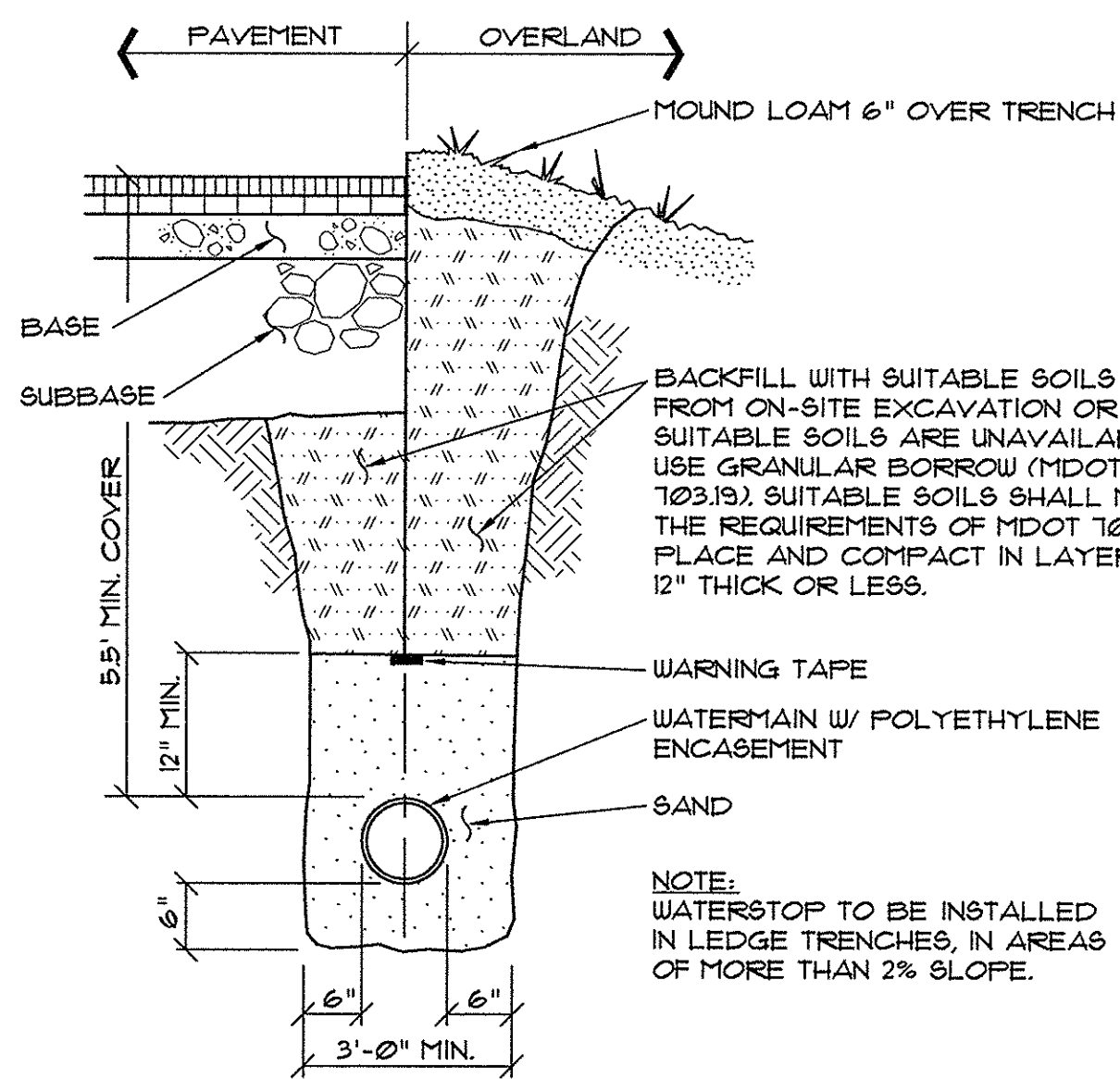
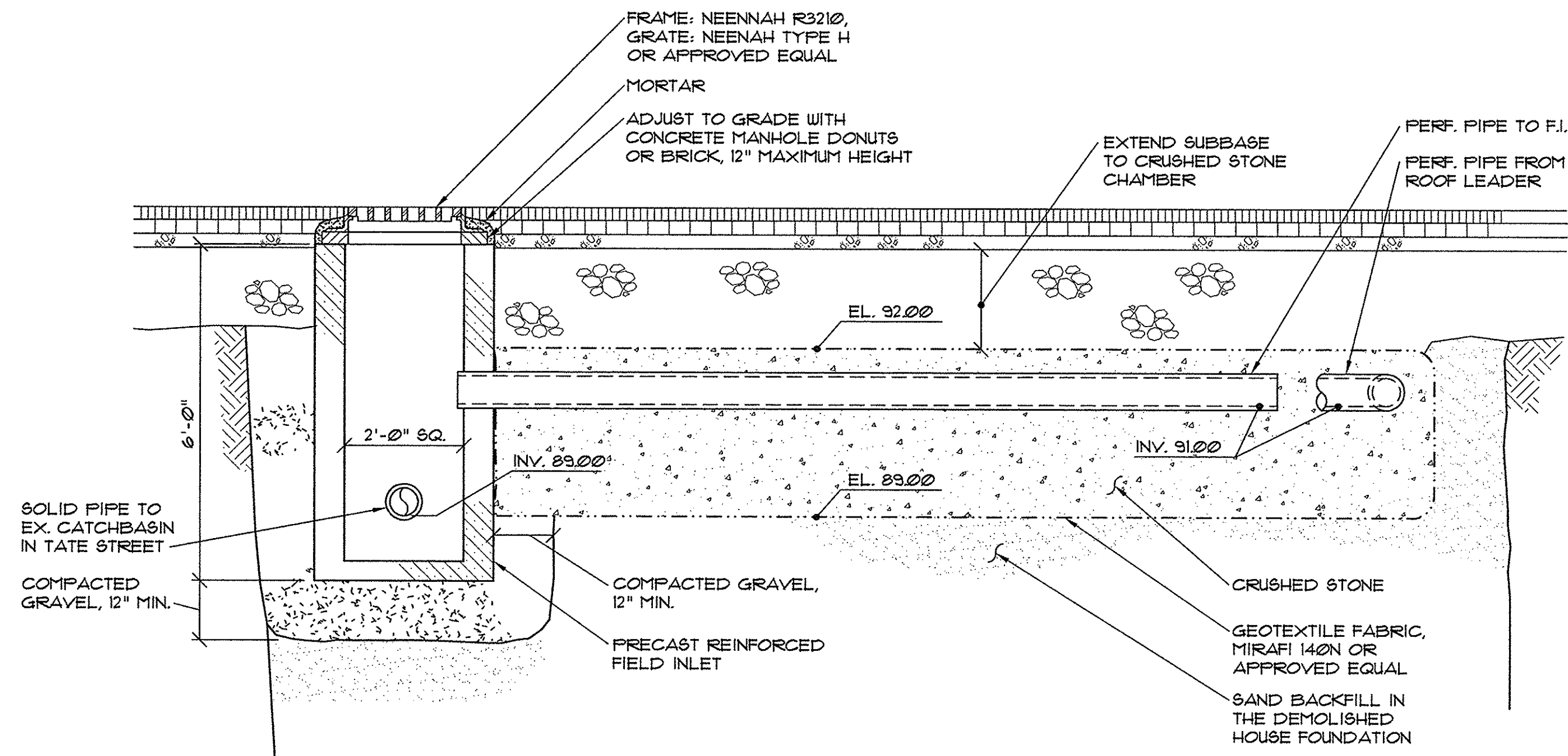


NOTES:
 1. INSTALLATION SHALL NOT ALLOW INTER-TWINING OF CABLES.
 2. DIRECT BURY CABLES EXCEPT UNDER PAVED AREAS.
 PROVIDE SCH. 40 PVC CONDUIT UNDER PAVED AREAS,
 EXTEND CONDUIT 5'-0" BEYOND EDGE OF PAVEMENT.

5 CABLE TRENCH SECTION
 NOT TO SCALE

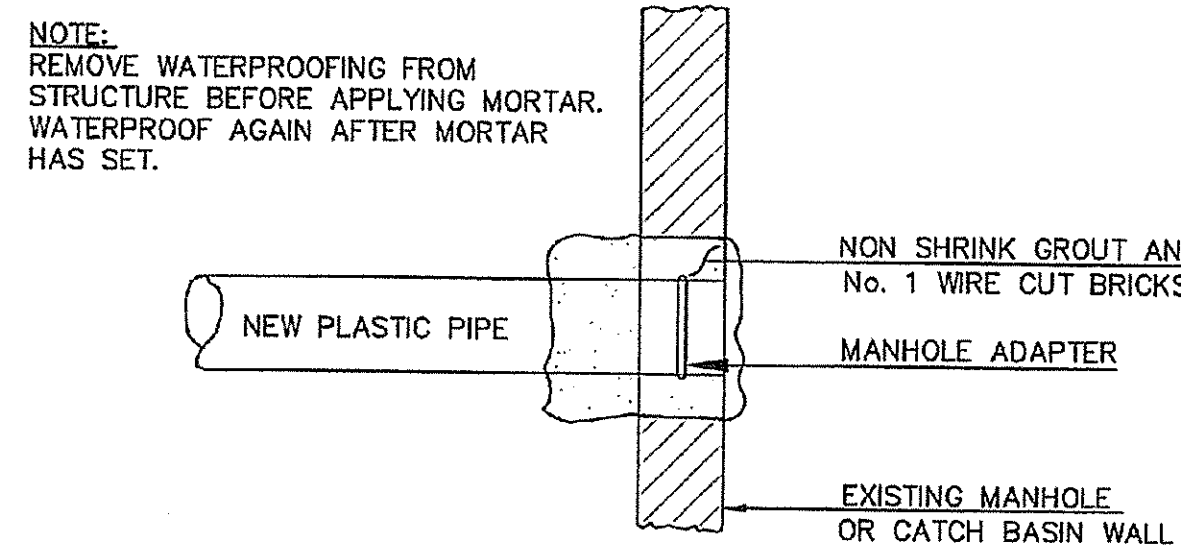


4 TYPICAL WATER MAIN SECTION ON-SITE
 NOT TO SCALE



6 FIELD INLET & CRUSHED STONE CHAMBER SECTION
 NOT TO SCALE

NOTE: EXISTING MANHOLE OR CATCH BASIN SHALL BE CORE DRILLED FOR PIPE INSTALLATION. IF PIPE DIAMETER IS SO LARGE THAT CORE DRILLING IS PROHIBITED, THE CONTRACTOR MAY SAW CUT THE STRUCTURE TO CREATE PIPE OPENING. THE NEW OPENING MUST THEN BE SEALED AND WATERTIGHT BOTH INSIDE AND OUTSIDE THE STRUCTURE.



METHOD 3 - NEW PIPE INTO EXISTING STRUCTURE

7 PIPE CONNECTION METHOD 3 (II-14)
 NOT TO SCALE

UNDERGROUND UTILITIES WARNING TAPE

IDENTIFICATION TAPE TO BE INSTALLED ABOVE ALL NEW UNDERGROUND UTILITIES AND ABOVE ANY EXISTING UTILITIES THAT MAY BE EXPOSED BY THIS CONSTRUCTION.

DETECTABLE UNDERGROUND MARKING TAPE TO BE PERMANENT, BRIGHT-COLORED, CONTINUOUS-PRINTED PLASTICIZED ALUMINUM TAPE, INTENDED FOR DIRECT-BURIAL SERVICE NOT LESS THAN 3\"/>

APUA UNIFORM COLOR CODE:

WHITE	PROPOSED EXCAVATION
PINK	TEMPORARY SURVEY MARKINGS
RED	ELECTRIC POWER LINES, CABLES, CONDUIT AND LIGHTING CABLES
YELLOW	GAS, OIL, STEAM, PETROLEUM OR GASEOUS MATERIALS
ORANGE	COMMUNICATION, ALARM OR SIGNAL LINES, CABLES OR CONDUIT
BLUE	POTABLE WATER
PURPLE	RECLAIMED WATER, IRRIGATION AND SLURRY LINES
GREEN	SEWERS AND DRAIN LINES

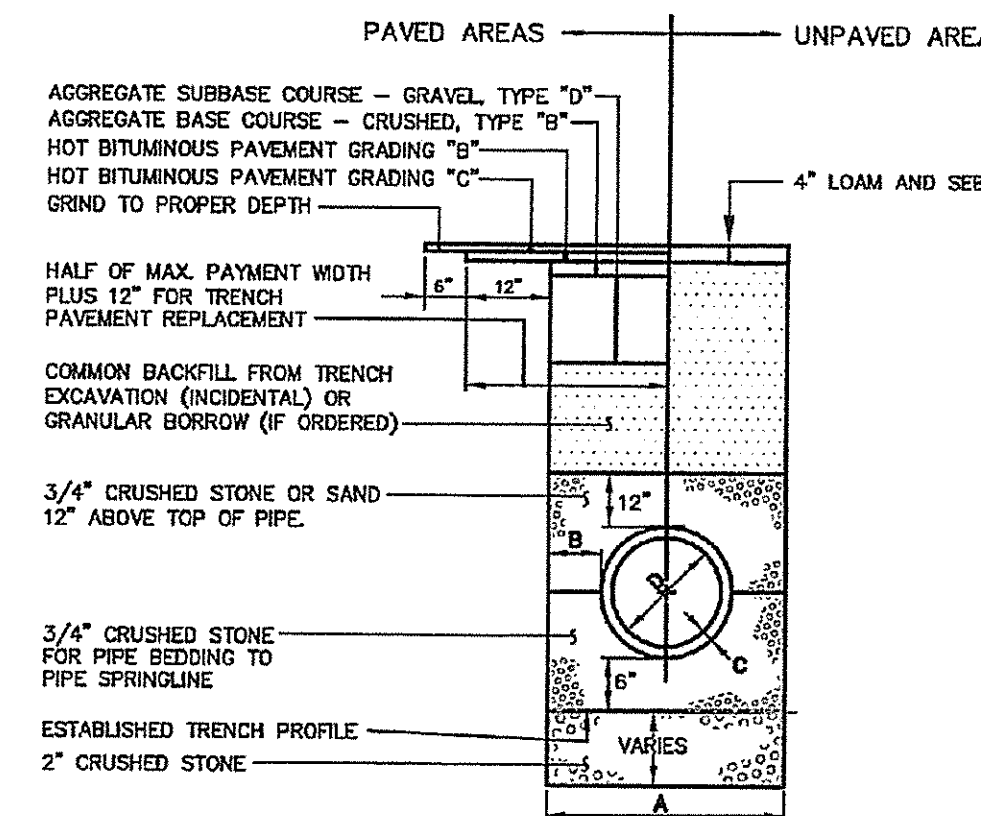
1 UNDERGROUND UTILITIES WARNING TAPE

GENERAL NOTES FOR MANHOLES AND CATCH BASINS

- ALL CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 4000 LBS. PER SQ. INCH AT THE END OF 28 DAYS, UNLESS OTHERWISE NOTED.
- MANHOLES MAY BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE, OR CAST IN PLACE.
- PRECAST REINFORCED CONE BARREL MANUFACTURED PER ASTM SPEC. C-478.
- ALL STORM AND SEWER MANHOLE COVERS SHALL BE SOLID AND SHALL HAVE ONE 7/8\"/>

2 GENERAL NOTES FOR MANHOLES AND CATCH BASINS (II-4)

NOTES:
 DEPTH OF BITUMINOUS PAVEMENT AND AGGREGATE COURSES SHALL BE DETERMINED BY STREET CLASSIFICATION.
 ANY ALTERNATE TRENCHING OR PAVEMENT METHODS SHALL BE APPROVED IN ADVANCE BY THE CITY OF PORTLAND, DEPARTMENT OF PUBLIC SERVICES.



NOTES:
 1. ALTERNATIVE CONSTRUCTION METHODS OR PAVEMENT METHODS SHALL BE APPROVED IN ADVANCE BY THE CITY.
 2. IN PAVED AREAS, DEPTHS OF GRAVEL AND HOT MIX ASPHALT PAVEMENT SHALL MATCH THE GREATER OF EXISTING CONDITIONS OR THE REQUIREMENTS FOR THE CORRESPONDING STREET CLASSIFICATION.
 DIMENSION B SHALL BE SUFFICIENT TO ALLOW CRUSHED STONE BEDDING TO BE PLACED AND COMPACTED UNDER THE MANHOLES OF THE PIPE, BUT IN ALL CASES DIMENSION B SHALL BE AT LEAST 8\"/>

PIPE DIAMETER, D (INCHES)	MAX. TRENCH WIDTH, A (FEET)
4	4.0
6	4.0
8	4.0
10	4.0
12	4.0
15	5.0
18	5.0
21	5.0
24	6.0
27	6.0
30	6.0
36	6.0
42	7.0
48	7.0

3 TYPICAL PIPE TRENCH INSTALLATION (11-12)

PINKHAM & GREER CIVIL ENGINEERS
 28 WANNAMUELL AVE. PORTLAND, ME 04103
 TEL: 207.761.5842 FAX: 207.761.4945

THOMAS
 S.E.
 REGISTERED PROFESSIONAL ENGINEER
 LICENSE NO. 42205
 10/19/15

NO.	REVISION	DATE	DESCRIPTION

DEVELOPER: WEST PORT LOFTS CONDOMINIUM
 TATE STREET PARTNERSHIP, LLC
 17 CHESTNUT STREET, PORTLAND

SCALE: AS SHOWN
 DATE: OCTOBER 9, 2015
 PROJECT: 15133

DRN BY: RJS/JDC
 DESG BY: TSG
 CHK BY: TSG

C2.2

DETAILS

MAPLOT 44E 15, 17, & 19