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WHATSOEVER, TO ANY PARTY THAT MODIFIES THIS DRAWING WITH AECOM'S EXPRESS WRITTEN CONSENT. DO NOT SCALE THIS DOCUMENT. ALL MEASUREMENTS MUST BE OBTAINED FROM STATED DIMENSIONS.

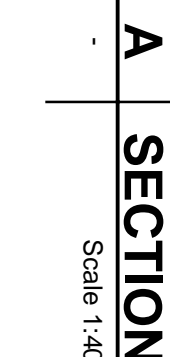
AS NOTED

HARBOUR REVITALIZATION REHABILITATION OF PAN AM PIER AND WHARF 405

PLAN, SECTIONS AND NOTES

LOCATION:

GIMLI, MANITOBA

CS-002 5519

- DESIGN LOADS:**

DECK LOAD ON DECK: 15.0 kPa
DECK SLAB DESIGNED AS A SLAB-ON-GRADE

GENERAL NOTES:

 1. THE METRIC SYSTEM OF MEASUREMENT IS USED ON ALL DRAWINGS. ELEVATIONS AND STATIONS ARE SHOWN IN METERS AND ALL OTHER DIMENSIONS ARE IN MILLIMETERS.
 2. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS ON SITE, PRIOR TO FABRICATION AND REPORT ANY DISCREPANCIES TO ENGINEER.
 3. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW BY THE ENGINEER PRIOR TO FABRICATION.
 4. CONTRACTOR TO CONFIRM LOCATION OF ALL UTILITIES PRIOR TO START OF CONSTRUCTION.
 5. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING BUILDINGS, FUTURES, EQUIPMENT AND SERVICES FROM DAMAGE DURING CONSTRUCTION OPERATIONS.
 6. CONTRACTOR SHALL PROVIDE TEMPORARY ACCESS TO THE FLOATING WHARF ALONG THE NORTH SIDE OF THE PIER AS PER CSD-001.
 7. GEOTECHNICAL SHALL BE AMOCO NON-WOVEN FILTER FABRIC OR APPROVED EQUAL CONFORMING TO OPSS 1880 CLASS II.
 8. BASE COURSE SHALL BE A1 LIMESTONE.
 9. EXCAVATION TO BE RECEIVED BY ENGINEER PRIOR TO BACKFILL.
 10. CONTRACTOR TO REMOVE RIP RAP AND BACKFILL AS REQUIRED TO DRIVE SHEET PILES.

STEEL NOTES:

 1. ALL STRUCTURAL AND MISCELLANEOUS STEEL SHALL CONFORM TO C.S.A. G40.21-04 (R2009) GRADE 350M.
 2. ALL PLATE STEEL SHALL CONFORM TO C.S.A. G40.21-04 (R2009) GRADE 400M.
 3. STEEL SHEET PILING SHALL BE 275 STEEL SHEET PILING CONFORMING TO C.S.A. G40.21.04 (R2009) GRADE 350M.
 4. ANCHOR ROOS SHALL BE 36mm DIA x 880.0 LONG DIVIDING THEREABOUT THE ROD GRADE 75 WITH DOUBLE CORROSION PROTECTION. DUE TO FLUCTUATIONS IN WATER LEVEL ON LAKE WINNIPEG, THE TIE RODS MAY BE BELOW WATER LEVEL DURING CONSTRUCTION.
 5. ALL WELDING SHALL CONFORM WITH CSA W59-03 (R2009) AND W47-1-09. WELDING ELECTRODES SHALL BE TYPE 49XX. ALL WELDS SHALL BE 6mm FILLET JNTO.
 6. ALL STEEL SHALL BE EITHER SHOP PRIMED AFTER FABRICATION, OR GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH CSA G164-M82 (R2003). DAMAGED AND FIELD DRILLED SURFACES SHALL BE TOUCHED UP WITH TWO COATS OF ZINC RICH PAINT, AS INDICATED.
 7. ALL THRU-BOLTS, NUTS AND WASHERS SHALL BE ASTM A325, 22mm DIAMETER, GALVANIZED UNLESS NOTED OTHERWISE.

TIMBER NOTES:

 1. ALL TIMBERS SHALL BE PRESSURE TREATED WITH CHROMATED COPPER ARSENATE (CCA) IN STRICT ACCORDANCE WITH CSA 80. ALL TIMBERS TO BE CUT TO LENGTH BEFORE TREATMENT.
 2. ALL TIMBERS SHALL BE GROUP A DOUGLAS FIR, ROUGH SAWN, NO. 2 GRADE OR BETTER AS PER CANCSA-2809.
 3. ALL DRIFT PINS SHALL BE ASTM A307, 19mm DIAMETER, GALVANIZED UNLESS NOTED OTHERWISE.

CONCRETE NOTES:

 1. CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 30 MPa AT 28 DAYS WITH 5% TO 8% AIR ENTRAINMENT. NORMAL COARSE AGGREGATE SIZE TO BE 20mm.
 2. REINFORCING BARS SHALL BE DEFORMED BARS GRADE 400.
 3. ANCHOR BOLTS SHALL BE ASTM A307.
 4. CLEAR CONCRETE COVER TO REINFORCING STEEL SHALL BE:
 - a) CONCRETE EXPOSED TO EARTH OR WEATHER: 50mm
 - b) CONCRETE EXPOSED TO WATER: 75mm
 5. ALL ANCHORS INTO CONCRETE SHALL BE GALVANIZED. SIZES AS INDICATED OR TO MATCH EXISTING BASE PLATE HOES. INSTALL ALL NEW ANCHORS INTO CONCRETE STANDARD EMBEDMENT DEPTH U.M. USING HILTI HY-150 MAX ANCHORAGE SYSTEM AS PER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
 6. CONCRETE SLAB SHALL BE LIGHT BROWN FINISH IN THE TRANSVERSE DIRECTION.
 7. CONTROL JOINT FILLER SHALL BE EXTRUDED POLYSTYRENE ROD "RODOFOAM" BY STERNSSON OR APPROVED EQUAL.
 8. BAR LENGTHS FOR REINFORCING BARS SHALL BE CLASS B, AS PER CHBCC U.O.
 9. BAR HOOKS, WHERE REQUIRED, SHALL BE MINIMUM LENGTH AND STIRRUPS SHALL HAVE MINIMUM HOOKS AS PER REINFORCING STEEL INSTITUTE OF CANADA (RISC) U.O.
 10. ALL EXPOSED CONCRETE EDGES TO BE CHAMFERED 25mm.

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