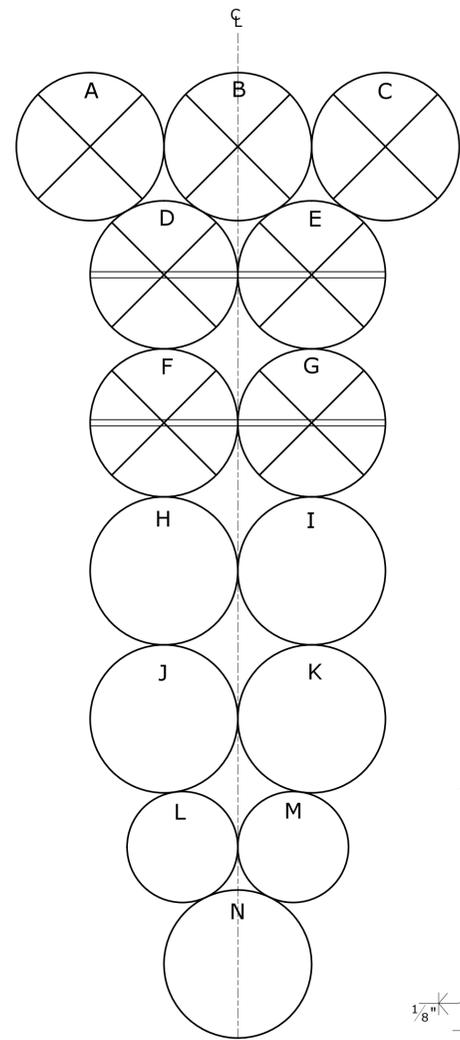
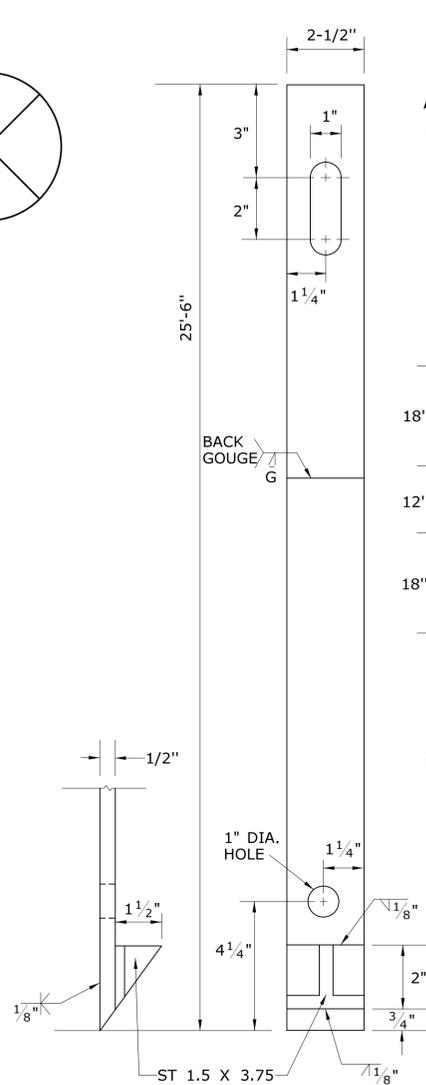


GENERAL SPECIFICATIONS:

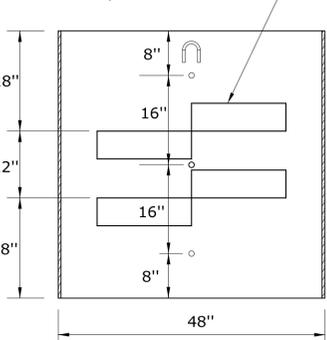
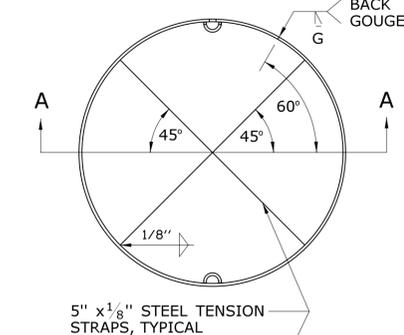
- ALL STEEL USED IN THE FABRICATION OF THE CIAS SHALL BE PRODUCED IN THE UNITED STATES.
- STEEL SPECIFICATIONS:
 - ALL STEEL PLATES, BARS, AND STRUCTURAL SHAPES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36.
 - ALL STEEL SHEETS AND STRIPS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A569.
 - ALL STEEL PIPE SHALL CONFORM TO THE REQUIREMENTS OF ASTM A53, GRADE B.
- ALL WELDING SHALL BE PERFORMED BY CONNDOT CERTIFIED WELDERS, AND SHALL CONFORM TO THE REQUIREMENTS OF THE MOST RECENT EDITION OF THE STATE OF CONNECTICUT, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATION. WELDING ELECTRODES SHALL BE APPROVED BY THE ENGINEER BEFORE THE WORK BEGINS.
- ALL EDGES SHALL BE MACHINED IN A WORKMANLIKE MANNER AND SHALL BE FREE OF BURRS AND SHARP EDGES. ALL HOLES SHALL BE DRILLED OR MACHINE CUT.
- ALL COMPLETE CIAS UNITS SHALL BE ASSEMBLED IN THEIR ENTIRETY, INSPECTED AND APPROVED BY CONNDOT PRIOR TO SHIPPING.
- EACH STEEL CYLINDER SHALL:
 - HAVE THE FOLLOWING WALL THICKNESS. NO SUBSTITUTIONS IN WALL THICKNESS SIZES WILL BE ACCEPTED; A,B,C, = 1/4" D,E, = 5/16" F,G,H,I,J,K,N = 3/16" L,M = 8 GAGE
 - HAVE A SINGLE ELECTRICALLY WELDED SEAM, CUT SQUARE;
 - BE ± 1/2" OF THE SPECIFIED DIAMETER, MEASURED ACROSS ANY DIAMETER OF THE CYLINDER;
 - HAVE 1" - DIAMETER HOLES DRILLED 8" FROM THE TOP AND 8" FROM THE BOTTOM AT ALL LOCATIONS WHERE THE CYLINDERS TOUCH EACH OTHER IN THE ARRANGEMENT SHOWN. CYLINDERS A,B,C SHALL HAVE 1"-DIAMETER HOLES DRILLED AT THE REAR OF THE SYSTEM AS SHOWN IN SECTION A-A;
 - HAVE TWO RINGS WELDED TO THE INNER FACE FOR LIFTING PURPOSES AS SHOWN. THE LIFTING RINGS SHALL BE MADE FROM 1/2" ROUND BAR STOCK; AND,
 - BE PERMANENTLY LABELED ON THE INSIDE WALL WITH ITS INDIVIDUAL LETTER DESIGNATION SHOWN.
- STIFFENERS:
 - CYLINDERS D,E,F,G SHALL EACH HAVE TWO COMPRESSION PIPE STIFFENERS INSTALLED AS SHOWN. THE PIPES SHALL BE FABRICATED FROM 1-1/2" ID, SCHEDULE 40 STEEL PIPE. EACH OF THESE INTERNAL STIFFENING PIPES SHALL BE WELDED TO THE CYLINDER WALL ON 'ONE END ONLY.' THE FREE END SHALL REST ON A PIPE RETAINER AS SHOWN. THE RETAINERS SHALL BE 3" IN LENGTH, AND FABRICATED FROM 1" ID, SCHEDULE 40 STEEL PIPE. THE RETAINERS SHALL BE WELDED TO THE TO THE CYLINDER WALL AS SHOWN, BUT NOT WELDED TO THE 1-1/2" ID STIFFENING PIPE.
 - CYLINDERS A,B,C,D,E,F,G SHALL EACH HAVE FOUR TENSION STRAPS INSTALLED AS SHOWN. TENSION STRAPS SHALL BE 5" x 1/8", AND SHALL BE CUT TO THE PROPER LENGTH AND WELDED TO THE CYLINDER WALL AT THE ORIENTATION AND HEIGHT SHOWN.
 - WHEN THE CIAS IS ASSEMBLED , THE STIFFENERS (COMPRESSION PIPES AND TENSION STRAPS) SHALL BE ORIENTED TO THE SYSTEMS' CENTERLINE AS SHOWN ON THE CYLINDER ARRANGEMENT DETAIL. ALL CYLINDER SECTIONS (A-A) THRU D-D) ARE TAKEN PERPENDICULAR TO THE SYSTEMS' CENTERLINE.
- CONNECTIONS:
 - EACH COMPLETE CIAS UNIT SHALL BE SUPPLIED WITH FIFTY (50) 2" - LONG x 7/8" - DIAMETER HEAVY HEX HIGH STRENGTH BOLTS CONFORMING TO ASTM A325 TYPE I. EACH BOLT SHALL BE PROVIDED WITH TWO (2) WASHERS CONFORMING TO ASTM F436 AND ONE (1) HEAVE HEX NUT CONFORMING TO ASTM A563 GRADE DH. ALL BOLTS, NUTS, AND WASHERS SHALL BE MECHANICALLY DEPOSITED IN ACCORDANCE WITH ASTM B695, CLASS 50 TYPE I.
- SKID RAILS AND L-BRACKETS :
 - EACH COMPLETE CIAS UNIT SHALL BE PROVIDED WITH TWO (2) SKID RAILS FABRICATED FROM 2-1/2" x 1/2" BAR STOCK, 25'-6" LONG. THE REAR END OF EACH RAIL SHALL HAVE A SLOT AS SHOWN, AND THE FRONT END OF EACH RAIL SHALL BE BEVELED, HAVE A WEDGE SHAPED ST 1.5 x 3.75 SECTION WELDED TO IT, AND HAVE A 1" DIAMETER HOLE AS SHOWN.
 - EACH COMPLETE CIAS UNIT SHALL BE PROVIDED WITH TWO (2) 12" x 8" x 1/4" L-BRACKETS, 40" LONG WITH SIX (6) 1" x 2" BOLT SLOTS AS SHOWN.
- PROTECTIVE COATING :
 - GALVANIZING - ALL FABRICATED STEEL PARTS (SKID RAILS, L-BRACKETS, CYLINDERS) SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A123. PRIOR TO GALVANIZING, COMPRESSION PIPES IN CYLINDERS D,E,F AND G SHALL BE ADEQUATELY VENTED AS SHOWN.
 - COATING REPAIR - DAMAGED OR OTHERWISE UNCOATED LOCATIONS LESS THAN 10 SQUARE FEET IN AREA SHALL BE REPAIRED IN CONFORMANCE WITH THE REQUIREMENTS OF ASTM A780. UNCOATED AREAS LARGER THAN 10 SQUARE FEET SHALL BE REGALVANIZED IN CONFORMANCE WITH THE REQUIREMENTS OF ASTM A123.



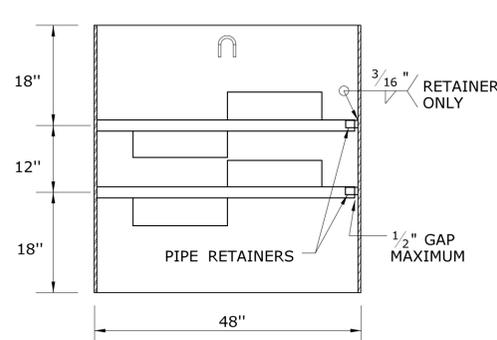
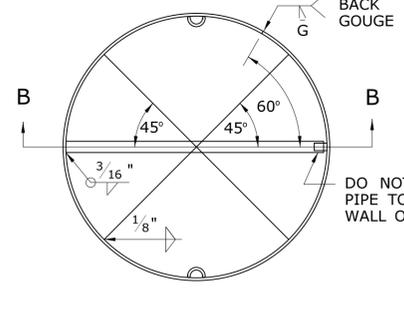
CYLINDER ARRANGEMENT



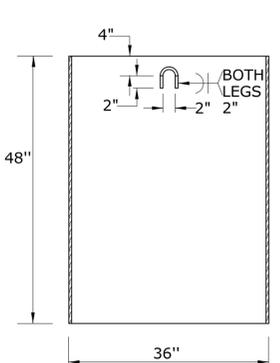
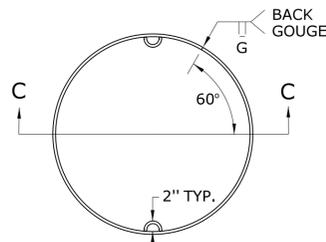
SKID RAIL
2 REQUIRED



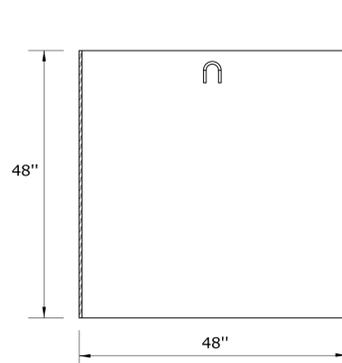
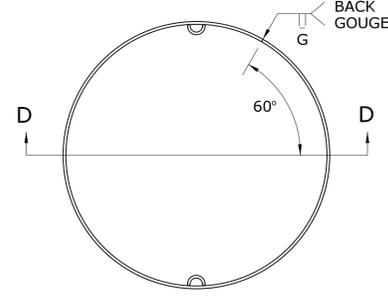
SECTION A - A
CYLINDERS A, B, C



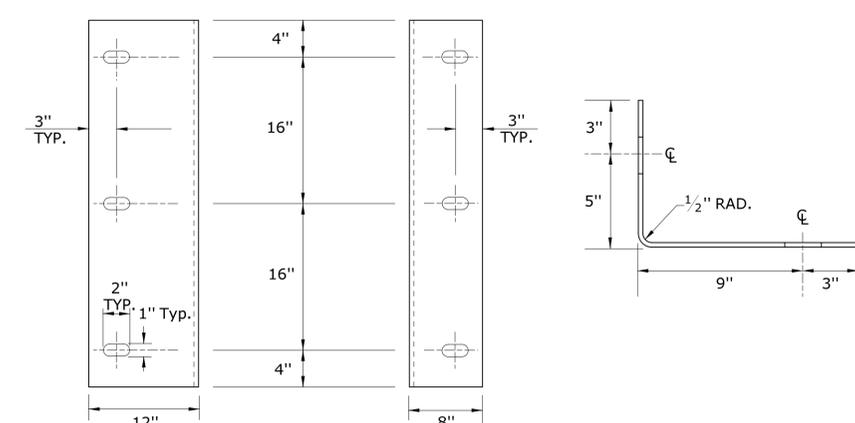
SECTION B - B
CYLINDERS D, E, F, G



SECTION C - C
CYLINDERS L, M



SECTION D - D
CYLINDERS H, I, J, K, N



L - BRACKET
(1/4" THICK)
2 REQUIRED

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.			DESIGNER/DRAFTER: - CHECKED BY: - NTS	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION FILENAME: ...vclass1fab.2008.dgn	SIGNATURE/BLOCK: - APPROVED BY: - DATE: - OFFICE OF ENGINEERING	PROJECT TITLE: -	TOWN: -	PROJECT NO. - DRAWING NO. 1804.A1 SHEET NO. \$\$\$
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 7/17/2013				

Revised 5/13/08