

### **3.24 SUMMARY OF MITIGATION COMMITMENTS**

This section provides a summary of the mitigation measures developed to avoid, minimize, rectify, reduce or compensate impacts from the Midvalley Highway.

#### **3.24.1 Transportation**

Although the Midvalley Highway would most likely increase traffic on adjacent roadways, especially those that provide a connection to the highway, no mitigation measures are proposed. The Midvalley Highway would improve congestion on SR-36 and at the Lake Point Interchange with I-80. The Midvalley Highway would improve regional traffic mobility by providing a new facility in the center of Tooele Valley and a new connection to I-80.

#### **3.24.2 Land Use**

Other than the direct impacts to property for the needed right-of-way, there will be no impacts to existing land use and existing zoning. Compensation to land owners for direct impacts to land will be handled in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act.

##### **Purchase of Property**

Tooele County and UDOT would coordinate with individual land owners that would be impacted by the Midvalley Highway (selected alternative). Compensation to impacted properties would be in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act.

If the Midvalley Highway severed a parcel and made it inaccessible it would be purchased under the same Act.

#### **3.24.3 Agricultural Lands**

##### **Purchase of Property**

Tooele County and UDOT would coordinate with individual land owners that would be impacted by the Midvalley Highway (selected alternative). Compensation to impacted agricultural lands would be in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act.

If the Midvalley Highway severed a parcel and made it inaccessible it would be purchased under the same Act.

##### **Access**

Tooele County and UDOT will maintain access to existing farmland and agricultural areas as part of the roadway design. Access to agricultural lands divided by the Midvalley Highway would be provided if reasonable and may include culverts or other structures beneath the Midvalley Highway. This would ensure that the agricultural lands would remain viable after the completion of the project.

## **Irrigation**

The irrigation pivots associated with the LDS Church property (Midvalley Highway West Alternative – both options) would require reconfiguration (if that alternative was selected). Access would not be eliminated nor affect the ability of owners to continue using the land for agricultural production. Tooele County and UDOT would coordinate with the LDS Church during the design phase of the project to ensure that the remaining agricultural parcel would remain viable.

Other impacted irrigation features (i.e. sprinklers, ponds) would be restored during the construction phase. Tooele County and UDOT would coordinate with the affected property owner during the design phase of the project to ensure that the remaining agricultural parcel would remain viable.

## **Agricultural Protection Areas**

Tooele County and UDOT have identified parcels that are protected by the Agricultural Protection Areas defined by Utah Code. Prior to construction, Tooele County and UDOT would coordinate with those property owners who have placed their lands in an APA. The removal of the APA status would require the approval of the land owner or the Tooele County Commission, who in cooperation with the Tooele County Agricultural Protection Board, has the authority to do so.

### **3.24.4 Social and Community Resources**

The only impacts from the Midvalley Highway alternatives identified in this section are acquisitions and relocations. Mitigation measures are required due to acquisition of property and relocation of residents and businesses.

To mitigate, the project will implement provisions of the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended and the Utah Relocation Assistance Act, Utah Code Section 57-12 for all properties purchased for needed right-of-way, and will compensate all property owners at fair market value and provide relocation assistance, including housing of last resort if needed.

### **3.24.5 Economics**

Under either of the Midvalley Highway alternatives, there would be no adverse impacts. As a result, there would be no mitigation measures required.

### **3.24.6 Pedestrian and Bicyclist Considerations**

All of the existing and planned trails intersected by the Midvalley Highway alternatives will either be spanned by a new bridge/culvert or crossed at-grade (arterial section). None of the trails would be bisected; all of the existing and planned trails would remain functional. Pedestrian and bicycle routes would be crossed either by a bridge, culvert, or at-grade.

## **Sheep Lane Trail**

Discussions with Tooele County indicate that this trail could be relocated adjacent or as part of the arterial section of the Midvalley Highway between SR-36 and SR-112. A potential multi-use trail could be constructed on the western side of the arterial, which could be used for the Sheep Lane Trail. It would cross over the UPRR tracks on the same bridge as the

arterial. The trail would reconnect with its existing alignment at SR-112. The trail realignment is shown in Figure 3.6-1.

In addition, this trail would be spanned by the proposed SR-138 interchange with the Midvalley Highway.

### **Midvalley Trail**

The Midvalley Trail would be spanned by a new bridge or culvert for the Midvalley Highway alternatives. In addition, the Rogers Street trailhead would be relocated or reconfigured due to its impacts from the Midvalley Highway.

### **UP Right-of-way Trail**

An interchange is planned for the future parkway (3400 North) interchange. This planned trail would be spanned by the interchange at this location.

### **Outer Rim Trail**

An interchange is planned for the future parkway (3400 North) interchange. This planned trail would be spanned by the interchange at this location.

#### **3.24.7 Air Quality**

The air quality analysis presented in this section does not indicate that significant air quality impacts will result from the implementation of either the Midvalley Highway East Alternative or the Midvalley Highway West Alternative. Therefore, no air quality mitigation measures (other than compliance with applicable regulations) are warranted.

#### **3.24.8 Noise**

As a result of this noise analysis, the potential noise barriers are considered not feasible or not reasonable. Therefore, noise barriers are not recommended as part of the Midvalley Highway alternatives.

#### **3.24.9 Geology, Soils, and Topography**

There would be no adverse impacts as a result of the project, and therefore, no mitigation is required. However, BMPs will be incorporated into the design of the project to reduce erosion once the Midvalley Highway is constructed.

In addition, a geotechnical report would be prepared during the design phase of this project. The geotechnical report would identify specific measures to minimize the risk from the geologic hazards discussed in section 3.9.

#### **3.24.10 Water Resources**

Neither Midvalley Highway alternative would have an adverse impact on impaired waters, groundwater quality or surface protection zones, so mitigation is not necessary. Detention ponds would be provided for water quality treatment where it would be necessary to detain runoff to reduce its peak flow rate. The proposed detention pond locations are shown in Figure 3.10-1.

Surface water conveyance structures would be designed and constructed to allow for the free movement of water to minimize increases in channel gradients, and to minimize concentrated discharges to waterways in the project study area. Types of surface water conveyances will be determined during the final design of the Midvalley Highway.

A stormwater pollution prevention plan (SWPPP) will be obtained prior to construction to comply with the required UPDES permit prior to construction. It would include measures to minimize potential for erosion or scour within the limits of disturbance and in local affected waterways. The SWPPP would focus on erosion-sensitive areas, sediment-sensitive areas, and control and precautionary measures to be followed. Other elements of the SWPPP would include a maintenance schedule of BMPs, drainage and culvert systems, pre- and post-construction hydrology, non-stormwater discharges, waste disposal, re-vegetation, and monitoring procedures.

Selected BMPs would be used to prevent runoff from leaving the limits of disturbance. BMPs would ensure that no untreated runoff from roadways, bridges, or other structures would drain into streams or rivers.

Measures to treat the water quality of stormwater runoff from the limits of disturbance would be implemented to remove oils, grease, sediments, and heavy metals. BMPs to treat water quality would be selected from UDOT's developed standard measures and may include vegetated filter strips, oil and water separators, outlet protection, and erosion control blankets. These measures would be implemented along the entire alternative. Final selection of BMPs would consider input from UDEQ, and would comply with the existing UDOT individual stormwater permit. The exact types of stormwater treatment system that would ultimately be installed as part of this project would not be determined until final roadway design. Tooele County would determine final selection of water quality treatments. Long-term maintenance of these water quality treatment features would be performed by Tooele County.

If a well would need to be relocated, Tooele County and UDOT would purchase the water right, or the land associated with the right, or negotiate an agreement with the water right owner to replace the well. Impacts to groundwater caused by encroaching on wells and drinking water source protection zones are unlikely to require a permit by the Utah Division of Water Quality. Affected wells would be abandoned by a licensed well driller in accordance with Utah Administrative Code Section 655-4-12. The driller must contact the State Engineer and provide an abandonment log when the closure is completed. Neat cement grout, sand cement grout, unhydrated bentonite, or bentonite grout would be used to abandon wells and boreholes (UAC R655-4).

Tooele County and UDOT would design the project in accordance with applicable regulations and would not significantly encroach on any floodplain. Culvert crossings will be sized to convey the 100-year storm event. Roadway elevations would be kept above the floodplain, so that flooding would not interfere with this transportation facility. In addition, any culverts that provide water movement that extend along the future roadway, would be properly sized for stormwater and spring runoff in the mapped floodplain areas.

### **3.24.11 Wetlands and Waters of the U.S.**

Before the USACE issues a Section 404 permit, compensatory mitigation measures will be described in a Final Mitigation Plan. The plan will commit to mitigation measures for any

impacts that result from the project. Taking into account avoidance, minimization, and compensatory mitigation measures, the Midvalley Highway will be in compliance with Section 404 of the CWA and Executive Order 11990.

### **3.24.12 Wildlife; Threatened, Endangered, and Candidate Species; Utah State Species of Concern**

The Midvalley Highway alternatives would possibly have a direct impact to potential wildlife habitat. In addition, the Midvalley Highway would potentially have an indirect impact to certain wildlife species through habitat fragmentation, increased highway mortality, higher levels of roadside pollution, and higher noise levels.

The Utah Department of Transportation, the Federal Highway Administration, and Tooele County will continue to coordinate with the U.S. Fish and Wildlife Service to develop reasonable, proportional mitigation to offset the potential impacts to wildlife. Coordination will continue through the National Environmental Policy Act process, design, and construction.

The Midvalley Highway will minimize impacts to wildlife by adhering to the following:

- The landscape concept for the Midvalley Highway will include low-maintenance, low-wildlife-forage-value plant materials to avoid attracting wildlife to the right-of-way;
- As practical, UDOT and Tooele County will ensure that the clearing and grubbing activities be limited during the non-nesting season of migratory bird species (approximately September 1 – April 30). If this is not possible, UDOT and Tooele County will conduct surveys to determine whether active nests are present; active nests found in the area should be left untouched until the young have fledged;
- Raptor nests within the range of disturbance of project activities (refer to the USFWS Utah *Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances* [2002]) will be surveyed prior to construction activity if the construction will occur during the nesting season. If an active raptor nest is identified, UDOT and Tooele County will coordinate with the USFWS to determine appropriate buffer distances and duration given the species and nest location;
- The design and construction will minimize the removal of vegetation where possible.

### **3.24.13 Vegetation and Invasive Species**

There is potential for the project to remove invasive species within the footprint of the Midvalley Highway; however there would be no long-term impacts associated with the spread of noxious and invasive weeds due to the implementation of mitigation measures included under UDOT Special Provision Section 02924S. To minimize temporary and long-term impacts, the Contractor would be required to use UDOT's Special Provision Section 02924S and 02924 for invasive weed control. Best Management Practices include high-pressure washing or steam cleaning of construction equipment prior to their use (i.e. scrapers, bulldozers, excavators), verifying and locating all noxious weeds within the disturbed areas, and utilizing a state licensed pesticide applicator to apply herbicide within identified areas prior to construction.

#### **3.24.14 Historic, Archaeological and Paleontological Resources**

No mitigation is required for the construction of the Midvalley Highway alternatives. The project would not have an Adverse Effect as defined by the NRHP. However, the contractor will be required to adhere to UDOT Standards Specification Section 01355, Part 1.13, *Discovery of Historical, Archaeological, or Paleontological Objects, Features, Sites, Human Remains, or Migratory Avian Species* during construction.

#### **3.24.15 Hazardous Materials**

During the final design phase of this project, the joint lead agencies (FHWA, UDOT and Tooele County) will coordinate with the Utah Division of Environmental Response and Remediation (DERR) and/or the EPA, the construction contractor, and the appropriate property owners. This coordination will involve determining the status of any sites of concern at the time of construction and identifying the nature and extent of remaining contamination (if any). The joint lead agencies will determine the need for Phase I Environmental Site Assessments at potential properties, if any, during the final design phase to further evaluate the potential for encountering hazardous materials. Previously unidentified sites such as buried drums, USTs, could be discovered during construction of the Midvalley Highway. In this case, all work will stop in the area of the contamination according to UDOT Standard Specification 01355 and the contractor will consult with the joint lead agencies and the Utah DERR.

#### **3.24.16 Visual Quality**

Tooele County may apply Context Sensitive Solution (CSS) principles and processes to develop appropriate and sustainable landscape and aesthetic treatments for the Midvalley Highway design elements at interchanges, retaining walls, and structures. The determination and degree to which CSS principles would be applied will be determined during the design phase of the Midvalley Highway Project. The visual impact of these structural elements may be mitigated by incorporating architectural design elements that reflect local community or regional characteristics. Visual impacts would also be mitigated through the use of sustainable landscaping as part of either Midvalley Highway alternative.

#### **3.24.17 Energy**

The anticipated energy consumption during the operation of the Tooele Midvalley Highway is similar for each alternative. No mitigation is proposed.

#### **3.24.18 Construction Impacts**

##### **Traffic**

To minimize impacts during construction the contractor would be required to follow the specifications in the *Manual on Uniform Traffic Control Devices* (MUTCD), provide advance notice for road closures and delay, and maintain access to residences and businesses. The impacts to traffic would be temporary in nature and not have any long-term delays. Access to property would be maintained during construction to the extent possible.

### **Utilities, Canals, and Railroads**

Utility agreements would be required between UDOT, Tooele County, and the affected utility companies prior to their relocation or disturbance. UDOT and Tooele County would coordinate with the UPRR during the design phase to ensure that their concerns are addressed. Also, UDOT and Tooele County would require a railroad right of entry to be obtained by the contractor prior to any work being performed within railroad right-of-way.

Advance notice would be given of all anticipated disruptions to utility service. Water carried by the irrigation facilities would continue to reach farmers and businesses during construction. Best Management Practices (BMPs) would be used to maintain the quality of the water within the irrigation facilities during construction.

### **Farmlands**

Tooele County would maintain access to existing farmland and agricultural areas during the construction phase of this project. Potential effects on the irrigation systems, including ditches, canals, and ponds, would be avoided or reconstructed as part of the design and construction of the preferred alternative. These facilities would be relocated and reconstructed to maintain continuity and use of the water delivery systems. Tooele County would coordinate with the affected property owners to ensure that to the extent possible their concerns are met and addressed.

### **Pedestrian and Bicycle Considerations**

During construction, the Sheep Lane Trail and the Midvalley Trail would still remain open and functional. However, at the location of the crossing, these trails may be closed during construction for safety reasons. Notice of these closures would be made to the public agencies that maintain and own the trails and to the general public. The impacts to trails and bicycle routes would only be temporary and during construction.

### **Air Quality**

The contractor would be required to abide by the conditions of UDOT's Standard Specification for Dust Control and Watering (section 01572). The mitigation measures for construction air quality would be developed as part of the Emission Control Plan and submitted to the Utah Division of Air Quality. Measures that would be included in this plan are listed below.

- **Fugitive Dust Control** – Fugitive dust emissions would be controlled during the construction phase of this project. A Fugitive Dust Emission – Control Plan would be required of the contractor. It would outline project-specific activities for emission control and monitoring throughout the construction phase of this project and would be in accordance with state and federal regulations. Specific measures for controlling fugitive dust may include watering excavated areas, unpaved staging and parking areas, and onsite stockpiles; chemical stabilization of excavated areas (depending on receiving waters); planting and revegetation of disturbed areas as soon as feasible; synthetic covers; reducing construction speeds on unpaved roads; covering loads; and washing haul trucks before entering the existing roadway network.
- **Street Sweeping** – Street sweeping would be required of the contractor at paved site access points.

- **Equipment Emissions** – Equipment emissions would be reduced. The contractor would be required to shut-off construction equipment when it is not used to reduce emissions from idling.

## Noise

Construction noise impacts are considered temporary and would be minimized through adhering to UDOT Standard Specifications for noise control (UDOT 2008 Standard Specification – 01355 Environmental Protection). Extended disruption of normal activities is not expected because no single receptor would be exposed to construction noise of long duration. In addition to these measures, the construction related activities would follow any applicable local noise ordinances to control potential construction noise impacts. The Tooele County noise ordinance states that a noise violation occurs by “using, operating or permitting, the use or operation of any... machine or device for the production or reproduction of sound between the hours of 10 p.m. and 7 a.m. in a way that is plainly audible...” (Tooele County Code 6-21-5).

Several construction noise abatement methods could be implemented to limit the effect on noise impacts. The below list of standard noise control specifications may be incorporated into construction contracts to mitigate the effects of construction noise:

- No pile driving or blasting operations performed within 2,000 feet of any occupied dwelling unit on Sundays, legal holidays and between the hours of 8:00 PM and 8:00 AM on other days, without the approval of the Engineer (Title 6, Chapter 21, Tooele County Code).
- Construction equipment used would have sound control devices no less effective than those provided on the original equipment. No equipment would have unmuffled exhaust.
- All equipment would comply with the pertinent equipment noise standards of the U.S. Environmental Protection Agency.
- The noise from rock crushing or screening operations within 2,000 feet of any occupied dwelling shall be mitigated by strategic placement of material stockpiles between the operation and the affected dwelling or by other means approved by the Engineer.

## Water Resources

The Storm Water Pollution Prevention Plan would be developed during the design phase of this project. It would include such measures as silt fences, fiber rolls, and other techniques to minimize storm water impacts to receiving waters. There may be a temporary increase in erosion due to the relocation or reconstruction of irrigation systems.

Due to the nature of the project, the potential for groundwater contamination is minimal. BMPs would be implemented to protect against spills or leakage of contaminants into soils. The Contractor would be required to follow UDOT’s Standard Specification 01355 – Environmental Protection.

An erosion control plan would be implemented to address any potential high-water flows from onsite and offsite that would need to be mitigated as these enter the construction site. BMPs may include the use of high flow silt fences, check dams, fiber rolls, and/or stilling

basins. Disturbed areas would also need to be seeded and stabilized as soon as possible after construction. Regular inspections would ensure that measures implemented remain effective. Construction practices would be managed to limit the duration of exposed soil to wind and rain.

### **Wetlands and Waters of the U.S.**

To ensure that the minimal acreage of impact to wetlands occurs, the following mitigation measures would be followed as discussed below.

The use of environmental fencing, slit fences, and other measures to ensure the contractor does not impact additional wetland areas would be used during construction. The wetland areas could be mapped, staked, and fenced prior to commencing construction related activities.

If additional wetland areas are impacted that have not been disclosed in this Draft EIS, the contractor would be required to identify those impacts. The contractor would be required to obtain the necessary environmental clearances and permits if such an impact occurred.

The contractor would be required to comply with the conditions of the USACE Section 404 permit and UDOT Standard Specification 01571 Environmental Controls. Many of the mitigation measures specified to protect water quality and vegetation during construction would also serve to protect wetlands and waters of the U.S. In addition, the following wetland protection and impact avoidance measures would be implemented:

- Before construction begins, the perimeter wetland areas outside the limits of disturbance would be marked by environmental fencing (as per UDOT Standard Specification 01571, part 2.1) to identify no-work zones.
- Free flow of waters into and across wetlands would be maintained by installing culverts at existing grade.
- Embankments, bridges, and culverts would be designed to minimize adverse impacts on wetland areas.
- Upon beginning construction, administrative and environmental controls would be in place to ensure that the wetland areas outside the construction zone are not impacted.
- Erosion control measures would be used to ensure that sediment from the construction area does not reach wetlands.
- Any changes to the construction plans by the contractor, UDOT and/or Tooele County would require review and approval by the appropriate state or federal agencies if there is the potential for impacts on wetlands or waters of the U.S. not previously identified.
- Contract specifications would ensure that all contractors are aware of the CWA Section 404 permit conditions and of the various plans and measures developed to control and minimize wetland impacts. UDOT and Tooele County would monitor contractor activities to ensure all permit conditions are met.
- The complete restoration of temporarily disturbed wetlands would include rough grading and revegetation to approximate pre-construction conditions.

### **Vegetation and Invasive Species**

The contractor would be required to follow UDOT's Special Provision 02924S – Invasive Weed Control, during construction activities. The BMPs listed in this specification include washing equipment (i.e. earth movers, graders) prior to their use and applying an herbicide along the project corridor to control the spreading of these noxious species. Also, disturbed areas would be revegetated with native, non-invasive species as soon as feasible.

### **Historic and Archaeological Resources**

The Contractor would be required to follow UDOT's Standard Specification 01355 - Environmental Protection. If cultural resources are discovered during construction, activities in the area would immediately stop and the contractor would notify Tooele County and UDOT.

### **Hazardous Materials**

Both of these types of hazardous materials concerns (discovery during construction and contractor caused) are addressed in UDOT's Standard Specification 01355 - Environmental Protection. The contractor would be required to adhere to this specification.

### **Visual Quality**

Impacts from lights used during nighttime construction would be minimized by aiming or shielding the construction lights away from residential neighborhoods or other sensitive areas.