SCHEMATIC PLAN VIEW - OPPOSING LANE APPROACH

End of bridge end bent wing (flared wing shown, parallel wing similar) or other Hazard that requires shielding
Lateral Hazard or Top of Non-Traversable slope
Clear Zone Limits or Horizontal Clearance Limit

SCHEMATIC PLAN VIEW - NEAR LANE APPROACH

Limits of Payment for Vertical Face Retrofit (include Tapered End Transition when provided)

X (Length of Advancement, Ft.)

Tapered End Transition *

Limits of Payment for Vertical Face Retrofit

SCHÉMATIQUE DU PLAN DE VUE - PROCHAÎNNE APPROCHE

End of bridge end bent wing (flared wing shown, parallel wing similar) or other Hazard that requires shielding
Lateral Hazard or Top of Non-Traversable slope
Clear Zone Limits or Horizontal Clearance Limit

SCHEMATIC PLAN VIEW - OPPOSING LANE APPROACH

End of bridge end bent wing (flared wing shown, parallel wing similar) or other Hazard that requires shielding
Lateral Hazard or Top of Non-Traversable slope
Clear Zone Limits or Horizontal Clearance Limit

* Guardrail or Crash Cushion may also be shown in the Contract Plans, in lieu of the Tapered End Transition.
CROSS REFERENCES:
For Section A-A, B-B and X-X see Sheet 4.

Toe of Curb
Top of Curb
2"

Bars 5F (Typ.)
Bars 4G (Typ.)

See Detail "B" when no approach curb is present

Bars 5S (field bend & cut to maintain cover)

20'-0" (Traffic Railing and Curb Transition)

Extend Bars 5S in back face of Traffic Railing 1'-6" into Tapered End Transition

Bars 4G (Typ.)
Bars 5E (Typ.)

(Leads to maintain cover in Transition Area)

Bars 5F @ 8" spacing (Tied to Bars 4F)

Bars 5E @ 8" spacing

PARTIAL PLAN VIEW

Typical Section

Bars 5S

Begin or End Approach Slab Transition (see Schemes for Details)

Bridge and/or Approach Slab Transition

Bars 4G (Typ.)

Optional Construction Joint

Top of Curb

2'-9" Vertical Curb Transition

20'-0" (Traffic Railing to Curb Transition)

Extend Bars 5S in back face of Traffic Railing 1'-6" into Tapered End Transition

Bars 5E @ 8" spacing (Tied to Bars 4F)

Bars 5F (Typ.)

TAPERED END TRANSITION

PARTIAL ELEVATION VIEW

Bars 5S (field bend)

See Detail "B" when no approach curb is present

Top of Curb

Bars 5S (field bend & cut to maintain cover)

Bars 4G (Typ.)

Bars 5F (Typ.)

Curb Transition

2'-9" Vertical
Curb Transition

DETAIL "B"
TRANSITION TO NON-CURB APPROACH
(Reinforcing Not Shown For Clarity)
NOTES:
1. On approach end provide a Roadway Guardrail Transition, Index 536-002 (Sheet 16 - Scheme 1) or other site specific treatment. See Roadway Plans for limiting station of Roadway Guardrail Transition or other site specific treatment.
2. Provide Railing & Curb Base Transitions (as shown) if curb does not extend beyond end of Spread Footing Approach, see Roadway Plans. Railing End Transition & Railing & Curb Base Transitions may be omitted on trailing ends with no opposing traffic.

CROSS REFERENCES:
For Section A-A, C-C and X-X see Sheet 4.
SECTION X-X (TYPICAL CURB, TYPE VARIES, TYPE F SHOWN)
(See Index 520-001 and Plans for Details)

* Match Cross Slope of high side and low side at begin or end bridge or approach slab.

** Match curb height of adjacent bridge and approach slab. Adjust height in Transition area to match adjoining Roadway curb.

SECTION A-A
TYPICAL SECTION
(9" Curb shown, 6" Curb similar)

SECTION B-B
TAPERED END TRANSITION
(Bars 5S not shown for clarity)

SECTION C-C
(GUARDRAIL END TRANSITION)

CROSS REFERENCES:
For location of Sections A-A, B-B and X-X see Sheet 2.
For location of Section C-C see Sheet 3.
PARTIAL ELEVATION OF INSIDE FACE OF RAILING

(Expansion Dowel Assemblies and Bars 4C not shown for clarity)

SCHEME 1 – MODIFICATION FOR INDEX 521-481, 521-482 AND 521-483 - SCHEME 1

RAILING END TREATMENT FOR PERPENDICULAR OR ANGLED WING WALLS WITH NARROW CURBS (SHOWN), WIDE CURBS AND INTERMEDIATE CURBS (SIMILAR)

CROSS REFERENCE:
For Section A-A see Sheet 4.
For Expansion Dowel Assemblies and placement of Dowel Bars 6D Details see Index 521-480.
NOTES:
1. Remove existing concrete along saw cut joints. Existing reinforcing steel may be cut at joint or extended into new concrete. Exposed existing reinforcing not encased in new concrete shall be removed 1" below existing concrete surface and grouted over.

PARTIAL PLAN

PARTIAL ELEVATION OF INSIDE FACE OF RAILING
(Expansion Dowel Assemblies and Bars 4C not shown for clarity)

SCHEME 2 ~ MODIFICATION FOR INDEX 521-481 - SCHEME 2
RAILING END TREATMENT FOR PARALLEL WING WALLS WITH NARROW CURBS

SECTION F-F

CROSS REFERENCES:
For Section A-A see Sheet 4.
For Section D-D see Sheet 5.
For Expansion Dowel Assembly and placement of Dowel Bars 6D Details see Index 521-480.

SECTION THRU EXISTING CURB AND
APPROACH SLAB TO BE REMOVED
(Free Standing Curb Similar)

FRONT FACE OF BACKWALL,
Begin or End Bridge & Match line (See Index 521-481, Sheet 2)
Existing Flared Wing Post to be removed to top of curb

Curb & portion of Approach Slab (when present, shown shaded) to be removed

Approach Slab Transition

Bars 4G @ 8" spacing

Max. (Typ.) Clip bars as reqd. to maintain Cover

Bars 5F @ 8" spacing Max. (Typ.) Clip bars as reqd. to maintain Cover

Bars 5E @ 8" spacing Max. (Typ.) tied to Bars 5F (tilt bars minimally as required)

Edge of Existing Approach Slab (Location Varies)

Typical Section

Final Riding Surface

Dowel Bars 6D

Asphalt Overlay when present

Note: ** Match curb height at adjoining existing end bent wing.

PARTIAL ELEVATION OF INSIDE FACE OF RAILING

(Expansion Dowel Assemblies and Bars 4C not shown for clarity)

SCHEME 3 – MODIFICATION FOR INDEX 521-481 SCHEME 3

RAILING END TREATMENT FOR FLARED WING WALLS WITH NARROW CURBS
**SCHEME 4 ~ MODIFICATION FOR INDEX 521-482 SCHEME 2**

RAILING END TREATMENT FOR PARALLEL CURBS AND WING WALLS WITH WIDE CURBS

**PARTIAL ELEVATION OF INSIDE FACE OF RAILING**

(Existing Wing Post, Expansion Dowel Assemblies and Bars 4C not shown for clarity)

**SCHEME 5 ~ MODIFICATION FOR INDEX 521-482 SCHEME 3 AND 4**

RAILING END TREATMENT FOR PARALLEL CURBS AND FLARED WING WALLS WITH WIDE CURBS

CROSS REFERENCES:
- For Section A-A see Sheet 4
- For Section D-D see Sheet 5
- For Section G-G see Sheet 7
- For Expansion Dowel Assemblies Details see Index 521-480
SCHEME 6 – MODIFICATION FOR INDEX 521-483 SCHEME 2
RAILING END TREATMENT FOR PARALLEL CURBS AND WING WALLS WITH INTERMEDIATE CURBS

PARTIAL ELEVATION OF INSIDE FACE OF RAILING
(Expansion Dowel Assemblies and Bars 4C not shown for clarity)

CROSS REFERENCES:
For Section A-A see Sheet 4.
For Section D-D see Sheet 5.
For Expansion Dowel Assembly and placement of Dowel Bars 6D Details see Index 521-480.

Note: Match curb height at adjoining existing end bent wing.
Note: **Match curb height at adjoining existing end bent wing.**

Bars 5F @ 8" spacing Max. (Typ.) Clip bars as reqd. to maintain Cover

Bars 5S @ 8" (Min.)

Bars 6D @ 8" sp.

Bars 5E @ 8" sp. Max. (Typ.) tied to Bars 5F (tilt bars minimally as required)

Bars 5S (Min.)

Top of Curb

Bars 5S

Existing End Bent Wing

Note: **Match curb height at adjoining existing end bent wing.**

CROSS REFERENCES:
For Section A-A see Sheet 4.
For Section D-D see Sheet 5.
For Section H-H see Sheet 9.
For Expansion Dowel Assemblies and placement of Dowel Bars 6D Details see Index 521-480.