FULL DEPTH SHOULDER
FOR MAINTENANCE OF TRAFFIC
STA. 114+81.81 LT. - STA. 117+46.89 LT.
STA. 119+39.11 LT. - STA. 121+99.17 LT.

WIDENING FOR GUARDRAIL

- NOTE: REFER TO STD. ENG. GR-3A AND CROSS SECTIONS FOR SLIP REQUIREMENTS BEHIND GUARDRAIL.

DETAIL FOR TRANSITIONS
NOTICE: TURNOUTS SHALL BE MODIFIED WHERE NECESSARY TO MEET LOCAL CONDITIONS AS DIRECTED BY THE ENGINEER.

CONSTRUCTION LIMITS

DETAIL FOR COUNTY ROAD TURNOUTS
OPEN SHOULDER SECTION

NOTICE: REFER TO PLAN SHEETS FOR WIDTH OF COUNTY ROAD.

FLOWABLE SELECT MATERIAL (APPROX. 3' DEPTH)

PROPOSED FINISHED GRADE

PROPOSED SUBGRADE

NOTE: EXCAVATION FOR PLACING FLOWABLE SELECT MATERIAL WILL NOT BE PAID FOR DIRECTLY. BUT PAYMENT SHALL BE CONSIDERED TO BE INCLUDED IN THE VARIOUS SUB-ITEMS.

FLOWABLE SELECT MATERIAL AT BRIDGE ENDS

DETAIL FOR DRIVEWAY TURNOUTS
OPEN SHOULDER SECTION (ARTERIALS)

NOTE: TURNOUTS AND PRIVATE DRIVES SHALL BE MODIFIED WHERE NECESSARY TO MEET LOCAL CONDITIONS AS DIRECTED BY THE ENGINEER.

ADOM SURFACE COURSE (1/3")
1200 LBS. PER SQ. YD. AND
AGGREGATE BASE COURSE (CLASS 7)
3" COMP. DEPTH

PROPOSED SLOPE OF THE EXISTING DRIVEWAY, WHICHER IS FURTHER.

ADOM SURFACE COURSE (1/3")
1200 LBS. PER SQ. YD. AND
AGGREGATE BASE COURSE (CLASS 7)
3" COMP. DEPTH IF ASPHALT OR
GRAVEL DRIVE EXISTING OR 6" CONCRETE IF CONCRETE DRIVE
EXISTING.
DETAILS OF RUMBLE STRIPS

LOCATION PLAN OF RUMBLE STRIPS
LEFT OR RIGHT SHOULDERS

GENERAL NOTES
1. RUMBLE STRIPS SHALL NOT BE INSTALLED ON CURB SECTIONS, BRIDGE DECKS, APPROACH RAMPS, INTERSECTING STREETS OR ROWDWAYS, RESIDENTIAL OR COMMERCIAL DRIVEWAYS OR ACROSS TRANSVERSE JOINTS OF CONCRETE SHOULDER.
2. RUMBLE STRIPS SHALL NOT BE INSTALLED ON A PAVED SHOULDER THAT IS USED AS A DECELERATION LANE FOR THE LENGTH DEEMED APPROPRIATE BY THE ENGINEER.
3. THE R UM BLE STRIP GAP AT DRIVeway TURNOUTS

DETAIL FOR RUMBLE STRIP GAP
AT DRIVeway TURNOUTS

PLAN VIEW

NOTE: GAP PATTERN SHALL BE ADJUSTED BY THE ENGINEER IN THE FIELD ALLOWING FOR DRIVEWAYS TO SERVE AS THE GAP.
DETAILS OF MODIFIED DROP INLET

PIPE EXTENSION
REINFORCED CONCRETE COLLAR DETAIL

DETAIL FOR SOLID SODDING AROUND DROP INLETS
STA. 3+28.82
END HWY. 70 CONST.

STA. 111+37.00 CONST. = STA. 0+00.00 HWY 70.
\[ \Delta = 90^\circ 00' 00" \]
### OUTLET MINIMUM TABLE

<table>
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<th>REINFORCING STEEL (include grade and type)</th>
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| *Z* = 1"                            | *Z* = 1"

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### OUTLET SLOPE SECTIONS:

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### SHEET 2 OF 2
DETAELS OF R.C. BOX CULVERT
QUADRUPEL BARREL BOX CULVERT
STA. MG + 77

The required number of bars and lengths shown are for estimating purpose only. The actual number and length required shall be determined in field, unless otherwise noted, all dimensions are in inches.
STATION 101+90.00
BEGIN JOB 030428
LOG MILE 5.24

REVISIONS

DATE
REVISION

E-1: SAND BAG DITCH CHECKS
E-2: ROCK DITCH CHECKS
E-3: SILT FENCE
E-4: SEDIMENT BASIN

TEMPORARY EROSION CONTROL DETAILS

STAGE 1

ERRATUM

OBLITERATE
ADVANCE WARNING (ALL STAGES)

NOTE: ALSO TO BE USED ON R.R. T.O.

ADVANCE WARNING - SIDE ROADS (ALL STAGES)

STA. 138+500.00, OLD DIERKS HIGHWAY

NOTE: ALL STATIONS BASED OFF C.L. CONST.

MAINTENANCE OF TRAFFIC DETAILS

ALL STAGES TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

DO NOT PASS

ALL STAGES TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

SUMP (15") X (10")

TURNBACK 90° + SPECIAL END UNIT OR T.J.A.B.

VARIABLE

TURNBACK 60° + SPECIAL END UNIT OR T.J.A.B.

REFER ALSO TO STANDARD DRAWING TC-5 FOR DETAILS OF PLACEMENT OF PCBB TURNBACKS.

NOTE: PCBB & OM-3R SIGNS SHALL BE EQUALLY SPACED ALONG PCC,B.

DETAIL OF OBJECT MARKERS AT PRECAST CONCRETE BARRIER TURNBACKS

ADVANCE WARNING
**STAGE 1 CONSTRUCTION SEQUENCE:**

**INSTALL ADVANCE WARNING SIGNS AND END ROAD WORK SIGNS** at the beginning and end of the job as shown on the advance warning detail.

**FURNISH AND INSTALL P.C.C.B. AS SHOWN IN STAGE 1.**

**CONSTRUCT L.T. SIDE OF BOX DILVERT AT STA. 140+77.**

**BEG. SIDE OF BOX DILVERT FROM STA. 140+77 TO STA. 119+86:**

**NOTCH AND Widen FOR LANES ON LEFT USING VERTICAL PANELS SPACED 50° 0′ C.C. USE TRAFFIC DRUMS TO DELIMETE DRIVER.**

**CONSTRUCT FULL DEPTH SHOULDER FROM STA. 114+00 TO STA. 117+67 AND STA. 119+39 TO STA. 121+99.**

**MAINTENANCE OF TRAFFIC - STAGE 1 QUANTITIES**

- **SLB/R:** 340.80 L.F.
- **TIE R:** 111 BARRIERS R.T., 32 L.F. L.T.
- **TIE L:** 111 BARRIERS L.T., 32 L.F. L.T.
- **VERTICAL PANELS:** 50 EACH
- **FURNISH AND INSTALL P.C.C.B. AS SHOWN IN STAGE 1.**

**BEGIN JOB 030428**

**LOG MILE 5.24**
STA 101 + 90.00
BEGIN JOB 030428
LOG MILE 5.24

QUOT IT: LOQ:

THERMOPLASTIC PAVEMENT MARKINGS
4" WHITE = 22852 L.N.F.T.
4" YELLOW = 23717 L.N.F.T.
HIGH PERFORMANCE CONTRAST PAVEMENT MARKING
4" WHITE = 216 L.N.F.T.
4" YELLOW = 22175 L.N.F.T.
RAISED PAVEMENT MARKERS (TYPE III) (100 D.C.)
YELLOW/YELLOW = 213 EACH
RED/WHITE = 177 EACH

4" WHITE SOLID THERMOPLASTIC PAVEMENT MARKINGS
4" DRY YELLOW SOLID THERMOPLASTIC PAVEMENT MARKINGS WITH RAISED PAVEMENT MARKERS (TYPE III) (YELLOW/YELLOW 180 D.C.)

4" WHITE SOLID THERMOPLASTIC PAVEMENT MARKINGS
4" DRY YELLOW SOLID THERMOPLASTIC PAVEMENT MARKINGS WITH RAISED PAVEMENT MARKERS (TYPE III) (YELLOW/YELLOW 180 D.C.)

4" WHITE SOLID THERMOPLASTIC PAVEMENT MARKINGS
4" DRY YELLOW SOLID THERMOPLASTIC PAVEMENT MARKINGS WITH RAISED PAVEMENT MARKERS (TYPE III) (YELLOW/YELLOW 180 D.C.)

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4" DRY YELLOW SOLID THERMOPLASTIC PAVEMENT MARKINGS WITH RAISED PAVEMENT MARKERS (TYPE III) (YELLOW/YELLOW 180 D.C.)

4" WHITE SOLID THERMOPLASTIC PAVEMENT MARKINGS
4" DRY YELLOW SOLID THERMOPLASTIC PAVEMENT MARKINGS WITH RAISED PAVEMENT MARKERS (TYPE III) (YELLOW/YELLOW 180 D.C.)
### CONSTRUCTION PAVEMENT MARKINGS AND PERMANENT PAVEMENT MARKINGS

<table>
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<tr>
<th>DESCRIPTION</th>
<th>STAGE 2</th>
<th>END OF JOB</th>
<th>REMOVAL OF PERMANENT PAVEMENT MARKINGS</th>
<th>CONSTRUCTION PAVEMENT MARKINGS</th>
<th>REMOVABLE CONSTRUCTION PAVEMENT MARKINGS</th>
<th>REMOVABLE PAVEMENT MARKERS TYPE 1</th>
<th>THERMOPLASTIC PAVEMENT MARKING WHITE</th>
<th>THERMOPLASTIC PAVEMENT MARKING RED</th>
<th>THERMOPLASTIC PAVEMENT MARKING YELLOW</th>
<th>HIGH PERFORMANCE CONTRAST PAVEMENT MARKING WHITE</th>
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<th>HIGH PERFORMANCE CONTRAST PAVEMENT MARKING YELLOW</th>
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<td>218</td>
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</table>

**NOTE:**
- This is a high traffic volume road as defined in Section 504.03, Standard Specifications for Highway Construction.
- Note: No permanent pavement markings shall be placed until a minimum 3 days after all main lane paving has been completed. In addition, no permanent pavement markings shall be placed during the time period from December 21 to March 15, inclusive.

### ADVANCE WARNING SIGNS AND DEVICES

<table>
<thead>
<tr>
<th>SIGN NUMBER</th>
<th>DESCRIPTION</th>
<th>SIGN SIZE</th>
<th>STAGE 1</th>
<th>STAGE 2</th>
<th>MAXIMUM NUMBER REQUIRED</th>
<th>TOTAL SIGNS REQUIRED</th>
<th>VERTICAL PANELS</th>
<th>TRAFFIC DRUMS</th>
<th>BARRIADGES (TYPE B)</th>
<th>FURNISHING &amp; INSTALLING PRECAST CONC. BARRIER</th>
<th>RELOCATING PRECAST CONCRETE BARRIER</th>
<th>TEMPORARY IMPACT ATTENUATION BARRIER</th>
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<td>48&quot; x 48&quot;</td>
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<td>1</td>
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<td>0</td>
<td>48.0</td>
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<tr>
<td>W05-14</td>
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<td>1</td>
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<td>1</td>
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<td>48&quot; x 48&quot;</td>
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<td>1</td>
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</tr>
</tbody>
</table>

**NOTE:**
- This is a high traffic volume road as defined in Section 504.03, Standard Specifications for Highway Construction.
- The quantity of vertical panels provided in the contract is for one side of the roadway for the full length of the 265. The maximum quantity required to allow the contractor to choose one side, fill it to a point where the vertical differences are 6" or less, and then pick another side and section. This is the road profile difference that will be paid for. Refer to Section 503.03 of the Standard Specifications for Construction Requirements.
### 4" PIPE UNDERDRAIN

<table>
<thead>
<tr>
<th>STATION</th>
<th>LOCATION</th>
<th>UNDERDRAIN</th>
<th>4&quot; PIPE UNDERDRAIN PROTECTORS</th>
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<tbody>
<tr>
<td>115-26.41</td>
<td>117-40.39</td>
<td>DT, SDE</td>
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<td>115-26.41</td>
<td>117-40.39</td>
<td>DT, SDE</td>
<td>200</td>
</tr>
<tr>
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</tr>
<tr>
<td>115-26.41</td>
<td>117-40.39</td>
<td>DT, SDE</td>
<td>200</td>
</tr>
<tr>
<td>115-26.41</td>
<td>117-40.39</td>
<td>DT, SDE</td>
<td>200</td>
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<tr>
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Note: Quantities estimated. See Section 104.03 of the Std. Specs.

### PAVEMENT REPAIR OVER CULVERTS (ASPHALT)

<table>
<thead>
<tr>
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<th>LENGTH</th>
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<tr>
<td>152-11.86</td>
<td>112.10</td>
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Note: Quantities estimated. See Section 104.03 of the Std. Specs.

### ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC

<table>
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<th>TACK COAT</th>
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<tr>
<td>150</td>
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Note: Quantities estimated. See Section 104.03 of the Std. Specs.

### RUMBLE STRIPS IN ASPHALT SHOULDER

<table>
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<tr>
<td>153-86</td>
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<td>1200</td>
</tr>
<tr>
<td>153-86</td>
<td>145-90</td>
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Note: Quantities estimated. See Section 104.03 of the Std. Specs.

### COLD MILLING ASPHALT PAVEMENT

<table>
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<th>AWC WIDTH</th>
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<tr>
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<td>30</td>
<td>112</td>
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Note: Average milling depth 1".

### STRUCTURES

<table>
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<tr>
<th>STATION</th>
<th>DESCRIPTION</th>
<th>REINFORCED CONCRETE PIPE CULVERT</th>
<th>PLAPPED END SECTIONS FOR R.C. PIPES CULVERTS</th>
<th>DROP INLETS</th>
<th>SPAN</th>
<th>HEIGHT</th>
<th>LENGTH</th>
<th>CLASS 5 CONCRETE CULVERT</th>
<th>REINF. STEEL CULVERT</th>
<th>UNICLAD FOR STF ROADWAY</th>
<th>SOLID WOODING</th>
<th>WATER</th>
<th>STD. DWG. NO.</th>
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<tr>
<td>154-04</td>
<td>CONCRETE CULVERT PIPE 18&quot; ID X 48&quot;</td>
<td>121</td>
<td>2</td>
<td>2</td>
<td>12</td>
<td>12</td>
<td>120</td>
<td>632.46</td>
<td>12774</td>
<td>390</td>
<td>40</td>
<td>G9-3</td>
<td></td>
</tr>
<tr>
<td>154-04</td>
<td>CONCRETE CULVERT PIPE 18&quot; ID X 48&quot;</td>
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<td>2</td>
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<td>12</td>
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<td>12774</td>
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<td>12</td>
<td>12</td>
<td>120</td>
<td>632.46</td>
<td>12774</td>
<td>390</td>
<td>40</td>
<td>G9-3</td>
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</tr>
<tr>
<td>TOTALS:</td>
<td></td>
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<td>121</td>
<td>2</td>
<td>2</td>
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<td>120</td>
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<td>12774</td>
<td>390</td>
<td>40</td>
<td>G9-3</td>
</tr>
</tbody>
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Note: Bases of estimation: 12" B.G. / 30" Y.D. of solid slogging.

### QUANTITIES
<table>
<thead>
<tr>
<th>STATION</th>
<th>SIDE</th>
<th>LOCATION</th>
<th>LENGTH</th>
<th>AGGREGATE BASE COURSE CLASSES</th>
<th>TACK COAT</th>
<th>ACQH BASE Course (1&quot;&quot;)</th>
<th>ACQH binder course (1&quot;&quot;)</th>
<th>ACQH surface course (1&quot;&quot;)</th>
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</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
<td>Aggregate Base Course</td>
<td>Tack Coat</td>
<td>Aggregate Base Course (1&quot;&quot;)</td>
<td>Aggregate Base Course (1&quot;&quot;)</td>
<td>Aggregate Base Course (1&quot;&quot;)</td>
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<td></td>
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</tbody>
</table>

**QUANTITIES**
- **AGGREGATE BASE COURSE CLASSES** (1"")
- **TACK COAT**
- **ACQH BASE Course (1"")**
- **ACQH binder course (1"")**
- **ACQH surface course (1"")**

**BASE OF ESTIMATE**

ACQH surface course (1"") 64% Min. Aggr. 3% Asphalt Binder

**MAXIMUM NUMBER OF OPERATIONS**

TOTALS

**QUANTITIES**

<table>
<thead>
<tr>
<th>QTY</th>
<th>STATION</th>
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<th>LOCATION</th>
<th>WIDTH</th>
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<th>SIDE DRAINS</th>
<th>STANDARD DRAWINGS</th>
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**TOTALS**

222.00 437.50 42
# SCHEDULE OF BRIDGE QUANTITIES - JOB NO. 030428

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>UNIT OF STRUCTURE</th>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>UNIT</th>
<th>QUALITY</th>
<th>QTY</th>
<th>UNIT</th>
<th>PRICE</th>
<th>TOTAL</th>
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<td>05</td>
<td>concrete bridge</td>
<td>m^3</td>
<td>cmu</td>
<td>36</td>
<td>75.90</td>
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<td>cmu</td>
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<td>cmu</td>
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<td>05</td>
<td>concrete bridge</td>
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<td>cmu</td>
<td>65</td>
<td>75.90</td>
<td>0.4</td>
<td>6,550</td>
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<td>05</td>
<td>concrete bridge</td>
<td>m^3</td>
<td>cmu</td>
<td>65</td>
<td>75.90</td>
<td>0.4</td>
<td>6,550</td>
</tr>
</tbody>
</table>

**Notes:**
1. These steel piles are required to have special treatment which will not be paid for directly but will be considered supplementary to the item "Steel Piling (25' 12'"").
2. Existing Bridge No. 020321 (log mile 5.961) is 27.6' wide and is long and have piers and posts with the concrete piers and posts that will carry the structure. The structure will be designed in accordance with Section 205.
3. Quantity shown for estimating and bidding purposes. Actual quantity, if any, shall be determined by the Engineer.

---

**SCHEDULE OF BRIDGE QUANTITIES**

**Location:** Burke Creek & Cossatot Relief Strs.

**Engineer:** Steven Peyton

**Date:** 03/15/2016

---

**ARKANSAS STATE HIGHWAY COMMISSION**

**Route:** 11, **Sec:** 6

**Drawing No.:** 030428

**Engineer:** Steven Peyton

**Date of Drawing:** 03/15/2016

---

**ARKANSAS REGISTERED PROFESSIONAL ENGINEER**

**LITTLE ROCK, ARK.**

**Arkansas State Highway Commission**

**Route:** 11, **Sec:** 6

**Drawing No.:** 030428

**Engineer:** Steven Peyton

**Date:** 03/15/2016
### SURVEY CONTROL COORDINATES

**Project Name:** Project 030428  
**Date:** 4/15/2014  
**Coordinate System:** Arkansas State Plane Coordinates  
**Units:** U.S. Survey Foot  

**COORDINATES LISTED BELOW ARE GROUND (Locational) COORDINATES!!!**

<table>
<thead>
<tr>
<th>Point</th>
<th>No.</th>
<th>Northing</th>
<th>Easting</th>
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<th>Point Description</th>
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<td>4438123</td>
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<td>443811</td>
<td>4438123</td>
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<td>441707</td>
</tr>
</tbody>
</table>

---

**Additional Control Points:**

- **Primary Control Monument - Rebar and Cap:** 5/8"x24 Rebar with 2" Aluminum Cap stamped ["Include all common information here"]
- **Secondary Control Monument - Rebar and Cap:** 5/8"x24 Rebar with 2" Aluminum Cap stamped ["Include all common information here"]

---

**Positional Accuracy:**

- **Horizontal - GPS (0.6 cnd SP90):** 0.106-0.107
- **Horizontal - Primary (Doris SP90):** 0.23-0.45
- **Vertical - NGS 1st Order (3mm error in each km):** 0.0008
- **Vertical - NGS 2nd Order (10mm error in each km):** 0.021

---

**Vertical Datum:** NAVD 1988 based on NGS BM 965-992

---

**Base of Bearing:** Grid Bearing based on ANIH FF 0000008

---

**Survey Control Details:**

- **Project Name:** Project 030428
- **Date:** 4/15/2014
- **Coordinate System:** Arkansas State Plane Coordinates
- **Units:** U.S. Survey Foot
- **COORDINATES LISTED BELOW ARE GROUND (Locational) COORDINATES!!!
- **Positional Accuracy:**
- **Vertical Datum:** NAVD 1988 based on NGS BM 965-992
- **Base of Bearing:** Grid Bearing based on ANIH FF 0000008

---

**Survey Control Details:**

- **Project Name:** Project 030428
- **Date:** 4/15/2014
- **Coordinate System:** Arkansas State Plane Coordinates
- **Units:** U.S. Survey Foot
- **COORDINATES LISTED BELOW ARE GROUND (Locational) COORDINATES!!!
- **Positional Accuracy:**
- **Vertical Datum:** NAVD 1988 based on NGS BM 965-992
- **Base of Bearing:** Grid Bearing based on ANIH FF 0000008
SPECIAL FLOOD HAZARD AREA FOR ENTIRE SHEET

STA. 140-77 CONSTRUCT
CONSTRUCT APPROACH = 165 CU. YDS.

STA. 136-15 CONSTRUCT
CONSTRUCT APPROACH = 165 CU. YDS.

REPAIR TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.
NOTE: At the Contractor's option, the transverse screw may be placed parallel to the skew or perpendicular to G.L. Bridge.

CONCRETE PLACEMENT PROCEDURE

For details of poured silicone joints, see SAE Reprint No. 59998.

TABLE OF SILICONE JOINT DATA

<table>
<thead>
<tr>
<th>&quot;a&quot; - Warm</th>
<th>&quot;b&quot; - Warm</th>
<th>&quot;c&quot; - Warm</th>
<th>&quot;d&quot; - Warm</th>
<th>&quot;e&quot; - Warm</th>
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</thead>
<tbody>
<tr>
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<td>100°F</td>
<td>100°F</td>
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For dimensions are out of box.

BAR LIST

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<th>P.L.</th>
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<td>5/8&quot;</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>10</td>
<td>8&quot;</td>
<td>3/4&quot;</td>
</tr>
</tbody>
</table>

NOTE: Bars designated with an "E" suffix are to be epoxy coated.
GENERAL NOTES
These GENERAL NOTES are applicable unless otherwise stated in the Plan, Details, Spec. Provisions, or Supplemental Specifications.

CONSTRUCTION SPECIFICATIONS

GENERAL NOTES: See Page 100A.

SUPERSTRUCTURE NOTES:
MATERIALS AND FINISHING
Doss 9200 Concrete
Nominal Strength 9200 as specified in Subsection 1201.400
Structural Steel A36, 2-7/16" x 1-1/2" x 1/8"
Structural Steel 5/8" x 1-1/2" x 1/8"
Structural Steel 1-1/2" x 1/8" x 1/8"

CONCRETE
All concrete shall be cast with a minimum 28 day compressive strength of 4,000 psi. All concrete shall be poured in the dry and all exposed corner and shall be chamfered 45° unless otherwise noted.
The superstructure details shown are for use when removable deck forming is used and are for the benefit of the contractor and owner. See Doss 9200 Conforming Drawing No.0000 for allowable modifications and for tolerances when Permanent Bridge Steel forms are used.
Use of long chain is not permitted on any span of bridge or with horizontal diaphragms.

REINFORCING STEEL
All reinforcing steel shall be Grade 60 conforming to ASTM A6 60 or 322, Type A, with not less than 11.9 ksi yield strength and shall be cold drawn. The reinforcing steel is to be securely placed in the areas specified in the plans and specifications. All reinforcing steel is to be furnished and installed by the contractor as specified in Subsection 1201.400. Prior to the placing of concrete, excess reinforcing steel shall be removed to provide a minimum 1/2" concrete cover around the reinforcing steel. All reinforcing bars shall be identified with the proper墩 marks in accordance with Subsection 1201.400.

STRUCTURAL STEEL (PLATE ORDERS)
All references to cross-frames shall include "F" or "T" type.
All girder web and flange plates, all field splice plates, and all diaphragm corners (except those located at the intersection of the main truss and main trusses) shall be field fabricated and shall be furnished in accordance with Subsection 1201.400. All structural steel, including all plate orders, shall be furnished by the contractor as specified in Subsection 1201.400. All plates shall be identified with the proper inspection and control stamps in accordance with Subsection 1201.400. All steel shall be furnished and installed in accordance with Subsection 1201.400.

SUBSTRUCTURE NOTES:
CONCRETE
All concrete shall be cast with a minimum 28 day compressive strength of 4,000 psi. All concrete shall be poured in the dry and all exposed corner and shall be chamfered 45° unless otherwise noted.

REINFORCING STEEL
All reinforcing steel shall be Grade 60 (yield strength 60,000 psi) conforming to ASTM A60 60 or 322, Type A, with not less than 11.9 ksi yield strength and shall be cold drawn. The reinforcing steel is to be securely placed in the areas specified in the plans and specifications. All reinforcing steel is to be furnished and installed by the contractor as specified in Subsection 1201.400. Prior to the placing of concrete, excess reinforcing steel shall be removed to provide a minimum 1/2" concrete cover around the reinforcing steel. All reinforcing bars shall be identified with the proper墩 marks in accordance with Subsection 1201.400.

STRUCTURAL STEEL
All structural steel, including all plate orders, shall be furnished by the contractor as specified in Subsection 1201.400 and shall be field fabricated and field welded in accordance with Subsection 1201.400 prior to pouring the concrete deck.

STANDARD GENERAL NOTES For STEEL BRIDGE STRUCTURES

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAFTING NO. 15006

DRAWN BY: R. G. SMITH, Jr.
DRAFTSMAN, R. L. MURPHY, JR., DRAUGHTSMAN

PUBLIC WORKS DEPARTMENT
CONSTRUCTION DIVISION

SUBMISSION DATE: October 22, 2015

DRAFTING NO. 15006

STANDARD GENERAL NOTES

GENERAL NOTES

These GENERAL NOTES are applicable unless otherwise stated in the Plan, Details, Spec. Provisions, or Supplemental Specifications.

CONSTRUCTION SPECIFICATIONS

GENERAL NOTES: See Page 100A.

SUPERSTRUCTURE NOTES:
MATERIALS AND FINISHING
Doss 9200 Concrete
Nominal Strength 9200 as specified in Subsection 1201.400
Structural Steel A36, 2-7/16" x 1-1/2" x 1/8"
Structural Steel 5/8" x 1-1/2" x 1/8"
Structural Steel 1-1/2" x 1/8" x 1/8"

CONCRETE
All concrete shall be cast with a minimum 28 day compressive strength of 4,000 psi. All concrete shall be poured in the dry and all exposed corner and shall be chamfered 45° unless otherwise noted.
The superstructure details shown are for use when removable deck forming is used and are for the benefit of the contractor and owner. See Doss 9200 Conforming Drawing No.0000 for allowable modifications and for tolerances when Permanent Bridge Steel forms are used.
Use of long chain is not permitted on any span of bridge or with horizontal diaphragms.

REINFORCING STEEL
All reinforcing steel shall be Grade 60 conforming to ASTM A6 60 or 322, Type A, with not less than 11.9 ksi yield strength and shall be cold drawn. The reinforcing steel is to be securely placed in the areas specified in the plans and specifications. All reinforcing steel is to be furnished and installed by the contractor as specified in Subsection 1201.400. Prior to the placing of concrete, excess reinforcing steel shall be removed to provide a minimum 1/2" concrete cover around the reinforcing steel. All reinforcing bars shall be identified with the proper墩 marks in accordance with Subsection 1201.400.

STRUCTURAL STEEL (PLATE ORDERS)
All references to cross-frames shall include "F" or "T" type.
All girder web and flange plates, all field splice plates, and all diaphragm corners (except those located at the intersection of the main truss and main trusses) shall be field fabricated and shall be furnished in accordance with Subsection 1201.400. All structural steel, including all plate orders, shall be furnished by the contractor as specified in Subsection 1201.400. All plates shall be identified with the proper inspection and control stamps in accordance with Subsection 1201.400.

SUBSTRUCTURE NOTES:
CONCRETE
All concrete shall be cast with a minimum 28 day compressive strength of 4,000 psi. All concrete shall be poured in the dry and all exposed corner and shall be chamfered 45° unless otherwise noted.

REINFORCING STEEL
All reinforcing steel shall be Grade 60 (yield strength 60,000 psi) conforming to ASTM A60 60 or 322, Type A, with not less than 11.9 ksi yield strength and shall be cold drawn. The reinforcing steel is to be securely placed in the areas specified in the plans and specifications. All reinforcing steel is to be furnished and installed by the contractor as specified in Subsection 1201.400. Prior to the placing of concrete, excess reinforcing steel shall be removed to provide a minimum 1/2" concrete cover around the reinforcing steel. All reinforcing bars shall be identified with the proper墩 marks in accordance with Subsection 1201.400.

STRUCTURAL STEEL
All structural steel, including all plate orders, shall be furnished by the contractor as specified in Subsection 1201.400 and shall be field fabricated and field welded in accordance with Subsection 1201.400 prior to pouring the concrete deck.
GENERAL NOTES FOR STEEL H-PILES

Steel H-Piles shall conform to ASTM A 325, Grade 50 or greater.

See Bridge Layout and Bent Details for pile size, estimated lengths, spacing, and allowable top reinforcement for driving information.

Steel H-Piles that extend above the ground and are not protected by pile encasements shall be battered to form a 90° angle with the horizontal as stated by Subsection 8602.

Pile end sockets, pile caps, pile driving equipment, pile driving specialties, and welding shall not be used for driving but shall be considered subsidiary to the item "Steel Fittings".

TYPICAL DETAILS OF H-PILE TRESTLE INTERMEDIATE BENT

Shown with Partial Height Encasement

When required on the Bridge Layout, pile encasements shall be constructed. See Notes and Details for infinity Encasements. Steel driving line in groutable splices in conventional encasements is extended to bottom of bent cap.

TYPICAL SPlice DETAILS

结晶形的图例表示了其自相容性，并且在该情况下的规格，如图示，提供了至少三个螺丝，而材料的厚度或宽度则为5英尺。

REINFORCING DETAIL FOR STEEL H-PILE TP

Steel H-Pile Rebars shall be placed in the groutable splices in conventional encasements.

PILE ENCASEMENT DETAIL FOR STEEL H-PILES

Shown with Encasement to Bottom of Cap

Table of Variables

FOR PILE ENCASEMENT

When required on the Bridge Layout, pile encasements shall be constructed. See Notes and Details for infinity Encasements. Steel driving line in conventional encasement is extended to bottom of bent cap.

ALTERNATE PILE ENCASEMENT DETAIL FOR STEEL H-PILES

Shown with Partial Height Encasement

STANDARD DETAILS FOR STEEL H-PILES AND PILE ENCASEMENTS

ARKANSAS STATE HIGHWAY COMMISSION

This document was originally issued and sealed by Charles L. W. L. J. C. M. B. A. on March 5, 2020. This copy is not a signed and sealed document.

DRAWING NO. 05020
DETAILS OF WIDENING FOR GUARD RAIL

SECTION A-A

SECTION B-B

DETAILS SHOWING POSITION OF GUARD RAIL ON HIGHWAY

METHOD OF INSTALLATION OF GUARD RAIL AT FIXED OBSTACLE
THREE BEAM RAIL WITH STEEL TUBING BLOCKOUT AND STEEL POST POSTS 1-7

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

NOTE:
THESE DIMENSIONS ALL NEED TO BE ADJUSTED IN THE FIELD TO MAKE THE TRANSITION FROM 7'4" W-BEAM TO 32" W-PHANT OF A BEAM.

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

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

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

GENERAL NOTES:
RAIL POSTS SHALL BE SET PERPENDICULAR TO THE ROADWAY PROFILE GRAD AND SHOWN IN CROSS SECTION.
WOOD POSTS & WOOD BLOCKS SHALL BE EITHER SAWN OR STRUCTURAL OR BETTER 6X6 MADE TO OR VALIZED 4 SOUTHERN PINE.

ARKANSAS STATE HIGHWAY COMMISSION
GUARD RAIL DETAILS

STANDARD DRAWING GR-10A
**MINIMUM TRENCH WIDTH BASED ON FILL HEIGHT "H"**

<table>
<thead>
<tr>
<th>Trench Width &quot;H&quot;</th>
<th>&quot;H&quot;</th>
<th>4&quot;</th>
<th>6&quot;</th>
<th>8&quot;</th>
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<tbody>
<tr>
<td>24&quot;</td>
<td>6&quot;</td>
<td>5&quot;</td>
<td>4&quot;</td>
<td>3&quot;</td>
</tr>
<tr>
<td>30&quot;</td>
<td>8&quot;</td>
<td>7&quot;</td>
<td>6&quot;</td>
<td>5&quot;</td>
</tr>
<tr>
<td>36&quot;</td>
<td>10&quot;</td>
<td>9&quot;</td>
<td>8&quot;</td>
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<tr>
<td>48&quot;</td>
<td>12&quot;</td>
<td>11&quot;</td>
<td>10&quot;</td>
<td>9&quot;</td>
</tr>
</tbody>
</table>

**MINIMUM COVER FOR CONSTRUCTION LOADS**

<table>
<thead>
<tr>
<th>Pipe Diameter</th>
<th>Clear Inside</th>
<th>Minimum Pipe</th>
<th>Trench Width &quot;H&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Outside</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.0</td>
<td>20.5</td>
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<td>18.00-20.00</td>
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<tr>
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<td>22.5</td>
<td></td>
<td>20.00-22.00</td>
</tr>
<tr>
<td>24.0</td>
<td>26.5</td>
<td></td>
<td>24.00-26.00</td>
</tr>
<tr>
<td>30.0</td>
<td>32.5</td>
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<td>30.00-32.00</td>
</tr>
</tbody>
</table>

**MULTIPLE INSTALLATION OF HIGH DENSITY POLYETHYLENE PIPES**

<table>
<thead>
<tr>
<th>Pipe Diameter</th>
<th>Clear Inside</th>
<th>Minimum Pipe</th>
<th>Trench Width &quot;H&quot;</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Outside</td>
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<tr>
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<td>18.00-20.00</td>
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<td>20.0</td>
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<tr>
<td>24.0</td>
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<td>24.00-26.00</td>
</tr>
<tr>
<td>30.0</td>
<td>32.5</td>
<td></td>
<td>30.00-32.00</td>
</tr>
</tbody>
</table>

**GENERAL NOTES**

1. Pipe shall conform to AASHTO standard M200-76 unless otherwise specified.
2. Plastic pipe culvert design shall conform to AASHTO L505 and AASHTO L506 design specifications.
3. The maximum allowable trench width shall be the minimum width plus a sufficient width to ensure working room to properly and safely place and compact backfill and other backfill materials.
4. Nondisturbing material should be placed as directed by the engineer at the end of the cutoff to prevent loss of structural bedding when pervious material is excavated for structural bedding and/or backfill.
5. When directed by the engineer, nondisturbing material that is excavated at the bottom of the excavated trench shall be replaced with structural bedding material.
6. Nondisturbing material that is excavated for the pipes shall be replaced with structural bedding material. The backfills and structural bedding material shall be compacted to a specified density and shall be maintained.

**CONSTRUCTION SEQUENCE**

1. Place structural bedding material to grade, do not compact.
2. Install pipe to grade.
3. Compact structural bedding outside the middle third of the pipe.
4. The structural backfill shall be placed and compacted in layers no greater than 1 foot, the layers shall be compacted to a density and shall maintain the maximum specified.
5. For pipe layout, the use of pipes shall be maintained.

**LEGEND**

- STRUCTURAL BACKFILL MATERIAL
- UNDISTURBED SOIL

**ARKANSAS STATE HIGHWAY COMMISSION**

**PLASTIC PIPE CULVERT**

**HIGH DENSITY POLYETHYLENE**

**STANDARD DRAWING PCP-1**
**MAXIMUM FILL HEIGHT BASED ON STRUCTURAL BACKFILL**

**MINIMUM TRENCH WIDTH BASED ON FILL HEIGHT "H"**

<table>
<thead>
<tr>
<th>PIPE DIAMETER (IN)</th>
<th>TRENCH WIDTH (Ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1/2</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3-1/2</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

**MINIMUM COVER FOR CONSTRUCTION LOADS**

<table>
<thead>
<tr>
<th>PIPE DIAMETER (IN)</th>
<th>COVER (FT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1/2</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>3-1/2</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
</tr>
</tbody>
</table>

**GENERAL NOTES**


2. Pipe shall be placed as directed by the engineer. The line of the culvert to prevent loss of structural bedding when necessary is used for structural bedding and/or backfill.

3. Upon direction by the engineer, unstable materials shall be furnished by the contractor. If the bed of the culvert to prevent loss of structural bedding when necessary is used for structural bedding and/or backfill.

4. When the line of the culvert to prevent loss of structural bedding when necessary is used for structural bedding and/or backfill.

5. Pipe shall be placed as directed by the engineer. The line of the culvert to prevent loss of structural bedding when necessary is used for structural bedding and/or backfill.

6. Pipe shall be placed as directed by the engineer. The line of the culvert to prevent loss of structural bedding when necessary is used for structural bedding and/or backfill.

7. Pipe shall be placed as directed by the engineer. The line of the culvert to prevent loss of structural bedding when necessary is used for structural bedding and/or backfill.

8. Pipe shall be placed as directed by the engineer. The line of the culvert to prevent loss of structural bedding when necessary is used for structural bedding and/or backfill.

9. Pipe shall be placed as directed by the engineer. The line of the culvert to prevent loss of structural bedding when necessary is used for structural bedding and/or backfill.

10. Pipe shall be placed as directed by the engineer. The line of the culvert to prevent loss of structural bedding when necessary is used for structural bedding and/or backfill.

**CONSTRUCTION SEQUENCE**

1. Structural bedding material shall be placed in layers not exceeding 6", The layers shall be placed to ensure a level and smooth transition to the elevation of the pipe centerline.

2. Plastic pipe culvert (PVC F944) - Standard Drawing PCP-2

**ARKANSAS STATE HIGHWAY COMMISSION**

**PLASTIC PIPE CULVERT (PVC F944)**

**DATE ISSUED: 12-15-05**

**ADDENDUM: 12-15-05**
REINFORCED CONCRETE BOX Culvert General Notes

Concrete shall be Class S with a minimum 28-day compressive strength of 3500 psi.

Reinforcing steel shall be A606 in S50 or S53, Grade 60.

Construction and materials for wingwalls and culvert drainages, including wing wall holes and granular material, shall be subject to the bid item class S concrete.

Membrane waterproofing shall conform to the requirements of Section B5 of the standard specifications.

Membrane waterproofing shall be applied to all construction joints in the top slab and the sidewalls of R.C. box culvert as directed by the engineer. No payment shall be made for this item, but payment will be considered to be included in the various items for general R.C. box culvert reinforcement.

Reinforcing steel tolerances: The tolerances for reinforcing steel shall meet those listed in "Manual of Standard Practice" published by Concrete Reinforcing Steel Institute (C.R.S.I.) except that the tolerance for Deformed Bars such as Figure 5 on page 7-4 of the Manual shall be within zero plus 3/16 inch.

Weep holes in box culvert walls shall have a maximum horizontal spacing of 10'-0" and shall be spaced to clear all reinforcing steel. The drain opening shall be 4" diameter and shall be placed 12" above the top of the bottom slab.

Weep holes in wingwalls shall have a maximum horizontal spacing of 10'-0" and shall be spaced to clear all reinforcing steel. These shall be a minimum of 32") diameter and shall be placed 12" above the top of the wingwall footing.

The requirements shown on this drawing shall supersede the corresponding requirements on all reinforced concrete box culvert standard drawings.

Overall Height of Hooked Bar Diagram

The hooked bars shall be placed in the bottom of the top slab and the top of the bottom slab. The straight bars shall be placed in the top of the top slab and the bottom of the bottom slab. See Table below for lengths of replacement hooked and straight bars.

For skewed culverts, the replacement straight bar may have to be cut in field to fit.

Replacement Bar Lengths Table

<table>
<thead>
<tr>
<th>Bar Size</th>
<th>Length of Hooked Bar</th>
<th>Length of Straight Bar</th>
</tr>
</thead>
<tbody>
<tr>
<td>#4</td>
<td>L + F - 9&quot;</td>
<td></td>
</tr>
<tr>
<td>#5</td>
<td>L + F - 9&quot;</td>
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<td>#12</td>
<td>L + F - 9&quot;</td>
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</tbody>
</table>

L = "ON" = 3 Inches

Wingwall & Culvert Drainage Detail

Concrete shall be Class S with a minimum 28-day compressive strength of 3500 psi.

Reinforcing steel shall be A606 in S50 or S53, Grade 60.

Construction and materials for wingwalls and culvert drainages, including wing wall holes and granular material, shall be subject to the bid item class S concrete.

Membrane waterproofing shall conform to the requirements of Section B5 of the standard specifications.

Membrane waterproofing shall be applied to all construction joints in the top slab and the sidewalls of R.C. box culvert as directed by the engineer. No payment shall be made for this item, but payment will be considered to be included in the various items for general R.C. box culvert reinforcement.

Reinforcing steel tolerances: The tolerances for reinforcing steel shall meet those listed in "Manual of Standard Practice" published by Concrete Reinforcing Steel Institute (C.R.S.I.) except that the tolerance for Deformed Bars such as Figure 5 on page 7-4 of the Manual shall be within zero plus 3/16 inch.

Weep holes in box culvert walls shall have a maximum horizontal spacing of 10'-0" and shall be spaced to clear all reinforcing steel. The drain opening shall be 4" diameter and shall be placed 12" above the top of the bottom slab.

Weep holes in wingwalls shall have a maximum horizontal spacing of 10'-0" and shall be spaced to clear all reinforcing steel. These shall be a minimum of 32") diameter and shall be placed 12" above the top of the wingwall footing.

The requirements shown on this drawing shall supersede the corresponding requirements on all reinforced concrete box culvert standard drawings.

Arkansas State Highway Commission

Reinforced Concrete Box Culvert Details

Standard Drawing RCB-1
SOLID SODDING
R.C. BOX CULVERT

PARTIAL SECTION SHOWING SOLID SODDING AT HEADWALLS AND WING WALLS

NOTE: LENGTH MEASURED ALONG THE CENTER OF 2' STRIP OF SOLID SODDING.

LONGITUDINAL SECTION
BACKFILL DETAILS FOR BOX CULVERT

SECTION C-C

DETAILS THROUGH EXISTING CHANNELS

GENERAL NOTES:
ROADWAY EXCAVATION (CHANNEL CHANGED) WILL BE PAID FOR AT R.C. BOX CULVERT LOCATIONS. IT WILL BE PAID TO THE LIMITS ACTUALLY CUT AND WILL BE MEASURED TO THE PORTION OF THE INDOATED AREA THAT IS ABOVE THE FLOW LINE. ROADWAY EXCAVATION (CHANNEL CHANGED) SHALL BE MEASURED BY CROSS SECTIONS AND VOLUMES COMPUTED BY AVERAGE END AREA METHOD. ALL CHANNEL CHANGES SHALL BE BROUGHT TO GRADE PRIOR TO MAKING ANY EXCAVATION FOR STRUCTURES.

EXCAVATION FOR STRUCTURES WILL BE PAID FOR AT ALL R.C. BOX CULVERT LOCATIONS. IT WILL BE PAID TO THE LIMITS SHOWN AND SHALL BE CONFORMED TO THAT PORTION OF THE INDOATED AREA THAT IS ABOVE THE FLOW LINE. ROADWAY EXCAVATION SHOWN IN SECTION C-C ABOVE AS SUBSIDENCY WILL NOT BE MEASURED OR PAID FOR DIRECTLY, BUT PAYMENT WILL BE CONSIDERED TO BE INCLUDED IN THE VARIOUS ITEMS OF EXCAVATION.

ARKANSAS STATE HIGHWAY COMMISSION
EXCAVATION PAY LIMITS, BACKFILL & SOLID SODDING FOR BOX CULVERTS
STANDARD DRAWING RCB-2
## Super-elevation Table for Two-Way Traffic

### Abbreviations:
- **N:** Normal Crown
- **NC:** Reverse Crown Super-elevation at normal crown slope
- **C:** Super-elevation at crown
- **L:** Length of super-elevation transition
- **D:** Distance from beginning of super-elevation transition to any point
- **M:** Width of pavement
- **T:** Width of subgrade
- **E:** Normal crown point

### General Notes:
1. On pavements with two-way traffic, the super-elevation shall be revolved on the inside pavement edge unless otherwise noted in the plans.
2. Super-elevation values shown on the cross sections and values of m·T to be used as the minimum distance from the point of control.
3. Super-elevation shall be in multiples of 25 ft or 50 ft.
4. Super-elevation shall be in multiples of 2.5 ft or 5 ft.

### Notes:
- Maintain normal crown on notes until super-elevation exceeds 2.5 ft.
- Rate of super-elevation shall be centered on straight line to the left using applicable formula.

### Standard Method When Super-elevation Revolves around Center Line

<table>
<thead>
<tr>
<th>DEGREES</th>
<th>M</th>
<th>N</th>
<th>C</th>
<th>L</th>
<th>D</th>
<th>T</th>
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</tr>
</tbody>
</table>

### Standard Method When Super-elevation Revolves around Outer Subgrade Edge

[Diagram showing super-elevation transition with notes and abbreviations]

### Notes:
- Maximum super-elevation shall be covered by the specified line, except where otherwise noted.
- The profile shall be noted at the specified point.

---

**Arkansas State Highway Commission**

### Tables and Method of Super-elevation for Two-Way Traffic

<table>
<thead>
<tr>
<th>Degree</th>
<th>Formula</th>
<th>Notes</th>
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</thead>
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<tr>
<td>0.8</td>
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<td></td>
</tr>
</tbody>
</table>

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File: Stormer002.png
GENERAL NOTES
1. Rise and tread dimensions of steps may be varied as directed by the engineer. However, rise of each step shall be 6" min. All steps in one flight shall be of consistent rise and tread. Minimum rise is 5".
2. Transverse expanders joints shall be placed in concrete walls at 45° intervals.

REINFORCED CONCRETE SPRING BOX

DETAILS OF CONCRETE STEPS & WALKS

DETAILS OF ALTERNATE POST ANCHOR SYSTEM

EPOXY ADHESIVE ANCHORS

HAND RAILING DETAILS

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF SPECIAL ITEMS

STANDARD DRAWING: SI-1
**Offset Distance**

<table>
<thead>
<tr>
<th>Offset Distance</th>
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<tbody>
<tr>
<td>Traffic Only</td>
</tr>
<tr>
<td>40 W</td>
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<tr>
<td>30 W</td>
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<tr>
<td>20 W</td>
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<tr>
<td>10 W</td>
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<tr>
<td>0 W</td>
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If offset distance is not attainable, then see "Barrier Placement With Attenuator" detail shown below.

**General Notes**

When shown on the plane, 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."

**Standard Traffic Controls**

For Highway Construction - Temporary Precast Barrier

**Standard Drawing TC-S**
CLEARING AND GRUBBING

CONSTRUCTION SEQUENCE
1. Place perimeter controls (1/2, 3/4, Fences, Sediment Basins, etc.).
2. Perform clearing and grubbing operation.

EXCAVATION

EXISTING EMBANKMENT

NOTE: NUMBER OF PHASES WILL VARY.
PHASE 1 EXCAVATION
PHASE 2 EXCAVATION
PHASE 3 EXCAVATION
GENERAL NOTE

ALL CUT SURFACES SHALL BE PARCELIZED INTO VERTICAL, HORIZONTAL, AND HPYTHETICAL INFORMED STAGES NOT TO EXCEED 20 FEET VERTICALLY.

CONSTRUCTION SEQUENCE
1. Construct erosion control devices as specified.
2. Perform Phase 1 excavation, place temporary or permanent seeding.
3. Perform Phase 2 excavation, place permanent or temporary seeding.
4. Perform final Phase of excavation, place permanent or temporary seeding.
5. Maintain erosion control devices until final Phase is completed.

EMBANKMENT

GENERAL NOTE

SLOPE SLOPE TO BE IN PLACE UNTIL COMPLETELY STABILIZED.

EMBANKMENT

NOTES: NUMBER OF PHASES WILL VARY, THREE PHASES SHOWN FOR ILLUSTRATION.
PHASE 1 EMBANKMENT
PHASE 2 EMBANKMENT
PHASE 3 EMBANKMENT
FINAL EMBANKMENT

SLOPE SLOPE TO BE IN PLACE UNTIL COMPLETELY STABILIZED.

EMBANKMENT

GENERAL NOTE

SLOPE SLOPE TO BE IN PLACE UNTIL COMPLETELY STABILIZED.

EMBANKMENT

GENERAL NOTE

SLOPE SLOPE TO BE IN PLACE UNTIL COMPLETELY STABILIZED.

EMBANKMENT

GENERAL NOTE

SLOPE SLOPE TO BE IN PLACE UNTIL COMPLETELY STABILIZED.

EMBANKMENT

GENERAL NOTE

SLOPE SLOPE TO BE IN PLACE UNTIL COMPLETELY STABILIZED.
CROSS SECTION STA. 130+00 TO STA. 132+00
CROSS SECTION STA. 149+00 TO STA. 152+00