NORTH

ORIENT
NORTH
ARROW

LENGTH OF BOX

WING LENGTH

VERTICAL CONST. JOINT
SEE STANDARD 36.03

40' MAX. CONST. JT. SPA.

C/L OF
ROADWAY

S°

SKEW ANGLE.

REFERENCE LINE

C/L OF CULVERT

WING LENGTH

WORKING
POINT

BEVEL 2"

Z°*

* Y°

C1

C1

1'-0"

DROP x SLOPE

C2

C2

C2

C2

DROP x SLOPE

1'-0"

1'-6"

NAME
PLATE

Y°*

* Z°

BEVEL 2"

GIVE STATION

VERTICAL CONST. JOINT
SEE STANDARD 36.03

WORKING POINT
SEE STANDARD 36.02

SHOW STATION FOR
ORIENTATION.

"T"

BEVEL 2"

WING LENGTH

SHOWING SKEW 20° & UNDER

SHOWING SKEW OVER 20°

WING LENGTH

* GIVE WING ANGLES ON
PLANS IN INCREMENTS
OF 5°. SEE BRIDGE MANUAL.

BUILD APRON & END OF BOX LEVEL.

BUILD APRON & END OF BOX LEVEL.

PLAN
LOOKING UP STATION

2'-0"
(TYP.)

EDGE OF SHOULDER AT
FINISHED GRADE (TYP.)

BOTTOM OF
SUB-BASE

SLOPE OF FILL

TOP OF WING AND
TOP OF SLAB

1'-0"

SLOPE OF
FILL

TOP SLAB

FILL HEIGHT

SLOPE OF FILL

4"

FOR STRAIGHT WINGS

FOR FLARED WINGS

DROP

BEVEL 2"

NAME
PLATE

BEVEL 2"

DROP

FOR STRAIGHT WINGS

FOR FLARED WINGS

CONST. JOINT

5½"

CONST. JOINT

CONST.
JOINT

1'-0"

2'-0"

1'-0"

2'-0"

ALT. CONST. JOINT
SEE STANDARD 36.03

VERTICAL CONST. JOINT
SEE STANDARD 36.03

CONST. JOINT

3'-0"

5'-0"

3'-0"

OPTIONAL
CONST. JOINT

CONST. JOINT

BOTTOM SLAB

UNDERCUT 1'-0". EXCAVATION FOR UNDERCUT TO BE
INCLUDED IN EXCAVATION FOR STRUCTURES, PLACE
GEOTEXTILE TYPE C, AND BACKFILL WITH 'BREAKER RUN'.
(TYPICAL UNDERCUT SHOWN. SEE STANDARD 9.02 FOR
ALTERNATIVES AND ADDITIONAL NOTES.)

OPTIONAL
CONST. JOINT

FOR CULVERTS AND
CATTLE PASSES

CULVERTS

CATTLE PASSES

CUT OFF WALL

18" MIN. WIDTH RUBBERIZED
MEMBRANE WATERPROOFING UP
WALLS & ACROSS TOP SLAB

CUT OFF WALL

OUTLET

SECTION C1

INLET

LEGEND

① INDICATES WING NUMBER

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF=1._ _
OPERATING RATING FACTOR: RF=1._ _
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): _ _ _ (KIPS)

** DESIGNED FOR FILL HEIGHT RANGE OF __TO__FEET

MATERIAL PROPERTIES:
CONCRETE MASONRY _____ f'c = 3,500 P.S.I.
BAR STEEL REINFORCEMENT _____ fy = 60,000 P.S.I.

NOTES

SEE STANDARD 36.02 FOR NOTES.

DESIGNER NOTES

FOR SECTION C2 AND CONST. JOINT DETAILS SEE STANDARD 36.03

** SEE SECTION 36.5 FOR DESIGN RANGE OF FILL HEIGHTS. HEIGHT TO BE TO THE
NEAREST 0.5 FEET ON FILLS UNDER 4 FEET AND TO THE NEAREST FOOT ON
FILLS OVER 4 FEET.

SEE STANDARD 36.02 FOR ADDITIONAL DESIGNER NOTES.

SEE CHAPTER 45 FOR LOAD RATING OF EXISTING CONCRETE BOX CULVERTS.

LOCATE THE NAME PLATE ON THE FIRST RIGHT WING TRAVELING IN THE
HIGHWAY CARDINAL DIRECTIONS OF NORTH OR EAST.

BOX CULVERT LAYOUT

BUREAU OF STRUCTURES

APPROVED: *Laura Shadewald*

DATE:
7-24

STANDARD 36.01