

## **General Specifications Housing Rehabilitation**

### **GENERAL REQUIREMENTS**

#### **General Requirements**

All materials supplied by the Contractor shall be new, and shall be installed in full accordance with the manufacturer's specifications. The Contractor is responsible for determining the quantities needed to complete the specified work.

Where specified, the Owner shall select finish, colors, styles and types of materials from a Contractor-provided selection of pre-mixed, in stock, readily available options which meet the General Specifications. The Contractor shall obtain the Owner's choice in writing, and shall provide a copy of these written choices to the Division if requested.

Contractors and their Subcontractors shall schedule working hours between 8:00am and 6:00pm Monday through Friday. Requests to work on weekends and before or after these hours must be approved by the Owner. The Contractor shall give a minimum 12-hour notice to the Owner before arriving for work.

All work shall comply with all applicable codes and regulations. These include the current adopted Utah State Construction and Fire Codes, the current Salt Lake City Ordinances Title 18 - Building and Construction, and other applicable codes and regulations. The Contractor shall obtain all permits for the work, schedule the inspections, and make any corrections required by the Building Official.

The Contractor is responsible for repairing any property that is damaged in the work area as a result of the work, unless the Contractor could not have foreseen causing the damage.

### **SITE WORK**

#### **Tree Removal**

Cut down and haul away the tree specified. Work shall be done in such a way that no damage is caused to above ground structures, overhead electrical or telecom wires, or other visible property. Remove all of the demolition debris from the site except wood chips. Grind the tree stump (not including the root system) to 12" below grade. Wood chips remain on site. Work does not include bringing in top soil fill or finishing of the demolition site. Unless otherwise specified, the Contractor is not responsible for damage to any subsurface obstacles (such as buried low voltage wire, invisible fence or sprinkling system). The Owner shall disclose any known subsurface obstacles that may be near the work area before work begins.

#### **Tree Trimming**

Trim the specified trees next to the home to provide a clearance of 2' horizontally and 8' vertically from the roof that is free of branches. All cuts shall be neat and at branch junctions.

Salt Lake City Housing and Neighborhood Development

# General Specifications Housing Rehabilitation

## Sewer Lateral Replacement

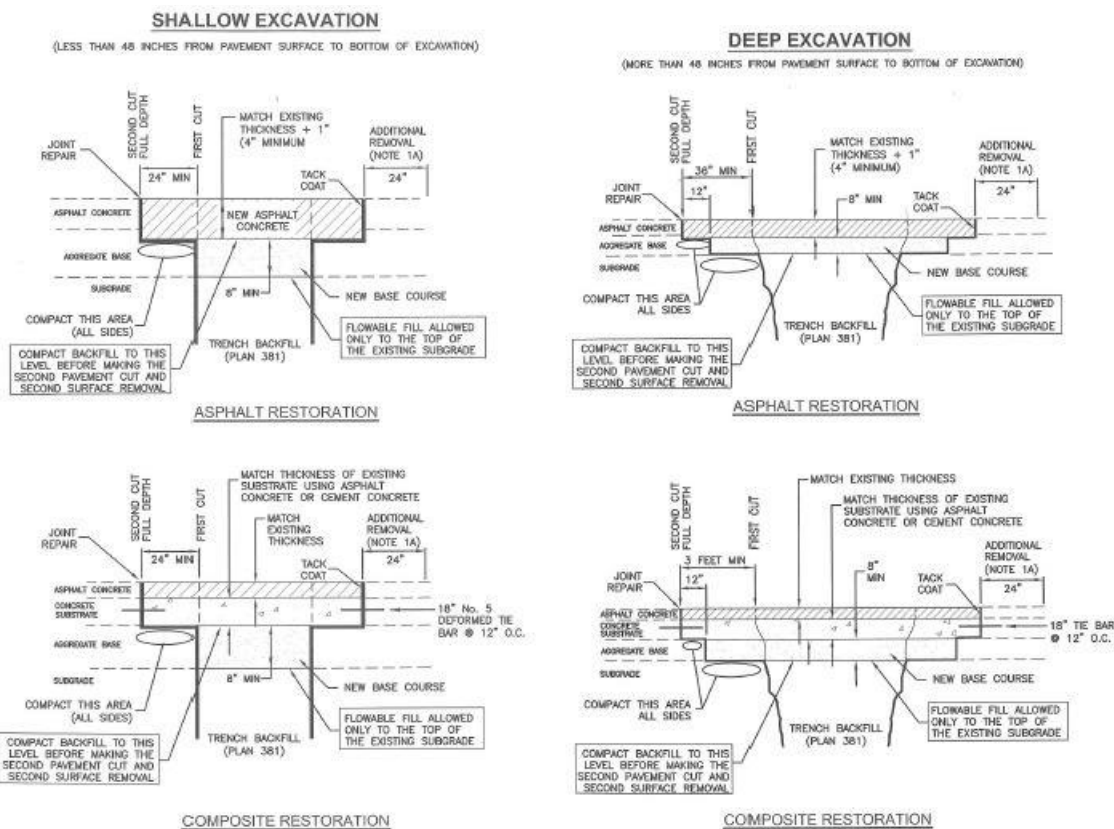
Replace the existing sewer lateral from house to the City main with a new 4-inch sewer lateral. Trenchless pipe bursting may be used if approved by Salt Lake City Public Utilities. The Contractor is responsible for obtaining and clearing all applicable permits and meeting all requirements of Salt Lake City Public Utilities, Engineering and Transportation.

## Sewer Lining

Line the existing sewer lateral from house to the City main with cured-in-place pipe. The work must be pre-authorized by Public Utilities, and then approved after completion. If the work is not approved by Public Utilities, the Contractor shall make the necessary repairs to obtain approval. The Contractor is responsible for obtaining and clearing all applicable permits and meeting all requirements of Salt Lake City Public Utilities, Engineering and Transportation.

## T-Patch Asphalt Pavement

Backfill trenches and patch asphalt pavement per the "T-Patch" design as shown in the drawings below (applies to work in private lanes and driveways where a City Engineering permit is not required):



## **General Specifications Housing Rehabilitation**

### **CONCRETE**

#### **Sub-Grade Prep**

Demolish and/or haul away the existing concrete or dirt of the new project area specified. Properly excavate and grade for new concrete. All vegetation and plant matter shall be removed from the pour area to 6 inches below sub-grade. Soft, wet or unstable areas within the pour area shall be removed to 12 inches below sub-grade and filled with granular material and mechanically compacted. Mechanically compact the entire new pour area before pouring. Proper drainage must be maintained away from the building with the same slope for sub-grade as for finished concrete surface.

#### **Gravel Sub-Grade**

Excavate and remove 4 inches of sub-grade material from the pour area. Additional areas within the sub-grade area that are soft, wet, or unstable shall be removed. The excavated area shall be graded for proper drainage away from all buildings and structural components such as post footings and columns. The sub-graded area shall be filled with 4 inches of  $\frac{3}{4}$  minus gravel or road-base and be mechanically compacted before placing any reinforcing steel or concrete.

#### **Ready-Mix Concrete**

The ready-mix concrete shall be Class 4000, APWA Section 03 30 04. This is the same mix required by Salt Lake City Engineering for public way concrete work (City Mix). The 6.5 bag City Mix shall be used from March 1st through October 1st, and the 7.5 bag City Mix shall be used from October 1st through March 1st. Concrete will not be poured between October 1st and March 1st unless approved by the Division and the Owner. The Contractor shall be responsible to see that the concrete used meets this specification and shall provide copies of the delivery tickets to the Division.

#### **Exterior Flatwork**

The new concrete shall be a minimum of 4 inches thick. Proper drainage must be maintained away from the building with a minimum slope of 2% (1/4 inch per foot). A landing outside a door or at the foot of a stairway shall have a maximum slope of 2% (1/4 inch per foot).

Expansion board shall be placed against abutting concrete, and tooled or saw-cut control joints shall be placed no more than 8 feet apart. For pours less than 8 feet in width, place control joints the same distance apart as the width of the pour. Control joint depth shall be no less than 25% of the slab thickness.

The finish shall be smooth with a light broom texture.

Contractor shall be responsible for the removal of all forms after the pour, and for the cleanup of the site from concrete spillage, splash, wash out and other construction debris. The form voids around the edges of the newly poured concrete shall be filled with soil and blended into the existing landscape. All existing sprinkler lines or heads that might have been damaged or dislodged as a result of the work shall

## **General Specifications Housing Rehabilitation**

be repaired or reset. Any damage from the concrete truck or other equipment shall be repaired by the Contractor.

Concrete shall not be poured in adverse weather conditions. Apply to the surface of the newly poured and finished concrete ChemMasters SilenCure, WR Meadows CS309, US Spec APS-25, or an approved alternate solvent-based acrylic curing and sealing compound. Notify the Division of the scheduled pour time 24 hours in advance so that an inspection of the forming and grading may be made, and an alternate sealant can be approved.

The Contractor is responsible for the protection of the concrete from vandalism or accidental imprints until work has been completed on the day of the pour.

### **Concrete Porch, Cap and Steps**

New work shall meet existing adjacent walking surfaces to provide a means of egress per current code. The horizontal surfaces shall shed water away from the building with a maximum slope of 2% (1/4 inch per foot) without pooling.

Footings for porch and steps shall be reinforced with rebar, and approved in a footings inspection by the Building Official.

A porch foundation wall shall be 6 inches thick, reinforced with rebar, and doweled to the footing and house foundation.

Steps shall be reinforced with rebar, and doweled to the porch foundation wall.

Any cavity under the porch or the steps shall be completely filled with compactable granular material.

A porch cap shall be 5 ¼ inches thick, overhang the foundation wall by 1 ½ inches, and be dowelled to the foundation wall or the house foundation.

A weatherstep shall replace an existing in the same configuration.

Notify the Division of the scheduled pour time 24 hours in advance so that an inspection of the grading and forming may be made, and the sealant can be approved before the pour. Concrete shall not be poured in adverse weather conditions.

The formwork shall be stable and secure during the pour. Forms that do not stay in place may result in the rejection of the pour by the Division.

Finish the horizontal surfaces smooth with a light broom texture. Apply foundation plaster to the vertical, above-grade surfaces.

Apply to the surface of the newly poured and finished concrete ChemMasters SilenCure, WR Meadows CS309, US Spec APS-25, or an approved alternate solvent-based acrylic curing and sealing compound.

Salt Lake City Housing and Neighborhood Development

451 South State Street, Room 445, Salt Lake City, UT 84114

Page 4 of 20

## **General Specifications Housing Rehabilitation**

The Contractor is responsible for the protection of the concrete from vandalism or accidental imprints until work has been completed on the day of the pour.

Remove forms after the pour, and clean from the site concrete spillage, splash, wash out and other construction debris. The form voids around the edges of the newly poured concrete shall be filled with soil and blended into the existing landscape. Any damage from the work, such as dislodged sprinklers or tire tracks in the yard, shall be repaired to the condition existing prior to the work.

## **ROOFING**

### **Shingle Roof Re-Cover**

Prepare the existing roof so that there aren't any curled shingles or humps that will be an obstacle to shingle over. This may also include patching a blown off area so that it is water tight and brought up to the same elevation as the existing shingles so that the new shingles lay down flat, even and consistent. If there are any spongy or weak spots in the decking it shall be replaced with decking matching the thickness of the existing decking. Remove existing drip edge on the entire perimeter of the roof and if necessary cut back shingles to be even with the edge of the fascia. If any rain gutters are removed or disturbed in this process then the Contractor shall have them reinstalled to drain and function properly.

Install a baked enamel preformed 90 degree drip edge on the entire perimeter of the roof that is being reroofed. Provide and install a 30 year architectural shingle that is listed and meets the current applicable codes for residential roofing. Install all new pipe flashings that are galvanized or galvanized "no caulk" flashings. This includes the power mast and flues. Turtle vents shall be aluminum or galvanized and installed on the back side of the roof. The vents shall provide openings that have a net area in accordance with the current applicable codes.

There shall be proper cementation around all chimneys, plumbing vent, pipes, flue vent pipes, TV antennas and any other protrusion on the roof. All valleys shall be ledgered, cut, or woven. All hip ridges shall be capped. Caps shall be cut square with no unevenness, the same color as the roof and set to a line.

Where a sloped portion of the roof is intercepted by a chimney (18" or greater), where there is not a saddle or cricket existing, the Contractor shall provide and install a cricket so as to divert the water way from the chimney base. The cricket shall have a 6/12 pitch and shall be as wide as the chimney at the base of the chimney.

Base flashing against a vertical sidewall or chimney shall be step flashing. Install a kickout flashing at the bottom of a run of step flashing. Base flashing against a vertical front wall shall be 4" x 4" "L" flashing. Where there is an appropriate siding type on a vertical wall, tuck the base flashing under the siding. Where the base flashing cannot be tucked under the siding, install counter flashing. Caulk shall be 50-year Dow Corning caulk, clear or a matching color.

Salt Lake City Housing and Neighborhood Development

## **General Specifications Housing Rehabilitation**

The roof shall be swept down and the rain gutters cleaned out. Any and all roofing debris shall be cleaned up and hauled away. The driveway and walkways shall be swept and clean. There will be NO nails found on the premises. All left over supplies shall be removed from the roof and the property.

### **Shingle Roof Tear Off**

Protect the building and plant material as well as possible from damage caused by removal of the existing roofing. Contractor will walk the property with the Owner to identify anything that is sensitive that could be damaged. Remove and dispose of any and all shingle layers down to the decking. Remove or set any and all nails in the decking. The Contractor shall inspect the decking and replace any decking whose structural integrity has been compromised with wood of similar size and dimension. If the decking is skip sheathing than the Contractor shall provide and install 7/16" OSB or approved equal to the entire roof. This shall be nailed on the rafter lines. The roof shall be dried in according to current code requirements. If any rain gutters are removed or disturbed in this process than the Contractor shall have them reinstalled to drain and function properly.

Install a baked enamel preformed 90 degree drip edge on the entire perimeter of the roof that is being reroofed. Provide and install a 30 year architectural shingle that is listed and meets the current applicable codes for residential roofing. Install Grace, Tamko Moisture Guard, GAF Stormguard, or CertainTeed Winterguard ice and water shield before installing synthetic or 15 pound tar paper. Install 30 year Tamko Heritage 30, GAF Timberline 30, or CertainTeed Landmark 30 shingles with five nails per full shingle. Install all new pipe flashings that are galvanized or galvanized "no caulk" flashings. This includes the power mast and flues. Turtle vents shall be aluminum or galvanized and installed on the back side of the roof. The vents shall provide openings that have a net area in accordance with the current applicable codes.

There shall be proper cementation around all chimneys, plumbing vent, pipes, flue vent pipes, TV antennas and any other protrusion on the roof. All valleys shall be ledgered, cut, or woven. All hip ridges shall be capped. Caps shall be cut square with no unevenness, the same color as the roof, and set to a line.

Where a sloped portion of the roof is intercepted by a chimney (24" or greater), where there is not a saddle or cricket existing, the Contractor shall provide and install a cricket so as to divert the water way from the chimney base. The cricket shall have a 6/12 pitch and shall be as wide as the chimney at the base of the chimney.

Base flashing against a vertical sidewall or chimney shall be step flashing. Install a kickout flashing at the bottom of a run of step flashing. Base flashing against a vertical front wall shall be 4" x 4" "L" flashing. Where there is an appropriate siding type on a vertical wall, tuck the base flashing under the siding. Where the base flashing cannot be tucked under the siding, install counter flashing. Caulk shall be 50-year Dow Corning caulk, clear or a matching color.

## **General Specifications Housing Rehabilitation**

The roof shall be swept down and the rain gutters cleaned out. Any and all roofing debris shall be cleaned up and hauled away. The driveway and walkways shall be swept and clean. There will be NO nails found on the premises. All left over supplies shall be removed from the roof and the property.

### **TPO Roof**

Protect the building and plant material as well as possible from damage caused by removal of the existing roofing. Remove and dispose of any and all roofing layers down to the decking. Remove or set any and all nails in the decking. The Contractor shall inspect the decking and replace any decking whose structural integrity has been compromised with wood of similar size and dimension. The roof shall be dried in according to current code requirements. If any rain gutters are removed or disturbed in this process the Contractor shall have them reinstalled to drain and function properly.

The TPO roofing that is used shall meet ASTM D6878, "Standard Specification for Thermoplastic Polyolefin Based Sheet Roofing", and shall carry at least a 20 year manufacturer's written warranty that is supplied to the Owner prior to any payment being made. The Contractor shall be certified by the manufacturer to install that specific brand of TPO roofing.

The Owner shall be responsible for all scheduled maintenance on the roof based on the manufacturer's maintenance schedule that shall be supplied to them by the roofing Contractor. Any and all metal drip edge, pipe flashings, and vents shall be TPO coated and approved by the manufacture and shall carry the same 20 year manufacturer's warranty.

The roof shall be swept down and the rain gutters cleaned out. Any and all roofing debris shall be cleaned up and hauled away. The driveway and walkways shall be swept and clean. There will be NO nails found on the premises. All left over supplies shall be removed from the roof and the property.

## **EXTERIORS**

### **Foundation Re-Plaster**

Remove all loose and hollow plaster from the foundation and concrete porches and steps. Infill voided areas and re-coat entire area specified using commercially available pre-mixed foundation plaster per manufacturer's instructions.

### **Foundation Plaster Patch**

Remove all loose and hollow plaster from the foundation and concrete porches and steps. Re-plaster voided areas using commercially available pre-mixed foundation plaster per manufacturer's instructions. Finish texture and color shall match and blend into the existing adjacent area as well as possible. The Contractor shall apply a sample in an inconspicuous location for approval of the color by the Owner.

## **General Specifications Housing Rehabilitation**

### **Repoint Brick**

Repoint exterior brick walls in all spots where there is a gap in the mortar greater than ¼" x ½" or where there is a crack along the mortar longer than 2". Cut out defective joints, and rake them to a depth of ¾ inches. Regrout them with mortar using a 1:1:6 mix of portland cement, lime and sand. SpecMix #PL-04, or other proprietary Type N mix that contains lime may be used instead. The new mortar shall match the existing as closely as possible. The Contractor shall apply a sample of the mortar in an inconspicuous location for approval of the color by the Owner. The surface to be repointed shall be wet immediately before application. Finish with an appropriate tool or method to match the tooling of the existing mortar as closely as possible. Clean the affected masonry areas to leave them in a condition normally accepted in the trade.

### **Chimney Cap**

Remove loose brick courses. Relay the top courses of the chimney brick which have been removed. Replace any defective bricks with new bricks matching existing as closely as possible.

Clear away loose material and dampen top course of the brick to prepare for the application of the new cap. Install a new cap so that moisture will run off the chimney. The chimney shall be left open and operable with a hole in the top that is equal to the existing. Chimney cap shall be a minimum of 2 inches thick on the outside edge, and extend a minimum of 1 - ½ inches horizontally beyond each side of the chimney.

Repoint the exterior brick sides of the chimney per the Repoint Brick Specification.

### **Exterior Paint**

Properly prepare and repaint all exterior wood surfaces on the structure. These surfaces must be thoroughly cleaned, allowed to dry, and scraped to remove all loose or peeling paint to obtain a sound working surface before new paint is applied. Work includes removing loose caulk, and removing and cleaning removable items attached to the structure. Holes, cracks, open joints and other defects will be caulked smooth.

Unless otherwise specified, prep work does not include re-nailing or replacing broken, loose, or missing wood members.

Owner understands that the texture of the scraped paint may show through to the newly painted surface.

If the surface is unfinished, or unpainted, or bare wood, or a repaired or patched surface, a primer coat will be applied before the two finish coats of paint. The Contractor will wait at least 4 hours between applications. Notify the Division of the scheduled 2<sup>nd</sup> coat application time 24 hours in advance so that an inspection may be made.

The Division may require at no additional expense to the Owner additional coats of paint to eliminate bleed-through of background material, unless the Owner chooses a paint that is incompatible with the Salt Lake City Housing and Neighborhood Development



## **General Specifications Housing Rehabilitation**

existing color. It is up to the Contractor to inform the Division in writing of any conflict that may arise over more than two coats of paint, and the Contractor must wait until the Division settles the matter before painting the house. If more than two coats are needed to cover incompatible paint, the Owner will pay the additional costs on the incompatible paint.

There will be clean painting cuts in all corners, around all trim, and where two colors join. The Owner will verify in writing with the Contractor which windows are not operable before painting and the Contractor will not be responsible for making those windows operable. All windows that were freely operable before painting will be operable after painting.

### **Primary Windows**

(This Specification may also apply to patio doors instead of windows.)

#### **Product:**

Provide and install Amsco Studio series or Milgard Style Line white vinyl windows (or door if a patio door is specified) in the existing jambs or opening. All windows shall have a Posi Lock, or equivalent.

All windows shall be insulated glass (double paned) and at least  $\frac{3}{4}$ " overall. Screens shall be included on all operable windows. All screens shall be tubular construction with the ability to rescreen the frame.

All bathrooms shall also have obscured glass.

#### **Installation:**

All remodel windows shall be installed according to AAMA 2410-03, and all new construction windows shall be installed according to AAMA 2400-10. The new window shall fit the existing jamb and or opening with a maximum of  $\frac{1}{4}$ " variance within the opening. The window shall be installed straight, plumb, and level, without twisting and securely anchored in place, in accordance with manufacture's published recommendations and the AAMA 2410-03 and AAMA 2400-10 standards. The sill shall be adequately supported along its entire length. At least three sides of the window will be foamed with Great Stuff Pro low expansion foam (from Dow) or approved equal. A non-hardening sealant compatible with vinyl shall be installed in sufficient quantity to provide a watertight seal between the window and the surrounding construction on the interior and the exterior. Dow 795 or 1199 silicone, or approved equal, shall be used on the exterior and a latex caulk on the inside. Remove and dispose of the existing specified window sashes. Replace any removed & broken wooden stop with new stop that matches the existing. The new stop shall be primed and painted to match the existing jambs.

If there are any gaps bigger than a  $\frac{1}{4}$ " the installer shall use backer rod before caulking in the window. The use of vinyl flat trim (same color as the windows) shall be used if there are any gaps bigger than  $\frac{3}{8}$ ".

## **General Specifications Housing Rehabilitation**

### **Exterior Door**

The door shall be a new pre-hung exterior door. Door shall be fiberglass if a front door, metal if a back door. Installation will include casings, latches and knobs. Exterior doors will be installed with a single-throw Kwikset, Schlage or Weiser deadbolt lock. All newly installed doors shall be keyed alike. The Contractor will provide the Owner with two sets of keys for the locks.

### **Fiber Cement Siding**

Use James Hardie Hardieplank<sup>®</sup>, Certainteed WeatherBoards<sup>®</sup>, or approved equal fiber cement as defined by the 2006 IBC. Prepare surface by removing nails, repairing sheathing, and applying house-wrap strictly to manufacturer's specifications. Install 1" x 8 ¼" fiber cement lap siding to the surface per manufacturer's instructions.

### **Vinyl Siding**

Provide and install vinyl siding per manufacturer's instructions in the specified areas. Existing siding will not be removed. The installation shall include rigid foam insulation backer as per manufacturer's instructions, corner moldings at corners, J channel at openings, and J-boxes at fixtures and vents. The siding material shall be minimum 0.044 inches thick, and shall have a written, 30-year non-prorated warranty from the manufacturer against color fading, peeling, flaking and cracking. The Owner shall be offered a choice of styles and colors.

### **Rain Gutters**

Provide and install 5", K- type, seamless gutters per manufacturer's instructions on the eaves of the house. The gutters shall be 0.027" aluminum with a baked enamel coating. The gutters shall have a proper slope so that after installation they do not collect standing water except for minimal damming behind sealant beads. Installation shall include matching downspouts placed as necessary to assure that the gutters drain properly. Downspouts shall be placed so that gutters drain to the ground or a gutter, but not to a roof. The installation shall include splashblocks at the end of each downspout directing the storm water away from the building.

The Owner shall verify downspout location prior to installation. They shall be installed if allowable according to standard installation practices. The Owner shall have a choice of colors.

### **Steel Railing**

Provide and install steel railing ("ironwork"), handrail or guardrail as specified, in the area specified. The handrail channel iron dimension shall be 1 ½" x ¾". Unless otherwise specified, the rails will be powder coated. The Owner shall have a choice of colors.

## General Specifications Housing Rehabilitation

### MECHANICAL

#### Furnace

Remove and properly dispose of the existing furnace and any related materials. Provide and install a new gas fired forced air furnace with a minimum AFUE rating of 95%, and minimum limited warranties of 20 years on heat exchanger, and 5 years on parts.

Install the furnace to the existing duct work, with all supply and return air duct transitions to the new furnace. The filter access shall be conveniently located and have a tightly fitting cover that requires no special tools and presents no cutting hazard. Seal all exposed and accessible duct joints, connections, and seams with duct mastic or UL listed tape.

Install a new appliance shut-off valve on the existing gas line, and any updates needed to bring the installation to code standards (including a gas flex pipe and sediment trap). Unless otherwise specified, the work does not include changes to the gas piping upstream of the shutoff.

Install PVC flue piping to the outside with a flat wall termination or a concentric roof termination. After installation of the furnace, the water heater flue shall be properly sized in accordance with GAMA vent tables and applicable mechanical code.

Provide condensate drainage to the plumbing system. Work includes, if necessary, a condensate drain pump.

Install a new thermostat. The Owner shall have the choice between a set back programmable thermostat and a digital round non-programmable thermostat.

Startup and green sticker the new furnace.

#### Furnace Sizing

Use the most recent version of the Air Conditioning Contractors of America (ACCA) Manual J residential load calculation tool <http://www.acca.org/tech/manualj/> (calculate the load with manual J based on the post rehab building envelope), and use the most recent version of ACCA's Manual S for equipment selection. Provide both Manual J and D reports to the Division for review and approval prior to installation.

#### Furnace Filter

The filter access shall be conveniently located and shall be accessed via a tightly fitting cover that requires no special tools to open and close and will not present a cutting hazard.

## **General Specifications Housing Rehabilitation**

### **ELECTRICAL**

#### **Electrical – General Requirements**

The electrical work items will be outlined in the electrical permit. All materials shall be new, and shall be UL approved and/or National Electrical Code rated. All drilling, cutting and fastening shall be neat and true. All electrical equipment abandoned due to the specified work shall be removed. Any areas that may show when any previous panels, boxes, conduits or raceways are removed as a result of the specified work shall be patched and painted to match the surrounding surface as closely as possible.

#### **Electrical Service Update**

Replace existing electrical service with a residential, 125 amp, single phase, 3 wire electric service. Include a main disconnect, 110/220 volt, 20 circuit panel board, outside receptacle, meter socket, weather head, service cable, and ground rod and cable. Seal exterior service penetrations to maintain a waterproof building envelope. Verify service location and metering provisions with Rocky Mountain Power. Contractor shall pay all charges imposed by the utility company for providing this service connection to this new entrance. The service shall be connected by Rocky Mountain Power to the weather head before payment will be made. All circuits in the panel shall be labeled legibly to indicate the purpose of the circuit.

#### **Electrical Distribution Panel**

Remove the old fuse box or distribution panel. Provide and install a 125 amp, 110/220 volt, 20 circuit panel board. If the panel is installed on the exterior of the house, the installation shall include an outside receptacle. All circuits in the panel shall be labeled legibly to indicate the purpose of the circuit.

#### **Electrical Update**

Update the entire structure as necessary. Furnish and install all the wiring, conduits, wiring devices and equipment, and lighting fixtures, where required necessary to complete the electrical installation according to the latest NEC (as applicable to the currently adopted code), the Salt Lake City Electrical Ordinances and this specification.

All wiring, where possible, will be flush and concealed. Wiring to plugs, lights and switches where run is exposed, must have prior permission by an agreement signed by the Owner and Contractor. As determined by the local Electrical Inspector, all exposed wiring shall be installed in conduit or approved raceways. Specification of the conduit or raceways will be noted in written agreement and given to the Housing and Economic Development Division.

There will be a minimum of two (2) receptacles located in every habitable room and one (1) switched light. The outlets may be switched for a room in lieu of a switched light. (This will require written agreement between the Owner and Contractor). Bathroom and outside outlets will be protected by a ground fault outlet or a breaker in the panel.

## **General Specifications Housing Rehabilitation**

As a minimum, the kitchen receptacles shall be installed on two (2) separate 20 amp small appliance circuits, with a minimum of four (4) outlets. These circuits shall have no other outlets, lights or plugs. There will be one receptacle for every six (6) feet of counter space, where applicable. Disposal and dishwasher shall be on a separate 20 amp appliance circuit if they are present in the kitchen. The refrigerator shall be on a separate 20 amp appliance circuit.

Where furnace wiring is required, a separate circuit will be installed.

If and where specified, provide and install a hard wired smoke detector with a battery backup in each bedroom of the house, in a hall that is outside of a bedroom area, in the basement, and on each floor of the house. The smoke detector will be initially equipped with a battery.

If and where specified provide and install a Carbon Monoxide detector on each floor of the house that has a gas appliance. An approved combination smoke detector/carbon monoxide detector may be used.

There shall be lighting at both front and rear exits and the furnace. All convenience outlets wired and installed will be of the grounded type and grounded. The existing wiring may be used if in good condition and is checked by the Electrical Contractor and considered usable. If in question, the local Electrical Inspector will make the final determination. All electrical work will be done by a State Licensed Electrical Contractor. The Contractor is responsible for obtaining necessary electrical permits and approval by the Electrical Inspector.

The Electrical Contractor should confer with the Owner on the location of any new plugs that may have to be installed in a room. The General Contractor will be responsible for patching any areas that may show when any previous panels, boxes, conduits or raceways were installed. Patching will be done at the request of the Housing and Economic Development Division. This additional work will not be charged to the Owner. The local Electrical Inspector will have the final determination as to the acceptability of the work by the Electrical Contractor.

Any light that is presently in the house will be checked and left operable.

The Contractor will provide and install an outlet in the bathroom that is on a GFI circuit.

All floor plugs will be removed. The plug will be removed and the box will be covered with a blank. The plug will be replaced with a 110 grounded duplex outlet on a wall as close to the existing plug as possible.

In the kitchen, any receptacle that is above the countertop and within 6' of the edge of the sink must have a Ground Fault outlet.

The refrigerator plug must be below the countertop.

Any diffuser that was originally a part of the installation that is now missing will be replaced.

Salt Lake City Housing and Neighborhood Development

451 South State Street, Room 445, Salt Lake City, UT 84114

Page **13** of **20**

## **General Specifications Housing Rehabilitation**

Unless otherwise specified, knob and tube wiring in the house shall stay in place and in use and is not addressed by this specification.

Existing circuits that are not grounded shall remain ungrounded unless specifically specified in the Description of Work. Any outlets that are added by the Contractor to an ungrounded circuit will either be a two prong outlet or else will be an outlet that is protect by a ground fault circuit interrupter.

All new circuits that are provided by the Contractor will be grounded.

### **Replace Knob-and-Tube Wiring**

Replace the accessible knob-and-tube wiring in the attic with new NM cable and flagged junction boxes. Work does not include replacing entire circuits unless otherwise specified. Re-spread any disturbed insulation to an even distribution.

### **Certify Electrical Distribution**

Electrician shall inspect all exposed wiring, fixtures, luminaires and devices for proper function and correct installation in accordance with the electrical code in effect at the time of installation. Any equipment or wiring that is found to be improperly functioning or installed shall be replaced with new wiring, devices, fixtures and luminaires. In distribution panels, check for loose connections and correct these. Check the labeling in the panel, and clearly label all circuits that are not properly labeled. Work does not include replacing knob-and-tube wiring that is under attic insulation.

### **Bathroom Vent Fan**

Provide all materials and labor necessary to install a 70 CFM vent fan in the bathroom ceiling. The unit shall include a damper, decorative grill, and it shall be vented to the outside of the building. Unless otherwise specified, the fan shall operate on a separate switch from the bathroom light.

### **Replace Floor Outlet**

Replace the existing floor outlet with new electrical outlet meeting current code standards. Either replace the outlet with a new outlet approved for a floor application, or replace it with a new outlet on the nearby wall.

If replacing with a wall outlet, cover the floor box with a blank metal plate. If installed on a framed wall, fish wire, and repair tear out. If installed on a masonry wall, use residential surface mounted raceway and a surface-mounted receptacle.

### **Replace Electrical Outlet Receptacle**

Replace the existing outlet receptacle with a new duplex outlet receptacle. The new receptacle shall be GFCI protected if located where GFCI protection is required by current code. If the existing circuit is not grounded, the new GFCI receptacle may be left ungrounded.

## **General Specifications Housing Rehabilitation**

### **New Electrical Outlet Receptacle**

Provide and install a new, grounded, duplex outlet receptacle and required distribution. If installed on a framed wall, fish wire, and repair tear out. If installed on a masonry wall, use residential, surface mounted raceway and a surface-mounted receptacle. If installed in a garage, use metal raceway and a surface mounted receptacle. The new receptacle shall be GFCI protected if located where GFCI protection is required by the Utah UBC.

### **Garbage Disposal and Circuit**

Provide and install a Badger 5 or approved equal garbage disposal under sink and connect to waste line. Install a toggle switch on wall adjacent to sink and power wiring on a separate circuit. Fish wire and patch all tear out.

## **PLUMBING**

### **Water Heater**

Install a 40 gallon gas water heater with a 6 year warranty in the same location as the existing water heater. Install the water heater under a Salt Lake City permit. Work includes a new thermal expansion tank and a new ball valve shutoff. Work also includes any other updates needed to bring the water heater installation to code standards (including manual gas shutoff, gas flex pipe, relief valve discharge pipe, dielectric connections, drain pan, 4 inch connector vent, seismic bracing, and other work as needed). Unless otherwise specified, the work does not include changes to the gas piping behind the shutoff, a floor drain, changes to the venting above the 4 inch connector, or providing combustion air to the water heater room. Startup and green sticker the new water heater.

## **INSULATION**

### **Attic Insulation**

Insulate the attic to R-49 with blown-in cellulose insulation. This will include any baffles as needed, and flags on all junction boxes. Insulate and air-seal the attic access hatch. Facilitate all applicable Questar and Rocky Mountain Power rebates, including providing the insulation certificate and documentation that must be filled out by the Contractor.

## **INTERIOR FINISH**

### **Interior Paint**

Paint interior of the house one tone. Work includes all previously-painted doors, interior of closets, and open shelves. All surfaces will be cleaned prior to painting. This will include all necessary wall and ceiling repairs. When complete the repairs will not be obvious. All stickers, pins, nails, hooks, blind and curtain

Salt Lake City Housing and Neighborhood Development

## **General Specifications Housing Rehabilitation**

hangars, etc., will be removed prior to painting. All light fixtures, light switch and outlet cover plates, telephone receptacles, thermostats, smoke detectors, HVAC registers and diffusers, railing brackets, etc., will be completely removed prior to painting and will be cleaned and reinstalled afterward. Unless otherwise specified, the blinds will not be reinstalled. All surfaces except doors will be back rolled after spraying.

### **Vinyl Resilient Sheet Flooring**

Provide and install new vinyl resilient sheet flooring in the areas specified. Work includes floor prep, underlayment, and trim and transitions.

The flooring shall carry a minimum 10-year limited residential warranty from the manufacturer. The Owner shall select the color and style of the new floor covering.

If “glass back” is specified, the flooring shall be Tarkett Fiberfloor CustomPro or approved equal. Install it using the full spread method.

Floor prep: remove all layers of flooring and underlayment to the subfloor unless “embossing” is specified. If an unseen material subject to environmental regulation is found below the existing flooring, the additional cost to remove this per environmental regulations shall be determined in a change order.

When installing over a concrete floor, the floor will be prepared as per manufacturer's recommendation in order to guarantee the warranty.

The underlayment shall be an appropriately-graded APA plywood (i.e. not Lauan) with a sanded face (not touch-sanded) (refer to APA publication L335 “Selection, Installation and Preparation of Plywood Underlayment”).

The flooring shall be laid seamless, unless the size of room is too large for available floor covering. If seams are necessary they shall receive the manufacturer's seam sealer.

Trim shall include new base and/or shoe moldings, along with transition strips, to hold down all edges of the flooring. Existing base shoe must be removed. Any new shoe molding shall be installed all around the room for a uniform finished appearance. Paint the new molding to match the existing molding as closely as possible.

#### **Flooring details in a bathroom:**

Install a metal strip by the tub, and set it in a bead of caulk. Use a tub and tile caulk to fill the seam where the flooring meets the metal strip, and the seam where the strip meets the tub.

Pull the toilet before installing the flooring. When resetting the toilet, use a new no-seep bowl wax. If the floor is not level, level the toilet with shims, and caulk the gap with a tub and tile caulk.



## **General Specifications Housing Rehabilitation**

If the vanity is removed, install the flooring beneath the vanity. If the vanity or other cabinetry is not removed, install molding around it to hold down edges.

### **Tile Floor**

Remove all existing flooring in the kitchen down to the existing subfloor. Install APA rated plywood underlayment per APA installation instructions. Tile backer may be floated with wire lathe, cement board, or a proprietary system (such as Schluter®-DITRA) installed per manufacturer's instructions. Installation shall include tile base, unless otherwise specified.

### **Carpet**

The carpet colors and style shall be selected by the Owner from a supplier's in-stock selection. The carpet will have a minimum 25 ounce face weight and meet FHA UM44D standards. Install according to manufacturer's recommendations on a rebonded 6 lb. density pad that has a uniform thickness of 7/16 inch. Include tackless strips, pound down metal strips, appropriate transitions, and all items necessary for a professional installation.

## **KITCHEN AND BATH FINISH**

### **Kitchen and Bath – General Requirements**

If there are occupants inhabiting the building during construction, and if the work area includes the only bathroom or kitchen in the house, then provide proper notification of the work and proceed without delay. Full demo of the work area shall start only after ordered materials are available for delivery. Once full demo begins, work shall proceed without interruption until substantial completion. A working toilet shall be provided for the occupants' use at the end of each workday.

### **Cabinets**

#### **Cabinets:**

The new cabinets will be factory assembled and finished. They will be constructed particle board: 3/8" for cabinet box and drawerbox bottom, and 1/2" for drawerbox sides.

Cabinet faces and door frames will be solid wood. The Owner will have a choice of wood species: knotty alder or oak.

Doors and drawer faces will have a plywood panel surrounded by a solid wood frame. The Owner will have a choice of door panel styles from Fashion Cabinet: Santa Fe II, Santa Fe I, Med-Cope, Cathedral II, Cathedral I, or Mediterranean, or approved equals from another manufacturer.

The Owner will have a choice of wood finishes from Fashion Cabinet: any Traditional Finish except Chestnut, or approved equals from another manufacturer.

Hinges will be Concealed by Blum, and drawer guides will be E by Blum, or approved equals.

Salt Lake City Housing and Neighborhood Development

## **General Specifications Housing Rehabilitation**

### **Installation:**

Remove and properly dispose of the existing cabinets in the area specified.

The new cabinets shall be secured to each other and to the walls with counter sunk screws through the rails and the stiles of the cabinets. New cabinets shall be anchored securely in a square and plumb position. The doors and drawers shall operate properly, closing fully without gaps at the top, bottom or sides.

The installation will be complete with necessary filler strips, strip molding, hinges, glides, drawers and shelves. An exposed side will be overlaid with a prefinished panel.

Where an old cabinet is removed and the area is not covered by a new cabinet, floors and walls shall be returned to a finished condition.

### **Countertops-Laminate**

Remove and haul away the existing countertop in the kitchen. The counter top shall be tri-cove (have a backsplash), unless otherwise specified. The new counter top shall be finished on all exposed edges. The top shall be scribed to the wall and caulked.

### **Wall Finish above Countertop**

Finish the wall above the countertop with 4x4 ceramic tile. Finished area will include any area behind a range adjacent to the countertop, installed level with or below the top of the counter. The finished area will not include the area behind the refrigerator.

### **Kitchen Sink**

Remove and dispose of existing kitchen sink, faucet and all pertaining parts. Provide all materials and labor necessary to install a new stainless steel self-rimming double bowl, 20 gauge, 8 inch deep kitchen sink. Minimum dimensions shall be 18 inches by 32 inches, unless otherwise specified.

The new sink shall be installed complete with a new water supply hoses, new ¼ turn shutoff valves, new waste lines, trap, strainer baskets, and Moen Adler or approved equal faucet with spray.

### **Bathtub/Shower**

Remove and dispose of the existing bathtub/shower and associated drain and supply valve. Install a new one-piece enamel on cast iron bathtub, new associated plumbing, and a new tub/shower surround.

The tub shall be installed level.

Install a new P-trap, waste and overflow. Replace any lead waste lines and/or drum traps with new plumbing.

The mixing valve shall be Moen Posi-Temp®. The shower arm shall attach to a cast drop elbow that is secured to the framing.

Salt Lake City Housing and Neighborhood Development

## **General Specifications Housing Rehabilitation**

The tub/shower surround shall be a solid surface tub/shower surround per the Solid Surface Tub/Shower Surround Specification (unless otherwise specified).

The finish plumbing shall be Moen Adler, chrome, single handle, with matching shower head, tub spout, and escutcheons.

Install a foot actuated stopper, and shower curtain rod.

### **Tile Tub/Shower Surround**

Provide and install a ceramic tile tub/shower surround. The tile shall be 4 inch by 4 inch glazed ceramic tile set on ½" cement board, HardieBacker®, floated surface, or an approved equal. The tile shall be extended beyond the outside edge of the tub at least the full width of a 2" trim tile and shall run to the floor. The top horizontal and front vertical edges shall be finished with radius bullnose edging.

If any portion of an existing window should fall within the coverage of the new tile coverage, the inside of the window opening shall be tiled and the sill sloped to drain towards the tub/shower.

All corners, the tub/tile intersection, and the window frame/tile intersection shall be caulked using a tub/shower caulk designed for this application.

### **Solid Surface Tub/Shower Surround**

Install a solid surface ("cultured marble," "acrylic" or "cast polymer") surround for the tub/shower enclosure. All material shall meet all aspects of ANSI/ICPA SS-1-2001 and shall be installed in accordance with accepted trade standards. The surround shall extend beyond the outside edge of the tub at least 2" and shall run to the floor. The installation shall include two corner shelves. There shall be no joints in the material other than at the corners. The Owner shall be given a choice of colors in solid or swirl patterns from a supplier's palette.

If any portion of an existing window should fall within the coverage of the new surround coverage, the inside of the window opening shall also be finished with the solid surface material, and the sill sloped to drain towards the tub/shower.

All corners, the tub/surround intersection, and the window frame/surround intersection shall be caulked using a tub/shower caulk designed for this application.

### **Vanities**

Provide and install new factory built vanity cabinet, molded top with backsplash and faucet in the bathroom. The new cabinets shall have a melamine interior finish. The new cabinet shall be anchored securely in a square and plumb position. Installation shall include a Moen Adler or approved equal faucet, drain pop-up, P-trap, supply tubes, ¼ turn supply shutoff valves and all other materials and labor necessary for proper installation. Where the old cabinet is removed and the area is not covered by the new cabinet, floors and walls shall be returned to a completely finished condition.

Salt Lake City Housing and Neighborhood Development

451 South State Street, Room 445, Salt Lake City, UT 84114

Page **19** of **20**

## **General Specifications Housing Rehabilitation**

### **Toilet**

Provide all materials and labor necessary to remove and dispose of the existing toilet and install a new toilet. This shall include a new ¼ turn supply valve, supply line, wax ring, mounting bolts, seat and all internal hardware.

The unit shall have a minimum MaP (Map-testing.com) rating of 1,000.

## **APPLIANCES**

### **Range Hood**

Install a range hood of commercial manufacture to match the range. Minimum 180 CFM, 2 speeds, and including a light. Unless otherwise specified, install in a recirculating configuration.

### **Refrigerator**

TBD

### **Range**

TBD