

# GENERAL NOTES

**PILE DRIVING CONSTRAINTS:** PRIOR TO DRIVING PILES, THE SPILL THROUGH SLOPES AND THE BRIDGE APPROACH EMBANKMENT BEHIND THE ABUTMENTS SHALL BE CONSTRUCTED UP TO THE LEVEL OF THE SUBGRADE ELEVATION FOR A MINIMUM DISTANCE OF 200 FEET BEHIND EACH ABUTMENT. THE EXCAVATION FOR THE ABUTMENT FOOTINGS AND THE INSTALLATION OF THE ABUTMENT PILES SHALL NOT BEGIN UNTIL AFTER THE ABOVE REQUIRED EMBANKMENT HAS BEEN CONSTRUCTED.

**PILE DESIGN LOADS (SAFE BEARING CAPACITY):** THE ULTIMATE BEARING VALUE FOR THE ABUTMENT PILES IS 60 TONS PER PILE AND THE ULTIMATE BEARING VALUE FOR THE PIER PILES IS 70 TONS PER PILE.

**ITEM 503, UNCLASSIFIED EXCAVATION, AS PER PLAN**

STRUCTURAL EXCAVATION, IN ADDITION TO THAT NECESSARY TO REMOVE PORTIONS OF THE EXISTING STRUCTURE, AND ALL NECESSARY BACKFILL, IS INCLUDED IN THE LUMP SUM BID ITEM, "UNCLASSIFIED EXCAVATION," FOR PAYMENT. BACKFILL MATERIAL BEHIND ABUTMENTS SHALL BE C.M.S. 304 MATERIAL PLACED IN LIFTS NOT TO EXCEED A THICKNESS OF MORE THAN SIX(6) INCHES AND SHALL BE COMPACTED IN ACCORDANCE WITH 304.04 USING MECHANICAL COMPACTORS.

**TEMPORARY FALSEWORK AND PROTECTIVE STRUCTURES:**

**A. GENERAL**

THIS WORK SHALL CONSIST OF CONSTRUCTING AND REMOVING RIGID TEMPORARY CONSTRUCTIONS REQUIRED TO COMPLETE THE WORK IN ADDITION TO THE FORMWORK AND ITEMS WHICH ARE SPECIFICALLY INCLUDED ELSEWHERE. THE WORK INCLUDES TEMPORARY PLATFORMS OR OTHER MEANS TO PREVENT LOOSE MATERIALS FROM FALLING DURING THE REMOVAL AND CONSTRUCTION OF SUPERSTRUCTURE. TIMBER SUBDECKING ALREADY EXISTS OVER THE TRAVELED LANES OF INTERSTATE 90.

**B. REQUIREMENTS**

IN ORDER TO PROTECT AGAINST DAMAGE FROM FALLING MATERIAL AND DEBRIS, WHILE SUPERSTRUCTURE CONCRETE IS BEING REPLACED OR WHILE WORK IS IN PROGRESS OVERHEAD, THE CONTRACTOR SHALL FURNISH AND ERECT TEMPORARY PROTECTIVE STRUCTURES. THE FLOORING AND SIDING OF THE STRUCTURES SHALL HAVE NO CRACKS

OR OPENINGS THROUGH WHICH MATERIAL PARTICLES AND WATER USED FOR SAWING OPERATIONS OR CURING MAY FALL.

THE PROTECTION IN ALL CASES SHALL EXTEND BEYOND THE EXTERIOR STRINGERS A SUFFICIENT DISTANCE TO PROTECT AREA UNDER THE BRIDGE RAILINGS.

AFTER THE TEMPORARY FALSEWORK AND PROTECTIVE STRUCTURES HAVE SERVED THEIR PURPOSE, AND WHEN SO DIRECTED BY THE ENGINEER, THEY SHALL BE REMOVED. ALL MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE AND DISPOSED OF BY THE CONTRACTOR AT HIS OWN EXPENSE.

DETAILS OF THE TEMPORARY FALSEWORK AND PROTECTIVE STRUCTURES INCLUDING THE PROPOSED TEMPORARY UNDERCLEARANCES TO I-90 SHALL BE SUBMITTED TO THE DIRECTOR FOR APPROVAL. THE REDUCTION OF VERTICAL CLEARANCE ON I-90 DUE TO THE INSTALLATION OF FALSEWORK SHALL NOT ALLOW THE VERTICAL CLEARANCE TO BE LESS THAN 15'-6". THIS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.

C. TEMPORARY FALSEWORK AND PROTECTIVE STRUCTURES WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED WITH THE UNIT PRICE BID FOR ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN.

**TEMPORARY SHEETING:**

TEMPORARY SHEETING SHALL BE USED TO SUPPORT EXISTING AND PROPOSED ROADWAY DURING PART WIDTH CONSTRUCTION. THE TEMPORARY SHEET PILE SHALL BE APPROVED BY THE ENGINEER. PAYMENT FOR THIS WORK SHALL BE MADE AT THE CONTRACT BID PRICE FOR ITEM 503, COFFERDAMS, CRIBS AND SHEETING.

**COFFERDAMS, CRIBS, AND SHEETING, AS PER PLAN:**

TEMPORARY SHORING SHALL BE USED TO ACCOMPLISH THE PROPOSED CONSTRUCTION IN STAGES. THE DESIGN OF THE TEMPORARY SHORING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER, AND CONFORM WITH 501.05. FOR APPROVAL, FIVE COPIES OF THE DRAWINGS SHALL BE SUBMITTED TO THE DIRECTOR AND CONCURRENTLY, ONE COPY TO THE BUREAU OF BRIDGES AND STRUCTURAL DESIGN. CONSTRUCTION OF SHORING SHALL NOT BEGIN UNTIL AFTER WRITTEN APPROVAL HAS BEEN RECEIVED FROM THE DIRECTOR. PORTIONS OF THE TEMPORARY SHORING COMPOSED OF STEEL OR CONCRETE MAY BE LEFT IN PLACE AT THE DISCRETION OF THE ENGINEER. PORTIONS COMPOSED OF OTHER MATERIALS SHALL BE REMOVED PRIOR TO COMPLETION OF THE WORK

**INSPECTION OF STRUCTURAL STEEL:**

THE ENGINEER SHALL VISUALLY INSPECT ALL EXISTING BUTT-WELDED SPLICES AND /OR TOP FLANGE COVER PLATE FILLET WELDS TO ENSURE THAT THEY ARE FREE OF DEFECTS. THE DECK SLAB HAUNCH FORMS IMMEDIATELY ADJACENT TO SUCH WELDS SHALL NOT BE ERECTED UNTIL AFTER THE ENGINEER HAS COMPLETED THIS INSPECTION. THIS INSPECTION SHALL NOT TAKE PLACE UNTIL AFTER THE TOP FLANGES ARE CLEANED AS SPECIFIED IN 511.08, BUT IT SHALL BE DONE BEFORE THE DECK SLAB REINFORCEMENT IS INSTALLED. THE COST ASSOCIATED WITH THIS INSPECTION SHALL BE INCLUDED WITH ITEM 511, SUPERSTRUCTURE CONCRETE FOR PAYMENT.

**SEALING OF CONCRETE SURFACES**

CONCRETE SEALER SHALL BE APPLIED TO THE FOLLOWING CONCRETE SURFACES WITH THE SPECIFIED SEALER AS LISTED BELOW:

- A. SUPERSTRUCTURE AND WINGWALL PARAPETS - USE NON-EPOXY SEALER.
- B. ABUTMENTS BELOW THE PARAPETS - USE EPOXY-URETHANE SEALER.
- C. PIER COLUMNS - USE TINTED SILANE TREATMENT ON THE QUADRANT OPPOSITE THE TRAFFIC DIRECTION AND EPOXY-URETHANE ON REMAINDER OF THE COLUMN.
- D. PIER CAPS - USE TINTED SILANE TREATMENT ON THE TOP OF THE PIER CAP AND EPOXY-URETHANE ON THE REMANING FACES OF THE PIER CAP.

THE COLOR FOR CONCRETE SEALER SHALL CONFORM TO FEDERAL SPECIFICATIONS NO. 595A-16187.

SEE THE PROPOSAL NOTE FOR SURFACE PREPARATION REQUIREMENTS, APPLYING RATES, MATERIAL REQUIREMENTS AND APPLICATION PROCEDURES.

**STRUCTURAL STEEL MEMBER, MISCELLANEOUS FABRICATION AS PER PLAN:**

STEEL MEMBERS INCLUDED IN THIS ITEM INCLUDE CROSSFRAMES, END-CROSSFRAMES, AND SHIM PLATES.

PERMANENT SHIM PLATES ARE REQUIRED AT EACH OF THE EXISTING BEAMS AT BOTH ABUTMENTS. THE SIZE OF THE STEEL SHIM PLATES SHALL BE 8" X 18", THE THICKNESS OF THE PLATES SHALL BE AS SHOWN ON SHEET [18.72A]. SHIM PLATES SHALL BE ASTM A36. SHIM PLATES SHALL BE WELDED TO EXISTING BEARINGS WITH CONTINUOUS SEAL WELD. SHIM PLATES SHALL BE PAINTED.

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REVISED	MJM
DESIGNED	BK
CHECKED	JRS

GENERAL NOTES  
BRIDGE NO. LAK-90-2687  
OVER INTERSTATE I-90

LAKE COUNTY  
LAK-90-26.87

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