

Show arrow heads pointing up station if describe grade of a tangent and use "+/-" to describe a rising or falling grade.

What does this Sta./Elev. marker signify? PVC? PVI? PVT?

Is this the VPI of a vertical curve? Provide vertical curve length

What does this Sta./Elev. marker signify? PVC? PVI? PVT?

Change made

Is this the VPI of a vertical curve? Provide vertical curve length

Length of Vertical Curve added

Remove arrow heads from grades of vertical curves. This can make it confusing with the "+/-" (typical all vertical curve callouts).

Change made

Length of Vertical Curve added

Notice and Disclaimer Regarding Boring Log Data

"" Indicates location of borings.

The locations of all subsurface borings for this structure are shown on the plan sheet(s) for this structure. The boring data for all locations indicated, as well as any other boring logs or other factual records of subsurface data and investigations performed by the Engineer for the design of the project, are shown on Sheet(s) No. 1-7. No greater significance or weight should be given to the boring data depicted on the plan sheets than is given to the subsurface data available from the Engineer or elsewhere.

The Engineer does not represent or warrant that any such boring data accurately depicts the conditions to be encountered in constructing this project. A contractor assumes all risks it may encounter in basing its bid prices, time or schedule of performance on the boring data depicted here, or on any other documentation not expressly warranted, which the contractor may obtain from the Engineer.

| Hydrologic Data |
|--|
| Drainage Area = 56.8 (sq. mi.) Design Flood Frequency = 50 years Design Flood Discharge = 4,794 cfs Design Flood (D.F.) Elevation = 809.8 |
| Base Flood (100-year) |
| Base Flood Elevation = 811.28 Base Flood Discharge = 5,636 cfs Estimated Backwater = 0.2 ft Average Velocity thru Opening = 2.6 ft/s |
| h Freeboard (50-year) |
| Design H _g Water = 809.8 Freeboard = 2.6 ft |
| Roadway Overlapping |
| Overlapping Flood Discharge = N/A Overlapping Flood Frequency N/A years Flood Elevation = N/A |

Notes:

Roadway fill shall be completed to the final roadway section and up to the elevation of the concrete beam within the limits of the structure and for not less than 25 feet in back of the fill face of the end bents before any piles are driven for any bents falling within the embankment section.

All bents are parallel.

All longitudinal dimensions shown are horizontal.

Confirm 3' End Bent cap width is adequate to provide clear between bent up strands from P/S girders and Fill Face of End Bent (typical both End Bents)

3' End Bent cap is adequate

Consider expansion bearings at Int. Bents due to "stout" wall piers being proposed. Allow for expansion and contraction of superstructure (typical both Int. Bents).

Expansion bearings will be considered at final design

What foundation type is being considered for Int. Bents? Is there concerns with scour due to depth of channel and location of bottom of wall piers shown (typical both Int. Bents).

Driven piles will be used at all locations. Scour depth will be considered. Scour is minimal.

Email from Clint Loumaster states the minimum aesthetic girder elevation is approx. 811.0 ft near abutments. This should be ok. As long as we have 2 feet of freeboard at the Int. Bents and under Span 2 for the 50-yr event then it should be ok. Keep 1 foot of freeboard for 100-yr event is a good idea though.

Freeboard over the 50-yr design storm will be provided

Were borings near Int. Bents considered? Was it going to be too difficult to get a drill rig near the Int. Bent locations?

Borings were requested. Geography did not allow for borings to be taken.

Only showing a 12" "shy" distance between edge of lane and barrier curb? Was using a larger shoulder width considered? Can the 12" "shy" distance handle drainage without encroaching on too much of the exterior lanes?

This is not a MoDOT bridge. City of Lee's Summit requires 1-lane remain open. 1-lane will be provided

CL Brg. End Bent No. 1

Added

Int. Bent No. 2

Int. Bent No. 3

CL Brg. End Bent No. 4

Added

Begin Sta. 11+77.70
Pr. Gr. Elev. 819.10

Sta. 12+37.72
Pr. Gr. Elev. 819.91

Sta. 13+07.72
Pr. Gr. Elev. 819.87

End Sta. 13+67.74
Pr. Gr. Elev. 819.03

SPAN (1-2)

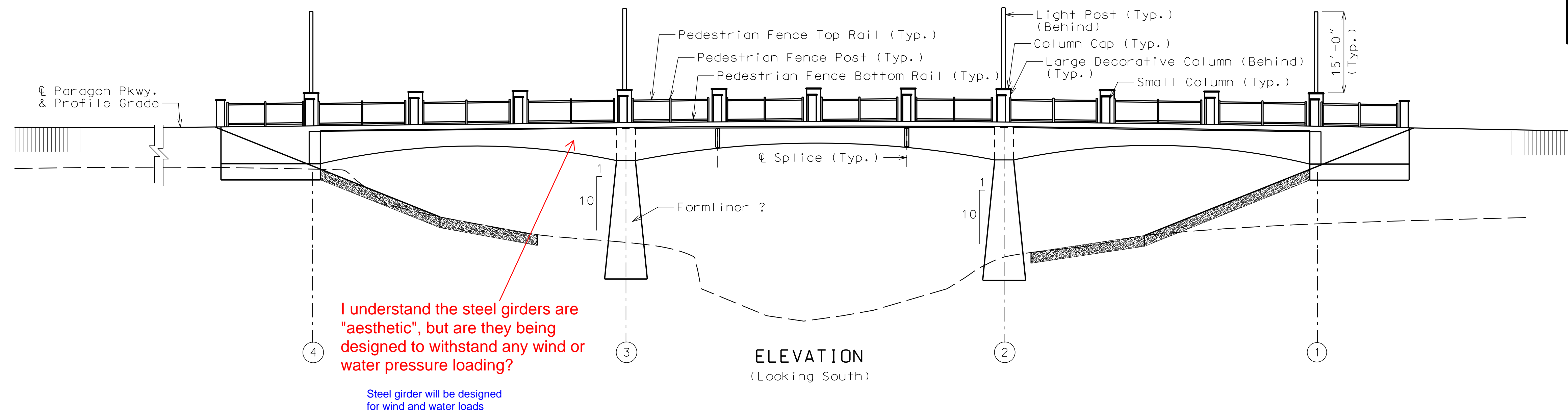
SPAN (2-3)

SPAN (3-4)

PLAN

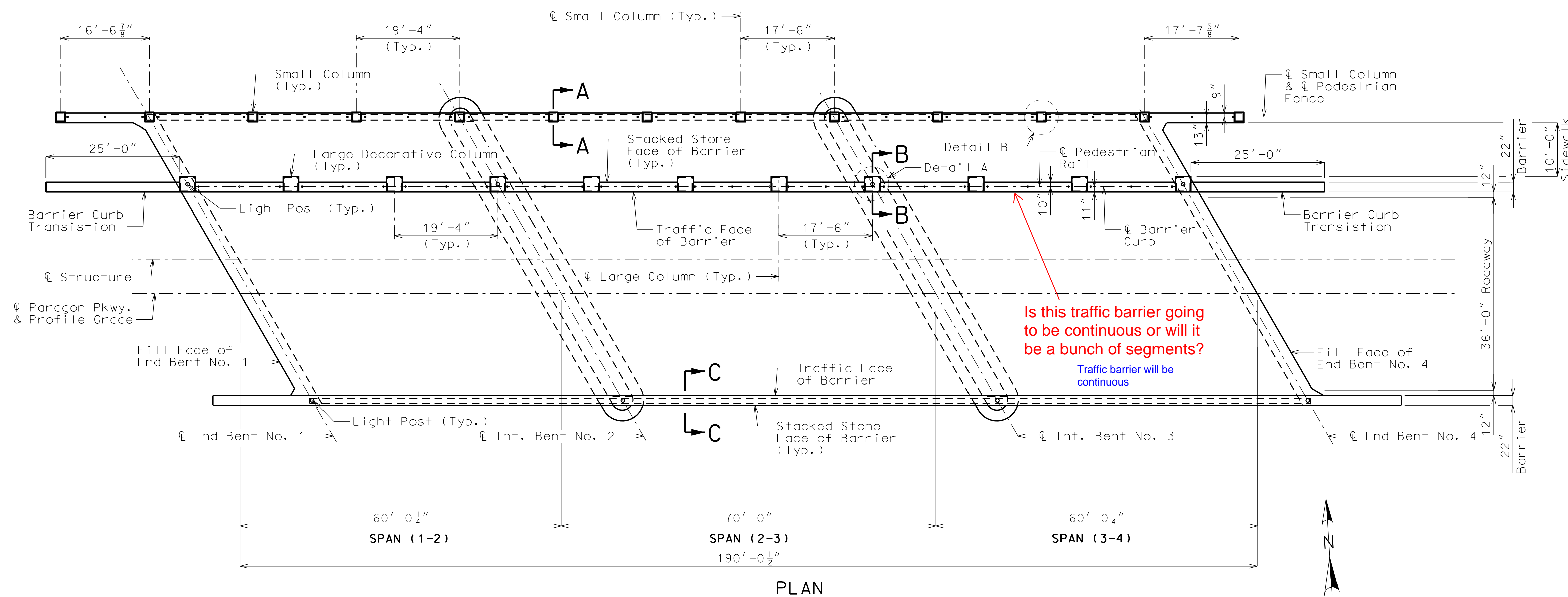
BRIDGE: WEST PARAGON PARKWAY OVER LITTLE BLUE RIVER

Note: This drawing is not to scale. Follow dimensions.



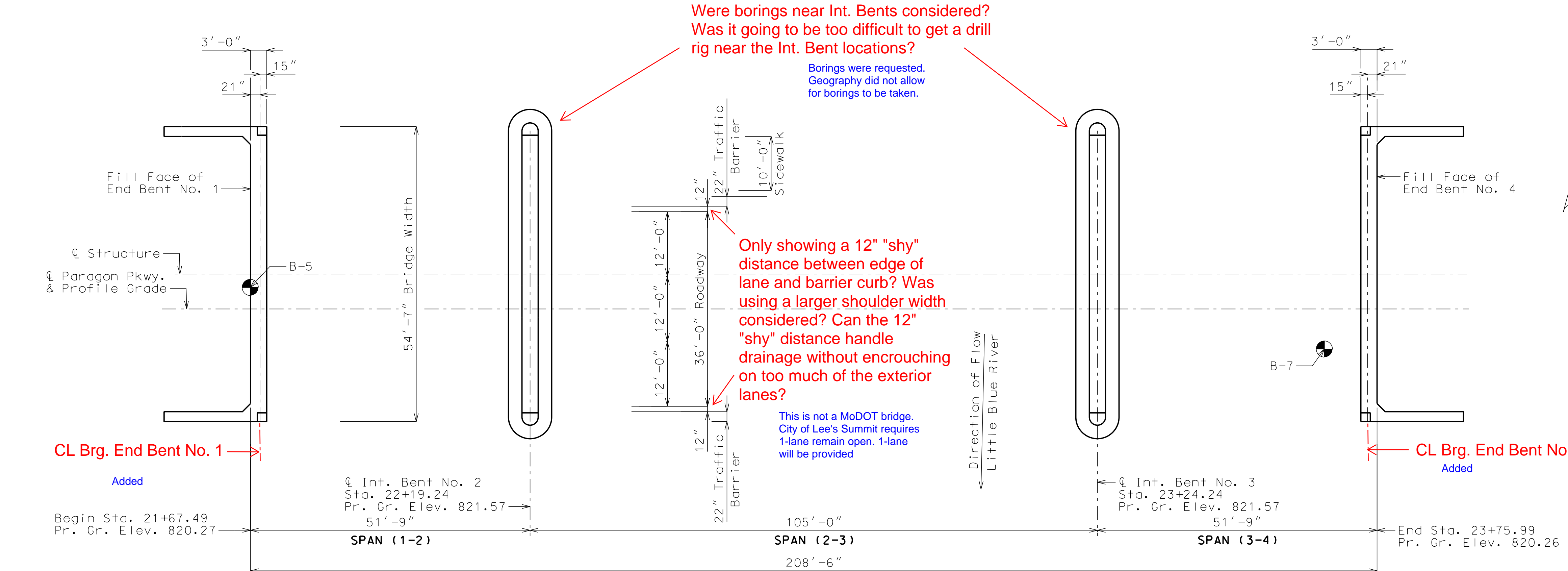
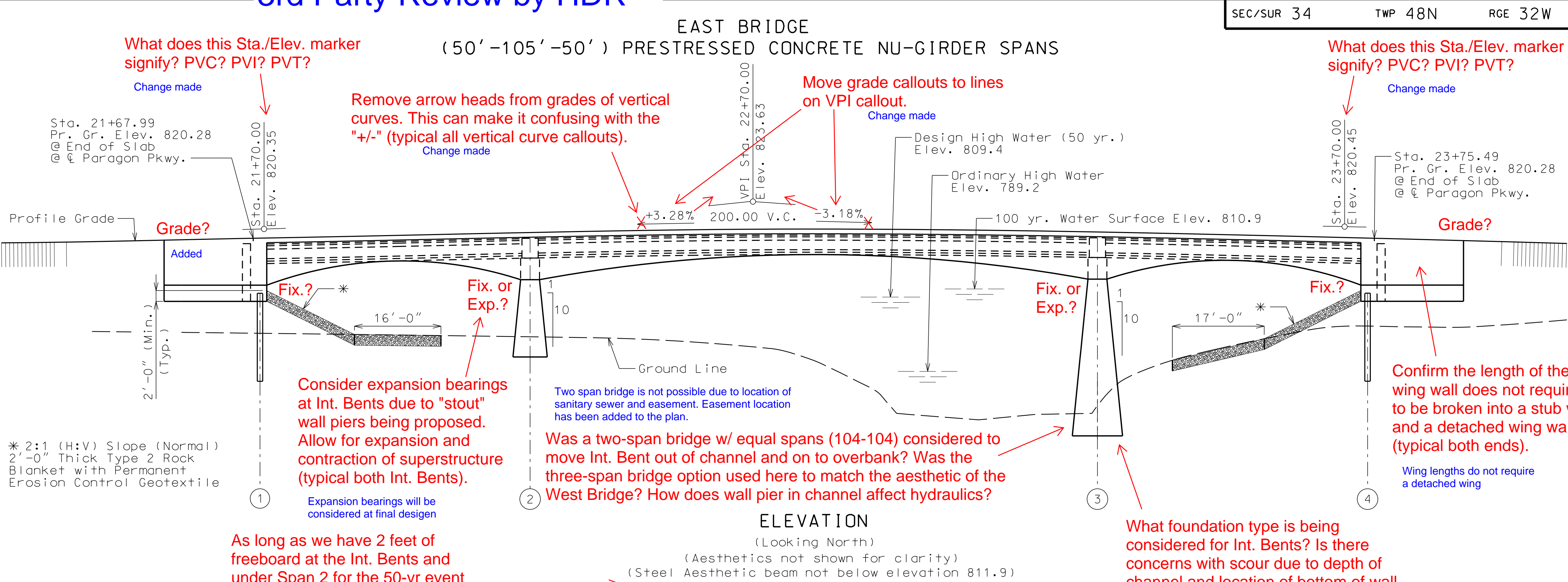
Notes:

For Detail A, Detail B, Section A-A, B-B & C-C,
see Sheet No. 5.



Note: This drawing is not to scale. Follow dimensions.

Architect 00212, Professional Engineer 000133, Landscape Architect 000025, Professional Land Surveyor 000059



SEC/SUR 34 TWP 48N RGE 32W

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913.492.0400
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Joshua J. Miller
Professional Engineer
License No. 2009010386

Bridge Plans
General Plan & Elevation

| NO. | DATE | REVISIONS | BY | APPROVED |
|-----|------|-----------|----|----------|
| | | | | |

BM #11 Chiseled "L" on top Northeast corner of concrete guardrail at Northeast corner of I-470 Bridge spanning View High Drive. Elev. = 833.80

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| Hydrologic Data |
|--|
| Drainage Area = 56.8 (sq. mi.) Design Flood Frequency = 50 years Design Flood Discharge = 4,794 cfs Design Flood (D.F.) Elevation = 809.4 |
| Base Flood (100-year) |
| Base Flood Elevation = 810.9 Base Flood Discharge = 5,636 cfs Estimated Backwater = 0.1 ft Average Velocity thru Opening = 2.4 ft/s |
| h Freeboard (50-year) |
| Design High Water = 809.4 Freeboard = 2.6 ft |
| Roadway Overlapping |
| Overtopping Flood Discharge = N/A Overtopping Flood Frequency N/A years Flood Elevation = N/A |

Notes:

Roadway fill shall be completed to the final roadway section and up to the elevation of the concrete beam within the limits of the structure and for not less than 25 feet in back of the fill face of the end bents before any piles are driven for any bents falling within the embankment section.

All bents are parallel.

All longitudinal dimensions shown are horizontal.

Architect 00212, Professional Engineer 000225, Landscape Architect 000133, Professional Land Surveyor 000059

3rd Party Review by HDR

EAST BRIDGE
(50'-105'-50') PRESTRESSED CONCRETE NU-GIRDER SPANS

GBA

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engineers

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913.492.0400
www.gbateam.com

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DRAWN BY:

PROJECT NO.:

SHEET NO.

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Joshua J. Miller
Professional Engineer
License No. 2009010386

Bridge Plans

Aesthetics Plan & Elevation

NO.

DATE

REVISIONS

BY

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This elevation view shows the bridge structure from Span 1 to Span 4. It includes details for the pedestrian fence, including top and bottom rails, posts, and decorative columns. A splice is indicated between spans. A red note asks if steel girders are designed for wind or water pressure loading, with a blue response stating they will be. A formliner is also noted near a bent.

Labels include: Light Post (Typ.) (Behind), Column Cap (Typ.), Large Decorative Column (Typ.), Small Column (Typ.), Pedestrian Fence Top Rail (Typ.), Pedestrian Fence Post (Typ.), Pedestrian Fence Bottom Rail (Typ.), \varnothing Splice (Typ.), Formliner?, \varnothing Paragon Pkwy. & Profile Grade, and \varnothing Structure.

ELEVATION
(Looking South)

Notes:
For Detail A, Detail B, Section A-A, B-B & C-C, see Sheet No. 5.

This plan view shows the bridge layout with spans 1-2, 2-3, and 3-4. It details the barrier system, including stacked stone faces, light posts, and pedestrian rails. Dimensions for various components and spans are provided. A red note asks if the traffic barrier is continuous or segmented, with a blue response stating it will be continuous. A north arrow is located in the bottom right.

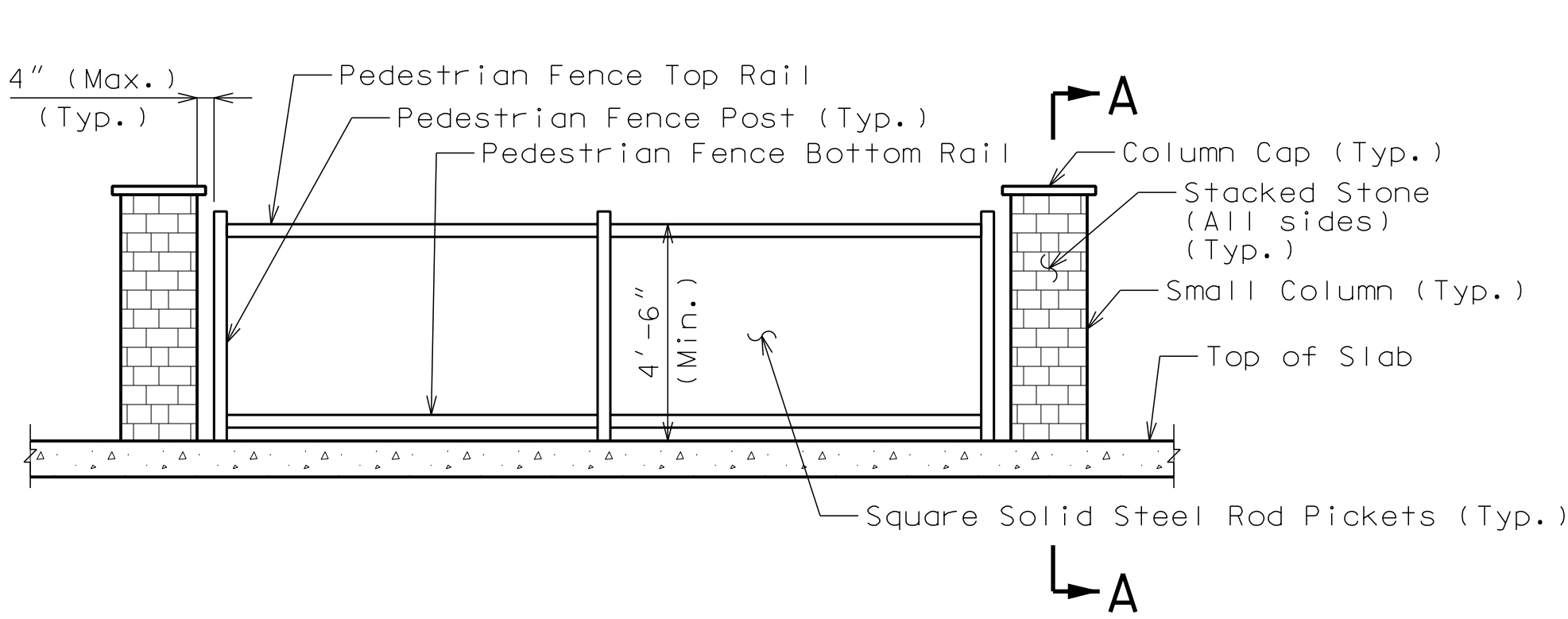
Labels include: Small Column (Typ.), Large Decorative Column (Typ.), Light Post (Typ.), Traffic Face of Barrier, Stacked Stone Face of Barrier (Typ.), \varnothing Small Column & \varnothing Pedestrian Fence, \varnothing Large Column (Typ.), \varnothing End Bent No. 1, \varnothing Int. Bent No. 2, \varnothing Int. Bent No. 3, \varnothing End Bent No. 4, Fill Face of End Bent No. 1, Fill Face of End Bent No. 4, Barrier Curb Transition, Barrier Curb, Barrier, Sidewalk, and \varnothing Paragon Pkwy. & Profile Grade.

PLAN

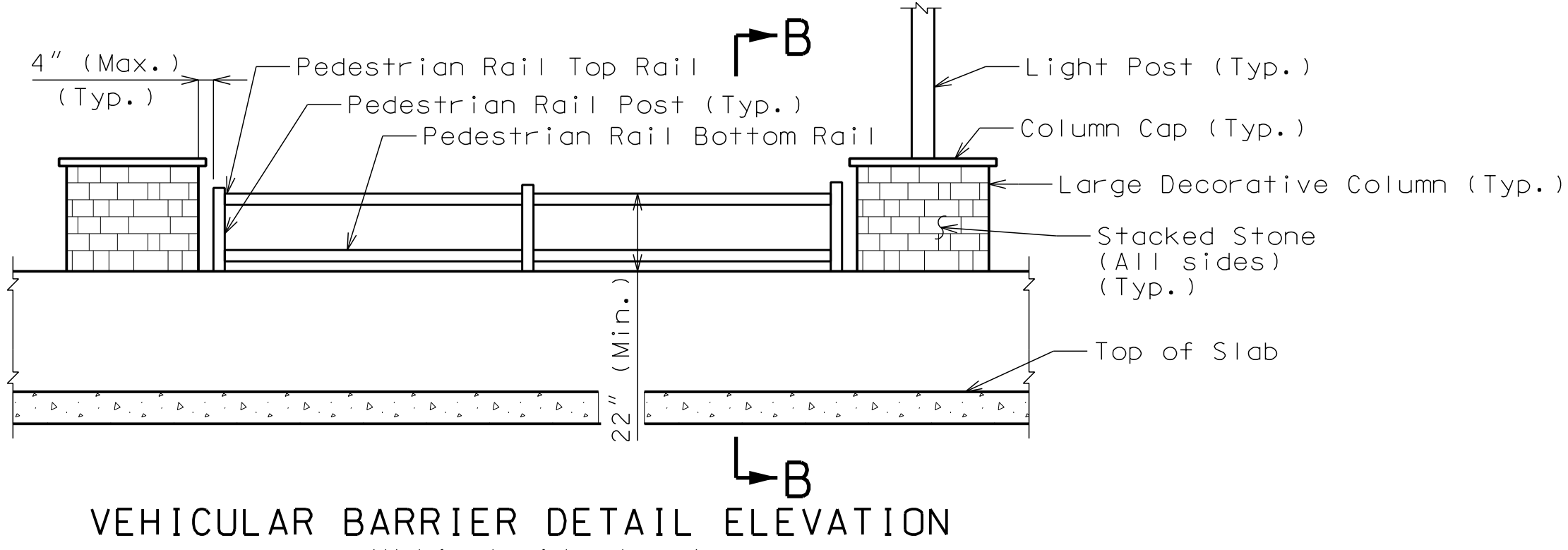
Note: This drawing is not to scale. Follow dimensions.

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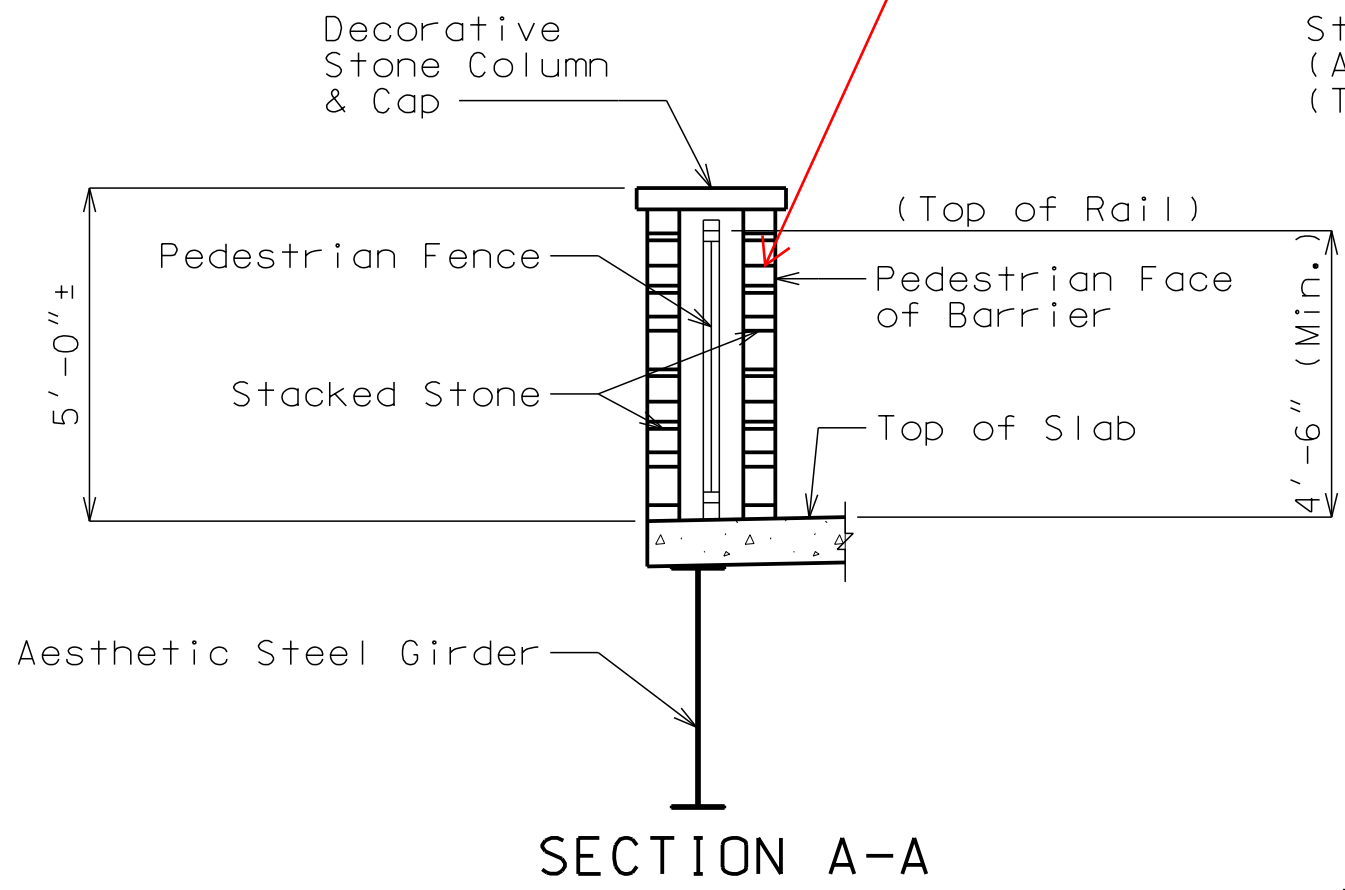
PEDESTRIAN FENCE DETAIL ELEVATION



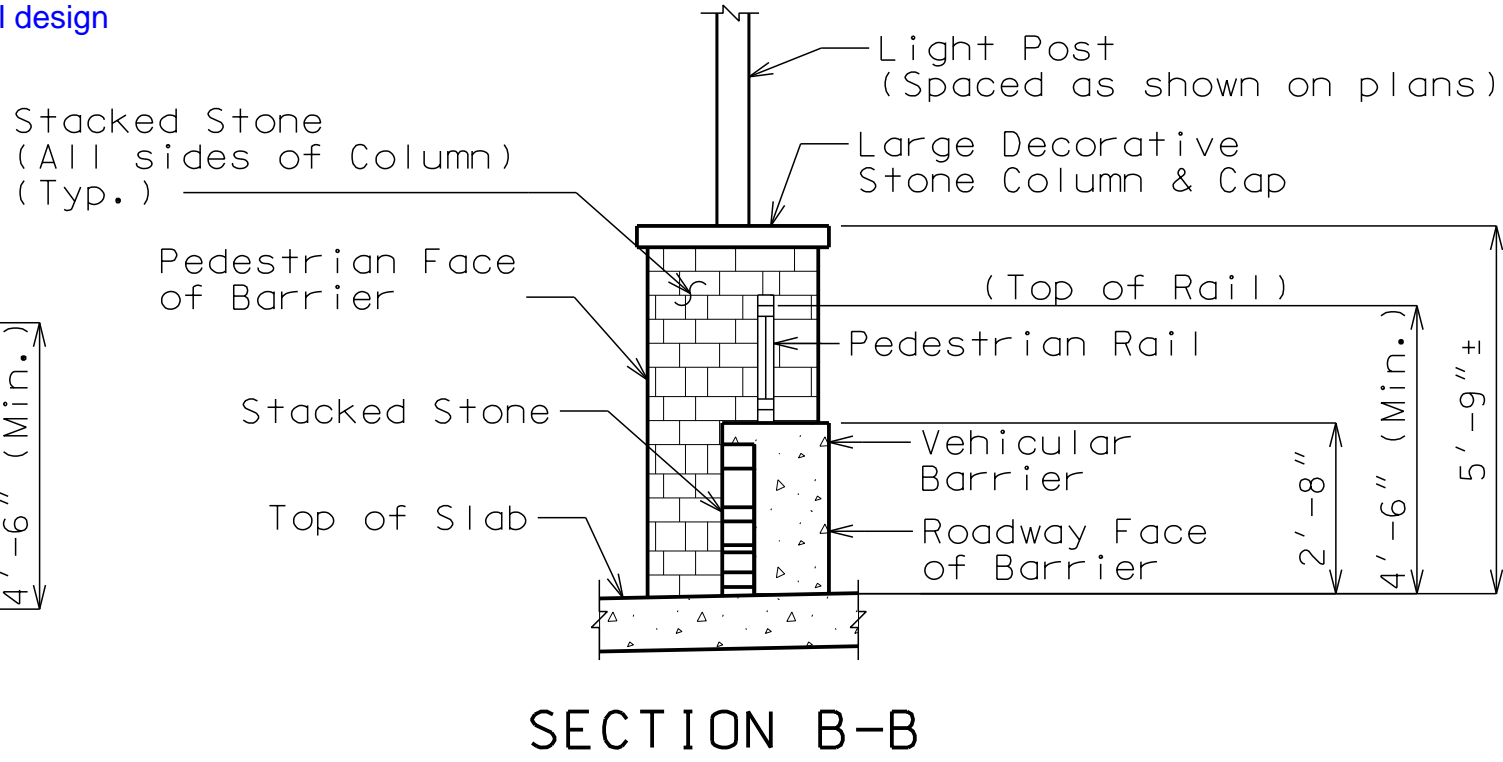
VEHICULAR BARRIER DETAIL ELEVATION
(Vehical side shown)

Consider details of how Stacked Stone will attach to deck and/or Columns (typical). Details will be provided at final design

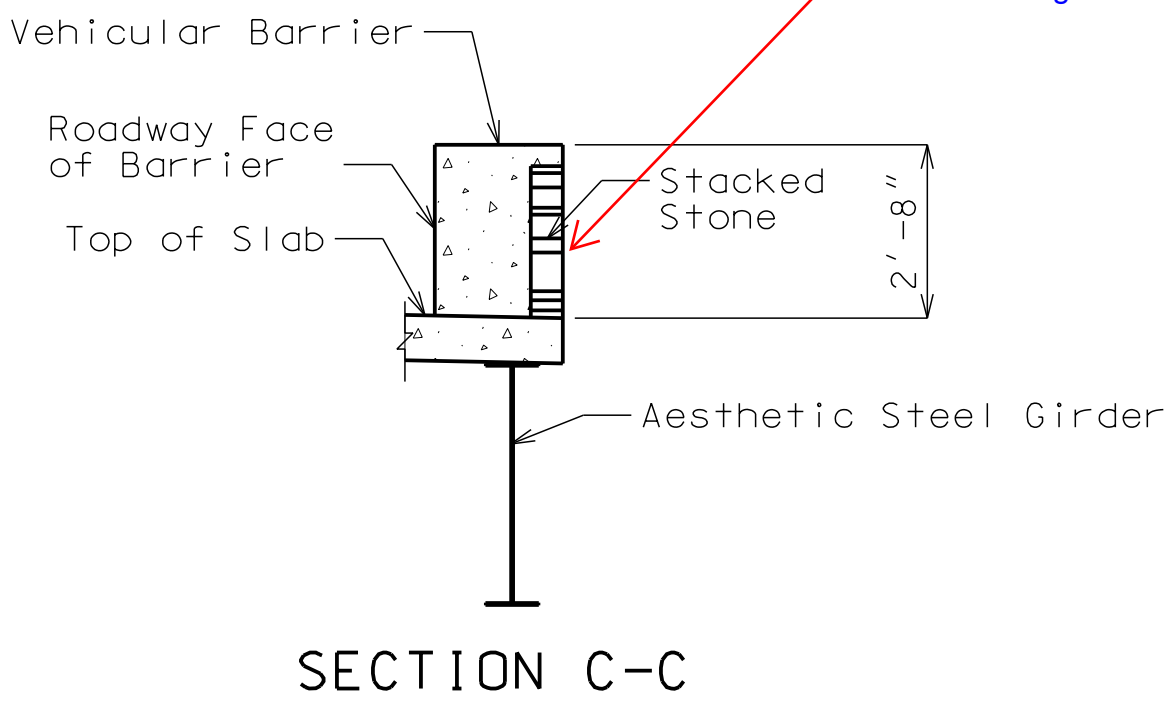
Consider details of how Stacked Stone will attach to deck and/or Traffic Barriers (typical). Details will be provided at final design



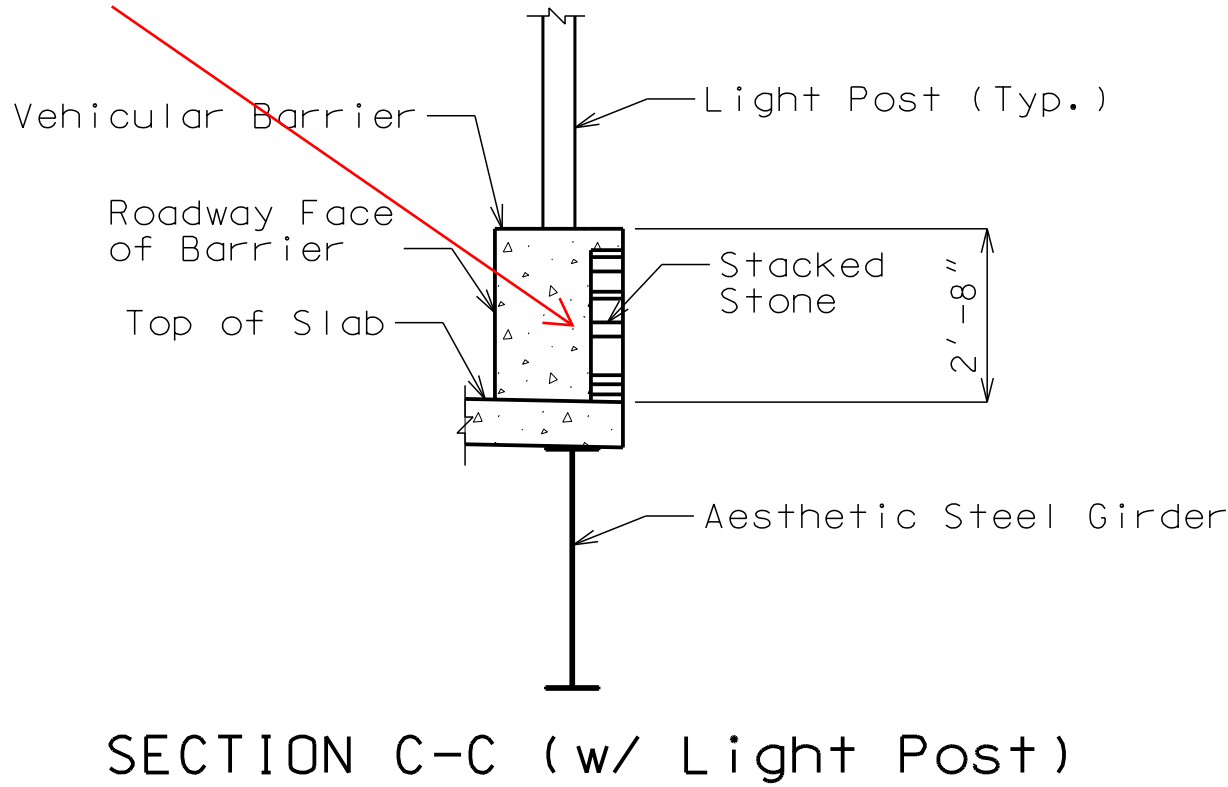
SECTION A-A



SECTION B-B

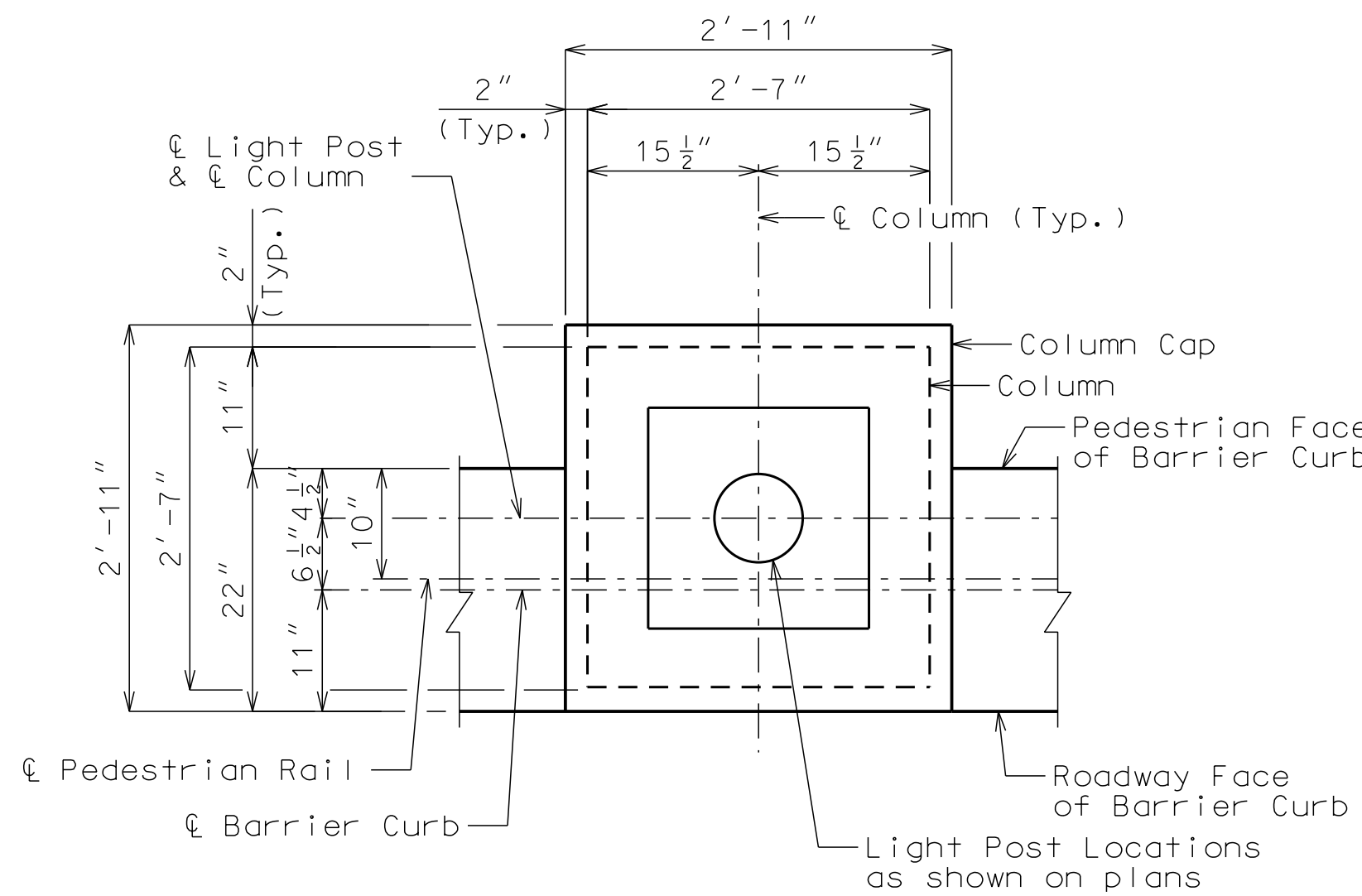


SECTION C-C

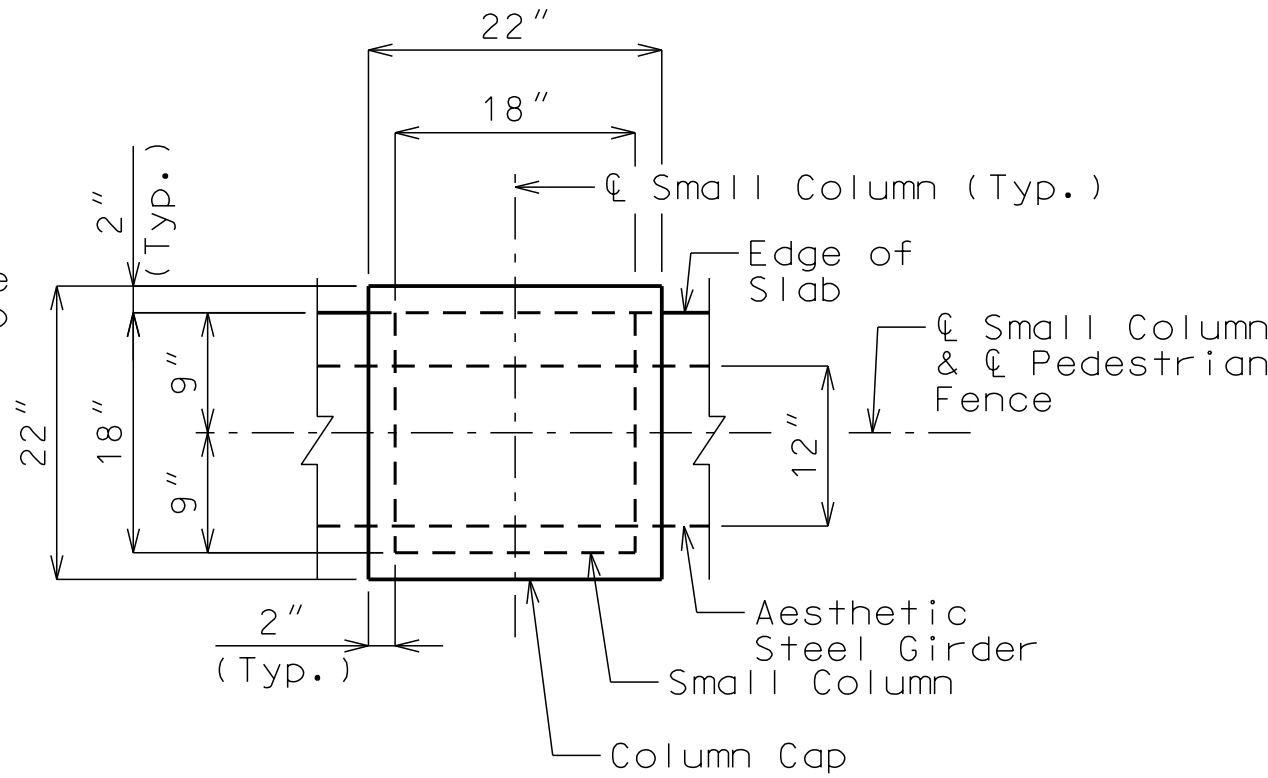


SECTION C-C (w/ Light Post)

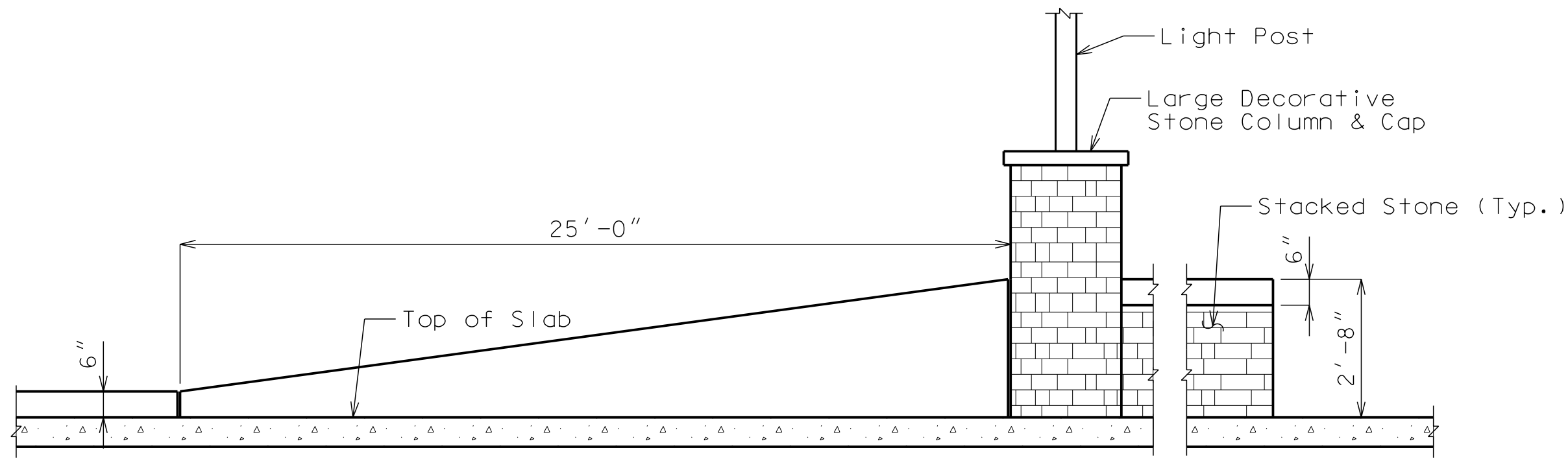
DETAILS OF BARRIER & PEDESTRIAN FENCE



DETAIL A



DETAIL B



VEHICULAR BARRIER CURB TRANSITION DETAIL
(Pedestrian side shown)

Note: This drawing is not to scale. Follow dimensions.

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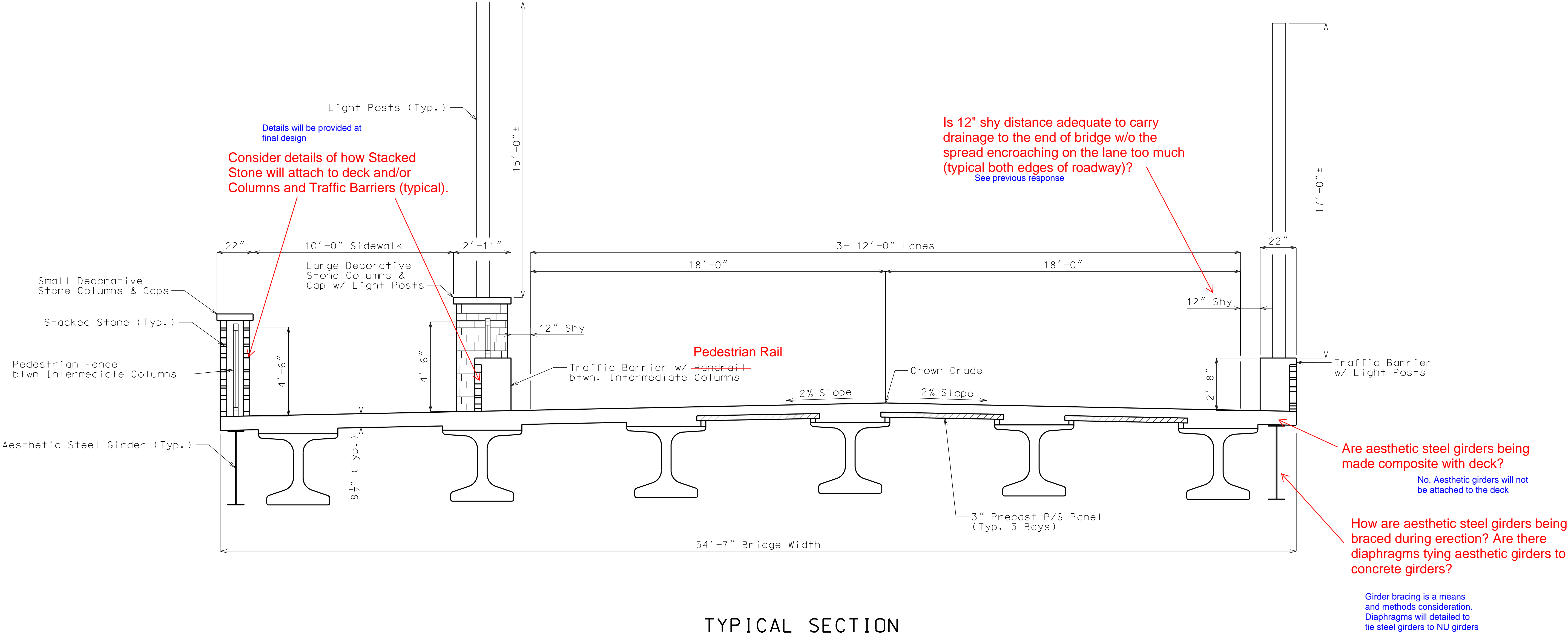
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Joshua J. Miller
Professional Engineer
License No. 2009010386

Bridge Plans
Bridge Aesthetic Details

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TYPICAL SECTION

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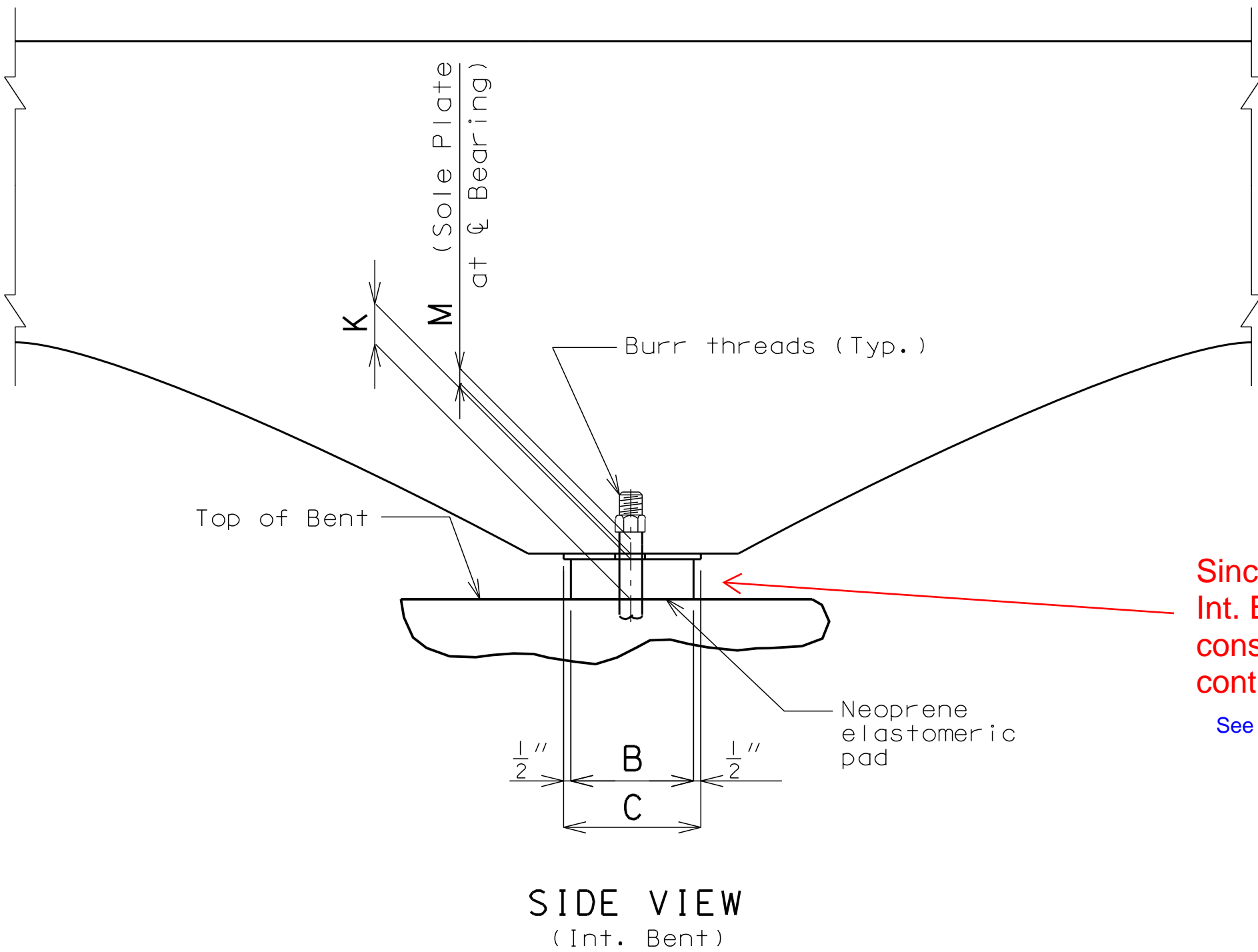
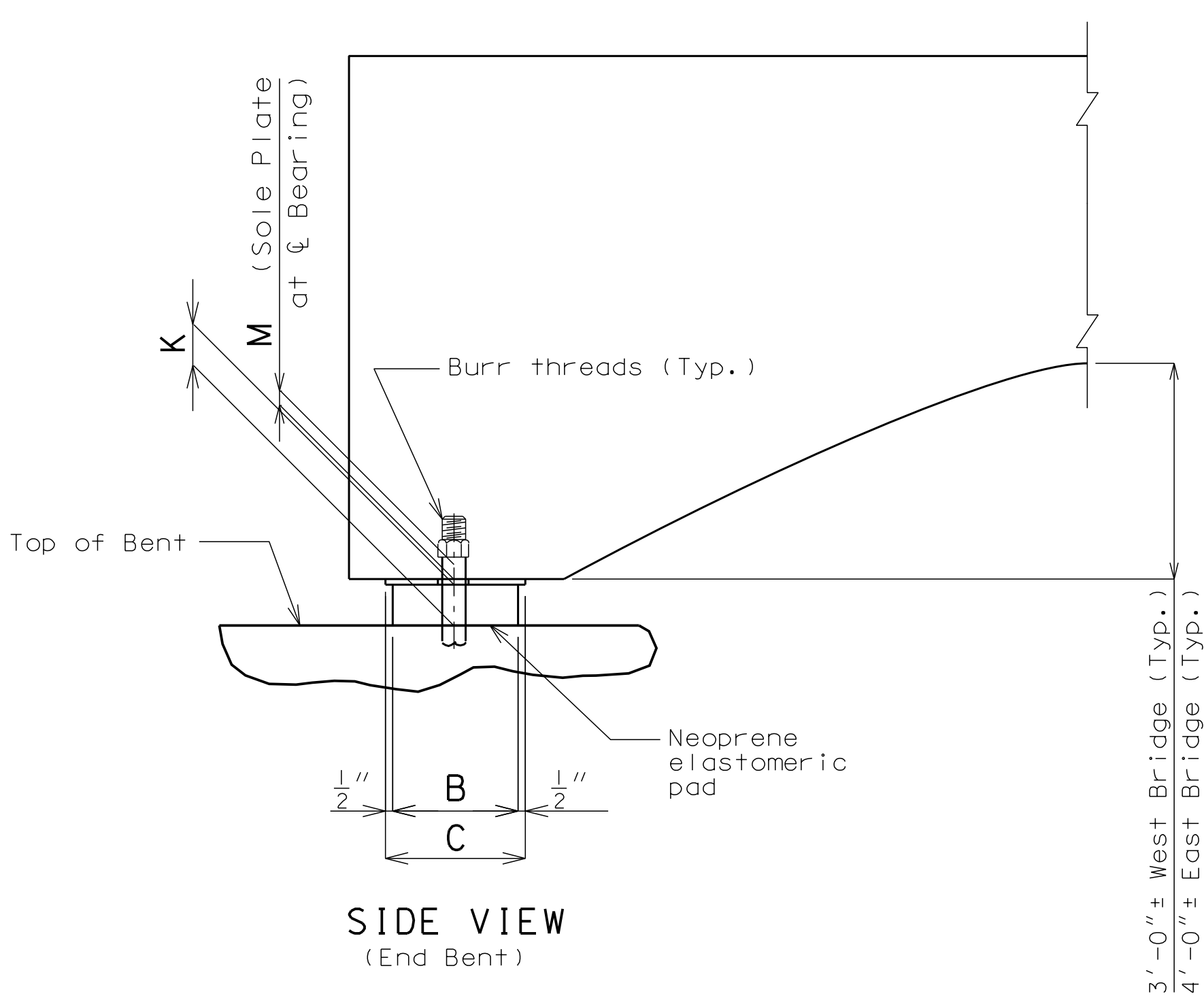
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License No. 2009010386

Bridge Plans
Steel Aesthetic Details

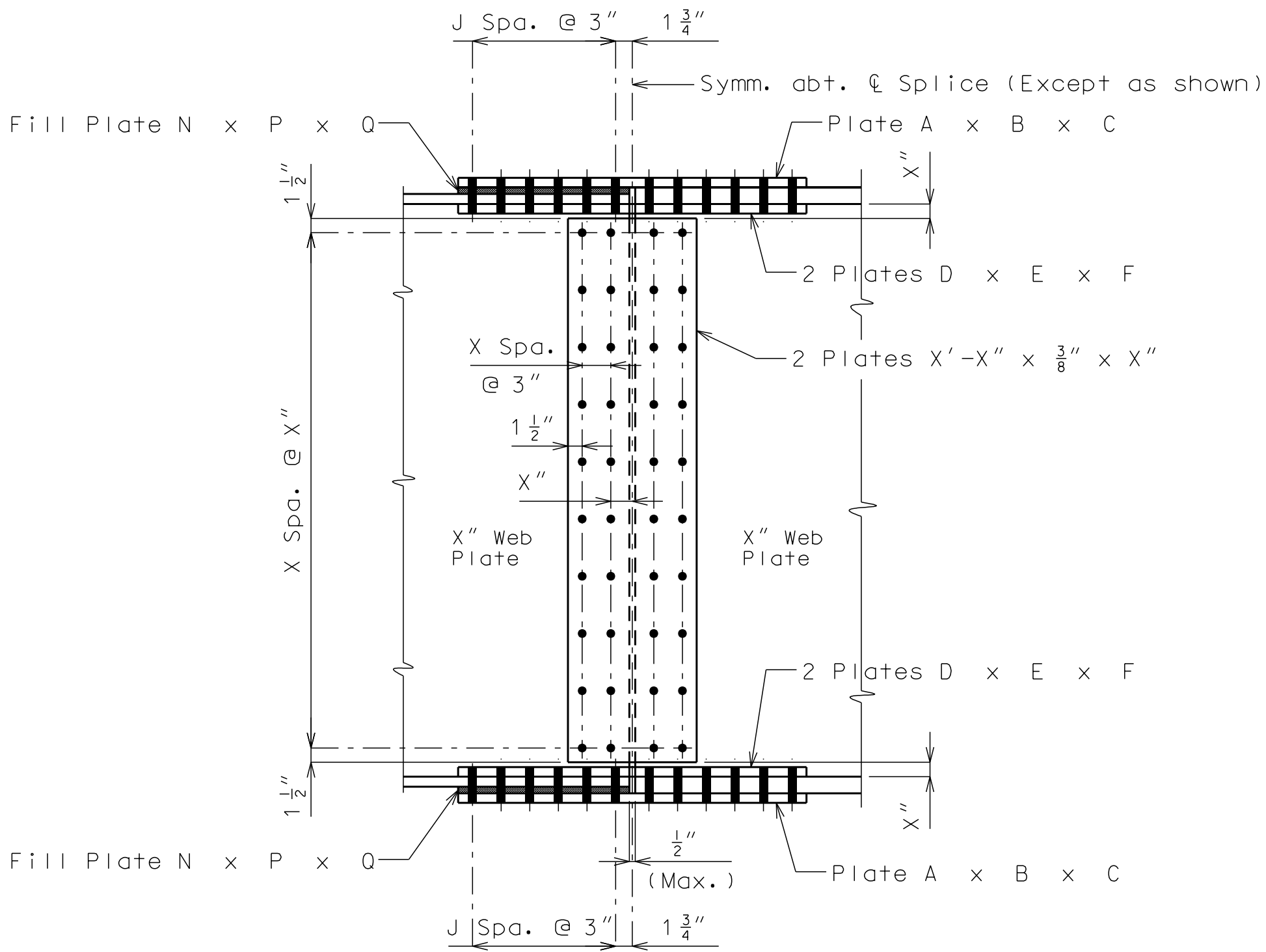
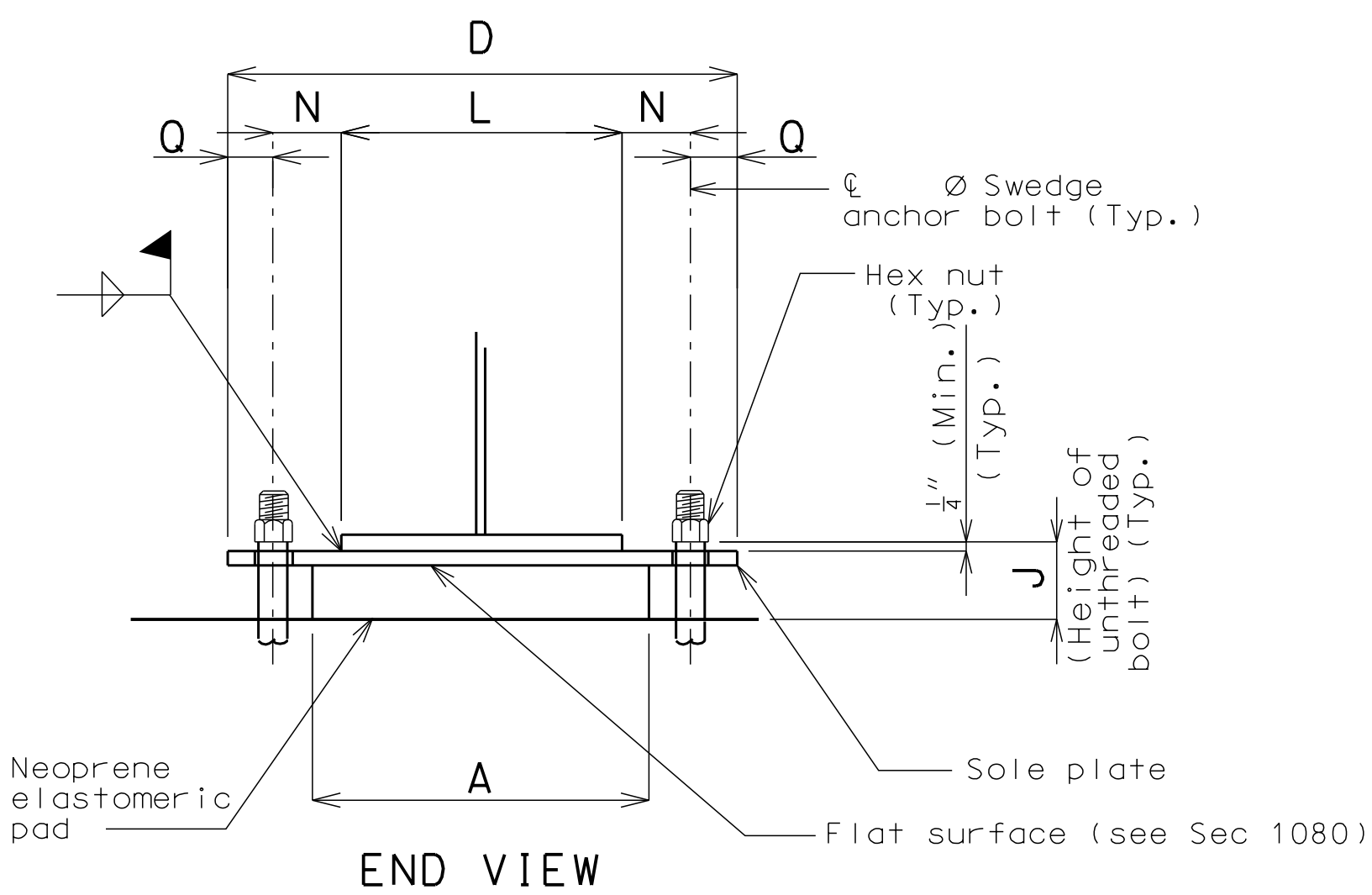
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Since we are using such "stout" wall piers for Int. Bents, are expansion bearings being considered here to allow for expansion and contraction of superstructure?

[See previous response](#)



DETAILS OF AESTHETIC STEEL GIRDER & ANCHORS AT END BENT & INT. BENT

DETAIL OF BOLTED FIELD SPLICE

Use 7/8"Ø high strength bolts with 15/16"Ø holes.

Contact surfaces shall be in accordance with Sec 1081 for surface preparation.

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