

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	4	Identifying Road/Intersection	I-15, Washington Interchange, St George.

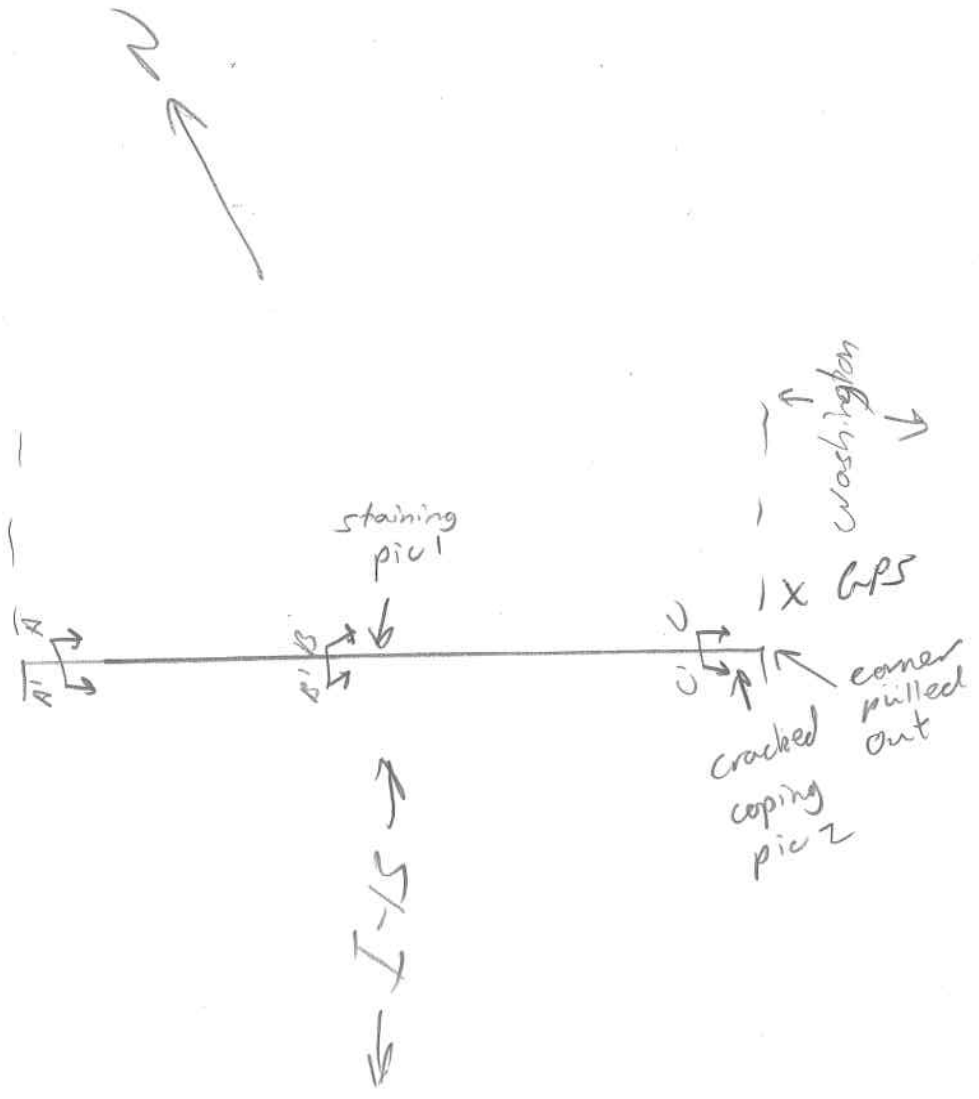
MSE WALL CHARACTERISTICS

MSE Wall at Bridge	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Bridge Number if applicable:		Wall Number	R-383-C
Surrounding Structures				Maximum Height of Wall (ft)	18 ft	
Distance to Each Structure				One Stage, Two Stage or Block Wall	1-stage	
State Route Number				Estimated Max Length of Wall Abutment:	130 ft	
Approximate Mile Marker				Max Slope of Ground in front of wall:	0	
GPS Datum	WGS/84, NAD/83, or NAD/27			Max Height of wall burial line above surrounding level ground:	0	
MSE Wall GPS Coordinates (Location of Measurement shown on plan view)	37° 7' 41.94" N 113° 31' 30.80" 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: 100px; margin: 0 auto; position: relative;"> 5' 6' </div>		

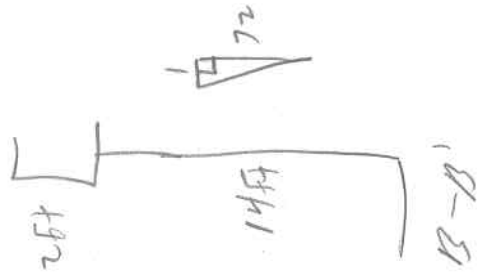
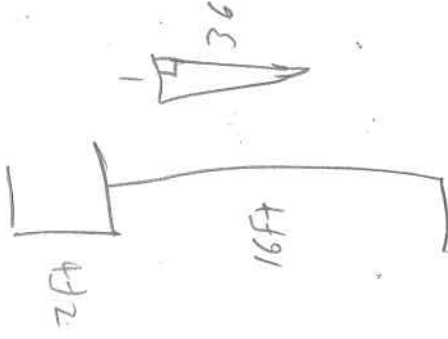
Summary of Key Observations:

Stains from water washed from bridge decking separating corner panel

Plan View/Drainage:



Cross Sections:



Cross Sections:

BASE WALL DRAINAGE

Required Item	Yes	No	N/A	UNKN	Measurement/Extent of Problem/Location/Photo Numbers
1-Is there any water source near the base of the wall (i.e. a body of water with noz)?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
2-If applicable, are the cracks located at the base of the wall block?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
3-Are there any water penetrating through the wall?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
4-Are there vertical drains that extend through the backfill?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
5-Is there evidence at the base of the wall or footing pad? (Photo 12)	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
6-Is there erosion along the wing wall?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
7-Are there any signs of water flow along the base of the wall?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
8-Is there any evidence of soil washing through drain pipes?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
9-Does the backfill or joint fabric appear to be saturated?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
10-Is there vegetation growing in post joint? (Photo 8)	Y	N	N/A	UNKN	Blocked / 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
11-Are the deck, inlets and outlets at the top of the wall block? (Photo 14)	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
12-Can water enter the wall between coping and slab (i.e. Drain appropriately)?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
13-Is there evidence of soil washing through drain pipes?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /

MISE WALL JOINTS

Required Item	Yes	No	N/A	UNKN	Measurement/Extent of Problem/Location/Photo Numbers
1-Is there any water source near the base of the wall (i.e. a body of water with noz)?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
2-If applicable, are the cracks located at the base of the wall block?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
3-Are there any water penetrating through the wall?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
4-Are there vertical drains that extend through the backfill?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
5-Is there evidence at the base of the wall or footing pad? (Photo 12)	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
6-Is there erosion along the wing wall?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
7-Are there any signs of water flow along the base of the wall?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
8-Is there any evidence of soil washing through drain pipes?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
9-Does the backfill or joint fabric appear to be saturated?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
10-Is there vegetation growing in post joint? (Photo 8)	Y	N	N/A	UNKN	Blocked / 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
11-Are the deck, inlets and outlets at the top of the wall block? (Photo 14)	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
12-Can water enter the wall between coping and slab (i.e. Drain appropriately)?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
13-Is there evidence of soil washing through drain pipes?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /

NEE WALL FACING

Required Item	Yes	No	N/A	UNKN	Measurement/Extent of Problem/Location/Photo Numbers
1-Is there any water source near the base of the wall (i.e. a body of water with noz)?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
2-If applicable, are the cracks located at the base of the wall block?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
3-Are there any water penetrating through the wall?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
4-Are there vertical drains that extend through the backfill?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
5-Is there evidence at the base of the wall or footing pad? (Photo 12)	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
6-Is there erosion along the wing wall?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
7-Are there any signs of water flow along the base of the wall?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
8-Is there any evidence of soil washing through drain pipes?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
9-Does the backfill or joint fabric appear to be saturated?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
10-Is there vegetation growing in post joint? (Photo 8)	Y	N	N/A	UNKN	Blocked / 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
11-Are the deck, inlets and outlets at the top of the wall block? (Photo 14)	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
12-Can water enter the wall between coping and slab (i.e. Drain appropriately)?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
13-Is there evidence of soil washing through drain pipes?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /

SEE TOP OF WALL OBSERVATIONS

Required Item	Yes	No	N/A	UNKN	Measurement/Extent of Problem/Location/Photo Numbers
1-Is there any water source near the base of the wall (i.e. a body of water with noz)?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
2-If applicable, are the cracks located at the base of the wall block?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
3-Are there any water penetrating through the wall?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
4-Are there vertical drains that extend through the backfill?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
5-Is there evidence at the base of the wall or footing pad? (Photo 12)	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
6-Is there erosion along the wing wall?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
7-Are there any signs of water flow along the base of the wall?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
8-Is there any evidence of soil washing through drain pipes?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
9-Does the backfill or joint fabric appear to be saturated?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
10-Is there vegetation growing in post joint? (Photo 8)	Y	N	N/A	UNKN	Blocked / 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
11-Are the deck, inlets and outlets at the top of the wall block? (Photo 14)	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
12-Can water enter the wall between coping and slab (i.e. Drain appropriately)?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /
13-Is there evidence of soil washing through drain pipes?	Y	N	N/A	UNKN	/ 0-Nb 1% 5% 10% 25% 50% 75% 90% 95% 100% /

Y	N	UN	16-Is there a large gap between the approach slab and the approach pavement? (Photo 13) (When the approach slab is not supported by a pier or abutment, the approach slab should be supported by a pier or abutment. If the approach slab is supported by a pier or abutment, the approach slab should be supported by a pier or abutment.)	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	UN	17-At the abutments, has the joint between the wall coping and the abutment opened up significantly? If so, record maximum distance.	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	UN	18-Is the coping wall pulling away from pavement/roadway section? Please record maximum distance of abutment for wall.	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /

RISE STABILITY

Required Y/N	Observed	Comments	Measurement/Extent of Problem/Location/Photo Numbers	Pass/Fail
Y	N	UN	19-What is the location depth of leveling pad? Found Cross-Probe (near wall) located 2 inches from wall in a maximum depth of 21 inches (24 inches is the minimum depth for MSE Wall)	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	UN	20-Is leveling pad exposed?	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	UN	21-Is there cracking in the leveling pad? If so, record maximum crack size with photo.	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	UN	22-Is there a four foot bench (level slope) directly along the wall before the slope changes? (Record width?)	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	UN	23-Is there a slope steeper than V:1.5 to H:1 in front of the wall? Please record slope and height of backfill above top of wall.	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	UN	24-Is there a slope greater than V: 1.5 to H:1 below the wall? Please record slope and height of backfill below the wall.	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	UN	25-Is there excessive degradation of panel face?	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /

RISE IMPACT COLLISION PROTECTION

Required Y/N	Observed	Comments	Measurement/Extent of Problem/Location/Photo Numbers	Pass/Fail
Y	N	UN	26-Is there excessive corrosion on girder(s) or other exposed metal that might indicate normal conditions?	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	UN	27-Are there major rust stains on the face panel(s)? Along joints? If so, record total number.	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	UN	28-Are any internal strips exposed? Does there appear to be corrosion on these strips? If applicable please record the total number of strips affected.	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	UN	29-Was a readily-observable depth of exposed wall? If so, please indicate depth in inches.	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	UN	30-Is there any indication of other corrosion (excluding bare rust, exposed metal inside epoxy coating)? If so, please indicate the location of the corrosion.	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /

RISE AS BUILT DIFFERENT FROM DESIGN

Required Y/N	Observed	Comments	Measurement/Extent of Problem/Location/Photo Numbers	Pass/Fail
Y	N	UN	31-Any groundwale wall protrusions in place at the base of the wall (to prevent it from potential traffic barrier)?	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	UN	32-Does it appear that the wall has been involved in an accident (exploded panel, recent damage to the wall)?	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	UN	33-Does it appear the wall's functionality and integrity has been compromised by a collision or accident?	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /

RISE AS BUILT DIFFERENT FROM DESIGN

Required Y/N	Observed	Comments	Measurement/Extent of Problem/Location/Photo Numbers	Pass/Fail
Y	N	UN	34-Are there some wall angles (<90°)?	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /

Required Y/N	Observed	Comments	Measurement/Extent of Problem/Location/Photo Numbers	Pass/Fail
Y	N	UN	35-Is the layout in general accordance with drawings?	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	UN	36-Is the panel CTR (Center in Place) Does there appear to be excessive cracking in the panel?	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	UN	37-Is the panel CTR (Center in Place) Does there appear to be excessive cracking in the panel?	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	UN	38-Is the panel CTR (Center in Place) Does there appear to be excessive cracking in the panel?	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	UN	39-Are there any structures on or near wall that were not included in initial drawings?	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	UN	40-Are there any irrigation, utilities, or structures that are not part of the initial drawings?	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	UN	41-Have there been any excavations or evidence of excavations near the wall?	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	UN	42-Have local property owners changed the dynamics of the wall (additional structures, irrigation, vegetation, etc.)?	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	UN	43-Are there piles located in the wall (bridge abutment)?	/ 0-N6 1% 5% 10% 25% 50% 75% 90% 95% 100% /