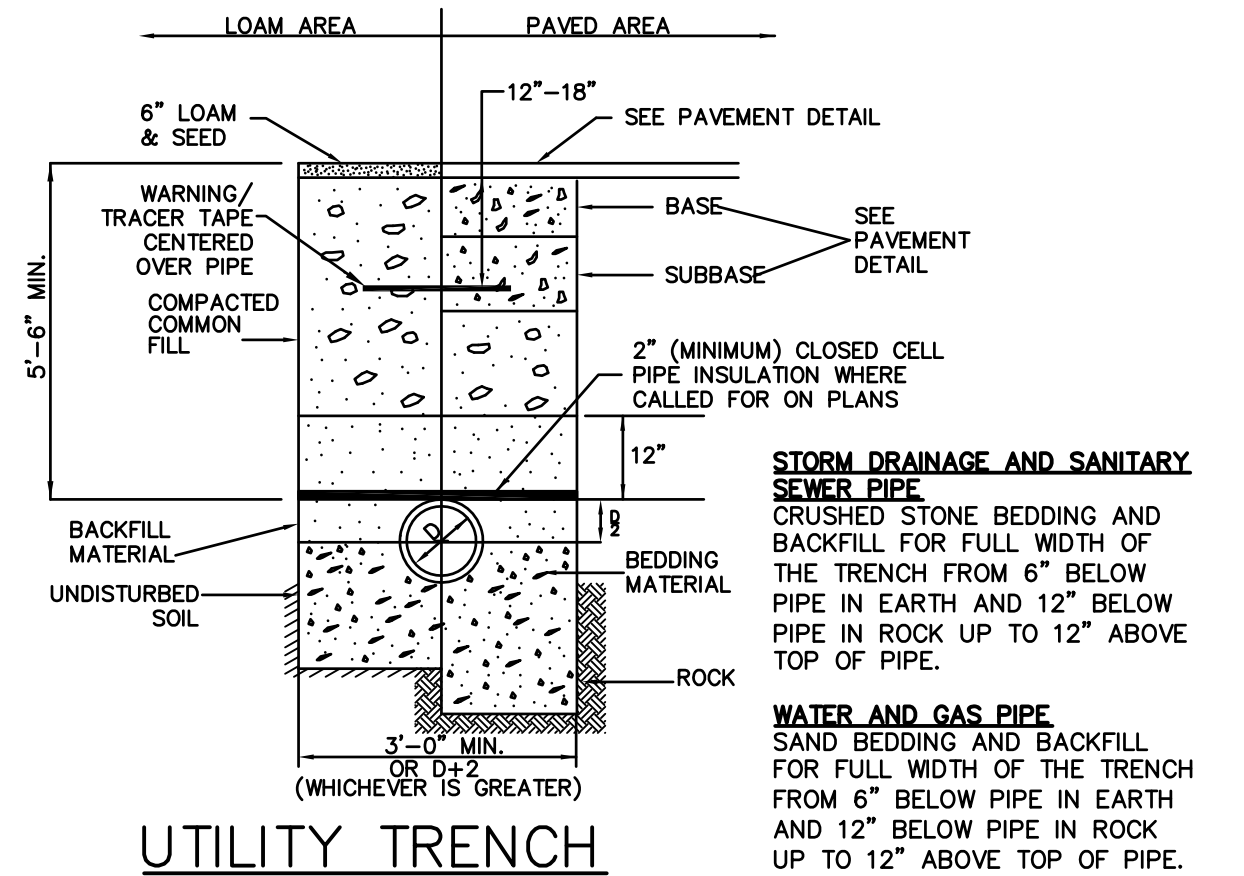
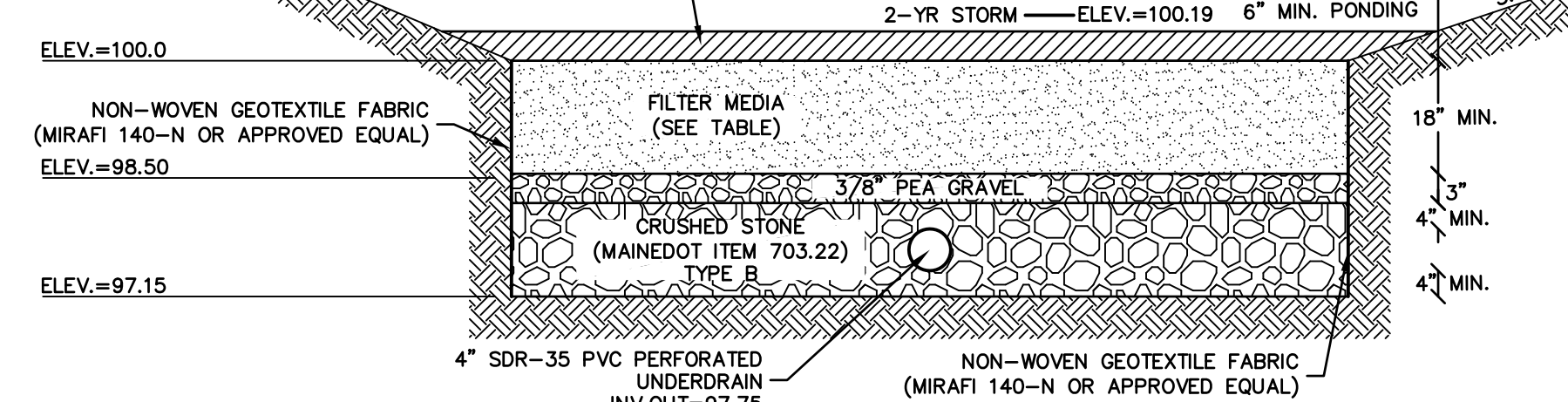


- NOTES:**
- NUMBER, MATERIAL & SIZE OF UTILITY CONDUITS TO BE DETERMINED BY LOCAL UTILITY OR AS SHOWN ON ELECTRICAL DRAWINGS. CONTRACTOR TO PROVIDE ONE SPARE CONDUIT FOR EACH UTILITY TO BUILDING.
  - DIMENSIONS SHOWN REPRESENT OWNERS MINIMUM REQUIREMENTS. ACTUAL DIMENSIONS MAY BE GREATER SHOWN BY UTILITY COMPANY STANDARDS, BUT SHALL NOT BE LESS THAN THOSE SHOWN.
  - NO CONDUIT RUN SHALL EXCEED 360 DEGREES IN TOTAL BENDS.
  - A SUITABLE PULLING STRING, CAPABLE OF 200 POUNDS OF PULL, MUST BE INSTALLED IN THE CONDUIT BEFORE UTILITY COMPANY IS NOTIFIED TO INSTALL CABLE. THE STRING SHOULD BE BLOWN INTO THE CONDUIT AFTER THE RUN IS ASSEMBLED TO AVOID BONDING THE STRING TO THE CONDUIT.
  - UTILITY COMPANY MUST BE GIVEN THE OPPORTUNITY TO INSPECT THE CONDUIT PRIOR TO BACKFILL. THE CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS SHOULD THE UTILITY COMPANY BE UNABLE TO INSTALL ITS CABLE IN A SUITABLE MANNER.
  - ALL CONDUIT INSTALLATIONS MUST CONFORM TO THE CURRENT EDITION OF THE NATIONAL ELECTRIC SAFETY CODE, STATE AND LOCAL CODES AND ORDINANCES, AND WHERE APPLICABLE, THE NATIONAL ELECTRIC CODE.
  - ALL 90° SWEEPS WILL BE MADE USING RIGID GALVANIZED STEEL. SWEEPS WITH A 36 TO 48 INCH RADIUS.

**ELECTRICAL AND COMMUNICATION CONDUIT**  
NOT TO SCALE



**UTILITY TRENCH**  
NOT TO SCALE



**CROSS SECTION UNDERDRAINED SOIL FILTER**  
DETAIL  
NOT TO SCALE

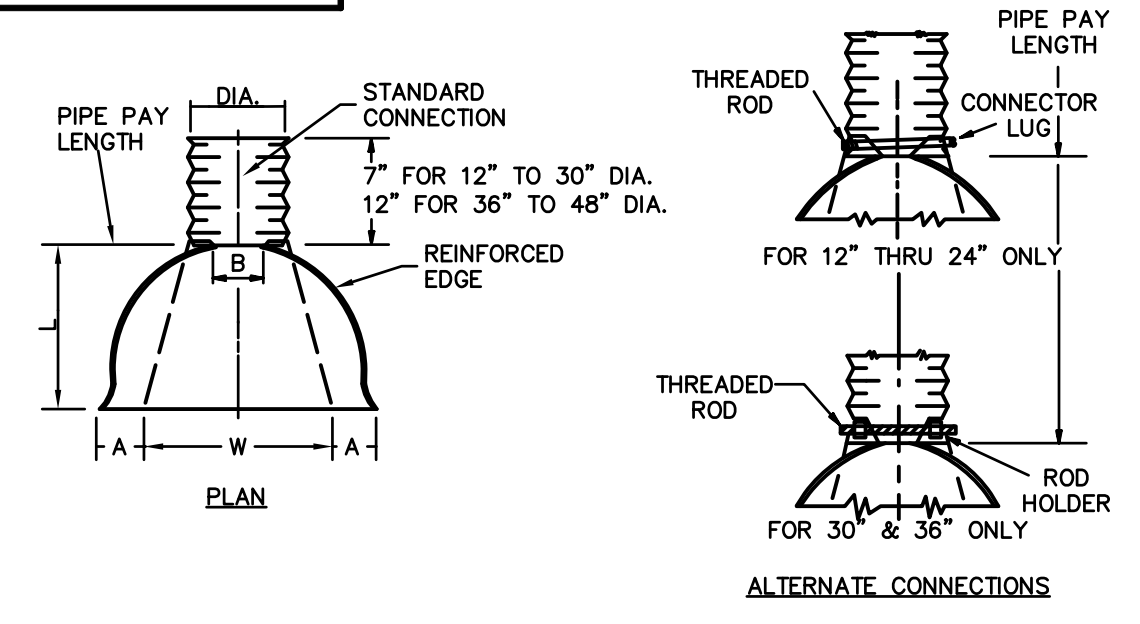
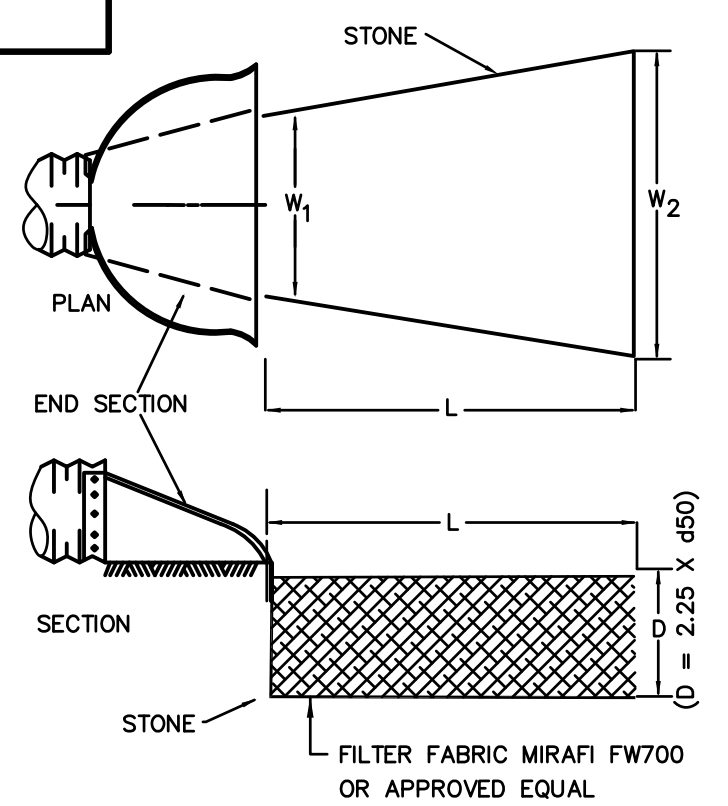
**FILTER MEDIA COMPOSITION:**

COMPONENT MATERIAL	PERCENT OF MIXTURE BY VOLUME	GRADATION OF MATERIAL	PERCENT PASSING
MAINEDOT ITEM 703.01 (SAND)	50-55	SEE NOTE #5	
LOAMY SAND TOPSOIL	20-30	200	8-25
MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH	20-25	200	5 MAX.

- NOTES:**
- BARK MULCH SHALL BE AGED A MINIMUM OF 12 MONTHS AND SHALL NOT FLOAT.
  - UNDERDRAINED SOIL FILTER SHALL NOT BE PLACED INTO SERVICE UNTIL THE PRACTICE HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
  - DO NOT TRAFFIC EXPOSED SOIL SURFACES WITH CONSTRUCTION EQUIPMENT. CONTRACTOR SHALL KEEP ALL EXCAVATION EQUIPMENT OUTSIDE OF THE LIMIT OF THE UNDERDRAINED SOIL FILTER.
  - SEE GRADING, DRAINAGE & EROSION CONTROL PLAN FOR LOCATIONS, LAYOUTS, AND ELEVATIONS.
  - THE SAND PORTION OF THE FILTER MEDIA SHALL MEET THE FOLLOWING GRADATION (MAINEDOT ITEM 703.01):
- | SIEVE SIZE | PERCENT PASSING |
|------------|-----------------|
| #4         | 100             |
| #8         | 95-100          |
| #16        | 80-100          |
| #30        | 50-85           |
| #60        | 25-80           |
| #100       | 10-30           |
| #200       | 2-10            |
| #400       | 0-5             |
6. THE ESTIMATED SEASONAL HIGH WATER TABLE (ESHWT) IS NOT ANTICIPATED TO BE WITHIN 1 FOOT OF THE BOTTOM OF THE RAIN GARDENS. CONTRACTOR TO CONTACT ENGINEER TO INSPECT SUBGRADE AND VERIFY ESHWT.

- NOTES:**
- STONE SIZE AND MAT DIMENSIONS DETAILED ON PLANS.
  - STONE SHALL CONSIST OF SUB-ANGULAR FIELD STONE OR ROUGH UNHEWN QUARRY STONE OF APPROXIMATELY RECTANGULAR SHAPE. FLAT OR ROUND ROCKS ARE NOT ACCEPTABLE. THE STONE SHALL BE HARD AND OF SUCH QUALITY THAT IT WILL NOT DISINTEGRATE ON EXPOSURE TO WATER OR WEATHERING, BE CHEMICALLY STABLE AND IT SHALL BE SUITABLE IN ALL OTHER RESPECTS FOR THE PURPOSE INTENDED. THE BULK SPECIFIC GRAVITY (SATURATED SURFACE-DRY BASIS) OF THE INDIVIDUAL STONES SHALL BE AT LEAST 2.5.
  - THE STONE SHALL BE COMPOSED OF A WELL-GRADED MIXTURE DOWN TO THE ONE-INCH SIZE PARTICLE SUCH THAT 50 PERCENT OF THE MIXTURE BY WEIGHT SHALL BE LARGER THAN THE D50 SIZE SPECIFIED. A WELL-GRADED MIXTURE IS DEFINED AS A MIXTURE COMPOSED PRIMARILY OF THE LARGER STONE SIZE BUT WITH A SUFFICIENT MIXTURE OF OTHER SIZES TO FILL THE PROGRESSIVELY SMALLER VOIDS BETWEEN THE STONES. THE DIAMETER OF THE LARGEST STONE SIZE IN SUCH A MIXTURE SHALL BE 1.5 TIMES THE D50 SIZE.

**STONE APRON DETAIL**  
NOT TO SCALE

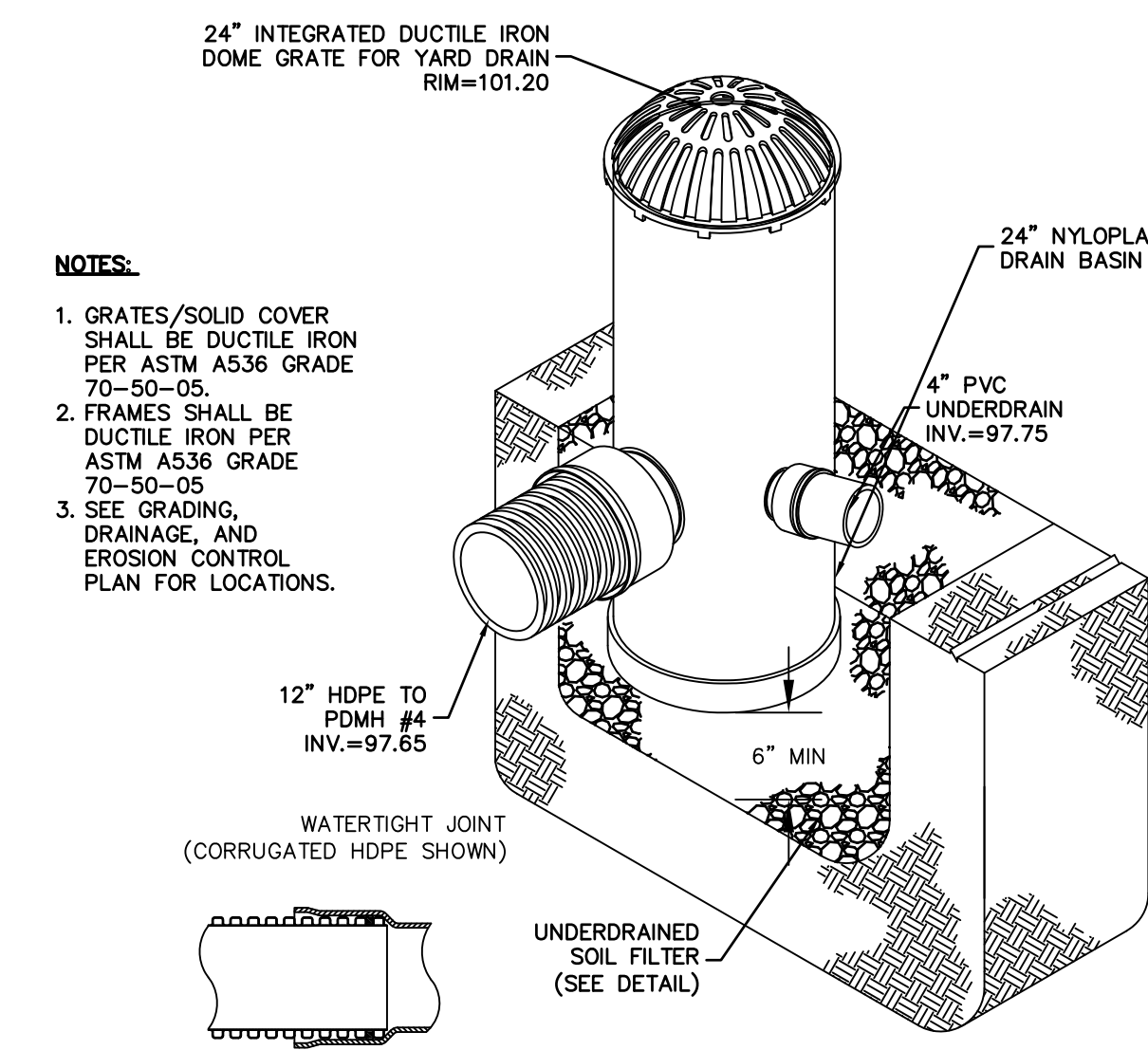


**METAL FLARED END SECTION**  
NOT TO SCALE

**PIPE DIMENSIONS**

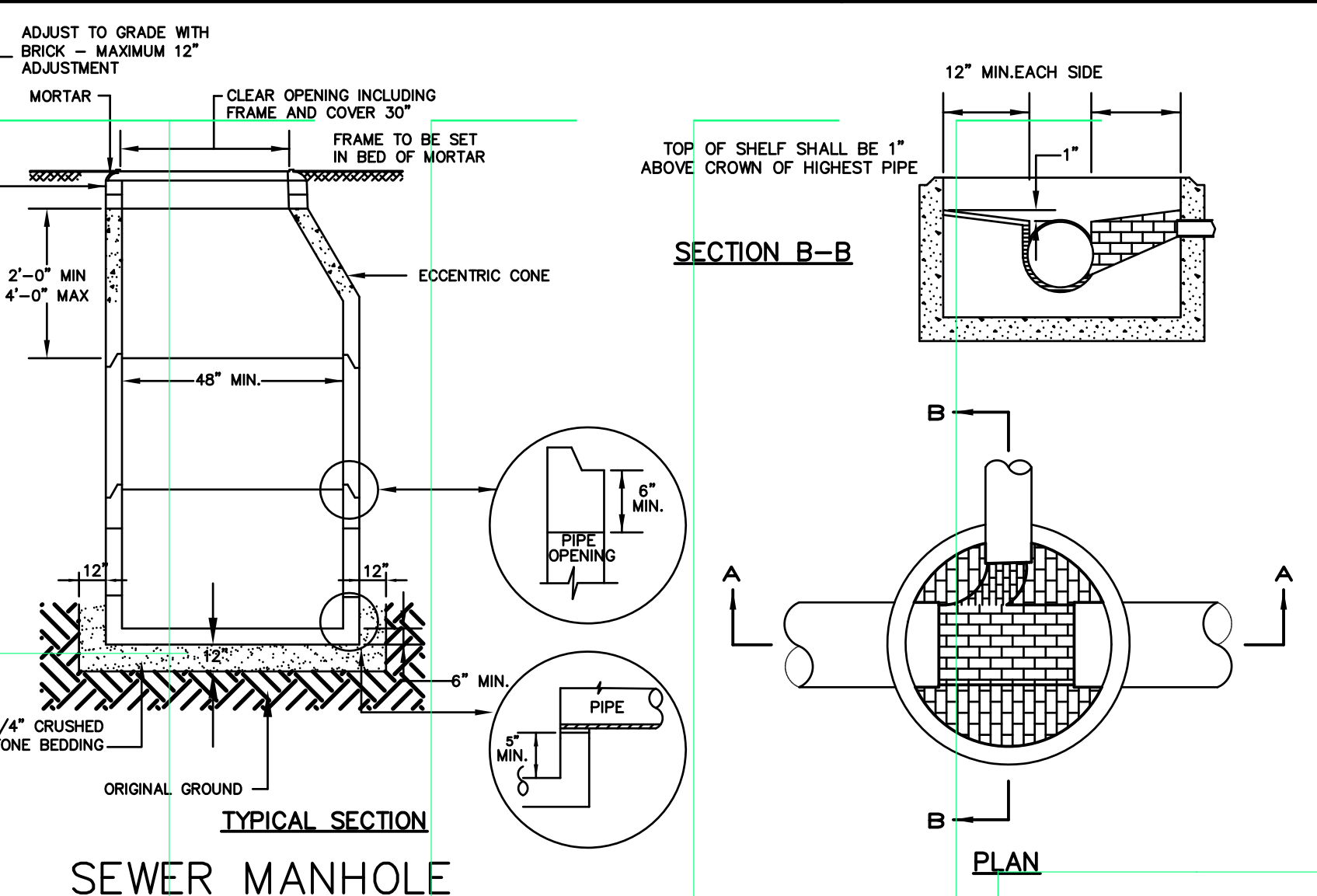
PIPE DIA.	METAL GAGE	A (1" TOL.)	B (1" TOL.)	H (1" TOL.)	W (2" TOL.)
12"	16	6"	6"	6"	21"
15"	16	7"	8"	6"	26"
18"	16	8"	13"	6"	31"
24"	16	10"	16"	6"	41"
30"	14	12"	16"	8"	51"
36"	14	14"	19"	9"	60"
42"	12	16"	22"	11"	69"
48"	12	18"	27"	12"	78"

- NOTES:**
- END SECTION FOR 12" TO 30" DIA. PIPE IN ONE PIECE, FOR 36" TO 48" DIA. PIPE TO BE MADE FROM TWO SHEETS JOINED BY RIVETING OR BOLTING ON CENTER LINE.
  - CONNECTOR SECTION, CORNER PLATE AND TOE PLATE TO BE SAME THICKNESS AS END SECTION AND EACH TO BE GALVANIZED.

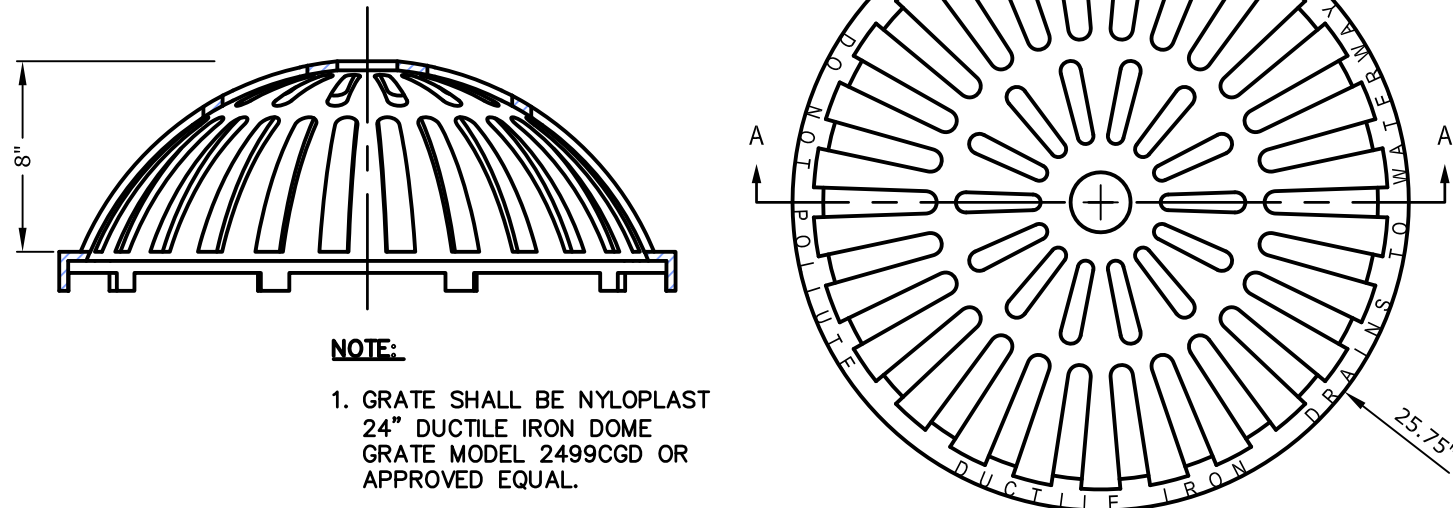


**YARD DRAIN OVERFLOW**  
NOT TO SCALE

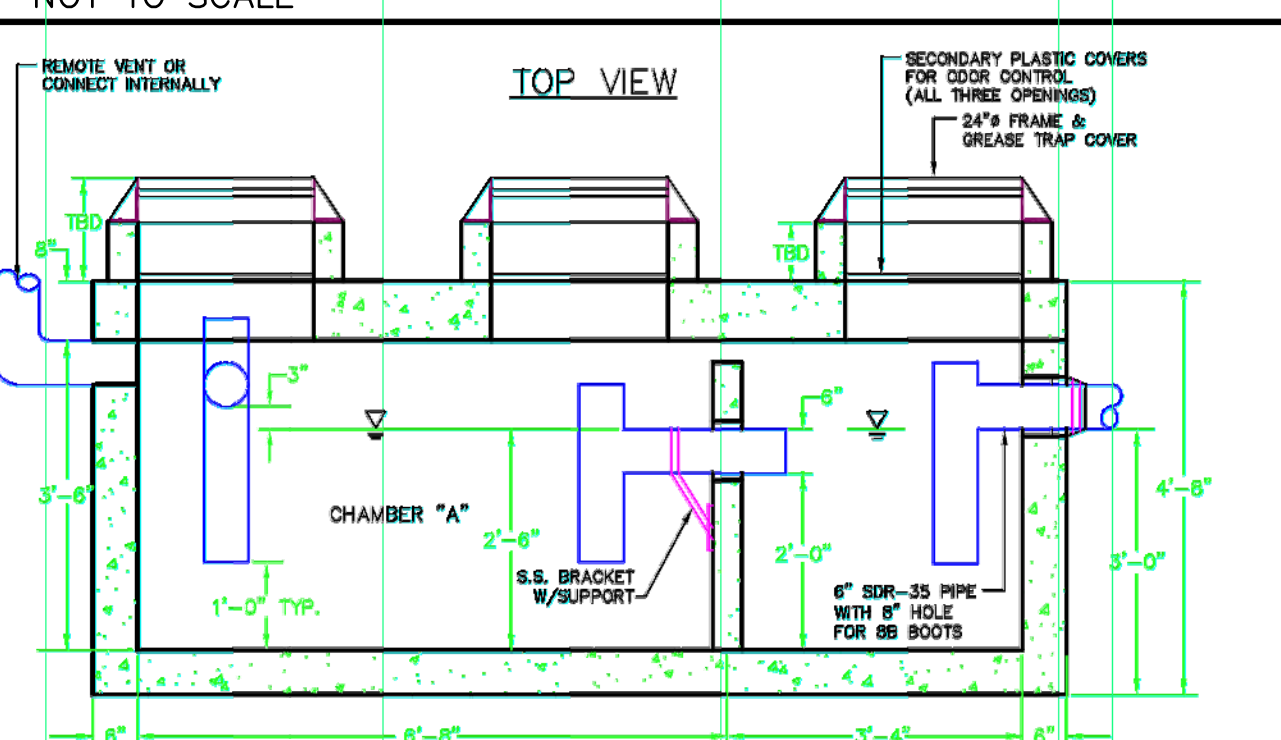
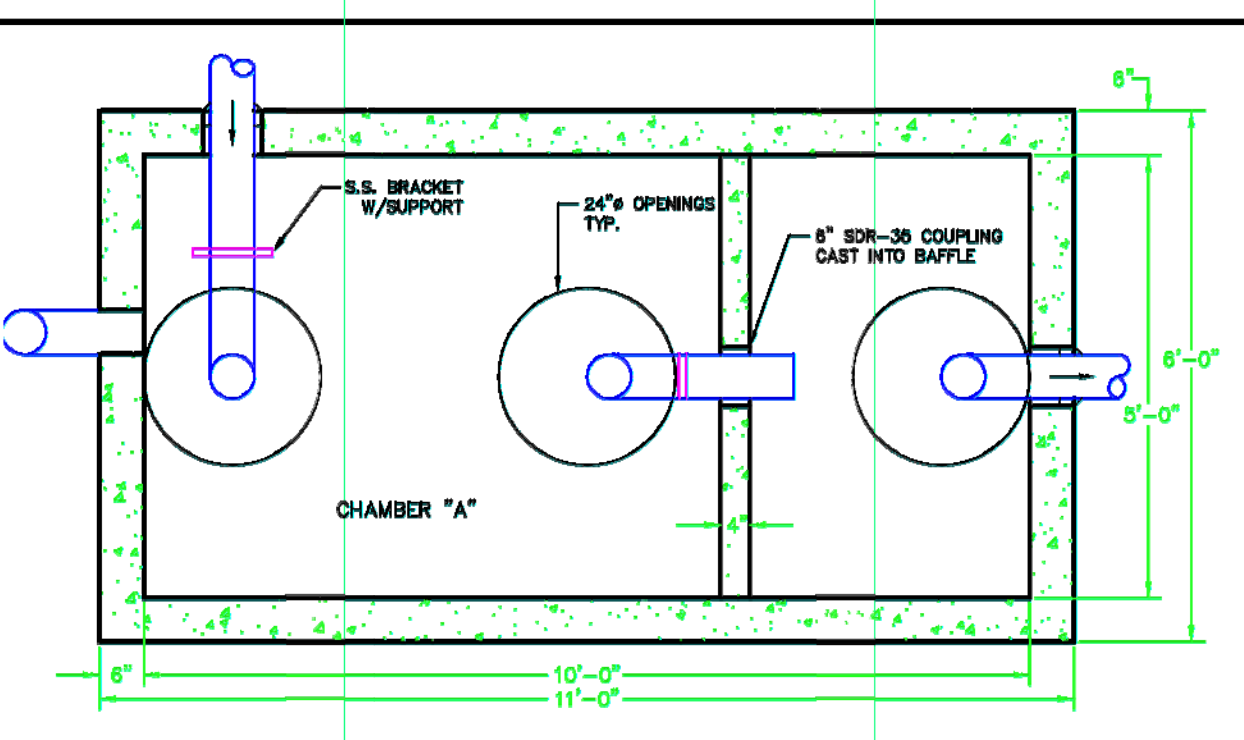
- NOTES:**
- INVERT AND SHELF TO BE PLACED AFTER EACH LEAKAGE TEST.
  - CARE SHALL BE TAKEN TO INSURE THAT THE BRICK INVERT IS A SMOOTH CONTINUATION OF THE SEWER INVERT.
  - INVERT BRICKS SHALL BE LAID ON EDGE.
  - BITUMINOUS WATERPROOF COATING TO BE APPLIED TO ENTIRE EXTERIOR OF MANHOLE.
  - FRAMES AND COVERS MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30-INCH CLEAR OPENING. A 3-INCH (MINIMUM HEIGHT) WORD "SEWER" SHALL BE PLAINLY CAST INTO THE CENTER OF EACH COVER.
  - HORIZONTAL JOINTS SHALL BE SEALED FOR WATER TIGHTNESS USING A DOUBLE ROW OF ELASTOMERIC OR MASTIC-LIKE SEALANT.
  - BARREL AND CONE SECTIONS SHALL BE PRECAST REINFORCED CONCRETE DESIGNED FOR H2O LOADING, AND CONFORMING TO ASTM C478-06.



**SEWER MANHOLE**  
NOT TO SCALE

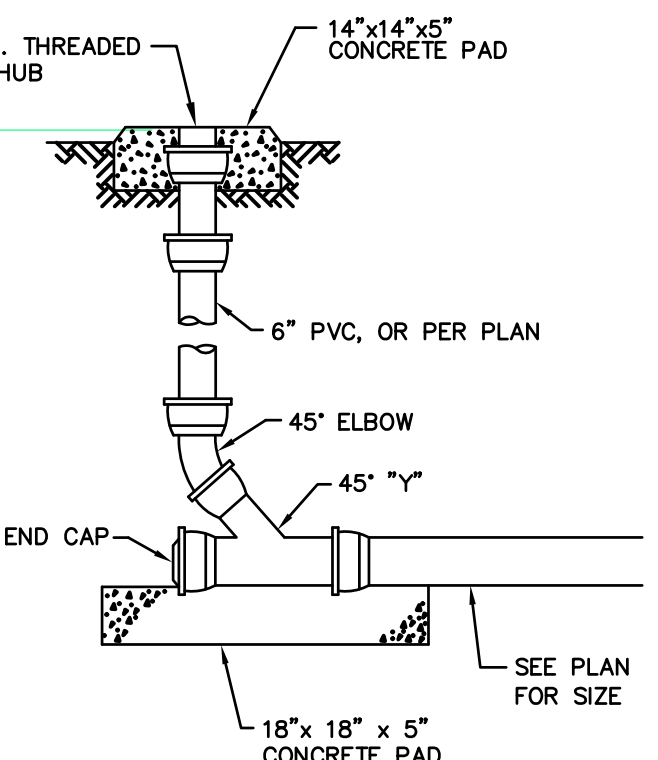


**YARD DRAIN OVERFLOW GRATE**  
NOT TO SCALE

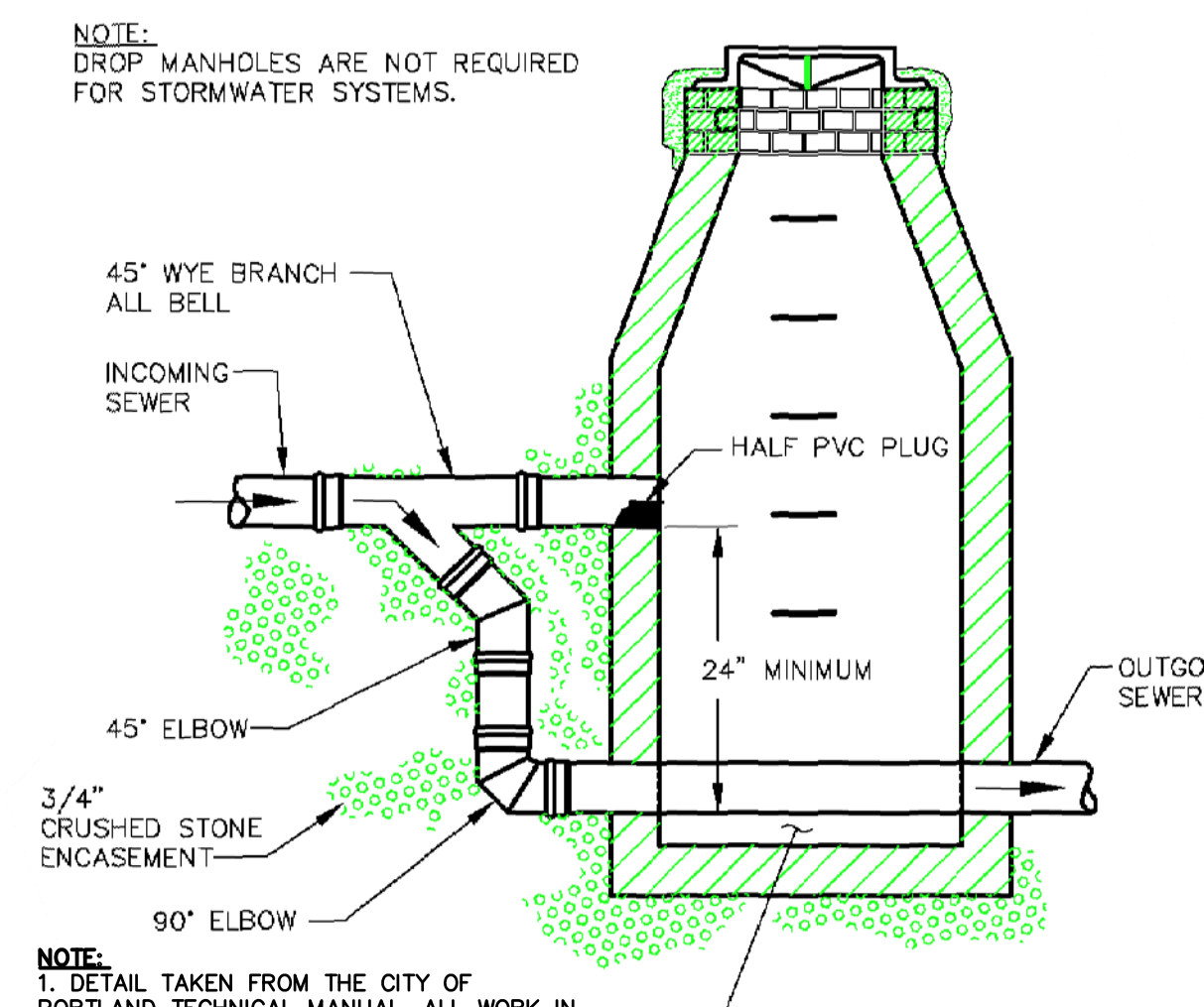


- DESIGN NOTES:**
- CONCRETE 5000 PSI AT 28 DAYS.
  - H-20 LOADING.
  - JOINTS SEALED WITH BUTYL RUBBER JOINT SEALANT (ASSHTO M-19)
  - ALL TEES/BAFFLES PROVIDED BY PRECAST.
- THIS STRUCTURE MUST DISCHARGE TO A CITY OF PORTLAND STANDARD MANHOLE WITH CHANNEL (CONTROL/SAMPLING MANHOLE).
- FORMULA FOR SIZING THE TRAP: CHAMBER "A" (2/3 OF TANK VOLUME) MUST BE EQUIVALENT TO THE AVERAGE DAILY PROCESS FLOW FROM THE FACILITY WITH NO SANITARY OR OTHER EXTRANEOUS WASTES FLOWING THROUGH IT.

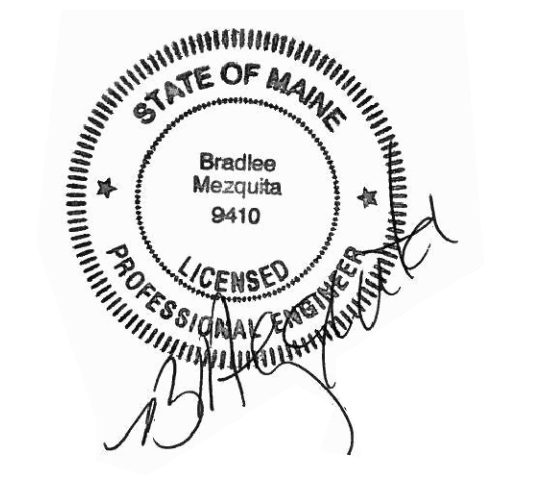
**CITY OF PORTLAND - TYPICAL 1,000 GALLON GREASE TRAP**  
NOT TO SCALE



**CLEAN-OUT**  
NOT TO SCALE



**CITY OF PORTLAND - OUTSIDE DROP SEWER MANHOLE**  
NOT TO SCALE



**Jewish Community Alliance of Southern Maine**

**Proposed Neighborhood Center**

Portland, Maine

July 11, 2016

Mark	Date	Description
PROJECT NO:	J-0096	
FILE:	J0096-DETAILS.dwg	
DRAWN BY:	GWH	
CHECKED:	BLM	
APPROVED BY:	BLM	

DETAILS SHEET

SCALE: AS SHOWN

C-7