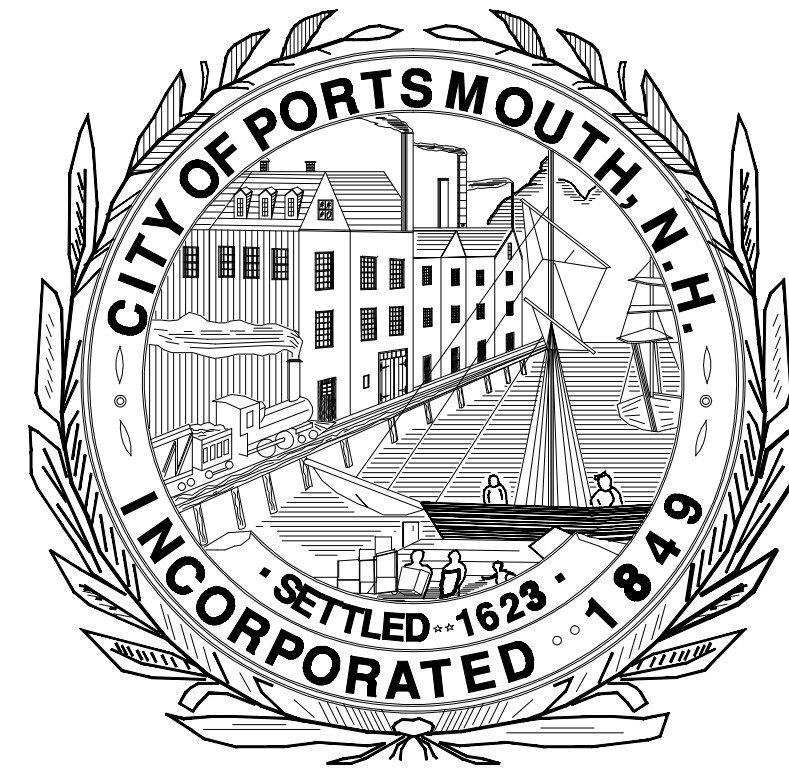


# COAKLEY ROAD & COTTAGE ST SIDEWALK CONNECTION

**PROJECT #7153**  
**BID #07-13**



DEPARTMENT OF  
PUBLIC WORKS

CITY OF PORTSMOUTH, NH  
FALL 2012

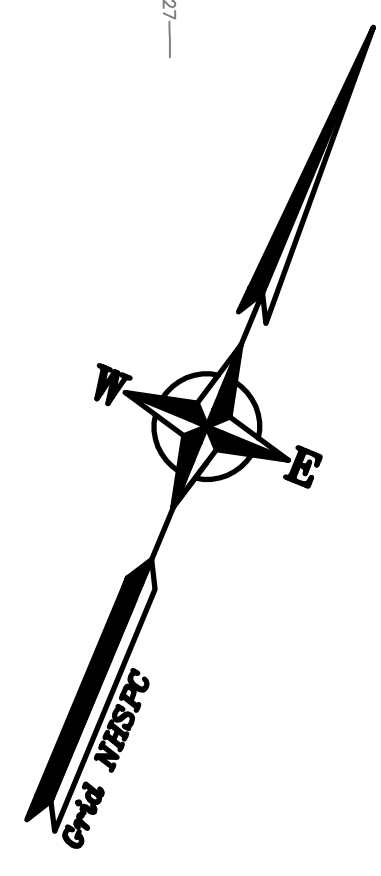
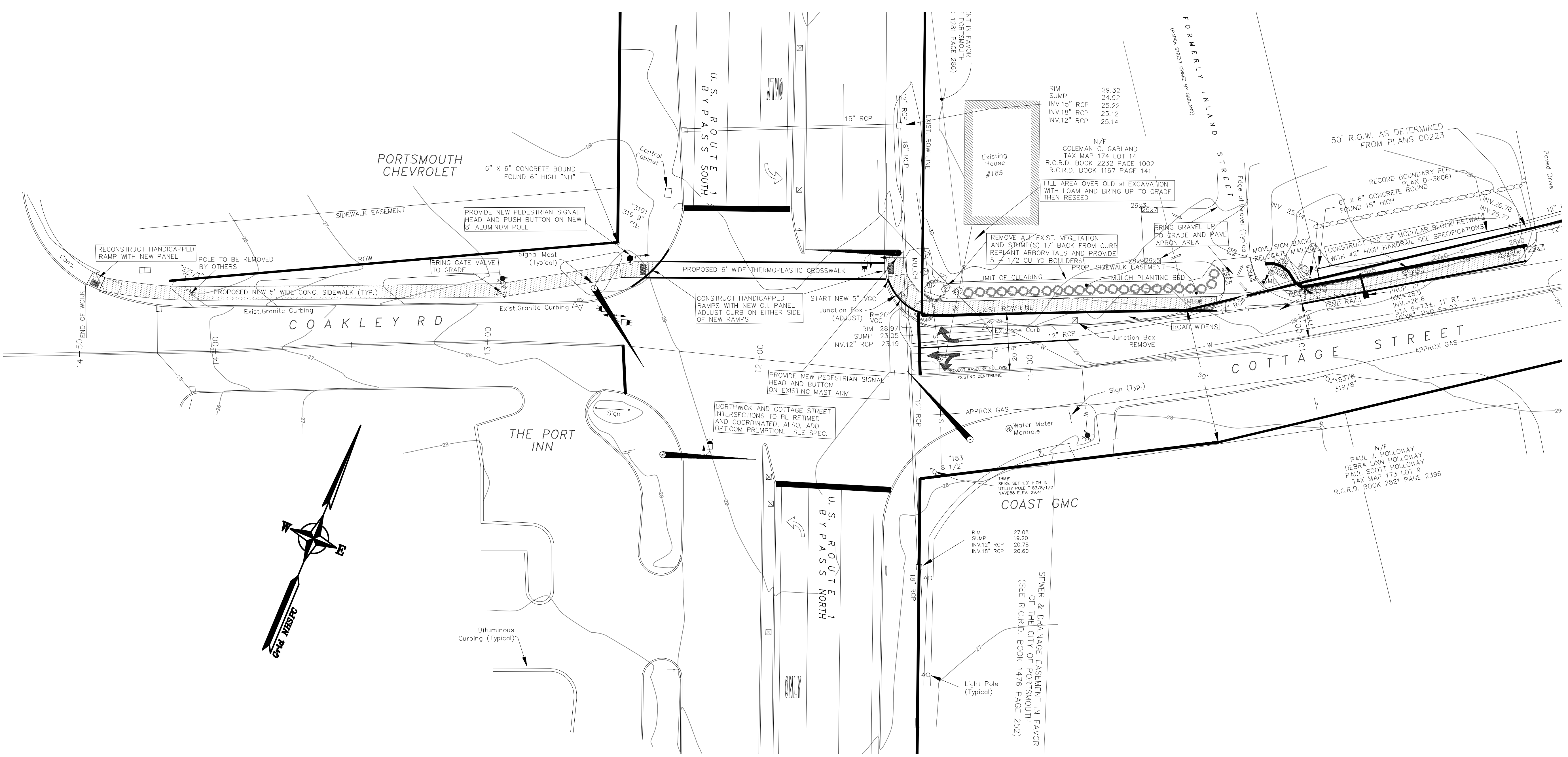
SURVEY PREPARED BY:

North  
W EASTERLY  
SURVEYING, Inc.

SURVEYORS IN N.H. & MAINE 191 STATE ROAD, SUITE #1  
(207) 439-6333 KITTERY, MAINE 03904

**LEGEND:**

- ..... IRON ROD FOUND
- ..... GRANITE BOUND FOUND
- NHSH ..... NEW HAMPSHIRE HIGHWAY BOUND
- △ ..... RAILROAD SPIKE FOUND
- ⊙ ..... SEWER MANHOLE
- ⊞ ..... CATCH BASIN
- ..... PROPOSED CATCH BASIN
- ..... TELEPHONE MANHOLE
- ⊕ ..... HYDRANT
- ⊕ ..... WATER GATE VALVE
- ⊕ ..... GAS METER
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- G — ..... GAS LINE
- OHW — ..... OVERHEAD WIRES
- OHE — ..... OVERHEAD ELECTRIC
- ⊕ ..... SIGN
- VGC ..... VERTICAL FACED GRANITE CURB
- SGC ..... SLOPED FACED GRANITE CURB
- SAC ..... SLOPED FACED ASPHALT CURB
- ⊕ ..... HANDICAP SPACE



SHEET 1 OF 1 SHEETS

1. UTILITIES (IF SHOWN) ARE APPROXIMATE, CALL 1-800-DIG-SAFE PRIOR TO ANY EXCAVATION.
2. ALL MATERIALS PROPOSED ON THIS PLAN ARE TO MEET NHDOT, NEC & CITY STANDARD SPECIFICATIONS.
3. TOPOGRAPHY IS BASED NGVD 88.
4. ACQUIRING LAY DOWN AREAS IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. SIDEWALKS MUST BE PASSABLE FOR PEDESTRIAN USE NIGHTLY.
6. HOURS OF WORK WILL BE 7 AM TO 5 PM DAILY. WEEKEND WORK WILL NOT BE ALLOWED.
7. THE STREET WILL NOT BE SHUT DOWN TO TRAFFIC.
8. FLAGGERS (OR POLICE) WILL NEED TO BE HIRED FOR THE DURATION OF THE PROJECT WHENEVER CONSTRUCTION OR VEHICLES ARE IN THE ROAD. THE CONTRACTOR WILL ACQUIRE A FLAGGING PERMIT WITH THE CITY AND THE CITY WILL DETERMINE THE APPROPRIATE FLAGGING PERSONEL FOR THE PROJECT.
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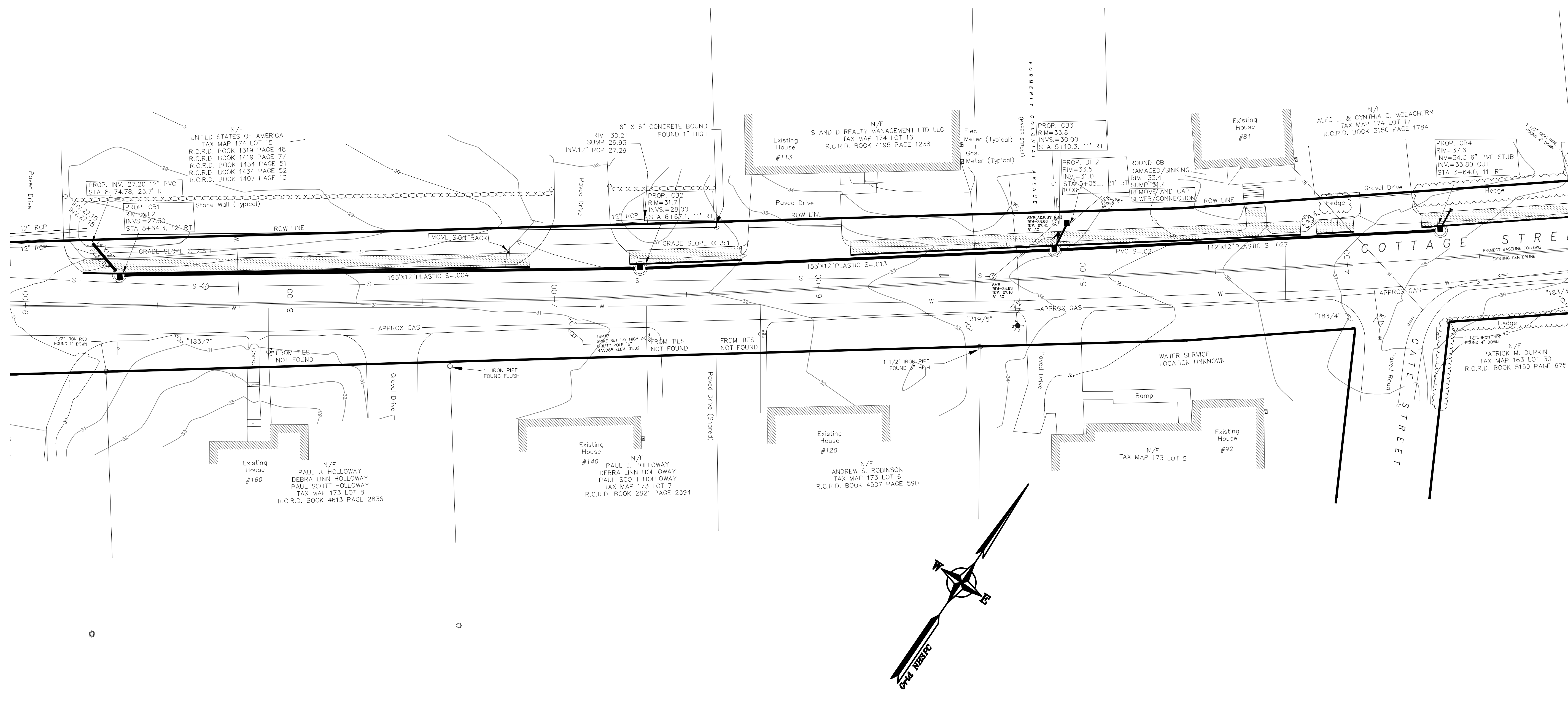


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NO.	DESCRIPTION	DATE
REVISIONS		
<b>SIDEWALK CONSTRUCTION PLAN</b> FOR <b>COAKLEY ROAD</b> <b>AND COTTAGE STREET</b> PORTSMOUTH, NEW HAMPSHIRE		
DRAWING_SCALE_ 1"=20'		8/01/12

LEGEND:

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SHEET 2 OF 2

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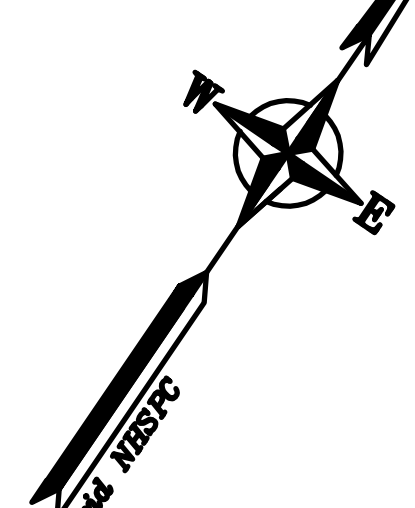
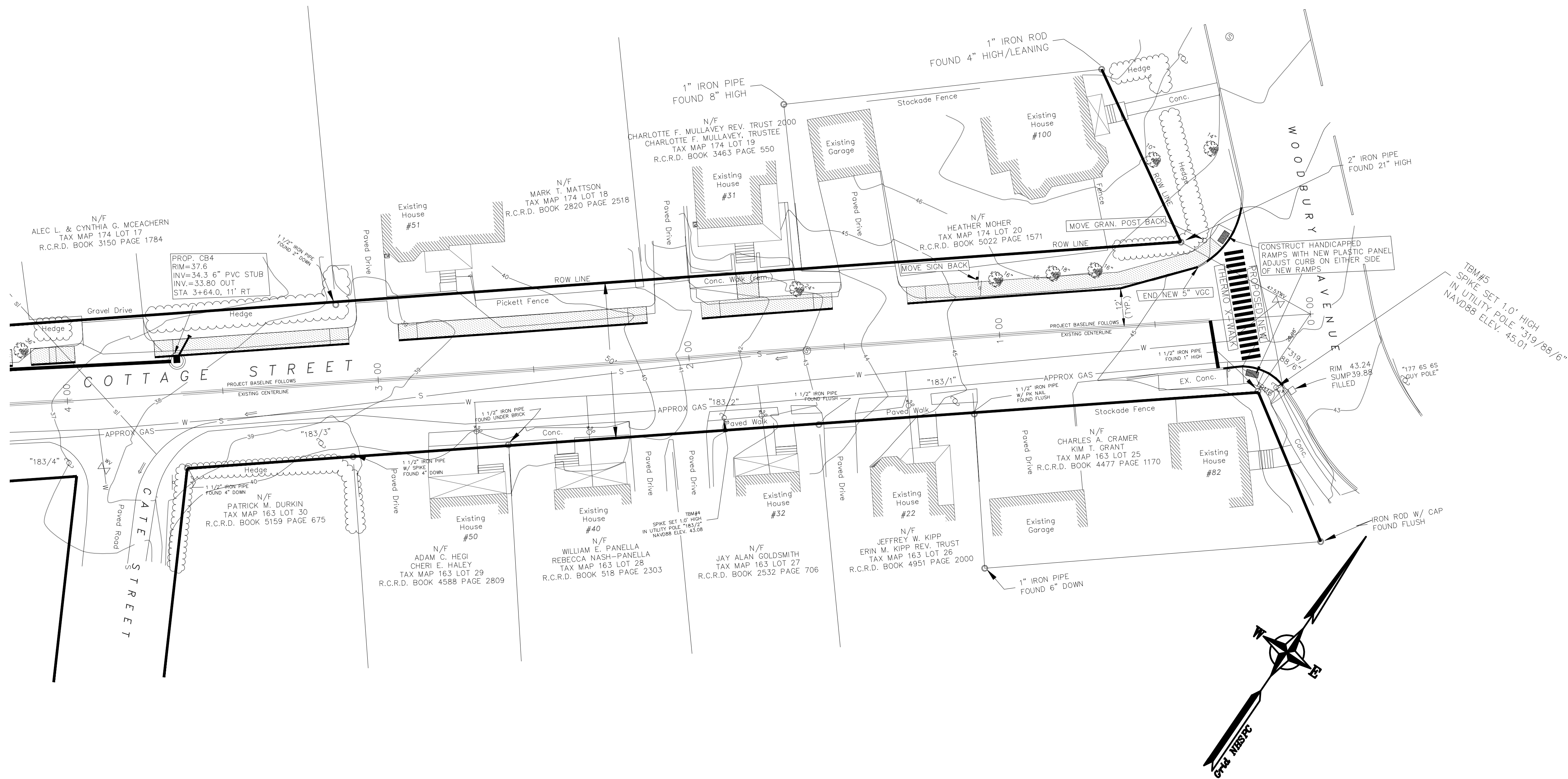


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SHEETS 3 OF 4

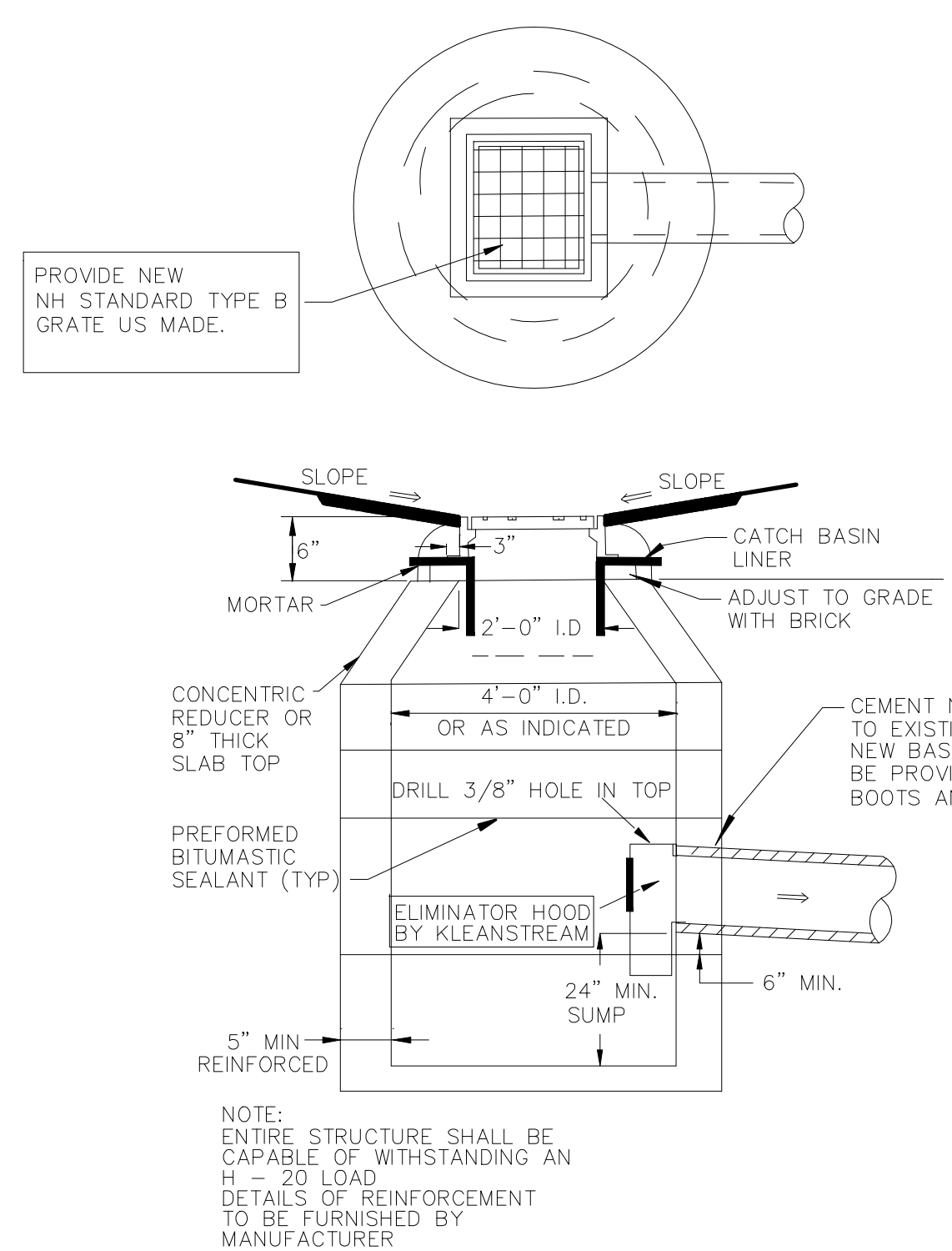
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<b>SIDEWALK CONSTRUCTION PLAN</b> FOR <b>COAKLEY ROAD</b> <b>AND COTTAGE STREET</b> PORTSMOUTH, NEW HAMPSHIRE		
DRAWING SCALE 1"=20'		8/01/12

**STANDARD MANHOLE NOTES:**

1. BARRELS AND CONE SECTIONS SHALL BE PRECAST REINFORCED CONCRETE.
2. PRECAST CONCRETE BARREL SECTIONS, CONES, AND BASES SHALL CONFORM TO ASTM C478.
3. INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW. CARE SHALL BE TAKEN TO INSURE THAT THE BRICK INVERT IS A SMOOTH CONTINUATION OF THE INVERT. INVERT BRICKS SHALL BE LAID ON EDGE. AT CHANGES IN DIRECTION, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST POSSIBLE TANGENT TO THE CENTER LINE OF THE PIPES. SHELVES SHALL BE CONSTRUCTED TO AN ELEVATION OF 1/2 THE PIPE DIA. AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL.
4. FRAMES AND COVERS: MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30-INCH CLEAR OPENING. LETTER "D" OR WORD "DRAIN", IN 3-INCH LETTERS SHALL BE PLAINLY CAST INTO THE CENTER OF EACH COVER.
5. BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33. STONE SIZE NO. 67.
  - 100% PASSING 1 INCH SCREEN
  - 0-10% PASSING #4 SIEVE
  - 90-100% PASSING 3/4 INCH SCREEN
  - 0- 5% PASSING #8 SIEVE
  - 20- 55% PASSING 3/8 INCH SCREEN

WHERE ORDERED BY THE ENGINEER TO STABILIZE THE BASE, SCREENED GRAVEL OR CRUSHED STONE 1-1/2 INCH TO 1/2 INCH SHALL BE USED.

6. SHALLOW MANHOLE: IN LIEU OF A CONE SECTION, WHEN MANHOLE IS LESS THAN 5 FEET, A REINFORCED CONCRETE SLAB COVER HAVING AN ECCENTRIC ENTRANCE AND CAPABLE OF SUPPORTING H=20 LOADS MAY BE USED.



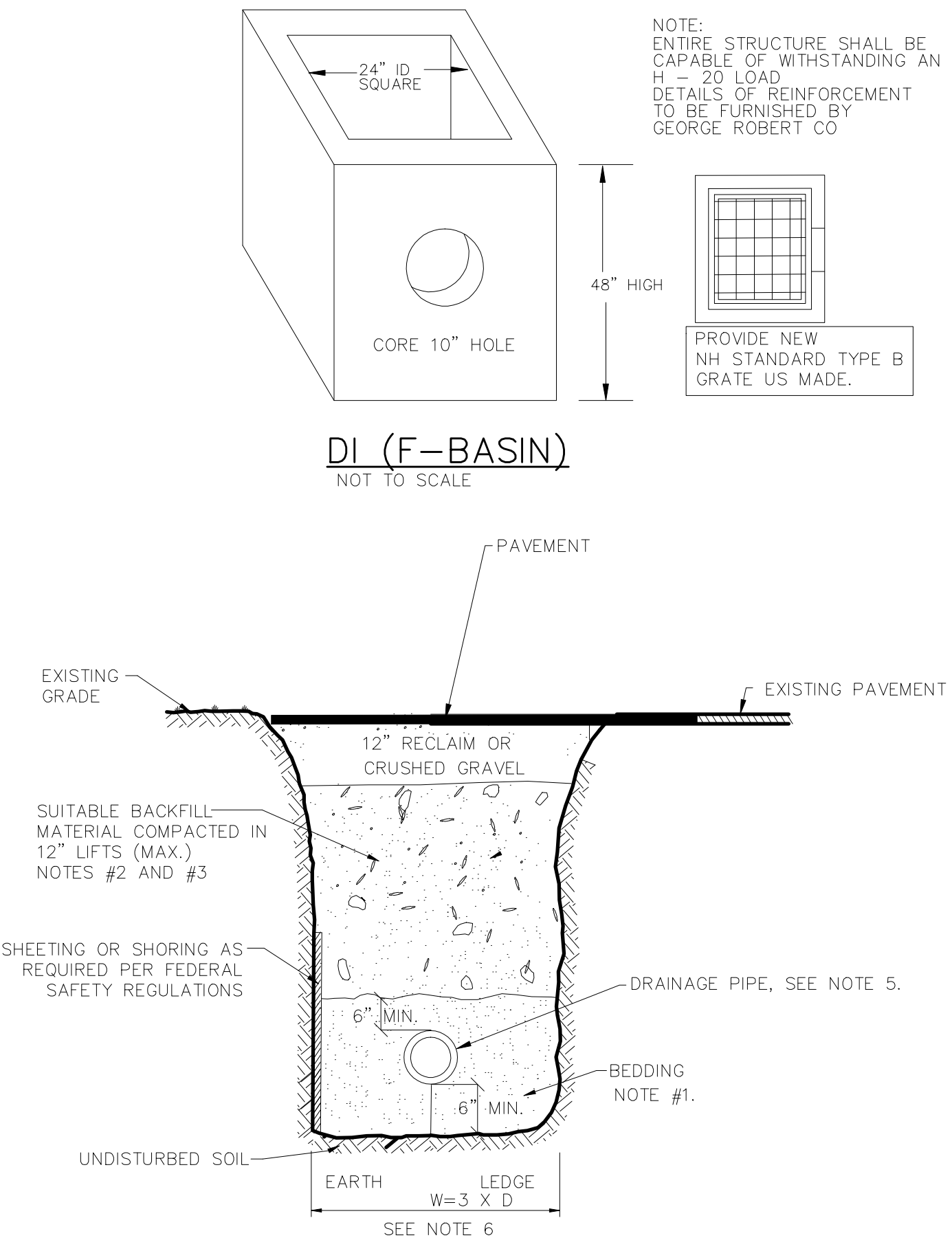
**CATCH BASIN**  
NOT TO SCALE

**TRENCH NOTES - STORM DRAIN**

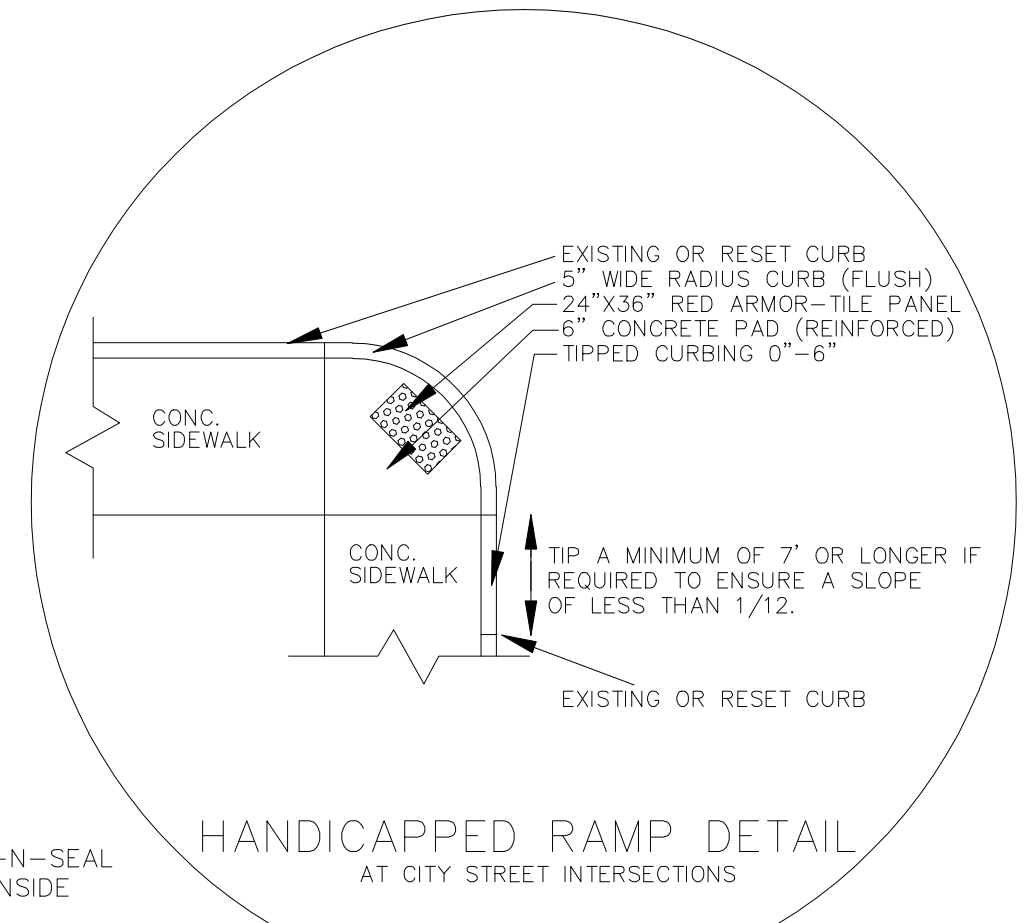
1. BEDDING: BEDDING FOR PIPES SHALL CONSIST OF PREPARING THE BOTTOM OF THE TRENCH TO SUPPORT THE ENTIRE LENGTH OF THE PIPE AT A UNIFORM SLOPE AND ALIGNMENT. CRUSHED STONE SHALL BE USED TO BED THE PIPE TO THE ELEVATION SHOWN ON THE DRAWINGS.
2. COMPACTION: ALL BACKFILL SHALL BE COMPACTED AT OR NEAR OPTIMUM MOISTURE CONTENT BY PNEUMATIC TAMPERS, VIBRATORY COMPACTORS OR OTHER APPROVED MEANS. BACKFILL BENEATH PAVED SURFACES SHALL BE COMPACTED TO NOT LESS THAN 95 PERCENT OF AASHTO T99, METHOD C.
3. SUITABLE MATERIAL: IN ROADS, ROAD SHOULDERS, WALKWAYS AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS; PIECES OF PAVEMENT; ORGANIC MATTER; TOP SOIL; ALL WET OR SOFT MUCK, PEAT, OR CLAY; ALL EXCAVATED LEDGE MATERIAL; ROCKS OVER 6 INCHES IN LARGEST DIMENSION; FROZEN EARTH AND ANY MATERIAL WHICH, AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION.

IN SEEDED AREAS, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SOIL, LOAM, ROCKS UNDER 12", FROZEN EARTH OR CLAY, IF HE/SHE IS SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EASY ACCESS TO THE PIPE WILL BE PRESERVED.

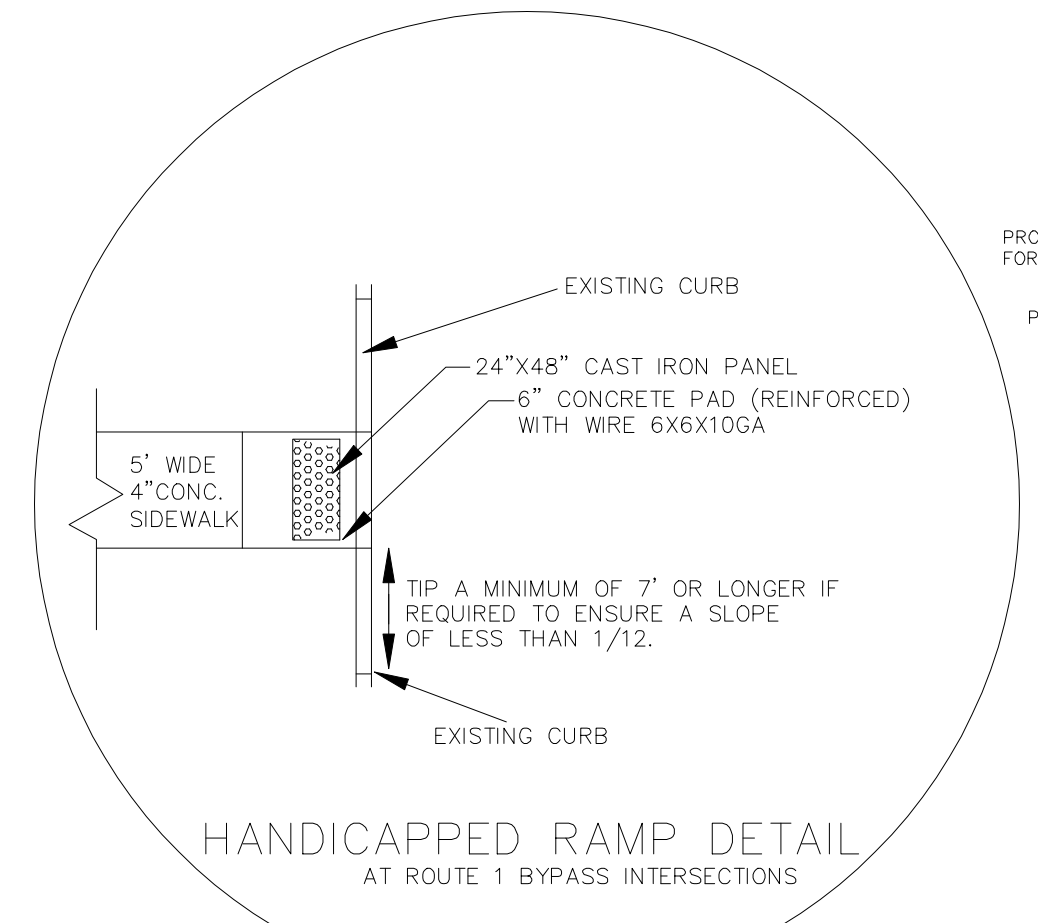
4. BASE COURSE AND PAVEMENT: SHALL MEET THE REQUIREMENTS OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES - DIVISIONS 300 AND 400 RESPECTIVELY.
5. W=MAXIMUM ALLOWABLE TRENCH WIDTH: W SHALL BE THE MAXIMUM PAYMENT WIDTH FOR ROCK EXCAVATION (TRENCH) AND FOR ORDERED EXCAVATION BELOW GRADE.



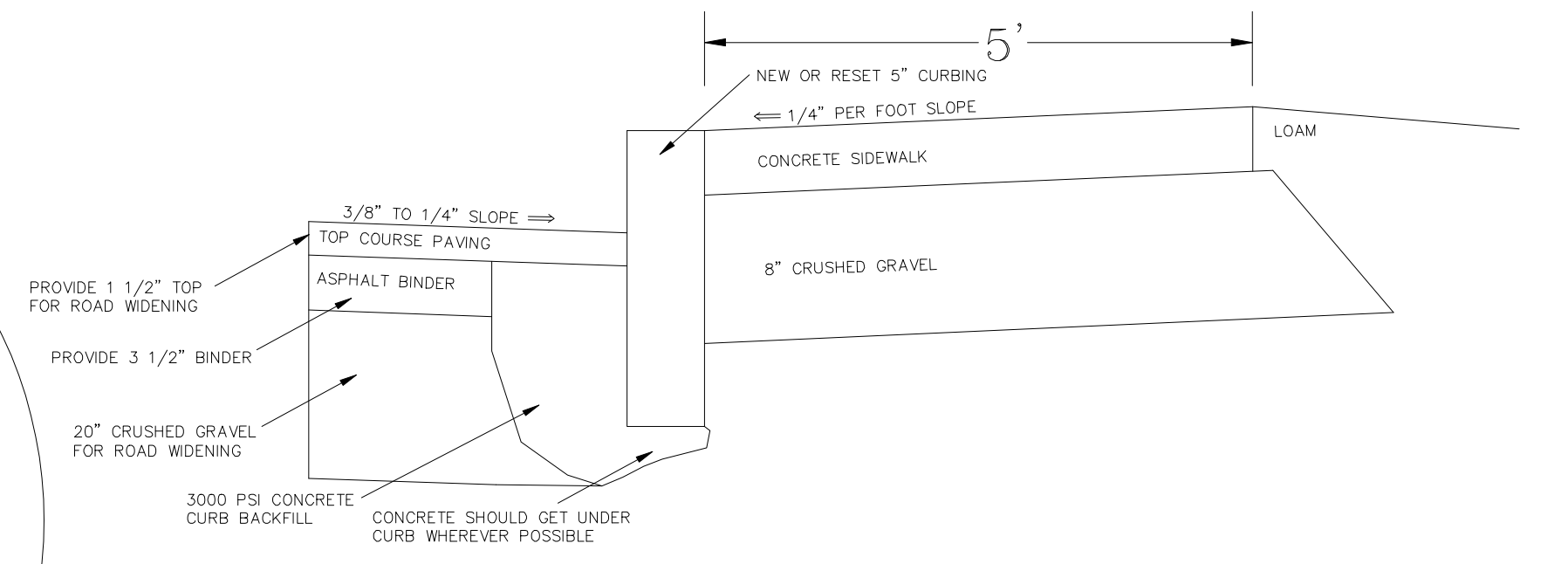
**DI (F-BASIN)**  
NOT TO SCALE



**HANDICAPPED RAMP DETAIL**  
AT CITY STREET INTERSECTIONS



**HANDICAPPED RAMP DETAIL**  
AT ROUTE 1 BYPASS INTERSECTIONS



ALL CONCRETE MUST BE 4000 PSI, 5-7% AIR ENTRAINED, FIBER REINFORCED WITH CONTROL JOINTS EVERY 5' AND EXPANSION JOINTS EVERY 25'. ALL CONTROL JOINTS WILL BE MADE WITH A JOINTING TOOL TO A DEPTH OF 1/4 OF THE SIDEWALK DEPTH. EXPANSION MATERIAL WILL ALSO BE USED AROUND MANHOLE COVERS, UTILITY POLES, ETC.

A PROTECTIVE COATING OF SILANE-SILOXANE SHALL BE APPLIED TO ALL EXPOSED SURFACES. THREE DAYS AFTER APPLICATION, THE ENGINEER WILL TEST THE PRODUCT. IF THE TEST COMES OUT NEGATIVE, THE CONTRACTOR WILL INSTALL A SECOND COAT OF THE PRODUCT.

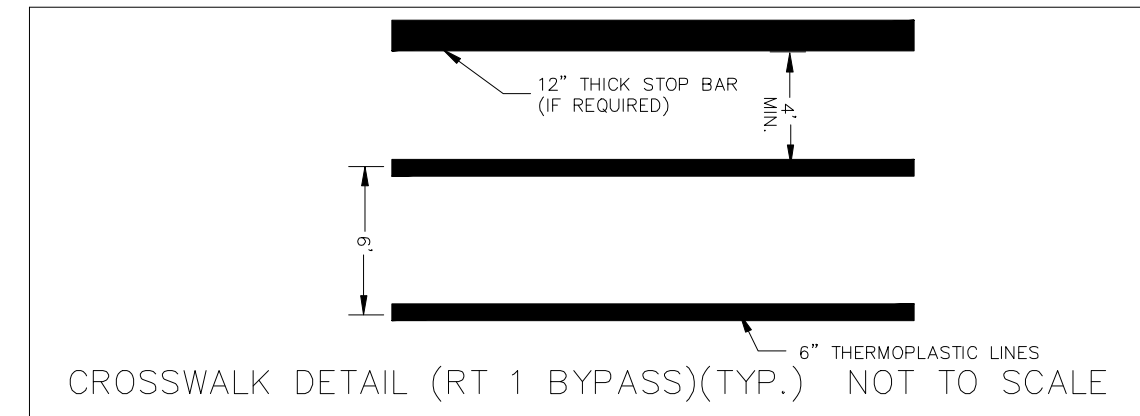
CURING COMPOUNDS WILL NOT BE PERMITTED UNLESS DIRECTED BY THE ENGINEER.

ALL SIDEWALKS WILL HAVE A LIGHT BROOM FINISH TRANSVERSE TO THE WALKING PATH.

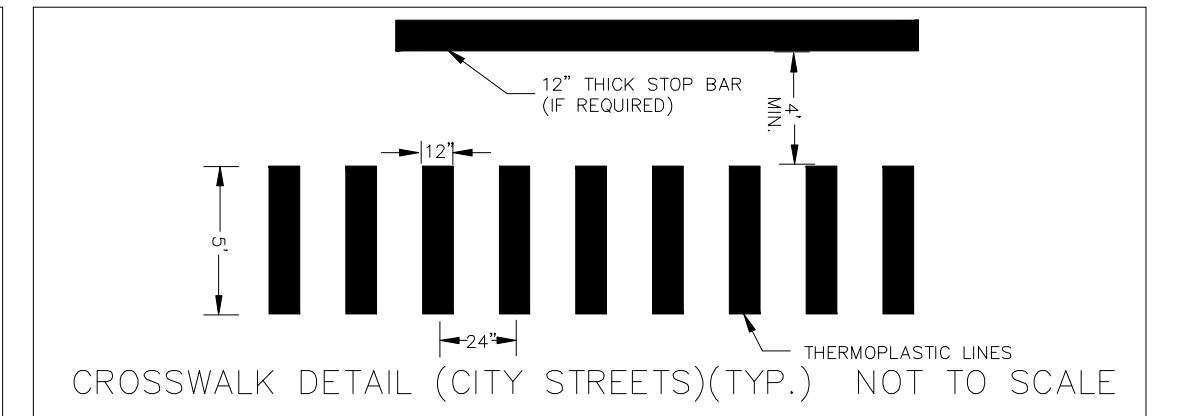
AFTER STRIPPING FORMS, THE SUBGRADE ON THE SIDES OF THE CONCRETE WILL BE BROUGHT UP EVEN WITH THE BOTTOM OF THE SIDEWALK OR 4" FROM THE TOP WHICHEVER IS LESS. DISTURBANCE OF LOAM MORE THAN 12" WIDE ON EITHER SIDE OF THE FINISHED SIDEWALK WILL NOT BE PAID FOR UNLESS DIRECTED BY THE ENGINEER.

HANDICAPPED RAMPS AT STREET CORNERS SHALL BE 6" DEEP AND BE REINFORCED WITH 6X6X10 WIRE MESH SHEETS.

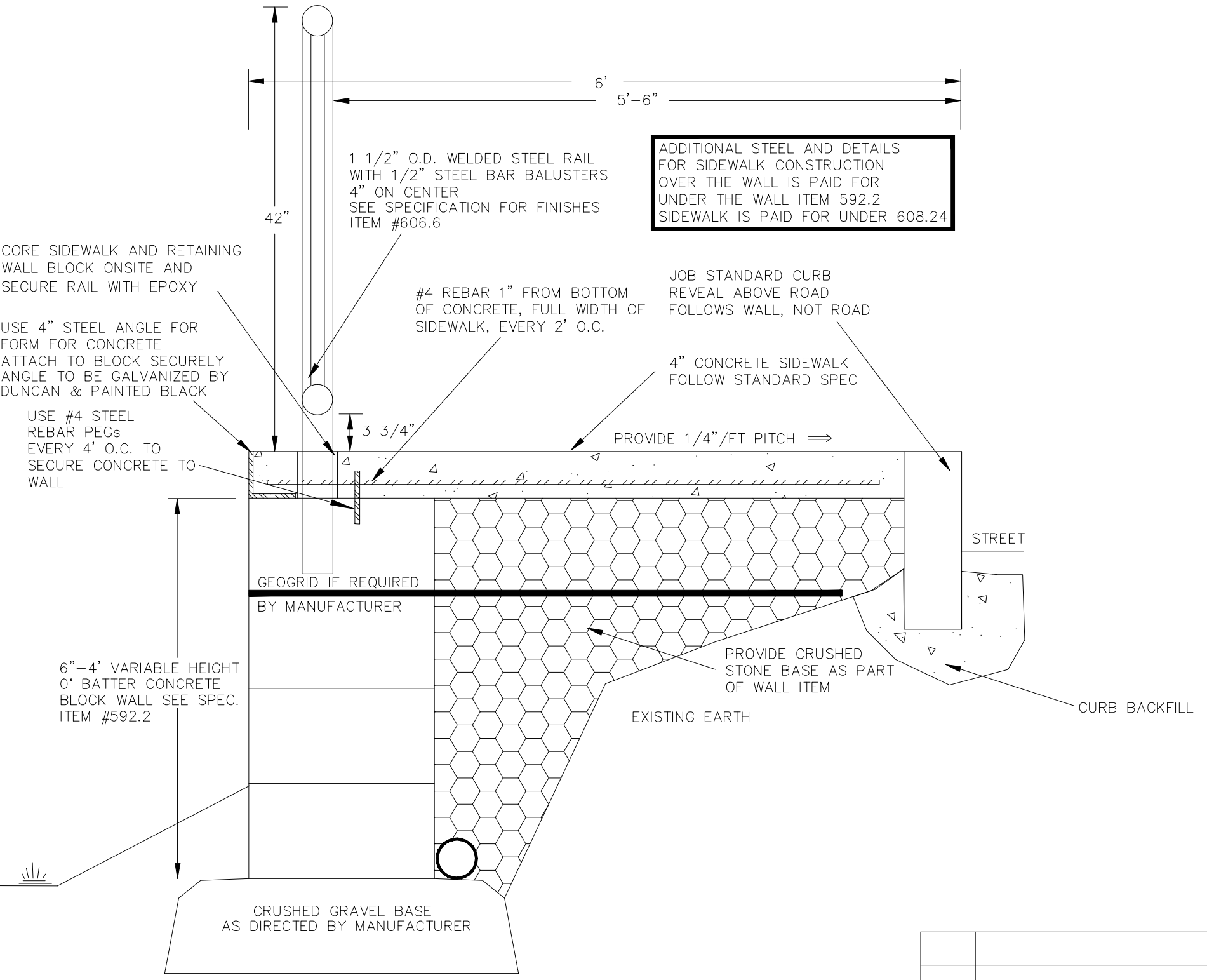
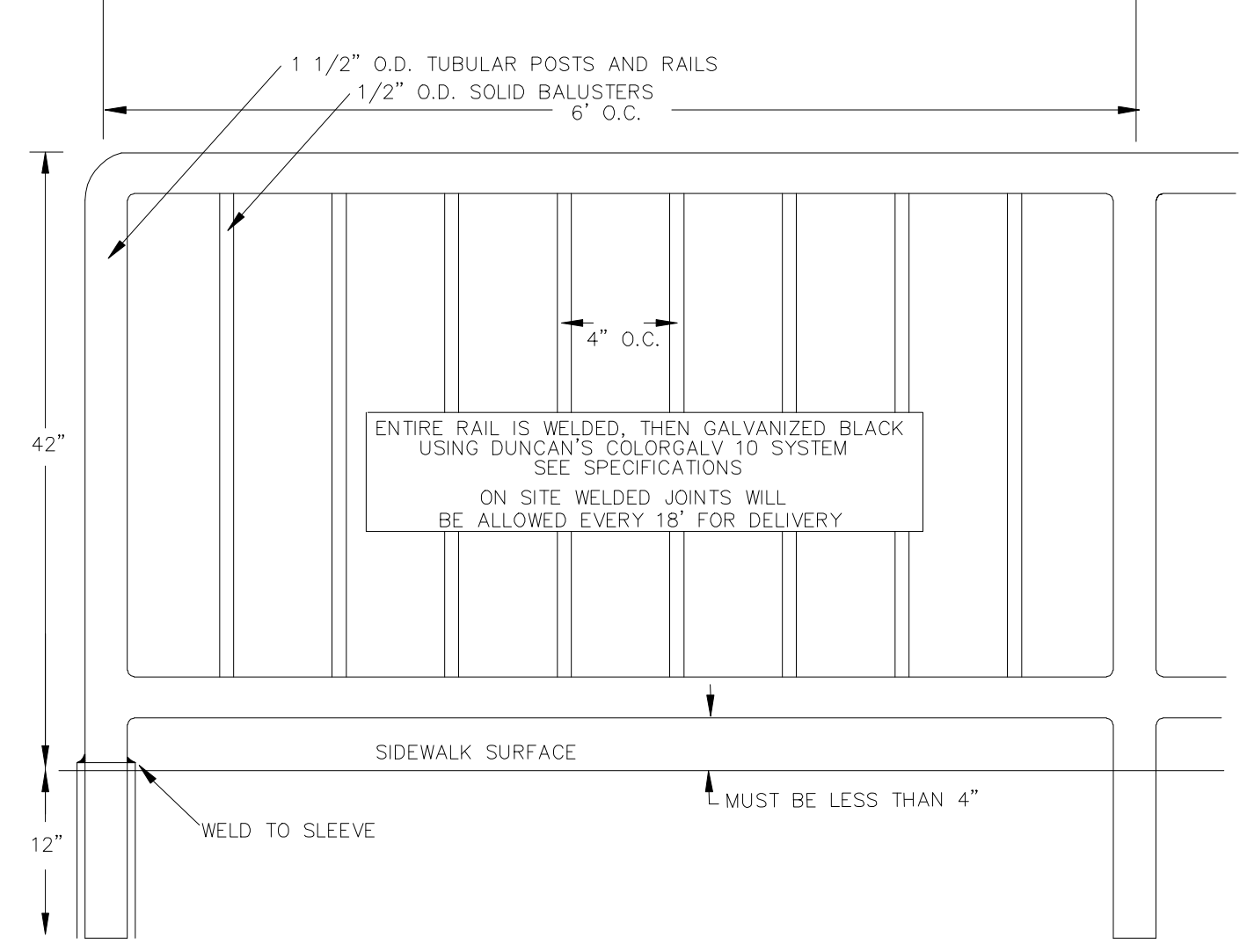
**SIDEWALK X-SECTION**  
N.T.S.



**CROSSWALK DETAIL (RT 1 BYPASS)(TYP.)** NOT TO SCALE



**CROSSWALK DETAIL (CITY STREETS)(TYP.)** NOT TO SCALE



**RETAINING WALL DETAIL WITH RAIL**  
NOT TO SCALE



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SHEET 1 OF 1