	SS	SANITARY SEWER
C&G	CURB AND GUTTER	INV	INVERT GRADE	SSCO	SANITARY SEWER CLEANOUT
CG	CROSS GUTTER	JB	JUNCTION BOX	SSMH	SANITARY SEWER MANHOLE
CG&S	CURB GUTTER AND SIDEWALK	L	LENGTH	Stc	STATION
CI	CURB INLET	L.F.	LINEAR FEET	STD.	STANDARD
CL	CENTERLINE	LON	LENGTH OF NEED	SW	SIDEWALK
CSP	CORRUGATED STEEL PIPE	L.P.	LOW POINT	TA	TOP OF ASPHALT
CSPA	CORRUGATED STEEL PIPE ARCH	LVC	LENGTH VERTICAL CURVE	TB	TOP OF BANK
CO	CLEANOUT	Lvx	MAXIMUM	T.B.R.	TO BE REMOVED
CONC.	CONCRETE	Min	MINIMUM	TC	TOP OF CURB
CR	CURB RETURN	MT	MULTI TRUNK	TDC	TOP DEPRESSED CURB
D	DELTA ANGLE	N&S	NAIL AND SHINNER	TFC	TOP FLUSH CURB
DI	DROP INLET	NO.	NUMBER	TC	TOP OF GRATE
Dia	DIAMETER	N.T.S.	NOT TO SCALE	TOE	TOE OF BANK
DWG.	DRAWING	O.C.	ON CENTER	T.R.	TO REMAIN
D/W	DRIVEWAY	OH	OVERHEAD	TS	TOP OF SLAB (OR SIDEWALK)
EC	END CURVE	(P)	PROPOSED	TW	TOP OF WALL
ECG	END CROSS GUTTER	PCC	PORTLAND CEMENT CONCRETE	Typ	TYPICAL
ECR	END CURB RETURN	PG	PROFILE GRADE	W	WATER
ECRP	END CURB RAMP	PL	PROPERTY LINE	WM	WATER METER
EG	EXISTING GRADE	PP	POWER POLE	WV	WATER VALVE
				Vert	VERTICAL

COUNTY OF LAKE
DEPARTMENT OF PUBLIC WORKS

HILL ROAD P.M. 7.75 LANDSLIDE REPAIR
IN NORTH LAKEPORT, CALIFORNIA
DISASTER EVENT CA15-2
FEDERAL PROJECT No. ER-28C1 (003)
PERMANENT RESTORATION

TO BE SUPPLEMENTED BY CALTRANS STANDARD PLANS AND SPECIFICATIONS DATED 2023

SHEET INDEX

- T1 TITLE SHEET
- PC1 PROJECT CONTROL
- X1 TYPICAL CROSS SECTIONS
- L1 LAYOUT
- P1 PROFILE
- EC1 EROSION CONTROL PLAN
- G1 CONTOUR GRADING
- D1 DRAINAGE PLAN
- DP1 DRAINAGE PROFILE
- DP2 DRAINAGE PROFILE
- DD1 DRAINAGE DETAILS NO. 1
- DD2 DRAINAGE DETAILS NO. 2
- DD3 DRAINAGE DETAILS NO. 3
- DD4 DRAINAGE DETAILS NO. 4
- DD5 DRAINAGE DETAILS NO. 5
- Q1 SUMMARY OF QUANTITIES
- SP1 STITCH PILE LAYOUT
- SP2 STITCH PILE DETAILS

APPROVED:

SCOTT DE LEON
LAKE COUNTY DIRECTOR OF PUBLIC WORKS

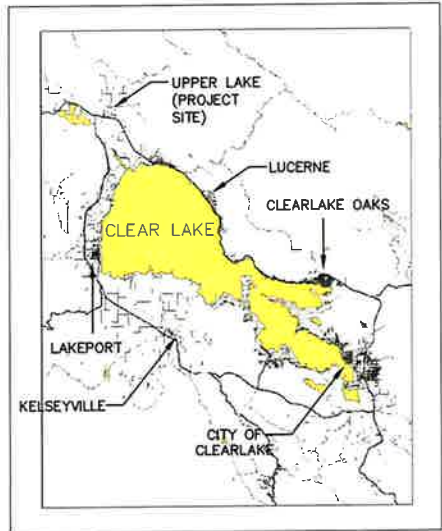
DATE

JOHN EVERETT
LAKE COUNTY PROJECT MANAGER

DATE

CONTACT INFORMATION

DESCRIPTION:	PHONE:	EMAIL:	MAILING ADDRESS:
COUNTY PROJECT MANAGER: JOHN EVERETT	(707) 263-2719	john.everett@lakecountycal.gov	255 N. FORBES STREET, RM. 309, LAKEPORT, CA 95453
COUNTY PROJECT ENGINEER: JOHN EVERETT	(707) 263-2719	john.everett@lakecountycal.gov	255 N. FORBES STREET, RM. 309, LAKEPORT, CA 95453
CALTRANS: MARK MUELLER (DISTRICT AREA ENGINEER)	(707) 441-3977	mark.mueller@dot.ca.gov	PO BOX 3700, EUREKA, CA 95502-3700
CONSULTANT PROJECT MANAGER: ROB FERGUSON	(916) 368-9181	robert.ferguson@consoreng.com	11017 COBBLEROCK DRIVE, #100, RANCHO CORDOVA, CA 95670
LAKE COUNTY SPECIAL DIST.: SCOTT HARTER	(707) 263-0119	scott.harter@lakecountycal.gov	230 NORTH MAIN STREET, LAKEPORT, CA 95453
P.G.&E.: DAVE KELLY	(707) 577-7273	dak8@pge.com	
A.T.&T.: MIKE HOLLAND	(707) 995-0650	jh3527@att.com	2510 OLD HIGHWAY 53, CLEARLAKE, CA 95422
LAKE COUNTY SPECIAL DISTRICT: LORI BACA	(855) 633-4226	lori.baca@lakecountycal.gov	
MEDIACOM: TIM BROWN	(707) 998-8165		
UNDERGROUND SERVICE ALERT	811		



REGIONAL MAP

N.T.S

COUNTY OF LAKE
PUBLIC WORKS DEPARTMENT

HILL ROAD LANDSLIDE REPAIR

TITLE SHEET

TYPE

Date 1/19/2024

Scale AS SHOWN

Drawn KDW

Sheet 1

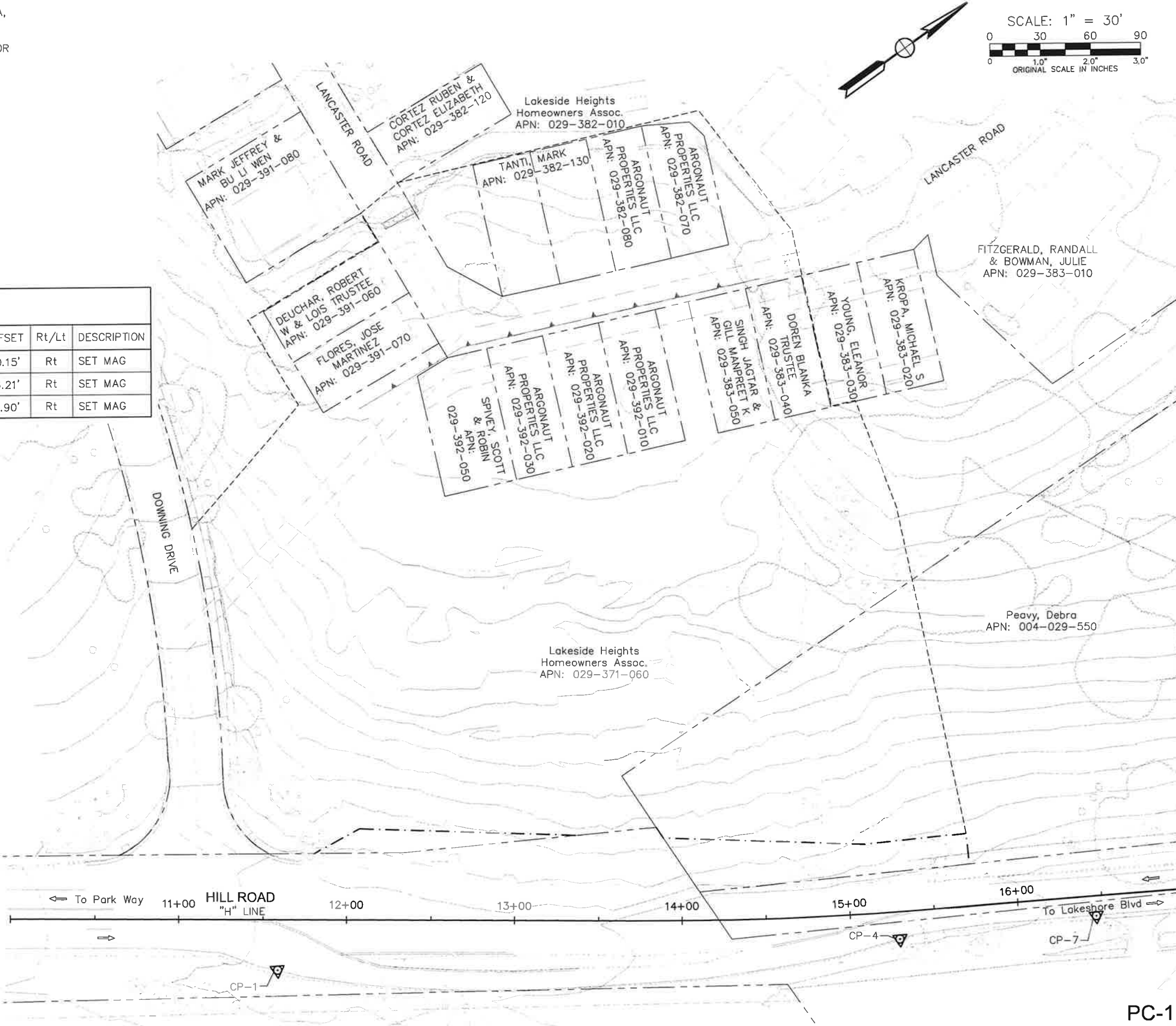
Of 18 Sheets

- NOTE:
- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT THE COUNTY OFFICE.
 - REFER TO TITLE SHEET AND CALTRANS STANDARD PLANS FOR SYMBOLOGY NOT SHOWN

- LEGEND:
- DIRECTION OF TRAFFIC
 - CONTROL POINT (CP)
 - 10' PUBLIC UTILITY EASEMENT (PUE)
 - Exist R/W & PROPERTY LINES
 - COUNTY PERMANENT EASEMENT
 - TCE

CONTROL POINTS

No.	NORTHING	EASTING	ELEVATION	LINE	STATION	OFFSET	Rt/Lt	DESCRIPTION
CP-1	2165594.70	6303988.85	1369.39	"H"	11+58.92	30.15'	Rt	SET MAG
CP-4	2165908.98	6304186.38	1361.76	"H"	15+28.51	16.21'	Rt	SET MAG
CP-7	2166012.44	6304242.27	1359.23	"H"	16+45.92	11.90'	Rt	SET MAG



REVISION	DATE	BY



COUNTY OF LAKE
PUBLIC WORKS DEPARTMENT
COURTHOUSE - 255 N. FORBES ST.
LAKEPORT, CALIFORNIA 95453
WWW.CO.LAKE.CA.US
TEL: (707) 263-2341 FAX: (707) 263-7748

PROJECT DESCRIPTION:
HILL ROAD LANDSLIDE REPAIR
P.M. 7.75

SHEET DESCRIPTION:
PROJECT CONTROL

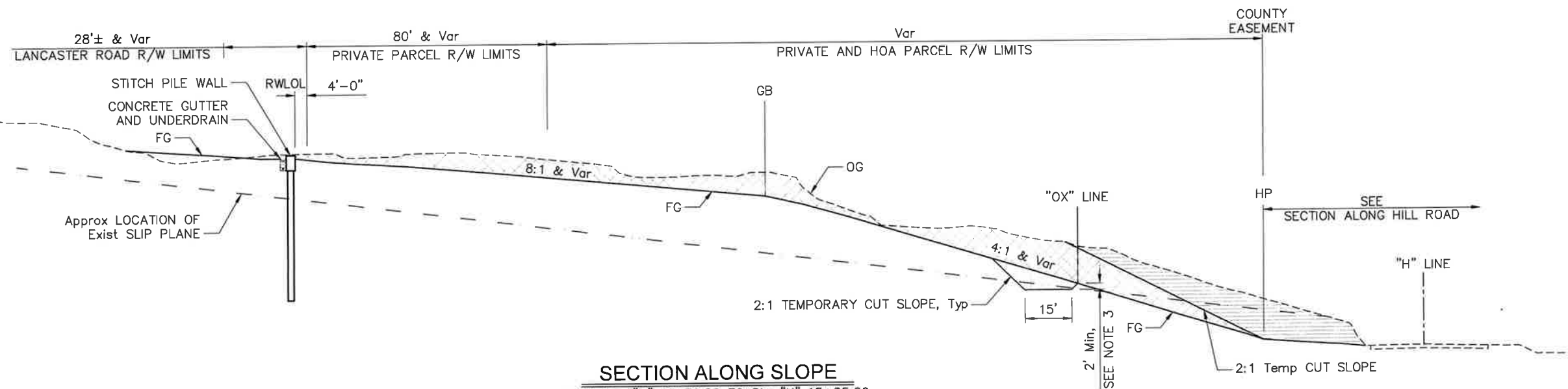
TYPE
Date 1/18/2024
Scale AS SHOWN
Drawn KDW
Sheet 2
Of 18 Sheets

NOTES:

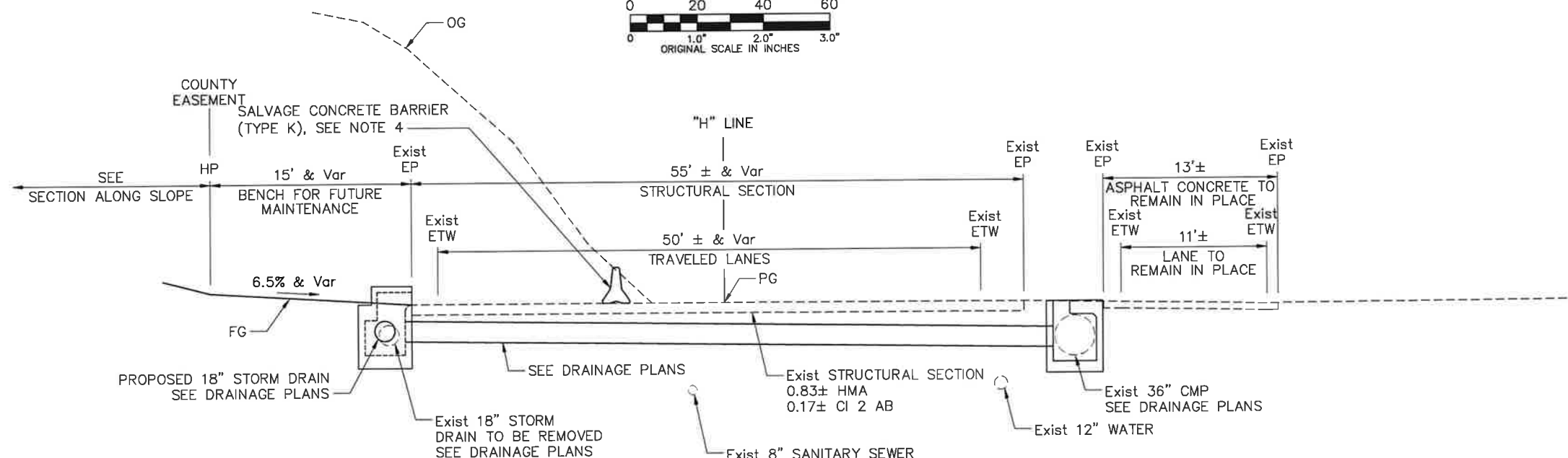
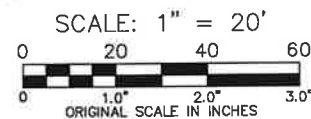
1. DIMENSIONS OF THE STRUCTURAL SECTION ARE SUBJECT TO THE TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. REFER TO TITLE SHEET AND CALTRANS STANDARD PLANS FOR SYMBOLOGY NOT SHOWN.
3. UNSUITABLE MATERIAL DEPTH WILL BE APPROVED IN THE FIELD BY THE ENGINEER.
4. MAINTAIN TWO-WAY TRAFFIC ALONG HILL ROAD AT ALL TIMES.
5. DO NOT REMOVE MATERIAL SHOWN AS ROADWAY EXCAVATION (SLIDE REMOVAL), STAGE 2 UNTIL AFTER THE STITCH PILE WALL IS COMPLETE AND ITS CONCRETE HAS REACHED SPECIFIED STRENGTH. YOU ARE PERMITTED TO REGRADE THIS MATERIAL TO CONSTRUCT A TEMPORARY EQUIPMENT ACCESS ROAD.

LEGEND:

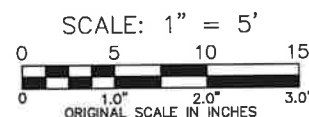
- ROADWAY EXCAVATION (SLIDE REMOVAL), STAGE 1
- ROADWAY EXCAVATION (SLIDE REMOVAL), STAGE 2
- ROADWAY EXCAVATION (UNSUITABLE MATERIAL): REPLACE WITH ROADWAY EMBANKMENT WITH 90% RELATIVE COMPACTION
- EXISTING SLIP PLANE



SECTION ALONG SLOPE
FROM Sta "H" 11+72.60 TO Sta "H" 15+85.00



SECTION ALONG HILL ROAD
FROM Sta "H" 11+72.60 TO Sta "H" 15+85.00



REVISION	DATE	BY



COUNTY OF LAKE
PUBLIC WORKS DEPARTMENT

COURTHOUSE - 255 N. FORBES ST.
LAKEPORT, CALIFORNIA 95453
WWW.COLAKECALIF.COM TEL (707) 263-2341 FAX: (707) 263-7748

PROJECT DESCRIPTION:
HILL ROAD LANDSLIDE REPAIR

SHEET DESCRIPTION:
TYPICAL CROSS
SECTIONS

TYPE
Date 1/19/2024
Scale AS SHOWN
Drawn KDW

Sheet 3
Of 18 Sheets

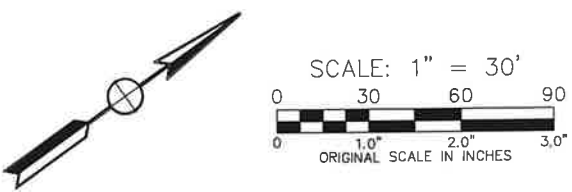
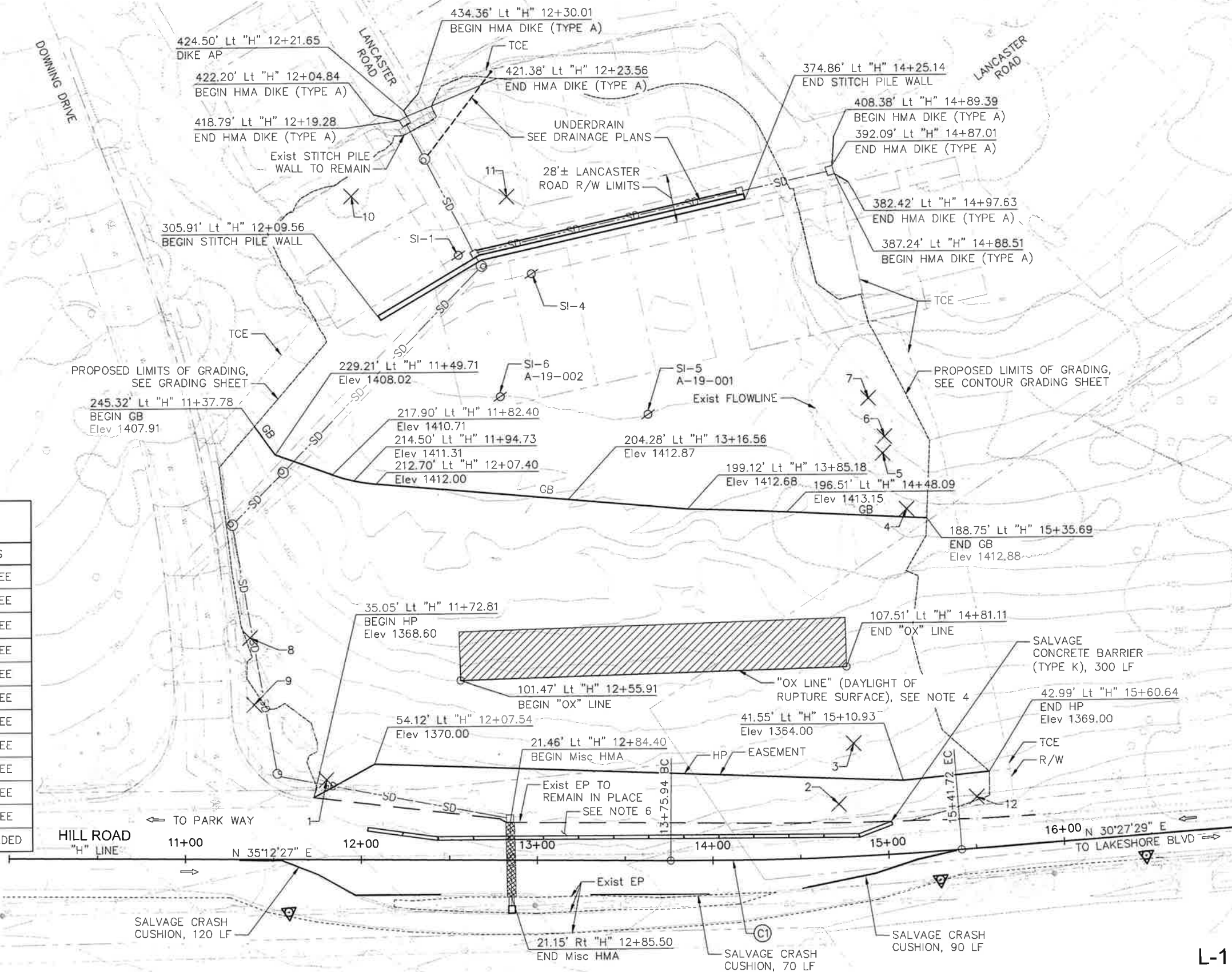
X-1

- NOTE:
- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT THE COUNTY OFFICE.
 - EXISTING STRUCTURAL SECTION TO REMAIN IN PLACE.
 - CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATIONS OF EXISTING UTILITIES CROSSING THE WORK AREA. CONTRACTOR SHALL POTHOLE AND PROVIDE ENGINEER WITH HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING UTILITIES. UTILITY VERIFICATION SHALL BE DONE PRIOR TO ANY EXCAVATION.
 - THE LOCATION OF THE DAYLIGHT TO RUPTURE SURFACE IS APPROXIMATE. THE LIMITS SHOWN ARE FOR ESTIMATING PURPOSES ONLY. THE ACTUAL LOCATION OF THE ROADWAY EXCAVATION (UNSUITABLE MATERIAL) SHALL BE DIRECTED BY THE ENGINEER
 - REFER TO TITLE SHEET AND CALTRANS STANDARD PLANS FOR SYMOLOGY NOT SHOWN.
 - EXISTING CONDITIONS MAY HAVE CHANGED SINCE TOPOGRAPHIC SURVEY WAS PERFORMED.

- LEGEND:
- DIRECTION OF TRAFFIC
 - Misc HMA AND CLASS 2 AB TO PLACED OVER PROPOSED 18" SD - SEE CROSS CULVERT DETAIL ON DRAINAGE DETAILS
 - OVEREXCAVATION AREA, SEE NOTE 4
 - CONTROL POINT - SEE PROJECT CONTROL SHEET
 - Exist INCLINOMETER, ADJUST AND MONITOR (SI-#)
 - TREE TO BE PROTECTED
 - TREE TO BE REMOVED

PROJECTED TREES TO BE IMPACTED (N)				
No.	TYPE	STATION	OFFSET	COMMENTS
1	18" FIR	"H" 11+80.09	45.11' Lt	REMOVE TREE
2	18" OAK	"H" 14+73.11	30.14' Lt	REMOVE TREE
3	MT (3) 4" OAK	"H" 14+83.26	64.08' Lt	REMOVE TREE
4	18" MADRONE	"H" 15+23.58	194.82' Lt	REMOVE TREE
5	18" OAK	"H" 15+10.53	227.41' Lt	REMOVE TREE
6	18" OAK	"H" 15+12.37	236.77' Lt	REMOVE TREE
7	18" OAK	"H" 15+03.38	259.16' Lt	REMOVE TREE
8	8" REDWOOD	"H" 11+36.13	125.16' Lt	REMOVE TREE
9	12" OAK	"H" 11+38.67	87.41' Lt	REMOVE TREE
10	6" TREE	"H" 11+92.25	376.15' Lt	REMOVE TREE
11	6" TREE	"H" 12+80.31	376.24' Lt	REMOVE TREE
12	18" OAK	"H" 15+52.62	29.17' Lt	TRIM AS NEEDED

CURVE DATA				
NO.	R	Δ	T	L
C1	2000.00'	4° 44' 57"	82.94'	165.78'



REVISION	DATE	BY



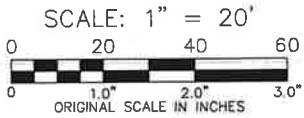
COUNTY OF LAKE
PUBLIC WORKS DEPARTMENT
COURTHOUSE- 255 N. FORBES ST.
LAKEPORT, CALIFORNIA 95453
WWW.COLAKECA.US.COM TEL: (707) 263-2341 FAX: (707) 263-7748

PROJECT DESCRIPTION:
HILL ROAD LANDSLIDE REPAIR
P.V. 7.75

SHEET DESCRIPTION:
LAYOUT

TYPE
Date 1/19/2024
Scale AS SHOWN
Drawn KDW
Sheet 4
Of 18 Sheets

- NOTES:
- 1. EXISTING STRUCTURAL SECTION TO REMAIN IN PLACE
 - 2. REFER TO TITLE SHEET AND CALTRANS STANDARD PLANS FOR SYMBOLS NOT SHOWN.

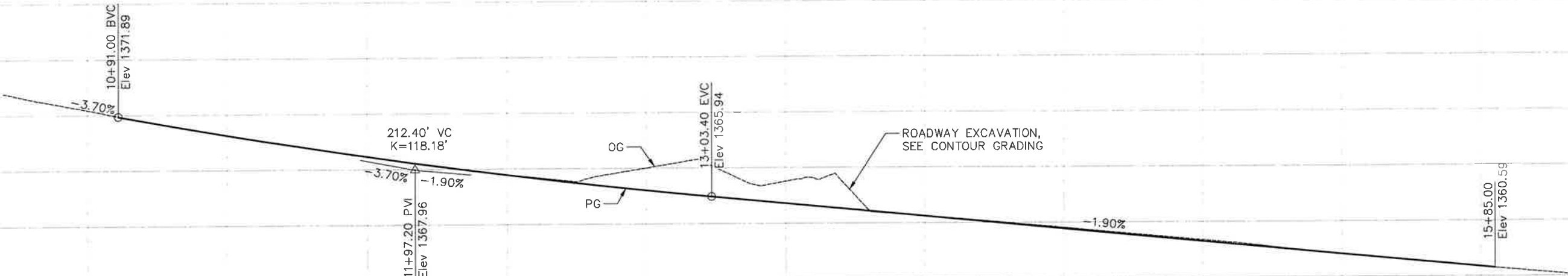


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PROJECT DESCRIPTION:
HILL ROAD LANDSLIDE REPAIR
P.M. 7.75

SHEET DESCRIPTION:	
TYPE	
Date	1/18/2024
Scale	AS SHOWN
Drawn	KDW
Sheet	5
Of 18 Sheets	

1388
1384
1380
1376
1372
1368
1364
1360
1356
1352
1348
1344
1340
1336
1332
1330



"H" LINE PROFILE
1" = 20' Horiz
1" = 4' Vert

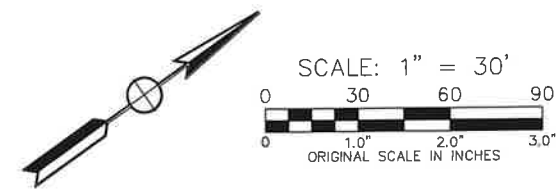
STATION		10+50	11+00	12+00	13+00	14+00	15+00	TOTAL
CY	Exc							P-1
	Emb							

NOTES:

- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT THE COUNTY OFFICE.
- THIS PLAN ACCURATE FOR EROSION CONTROL WORK ONLY.
- PLACE TEMPORARY EROSION CONTROL BMP'S PER CONTRACTOR'S APPROVED SWPPP.
- TEMPORARY CONCRETE WASHOUT TO BE PLACED AS DIRECTED BY THE ENGINEER.
- LOCATION OF FIBER ROLLS ARE SCHEMATIC. ACTUAL PLACEMENT LOCATIONS OF FIBER ROLLS SHALL BE IN ACCORDANCE WITH SPECIAL PROVISIONS.
- EROSION CONTROL (HYDROSEED) SHALL NOT BE PLACED WITHIN ACTIVE DRAINAGE DITCHES.
- REFER TO TITLE SHEET AND CALTRANS STANDARD PLANS FOR SYMBOLOGY NOT SHOWN.

LEGEND:	
	FIBER ROLLS
	TEMPORARY HIGH-VISIBILITY FENCE
	TEMPORARY FIBER ROLLS AND TEMPORARY SILT FENCE
	EROSION CONTROL (HYDROSEED)

EROSION CONTROL SEQUENCE AND APPLICATION						
SEQUENCE	STEP 1	STEP 2				
BID ITEM	COMPOST	HYDROSEED				
MATERIALS	COMPOST	SEED MIX	FIBER	TACKIFIER	STRAW	FERTILIZER
APPLICATION RATE	6.5 CY/1000 SQFT	34.0 LB/ACRE	240 LB/ACRE	125 LB/ACRE	2.0 TON/ACRE	265 LB/ACRE



REVISION	DATE	BY



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PROJECT DESCRIPTION:
HILL ROAD LANDSLIDE REPAIR
P.A. 7.75

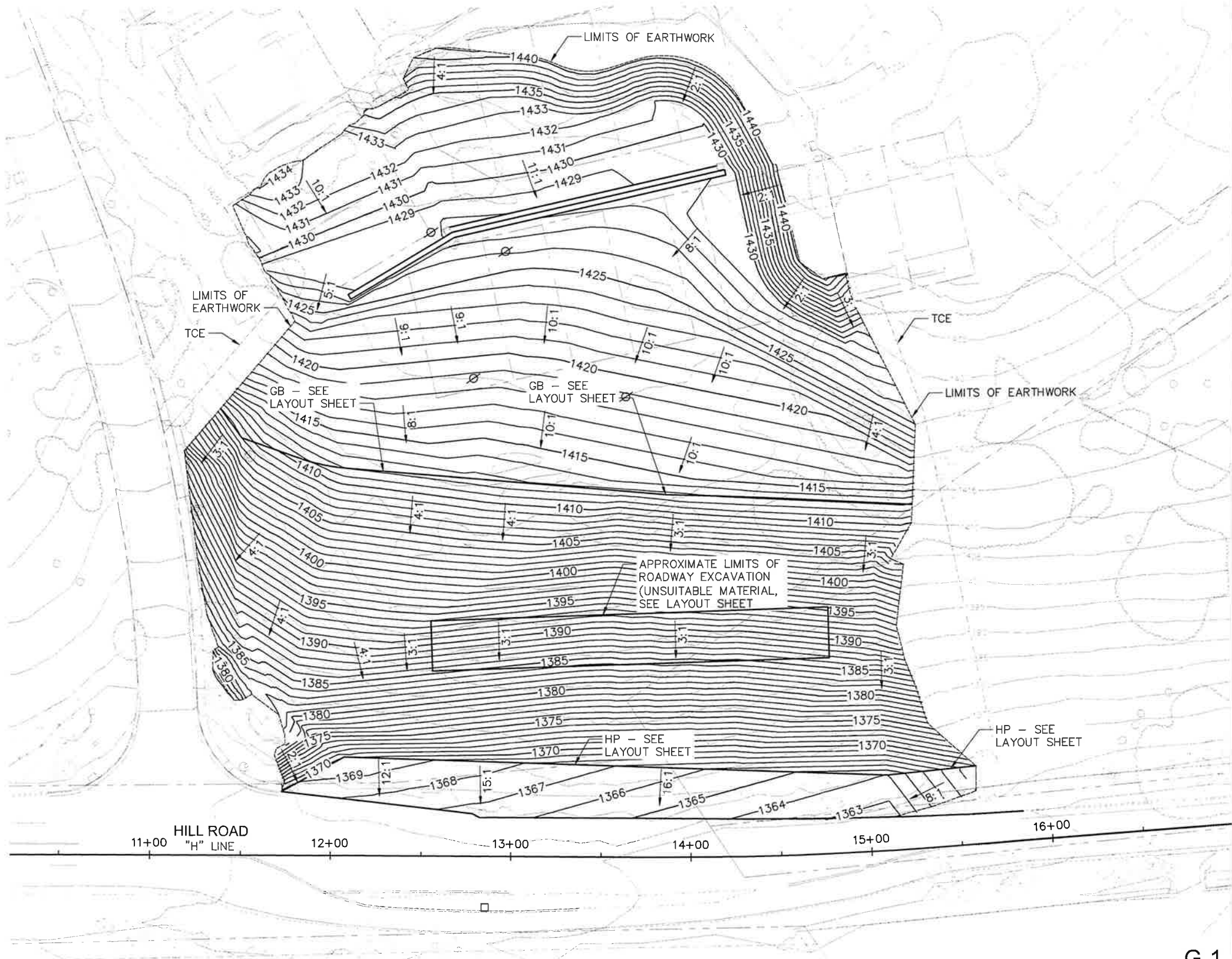
SHEET DESCRIPTION:
EROSION
CONTROL PLAN

TYPE
Date 1/18/2024
Scale AS SHOWN
Drawn KDW

Sheet 6
Of 18 Sheets

EPC-1

- NOTE:
- 1. THIS PLAN ACCURATE FOR GRADING WORK ONLY.
 - 2. REFER TO TITLE SHEET AND CALTRANS STANDARD PLANS FOR SYMBOLOGY NOT SHOWN.



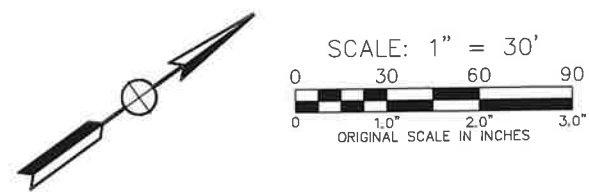
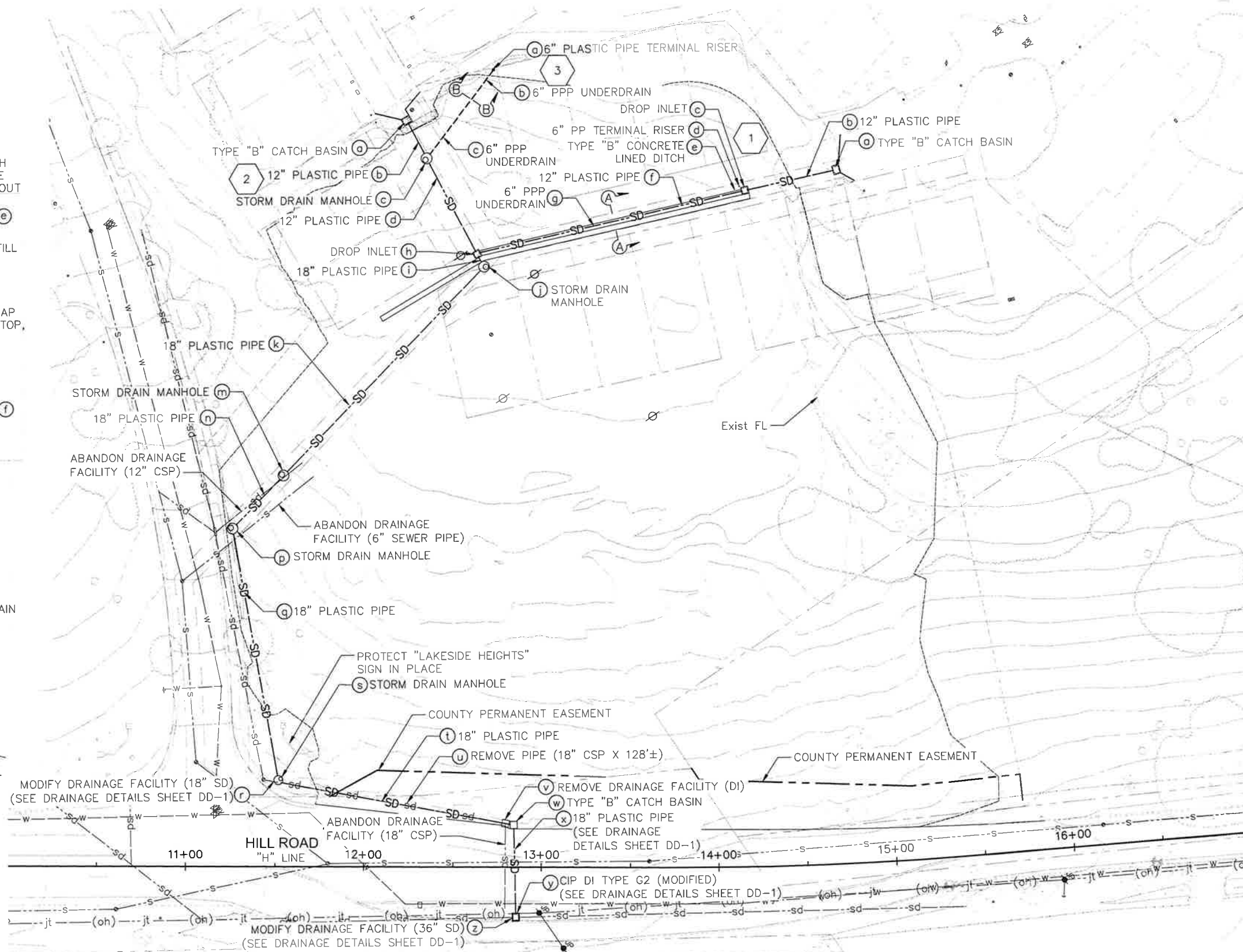
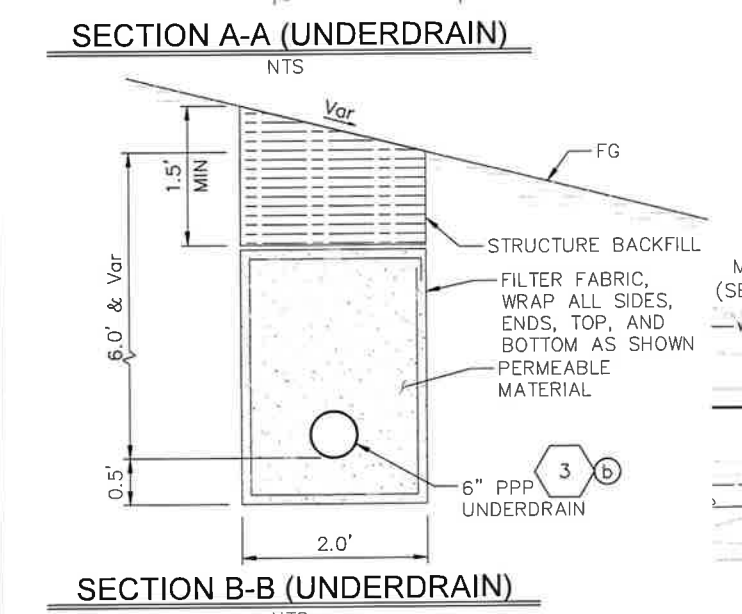
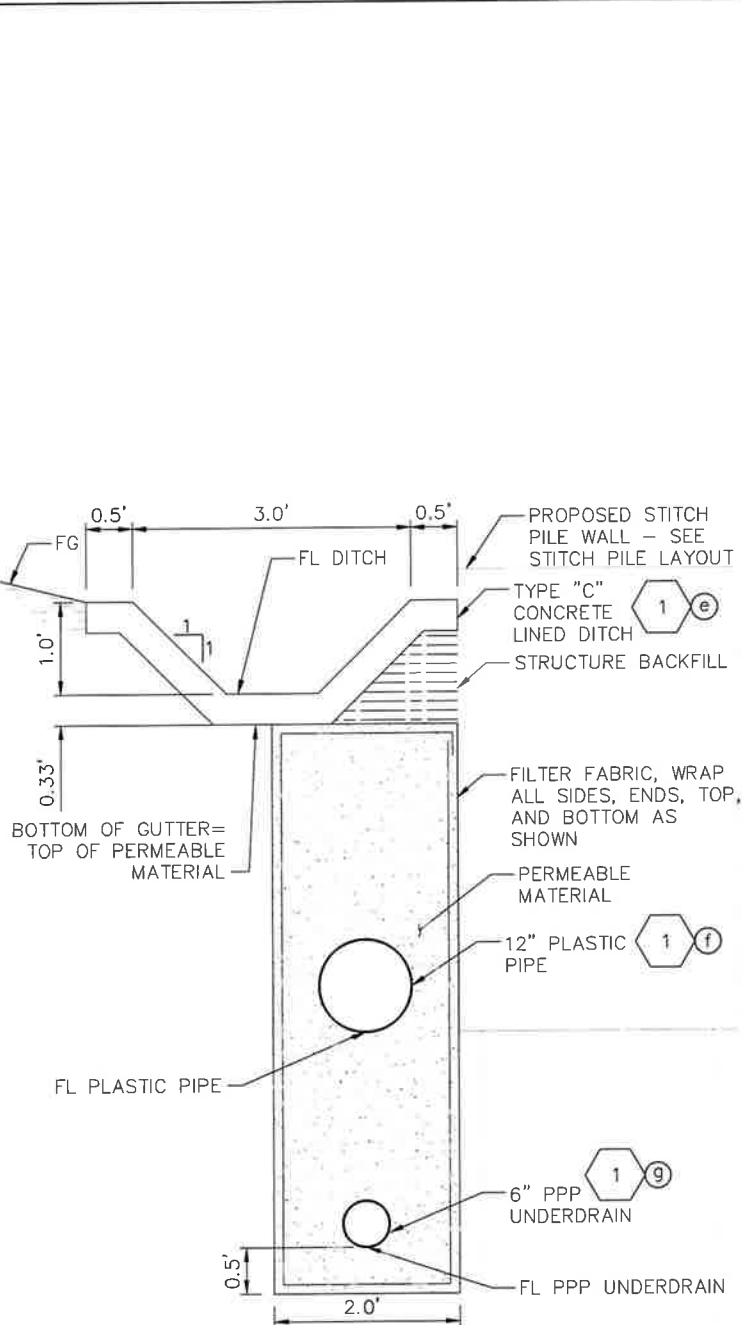
REVISION	DATE	BY



COUNTY OF LAKE
PUBLIC WORKS DEPARTMENT
COURTHOUSE - 255 N. FORBES ST.
LAKEPORT, CALIFORNIA 95453
WWW.CO.LAKE.CA.US.COM TEL: (707) 263-2341 FAX: (707) 263-7748

PROJECT DESCRIPTION:
HILL ROAD LANDSLIDE REPAIR
P.M. 7.75

SHEET DESCRIPTION:
CONTOUR GRADING
TYPE
Date 1/18/2024
Scale AS SHOWN
Drawn KDW
Sheet
7
Of 18 Sheets



REVISION	DATE	BY



COUNTY OF LAKE
PUBLIC WORKS DEPARTMENT
COURTHOUSE - 255 N. FORBES ST.
LAKEPORT, CALIFORNIA 95453
WWW.COLAKECA.US.COM TEL: (707) 263-2341 FAX: (707) 263-7746

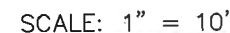
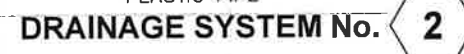
PROJECT DESCRIPTION:
HILL ROAD LANDSLIDE REPAIR

SHEET DESCRIPTION:
DRAINAGE PLAN

TYPE
Date 1/18/2024
Scale AS SHOWN
Drawn KDW

Sheet 8
Of 18 Sheets

1. REFER TO TITLE SHEET AND CALTRANS STANDARD PLANS FOR SYMBOLOGY NOT SHOWN.
2. REFER TO SECTION B-B ON DRAINAGE PLAN FOR UNDERDRAIN DETAIL.



COUNTY OF LAKE
PUBLIC WORKS DEPARTMENT

COURTHOUSE—255 N. FORBES ST.
LAKEPORT, CALIFORNIA 95453

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z															
PROJECT DESCRIPTION:																																		HILL ROAD LANDSLIDE REPAIR																	

DESCRIPTION:

DRAINAGE PROFILE

	TYPE
--	------

Date 1/18/2024

Scale 1" = 20'

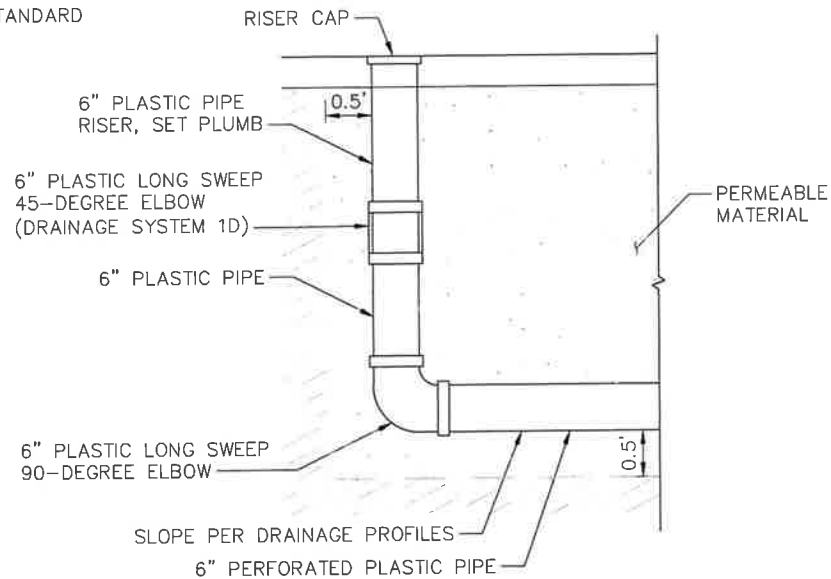
Drawn	KDW
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Sheet 10

Of 18 Sheets

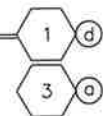
NOTE:

1. REFER TO TITLE SHEET AND CALTRANS STANDARD PLANS FOR SYMBOLS NOT SHOWN.

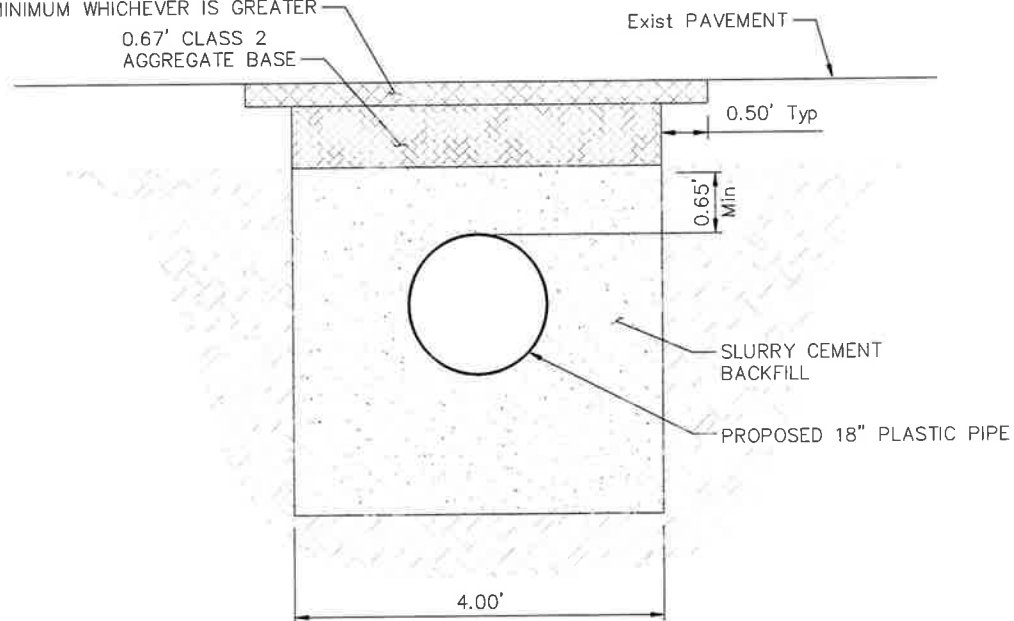


TERMINAL RISER DETAIL

NTS

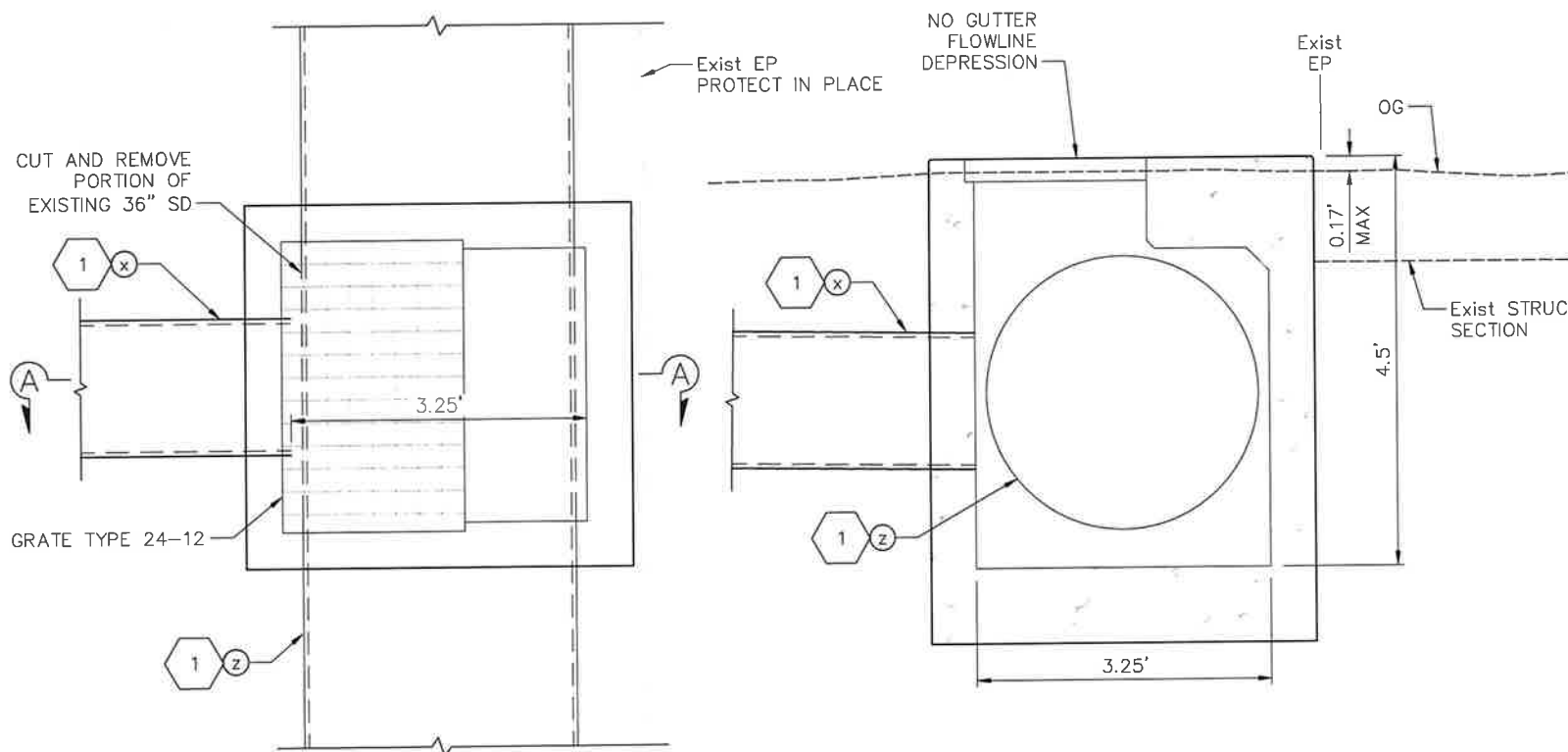


HMA (TYPE A) THICKNESS
TO MATCH EXISTING OR 0.25'
MINIMUM WHICHEVER IS GREATER



CROSS CULVERT DETAIL

NTS

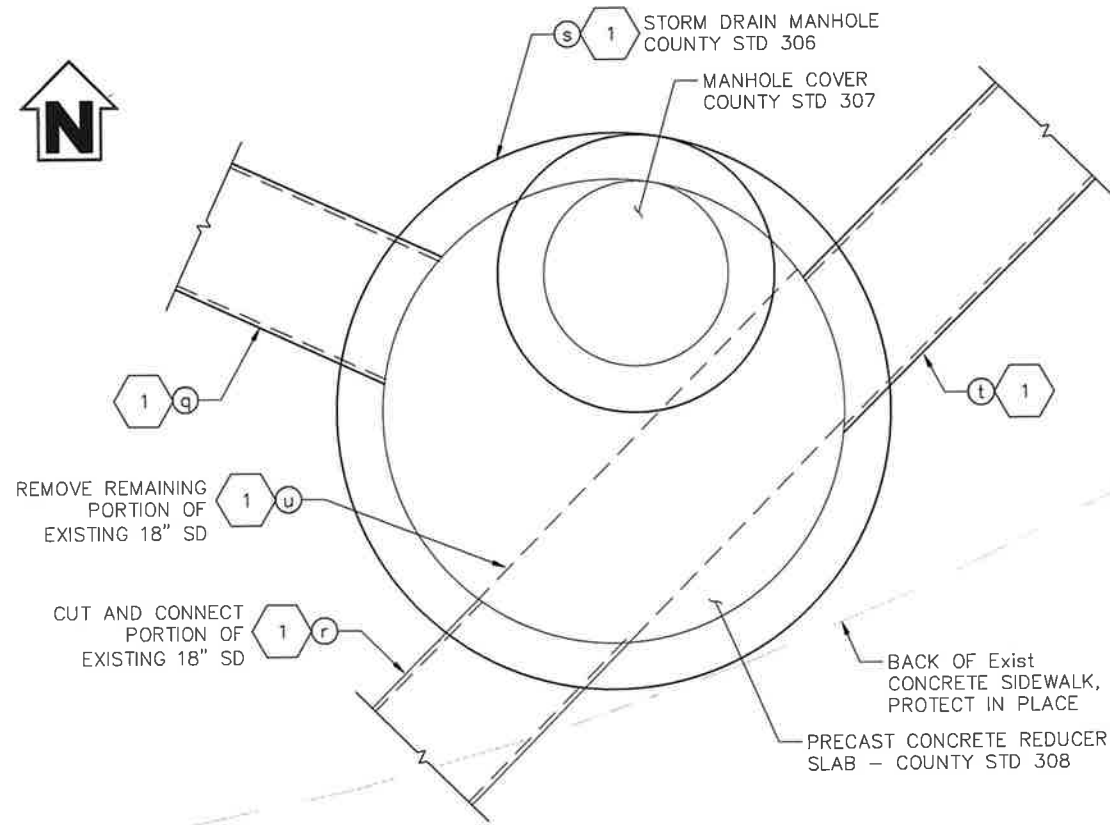


PLAN

SECTION A-A

CAST-IN-PLACE DRAINAGE INLET TYPE G2 (MODIFIED)

NTS



MODIFY EXISTING 18" STORM DRAIN

NTS



REVISION	DATE	BY



COUNTY OF LAKE
PUBLIC WORKS DEPARTMENT

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LAKEPORT, CALIFORNIA 95453
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TEL: (707) 263-2341 FAX: (707) 263-7748

PROJECT DESCRIPTION:
HILL ROAD LANDSLIDE REPAIR

P.L. 7.75

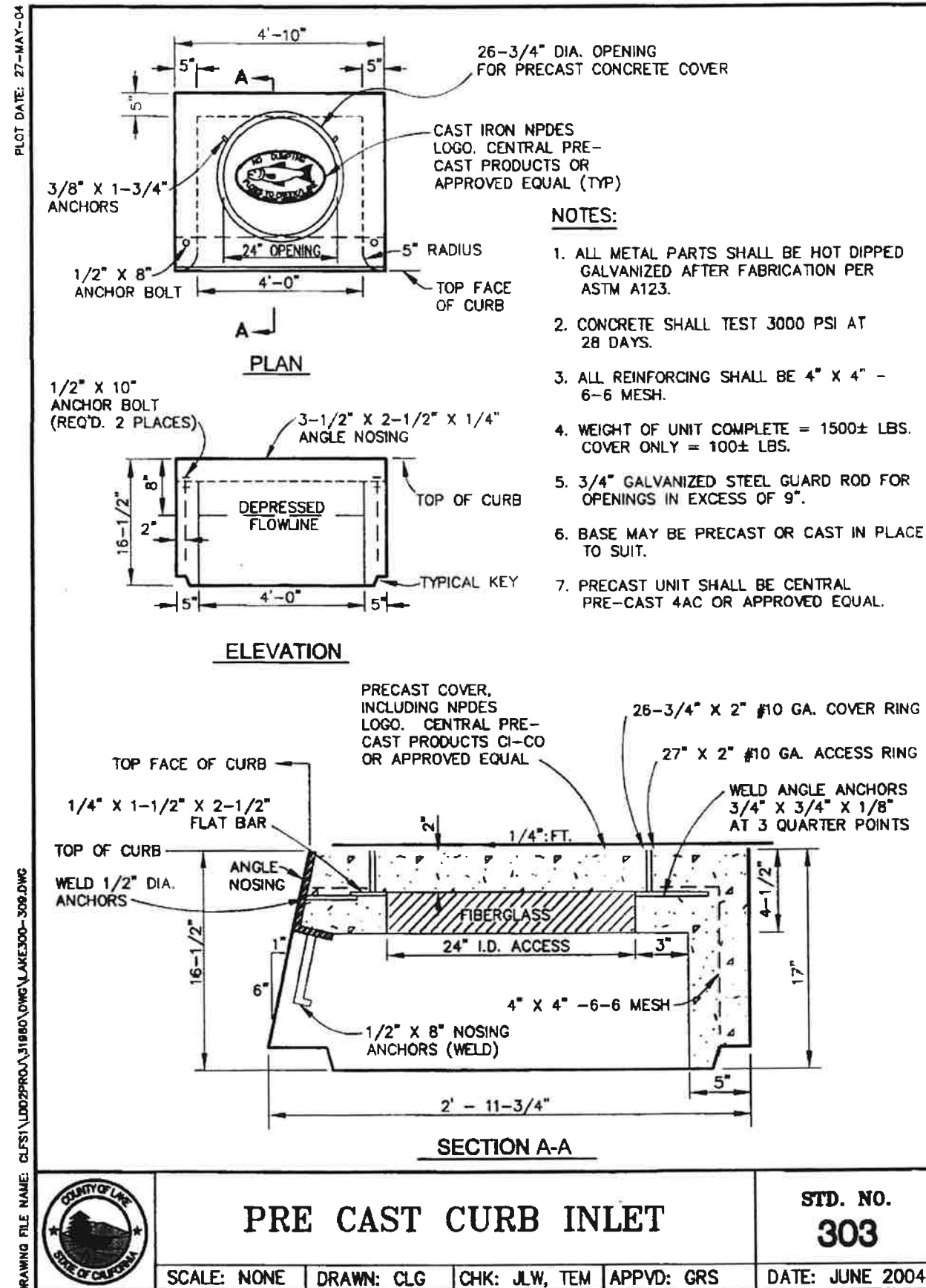
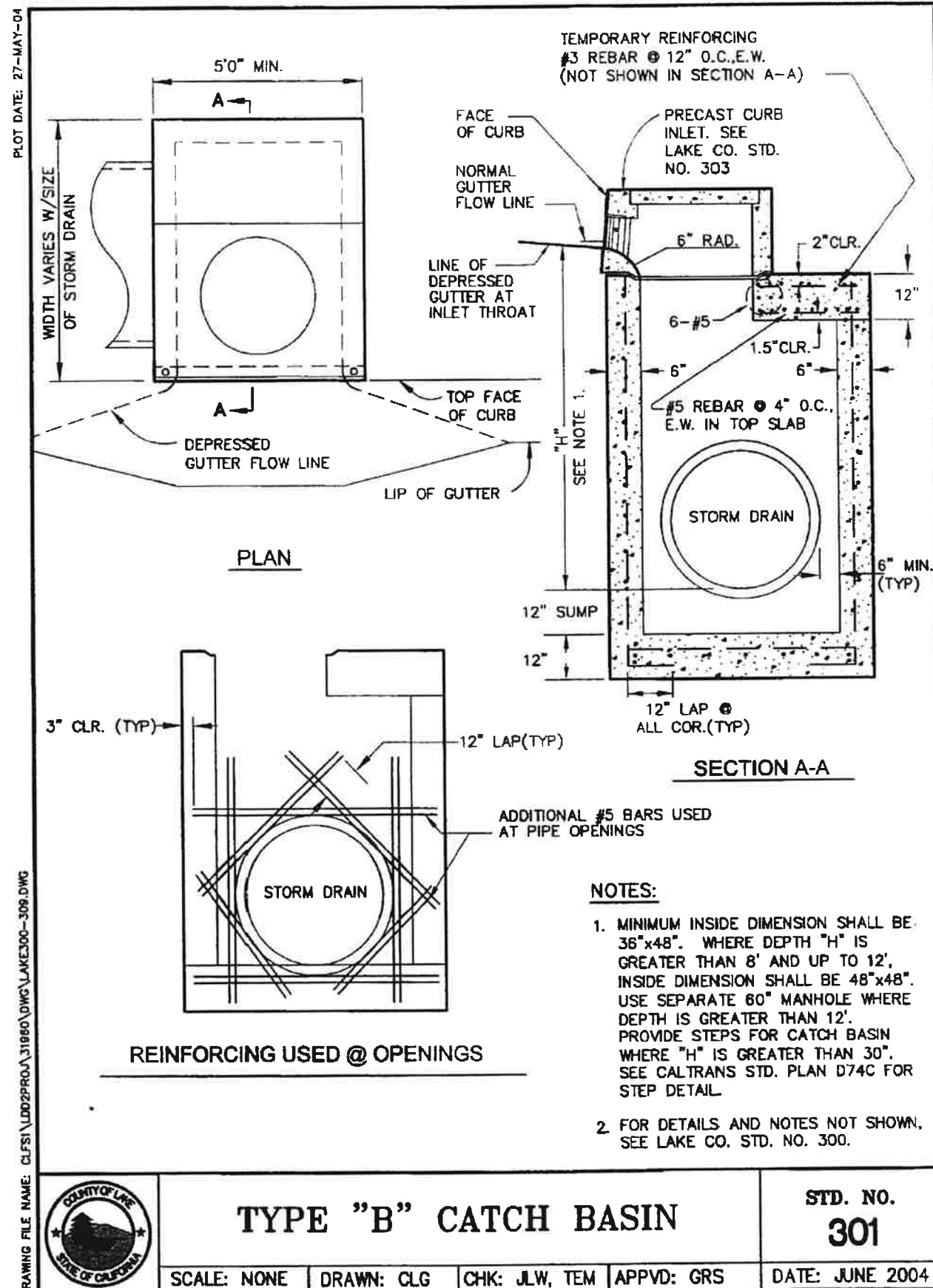
SHEET DESCRIPTION:
DRAINAGE
DETAILS NO. 1

TYPE
Date 1/18/2024
Scale 1" = 20'
Drawn KDW

Sheet 11
Of 18 Sheets

NOTE:

1. REFER TO TITLE SHEET AND CALTRANS STANDARD PLANS FOR SYMBOLS NOT SHOWN.



COUNTY OF LAKE
PUBLIC WORKS DEPARTMENT

COURTHOUSE - 255 N. FORBES ST.
LAKEPORT, CALIFORNIA 95453
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HILL ROAD LANDSLIDE REPAIR

P.M. 7-5

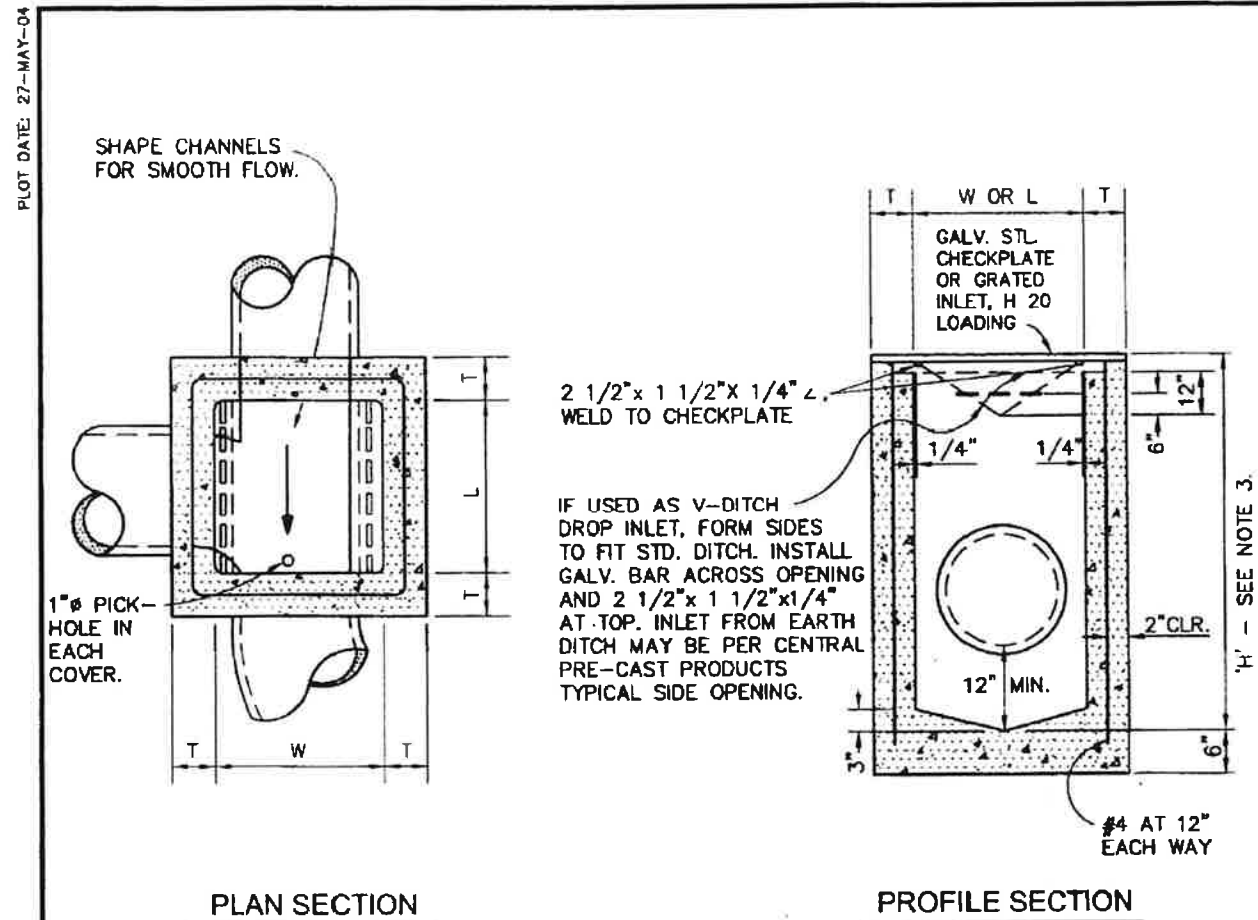
DRAINAGE
DETAILS

TYPE
Date 1/18/2024
Scale 1" = 20'
Drawn KDW
Sheet 12
Of 18 Sheets

DD-2

NOTE:

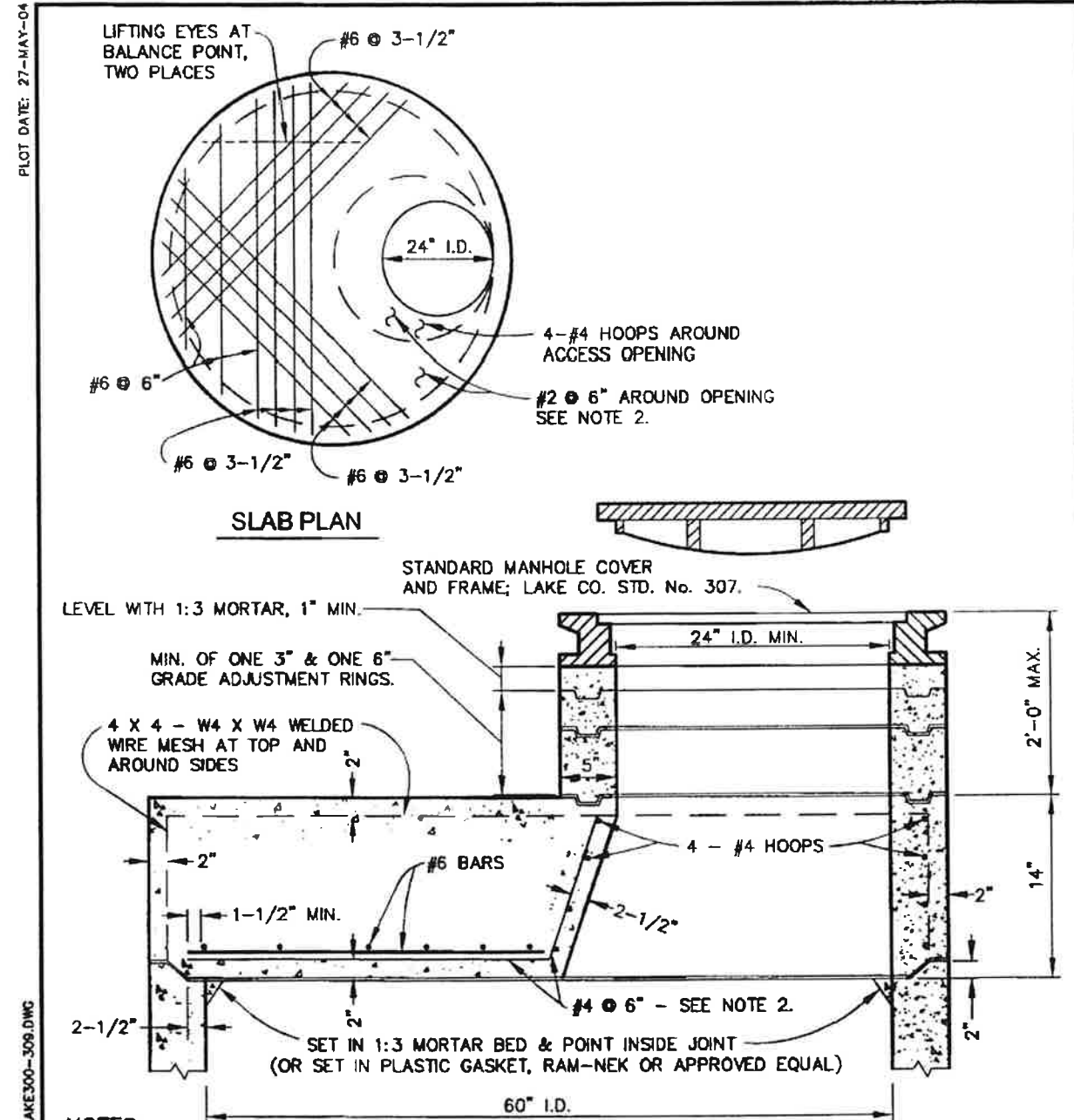
1. REFER TO TITLE SHEET AND CALTRANS STANDARD PLANS FOR SYMBOLOGY NOT SHOWN.



DEPTH	L	W	T	COVER(S)
3' OR LESS	24"	24"	6"	1 - 36"x 36"
OVER 3' TO 8'	36"	36"	6"	2 - 24"x 48"
OVER 8' TO 12'	SEE NOTE 3	8"	2 - 30"x 48"	
OVER 12'	CUSTOM STRUCTURE			

NOTE:

1. SEE LAKE CO. STD. NO. 300 FOR GENERAL NOTES, REINFORCING, AND OTHER REQUIREMENTS.
2. DROP INLET MAY BE PRECAST OR CAST IN PLACE, AT CONTRACTOR'S OPTION. PRECAST INLET SHALL BE CENTRAL PRE-CAST PRODUCTS MODEL 2K, 1M, OR 3M OR SANTA ROSA PRECAST DI OR HG OR APPROVED EQUAL.
3. PROVIDE 40" MANHOLE BASE WHERE 'H' IS GREATER THAN 8' AND LESS THAN OR EQUAL TO 12', USE CENTRAL PRE-CAST PRODUCTS REDUCER SLAB 48MH-1M OR APPROVED EQUAL.



NOTES:

1. FOR DETAILS OF BASE AND BARREL SECTIONS, SEE LAKE COUNTY STD NO. 306-A AND 306-B.
2. #2 BARS BENT UP AND SPACED 6" O.C. AROUND 24" OPENING. HORIZONTAL LEGS TO FAN OUT EQUALLY SPACED, TO 2-1/2" CLEAR AT EDGE OF SLAB.
3. REDUCER SLAB MAY BE PRECAST OR CAST IN PLACE, AT CONTRACTOR'S OPTION. PRECAST SLAB SHALL BE CERTIFIED BY THE MANUFACTURER FOR H20 HIGHWAY LOADING AND SHALL BE CENTRAL PRE-CAST M60-24E OR APPROVED EQUAL. FOR 48" DIAMETER MANHOLES, USE CENTRAL PRE-CAST M48-24E OR APPROVED EQUAL.



**DROP INLET
AND TURNING STRUCTURE**

**STD. NO.
305**

SCALE: NONE DRAWN: CLG CHK: JLW, TEM APPVD: GRS DATE: JUNE 2004



**STORM DRAIN MANHOLE
PRECAST CONCRETE REDUCER SLAB**

**STD. NO.
308**

SCALE: NONE DRAWN: CLG CHK: JLW, TEM APPVD: GRS DATE: JUNE 2004

REVISION	DATE	BY



**COUNTY OF LAKE
PUBLIC WORKS DEPARTMENT**

HILL ROAD LANDSLIDE REPAIR

**DRAINAGE
DETAILS**

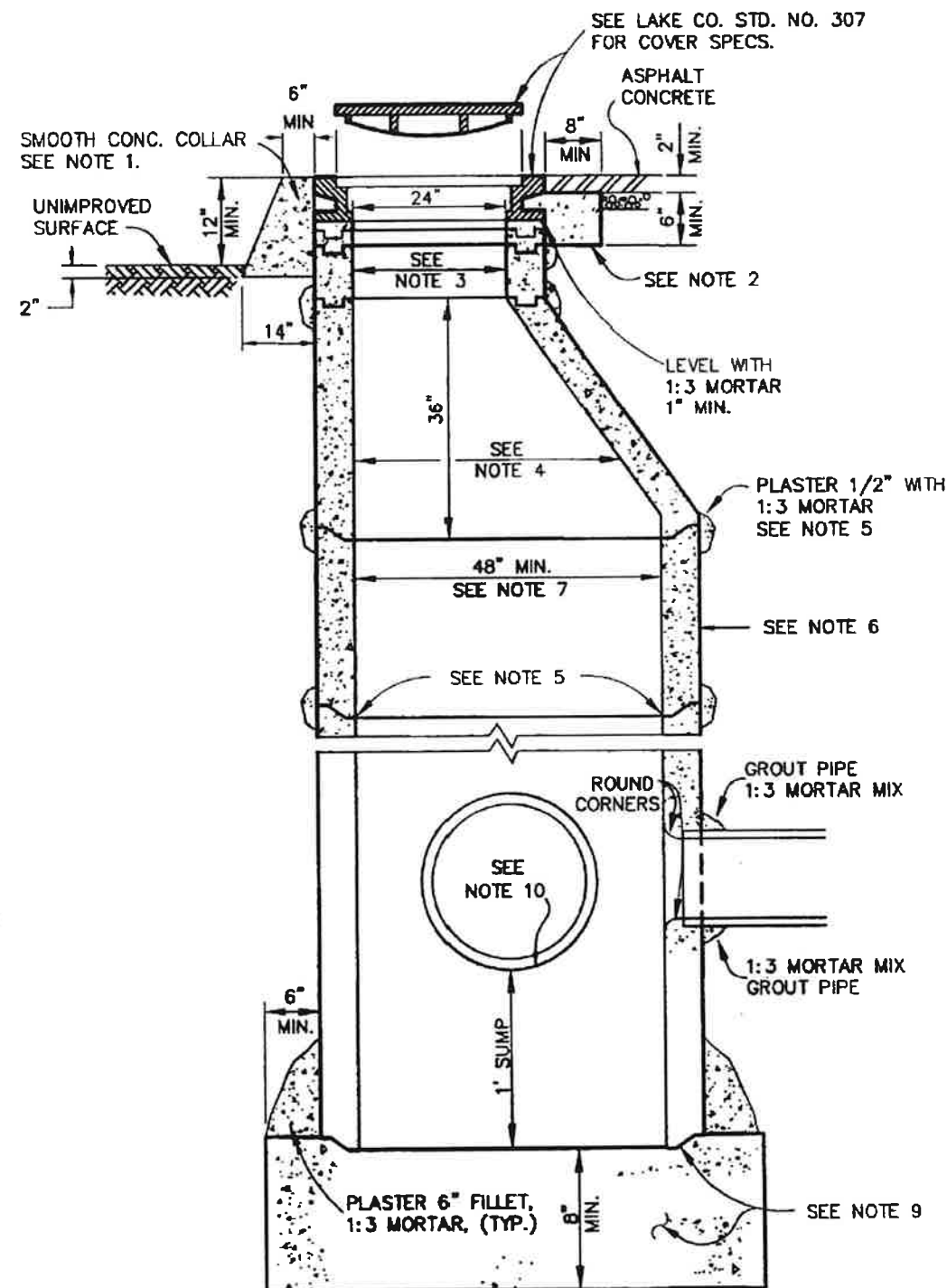
TYPE
Date 1/18/2024
Scale 1"=20'
Drawn KDW

Sheet 13
Of 18 Sheets

NOTE:

1. REFER TO TITLE SHEET AND CALTRANS STANDARD PLANS FOR SYMBOLOGY NOT SHOWN.

PLOT DATE: 27-MAY-04



NOTE: SEE MANHOLE NOTES ON STANDARD 306-B

SHEET 1 OF 2



STORM DRAIN MANHOLE

STD. NO.
306-A

SCALE: NONE

DRAWN: CLG

CHK: JLW, TEM

APPVD: GRS

DATE: JUNE 2004

PLOT DATE: 27-MAY-04

NOTES:

1. WHEN MANHOLES ARE INSTALLED IN UNIMPROVED AREAS, THE TOP OF THE COVER SHALL BE A MINIMUM OF 1 FOOT ABOVE ADJACENT GRADE AND CONCRETE COLLAR SHALL BE PROVIDED. CONCRETE COLLAR SHALL BE CLASS 1 CONCRETE (6-SACK MIX). SEE DETAIL.
2. WHEN MANHOLES ARE INSTALLED IN PAVED AREAS, UNPAVED SHOULDERS OR UNPAVED ROADS, A CONCRETE COLLAR SHALL BE PROVIDED. SEE DETAIL.
3. PROVIDE A MINIMUM OF ONE 3" AND ONE 6" GRADE ADJUSTMENT RING AT TOP OF MANHOLE. MAXIMUM HEIGHT OF GRADE ADJUSTMENT RINGS SHALL NOT EXCEED 20".
4. CONE SECTION SHALL BE ECCENTRIC, WITH STEPS ON THE VERTICAL SIDE. STEPS SHALL BE PER CALTRANS STD. PLAN D74C. WHERE DEPTH IS NOT SUFFICIENT TO PROVIDE CONE SECTION, REDUCER SLAB PER LAKE CO. STD. NO. 308 SHALL BE USED.
5. ALL JOINTS SHALL BE SEALED WITH RAM-NEK JOINT COMPOUND, 1:3 MORTAR MIX, OR APPROVED EQUAL. WET BOTH TONGUE AND RING BEFORE APPLYING MORTAR AND SETTING RING. WIPE INSIDE EDGE OF JOINTS SMOOTH AND PROVIDE POINTED JOINT. PLASTER OUTSIDE OF JOINT WITH 1/2" LAYER OF MORTAR.
6. PRECAST MANHOLE MATERIAL SHALL BE MANUFACTURED TO ASTM SPECIFICATION C-478. ALL SECTIONS OF MANHOLE SHALL BE IDENTICAL MAKE AND MANUFACTURER. PRECAST MANHOLE SHALL BE CENTRAL PRE-CAST MODEL M48E OR JENSEN PRECAST MODEL MH-6072-NC OR APPROVED EQUAL.
7. DEPTH SHALL BE MEASURED FROM RIM TO FLOWLINE OF OUTLET PIPE. MANHOLES OVER 7 FEET IN DEPTH, OR WITH A PIPE GREATER THAN 36" INSIDE DIAMETER, SHALL BE 5 FEET INSIDE DIAMETER.
8. LAKE CO. STD. NO. 306 SHALL NOT BE USED FOR MANHOLES LESS THAN 3 FEET IN DEPTH, PIPES GREATER THAN 60" INSIDE DIAMETER, OR FOR MANHOLES WITH MORE THAN 3 PIPE CONNECTIONS.
9. BASE SHALL BE CAST IN PLACE TO FULL THICKNESS SHOWN. BASE SHALL BE CONSTRUCTED OF CLASS 1 CONCRETE (6-SACK MIX) AND SHALL BE PLACED AGAINST UNDISTURBED EARTH. JOINT BETWEEN BASE AND FIRST WALL SECTION SHALL BE FORMED BY SETTING WALL SECTION ON FRESH CONCRETE OR BY USING TONGUE & GROOVE IMPRESSION RING.
10. CONSTRUCT FLOW CHANNELS TO MATCH PIPE SHAPE USING STEEL TROWEL. ELEVATION CHANGES THROUGH MANHOLE SHALL BE A STRAIGHT GRADE WITH NO ABRUPT CHANGES. DIRECTIONAL CHANGES SHALL BE MADE WITH SMOOTH CURVES.

NOTE: NOTES REFER TO LAKE COUNTY STD. 306-A

SHEET 2 OF 2

STORM DRAIN MANHOLE
NOTESSTD. NO.
306-B

SCALE: NONE

DRAWN: CLG

CHK: JLW, TEM

APPVD: GRS

DATE: JUNE 2004

COUNTY OF LAKE
PUBLIC WORKS DEPARTMENTCOURTHOUSE - 255 N. FORBES ST.
LAKEPORT, CALIFORNIA 95453
WWW.COLLAKE.CA.US TEL: (707) 263-2341 FAX: (707) 263-7748PROJECT DESCRIPTION:
HILL ROAD LANDSLIDE REPAIR

1/11/2004

SHEET DESCRIPTION:
DRAINAGE
DETAILS

TYPE

Date 1/18/2024

Scale 1" = 20'

Drawn KDW

Sheet 14

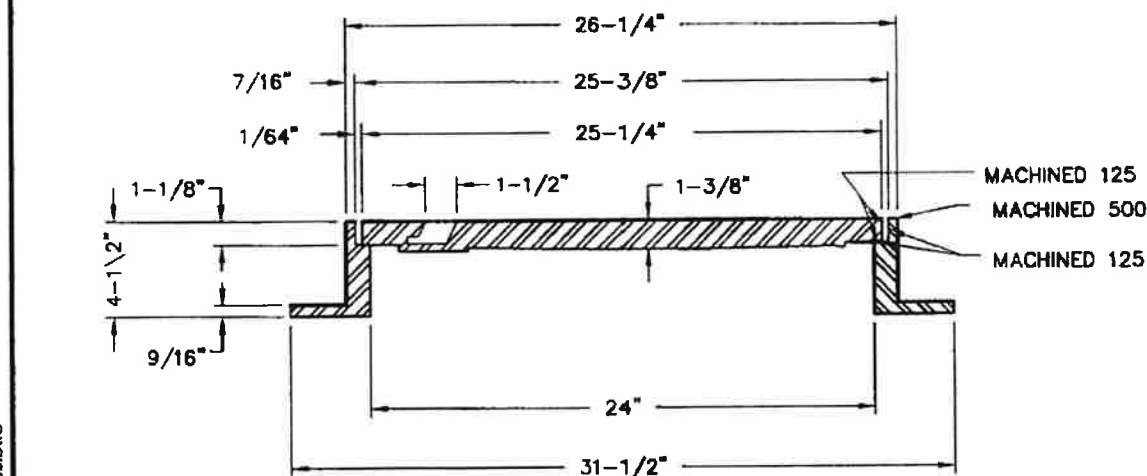
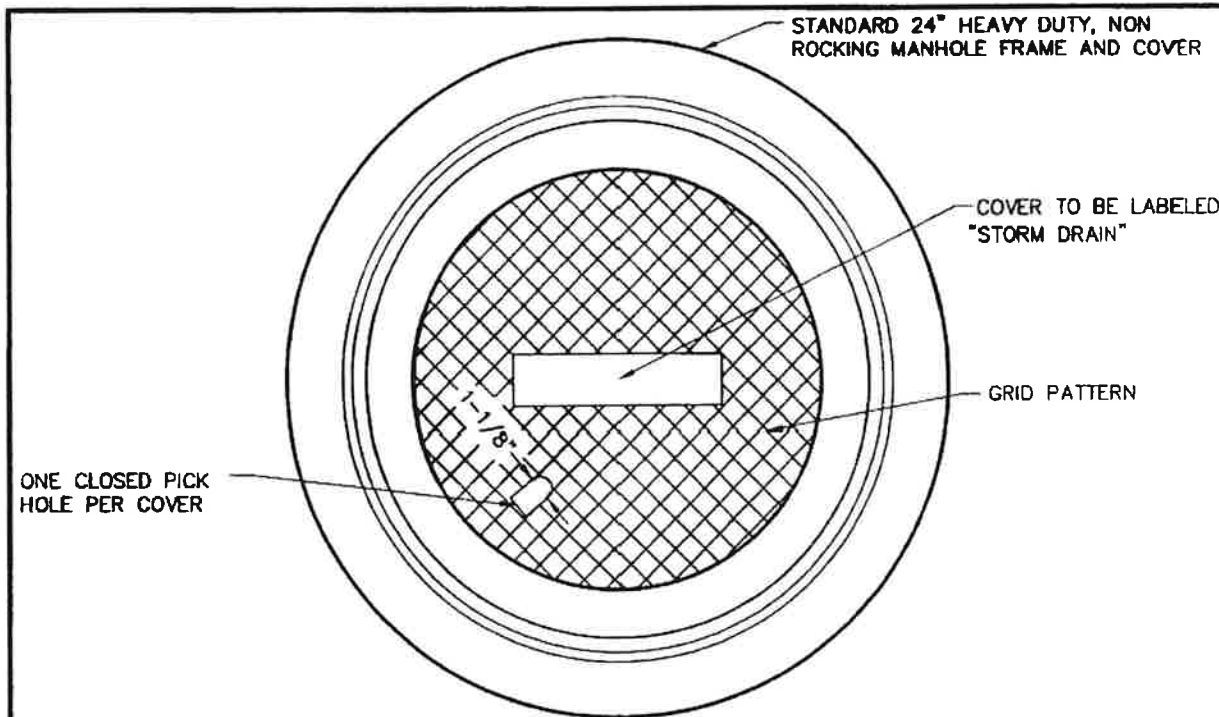
Of 18 Sheets

DD-4

NOTE:

1. REFER TO TITLE SHEET AND CALTRANS STANDARD PLANS FOR SYMBOLOGY NOT SHOWN.

PLOT DATE: 27-MAY-04



NOTES:

1. ALL CASTINGS SHALL BE DIPPED IN APPROVED ASPHALT PAINT.
2. ALL MATERIAL USED IN MANUFACTURING SHALL CONFORM TO A.S.T.M. DESIGNATION 48-30, OR TO UNITED STATES GOVERNMENT SPECIFICATIONS QQI-652B.
3. MINIMUM WEIGHT COMPONENTS: COVER - 130 POUNDS
FRAME - 135 POUNDS
4. CAST IRON FRAME AND COVER SHALL BE MACHINE FITTED AND PAINTED WITH BITUMINOUS PAINT. SOUTHBAY FOUNDRY SBF1900 OR APPROVED EQUAL.

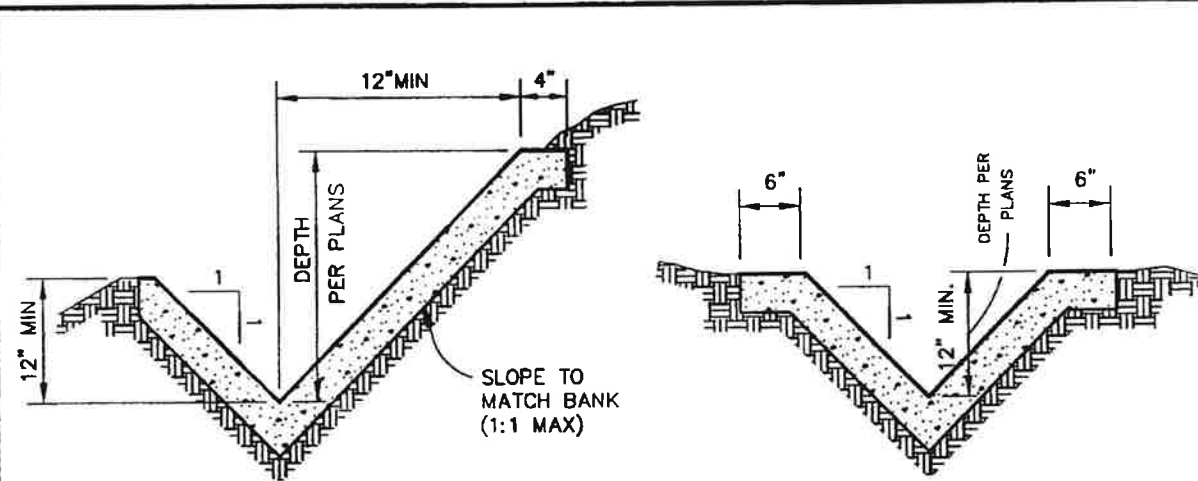


**STORM DRAIN MANHOLE
FRAME AND COVER**

**STD. NO.
307**

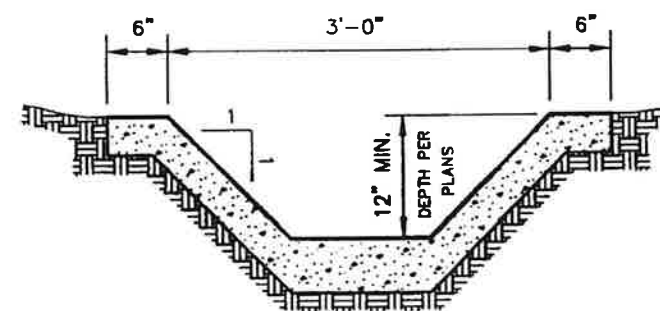
SCALE: NONE DRAWN: CLG CHK: JLW, TEM APPVD: GRS DATE: JUNE 2004

PLOT DATE: 27-MAY-04



TYPE "A"

TYPE "B"



TYPE "C"

NOTES:

1. ALL SECTIONS SHALL BE AT LEAST 4" THICK.
2. CONCRETE SHALL BE 3000 P.S.I.. REINFORCING, #4 AT 24" O.C. EACH WAY, OR A 1.5" FIBERMESH ADDED AT A RATE OF 3 POUNDS/CY SHALL BE PROVIDED.
3. BOTH SIDES OF THE DITCH SHALL BE FORMED WITH 2"x4" LUMBER, UNLESS OTHERWISE SHOWN ON PLANS.
4. CONCRETE FINISH SHALL BE ORDINARY SURFACE FINISH PER SECTION 51-1.18A OF THE CALTRANS STANDARD SPECIFICATIONS.
5. DITCH SIDES SHALL BE BACKFILLED AND COMPACTED IMMEDIATELY AFTER THE REMOVAL OF SIDE FORMS.
6. NO CONCRETE SHALL BE PLACED PRIOR TO FORM INSPECTION BY THE D.P.W. INSPECTOR.
7. NO DITCH IS TO BE CONSTRUCTED ON FILLED GROUND PRIOR TO CERTIFICATION OF THE FILL TO THE D.P.W. BY THE SOIL ENGINEER.
8. NO EXPANSION JOINTS SHALL BE REQUIRED.
9. CONCRETE-LINED DITCHES SHALL ONLY BE USED OUTSIDE OF THE ROADWAY CLEAR ZONE.

SHEET 1 OF 2



DITCHES, CONCRETE LINED

**STD. NO.
311-A**

SCALE: NONE DRAWN: CLG CHK: JLW, TEM APPVD: GRS DATE: JUNE 2004



**COUNTY OF LAKE
PUBLIC WORKS DEPARTMENT**
COURTHOUSE - 255 N. FORBES ST.
LAKEPORT, CALIFORNIA 95453
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HILL ROAD LANDSLIDE REPAIR

**DRAINAGE
DETAILS**

TYPE
Date 1/18/2024
Scale 1"=20'
Drawn KDW
Sheet 15
Of 18 Sheets

DD-5

ROADWAY QUANTITIES															
FROM			TO			ROADWAY EXCAVATION (SLIDE REMOVAL)	ROADWAY EXCAVATION (UNSUITABLE MATERIAL)	ROADWAY EMBANKMENT (N)	CLASS 2 AGGREGATE BASE (CY)	HOT MIX ASPHALT (TYPE A)	PLACE HOT MIX ASPHALT DIKE (TYPE A)	PLACE HOT MIX ASPHALT (MISCELLANEOUS AREA)	SALVAGE CONCRETE BARRIER (TYPE K)	SALVAGE CRASH CUSHION	
LINE	FROM	OFFSET	LINE	TO	OFFSET										
" H"	11+72.81	35.05' Lt	" H"	15+60.64	42.99' Lt	8,815									STAGE 1
" H"	11+17.17	237.07' Lt	" H"	15+60.64	42.99' Lt	19,373									STAGE 2, IN FRONT OF WALL
" H"	11+34.88	357.79' Lt	" H"	14+74.60	409.15' Lt	291									STAGE 2, BEHIND WALL
" H"	12+55.91	101.47' Lt	" H"	14+81.11	107.51' Lt		2,885	2,885							"OX" Line
" H"	11+17.17	237.07' Lt	" H"	15+60.64	42.99' Lt			1,645							IN FRONT OF WALL
" H"	11+17.17	237.07' Lt	" H"	15+60.64	42.99' Lt			829							BEHIND WALL
" H"	12+84.40	21.46' Lt	" H"	12+85.50	21.15' Rt				4	4		24			CROSS CULVERT DETAIL
" H"	12+21.65	424.5' Lt	" H"	12+30.01	434.36' Lt					0.4	13				NEAR DRAINAGE SYSTEM 2A
" H"	12+04.84	422.2' Lt	" H"	12+19.28	418.79' Lt					0.4	15				NEAR DRAINAGE SYSTEM 2A
" H"	14+89.39	408.38' Lt	" H"	14+87.01	392.09' Lt					0.5	16				NEAR DRAINAGE SYSTEM 1A
" H"	14+97.63	382.42' Lt	" H"	14+88.51	387.24' Lt					0.3	10				NEAR DRAINAGE SYSTEM 1A
" H"	12+03.57	16.30' Lt	" H"	15+02.78	16.59' Rt								300		
" H"	11+30.14	0.82' Rt	" H"	15+38.63	0.34' Rt									280	
TOTAL						28,479	2,885	5,359	4	5.5	55	24	300	280	

(N) NOT A SEPARATE BID ITEM

EROSION CONTROL QUANTITIES												
FROM			TO			FIBER ROLLS	HYDROSEED	COMPOST	TEMPORARY FIBER ROLLS	TEMPORARY SILT FENCE	TEMPORARY HIGH-VISIBILITY FENCE	
LINE	FROM	OFFSET	LINE	TO	OFFSET							
						LF	SQFT	CY	LF	LF	LF	COMMENTS
" H"	11+11.17	237.07' Lt	" H"	15+47.49	17.175' Lt	5,486	158,111	920				ENTIRE AREA
" H"	11+34.88	357.79' Lt	" H"	11+67.34	302.98' Lt				64	64		NEAR DOWNING, HIGH SIDE
" H"	11+11.17	237.07' Lt	" H"	11+31.06	73.89' Lt				148	148		NEAR DOWNING, LOW SIDE
" H"	11+67.35	38.05' Lt	" H"	12+82.33	25.67' Lt				113	113		NEAR HILL ROAD
" H"	12+83.22	49.03' Lt	" H"	13+63.29	23.29' Lt				85	85		NEAR HILL ROAD
" H"	13+63.29	23.29' Lt	" H"	15+74.49	17.75' Lt				208	208		NEAR HILL ROAD
" H"	12+06.47	419.79' Lt	" H"	12+82.33	25.67' Lt						586	NEAR DOWNING
" H"	12+36.43	425.25' Lt	" H"	12+83.22	49.03' Lt						1,009	
TOTAL						5,486	158,111	920	617	617	1,595	

DRAINAGE QUANTITIES																	
FROM			TO			STRUCTURAL CONCRETE, DRAINAGE INLET	12" PLASTIC PIPE	18" PLASTIC PIPE	6" PERFORATED PLASTIC PIPE UNDERDRAIN	ABANDON DRAINAGE FACILITY (EA)	REMOVE PIPE (LF)	REMOVE DRAINAGE FACILITY (EA)	MODIFY DRAINAGE FACILITY	MINOR CONCRETE (GUTTER) (CY)	MISCELLANEOUS IRON AND STEEL	DRAINAGE SYSTEM AND UNIT No.	
LINE	FROM	OFFSET	LINE	TO	OFFSET												
"H"	14+85.35	389.19' Lt	"H"	14+22.00	378.95' Lt	4.2	49.7								46	1a,1b	TYPE "B" CATCH BASIN
"H"	14+22.00	378.95' Lt	"H"	12+62.40	343.18' Lt	1.8	153.3		158.4						163	1c, 1d, 1f, 1g	DROP INLET
"H"	14+19.49	378.46' Lt	"H"	12+62.40	343.18' Lt									9.1		1e	CONCRETE GUTTER
"H"	12+62.40	343.18' Lt	"H"	12+66.29	336.76' Lt	2.4		4.0							163	1h, 1i	DROP INLET
"H"	12+66.29	336.76' Lt	"H"	11+54.21	219.10' Lt	3.8		158.4							265	1j, 1k	STORM DRAIN MANHOLE
"H"	11+54.21	219.10' Lt	"H"	11+25.69	189.16' Lt	5.7		36.5							265	1m, 1n	STORM DRAIN MANHOLE
"H"	11+25.69	189.16' Lt	"H"	11+52.23	47.23' Lt	4.3		142.6							265	1p, 1q	STORM DRAIN MANHOLE
"H"	11+52.23	47.23' Lt	"H"	12+84.33	23.67' Lt	3.5		130.9			128.0	1	1		265	1s, 1t, 1u, 1v	STORM DRAIN MANHOLE
"H"	12+84.33	23.67' Lt	"H"	12+85.69	28.27' Rt	2.6		48.6							46	1w, 1x	TYPE "B" CATCH BASIN
"H"	12+85.69	28.27' Rt	-	-	-	2.4							1		326	1y, 1z	CIP DI CALTRANS TYPE G2 MODIFIED
"H"	12+22.76	417.97' Lt	"H"	12+33.15	396.43' Lt	3.4	20.1								46	2a, 2b	TYPE "B" CATCH BASIN
"H"	12+33.15	396.43' Lt	"H"	12+62.40	343.18' Lt	5.6	57.7								265	2c, 2d	STORM DRAIN MANHOLE
"H"	12+35.40	415.12' Lt	"H"	12+22.76	417.97' Lt				73.2							3a, 3b, 3c	
"H"	10+98.47	160.27' Lt	"H"	11+71.03	218.59' Lt					1							6" SEWER PIPE NEAR DOWNING DRIVE
"H"	11+16.41	187.51' Lt	"H"	11+64.76	226.38' Lt					1							12" CSP NEAR DOWNING DRIVE
"H"	12+79.67	22.47' Lt	"H"	12+79.49	23.43' Rt					1							18" CSP CROSSING HILL ROAD
TOTAL						39.7	281	521	232	3	128	1	2	9.1	2,114		

REVISION	DATE	BY



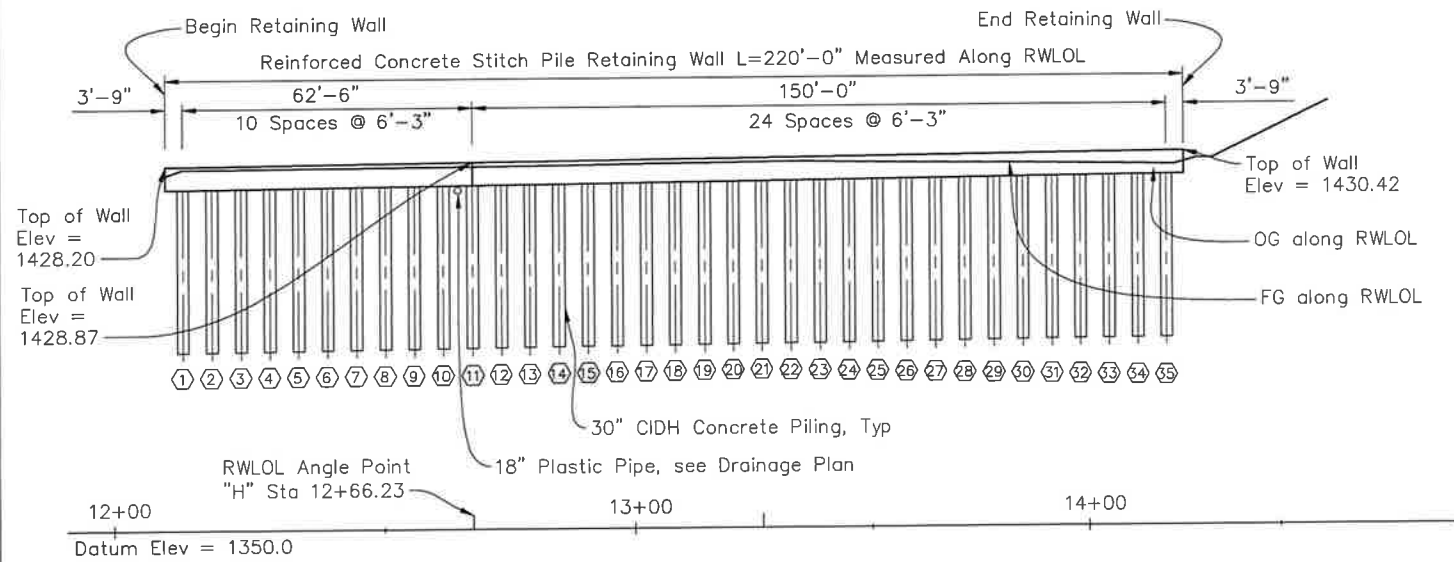
COUNTY OF LAKE
PUBLIC WORKS DEPARTMENT
COURTHOUSE - 255 N. FORBES ST.
LAKEPORT, CALIFORNIA 95453
WWW.CO.LAKE.CA.US.COM TEL: (707) 263-2341 FAX: (707) 263-7748

PROJECT DESCRIPTION:
HILL ROAD LANDSLIDE REPAIR
P.L. 7.75

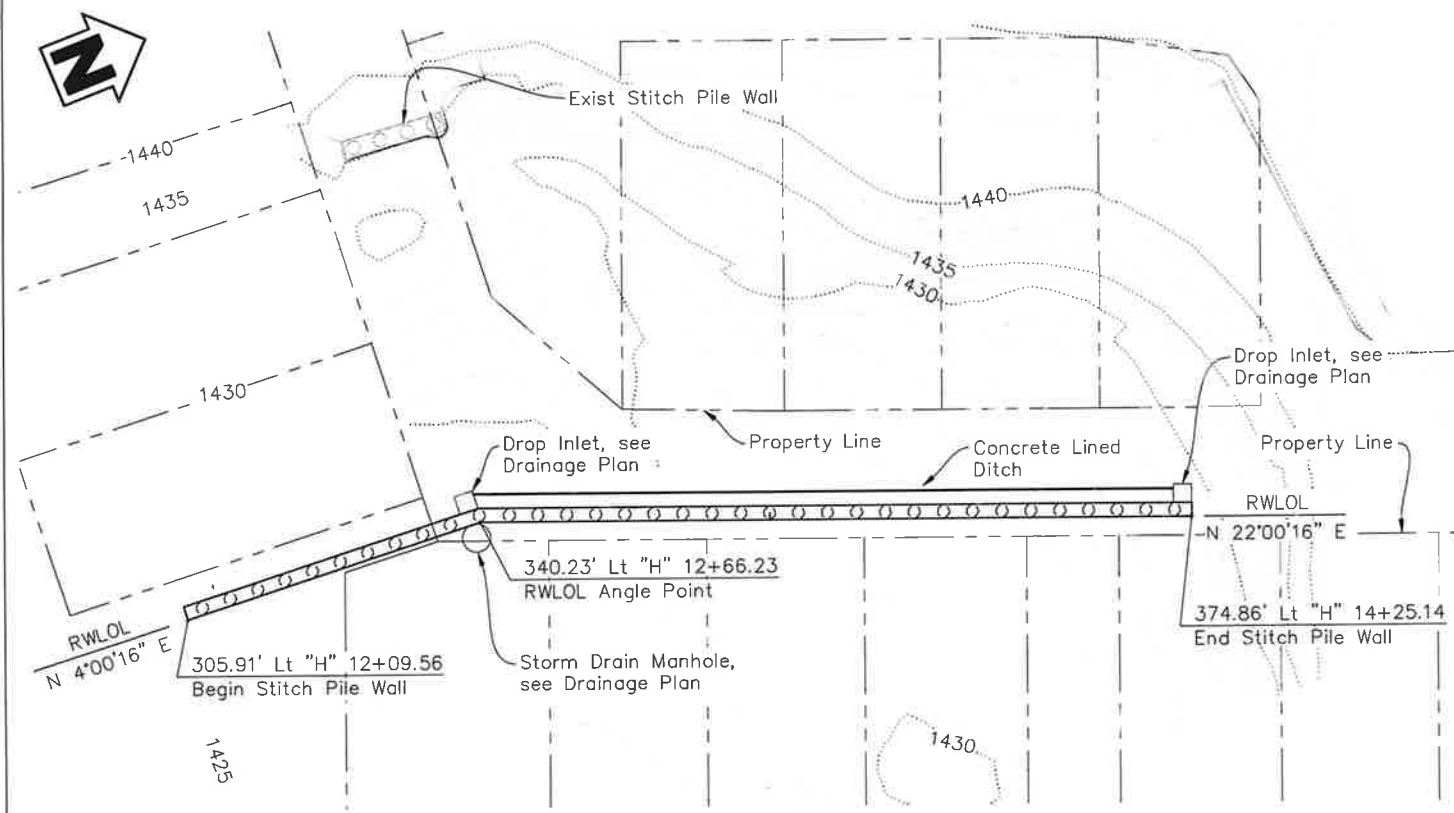
SHEET DESCRIPTION:
SUMMARY OF
QUANTITIES

TYPE
Date 1/19/2024
Scale 1"=20'
Drawn KDW

Sheet 16
Of 18 Sheets



DEVELOPED ELEVATION
1" = 20'



PLAN
1" = 20'

PILE DATA TABLE

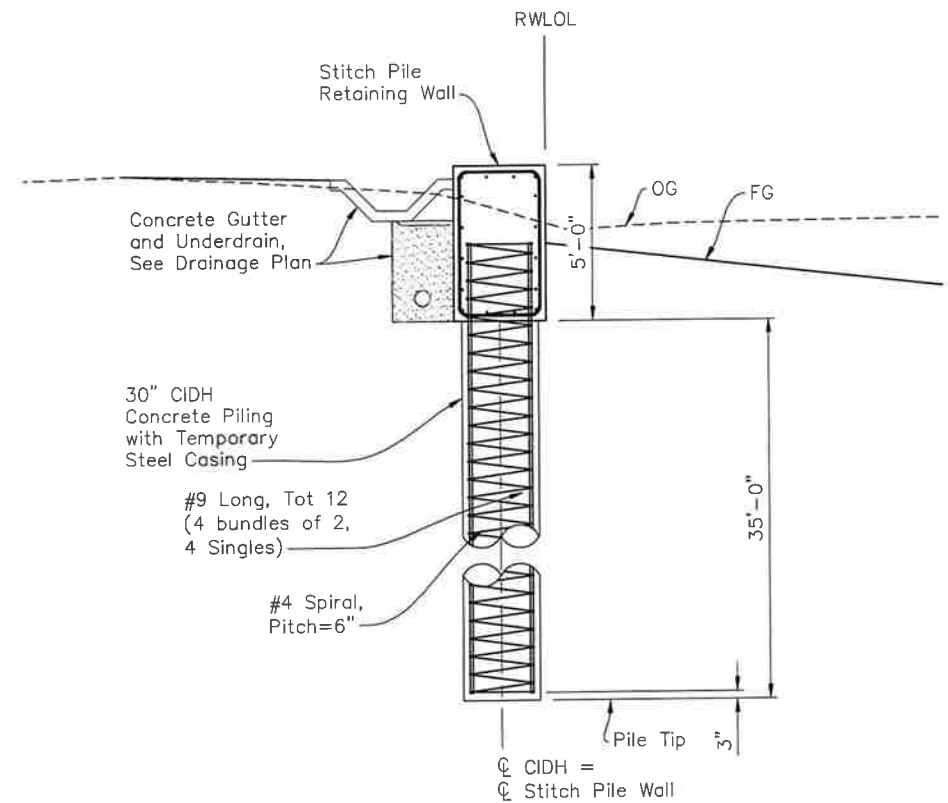
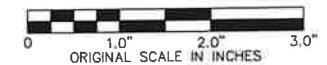
Steel Pile No. (X)	Pile Tip Elev	Cut-off Elev
1	1388.24	1423.49
2	1388.30	1423.55
3	1388.37	1423.62
4	1388.43	1423.68
5	1388.49	1423.74
6	1388.55	1423.80
7	1388.62	1423.87
8	1388.68	1423.93
9	1388.74	1423.99
10	1388.81	1424.06
11	1388.87	1424.12
12	1388.93	1424.18
13	1389.00	1424.25
14	1389.06	1424.31
15	1389.12	1424.37
16	1389.19	1424.44
17	1389.25	1424.50
18	1389.31	1424.56
19	1389.37	1424.62
20	1389.44	1424.69
21	1389.50	1424.75
22	1389.56	1424.81
23	1389.63	1424.88
24	1389.69	1424.94
25	1389.75	1425.00
26	1389.82	1425.07
27	1389.88	1425.13
28	1389.94	1425.19
29	1390.00	1425.25
30	1390.07	1425.32
31	1390.13	1425.38
32	1390.19	1425.44
33	1390.26	1425.51
34	1390.32	1425.57
35	1390.38	1425.63

LEGEND:

RWLOL Retaining Wall Layout Line

NOTE:

1. Refer to Title Sheet and Caltrans Standard Plans for symbology not shown



TYPICAL SECTION
1" = 3'

GENERAL NOTES
LOAD AND RESISTANCE FACTOR DESIGN

DESIGN: AASHTO LRFD Bridge Design Specifications, 8th edition and with Caltrans Amendments, preface dated April 2019.

SEISMIC DESIGN: Caltrans Seismic Design Criteria (SDC), version 2.0, dated April 2019.

SEISMIC LOADING: $k_h = 0.2$

CONCRETE: $f'_c = 3.6$ ksi
 $f_y = 60$ ksi
 $n = 8$

QUANTITIES

Structure Excavation (Retaining Wall)	122	CY
Structure Backfill (Retaining Wall)	25	CY
30" Cast-in-Drilled Hole Concrete Piling	1225	LF
Structural Concrete, Retaining Wall	124	CY
Bar Reinforcing Steel (Retaining Wall)	72788	LB

REVISION	DATE	BY

COUNTY OF LAKE
PUBLIC WORKS DEPARTMENT
COURTHOUSE - 235 N. FORBES ST.
LAKEPORT, CALIFORNIA 95453
WWW.COLAKECA.US.COM TEL: (707) 263-2341 FAX: (707) 263-7746

HILL ROAD LANDSLIDE REPAIR

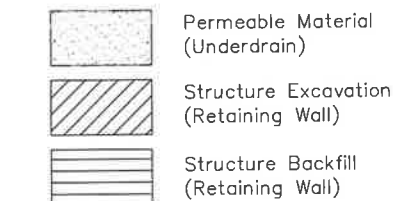
STITCH PILE LAYOUT

DATE 1/19/2024
Scale AS SHOWN
Drawn AMH

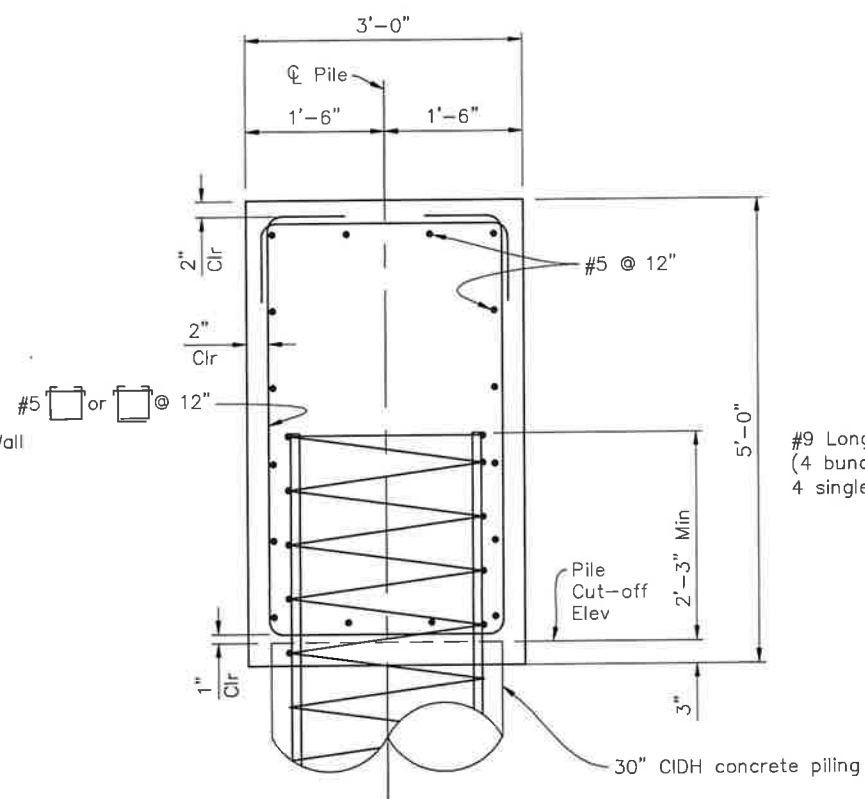
Sheet 17
Of 18 Sheets

RWLOL Retaining Wall Layout Line

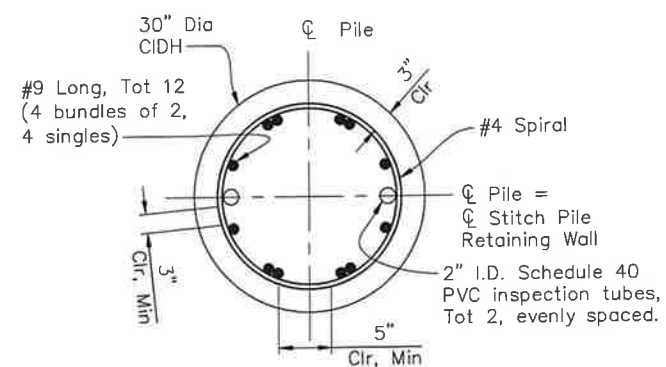
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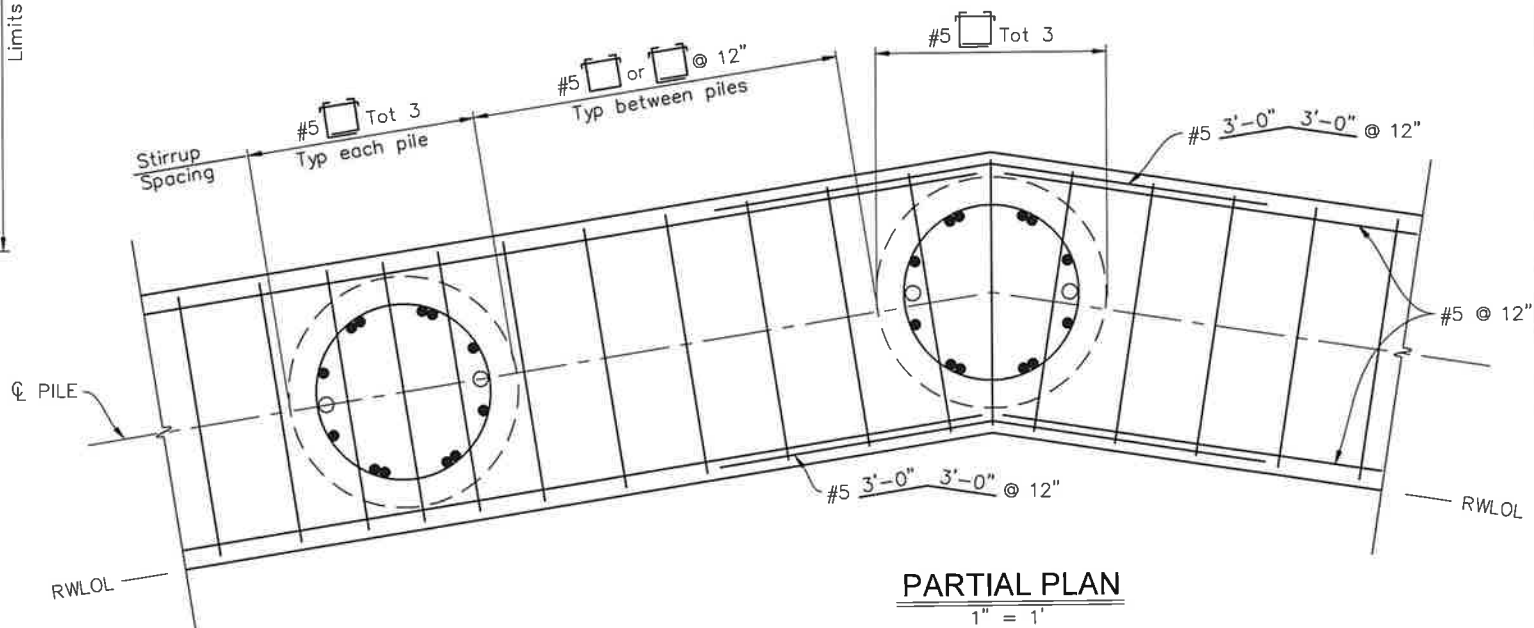
EARTHWORK PAYMENT LIMITS



STITCH PILE CAP SECTION
1" = 1'



SECTION A-A
1" = 1'



PARTIAL PLAN
1" = 1'

[illegible]

COUNTY OF LAKE
PUBLIC WORKS DEPARTMENT

PUBLIC WORKS DEPARTMENT
COURTHOUSE - 255 N. FORBES ST.
LAKEPORT, CALIFORNIA 95453
TEL: (707) 263-2341 FAX: (707) 263-7748
WWW.CO.LAKE.CA.US

PROJECT DESCRIPTION:
HILL ROAD LANDSLIDE REPAIR

2016.7.25

STITCH PILE DETAILS

TYPE	
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Date 1/18/2024

Scale AS SHOWN

Drawn AMH

Sheet 18

Of 18 Sheets

SP-2

