STD159.DGN

CONST. NO.

| PROJECT NO. | YEAR | SHEET NO. |
|---|---|---|
| | 2000 | |

REVISIONS

| NO. | DATE | BY | BRIEF DESCRIPTION |
|---|---|---|---|
| | | | |

**12' × 6' BOX SECTION**

| EARTH COVER | WALL THICKNESS | | | CIRCUMFERENTIAL REINFORCEMENT AREA | | | | | | DISTRIBUTION AREA | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | TOP SLAB | BOTTOM SLAB | WALLS | As1 | As2 | As3 | As4 | As7 | As8 | As5 | As6 |
| 0-2' | 10" | 10" | 10" | 0.39 | 0.48 | 0.36 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 |
| 2' | 10" | 10" | 10" | 0.39 | 0.44 | 0.40 | 0.24 | 0.24 | 0.24 | | |
| 3' | 10" | 10" | 10" | 0.36 | 0.39 | 0.38 | 0.24 | 0.24 | 0.24 | | |
| 4' | 10" | 10" | 10" | 0.37 | 0.39 | 0.40 | 0.24 | 0.24 | 0.24 | | |
| 5' | 10" | 10" | 10" | 0.35 | 0.39 | 0.39 | 0.24 | 0.24 | 0.24 | | |
| 6' | 10" | 10" | 10" | 0.38 | 0.41 | 0.42 | 0.24 | 0.24 | 0.24 | | |
| 8' | 10" | 10" | 10" | 0.44 | 0.48 | 0.49 | 0.24 | 0.24 | 0.24 | | |
| 10' | 10" | 10" | 10" | 0.50 | 0.54 | 0.56 | 0.24 | 0.24 | 0.24 | | |
| 12' | 10" | 10" | 10" | 0.57 | 0.62 | 0.64 | 0.24 | 0.24 | 0.24 | | |
| 14' | 10" | 10" | 10" | 0.65 | 0.79 | 0.83 | 0.24 | 0.24 | 0.24 | | |

**12' × 8' BOX SECTION**

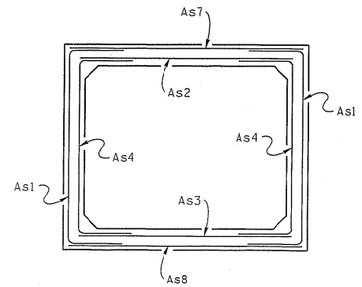
| EARTH COVER | WALL THICKNESS | | | CIRCUMFERENTIAL REINFORCEMENT AREA | | | | | | DISTRIBUTION AREA | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | TOP SLAB | BOTTOM SLAB | WALLS | As1 | As2 | As3 | As4 | As7 | As8 | As5 | As6 |
| 0-2' | 10" | 10" | 10" | 0.35 | 0.50 | 0.41 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 |
| 2' | 10" | 10" | 10" | 0.35 | 0.48 | 0.45 | 0.24 | 0.24 | 0.24 | | |
| 3' | 10" | 10" | 10" | 0.32 | 0.43 | 0.43 | 0.24 | 0.24 | 0.24 | | |
| 4' | 10" | 10" | 10" | 0.33 | 0.43 | 0.46 | 0.24 | 0.24 | 0.24 | | |
| 5' | 10" | 10" | 10" | 0.31 | 0.43 | 0.44 | 0.24 | 0.24 | 0.24 | | |
| 6' | 10" | 10" | 10" | 0.34 | 0.45 | 0.48 | 0.24 | 0.24 | 0.24 | | |
| 8' | 10" | 10" | 10" | 0.39 | 0.52 | 0.56 | 0.24 | 0.24 | 0.24 | | |
| 10' | 10" | 10" | 10" | 0.44 | 0.59 | 0.62 | 0.24 | 0.24 | 0.24 | | |
| 12' | 10" | 10" | 10" | 0.50 | 0.71 | 0.80 | 0.24 | 0.24 | 0.24 | | |
| 14' | 10" | 10" | 10" | 0.56 | 0.96 | 1.04 | 0.24 | 0.24 | 0.24 | | |

**12' × 10' BOX SECTION**

| EARTH COVER | WALL THICKNESS | | | CIRCUMFERENTIAL REINFORCEMENT AREA | | | | | | DISTRIBUTION AREA | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | TOP SLAB | BOTTOM SLAB | WALLS | As1 | As2 | As3 | As4 | As7 | As8 | As5 | As6 |
| 0-2' | 10" | 10" | 10" | 0.32 | 0.54 | 0.47 | 0.30 | 0.24 | 0.24 | 0.24 | 0.24 |
| 2' | 10" | 10" | 10" | 0.31 | 0.51 | 0.50 | 0.24 | 0.24 | 0.24 | | |
| 3' | 10" | 10" | 10" | 0.29 | 0.45 | 0.48 | 0.24 | 0.24 | 0.24 | | |
| 4' | 10" | 10" | 10" | 0.30 | 0.46 | 0.50 | 0.24 | 0.24 | 0.24 | | |
| 5' | 10" | 10" | 10" | 0.29 | 0.45 | 0.48 | 0.24 | 0.24 | 0.24 | | |
| 6' | 10" | 10" | 10" | 0.31 | 0.47 | 0.52 | 0.24 | 0.24 | 0.24 | | |
| 8' | 10" | 10" | 10" | 0.36 | 0.55 | 0.60 | 0.24 | 0.24 | 0.24 | | |
| 10' | 10" | 10" | 10" | 0.40 | 0.63 | 0.77 | 0.24 | 0.24 | 0.24 | | |
| 12' | 10" | 10" | 10" | 0.45 | 0.88 | 1.02 | 0.24 | 0.24 | 0.24 | | |
| 14' | 10" | 10" | 10" | 0.57 | 1.14 | 1.27 | 0.24 | 0.24 | 0.24 | | |

**12' × 12' BOX SECTION**

| EARTH COVER | WALL THICKNESS | | | CIRCUMFERENTIAL REINFORCEMENT AREA | | | | | | DISTRIBUTION AREA | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | TOP SLAB | BOTTOM SLAB | WALLS | As1 | As2 | As3 | As4 | As7 | As8 | As5 | As6 |
| 0-2' | 10" | 10" | 10" | 0.40 | 0.56 | 0.53 | 0.47 | 0.24 | 0.24 | 0.24 | 0.24 |
| 2' | 10" | 10" | 10" | 0.30 | 0.56 | 0.56 | 0.29 | 0.24 | 0.24 | | |
| 3' | 10" | 10" | 10" | 0.27 | 0.49 | 0.53 | 0.25 | 0.24 | 0.24 | | |
| 4' | 10" | 10" | 10" | 0.28 | 0.49 | 0.56 | 0.24 | 0.24 | 0.24 | | |
| 5' | 10" | 10" | 10" | 0.28 | 0.48 | 0.53 | 0.24 | 0.24 | 0.24 | | |
| 6' | 10" | 10" | 10" | 0.30 | 0.50 | 0.57 | 0.24 | 0.24 | 0.24 | | |
| 8' | 10" | 10" | 10" | 0.35 | 0.59 | 0.70 | 0.24 | 0.24 | 0.24 | | |
| 10' | 10" | 10" | 10" | 0.42 | 0.71 | 0.91 | 0.24 | 0.24 | 0.24 | | |
| 12' | 10" | 10" | 10" | 0.69 | 0.97 | 1.16 | 0.24 | 0.24 | 0.24 | | |




TYPICAL SECTION

NOTE: CAGES MUST OVERLAP A MINIMUM OF 14 INCHES.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# PRECAST BOX CULVERT DETAILS

DESIGNED BY _____ DATE _____
DRAWN BY KLF / MDB DATE 12-99
SUPERVISED BY RLH/CMH/MAH DATE 12-99
CHECKED BY _____ DATE _____

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

2000

STD-15-29

Current Drawing (c:\projects\workspace\dgn\std\std159.dgn)
09-Jul-2001 14:29