

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.

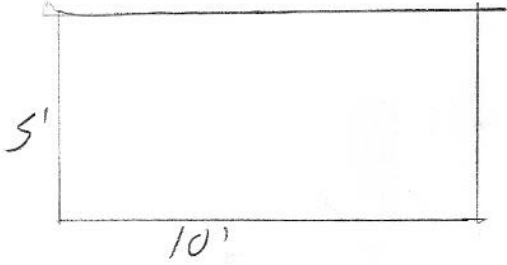
2-Inspect the wall using the attached form. Questions that require a 'Yes' answer should be documented by noting the extent of the problem in the right most column and photo documentation. Photo documentation should consist of wall or bridge number, nature of problem, date, photo number for wall, and 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

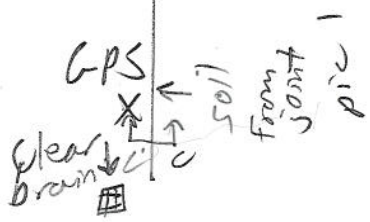
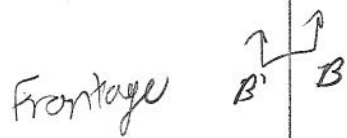
Region	2	Identifying Road/Intersection	I-15, North of 1700 S, SLC
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MSE WALL CHARACTERISTICS

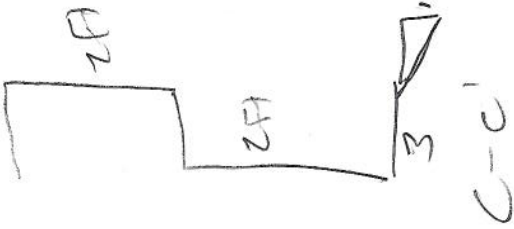
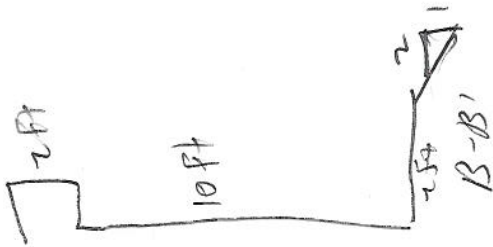
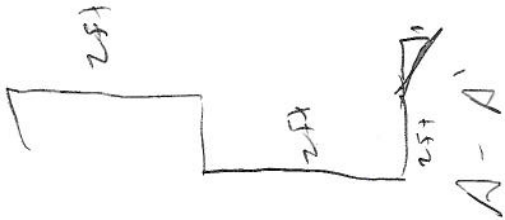
MSE Wall at Bridge	Y <input checked="" type="checkbox"/> (N)	Bridge Number if applicable:		Wall Number	R-350-2
Surrounding Structures				Maximum Height of Wall (ft)	12 ft
Distance to Each Structure				One Stage, Two Stage or Block Wall	
State Route Number				Estimated Max Length of Wall Abutment:	720 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:	
MSE Wall GPS Coordinates (Location of Measurement shown on plan view)	40°18.34.65" N 111°43.25.66" W 40°44' 8.82" N 111°54' 14.31" W			Please draw rough layout of panel with approximate dimensions in space provided below:	
If known, Panel or System Manufacturer					

Summary of Key Observations:

Plan View/Drainage:



Cross Sections:



Cross Sections:

BASE WALL DRAINAGE

Required	Yes	No	N/A	UKN	Drainage	Measurement/Extent of Problem/Location/Photo Numbers
1-4	Y	N	N/A	UKN	1-4 Are there any active water sources near the toe of the wall (or the wall over a body of water with seepage potential)?	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
5	Y	N	N/A	UKN	5-Are there cracks at the base of the wall?	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
6	Y	N	N/A	UKN	6-Are there vertical drains that travel through the backfill?	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
7	Y	N	N/A	UKN	7-Are there vertical drains that travel through the backfill?	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
8	Y	N	N/A	UKN	8-Is there erosion along the wing wall?	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
9	Y	N	N/A	UKN	9-Are there any signs of water flow along the base of the wall?	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
10	Y	N	N/A	UKN	10-Is there erosion at the base of the wall or leveling pad? (Photo 12)	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
11	Y	N	N/A	UKN	11-Does the backfill or joint fabric appear to be saturated?	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
12	Y	N	N/A	UKN	12-Over the deck drains and outlets at the top of the wall blockoff? (Photo 14)	Partial / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
13	Y	N	N/A	UKN	13-Does water enter the wall between coping and side (i.e., drain appropriately)?	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
14	Y	N	N/A	UKN	14-Is there evidence of discharge point of fill washing through drain pipe?	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /

BASE WALL JOINTS

Required	Yes	No	N/A	UKN	Joint	Measurement/Extent of Problem/Location/Photo Numbers
15	Y	N	N/A	UKN	15-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% /
16	Y	N	N/A	UKN	16-Are the joints wide enough to see fabric or backfill behind panels when looking into joint? (Photo 5) If yes, record the approximate maximum joint width in inches.	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
17	Y	N	N/A	UKN	17-Is exposed backfill visible in the horizontal joint? (Photo 3)	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
18	Y	N	N/A	UKN	18-Are there visible tears in the fabric? If there is evidence of backfill or water leaking through joint? (Do not induce additional damage to fabric)	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
19	Y	N	N/A	UKN	19-Do the joints have a non-uniform horizontal spacing? Are some horizontal joints larger/smaller than others? (Photo 6)	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
20	Y	N	N/A	UKN	20-Do the joints have a non-uniform vertical spacing? Are some vertical joints larger/smaller than others? (Photo 6)	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
21	Y	N	N/A	UKN	21-For the top of the joint either in or out of the wall? (Photo 7) If yes, record the approximate maximum distance.	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
22	Y	N	N/A	UKN	22-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

Required	Yes	No	N/A	UKN	Wall Facing	Measurement/Extent of Problem/Location/Photo Numbers
23	Y	N	N/A	UKN	23-Are there cracks in the panel?	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
24	Y	N	N/A	UKN	24-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% /
25	Y	N	N/A	UKN	25-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% /
26	Y	N	N/A	UKN	26-Over 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% /
27	Y	N	N/A	UKN	27-Over the panel corners "popped-off" or chipped 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% /
28	Y	N	N/A	UKN	28-Does the overlying coping exhibit Differential Settlement?	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
29	Y	N	N/A	UKN	29-Over the coping and parapets loose or dislodged? If yes, (1) may be appropriate to contact UDOT if detachment seems imminent.	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
30	Y	N	N/A	UKN	30-Are the panels in danger of falling off? (If potential risk to contact, approximate UDOT region).	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
31	Y	N	N/A	UKN	31-Are the panels bulging (bowing horizontally)? If yes, record maximum deformation from acceptable coping to leveling pad. (Photo 11)	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
32	Y	N	N/A	UKN	32-Is there tipping at the top or bottom of the wall? (Record maximum degree of tipping from vertical using vertical level and affected area).	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /

BASE TOP OF WALL OBSERVATIONS

Required	Yes	No	N/A	UKN	Top Of Wall	Measurement/Extent of Problem/Location/Photo Numbers
33	Y	N	N/A	UKN	33-Is there evidence of settlement at the top of the wall? (movement cracking, etc)	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
34	Y	N	N/A	UKN	34-Are there any open cracks in the concrete coping (not buffing)? If yes record the approximate crack width.	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
35	Y	N	N/A	UKN	35-Are the construction joints in the concrete coping opened up? (Photo 8) If yes, record the maximum joint width.	/ 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /

