

STATE OF UTAH MSE WALL INSPECTION FORM

Compiled As Part of Research By The Utah Department of Transportation

Instructions:

- 1-Fill out required sections for MSE Wall Inspector and Wall Characteristics.
- 2-Inspect the wall using the attached form. Questions that require a "Yes" answer should be documented by noting the extent of the problem in the right most column and photo documentation. Photo documentation should consist of wall or bridge number, nature of problem, date, photo number for wall, and a size reference, which should be indicated in the photo (white board/paper). Photos taken should be placed on the Top View layout and indicated with the appropriate number. Note should be taken by the inspector that often anomalies are due to construction and should be distinguished from those that are a result of post-construction. If it is observable that they existed at the time of construction note should be taken in the space provided for drawings.
- 3- Shoot digital photos of the entire wall. This may require the use of a variety of shots and angles on each wall to cover the wall in its entirety.
- 4- Indicate Layout of MSE Wall in respect to major intersections, roadways, potential hazards, irrigation, vegetation, locations of conditions for which "Yes" was marked, etc. in space provided below. Also Indicate approximate GPS Coordinates of Site of Interest in space provided below

Region	3	Identifying Road/Intersection	SW corner I-15 + P.G. exit
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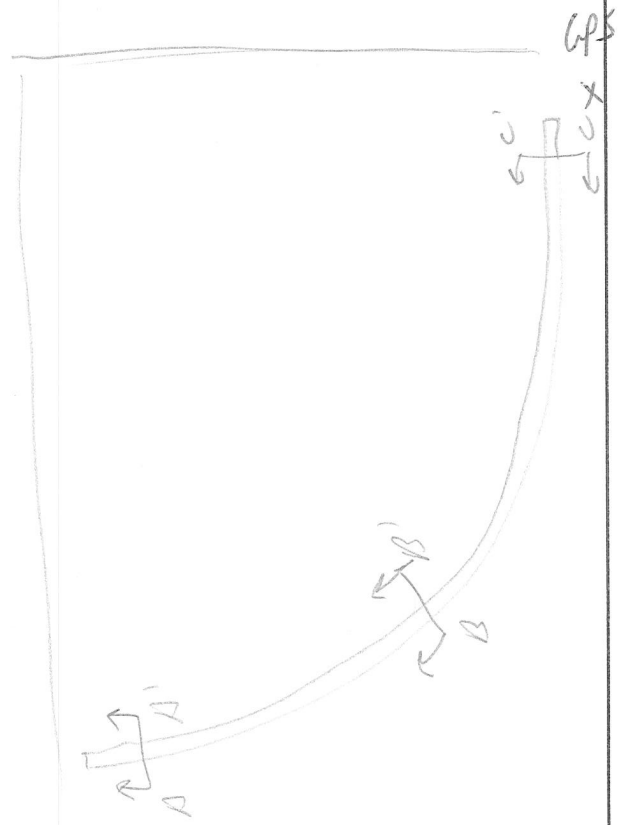
MSE WALL CHARACTERISTICS

MSE Wall at Bridge	(Y) N	Bridge Number if applicable:		Wall Number	R-374F
Surrounding Structures				Maximum Height of Wall (ft)	10.5 ft
Distance to Each Structure				One Stage, Two Stage or Block Wall	one stage
State Route Number				Estimated Max Length of Wall Abutment:	100 ft
Approximate Mile Marker				Max Slope of Ground in front of wall:	
GPS Datum	WGS/84, NAD/83, or NAD/27			Max Height of wall burial line above surrounding level ground:	30 ft
MSE Wall GPS Coordinates (Location of Measurement shown on plan view)	40° 20' 56.80" N 111° 46' 7.87" W			Please draw rough layout of panel with approximate dimensions in space provided below:	
If known, Panel or System Manufacturer	<div style="border: 1px solid black; width: 150px; height: 80px; margin: 0 auto; position: relative;"> 18" 8" </div>				

Summary of Key Observations:

18
128

Plan View/Drainage:



Cross Sections:



Cross Sections:

Required Item:		Notes/Measure/Extent of Problem/Location/Photo Numbers	Measurement/Extent of Problem/Location/Photo Numbers
BASE WALL DRAINAGE			
Drainage			
Yes	No	N/A	UKN
Y	N	1-Is there an active water source near the base of the wall (i.e. the wall near a body of water with no cover)?	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	2-If applicable, are the catch basins at the base of the wall blocked?	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	3-Is there any debris protruding through the wall?	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	4-Is there any vertical drains that extend through the backfill?	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	5-Is there erosion at the base of the wall or footing pad? (Photo 12)	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	6-Is there erosion along the wing wall?	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	7-Is there any signs of water flow along the base of the wall?	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	8-Is there less than 14 feet between irrigation sprinklers and wall?	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	9-Does the backfill or joint fabric appear to be saturated?	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	10-Is there vegetation growing in panel joints? (Photo 8)	Partial Clear / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	11-Are the deck drains and outlets at the top of the wall blocked? (Photo 14)	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	12-Can water enter the wall between coping and slab (i.e. Drain appropriate)?	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	13-Is there evidence at the base of the wall of water washing through their pipes?	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
BASE WALL JOINTS			
Long Level Slings Concrete Cracks			
Yes	No	N/A	UKN
Y	N	14-Is backfill coming out of joints or are there piles of backfill at the base of the wall? (Photos 2 & 3)	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	15-Are the joints wide enough to see fabric or backfill behind panels when looking into joints? (Photo 5) If yes, record the approximate maximum joint width in inches.	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	16-Is exposed backfill visible in the horizontal joints? (Photo 4)	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	17-Is there evidence of backfill or water washing through base? (Do not include additional drawings or photos)	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	18-Do the joints have a nonuniform horizontal spacing size? Are some horizontal joints larger/smaller than others? (Photo 6)	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	19-Do the joints have a nonuniform vertical spacing size? Are some vertical joints larger/smaller than others? (Photo 6)	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	20-Are the panels at the top of the wall either in or out of the wall? (Photo 7) If yes, record the approximate maximum offset.	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	21-Does the fabric appear brittle, or appear as if it has undergone excessive UV exposure?	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
BASE WALL FACING			
Wall Facing			
Yes	No	N/A	UKN
Y	N	22-Are the panels "popped-off" or clipped from contact with an adjacent panel? If yes, record the number in the wall.	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	23-Are there cracks that continue vertically through adjacent panels? (Photos 9 & 10) If yes, record the approximate number of panels in the wall with cracking.	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	24-Are there cracks that continue horizontally through adjacent panels? (Photos 9 & 10) If yes, record the approximate number of panels in the wall with cracking.	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	25-Are the panel corners making contact with each other? If yes, record the approximate number in the wall.	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	26-Are the panel corners "popped-off" or clipped from contact with an adjacent panel? If yes, record the number in the wall.	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	27-Does crack spacing suggest Differential Settlement?	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	28-Does the overlying coping exhibit Vertical Offset?	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	29-Are the coping and parapets loose or detaching? If yes, it may be appropriate to contact LDOT if detachment seems eminent.	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	30-Are the panels in danger of falling off? (If potential exists contact appropriate LDOT region).	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	31-Are the panels building (bowing horizontally)? If so, record maximum deformation from accessible coping to leveling pad. (Photo 11)	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	32-Is there tilting at the top or bottom of the wall? (Record maximum degree of tilting from azimuth using vertical level and inside the area)	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
BASE TOP OF WALL OBSERVATIONS			
Top of Wall			
Yes	No	N/A	UKN
Y	N	33-Is there evidence of settlement at the top of the wall? (pavement cracking, etc.)	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	34-Are there any open cracks in the concrete coping (not hairline)? If yes, record the approximate maximum crack width.	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	35-Is there any construction joint in the concrete coping opened up? (Photo 6) If yes, record the maximum joint width.	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /

