

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 | Main St., 2400 S, SLU |
|---------------|---|--------------------------------------|-----------------------|

MSE WALL CHARACTERISTICS

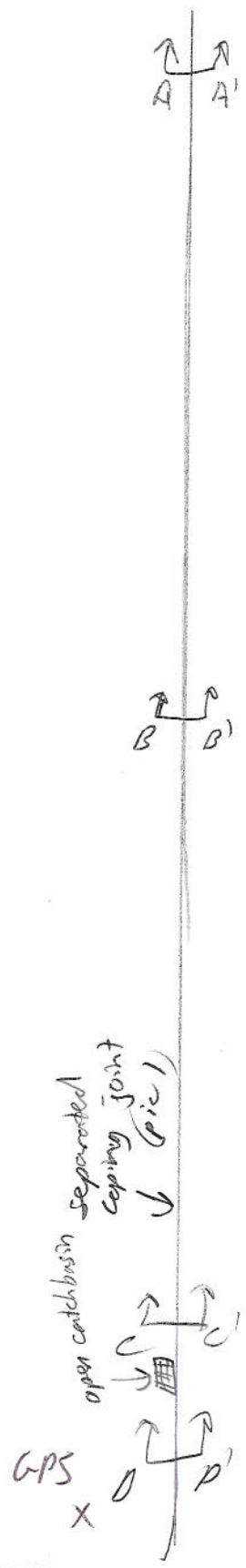
| | | | | | |
|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------|------------------------------|----------------------------------------------------------------------------------------|-----------------------------|---------|
| MSE Wall at Bridge | <input checked="" type="checkbox"/> N | Bridge Number if applicable: | | Wall Number | R-348-4 |
| Surrounding Structures | | | | Maximum Height of Wall (ft) | 24 ft |
| Distance to Each Structure | | | One Stage, Two Stage or Block Wall | | |
| State Route Number | | | Estimated Max Length of Wall Abutment: | | 400 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°43'6.92"N 111°53'27.42"W | | Please draw rough layout of panel with approximate dimensions in space provided below: | | |
| If known, Panel or System Manufacturer |  | | | | |

Summary of Key Observations:

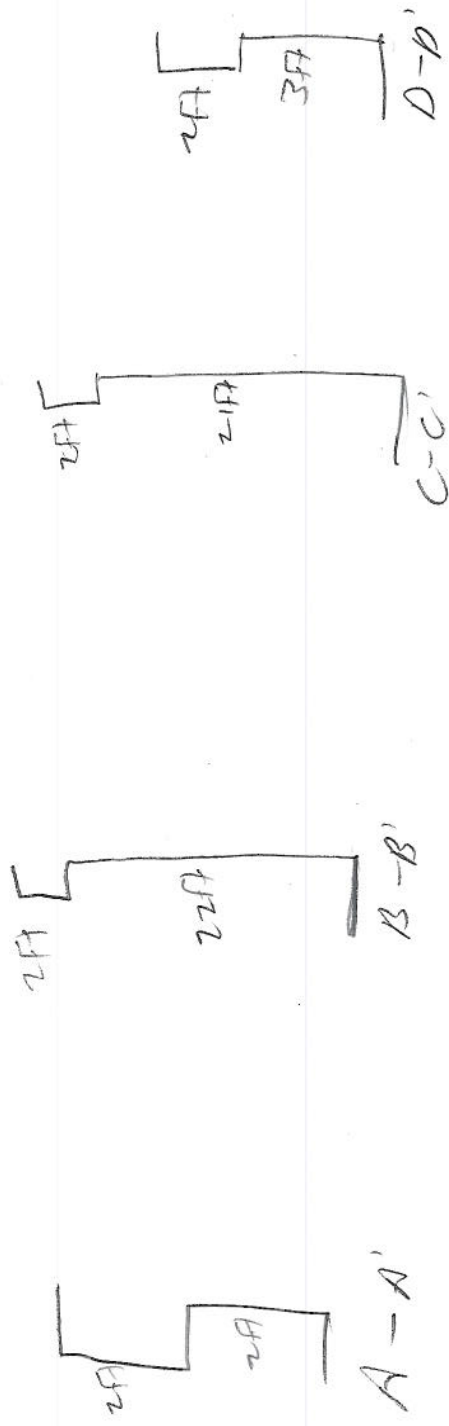
vines

Plan View/Drainage:

Z ←



Cross Sections:



Cross Sections:

MISE WALL DRAINAGE

Table with columns: Required Tests, Pass/Fail/NA/UNK, Measurement/Extent of Problem/Location/Photo Numbers. Includes tests for drainage, backfill, and vegetation growth.

MISE WALL JOINTS

Table with columns: Required Tests, Pass/Fail/NA/UNK, Measurement/Extent of Problem/Location/Photo Numbers. Includes tests for joints, backfill, and mortar.

MISE WALL FACING

Table with columns: Required Tests, Pass/Fail/NA/UNK, Measurement/Extent of Problem/Location/Photo Numbers. Includes tests for facing, mortar, and coping.

MISE TOP OF WALL OBSERVATIONS

Table with columns: Required Tests, Pass/Fail/NA/UNK, Measurement/Extent of Problem/Location/Photo Numbers. Includes tests for top of wall, cracking, and joint width.

| | | | | | |
|---|---|-----|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| Y | N | N/A | UKS | 56-Is there a large gap between the approach slab and the approach pavement? (Photo 15) Often this is a problem with the approach slab. Record the approximate maximum gap size. | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |
| Y | N | N/A | UKS | 57-Is the shoulder on the approach slab? Record the approximate maximum gap size. | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |
| Y | N | N/A | UKS | 58-Is the coping wall pulling away from pavement/curb by accident? Please record maximum displacement for wall. | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |

| ASSESS STABILITY | | | | | |
|------------------|----------|------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| Required Tests: | Observed | Code | Comments | Measurements/Extent of Problem/Location/Photo Numbers | |
| Y | N | N/A | UKS | 59-What is the location depth of leveling pad? Found Gage-Probe into wall located 2 inches from wall to a maximum depth of 24 inches (24 inches is the minimum depth for ASSE Wall) | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |
| Y | N | N/A | UKS | 60-Is leveling pad exposed? | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |
| Y | N | N/A | UKS | 61-Is there cracking in the leveling pad? If so, record maximum crack size with gage. | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |
| Y | N | N/A | UKS | 62-Is there a four foot bench (found dips) directly along the wall before the slope changes (Record Width)? | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |
| Y | N | N/A | UKS | 63-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-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |
| Y | N | N/A | UKS | 64-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-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |
| Y | N | N/A | UKS | 65-Is there excessive degradation of panel face? | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |

| ASSESS METAL CORROSION | | | | | |
|------------------------|----------|------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| Required Tests: | Observed | Code | Comments | Measurements/Extent of Problem/Location/Photo Numbers | |
| Y | N | N/A | UKS | 66-Is there excessive corrosion on guardrails or other exposed metal that might indicate corrosive conditions? | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |
| Y | N | N/A | UKS | 67-Are there major rust stains on the face panels? Along joints? If so, record total number. | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |
| Y | N | N/A | UKS | 68-Are any internal straps exposed? Does there appear to be corrosion on these straps? If applicable please record the total number of straps affected. | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |
| Y | N | N/A | UKS | 69-Is there any indication of other corrosion (swelling, bare rust, exposed steel inside epoxy coating)? If so please record the total number of panels affected. | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |

| ASSESS IMPACT COLLISION PROTECTION | | | | | |
|------------------------------------|----------|------|----------|-------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| Required Tests: | Observed | Code | Comments | Measurements/Extent of Problem/Location/Photo Numbers | |
| Y | N | N/A | UKS | 70-Are guardrails wall projections in place at the base of the wall (to protect it from potential traffic loads)? | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |
| Y | N | N/A | UKS | 71-Does it appear that the wall has been involved in an accident (replaced panel, recent damage in the wall)? | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |
| Y | N | N/A | UKS | 72-Does it appear the wall functionality and integrity has been compromised by a collision or accident? | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |

| ASSESS OBSTRUCTIONS IN REINFORCEMENT GEOMETRY | | | | | |
|-----------------------------------------------|----------|------|----------|-------------------------------------------------------|---------------------------------------------|
| Required Tests: | Observed | Code | Comments | Measurements/Extent of Problem/Location/Photo Numbers | |
| Y | N | N/A | UKS | 73-Are there acute wall angles (<90)? | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |

| ASSESS AS BUILT DIFFERENT FROM DESIGN | | | | | |
|---------------------------------------|----------|------|----------|----------------------------------------------------------------------------------------|---------------------------------------------|
| Required Tests: | Observed | Code | Comments | Measurements/Extent of Problem/Location/Photo Numbers | |
| Y | N | N/A | UKS | 74-Is the layout in general accordance with drawing? | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |
| Y | N | N/A | UKS | 75-Are there any structures on or near wall that were not included in initial drawing? | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |
| Y | N | N/A | UKS | 76-Is there any excavation or evidence of excavation near the wall? | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |
| Y | N | N/A | UKS | 77-Is there any excavation or evidence of excavation near the wall? | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |
| Y | N | N/A | UKS | 78-Is there any excavation or evidence of excavation near the wall? | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |
| Y | N | N/A | UKS | 79-Is there any excavation or evidence of excavation near the wall? | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |
| Y | N | N/A | UKS | 80-Is there any excavation or evidence of excavation near the wall? | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |
| Y | N | N/A | UKS | 81-Is there any excavation or evidence of excavation near the wall? | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |
| Y | N | N/A | UKS | 82-Is there any excavation or evidence of excavation near the wall? | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |
| Y | N | N/A | UKS | 83-Is there any excavation or evidence of excavation near the wall? | / 0-No 1% 5% 10% 25% 50% 75% 90% 95% 100% / |