NOTES
1. All rods "A" and Anchor bolts shall be per ASTM F1554 grade 105.
2. Anchor Bolts, Nuts, Washers and Rod "A" shall have a protective coating of either Hot Dipped Galvanizing per AASHTO M232 for hardware or AASHTO M111 for Washers and Plates.
3. For intermediate wall heights, use the next higher "H".
4. Panels shall have at least 3 feet of level ground on each side.
5. The Contract specifies actual foundation requirements for D1 or D2 and location of Western WA or Eastern WA.
6. Maximum panel length shall be 12 feet.
7. Materials shall meet the requirements of Standard Specifications Section 6-12 and Special Concrete Barrier shall be MASH compliant with a railing test level of TL-4 or less.
8. Concrete Barrier shall be MASH compliant with a railing test level of TL-4 or less.
9. Single Slope Concrete Barrier is shown. Other MASH compliant concrete barrier shapes are permitted.
10. The concrete barrier embedment minimum shall be 3" minimum, or as required for the concrete barrier selected.

SECTION A
- ONLY ANCHOR BOLT OPTION FOR ROD "A" ALLOWED - WEDGE HEAD OPTION NOT ALLOWED

SECTION B
- TYPICAL SECTION

WESTERN WASHINGTON
- EXPOSED WALL HT
- SHAFT DEPTH
- ROD "A" BAR "B"
- LAP SPACED Y
- ANCHOR BOLT DIAM.
- BASE PLATE

- EASTERN WASHINGTON
- EXPOSED WALL HT
- SHAFT DEPTH
- ROD "A" BAR "B"
- LAP SPACED Y
- ANCHOR BOLT DIAM.
- BASE PLATE

NOISE BARRIER WALL
TYPE 14
STANDARD PLAN D-2.46-02
APPROVED FOR PUBLICATION
Aug 13, 2021

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
STATE DESIGN ENGINEER
Aug 13, 2021
EPOXY BONDING AGENT BETWEEN PILASTER AND BASE PLATE FOR NO TAPER FOR ANCHOR BOLT OPTION

ROD "A" THREADED BAR OPTION

PILASTER AND BASE PLATE FOR NO TAPER FOR ANCHOR BOLT OPTION WITH HOLE DIAMETER = ROD "A" (IN) DIAMETER + 1/16" (IN) (TYP.)

ASTM A563 NUT WITH ASTM F438 WASHER (TYP.) SET THE ELEVATION OF THE LEVELING NUTS BEFORE SETTING THE PANEL.

BASE PLATE DETAIL

ROD "A" (TYP.) = DEFORMED 5 1/2" REINFORCING BAR

ASTM A563 NUT WITH ASTM F438 WASHER (TYP.) = SEE TABLE FOR DIAMETER

BASE PLATE DETAIL

ASTM A563 NUT WITH ASTM F438 WASHER

BASE PLATE, SHAFT AND TRAFFIC BARRIER DETAIL NOT SHOWN FOR CLARITY

ANCHOR PLATE DETAIL

ROD "A" = DEFORMED REINFORCING BAR

ROD "A" THREADED BAR OPTION

ASTM A706 GR 105 FOR ALL HEIGHTS "H"

ASTM A706 GR 80 AS ALLOWED PER TABLE, FOR HEIGHTS "H" ≥ 16' IN THE WEST AND HEIGHTS "H" ≤ 18' IN THE EAST

ROD "A" ANCHOR BOLT OPTION

ANCHOR PLATE DETAIL

SECTION E

BASE PLATE DETAIL

BASE PLATE, SHAFT AND TRAFFIC BARRIER DETAIL NOT SHOWN FOR CLARITY

SHAFT TO PANEL CONNECTION

EITHER OPTION AVAILABLE TO GROUT BLOCKOUTS, ANCHOR BOLTS, BASE PLATE TO LIMITS SHOWN

SECTION F

BASE PLATE, SHAFT AND TRAFFIC BARRIER DETAIL

SECTION C

BASE PLATE DETAIL

BASE PLATE, SHAFT AND TRAFFIC BARRIER DETAIL NOT SHOWN FOR CLARITY

NOISE BARRIER WALL TYPE 14

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SHEET 2 OF 3 SHEETS

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NOSE BARRIER WALL

TYPE 14

WIND AND SEISMIC LIMITATIONS

LOCATION

WESTERN WASHINGTON

EASTERN WASHINGTON

WIND VELOCITY (MPH)

100

80

PEAK SEISMIC GROUND ACCELERATION COEFFICIENT ON ROCK, SITE CLASS B (g)

0.45

0.19

FOUNDATION DESIGN

SOIL TYPE

D1

D2

ANGLE OF INTERNAL FRICTION, \( \phi \) (DEGREES)

32

38

DUMMY JOINT DETAIL

CAST IN PLACE BARRIER OPTION

(SEE NOTE 9 - SHEET 1)

SEE WEDGE HEAD OPTION FOR TAPERED HOLE DIMENSIONS. NO TAPER FOR ANCHOR BOLT OPTION.

HOLE DIAM. = ROD "A" DIAM. + 1/16" (TYP.)

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