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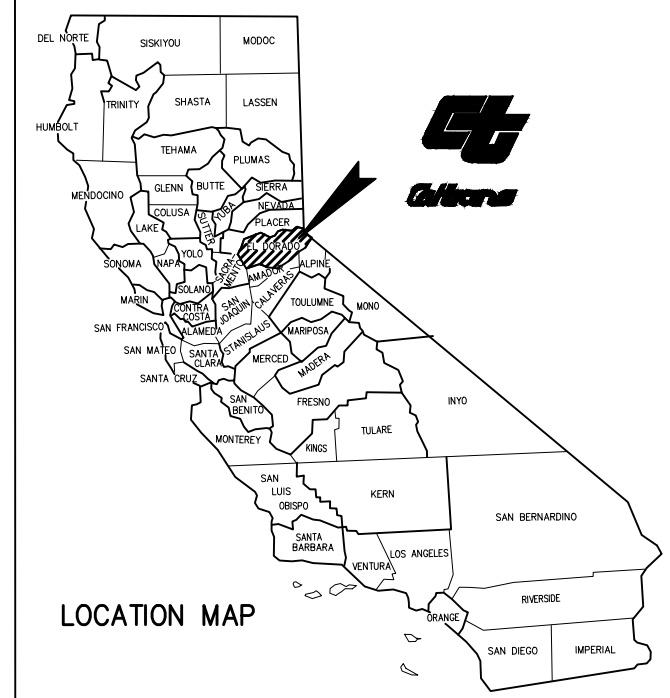
| SHEET | PLAN SHEET       | TITLE                          |
|-------|------------------|--------------------------------|
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STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**PROJECT PLANS FOR CONSTRUCTION ON  
STATE HIGHWAY 49**

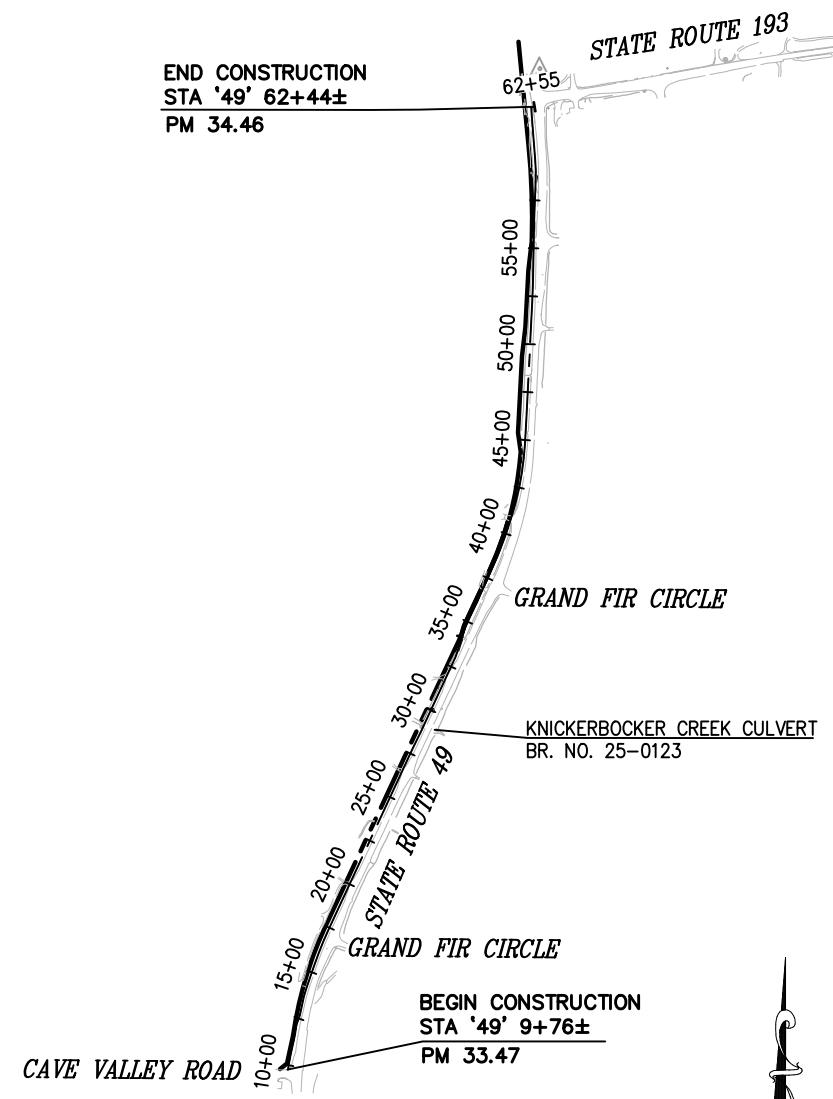
IN THE COUNTY OF EL DORADO, DISTRICT 4, COOL, CA  
CAVE VALLEY ROAD TO SR49/SR193 INTERSECTION

To be supplemented with Standard Plans and Specifications 2010, including the Revised Standard Specifications 2010, of the California Department of Transportation, unless otherwise noted and the El Dorado County Design and Improvement Standards Manual, as noted.

|      |        |       |              |               |           |              |
|------|--------|-------|--------------|---------------|-----------|--------------|
| DIST | COUNTY | ROUTE | POST MILES   | TOTAL PROJECT | SHEET NO. | TOTAL SHEETS |
| 03   | ED     | SR49  | 34.4 to 35.4 | 1             | 1         | 35           |

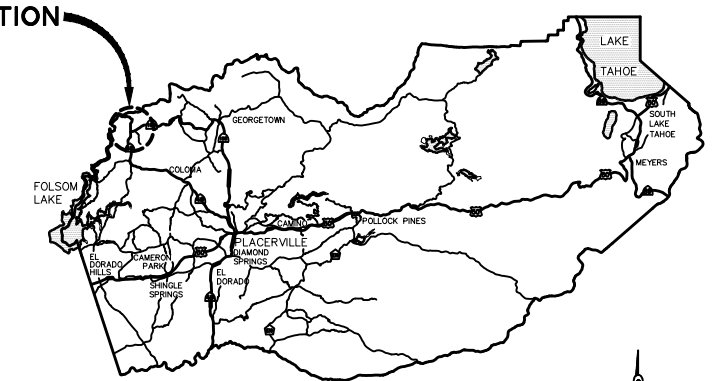


The state of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet



**SITE PLAN**  
SCALE: 1" = 500'

**SITE LOCATION**



**VICINITY MAP**  
COUNTY OF EL DORADO

*Paul J. Hom*  
Project ENGINEER  
Registered Civil Engineer



**05/08/13**

|                     |              |                 |
|---------------------|--------------|-----------------|
| Plans Approved Date | FED. PROJECT | SRTSL 5925(070) |
| PW# 11-30628        | CU           | EA 03-2E4801    |

Approved as to impact on State facilities and conformance with applicable State Standards and Practices and that technical oversight was performed as described in the California Department of Transportation A&E Consultant Services Manual.

PROJECT ENGINEER: PAUL HOM  
DESIGN OVERSIGHT APPROVAL: [Signature]  
REGISTRATION NO.: C-Plans  
DATE: 06/06/13

|  |                    |
|--|--------------------|
| ADOPTED AND APPROVED BY:   | 1-2-14             |
| RON V. BRIGGS<br>CHAIR, EL DORADO COUNTY BOARD OF SUPERVISORS  | Board date 5-21-13 |
| APPROVED BY:   | 1/2/14             |
| KIMBERLY A. KERR<br>INTERIM DIRECTOR, EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION                                  |                    |
| MATTHEW D. SMELTZER P.E. NO. C56832<br>DEPUTY DIRECTOR OF ENGINEERING, EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION | 12/31/13           |

**COUNTY OF EL DORADO  
DEPARTMENT OF TRANSPORTATION**

2850 FAIRLANE COURT  
PLACERVILLE, CA 95667  
(916) 621-5900



| REVISIONS |      |    |
|-----------|------|----|
| MARK      | DATE | BY |
|           |      |    |
|           |      |    |
|           |      |    |

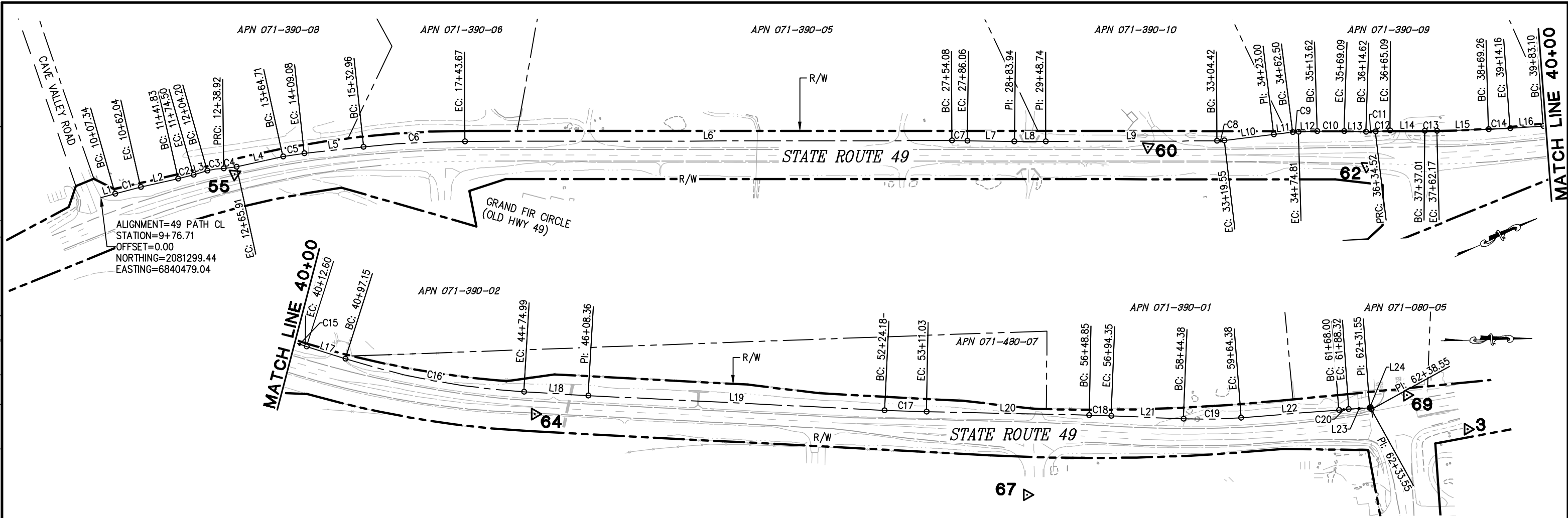
| BOARD OF SUPERVISORS |     |
|----------------------|-----|
| RON MIKULACO         | I   |
| RAYMOND J. NUTTING   | II  |
| BRIAN VEERKAMP       | III |
| RON V. BRIGGS        | IV  |
| NORMA SANTIAGO       | V   |

**NORTHSIDE SCHOOL CLASS 1  
BIKE PATH - PHASE 2 (SR49)**

**TITLE SHEET**

SHEET **1** OF **35**

ORIGINAL SCALE IS IN INCHES  
 Drawing name: C:\Civil 3D\Projects\72306 Northside School Class 1 Bike Path - SR 49\CADD Files\Sheets\CD-1.dwg Layout Tab: CD-1 May 08, 2013 10:50am S:\mvey



| 49 PATH CL |         |         |                                 |             |
|------------|---------|---------|---------------------------------|-------------|
| NUMBER     | LENGTH  | RADIUS  | LINE / CHORD DIRECTION & LENGTH | DELTA       |
| L1         | 30.63   |         | N 9° 06' 10" E                  |             |
| C1         | 54.70   | 1000.00 | N 10° 40' 11" E - 54.69         | 3° 08' 02"  |
| L2         | 79.80   |         | N 12° 14' 13" E                 |             |
| C2         | 32.67   | 600.00  | N 10° 40' 37" E - 32.66         | 3° 07' 11"  |
| L3         | 29.70   |         | N 9° 07' 02" E                  |             |
| C3         | 34.71   | 130.00  | N 16° 46' 00" E - 34.61         | 15° 17' 57" |
| C4         | 27.00   | 130.00  | N 18° 28' 00" E - 26.95         | 11° 53' 56" |
| L4         | 98.80   |         | N 12° 31' 02" E                 |             |
| C5         | 44.37   | 400.00  | N 15° 41' 43" E - 44.35         | 6° 21' 21"  |
| L5         | 123.88  |         | N 18° 52' 23" E                 |             |
| C6         | 210.71  | 2000.00 | N 21° 53' 28" E - 210.61        | 6° 02' 11"  |
| L6         | 1010.41 |         | N 24° 54' 34" E                 |             |
| C7         | 31.97   | 2000.00 | N 25° 22' 03" E - 31.97         | 0° 54' 58"  |
| L7         | 97.88   |         | N 25° 49' 31" E                 |             |
| L8         | 64.80   |         | N 25° 02' 05" E                 |             |

| 49 PATH CL |        |         |                                 |            |
|------------|--------|---------|---------------------------------|------------|
| NUMBER     | LENGTH | RADIUS  | LINE / CHORD DIRECTION & LENGTH | DELTA      |
| L9         | 355.68 |         | N 24° 50' 18" E                 |            |
| C8         | 15.13  | 130.00  | N 21° 30' 11" E - 15.13         | 6° 40' 13" |
| L10        | 103.45 |         | N 18° 10' 04" E                 |            |
| L11        | 39.50  |         | N 17° 53' 49" E                 |            |
| C9         | 12.31  | 130.00  | N 20° 36' 36" E - 12.31         | 5° 25' 34" |
| L12        | 38.81  |         | N 23° 19' 23" E                 |            |
| C10        | 55.47  | 900.00  | N 25° 05' 19" E - 55.46         | 3° 31' 52" |
| L13        | 45.53  |         | N 26° 51' 14" E                 |            |
| C11        | 19.91  | 130.00  | N 22° 28' 03" E - 19.89         | 8° 46' 24" |
| C12        | 30.57  | 250.90  | N 21° 34' 15" E - 30.55         | 6° 58' 49" |
| L14        | 71.92  |         | N 25° 24' 00" E                 |            |
| C13        | 25.16  | 750.00  | N 24° 26' 20" E - 25.16         | 1° 55' 19" |
| L15        | 107.10 |         | N 23° 28' 41" E                 |            |
| C14        | 44.90  | 1000.00 | N 22° 11' 30" E - 44.90         | 2° 34' 21" |
| L16        | 68.94  |         | N 20° 54' 20" E                 |            |

| 49 PATH CL |        |         |                                 |             |
|------------|--------|---------|---------------------------------|-------------|
| NUMBER     | LENGTH | RADIUS  | LINE / CHORD DIRECTION & LENGTH | DELTA       |
| C15        | 29.49  | 500.00  | N 19° 12' 56" E - 29.49         | 3° 22' 47"  |
| L17        | 84.55  |         | N 17° 31' 32" E                 |             |
| C16        | 377.84 | 1534.45 | N 10° 28' 18" E - 376.88        | 14° 06' 30" |
| L18        | 133.37 |         | N 3° 25' 03" E                  |             |
| L19        | 615.82 |         | N 2° 50' 14" E                  |             |
| C17        | 86.84  | 3000.00 | N 2° 00' 29" E - 86.84          | 1° 39' 31"  |
| L20        | 337.82 |         | N 1° 10' 43" E                  |             |
| C18        | 45.51  | 2200.00 | N 1° 46' 16" E - 45.51          | 1° 11' 07"  |
| L21        | 150.03 |         | N 2° 21' 50" E                  |             |
| C19        | 120.00 | 1000.00 | N 1° 04' 26" W - 119.92         | 6° 52' 31"  |
| L22        | 203.63 |         | N 4° 30' 41" W                  |             |
| C20        | 20.32  | 2000.00 | N 4° 13' 13" W - 20.32          | 0° 34' 56"  |
| L23        | 43.23  |         | N 3° 55' 46" W                  |             |
| L24        | 2.00   |         | N 28° 50' 11" W                 |             |

| CONTROL TABLE  |            |            |           |                      |
|----------------|------------|------------|-----------|----------------------|
| CONTROL NUMBER | NORTHING   | EASTING    | ELEVATION | DESCRIPTION          |
| 3              | 2086512.20 | 6841790.31 | 1529.50   | CP HPGN 03EK         |
| 55             | 2081571.93 | 6840552.13 | 1500.57   | AERIAL CONTROL POINT |
| 60             | 2083313.39 | 6841301.64 | 1464.18   | AERIAL CONTROL POINT |
| 62             | 2083707.78 | 6841530.20 | 1469.45   | AERIAL CONTROL POINT |
| 64             | 2084576.52 | 6841758.99 | 1478.64   | AERIAL CONTROL POINT |
| 67             | 2085598.23 | 6841926.44 | 1492.86   | AERIAL CONTROL POINT |
| 69             | 2086386.31 | 6841719.57 | 1522.74   | AERIAL CONTROL POINT |

**XXΔ** - DENOTES TARGET LOCATION AND ELEVATION

HORIZONTAL DATUM  
 BEARINGS, DISTANCES, STATIONING AND COORDINATES SHOWN ARE ON THE CALIFORNIA STATE PLANE COORDINATE SYSTEM, NAD 83 ZONE 2, U.S. FEET 2004.69 EPOCH. DISTANCES SHOWN ARE GRID DISTANCES. DIVIDE DISTANCES SHOWN BY 0.99985645 TO OBTAIN GROUND DISTANCES.

VERTICAL DATUM  
 ELEVATIONS SHOWN HEREON ARE REFERENCED TO NAVD 88 FROM GPS OBSERVATIONS  
 CONTROL POINTS SHOWN HEREON ARE TBM'S

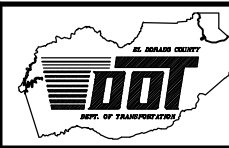
**SURVEY CONTROL DIAGRAM**  
 SCALE : 1"=100'

| REVISION | NUMBER | DATE | DESCRIPTION | BY |
|----------|--------|------|-------------|----|
|          |        |      |             |    |
|          |        |      |             |    |
|          |        |      |             |    |



PREPARED UNDER THE SUPERVISION OF:  
*Loren A. Masstard*  
 PROFESSIONAL LAND SURVEYOR  
 DATE: 05/08/13

DESIGNED: RR  
 DRAWN: RR  
 CHECKED: LM  
 DATE: 04/23/13  
 ROAD NUMBER: SR 49

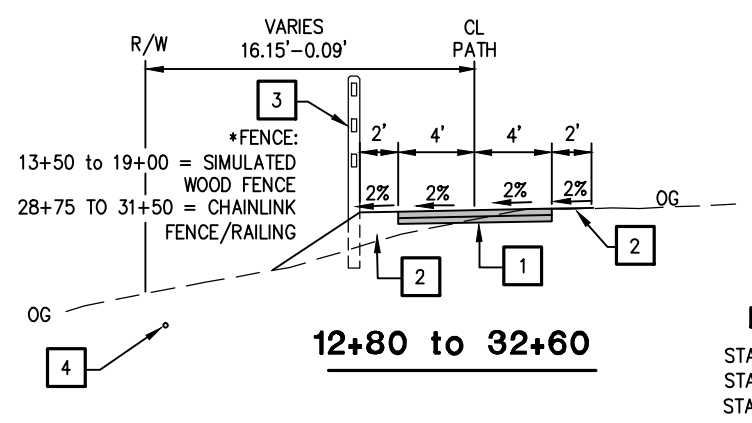
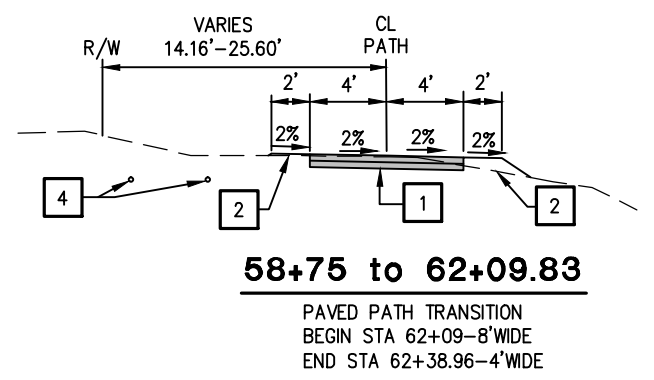
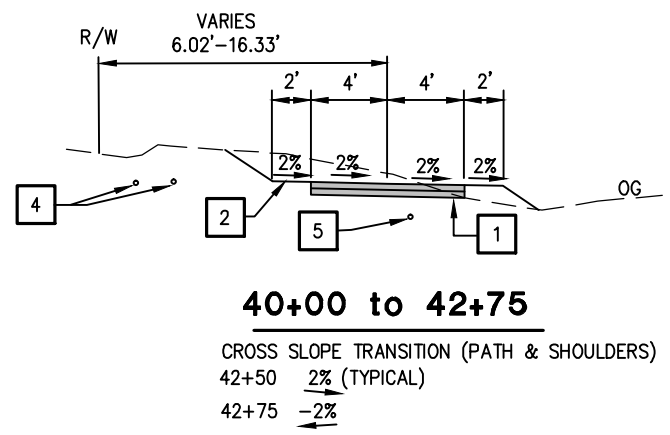
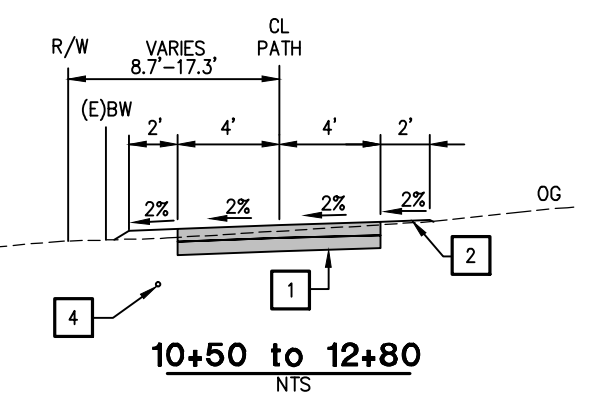
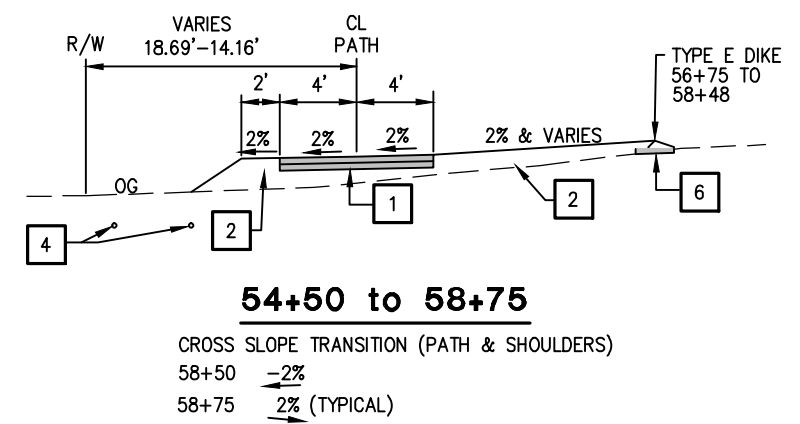
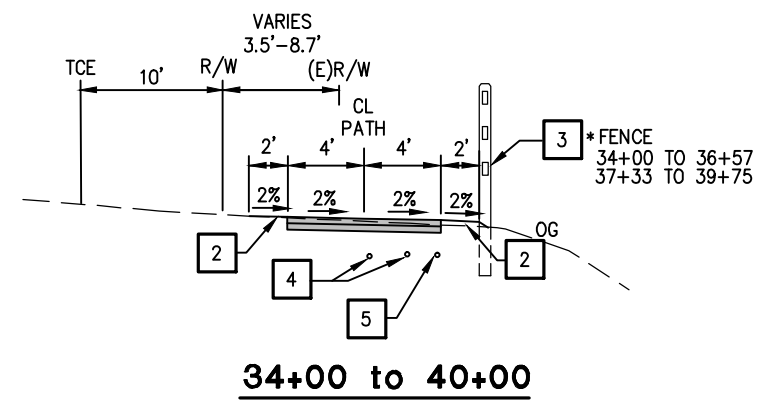
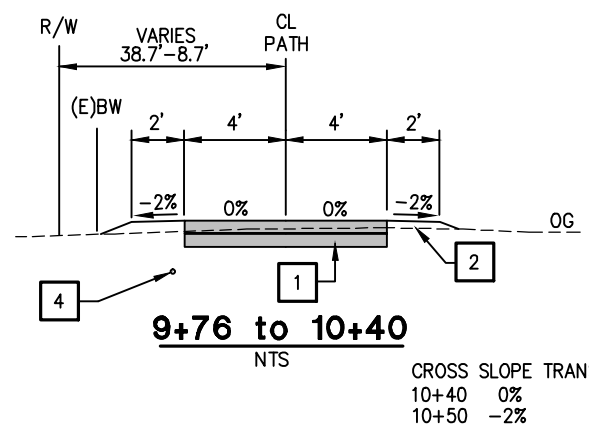


**EL DORADO COUNTY**  
 DEPARTMENT OF TRANSPORTATION

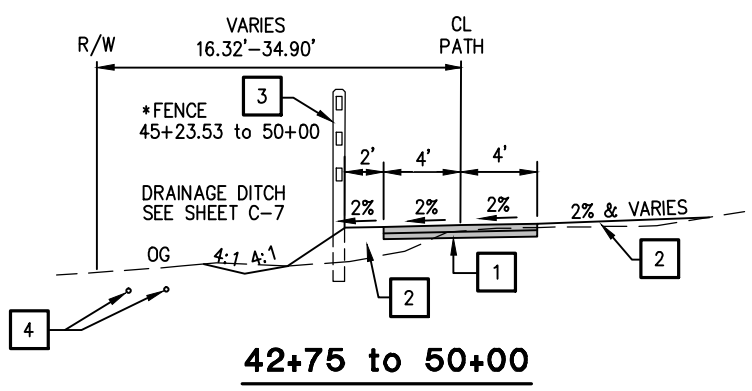
**NORTHSIDE SCHOOL CLASS 1**  
**BIKE PATH - PHASE 2 (SR49)**

SHEET  
**CD-1**  
 2 OF 35  
 W.O. No. 72306

ORIGINAL SCALE IS IN INCHES  
 Drawing name: C:\Civil 3D\Projects\72306 Northside School Class 1 Bike Path - SR 49\CADD Files\Sheets\X-1.dwg Layout Tab: X-1 May 08 2013 - 10:56am SMCvey



**DRIVEWAYS**  
 STA 19+83-20+17  
 STA 26+35-26+68  
 STA 31+73-32+15



**GENERAL NOTES:**

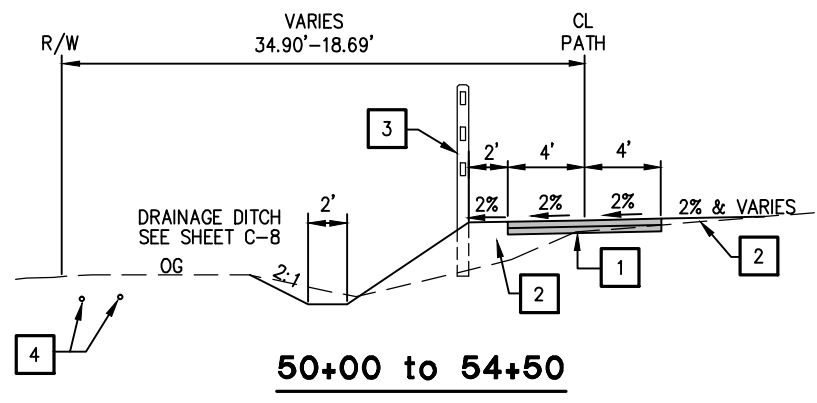
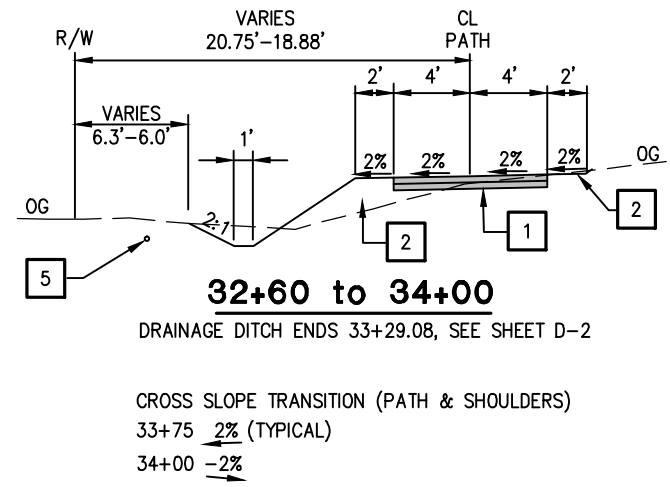
1. STATION/OFFSET CALLOUTS PER "49 PATH CL" ALIGNMENT
2. 1.5:1 CUT/FILL SLOPES, UNLESS NOTED
3. ALL FILL SLOPES SHALL BE KEYED
4. 8' WIDE AC PATH UNLESS NOTED
5. 2' WIDE SHOULDERS UNLESS NOTED
6. BIKE/PED PATHWAY SHALL HAVE 5' MINIMUM SEPARATION FROM EDGE OF EXISTING ROADWAY PAVEMENT
7. INSTALL ROLLED EROSION CONTROL PRODUCT (BLANKET) TYPE Q ON ALL CUT AND FILL SLOPES 2:1 OR STEEPER

**ABBREVIATIONS**

R/W - RIGHT OF WAY  
 (E)BW - EXISTING BARB WIRE FENCE  
 (E)AC - EXISTING ASPHALT CONCRETE

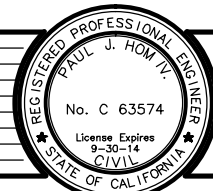
**CONSTRUCTION NOTES:**

1. 0.33' HOT MIX ASPHALT (TYPE A) OVER 0.33' AB (CLASS 2)
2. SUBGRADE COMPACTED TO 90% 0.5' DEPTH MAX UNDER SHOULDER
3. FENCE, SEE LAYOUT SHEETS FOR TYPE AND STATION BEGIN/END
4. APPROXIMATE LOCATION OF AT&T UNDERGROUND UTILITIES. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION.
5. APPROXIMATE LOCATION OF PRIVATE WATER SERVICE. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION.
6. 2' PAVED SHOULDER FOR TYPE E DIKE, 0.25' HOT MIX ASPHALT (TYPE A) OVER COMPACTED NATIVE



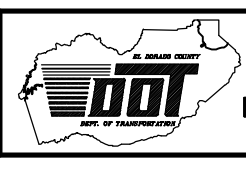
**TYPICAL SECTIONS  
 SCALE : N.T.S.**

| REVISION | NUMBER | DATE | DESCRIPTION | BY |
|----------|--------|------|-------------|----|
|          |        |      |             |    |



PREPARED UNDER THE SUPERVISION OF:  
*Paul J. Hom*  
 REGISTERED CIVIL ENGINEER  
 DATE: **05/08/13**

DESIGNED: CG  
 DRAWN: RR  
 CHECKED: PH  
 DATE: 04/23/13  
 ROAD NUMBER: SR 49

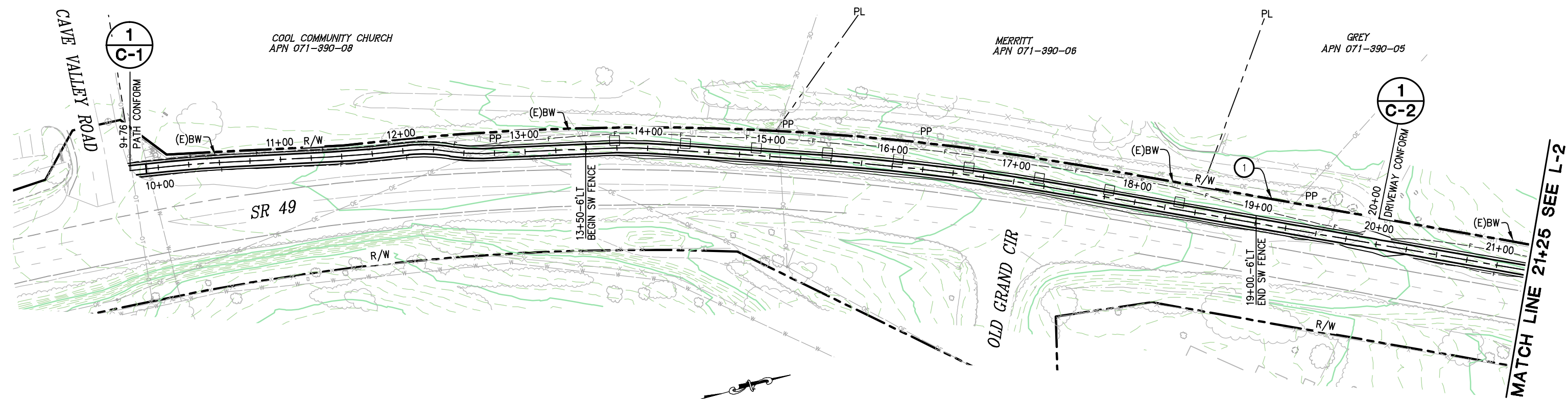


**EL DORADO COUNTY  
 DEPARTMENT OF TRANSPORTATION**

**NORTHSIDE SCHOOL CLASS 1  
 BIKE PATH - PHASE 2 (SR49)**

SHEET  
**X-1**  
 3 OF 35  
 W.O. No. **72306**

ORIGINAL SCALE IS IN INCHES  
Drawing name: C:\Civil 3D\Projects\72306 Northside School Class 1 Bike Path - SR 49\CADD Files\Sheets\L-1.dwg Layout Tab: L-1 May 08, 2013 - 11:06am Smiley



**PLAN - BIKE PATH**  
SCALE: 1"=40'

**ABBREVIATIONS**

- R/W - RIGHT OF WAY
- PP - UTILITY POLE
- TCE - TEMPORARY CONSTRUCTION EASEMENT
- ESA - ENVIRONMENTALLY SENSITIVE AREA FENCING
- AP - ANGLE POINT
- (E)BW - EXISTING BARB WIRE FENCE
- SW - SIMULATED WOOD FENCE

**CONSTRUCTION NOTES:**

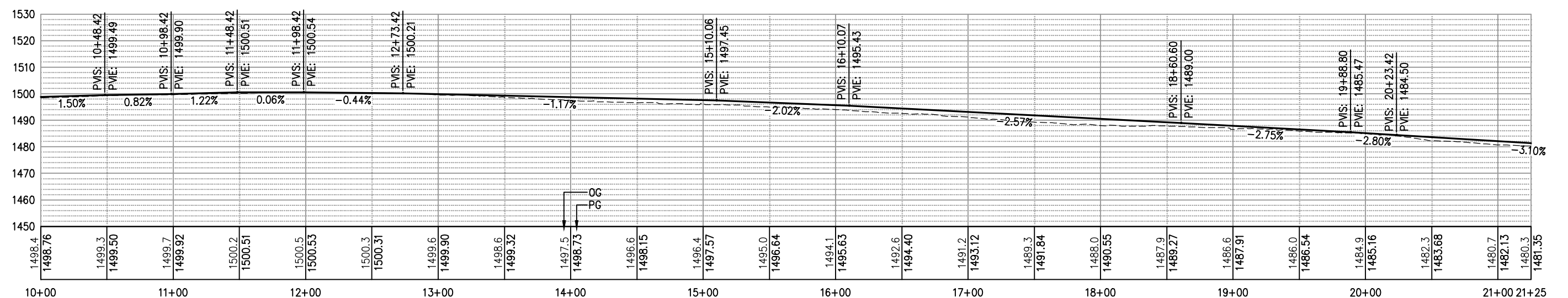
1. 4" X 8" "WARNING ELECTRIC FENCE" SIGNS PLACED EVERY 100', STA 18+50 TO STA 29+00.

**GENERAL NOTES:**

1. STATION/OFFSET CALLOUTS PER "49 PATH CL" ALIGNMENT
2. 1.5:1 CUT/FILL UNLESS NOTED
3. CONTRACTOR SHALL PLACE REFERENCE STAKES FOR ALL MAILBOXES AND SIGNS THAT NEED TO BE REMOVED FOR CONSTRUCTION. CONTRACTOR TO USE THESE STAKES TO REINSTALL ITEMS AT THE EARLIEST TIME POSSIBLE.
4. FUTURE CALTRANS LANE IMPROVEMENTS-STA 9+76 TO 12+75

**LEGEND:**

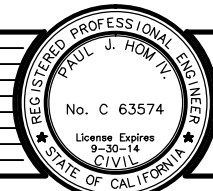
- SIMULATED WOOD FENCE (SW), SEE SHEET C-9. FENCE LINETYPE IS GRAPHIC ONLY AND DOES NOT DELINEATE ACTUAL POST LOCATION
- R/W FENCE



**PROFILE - BIKE PATH**  
SCALE: 1"=40'H, 20'V

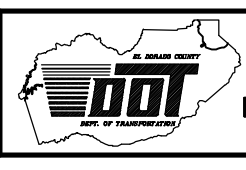
**PLAN AND PROFILE SCALE : AS NOTED**

| REVISION | NUMBER | DATE | DESCRIPTION | BY |
|----------|--------|------|-------------|----|
|          |        |      |             |    |



PREPARED UNDER THE SUPERVISION OF:  
*Paul J. Hom*  
REGISTERED CIVIL ENGINEER  
DATE: 05/08/13

DESIGNED: CG  
DRAWN: RR  
CHECKED: PH  
DATE: 04/23/13  
ROAD NUMBER: SR 49



**EL DORADO COUNTY**  
DEPARTMENT OF TRANSPORTATION

**NORTHSIDE SCHOOL CLASS 1**  
**BIKE PATH - PHASE 2 (SR49)**

SHEET  
**L-1**  
4 OF 35  
W.O. No. **72306**

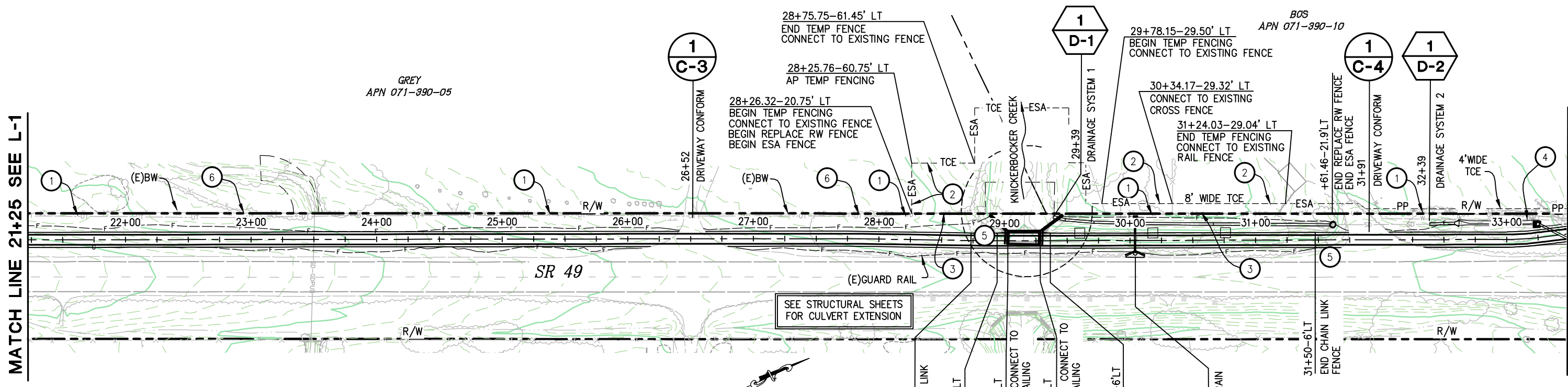
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Drawing name: C:\Civil 3D\Projects\72306 Northside School Class 1 Bike Path - SR 49\CADD Files\Sheets\L-1.dwg Layout Tab: L-2 May 08, 2013 11:05am SMCvey

MATCH LINE 21+25 SEE L-1

MATCH LINE 33+50 SEE L-3

GREY  
APN 071-390-05

BOS  
APN 071-390-10



**PLAN - BIKE PATH**

SCALE: 1"=40'

**ABBREVIATIONS**

- R/W - RIGHT OF WAY
- PP - UTILITY POLE
- TCE - TEMPORARY CONSTRUCTION EASEMENT
- ESA - ENVIRONMENTALLY SENSITIVE AREA FENCING
- AP - ANGLE POINT
- (E)BW - EXISTING BARB WIRE FENCE
- CL - CHAIN LINK FENCE

**LEGEND:**

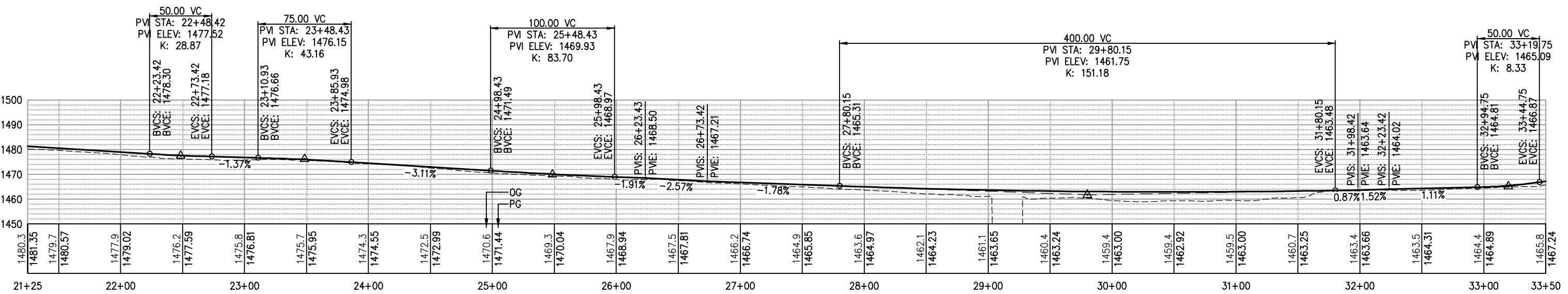
- CHAIN LINK FENCE
- R/W FENCE
- ESA FENCE, 26+59 TO 31+62. FENCE TO INCLUDE TCE AREA AND KNICKERBOCKER CREEK AS SHOWN ON PLAN

**GENERAL NOTES:**

1. STATION/OFFSET CALLOUTS PER "49 PATH CL" ALIGNMENT
2. NEW RW FENCING MATERIAL AND CONSTRUCTION SHALL MATCH EXISTING FENCE AND WILL BE PLACED ON THE RW PER A86
3. REPLACEMENT OF PRIVATE FENCING SHALL MATCH THE MATERIAL AND CONSTRUCTION OF EXISTING FENCE.
4. TEMPORARY LIVESTOCK FENCING SHALL BE APPROVED BY PROPERTY OWNER PRIOR TO INSTALLATION
5. CONTRACTOR SHALL PLACE REFERENCE STAKES FOR ALL MAILBOXES AND SIGNS THAT NEED TO BE REMOVED FOR CONSTRUCTION. CONTRACTOR TO USE THESE STAKES TO REINSTALL ITEMS AT THE EARLIEST TIME POSSIBLE.

**CONSTRUCTION NOTES:**

- 1 AT&T UNDERGROUND UTILITIES
- 2 PLACE ESA FENCE ON TCE AS SHOWN
- 3 EXISTING RW FENCE TO BE REMOVED DURING CONSTRUCTION. NEW RW FENCE TO BE INSTALLED AT COMPLETION OF WORK PER A86
- 4 EXISTING WATER AND IRRIGATION LINES, PROTECT IN PLACE.
- 5 REMOVE TREES (4) TOTAL, SEE SPECS FOR STATION CALLOUTS
- 6 4" X 8" "WARNING ELECTRIC FENCE" SIGNS PLACED EVERY 100', STA 18+50 TO STA 29+00.

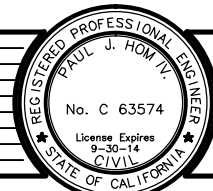


**PROFILE - BIKE PATH**

SCALE: 1"=40'H,20'V

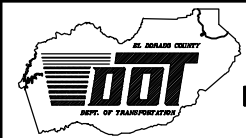
**PLAN AND PROFILE SCALE : AS NOTED**

| REVISION | NUMBER | DATE | DESCRIPTION | BY |
|----------|--------|------|-------------|----|
|          |        |      |             |    |



PREPARED UNDER THE SUPERVISION OF:  
*Paul J. Hom*  
REGISTERED CIVIL ENGINEER  
DATE: 05/08/13

DESIGNED: CG  
DRAWN: RR  
CHECKED: PH  
DATE: 04/23/13  
ROAD NUMBER: SR 49

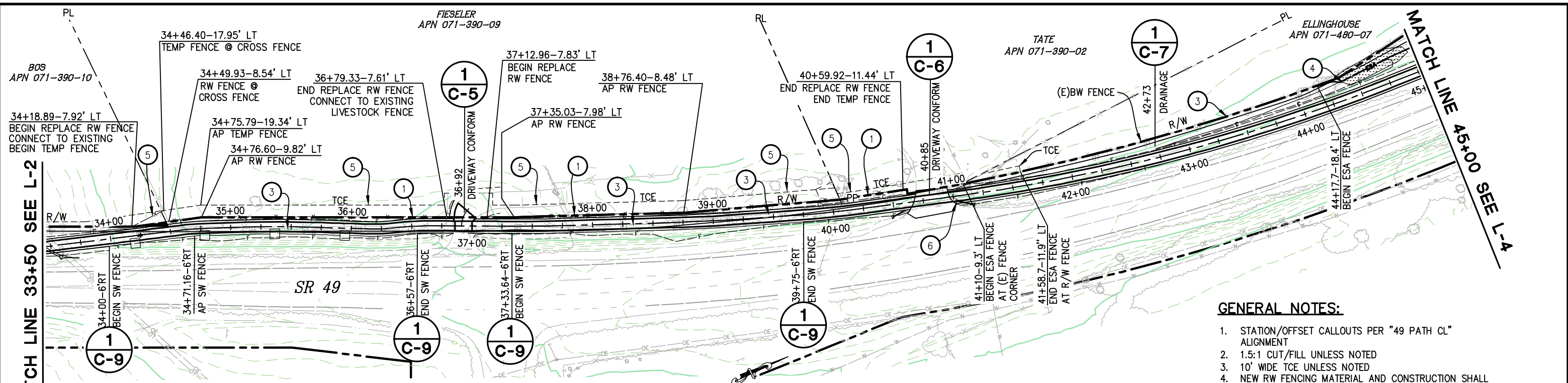


**EL DORADO COUNTY**  
DEPARTMENT OF TRANSPORTATION

**NORTHSIDE SCHOOL CLASS 1**  
**BIKE PATH - PHASE 2 (SR49)**

SHEET  
**L-2**  
5 OF 35  
W.O. No. **72306**

ORIGINAL SCALE IS IN INCHES  
 Drawing name: C:\Civil 3D\Projects\72306 Northside School Class 1 Bike Path - SR 49\CADD Files\Sheets\L-1.dwg Layout Tab: L-3 May 08, 2013 - 11:03am Smiley  
 FOR REDUCED PLANS



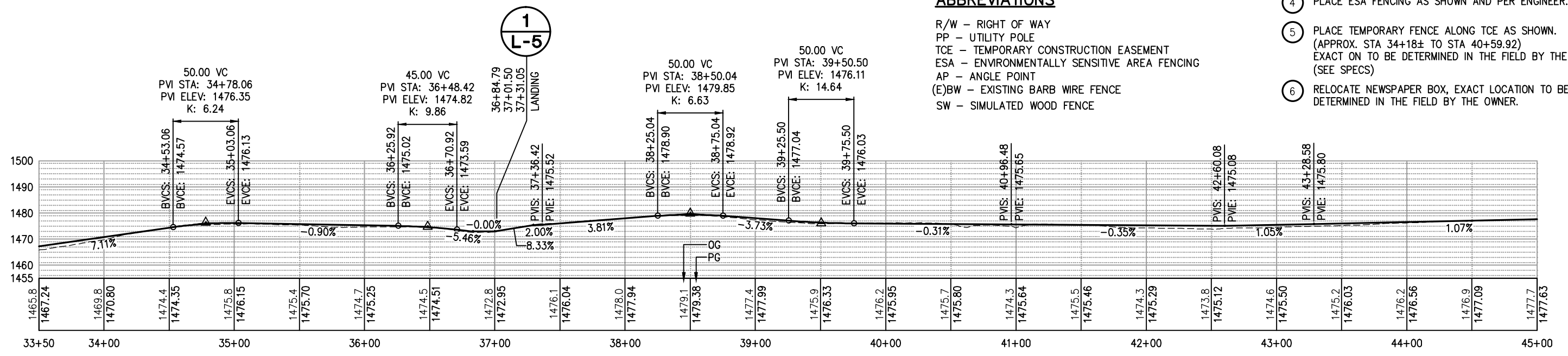
**WARNING**  
 THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION

- GENERAL NOTES:**
1. STATION/OFFSET CALLOUTS PER "49 PATH CL" ALIGNMENT
  2. 1.5:1 CUT/FILL UNLESS NOTED
  3. 10' WIDE TCE UNLESS NOTED
  4. NEW RW FENCING MATERIAL AND CONSTRUCTION SHALL MATCH EXISTING FENCE

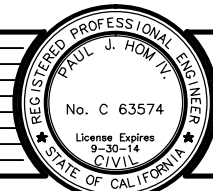
- LEGEND:**
- SIMULATED WOOD FENCE (SW), SEE SHEET C-9. FENCE LINETYPE IS GRAPHIC ONLY AND DOES NOT DELINEATE ACTUAL POST LOCATION
  - x- R/W FENCE
  - ▨ DEFINED WETLANDS

- ABBREVIATIONS**
- R/W - RIGHT OF WAY
  - PP - UTILITY POLE
  - TCE - TEMPORARY CONSTRUCTION EASEMENT
  - ESA - ENVIRONMENTALLY SENSITIVE AREA FENCING
  - AP - ANGLE POINT
  - (E)BW - EXISTING BARB WIRE FENCE
  - SW - SIMULATED WOOD FENCE

- CONSTRUCTION NOTES:**
- 1 NEW R/W FENCE SHALL BE INSTALLED PER DETAIL A86, AT THE COMPLETION OF WORK.
  - 2 PLACE ESA FENCING ALONG TCE AS SHOWN
  - 3 AT&T UNDERGROUND UTILITIES
  - 4 PLACE ESA FENCING AS SHOWN AND PER ENGINEER.
  - 5 PLACE TEMPORARY FENCE ALONG TCE AS SHOWN. (APPROX. STA 34+18± TO STA 40+59.92) EXACT ON TO BE DETERMINED IN THE FIELD BY THE OWNER. (SEE SPECS)
  - 6 RELOCATE NEWSPAPER BOX, EXACT LOCATION TO BE DETERMINED IN THE FIELD BY THE OWNER.

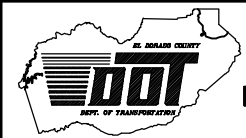


**PLAN AND PROFILE SCALE : AS NOTED**



PREPARED UNDER THE SUPERVISION OF:  
*Paul J. Hom*  
 REGISTERED CIVIL ENGINEER  
 DATE: 05/08/13

DESIGNED: CG  
 DRAWN: RR  
 CHECKED: PH  
 DATE: 04/23/13  
 ROAD NUMBER: SR 49



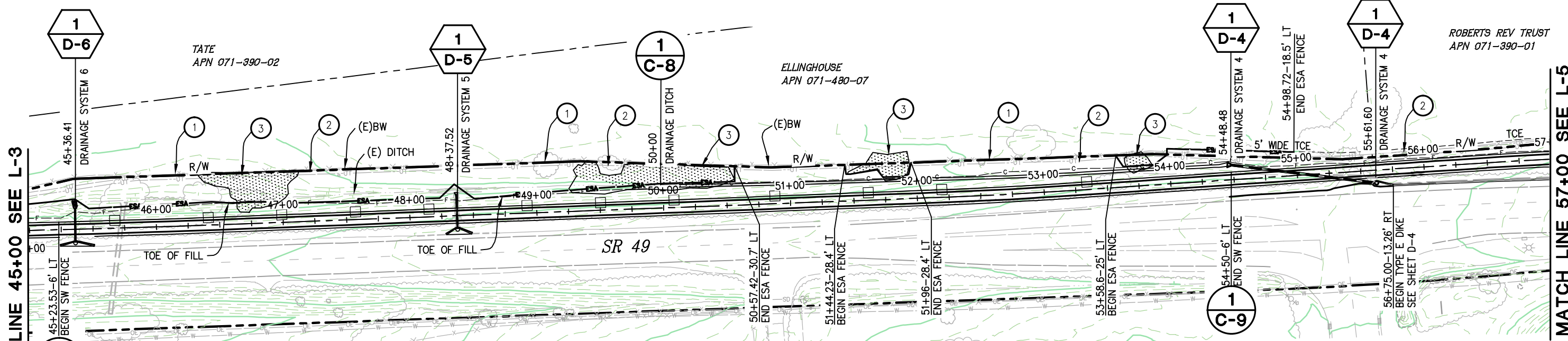
**EL DORADO COUNTY**  
 DEPARTMENT OF TRANSPORTATION

**NORTHSIDE SCHOOL CLASS 1**  
**BIKE PATH - PHASE 2 (SR49)**

SHEET  
**L-3**  
 6 OF 35  
 W.O. No. 72306

| REVISION | NUMBER | DATE | DESCRIPTION | BY |
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ORIGINAL SCALE IS IN INCHES  
 Drawing Name: C:\Civil 3D\Projects\72306 Northside School Class 1 Bike Path - SR 49\CADD Files\Sheets\L-1.dwg Layout Tab: L-4 May 08, 2013 11:02am Smiley  
 FOR REDUCED PLANS



**ABBREVIATIONS**

- R/W - RIGHT OF WAY
- PP - UTILITY POLE
- TCE - TEMPORARY CONSTRUCTION EASEMENT
- ESA - ENVIRONMENTALLY SENSITIVE FENCING
- AP - ANGLE POINT
- (E)BW - EXISTING BARB WIRE FENCE
- SW - SIMULATED WOOD FENCE

**WARNING**  
 THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION

**LEGEND:**

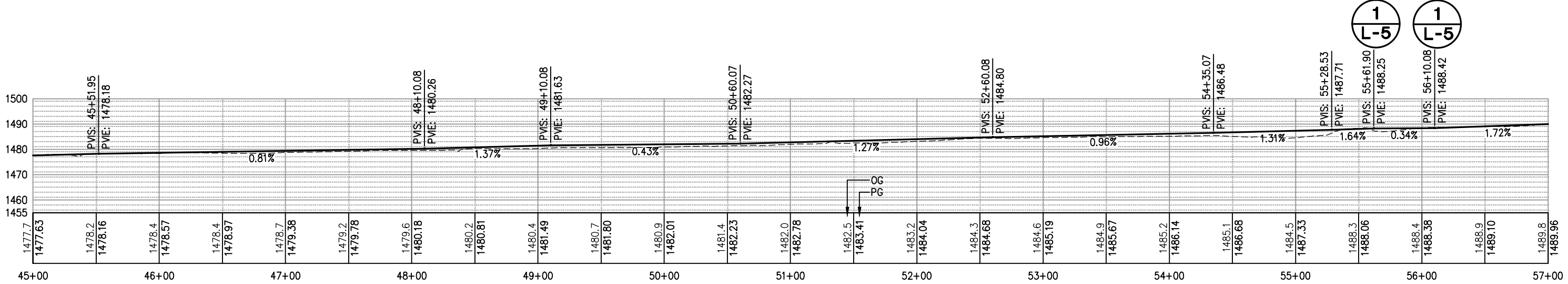
- SIMULATED WOOD FENCE (SW), SEE SHEET C-9. FENCE LINETYPE IS GRAPHIC ONLY AND DOES NOT DELINEATE ACTUAL POST LOCATION
- R/W FENCE
- DEFINED WETLANDS

**GENERAL NOTES:**

1. STATION/OFFSET CALLOUTS PER "49 PATH CL" ALIGNMENT
2. 1.5:1 CUT/FILL UNLESS NOTED
3. NEW RW FENCING MATERIAL AND CONSTRUCTION SHALL MATCH EXISTING FENCE AND WILL BE PLACED ON THE RW PER A86

**CONSTRUCTION NOTES:**

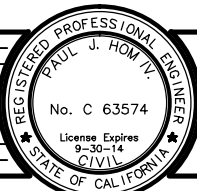
1. PLACE ESA FENCING ALONG TCE AND (E)BW FENCE AS SHOWN
2. AT&T UNDERGROUND UTILITIES
3. PLACE ESA FENCING AS SHOWN AND PER ENGINEER.



**PROFILE - BIKE PATH**

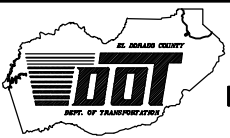
SCALE: 1"=40'H, 20'V

PLAN AND PROFILE SCALE : AS NOTED



PREPARED UNDER THE SUPERVISION OF:  
**Paul J. Hom**  
 REGISTERED CIVIL ENGINEER  
 DATE: 05/08/13

DESIGNED: CG  
 DRAWN: RR  
 CHECKED: PH  
 DATE: 04/23/13  
 ROAD NUMBER: SR 49



**EL DORADO COUNTY**  
 DEPARTMENT OF TRANSPORTATION

**NORTHSIDE SCHOOL CLASS 1**  
**BIKE PATH - PHASE 2 (SR49)**

SHEET  
**L-4**  
 7 OF 35  
 W.O. No. 72306

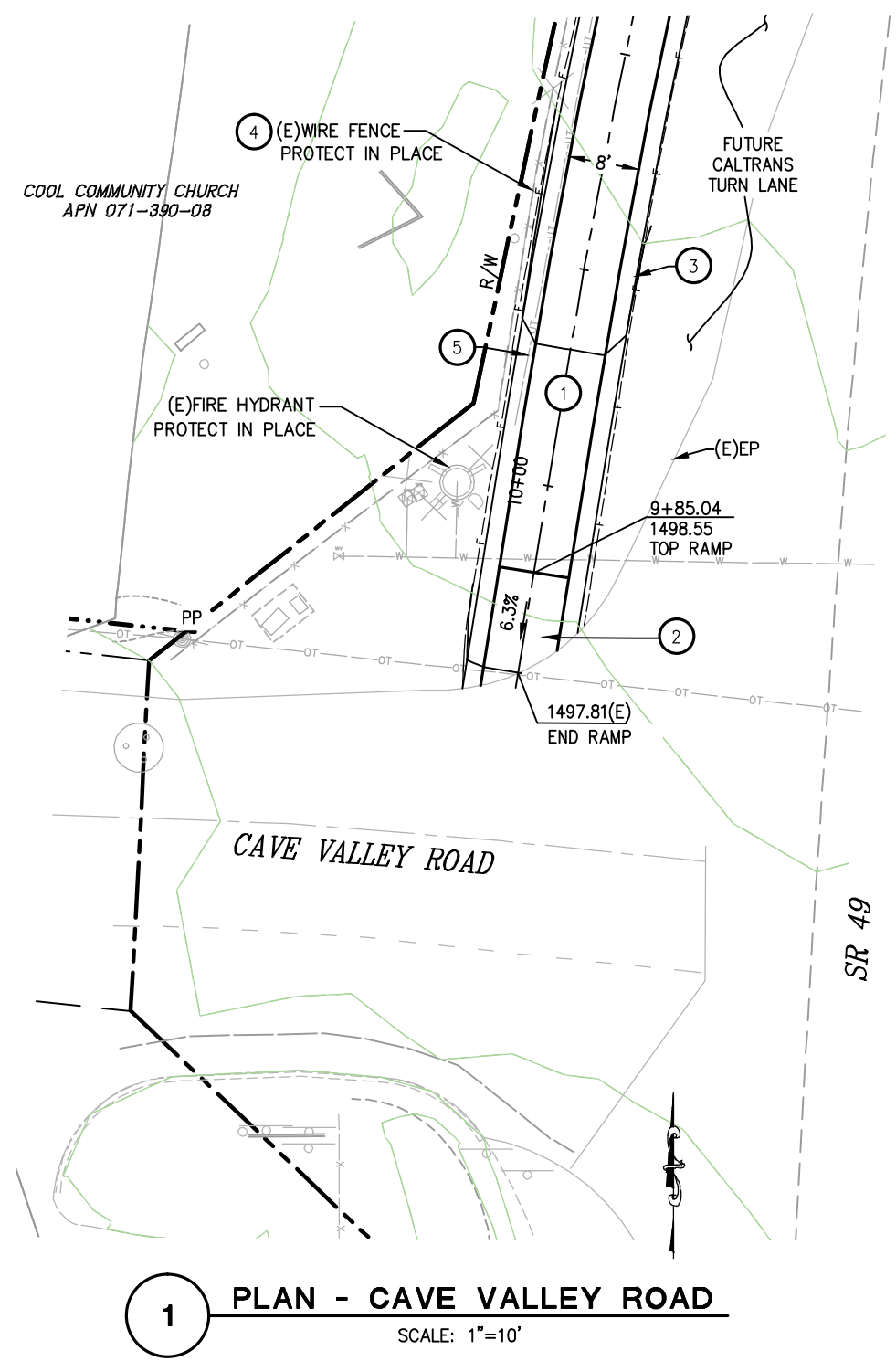
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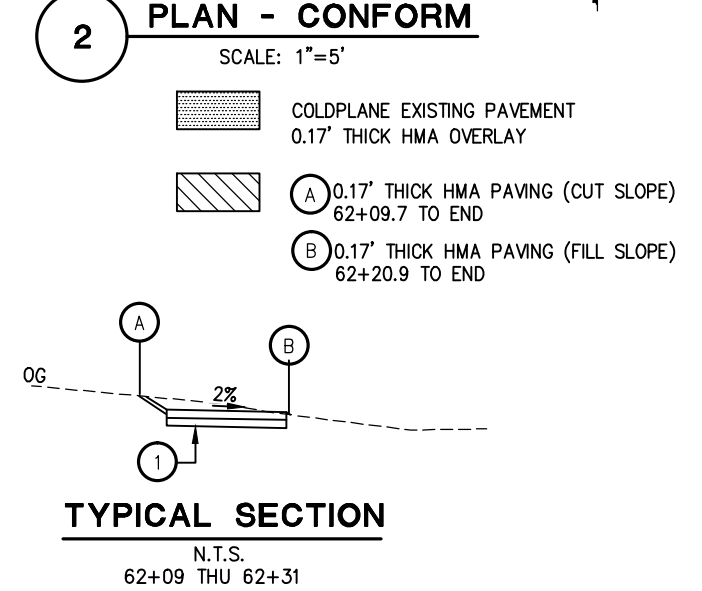
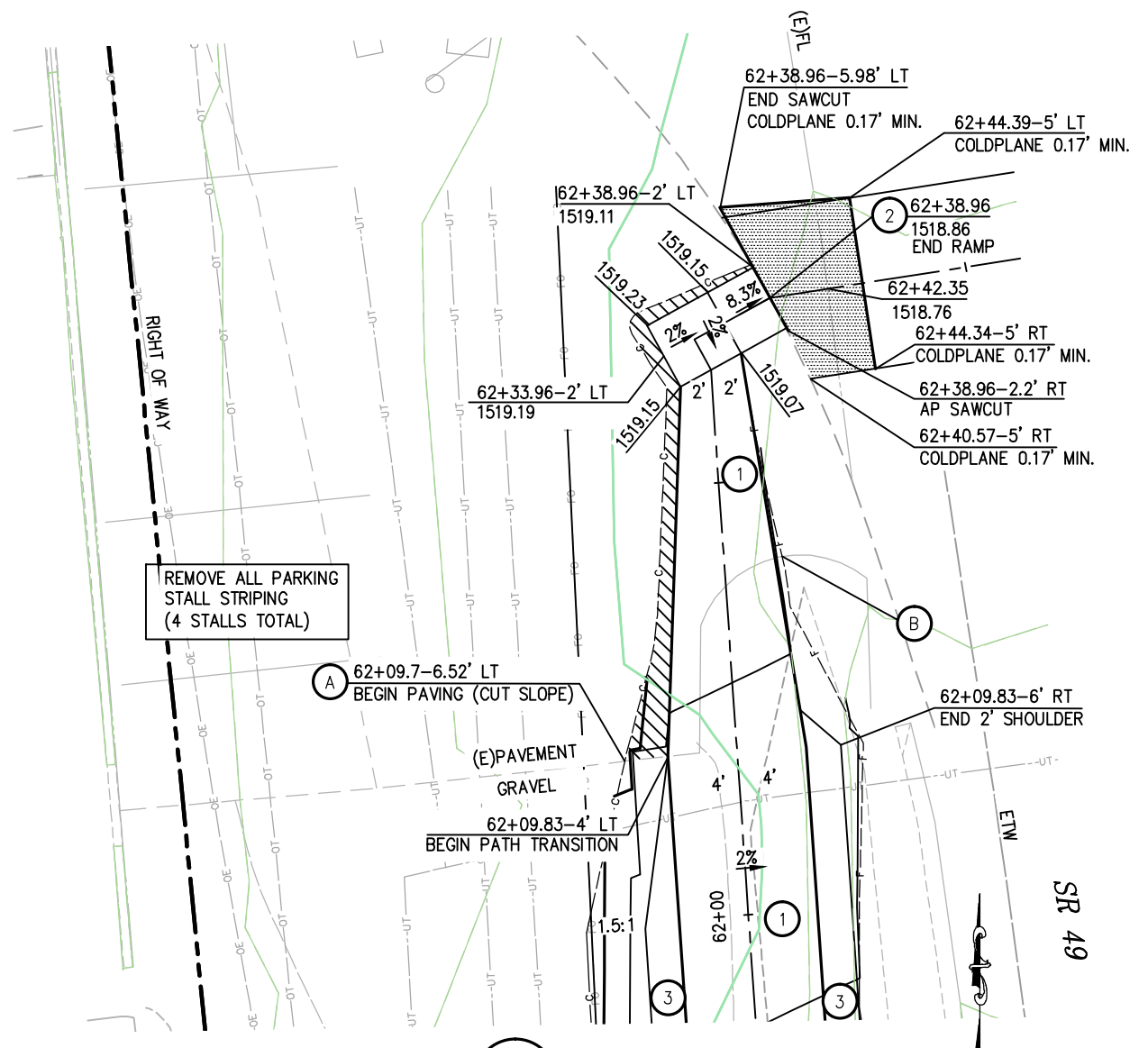
ORIGINAL SCALE IS IN INCHES  
Drawing name: C:\Civil 3D\Projects\72306 Northside School Class 1 Bike Path - SR 49\CADD Files\Sheets\C-1.dwg Layout Tab: C-1 May 08, 2013 11:11am SMCvey

**WARNING**  
THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION



- GENERAL NOTES:**
1. STATION/OFFSETS PER "49 PATH CL"
  2. ALIGNMENT 1.5:1 CUT/FILL UNLESS NOTED

- CONSTRUCTION NOTES:**
- 1 STRUCTURAL SECTION 0.33' AC (TYPE A), OVER 0.33' AB (CLASS 2)
  - 2 ASPHALT RAMP SHALL BE HAVE DETECTABLE WARNING SURFACE AT THE END AND A GROOVED DETAIL AT THE TOP PER A88A
  - 3 2' WIDE SHOULDER SUBGRADE COMPACTED TO 90%
  - 4 EXISTING WIRE FENCE
  - 5 APPROXIMATE LOCATION OF AT&T UNDERGROUND UTILITIES

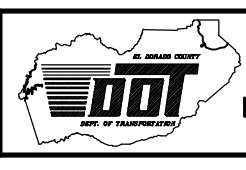


| REVISION | NUMBER | DATE | DESCRIPTION | BY |
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PREPARED UNDER THE SUPERVISION OF:  
*Paul J. Horn*  
REGISTERED CIVIL ENGINEER  
DATE: 05/08/13

DESIGNED: CG  
DRAWN: RR  
CHECKED: PH  
DATE: 04/23/13  
ROAD NUMBER: SR 49



**EL DORADO COUNTY**  
DEPARTMENT OF TRANSPORTATION

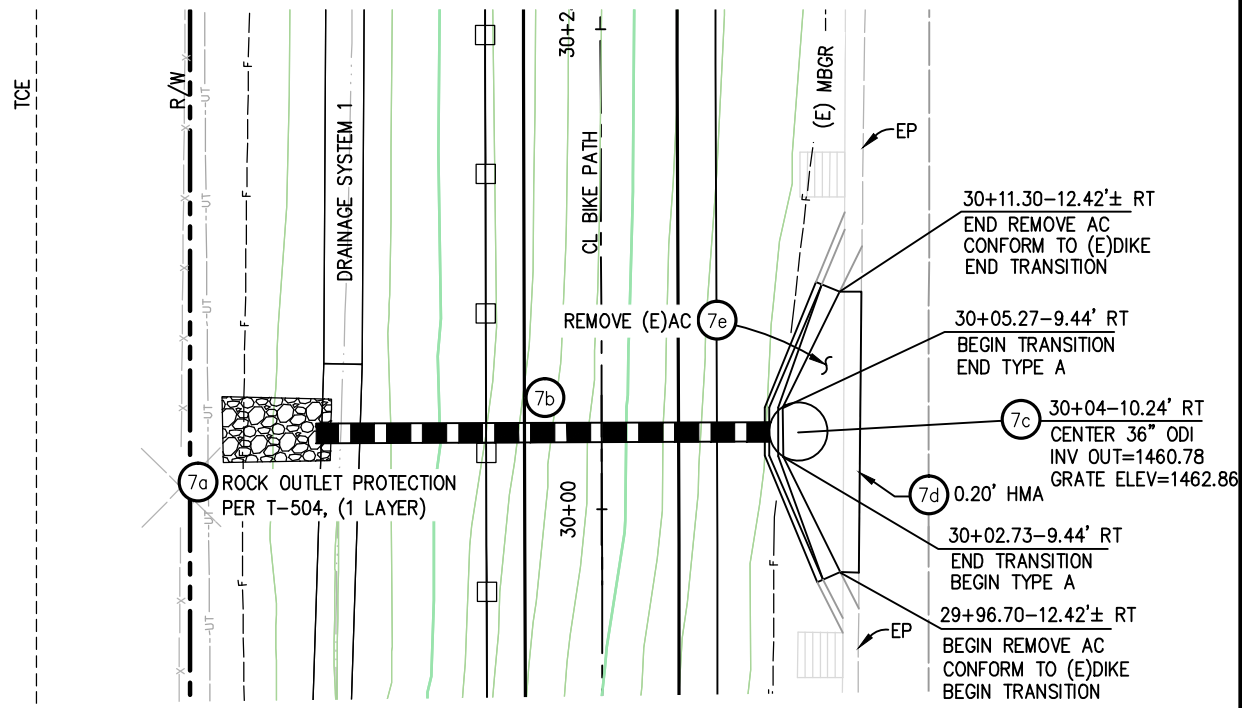
**NORTHSIDE SCHOOL CLASS 1**  
BIKE PATH - PHASE 2 (SR49)

**CONSTRUCTION DETAILS**  
SCALE : AS NOTED

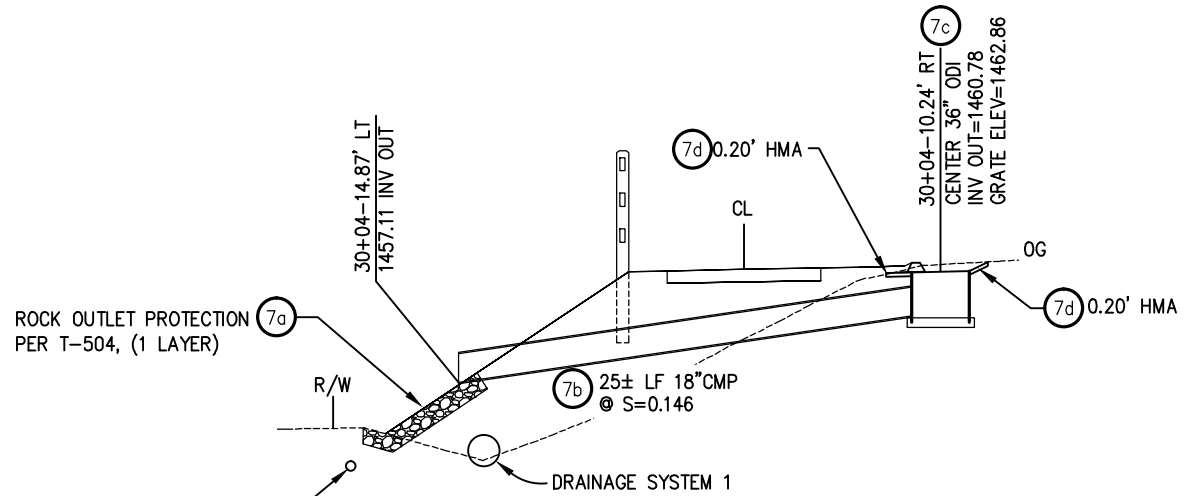
SHEET  
**C-1**  
9 OF 35  
W.O. No. **72306**

**WARNING**

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION



**1 PLAN - DRAINAGE SYSTEM 7**  
TYPE ODI INLET PER D75A  
SCALE: 1"=5'

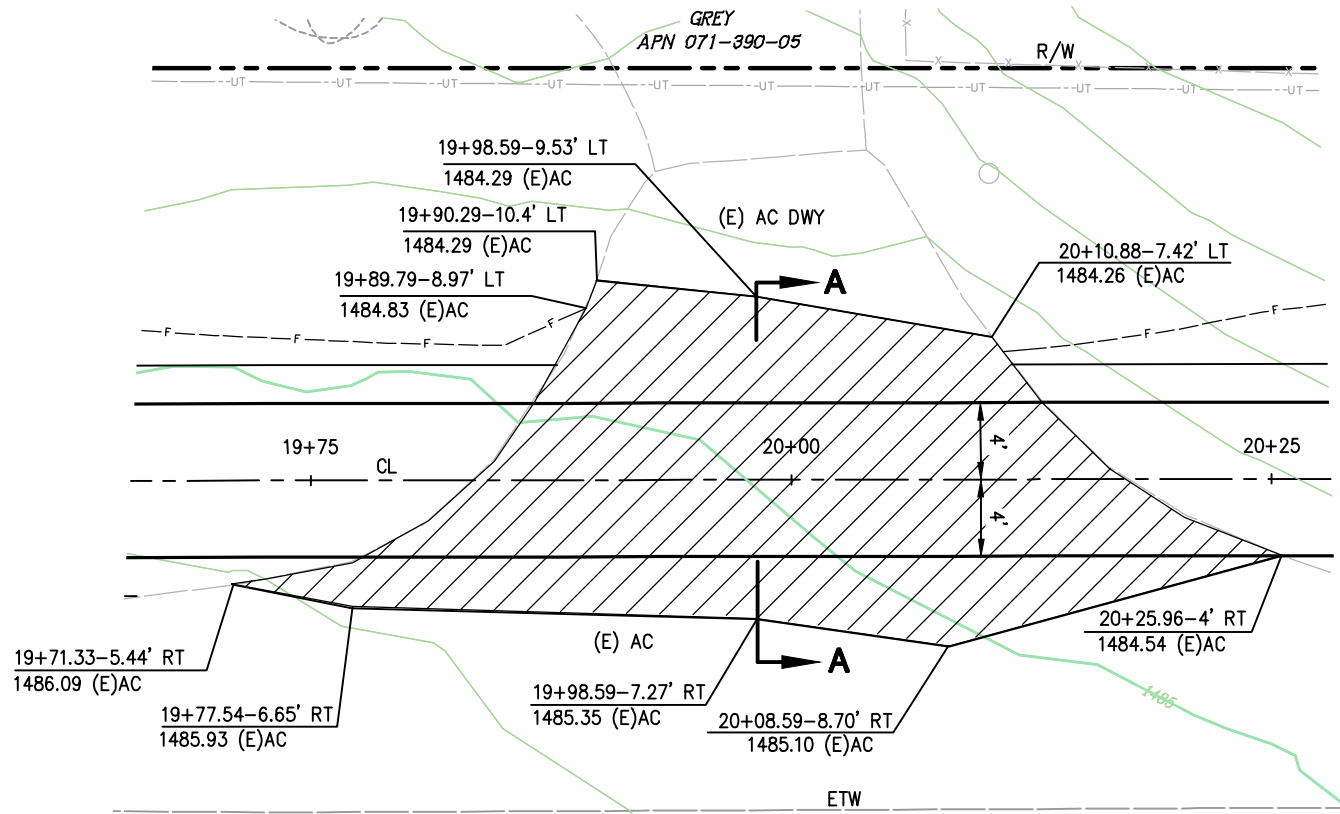


**SECTION - DRAINAGE SYSTEM 7**  
TYPE ODI INLET PER D75A  
STEEL PIPE INLET w/36 RX GRATE AND RAISED OPENING AT HMA FLOWLINE  
SCALE: 1"=5'H,V

APPROX. LOCATION OF UNDERGROUND UTILITIES. CONTRACTOR TO VERIFY THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION.

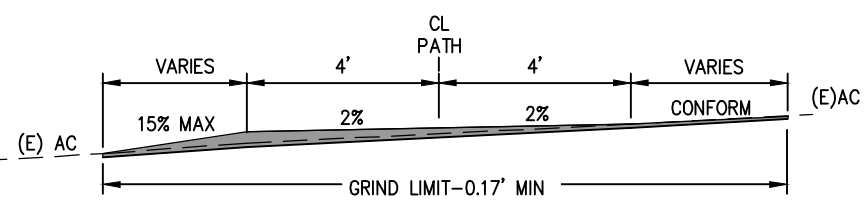
**WARNING**

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION



**1 PLAN - DRIVEWAY CONFORM**  
SCALE: 1"=5'

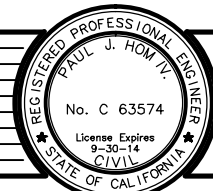
NOTE: HMA THICKNESS VARIES 0.17 TO 0.3 ±



**SECTION A-A**  
N.T.S.

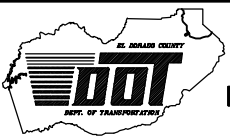
**CONSTRUCTION DETAILS  
DRIVEWAY CONFORM  
SCALE : AS NOTED**

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Drawing name: C:\Civil 3D Projects\72306 Northside School Class 1 Bike Path - SR 49\CADD Files\Sheets\C-2.dwg Layout Tab: C-2 May 08, 2013 - 11:17am SMCvey



PREPARED UNDER THE SUPERVISION OF:  
*Paul J. Hom*  
REGISTERED CIVIL ENGINEER  
DATE: **05/08/13**

DESIGNED: CG  
DRAWN: RR  
CHECKED: PH  
DATE: 04/23/13  
ROAD NUMBER: SR 49



**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

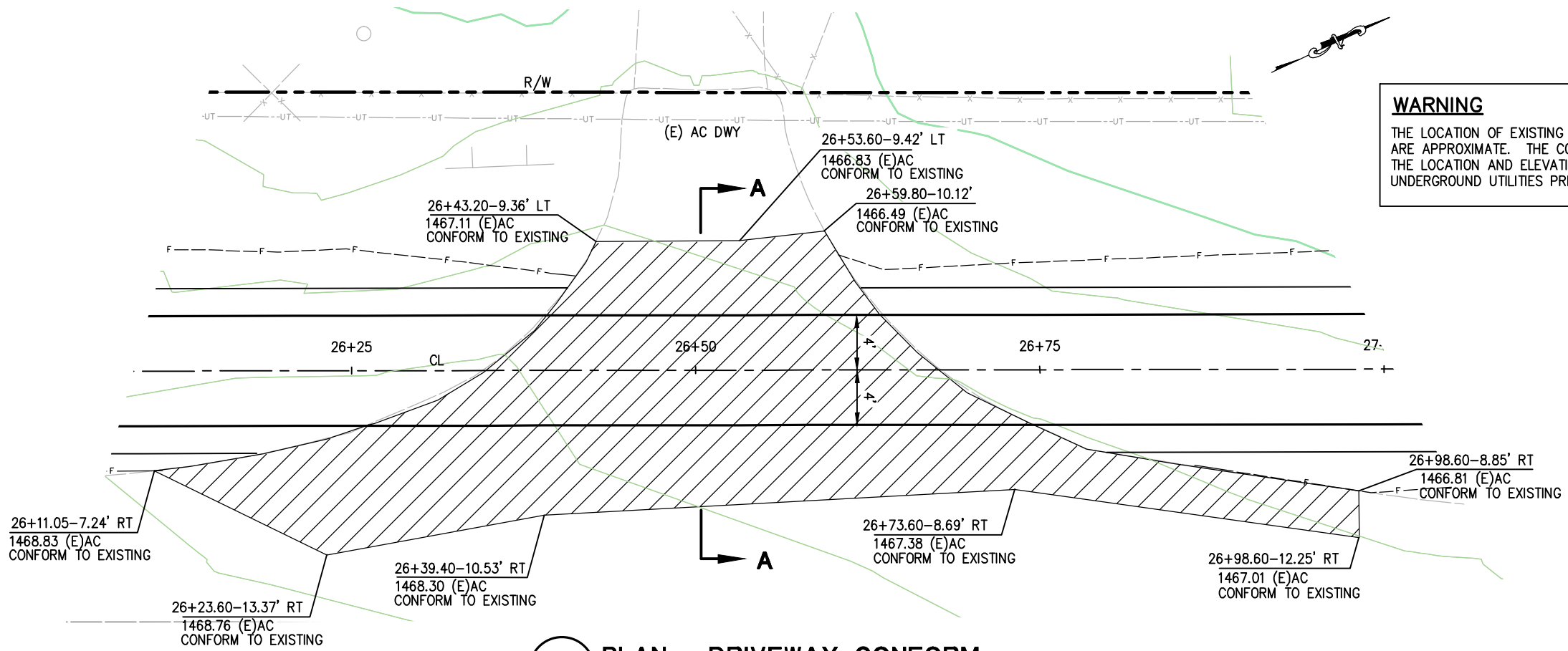
**NORTHSIDE SCHOOL CLASS 1  
BIKE PATH - PHASE 2 (SR49)**

SHEET  
**C-2**  
10 OF 35  
W.O. No. **72306**

| REVISION | NUMBER | DATE | DESCRIPTION | BY |
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GREY  
APN 071-390-05

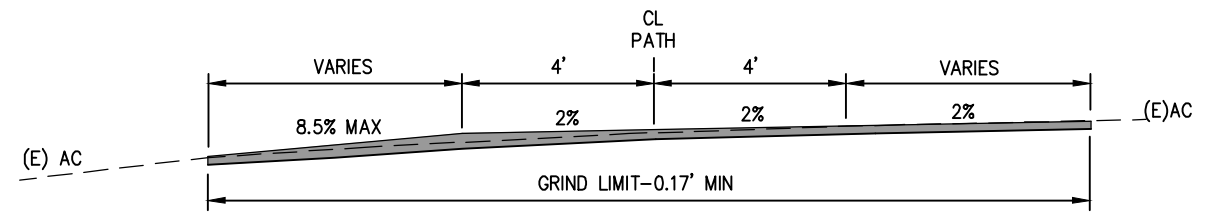


**WARNING**  
 THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION

**1 PLAN - DRIVEWAY CONFORM**  
 SCALE: 1"=5'

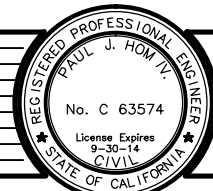
GRIND 0.17' MINIMUM

NOTE:  
HMA THICKNESS VARIES 0.17 TO 0.3 ±



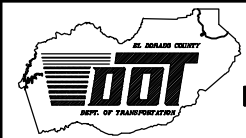
**SECTION A-A**  
 NTS

**CONSTRUCTION DETAILS**  
**DRIVEWAY CONFORM**  
 SCALE : AS NOTED



PREPARED UNDER THE SUPERVISION OF:  
*Paul J. Hom*  
 REGISTERED CIVIL ENGINEER  
 DATE: 05/08/13

DESIGNED: CG  
 DRAWN: RR  
 CHECKED: PH  
 DATE: 04/23/13  
 ROAD NUMBER: SR 49



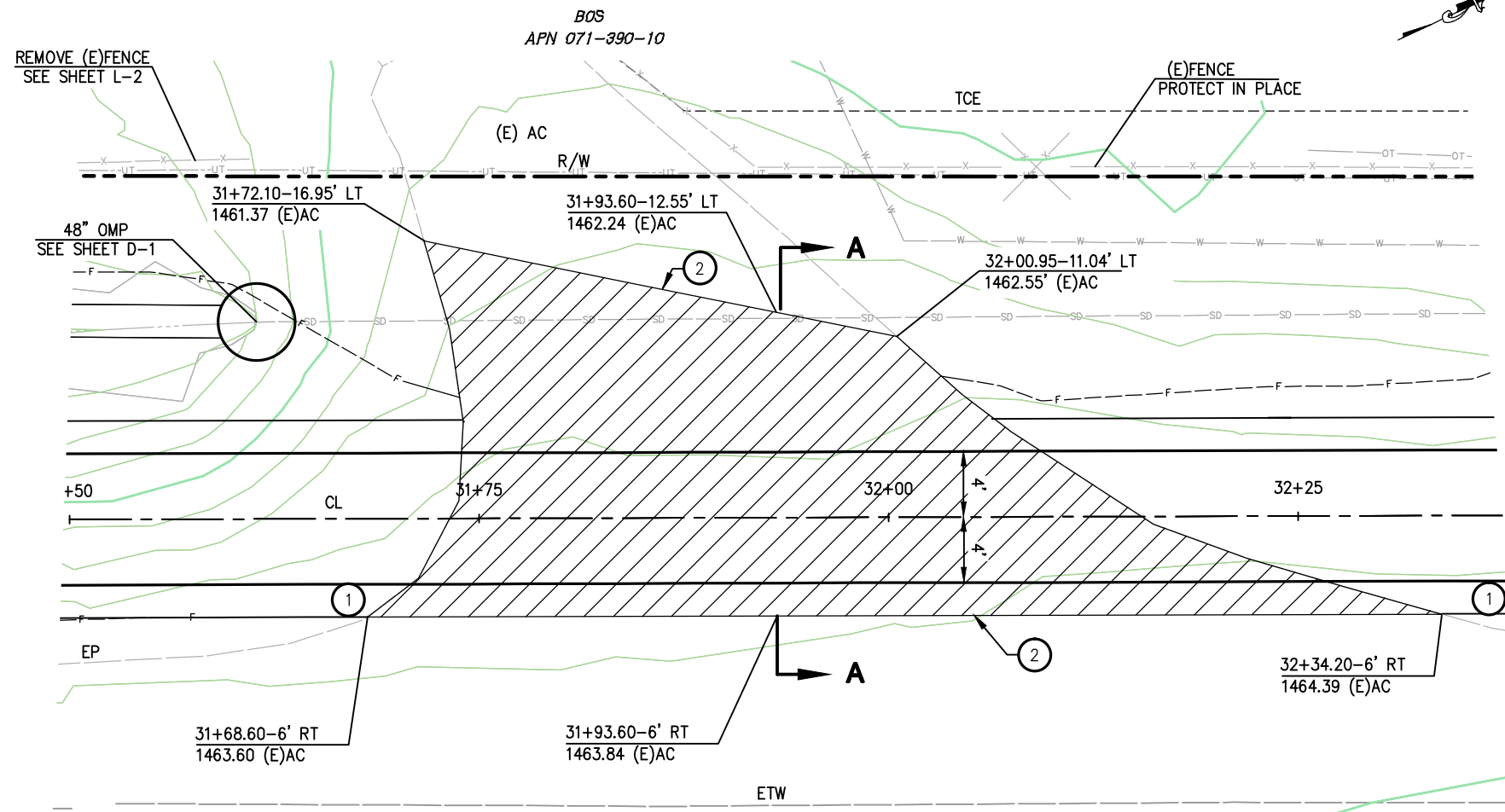
**EL DORADO COUNTY**  
**DEPARTMENT OF TRANSPORTATION**

**NORTHSIDE SCHOOL CLASS 1**  
**BIKE PATH - PHASE 2 (SR49)**

SHEET  
**C-3**  
 11 OF 35  
 W.O. No. **72306**

| REVISION | NUMBER | DATE | DESCRIPTION | BY |
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 FOR REDUCED PLANS



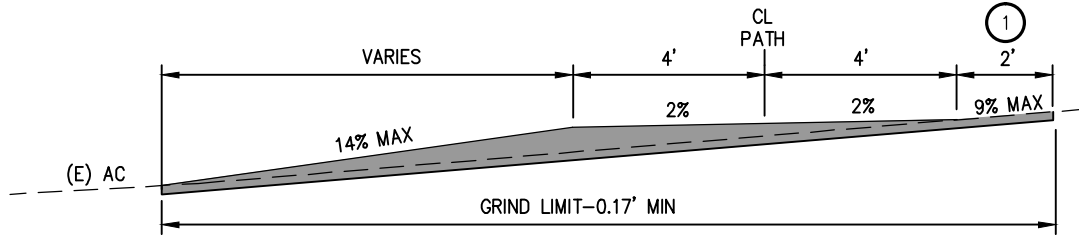
**WARNING**  
 THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION

**1 PLAN - DRIVEWAY DETAIL**  
 SCALE: 1"=5'



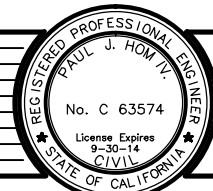
- CONSTRUCTION NOTES:**
- ① - 2' WIDE SHOULDER TO CONFORM TO EXISTING DRIVEWAY
  - ② - GRIND LIMIT TO CONFORM TO EXISTING DRIVEWAY

NOTE:  
 HMA THICKNESS VARIES 0.17 TO 0.7 ±



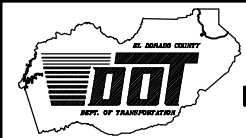
**SECTION A-A**  
 NTS

**CONSTRUCTION DETAILS  
 DRIVEWAY CONFORM  
 SCALE : AS NOTED**



PREPARED UNDER THE SUPERVISION OF:  
*Paul J. Horn*  
 REGISTERED CIVIL ENGINEER  
 DATE: 05/08/13

DESIGNED: CG  
 DRAWN: RR  
 CHECKED: PH  
 DATE: 04/23/13  
 ROAD NUMBER: SR 49



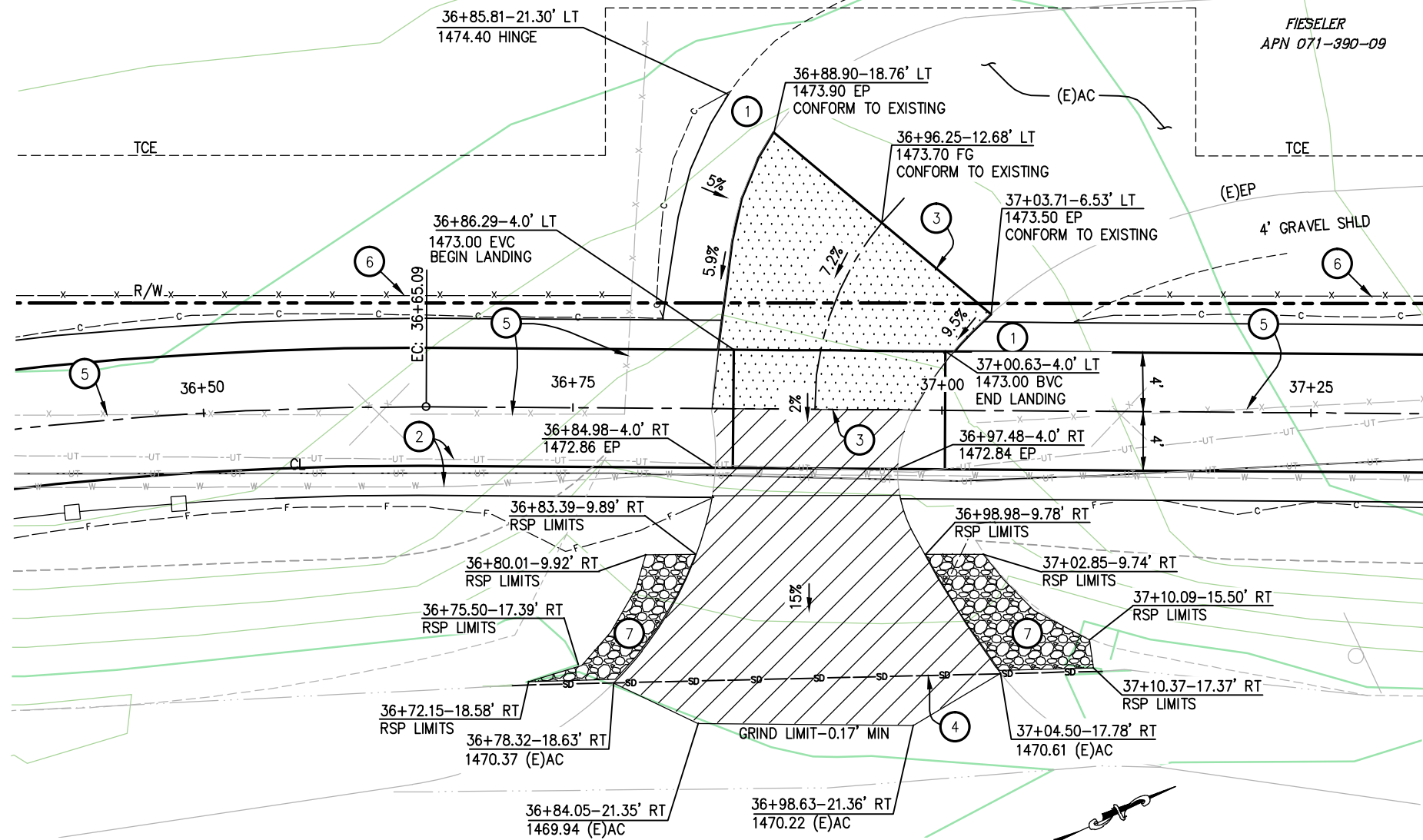
**EL DORADO COUNTY  
 DEPARTMENT OF TRANSPORTATION**

**NORTHSIDE SCHOOL CLASS 1  
 BIKE PATH - PHASE 2 (SR49)**

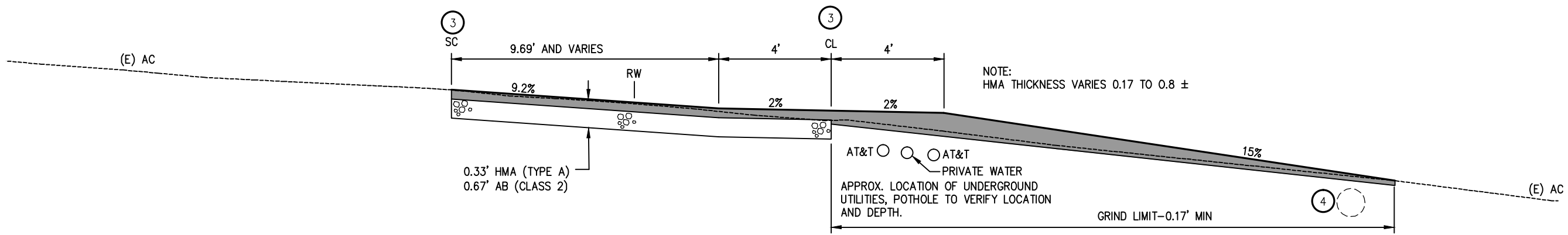
SHEET  
**C-4**  
 12 OF 35  
 W.O. No. 72306

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**1 PLAN - DRIVEWAY DETAIL**  
SCALE: 1"=5'



**PROFILE**  
NTS

**WARNING**

UNDERGROUND AT&T AND PRIVATE WATER SERVICE CROSS THIS DRIVEWAY. LOCATE AND POT HOLE ALL UTILITIES PRIOR TO CONSTRUCTION.

**GENERAL NOTES:**

1. STATION/OFFSET CALLOUTS PER "49 PATH CL" ALIGNMENT
2. UNLESS NOTED, 2:1 CUT/FILL ALONG DRIVEWAY
3. PRIOR TO CONSTRUCTION - INSTALL ELECTRIFIED TEMPORARY FENCE NEAR THE TCE LINE. THE EXACT LOCATION OF THE FENCE WILL BE DETERMINED BY THE OWNER.

**CONSTRUCTION NOTES:**

1. 4' WIDE GRAVEL SHOULDER, (0.25' THICK) TO MATCH EXISTING SHOULDER
2. UNDERGROUND AT&T AND PRIVATE WATER SERVICE CONTRACTOR SHALL VERIFY VERTICAL AND HORIZONTAL LOCATION PRIOR TO CONSTRUCTION
3. SAWCUT TO A CLEAN UNIFORM LINE
4. (E) CULVERT, PROTECT IN PLACE
5. EXISTING FENCE TO BE REMOVED.
6. NEW R/W FENCE SHALL BE INSTALLED PER DETAIL A86, AT THE COMPLETION OF WORK. (SEE SHEET L-3 FOR STA/OFFSET)
7. REMOVE EXISTING ROCK AND INSTALL RSP (NO.1 METHOD B)

**LEGEND:**

- 0.33' HMA (TYPE A), 0.67' AB (CLASS 2)
- GRIND 0.17' MINIMUM

**CONSTRUCTION DETAILS  
DRIVEWAY CONFORM  
SCALE : AS NOTED**



PREPARED UNDER THE SUPERVISION OF:  
*Paul J. Hom*  
 REGISTERED CIVIL ENGINEER  
 DATE: 05/08/13

DESIGNED: CG  
 DRAWN: RR  
 CHECKED: PH  
 DATE: 04/24/13  
 ROAD NUMBER: SR 49



**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

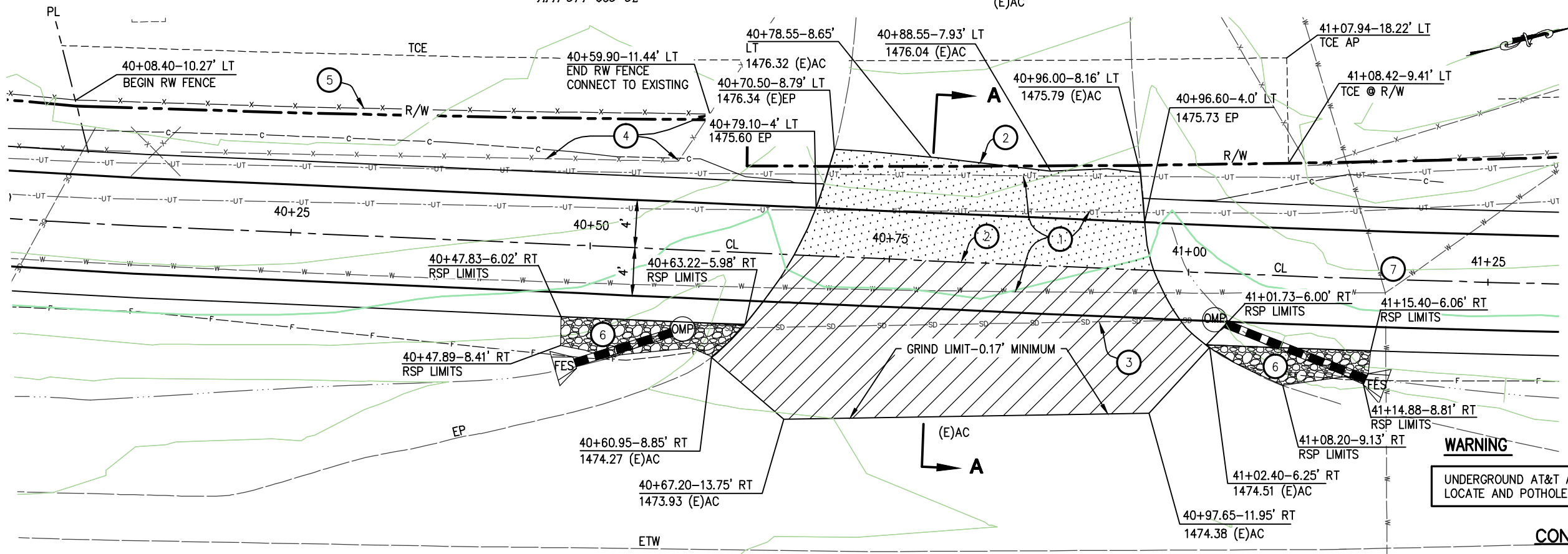
**NORTHSIDE SCHOOL CLASS 1  
BIKE PATH - PHASE 2 (SR49)**

SHEET  
**C-5**  
 13 OF 35  
 W.O. No. 72306

| REVISION | NUMBER | DATE | DESCRIPTION | BY |
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 Drawing name: C:\Civil 3D\Projects\72306 Northside School Class 1 Bike Path - SR 49\CADD Files\Sheets\C-6.dwg  
 Layout Tab: C-6 May 08, 2013 11:44am Mikevey  
 FOR REDUCED PLANS  
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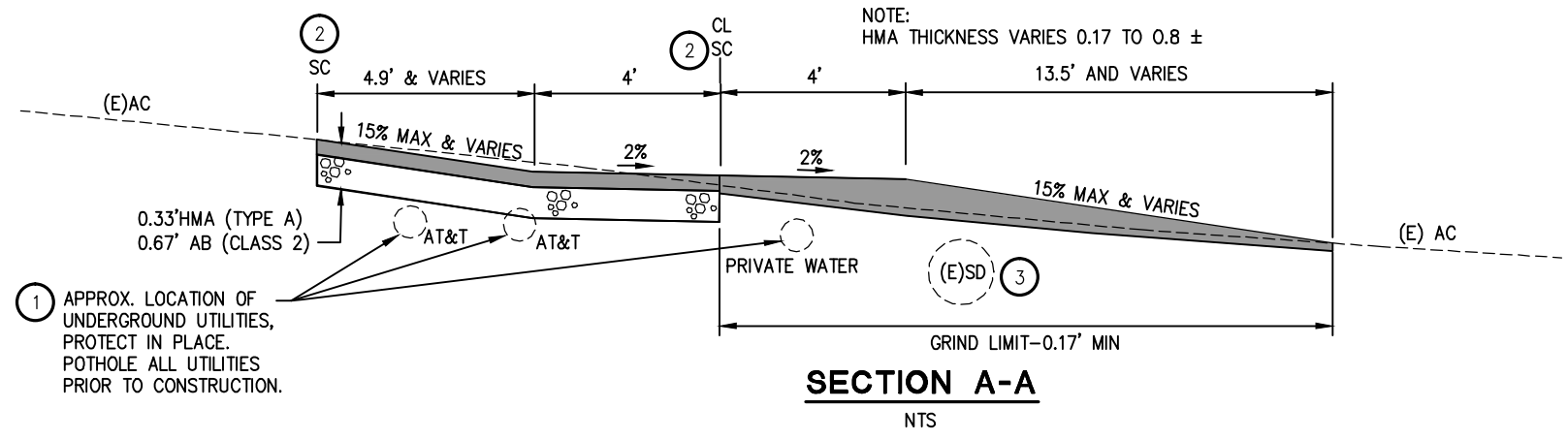
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APN 071-390-02



**1 PLAN - DRIVEWAY DETAIL**  
SCALE: 1"=5'

**CONSTRUCTION NOTES:**  
 STATION/OFFSET CALLOUTS PER "49 PATH CL" ALIGNMENT UNLESS NOTED, 2:1 CUT/FILL

- ① UNDERGROUND AT&T AND WATER SERVICE CONTRACTOR SHALL VERIFY VERTICAL AND HORIZONTAL LOCATION PRIOR TO CONSTRUCTION
- ② SAWCUT TO A CLEAN UNIFORM LINE
- ③ (E)CULVERT, PROTECT IN PLACE SEE SHEET D-3 FOR DRAINAGE SYSTEM
- ④ EXISTING FENCE TO BE REMOVED
- ⑤ NEW R/W FENCE PER DETAIL A86 INSTALL AT THE COMPLETION OF WORK
- ⑥ RSP (No.1 METHOD B)
- ⑦ EXISTING GDPUD WATER SERVICE METERS (3) REPLACE WITH TRAFFIC RATED BOXES AND COVERS. ADJUST TO FINISH GRADE OF PATH.



0.33' HMA (TYPE A), 0.67' AB (CLASS 2)  
 GRIND 0.17' MINIMUM

**CONSTRUCTION DETAILS  
DRIVEWAY CONFORM  
SCALE : AS NOTED**



PREPARED UNDER THE SUPERVISION OF:  
*Paul J. Hom*  
 REGISTERED CIVIL ENGINEER  
 05/08/13

DESIGNED: CG  
 DRAWN: RR  
 CHECKED: PH  
 DATE: 04/24/13  
 ROAD NUMBER: SR 49



**EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**NORTHSIDE SCHOOL CLASS 1  
BIKE PATH - PHASE 2 (SR49)**

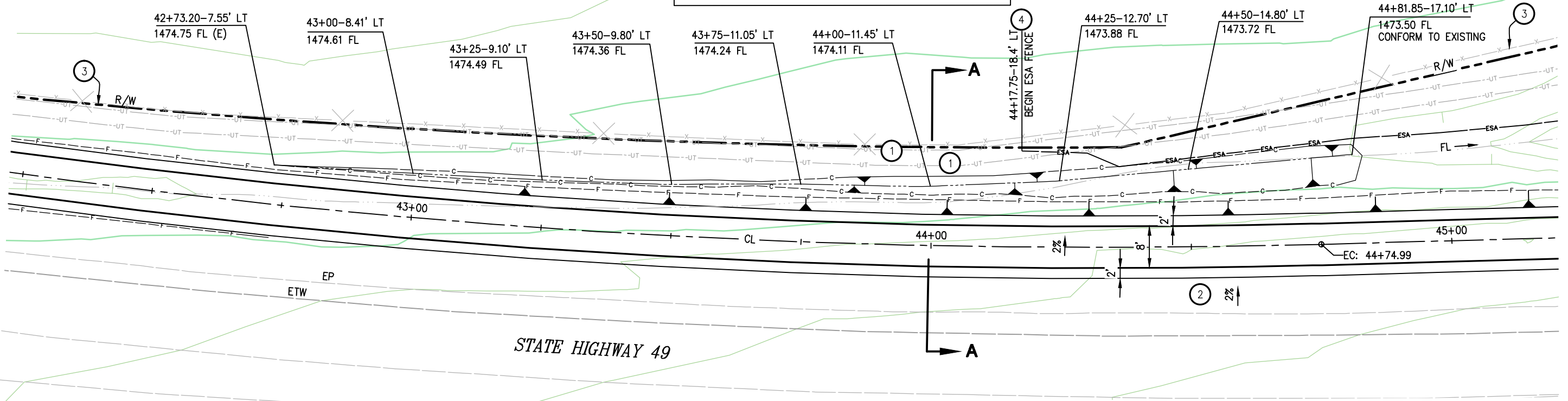
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**C-6**  
 14 OF 35  
 W.O. No. 72306

| REVISION | NUMBER | DATE | DESCRIPTION | BY |
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ELLINGHOUSE  
APN 071-480-07

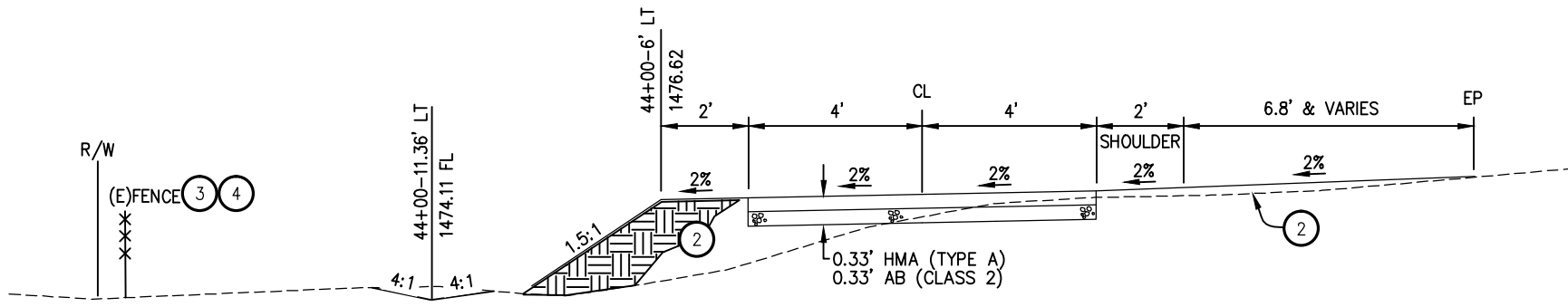
**WARNING**

THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION.



**1 PLAN - DRAINAGE DITCH**  
SCALE: 1"=10'

- GENERAL NOTES:**
1. STATION/OFFSET CALLOUTS PER "49 PATH CL" ALIGNMENT
  2. 4:1 CUT ALONG DRAINAGE DITCH



**SECTION A-A**  
NTS

APPROXIMATE LOCATION OF AT&T UNDERGROUND UTILITIES. CONTRACTOR SHALL VERIFY THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION.

- CONSTRUCTION NOTES:**
- 1 UNDERGROUND AT&T CONTRACTOR SHALL VERIFY VERTICAL AND HORIZONTAL LOCATION PRIOR TO CONSTRUCTION
  - 2 SUBGRADE COMPACTED TO 90% 0.5' MIN. DEPTH UNDER 2' SHOULDER GRADE TO DRAIN FROM EXISTING EP TO BIKE PATH, 2% AND VARIES
  - 3 EXISTING RW FENCE, PROTECT IN PLACE
  - 4 PLACE ESA FENCING AS SHOWN AND PER ENGINEER

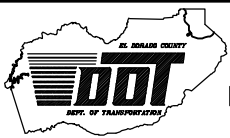
**CONSTRUCTION DETAILS**  
SCALE : AS NOTED

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES Drawing Name: C:\Civil 3D\Projects\72306 Northside School Class 1 Bike Path - SR 49\CADD Files\Sheets\C-7.dwg Layout Tab: C-7 May 08, 2013 11:49am SMovey



PREPARED UNDER THE SUPERVISION OF:  
*Paul J. Horn*  
REGISTERED CIVIL ENGINEER  
DATE: 05/08/13

DESIGNED: CG  
DRAWN: RR  
CHECKED: PH  
DATE: 04/24/13  
ROAD NUMBER: SR 49



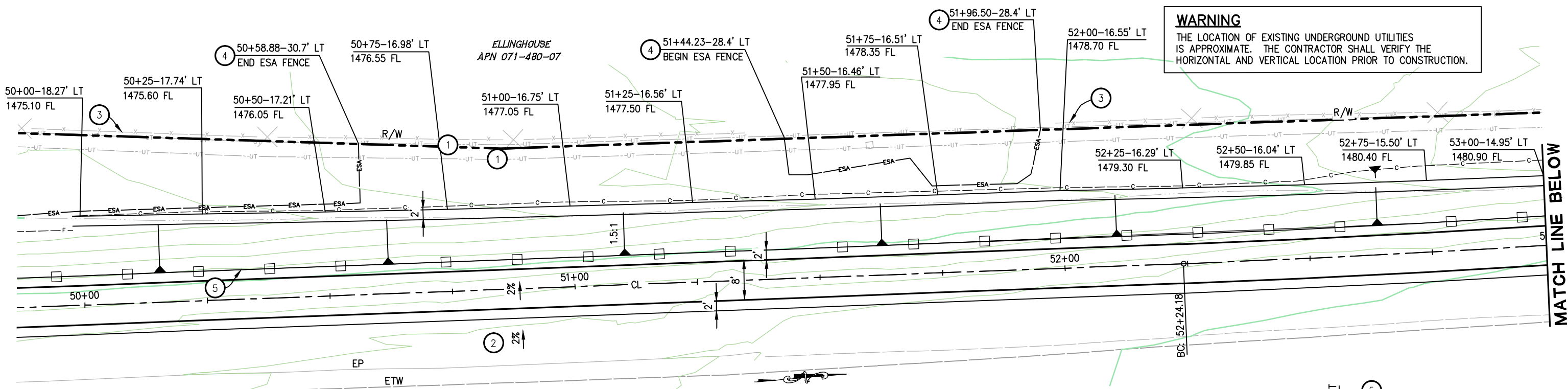
**EL DORADO COUNTY**  
DEPARTMENT OF TRANSPORTATION

**NORTHSIDE SCHOOL CLASS 1**  
**BIKE PATH - PHASE 2 (SR49)**

SHEET  
**C-7**  
15 OF 35  
W.O. No. 72306

| REVISION | NUMBER | DATE | DESCRIPTION | BY |
|----------|--------|------|-------------|----|
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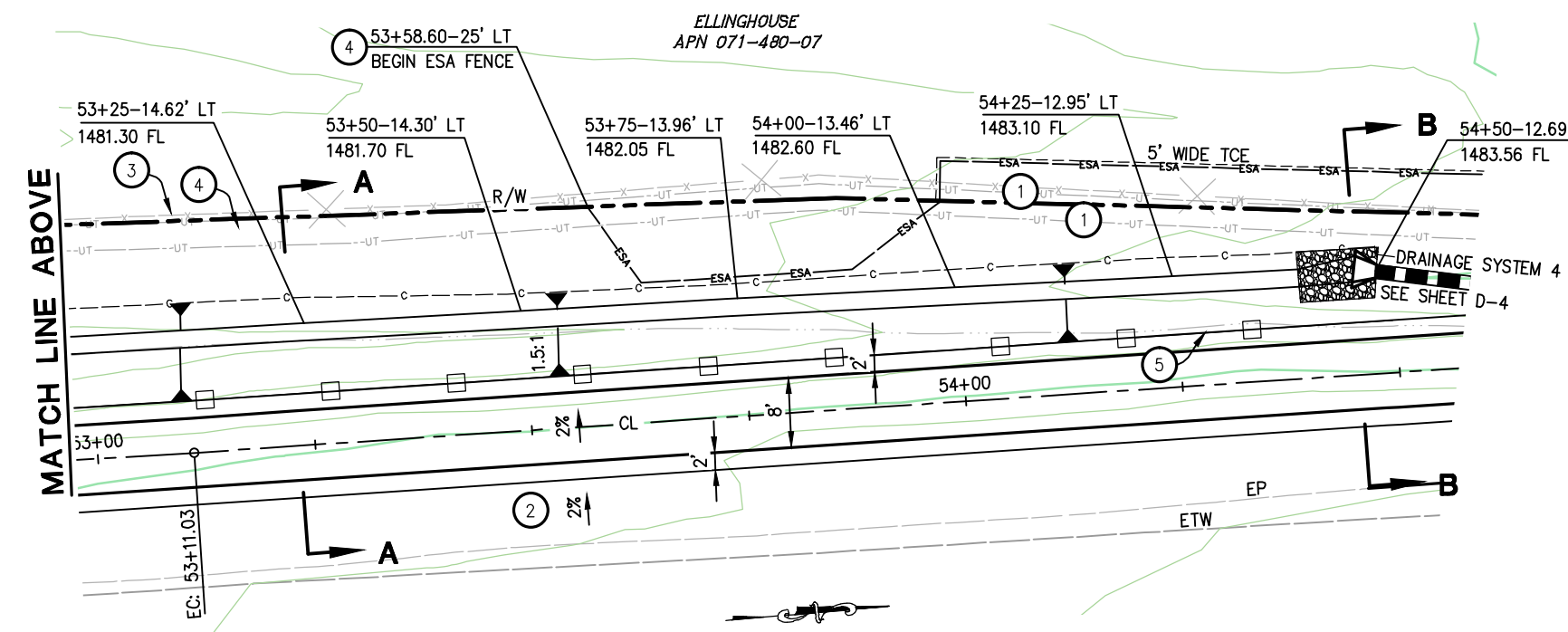
ORIGINAL SCALE IS IN INCHES  
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 FOR REDUCED PLANS  
 2  
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STATE HIGHWAY 49

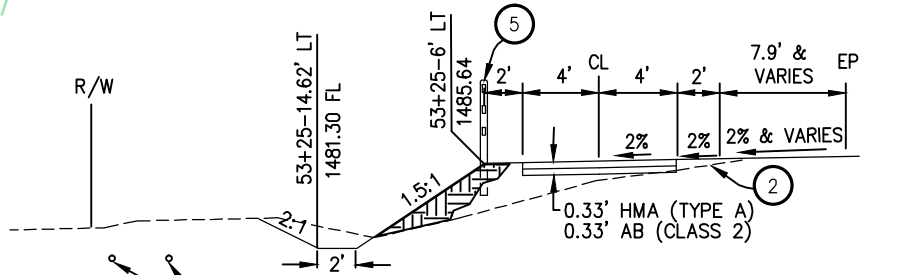
**1 PLAN - DRAINAGE DITCH**  
SCALE: 1"=10'H

**WARNING**  
THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION.

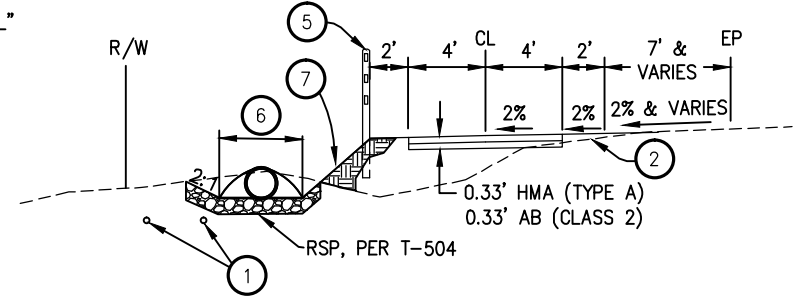


MATCH LINE ABOVE

**1 PLAN - DRAINAGE DITCH**  
SCALE: 1"=10'H



**SECTION A-A**  
NTS



**SECTION B-B**  
NTS

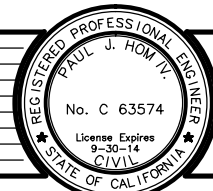
**GENERAL NOTES:**

1. STATION/OFFSET CALLOUTS PER "49 PATH CL" ALIGNMENT

**CONSTRUCTION NOTES:**

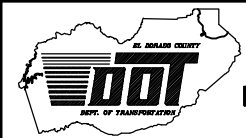
- 1 APPROXIMATE LOCATION OF AT&T UNDERGROUND UTILITIES. CONTRACTOR SHALL VERIFY THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION.
- 2 SUBGRADE COMPACTED TO 90% 6" MIN. DEPTH UNDER 2' SHOULDER GRADE TO DRAIN FROM EXISTING EP TO BIKE PATH - 2% AND VARIES
- 3 EXISTING RW FENCE, PROTECT IN PLACE
- 4 PLACE ESA FENCING AROUND DEFINED WETLANDS AND GRADING, PER ENGINEER
- 5 SIMULATED WOOD FENCE, SEE SHEET C-9
- 6 WIDEN DITCH FROM 2' TO 4' AT PIPE OUTLET TO ACCOMMODATE FES
- 7 ADJUST SLOPE AT PIPE OUTLET TO ACCOMMODATE FES

**CONSTRUCTION DETAILS**  
SCALE : AS NOTED



PREPARED UNDER THE SUPERVISION OF:  
*Paul J. Hom*  
REGISTERED CIVIL ENGINEER  
DATE: 05/08/13

DESIGNED: CG  
DRAWN: RR  
CHECKED: PH  
DATE: 04/25/13  
ROAD NUMBER: SR 49



**EL DORADO COUNTY**  
DEPARTMENT OF TRANSPORTATION

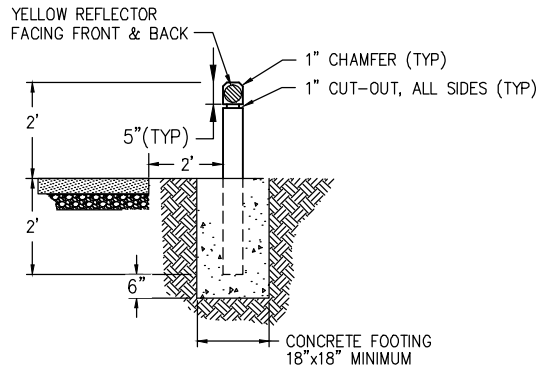
**NORTHSIDE SCHOOL CLASS 1**  
**BIKE PATH - PHASE 2 (SR49)**

SHEET  
**C-8**  
16 OF 35  
W.O. No. 72306

| REVISION | NUMBER | DATE | DESCRIPTION | BY |
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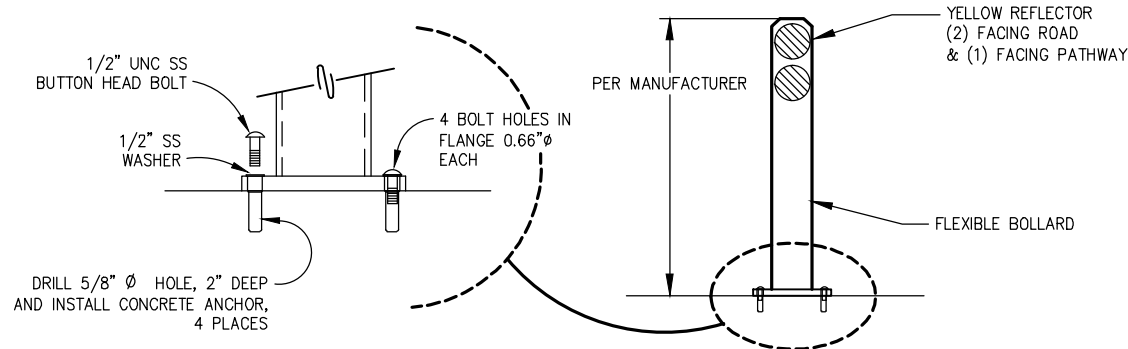


ORIGINAL SCALE IS IN INCHES  
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 FOR REDUCED PLANS  
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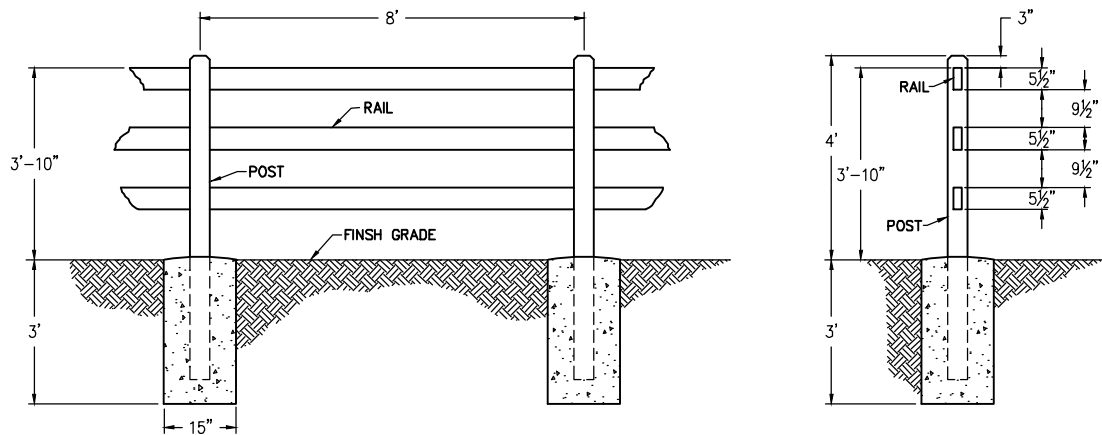
**EDGE BOLLARD DETAIL**

SCALE: 1" = 2'  
 STATION 9+90-4' LT  
 STATION 9+90-4' RT  
 STATION 61+75-6' LT  
 STATION 61+75-6' RT



**FLEXIBLE SURFACE MOUNTED CENTER BOLLARD DETAIL**

BCN FLEXIBLE BOLLARD, MODEL R-8303 OR EQUAL  
 N.T.S.  
 STATION 12+75  
 STATION 61+75

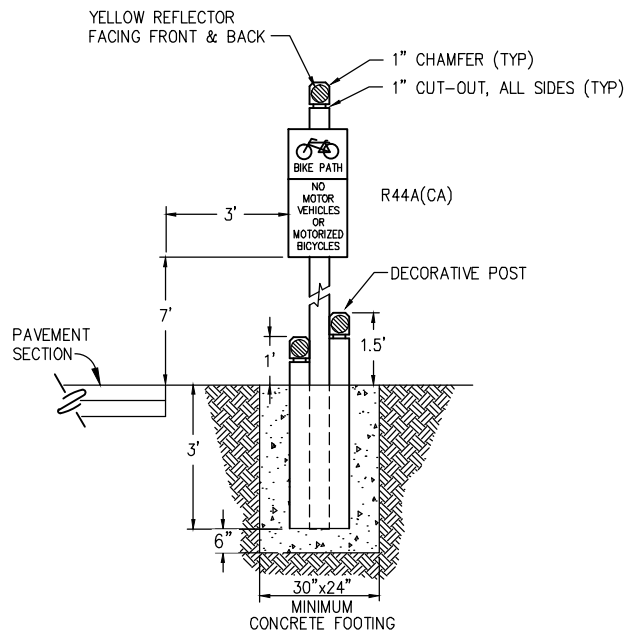


**4' SIMULATED WOOD FENCE DETAIL**

SCALE: 1" = 2'

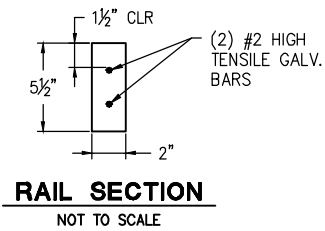
**GENERAL NOTES:**

1. ALL SIGNS SHALL BE CREATED AND INSTALLED PER THE 2012 CALIFORNIA MUTCD.
2. ALL POSTS (SIGNS AND EDGE BOLLARDS) SHALL BE 4"x4" PRESSURE TREATED DOUGLAS FIR.

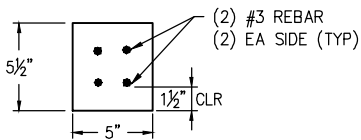


**SIGN POST DETAIL A**

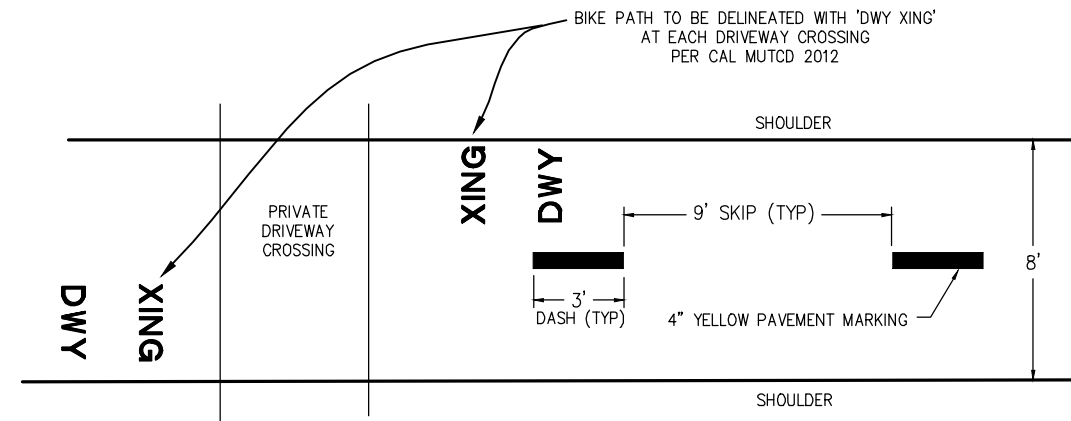
SCALE: 1" = 2'  
 STATION 12+75-5' LT  
 STATION 61+75-7' LT



**RAIL SECTION**  
 NOT TO SCALE

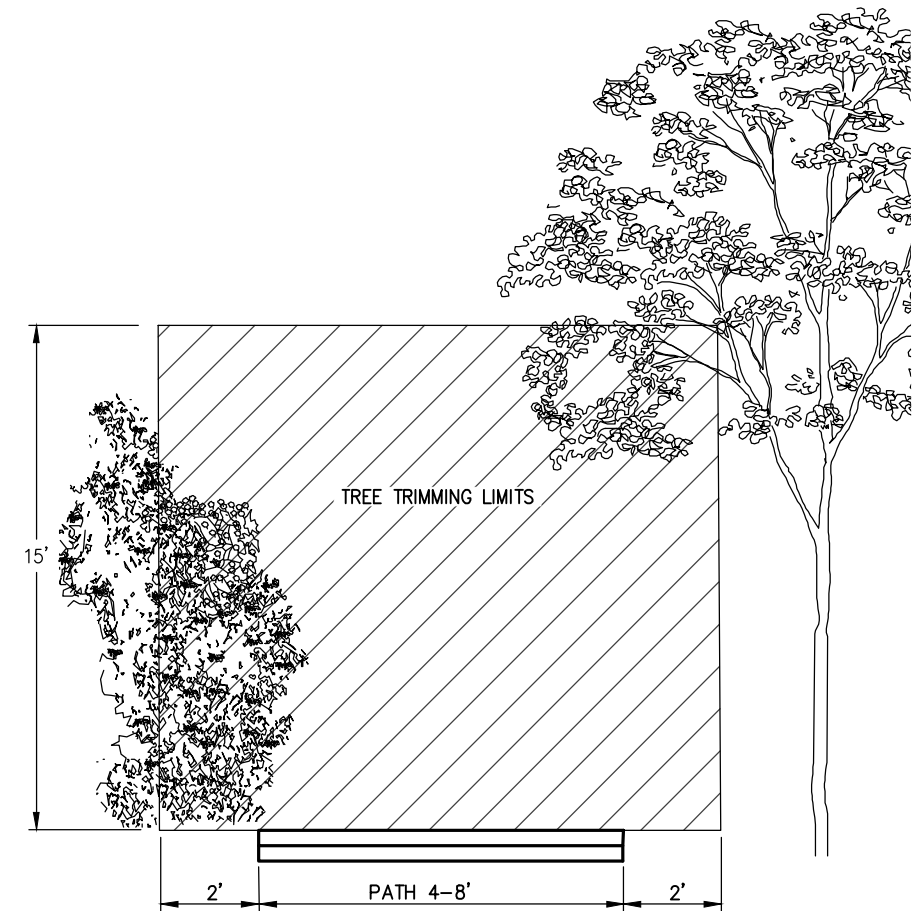


**LINE POST**  
 NOT TO SCALE



**PATHWAY CENTERLINE STRIPING DETAIL**

NTS  
 PATHWAY STRIPING PER CAL MUTCD 2012  
 STATION 9+76-62+09



**TREE TRIMMING DETAIL**

NTS

**CONSTRUCTION DETAILS**  
 SCALE : AS NOTED



PREPARED UNDER THE SUPERVISION OF:  
*Paul J. Hom*  
 REGISTERED CIVIL ENGINEER  
 DATE: 05/08/13

DESIGNED: CG  
 DRAWN: RR  
 CHECKED: PH  
 DATE: 05/02/13  
 ROAD NUMBER: SR 49



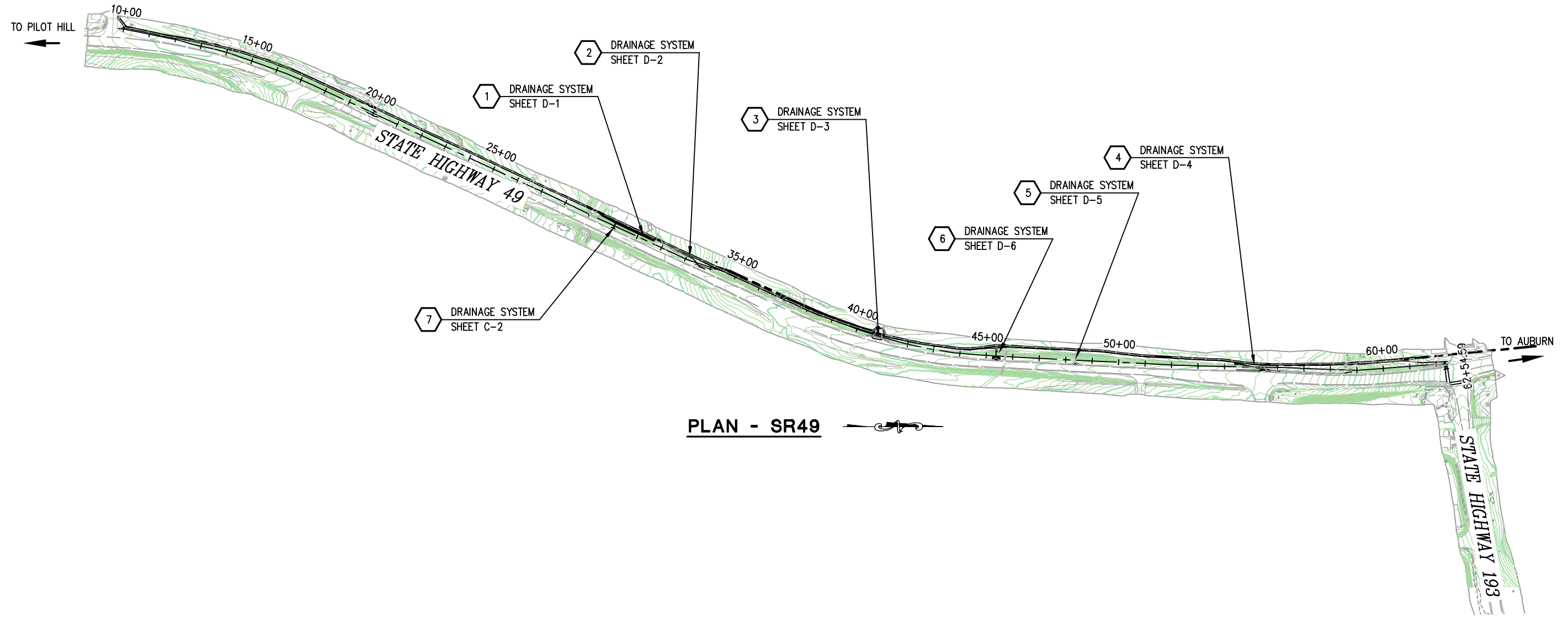
**EL DORADO COUNTY**  
 DEPARTMENT OF TRANSPORTATION

**NORTHSIDE SCHOOL CLASS 1**  
**BIKE PATH - PHASE 2 (SR49)**

SHEET  
**C-9**  
 17 OF 29  
 W.O. No. 72306

| REVISION | NUMBER | DATE | DESCRIPTION | BY |
|----------|--------|------|-------------|----|
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ORIGINAL SCALE IS IN INCHES  
 Drawing name: C:\Civil 3D Projects\72306 Northside School Class 1 Bike Path - SR 49\CADD Files\Sheets\D-INDEX.dwg Layout Tab: D-INDEX May 08, 2013 - 11:58am SMCvey  
 FOR REDUCED PLANS  
 2  
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**PLAN - SR49**

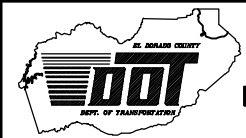
**DRAINAGE INDEX**  
SCALE : 1" = 200'

| REVISION | NUMBER | DATE | DESCRIPTION | BY |
|----------|--------|------|-------------|----|
|          |        |      |             |    |
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PREPARED UNDER THE SUPERVISION OF:  
*Paul J. Horn*  
 REGISTERED CIVIL ENGINEER  
 DATE: **05/08/13**

DESIGNED: RR  
 DRAWN: RR  
 CHECKED: PH  
 DATE: 04/25/13  
 ROAD NUMBER: SR 49

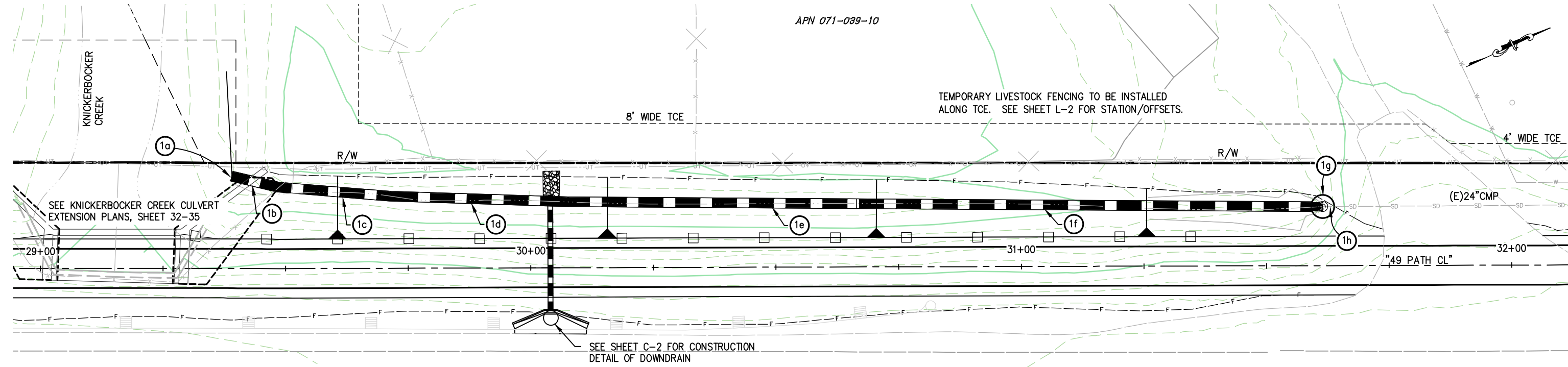


**EL DORADO COUNTY**  
**DEPARTMENT OF TRANSPORTATION**

**NORTHSIDE SCHOOL CLASS 1**  
**BIKE PATH - PHASE 2 (SR49)**

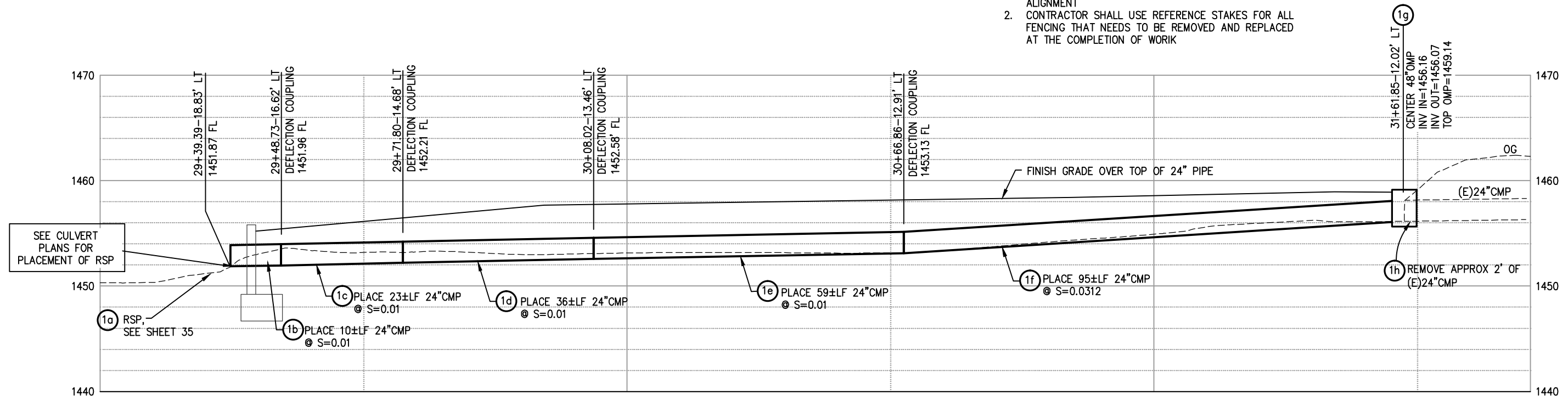
SHEET  
**D-INDEX**  
 18 OF 35  
 W.O. No. **72306**

ORIGINAL SCALE IS IN INCHES  
 Drawing name: C:\Civil 3D\Projects\72306 Northside School Class 1 Bike Path - SR 49\CADD Files\Sheets\D-1.dwg Layout Tab: D-1 May 08, 2013 - 12:07pm SMCvey  
 FOR REDUCED PLANS



**PLAN - DRAINAGE SYSTEM 1**  
 SCALE: 1"=10'

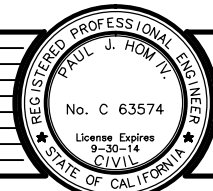
- GENERAL NOTES:**
1. STATION/OFFSET CALLOUTS PER "49 PATH CL" ALIGNMENT
  2. CONTRACTOR SHALL USE REFERENCE STAKES FOR ALL FENCING THAT NEEDS TO BE REMOVED AND REPLACED AT THE COMPLETION OF WORK



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

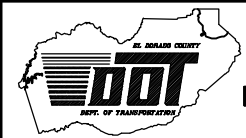
**DRAINAGE SYSTEM 1**  
 SCALE : AS NOTED

| REVISION | NUMBER | DATE | DESCRIPTION | BY |
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PREPARED UNDER THE SUPERVISION OF:  
*Paul J. Horn*  
 REGISTERED CIVIL ENGINEER  
 DATE: 05/08/13

DESIGNED: CG  
 DRAWN: RR  
 CHECKED: PH  
 DATE: 04/25/13  
 ROAD NUMBER: SR 49



**EL DORADO COUNTY**  
 DEPARTMENT OF TRANSPORTATION

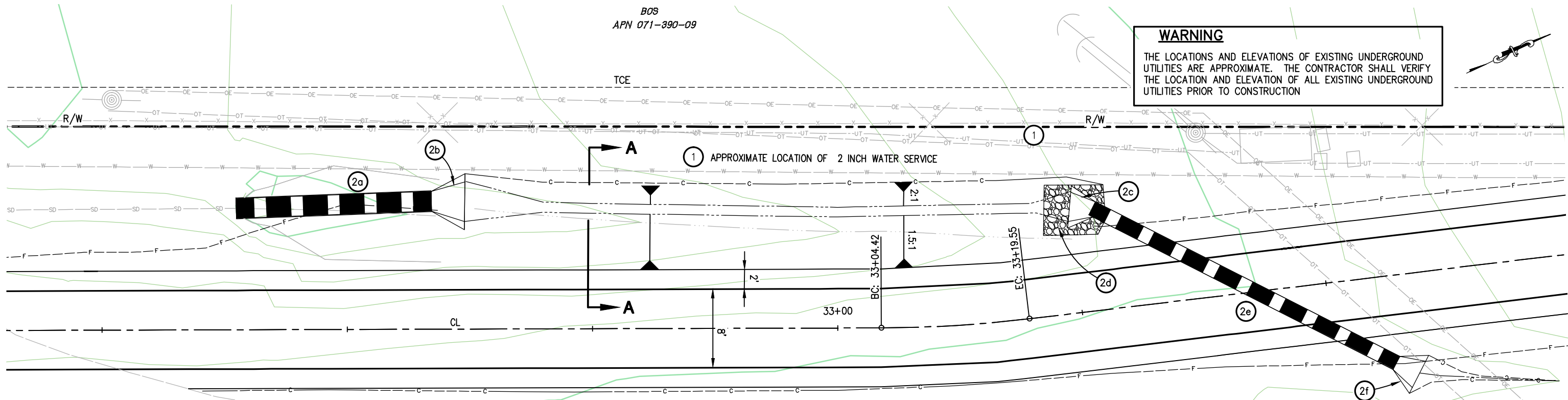
**NORTHSIDE SCHOOL CLASS 1**  
**BIKE PATH - PHASE 2 (SR49)**

SHEET  
**D-1**  
 19 OF 35  
 W.O. No. **72306**

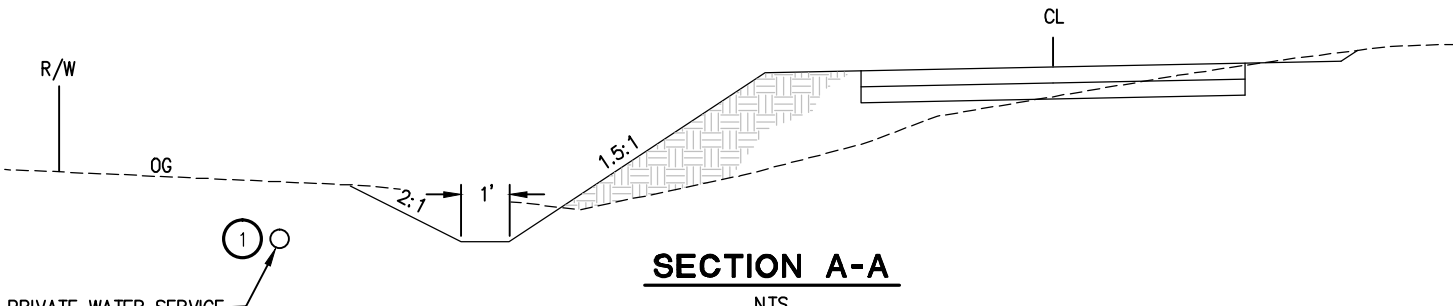
ORIGINAL SCALE IS IN INCHES  
 Drawing name: C:\Civil 3D\Projects\72306 Northside School Class 1 Bike Path - SR 49\CADD Files\Sheets\D-2.dwg Layout Tab: D-2 May 08, 2013 12:16pm Mikeve  
 FOR REDUCED PLANS

BOS  
 APN 071-390-09

**WARNING**  
 THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION



**PLAN - DRAINAGE SYSTEM 2**  
 SCALE: 1"=5'



**SECTION A-A**  
 NTS

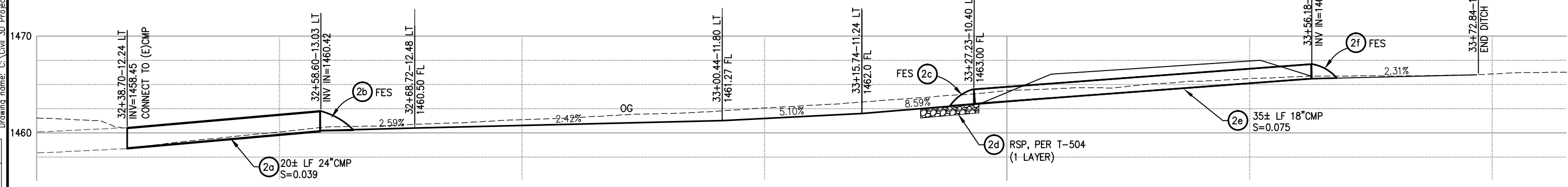
APPROXIMATE LOCATION OF PRIVATE WATER SERVICE. CONTRACTOR SHALL VERIFY THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION.

**GENERAL NOTES:**

1. STATION/OFFSET CALLOUTS ARE PER "49 PATH CL" ALIGNMENT
2. CONTRACTOR SHALL REMOVE ANY DAMAGED PORTION OF EXISTING CULVERT TO PROVIDE A CLEAN UNIFORM END. CONNECT NEW PIPE WITH NEOPRENE GASKETS AND BAND COUPLERS.

**CONSTRUCTION NOTES:**

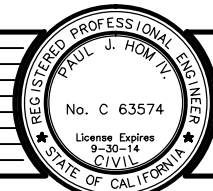
- 1 UNDERGROUND AT&T & PRIVATE WATER SERVICE CONTRACTOR SHALL VERIFY VERTICAL AND HORIZONTAL LOCATION PRIOR TO CONSTRUCTION



**PROFILE - DRAINAGE SYSTEM 2**  
 SCALE: 1"=5H,V

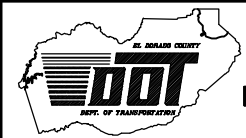
**DRAINAGE SYSTEM 2**  
 SCALE : AS NOTED

| REVISION | NUMBER | DATE | DESCRIPTION | BY |
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PREPARED UNDER THE SUPERVISION OF:  
*Paul J. Hom*  
 REGISTERED CIVIL ENGINEER  
 DATE: 05/08/13

DESIGNED: CG  
 DRAWN: RR  
 CHECKED: PH  
 DATE: 04/25/13  
 ROAD NUMBER: SR 49

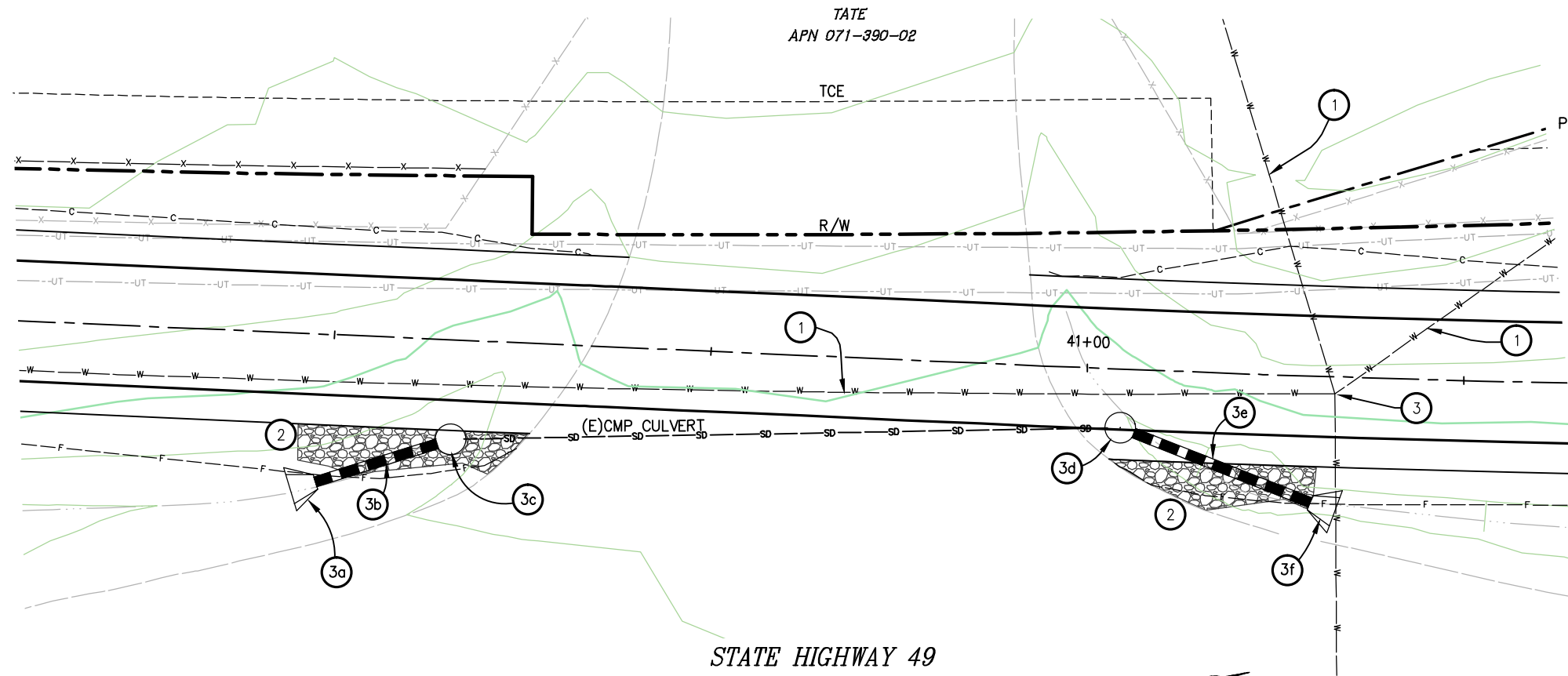


**EL DORADO COUNTY**  
 DEPARTMENT OF TRANSPORTATION

**NORTHSIDE SCHOOL CLASS 1**  
**BIKE PATH - PHASE 2 (SR49)**

SHEET  
**D-2**  
 20 OF 35  
 W.O. No. **72306**

ORIGINAL SCALE IS IN INCHES  
 Drawing name: C:\Civil 3D Projects\72306 Northside School Class 1 Bike Path - SR 49\CADD Files\Sheets\D-3.dwg Layout Tab: D-3 May 08, 2013 12:21pm SMevey  
 FOR REDUCED PLANS



**PLAN - DRAINAGE SYSTEM 3**

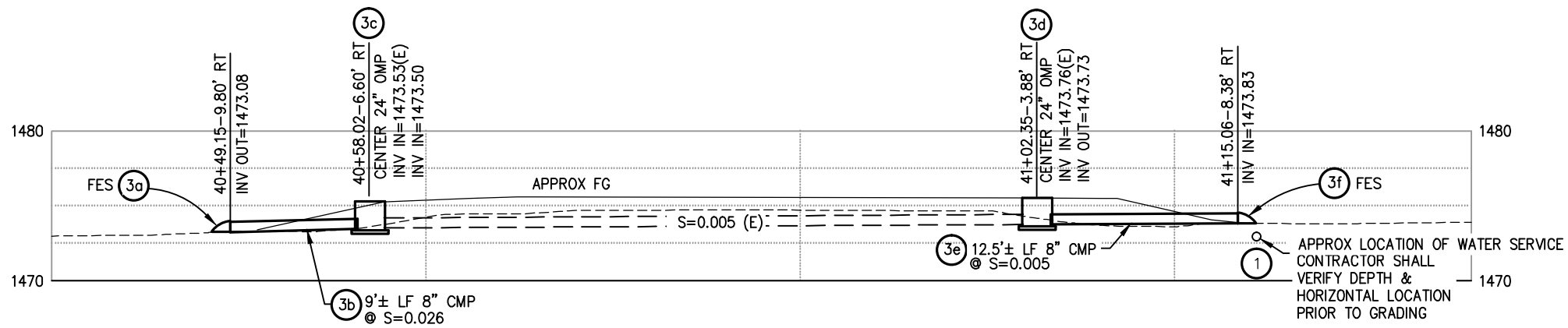
SCALE: 1"=5'

**GENERAL NOTES:**

1. STATION/OFFSET CALLOUTS ARE PER "49 PATH CL" ALIGNMENT

**CONSTRUCTION NOTES:**

- 1 PRIVATE WATER SERVICE CONTRACTOR SHALL VERIFY VERTICAL AND HORIZONTAL LOCATION PRIOR TO CONSTRUCTION
- 2 RSP, SEE SHEET C-6
- 3 GDPUD WATER METERS, (3) PROTECT IN PLACE METERS SHALL BE ADJUSTED TO FINISH GRADE OF PATH



**PROFILE - DRAINAGE SYSTEM 3**

SCALE: 1"=5'

**NOTE:**  
 UNDERGROUND UTILITIES.  
 CONTRACTOR SHALL VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. THIS PLAN IS ACCURATE FOR DRIVEWAY CROSSING ONLY.

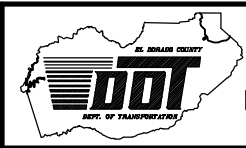
**DRAINAGE SYSTEM 3**  
 SCALE : AS NOTED

| REVISION | NUMBER | DATE | DESCRIPTION | BY |
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PREPARED UNDER THE SUPERVISION OF:  
*Paul J. Hom*  
 REGISTERED CIVIL ENGINEER  
 DATE: 05/08/13

DESIGNED: CG  
 DRAWN: RR  
 CHECKED: PH  
 DATE: 04/26/13  
 ROAD NUMBER: SR 49

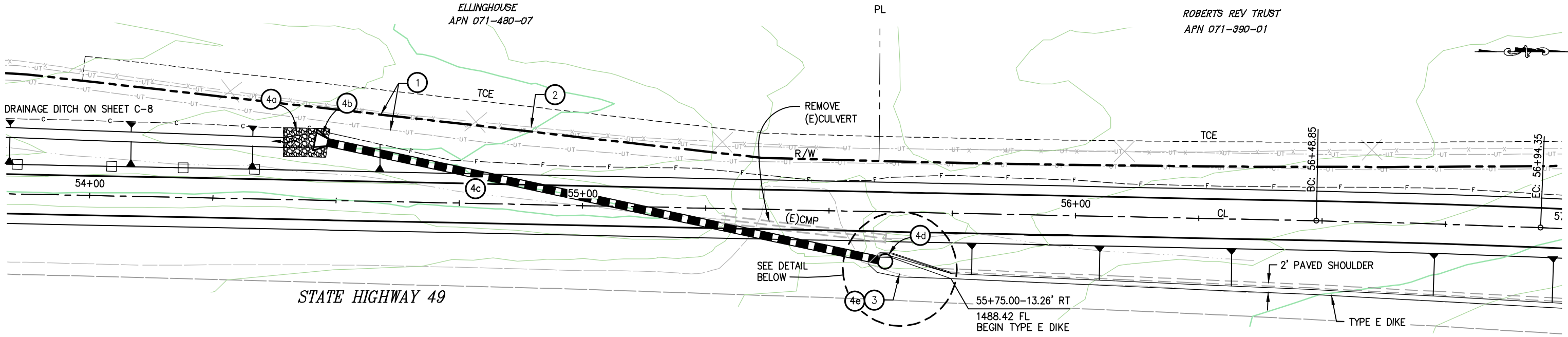


**EL DORADO COUNTY**  
 DEPARTMENT OF TRANSPORTATION

**NORTHSIDE SCHOOL CLASS 1**  
**BIKE PATH - PHASE 2 (SR49)**

SHEET  
**D-3**  
 21 OF 35  
 W.O. No. 72306

ORIGINAL SCALE IS IN INCHES  
 Drawing name: C:\Civil 3D\Projects\72306 Northside School Class 1 Bike Path - SR 49\CADD Files\Sheets\D-4.dwg  
 Layout Tab: D-4 May 08, 2013 12:26pm Smevey  
 FOR REDUCED PLANS



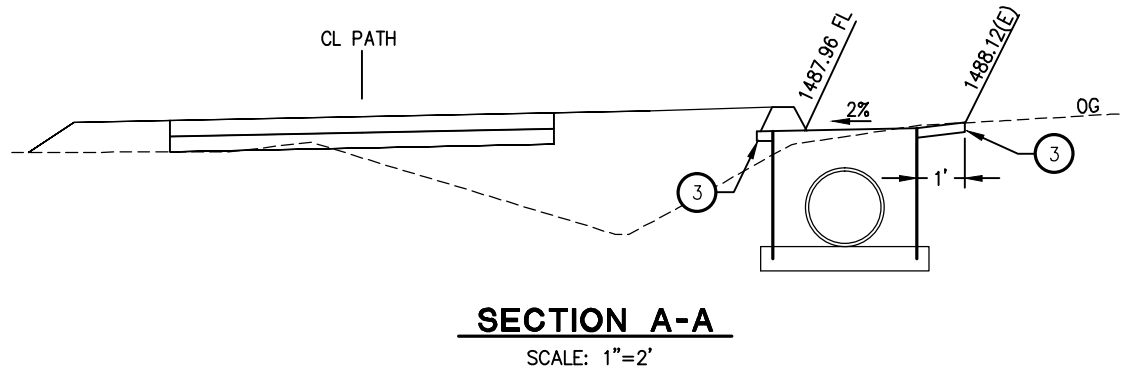
**PLAN - DRAINAGE SYSTEM 4**  
SCALE: 1"=10'

**GENERAL NOTES:**

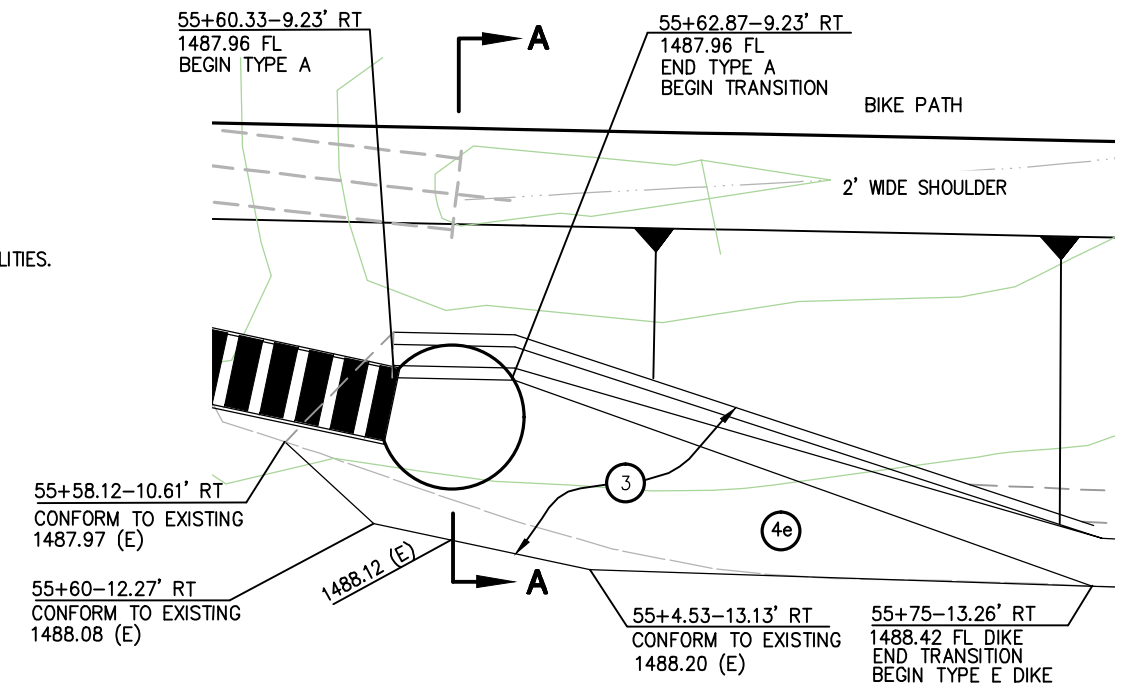
1. STATION/OFFSET CALLOUTS ARE PER "49 PATH CL" ALIGNMENT

**CONSTRUCTION NOTES:**

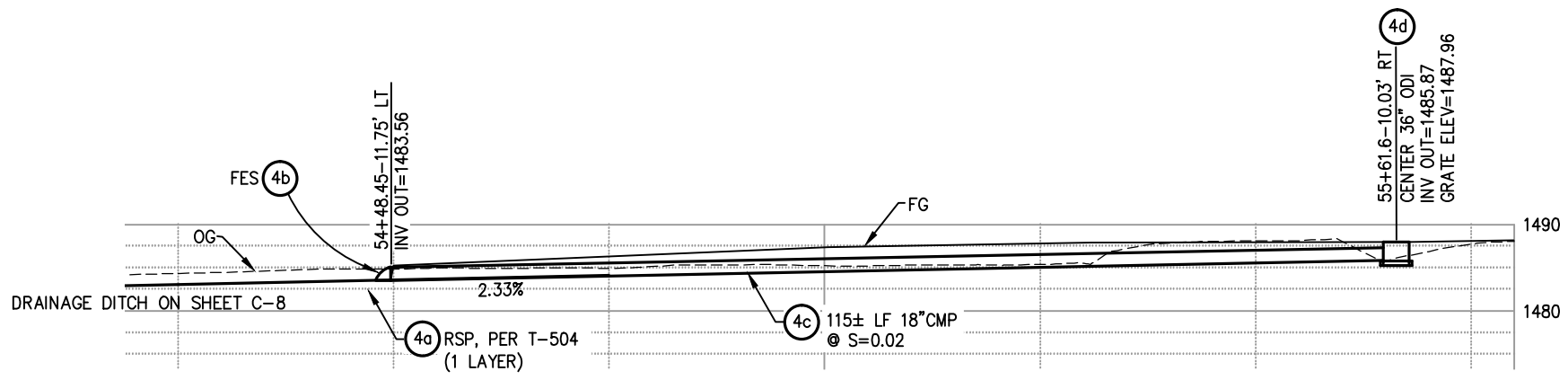
- ① APPROXIMATE LOCATION OF AT&T UNDERGROUND UTILITIES. CONTRACTOR SHALL VERIFY THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION.
- ② EXISTING FENCE, PROTECT IN PLACE
- ③ 0.20' HMA OVER COMPACTED NATIVE



**SECTION A-A**  
SCALE: 1"=2'



**DETAIL**  
TYPE ODI INLET PER D75A  
STEEL PIPE INLET w/36 RX GRATE AND  
RAISED OPENING AT HMA DIKE FLOWLINE  
SCALE: 1"=2'



**PROFILE - DRAINAGE SYSTEM 4**  
SCALE: 1"=10'H,V

**DRAINAGE SYSTEM 4**  
SCALE : AS NOTED

| REVISION | NUMBER | DATE | DESCRIPTION | BY |
|----------|--------|------|-------------|----|
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PREPARED UNDER THE SUPERVISION OF:  
*Paul J. Hom*  
 REGISTERED CIVIL ENGINEER  
 DATE: 05/08/13

DESIGNED: CG  
 DRAWN: RR  
 CHECKED: CG  
 DATE: 04/26/13  
 ROAD NUMBER: SR 49

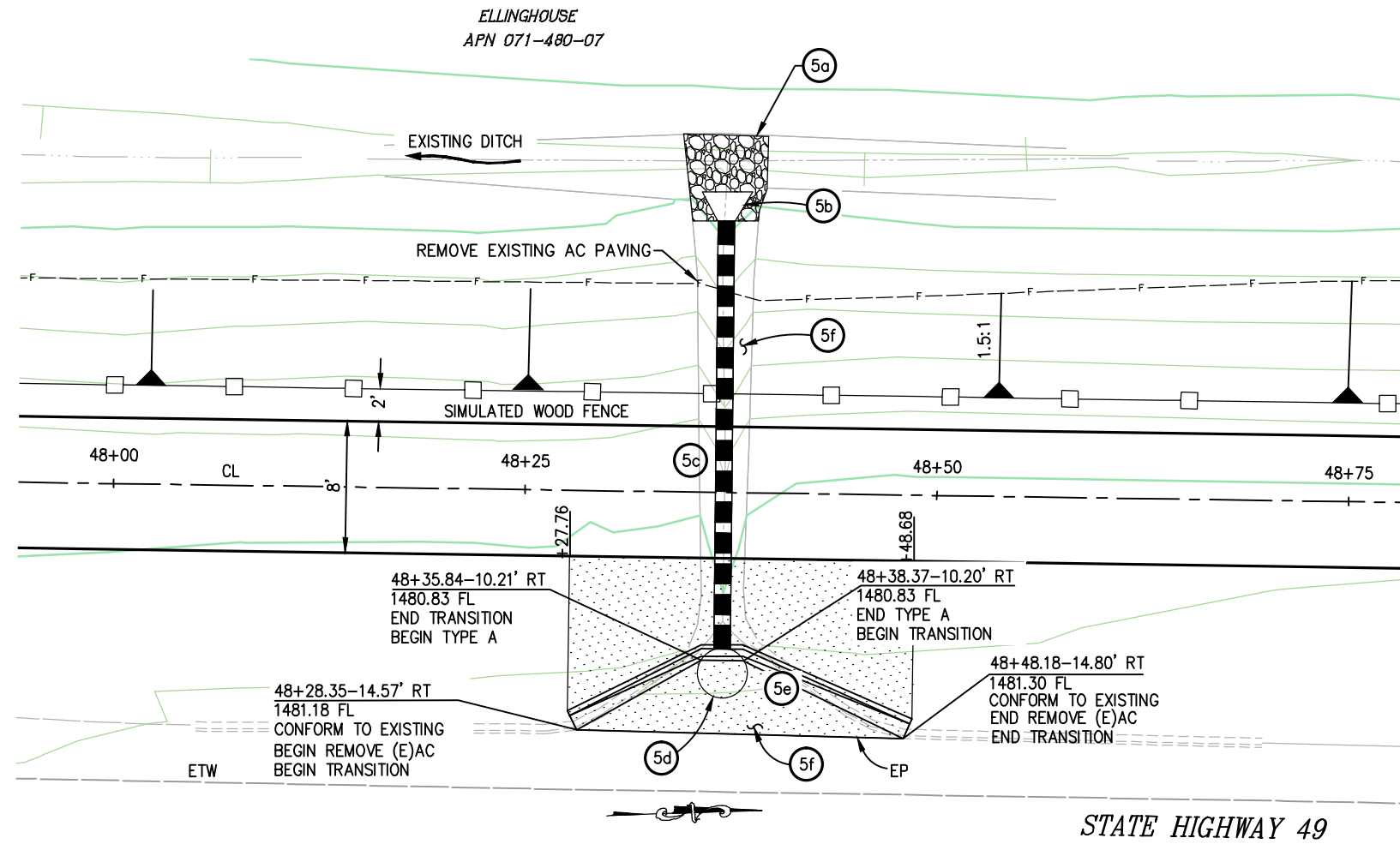


**EL DORADO COUNTY**  
**DEPARTMENT OF TRANSPORTATION**

**NORTHSIDE SCHOOL CLASS 1**  
**BIKE PATH - PHASE 2 (SR49)**

SHEET  
**D-4**  
 22 OF 35  
 W.O. No. 72306

ORIGINAL SCALE IS IN INCHES  
 Drawing name: C:\Civil 3D Projects\72306 Northside School Class 1 Bike Path - SR 49\CADD Files\Sheets\D-5.dwg Layout Tab: D-5 May 08, 2013 - 12:32pm SMevey  
 FOR REDUCED PLANS  
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**PLAN - DRAINAGE SYSTEM 5**

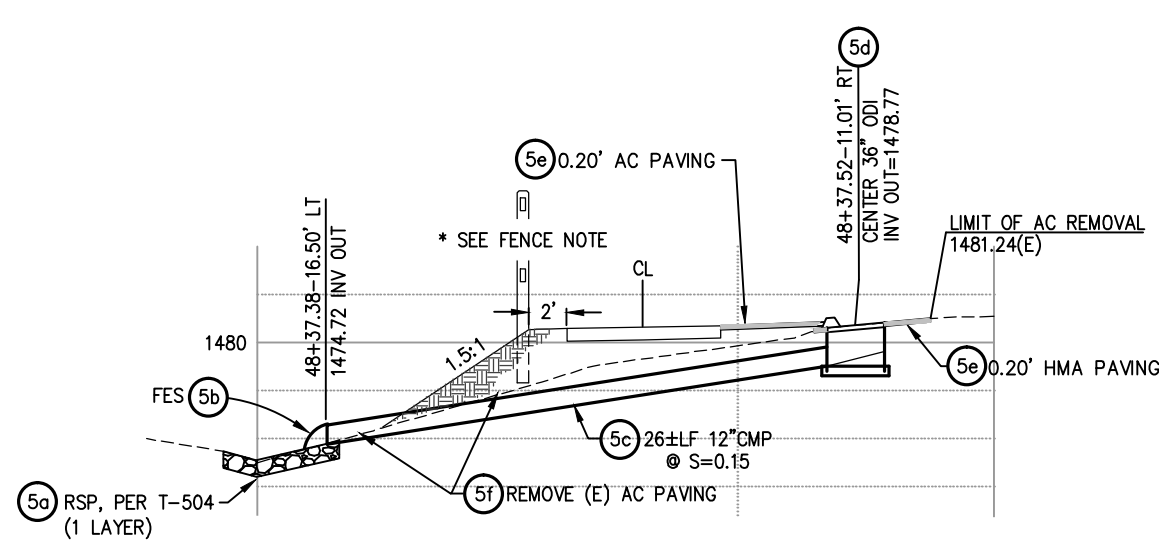
TYPE ODI INLET PER D75A  
 STEEL PIPE INLET w/36" RX GRATE AND  
 RAISED OPENING AT HMA DIKE FLOWLINE  
 SCALE: 1"=5'

**GENERAL NOTES:**

1. STATION/OFFSETS PER "49 PATH CL" ALIGNMENT
2. REMOVAL OF EXISTING DIKE AND PAVEMENT TO THE LIMIT LINE AS SHOWN. MINIMUM 0.20' THICK AC PAVEMENT FOR NEW TAPER AND AREA CALLED OUT AS 5e

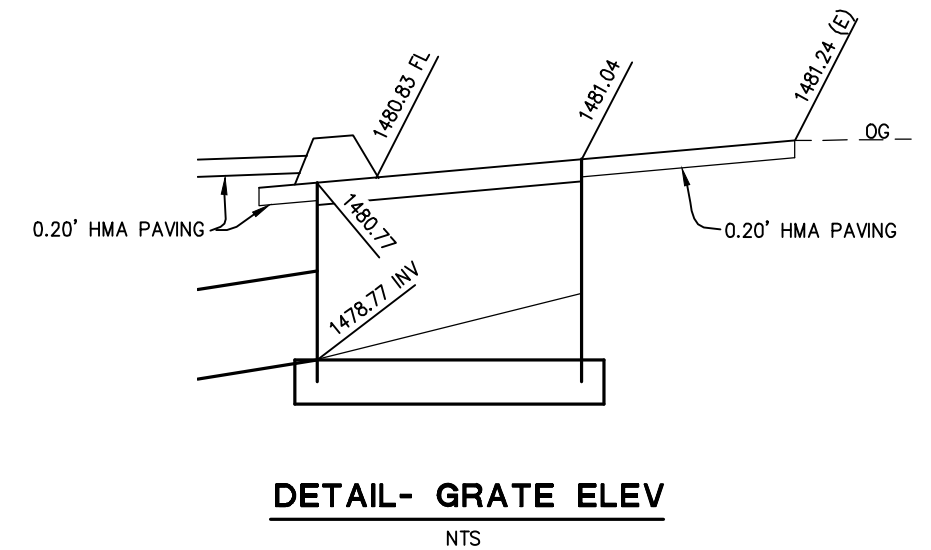
**LEGEND:**

- 0.20' HMA PAVING
- SIMULATED WOOD FENCE (SW), SEE SHEET C-9. FENCE LINETYPE IS GRAPHIC ONLY AND DOES NOT DELINEATE ACTUAL POST LOCATION



**PROFILE - DRAINAGE SYSTEM 5**

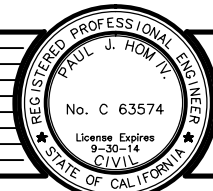
SCALE: 1"=5'H,V



**DETAIL - GRATE ELEV**

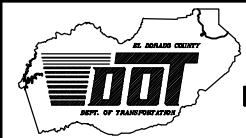
NTS

**DRAINAGE SYSTEM 5**  
SCALE : AS NOTED



PREPARED UNDER THE SUPERVISION OF:  
*Paul J. Hom*  
 REGISTERED CIVIL ENGINEER  
 DATE: 05/08/13

DESIGNED: CG  
 DRAWN: RR  
 CHECKED: PH  
 DATE: 05/03/13  
 ROAD NUMBER: SR 49

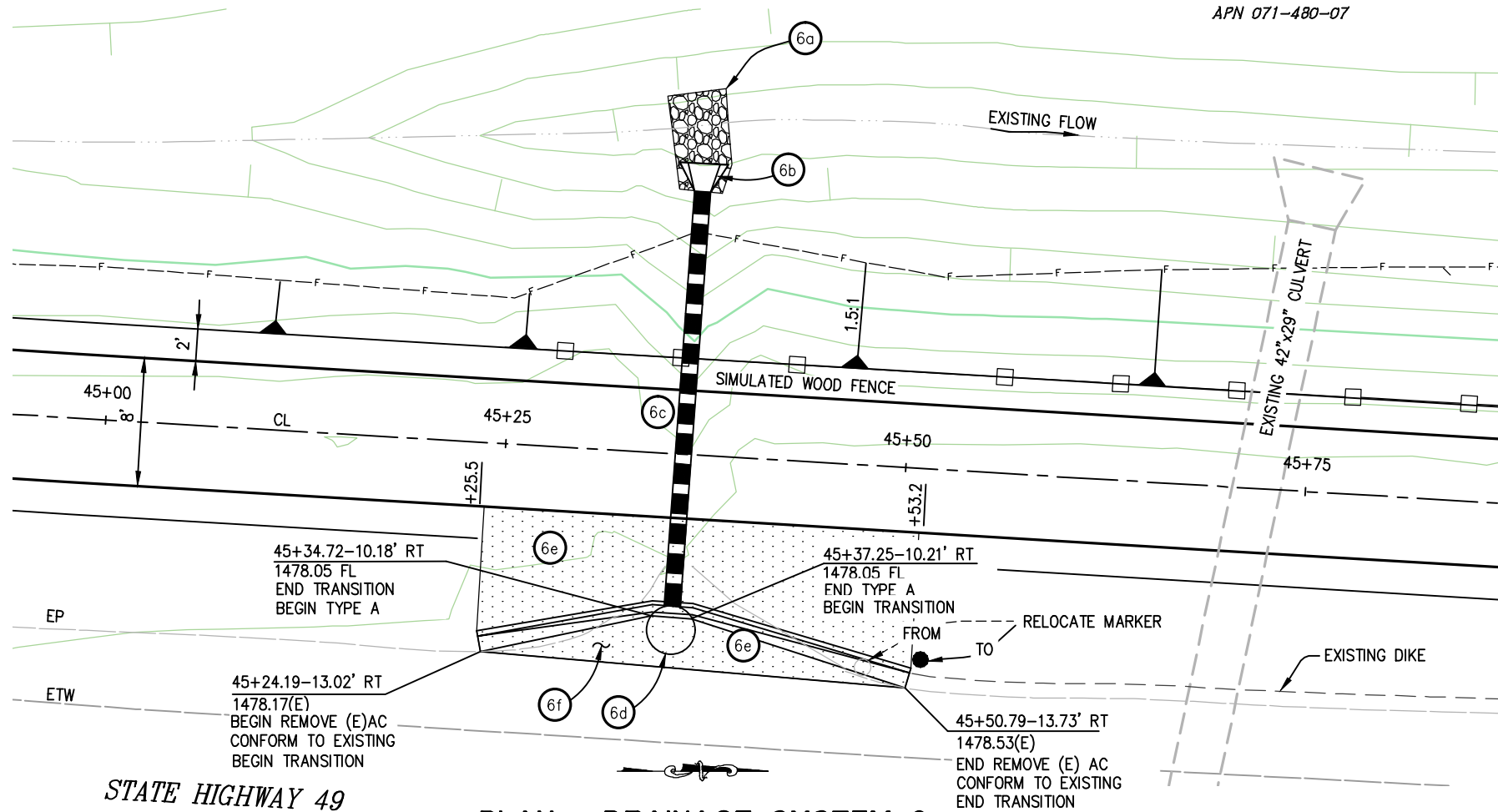


**EL DORADO COUNTY**  
DEPARTMENT OF TRANSPORTATION

**NORTHSIDE SCHOOL CLASS 1**  
**BIKE PATH - PHASE 2 (SR49)**

SHEET  
**D-5**  
 23 OF 35  
 W.O. No. 72306

| REVISION | NUMBER | DATE | DESCRIPTION | BY |
|----------|--------|------|-------------|----|
|          |        |      |             |    |
|          |        |      |             |    |
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STATE HIGHWAY 49

**PLAN - DRAINAGE SYSTEM 6**

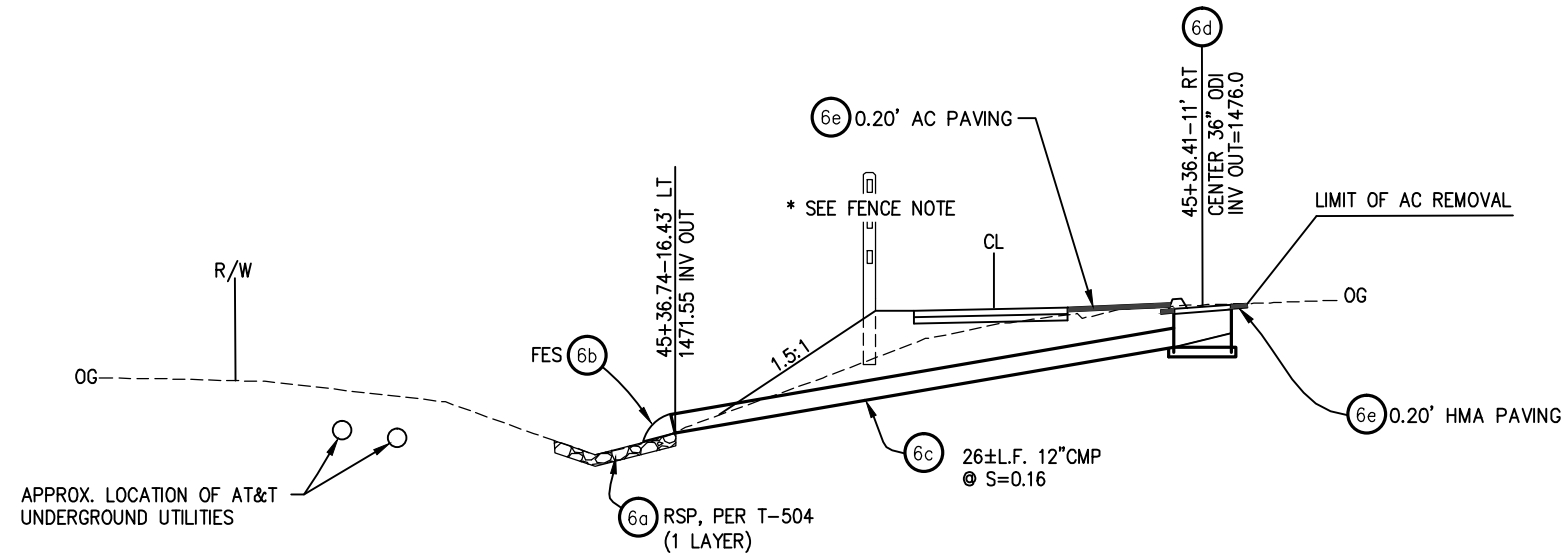
TYPE ODI INLET PER D75A  
STEEL PIPE INLET w/36" RX GRATE AND RAISED  
OPENING AT HMA DIKE FLOWLINE  
SCALE: 1"=5'

**GENERAL NOTES:**

1. STATION/OFFSETS PER "49 PATH CL" ALIGNMENT
2. REMOVAL OF EXISTING DIKE AND PAVEMENT TO THE LIMIT LINE AS SHOWN. MINIMUM 0.20' THICK AC PAVEMENT FOR NEW TAPER AND AREA CALLED OUT AS 6e

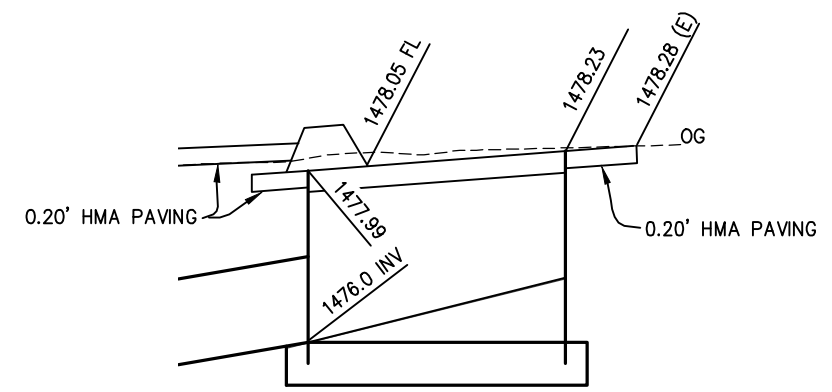
**LEGEND:**

- 0.20' HMA PAVING
- SIMULATED WOOD FENCE (SW), SEE SHEET C-9. FENCE LINETYPE IS GRAPHIC ONLY AND DOES NOT DELINEATE ACTUAL POST LOCATION



**PROFILE - DRAINAGE SYSTEM 6**

SCALE: 1"=5'H,V

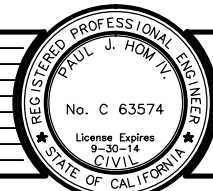


**DETAIL- GRATE ELEV**

NTS

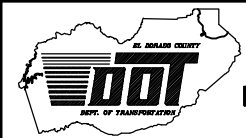
**DRAINAGE SYSTEM 6**  
SCALE : AS NOTED

ORIGINAL SCALE IS IN INCHES  
Drawing name: C:\Civil 3D Projects\72306 Northside School Class 1 Bike Path - SR 49\CADD Files\Sheets\D-6.dwg Layout Tab: D-6 May 08, 2013 - 12:42pm SMevey



PREPARED UNDER THE SUPERVISION OF:  
*Paul J. Horn*  
REGISTERED CIVIL ENGINEER  
DATE: 05/08/13

DESIGNED: CG  
DRAWN: RR  
CHECKED: PH  
DATE: 05/03/13  
ROAD NUMBER: SR 49



**EL DORADO COUNTY**  
DEPARTMENT OF TRANSPORTATION

**NORTHSIDE SCHOOL CLASS 1**  
**BIKE PATH - PHASE 2 (SR49)**

SHEET  
**D-6**  
24 OF 35  
W.O. No. **72306**

| REVISION | NUMBER | DATE | DESCRIPTION | BY |
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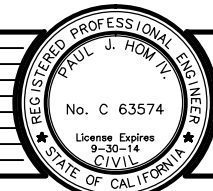
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 Drawing name: C:\Civil 3D Projects\72306 Northside School Class 1 Bike Path - SR 49\CADD Files\Sheets\D-7.dwg Layout Tab: D-7 May 08, 2013 - 12:45pm SMevey  
 FOR REDUCED PLANS  
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| DRAINAGE PLAN SHEET NO. | DRAINAGE SYSTEM | DRAINAGE ITEM | 8" CMP | 12" CMP | 18" CMP | 24" CMP | 8" FES | 12" FES | 18" FES | 24" FES | 24" OMP | 48" OMP | 36" ODI | RSP | 0.20' AC (TYPE A) | REMOVE 24" CMP | REMOVE AC [N] | DESCRIPTION | STATION/OFFSET |                            |                    |
|-------------------------|-----------------|---------------|--------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|-----|-------------------|----------------|---------------|-------------|----------------|----------------------------|--------------------|
|                         |                 |               | LF     | LF      | LF      | LF      | EA     | EA      | EA      | EA      | EA      | EA      | EA      | CY  | TON               | LF             | SF            |             |                |                            |                    |
| D-1                     | 1               | a             |        |         |         |         |        |         |         |         |         |         |         | 1.5 |                   |                |               | RSP         |                |                            |                    |
|                         |                 | b             |        |         |         | 10      |        |         |         |         |         |         |         |     |                   |                |               |             | S=0.01         |                            |                    |
|                         |                 | c             |        |         |         | 23      |        |         |         |         |         |         |         |     |                   |                |               |             |                | S=0.01                     |                    |
|                         |                 | d             |        |         |         | 36      |        |         |         |         |         |         |         |     |                   |                |               |             |                | S=0.01                     |                    |
|                         |                 | e             |        |         |         | 59      |        |         |         |         |         |         |         |     |                   |                |               |             |                | S=0.01                     |                    |
|                         |                 | f             |        |         |         | 95      |        |         |         |         |         |         |         |     |                   |                |               |             |                | S=0.031                    |                    |
|                         |                 | g             |        |         |         |         |        |         |         |         |         | 1       |         |     |                   |                |               |             | OMP            | 31+61.85-12.02' LT         |                    |
|                         |                 | h             |        |         |         |         |        |         |         |         |         |         |         |     |                   |                | 2             |             |                |                            |                    |
| D-2                     | 2               | a             |        |         | 20      |         |        |         |         |         |         |         |         |     |                   |                |               |             | S=0.039        |                            |                    |
|                         |                 | b             |        |         |         |         |        |         |         | 1       |         |         |         |     |                   |                |               |             | FES            | 32+58.60-13.03' LT         |                    |
|                         |                 | c             |        |         |         |         |        |         |         | 1       |         |         |         |     |                   |                |               |             | FES            | 33+27.23-10.40' LT         |                    |
|                         |                 | d             |        |         |         |         |        |         |         |         |         |         |         | 1.5 |                   |                |               |             | RSP            |                            |                    |
|                         |                 | e             |        |         | 35      |         |        |         |         |         |         |         |         |     |                   |                |               |             |                | S=0.075                    |                    |
|                         |                 | f             |        |         |         |         |        |         |         | 1       |         |         |         |     |                   |                |               |             |                | FES                        | 33+56.18-8.89' RT  |
| D-3                     | 3               | a             |        |         |         |         | 1      |         |         |         |         |         |         |     |                   |                |               |             | FES            | 40+49.15-9.80' RT          |                    |
|                         |                 | b             | 9      |         |         |         |        |         |         |         |         |         |         |     |                   |                |               |             | S=0.026        |                            |                    |
|                         |                 | c             |        |         |         |         |        |         |         |         | 1       |         |         | 1.5 |                   |                |               |             | OMP            | 40+58.02-6.60' RT          |                    |
|                         |                 | d             |        |         |         |         |        |         |         |         | 1       |         |         | 1.5 |                   |                |               |             | OMP            | 41+02.35-3.88' RT          |                    |
|                         |                 | e             | 13     |         |         |         |        |         |         |         |         |         |         |     |                   |                |               |             |                | S=0.005                    |                    |
|                         |                 | f             |        |         |         |         |        | 1       |         |         |         |         |         |     |                   |                |               |             |                | FES                        | 41+15.06-8.38' RT  |
| D-4                     | 4               | a             |        |         |         |         |        |         |         |         |         |         |         | 1.5 |                   |                |               |             | RSP            |                            |                    |
|                         |                 | b             |        |         |         |         |        |         |         | 1       |         |         |         |     |                   |                |               |             | FES            | 54+48.45-11.75' LT         |                    |
|                         |                 | c             |        |         | 115     |         |        |         |         |         |         |         |         | 1   |                   |                |               |             | ODI            | 55+61.60-10.03' RT         |                    |
|                         |                 | d             |        |         |         |         |        |         |         |         |         |         |         |     |                   | 0.5            |               |             |                | AC PAVING                  |                    |
|                         |                 | e             |        |         |         |         |        |         |         |         |         |         |         |     |                   |                |               |             |                |                            |                    |
| D-5                     | 5               | a             |        |         |         |         |        |         |         |         |         |         |         | 1.5 |                   |                |               |             | RSP            |                            |                    |
|                         |                 | b             |        |         |         |         |        |         |         | 1       |         |         |         |     |                   |                |               |             | FES            | 48+37.38-16.50' LT         |                    |
|                         |                 | c             |        | 26      |         |         |        |         |         |         |         |         |         |     |                   |                |               |             |                | S=0.15                     |                    |
|                         |                 | d             |        |         |         |         |        |         |         |         |         | 1       |         |     |                   |                |               |             |                | ODI                        | 48+37.52-11.01' RT |
|                         |                 | e             |        |         |         |         |        |         |         |         |         |         |         |     | 2.4               |                |               |             |                | AC PAVING                  |                    |
|                         |                 | f             |        |         |         |         |        |         |         |         |         |         |         |     |                   |                |               | 170         |                | EXISTING AC OVERSIDE DRAIN |                    |
| D-6                     | 6               | a             |        |         |         |         |        |         |         |         |         |         |         | 1.5 |                   |                |               |             | RSP            |                            |                    |
|                         |                 | b             |        |         |         |         |        |         |         | 1       |         |         |         |     |                   |                |               |             | FES            | 45+36.74-16.43' LT         |                    |
|                         |                 | c             |        |         | 26      |         |        |         |         |         |         |         |         |     |                   |                |               |             |                | S=0.16                     |                    |
|                         |                 | d             |        |         |         |         |        |         |         |         |         | 1       |         |     |                   |                |               |             |                | ODI                        | 45+36.41-11.0' RT  |
|                         |                 | e             |        |         |         |         |        |         |         |         |         |         |         |     | 2.4               |                |               |             |                | AC PAVING                  |                    |
|                         |                 | f             |        |         |         |         |        |         |         |         |         |         |         |     |                   |                |               | 96          |                | EXISTING AC OVERSIDE DRAIN |                    |
| C-2                     | 7               | a             |        |         |         |         |        |         |         |         |         |         |         | 1.5 |                   |                |               |             | RSP            |                            |                    |
|                         |                 | b             |        |         | 25      |         |        |         |         |         |         |         |         |     |                   |                |               |             |                | S=0.146                    |                    |
|                         |                 | c             |        |         |         |         |        |         |         |         |         | 1       |         |     |                   |                |               |             |                | ODI                        | 30+04-10.24' RT    |
|                         |                 | d             |        |         |         |         |        |         |         |         |         |         |         |     | .4                |                |               |             |                | AC PAVING                  |                    |
|                         |                 | e             |        |         |         |         |        |         |         |         |         |         |         |     |                   |                |               | 70          |                | EXISTING AC OVERSIDE DRAIN |                    |
| TOTAL                   |                 |               | 22     | 52      | 175     | 243     | 2      | 2       | 3       | 1       | 2       | 1       | 4       | 12  | *5.7              | 2              | 336           |             |                |                            |                    |

[N] NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY

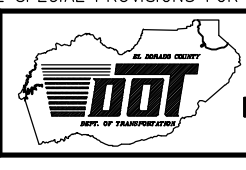
**DRAINAGE QUANTITIES SCALE : NONE**

| REVISION | NUMBER | DATE | DESCRIPTION | BY |
|----------|--------|------|-------------|----|
|          |        |      |             |    |
|          |        |      |             |    |
|          |        |      |             |    |



PREPARED UNDER THE SUPERVISION OF:  
*Paul J. Hom*  
 REGISTERED CIVIL ENGINEER  
 DATE: 05/08/13

DESIGNED: CG  
 CHECKED: PH  
 ROAD NUMBER: SR 49



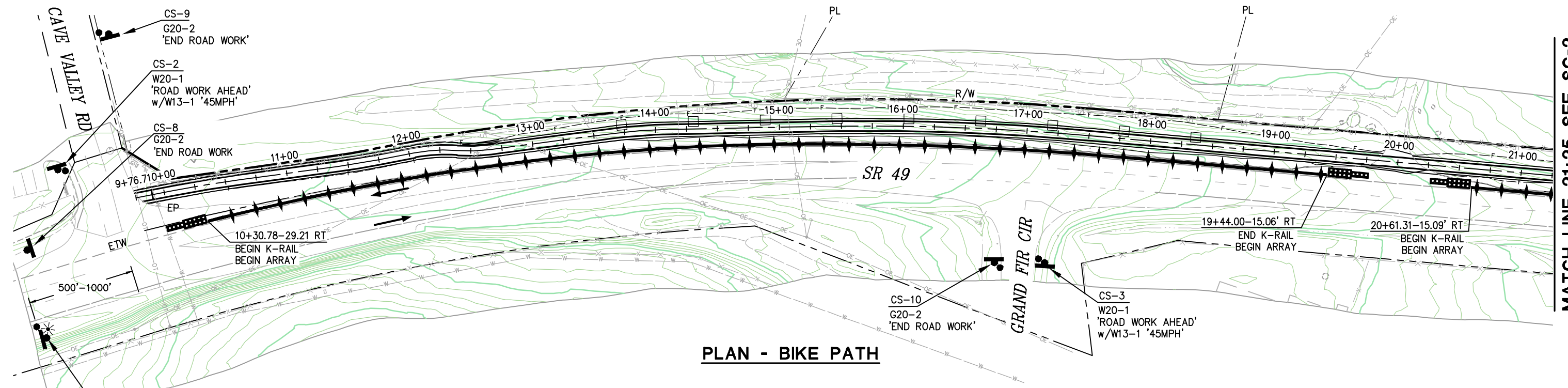
**EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION**

**NORTHSIDE SCHOOL CLASS 1 BIKE PATH - PHASE 2 (SR49)**

SHEET **D-7**  
 25 OF 35  
 W.O. No. **72306**

\*SEE SPECIAL PROVISIONS FOR PAYMENT

ORIGINAL SCALE IS IN INCHES  
 Drawing name: C:\Civil 3D\Projects\72306 Northside School Class 1 Bike Path - SR 49\CADD Files\Sheets\SC-1.dwg Layout Tab: SC-1 May 08, 2013 12:48pm S:\mvey  
 FOR REDUCED PLANS  
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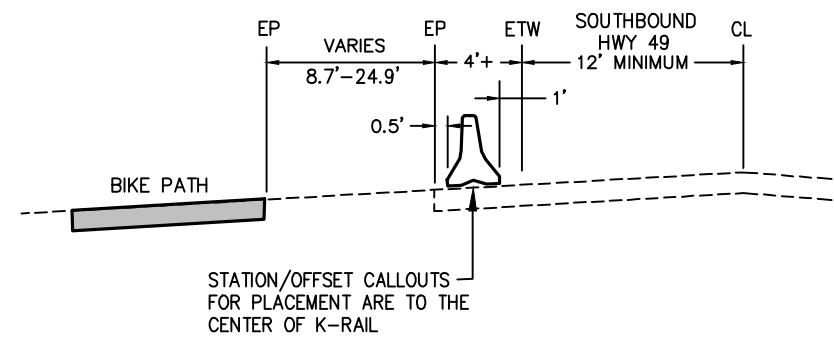


MATCH LINE 21+25 SEE SC-2

**PLAN - BIKE PATH**

**500'-1000' SIGN SPACING PER T-13**

1 PCMS ALL STAGES



**TYPICAL SECTION**

K-RAIL PLACEMENT-ALL PHASES  
N.T.S.

**STAGE CONSTRUCTION NOTES:**

- REFER TO SPECIAL PROVISIONS FOR TRAFFIC HANDLING & ACCESS REQUIREMENTS WITHIN THE WORK AREA.
- MAINTAIN EXISTING SHOULDER AREA AS LONG AS POSSIBLE.
- EXACT LOCATION OF CONSTRUCTION AREA SIGNS SHALL BE DETERMINED BY ENGINEER.
- CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLAN FOR ANY DETOURS AND CHANGES ON THE STAGE CONSTRUCTION PLANS TO THE ENGINEER FOR REVIEW AND WRITTEN APPROVAL PRIOR TO IMPLEMENTATION. CONTRACTOR TO COORDINATE ALL STAGE CONSTRUCTION AND TRAFFIC HANDLING WITH UTILITY RELOCATIONS.
- MAINTAIN ACCESS TO ALL DRIVEWAYS.

**LEGEND**

- K-RAIL
- CRASH CUSHION ARRAY TB14
- TEMPORARY SIGN
- PCMS PORTABLE CHANGABLE MESSAGE SIGN, ALL STAGES
- PCMS No.
- TUBULAR CHANNELIZER
- PORTABLE FLASHING BEACON
- FLOW OF TRAFFIC
- CS CONSTRUCTION SIGN NUMBER

| PCMS No. | FIRST FLASH | SECOND FLASH    |
|----------|-------------|-----------------|
| 1        | SLOW        | ROAD WORK AHEAD |
| 2        | SLOW        | ROAD WORK AHEAD |

**GENERAL STAGE CONSTRUCTION NOTE**  
 THESE STAGE CONSTRUCTION PLANS ARE INTENDED TO SERVE AS A GUIDELINE IN ESTABLISHING TRAFFIC CONTROL AND CONSTRUCTION STAGING. SOME MODIFICATION OR ALTERATION MAY BE NEEDED TO ACCOMMODATE FIELD CONDITIONS AND TRAFFIC MOVEMENTS. THE CONTRACTOR SHALL OBTAIN PRIOR ENGINEERING APPROVAL IF ANY CHANGES OR DEVIATIONS FROM THESE PLANS ARE PROPOSED.

**STAGE CONSTRUCTION**

| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>REVISION</th> <th>NUMBER</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> | REVISION | NUMBER | DATE        | DESCRIPTION | BY |  |  |  |  |  |  | PREPARED UNDER THE SUPERVISION OF:<br><br>REGISTERED CIVIL ENGINEER<br><b>05/08/13</b><br>DATE: | DESIGNED: CG<br>DRAWN: RR<br>CHECKED: PH<br>DATE: 04/26/13<br>ROAD NUMBER: SR 49 |  | <b>EL DORADO COUNTY</b><br><b>DEPARTMENT OF TRANSPORTATION</b> | <b>NORTHSIDE SCHOOL CLASS 1</b><br><b>BIKE PATH - PHASE 2 (SR49)</b> | SHEET<br><b>SC-1</b><br>26 OF 35<br>W.O. No. <b>72306</b> |
|---|----------|--------|-------------|-------------|----|--|--|--|--|--|--|---|--|--|--|--|---|
| REVISION  | NUMBER   | DATE   | DESCRIPTION | BY          |    |  |  |  |  |  |  |   |  |  |  |  |   |
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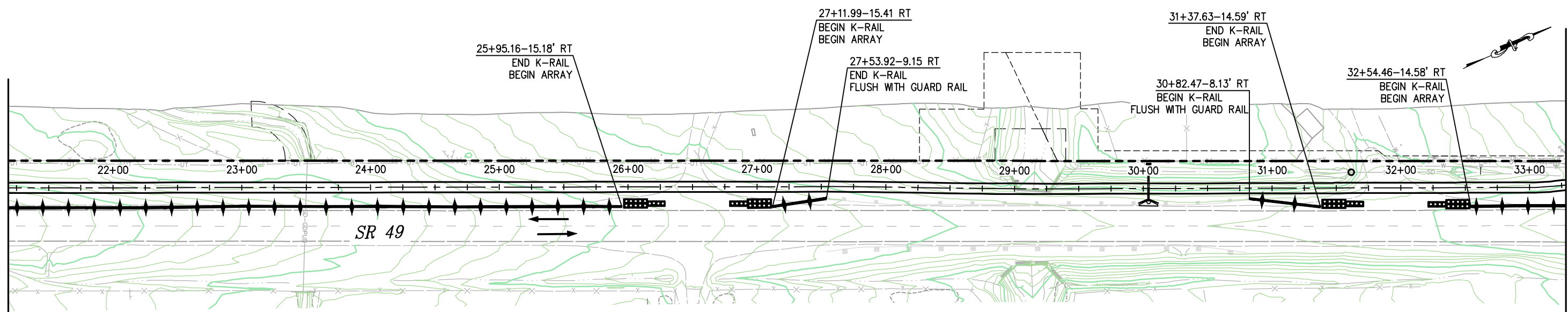
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MATCH LINE 21+25 SEE SC-1

MATCH LINE 33+25 SEE BELOW

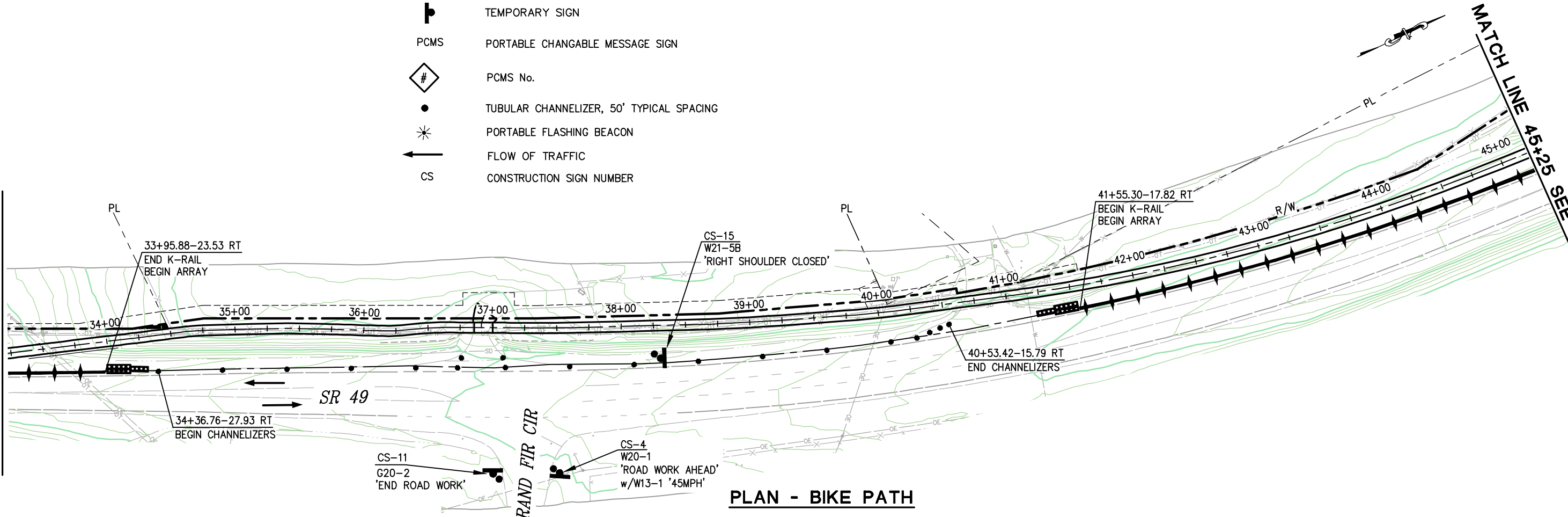
MATCH LINE 33+25 SEE ABOVE

MATCH LINE 45+25 SEE SC-3



**PLAN - BIKE PATH**

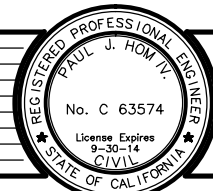
- LEGEND**
- K-RAIL
  - CRASH CUSHION ARRAY TB14
  - TEMPORARY SIGN
  - PCMS PORTABLE CHANGABLE MESSAGE SIGN
  - PCMS No.
  - TUBULAR CHANNELIZER, 50' TYPICAL SPACING
  - PORTABLE FLASHING BEACON
  - FLOW OF TRAFFIC
  - CS CONSTRUCTION SIGN NUMBER



**PLAN - BIKE PATH**

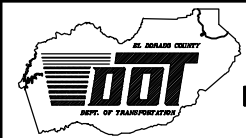
STAGE CONSTRUCTION

| REVISION | NUMBER | DATE | DESCRIPTION | BY |
|----------|--------|------|-------------|----|
|          |        |      |             |    |



PREPARED UNDER THE SUPERVISION OF:  
*Paul J. Horn*  
 REGISTERED CIVIL ENGINEER  
 DATE: 05/08/13

DESIGNED: CG  
 DRAWN: RR  
 CHECKED: PH  
 DATE: 04/26/13  
 ROAD NUMBER: SR 49



**EL DORADO COUNTY**  
 DEPARTMENT OF TRANSPORTATION

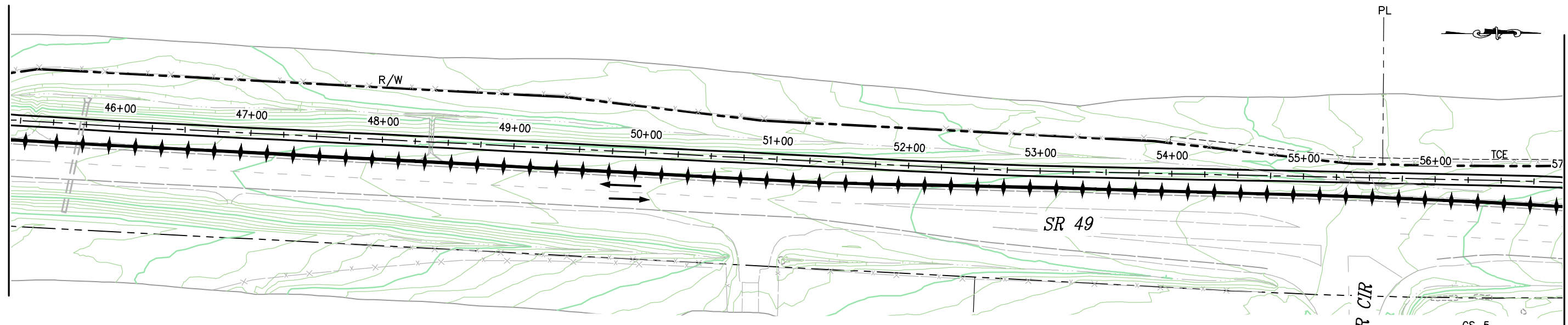
**NORTHSIDE SCHOOL CLASS 1**  
**BIKE PATH - PHASE 2 (SR49)**

SHEET  
**SC-2**  
 27 OF 35  
 W.O. No. 72306

ORIGINAL SCALE IS IN INCHES  
Drawing name: C:\Civil 3D\Projects\72306 Northside School Class 1 Bike Path - SR 49\CADD Files\Sheets\SC-3.dwg Layout Tab: SC-3 May 08, 2013 - 1:01pm SMCvey

MATCH LINE 45+25 SEE SC-2

MATCH LINE 57+00 SEE BELOW



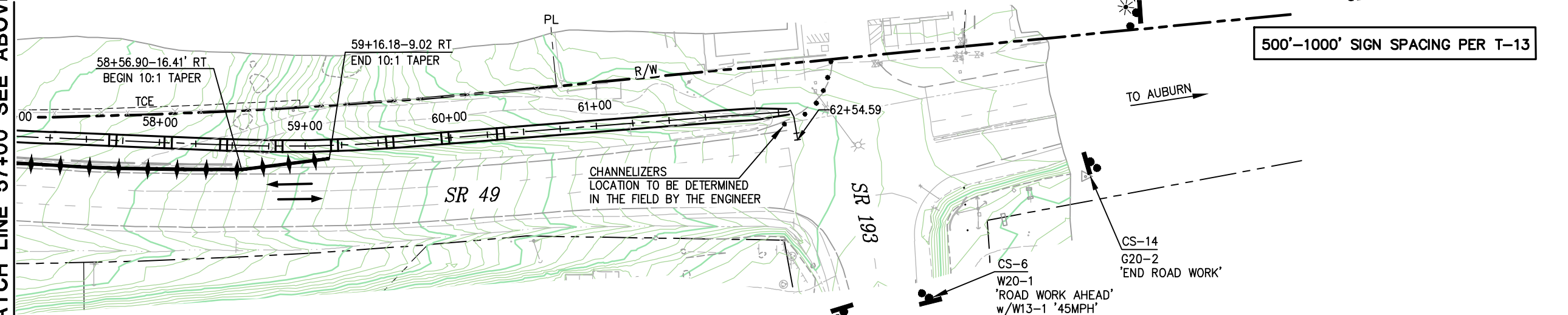
**PLAN - BIKE PATH**

**LEGEND**

- K-RAIL
- CRASH CUSHION ARRAY TB14
- TEMPORARY SIGN
- PCMS PORTABLE CHANGABLE MESSAGE SIGN
- PCMS No.
- TUBULAR CHANNELIZERS, 50' TYPICAL SPACING
- PORTABLE FLASHING BEACON
- FLOW OF TRAFFIC
- CS CONSTRUCTION SIGN NUMBER

| PCMS No. | FIRST FLASH | SECOND FLASH    |
|----------|-------------|-----------------|
| 1        | SLOW        | ROAD WORK AHEAD |
| 2        | SLOW        | ROAD WORK AHEAD |

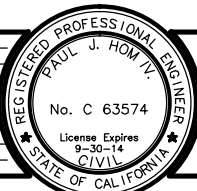
MATCH LINE 57+00 SEE ABOVE



**PLAN - BIKE PATH**

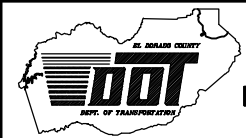
**STAGE CONSTRUCTION**

| REVISION | NUMBER | DATE | DESCRIPTION | BY |
|----------|--------|------|-------------|----|
|          |        |      |             |    |



PREPARED UNDER THE SUPERVISION OF:  
*Paul J. Hom*  
REGISTERED CIVIL ENGINEER  
DATE: 05/08/13

DESIGNED: CG  
DRAWN: RR  
CHECKED: PH  
DATE: 04/26/13  
ROAD NUMBER: SR 49



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

**NORTHSIDE SCHOOL CLASS 1**  
**BIKE PATH - PHASE 2 (SR49)**

SHEET  
**SC-3**  
28 OF 35  
W.O. No. 72306

ORIGINAL SCALE IS IN INCHES  
 Drawing name: C:\Civil 3D Projects\72306 Northside School Class 1 Bike Path - SR 49\CADD Files\Sheets\SC-4.dwg Layout Tab: SC-4 May 08, 2013 - 2:14pm SMCvey  
 FOR REDUCED PLANS  
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| CONSTRUCTION AREA SIGNS |                    |                       |                  |                   |                    |             |
|-------------------------|--------------------|-----------------------|------------------|-------------------|--------------------|-------------|
| SIGN NO.                | CONSTRUCTION STAGE | SIGN                  | CODE             | PANEL SIZE INCHES | POST SIZE & LENGTH | INSTALL EA. |
| CS-1                    | ALL                | ROAD WORK AHEAD       | W20-1 w/ C17(CA) | 36 x 36           | 4x4x12             | 1           |
| CS-2                    | ALL                | ROAD WORK AHEAD       | W20-1 w/ C17(CA) | 36 x 36           | 4x4x12             | 1           |
| CS-3                    | ALL                | ROAD WORK AHEAD       | W20-1 w/ C17(CA) | 36 x 36           | 4x4x12             | 1           |
| CS-4                    | ALL                | ROAD WORK AHEAD       | W20-1 w/ C17(CA) | 36 x 36           | 4x4x12             | 1           |
| CS-5                    | ALL                | ROAD WORK AHEAD       | W20-1 w/ C17(CA) | 36 x 36           | 4x4x12             | 1           |
| CS-6                    | ALL                | ROAD WORK AHEAD       | W20-1 w/ C17(CA) | 36 x 36           | 4x4x12             | 1           |
| CS-7                    | ALL                | ROAD WORK AHEAD       | W20-1 w/ C17(CA) | 36 x 36           | 4x4x12             | 1           |
| CS-8                    | ALL                | END ROAD WORK         | G20-2            | 36 x 18           | 4x4x12             | 1           |
| CS-9                    | ALL                | END ROAD WORK         | G20-2            | 36 x 18           | 4x4x12             | 1           |
| CS-10                   | ALL                | END ROAD WORK         | G20-2            | 36 x 18           | 4x4x12             | 1           |
| CS-11                   | ALL                | END ROAD WORK         | G20-2            | 36 x 18           | 4x4x12             | 1           |
| CS-12                   | ALL                | END ROAD WORK         | G20-2            | 36 x 18           | 4x4x12             | 1           |
| CS-13                   | ALL                | END ROAD WORK         | G20-2            | 36 x 18           | 4x4x12             | 1           |
| CS-14                   | ALL                | END ROAD WORK         | G20-2            | 36 x 18           | 4x4x12             | 1           |
| CS-15                   | ALL                | RIGHT SHOULDER CLOSED | W21-5B           | 36 x 36           | 4x4x12             | 1           |
| CS-16                   | ALL                | RIGHT SHOULDER CLOSED | W21-5B           | 36 x 36           | 4x4x12             | 1           |
| CS-17                   | ALL                | ROAD NARROWS          | W5-1             | 36 x 36           | 4x4x12             | 1           |


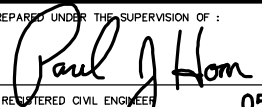

| TEMPORARY CRASH CUSHIONS |       |           |            |
|--------------------------|-------|-----------|------------|
| ARRAY TB14 PER T1B       |       |           |            |
| LOCATION                 | SR 49 | ARRAY EA. | MODULE EA. |
| STA 10+30.78 RT          |       | 1         | 14         |
| STA 19+44.00 RT          |       | 1         | 14         |
| STA 20+61.31 RT          |       | 1         | 14         |
| STA 25+95.57 RT          |       | 1         | 14         |
| STA 27+11.99 RT          |       | 1         | 14         |
| STA 31+37.63 RT          |       | 1         | 14         |
| STA 32+54.46 RT          |       | 1         | 14         |
| STA 33+95.88 RT          |       | 1         | 14         |
| STA 41+55.30 RT          |       | 1         | 14         |
| TOTAL                    |       | 9         | 126        |

| TEMPORARY CHANNELIZERS   |      |
|--------------------------|------|
| CHANNELIZERS-50' SPACING |      |
| LOCATION-ALONG EP, SR 49 | L.F. |
| 34+37 TO 40+54           | 617  |

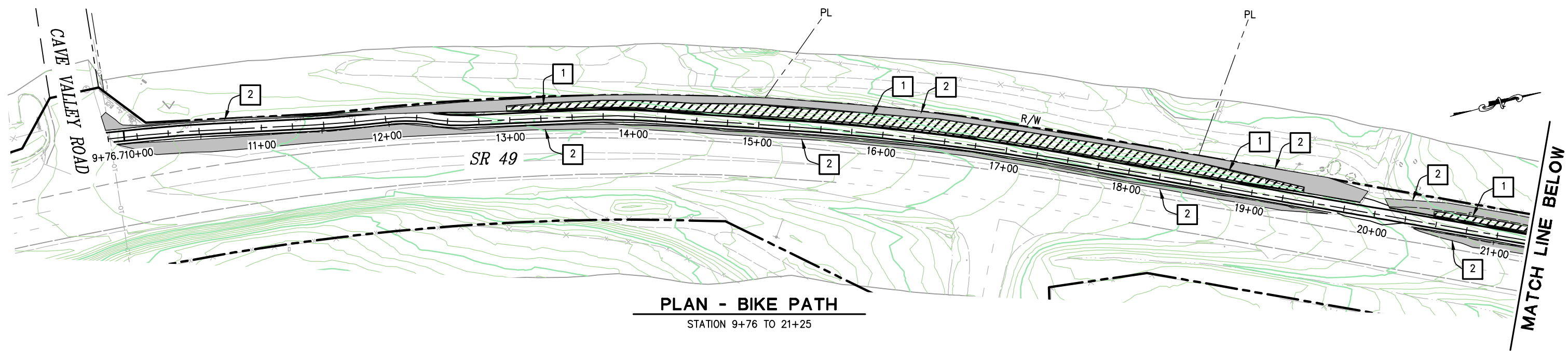
| TEMPORARY RAIL                              |       |
|---|-------|
| TYPE K SHALL INCLUDE TOP MOUNTED REFLECTORS |       |
| LOCATION-ALONG SR 49                        | L.F.  |
| STA 10+30 - 19+45                           | 915   |
| STA 20+62 - 25+97                           | 534   |
| STA 27+13 - 27+55                           | 42    |
| STA 30+84 - 31+39                           | 55    |
| STA 32+56 - 33+97                           | 141   |
| STA 41+57 - 59+17                           | 1766  |
| TOTAL                                       | 3,453 |

**GENERAL STAGE CONSTRUCTION NOTE**  
 THESE STAGE CONSTRUCTION PLANS ARE INTENDED TO SERVE AS A GUIDELINE IN ESTABLISHING TRAFFIC CONTROL AND CONSTRUCTION STAGING. SOME MODIFICATION OR ALTERATION MAY BE NEEDED TO ACCOMMODATE FIELD CONDITIONS AND TRAFFIC MOVEMENTS. THE CONTRACTOR SHALL OBTAIN PRIOR ENGINEERING APPROVAL IF ANY CHANGES OR DEVIATIONS FROM THESE PLANS ARE PROPOSED.

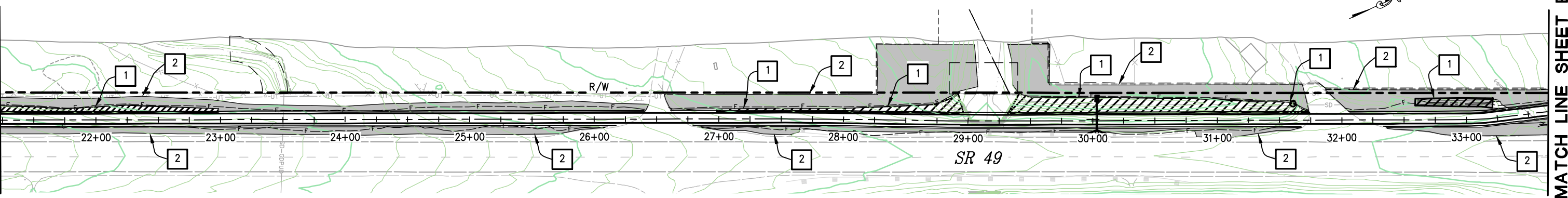
**STAGE CONSTRUCTION SIGNS**

|  |  |   |  |  |   |
|--|--|---|--|--|---|
| REVISION<br>NUMBER DATE DESCRIPTION BY | DESIGNED: CG<br>CHECKED: PH<br>ROAD NUMBER: SR 49  | DRAWN: RR<br>DATE: 04/29/13   |  <b>EL DORADO COUNTY</b><br><b>DEPARTMENT OF TRANSPORTATION</b> | <b>NORTHSIDE SCHOOL CLASS 1</b><br><b>BIKE PATH - PHASE 2 (SR49)</b> | SHEET<br><b>SC-4</b><br>29 OF 35<br>W.O. No. <b>72306</b> |
|  | PREPARED UNDER THE SUPERVISION OF:<br><br>REGISTERED CIVIL ENGINEER<br>No. C 63574<br>License Expires 9-30-14<br>DATE: 05/08/13 |  |  |  |   |

ORIGINAL SCALE IS IN INCHES  
Drawing name: C:\Civil 3D Projects\72306 Northside School Class 1 Bike Path - SR 49\CADD Files\Sheets\EC-1.dwg Layout Tab: EC-1 May 08, 2013 1:11pm SMevey



**PLAN - BIKE PATH**  
STATION 9+76 TO 21+25



**PLAN - BIKE PATH**  
STATION 21+25 TO 33+75

**NOTE:**  
SEE SECTION 21 OF THE SPECIAL PROVISIONS FOR SEED SPECIFICATIONS AND HYDROSEED APPLICATION RATES

**LEGEND**

|   |  |  |
|---|--|--|
| 1 | CUT/FILL SLOPES 2:1 OR STEEPER - ROLLED EROSION CONTROL PRODUCT (BLANKET) TYPE A & HYDROSEED (22,553 S.F. TOTAL) |  |
| 2 | SLOPES FLATTER THAN 2:1 - HYDROSEED (66,400 S.F. TOTAL)  |  |

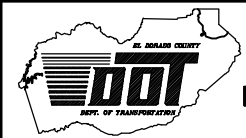
**EROSION CONTROL PLAN**  
SCALE : 1" = 40'

| REVISION | NUMBER | DATE | DESCRIPTION | BY |
|----------|--------|------|-------------|----|
|          |        |      |             |    |



PREPARED UNDER THE SUPERVISION OF:  
*Paul J. Hom*  
REGISTERED CIVIL ENGINEER  
DATE: 05/08/13

DESIGNED: CG  
DRAWN: RR  
CHECKED: PH  
DATE: 05/06/13  
ROAD NUMBER: SR 49



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

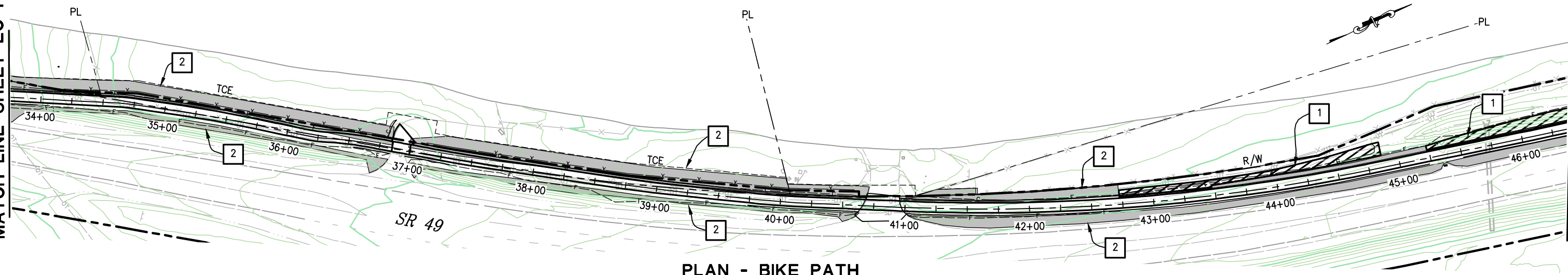
**NORTHSIDE SCHOOL CLASS 1**  
**BIKE PATH - PHASE 2 (SR49)**

SHEET  
**EC-1**  
30 OF 35  
W.O. No. 72306

ORIGINAL SCALE IS IN INCHES  
Drawing name: C:\Civil 3D\Projects\72306 Northside School Class 1 Bike Path - SR 49\CADD Files\Sheets\EC-1.dwg Layout Tab: EC-2 May 08, 2013 1:13pm S:\mvey

MATCH LINE SHEET EC-1

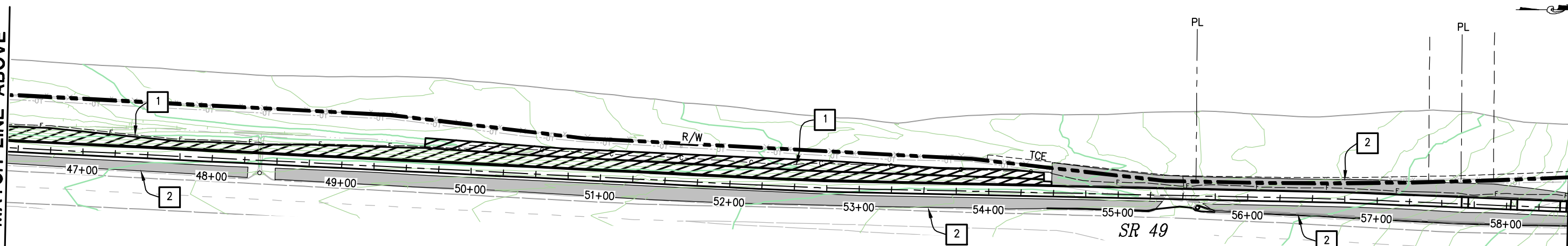
MATCH LINE BELOW



**PLAN - BIKE PATH**  
STATION 33+75 TO 46+50

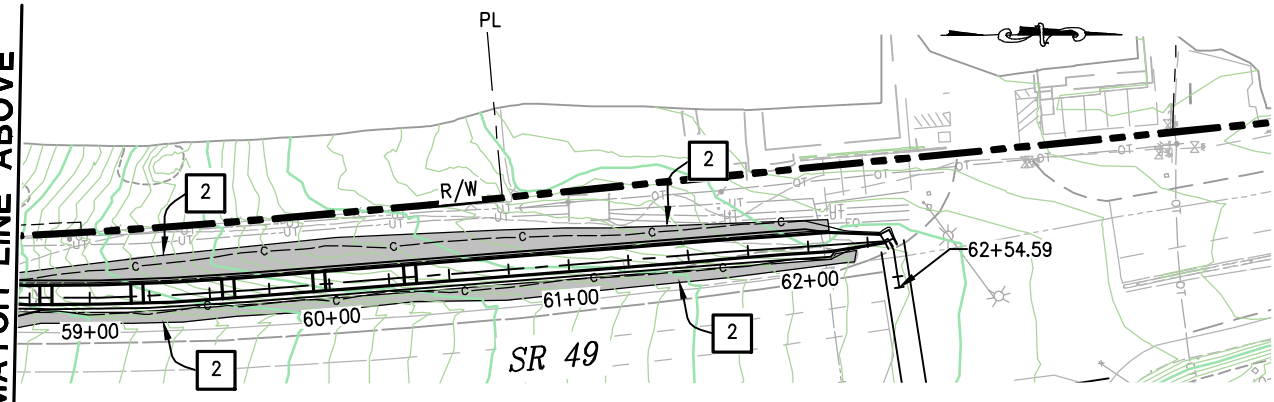
MATCH LINE ABOVE

MATCH LINE BELOW



**PLAN - BIKE PATH**  
STATION 46+50 TO 58+50

MATCH LINE ABOVE



**PLAN - BIKE PATH**  
STATION 46+50 TO 62+21

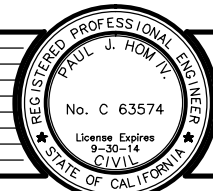
**NOTE:**  
SEE SECTION 21 OF THE SPECIAL PROVISIONS FOR SEED SPECIFICATIONS AND HYDROSEED APPLICATION RATES

**LEGEND**

|   |  |  |
|---|--|--|
| 1 | CUT/FILL SLOPES 2:1 OR STEEPER - ROLLED EROSION CONTROL PRODUCT (BLANKET) TYPE A & HYDROSEED |  |
| 2 | SLOPES FLATTER THAN 2:1 - HYDROSEED  |  |

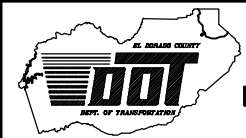
**EROSION CONTROL PLAN**  
SCALE : 1" = 40'

| REVISION | NUMBER | DATE | DESCRIPTION | BY |
|----------|--------|------|-------------|----|
|          |        |      |             |    |



PREPARED UNDER THE SUPERVISION OF:  
*Paul J. Horn*  
REGISTERED CIVIL ENGINEER  
DATE: 05/08/13

DESIGNED: CG  
DRAWN: RR  
CHECKED: PH  
DATE: 05/06/13  
ROAD NUMBER: SR 49



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

**NORTHSIDE SCHOOL CLASS 1**  
**BIKE PATH - PHASE 2 (SR49)**

SHEET  
**EC-2**  
31 OF 35  
W.O. No. 72306

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No | TOTAL SHEETS |
|------|--------|-------|--------------------------|----------|--------------|
| 03   | ED     | 49    | 31.2/34.8                | 32       | 35           |

REGISTERED CIVIL ENGINEER  
 ANTHONY C. POWERS  
 No. 51772  
 Exp. 6-30-14  
 CIVIL  
 STATE OF CALIFORNIA

11-30-12  
 DATE

PLANS APPROVAL DATE

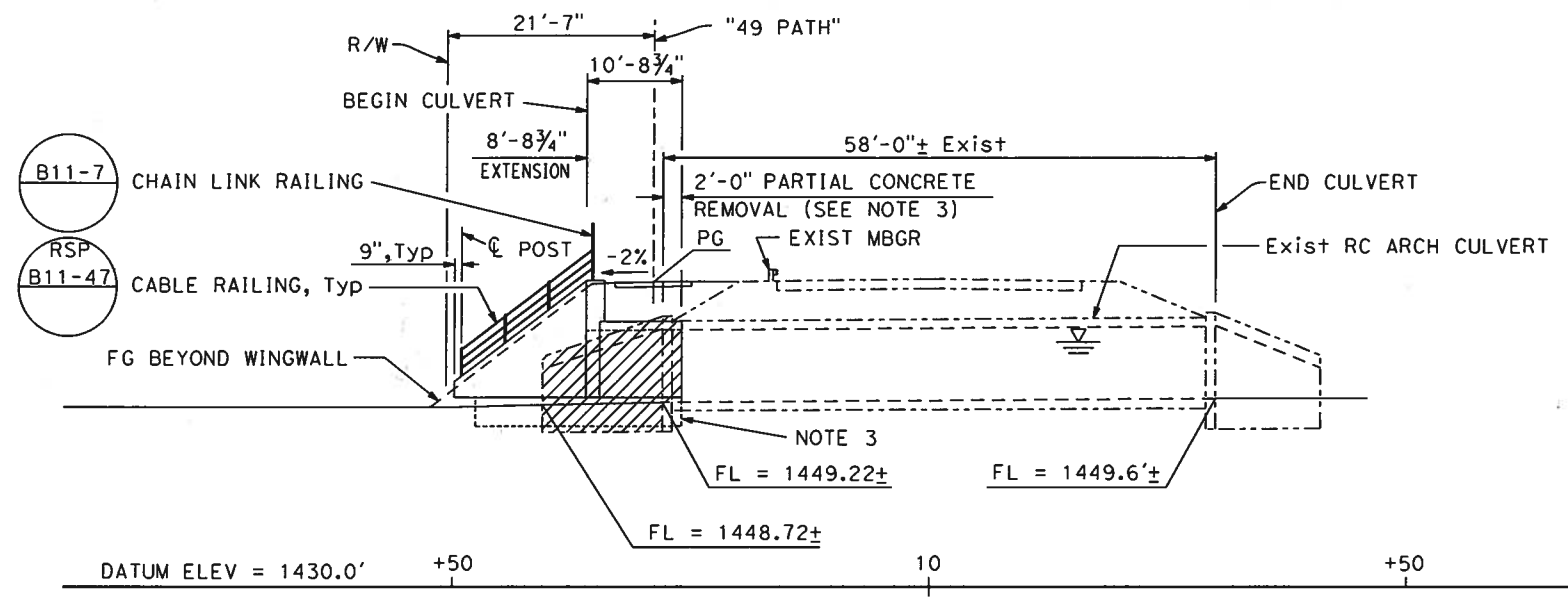
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El Dorado County Department of Transportation  
 2850 Fairlane Court  
 Placerville, CA 95667

Dokken Engineering  
 110 Blue Ravine Rd, Suite 200  
 Folsom, CA 95630 (916) 858-0642

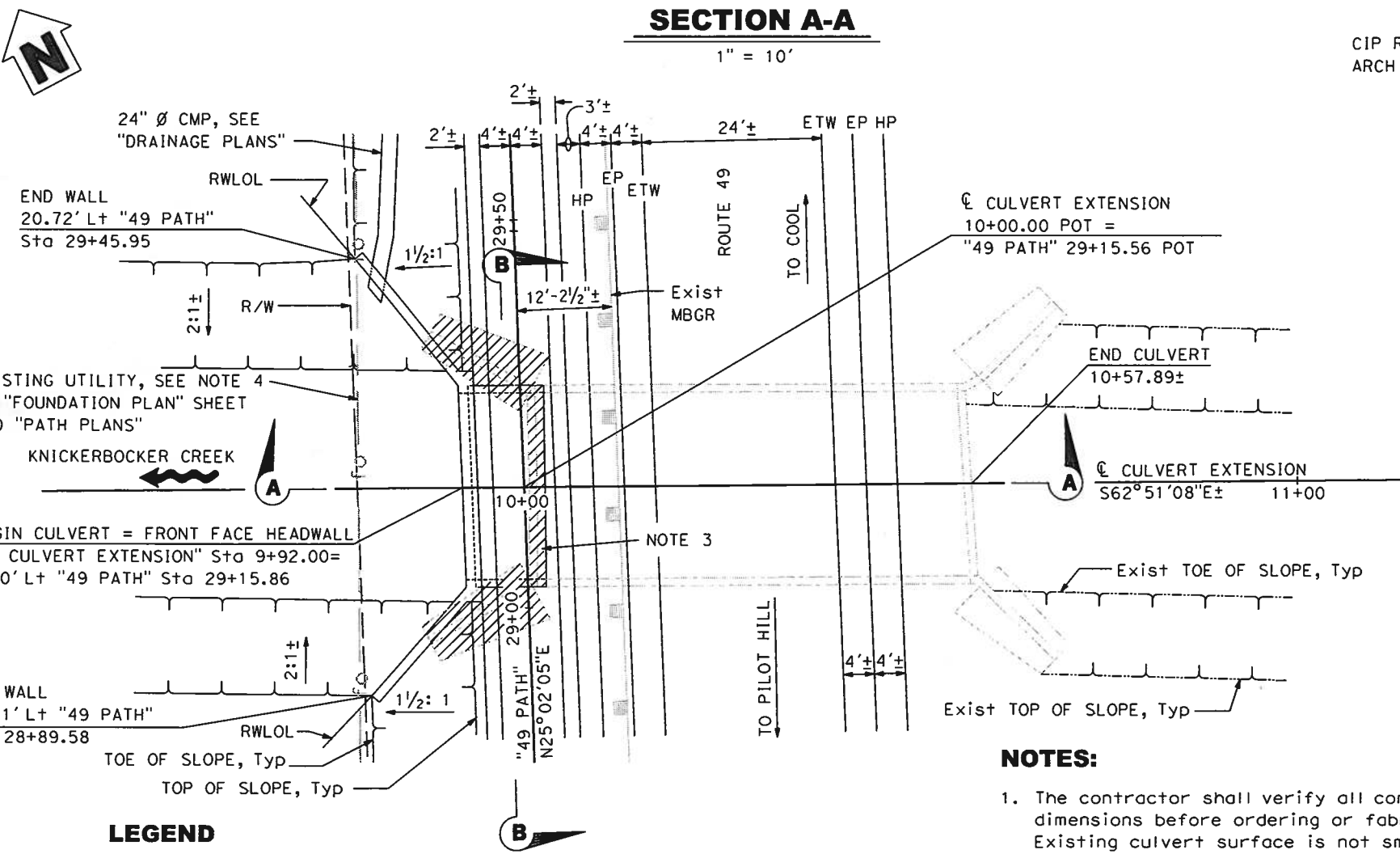
### INDEX TO PLANS

| SHEET No. | TITLE                 |
|-----------|-----------------------|
| 1         | GENERAL PLAN          |
| 2         | FOUNDATION PLAN       |
| 3         | CULVERT DETAILS NO. 1 |
| 4         | CULVERT DETAILS NO. 2 |



### SECTION A-A

1" = 10'



### PLAN

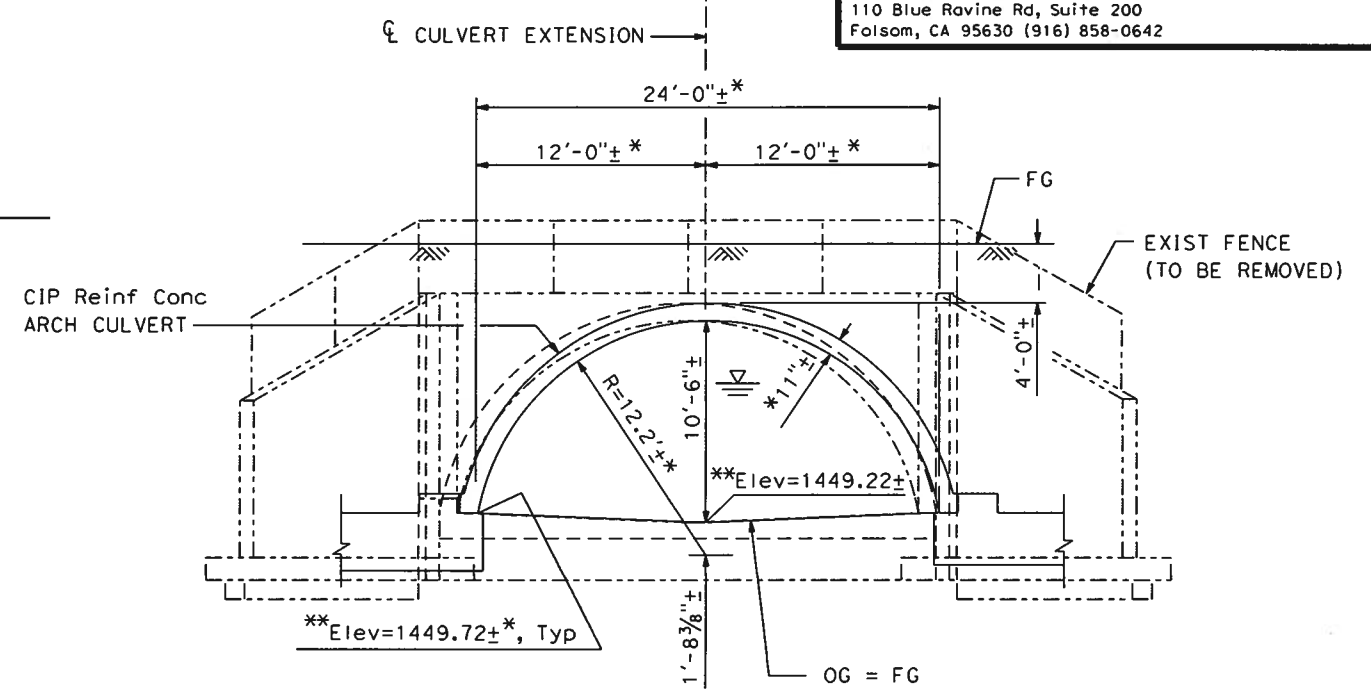
1" = 10'

**LEGEND**

Denotes limits of concrete removal  
 Denotes exist structure  
 HW Elev = 1456.44'

### NOTES:

- The contractor shall verify all controlling field dimensions before ordering or fabricating any material. Existing culvert surface is not smooth.
- For General Notes, Quantities and Hydrologic Summary, see "FOUNDATION PLAN" sheet.
- Arch culvert and headwall to be partially removed. For concrete removal limits see "FOUNDATION PLAN" sheet.



### SECTION B-B

1" = 5'

\* MATCH Exist  
 \*\* AT FACE OF Exist HEADWALL

### CALTRANS' STANDARD PLANS DATED 2010

| Sheet No.  | Title   |
|------------|---|
| A10A       | ACRONYMS AND ABBREVIATIONS (SHEET 1 OF 2)                                       |
| A10B       | ACRONYMS AND ABBREVIATIONS (SHEET 2 OF 2)                                       |
| A10C       | LINES AND SYMBOLS (SHEET 1 OF 3)  |
| A10D       | LINES AND SYMBOLS (SHEET 2 OF 3)  |
| A10E       | LINES AND SYMBOLS (SHEET 3 OF 3)  |
| A62B       | LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL BRIDGE SURCHARGE AND WALL         |
| A62E       | EXCAVATION AND BACKFILL CAST-IN-PLACE REINFORCED CONCRETE BOX AND ARCH CULVERTS |
| RSP B3-5   | RETAINING WALL DETAILS No. 1  |
| B3-6       | RETAINING WALL DETAILS No. 2  |
| B11-7      | CHAIN LINK RAILING  |
| RSP B11-47 | CABLE RAILING   |

STANDARD PLAN SHEET No.  
 DETAIL No.

|  |  |  |   |  |   |   |
|--|--|--|---|--|---|---|
| <br>DESIGN OVERSIGHT<br>12-6-12<br>SIGN OFF DATE | DESIGN BY: K. Sorokina<br>CHECKED: L. Burne  | LOAD & RESISTANCE FACTOR DESIGN BY: K. Sorokina<br>CHECKED: L. Burne | LIVE LOADING: HL93 APPLIED THROUGH TIRE CONTACT AREA<br>CHECKED: L. Burne | PREPARED FOR THE<br><b>STATE OF CALIFORNIA</b><br>DEPARTMENT OF TRANSPORTATION | BRIDGE NO.: 25-0123<br>POST MILES: 33.80                                | <b>KNICKERBOCKER CREEK CULVERT (EXTENSION)</b><br><b>GENERAL PLAN</b> |
|  | DETAILS BY: C. Houghton<br>CHECKED: L. Burne | LAYOUT BY: K. Sorokina<br>CHECKED: L. Burne                          | PLANS AND SPECS COMPARED A. Powers  | PROJECT ENGINEER: A. Powers  | UNIT: X<br>PROJECT NUMBER & PHASE: 030000347<br>CONTRACT NO.: 03-2E4801 |   |
| QUANTITIES BY: K. Sorokina<br>CHECKED: L. Burne  | SPECIFICATIONS BY: L. Burne                  | ORIGINAL SCALE IN INCHES FOR REDUCED PLANS                           | DISREGARD PRINTS BEARING EARLIER REVISION DATES                           | REVISION DATES: 11-30-12, 5-9-12, 5-14-12, 5-12-12                             | SHEET 1 OF 4  |   |



| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No | TOTAL SHEETS |
|------|--------|-------|--------------------------|----------|--------------|
| 03   | ED     | 49    | 31.2/34.8                | 33       | 35           |

REGISTERED CIVIL ENGINEER  
 ANTHONY C. POWERS  
 No. 51772  
 Exp. 6-30-14  
 CIVIL  
 STATE OF CALIFORNIA

11-30-12  
 DATE

PLANS APPROVAL DATE

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El Dorado County Department of Transportation  
 2850 Fairlane Court  
 Placerville, CA 95667

Dakken Engineering  
 110 Blue Ravine Rd, Suite 200  
 Folsom, CA 95630 (916) 858-0642

**NOTES:**

- The contractor shall verify all controlling field dimensions before ordering or fabricating any material.
- Temporary shoring may be required.
- Exposed exist culvert and footing reinforcement to remain undamaged.
- AT&T direct burial and fiber optic lines. The contractor shall verify the horizontal and vertical location of all utilities prior to construction.

**LEGEND**

- Denotes limits of concrete removal
- Denotes exist structure
- Denotes bottom of footing elev

**GENERAL NOTES  
LOAD AND RESISTANCE FACTOR DESIGN**

DESIGN:

AASHTO LRFD Bridge Design Specifications, 4th edition with California Amendments, preface dated November, 2011.

SOIL LOADING:

120 PCF VERTICAL, 36 PCF ACTIVE

LIVE LOADING:

HL93 applied through tire contact area method.

REINFORCED CONCRETE:

fy = 60 ksi  
f'c = 4.0 ksi  
n = 8

FOOTING PRESSURE:

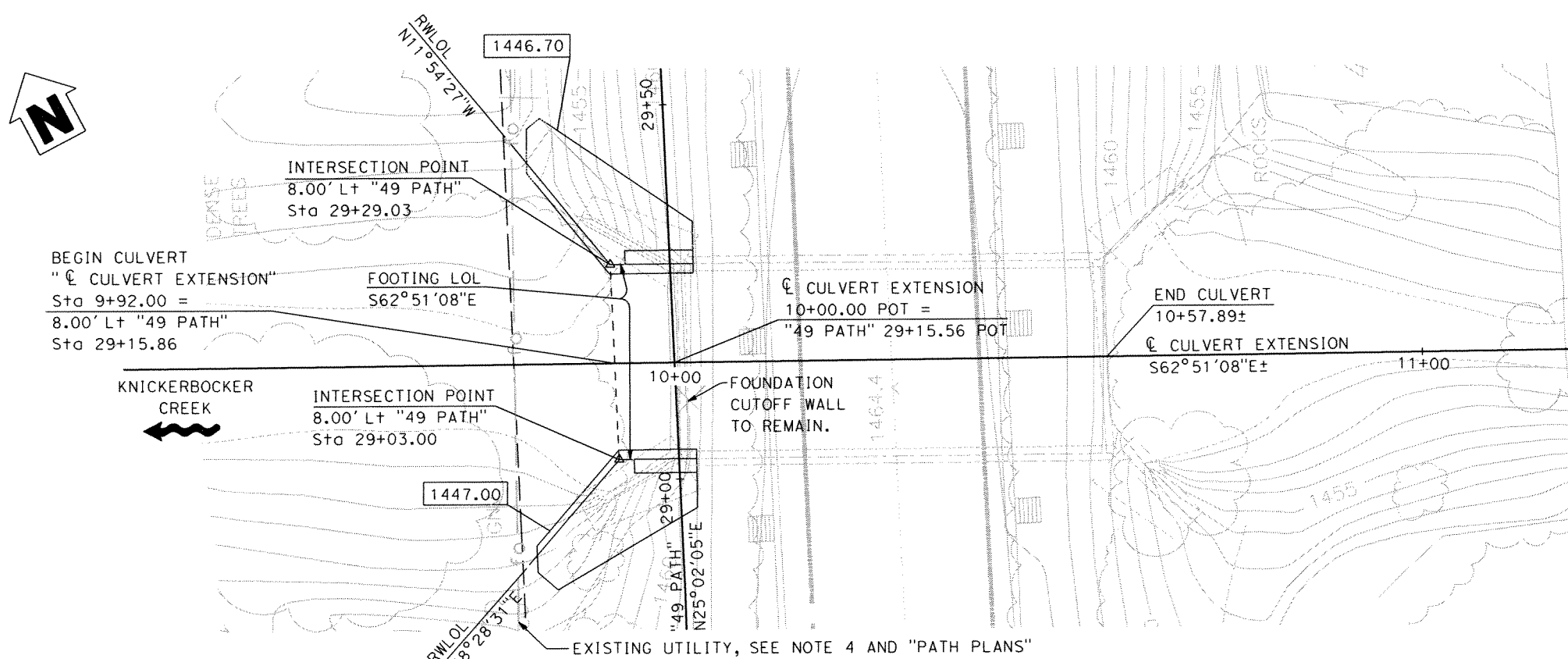
Allowable = 5.0 ksf  
Design = 4.66 ksf

**HYDROLOGIC SUMMARY**

DRAINAGE AREA: 2.45 square miles

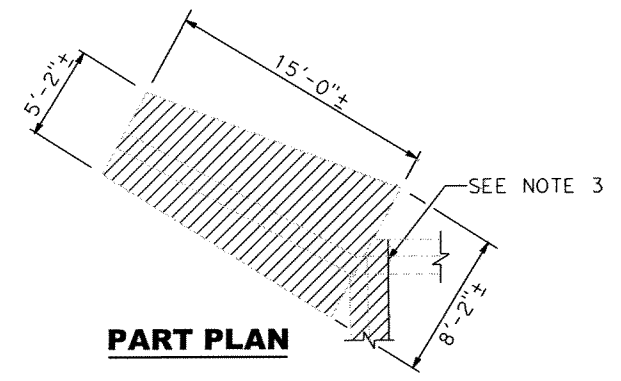
|                                     | DESIGN FLOOD | BASE FLOOD | OVERTOPPING FLOOD |
|-------------------------------------|--------------|------------|-------------------|
| FREQUENCY (Years)                   | 50           | 100        | > 100             |
| DISCHARGE (Cubic feet per second)   | 814          | 1075       | N/A               |
| WATER SURFACE (Elevation at bridge) | 1456.05'     | 1456.44'   | N/A               |

Flood plain data are based upon information available when the plans were prepared and are shown to meet Federal requirements. The accuracy of said information is not warranted by the State, County, or consultants and interested or affected parties should make their own investigations.

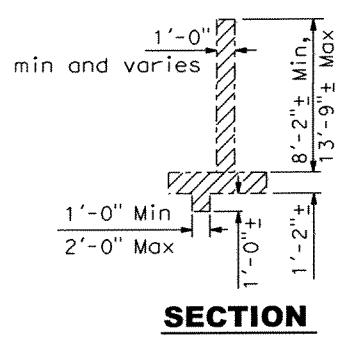


**PLAN**

1" = 10'



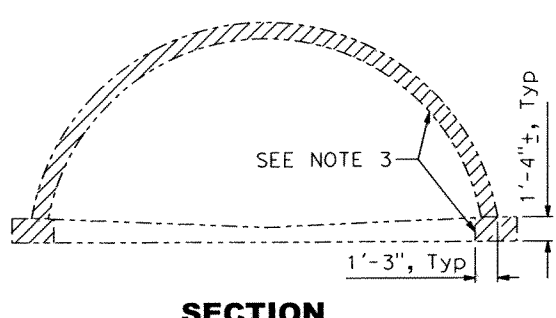
**PART PLAN**



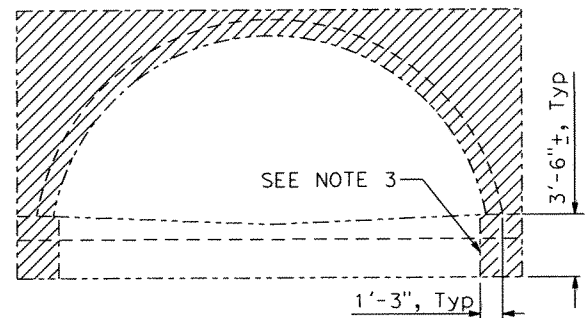
**SECTION**

**QUANTITIES**

| ITEM                            | TOTAL     |
|---------------------------------|-----------|
| REMOVE CONCRETE                 | 1 LS      |
| STRUCTURE EXCAVATION (TYPE D)   | 227 CY    |
| STRUCTURE BACKFILL (CULVERT)    | 177 CY    |
| STRUCTURAL CONCRETE             | 84 CY     |
| BAR REINFORCING STEEL (CULVERT) | 12,971 LB |
| CHAIN LINK RAILING              | 26 LF     |
| CABLE RAILING                   | 38 LF     |



**SECTION CULVERT WALL AND FOOTING**



**ELEVATION HEADWALL**

**CONCRETE REMOVAL LIMITS**

3/16" = 1'-0"

June 7, 2012  
 APPROVAL DATE  
 REGISTERED PROFESSIONAL ENGINEER  
 RICHARD D. SCHWERS  
 No. 38788  
 EXP. 3-31-13  
 CIVIL  
 STATE OF CALIFORNIA

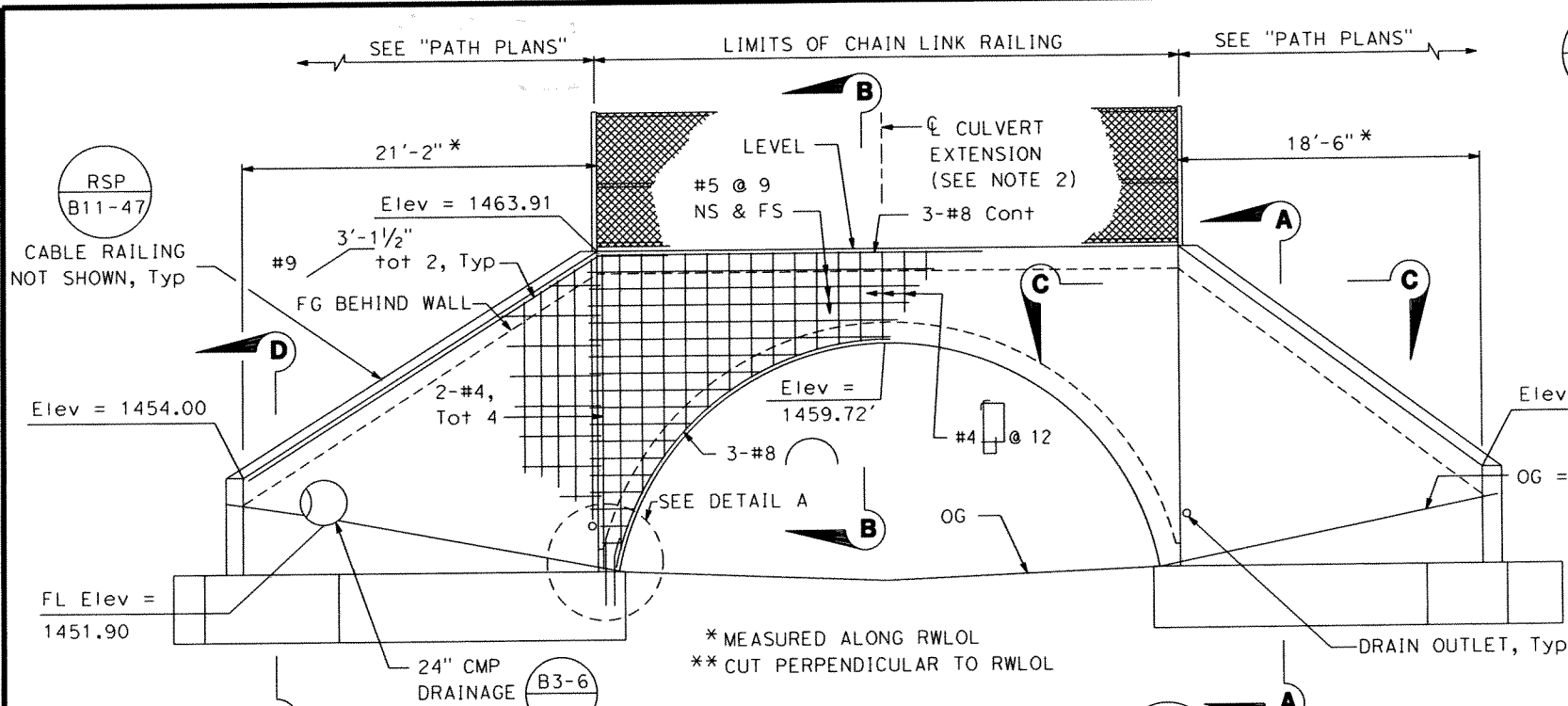
|  |  |  |   |  |  |  |  |                               |  |   |  |              |
|--|--|--|---|--|--|--|--|-------------------------------|--|---|--|--------------|
| DESIGN OVERSIGHT<br>12-6-12<br>SIGN OFF DATE | SCALE: As Noted<br>PHOTOGRAMMETRY AS OF: 4-2-10<br>SURVEYED BY ED County<br>FIELD CHECKED BY ED County | VERT.DATUM NAVD 88<br>ALIGNMENT TIES ED County<br>DRAFTED BY ED County<br>CHECKED BY ED County | HORZ.DATUM NAD 83<br>DESIGN BY K. Sorokina<br>DETAILS BY C. Houghton<br>QUANTITIES BY K. Sorokina | CHECKED L. Burne<br>CHECKED L. Burne<br>CHECKED L. Burne | PREPARED FOR THE<br><b>STATE OF CALIFORNIA</b><br>DEPARTMENT OF TRANSPORTATION | BRIDGE NO.<br>25-0123<br>POST MILES<br>33.80 | <b>KNICKERBOCKER CREEK CULVERT (EXTENSION)</b><br><b>FOUNDATION PLAN</b> | A. Powers<br>PROJECT ENGINEER | UNIT: X<br>PROJECT NUMBER & PHASE: 0300000347<br>CONTRACT NO.: 03-2E4801 | DISREGARD PRINTS BEARING EARLIER REVISION DATES | REVISION DATES<br>11-30-12 8-3-12 8-14-12 9-5-12 | SHEET 2 OF 4 |
|--|--|--|---|--|--|--|--|-------------------------------|--|---|--|--------------|

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

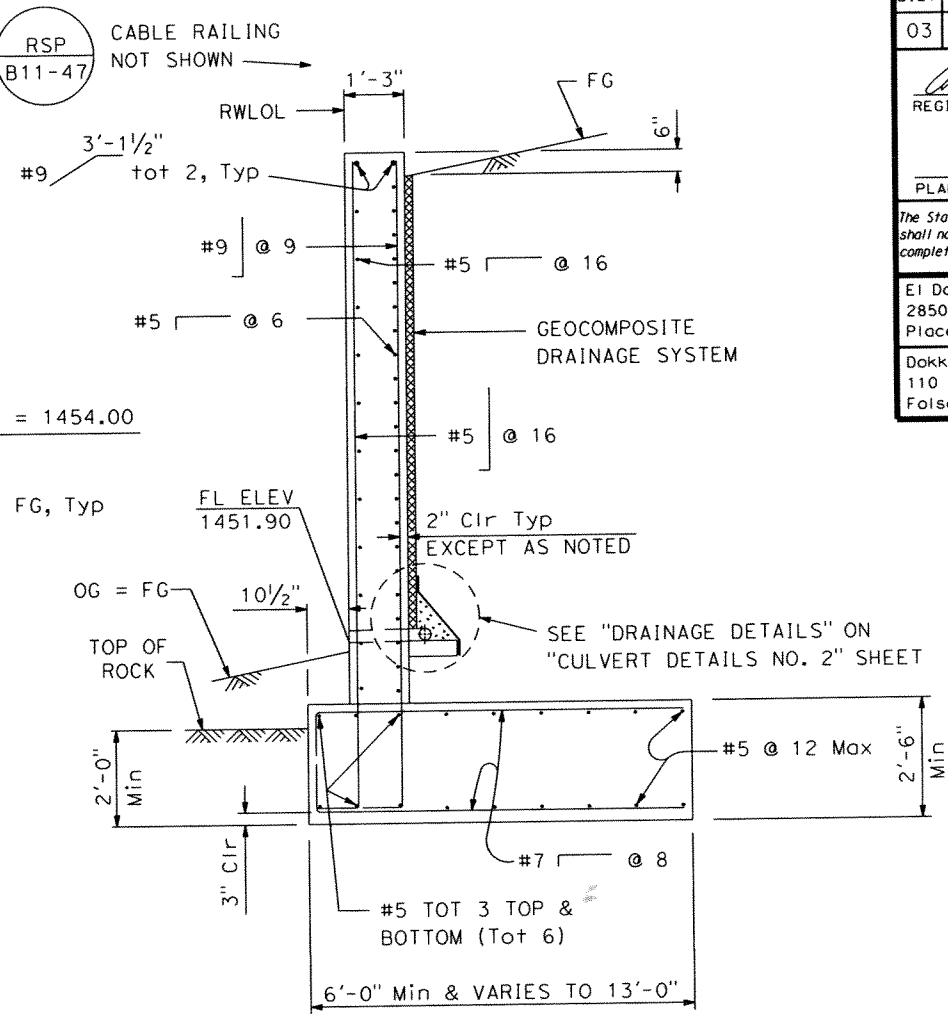
| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No | TOTAL SHEETS |
|------|--------|-------|--------------------------|----------|--------------|
| 03   | ED     | 49    | 31.2/34.8                | 34       | 35           |

11-30-12  
 REGISTERED CIVIL ENGINEER DATE  
 ANTHONY C. POWERS  
 No. 51772  
 Exp. 6-30-14  
 CIVIL  
 STATE OF CALIFORNIA

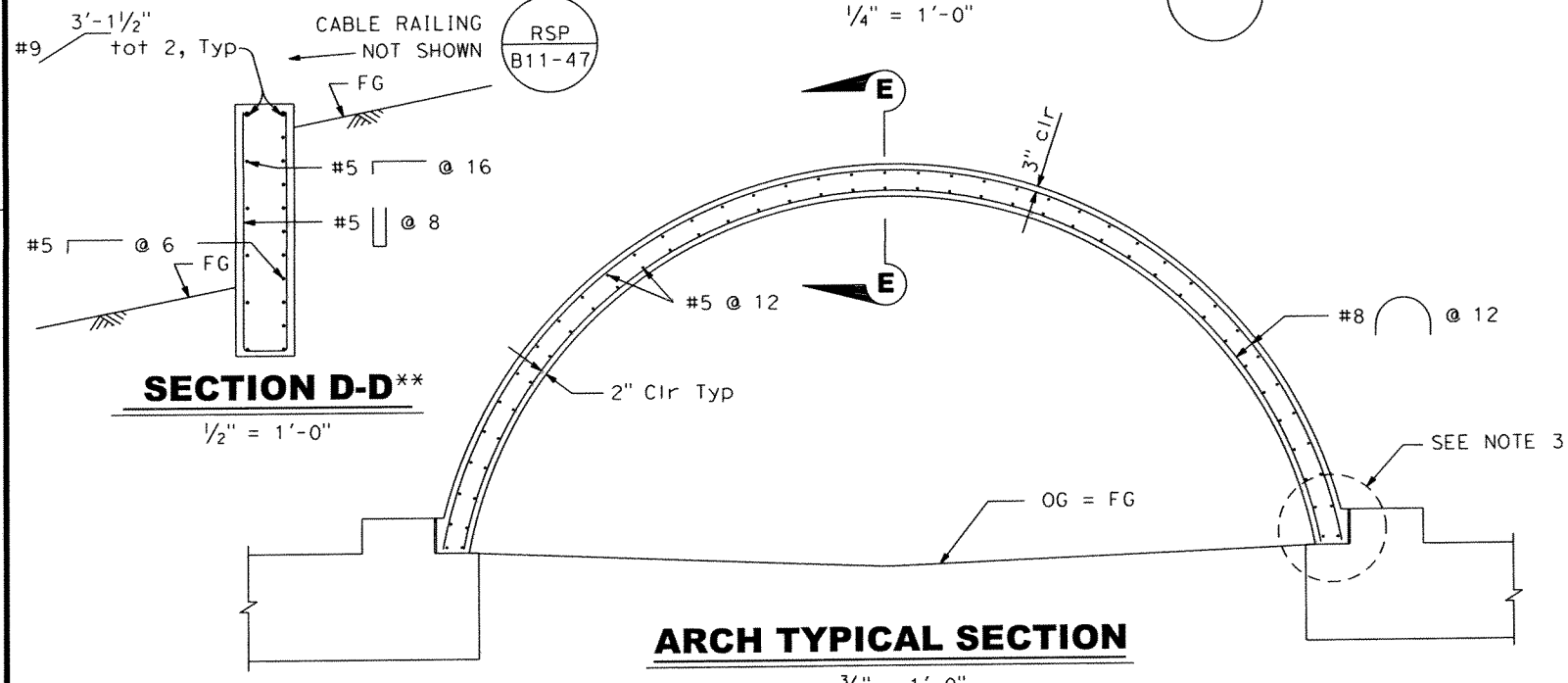
PLANS APPROVAL DATE  
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 2850 Fairlane Court  
 Placerville, CA 95667  
 Dakken Engineering  
 110 Blue Ravine Rd, Suite 200  
 Folsom, CA 95630 (916) 858-0642



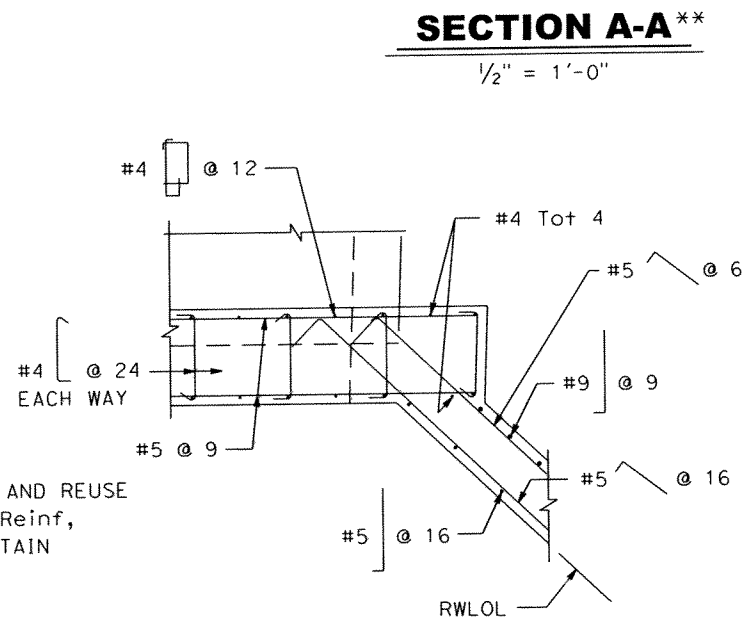
**HEADWALL ELEVATION**  
1/4" = 1'-0"



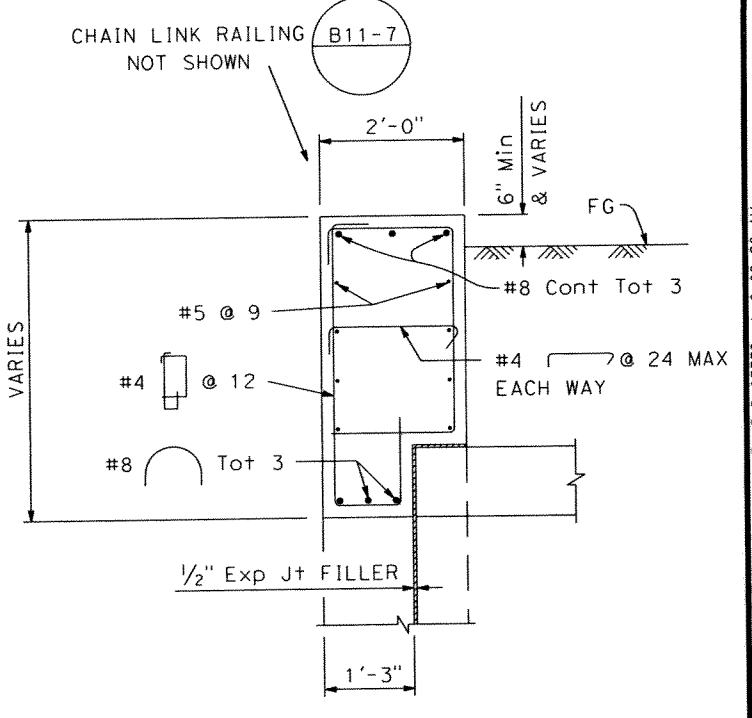
**SECTION A-A\*\***  
1/2" = 1'-0"



**ARCH TYPICAL SECTION**  
3/8" = 1'-0"

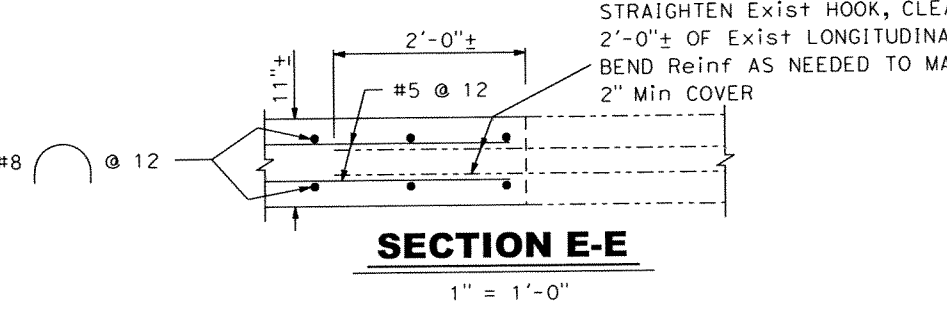


**SECTION C-C**  
1/2" = 1'-0"



**SECTION B-B**  
3/4" = 1'-0"

- NOTES:**
- The contractor shall verify all controlling field dimensions before ordering or fabricating any material.
  - Headwall reinf symmetrical about  $\bar{C}$  culvert extension.
  - For culvert footing details, see "SECTION G-G" on "CULVERT DETAILS NO. 2" sheet.



**SECTION E-E**  
1" = 1'-0"

DESIGN OVERSIGHT  
 12-6-12  
 SIGN OFF DATE  
 DESIGN DETAIL SHEET (ENGLISH) (REV.7/16/10)

|            |                |                  |
|------------|----------------|------------------|
| DESIGN     | BY K. Sorokina | CHECKED L. Burne |
| DETAILS    | BY C. Houghton | CHECKED L. Burne |
| QUANTITIES | BY K. Sorokina | CHECKED L. Burne |

PREPARED FOR THE  
 STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 25-0123  
 POST MILES 33.80  
 A. Powers  
 PROJECT ENGINEER

**KNICKERBOCKER CREEK CULVERT (EXTENSION)**  
**CULVERT DETAILS NO. 1**

|   |                         |                |              |
|---|-------------------------|----------------|--------------|
| UNIT: PROJECT NUMBER & PHASE: 0300000347        | CONTRACT NO.: 03-2E4801 | REVISION DATES | SHEET 3 OF 4 |
| DISREGARD PRINTS BEARING EARLIER REVISION DATES |                         | 11-30-12       | 3 4          |

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No | TOTAL SHEETS |
|------|--------|-------|--------------------------|----------|--------------|
| 03   | ED     | 49    | 31.2/34.8                | 35       | 35           |

REGISTERED CIVIL ENGINEER  
 ANTHONY C. POWERS  
 No. 51772  
 Exp. 6-30-14  
 CIVIL  
 STATE OF CALIFORNIA

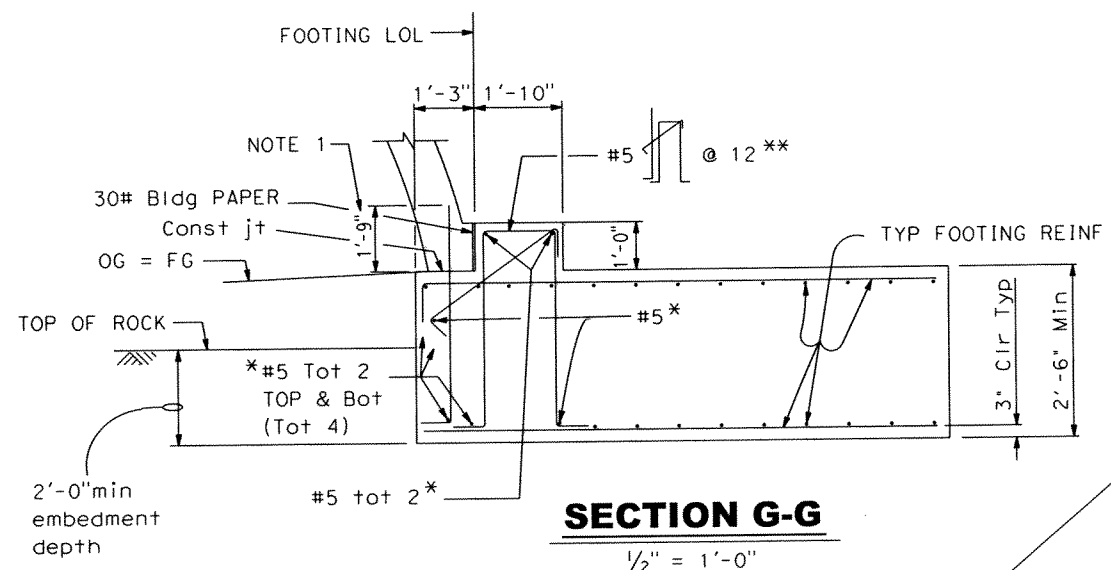
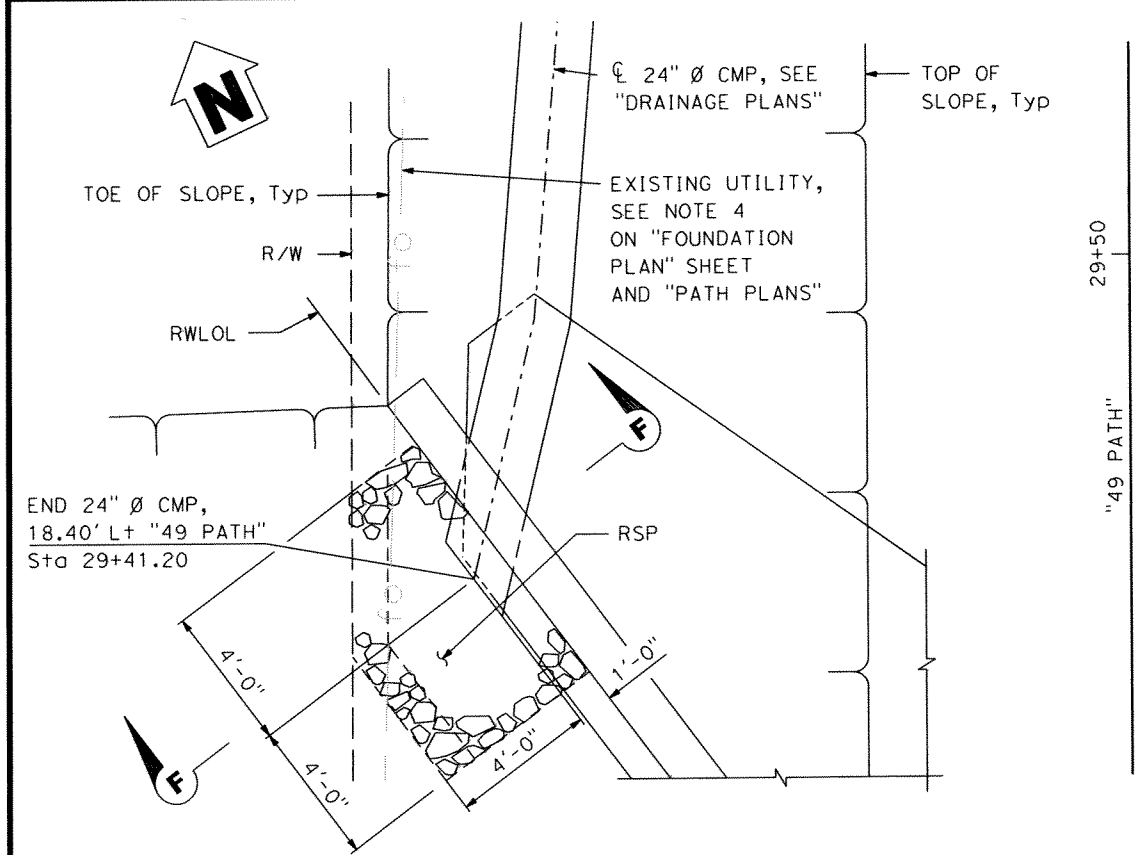
11-30-12  
 DATE

PLANS APPROVAL DATE

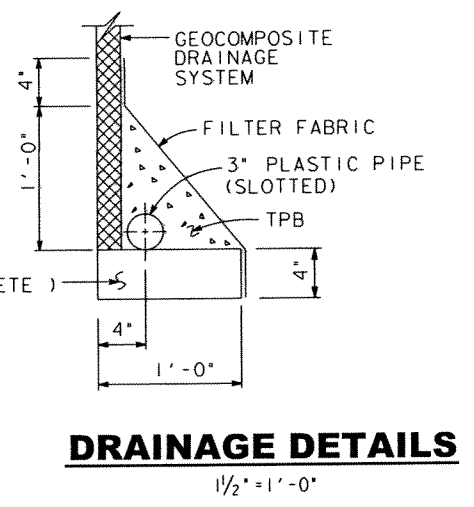
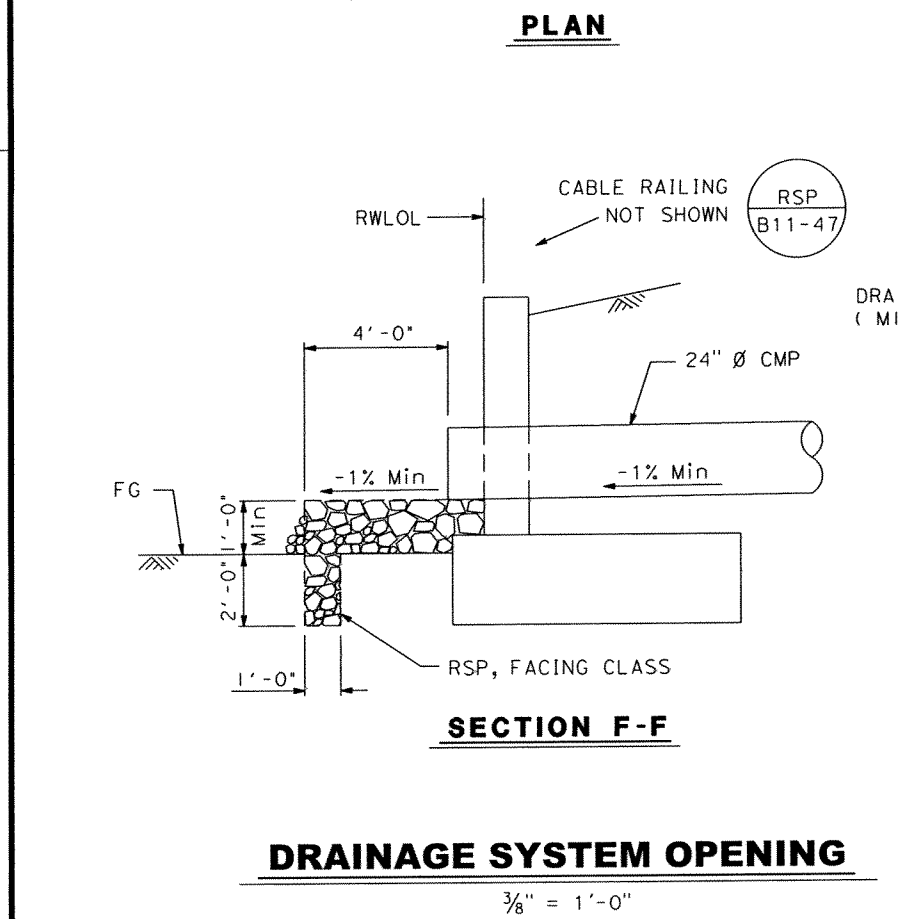
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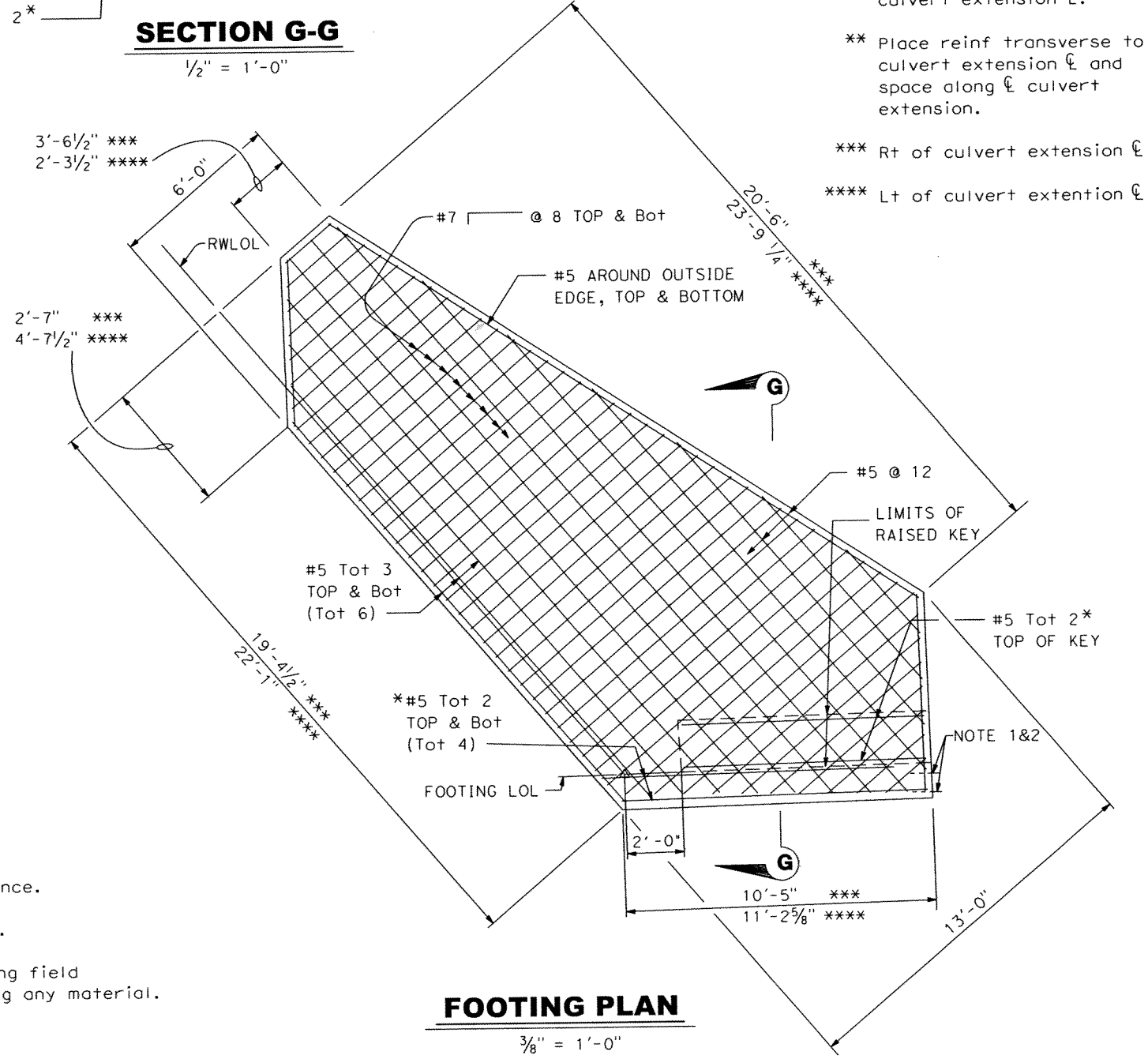
Dokken Engineering  
 110 Blue Ravine Rd, Suite 200  
 Folsom, CA 95630 (916) 858-0642



- \* Place reinf parallel to culvert extension  $\ell$ .
- \*\* Place reinf transverse to culvert extension  $\ell$  and space along  $\ell$  culvert extension.
- \*\*\* Rt of culvert extension  $\ell$
- \*\*\*\* Lt of culvert extension  $\ell$



- NOTES:**
- Bend as needed to maintain 3" min clearance.
  - Exist exposed reinf to remain undamaged.
  - The contractor shall verify all controlling field dimensions before ordering or fabricating any material.



DESIGN OVERSIGHT  
 12-6-12  
 SIGN OFF DATE

|            |                |                  |
|------------|----------------|------------------|
| DESIGN     | BY K. Sorokina | CHECKED L. Burne |
| DETAILS    | BY C. Houghton | CHECKED L. Burne |
| QUANTITIES | BY K. Sorokina | CHECKED L. Burne |

PREPARED FOR THE  
 STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

A. Powers  
 PROJECT ENGINEER  
 BRIDGE NO. 25-0123  
 POST MILES 33.80  
 UNIT: X  
 PROJECT NUMBER & PHASE: 0300000347  
 CONTRACT NO.: 03-2E4801

|   |          |
|---|----------|
| KNICKERBOCKER CREEK CULVERT (EXTENSION) |          |
| CULVERT DETAILS NO. 2                   |          |
| REVISION DATES                          | SHEET OF |
| 11-30-12 8-3-12 8-16-12 9-5-12          | 4 4      |

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS