"A FULLY CONTROLLED ACCESS FACILITY"
ARKANSAS DEPARTMENT OF TRANSPORTATION
CONSTRUCTION PLANS FOR STATE HIGHWAY

SIEBENMORGEN RD. - MILL ST.
NOISE BARRIER WALL (I-40) (CONWAY) (S)
FAULKNER COUNTY
ROUTE 40 SECTION 52

JOB 080496
F.A.P. NHPP-9095(29)

NOT TO SCALE

LENGTH COMPUTED ALONG & NOISE WALL
GROSS LENGTH OF PROJECT 1,651.96 FEET OR 0.31 MILES
NET LENGTH OF ROADWAY 1,554.96 FEET OR 0.30 MILES
NET LENGTH OF BRIDGES 0.00 FEET OR 0.000 MILES
NET LENGTH OF PROJECT 1,651.96 FEET OR 0.31 MILES

BEGIN PROJECT MILE 0.00
END PROJECT MILE 1.65

LATITUDE N 35°05'56" N 35°05'50" N 35°05'44"
LONGITUDE W92°29'50" W92°29'44" W92°29'37"

DIRECTIONS: N 35°05'56" W92°29'50"

PROJECT LOCATION
VICINITY MAP
INDEX OF SHEETS

SHEET NO. DRAWNO. TITLE
1  T.C. 1- STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION...
2  T.C. 2- STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION...
3  T.C. 3- TEMPORARY EROSION CONTROL DEVICES...

ROADWAY STANDARD DRAWINGS

DRAWNO. TITLE DATE
CP-1- CONCRETE DITCH PAVING 12/08/16
CP-2- FLARED END SECTION 10/18/16
CP-3- DETAIL FOR CORNER BLOCK JUNCTION BOX (TYPE ST) 07/08/12
GR-1- GUARD RAILS DETAILS 11/16/17
GR-2- GUARD RAIL DETAILS 11/16/17
GR-3- GUARD RAIL DETAILS 11/16/17
GR-4- GUARD RAIL DETAILS 11/16/17
GR-5- GUARD RAIL DETAILS 11/16/17
GR-11- GUARD RAIL DETAILS 11/16/17
GR-12- GUARD RAIL DETAILS 11/16/17
PC-1- CONCRETE PIPE CULVERT- FULL HEIGHTS & BEDDING 02/27/14
PM-1- PAVEMENT MARKING DETAILS 06/01/17
PL-1- DETAILS OF PIPE UNDERGROUND 12/08/16
TC-1- STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION 04/13/17
TC-2- STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION 04/23/15
TC-3- STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION 01/25/19
TC-4- STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION- TEMPORARY PRECAST BARRIER 02/21/14
TC-5- STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION- TEMPORARY PRECAST BARRIER 10/15/19
TEC-1- TEMPORARY EROSION CONTROL DEVICES 11/16/17
TEC-3- TEMPORARY EROSION CONTROL DEVICES 11/03/17

Governing Specifications

NUMBER TITLE
ERRATA_ ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
FHWA-1273 REQUIRED CONTRACT PROVISIONS FOR FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA-1273 SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - NOTICE TO CONTRACTORS
FHWA-1273 SUPPLEMENT - SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES (23 U.S.C. 145)
FHWA-1273 SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - GOALS AND TABLES
FHWA-1273 SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - FEDERAL STANDARDS
FHWA-1273 SUPPLEMENT - POSTERS AND NOTICES REQUIRED FOR FEDERAL-AID PROJECTS
FHWA-1273 SUPPLEMENT - NOISE RATE DETERMINATION
106-1 CONTRACTOR'S LICENSE
106-2 DEPARTMENT NAME CHANGE
106-3 ISSUE OF PROPOSALS
106-4 LOADING AND UNLOADING
106-5 WORK ALLOWED PRIOR TO ISSUE OF WORK ORDER
106-6 AGRASSIBLE BASE COURSE
106-7 QUALITY CONTROL AND ACCEPTANCE
106-8 ROAD CURB
106-9 DESIGN AND QUALITY CONTROL OF ASPHALT MIXTURES
106-10 PERCENT AIR VAPOR FOR ACID MIX DESIGNS
106-11 LIQUID ANTI-SLIP ADHESIVE
106-12 INDEMNIFICATION
106-13 RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
106-14 CONCRETE DITCH PAVING
106-15 ORCHard
106-20 BIDDING REQUIREMENTS AND CONDITIONS
106-21 CARGO PREFERENCE ACT REQUIREMENTS
106-22 DRILLED SHAFT FOUNDATIONS (ROCA-SOCKETED)
106-23 FLEXIBLE BEGINNING OF WORK - CALENDAR DAY CONTRACT
106-24 LIGHT POLE FOUNDATION
106-25 MAINTENANCE OF TRAFFIC
106-26 MANDATORY ELECTRONIC CONTRACT
106-27 MANDATORY ELECTRONIC DOCUMENT SUBMITTAL
106-28 PARTNERING REQUIREMENTS
106-29 PROSECUTION AND PROGRESS WITH BID SCHEDULE
106-30 REMOVAL AND DISPOSAL OF GUARDRAILS
106-31 SITE USE (A+B+C METHOD) - CALENDAR DAY CONTRACT
106-32 SOIL STABILIZATION
106-33 SOUND ABSORBING NOISE BARRIERS
106-34 SOUND ABSORBING NOISE BARRIERS WITH LIGHTWEIGHT PANELS
106-35 SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
106-36 UTILITY ADJUSTMENTS
106-37 VALUE ENGINEERING
106-38 WARM MIX ASPHALT

INDEX OF SHEETS, GOV. SPECS., & GEN. NOTES
I-40 MEDIAN LANES

PROPOSED NOISE BARRIER (SEE DETAILS - SHEETS 20-30)

CONCRETE BARRIER WALL (SIDE TYPE SPECIAL) (SEE DETAIL - SHEETS 7, 3D)

AGGREGATE BASE COURSE (CL. 7) - 0.02 FT./FT.

NOTES:
1. REFER TO CROSS SECTIONS FOR DEVIATION FROM THE NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.

2. THE THICKNESS OF AGGREGATE BASE COURSE SHALL BE WITHIN PLUS OR MINUS ONE INCH OF PLAN THICKNESS SHOWN. THE CONTRACTOR WILL CORRECT ANY DEFICIENT THICKNESS THAT DOES NOT MEET TOLERANCE INDICATED. PAYMENT WILL NOT BE MADE FOR MATERIAL PlACED IN EXCESS OF THE TOLERANCE INDICATED.

3. PAVING EQUIPMENT SHALL NOT BE ALLOWED TO TRACK ON TOP OF EDGE DRains.

4. ANY EXISTING ASPHALT PAVEMENT TO BE REMOVED SHALL BE SEPARATED FROM THE REMAINING ASPHALT PAVEMENT BY SAWING ALONG A NEAT LINE.

5. ANY PAVEMENT TO BE REMOVED SHALL BE CAREFULLY REMOVED IN A MANNER THAT WILL NOT DAMAGE THE PAVEMENT THAT IS TO REMAIN IN PLACE. DAMAGED PAVEMENT SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.

6. THE CONTRACTOR SHALL FILL WITH EARTH AND/OR OTHER SUITABLE MATERIAL ALL HOLES AND TRENCHES WHERE EXISTING 4" PIPE UNDERDRAINS AND LATERALS ARE MODIFIED TO AVOID PROPOSED FOUNDATIONS. EARTH IN THE HOLES SHALL BE TURGOUSLY COMPACTED WITH A MECHANICAL TAMPER UNTIL IT IS AS FIRM AND UNYELDING AS THE SURROUNDING MATERIAL.

7. PAYMENT FOR LOAD BACKFILL BETWEEN THE CONCRETE BARRIER WALL AND THE NOISE BARRIER SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS BUT SHALL CONSIST OF AGGREGATE BASE COURSE (CLASS 4) OR EQUIVALENT. DENSITY REQUIREMENTS SHALL BE WAIVED.

8. A CONCRETE CAP (4") (L.T.) SHALL BE PLACED ON TOP OF THE AGGREGATE BACKFILL. PAYMENT FOR THE CONCRETE CAP SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR ITEM 2D - CONCRETE BARRIER WALL (SIDE TYPE SPECIAL).

NOISE BARRIER WALL ALONG EB I-40 TYPICAL AT BARRIER POST (NORMAL CROWN) (SHOWN IN DIRECTION OF TRAFFIC)

NOISE BARRIER WALL ALONG EB I-40 TYPICAL AT BARRIER POST (SUPERELEVATION) (SHOWN IN DIRECTION OF TRAFFIC)
NOTES:

1. REFER TO CROSS SECTIONS FOR DEVIATION FROM THE NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.

2. THE THICKNESS OF AGGREGATE BASE COURSE SHALL BE WITHIN PLUS OR MINUS ONE INCH OF PLAN THICKNESS SHOWN. THE CONTRACTOR WILL CORRECT ANY DEFICIENT THICKNESS THAT DOES NOT MEET TOLERANCE INDICATED. PAYMENT WILL NOT BE MADE FOR MATERIAL PLACED IN EXCESS OF THE TOLERANCE INDICATED.

3. PAVING EQUIPMENT SHALL NOT BE ALLOWED TO TRACK ON TOP OF EDGE DRAINS.

4. ANY EXISTING ASPHALT PAVEMENT TO BE REMOVED SHALL BE SEPARATED FROM THE REMAINING ASPHALT PAVEMENT BY SAWING ALONG A NEAT LINE.

5. ANY PAVEMENT TO BE REMOVED SHALL BE CAREFULLY REMOVED IN A MANNER THAT WILL NOT DAMAGE THE PAVEMENT THAT IS TO REMAIN IN PLACE. DAMAGED PAVEMENT SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.

6. THE CONTRACTOR SHALL FILL WITH EARTH AND/OR OTHER SUITABLE MATERIAL ALL HOLES AND TRENCHES WHERE EXISTING 4" PIPE UNDERDRAINS AND LATERALS ARE MODIFIED TO AVOID PROPOSED FOUNDATIONS. EARTH IN THE HOLES SHALL BE THOROUGHLY COMPACTED WITH A MECHANICAL TAMPER UNTIL IT IS AS FIRM AND UNYIELDING AS THE SURROUNDING MATERIAL.

7. PAYMENT FOR AGGREGATE BACKFILL BETWEEN THE CONCRETE BARRIER WALL AND THE NOISE BARRIER SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS BUT SHALL CONSIST OF AGGREGATE BASE course (CLASS 4) OR EQUIVALENT. DENSITY REQUIREMENTS SHALL BE WAIVED.

8. A CONCRETE CAP (4") (LT. I) SHALL BE PLACED ON TOP OF THE AGGREGATE BACKFILL. PAYMENT FOR THE CONCRETE CAP SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR ITEM SP - CONCRETE BARRIER WALL (SIDE TYPE SPECIAL).
NOTE:
REFER TO STD. DWG. GR-8, GR-8A, GR-9, GR-9A, GR-10, GR-11 AND GR-12 FOR ADDITIONAL INFORMATION

TYPICAL LAYOUT OF GUARDRAIL AT END OF CONCRETE BARRIER WALL
(N.T.S.)
DETAIL OF BARRIER TRANSITION AT PIER PROTECTION TYPE A (N.T.S.)

SECTION X-X

SECTION Y-Y

DETAIL OF BARRIER TRANSITION AT GUARDRAIL CONNECTIONS (N.T.S.)

SECTION X-X

SECTION Y-Y

NOTES:
- IO'-0" TRANSITION SECTION WILL BE MEASURED AND PAID FOR AS CONCRETE BARRIER WALL (SIDE TYPE SPECIAL).

SEE STD. DMG. OR HQ FOR GUARDRAIL ATTACHMENT DETAILS

RED'D CONSTRUCTION JOINT
NOISE WALL

PROPOSED NOISE BARRIER
(SEE DETAILS - SHEETS 20-30)

CONCRETE CAP 4" UNIFORM THICKNESS
AGG. BASE COURSE (CLASS 4) - DENSITY REQUIREMENTS WAIVED

CONCRETE BARRIER WALL (SIDE TYPE SPECIAL)
(SEE DETAIL - SHEET 30)

AGGREGATE BASE COURSE
(CL. 71 - 6" COMP'D DEPTH
23.25 TONS/STA.

AT BARRIER WALL POST

DETAIL OF AGGREGATE BASE COURSE UNDER
CONCRETE BARRIER WALL
PROTRUSION TO BE ESTABLISHED BY BREAKAWAY BOLT/COUPLING MANUFACTURER IN COORDINATION WITH CONWAY CORPORATION TO BE CONNECTED TO POLE GROUND LUG.

2' NON-METALLIC CONDUIT

NOTE: TOP OF FOUNDATION SHALL BE FLUSH WITH LOCAL GROUND SURFACE.

CONCRETE BASE

CONCRETE PULL BOX (TYPE 2 HD)

4-No. 5 BARS

4-1" ANCHOR BOLTS ON 17/4" BOLT CIRCLE (CONFIRM WITH MANUFACTURER)

3/4" DIA. COPPER COATED STEEL GROUND ROD

FORM 4" BELOW GROUND LEVEL

4" MIN.

24"

8'-0" MIN.

FOUNDATION NOTES:

1. CONCRETE FOR LIGHT POLE STRUCTURE FOUNDATION SHALL HAVE A MINIMUM OF 30 MPA. ALL REINFORCEMENT SHALL BE DEFORMED STEEL BARS AND CONFORM TO ASTM A605M, GRADE 400M.

2. CONTRACTOR SHALL PROVIDE PRE-CAST OR CAST-IN-PLACE FOUNDATIONS.

3. PROVIDE WATERTIGHT CAPS FOR ANY UNUSED CONDUITS.

4. THE CONTRACTOR SHALL COORDINATE WITH THE LIGHTING FIXTURE, BREAKAWAY COUPLING/BOLT, FOUNDATION AND POLE MANUFACTURERS TO ENSURE PROPER FIT OF ALL COMPONENTS.

5. DIMENSIONS AND SIZE OF ANCHOR BOLTS, INCLUDING BOLT CIRCLE, TO BE VERIFIED BY LIGHT POLE MANUFACTURER. THREADED END OF ANCHOR BOLTS TO BE GALVANIZED IN ACCORDANCE WITH ASTM A153. ANCHOR BOLTS, FASTENERS, NUTS AND WASHERS SHALL CONFORM TO ASTM A449.

6. ASSURE THAT REINFORCING STEEL IS ALL INTERCONNECTED VIA TIE WRAPPING.

7. CONTRACTOR TO COORDINATE THE APPROPRIATE DIMENSION TO ASSURE THE MINIMUM CONDUIT DEPTH IS 2'-0" WHEN LEADING TO PULLBOX.
NOTES:
1. CONTRACTOR SHALL COORDINATE WITH CONWAY CORPORATION FOR SAFE DE-ENERGIZING OF CIRCUIT.
2. CONTRACTOR SHALL CONSTRUCT NEW FOUNDATIONS IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS.
3. AFTER COMPLETION OF NEW FOUNDATIONS, THE CONTRACTOR SHALL COORDINATE WITH CONWAY CORPORATION TO HAVE THE EXISTING POLES MOVED TO THE NEW FOUNDATIONS. ONCE THIS IS COMPLETED, THE OLD FOUNDATIONS SHALL BE DEMOLISHED TO A LEVEL OF AT LEAST 2 FEET BELOW SURROUNDING GRADE LEVEL.
4. CONTRACTOR SHALL PROVIDE BACKFILL AND SEEDING AND/OR SODDING TO RESTORE THE REMOVED FOUNDATION AREA TO A CONDITION SATISFACTORY TO THE ENGINEER.

PLAN VIEW
(TYPICAL ALL 7 LOCATIONS)
SEQUENCE OF CONSTRUCTION:
1. Install all advance warning signs.
2. Install temp. precast concrete barrier wall on right eastbound shoulder.
3. Construct noise wall, concrete barrier wall and storm drain.
4. Remove temp. barrier wall and advance warning signs.

**DM-3 Placement and Precast Concrete Barrier Detail**

- Existing EB lanes
- Approach lanes with temporary alternating barrier
- Precast concrete barriers for safety purposes

**Precast Concrete Barrier Placement Detail**

- EB lanes
- Existing
- 2'

**Advance Warning & Lane Closure Sign Layout Detail**

(Beginning of Job)

MAINTENANCE OF TRAFFIC DETAILS
MAINTENANCE OF TRAFFIC DETAILS
MAINTENANCE OF TRAFFIC DETAILS
### Advance Warning Signs and Devices

<table>
<thead>
<tr>
<th>Sign Number</th>
<th>Description</th>
<th>Sign Size</th>
<th>Construction</th>
<th>Maximum Number Required</th>
<th>Total Signs Required</th>
<th>Furnishing &amp; Installing Precast Conc. Barrier</th>
<th>Temporary Impact Attenuation Barrier</th>
<th>Temp. Impact Attenuation (Repair)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1001-1</td>
<td>Road Work 1000 Ft</td>
<td>40' x 4Ft</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>320</td>
<td>320</td>
<td></td>
</tr>
<tr>
<td>1002-1</td>
<td>Road Work 1000 Ft</td>
<td>40' x 4Ft</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>320</td>
<td>320</td>
<td></td>
</tr>
<tr>
<td>W1-15A</td>
<td>Right Shoulder Closed</td>
<td>40' x 4Ft</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>320</td>
<td>320</td>
<td></td>
</tr>
<tr>
<td>W1-15P</td>
<td>1000 Feet</td>
<td>30' x 6Ft</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W2-14P</td>
<td>Next 1/2 Mile</td>
<td>30' x 6Ft</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>032-2</td>
<td>End Road Work</td>
<td>40' x 4Ft</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>24.0</td>
<td>24.0</td>
<td></td>
</tr>
<tr>
<td>033-2</td>
<td>Object Marker</td>
<td>12' x 8Ft</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>32.0</td>
<td>32.0</td>
<td></td>
</tr>
<tr>
<td>034-2</td>
<td>Shoulder Closed</td>
<td>48' x 4Ft</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>20.0</td>
<td>20.0</td>
<td></td>
</tr>
</tbody>
</table>

Furnishing and Installing Precast Concrete Barrier: 2040
Temporary Impact Attenuation Barrier: 1
Temporary Impact Attenuation Barrier (Repair): 1

**TOTALS:** 188.5

**NOTE:** This is a high traffic volume road as defined in Section 604.03, Standard Specifications for Highway Construction.

### Grubbing

<table>
<thead>
<tr>
<th>Station</th>
<th>Station</th>
<th>Location</th>
<th>Grubbing</th>
</tr>
</thead>
<tbody>
<tr>
<td>7134+20</td>
<td>7134+20</td>
<td>Noise Wall</td>
<td>17</td>
</tr>
<tr>
<td><strong>TOTAL:</strong></td>
<td></td>
<td></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

### Removal and Disposal of Items

<table>
<thead>
<tr>
<th>Station</th>
<th>Station</th>
<th>Location</th>
<th>Removal and Disposal of Pole Foundation</th>
<th>Light Pole Foundation</th>
<th>Non-Metallic Conduit (2&quot;)</th>
<th>Sold Sodding</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>7134+20</td>
<td>7134+20</td>
<td>Noise Wall</td>
<td>7</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>7135+20</td>
<td>7135+20</td>
<td>Noise Wall</td>
<td>5</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>7136+20</td>
<td>7136+20</td>
<td>Noise Wall</td>
<td>7</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>7137+20</td>
<td>7137+20</td>
<td>Noise Wall</td>
<td>5</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>7138+20</td>
<td>7138+20</td>
<td>Noise Wall</td>
<td>5</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>7139+20</td>
<td>7139+20</td>
<td>Noise Wall</td>
<td>5</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
</tr>
</tbody>
</table>

**TOTALS:** 7.0 7.0 14.0 21.0 0.28

### Temporary Erosion Control

#### Erosion Control

<table>
<thead>
<tr>
<th>Station</th>
<th>Station</th>
<th>Location</th>
<th>Seeding</th>
<th>Lime</th>
<th>Mulch Cover</th>
<th>Water</th>
<th>Second Seeding Application</th>
<th>Temporary Seeding</th>
<th>Mulch Cover</th>
<th>Water</th>
<th>Sand Bag Ditch Checks</th>
<th>Drop Inlet Silt Fence</th>
<th>Erosion Control</th>
<th>Sediment Removal &amp; Disposal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Acre</td>
<td>Ton</td>
<td>Acre</td>
<td>Acre</td>
<td>Gallon (G.)</td>
<td>Acre</td>
<td>Acre</td>
<td>Acre</td>
<td>Acre</td>
<td>Acre</td>
<td>Acre</td>
<td>Acre</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Station</td>
<td>Station</td>
<td>Location</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.37</td>
<td>0.37</td>
<td>12.1</td>
<td>0.37</td>
<td>3.2</td>
<td>1</td>
<td>1</td>
<td>2.00</td>
<td>2.00</td>
<td>45.8</td>
<td>52</td>
<td>100.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.10</td>
<td>0.10</td>
<td>10.3</td>
<td>0.10</td>
<td>3.0</td>
<td>2</td>
<td>2</td>
<td>2.00</td>
<td>2.00</td>
<td>45.8</td>
<td>52</td>
<td>100.5</td>
</tr>
<tr>
<td><strong>TOTALS:</strong></td>
<td>0.37</td>
<td>0.34</td>
<td>0.47</td>
<td>47.9</td>
<td>0.47</td>
<td>2.00</td>
<td>2.00</td>
<td>45.8</td>
<td>52</td>
<td>100.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** The temporary erosion control devices shown above and on the plans shall be installed in such a sequence as to deter erosion and sedimentation on U.S. waterways as explained by the National Pollutant Discharge Elimination System Permit.

**QUANTITIES ESTIMATED:**

See Section 104.03 of the STD. SPECS.
## Earthwork

<table>
<thead>
<tr>
<th>Station</th>
<th>Description</th>
<th>Unclassified Excavation</th>
<th>Compacted Filled Embankment</th>
<th>Total Station Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Project</td>
<td>Barrier Wall Footing and Backbone</td>
<td>811 355 7</td>
<td></td>
<td>811 355 7</td>
</tr>
<tr>
<td>Entire Project</td>
<td>Light Pole Foundation Backbone</td>
<td>10</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Entire Project</td>
<td>To Be Used If and Where Directed by the Engineer</td>
<td>10</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>811 582 10</td>
<td></td>
<td>811 582 10</td>
</tr>
</tbody>
</table>

*Quantities Estimated: See Section 104.03 of the Std. Specs.*

**Note:** Earthwork quantities shown above shall be paid as plan quantities.

---

## Asphal! Concrete Patching for Maintenance of Traffic

<table>
<thead>
<tr>
<th>Location</th>
<th>Tack Coat</th>
<th>Asphalt Concrete Patching for Maintenance of Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Project</td>
<td>To Be Used If and Where Directed by the Engineer</td>
<td>10 20</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td>10 20</td>
</tr>
</tbody>
</table>


---

## Concrete Ditch Paving

<table>
<thead>
<tr>
<th>Station</th>
<th>Location</th>
<th>Length</th>
<th>&quot;W&quot;</th>
<th>Conc. Ditch Paving</th>
<th>Solid Sodding</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>7140+50.00</td>
<td>NORE WALL RT</td>
<td>4.00</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
<td>0.00</td>
</tr>
<tr>
<td>7140+50.00</td>
<td>NORE WALL RT</td>
<td>8.00</td>
<td>3.50</td>
<td>3.11</td>
<td>3.66</td>
<td>0.04</td>
</tr>
<tr>
<td>7140+50.00</td>
<td>NORE WALL RT</td>
<td>16.00</td>
<td>3.50</td>
<td>3.92</td>
<td>7.41</td>
<td>0.09</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td>28.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Base of Estimate:** Water, 12.6 Gal./1000 ft of Solid Sodding

---

## Guardrail

<table>
<thead>
<tr>
<th>Station</th>
<th>Location</th>
<th>GUARDRAIL</th>
<th>Three Beam Guardrail Terminus</th>
<th>YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>7151+00.00</td>
<td>7151+18.75</td>
<td>C.L. NORE WALL</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td>38</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Guardrail quantities estimated. See Section 104.03 of the Std. Specs.

---

## Aggregate Base Course

<table>
<thead>
<tr>
<th>Station</th>
<th>Station</th>
<th>Location</th>
<th>Length</th>
<th>Aggregate Base Course (class 7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7144+61.40</td>
<td>7151+00.00</td>
<td>NORE WALL UNDER CONCRETE BARRIER WALL</td>
<td>1644.66</td>
<td>23.25 382.43</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td></td>
<td></td>
<td>382.43</td>
</tr>
</tbody>
</table>

**Note:** Aggregate base course quantities estimated. See Section 104.03 of the Std. Specs.

---

## Concrete Barrier Wall (Side Type Special)

<table>
<thead>
<tr>
<th>Station</th>
<th>Location</th>
<th>CONCRETE BARRIER WALL (SIDE TYPE SPECIAL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7134+15.00</td>
<td>7151+00.00</td>
<td>EXISTING 140 C.L. ON RT</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td>1646</td>
</tr>
</tbody>
</table>

---

## Structures

<table>
<thead>
<tr>
<th>Station</th>
<th>Description</th>
<th>Reinforced Concrete Pile (class 3)</th>
<th>Flared End Sections for R.C. Pipe Culverts</th>
<th>Drop Inlets</th>
<th>Solid Sodding</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>7140+50</td>
<td>NORE WALL ON LT</td>
<td>10</td>
<td></td>
<td>1</td>
<td>5</td>
<td>0.06 FPC-65, RCC-1, FES-1, FES-2</td>
</tr>
<tr>
<td>7140+50</td>
<td>NORE WALL ON LT</td>
<td>19</td>
<td></td>
<td>1</td>
<td>5</td>
<td>0.06 FPC-65, RCC-1, FES-1, FES-2</td>
</tr>
<tr>
<td>7140+50</td>
<td>NORE WALL ON LT</td>
<td>19</td>
<td></td>
<td>1</td>
<td>5</td>
<td>0.06 FPC-65, RCC-1, FES-1, FES-2</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td>49</td>
<td></td>
<td>3</td>
<td>15</td>
<td>0.18</td>
</tr>
</tbody>
</table>

**Note:** For R.C. Pipe Culvert Installations use Type 3 bedding unless otherwise specified.

---

## Quantities

<table>
<thead>
<tr>
<th>D-25E</th>
<th>APR</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>OCT</th>
<th>Nov</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>64</td>
<td>38</td>
<td>20</td>
<td>12</td>
<td>10</td>
<td>8</td>
<td>6</td>
</tr>
</tbody>
</table>
### SCHEDULE OF NOISE BARRIER WALL QUANTITIES

<table>
<thead>
<tr>
<th>UNIT OF STRUCTURE</th>
<th>ITEM NUMBER</th>
<th>SP. JOB DRAWN</th>
<th>SP. JOB DRAWN</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOISE BARRIER WALL</td>
<td>ITEM</td>
<td>SCHEDULE SHEET (30X41)</td>
<td>NOISE BARRIER WALL</td>
</tr>
<tr>
<td>NOISE BARRIER - ALTERNATE NO. 1</td>
<td></td>
<td></td>
<td>2095</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>20500.00</td>
</tr>
<tr>
<td>NOISE BARRIER - ALTERNATE NO. 2</td>
<td></td>
<td></td>
<td>2050.00</td>
</tr>
</tbody>
</table>

Notes:
1. Includes all labor for complete installation of noise barriers - Alternate No.1 as detailed on these plans, from top of grade to top of noise barrier including trenching of cut surface, finishing of cut ends, etc. See if job description "SOUND ABSORBING NOISE BARRIERS".
2. Includes all labor for complete installation of noise barriers - Alternate No.2. Includes designing, fabricating, furnishing, installing, and inspecting noise barrier co-extrusion, sound absorptions bar, reinforcing steels composition, etc. See if job description "SOUND ABSORBING NOISE BARRIERS".

### SCHEDULE OF NOISE BARRIER WALL QUANTITIES

<table>
<thead>
<tr>
<th>LENGTHS</th>
<th>NOISE BARRIER WALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1 L</td>
<td></td>
</tr>
<tr>
<td>0.2 L</td>
<td></td>
</tr>
<tr>
<td>0.3 L</td>
<td></td>
</tr>
<tr>
<td>0.4 L</td>
<td></td>
</tr>
</tbody>
</table>

### BORING LEGEND

- **L**: Loosened brown, tan & white, cozy gray, granulite sand, etc.
- **S**: Soft, brown & gray, sandy lean clay.
- **L**: Loose, gray & brown, sandy lean clay.
- **S**: Soft, gray & brown, sandy lean clay.
- **L**: Soft, gray & brown, sandy lean clay.
- **S**: Loose, gray & brown, sandy lean clay.
- **L**: Soft, gray & brown, sandy lean clay.
- **S**: Soft, gray & brown, sandy lean clay.
- **L**: Soft, gray & brown, sandy lean clay.
- **S**: Soft, gray & brown, sandy lean clay.
- **L**: Soft, gray & brown, sandy lean clay.
- **S**: Soft, gray & brown, sandy lean clay.
- **L**: Soft, gray & brown, sandy lean clay.
- **S**: Soft, gray & brown, sandy lean clay.
- **L**: Soft, gray & brown, sandy lean clay.
- **S**: Soft, gray & brown, sandy lean clay.
- **L**: Soft, gray & brown, sandy lean clay.
- **S**: Soft, gray & brown, sandy lean clay.
- **L**: Soft, gray & brown, sandy lean clay.
- **S**: Soft, gray & brown, sandy lean clay.
- **L**: Soft, gray & brown, sandy lean clay.
- **S**: Soft, gray & brown, sandy lean clay.
- **L**: Soft, gray & brown, sandy lean clay.

### MAXIMUM PICK-UP

<table>
<thead>
<tr>
<th>MAXIMUM PICK-UP</th>
<th>LENGTHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1 L</td>
<td></td>
</tr>
<tr>
<td>0.2 L</td>
<td></td>
</tr>
<tr>
<td>0.3 L</td>
<td></td>
</tr>
<tr>
<td>0.4 L</td>
<td></td>
</tr>
</tbody>
</table>

### ONE POINT PICK-UP

- **L**: 0.1 L with foot in horizontal position.
- **L**: 0.2 L with foot in horizontal position.

### TWO POINT PICK-UP

- **L**: 0.1 L with foot in horizontal position.
- **L**: 0.2 L with foot in horizontal position.

### THREE POINT PICK-UP

- **L**: 0.1 L with foot in horizontal position.
- **L**: 0.2 L with foot in horizontal position.

### NOTE:

- *Points placed in the direction of the strongest winds.

**MANUFACTURE, TRANSPORTATION, AND STORAGE:** See Subsection B1 of the Standard Specifications for more information.

**Shipment of panels from the point of origin must be performed until the required minimum compressive strength is reached and in no case less than 21 days after placing the concrete.**

Any fitting mechanisms cast into prestress post and/or removed before the surface and the hole filled with grout.
### SUMMARY OF QUANTITIES

<table>
<thead>
<tr>
<th>ITEM NUMBER</th>
<th>ITEM</th>
<th>QUANTITY</th>
<th>UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>201</td>
<td>GRUBBING</td>
<td>1</td>
<td>STATION</td>
</tr>
<tr>
<td>202</td>
<td>REMOVAL AND DISPOSAL OF POLE FOUNDATION</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>203</td>
<td>REMOVAL AND DISPOSAL OF GUARDRAIL</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>204</td>
<td>UNCLASSIFIED LOCATION</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>210</td>
<td>COMPACTED EMBANKMENT</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>210</td>
<td>SOIL STABILIZATION</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>401</td>
<td>ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>402</td>
<td>MAINTENANCE OF TRAFFIC</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>501</td>
<td>CONCRETE DITCH FACING</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>502</td>
<td>CONCRETE DITCH FACING</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>503</td>
<td>CONCRETE DITCH FACING</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>601</td>
<td>SEEDING</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>602</td>
<td>MEAL COVER</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>603</td>
<td>WATER</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>604</td>
<td>TEMPORARY SEEDING</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>605</td>
<td>SITE FENCE</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>606</td>
<td>LANDSCAPE DITCH CHECKS</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>607</td>
<td>DRAIN IN SEED</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>608</td>
<td>SEEDING</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>609</td>
<td>SOIL SEEDING</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>610</td>
<td>CONCRETE BARREL WALL</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>611</td>
<td>NOSE BARRIER WALL</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>612</td>
<td>NOSE BARRIER WALL</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>613</td>
<td>ROADWAY CONSTRUCTION CONTROL</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>614</td>
<td>NONSTANDARD CONCRETE</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>615</td>
<td>LIGHT POLE FOUNDATION</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>616</td>
<td>TEMPORARY IMPACT ATTENSIATION BARIER</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>617</td>
<td>TEMPORARY IMPACT ATTENSIATION BARIER</td>
<td>1</td>
<td>EACH</td>
</tr>
<tr>
<td>618</td>
<td>EMBLEMS</td>
<td>1</td>
<td>EACH</td>
</tr>
</tbody>
</table>

### REVISIONS

<table>
<thead>
<tr>
<th>DATE</th>
<th>REVISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-17-17</td>
<td>REVISED STANDARD DRAWINGS CP-1 AND CP-1</td>
</tr>
<tr>
<td>1-17-17</td>
<td>ADDED PAY ITEM FOR &quot;NOSE BARRIER WALL WITH LIGHTWEIGHT PANELS&quot;</td>
</tr>
<tr>
<td>1-25-17</td>
<td>REVISED SPECIAL PROVISIONS &quot;SOUND ABSORBING NOSE BARRIER WITH LIGHTWEIGHT PANELS&quot;</td>
</tr>
<tr>
<td>2-17-17</td>
<td>REMOVED SPECIAL PROVISION &quot;CONCRETE BARREL WALL&quot;</td>
</tr>
<tr>
<td>2-17-17</td>
<td>REVISED SPECIAL PROVISIONS &quot;SOUND ABSORBING NOSE BARRIER WITH LIGHTWEIGHT PANELS&quot;</td>
</tr>
</tbody>
</table>

### SUMMARY OF QUANTITIES AND REVISIONS
SURVEY CONTROL COORDINATES

**Project Name:** 080496

**Date:** 9/6/2016

**Coordinate System:** Arkansas State Plane Coordinates

Based on AHTD GPS PTS: 230030, 230011A, 230028, 230028A

Projected to Ground Coordinates

**Units:** U.S. Survey Foot

<table>
<thead>
<tr>
<th>Point No.</th>
<th>Northing</th>
<th>Easting</th>
<th>Elevation</th>
<th>Feature Code</th>
<th>Point Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>278920.562</td>
<td>1183591.3032</td>
<td>316.42</td>
<td>0.009 CTI</td>
<td>PD:AHTD STD. MON. STAMPED PN:1</td>
</tr>
<tr>
<td>2</td>
<td>278499.072</td>
<td>1183943.9124</td>
<td>312.065</td>
<td>0.010 CTI</td>
<td>PD:AHTD STD. MON. STAMPED PN:2</td>
</tr>
<tr>
<td>3</td>
<td>278104.712</td>
<td>1184306.2291</td>
<td>309.968</td>
<td>0.011 CTI</td>
<td>PD:AHTD STD. MON. STAMPED PN:3</td>
</tr>
<tr>
<td>4</td>
<td>277634.2336</td>
<td>1184647.2887</td>
<td>310.39</td>
<td>0.012 CTI</td>
<td>PD:AHTD STD. MON. STAMPED PN:4</td>
</tr>
<tr>
<td>5</td>
<td>277356.1372</td>
<td>1185098.4447</td>
<td>315.733</td>
<td>0.012 CTI</td>
<td>PD:AHTD STD. MON. STAMPED PN:5</td>
</tr>
<tr>
<td>6</td>
<td>276536.3128</td>
<td>1185469.8280</td>
<td>313.672</td>
<td>0.012 CTI</td>
<td>PD:AHTD STD. MON. STAMPED PN:6</td>
</tr>
<tr>
<td>100</td>
<td>279040.5165</td>
<td>1183494.7200</td>
<td>337.519</td>
<td>0.004 GPS</td>
<td>PD:AHTD GPS #230028</td>
</tr>
<tr>
<td>101</td>
<td>278991.8223</td>
<td>1181731.3279</td>
<td>333.845</td>
<td>0.003 GPS</td>
<td>PD:AHTD GPS #230028A</td>
</tr>
<tr>
<td>102</td>
<td>269801.9003</td>
<td>1182729.5064</td>
<td>298.567</td>
<td>0.001 GPS</td>
<td>PD:AHTD GPS #230020</td>
</tr>
<tr>
<td>103</td>
<td>268533.6072</td>
<td>1183333.7866</td>
<td>293.742</td>
<td>0.001 GPS</td>
<td>PD:AHTD GPS #230011A</td>
</tr>
</tbody>
</table>

**Horizontal Datum:** NAD 1983 (1997)

**State Plane Zone:** 0302 - South Zone

A project CAF of: 0.9999675209 has been used to compute the above coordinates. This CAF is intended for use within the project limits only.

Grid Distance = Ground Distance X CAF

If Coordinates are listed as Ground:

- To compute Grid Coordinates, multiply the Ground Coordinates by CAF about the origin of X=0 & Y=0

If Coordinates are listed as Grid:

- To compute Ground Coordinates, divide the Grid Coordinates by CAF about the origin of X=0 & Y=0

**Point No., SY, SX, Elevation, Feature Code, Point Description**

<table>
<thead>
<tr>
<th>No.</th>
<th>Northing</th>
<th>Easting</th>
<th>Elevation</th>
<th>Feature Code</th>
<th>Point Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>278920.562</td>
<td>1183591.3032</td>
<td>316.42</td>
<td>0.009 CTI</td>
<td>PD:AHTD STD. MON. STAMPED PN:1</td>
</tr>
<tr>
<td>2</td>
<td>278499.072</td>
<td>1183943.9124</td>
<td>312.065</td>
<td>0.010 CTI</td>
<td>PD:AHTD STD. MON. STAMPED PN:2</td>
</tr>
<tr>
<td>3</td>
<td>278104.712</td>
<td>1184306.2291</td>
<td>309.968</td>
<td>0.011 CTI</td>
<td>PD:AHTD STD. MON. STAMPED PN:3</td>
</tr>
<tr>
<td>4</td>
<td>277634.2336</td>
<td>1184647.2887</td>
<td>310.39</td>
<td>0.012 CTI</td>
<td>PD:AHTD STD. MON. STAMPED PN:4</td>
</tr>
<tr>
<td>5</td>
<td>277356.1372</td>
<td>1185098.4447</td>
<td>315.733</td>
<td>0.012 CTI</td>
<td>PD:AHTD STD. MON. STAMPED PN:5</td>
</tr>
<tr>
<td>6</td>
<td>276536.3128</td>
<td>1185469.8280</td>
<td>313.672</td>
<td>0.012 CTI</td>
<td>PD:AHTD STD. MON. STAMPED PN:6</td>
</tr>
<tr>
<td>100</td>
<td>279040.5165</td>
<td>1183494.7200</td>
<td>337.519</td>
<td>0.004 GPS</td>
<td>PD:AHTD GPS #230028</td>
</tr>
<tr>
<td>101</td>
<td>278991.8223</td>
<td>1181731.3279</td>
<td>333.845</td>
<td>0.003 GPS</td>
<td>PD:AHTD GPS #230028A</td>
</tr>
<tr>
<td>102</td>
<td>269801.9003</td>
<td>1182729.5064</td>
<td>298.567</td>
<td>0.001 GPS</td>
<td>PD:AHTD GPS #230020</td>
</tr>
<tr>
<td>103</td>
<td>268533.6072</td>
<td>1183333.7866</td>
<td>293.742</td>
<td>0.001 GPS</td>
<td>PD:AHTD GPS #230011A</td>
</tr>
</tbody>
</table>

**Vertical Datum:** NAVD 1988 based NGS BM

A project Elevation Factor of: 0.9999649714 has been computed and incorporated in the above CAF. This is based on the average elevation of the project: 314.19 Feet

3-Wire Leveling techniques have been used to establish elevations on

<table>
<thead>
<tr>
<th>Points</th>
<th>Basis of Bearing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-103</td>
<td>Grid Bearings based on AHTD GPS points: 230030, 230011A, 230028, 230028A</td>
</tr>
<tr>
<td></td>
<td>Convergence Angle is: 0°14'54.42&quot; Left</td>
</tr>
<tr>
<td></td>
<td>at PN: 4</td>
</tr>
<tr>
<td></td>
<td>LT: 35-05-43 N</td>
</tr>
<tr>
<td></td>
<td>LG: 92-25-37 W</td>
</tr>
</tbody>
</table>

**Grid Azimuth = Astronomical Azimuth - Convergence Angle**
EXISTING 1-40

STA, 7154+48.04 C.L. 1-40

STA, 7134+40.00 C.L. NOISE WALL

BEGIN JOB 080496

LOG MILE 126.13

STA, 7154+00.00

END JOB 080496

SURVEY CONTROL DETAILS
Utilities: City of Conway - Water, San, Sewer, Electric
CenturyLink - Telephone, Fiber Optic Cable

 Stark May Not Include All Utilities, The Contractor Shall Have All Utilities Marked Prior to Construction Activities in Accordance with Standard Specifications.

Contractor shall have all utilities marked prior to construction activities in accordance with standard specifications.

Values in place:
- STA. 7134+48
- STA. 7135+06
- STA. 7136+22
- STA. 7136+95
- STA. 7137+00

Concrete Retain:
- 4' x 5' x H = 4'-6" with 24" x 296" R.C. pipe outlet retain
- 4' x 5' x H = 3'-5" with 24" x 296" R.C. pipe outlet retain

Impact Attenuation Barrier in Median Retain:
- Type Special Drop Inlet in Median
- Size: 45' LT. Two Skew

Concrete Pier Protection:
- P.T. = 7134+34.67

Plan & Profile STA. 7134+48 to STA. 7135+06
NOTE: THE EXISTING GUARDRAIL SHALL BE REMOVED IN SUCH A MANNER THAT THE PROPOSED THREE BEAM TERMINAL CAN BE ATTACHED TO THE PROPOSED CONCRETE WALL (TYPE SPECIAL) AND THE REMAINING EXISTING GUARDRAIL.
PLAN

PROFILE

ALTERNATE NO. 1

PROFILE OF NOISE WALL
INTERSTATE I-40 NOISE WALL
FAULKNER COUNTY

ROUTE 46
SEC. 32
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: D.F.
DATE: 02-03
FILING: 20120103-03.png
CHECKED BY: D.F.
DATE: 02-03
SCALE: 1:20=1'-0"

REVISED SHEETS NUMBER:
10/24/18

NOTES:

(1) Revised sheets number.
10/24/18

(2) LAYOUT
58324

(3) Plan

(4) Profile

Profile of Noise Wall

Interstate I-40 Noise Wall

Faulkner County

Alternate No. 1

(5) SHEET 3 OF 4

(6) ARKANSAS STATE HIGHWAY COMMISSION

(7) LITTLE ROCK, ARK.

(8) DRAWN BY: D.F.
DATE: 02-03
FILING: 20120103-03.png

(9) CHECKED BY: D.F.
DATE: 02-03
SCALE: 1:20=1'-0"

(10) DRAWING NO. 58324

Note: Unless otherwise noted, stations and elevations shown are taken using C.L. No.

Note: All pipes and utilities need to be field verified prior to construction.
PROFILE OF NOISE WALL
INTERSTATE I-40
FAULKNER COUNTY

ALTERNATE NO. 1

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

ROUTE 40
SEC. 32

SCALE 1" = 200' ON PLAN
SCALE 1" = 100' ON PROFILE

DRAWN BY: [Signature]  DATE: 03-2015
CHECKED BY: [Signature]  DATE: 09-2015
DESIGNED BY: [Signature]  DATE: 03-2015
DRAWING NO. 58325

Notes Unless otherwise noted, sections and elevations shown are taken along C.L. No. 6.
Notes All pipes and utilities need to be field verified prior to construction.

PROFILE

SHEET 4 OF 4

PLAN

SCALE 8" = 100' ON PLAN
SCALE 1" = 100' ON PROFILE

DRAUGHTED BY: [Signature]  DATE: 03-2015
CHECKED BY: [Signature]  DATE: 09-2015
DESIGNED BY: [Signature]  DATE: 03-2015
DRAWING NO. 58325

Notes Unless otherwise noted, sections and elevations shown are taken along C.L. No. 6.
Notes All pipes and utilities need to be field verified prior to construction.

PROFILE
### NOISE WALL SCHEDULE

<table>
<thead>
<tr>
<th>POST NO.</th>
<th>BARRIER NO.</th>
<th>STATION</th>
<th>METH (POST TO POST)</th>
<th>PANEL WIDTH</th>
<th>DRILLED SHAFT (DEPTH FT.)</th>
<th>SHAFT DIAMETER</th>
<th>PLAN TP</th>
<th>ELEVATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>7464-4H0</td>
<td>20,0000</td>
<td>26</td>
<td>5</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>7464-5H0</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>7464-6H0</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>7464-7H0</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>7464-8H0</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>7464-9H0</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>7464-10H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>7464-11H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>9</td>
<td>7464-12H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td>7464-13H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### NOISE WALL SCHEDULE (CONT.)

<table>
<thead>
<tr>
<th>POST NO.</th>
<th>BARRIER NO.</th>
<th>STATION</th>
<th>METH (POST TO POST)</th>
<th>PANEL WIDTH</th>
<th>DRILLED SHAFT (DEPTH FT.)</th>
<th>SHAFT DIAMETER</th>
<th>PLAN TP</th>
<th>ELEVATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>11</td>
<td>7464-14H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>12</td>
<td>7464-15H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>13</td>
<td>7464-16H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>14</td>
<td>7464-17H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>15</td>
<td>7464-18H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>16</td>
<td>7464-19H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>17</td>
<td>7464-20H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>18</td>
<td>7464-21H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>19</td>
<td>7464-22H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>20</td>
<td>7464-23H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>21</td>
<td>7464-24H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>22</td>
<td>7464-25H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>23</td>
<td>7464-26H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>24</td>
<td>7464-27H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>25</td>
<td>7464-28H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>26</td>
<td>7464-29H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>27</td>
<td>7464-30H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>28</td>
<td>7464-31H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>29</td>
<td>7464-32H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>30</td>
<td>7464-33H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>31</td>
<td>7464-34H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>32</td>
<td>7464-35H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>33</td>
<td>7464-36H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>34</td>
<td>7464-37H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>35</td>
<td>7464-38H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>36</td>
<td>7464-39H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>37</td>
<td>7464-40H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>38</td>
<td>7464-41H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>39</td>
<td>7464-42H</td>
<td>20,0000</td>
<td>24</td>
<td>3</td>
<td>286.25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The Drilled Shaft shall be Socketed a minimum depth of ¹/₂" see Details D on Dwg. No. 8080496X2 for details.
Note: All post footings are to be installed from top of wall elevation to bottom of drilled shaft.
Note: Stations are referenced along C.J. Noise Wall.
### PANEL SECTION

- "A" Bars: $\frac{1}{2}$ in. (Welding reinforcement)
- "B" Bars: 10 ga. (Welding reinforcement)

### PANEL SECTION

- "A" Bars: 1/2 in. (Welding reinforcement)

### PANEL SECTION

- Concrete Side: Custom Rock Filler, Smooth Finish
- Highway Side: Custom Rock Filler, Smooth Finish

### DETAIL "A"

- (See Panel Elevations on this sheet)

### DETAIL "B"

- (See Panel Elevations on this sheet)

### ALIGNMENT KEY & ALIGNMENT GROOVE DETAIL

- Top of Panel
- Top of Interior Panel

### TABLE OF VARIABLES

<table>
<thead>
<tr>
<th>PANEL NO.</th>
<th>&quot;A&quot;</th>
<th>&quot;B&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0&quot;</td>
<td>0&quot;</td>
</tr>
<tr>
<td>2</td>
<td>0&quot;</td>
<td>0&quot;</td>
</tr>
<tr>
<td>3</td>
<td>0&quot;</td>
<td>0&quot;</td>
</tr>
</tbody>
</table>

### PANEL ELEVATIONS

- Top of Panel: 3'-0" To Pick Line
- Top of Interior Panel: 4'-0" To Pick Line

### INTERIOR PANEL

- Top of Panel: 3'-0" To Pick Line
- Top of Interior Panel: 4'-0" To Pick Line

---

### ALTERNATE NO. 1

**NOISE WALL DETAILS**

**INTERSTATE I-40 NOISE WALL**

**FAULKNER COUNTY**

**ROUTE 48 - SEC. 12**

**ARKANSAS STATE HIGHWAY COMMISSION**

**LITTLE ROCK, ARK.**

**DRAWN BY:** [Signature]

**DESIGNED BY:** [Signature]

**DRAWING NO.:** 58328

**REVIEWED:** [Signature] 08-2015

**CONTRACT NO.:** 634-00-00476

**REVISED SHEET NUMBER:** 10/26/06

**DATE:** 10/26/06

**DRAWN:** 09/28/06

**DESIGNED:** 09/28/06

**PROJ. NO.:** 0666

**DRAPE:** 08-2015

---

- Surface Smooth Finish on Both Sides For Top 1'-0" of All Top Panels.
**BAR LIST - POST NO. 1, 3, 5, 84**

<table>
<thead>
<tr>
<th>PANEL NO.</th>
<th>LENGTH (Ft)</th>
<th>MATERIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 8x4 #3</td>
<td>20-0'</td>
<td>F</td>
</tr>
<tr>
<td>2 8x4 #3</td>
<td>22-0'</td>
<td>F</td>
</tr>
<tr>
<td>3 8x4 #3</td>
<td>22-0'</td>
<td>F</td>
</tr>
</tbody>
</table>

**BAR LIST - POST NO. 4**

<table>
<thead>
<tr>
<th>PANEL NO.</th>
<th>LENGTH (Ft)</th>
<th>MATERIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 8x4 #3</td>
<td>20-0'</td>
<td>F</td>
</tr>
<tr>
<td>6 8x4 #3</td>
<td>22-0'</td>
<td>F</td>
</tr>
</tbody>
</table>

**ALTERNATE NO. 1**

**NOISE WALL DETAILS**

**INTERSTATE 1-40 NOISE WALL**

**FAULKNER COUNTY**

**ROUTE 40**

**SECT. 12**

**ARKANSAS STATE HIGHWAY COMMISSION**

**LITTLE ROCK, ARK.**

**DRAWN BY:** DJ  
**FILEMARK:** L88645942-SJK

**CHECKED BY:** DJ  
**SCALE:** 1/32

**DESIGNED BY:** DJ  
**DATE:** 04/20/95

**DRAWING NO:** L8929

**MARK**

**LEN**
PARTIAL PLAN OF CONCRETE BARRIER WALL

CONTRACTION JOINT DETAIL

SECTION C-C

ALTERNATE NO. 1
NOISE WALL DETAILS
INTERSTATE I-40
FAULKNER COUNTY

ARKANSAS STATE HIGHWAY COMMISSION

DRAWN BY: DJ
DATE: 08-2015

DESIGNED BY: DJ
DATE: 08-2015

DRAWING NO. 58330

Note: For details of Concrete Post and Wall Panel, see Spec. Nos. 58328 & 58329.

Note: For locations of Drilled Shells, see Spec. No. 58330.

The Concrete Cap shall be Class "F" concrete with a minimum 28-day compressive strength F'c = 3500 psi. Work and materials required for the concrete cap will not be paid for directly, but will be considered subsidary to the item "Concrete Barrier Wall Side Type Special".

Note: Use 4 layers - 1" Preformed Joint (Type 29) per Subsection 550E/068.

ALTERNATE NO. 1
NOISE WALL DETAILS
INTERSTATE I-40
FAULKNER COUNTY

ARKANSAS STATE HIGHWAY COMMISSION

DRAWN BY: DJ
DATE: 08-2015

DESIGNED BY: DJ
DATE: 08-2015

DRAWING NO. 58330
ELEVATION VIEW
Looking from the Highway Side

NOTES: HIGHWAY SIDE

The Highway side of the noise barrier panels will require a finish to be specified in SP Job 080496, "NOISE
WALL ENHANCEMENT"

The color of paint shall be Tan and shall be
Field 516.553, Cover Chip No. 33013.

The pattern on the Highway side shall be Custom
Rocker Finisher, Ashlar Stone pattern or an approved equal.

ELEVATION VIEW
Looking from the Community Side

NOTES: COMMUNITY SIDE

The Community Side will require a Class 3 Textured
Coating Finish which shall be applied to surfaces as
specified in SP Job 080496, "NOISE WALL
ENHANCEMENT" and in accordance with Section 82059.

The color of paint shall be Dark Tan and shall be
Field 516.553, Cover Chip No. 33041.

The pattern on the Community side shall be Custom
Rocker Finisher, Dry Stack pattern or an approved equal.

ALTERNATE NO. 1

NOISE WALL ENHANCEMENT
INTERSTATE I-40 NOISE WALL
FAULKNER COUNTY

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

ROUTE 40 SEC. 12

DRAWN BY: CM
DATED: 09-2015
SCALING: 1" = 20'

PLANSCALE: 1" = 20'

DESIGNED BY: DM
DATED: 09-2015
SCALING: 1" = 20'

DRAWING NO. 5833A
BEGIN CONSTRUCTION NOISE WALL STA. 7134+48.04

STA. 7134+48.04 TO STA. 7134+50.00
NOISE WALL

CROSS SECTIONS
CROSS SECTIONS

STA. 7137+00.00 TO STA. 7137+50.00
NOISE WALL
ENERGY DISSIPATORS

NUMBER OF ELEMENTS PER ROW VARIES WITH WIDTH OF PAVING SPECIFIED

ENERGY DISSIPATORS TO BE USED FOR THE ENTIRE LENGTH OF DITCH WHEN SLOPE OF DITCH PAVING EXCEEDS 7%. THE DISSIPATORS WILL NOT BE PAID FOR DIRELY, BUT SHALL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID FOR CONCRETE DITCH PAVING.

GENERAL NOTES:

1. THE FULL WIDTH OF EACH SECTION SHALL BE Poured MONOLITHICALLY.
2. TOE WALLS TO BE CONSTRUCTED FULL WIDTH AT EACH END OF DITCH PAVING AND POURED MONOLITHICALLY.
3. SOLID SOD ALONG DITCH PAVING TO BE PLACED WITHIN 14 DAYS OF DITCH PAVING CONSTRUCTION.

1" WIDE TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE DITCH PAVING AT 40 INTERVALS. THE SPACE SHALL BE FILLED WITH APPROVED JOINT FILLER COMPLYING WITH AASHTO M213.

ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE DITCH PAVING

STANDARD DRAWING CD-1

DATE REVISION DATE FILED
TABLE OF DIMENSIONS

<table>
<thead>
<tr>
<th>WALL</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>S</th>
<th>P</th>
<th>R1</th>
<th>R2</th>
<th>G-T</th>
<th>R1/2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ARCH PIPE

| EXH. | SPAN | RISE | IN (DEVIATION FROM HORIZONTAL) | V | A | B | C | D | E | P | R1 | R2 | G-T |
|------|------|------|--------------------------------|---|---|---|---|---|---|----|----|-----|-----|----|
|      |      |      |                                 |   |   |   |   |   |   |    |    |     |     |    |

*THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ±2 PER CENT FROM THE VALUES SPECIFIED BY AASHTO W 206.*

END SECTION FOR REINFORCED CONCRETE PIPE CULVERTS

NOTE: TONGUE END ON UPSTREAM SECTION, GROOVE END ON DOWNSTREAM SECTION

CIRCULAR PIPE

<table>
<thead>
<tr>
<th>GAUGE</th>
<th>SPAN</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C.M. ARCH PIPE

| EXH. | SPAN | RISE | IN (DEVIATION FROM HORIZONTAL) | V | A | B | C | D | E | P | R1 | R2 | G-T |
|------|------|------|--------------------------------|---|---|---|---|---|---|----|----|-----|-----|----|
|      |      |      |                                 |   |   |   |   |   |   |    |    |     |     |    |

MULTIPLE R.C. PIPE CULVERTS

<table>
<thead>
<tr>
<th>MULTIPLE C.M. PIPE CULVERTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

END SECTIONS FOR CORRUGATED METAL PIPE CULVERTS

NOTE: ALTERNATE CONNECTIONS TO THE PIPE CULVERTS, IN ACCORDANCE WITH MANUFACTURER'S STANDARD PRACTICES, MAY BE MADE SUBJECT TO THE APPROVAL OF THE ENGINEER.
METHODS OF INSTALLATION OF GUARD RAIL AT LESS THAN FULL SHOULDER WIDTH BRIDGES USING GUARD RAIL TERMINAL (TYPE 2)

METHOD OF INSTALLATION OF GUARD RAIL AT FULL SHOULDER WIDTH BRIDGES USING GUARD RAIL TERMINAL (TYPE 2)

LEGEND
- Three Beam Guard Rail Terminal
- Guard Rail Terminal (Type 2)

METHOD OF INSTALLATION OF GUARD RAIL USING GUARD RAIL TERMINAL (TYPE I)
(FULL SHOULDER WIDTH OR LESS BRIDGES)
Details of Widening for Guard Rail

Method of Installation of Guard Rail at Fixed Obstacle

Section A-A

Section B-B

Details showing position of Guard Rail on Highway

Notes:
- Normal section to be widened approx. 5'-6" each side to support Guard Rail.
- Normal sections to be widened approx. 5'-6" to support Guard Rail.

Arkansas State Highway Commission

Guard Rail Details

Standard Drawing CR-9A
SPECIAL END SHOE

THREE BEAM RAIL

TRANSITION SECTION

CONNECTION PLATE

GENERAL NOTES:
The three beam rail, special end shoe, and the transition section shall be made of steel and shall be of such size and contour shall be in conformity with AASHTO M-270.
Rail posts shall be set perpendicular to the roadway profile and vertically in a cross section.
All holes shall be center to center, parallel to the side of the beam, and in the direction of the head traffic.
Refer to STD. SP. 40-400 for post details.
Use three beam guard rail components of same material, width of entire job.
Three beam posts shall be same material as W-beam posts for entire job.
Three beam posts shall be either grade No. 1 structural or better 0.015 and No. 1 0.005 x Southern pine.

STRUCTURAL STEEL TUBING

BLOCKOUT DETAIL

HOLE PUNCHING DETAIL FOR STEEL POST & WOOD OR PLASTIC BLOCKOUTS

NOTE: All holes shall be the same type throughout the project limits.

CONNECTOR PLATE

The three beam rail, special end shoe, and the transition section shall be made of steel and shall be of such size and contour shall be in conformity with AASHTO M-270.
Rail posts shall be set perpendicular to the roadway profile and vertically in a cross section.
All holes shall be center to center, parallel to the side of the beam, and in the direction of the head traffic.
Refer to STD. SP. 40-400 for post details.
Use three beam guard rail components of same material, width of entire job.
Three beam posts shall be same material as W-beam posts for entire job.
Three beam posts shall be either grade No. 1 structural or better 0.015 and No. 1 0.005 x Southern pine.
THREE BEAM RAIL WITH STEEL TUBING BLOCKOUT AND STEEL POSTS 1-7

W-BEAM TO THREE BEAM TRANSITION RAIL WITH WOOD OR PLASTIC BLOCKOUT AND STEEL POST 8

THREE BEAM RAIL WITH WOOD OR PLASTIC BLOCKOUTS & WOOD POSTS POSTS 1-6

THREE BEAM RAIL WITH WOOD OR PLASTIC BLOCKOUT & WOOD POST 7

W-BEAM TO THREE BEAM TRANSITION RAIL WITH WOOD OR PLASTIC BLOCKOUT & WOOD POST 8

GENERAL NOTES:
- Rail posts shall be set perpendicular to the roadway profile grade and vertically in cross section.
- Wood posts & wood blocks shall be either Grade No. 1 structural or better B7 allowable for No. 1250 or Southern Pine.
THREE BEAM GUARD RAIL CONNECTION AT BRIDGE ENDS

GENERAL NOTES:

1. All bolt spacing from rail transition producer.
2. Refer to approach gutter details.
3. Length of blockout on post to be modified to fit rail metal.

THREE BEAM GUARD RAIL COMPONENTS OF SAME MATERIAL FOR ENTIRE JOB.

POSTS: THREE BEAM GUARD RAIL COMPONENTS OF SAME MATERIAL FOR ENTIRE JOB.

POSTS TO BE PLACED AT THE MID-SPAN OF THE "H" BEAM.
NOTES:
1. REFER TO THE STRIPING DETAILS FOR PAVEMENT MARKING LINE WIDTHS.
2. THIS DRAWING SHALL BE USED IN CONJUNCTION WITH THE LATEST REVISED ADDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
3. RAISED PAVEMENT MARKERS SHALL BE PLACED ON AN 80 FEET SPACING UNLESS OTHERWISE SHOWN IN THE PLANS.

2" FOR ASPHALT OR CONCRETE PAVEMENT
6" FOR BITUMINOUS SURFACE TREATMENT

CONCRETE PAVEMENT

BROKEN LINE STRIPING

APPROVED REFLECTOR

EDGE OF PAVEMENT

CONTINUOUS WHITE

CONTINUOUS WHITE

ASPHALT PAVEMENT

SOLID LINE STRIPING ON CONCRETE PAVEMENT

SOLID LINE STRIPING ON ASPHALT PAVEMENT

ASPHALT PAVEMENT

CONCRETE PAVEMENT

STRIPING AT ADJACENT NO PASSING LANES

YIELD LINE DETAIL

CROSSWALK AND STOPBAR DETAILS

DETAIL OF STANDARD RAISED PAVEMENT MARKERS

ARKANSAS STATE HIGHWAY COMMISSION

PAVEMENT MARKING DETAILS

STANDARD DRAWING PM-1
DETAILS OF PIPE UNDERDRAIN

1. Geotextile fabric shall meet the requirements of Section 406 for Type I, Payment for Geotextile Fabric and Granular Filter Material shall be included in the Price Bid per linear ft. for "4" pipe underdrains in accordance with Section 601 of the Standard Specifications.

2. "4" non-perforated schedule 40 PVC pipe laterals with outlet protectors shall be installed as shown herein; laterals will be measured and paid for as "4" pipe underdrains. Underdrain outlet protectors will be measured and paid for by the unit in accordance with Section 6 of the Standard Specifications.

3. Existing "4" pipe laterals may be connected to proposed drop inlets or extended where directed by the Engineer. Payment for connecting to drop inlets shall be considered included in the Price Bid for "4" pipe underdrains.

4. The location of all laterals shall be marked with "4" x 2" permanent pavement marking tape (Type B) not at the outside edge of the shoulder, placed transverse to traffic. Payment for this work shall be included in the Price Bid for the various contract items.

5. Payment for the rodent screen shall be included in the Price Bid per each for "Underdrain Outlet Protectors." If any existing underdrains that interfere with installation of the new underdrain system shall be removed and disposed of at the direction of the Engineer. Payment for the removal will be considered included in the Price Bid for the various contract items. Existing underdrain outlet protectors shall be removed under the item "Removal and Disposal of Underdrain Outlet Protectors." If at locations where a single lateral is used the contractor shall have the following options: install outlet protector as shown on standard drawing P-1 or identify the unobstructed hole or D. Install an outlet protector with a single hole.

6. Notes for Pipe Underdrains

7. Underdrain outlet protectors shall have the following options: install outlet protector as shown on standard drawing P-1 or identify the unobstructed hole or D. Install an outlet protector with a single hole.

8. "4" stainless steel bolt with anchor & stainless steel expanded metal screen opening size 0.32" x 0.000"}

9. Appendix C:

   a. Stainless steel bolt with anchor & stainless steel expanded metal screen opening size 0.32" x 0.000"

   b. Expanded metal screen opening size 0.32" x 0.000"

   c. Stainless steel bolt with anchor & stainless steel expanded metal screen opening size 0.32" x 0.000"
BARRIER PLACEMENT ALONG BRIDGE WITH OFFSET

** Offset Distance for Two Way Traffic Only

<table>
<thead>
<tr>
<th>Speed</th>
<th>Offset Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>4</td>
</tr>
</tbody>
</table>

If offset distance is not attainable, then use "Barrier Placement With Attenuator" detail shown below.

** Offset Distance Traffic Only

When shown on the Plans, the ends of the Temporary Precast Concrete Barrier shall be protected with an NCHRP-350 or Manual For Assessing Safety Hardware (MASH) approved Crash Cushion. Payment for Crash Cushions shall be made under the item of "Temporary Impact Attenuation Barrier."
CLEARING AND GRUBBING

CONSTRUCTION SEQUENCE
1. Place perimeter controls (i.e., silt fences, diversion ditches, sediment basins, etc.)
2. Perform clearing and grubbing operation.

EXCAVATION

EXISTING GROUND
INTERCEPTOR OR DIVERSION DITCH
EXISTING GROUND

NOTE: NUMBER OF PHASES WILL VARY, PHASES SHOWN FOR ILLUSTRATION.

GENERAL NOTE:
ALL CUT SLOPES SHALL BE DREDGED, PREPARED, SEEDED, AND WILTED AS SHOWN. SLOPES SHALL BE STABILIZED IN EQUAL INCREMENTS NOT TO EXCEED 25 FEET, MEASURED VERTICALLY.

CONSTRUCTION SEQUENCE
1. Excavate and stabilize interceptor and/or diversion ditches.
2. Perform Phase 1 excavation, place temporary or permanent seeding.
3. Perform Phase 2 excavation, place temporary or permanent seeding.
4. Perform final Phase of excavation, place permanent or temporary seeding, stabilize ditches, construct ditches and check diversion ditches, sediment basins, or other erosion control devices as required.

EMBANKMENT

DIVERSION DITCH TO BE IN PLACE UNTIL SLOPE IS COMPLETELY STABILIZED.

GENERAL NOTE

ALL EMBANKMENT SLOPES SHALL BE DREDGED, PREPARED, SEEDED, AND WILTED AS SHOWN. SLOPES SHALL BE STABILIZED IN EQUAL INCREMENTS NOT TO EXCEED 25 FEET, MEASURED VERTICALLY.

CONSTRUCTION SEQUENCE
1. Construct diversion ditches, ditches, sediment basins, silt fences, or other erosion control devices as specified.
2. Place Phase 1 embankment with permanent or temporary seeding.
3. Place Phase 2 embankment with permanent or temporary seeding.
4. Place final Phase of embankment with permanent or temporary seeding. Place diversion ditches and slope drains if embankment construction is to be temporarily drained for a period of greater than 21 days.
5. Place final Phase of embankment with permanent or temporary seeding. Place diversion ditches and slope drains and maintain until entire slope is stabilized.