STRUCTURE NOTES:

FASTENERS SHOULD BE GALVANIZED NUT AND BOLTS AND REPLACEMENT TIMBER SIZE SHOULD BE SIMILAR, IF NOT, IDENTICAL IN SIZE. TIMBER CROSS BRACING SHOULD UTILIZE BOLT, WASHERS, AND NUT FASTENERS TO ALLOW FOR THE DEVELOPMENT OF A PIN CONNECTION THAT IS SUBJECTED TO MINIMAL ECCENTRIC LOADING. CONNECTIONS TO FILES SHOULD BE MADE IN A MANNER THAT PREVENTS SPOTTING BETWEEN THE NEW AND EXISTING FASTENER HOLES.

INTERMEDIATE HELPER BENT WITH CORBEL DIAPHRAGM (PROFILE)

FASTENERS SHOULD BE GALVANIZED NUT AND BOLTS AND REPLACEMENT TIMBER SIZE SHOULD BE SIMILAR, IF NOT, IDENTICAL IN SIZE. TIMBER CROSS BRACING SHOULD UTILIZE BOLT, WASHERS, AND NUT FASTENERS TO ALLOW FOR THE DEVELOPMENT OF A PIN CONNECTION THAT IS SUBJECTED TO MINIMAL ECCENTRIC LOADING. ANY "L" SHAPE FASTENERS SHOULD ONLY BE EMPLOYED DURING THE INSTALLATION PROCESS TO FACILITATE INSTALLATION OF NUT AND BOLT FASTENERS.

STRUCTURE NOTES:

REPLACEMENT DIAPHRAGM BENT SHOULD BE DESIGNED AS A FLEXURAL MEMBER WITH SPECIFIC CONSIDERATION GIVEN "D" DEFLECTIONS AND LOADING.

STEEL SECTIONS UTILIZE WELDED CONNECTIONS BETWEEN ALL STEEL COMPONENTS ASSOCIATED WITH THIS REPAIR. ALTERNATIVELY, BOTH FIELD AND SHOP WELDS MAY BE UTILIZED. BOLTED CONNECTIONS MAY BE USED AND IS ENCOURAGED WHEN SHOP FABRICATION IS EMPLOYED FOR THE ASSEMBLY OF COMPLEX CONNECTIONS.
TIMBER TO STEEL H-PILE SPICE SECTION

STRUCTURE NOTES:
STEEL PILE SECTIONS UTILIZEBOLTED CONNECTIONS BETWEEN ALL STEEL COMPONENTS ASSOCIATED WITH THIS REPAIR. ALTERNATIVELY BOTH FIELD AND SHOP HOLE DRILLING MAY BE UTILIZED.

BOLTS, BOLTS, NUTS AND POLISHED STEEL SHEAR PLATES AS SHOWN MAY BE REPLACED. THE ABSENCE OF COMPLEX CONNECTIONS, FASTENERS SHOULD BE GALVANIZED, AND REPLACEMENT TIMBER SIZE SHOULD BE IDENTICAL. IF NOT, IDENTICAL IN SIZE. CONNECTIONS TO PILES SHOULD BE MADE IN A MANNER THAT PREVENTS SPILLING.

TIMBER TO TIMBER PILE SPICE SECTION

STRUCTURE NOTES:
STEEL SPICE C-HANDEL FASTENERS SHOULD BE GALVANIZED AND REPLACEMENT TIMBER SIZE SHOULD BE SIMILAR OR IDENTICAL IN SIZE. IN THE INSTALLATION OF THE SPICE SECTIONS INTO NEW AND EXISTING TIMBER PILES.

TIMBER TO TIMBER PILE WITH CONCRETE FILLED SPICE SECTION

STRUCTURE NOTES:
TIMBER PILE SPICE UTILIZING BARREL CONTAINMENT OF CONCRETE AND SHOULD HAVE HOLES CENTERED FOR THE ATTACHMENT OF THE TIMBER PILE. TIMBER END SECTIONS SHOULD BE IDENTIFIED IN THE BARS AND ALL AXES. WELDED WIRE FABRIC SHOULD BE CONSIDERED FOR SPICES AT MULTIPLE SPICE OR SPICE ELEVATIONS COINCIDING WITH THE BARREL SPICE SECTION.

TIMBER TO TIMBER PILE SPICE SECTION

STRUCTURE NOTES:
FASTENERS SHOULD BE GALVANIZED, AND CONNECTIONS TO PILES SHOULD BE MADE IN A MANNER THAT PREVENTS SPILLING. IN THE INSTALLATION OF THE SPICE SECTIONS INTO NEW AND EXISTING TIMBER PILES.
TIMBER TO STEEL H-PILE SPICE SECTION

STRUCTURE NOTES:
STEEL PILE SECTIONS UTILIZE WELDED CONNECTIONS BETWEEN ALL STEEL COMPONENTS ASSOCIATED WITH THIS REPAIR. ALTERNATIVELY, BOTH FIELD AND SHOP WELDS MAY BE UTILIZED.

BOLTED CONNECTIONS CAN BE USED AND IS ENCOURAGED WHEN SHOP FABRICATION IS EMPLOYED FOR THE ASSEMBLY OF COMPLEX CONNECTIONS. FASTENERS SHOULD BE GALVANIZED, AND REPLACEMENT TIMBER SIZE SHOULD BE SIMILAR TO IDENTICAL IN SIZE. CONNECTIONS TO PILES SHOULD BE MADE IN A MANNER THAT PREVENTS SPLITTING.

TIMBER TO TIMBER PILE SPICE SECTION

STRUCTURE NOTES:
STEEL SPICE C-CHANNELS, FASTENERS SHOULD BE GALVANIZED AND REPLACEMENT TIMBER SIZE SHOULD BE SIMILAR OR IDENTICAL IN SIZE. IN THIS REPAIR DETAIL, NAILS PROVIDE ONLY TEMPORARY FASTENING FOR THE INSTALLATION OF THE SPICE SECTIONS INTO NEW AND EXISTING TIMBER PILES.

TIMBER TO TIMBER PILE SPICE SECTION WITH STEEL BRACKET SPICE SECTIONS

STRUCTURE NOTES:
BOLTED CONNECTIONS MAY BE USED AND IS ENCOURAGED WHEN SHOP FABRICATION IS EMPLOYED FOR THE ASSEMBLY OF COMPLEX CONNECTIONS. FASTENERS SHOULD BE GALVANIZED, AND REPLACEMENT TIMBER SIZE SHOULD BE SIMILAR OR IDENTICAL IN SIZE. CONNECTIONS TO PILES SHOULD BE MADE IN A MANNER THAT PREVENTS SPLITTING.

CONCRETE REPLACEMENT SECTIONS WITH A REINFORCING CAGE MAY UTILIZE LEAVE-IN PLACE OR REMOVABLE FORMWORK. ADDITIONALLY, THE USE OF WELDING STUDS OR EQUIVALENT IS ENCOURAGED TO PROVIDE A STRONGER INTERFACE BETWEEN CAP AND PILE. FASTENERS SHOULD BE GALVANIZED, AND CONNECTIONS TO PILES SHOULD BE MADE IN A MANNER THAT PREVENTS SPLITTING. PROVIDE ADEQUATE CONCRETE COVER OF 2" (MIN.) FOR REINFORCEMENT.