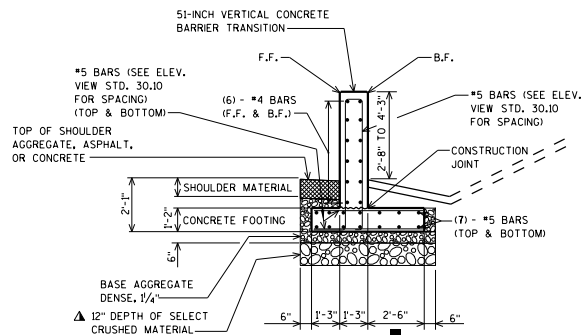


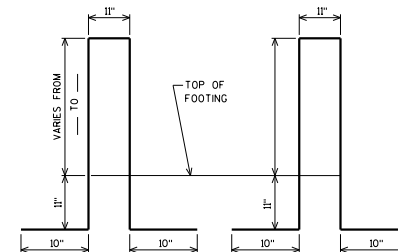
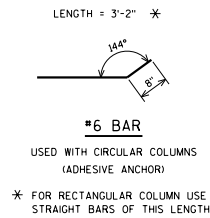
SECTION A-A
BETWEEN COLUMNS



SECTION B-B
TRANSITION REGION

▲ 12" SELECT CRUSHED MATERIAL MAY BE ELIMINATED IF IT IS DETERMINED BY THE ENGINEER THAT THE EXISTING MATERIAL IS COMPACTED, GRANULAR MATERIAL.

■ FOR COLUMNS WITH "DIA." OR "L" GREATER THAN 3'-0", INCREASE THIS VALUE SO THAT B.F. OF FOOTING EXTENDS 9" BEYOND B.F. OF COLUMN.



#5 BAR
BARRIER REINF. IN
TRANSITION REGION

#5 BAR
BARRIER REINF.
BETWEEN COLUMNS

BAR BENDING DIAGRAMS

BAR DIMENSIONS ARE OUT TO OUT OF BAR

DESIGNER NOTES

THE DETAILS SHOWN ON STANDARDS 13.10 AND 13.11 ARE FOR VEHICLE PROTECTION AND ARE USED WITH EXISTING STRUCTURES.

CONSIDER PROVIDING AN ADDITIONAL TRANSITION SECTION ADJACENT TO THE OTHER EXTERIOR PIER COLUMN FOR THE FOLLOWING CONDITIONS:

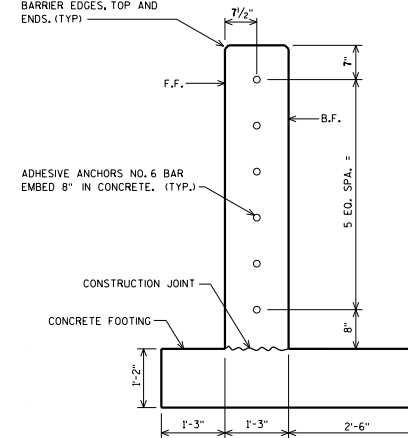
- TWO-LANE ROAD IS ADJACENT TO BARRIER AND THERE IS A CONCERN FOR TRAFFIC TO CROSS-OVER.
- FUTURE TRAFFIC CONTROL NEEDS MAY CAUSE THE DIRECTION OF TRAFFIC ADJACENT TO BARRIER TO BE REVERSED.
- HAZARDS MAY EXIST IN THIS REGION THAT REQUIRE SHIELDING.

CONTACT THE REGIONAL OFFICE FOR VERIFICATION OF ANY OF THESE CONDITIONS.

THESE DETAILS MEET CRITERIA FOR TEST LEVELS TL-3/TL-4.

FOR VEHICLE PROTECTION, SEE FDM 11-35-1 TO DETERMINE WHEN BEAM GUARD OR CONCRETE BARRIER SHOULD BE PLACED BETWEEN THE TRAFFIC AND THE PIER, OR WHEN AN INTEGRAL BARRIER SHOULD BE USED.

PROVIDE 3/4-INCH BEVEL OR 1-INCH RADIUS ON CONCRETE BARRIER EDGES, TOP AND ENDS. (TYP.)



ADHESIVE ANCHOR LAYOUT

F.F. = FRONT FACE
B.F. = BACK FACE

51-INCH VERTICAL CONCRETE BARRIER AND TRANSITION

SEE STANDARD 13.10 FOR ADDITIONAL DETAILS

INTEGRAL BARRIER DETAILS



APPROVED: Bill Oliva DATE: 1-21