

ORIGINATION FORM

Proposed Revisions to a Standard Plans Index
(Please provide all information – Incomplete forms will be returned)

Contact Information:

Date: May 7, 2018
Originator: Rick Jenkins
Phone: (850) 414-4355
Email: Rick.Jenkins@dot.state.fl.us

Standard Plans:

Index Number: 430-040
Sheet Number (s): 1 of 1
Index Title: Winged Concrete Endwalls - Single Round Pipe

Summary of the changes:

Reorganized Index.

Sheet 1: General Notes and Overview. Moved specification and payment information to Specifications. Deleted design information covered in the Design Manual. Added note on quantities for estimating purposes only.

Sheet 2: Details from old Sheet 1.



Commentary / Background:

With pay item changing to "Per Each", the quantities in the Index are being provided as an estimate.

Other Affected Offices / Documents: (Provide name of responsible personnel)

- | Yes | No | |
|-------------------------------------|-------------------------------------|--|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Other Standard Plans – |
| <input type="checkbox"/> | <input type="checkbox"/> | FDOT Design Manual – |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Basis of Estimates Manual – Melissa Hollis |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Standard Specifications – |
| <input type="checkbox"/> | <input type="checkbox"/> | Approved Product List – |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Construction – Jason Russell |
| <input type="checkbox"/> | <input type="checkbox"/> | Maintenance – |

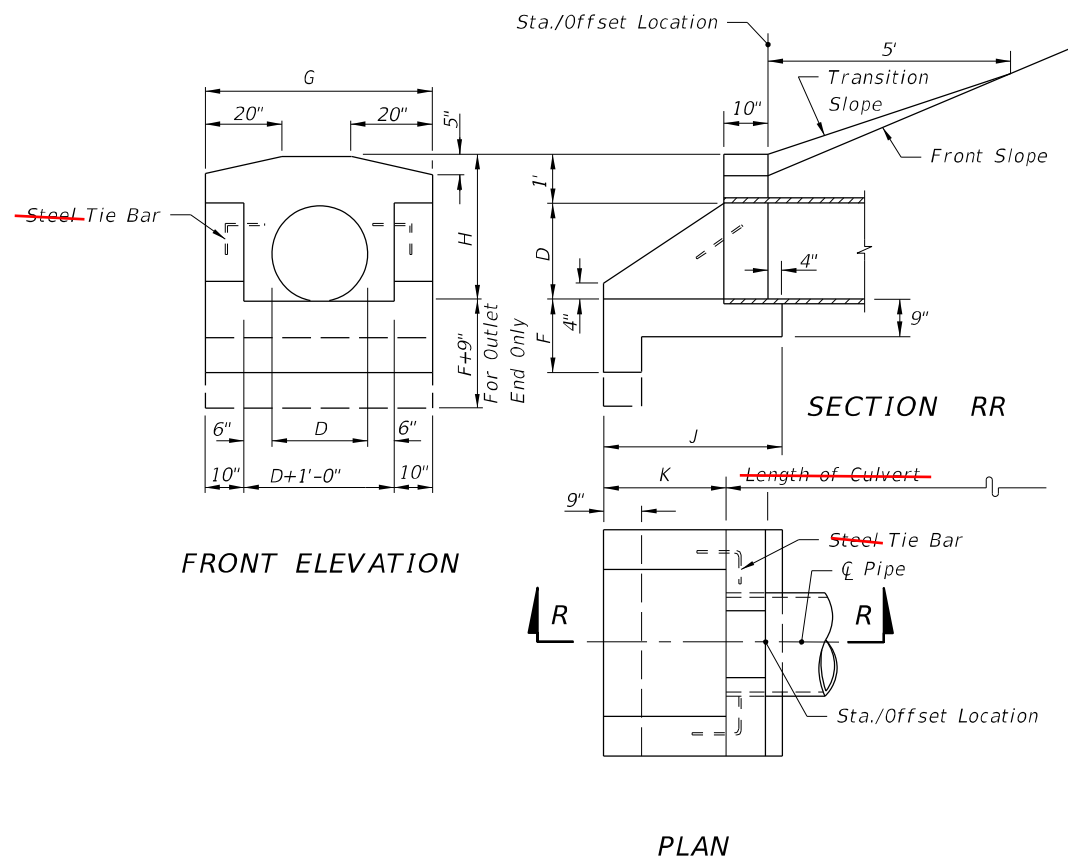
Origination Package Includes: (Email or hand deliver package to Derwood Sheppard)

- | Yes | N/A | |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Redline Mark-ups |
| <input type="checkbox"/> | <input type="checkbox"/> | Proposed Standard Plan Instructions (SPI) |
| <input type="checkbox"/> | <input type="checkbox"/> | Revised SPI |
| <input type="checkbox"/> | <input type="checkbox"/> | Other Support Documents |

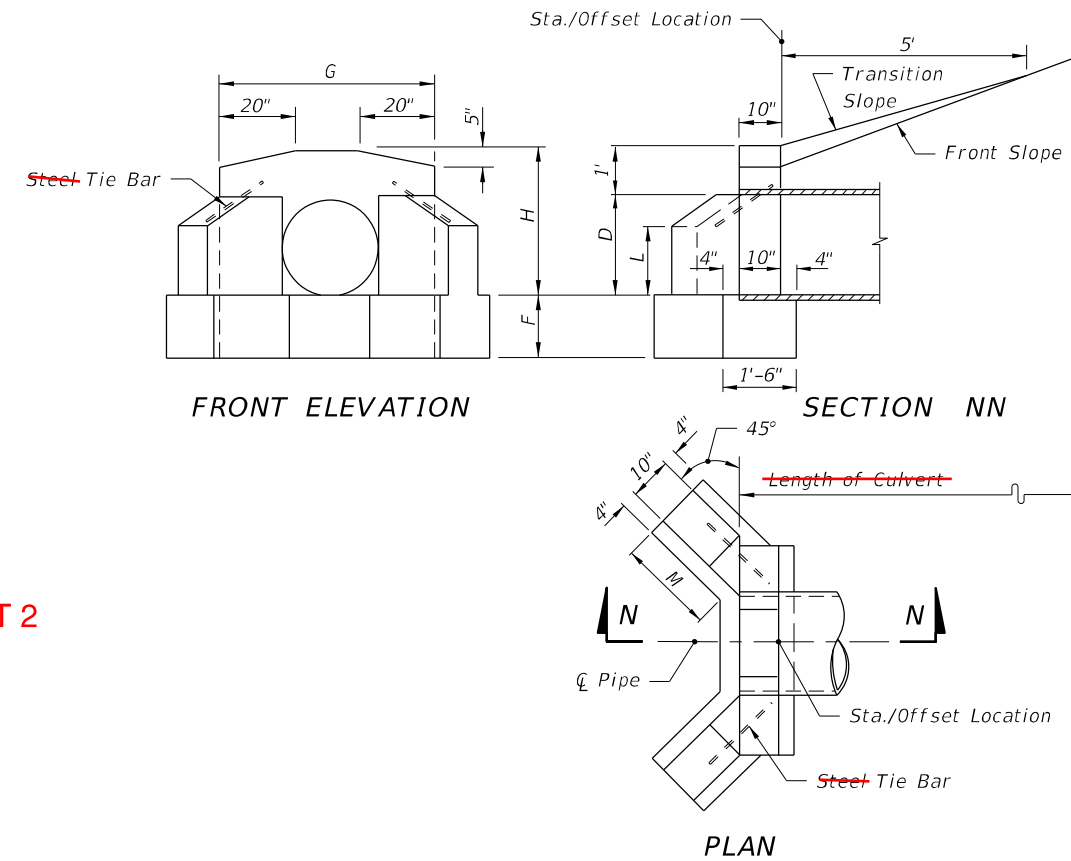
Implementation:

- Design Bulletin (Interim) DCE Memo Program Mgmt. Bulletin FY-Standard Plans (Next Release)

Contact the Roadway Design Office for assistance in completing this form



CONCRETE ENDWALL WITH U-TYPE WINGS FOR PIPE CULVERTS



CONCRETE ENDWALL WITH 45° WINGS FOR PIPE CULVERTS

SHEET 2

TABLE OF DIMENSIONS AND ESTIMATED QUANTITIES
PIPE CULVERT ENDWALLS WITH U-TYPE WINGS

| Opening Dia. | Area (ft ²) | DIMENSIONS | | | | | QUANTITIES IN ONE ENDWALL | | | | | | |
|-----------------|----------------------------|------------|-------|---------|-------|--------|-------------------------------|------|------|------|------|------|-------------------|
| | | Wall | | Footing | | | Concrete, Class I, Total (CY) | | | | | | Steel Tie Bars |
| | | G | H | K | F | J | RCP | | CMP | | CIP | | |
| 12" | 0.8 | 3'-8" | 2'-0" | 1'-0" | 1'-3" | 2'-2" | 0.48 | 0.55 | 0.49 | 0.57 | 0.49 | 0.57 | none |
| 15" | 1.2 | 3'-11" | 2'-3" | 1'-5" | 1'-3" | 2'-7" | 0.59 | 0.67 | 0.62 | 0.70 | 0.61 | 0.70 | none |
| 18" | 1.8 | 4'-2" | 2'-6" | 1'-9" | 1'-3" | 2'-11" | 0.70 | 0.79 | 0.74 | 0.82 | 0.74 | 0.82 | none |
| 24" | 3.1 | 4'-8" | 3'-0" | 2'-6" | 1'-6" | 3'-8" | 1.01 | 1.11 | 1.06 | 1.16 | 1.06 | 1.16 | 2-#6 Bars x 2'-0" |
| 30" | 4.9 | 5'-2" | 3'-6" | 3'-3" | 1'-6" | 4'-5" | 1.33 | 1.44 | 1.41 | 1.51 | 1.40 | 1.51 | 2-#6 Bars x 2'-0" |
| 36" | 7.1 | 5'-8" | 4'-0" | 4'-0" | 1'-9" | 5'-2" | 1.73 | 1.85 | 1.84 | 1.96 | 1.82 | 1.94 | 2-#6 Bars x 2'-6" |
| 42" | 9.6 | 6'-2" | 4'-6" | 4'-9" | 2'-0" | 5'-11" | 2.19 | 2.32 | 2.32 | 2.45 | | | 2-#6 Bars x 2'-6" |
| 48" | 12.6 | 6'-8" | 5'-0" | 5'-6" | 2'-0" | 6'-8" | 2.64 | 2.78 | 2.81 | 2.95 | | | 2-#6 Bars x 3'-0" |

TABLE OF DIMENSIONS AND ESTIMATED QUANTITIES
PIPE CULVERT ENDWALLS WITH 45° WINGS

| Opening Dia. | Area (ft ²) | DIMENSIONS | | | | | QUANTITIES IN ONE ENDWALL | | | | | | |
|-----------------|----------------------------|------------|--------|-------|---------|-------|---------------------------|------|------|------|------|------|-------------------|
| | | Wall | | | Footing | | Concrete, Class I | | | | | | Steel Tie Bars |
| | | H | G | L | M | F | Total (CY) | | | | | | |
| 15" | 1.2 | 2'-3" | 3'-7" | 1'-0" | 1'-3" | 1'-3" | 0.56 | 0.59 | 0.59 | 0.56 | 0.59 | 0.59 | none |
| 18" | 1.8 | 2'-6" | 3'-10" | 1'-2" | 1'-7" | 1'-3" | 0.74 | 0.77 | 0.77 | 0.74 | 0.77 | 0.77 | none |
| 24" | 3.1 | 3'-0" | 4'-4" | 1'-5" | 2'-1" | 1'-4" | 1.01 | 1.06 | 1.06 | 1.01 | 1.06 | 1.06 | 2-#6 Bars x 2'-0" |
| 30" | 4.9 | 3'-6" | 4'-10" | 1'-9" | 2'-5" | 1'-6" | 1.32 | 1.40 | 1.39 | 1.32 | 1.40 | 1.39 | 2-#6 Bars x 2'-0" |
| 36" | 7.1 | 4'-0" | 5'-4" | 2'-0" | 2'-11" | 1'-8" | 1.72 | 1.83 | 1.82 | 1.72 | 1.83 | 1.82 | 2-#6 Bars x 2'-6" |
| 42" | 9.6 | 4'-6" | 5'-10" | 2'-3" | 3'-6" | 2'-0" | 2.34 | 2.47 | 2.47 | 2.34 | 2.47 | 2.47 | 2-#6 Bars x 2'-6" |
| 48" | 12.6 | 5'-0" | 6'-4" | 2'-6" | 4'-0" | 2'-0" | 2.74 | 2.90 | 2.90 | 2.74 | 2.90 | 2.90 | 2-#6 Bars x 2'-6" |

GENERAL NOTES

Delete: Already in DM Table 3.5. Add to SPI?

Delete: Moved to Specification

1. Winged concrete endwalls are intended for use outside the clear zone.
2. Chamfer all exposed edges 3/4".
3. Concrete shall be Class I, except ASTM C478 (4000 psi) Concrete may be substituted for precast items manufactured in plants meeting the requirements of Section 449 of the Specifications.
4. Endwall to be paid for under the contract unit price for Class I Concrete.
5. Sodding to be in accordance with Index 524-001, and paid for under the contract unit price for Performance Turf, SY.

SHEET 1

10/24/2018 9:02:01 AM

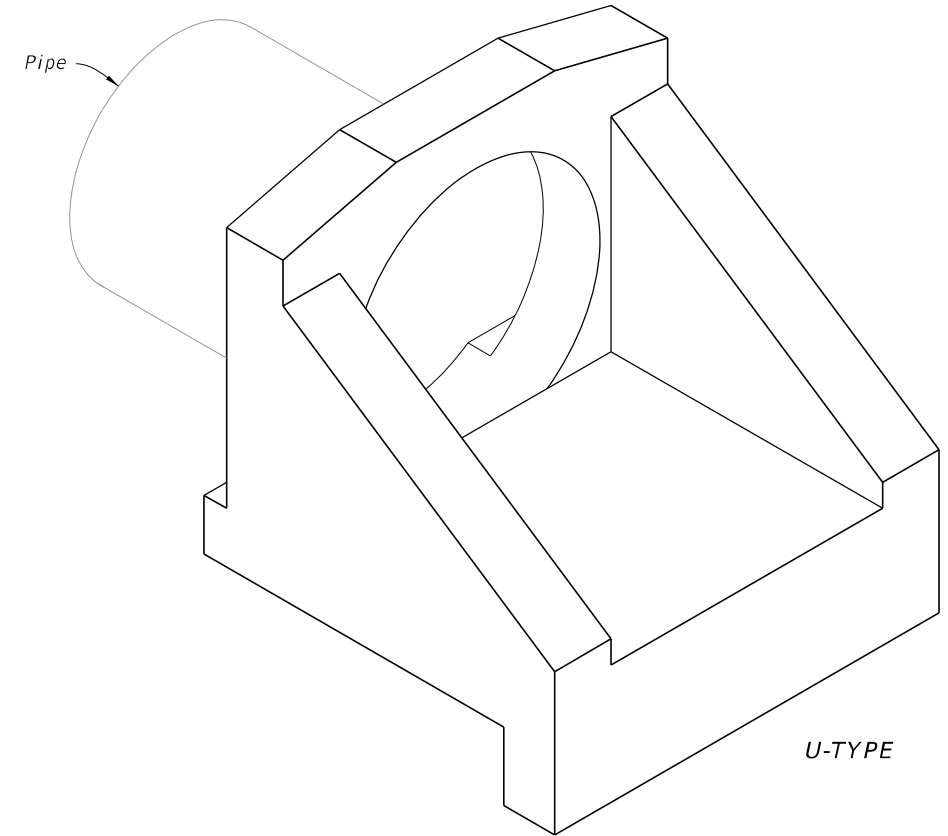
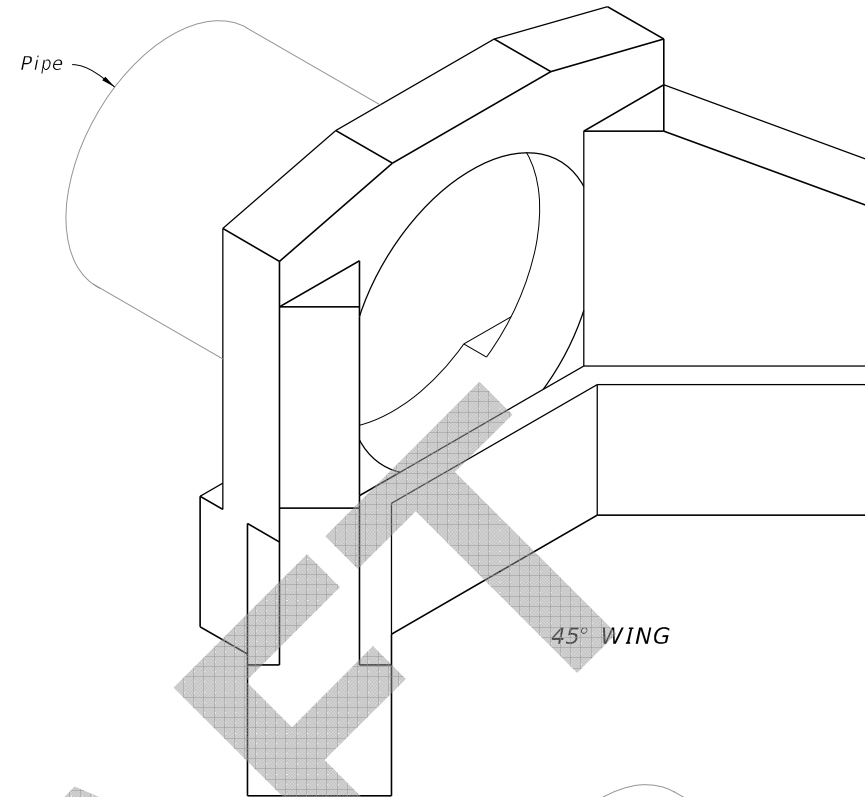
| | | | | | | |
|---------------------------|--------------|------|------------------------------|--|------------------|-----------------|
| LAST REVISION 11/01/17 | DESCRIPTION: | FDOT | FY 2019-20 STANDARD PLANS | WINGED CONCRETE ENDWALLS SINGLE ROUND PIPE | INDEX 430-040 | SHEET 1 of 1 |
|---------------------------|--------------|------|------------------------------|--|------------------|-----------------|

GENERAL NOTES:

1. Use Class I concrete.
2. Chamfer all exposed edges and corners $\frac{3}{4}$ " unless otherwise shown.
3. Quantities shown are for estimating purposes only.

| TABLE OF CONTENTS: | |
|--------------------|----------------------------|
| Sheet | Description |
| 1 | General Notes and Contents |
| 2 | U-Type and 45° Endwalls |

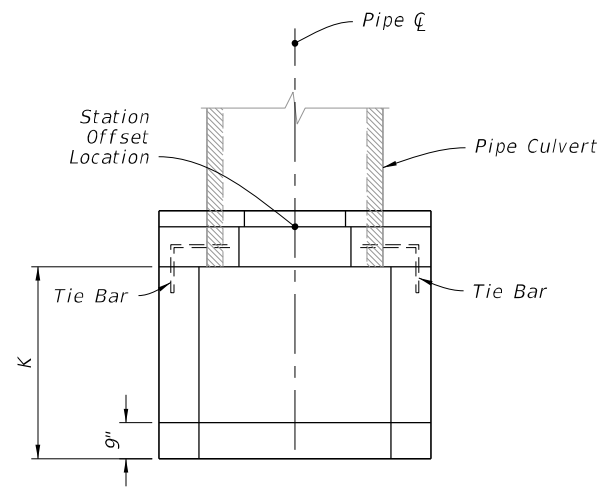
DRAWING



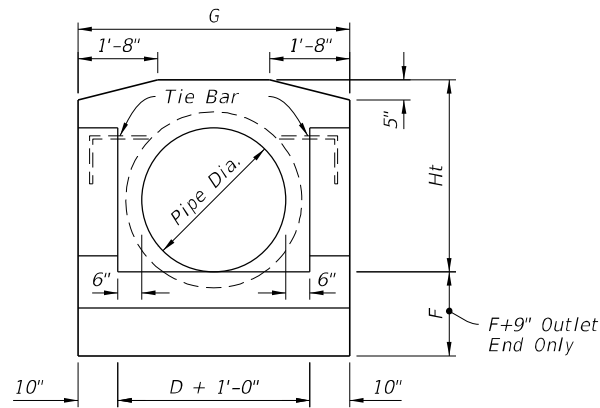
===== WINGED CONCRETE ENDWALLS =====

8/12/2019 1:26:40 PM

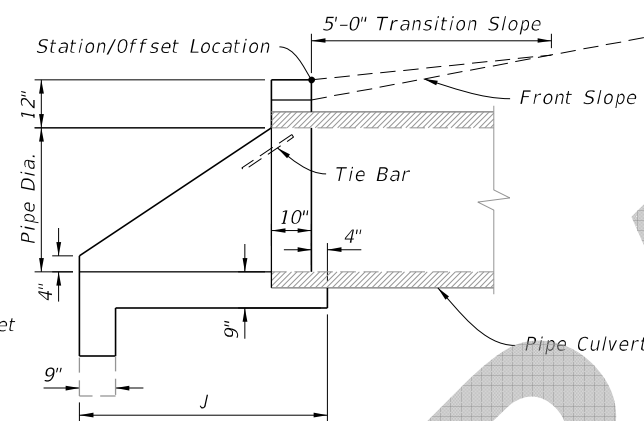
| | | | | | | |
|------------------------------|----------|--------------|----------------------------------|--------------------------|------------------|-----------------|
| LAST REVISION 11/01/19 | REVISION | DESCRIPTION: | FY 2020-21 STANDARD PLANS | WINGED CONCRETE ENDWALLS | INDEX 430-040 | SHEET 1 of 2 |
|------------------------------|----------|--------------|----------------------------------|--------------------------|------------------|-----------------|



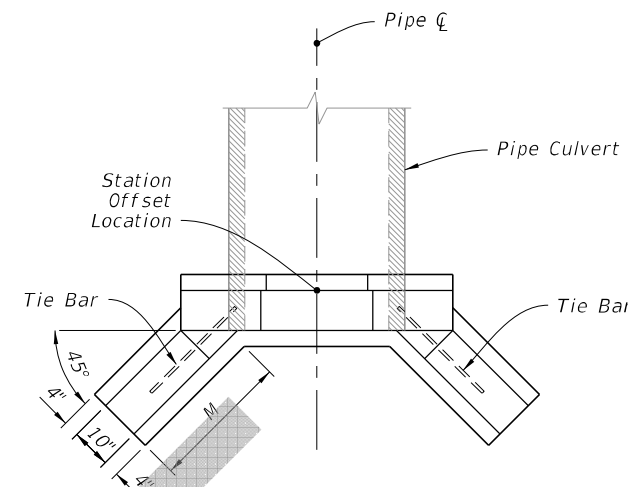
PLAN



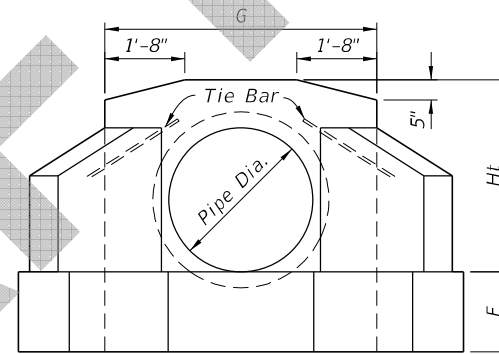
FRONT ELEVATION



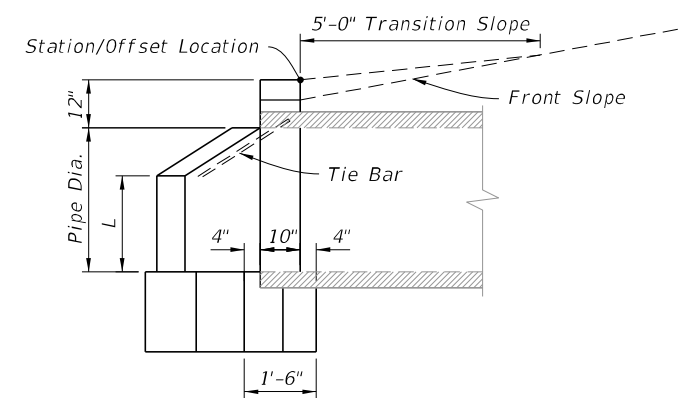
SIDE ELEVATION



PLAN



FRONT ELEVATION



SIDE ELEVATION

| DIMENSIONS AND ESTIMATED QUANTITIES PIPE CULVERT ENDWALLS WITH U-TYPE WINGS | | | | | | | | | | | | | |
|---|-------------------------|--------|-------|---------|-------|-------------------------------|-------|--------|-------|--------|-------|----------------|-------------------|
| DIMENSIONS | | | | | | QUANTITIES IN ONE ENDWALL | | | | | | | |
| Pipe | | Wall | | Footing | | Concrete, Class I, Total (CY) | | | | | | Steel Tie Bars | |
| Di. D | Area (ft ²) | G | Ht | K | F | J | RCP | | CMP | | CIP | | |
| | | | | | | | Inlet | Outlet | Inlet | Outlet | Inlet | Outlet | |
| 15" | 1.2 | 3'-11" | 2'-3" | 1'-5" | 1'-3" | 2'-7" | 0.59 | 0.67 | 0.62 | 0.70 | 0.61 | 0.70 | none |
| 18" | 1.8 | 4'-2" | 2'-6" | 1'-9" | 1'-3" | 2'-11" | 0.70 | 0.79 | 0.74 | 0.82 | 0.74 | 0.82 | none |
| 24" | 3.1 | 4'-8" | 3'-0" | 2'-6" | 1'-6" | 3'-8" | 1.01 | 1.11 | 1.06 | 1.16 | 1.06 | 1.16 | 2-#6 Bars x 2'-0" |
| 30" | 4.9 | 5'-2" | 3'-6" | 3'-3" | 1'-6" | 4'-5" | 1.33 | 1.44 | 1.41 | 1.51 | 1.40 | 1.51 | 2-#6 Bars x 2'-0" |
| 36" | 7.1 | 5'-8" | 4'-0" | 4'-0" | 1'-9" | 5'-2" | 1.73 | 1.85 | 1.84 | 1.96 | 1.82 | 1.94 | 2-#6 Bars x 2'-6" |
| 42" | 9.6 | 6'-2" | 4'-6" | 4'-9" | 2'-0" | 5'-11" | 2.19 | 2.32 | 2.32 | 2.45 | | | 2-#6 Bars x 2'-6" |
| 48" | 12.6 | 6'-8" | 5'-0" | 5'-6" | 2'-0" | 6'-8" | 2.64 | 2.78 | 2.81 | 2.95 | | | 2-#6 Bars x 3'-0" |

ENDWALL WITH U-TYPE WINGS

| DIMENSIONS AND ESTIMATED QUANTITIES PIPE CULVERT ENDWALLS WITH 45° WINGS | | | | | | | | | | | |
|--|-------------------------|-------|--------|-------|---------|-------|---------------------------|------|------|-------------------|--|
| DIMENSIONS | | | | | | | QUANTITIES IN ONE ENDWALL | | | | |
| Pipe | | Wall | | | Footing | | Concrete, Class I | | | Steel Tie Bars | |
| Di. D | Area (ft ²) | Ht | G | L | M | F | Total (CY) | | | | |
| | | | | | | | RCP | CMP | CIP | | |
| 15" | 1.2 | 2'-3" | 3'-7" | 1'-0" | 1'-3" | 1'-3" | 0.56 | 0.59 | 0.59 | none | |
| 18" | 1.8 | 2'-6" | 3'-10" | 1'-2" | 1'-7" | 1'-3" | 0.74 | 0.77 | 0.77 | none | |
| 24" | 3.1 | 3'-0" | 4'-4" | 1'-5" | 2'-1" | 1'-4" | 1.01 | 1.06 | 1.06 | 2-#6 Bars x 2'-0" | |
| 30" | 4.9 | 3'-6" | 4'-10" | 1'-9" | 2'-5" | 1'-6" | 1.32 | 1.40 | 1.39 | 2-#6 Bars x 2'-0" | |
| 36" | 7.1 | 4'-0" | 5'-4" | 2'-0" | 2'-11" | 1'-8" | 1.72 | 1.83 | 1.82 | 2-#6 Bars x 2'-6" | |
| 42" | 9.6 | 4'-6" | 5'-10" | 2'-3" | 3'-6" | 2'-0" | 2.34 | 2.47 | | 2-#6 Bars x 2'-6" | |
| 48" | 12.6 | 5'-0" | 6'-4" | 2'-6" | 4'-0" | 2'-0" | 2.74 | 2.90 | | 2-#6 Bars x 2'-6" | |

ENDWALL WITH 45° WINGS

8/12/2019 1:26:41 PM

U-TYPE AND 45° ENDWALLS

| | | | | | | | |
|---------------------------|----------|--------------|--|------------------------------|---------------------------------|------------------|-----------------|
| LAST REVISION 11/01/19 | REVISION | DESCRIPTION: | | FY 2020-21 STANDARD PLANS | <p>WINGED CONCRETE ENDWALLS</p> | INDEX 430-040 | SHEET 2 of 2 |
|---------------------------|----------|--------------|--|------------------------------|---------------------------------|------------------|-----------------|