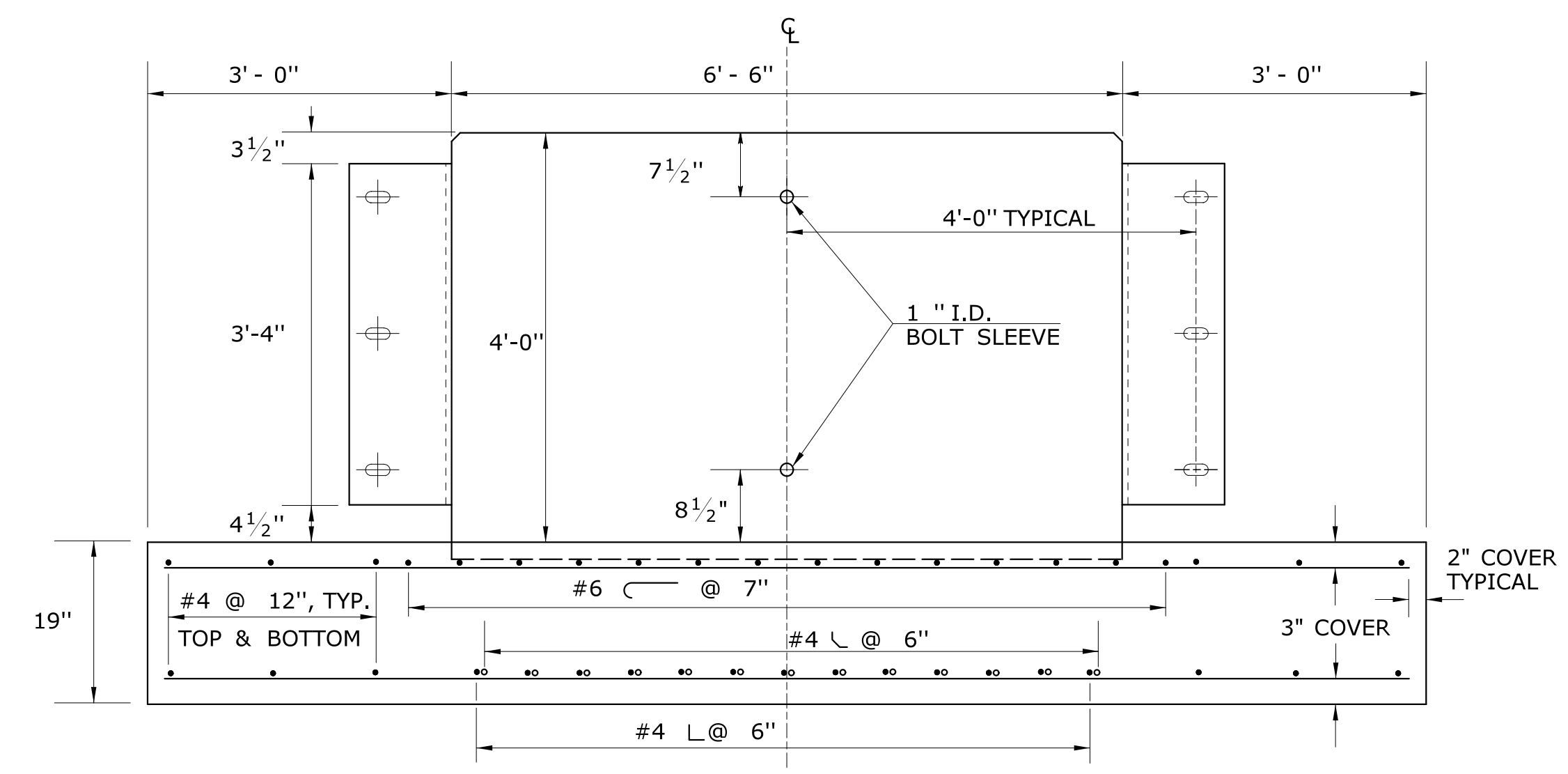


ANCHORAGE and ASSEMBLY DETAILS



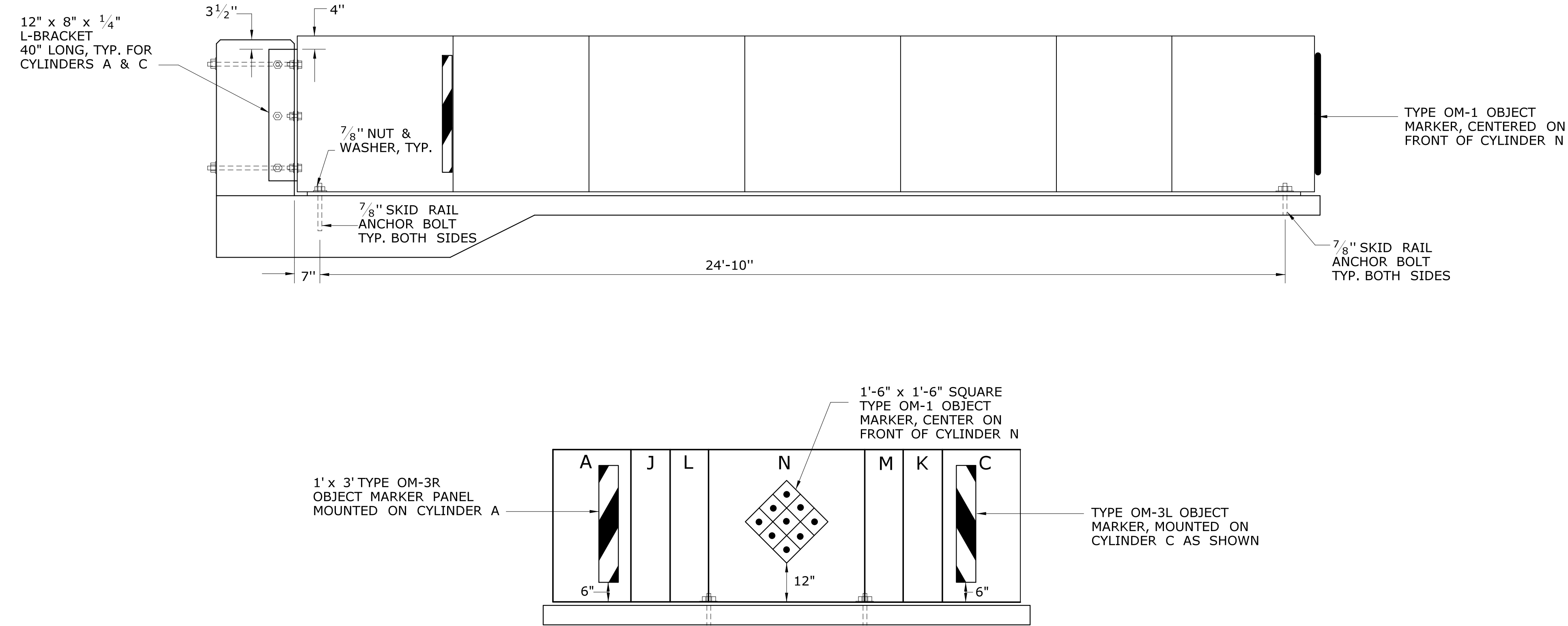
BACKUP WALL SECTION B - B

PAD AND BACKUP WALL NOTES

- CONSTRUCTION OF THE CIAS SHALL CONFORM TO THE REQUIREMENTS OF THE CONNECTICUT DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION (MOST RECENT EDITION) AND THE SPECIAL PROVISIONS.
- THE CIAS PAD AND BACKUP WALL SHALL BE CONSTRUCTED WITH CONCRETE HAVING A MINIMUM COMPRESSION STRENGTH (f'c) OF 4000 PSI.
- ALL REINFORCING STEEL SHALL BE NEW DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60 UNLESS OTHERWISE NOTED. WELDED WIRE FABRIC SHALL BE SIZE DESIGNATION 6 x 6 -W4xW4 AND GRADE 60. THE BOLT SLEEVES SHALL BE 1"-DIAMETER. SCHEDULE 40 STEEL PIPE CONFORMING TO THE REQUIREMENTS OF ASTM A53, GRADE B. THEY SHALL BE TIED TO THE REINFORCING CAGE IN THE EXACT LOCATIONS SHOWN ABOVE PRIOR TO THE PLACEMENT OF THE BACKUP WALL CONCRETE. WHEN SECURING CIAS TO AN EXISTING BACKUP WALL, USE TWO (2) 7/8" CHEMICAL ANCHOR BOLTS IN PLACE OF BOLT SLEEVES AND THREADED RODS FOR CYLINDER B.
- TOP OF PAD ELEVATIONS SHALL BE WITH THE RANGE 0" TO 1/4" ABOVE THE TOP ELEVATIONS OF THE SURROUNDING PAVEMENT. THE PAD SHALL NOT BE CONSTRUCTED SUCH THAT THE WATER WILL COLLECT AND BE RETAINED ON ITS SURFACE AT ANY TIME.
- THE PAD AND BACKUP WALL DETAILS SHOWN ARE FOR CONSTRUCTION ON A SUBBASE. BACKUP WALLS AND PADS CONSTRUCTED ON EXISTING CONCRETE OR BRIDGE DECKS SHALL BE DESIGNED TO MEET SITE REQUIREMENTS.
- ANCHOR BOLTS AND NUTS SHALL CONFORM TO ASTM A325. WASHERS FOR THE ANCHOR STUDS SHALL CONFORM TO ASTM F436. ANCHOR STUDS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A153. EACH ANCHOR BOLT SHALL BE CHEMICALLY IMBEDDED IN A PREPARED HOLE IN STRICT CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE CHEMICAL ANCHORS AND METHODS OF HOLE PREPARATION SHALL BE APPROVED BY THE ENGINEER BEFORE WORK BEGINS. EACH ANCHOR BOLT SHALL HAVE 2" OF THREADS EXPOSED ABOVE THE CONCRETE SURFACE.

ASSEMBLY NOTES

- SKID RAILS AND L-BRACKETS SHALL BE PLACED IN POSITION OVER THE CORRESPONDING ANCHOR BOLTS, AND SECURED IN PLACE WITH WASHERS AND NUTS. ALL ANCHOR BOLT NUTS SHALL BE TIGHTENED TO A MINIMUM FINAL TORQUE OF 75 FT-LB.
- CYLINDER B SHALL BE CONNECTED TO THE BACKUP WALL WITH TWO (2) 7/8" x 2'-6" THREADED RODS AND NUTS CONFORMING TO ASTM A325, AND WASHERS CONFORMING TO ASTM F436. 4" x 4" x 1/2" ASTM A36 STEEL SPACERS WITH 1" - DIAMETER HOLES ON CENTER SHALL BE PLACED BETWEEN THE BACKUP WALL AND CYLINDER B AS SHOWN ABOVE. ALL THREADED RODS, NUTS, WASHERS, AND SPACERS SHALL BE GALVANIZED AFTER FABRICATION IN CONFORMANCE WITH ASTM A153.
- ALL CYLINDERS (A THRU N) SHALL BE PLACED ON THE SKID RAILS IN THE CONFIGURATION SHOWN ABOVE. IT IS EXTREMELY IMPORTANT THAT THE INDIVIDUAL CYLINDERS BE PLACED IN THEIR PROPER POSITION IN THE ARRAY. ALL CYLINDERS SHALL BE CONNECTED TO EACH OTHER AT ALL POINTS OF TANGENCY WITH TWO (2) 7/8" x 2" DIAMETER HEAVY HEX HEAD HIGH STRENGTH BOLTS CONFORMING TO ASTM A325 TYPE I. EACH BOLT SHALL BE PROVIDED WITH TWO (2) WASHERS CONFORMING TO ASTM F 436 AND ONE (1) HEAVY HEX NUT CONFORMING TO ASTM B695, CLASS 50 TYPE I. CYLINDERS A AND C SHALL BE SECURED TO THE CORRESPONDING L - BRACKET USING THREE (3) OF THE ABOVE MENTIONED BOLTS, NUTS, AND WASHERS. ALL BOLTS SHALL BE TIGHTENED TO A MINIMUM FINAL TORQUE OF 75 FT-LB.
- CYLINDER CONNECTION HARDWARE (BOLTS, NUTS, AND WASHERS) SHALL BE SUPPLIED BY THE CIAS MANUFACTURER. ANCHORING HARDWARE (THREADED RODS, SPACERS, CHEMICAL ANCHOR BOLTS, AND RELATED NUTS AND WASHERS) SHALL BE SUPPLIED BY THE CIAS INSTALLATION CONTRACTOR AS PART OF THE PAD AND BACKUP WALL CONSTRUCTION.



1' x 3' TYPE OM-3R OBJECT MARKER PANEL MOUNTED ON CYLINDER A

1'-6" x 1'-6" SQUARE TYPE OM-1 OBJECT MARKER, CENTER ON FRONT OF CYLINDER N

TYPE OM-3L OBJECT MARKER, MOUNTED ON CYLINDER C AS SHOWN

REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 7/17/2013	DESIGNER/DRAFTER:	CHECKED BY:	NTS	<p>STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION</p> <p>Filename: ...vclas3asm-2008.dgn</p>	<p>SIGNATURE/BLOCK:</p> <p>OFFICE OF ENGINEERING</p> <p>APPROVED BY: DATE:</p>	PROJECT TITLE:	TOWN:	PROJECT NO.:	<p>DRAWING NO.:</p> <p>1804.A3</p> <p>SHEET NO.:</p> <p>\$\$\$</p>
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Revised 5/14/08