GENERAL NOTES

30" DIAMETER CONTINUED

CONTRACTOR QUALIFICATION

THE CONTRACTOR SHALL SUBMIT INFORMATION TO THE ENGINEER TO DOCUMENT THAT HIS PERSONNEL IS EXPERIENCED IN THE COSTRUCTION OF DRILLED SHAFTS OF THE TYPE AND SIZE SPECIFIED ON THE PLANS. THIS INFORMATION SHALL BE SUBMITTED AT THE PRECONSTRUCTION CONFERENCE. THE PROJECT ENGINEER IS REQUESTED TO INFORM BUREAU OF BRIDGES, ATTENTION: FOUNDATION ENGINEER (TEL. 614-466-2399) OF THE DATES WHEN THE CONTRACTOR WILL BE CONSTRUCTING THE DRILL SHAFTS.

DEWATERING

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING ANY INCOMING WATER TO THE EXTENT THAT THE SHAFT EXCAVATION IS MAINTAINED DRY ENOUGH FOR PERFORMANCE OF THE REQUIRED INSPECTION AND CONCRETING OPERATIONS. THE PREFERRED METHOD OF CONSTRUCTION IS TO PLACE THE CONCRETE IN A CLEAN, DRY EXCAVATION. THE CONTRACTOR IS EXSPECTED TO MAKE A RESONABLE ATTEMPT TO SEAL WATER OUT OF THE DRILLED SHAFT EXCAVATION.

FOR ADDITIONAL NOTES AND DETAILS SEE SHEET 36.

TIMBER LAGGING

THE TIMBER MEMBERS OF THE WALL SYSTEM SHALL BE 8 FEET IN LENGTH AND 4" X 12" IN ACTUAL CROSS-SECTION. (LENGTH TOLERANCE ± 1/2" AND CROSS-SECTION TOLERANCE ± 3/8".) THE CONTRACTOR SHALL FURNISH TIMBERS WITH ADEQUATE DIMENSIONS TO CONSTRUCT THE PROPOSED WALL. THE ENDS OF THE TIMBERS SHALL BE SAWED SQUARE WITH THE AXIS OF THE TIMBER.

THE CONTRACTOR SHALL FURNISH TIMBER LAGGING, AND OTHER INCIDENTAL MATERIALS NECESSARY TO PERFORM THE REQUIRED WORK. THE MATERIALS SHALL MEET THE FOLLOWING REQUIREMENTS.

TREATED TIMBER USED AS LAGGING SHALL CONFORM TO REQUIREMENTS OF 711.26. THE SAME SPECIES SHALL BE USED FOR ALL THE TIMBER MEMBERS REQUIRED. THE TIMBERS SHALL BE OF A GRADE AND TYPE WITH AN ALLOWABLE EXTREME FIBER STRESS IN BENDING OF A MINIMUM OF 1250 PSI AND AN ALLOWABLE STRESS IN SHEAR OF A MINIMUM OF 85 PSI. THE WOOD SHALL BE SEASONED, SOUND, AND FREE FROM DECAY AND INSECT ATTACK, WITH ON LOOSE AND/OR CLUSTER KNOTS. THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING TIMBER LAGGING HAVING ADEQUATE STRENGTH TO SUPPORT THE LATERAL PRESSURE APPLIED TO THE WALL. THE TIMBER LAGGING USED SHALL CONFORM TO THE REQUIREMENTS SHOWN IN THE PLANS. IF THE LAGGING USED AT ANY LOCATION IS FOUND TO BE INADEQUATE, THE CONTRACTOR IS RESPONSIBLE FOR ALL CORRECTIVE MEASURES. LAGGING MAY BE FIELD CUT.

TIMBER LAGGING SHALL BE SEPARATED WITH 4"X 4"X 1/2" HARDWOOD SPACE BLOCKS PLACED BETWEEN ADJACENT TIMBERS

PREFABRICATED GEOCOMPOSITE IN - PLANE DRAINS

A. DESCRIPTION

PREFABRICATED DRAINS SHALL BE PROVIDED BETWEEN THE WOOD LAGGING AND THE CAST-IN-PLACE CONCRETE FACING ON THE SOLDIER PILE WALL IN ACCORDANCE TO THE DETAILS AND DIMENSIONS SHOWN ON THE PLANS.

B. MATERIAL AND DRAIN SYSTEMS

THE PREFABRICATED GEOCOMPOSITE IN-PLANE DRAIN SHALL CONSIST OF A POLYMERIC CORE WITH NON-WOVEN DRAINAGE FABRIC BONDED TO THE CORE. THE CORE MATERIAL SHALL BE RESISTANT TO PETROLEUM BASED CHEMICALS, NATURALLY OCCURRING SOIL CHEMICALS, AND ROAD DEICING AGENTS.

NON-WOVEN DRAINAGE FABRIC SHALL HAVE AN EQUIVALENT OPENING SIZE IN ACCORDANCE WITH THE REQUIREMENT OF 712209 FOR SOIL TYPE-2 AND SHALL HAVE A MINIMUM WEIGHT OF 4.0 OZ./YD.

THE CONTRACTOR MAY USE ANY OF THE FOLLOWING PREFABRICATED IN-PLANE DRAIN SYSTEMS:

	DRAIN SYSTEM	COMPANY ADDRESS
1.	MIRADRAIN 6000	MIRAFI, INC. P.O. BOX 240967 CHARLOTTE, NC. 28224 1-800-438-1855
2.	TIGER DRAIN	EXXON CHEMICAL COMPANY 2100 RIVEREDGE PARKWAY SUITE 1025 ATLANTA, GA 30328 1-404-955-2300
3.	STRIPDRAIN 75	ARMCO CONSTRUCTION PRODUCTS DIVISION DEPT. 4565 P.O. BOX 800 MIDDLETOWN, OHIO 45043 1-317-842-7766

C. CONSTRUCTION

1. MIRADRAIN 6000 - ATTACH THE PANELS TO THE LAGGING WITH MASTIC ADHESIVE SUCH AS BITUTHENE PBA-3000 OR STYROFOAM #11. DOUBLE-STICK, BUTYL RUBBER TAPE OR NAILS ARE OPTIONAL. TROWEL ADHESIVE ON THE LAGGING IN FIVE SPOTS, NEAR EACH CORNER AND CENTER OF THE PANEL. APPLY THE MASTIC IN SPOTS EACH 1/2 INCH THICK AND 6 INCHES IN DIAMETER. ATTACH THE FIRST PANEL AGAINST THE LAGGING, PLACING THE FABRIC SIDE TOWARD THE LAGGING. CONNECT THE NEXT PANEL BY PEELING BACK THE FABRIC 12 INCHES FROM THE JOINING EDGE OF BOTH PANELS. INTERLOCK THE SECOND PANEL WITH THE FIRST PANEL WITH A 3-INCH OVERLAP OF THE CORE MATERIALS; OVERLAP THE FABRIC AND CORE IN THE DIRECTION OF FLOW AND TAPE THE FABRIC FLAPS TO HELD THEM IN PLACE. CARE SHALL BE TAKEN WHEN LAPPING THE FABRICS SO AS TO PREVENT ANY FOREIGN MATERIALS FROM ENTERING THE CORE. WHEN WEEP HOLES ARE USED, CUT OF THE CORE DIMPLES WITH A KNIFE OR SCISSORS TO MATCH THE WEEP HOLES, AND POSITION HARDWARE CLOTH OR ALUMINUM SCREENING OVER THE HOLE BETWEEN THE FABRIC AND CORE. ROLL TOPE AND TERMINAL SIDE FABRIC FLAPS IN FRONT OF THE PANEL, SECURING BY NAILS AND CONSTRUCTION GLUE, AND SMOOTH OUT ALL FABRIC WRINKLES. MIRADRAIN SHALL BE PLACED TO A HEIGHT THAT LEAVES A LEAST 6 INCHES OF BACKFILL ABOVE IT. CONSTRUCT CONCRETE FACING AS SOON AS POSSIBLE.

2. TIGER DRAIN II. - TIGER DRAIN II SHALL BE INSTALLED VERTICALLY AGAINST THE SURFACE OF THE LAGGING. EITHER FABRIC SIDE MAY BE ORIENTED TOWARD THE LAGGING. EITHER FABRIC SIDE MAY BE ORIENTED TOWARD THE LAGGING. THE ATTACHMENT OF THE DRAINAGE SYSTEM TO THE LAGGING WILL HOLD IT IN PLACE DURING THE CONSTRUCTION OF THE CONCRETE FACING. TIGER DRAIN II MAY BE SECURED TO THE LAGGING BY DRIVING NAILS INTO THE LAGGING THROUGH PROTECTIVE WASHERS OR WOODEN STRIPS OR BY GLUING WITH CONSTRUCTION OR MASTIC GLUE. SECTIONS SHALL BE JOINED BY PEELING BACK 3 INCHES OF FILTER FABRIC FROM THE CORE ON BOTH SIDES AND OVERLAPPING THE BLUE CORE MATERIAL APPROXIMATELY 3 INCHES AND FITTING THEM TOGETHER. SECURE THE OVERLAP WITH STAPLES OR NAILS AND COVER THE JOINT BY OVERLAPPING THE FABRIC IN THE DIRECTION OF FLOW. TO ENSURE THAT THE TOP OF THE DRAINAGE CORE IS COVERED, THE BACK GEOTEXTILE FABRIC FLAP SHOULD BE ROLLED IN FRONT OF THE DRAINAGE CORE AND LAPPED OVER THE FRONT FABRIC AND SECURED BY GLUING, NAILING OR STAPLING. TIGER DRAIN II SHALL BE PLACED TO A HEIGHT THAT LEAVES A LEAST 6 INCHES OF BACKFILL ABOVE IT. WHEN WEEP HOLES ARE ENCOUNTERED, THIS REQUIRED THE USE OF HARDWARE CLOTH OR ALUMINUM SCREENING THAT IS TO BE CENTERED OVER THE HOLE BETWEEN THE BACK FABRIC AND CORE AND BONDED TO THE TIGER DRAIN II WITH EITHER CONSTRUCTION OR MASTIC GLUE. THEN THE FRONT FABRIC SHALL BE CUT IN AN "X" SHAPE AND WRAPPED AROUND THE PVC WEEPHOLE PIPE. LEAVE NO EDGES OF THE PLASTIC CORE EXPOSED. ALL EDGES SHALL BE COVERED BY FILTER FABRIC 9712.09, TYPE B). CONSTRUCT CONCRETE FACING AS SOON AS POSSIBLE.

3. STRIPDRAIN 75. - STRIPDRAIN 75 SHALL BE INSTALLED VERTICALLY AGAINST THE SURFACE OF THE LAGGING. STRIPDRAIN 75 SHALL BE ATTACHED TO THE LAGGING BY NAILS WITH 2 INCH X 2 INCH SQUARES OF PLYWOOD SPACERS EVERY 3 FEET OR BY USE OF CONSTRUCTION ADHESIVE. THE FABRIC SIDE SHALL BE ORIENTED TOWARD THE LAGGING. THE "LONG" EDGES OF STRIPDRAIN 75 ARE SUPPLIED WITH A 4- INCH FABRIC FLAP THAT OVERHANGS THE CORE. ON THE TOP OF THE INSTALLATION, THIS FLAP SHALL BE ROLLED OVER THE EDGE OF THE CORE AND ROLLED IN FRONT OF THE PANEL AND SECURED BY NAILS OR CONSTRUCTION GLUE. WHEN USING STRIPDRAIN WITH WEEP HOLES, CUT OFF THE DIMPLES TO MATCH THE WEEP HOLES USING A KNIFE OR SCISSORS, AND POSITION HARDWARE CLOTH OR ALUMINUM SCREENING OVER THE HOLE BETWEEN THE FABRIC AND CORE. AT ALL JOINTS IN THE DRAIN, OVERLAP THE CORE MATERIAL BY ROLLING BACK THE FILTER FABRIC AND NESTING THE CORE MATERIAL TOGETHER WITH A 3-INCH TO 4-INCH OVERLAP. IN VERTICAL INSTALLATIONS, THE LAP SHOULD BE MADE IN THE DIRECTION OF FLOW. LEAVE NO EDGES OF THE PLASTIC CORE EXPOSED. ALL EDGES SHALL BE COVERED BY FILTER FABRIC (712.09, TYPE B). CONSTRUCT CONCRETE FACING AS SOON AS POSSIBLE.

APPLICABLE NOTE FOR ALL CONSTRUCTION METHODS:

SHOULD A CUT OCCUR IN THE GEOTEXTILE, IT SHALL BE IMMEDIATELY TAPED TO ENSURE THAT SOIL CANNOT ENTER THE DRAIN. IF A LARGE AREA OF GEOTEXTILE IS DAMAGED. THEN A PATCH OF GEOTEXTILE SHALL BE PLACED OVER THE AREA ALLOWING THE OVERLAP OF 4 INCHES. THE PATCH SHALL BE TAPED AROUND THE EDGES.

D. METHOD OF MEASUREMENT

THE QUANTITY OF MATERIAL SHALL BE THE SQUARE FEET AMOUNT OF IN-PLANE DRAINAGE MATERIAL INSTALLED AND ACCEPTED.

E. BASIS OF PAYMENT

PAYMENT WILL BE MADE FOR ACCEPTED QUANTITIES OF IN-PLANE DRAIN, AT THE CONTRACT UNIT PRICE BID FOR:

ITEM	UNIT	DESCRIPTION
SPECIAL	SQUARE FOOT	PREFABRICATED GEOCOMPOSITE IN-PLANE DRAINS

SEPARATE PAYMENT WILL NOT BE MADE FOR ANY INCIDENTALS NECESSARY TO INSTALL THE IN-PLANE DRAINS, OR FOR PROVIDING WEEP HOLES IN PLACE AS SHOWN ON THE DRAWINGS, OR FOR MAKING PVC PIPE CONNECTIONS TO THE WEEP HOLES, BUT COST THEREOF SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM SPECIAL - PREFABRICATED GEOCOMPOSITE IN-PLANE DRAINS.

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GENERAL NOTES

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