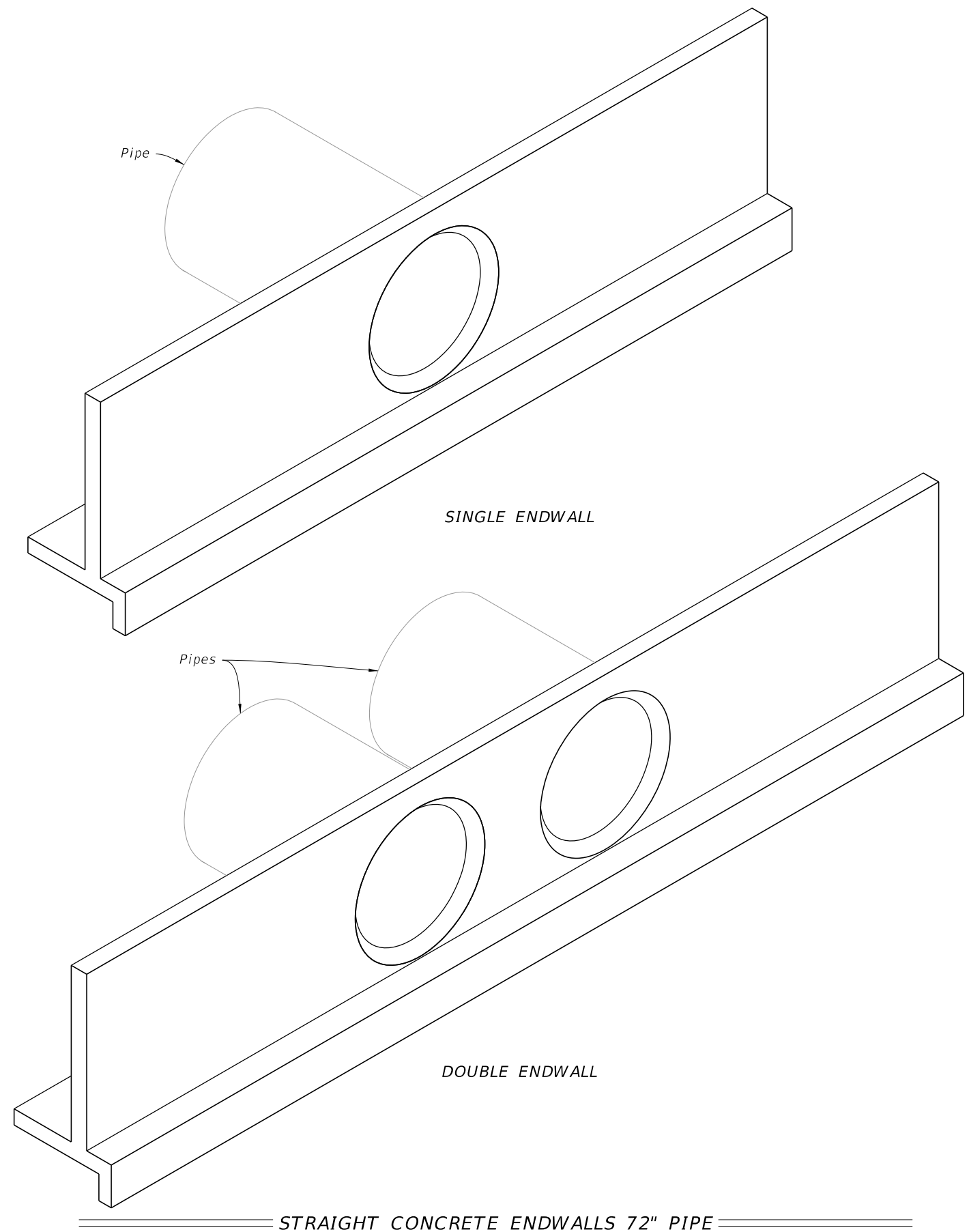


GENERAL NOTES:

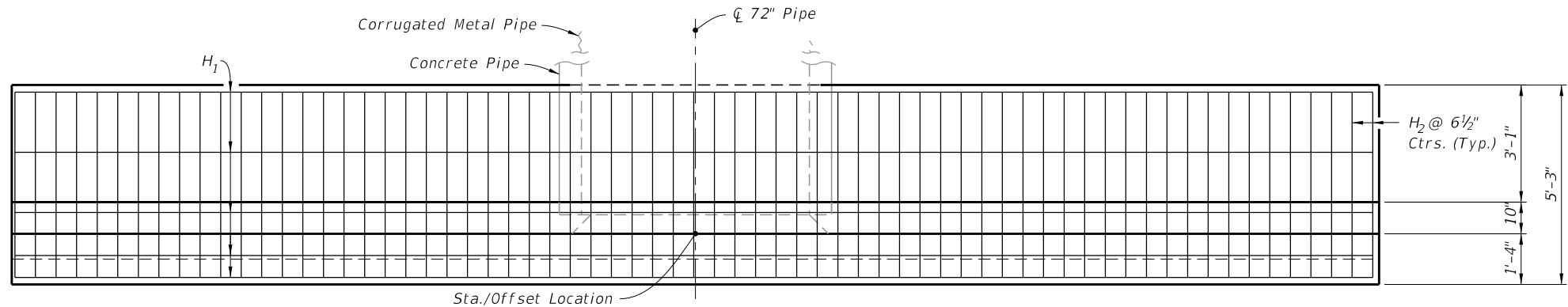
1. Use Class II concrete.
2. Reinforcing steel is either Grade 40 or 60.
3. Endwalls may be cast in place or precast concrete. The Contractor or the Supplier will determine the additional reinforcement necessary for handling precast units.
4. Chamfer all exposed edges and corners $\frac{3}{4}$ " unless otherwise shown.
5. Quantities shown are for estimating purposes only.

| TABLE OF CONTENTS: | |
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| Sheet | Description |
| 1 | General Notes and Contents |
| 2 | Single 72" Pipe Endwall Details |
| 3 | Double 72" Pipe Endwall Details |



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| | | | | | | |
|---------------------------|----------|--------------|---|--|------------------|-----------------|
| LAST REVISION 11/01/18 | REVISION | DESCRIPTION: |  FY 2020-21 STANDARD PLANS | STRAIGHT CONCRETE ENDWALLS SINGLE AND DOUBLE 72" PIPE | INDEX 430-033 | SHEET 1 of 3 |
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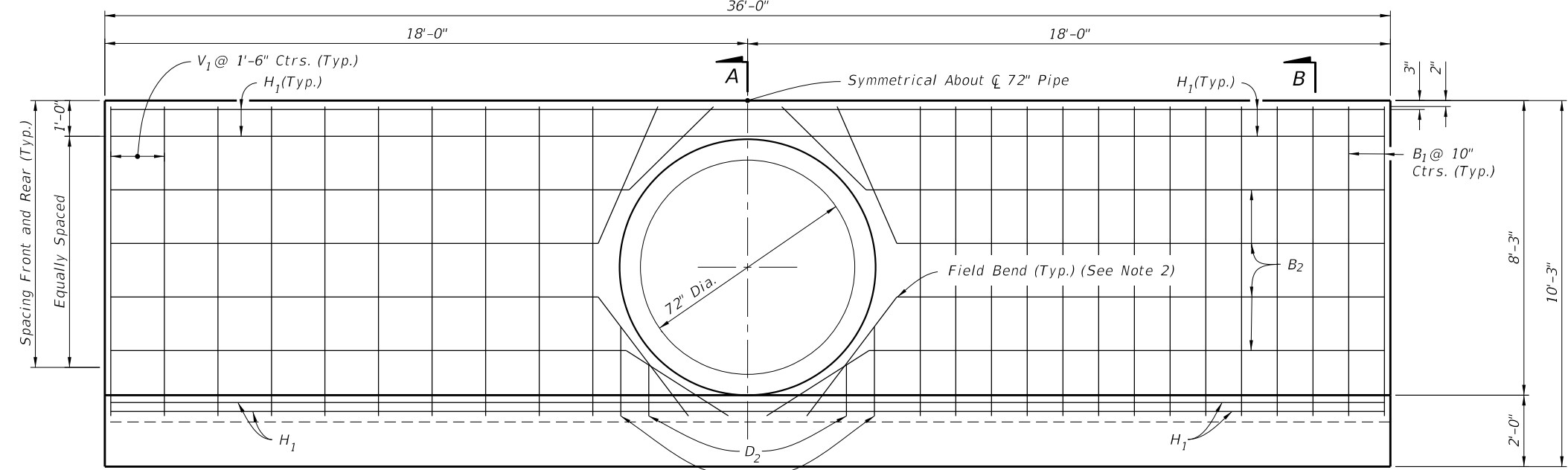
PLAN
(Showing Bars In Footing)
36'-0"

NOTES:
 1. 2" clearance on all reinforcement, unless otherwise shown.
 2. Cut and bend B_2 Bars as shown.
 3. All bar dimensions are out to out.

LEGEND:
 H = Horizontal Bars B = Bent Bars
 V = Vertical Bars D = Dowels or Diagonal Bars

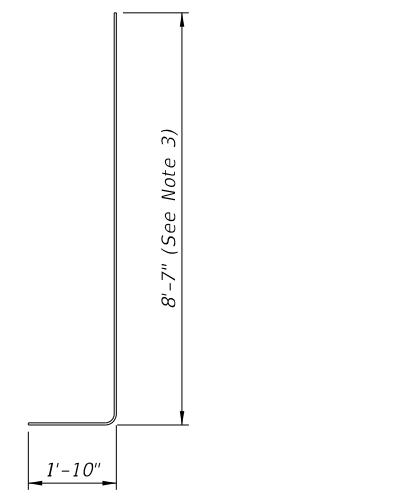
| SINGLE 72" PIPE ENDWALL ESTIMATED QUANTITIES | | | |
|--|---------|------|------|
| ITEM | UNIT | RCP | CMP |
| Class II Concrete | Cu. Yd. | 14.4 | 14.5 |
| Reinforcing Steel | Lb. | 1249 | 1249 |

| BILL OF REINFORCING STEEL | | | |
|---------------------------|------|-----------|--------|
| MARK | SIZE | NO. REQD. | LENGTH |
| H_1 | 4 | 9 | 35'-8" |
| H_2 | 5 | 68 | 4'-11" |
| V_1 | 4 | 20 | 8'-7" |
| B_1 | 5 | 34 | 10'-5" |
| B_2 | 4 | 8 | 35'-8" |
| D_1 | 4 | 4 | 2'-6" |
| D_2 | 4 | 4 | 1'-6" |

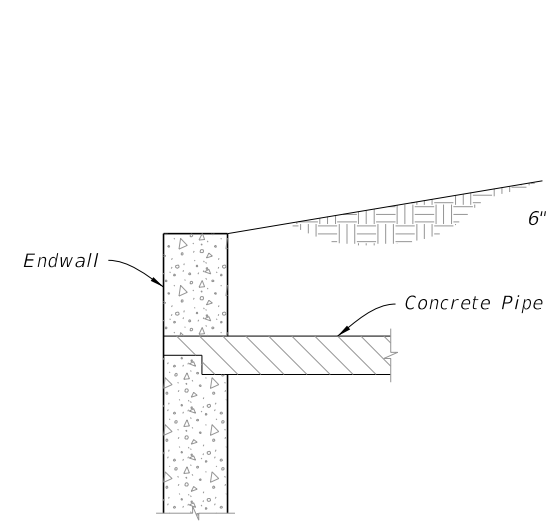


HALF ELEVATION
(Showing Bars in Front Face of Wall)

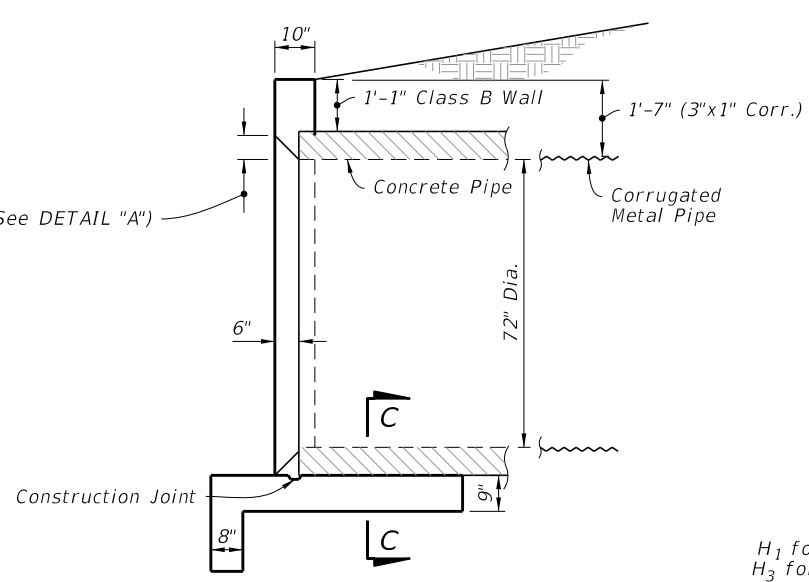
HALF ELEVATION
(Showing Bars in Back Face of Wall)



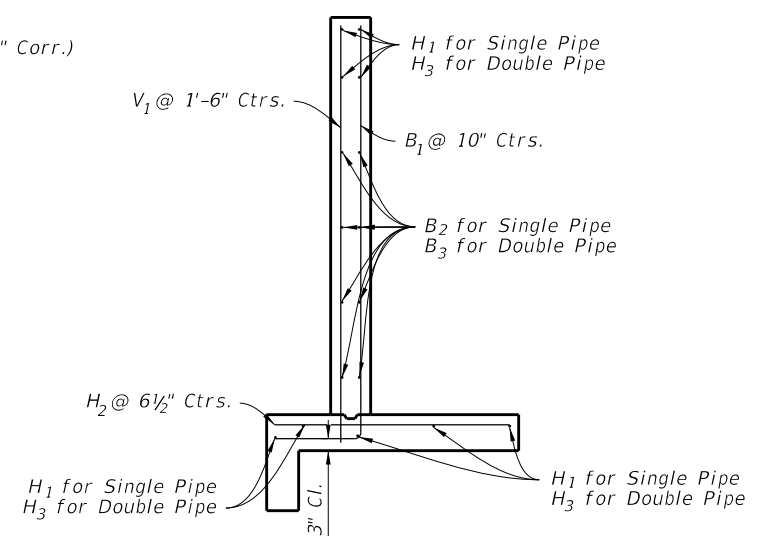
BAR B_1
BENDING DIAGRAM



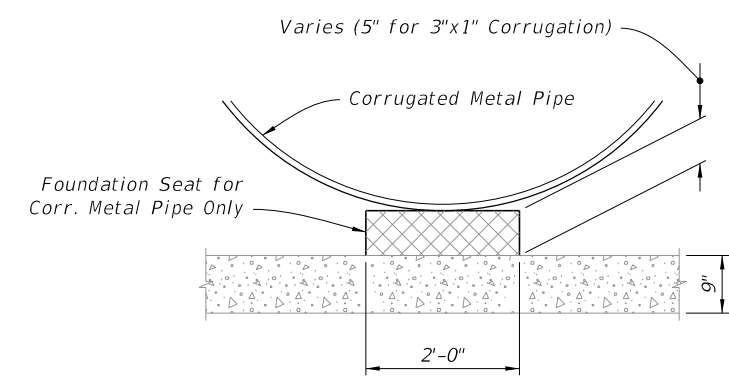
DETAIL "A"
(Concrete Pipe Optional Entrance)



SECTION A-A
(Rebar Not Shown)



SECTION B-B
(Typical Section)



SECTION C-C

SINGLE 72" PIPE ENDWALL DETAILS

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| | | | | | |
|---------------------------|--------------|----------------------------------|--|------------------|-----------------|
| LAST REVISION 11/01/19 | DESCRIPTION: | FY 2020-21 STANDARD PLANS | STRAIGHT CONCRETE ENDWALLS SINGLE AND DOUBLE 72" PIPE | INDEX 430-033 | SHEET 2 of 3 |
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**DOUBLE 72" PIPE ENDWALL
ESTIMATED QUANTITIES**

| ITEM | UNIT | RCP | CMP |
|-------------------|---------|------|------|
| Class II Concrete | Cu. Yd. | 17.5 | 17.8 |
| Reinforcing Steel | Lb. | 1519 | 1519 |

BILL OF REINFORCING STEEL

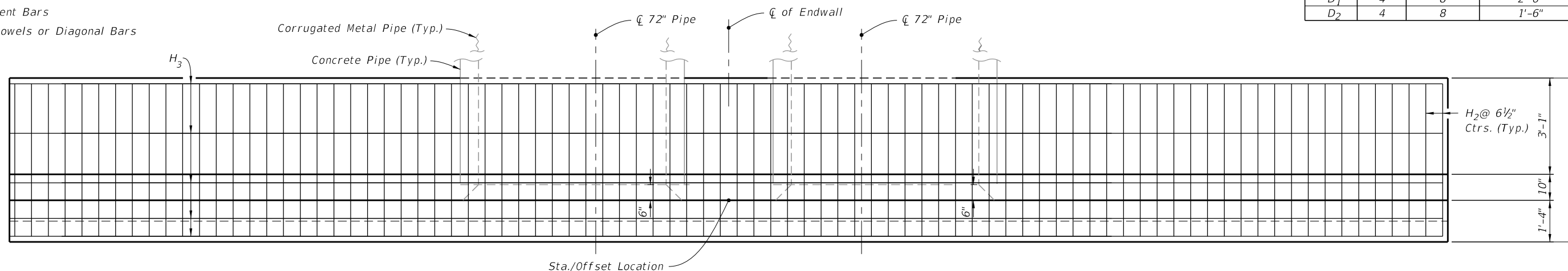
| MARK | SIZE | NO. REQD. | LENGTH |
|----------------|------|-----------|--------|
| H ₂ | 5 | 85 | 4'-11" |
| H ₃ | 4 | 9 | 45'-8" |
| V ₁ | 4 | 23 | 8'-7" |
| B ₁ | 5 | 38 | 10'-5" |
| B ₃ | 4 | 8 | 45'-8" |
| D ₁ | 4 | 8 | 2'-6" |
| D ₂ | 4 | 8 | 1'-6" |

NOTES:

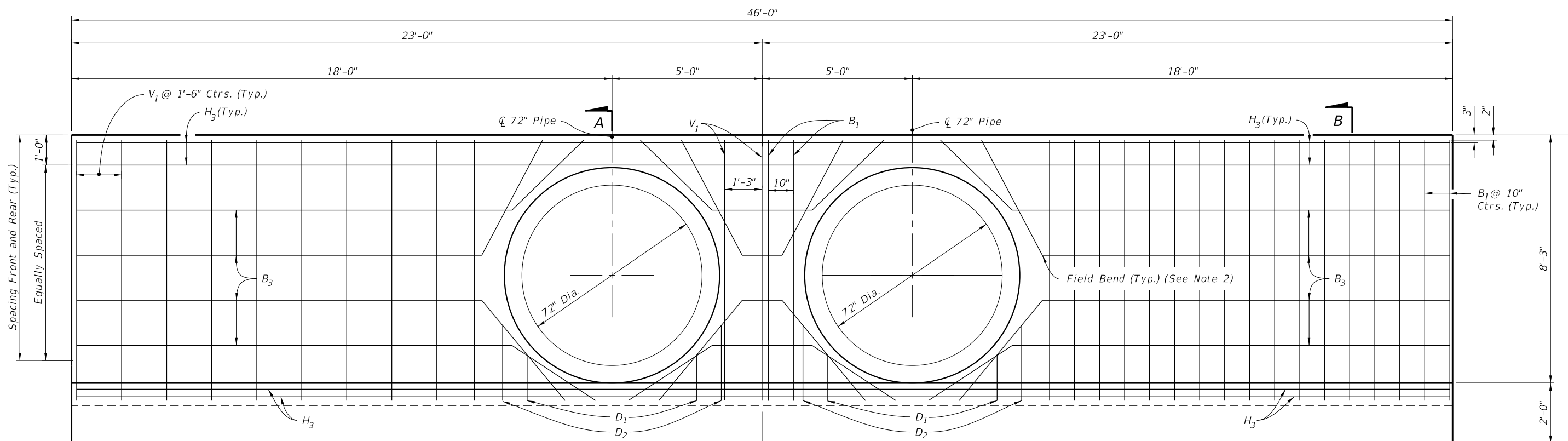
- 2" clearance on all reinforcement, unless otherwise shown.
- Cut and bend B₃ Bars as shown.
- All bar dimensions are out to out.

LEGEND:

- H = Horizontal Bars
- V = Vertical Bars
- B = Bent Bars
- D = Dowels or Diagonal Bars



PLAN
(Showing Bars In Footing)



HALF ELEVATION
(Showing Bars in Front Face of Wall)

HALF ELEVATION
(Showing Bars in Back Face of Wall)

DOUBLE 72" PIPE ENDWALL DETAILS

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LAST REVISION
11/01/19

REVISION
DESCRIPTION:



FY 2020-21
STANDARD PLANS

STRAIGHT CONCRETE ENDWALLS
SINGLE AND DOUBLE 72" PIPE

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430-033

SHEET
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