<table>
<thead>
<tr>
<th>CELL / MODEL NAME</th>
<th>DESCRIPTION</th>
<th>DATE</th>
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<tbody>
<tr>
<td>TSA-SB-LT-LS</td>
<td>2 rows of reinf in top slab; 1 row of reinf in each sidewall; L-Type Wingwalls, Left Skew</td>
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<tr>
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<td>2 rows of reinf in top slab; 1 row of reinf in each sidewall; L-Type Wingwalls, Right Skew</td>
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LONGITUDINAL SECTION
(Dimensions at Rt. ± to Roadway)

"a" bars in skew portion of slab shall be ordered full length & cut to fit. Balance of bar to be used in opposite end of culvert.

BAR d

d

Tilt hook of a1 bars if necessary for 3'-0" cl.

4'-5" L o n g  W i n g (B a c k )

h9

Size typ.

Notes:

Bars indicated thus 12 x 4-#5 etc. Indicates 12 lines of bars with 4 lengths per line.

At the Contractor's option, a longer v1 bar may be ordered to replace the v bar.

No reduction in quantities shall be made for this substitution.

No reduction in quantities shall be made for this substitution.

SECTIONS A-A

SHOWING TOEWALL

ORDER BARS SHOWN FULL LENGTH, CUBIC YARDS AS SHOWN AND USE REMAINDER OF BARS IN OPPOSITE WING WALL.

BILL OF MATERIAL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT DETAIL

STRUCTURE NO.

CONTRACT NO.

PLOT DATE

PLOT SCALE

CHECKED

REVISED

D E P A R T M E N T  O F  T R A N S P O R T A T I O N

STATE OF ILLINOIS

2'-8" L o n g  W i n g (F r o n t )

h9

h8

v4

2'-8"

2'-0"

2'-0"
No reduction in quantities shall be made for this substitution.

Notes:
- # 5 bars at 12” cts.
- # 3 bars at 12” cts.

"d" bars in skew portion of slab shall be ordered full length & cut to fit. Balance of bar to be used in opposite end of culvert.

FIELD CUTTING DIAGRAM
Order bars shown full length. Cut as shown and use remainder of bars in opposite wingwall.
LONGITUDINAL SECTION

FIELD CUTTING DIAGRAM

SHOWING TOE WALL

SHOWING HEAD WALL

SECTION A-A

BILL OF MATERIAL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT DETAILS
STRUCTURE NO.

DEPARTMENT OF TRANSPORTATION
STATE OF ILLINOIS
F.A. RTE.
SECTION
ILLINOIS FED. AID PROJECT
COUNTY
CONTRACT NO.
TOTAL SHEETS
SHEET NO.

No reduction in quantities shall be made for this substitution.

At the Contractor's option, a longer v1 bar may be ordered to replace the v bar.

Notes:
Bars indicated thus 32 x 4-#5 etc. indicates 32 lines of bars with 4 lengths per line.

Bars (Back)
Bars at " cts. Each Wall
2'-8" - 2 bars at " cts. Each Wall
4'-5" - 2 bars at " cts. Each Wall

Concrete Box Culverts (Per Unit)
Reinforcement Bars, Round

BAR v5(E)
BAR v7(E)
BAR s1
BAR s
BAR d
BAR a1
At the Contractor's option, a longer v1 bar may be ordered to replace the v bar.

Notes:
- "h" bars in area portion of slab shall be ordered full length & cut to fit
- Balance of bar to be used in opposite end of culvert.

Order bars shown full length. Cut as shown and use remainder of bars in opposite wingwall.

No reduction in quantities shall be made for this substitution.

TSA-SC-LT-LS  2-17-2007
### BILL OF MATERIAL

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<tr>
<th>Bar No.</th>
<th>Limit Type</th>
<th>Length</th>
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<td>48</td>
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</table>

**Concrete Box Culverts**
- Co Tip
- Reinforcement Bars
- Epoxy Coated

Notes:
- Bars indicated thus 12 x 4-#5 etc. Indicates 12 lines of bars with 4 lengths per line.
- At the Contractor's option, a longer v3 bar may be ordered to replace the v bar.
- No reduction in quantities shall be made for this substitution.

**Sections**
- **A-A**
- **THRU BARREL**
- **THRU HEADWALL**
- **FIELD CUTTING DIAGRAM**
- **LONGITUDINAL SECTION**

**Design Notes**
- Construction Joint (CJ)
- Top of Top Slab
- Bottom of Bottom Slab
- Cut Line
- 2'-8" Epoxy Coated Bar
- Concrete Box Culvert Co Tip
- Reinforcement Bars
- Epoxy Coated Bars

**Drawing Information**
- Designed by: (Name)
- Drawn by: (Name)
- Checked by: (Name)
- Designed by: (Name)
- Revised by: (Name)

**Bill of Material Details**
- TSA-SC-LT-ZS
- 2-17-2017
LONGITUDINAL SECTION
(Dimensions at M. CS to & Roadway)

LONG WING (Front)
- v1 bars at " cts. Each Wall

LONG WING (Back)
- v bars at " cts. Each Wall

SHORT WING (Back)
- h3 bars at

SHORT WING (Front)
- h5 bars at

Field Cutting Diagram
Order bars shown full length. Use as shown and use remainder of bars in opposite wingwall.

Notes:
- Bars indicated thus 12 x 4-#5 etc. Indicates 12 lines of bars with 4 lengths per line.
- At contractor's option, a longer v1 bar may be ordered to replace the v bar.
- No reduction in quantities shall be made for this substitution.
Notes:
Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.
At the Contractor's option, a longer v1 bar may be ordered to replace the v bar.
No reduction in quantities shall be made for this substitution.

ORDER BARS SHOWN FULL LENGTH. CUT AS SHOWN AND USE REMAINDER OF BARS IN OPPOSITE WINGWALL.
LONGITUDINAL SECTION

(Dimensions at R. Cts to C Roadway)

"a" bars in some portion of slab shall be ordered full length & cut to fit. Balance of bar to be used in opposite end of culvert.

SECTION A-A

Showing long wing with counterfort. Limit counterfort at short wing.

FIELD CUTTING DIAGRAM

Order bars shown full length, Cts as shown and use remainder of bars in opposite wingwall.

Notes:
Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.
At the Contractor's option, a longer #2 bar may be ordered to replace the #1 bar. No reduction in quantities shall be made for this substitution.

2-17-2007

T5B-SC-LT-LS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT DETAILS

STRUCTURE NO.

BILL OF MATERIAL

REINFORCEMENT BARS

Concrete Box Culvert Co. Inc. 18"
Reinforcement Bars, Epoxy Coated
Pound
LONG WING (BACK)
- # 65 bars at " cts. Short Wing (Back)
- # 55 bars at " cts. Long Wing (Back)
- # 43 bars at " cts. Short Wing (Front)
- # 34 bars at " cts. Long Wing (Front)

LONG WING (FRONT)
- # 52 bars at " cts. I.F. Each Wall
- # 41 bars at " cts. O.F. Each Wall
- # 31 bars at " cts. I.F. Each Wall
- # 21 bars at " cts. O.F. Each Wall

Notes:
- "a" bars in skew portion of slab shall be ordered full length & cut to fit. Balance of bar to be used in opposite end of culvert.
- No reduction in quantities shall be made for this substitution.
- At the Contractor's option, a longer v1 bar may be ordered to replace the v bar.
- Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.
- All the Contractor's option, a longer v1 bar may be ordered to replace the v bar.
- No reduction in quantities shall be made for this substitution.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONTRACT NO.
SHEETS
COUNTY
REVISION
DATE
BOB.
STATEMENT

CULVERT DETAILS
STRUCTURE NO.

BILL OF MATERIAL

FIELD CUTTING DIAGRAM
Order bars shown full length, C.C. as shown and use remainder of bars in opposite wingwall.

SECTION THRU HEADWALL

SECTION THRU BARREL

BILL OF MATERIAL