

VALUES LISTED IN "SCHEDULE OF DIMENSIONS AND REINFORCING STEEL" ARE MINIMUM VALUES. STRUCTURES THAT PROVIDE LARGER VALUES THAN THOSE SHOWN WILL BE CONSIDERED ACCEPTABLE

> 0.11 0.11 0.11 0.12 0.13

> > 0.15 | 0.17 |

0.19

A BARS (IN²/FT)

0.16 | 0.18 | 0.22

0.19 | 0.23 | 0.28 |

0.20 | 0.24 | 0.31

0.15 | 0.17 | 0.21

0.19 | 0.23 | 0.30

0.23 | 0.28 | 0.36

0.24 | 0.29 | 0.38

6'-10' 11'-15

TANDAR

DEPTH

4'-6"

5'-6"

3'-6"

4'-6"

5'-6"

6'-6"

BARREL DIMENSIONS

HEIGH1

3'

4'

2'

3'

4'

SPAN

4'

4'

5'

5'

5'

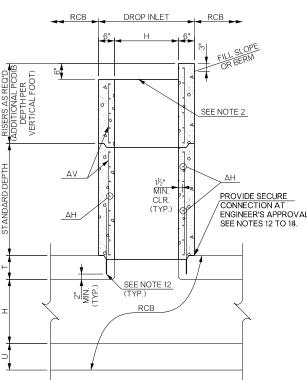
DESIGN

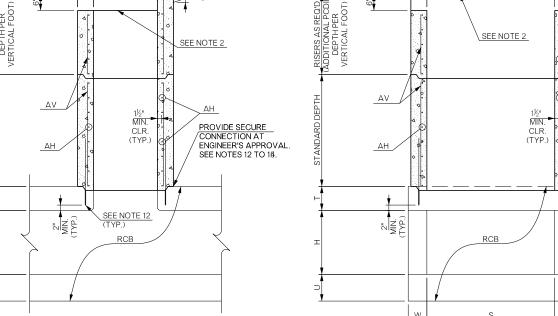
NO.

4

6

RCB __ DROP INLET RISERS AS REG'D ADDITIONAL PCDIE DEPTH PER VERTICAL FOOT) CLR. CONNECTION AT ENGINEER'S APPROVAL SEE NOTE 2 SEE NOTES 12 TO 15 AV MAX. SEE NOTE 12 SEE NOTE 8 SECTION A-A ΔΙ TERNATE 1





SECTION C-C ALTERNATE 2

0.11 0.11

0.11 0.11

0.11 0.11

0.11 0.11

0.11 0.11

0.12 0.13

4'-5' 5'-6' 6'-7'

0.11

0.11

0.11 | 0.11 | 0.11 | 0.11 | 0.11

0.11

0.11 0.11

0.11 0.11

0.11

0.21 0.22

0.31 0.33 AH BARS (IN²/FT) - ALTERNATE 2

0.11 | 0.11 | 0.11 |

0.11 | 0.11 | 0.11 |

8'-9' 9'-10' 10'-11' 11'-12' 12'-13' 13'-14' 14'-15'

0.11 | 0.11 | 0.12 | 0.13 | 0.13 | 0.14 | 0.15 |

0.12 | 0.14 | 0.15 | 0.16 | 0.17 | 0.18 | 0.19 |

0.15 | 0.17 | 0.18 | 0.19 | 0.20 | 0.21 | 0.23 |

0.11 0.12 0.13 0.14 0.15 0.16

0.11 0.12 0.13 0.14 0.15 0.16

0.11 | 0.11 | 0.11 |

0.11 | 0.11 | 0.12 |

0.12

0.13

0.17

0.17

0.11

0.11

0.11

0.11

SCHEDULE OF DIMENSIONS AND REINFORCING STEEL

0.25 0.27 0.29

0.17 | 0.18 | 0.19 |

AHBARS (IN2/FT) - ALTERNATE 1

0.14 0.15

0.21 0.23

4'-5' 5'-6' 6'-7' 7'-8' 8'-9' 9'-10' 10'-11' 11'-12' 12'-13' 13'-14' 14'-15

GALVANIZED GRADE A36 GALVANIZED 34 X 5" | A325 BOLT, A563DH NUT AND F436 WASHER

SECTION D-D

ALTERNATE 2

SEE NOTE 12

DROP INLET

SEE NOTE 2

SECTION B-B

ΔΙ TERNATE 1

DROP INLET

ΑV

SEE NOTE 8

CLR.

(TYP.

ALTERNATE ANCHORAGE DETAIL CONNECTION ASSEMBLIES PLACED AT 18" MAX ALONG THE SPAN SIDES OF THE DROP INLET. MINIMUM OF 2 CONNECTIONS PER SIDE

DESIGN DATA

MATERIAL:

CLASS A CONCRETE f'c = 4 KSI REINFORCING STEEL fy = 60 KSI LOADING:

HL-93

DESIGN

AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION ASTM C890 ASTM C913

GENERAL NOTES

- 1. ALL CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE 2019 ODOT STANDARD SPECIFICATIONS
- 2. FOR DETAILS OF GRATES SEE ROADWAY STANDARD CDIB-2. COST OF GRATES SHALL BE INCLUDED IN THE COST OF THE STRUCTURE.
- 3. THERE SHALL BE A MINIMUM VERTICAL DISTANCE OF 6 INCHES BETWEEN AN OPENING AND ANY EDGE.
- 4. PROVIDE LIFTING DEVICES IN CONFORMANCE WITH THE MANUFACTURER'S
- PROVIDE GRADE 60 REINFORCING STEEL CONFORMING TO ASTM A615 OR EQUIVALENT AREA OF WELDED WIRE REINFORCING CONFORMING TO ASTM A1064
- PROVIDE A MINIMUM CLEAR COVER OF 11/2 INCHES TO REINFORCING STEEL.
- 7. IF THE MANUFACTURER ELECTS TO USE WALLS OR SLABS WITH A THICKNESS OF 8 INCHES OR GREATER, THE WALLS OR SLABS WILL REQUIRE A SECONDARY LAYER OF REINFORCING STEEL. PROVIDE AN AREA OF REINFORCING STEEL EQUAL TO 0.11 IN 2/FT EACH WAY IN THE SECONDARY LAYER.
- THE FOUNDATION SHALL BE STABILIZED OR REMOVED AND REPLACED WITH FIRM AND STABLE FOUNDATION MATERIAL. A MINIMUM 3 INCH THICK LEVELING COURSE SHALL BE PROVIDED BELOW THE BASE AREA OF THE INLET AND EXTEND 6 INCHES BEYOND THE BASE AREA. THE LEVELING COURSE SHALL BE CONSTRUCTED WITH AGGREGATE BASE TYPE A. COSTS ASSOCIATED WITH THE FOUNDATION AND LEVELING COURSE SHALL BE INCLUDED IN THE PRICE BID OF THE STRUCTURE.
- 9. FLEXURAL REINFORCING STEEL SHALL NOT EXCEED SPACING OF 6 INCHES CENTER
- 10. FOR T, U, AND W DIMENSIONS, SEE BRIDGE STANDARDS RCB CULVERT DRAWINGS.
- 11. SEAL JOINTS BETWEEN SUBASSEMBLIES AND AT EACH ENTRANCE OR EXIT CONDUIT WITH PREFORMED OR BULK MASTIC IN CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. PROVIDE A SOIL-TIGHT CONNECTION AND SEAL IN ACCORDANCE WITH SECTION 611 OF THE STANDARD SPECIFICATIONS. JOINT SEALING SHALL BE INCLUDED IN THE COST OF THE INLET.
- 12. PROVIDE A SECURE CONNECTION BETWEEN THE DROP INLET AND RCB SUCH AS A CONCRETE COLLAR OR MECHANICAL CONNECTION AS STATED IN NOTES 13 THROUGH 15. THE CONTRACTOR MAY PROVIDE AN ALTERNATIVE ANCHORAGE DETAIL, APPROVED BY THE ENGINEER, TO CONNECT THE DROP INLET TO THE RCB.
- 13. THE CONTRACTOR MAY PLACE A FORMED AND POURED CONCRETE COLLAR BETWEEN THE DROP INLET AND RCB. PIN THE CONCRETE COLLAR TO THE DROP INLET AND RCB AS APPROVED BY THE ENGINEER.
- 14 DRILL AND EMBED #4 BARS AT 18 INCHES IN ACCORDANCE WITH SECTION 509.04.(D3) OF THE 2019 ODOT STANDARD SPECIFICATIONS. INCLUDE ALL COSTS OF DRILLING, DOWELS, EPOXY ANCHORAGE SYSTEM AND INCIDENTALS IN THE COST
- 15. AN ALTERNATE ANCHORAGE DETAIL MAY BE USED IN LIEU OF DRILLING AND EMBEDDING #4 BARS. SECURE DROP INLETS TO THE RCB WITH 34 INCH DIAMETER BOLTS, WASHERS, NUTS AND ANGLES OR PLATES. ALL HARDWARE SHALL BE GALVANIZED. INCLUDE ALL COSTS OF DRILLING, BOLTS, NUTS, WASHERS, ANGLES, PLATES, ANCHORAGE SYSTEM AND INCIDENTALS IN THE COST OF THE STRUCTURE. SEE "ALTERNATE ANCHORAGE DETAIL".
- 16. MAXIMUM DEPTH OF DROP INLETS IS 15 FEET, ANY DROP INLET WHICH IS GREATER THAN 15 FEET IN DEPTH SHALL BE A SPECIAL DESIGN AS SHOWN IN THE PLANS AND SHOULD NOT FOLLOW THIS STANDARD
- 17. ALL MATERIALS AND LABOR INCLUDED IN COST OF PRECAST INLET.

BASIS OF PAYMENT		
ITEM NO.	ITEM	UNIT
611(G)	PRECAST INLET (CDI RCB DES. ▲)	EA
611(H)	ADD'L DEPTH IN PRECAST INLET (CDI RCB DES. ▲)	VF

▲ SPECIFY INLET DESIGN NUMBER

APPROVED BY ROADWAY ENGINEER

DATE: 4/1/2025

ROADWAY DESIGN DIVISION STANDARD

PRECAST CONCRETE DROP INLETS FOR R.C. BOXES (4' x 2' TO 5' x 5')



2019 SPECIFICATIONS

PCDIB

R-53