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7	DE-1	DETOUR PLAN

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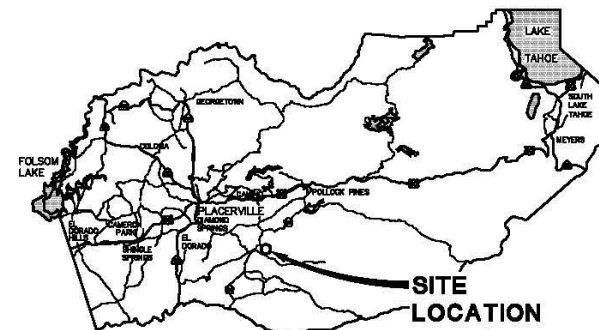
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# COUNTY OF EL DORADO, CA DEPARTMENT OF TRANSPORTATION

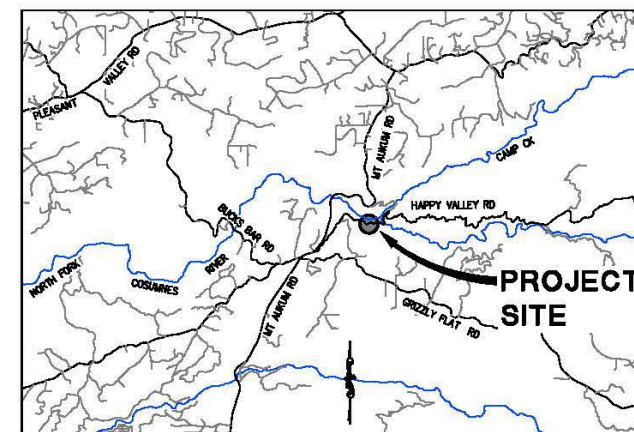
## PROJECT PLANS FOR THE CONSTRUCTION OF 2017 HAPPY VALLEY ROAD STORM DAMAGE REPAIR

IN THE COUNTY OF EL DORADO, DISTRICT 2  
APPROXIMATELY 1.04 MILES EAST OF THE HAPPY VALLEY RD/MT AUKUM RD INTERSECTION

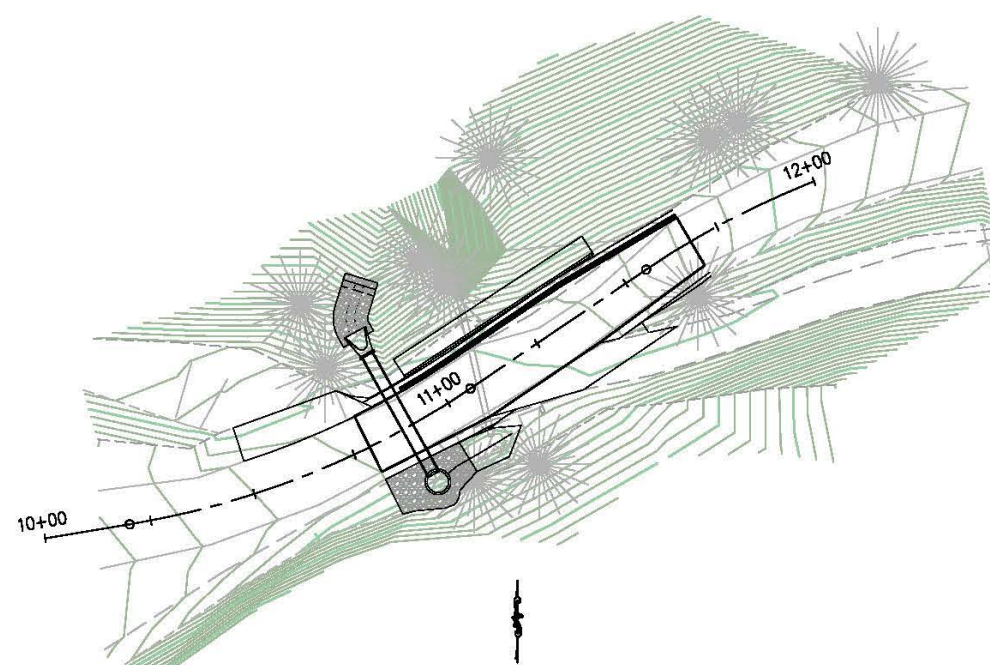
To be supplemented with Standard Plans and Specifications dated 2015, including the 2015 REVISED Standard Specifications, of the California Department of Transportation, unless otherwise noted.



**VICINITY MAP**  
COUNTY OF EL DORADO



**LOCATION MAP**  
NOT TO SCALE



**SITE PLAN**  
SCALE: 1"=30'

**CONTRACTOR'S LICENSE CLASSIFICATION:** Bidders shall be properly licensed to perform the Work pursuant to the State Contractor's License Act (Business and Professions Code section 7000 et seq.) and shall possess a CLASS A LICENSE or equivalent combination of Classes required by the categories and type of Work included in the Contract Documents and Plans. Failure of the successful Bidder to obtain proper and adequate licensing at the time bids are submitted shall constitute a failure to execute the Contract, and forfeiture as provided under that section.

**REVISIONS**

MARK	DATE	BY



SUBMITTED BY: DWIGHT G. ANDERSON DATE: \_\_\_\_\_  
CIVIL ENGINEER  
STATE OF CALIFORNIA NO. C69999

**BOARD OF SUPERVISORS**

I	JOHN HIDAHIL
II	SHIVA FRENTZEN
III	BRIAN VEERKAMP
IV	MICHAEL RANALLI
V	SUE NOVASEL

**COUNTY OF EL DORADO  
DEPARTMENT OF TRANSPORTATION**

(530) 621-5900  
2850 FAIRLANE CT  
PLACERVILLE, CA 95667

ADOPTED AND APPROVED BY:

MICHAEL RANALLI CHAIR, EL DORADO COUNTY BOARD OF SUPERVISORS	DATE
APPROVED BY:	DATE
RAFAEL MARTINEZ, DIRECTOR DEPARTMENT OF TRANSPORTATION	DATE
JOHN KANUNG P.E. NO. C52428 DEPUTY DIRECTOR, ENGINEERING	DATE

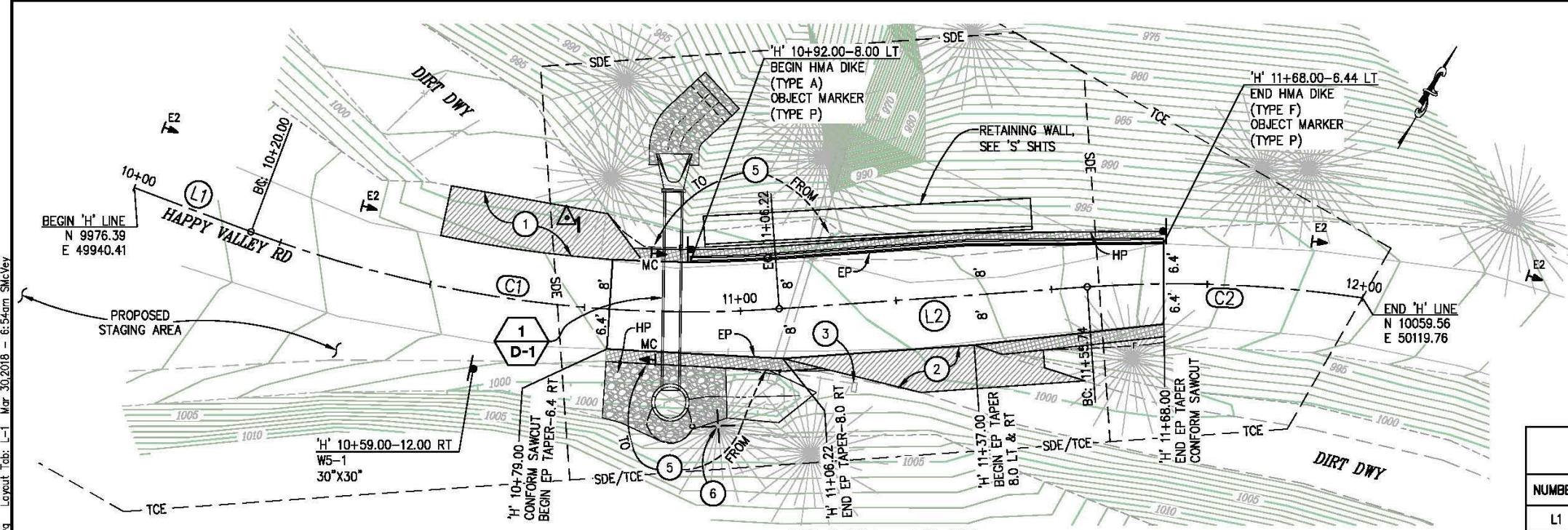
PW NO. 17-31206 PROJECT NO. 78724

**2017 HAPPY VALLEY ROAD  
STORM DAMAGE REPAIR**

**TITLE SHEET**

SHEET 1 OF 11

ORIGINAL SCALE IS IN INCHES  
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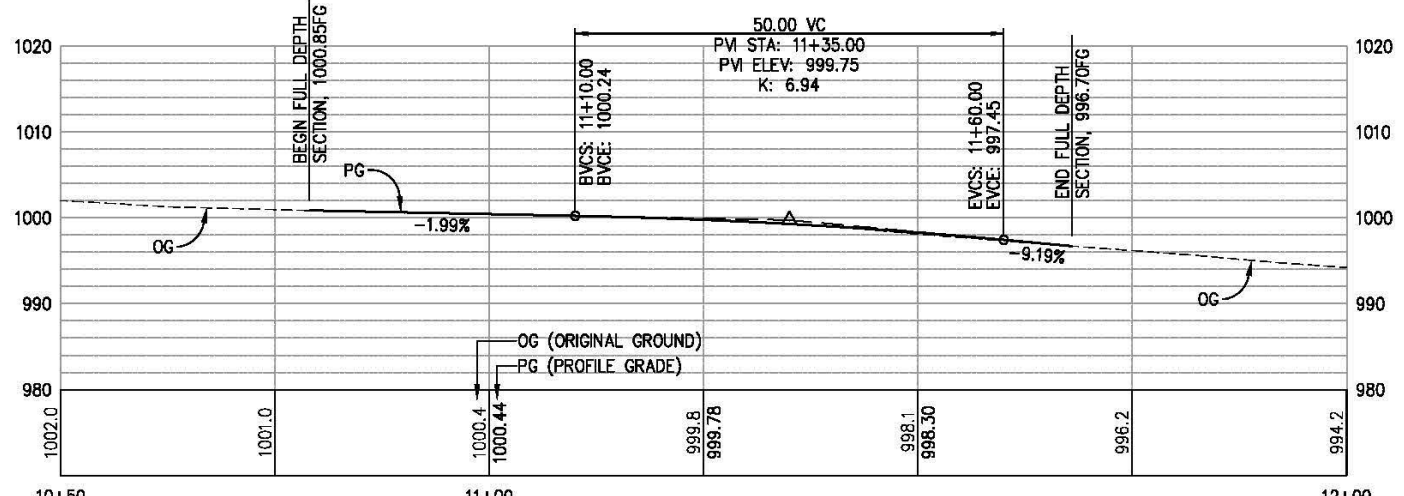
**'H' LINE - PLAN**  
SCALE: 1"=10'

CONTROL TABLE				
CONTROL NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	10006.91	50002.89	1000.00	CP Spike
2	10087.74	50240.16	983.88	CP Spike
3	10022.68	50513.30	966.93	CP Spike
4	10155.54	50660.92	957.36	CP Spike

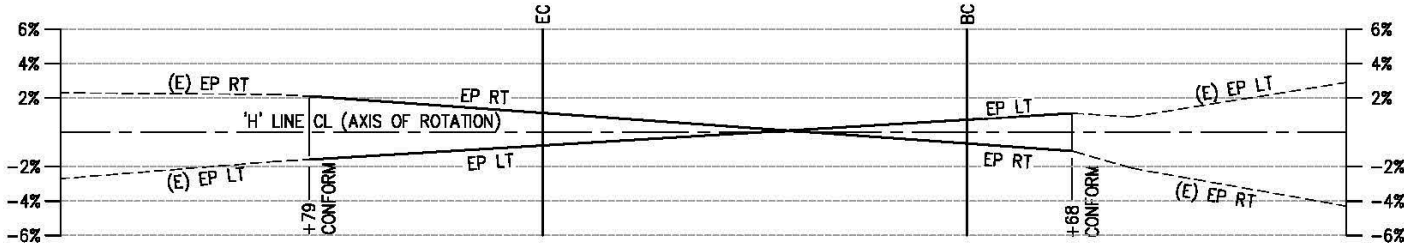
**SURVEY AND CONTROL NOTES:**  
 COORDINATES AND ELEVATIONS SHOWN HEREON ARE ASSUMED.  
 CONTROL POINTS AS SHOWN ARE TEMPORARY BENCH MARKS.

'H' LINE ALIGNMENT DATA				
NUMBER	LENGTH	RADIUS	LINE / CHORD DIRECTION & LENGTH	DELTA
L1	20.00		N 80° 38' 40" E	
C1	86.22	200.00	N 68° 17' 39" E - 85.56	24° 42' 03"
L2	49.52		N 55° 56' 37" E	
C2	44.26	200.00	N 62° 16' 58" E - 44.17	12° 40' 42"

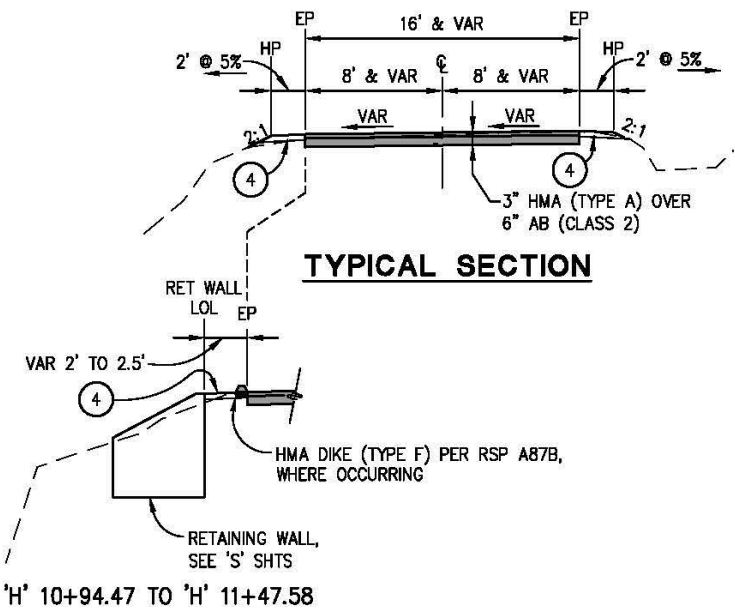
- CONSTRUCTION NOTES:**
- ① - GRAVEL DRIVEWAY, DWY 1, SEE SHT L-2
  - ② - GRAVEL DRIVEWAY, DWY 2, SEE SHT L-2
  - ③ - RELOCATE MAILBOX, INSTALL/MAINTAIN TEMP MAILBOX
  - ④ - 4" SHOULDER BACKING, AB (CLASS 2) LIMITS SHOWN AS HATCH
  - ⑤ - RELOCATE CULVERT MARKERS TO NEW CULVERT CROSSING LOCATION (TOTAL 2)
  - ⑥ - REMOVE TREE, TAG # 5501, 1.27" FIR



**'H' LINE - PROFILE**  
SCALE: 1"=10' H,V



**'H' LINE - SUPERELEVATION**



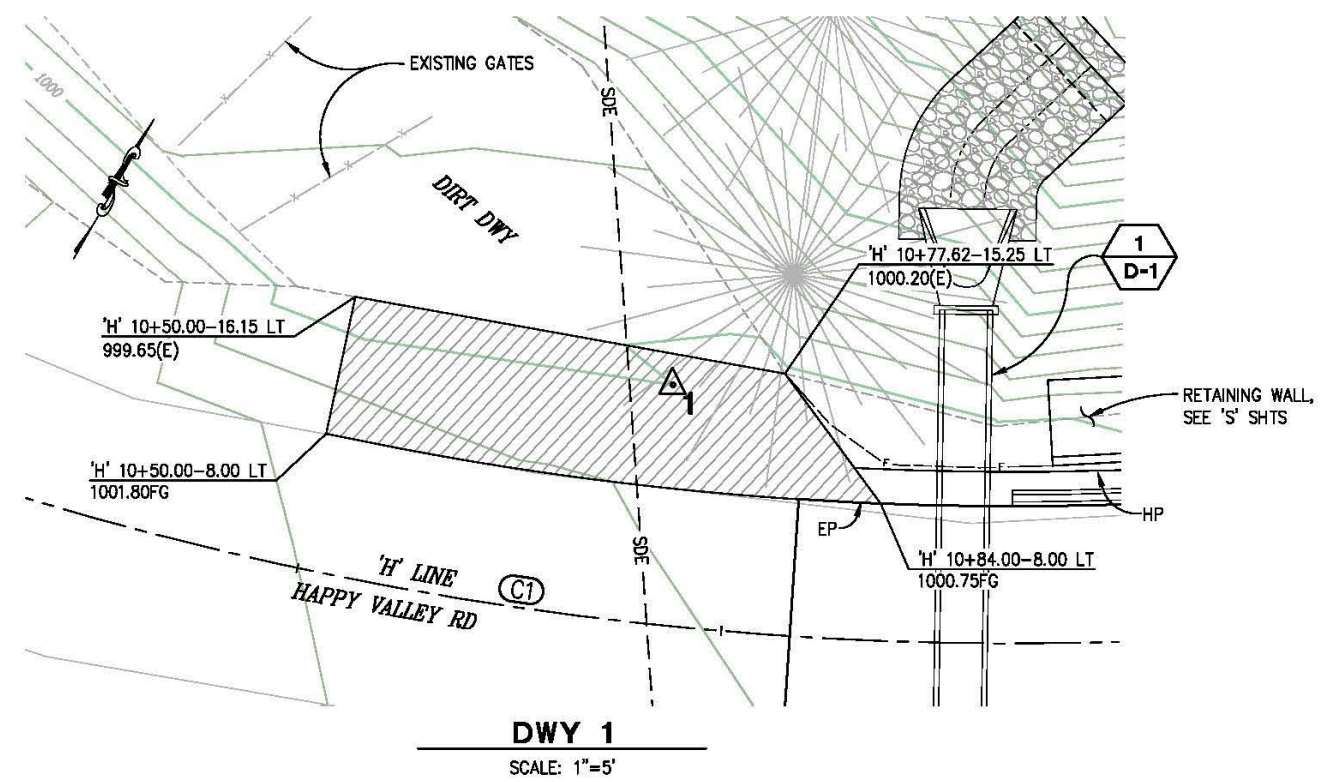
**TYPICAL SECTION**

DELINEATORS	
LOCATION	TYPE E CLASS 2
'H' 10+01 LT	1
'H' 10+36 LT	1
'H' 11+91 LT	1
'H' 12+26 LT	1
TOTAL	4

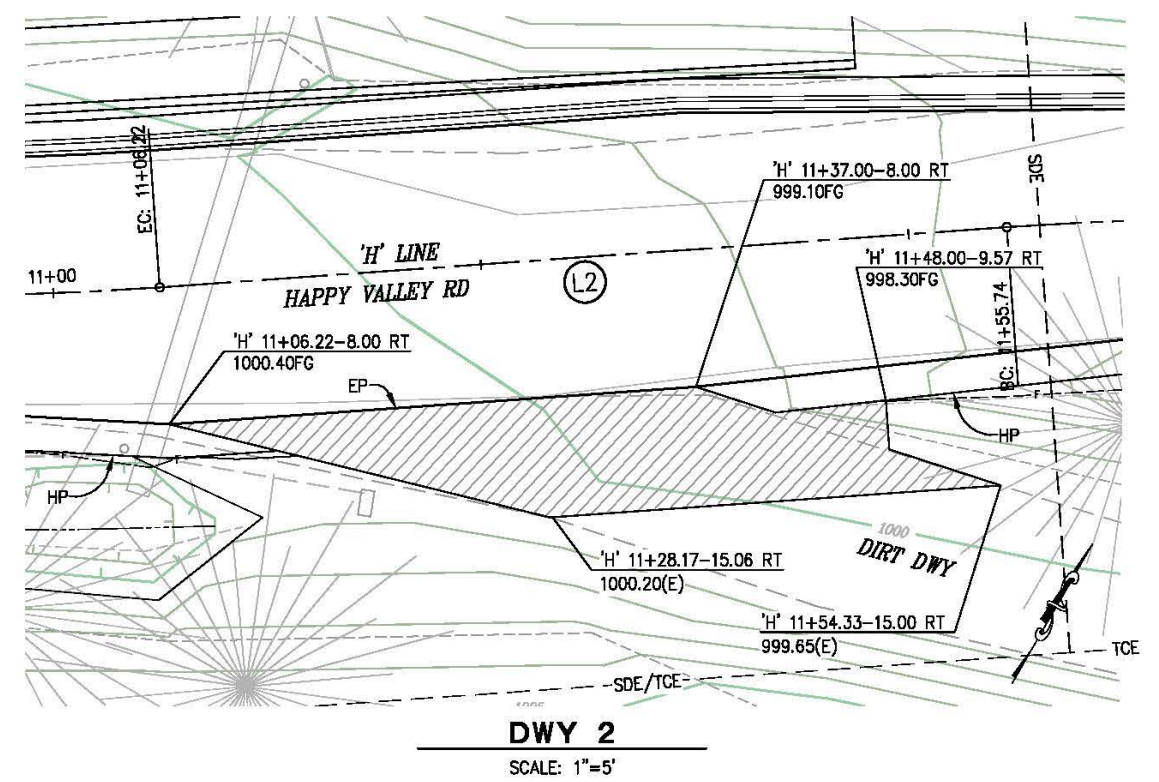
LAYOUT SCALE: AS SHOWN

<p>FOR REDUCED PLANS</p> <p>REVISION</p> <table border="1"> <thead> <tr> <th>NUMBER</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	NUMBER	DATE	DESCRIPTION	BY					<p>PREPARED UNDER THE SUPERVISION OF:</p> <p>REGISTERED CIVIL ENGINEER</p>	<p>DESIGNED: DA</p> <p>DRAWN: SGM</p> <p>CHECKED: CG</p> <p>DATE: 03/30/18</p> <p>ROAD NUMBER: OBO</p>	<p>COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION</p>	<p>2017 HAPPY VALLEY ROAD STORM DAMAGE REPAIR</p>	<p>SHEET L-1 2 OF 11 W.O. No. 78724</p>
NUMBER	DATE	DESCRIPTION	BY										

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 Drawing name: C:\Civil\_3D Projects\48918\_Happy Valley Road\_Side\_CADD\_Files\Sheets\Layout\_Tab: L-2\_Mar\_30\_2018 - 6:31am\_SMcKey



**DWY 1**  
SCALE: 1"=5'



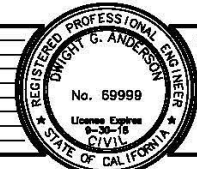
**DWY 2**  
SCALE: 1"=5'

**CONSTRUCTION NOTES:**  
 - AB (CLASS 2), 6" MIN THICKNESS

FOR REDUCED PLANS  
 2  
1  
0

LAYOUT  
SCALE : AS SHOWN

REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF:  
 REGISTERED CIVIL ENGINEER  
 DATE: \_\_\_\_\_

DESIGNED: DA  
 DRAWN: SGM  
 CHECKED: CG  
 DATE: 03/30/18  
 ROAD NUMBER: OBO

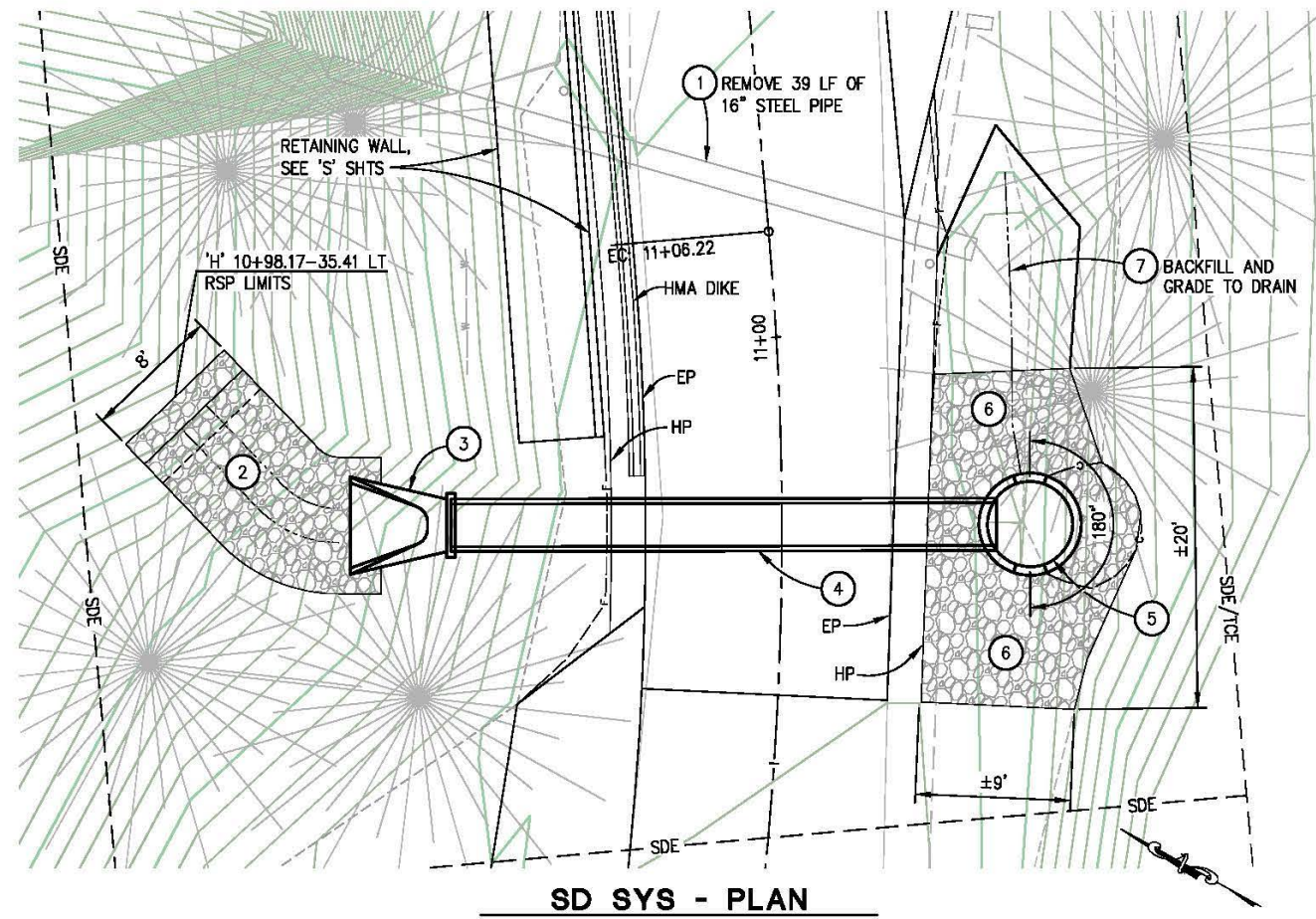


COUNTY OF EL DORADO  
DEPARTMENT OF TRANSPORTATION

2017 HAPPY VALLEY ROAD  
STORM DAMAGE REPAIR

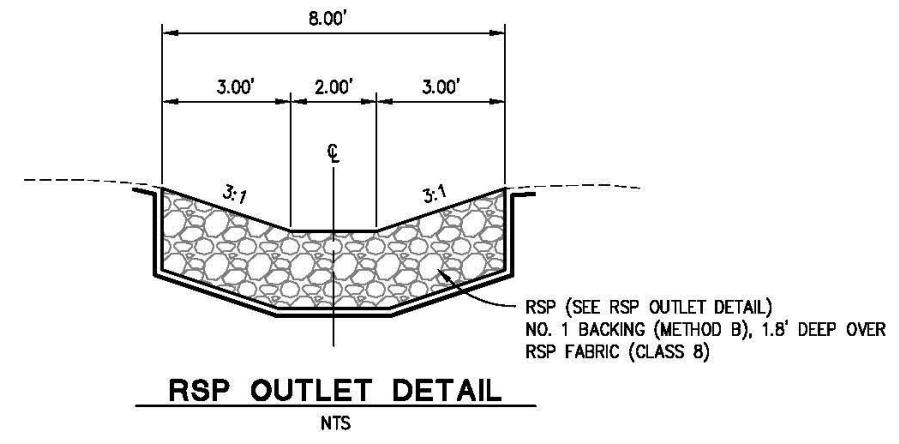
SHEET  
L-2  
3 OF 11  
W.O. No. 78724

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 FOR REDUCED PLANS  
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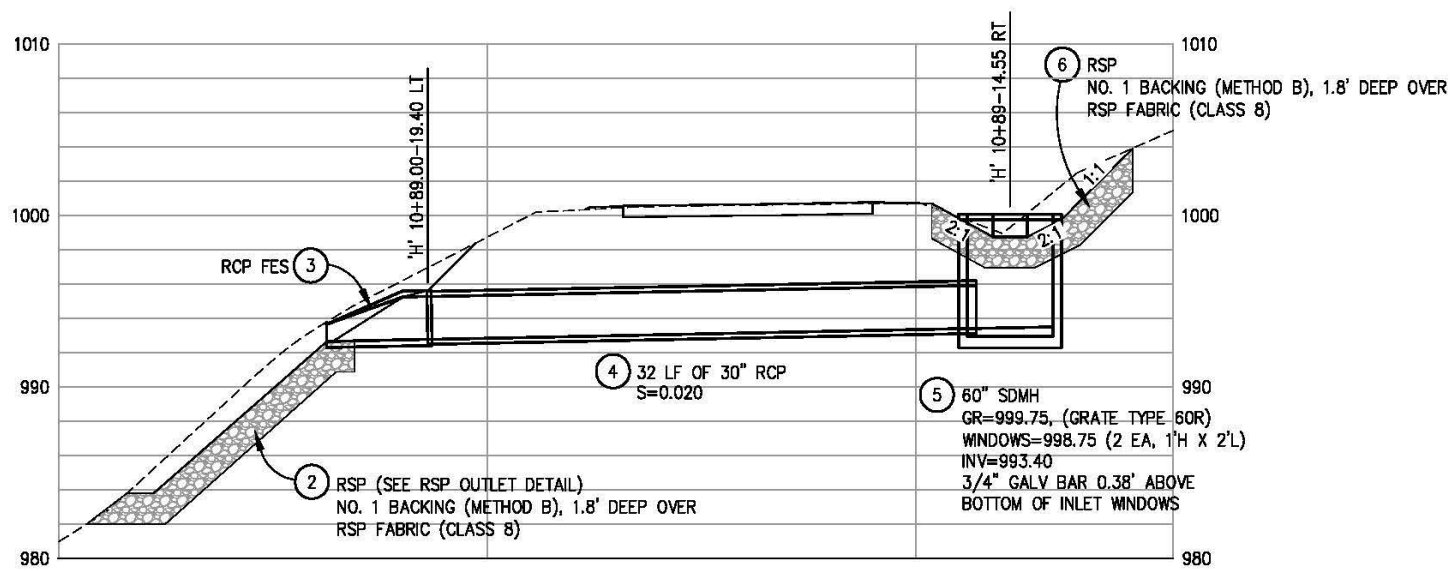
**SD SYS - PLAN**

SCALE: 1"=5'



**RSP OUTLET DETAIL**

NTS

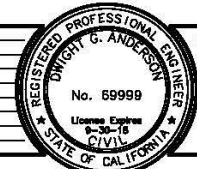


**SD SYS - PROFILE**

SCALE: 1"=5' H,V

**DRAINAGE SCALE : AS SHOWN**

REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF:  
 DWIGHT G. ANDERSON  
 No. 69999  
 LICENSED PROFESSIONAL ENGINEER  
 REGISTERED CIVIL ENGINEER  
 DATE: \_\_\_\_\_

DESIGNED: DA  
 DRAWN: SGM  
 CHECKED: CG  
 DATE: 03/30/18  
 ROAD NUMBER: OBO

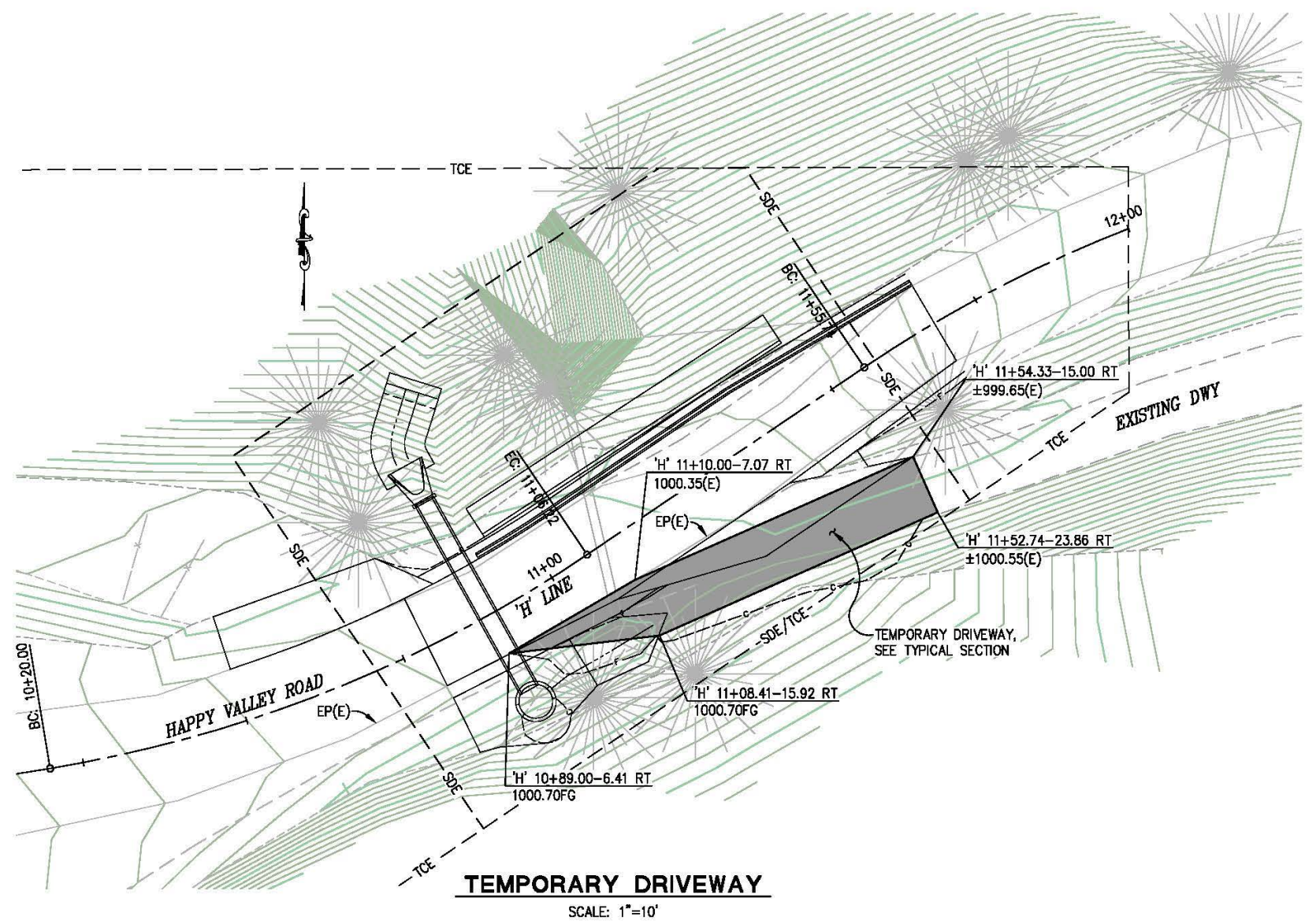


**COUNTY OF EL DORADO  
 DEPARTMENT OF TRANSPORTATION**

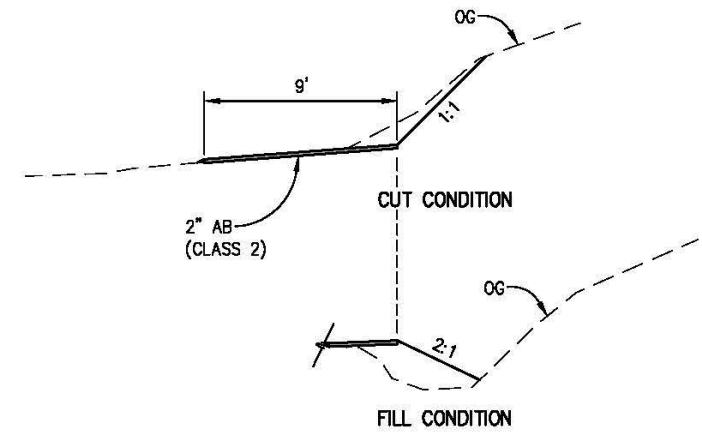
**2017 HAPPY VALLEY ROAD  
 STORM DAMAGE REPAIR**

SHEET  
**D-1**  
 4 OF 11  
 W.O. No. **78724**

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 FOR REDUCED PLANS  
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**TEMPORARY DRIVEWAY**  
SCALE: 1"=10'



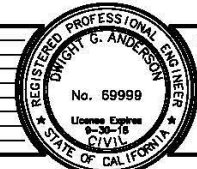
**TEMPORARY DRIVEWAY  
TYPICAL SECTION**  
NTS

**GENERAL NOTES:**

- TEMPORARY DRIVEWAY FOR PROPERTY OWNER ACCESS DURING CONSTRUCTION, RESTORE SLOPES TO ORIGINAL CONTOURS AND REFER TO SHTS L-2 AND D-1 FOR FINAL GRADING

**TEMPORARY DRIVEWAY  
SCALE : AS SHOWN**

REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF:  
 REGISTERED CIVIL ENGINEER  
 DATE:

DESIGNED: DA  
 DRAWN: SGM  
 CHECKED: CG  
 DATE: 03/30/18  
 ROAD NUMBER: OBO

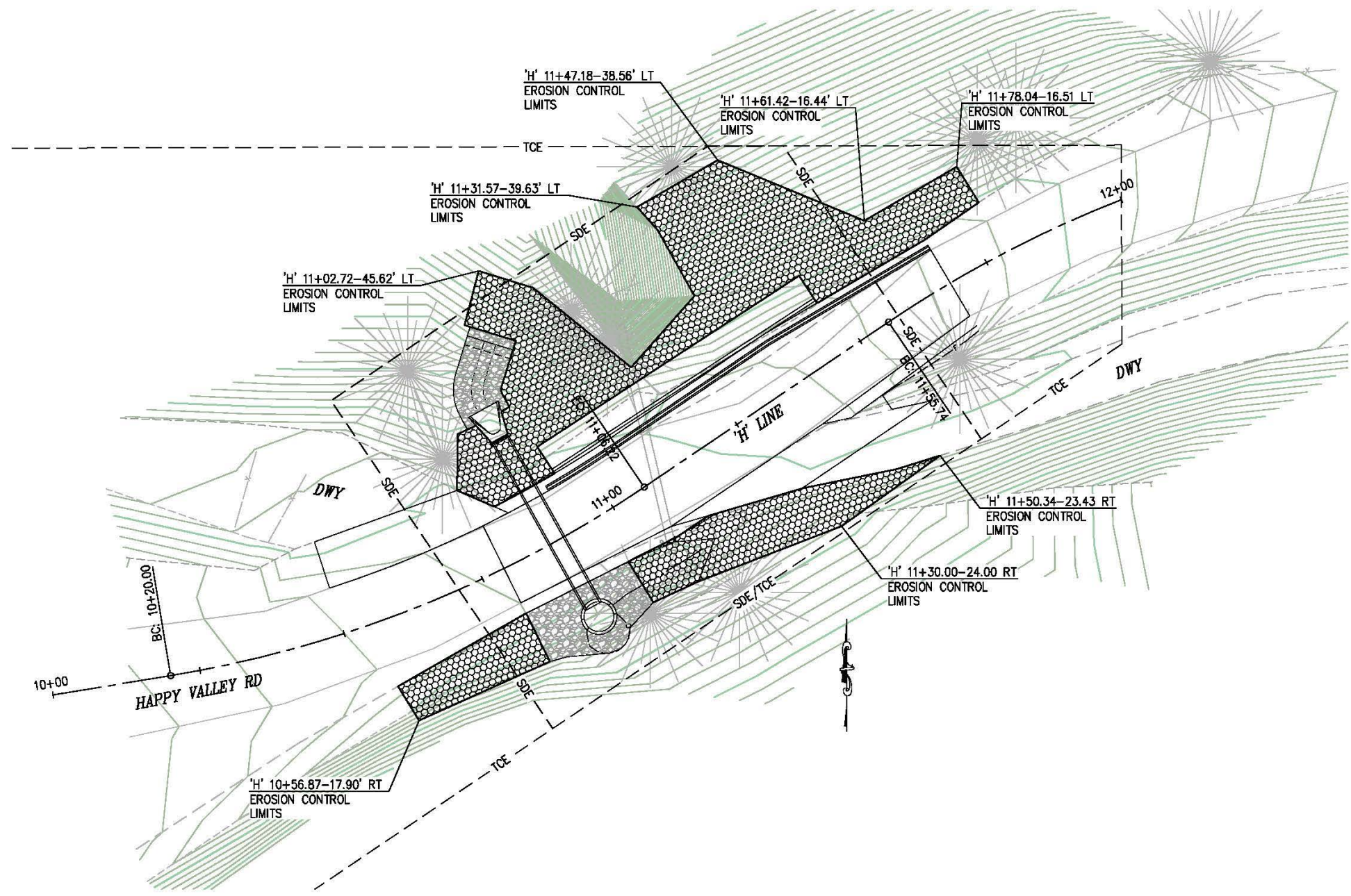


**COUNTY OF EL DORADO  
DEPARTMENT OF TRANSPORTATION**

**2017 HAPPY VALLEY ROAD  
STORM DAMAGE REPAIR**

SHEET  
**SC-1**  
 5 OF 11  
 W.O. No. **78724**

ORIGINAL SCALE IS IN INCHES  
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 FOR REDUCED PLANS  
 2  
 1  
 0



**LEGEND:**  
 — RECP WITH HYDROSEED

**EROSION CONTROL**  
**SCALE : 1" = 10'**

REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF :  
 REGISTERED CIVIL ENGINEER  
 DATE:

DESIGNED: DA  
 DRAWN: SGM  
 CHECKED: CG  
 DATE: 03/30/18  
 ROAD NUMBER: OBO



**COUNTY OF EL DORADO**  
**DEPARTMENT OF TRANSPORTATION**

**2017 HAPPY VALLEY ROAD**  
**STORM DAMAGE REPAIR**

SHEET  
**EC-1**  
 6 OF 11  
 W.O. No. **78724**

ORIGINAL SCALE IS IN INCHES  
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 FOR REDUCED PLANS  
 2  
 1  
 0

PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) TABLE				
PCMS No.	POST MILE (PM)	FIRST FLASH	SECOND FLASH	THIRD FLASH
1	MT AUKUM RD ±8.97	HAPPY VALLEY ROAD	CLOSED (DATE) (DATE)	1 MIKE AHEAD
2	MT AUKUM RD ±9.16	HAPPY VALLEY ROAD	CLOSED (DATE) (DATE)	1 MILE AHEAD
3	MT AUKUM RD ±10.60	HAPPY VALLEY ROAD	CLOSED (DATE) (DATE)	1000 FT WEST OF RIVER

- GENERAL NOTES:**
- ADVANCED WARNING SIGNS TO BE PLACED PER CALIFORNIA MANUAL ON TRAFFIC CONTROL DEVICES. EXACT LOCATION OF SIGNS AND BARRICADES TO BE DETERMINED BY THE ENGINEER.
  - ALL SIGNS SHALL BE PLACED ON TEMPORARY WOOD POSTS, EXCEPT PCMS' AND SIGNS ON TYPE III BARRICADES.

**LEGEND**

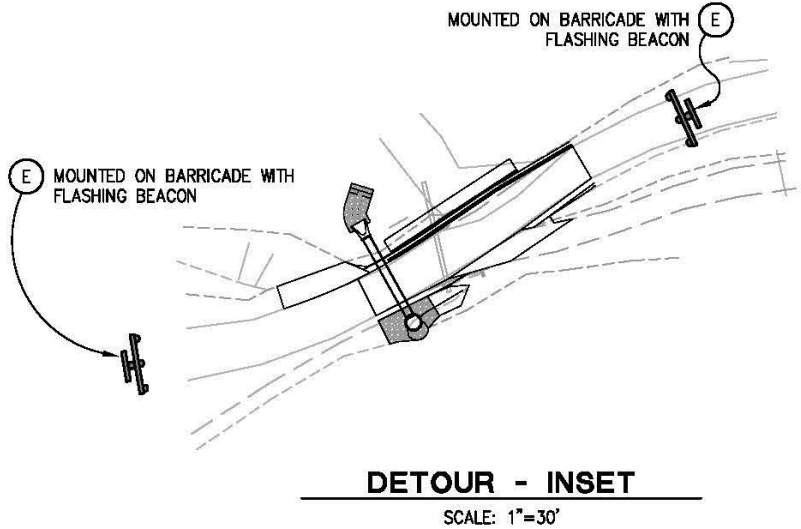
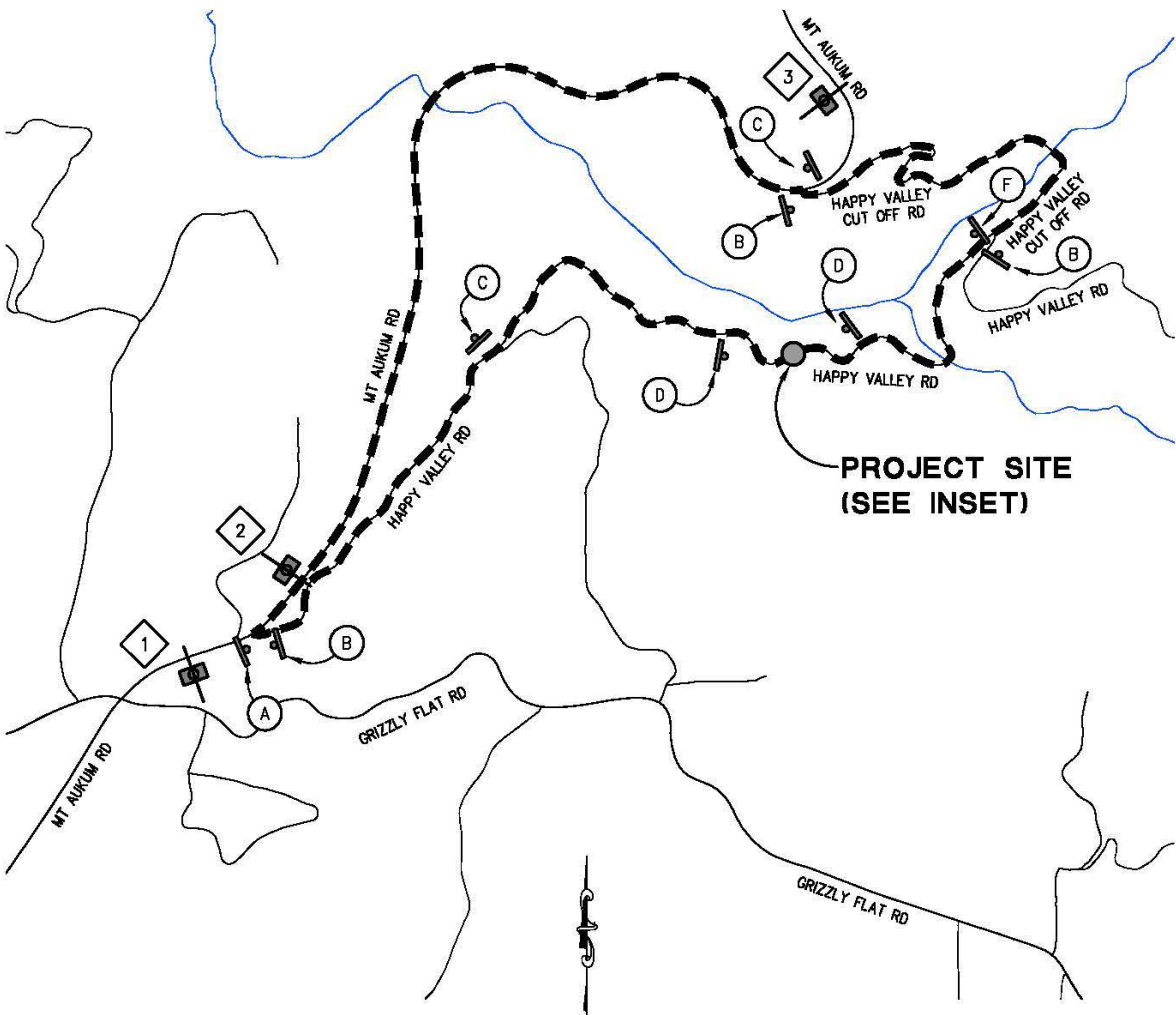
- PCMS - PORTABLE CHANGEABLE MESSAGE SIGN
- TEMPORARY SIGN
- TYPE III BARRICADE(S) w/ FLASHING BEACON

**HAPPY VALLEY ROAD DETOUR**

- (A) M4-9 SIGN, BLACK LETTERING ON ORANGE BACKGROUND (ARROW FACING UP)
- (B) M4-9 SIGN, BLACK LETTERING ON ORANGE BACKGROUND (ARROW FACING RIGHT)
- (C) M4-9 SIGN, BLACK LETTERING ON ORANGE BACKGROUND (ARROW FACING LEFT)

**ROAD CLOSED AHEAD**

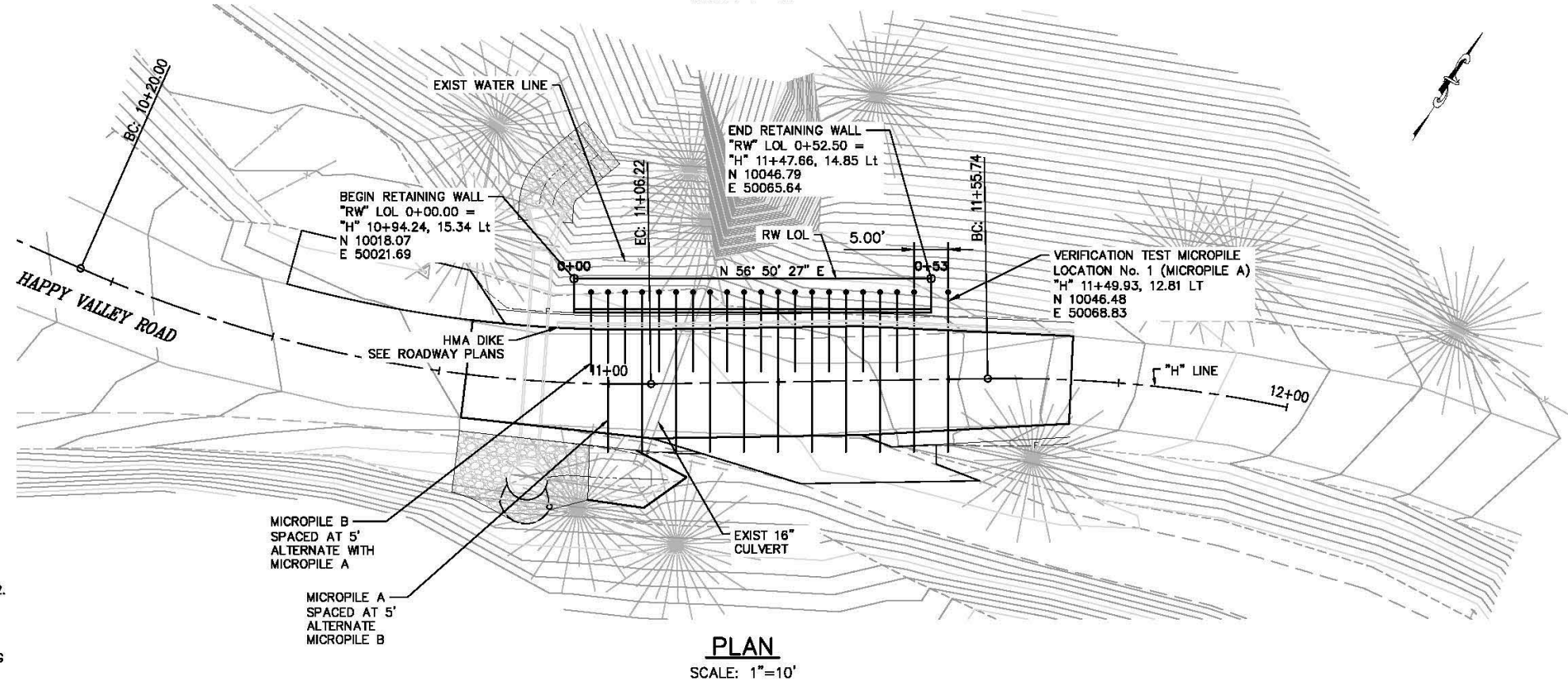
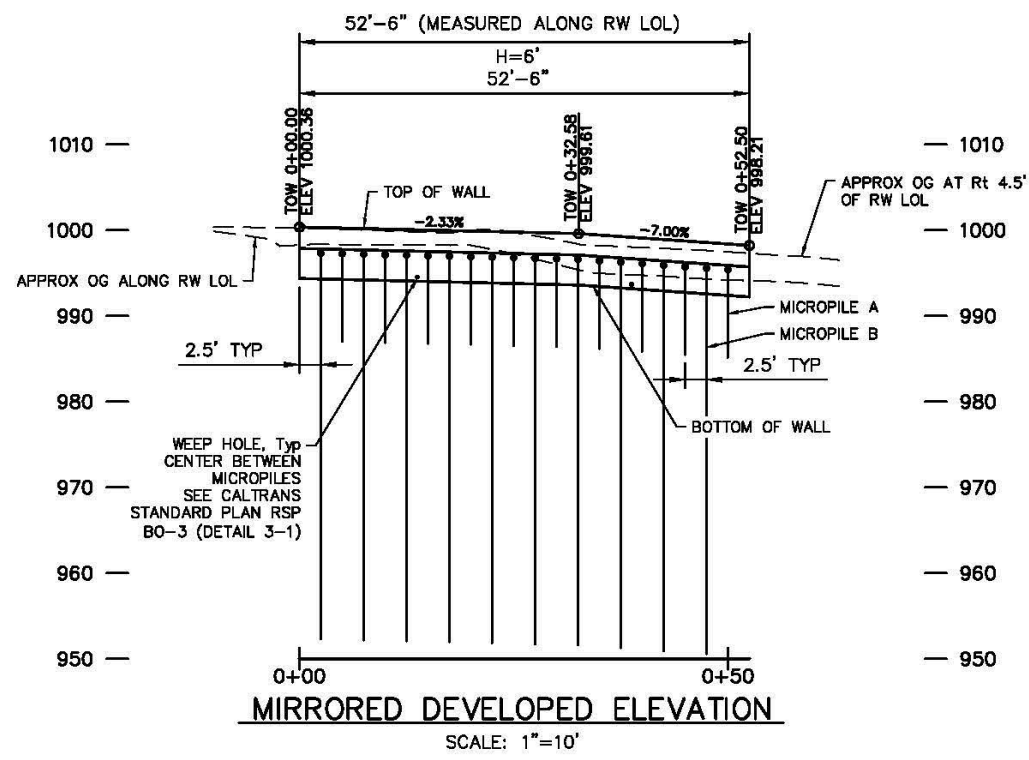
- (D) C19 (CA) SIGN, BLACK LETTERING ON ORANGE BACKGROUND W16P-2aP ("200 FT")
- (E) R11-2 SIGN, BLACK LETTERING ON ORANGE BACKGROUND
- (F) C19 (CA) SIGN, BLACK LETTERING ON ORANGE BACKGROUND W16P-2aP ("800 FT")



**DETOUR PLAN**  
SCALE : AS SHOWN

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REVISION	NUMBER	DATE	DESCRIPTION	BY																						

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 FOR REDUCED PLANS



- NOTES:**
1. FOR TYPICAL SECTION, GENERAL NOTES, DESIGN TABLE, AND DRAINAGE DETAILS SEE DRAWING S-2.
  2. SLOPES DISTURBED AT WALL ENDS TO BE RECONSTRUCTED TO MATCH EXISTING SLOPES.
  3. THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

**RETAINING WALL LAYOUT**  
SCALE : AS SHOWN

REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF:  
**SEAN J. SMITH**  
 REGISTERED CIVIL ENGINEER  
 DATE: 3-26-2018

DESIGNED: S. SMITH  
 DRAWN: AIM  
 CHECKED: T. VESCO  
 DATE: 1/24/2018  
 ROAD NUMBER: 080



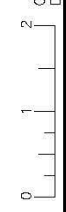
**COUNTY OF EL DORADO**  
**DEPARTMENT OF TRANSPORTATION**

**2017 HAPPY VALLEY ROAD**  
**STORM DAMAGE REPAIR**

SHEET  
**S-1**  
 B OF 11  
 W.O. No. 78724

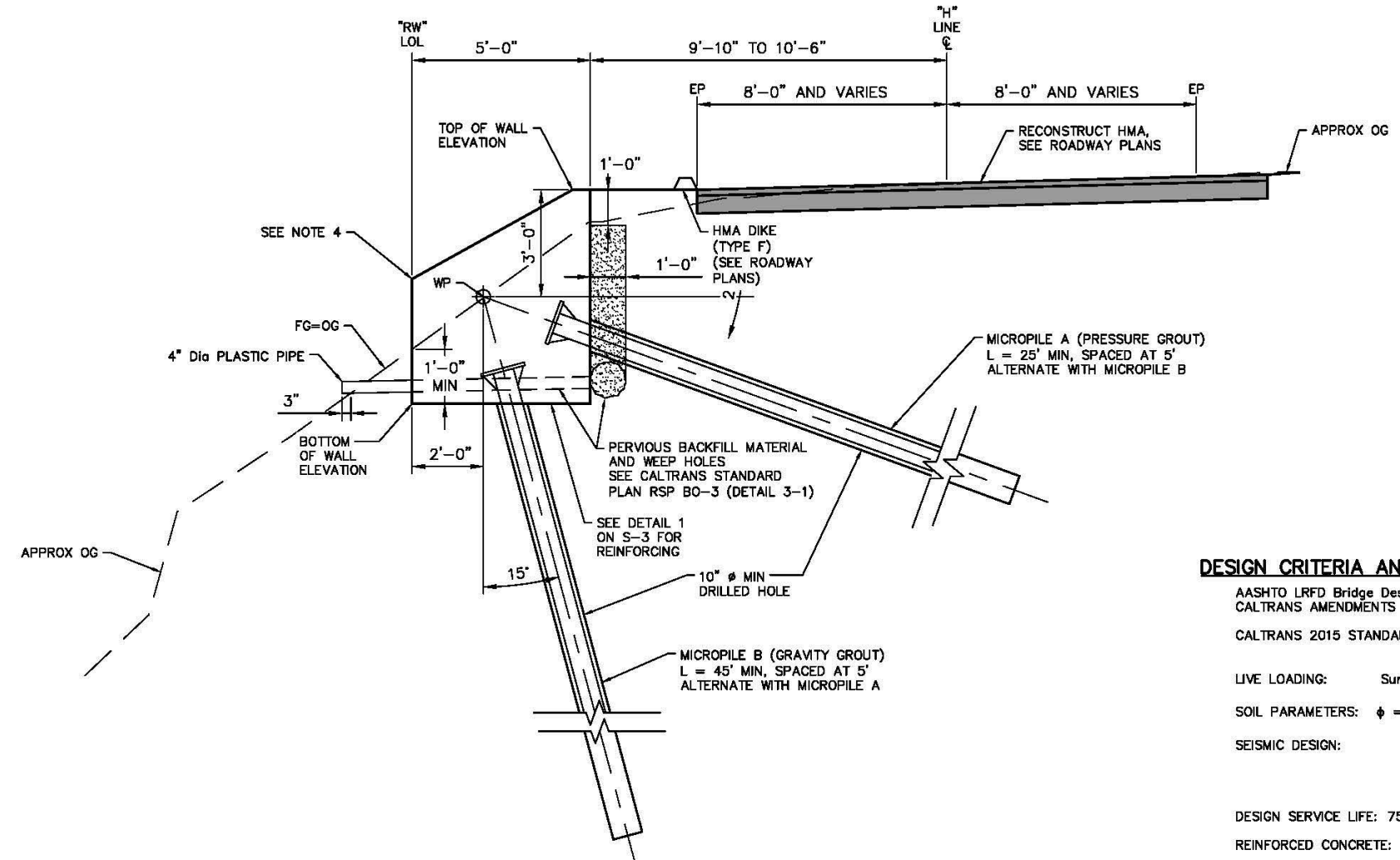


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 FOR REDUCED PLANS:



PILE ID	PILE TYPE	NOMINAL RESISTANCE (kips)		CASED LENGTH	UNCASED LENGTH	SL (kips)	FDL (kips)	FTL (kips)	LL (kips)
		COMPRESSION	TENSION						
MICROPILE A	10" MICROPILE	-	52	15 ft	10 ft	16.4	23.4	39.1	1.6
MICROPILE B	10" MICROPILE	68	-	25 ft	20 ft	29.1	37.4	62.5	2.9

**LEGEND:**  
 SL = SERVICE LOAD  
 FDL = FACTORIAL DESIGN LOAD  
 FTL = FACTORED TEST LOAD  
 LL = LOCK-OFF LOAD



**TYPICAL SECTION**  
 SCALE: 1"=10'

**DESIGN CRITERIA AND PARAMETERS:**  
 AASHTO LRFD Bridge Design Specifications, 6th Edition, AND CALTRANS AMENDMENTS PREFACE DATED JANUARY 2014.  
 CALTRANS 2015 STANDARD PLANS AND STANDARD SPECIFICATIONS.

LIVE LOADING: Surcharge = 240 lb/ft<sup>2</sup>

SOIL PARAMETERS:  $\phi = 34^\circ$ ,  $\gamma = 115 \text{ lbs/ft}^3$

SEISMIC DESIGN: PGA = 0.22g  
 K<sub>h</sub> = 0.07g  
 K<sub>v</sub> = 0.0g  
 K<sub>ae</sub> = 0.30g

DESIGN SERVICE LIFE: 75 YEARS

REINFORCED CONCRETE:  $f'_c = 60,000 \text{ psi}$   
 $f'_t = 3,600 \text{ psi}$   
 n = 8

GROUT:  $f'_c = 4000 \text{ psi}$

STRUCTURAL STEEL BEARING PLATE: ASTM A36  
 $f_y = 36 \text{ ksi}$

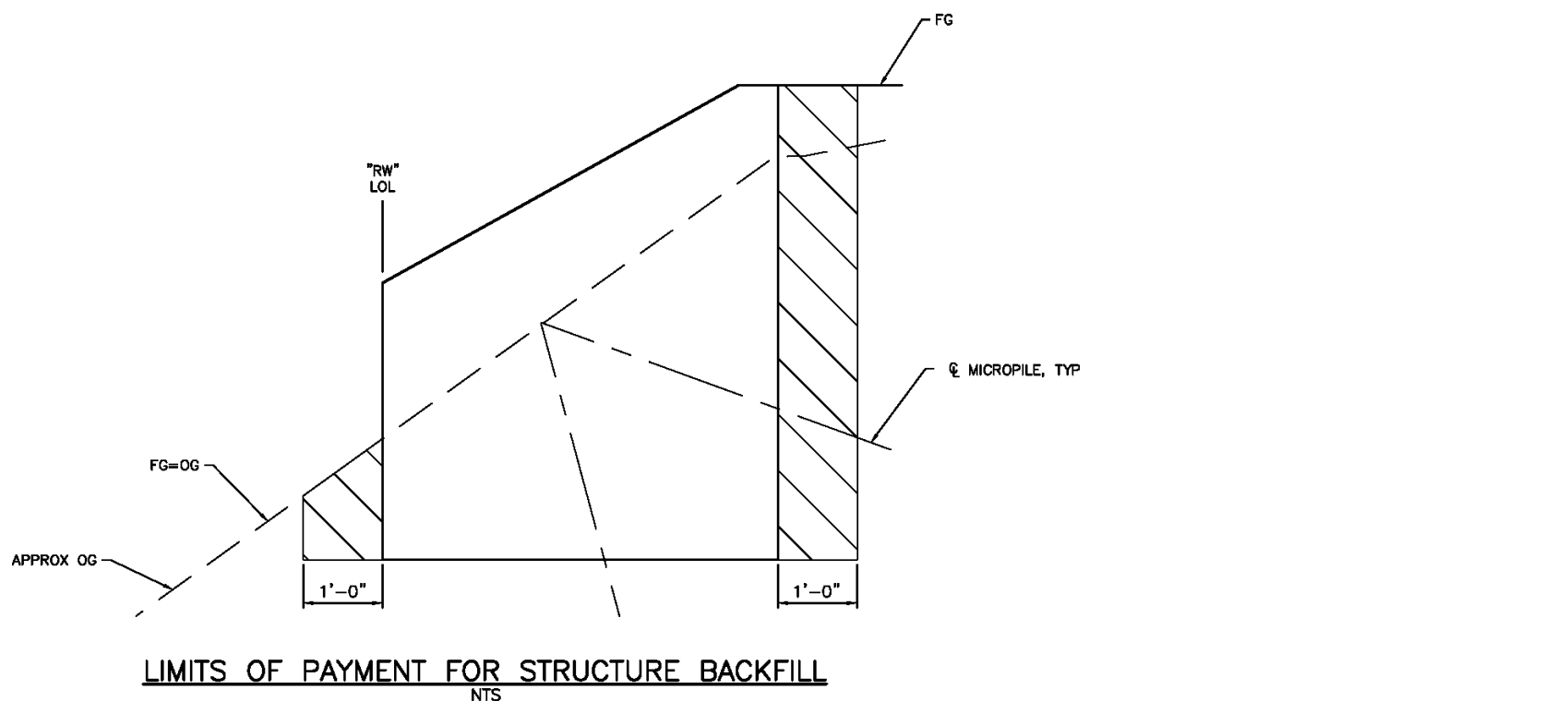
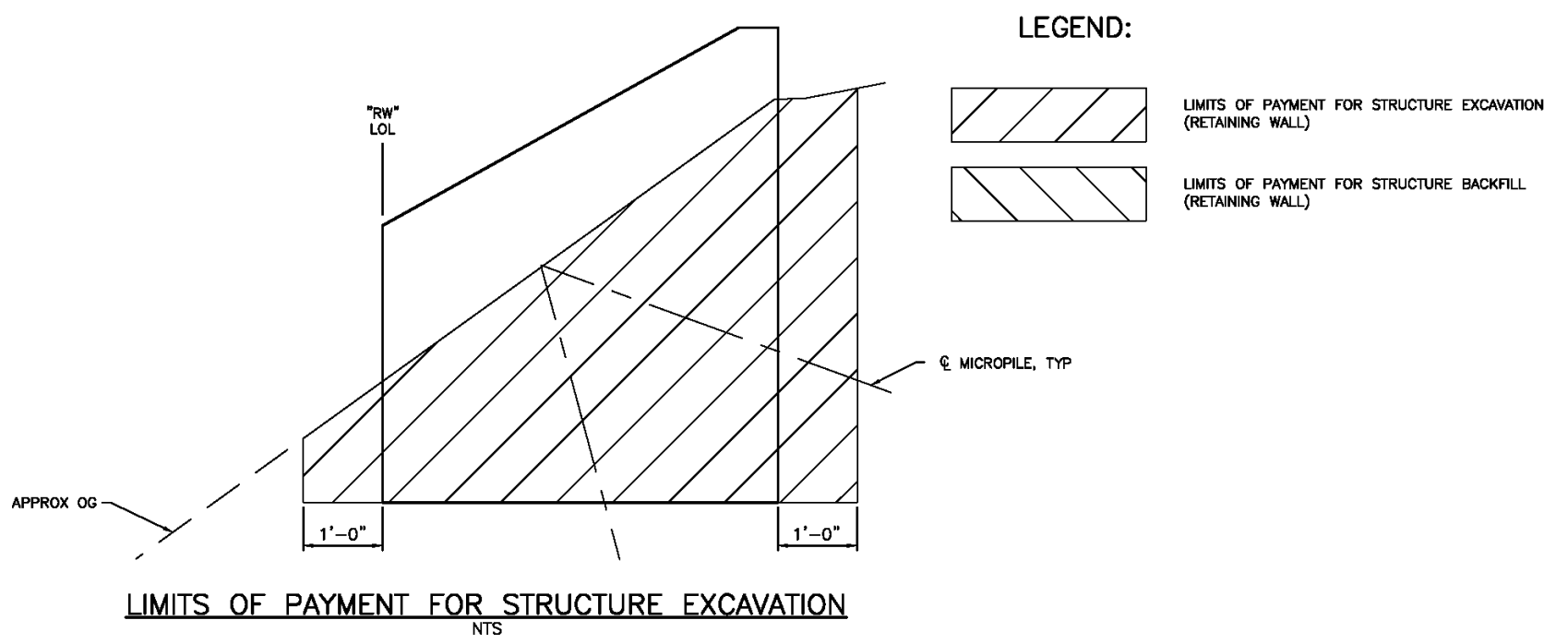
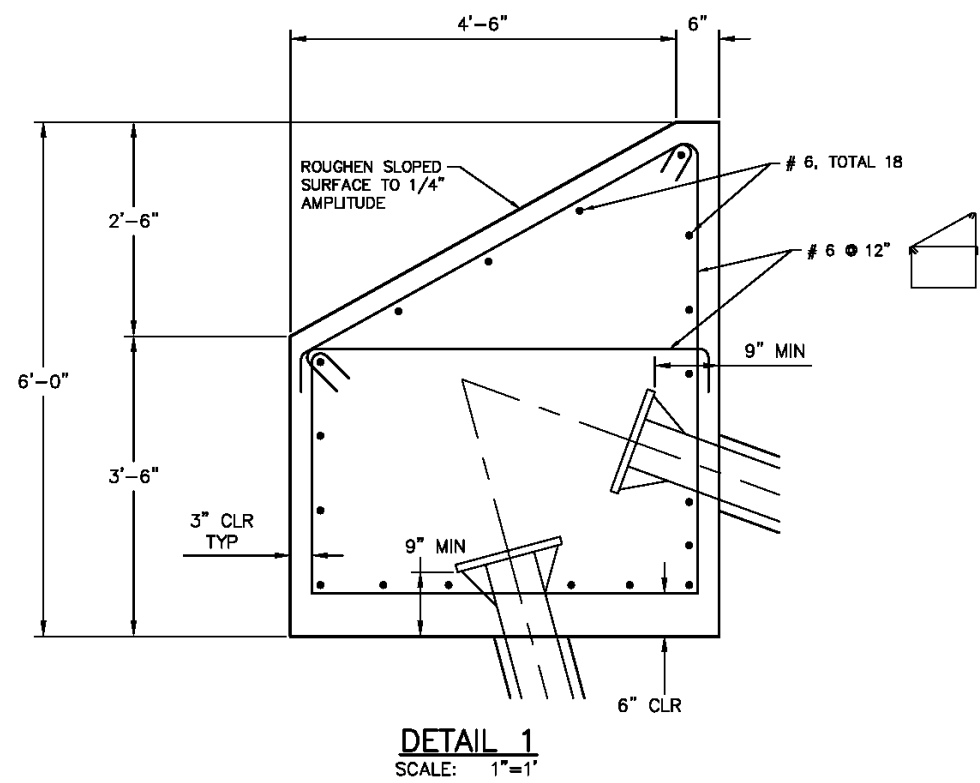
HIGH STRENGTH THREAD BAR: ASTM A722  
 GRADE 150

- NOTES:**
- SLOPES DISTURBED AT WALL ENDS TO BE RECONSTRUCTED TO MATCH EXISTING SLOPES.
  - SEE SHEET S-3 FOR LIMITS OF STRUCTURE EXCAVATION AND LIMITS OF STRUCTURE BACKFILL.
  - THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.
  - WHERE EXISTING OG ELEVATION IS ABOVE TOP OF WALL AT FACE, BENCH FG AS NECESSARY.


**RETAINING WALL DETAILS No. 1**  
 SCALE : AS SHOWN


REVISION NUMBER DATE DESCRIPTION BY			PREPARED UNDER THE SUPERVISION OF: <b>SEAN J. SMITH</b> REGISTERED CIVIL ENGINEER DATE: 3-26-2018	DESIGNED: S. SMITH DRAWN: AIM CHECKED: T. VESCO DATE: 1/24/2018 ROAD NUMBER: OBO		<b>COUNTY OF EL DORADO</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>2017 HAPPY VALLEY ROAD</b> <b>STORM DAMAGE REPAIR</b>	SHEET <b>S-2</b> 9 OF 11 W.O. No. 78724
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 FOR REDUCED PLANS  
 2  
 1  
 0



**LEGEND:**

 LIMITS OF PAYMENT FOR STRUCTURE EXCAVATION (RETAINING WALL)

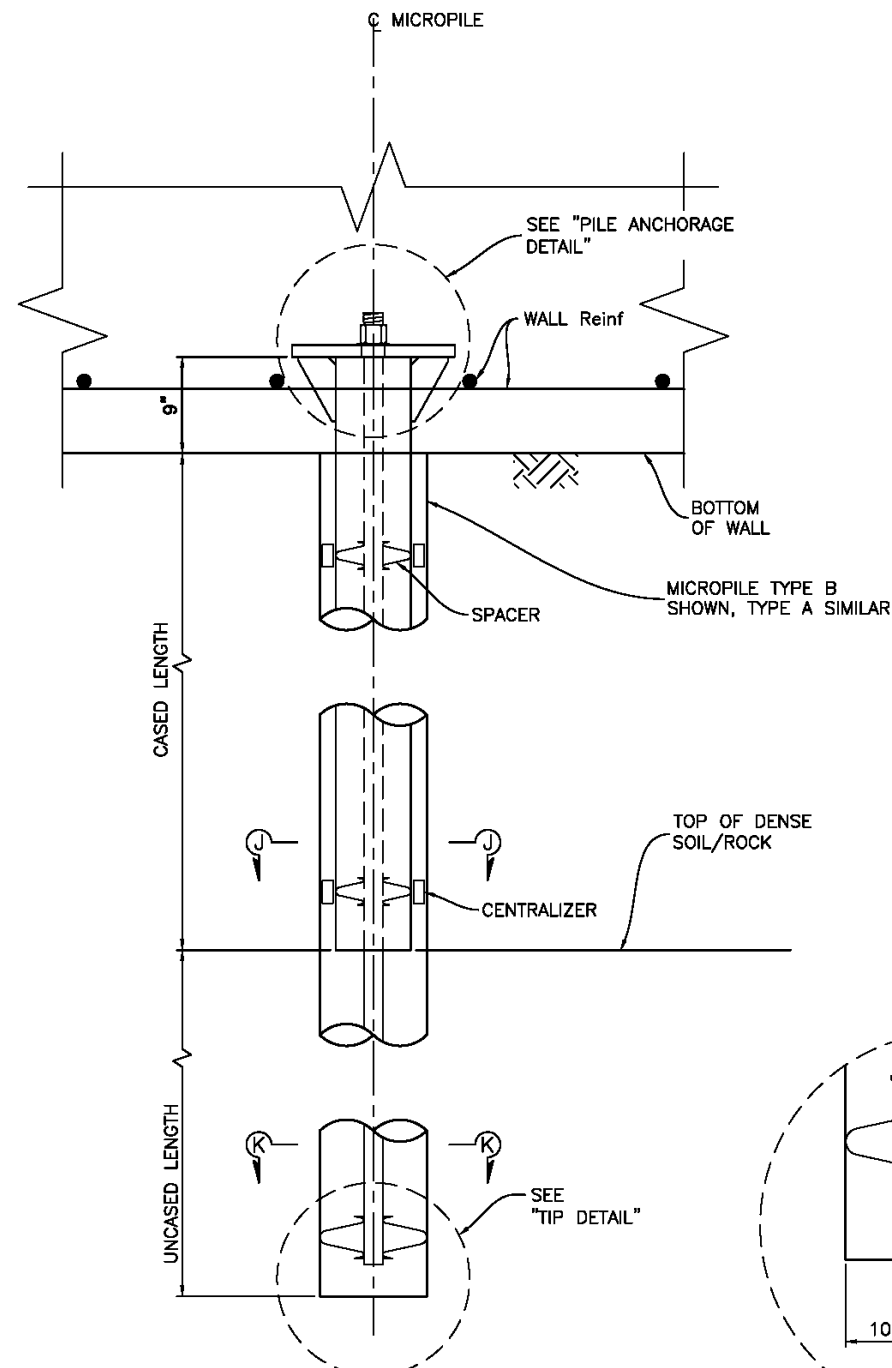
 LIMITS OF PAYMENT FOR STRUCTURE BACKFILL (RETAINING WALL)

**NOTES:**  
1. THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

**RETAINING WALL DETAILS No. 2**  
SCALE : AS SHOWN

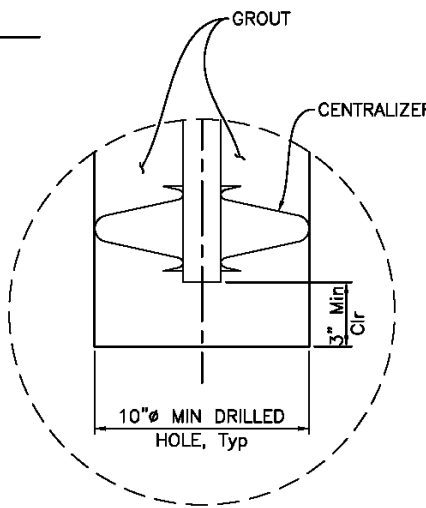
DESIGNED: S. SMITH CHECKED: T. VESCO ROAD NUMBER: OBO		DRAWN: AIM DATE: 1/24/2018		 PREPARED UNDER THE SUPERVISION OF: <b>SEAN J. SMITH</b> REGISTERED CIVIL ENGINEER DATE: 3-26-2018		 <b>COUNTY OF EL DORADO</b> DEPARTMENT OF TRANSPORTATION		<b>2017 HAPPY VALLEY ROAD</b> <b>STORM DAMAGE REPAIR</b>		SHEET <b>S-3</b> 10 OF 11 W.O. No. 78724	
REVISION	NUMBER	DATE	DESCRIPTION	BY							

ORIGINAL SCALE IS IN INCHES  
 Drawing name: C:\users\pwalker\pwalker\ch2m\_den\_003\dms53020\HAPPY-S4-DET03.dwg Layout: Tab: S-4 Mar 27 2018 - 9:40am pwalker  
 FOR REDUCED PLANS  
 2  
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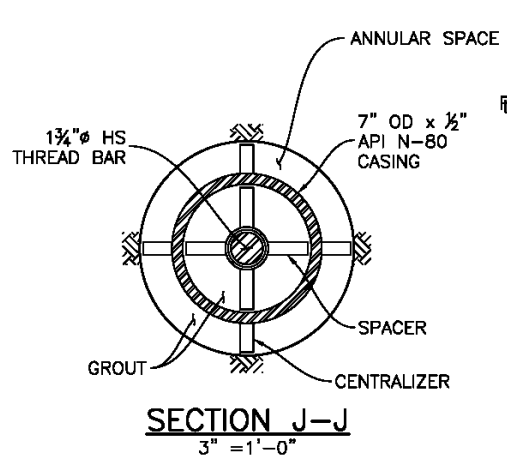


**NOTE:**  
No splices allowed in Casing or Thread Bar

**MICROPILE ELEVATION**  
1 1/2" = 1'-0"

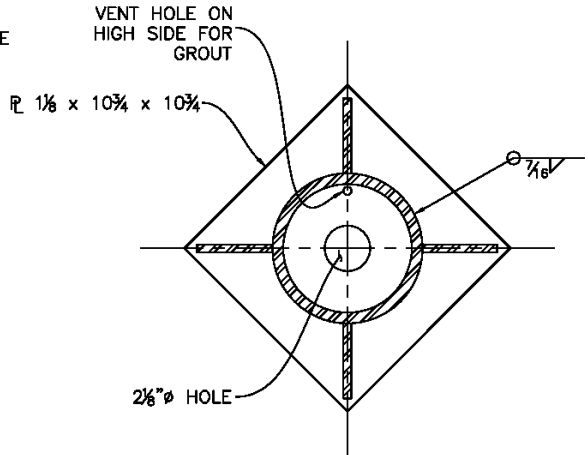


**TIP DETAIL**  
3" = 1'-0"

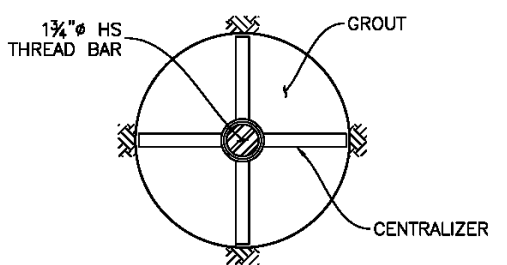


**SECTION J-J**  
3" = 1'-0"

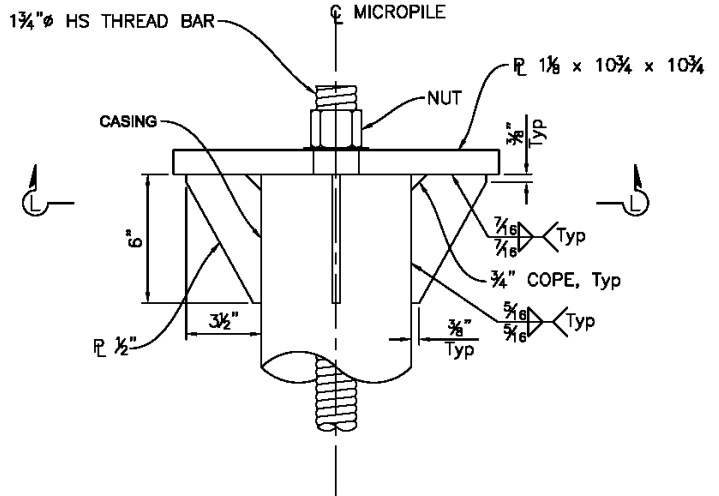
**NOTE:**  
Casing and annular space shall be completely filled with grout.



**SECTION L-L**  
3" = 1'-0"



**SECTION K-K**  
3" = 1'-0"



**PILE ANCHORAGE**  
3" = 1'-0"

**NOTES:**  
1. THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

**MICROPILE DETAILS**  
SCALE : AS SHOWN

REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF :  
**SEAN J. SMITH**  
REGISTERED CIVIL ENGINEER  
3-26-2018  
DATE:

DESIGNED: **S. SMITH**  
DRAWN: **AIM**  
CHECKED: **T. VESCO**  
DATE: **1/24/2018**  
ROAD NUMBER: **OBO**

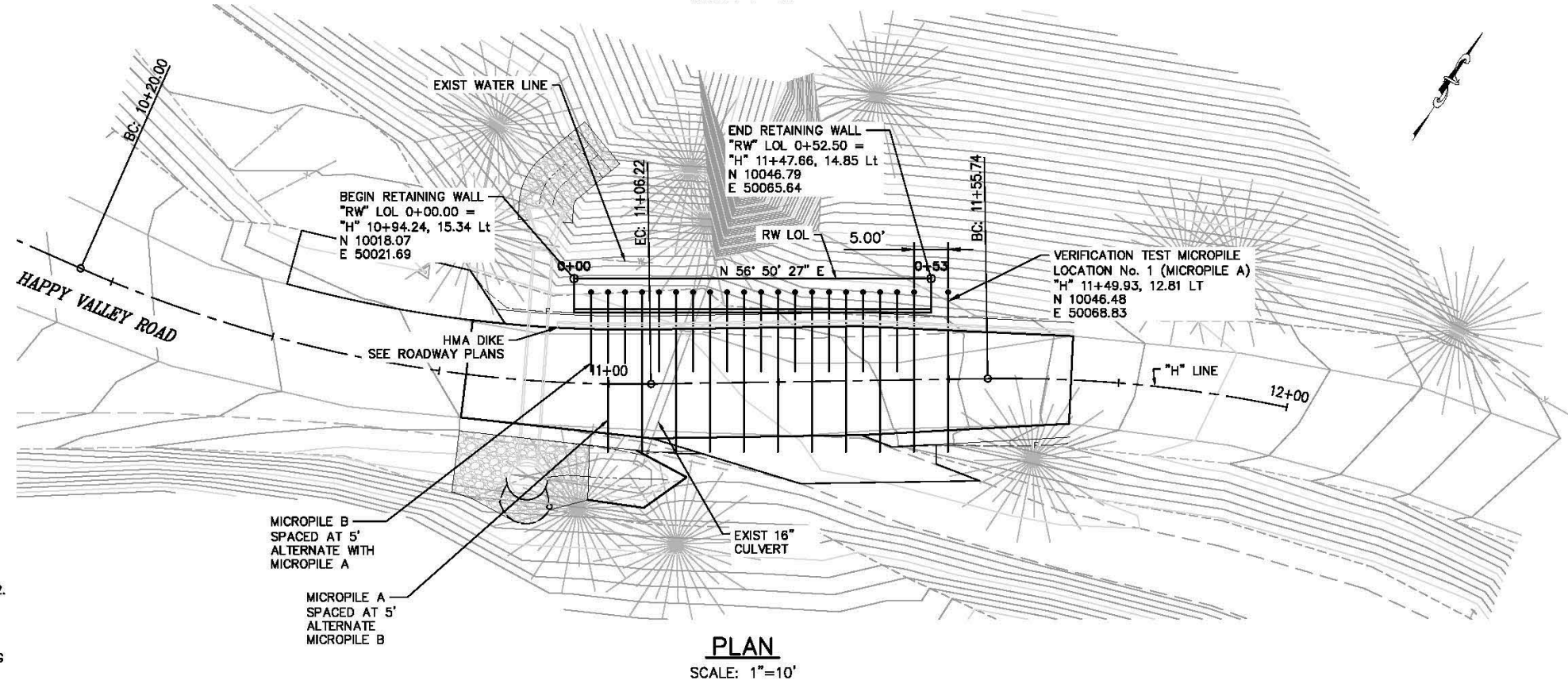
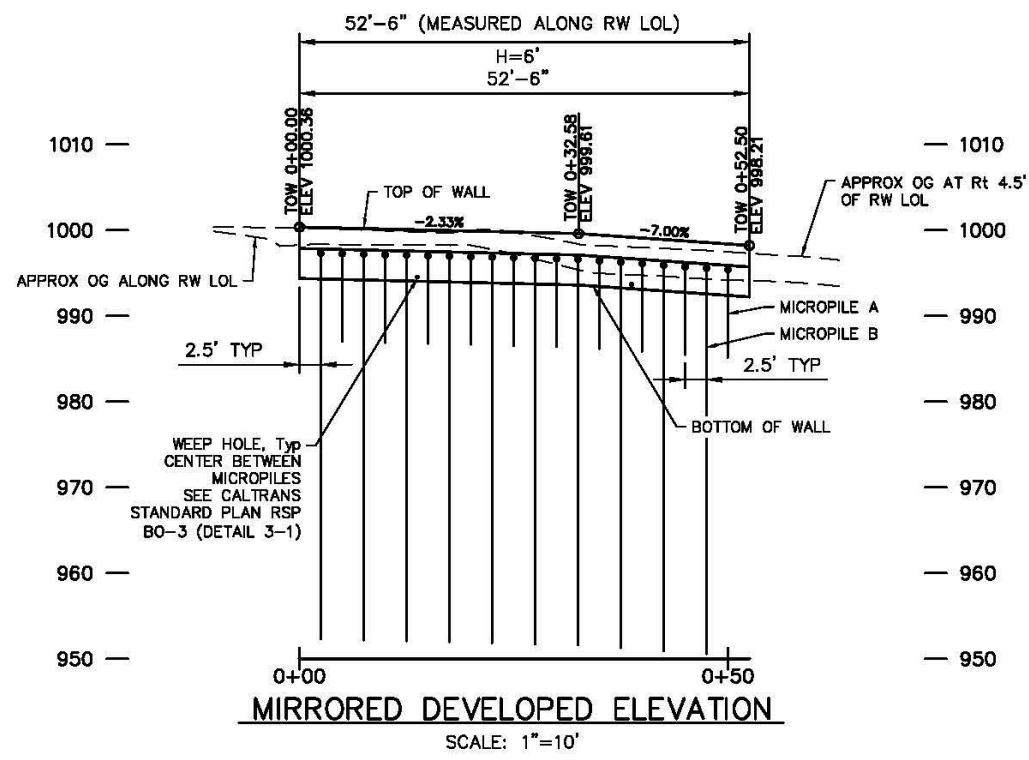


**COUNTY OF EL DORADO**  
**DEPARTMENT OF TRANSPORTATION**

**2017 HAPPY VALLEY ROAD**  
**STORM DAMAGE REPAIR**

SHEET  
**S-4**  
11 OF 11  
W.O. No. **78724**

ORIGINAL SCALE IS IN INCHES  
 Drawing name: C:\users\pwalker\pwworking\003\dms53020\HAPPY-S1-GP01.dwg Layout Tab: S-1 Mar 27, 2018 - 10:15am pwalker  
 FOR REDUCED PLANS



- NOTES:**
1. FOR TYPICAL SECTION, GENERAL NOTES, DESIGN TABLE, AND DRAINAGE DETAILS SEE DRAWING S-2.
  2. SLOPES DISTURBED AT WALL ENDS TO BE RECONSTRUCTED TO MATCH EXISTING SLOPES.
  3. THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

RETAINING WALL LAYOUT  
SCALE : AS SHOWN

REVISION	NUMBER	DATE	DESCRIPTION	BY

PREPARED UNDER THE SUPERVISION OF:  
**SEAN J. SMITH**  
 REGISTERED CIVIL ENGINEER  
 DATE: 3-26-2018

DESIGNED: S. SMITH  
 DRAWN: AIM  
 CHECKED: T. VESCO  
 DATE: 1/24/2018  
 ROAD NUMBER: 080



COUNTY OF EL DORADO  
 DEPARTMENT OF TRANSPORTATION

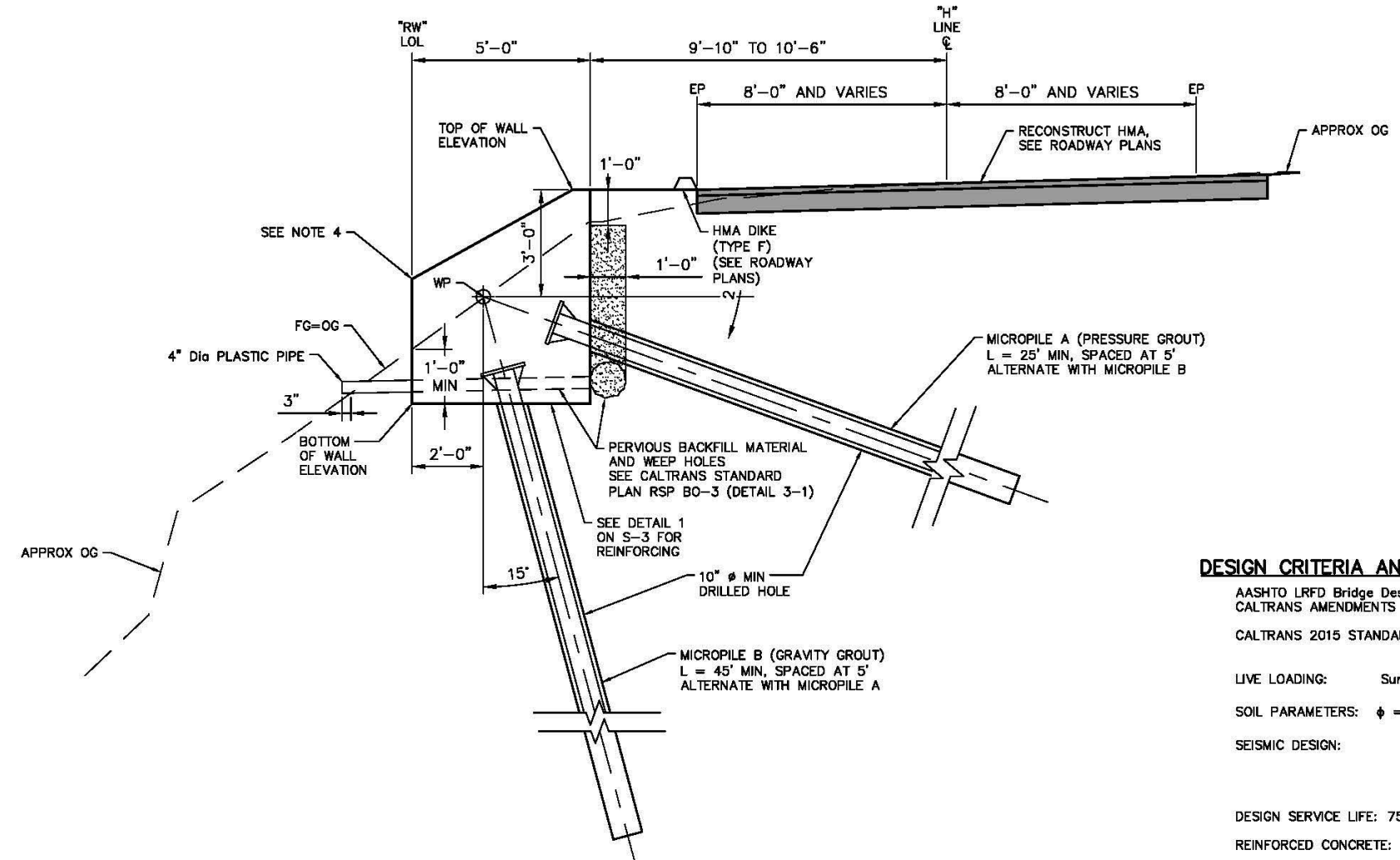
2017 HAPPY VALLEY ROAD  
 STORM DAMAGE REPAIR

SHEET S-1  
 B OF 11  
 W.O. No. 78724

ORIGINAL SCALE IS IN INCHES  
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 FOR REDUCED PLANS  
 2  
 1  
 0

PILE ID	PILE TYPE	NOMINAL RESISTANCE (kips)		CASED LENGTH	UNCASED LENGTH	SL (kips)	FDL (kips)	FTL (kips)	LL (kips)
		COMPRESSION	TENSION						
MICROPILE A	10" MICROPILE	-	52	15 ft	10 ft	16.4	23.4	39.1	1.6
MICROPILE B	10" MICROPILE	68	-	25 ft	20 ft	29.1	37.4	62.5	2.9

**LEGEND:**  
 SL = SERVICE LOAD  
 FDL = FACTORIAL DESIGN LOAD  
 FTL = FACTORED TEST LOAD  
 LL = LOCK-OFF LOAD



**TYPICAL SECTION**  
 SCALE: 1"=10'

**DESIGN CRITERIA AND PARAMETERS:**

AASHTO LRFD Bridge Design Specifications, 6th Edition, AND CALTRANS AMENDMENTS PREFACE DATED JANUARY 2014.  
 CALTRANS 2015 STANDARD PLANS AND STANDARD SPECIFICATIONS.  
 LIVE LOADING: Surcharge = 240 lb/ft<sup>2</sup>  
 SOIL PARAMETERS:  $\phi = 34^\circ$ ,  $\gamma = 115 \text{ lbs/ft}^3$   
 SEISMIC DESIGN: PGA = 0.22g, K<sub>h</sub> = 0.07g, K<sub>v</sub> = 0.0g, K<sub>ae</sub> = 0.30g  
 DESIGN SERVICE LIFE: 75 YEARS  
 REINFORCED CONCRETE:  $f_c = 60,000 \text{ psi}$ ,  $f_t = 3,600 \text{ psi}$ ,  $n = 8$   
 GROUT:  $f_c = 4000 \text{ psi}$   
 STRUCTURAL STEEL BEARING PLATE: ASTM A36,  $f_y = 36 \text{ ksi}$   
 HIGH STRENGTH THREAD BAR: ASTM A722 GRADE 150

**RETAINING WALL DETAILS No. 1**  
 SCALE : AS SHOWN

- NOTES:**
- SLOPES DISTURBED AT WALL ENDS TO BE RECONSTRUCTED TO MATCH EXISTING SLOPES.
  - SEE SHEET S-3 FOR LIMITS OF STRUCTURE EXCAVATION AND LIMITS OF STRUCTURE BACKFILL.
  - THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.
  - WHERE EXISTING OG ELEVATION IS ABOVE TOP OF WALL AT FACE, BENCH FG AS NECESSARY.

REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF :  
**SEAN J. SMITH**  
 REGISTERED CIVIL ENGINEER  
 DATE: 3-26-2018

DESIGNED: S. SMITH  
 DRAWN: AIM  
 CHECKED: T. VESCO  
 DATE: 1/24/2018  
 ROAD NUMBER: OBO

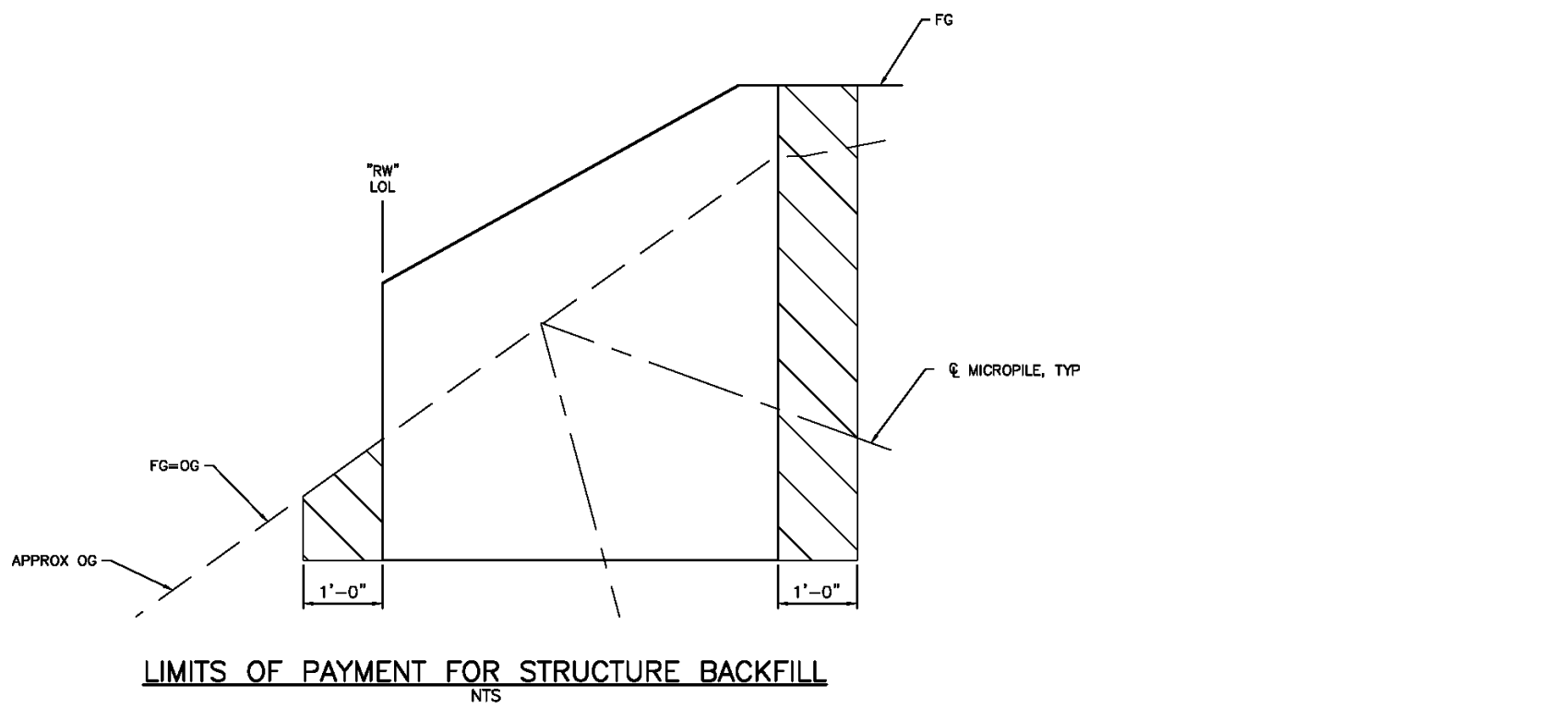
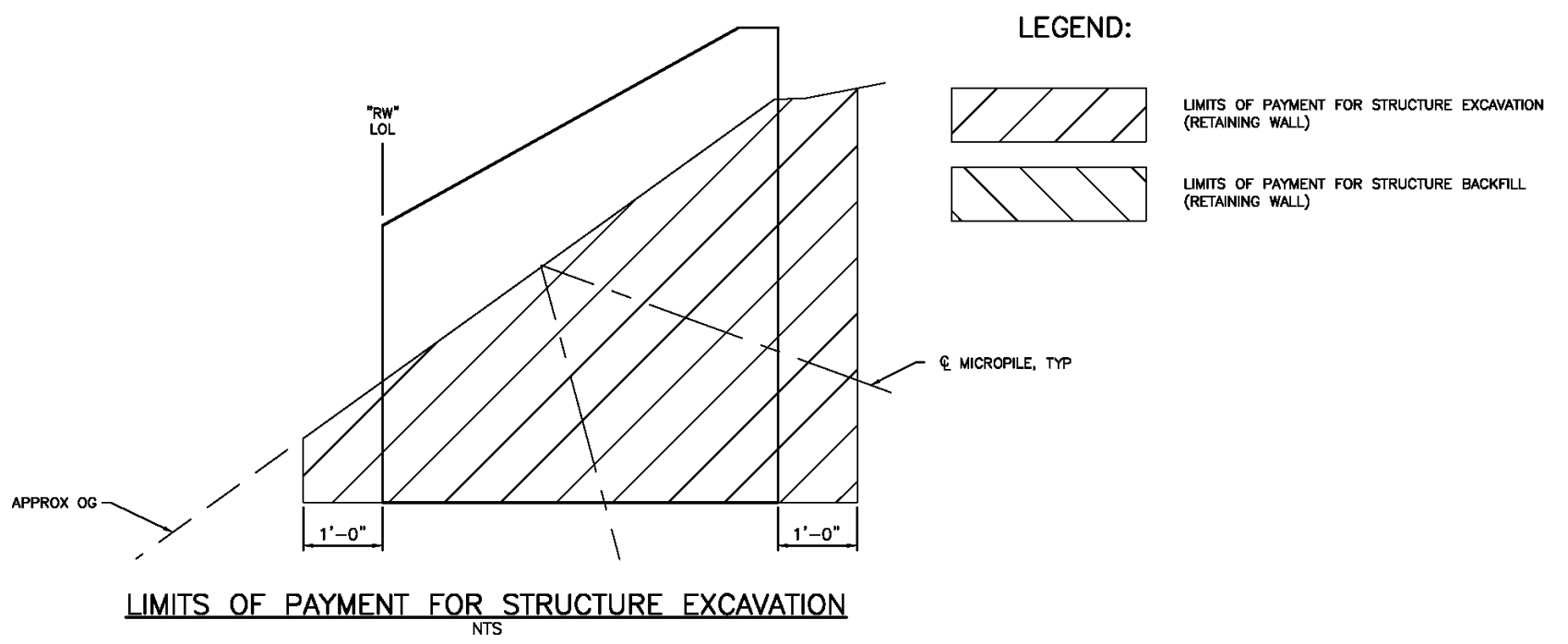
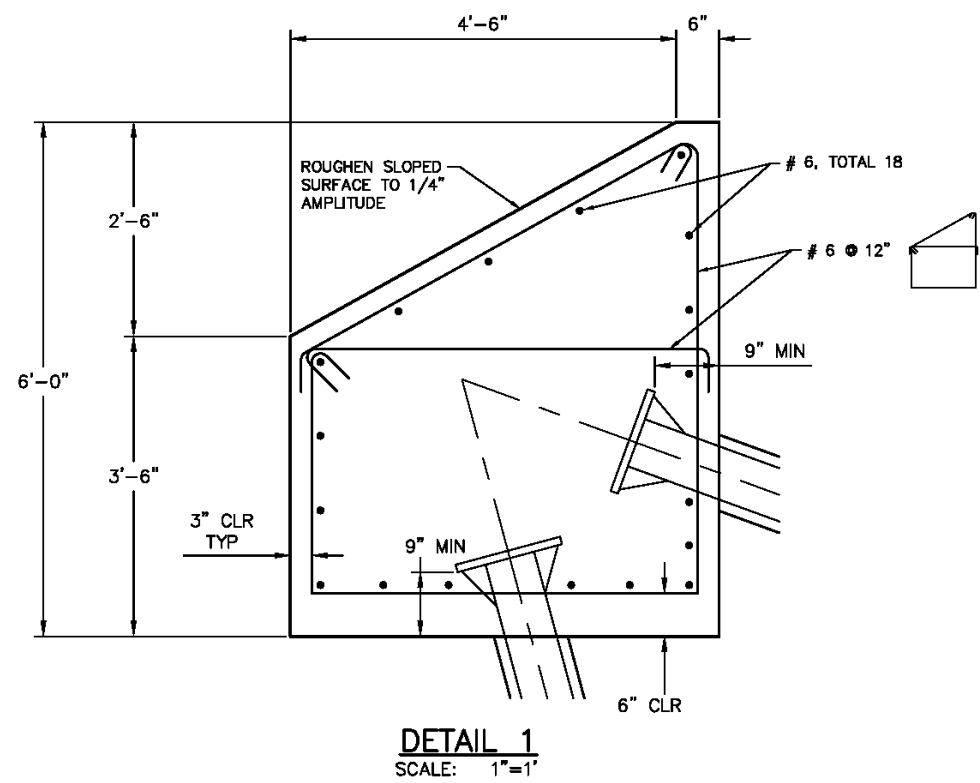


**COUNTY OF EL DORADO**  
**DEPARTMENT OF TRANSPORTATION**

**2017 HAPPY VALLEY ROAD**  
**STORM DAMAGE REPAIR**

SHEET  
**S-2**  
 9 OF 11  
 W.O. No. 78724

ORIGINAL SCALE IS IN INCHES  
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 FOR REDUCED PLANS  
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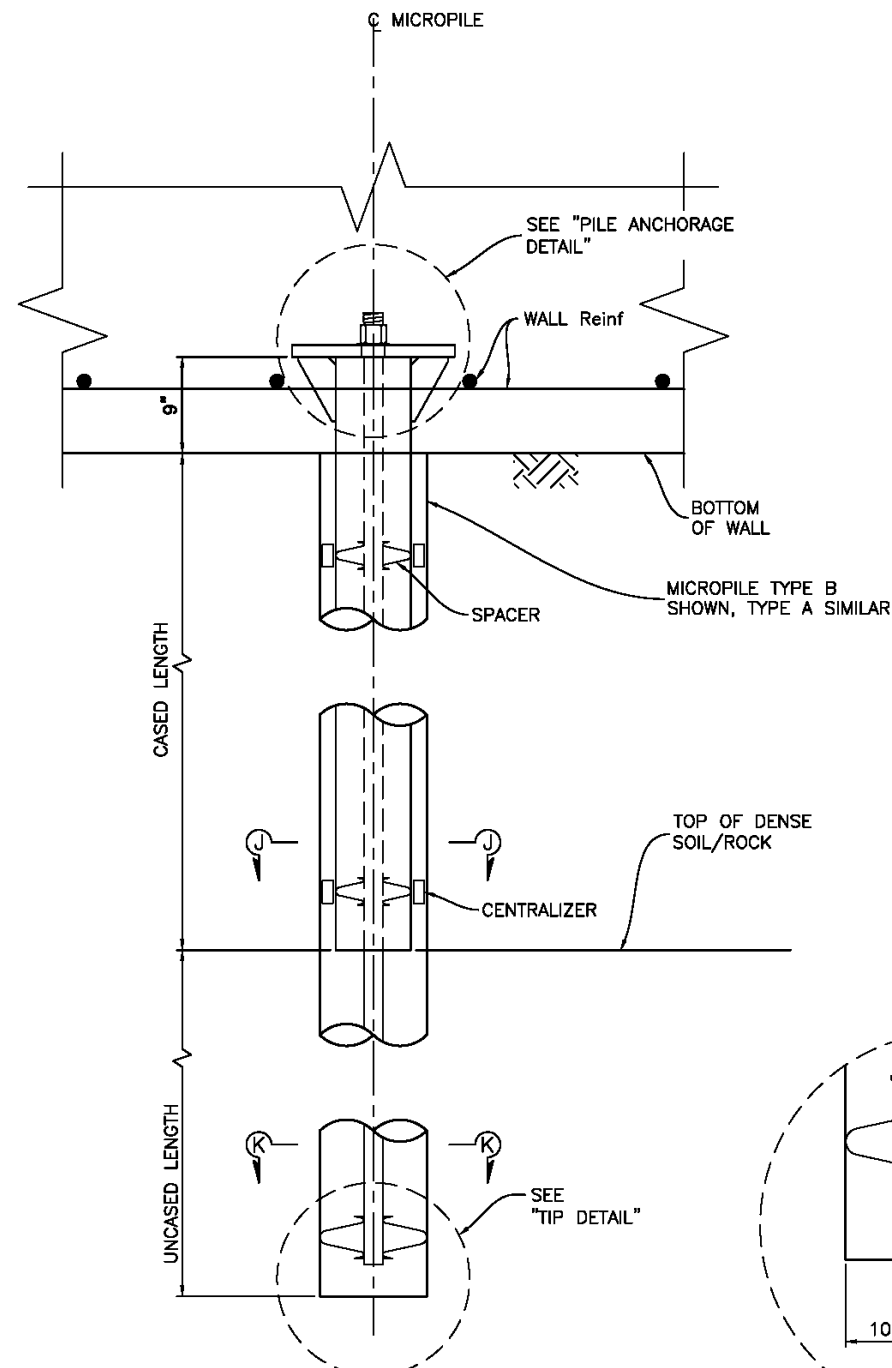


**NOTES:**  
 1. THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

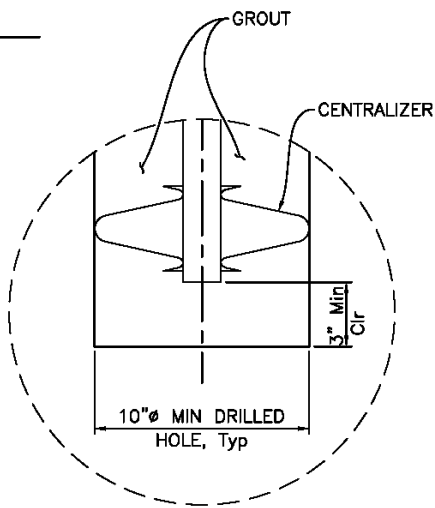
RETAINING WALL DETAILS No. 2  
 SCALE : AS SHOWN

REVISION NUMBER DATE DESCRIPTION BY			PREPARED UNDER THE SUPERVISION OF : <b>SEAN J. SMITH</b> REGISTERED CIVIL ENGINEER DATE: 3-26-2018	DESIGNED: S. SMITH DRAWN: AIM CHECKED: T. VESCO DATE: 1/24/2018 ROAD NUMBER: OBO		COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION	2017 HAPPY VALLEY ROAD STORM DAMAGE REPAIR	SHEET <b>S-3</b> 10 OF 11 W.O. No. 78724

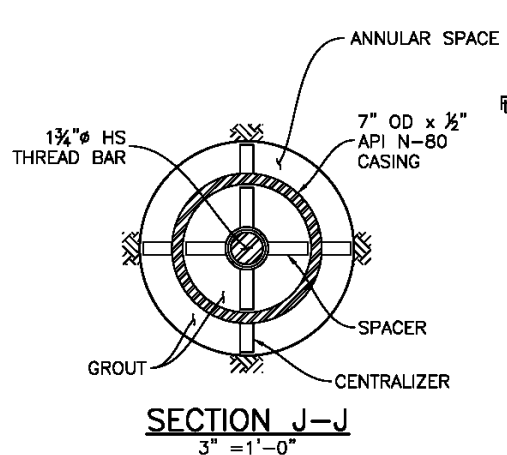
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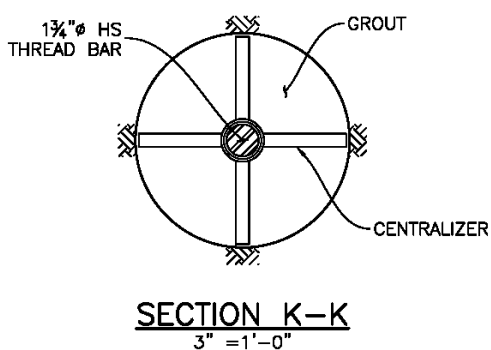
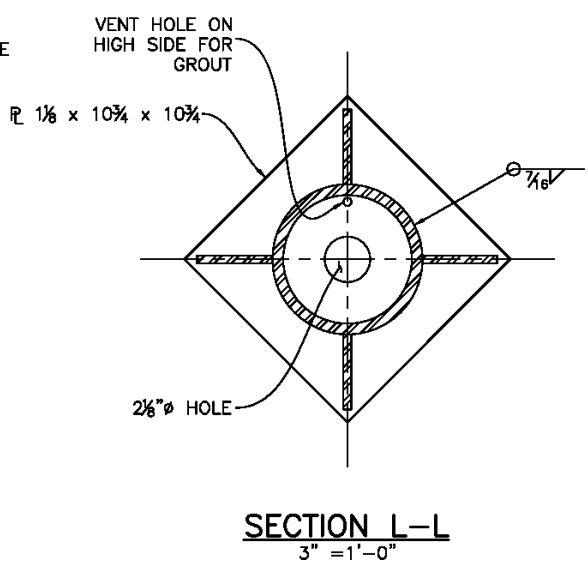
**MICROPILE ELEVATION**  
1 1/2" = 1'-0"



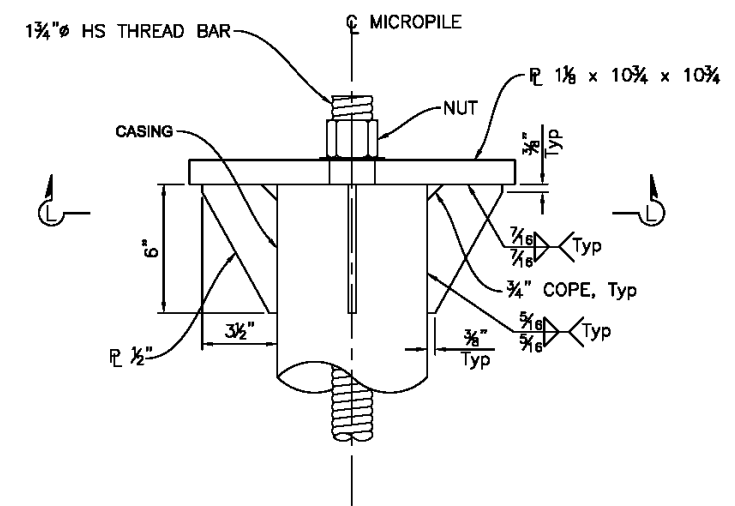
**TIP DETAIL**  
3" = 1'-0"



**NOTE:**  
Casing and annular space shall be completely filled with grout.



**SECTION K-K**  
3" = 1'-0"



**PILE ANCHORAGE**  
3" = 1'-0"

**NOTES:**  
1. THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

**MICROPILE DETAILS**  
SCALE : AS SHOWN

REVISION	NUMBER	DATE	DESCRIPTION	BY

PREPARED UNDER THE SUPERVISION OF :  
**SEAN J. SMITH**  
 REGISTERED CIVIL ENGINEER  
 3-26-2018  
 DATE

DESIGNED: **S. SMITH**  
 DRAWN: **AIM**  
 CHECKED: **T. VESCO** DATE: **1/24/2018**  
 ROAD NUMBER: **OBO**

**COUNTY OF EL DORADO**  
**DEPARTMENT OF TRANSPORTATION**

**2017 HAPPY VALLEY ROAD**  
**STORM DAMAGE REPAIR**

SHEET  
**S-4**  
 11 OF 11  
 W.O. No. 78724