FIGURE EAST ELEVATION

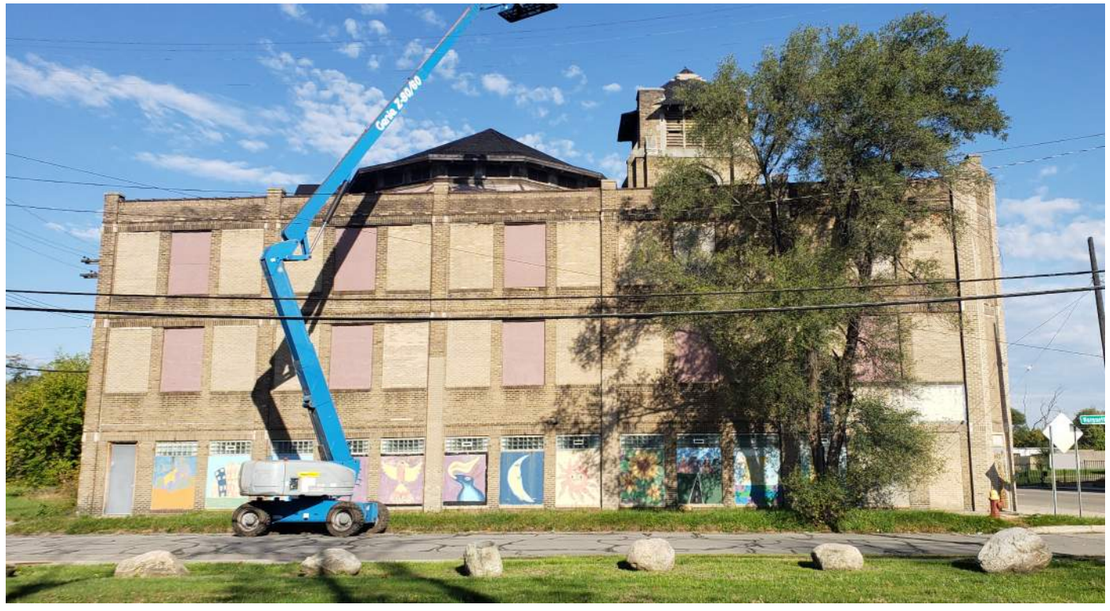

FIGURE SOUTH ELEVATION

FIGURE WEST ELEVATION

FIGURE NORTH ELEVATION

ZONE 2: HEPTAGONAL ROOF - ARCHITECTURAL ASSESSMENT

Zone 2 constitutes a 5,250 square feet, wood framed, two tiered, seven-sided polygon asphalt roof that is part of the original Temple construction. Bot tiers have a flared eave, extended over decorative wood brackets and outriggres. The lower tier terminates over the Zone 1 flat roof with minimal clearance. This roof shows significant deterioration at the lower tier, as evidence by systemic failure along the eave and open holes throughout the roof surface. Exposure to the outdoor elements and increased water infiltration has caused the roof structure to rot and weaken further. Listed below are the *architectural observations and findings*:

- Asphalt shingles worn, well beyond the end of their useful life
- Large, visible holes in the roof, exposing deteriorating wood structural framing; deteriorated plywood patching *(see figure A2.1 and A2.7)*
- Pronounced waviness to the roof surface which may indicate damage to the roof decking and structural framing below *(see figure A2.2)*
- Extensive deterioration of the decorative wooden eave brackets, particularly along the lower tier where the decking has mostly deteriorated completely away at the overhang *(see figure A2.8)*
- Flashing failure along the supporting masonry wall under the eaves *(see figure A2.7)*
- Patched valley flashing with improper terminations along bell tower masonry wall and of asphalt roofing. Excessive mastic on masonry wall. *(see figure A2.13)*
- Severely rusting metal head flashing where the lower tier roof terminates at the vertical clerestory wall between roof tiers; moderately rusting metal drip flashing along upper tier roof edge
- Clerestory glazed windows set between metal trim between two roof tiers appear to be in fair to good condition, with metal trim exhibiting surface rust and worn paint *(see figure A2.11)*

FIGURE A2.1 OVERVIEW OF THE TWO TIERED HEPTAGON ROOF; ROOF DECAY AND WATER INFILTRATION, WORN AND MISSING ASPHALT TILES, WEATHERED AND ROTTED DECORATIVE EAVE OUTRIGGERS/RAFTER TAILS.

FIGURE A2.2 SURFACE DEPRESSIONS ALONG THE ROOF; CURLED, DISCOLORED AND FRAYED ASPHALT SHINGLES; RUSTED METAL FLASHING UNDER THE UPPER WINDOWS

FIGURE A2.7 COMPLETE DETERIORATION AND DECAY OF THE DECORATIVE WOOD EAVES AND DECORATIVE RAFTER TAILS; THE LEVEL OF DETERIORATION MAY REQUIRE LOCALIZED REPAIRS TO ADJACENT ELEMENTS SUCH AS THE BRICK WALL BELOW

FIGURE A2.8 SIGNIFICANT DETERIORATION AT THE PERIMETER (TERMINATION OF DECORATIVE EAVES); EXTENSIVE WOOD ROT OF THE DECORATIVE EAVE OUTRIGGERS/RAFTER TAILS; PONDING WATER BELOW

FIGURE A2.10 UPPER TIER OF HEPTAGON ROOF; WORN, MISSING CURLED, DISCOLORED, AND FRAYED ASPHALT SHINGLES

FIGURE A2.12 OVERVIEW OF THE HEPTAGON ROOF ABOVE, SHOWS THE EXTENT OF THE ROOF DETERIORATION WITH VARIOUS HOLES ALONG THE SURFACE

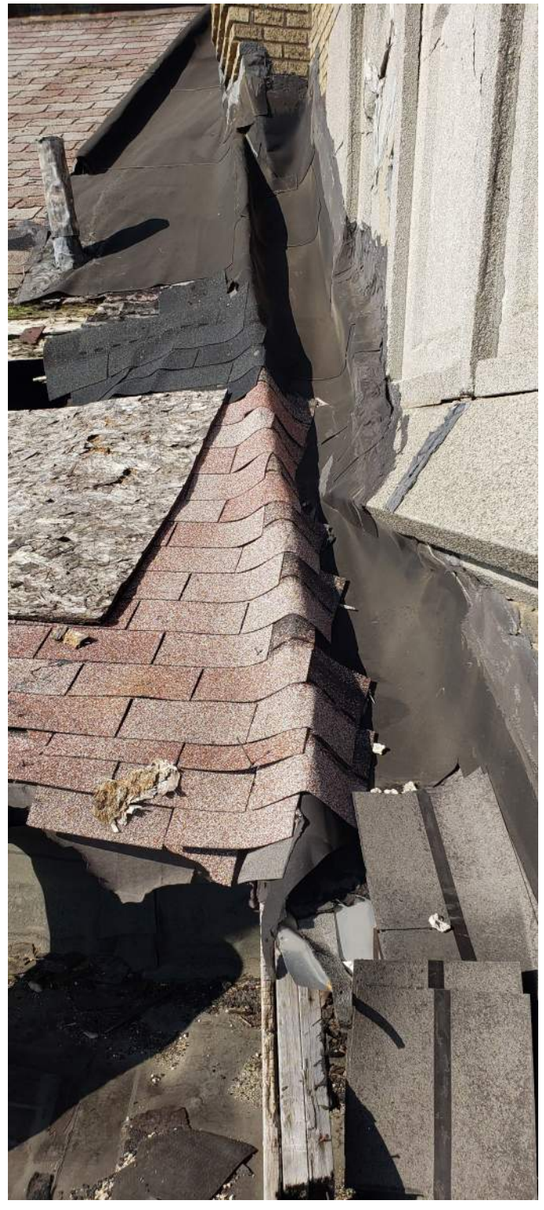

FIGURE A2.13 IMPROPER FLASHING AND PATCHING AT THE VALLEY JUNCTION BETWEEN THE POLYGONAL ROOF AND BELL TOWER; THE ASPHALT SHINGLES ARE NOT PROPERLY TERMINATED; EXCESSIVE USE OF ROOFING MASTIC ALONG THE BELL TOWER WALL; DETERIORATED ROOF VENT NEAR THE LARGE HOLE IN THE ROOF.

FIGURE A2.6 FAILURE OF THE FLASHING AT THE INTERSECTION WHERE THE POLYGONAL ROOF INTERSECTS WITH THE BELL TOWER; STAINING OF THE DECORATIVE STONE BY FLASHING SEALANT

FIGURE A2.14 DETERIORATING INTERIOR PLASTER BELOW THE HEPTAGONAL ROOF STRUCTURE; SUN LIGHT IS VISIBLE THROUGH THE HOLE IN THE ROOF ABOVE

FIGURE A2.11 THE UPPER TIER OF THE POLYGONAL ROOF; VISIBLE RUST ON THE METAL WINDOW FRAMING AND ROOF HIPS; METAL FLASHING IS CORRODING AND DETACHING FROM THE FASCIA BOARD AND HEAD OF LOWER ROOF

FIGURE A2.13 DECORATIVE WOOD EAVE SHOW SIGNS OF DECAY AND ROT; SIGNIFICANT DETERIORATION OF THE ROOF PERIMETER EDGE; WITH POOLS OF WATER GATHERING UNDER THE EAVES

ZONE 2: HEPTAGONAL - STRUCTURAL ASSESSMENT

Zone 2's structural roof is constructed of tongue and groove wood plank sheathing, spanning to sloped rafters or brackets at approximately 4'-0" on center. The sloped rafters span to the exterior beams and is constructed of an elaborate system of trusses, posts and transfer beams. The roof has an intermediate level of windows located at the upper tier. The roof flares out and extends beyond and overhangs the exterior support walls at the low end as well above the intermediate level of windows. Listed below are the *structural observations and findings:*

- The lower overhang extending over the flat roof is in poor condition with missing and deteriorated sheathing. The structural rafters inside the decorative side panels are in very poor condition. The wood is rotten beyond serviceability. Water shedding off the roof flows over exposed wood sides and edges, accelerating the deterioration of the support structure. *(see figure S2.1)*

- The lower roof area up to the intermediate windows conditions varies. There is a large hole with severely deteriorated and damaged sheathing and support framing on the east side and in the valley behind the bell tower. The condition of the roof framing appears to improve towards the south side will only localized signs of damaged, deteriorated sheathing. The condition of the roof further deteriorates toward the northwest corner where the sheathing is visibly sagging between the support rafters. *(see figure S2.2)*

- The condition of the vertical walls, framing and windows at the intermediate window level appear in to be structurally functional. *(see figure S2.3)*

- The roof overhang above the intermediate windows appears intact for all segments except at the northwest corner where the overhang had been removed with only the exposed outrigger brackets remaining. It can be assumed that the exposed wooden brackets are rotten and are beyond serviceable condition. *(see figure S2.4)*

- Upper tier roof area appears in better condition than the lower roof. Localized deterioration of sheathing and rafters can be anticipated above the area with exposed overhang brackets. *(see figure S2.5)*

FIGURE S2.1

FIGURE S2.2

FIGURE S2.3

FIGURE S2.4

FIGURE S2.5

KING SOLOMON BAPTIST CHURCH ROOF INSPECTION REPORT

ZONE 3: BELL TOWER - ARCHITECTURAL ASSESSMENT

Zone 3 constitutes a 800 square feet pyramid hip roof on a wood framed structure with asphalt shingles. The decking flares into deep overhangs at each side and returns around four masonry corner piers of the tower. Decorative wood rafter tails support the extended overhang on all four sides. The extended wood eave overhangs and rafter tails, show significant deterioration on all four sides with extensive wood decay and rot. Several sections of the overhangs and select rafter tails have fallen off the building to the roofs or street below . Listed below are the *architectural observations and findings*:

- Asphalt shingles are work, well beyond the end of their useful life, with a significant quantity missing and exposing the sheathing below
- Weathered, rotted, or missing roof decking and painted soffit trim *(see figure A 3.7 and S3.0)*
- Extensive roof damage at extended eave overhangs
- Decorative wood rafter tails are rotted or missing; wood frieze board and trim is detaching from the masonry wall where still existing, weathered with worn paint. *(see figure A3.4 and A3.6)*
- Some displacement or movement is visible in the upper section of the four corner masonry piers *(see figure S3.3)*
- Several piece of stone caps over the masonry bell tower piers and buttress, as well as within the window and louver surrounds are cracked, detached, or already fallen to the roof or site below, exposing openings in the masonry wall assemblies *(see figure S3.2)*
- Missing or detaching, deteriorated copper step flashing at the overhang returns and brick piers; original copper gutters are missing and remnants of some disconnected copper downs[pouts remain *(see figure A3.10)*
- Large arched windows in the bell tower are missing glass and framing, leaving the underside of the roof and bell tower interior exposed to the elements and increased deterioration. Wood louvers above the windows are weathered with worn pain, in poor to fair condition, with some sections missing. *(see figure A3.1 and A3.2)*

FIGURE A3.2 THE EAVE OVERHANG SHOWS EXTENSIVE WOOD DECAY AND DETERIORATION

FIGURE A3.4 DECORATIVE WOOD OVERHANGS COLLAPSING AND OPEN AT ENDS TO INTERIOR; BRICK MASONRY SHOWS SIGNS OF DIFFERENTIAL MOVEMENT; REMAINING STEPPED COPPER FLASHING (EAST ELEVATION)

FIGURE A3.6 DIFFERENTIAL BRICK MOVEMENT UNDER EAVES; REMNANTS OF THE ORIGINAL STEPPED COPPER FLASHING; (NORTH ELEVATION)

FIGURE A3.7 HIP ROOF IS IN VERY POOR CONDITION; WEATHERED AND DECAYED WOOD DECKING, MISSING/FALLEN SHINGLES AND EXPOSED DECKING AND ORIGINAL STEPPED COPPER FLASHING (EAST ELEVATION)

FIGURE A3.8 ROTTED DECORATIVE WOOD RAFTER TAIL AND DETACHING FRIEZE BOARD TRIM

FIGURE A3.9 UNDERSIDE OF THE PAINTED DECORATIVE OVERHANGS; WEATHERED DETERIORATED WOOD DECKING (EAST ELEVATION)

FIGURE A3.10 OVERVIEW OF THE BELL TOWER'S ROOF AND DECKING; THE DECKING ON TOP OF THE DECORATIVE EAVE HAS COMPLETELY DECAYED AND DETACHED FROM THE ROOF ASSEMBLY (NORTH ELEVATION)

FIGURE A3.11 DETACHED COPPER DOWNSPOUT AND MISSING ASSOCIATED COPPER GUTTER

FIGURE A3.12 SOUTH WEST ELEVATION OF BELL TOWER; CRUMBLING STONE AT THE COLUMN CAP; BRICK MOVEMENT DIRECTLY UNDER THE ROOF

ZONE 3: BELL TOWER - STRUCTURAL ASSESSMENT

Zone 3's bell tower has a pyramid roof constructed of sloped rafters above the bell loft. The roof flares out between masonry corner piers that extend above the trusses. The flared roof, originally wrapped partially around the sides of the masonry corner piers. Listed below are the *structural observations and findings*:

- The entire roof structure is in very poor condition and beyond serviceable condition. Large portions of the roof overhang area and support brackets are missing. The plank sheathing on the pyramid roof is exposed and is in poor condition. The nearby areas are badly deteriorated or missing. *(see figure S3.1)*
- The masonry piers and masonry below the roof support zone has limited cracking, moderate mortar joint deterioration and visible spalling. There is a significant risk of damage to people and property from falling debris due to the condition of the masonry. *(see figure S3.2)*
- There are large openings in the bell tower where the original windows and louvers have been removed or are damaged. These openings should be closed off as part of the roofing solution. *(see figure S3.3)*

FIGURE S3.1

FIGURE S3.2

FIGURE S3.0

FIGURE S3.3

KING SOLOMON BAPTIST CHURCH ROOF INSPECTION REPORT

ZONE 4: CENTRAL GABLE ROOF - ARCHITECTURAL ASSESSMENT

Zone 4 constitutes a 5,650 square feet cross gable wood roof structure with asphalt shingles that is situated over the main sanctuary. This roof shows significant deterioration at various locations along is surface, particularly on its southwest slope. Openings in the roof exposure to the outdoor elements has allowed water to infiltrate into the building and damage the structure and interior space below. Listed below are the *architectural observations and findings*:

- Asphalt shingles are beyond their useful life; numerous shingles have lifted, are cracked, or missing with curled edges
- Open holes through the roofing and sheathing on the southwest slope, each corner of the overhangs, and the in the valley connections adjacent to the bell tower, allowing exposure from the elements to deteriorate the structural framing and interior spaces below
- Some wave or sag between structural support members can be seen in the north slope.
- Decorative wood rafter tails are rotted and failed on the west rake but generally in fair condition along the north overhang. The large decorative support brackets below structural wood outriggers, supporting the deep west and east rake overhangs are in fair to poor condition. End caps surrounding the outriggers are mostly open and the structural wood members rotted away. The decorative brackets below the outriggers are in fair condition with worn paint and weathered wood.
- Extensive deterioration and now measurable missing decking and trim at the deep overhang and fascia along the west rake edge. The full depth of the exterior wall assembly is exposed from above in the southwest corner where the sheathing is missing.
- Tongue-and-groove trim at the underside of the east and west rake overhangs, as well as adjacent fascia trim is in poor to fair condition with worn paint and weathered or missing wood elements. The wood fascia behind the gutters at the north eave has detached from the decorative rafter tails but is otherwise in fair condition, weathered with worn paint.
- At the north eave, the metal gutter and downspouts are significantly rusted, with some section of the downspout missing. Any previous gutter along the southwest eave is not missing, and a single disconnected copper downspout remains extending to grade.
- A block wall stair enclosure for access to the north flat roof (not in project) sits under a portion of the north eave overhang. The block walls are in poor condition with displaced units and broken blocks. The door and frame has completely failed leaving an opening into the stair from the exterior. The membrane roofing on the north flat roof is detached at its base and vegetation is present. Despite the connection, it appears that repairs can be made to the Zone 4 gable roof independent of any removal or repairs to the stair enclosure.

FIGURE A4.00 OVERVIEW OF NORTHERN SIDE OF THE CROSS GABLE ROOF

FIGURE 4.1 DETERIORATED WOOD DECKING, MISSING/FALLEN SHINGLES AT THE EAVE (WEST ELEVATION)

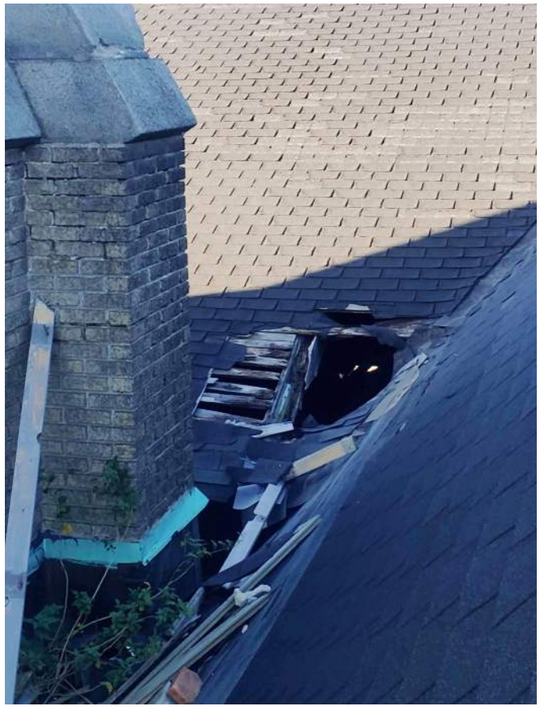

FIGURE A4.17 LARGE HOLE IN THE ROOF; DETERIORATED SHINGLES, WOOD DECKING AT THE ROOF VALLEY ; FALLEN WOOD DECKING FROM THE BELL TOWER ROOF ABOVE

FIGURE A4.23 EXTENSIVE EXTERIOR MASONRY DETERIORATION AT ROOFTOP STAIR ENTRY/EXIT; MISSING AND DETERIORATED MORTAR JOINTS; DETACHED ROOFTOP STAIR ENTRY DOOR; DAMAGED DOOR FRAMING. DETACHED FLASHING AT THE UPTURN OF THE NORTH MEMBRANE ROOFING

FIGURE 4.2 DECORATIVE WOOD EAVE, SIDE ELEVATION APPROX. LENGTH 3'-4"; IN FAIR CONDITION

FIGURE A4.3 DECORATIVE WOOD EAVE IN FAIR CONDITION; (NORTH ELEVATION)

FIGURE A4.4 WEATHERED FASCIA BOARD WITH ATTACHED METAL GUTTER

FIGURE A4.5 RUSTED GUTTER, CURLED AND FRAYED ASPHALT SHINGLES

FIGURE A4.6 OVERVIEW OF NORTHERN ROOF; CURLED, DISCOLORED, AND FRAYED ASPHALT SHINGLES; SHOW SIGNS OF DEPRESSIONS AND UNEVEN SURFACES ALONG THE ROOF

FIGURE A4.9 WEATHERED FASCIA BOARD; DECAYED WOOD DECKING; CURLED, FRAYED AND MISSING ASPHALT SHINGLES ABOVE ROOFTOP STAIR ENTRY.

FIGURE A4.14 MISSING WOOD FASCIA BOARDS AT EAST ELEVATION

FIGURE A4.12 WEATHERED, FADED EAVES; RUSTED GUTTER (EAST ELEVATION)

FIGURE A4.24 WEATHER AND FADED FASCIA BOARDS; DECAYED HOLLOWED WOODEN SUPPORT BRACKET

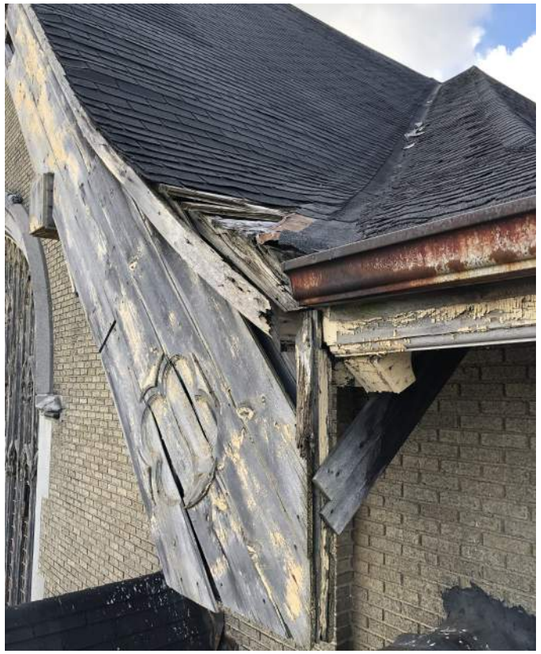

FIGURE 4.13 DECORATIVE FASCIA BOARDS ARE WEATHERED AND FADED; THEY ARE DETACHING FROM THE SUBSTRUCTURE. WOOD DECKING AT VALLEY TERMINATION IS EXPOSED, DECAYED WITH MISSING SHINGLES

FIGURE A4.15 UNDERSIDE OF THE EAVES; PAINTED WOODEN BRACKET EAVE SUPPORT; (EACH BRACKET SHOULD BE INDIVIDUALLY EVALUATED)

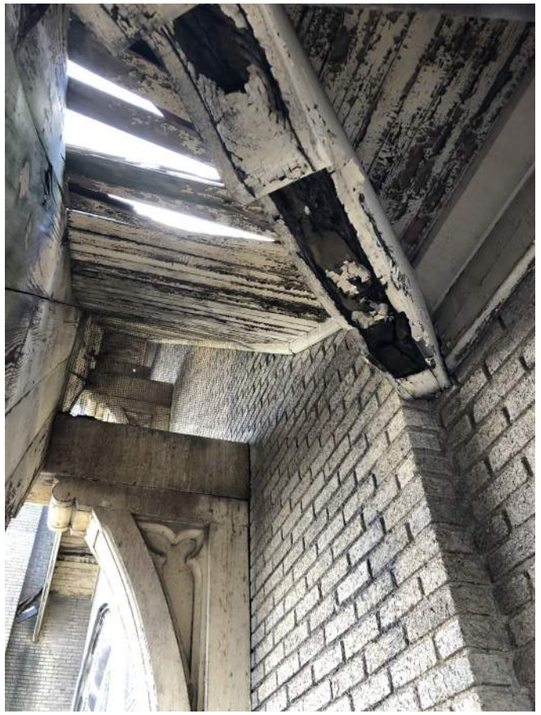

FIGURE A4.16 UNDERSIDE OF EAVES ON THE EAST ELEVATION AT THE MAIN ENTRANCE; WOOD DECKING IS DETERIORATION AT THE EAVE; MISSING WOOD DECKING; WEATHERED AND DECAYING SUPPORT BRACKETS

FIGURE 4.22 WEATHER AND FADED FASCIA BOARDS, FADED WOOD DECKING AT THE UNDERSIDE OF THE EAVES ON THE EAST ELEVATION AT THE MAIN ENTRANCE

ZONE 4: CENTRAL GABLE ROOF - STRUCTURAL ASSESSMENT

Zone 4 is a staggered ridge sloped roof with gabled overhangs on the east and west ends. The roof extends over the gable end walls. Decorative wood brackets support sloping edge beam/ fascia. The edge beam and fascia support the roof sheathing planks.

- The condition of the east overhang varies. The sheathing and a sloping beam that appears to be in moderate condition. The top members and inside structural members within the decorative brackets are in poor condition due to water leaking into the top of the brackets. *(see figure S4.1)*
- The main roof structure beyond the east overhang appears in moderate condition at the north and southeast slopes. The area at valley between the sloped roof and the bell tower is damaged, the structural members below the roofing may show some level of deterioration. *(see figure S4.2)*
- The southwest slope of the main roof area is in poor condition with many holes and areas of deteriorated sheathing and rafters. *(see figure S4.3)*
- The west overhang is in poor condition. The decorative support varies in condition. *(see figure S4.4)*

FIGURE S4.1

FIGURE S4.2

FIGURE S4.1

FIGURE S4.3