

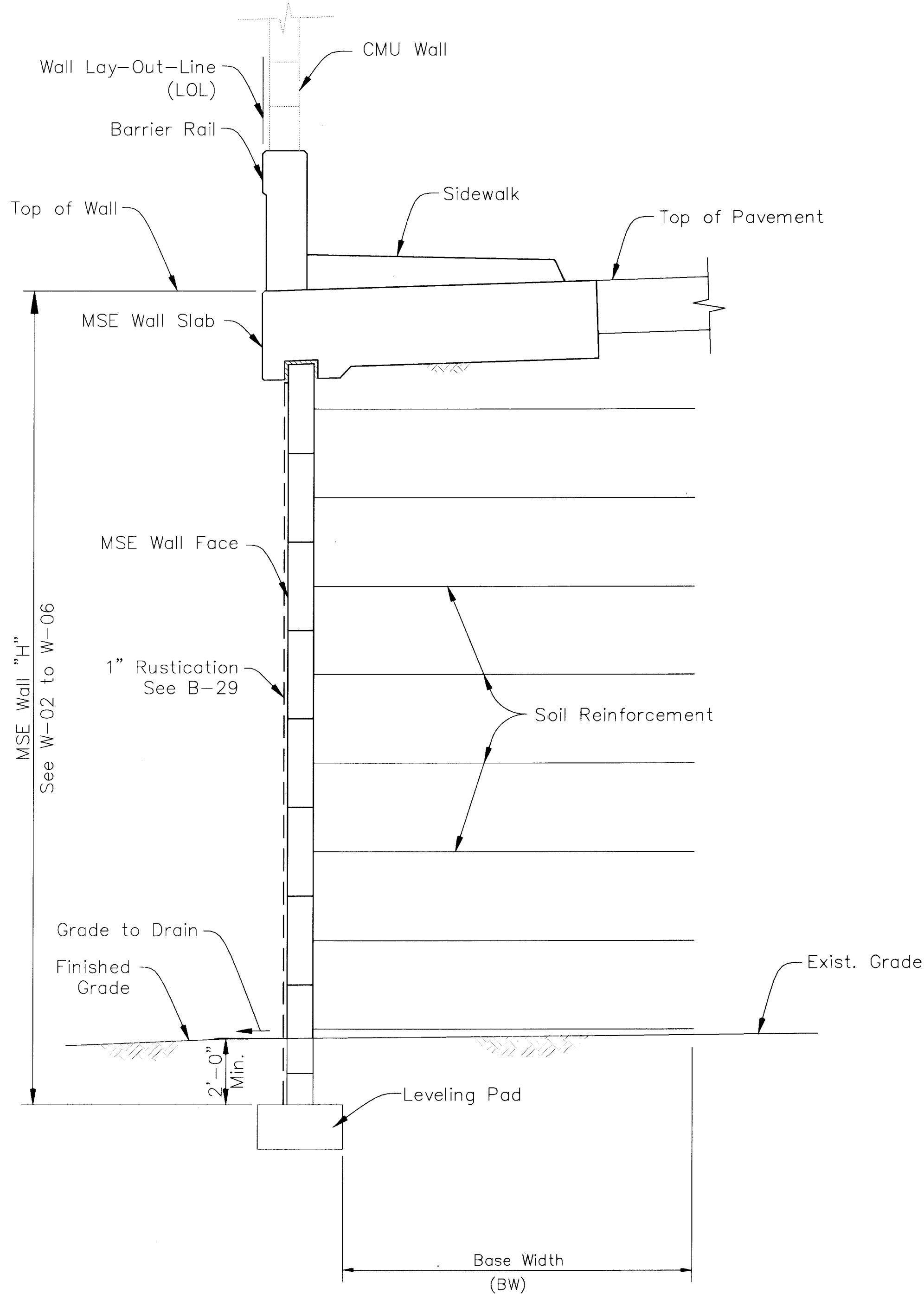
GENERAL NOTES:

Mechanically Stabilized Earth (MSE) Walls to be designed and constructed by the Contractor in accordance with the following requirements.

- DESIGN SPECIFICATIONS:** AASHTO "Standard Specifications for Highway Bridges, 17th Edition, 2002" with interims to date.
- CONSTRUCTION SPECIFICATIONS:** State of Nevada Department of Transportation "Standard Specifications for Road and Bridge Construction, 2001" except as noted below and in the special provisions for this contract.
- LIVE LOAD:** Live load surcharge pressure equal to 2 ft. of earth.
- SEISMIC LOAD:** Acceleration coefficient 0.15g ATC-6 soil type II.
- CONCRETE:** All concrete shall be Class A Modified (Major) with an ultimate compressive strength of 4000 psi at 28 days. Only type V cement shall be used for concrete in contact with soil.
- REINFORCING STEEL:** All reinforcing steel shall be ASTM A706 Grade 60. Dimensions relating to bar spacing are center-to-center. Bending dimensions are from out-to-out of the bars. Bar sizes Three (3) to Nine (9) are indicated by the first number in the mark; Ten (10) or larger by the first two numbers. Any adjustments to reinforcing steel lengths or spacing must be approved by the Bridge Engineer. When considered as bars to control temperature, shrinkage and distribution stresses by the Bridge Engineer, bars may be adjusted by the contractor upon concurrence and approval of the Bridge Engineer.
- SOIL PROPERTIES:** MSE wall is designed based on the following soil properties:
Mechanically stabilized earth fill:
minimum internal angle of friction = 34°
minimum cohesion = 0
minimum unit weight = 125 pcf
fills not meeting the above specified soil parameters shall not be approved.
Refer to final Geotechnical Evaluation, Tenaya Way Overpass prepared by Ninjo and Moore, dated December 15,2004.
- EXTERNAL DESIGN PARAMETERS:**
Sliding friction factor = 0.45
Allowable bearing pressure of foundation soils beneath walls = 3500 psf based on foundation report.
Ultimate bearing pressure of foundation soils beneath walls = 10,000 psf based on foundation report.
Minimum soil reinforcement length (base width):= minimum length as shown on the plans.
Minimum footing embedment length = 2'-0", based on foundation report.
- METHOD OF DESIGN:** "Simplified coherent gravity method" shall be used for the design.
- WALL PANEL:** Panel layout and panel geometry shown are for bidding purposes only. The contractor shall submit panel layout and panel geometry based on their proposed panel details and will be subject to approval by the engineer.
- DRAINAGE:** The contractor shall be responsible for appropriate drainage behind the walls as required by the contractor's design of the walls. No direct payment.
- RAIL SLAB AND BARRIER RAIL:** Cost of MSE Wall slab, barrier rail, sidewalk and CMU Wall or pedestrian rail paid for by the linear foot under the pay items. West MSE Wall cap, sidewalk, barrier rail and CMU Wall or East MSE Wall cap, sidewalk, barrier rail and pedestrian rail.
- LEVELING PAD:** Contractor shall be responsible for the design of leveling pads as required by the contractor's design of walls. No direct payment will be made for the construction of leveling pads.
- INCIDENTAL ITEMS:** All items shown or noted on the plans which are not specific bid items are considered incidental items. The cost of finishing and installing all such items will not be paid for directly, but shall be included in the unit price bid for other items, unless noted otherwise.

Sequence of Construction Notes:

1. Prepare foundation for construction of leveling pad and placement of initial panel course.
2. Construct leveling pad.
3. Place panel course joint materials.
4. Place approved backfill up to the bottom row of panel tie strips.
5. Place soil reinforcement.
6. Repeat steps 3 to 5 as appropriate to top of wall elevation.
7. Construct concrete slab, barrier rail, sidewalk and CMU Wall/Pedestrian Rail as shown on the plans.



TYPICAL SECTION
Westside Shown, Eastside Similar

REVISIONS		NO.		DATE		DESCRIPTION		APP'D	
DEPARTMENT OF PUBLIC WORKS									
ENGINEERING DESIGN SECTION									
CITY ENGINEER: JORGE CERVANTES, P.E. PROGRAM MANAGER: MARK SORESEN, P.E. DESIGNED BY: MA DRAWN BY: CG CHECKED BY: CS									
HORIZONTAL SCALE: N/A VERTICAL SCALE: N/A DATE: 10/2007									
HDR HDR Engineering, Inc.									
TENAYA WAY OVERPASS AT SUMMERLIN PKWY									
MSE WALL GENERAL NOTES									
TITLE: SHEET:									
PROFESSIONAL ENGINEER CRAIG W. SMART Exp. 12-2011 CIVIL No. 14579									
Sheet W-01 78 of 96 DRAWING NO. 107Y4452									