

STATE OF UTAH MSE WALL INSPECTION FORM

Compiled As Part of Research By The Utah Department of Transportation

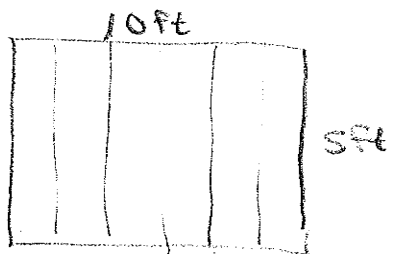
Instructions:

- 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

Inspector Information

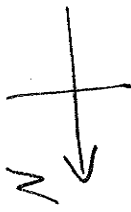
Inspection Date	7/20/07	Names Of Inspectors	Ryan maw, Holly Griffin
Region	2	Identifying Road/Intersection	480N / I-15

at Southern MSE WALL CHARACTERISTICS

MSE Wall at Bridge	<input checked="" type="radio"/> Y <input type="radio"/> N	Bridge Number if applicable:		Wall Number	351-30
Surrounding Structures	residential		Maximum Height of Wall (ft)	8ft min to 21.5'	
Distance to Each Structure	150ft		One or Two Stage Wall	+10	
State Route Number			Estimated Max Length of Wall Abutment:	1000 ft	
Approximate Mile Marker			Max Slope of Ground in front of wall:	level - 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)	N 40° 46.676 (400N)		Please draw rough layout of panel with approximate dimensions in space provided below: 		
	W 111° 54.598				
If known, Panel or System Manufacturer	VSL				

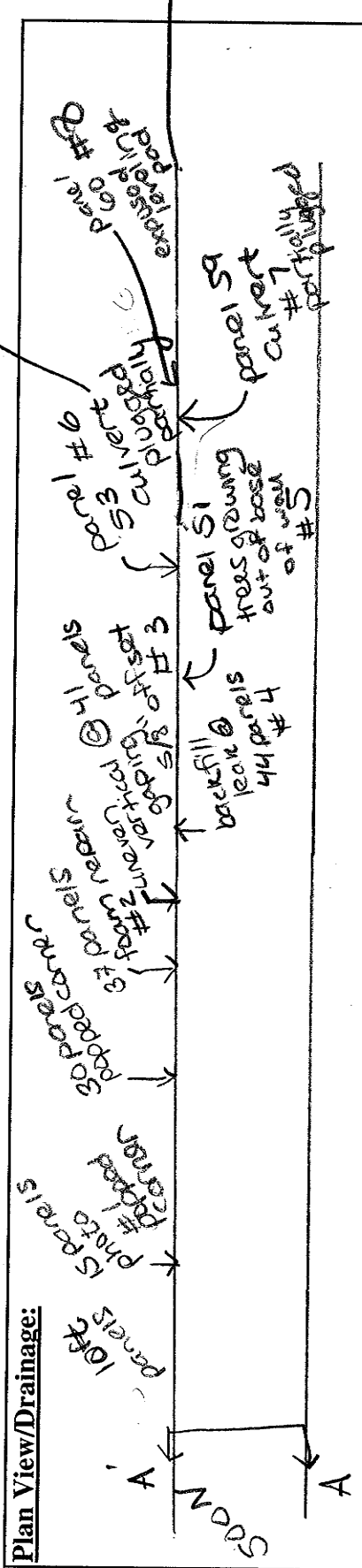
Summary of Key Observations:

- closing of approach slab gap (#14, 15)
- vegetation along interstate w/ irrigation on top of wall
- leveling pad exposed through res. area
- ~~grass~~ culverts through wall
- residents - sprinklers + concrete driveway
- does not wrap around abutment
- culverts difficult to observe - bared entry, offsets if any were minimal



3' diameter

Plan View/Drainage:



---I-S---

20" between two stages

laeving pad # 9

331 N - #10 - ivy

#11 - coupons @ 30s N apple court

#12 - panel buldge " " " " " "

#13 " " " " " "

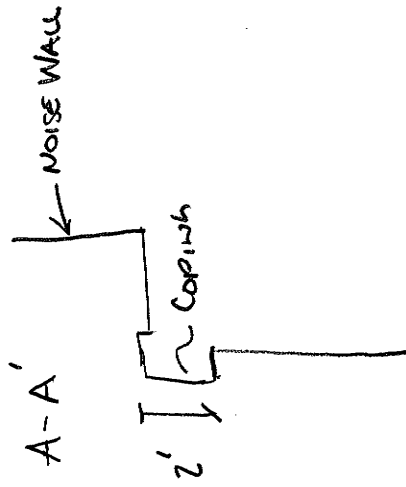
#14 approach slab covered

#15 differential gap between abutment and approach slab @ 300N

INCLUDED ALONG 640 WEST

← 3" offset

Cross Sections:



Cross Sections:

MSE WALL DRAINAGE

Table with columns: Required Field, Yes, No, N/A, URSI, Description, Measurement/Extent of Problem/Location/Photo Numbers. Includes rows 1-15 for drainage and joint inspection.

MSE WALL JOINTS

Table with columns: Required Field, Yes, No, N/A, URSI, Description, Measurement/Extent of Problem/Location/Photo Numbers. Includes rows 16-21 for joint inspection.

MSE WALL TACKING

Table with columns: Required Field, Yes, No, N/A, URSI, Description, Measurement/Extent of Problem/Location/Photo Numbers. Includes rows 22-31 for tacking inspection.

MSE TOP OF WALL OBSERVATION

Table with columns: Required Field, Yes, No, N/A, URSI, Description, Measurement/Extent of Problem/Location/Photo Numbers. Includes rows 32-35 for top of wall observation.

Required Field	Drawings	Observed	Problem/Location/Photo Numbers	Measurements	Problem/Location/Photo Numbers	Measurements
Y	N/A	UNK	36-Is there a large gap between the approach slab and the approach pavement? (Photo 1.1) Open this problem if a lighting situation at the approach is correct. Record the approximate maximum gap size.	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	UNK	37-Is the pavement, but the joint between the wall coping and the abutment opened up significantly? If so record the opening.	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N	UNK	38-Is the coping wall pulling away from permanent/backup wall? Please record maximum displacement of the wall.	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /

MBE METAL CORROSION

Required Field	Drawings	Observed	Problem/Location/Photo Numbers	Measurements	Problem/Location/Photo Numbers	Measurements
Y	N/A	UNK	39-What is the location depth of leveling steel? Please Check-Photo into soil located 2 inches from wall to a maximum depth of 24 inches (24 inches is the minimum depth for MBE Wall)	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N/A	UNK	40-Is leveling pad exposed?	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N/A	UNK	41-Is there cracking in the leveling pad? If so, record maximum crack size with gaps.	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N/A	UNK	42-Is there a fine foot base? (Foot step) directly along the wall before the slope begins (Closest Width)?	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N/A	UNK	43-Is there a slope steeper than V:1.5 to H:1 in front of the wall? Please record slope and height of bankfill above top of wall.	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N/A	UNK	44-Is there a slope greater than V:1.5 to H:1 below the wall? Please record slope and height of bankfill below the wall.	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N/A	UNK	45-Is there excessive degradation of panel base?	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /

MBE IMPACT/CRACK PROTECTION

Required Field	Drawings	Observed	Problem/Location/Photo Numbers	Measurements	Problem/Location/Photo Numbers	Measurements
Y	N/A	UNK	46-Is there excessive corrosion on guardrails or other exposed metal that might indicate sensitive conditions?	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N/A	UNK	47-Are there major rust stains on the face panels? Along joints? If so, record total number.	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N/A	UNK	48-Are any internal steps exposed? Does there appear to be corrosion on these steps? If applicable please record the total number of steps exposed.	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N/A	UNK	49-Was a reliability sample taken of exposed steel? If so, please indicate depth in inches.	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N/A	UNK	50-Is there any indication of fiber corrosion (swelling base, rust, exposed metal inside epoxy coating)? If so please record the total number of panels affected.	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /

MBE OBSTRUCTIONS IN REINFORCEMENT GEOMETRY

Required Field	Drawings	Observed	Problem/Location/Photo Numbers	Measurements	Problem/Location/Photo Numbers	Measurements
Y	N/A	UNK	51-Are generally wall protrusions in place at the base of the wall (to prevent it from potential uplift)?	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N/A	UNK	52-Does it appear that the wall has been involved in an accident (replaced panel, recent dips in the wall)?	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N/A	UNK	53-Does it appear the wall functionally and integrity has been compromised by a collision or accident?	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /

MBE AS BUILT DIFFERENT FROM DESIGN

Required Field	Drawings	Observed	Problem/Location/Photo Numbers	Measurements	Problem/Location/Photo Numbers	Measurements
Y	N/A	UNK	54-Are there available drawings for the wall? Please indicate type (Situation and Layout, Design, As Built, etc.)	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N/A	UNK	55-Is the layout in general accordance with drawings?	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N/A	UNK	56-Are the panels CIP (Cast in Place)? Does there appear to be concrete existing in the panels?	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N/A	UNK	57-Was GEOTECH used in the construction of the wall?	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N/A	UNK	58-Are there any structures on or near wall that were not included in initial drawings?	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N/A	UNK	59-Are there any irrigation, utilities, or foundations that are not part of the initial drawings?	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N/A	UNK	60-Is there any evidence of excavation near the wall?	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N/A	UNK	61-Is there any evidence of vegetation near the wall?	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N/A	UNK	62-Is there any evidence of erosion near the wall (additional measures, irrigation, vegetation, etc.)?	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /
Y	N/A	UNK	63-Are there piles located in the wall (bridge abutment)?	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /	/ O-No 1% 5% 10% 25% 50% 75% 90% 95% 100% /

PHOTO #8

RESIDENTIAL

RESIDENTIAL

RESIDENTIAL

RESIDENTIAL