CONGRESS & CHESTNUT STREET STREETSCAPE & UTILITIES PROJECT

Portsmouth, New Hampshire

Owner:

A Joint Venture with:



1 JUNKINS AVENUE PORTSMOUTH, N.H. 03801



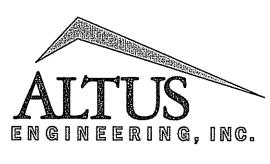
28 CHESTNUT STREET PORTSMOUTH, N.H. 03801 TEL.: (603) 433-3100

Issued for Client Review

MARCH 21, 2017 JUNE 16, 2017

80% Submission Bid Issue

Civil Engineer:



www.ALTUS-ENG.com

Landscape Architect:

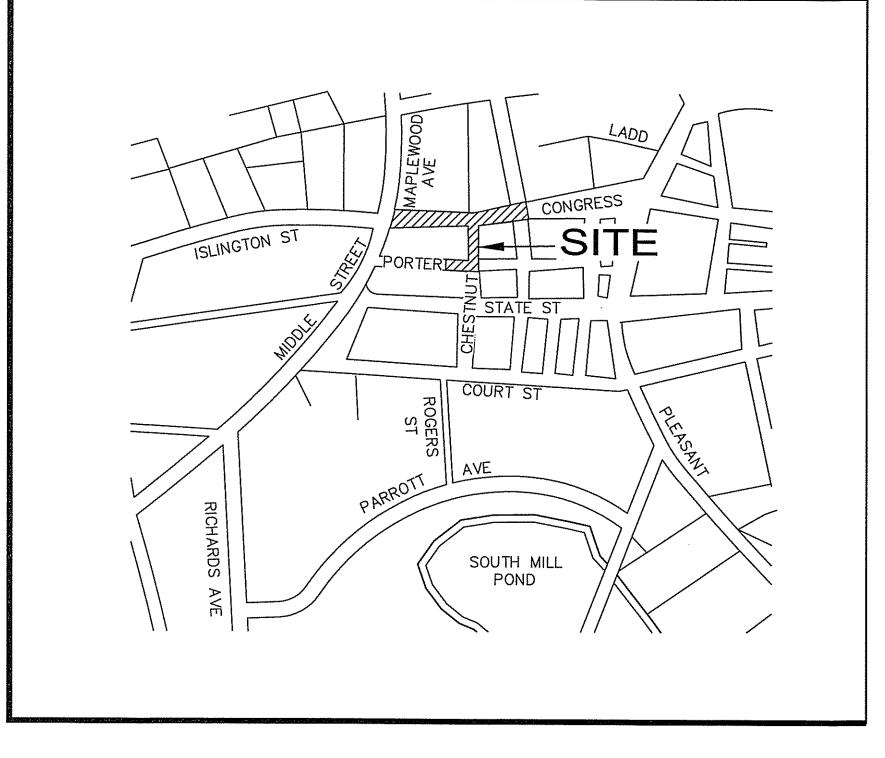


163.a Court Street Portsmouth, N.H. 03801 603.430.8388 603.531.9109 mobile

Sur veyor:

James Verra and Associates, Inc. LAND SURVEYORS

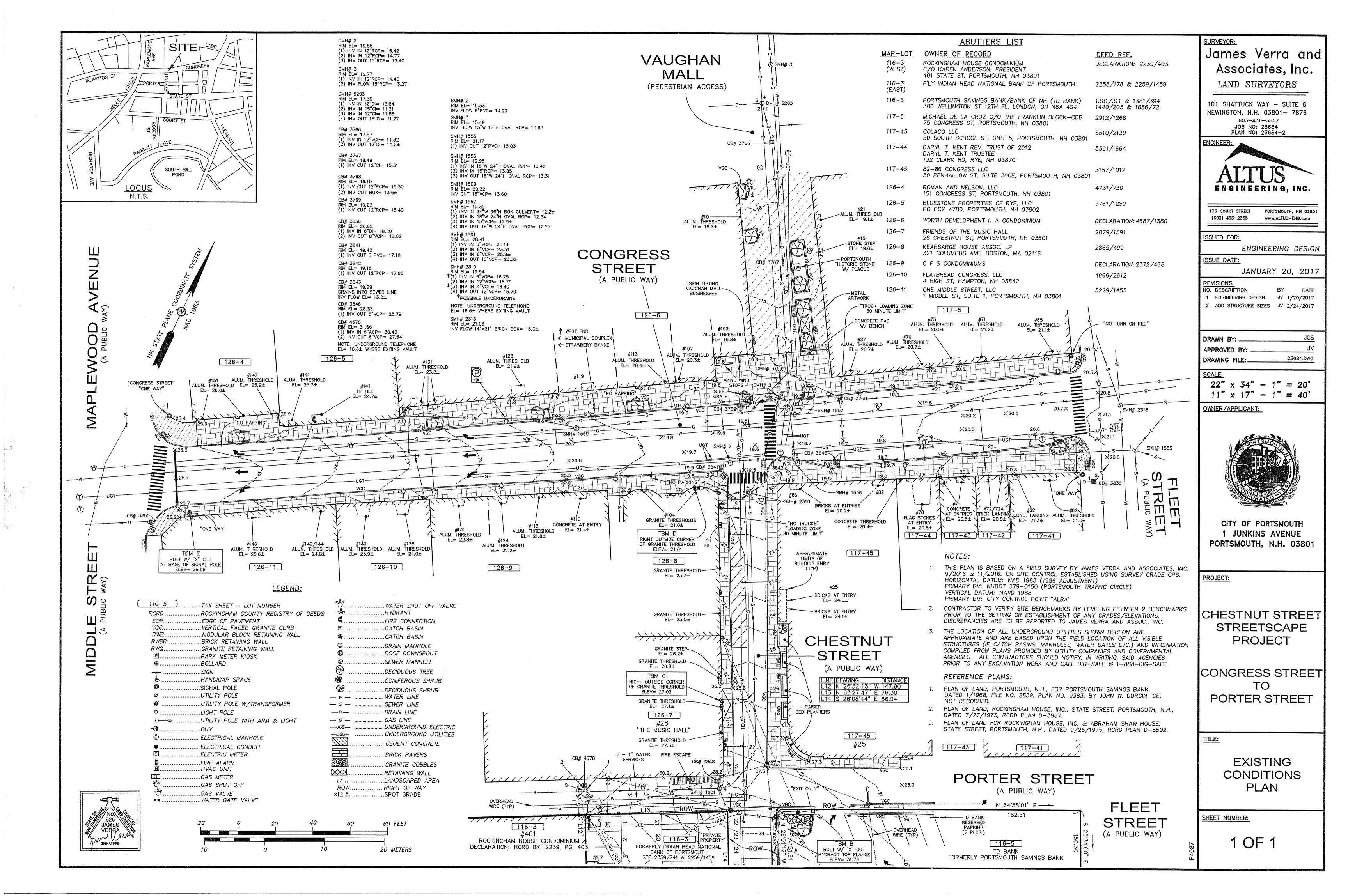
101 SHATTUCK WAY - SUITE 8 NEWINGTON, N.H. 03801- 7876 603-436-3557



Locus Map Scale: Not to Scale

Permit Summary

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DEMOLITION NOTES

- 1. CONTRACTOR SHALL SAFELY SECURE THE SITE WITH SECURITY FENCING OR OTHER MEANS TO ENSURE A SAFE SITE DURING NON-WORK HOURS.
- 2. CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES SCHEDULED TO
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TIMELY NOTIFICATION OF ALL PARTIES, CORPORATIONS, COMPANIES, INDIVIDUALS AND STATE AND LOCAL AUTHORITIES OWNING AND/OR HAVING JURISDICTION OVER ANY UTILITIES RUNNING TO, THROUGH OR ACROSS AREAS TO BE DISTURBED BY DEMOLITION AND/OR CONSTRUCTION ACTIVITIES WHETHER OR NOT SAID UTILITIES ARE SUBJECT TO DEMOLITION, RELOCATION, MODIFICATION AND /OR CONSTRUCTION.
- 4. ALL UTILITY DISCONNECTIONS/DEMOLITIONS/RELOCATIONS TO BE COORDINATED BETWEEN THE CONTRACTOR, ALL APPROPRIATE UTILITY COMPANIES AND THE PORTSMOUTH DEPARTMENT OF PUBLIC WORKS. UNLESS OTHERWISE SPECIFIED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELATED EXCAVATION, TRENCHING AND BACKFILLING.
- 5. ALL STRUCTURES, CURBING, CONCRETE, PAVEMENT AND SUBBASE MATERIALS SHALL BE REMOVED FROM PROPOSED LANDSCAPE AREAS AND REPLACED WITH LOAM MATERIALS SUITABLE FOR LANDSCAPE AND/OR STORMWATER MANAGEMENT PURPOSES AND MEETING THE PROJECT SPECIFICATIONS.
- 6. WHERE SPECIFIED TO REMAIN, MANHOLE RIMS, CATCH BASIN GRATES, VALVE COVERS, HANDHOLES, ETC. SHALL BE ADJUSTED TO FINISH GRADE.
- 7. NO BURNING SHALL BE PERMITTED PER LOCAL REGULATIONS.
- 8. HAZARDOUS MATERIALS ENCOUNTERED DURING DEMOLITION AND CONSTRUCTION ACTIVITIES SHALL BE ABATED IN STRICT ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL REGULATIONS AT NO EXTRA COST TO THE OWNER.
- 9. SEE EROSION CONTROL PLANS FOR EROSION CONTROL REQUIREMENTS TO BE IN PLACE PRIOR TO START OF DEMOLITION ACTIVITIES, INCLUDING, BUT NOT LIMITED TO; SILT FENCING, STABILIZED CONSTRUCTION SITE EXITS, AND STORM DRAIN INLET PROTECTION.
- 10. ALL DEMOLISHED MATERIALS OR MATERIALS SCHEDULED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS SPECIFIED.
- 11. ALL MATERIALS SCHEDULED TO BE REMOVED SHALL BE LEGALLY DISPOSED IN ACCORDANCE WITH ALL LOCAL, STATE, & FEDERAL REGULATIONS AND CODES.
- 12. CONTRACTOR SHALL COORDINATE ALL TELE-COMMUNICATION DISCONNECTIONS AND INSTALLATION WITH FAIRPOINT COMMUNICATIONS. CONTACT JOE CONSIDINE @ 603-427-5525
- 15. CONTRACTOR SHALL COORDINATE ALL ELECTRICAL DISCONNECTIONS/INSTALLATIONS WITH EVERSOURCE. CONTACT: NICK KOSKO @ 603-332-4227 EXT. 5555334
- 16. CONTRACTOR SHALL COORDINATE ALL NATURAL GAS DISCONNECTIONS/INSTALLATIONS WITH UNITIL CORPORATION. CONTACT: DAVID BEAULIEU @ 603-294-5144
- 17. CONTRACTOR SHALL COORDINATE ALL CABLE DISCONNECTIONS/INSTALLATIONS WITH COMCAST. CONTACT: MIKE COLLINS @ 603-679-5695, EXT. 1037
- 18. CONTRACTOR SHALL COORDINATE ALL TELE-COMMUNICATIONS/INSTALLATIONS WITH BAYRING/OXFORD NETWORKS. CONTACT: SHAWN SMITH @ 603-205-9795.
- 19. ALL EXISTING WATER MAINS, SEWER LINES, AND DRAIN LINES SCHEDULED TO BE ABANDONED IN PLACE SHALL EITHER BE DEMOLISHED, REMOVED OR HAVE A CAP INSTALLED AT EACH END OF THE PIPE. THIS WORK SHALL BE CONSIDERED
- 20. ASBESTOS PIPE ENCOUNTERED DURING CONSTRUCTION SHALL BE ABANDONED IN PLACE IF INTACT. IF REMOVAL IS REQUIRED TO COMPLETE NEW UTILITY WORK, PAYMENT WILL BE MEASURED AS DESCRIBED IN SECTION 01025, ITEM ?.
- 21. EXISTING LIGHTS, POLE & FIXTURES SCHEDULED TO BE REMOVED IN CONGRESS STREET SHALL BE REUSED IN CHESTNUT STREET. NEW POLE BASES SHALL BE INSTALLED.
- 22. NO EQUIPMENT OR MATERIAL STORAGE OVER NIGHT IN RIGHT OF WAY(S) EXCEPT ON "CLOSED STREETS". COORDINATE W/CITY OF PORTSMOUTH DPW.

GENERAL NOTES:

- 1. DO NOT BEGIN CONSTRUCTION UNTIL ALL STATE, LOCAL AND FEDERAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.
- 1. CONTRACTOR SHALL CALL DIG SAFE AT 1 (800) DIG-SAFE AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO COMMENCING CONSTRUCTION.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION, PROTECTION AND REPAIR (IF DAMAGED) OF ALL EXISTING UTILITIES. THE LOCATIONS DEPICTED ON THESE DRAWINGS ARE APPROXIMATE AND ARE BASED ON THE KNOWN INFORMATION. THE LOCATIONS OF ALL THE SERVICE LATERALS INCLUDING SEWER, GAS, WATER, TELE-COMMUNICATION AND ELECTRIC HAVE NOT BEEN DEPICTED. THE CONTRACTOR SHALL ANTICIPATE THEIR EXISTENCE. RELOCATIONS DUE TO CONFLICTS SHALL BE COMPLETED AT THE CONTRACTOR'S COST.
- 3. CONTRACTOR SHALL HOLD A PRE-CONSTRUCTION CONFERENCE WITH THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS AND ALL STAKE HOLDERS A MINIMUM OF 7-DAYS PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES.
- 4. CONTRACTOR SHALL INSTALL AND MAINTAIN TEMPORARY SEDIMENT AND EROSION CONTROL ITEMS TO PREVENT SEDIMENT FROM CONSTRUCTION ACTIVITIES FROM LEAVING THE SITE. CONTROLS SHALL BE INSPECTED ON A REGULAR BASIS AND AFTER ALL RAIN EVENTS OF 0.25 INCHES OR GREATER. ANY DEFICIENCIES IN THE CONTROLS SHALL BE ADDRESSED IMMEDIATELY AND BROUGHT TO THE ATTENTION OF THE OWNER. ALL STORMS DRAINS WITHIN OR ADJACENT TO THE WORK AREA, WITH THE POTENTIAL TO RECEIVE RUNOFF FROM EXPOSED CONSTRUCTION AREAS, SHALL RECEIVE STORM DRAIN INLET PROTECTION.
- 5. CONTRACTOR SHALL PREVENT TRACKING OF DIRT ONTO ANY PUBLIC OR PRIVATE ROADWAYS. IF TRACKING OF DIRT FROM CONSTRUCTION VEHICLES IS PRESENT ON THE OPEN STREETS, CONTRACTOR WILL BE REQUIRED TO SWEEP THE ROADWAY AT NO ADDITIONAL EXPENSE TO THE OWNER.
- 6. AS A MINIMUM THE CONTRACTOR SHALL AT ALL TIMES MAINTAIN A SINGLE LANE OF TRAFFIC ON CONGRESS STREET. AT THE END OF EACH DAY'S OPERATION, TWO LANES OF TRAVEL SHALL BE PROVIDED ON CONGRESS STREET.
- 7. AT THE END OF THE WEEK'S WORK, CONGRESS STREET AND THE ADJACENT SIDEWALKS ON BOTH SIDES OF THE STREET SHALL BE TEMPORARILY PAVED AND ACCESSIBLE.
- 8. PORTER STREET MAY BE FULLY CLOSED DURING THE WORK DAY. AT THE END OF EACH DAY, PORTER STREET SHALL BE OPEN TO VEHICULAR TRAFFIC. CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH ROCKINGHAM HOUSE CONDOMINIUM ASSOCIATION TO ENSURE THAT THEIR PARKING LOT IS ACCESSIBLE AT ALL TIMES.
- 9. CHESTNUT STREET MAY CLOSED TO VEHICULAR TRAFFIC FOR AN EXTENDED PERIOD OF TIME. CONTRACTOR SHALL ENSURE THAT SAFE ACCESS TO ALL BUSINESSES ON CHESTNUT STREET ARE MAINTAINED AT ALL TIMES THORUGHOUT CONSTRUCTION. AT THE END OF THE WEEK, THERE SHALL BE A PAVED ACCESS TO THE MUSIC HALL.
- 10. CONTRACTOR SHALL INSTALL AND MAINTAIN APPROPRIATE TRAFFIC CONTROL WARNING DEVICES IN ACCORDANCE WITH MUTCD REQUIREMENTS AND SECTION 01570 OF THE PROJECT MANUAL.
- 11. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL BUSINESSES AT ALL TIMES. 12. ALL STREET OPENINGS SHALL BE COVERED AT THE END OF EACH DAYS WORK TO ENSURE SAFE PEDESTRIAN AND VEHICULAR TRAFFIC.
- 13. SOME OF THE OVERHEAD WIRES ARE DEPICTED ON THE PLANS. THE CONTRACTOR SHALL ANTICIPATE THEIR EXISTENCE AND ANTICIPATE CONFLICTS.
- 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL SURPLUS EARTHEN AND CONSTRUCTION MATERIALS INCLUDING LEDGE, SPOILS, PIPE, CURB, PAVEMENT, DRAINAGE AND SEWER STRUCTURES EXCAVATED DURING CONSTRUCTION UNLESS MATERIALS ARE CLAIMED BY THE OWNER.
- 15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ALL PROPERTY DAMAGED BY THE CONSTRUCTION ACTIVITIES INCLUDING BOTH PUBLIC AND PRIVATE AT NO ADDITIONAL COST TO THE OWNER OR PROPERTY OWNER.
- 16. PAVEMENT REPAIRS BEYOND THE WORK LIMITS TO DRIVEWAYS OR ROADWAYS AS A RESULT OF THE CONTRACTOR'S ACTIVITIES SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- 17. DEWATERING ACTIVITIES, IF REQUIRED, SHALL BE DONE IN ACCORDANCE WITH EPA AND NHDES REGULATIONS.
- 18. THE ENGINEER & SURVEYOR HAVE MADE ATTEMPTS TO LOCATE THE EXISTING UNDERGROUND UTILITIES. ADDITIONAL UTILITIES MAY BE ENCOUNTERED THAT ARE ABANDONED OR ACTIVE. WHEN A UTILITY IS ENCOUNTERED AND IS WITHIN THE PATH OF A NEW UTILITY, THE CONTRACTOR SHALL VERIFY ABANDONMENT. IF NOT ABANDONED CONTRACTOR SHALL EITHER RELOCATE UTILITY AND/OR CONNECT IT TO THE NEW UTILITY SYSTEM. ALL WORK SHALL BE REVIEWED AND APPROVED BY THE ENGINEER.
- 19. CONTRACTOR SHALL BE RESPONSIBLE FOR EXCAVATION, SUBGRADE PREPARATION INSTALLATION OF ARCH CONCRETE FOUNDATION AS DEPICTED ON SHEET S1.0 (BY JSN ASSOCIATES, INC.), BACKFILL & COMPACTION FOR THE ARCH FOUNDATION. WORK SHALL INCLUDE BUT NOT BE LIMITED TO:
 - PROVIDING SAFE ACCESS TO THE EXCAVATION
 - BARRIER PROTECTION TO THE EXCAVATION
 - ELECTRICAL CONDUIT FROM POWER SUPPLY (FORMER STREET LIGHTS) TO WITHIN 1' OF FOUNDATION PIER
 - REVIEW OF JSN STRUCTURAL DRAWING & FOLLOWING THEIR SITE WORK DIRECTIONS
 - INSTALLATION OF CONCRETE FOUNDATION
 - COORDINATION W/ARCH MANUFACTURER
- 20. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING EXISTING PLANTERS AND EXPOSING FOUNDATION. CONTRACTOR SHALL CONSTRUCT A SAWCUT SHELF IN THE EXISTING FOUNDATION. INSTALLATION OF CONCRETE FOUNDATION. INSTALL NEW BRICK ON EXPOSED AREAS. BRICK SHALL MATCH EXISTING BRICK & SAMPLES SHALL BE SUPPLIED TO ENGINEER FOR APPROVAL. BRICK INSTALLATION SHALL BE SATISFATORY TO BOTH THE ENGINEER & OWNER.
- 21. IN ADDITION TO THE SCHEDULING COORDINATION NOTES ON THESE PLANS, CONTRACTOR SHALL MAKE PROVISIONS TO THE SCHEDULING REQUIREMENTS NOTED IN THE PROJECT MANUAL.

CONSTRUCTION SEQUENCING NOTES

- 1. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE THE ENGINEER AND THE CITY OF PORTSMOUTH WITH A WRITTEN NARRATIVE OUTLINING THE CONSTRUCTION MEANS AND METHODS TO BE USED. THE NARRATIVE SHALL INCLUDE A PRELIMINARY SCHEDULE OF KEY MILESTONES. IT SHALL INCLUDE COORDINATION AND TIMING OF WORK WITH THE PUBLIC UTILITIES. SCHEDULE SHALL BE UPDATED AND SUBMITTED TO THE ENGINEER ON A WEEKLY BASIS.
- 2. SEE PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.
- 3. THE CONTRACTOR SHALL CONDUCT EXPLORATORY EXCAVATIONS WITH THE ENGINEER PRIOR TO STARTING OVERALL CONSTRUCTION ACTIVITIES TO IDENTIFY POSSIBLE CONFLICTS. THE ENGINEER HAS IDENTIFIED TWO POSSIBLE AREAS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY ADDITIONAL LOCATIONS FOR CONFLICTS. PAYMENT FOR EXPLORATORY EXCAVATIONS SHALL BE CONSIDERED SUBSIDERARY.
- 4. TEMPORARY MATERIAL STOCKPILE AREAS SHALL BE LIMITED TO THE CHESTNUT STREET PORTION OF THE PROJECT
- 5. INSTALL AND MAINTAIN TEMPORARY EROSION MEASURES PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL MAINTAIN DEVICES THROUGHOUT CONSTRUCTION IN ACCORDANCE WITH THE EROSION CONTROL NOTES AND DETAILS
- 6. INSTALL TEMPORARY AND TEST TEMPOARY WATER TO ALL PROPERTIES AFFECTED BY THE CONSTRUCTION PRIOR TO TERMINATING EXISITNG WATER MAIN

DRAINAGE NOTES

- 1. IN GENERAL ALL CATCH BASINS AND DRAIN MANHOLES SHALL BE SET IN THE LOCATIONS DEPICTED ON THE PLANS. IT IS THE INTENT OF THE DESIGN THAT THE CATCH BASINS SHALL BE SET PARALLEL TO AND AT THE CURBLINE. CATCH BASIN FRAMES AND GRATES SHALL BE ADJUSTED WHERE POSSIBLE TO MINIMIZE THE CUTTING OF BRICK AND CONCRETE PAVERS.
- 2. ALL FRAMES AND GRATES IN PAVED SURFACES SHALL BE SET AT BINDER COURSE GRADE. STRUCTURES IN PAVERS SHALL BE SET 1/8-INCH TO 1/4-INCH BELOW FINISH GRADE.
- 3. ALL MANHOLES, CATCH BASINS AND OTHER CONCRETE STRUCTURES SHALL BE SUPPLIED WITH A MINIMUM OF 6-INCHES OF PERIPHERY MONOLITHIC SOLID WALL CONCRETE BETWEEN PENETRATIONS AND JOINTS.
- 4. ALL DRAINAGE STRUCTURES SHALL BE CLEANED PRIOR TO ACCEPTANCE. CONTRACTOR SHALL SUBMIT CERTIFIED DOCUMENTATION TO THE ENGINEER.
- 5. ALL DRAINAGE PIPE SHALL BE SMOOTH WALL HDPE.
- 6. ALL ROOF DRAINS, GUTTERS AND OTHER STORM DRAINAGE SHALL BE CONNECTED INTO THE NEW STORM DRAINAGE SYSTEM.

WATER DISTRIBUTION NOTES:

- 1. THE CONTRACTOR SHALL SUBMIT A DETAILED PLAN FOR SUPPLYING TEMPORARY WATER TO THE IMPACTED CUSTOMERS A MINIMUM OF 14-DAYS PRIOR TO EXECUTING SAID PLAN.
- CONTRACTOR SHALL PROVIDE IMPACTED CUSTOMERS WITH A SCHEDULE 14-DAYS IN ADVANCE OF ANY PLANNED INTERRUPTIONS.
- 3. ALL WATER MAIN INSTALLATION AND SERVICE CONNECTIONS SHALL CONFORM TO PORTSMOUTH WATER DEPARTMENT STANDARDS. WATER MAIN SHALL BE WRAPPED IN A WATERTIGHT POLYETHYLENE WRAPPING. ALL JOINTS SHALL HAVE THREE BRASS WEDGES PER JOINT.
- 4. ALL GATE VALVES, TEES, AND BENDS SHALL HAVE RESTRAINED MECHANICAL JOINTS AND THRUST BLOCK RESTRAINTS, SUBSIDIARY TO WATER MAIN CONSTRUCTION.
- 5. MAINTAIN A MINIMUM OF 10-FEET HORIZONTAL DISTANCE (WHERE POSSIBLE) AND 18-INCHES VERTICAL DISTANCE BETWEEN WATER MAIN AND SEWER PIPING UNLESS SPECIFIED ON THE PLANS.
- 6. ALL WATER SERVICE AND FIRE SUPPRESSION CONNECTIONS SHALL MATCH THE EXISTING SIZES UNLESS NOTED OTHERWISE ON THE PLANS. IT ASSUMED FOR THE BASIS OF THE BID DRAWINGS THAT THE MINIMUM SIZE SHALL BE 1-INCH DIAMETER.

SANITARY SEWER NOTES:

- 1. THE SEWER CONSTRUCTION SHALL PROCEED FROM THE LOWEST POINT UPWARD UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 2. SEWER CONNECTIONS TO SUMP PUMPS, PERIMETER DRAINS OR ROOF DRAINAGE SHALL BE PROHIBITED.
- 3. THE CONTRACTOR SHALL PHASE THE SEWER INSTALLATIONS SO AS TO MINIMIZE DISRUPTIONS TO THE BUSINESSES AND RESIDENTIAL PROPERTIES. BYPASS PUMPING OR OTHER APPROVED METHODS SHALL BE USED AS NECESSARY TO MAINTAIN ACTIVE SEWER AND SHALL BE CONSIDERED SUBSIDIARY TO THE WORK. INTERRUPTIONS TO SEWER LATERALS SHALL NOT CAUSE INTERNAL BACKUPS TO BUILDING PLUMBING.
- 4. ALL SEWER SERVICE LATERALS SHALL BE A MINIMUM OF 6-INCH DIAMETER. LATERALS SHALL BE CONSTRUCTED WITH A MINIMUM OF 0.02 FT/FT SLOPE. CONTRACTOR SHALL BE RESPONSIBLE FOR FITTINGS TO CONNECT TO EXISTING SERVICES. CONNECTIONS SHALL BE CONSIDERED SUBSIDIARY TO THE WORK.

LEACHE

<u>LEC</u>	<u>SEND</u>
∅	WOOD FENCE POST
	TAX SHEET — LOT NUMBER
	ROCKINGHAM COUNTY REGISTRY OF DEEDS
	.EDGE OF PAVEMENT
	VERTICAL FACED GRANITE CURB .MODULAR BLOCK RETAINING WALL
	BRICK RETAINING WALL
	GRANITE RETAINING WALL
<u>₽</u>	.PARK METER KIOSK BOLLARD
	
<u> </u>	ACCESSIBLE SPACE
ø	
•=	.UTILITY POLE W/TRANSFORMER
ф	LIGHT POLE .UTILITY POLE WITH ARM & LIGHT
-0	
_ *************************************	ELECTRICAL MANHOLE
•	ELECTRICAL CONDUIT
	ELECTRIC METER
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	GAS VALVE WATER GATE VALVE
4 S n	WATER SHUT OFF VALVE
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	FIRE CONNECTION
=	
	DRAIN MANHOLE
	ROOF DOWNSPOUT
-	SEWER MANHOLE
₩	DECIDUOUS TREE
*	CONIFEROUS SHRUB
	DECIDUOUS SHRUB
— W —	WATER LINE SEWER LINE
—D—	
— G —	
	UNDERGROUND ELECTRIC UNDERGROUND UTILITIES
1222	CEMENT CONCRETE
	BRICK PAVERS
RXXXXX	GRANITE COBBLES
	RETAINING WALL
	LANDSCAPED AREA
ROW ×12.5	RIGHT OF WAY
·—·	PROP. DRAIN STRUCTURE
□ ■ □ ■	PROP. DRAIN LINE
——PF——PUT—	PROPOSED UNDERGROUND ELECTRICAL, TELECOMMUNICATIONS
· <u>-</u>	PROPOSED GAS
PG ———	PROP. SEWER MANHOLE
⑤ 	PROP. SEWER LINE
r3	THE
♥ 🖔	PROP. WATER STRUCTURE
PW	PROP. WATERLINE
тилизанализиранской полицинализираниями VGC	PROP. EDGE OF PAVEMENT/VGC
VGC	PROP. VERTICAL GRANITE CURB
100	EXISTING CONTOUR
75.5 X	PROP. SPOT GRADE
14	PROPOSED CONTOUR
	PROP. SIGN
•	
	SAWCUT LINE/MATCH EXISTING
	PROPOSED LIMIT OF DISTURBANCE
— W → ₩ X	EXISTING WATER/CURB STOP/VALVE/HYDRANT
S(S)	EXISTING SEWER/MANHOLE
—G———	EXISTING GAS/VALVE
OHEUGE 	EXIST. OVER/UNDERGROUND UTILITIES/POLE
	FIFE MANUAL (SECTOR CARINET /PHILL BOY (TRANSFORMER

ELEC MANHOLE/SECTOR CABINET/PULL BOX/TRANSFORMER

PROPOSED THRUST BLOCK/WATER/CURB STOP/VALVE/HYDRANT

PROPOSED DRAINAGE STRUCTURES (HARD PIPE)/CB/DCB/DMH/FES

EXISTING DRAINAGE/CB/DMH

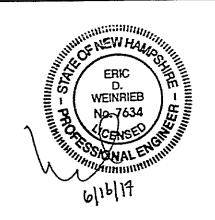
PROPOSED SEWER/MANHOLE/CLEANOUT

-MH-SC-PB-O-

▶—PW—**◆**→★

ENGINEERING. INC.

133 COURT STREET PORTSMOUTH, NH 03801 www.ALTUS-ENG.com (603) 433-2335



SSUED FOR:

BIDDING **ISSUE DATE:**

EDW 06/16/17

JUNE 16, 2017

<u>REVISIONS</u> DATE NO. DESCRIPTION EDW 03/21/17 0 DISCUSSION

I ISSUED FOR BIDDING

DRAWN BY:

APPROVED BY: 4087DS-ALT.DWG

SCALE: N.T.S.

OWNER:



CITY OF PORTSMOUTH 1 JUNKINS AVENUE PORTSMOUTH, N.H. 03801

PROJECT:

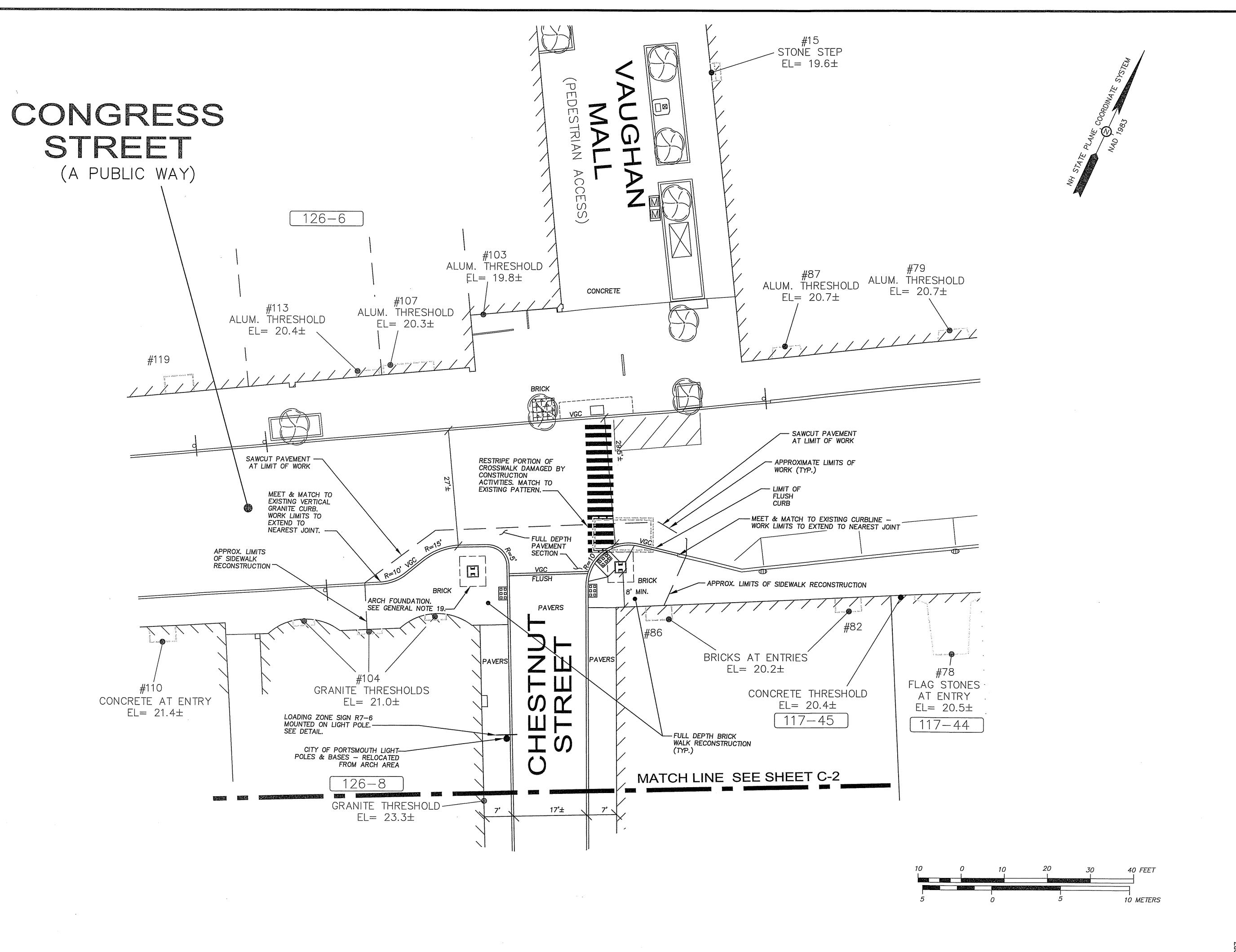
CONGRESS & CHESTNUT STREET STREETSCAPE & UTILITIES **PROJECT**

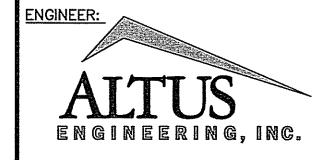
CONGRESS STREET TO PORTER STREET

GENERAL NOTES & LEGEND

SHEET NUMBER:

GN-1





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ISSUED FOR:

ISSUE DATE:

BIDDING

JUNE 16, 2017

S_ IPTION BY

O ENGINEERING DESIGN EDW 03/21/1

1 ELIMINATE WORK EDW 06/07/1

ISSUED FOR BIDDING EDW 06/16/17

4087-ADD ALT.DWG

DRAWN BY: RLH
APPROVED BY: EDW

SCALE

24" x 36" - 1" = 10' 12" x 18" - 1" = 20'

OWNER/APPLICANT:



CITY OF PORTSMOUTH

1 JUNKINS AVENUE

PORTSMOUTH, N.H. 03801

PROJECT:

CHESTNUT STREET
STREETSCAPE
PROJECT

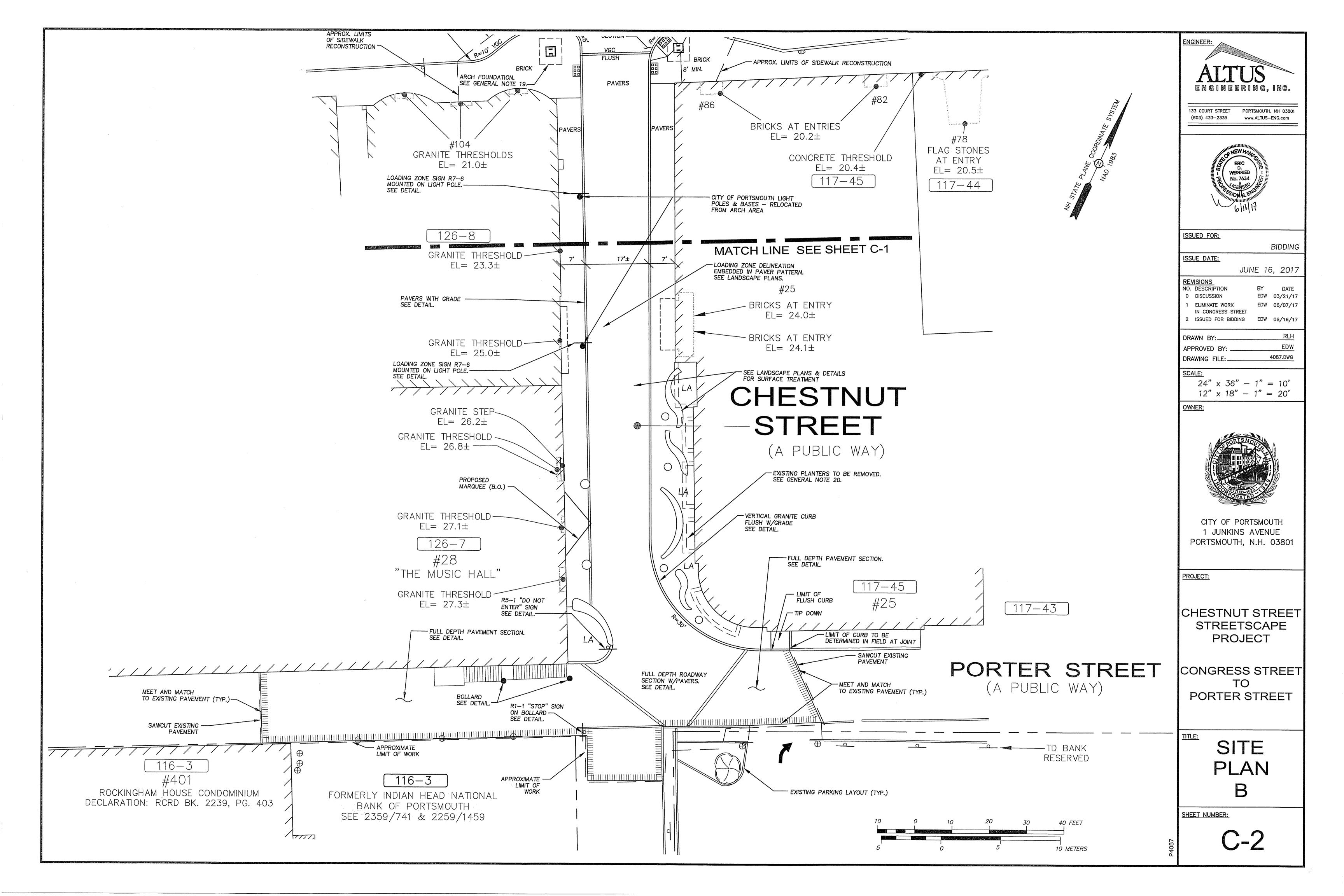
CONGRESS STREET
TO
PORTER STREET

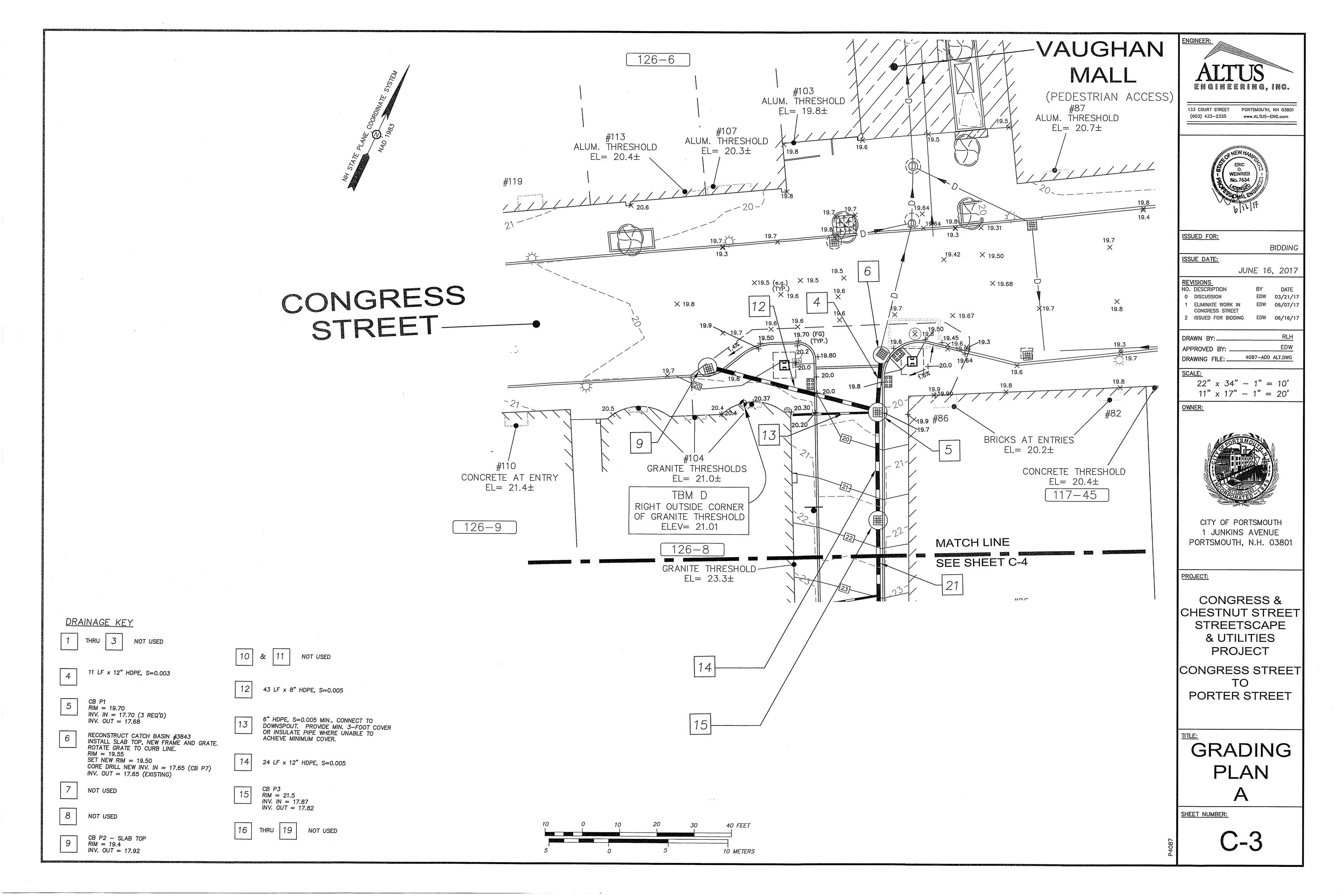
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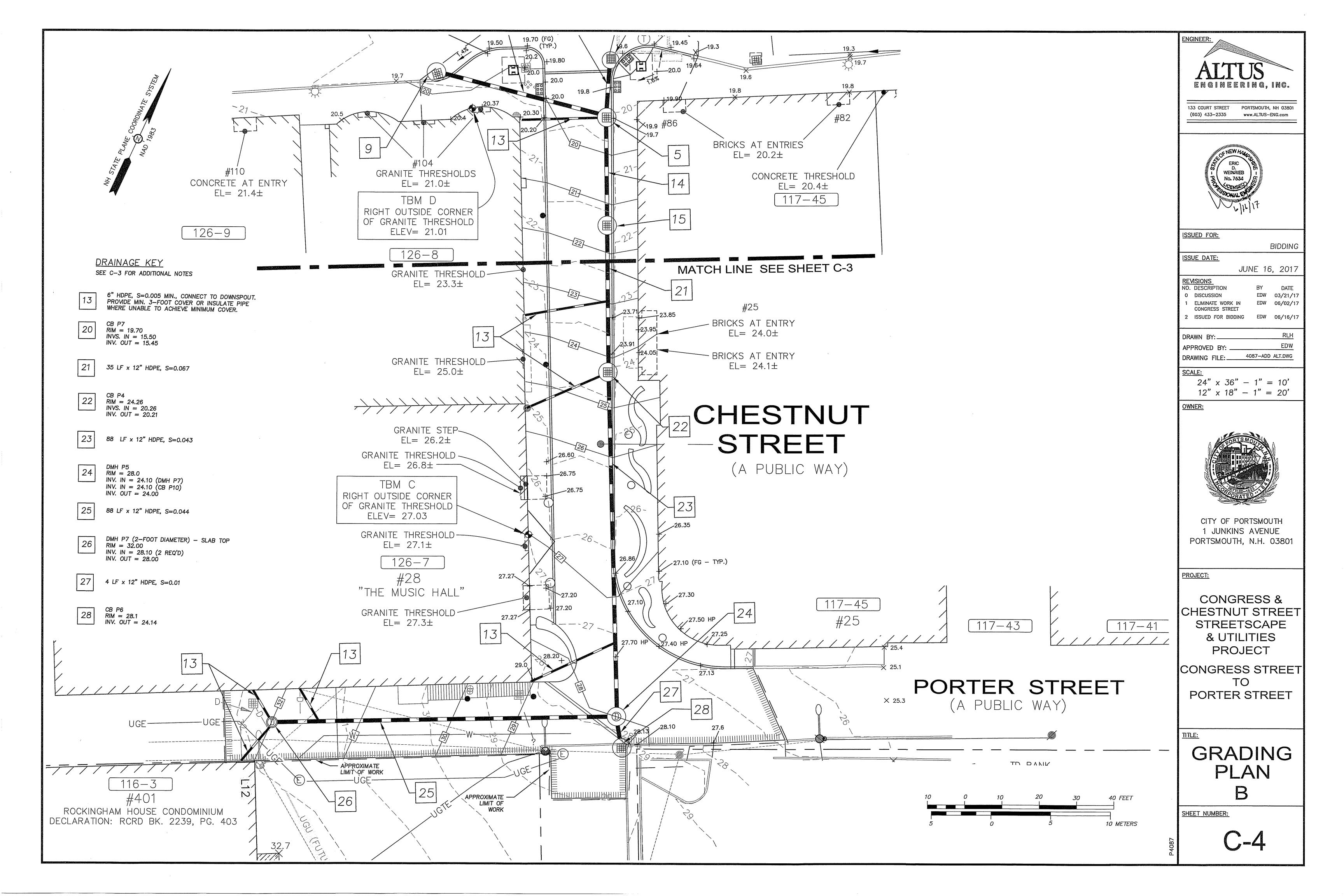
SITE PLAN A

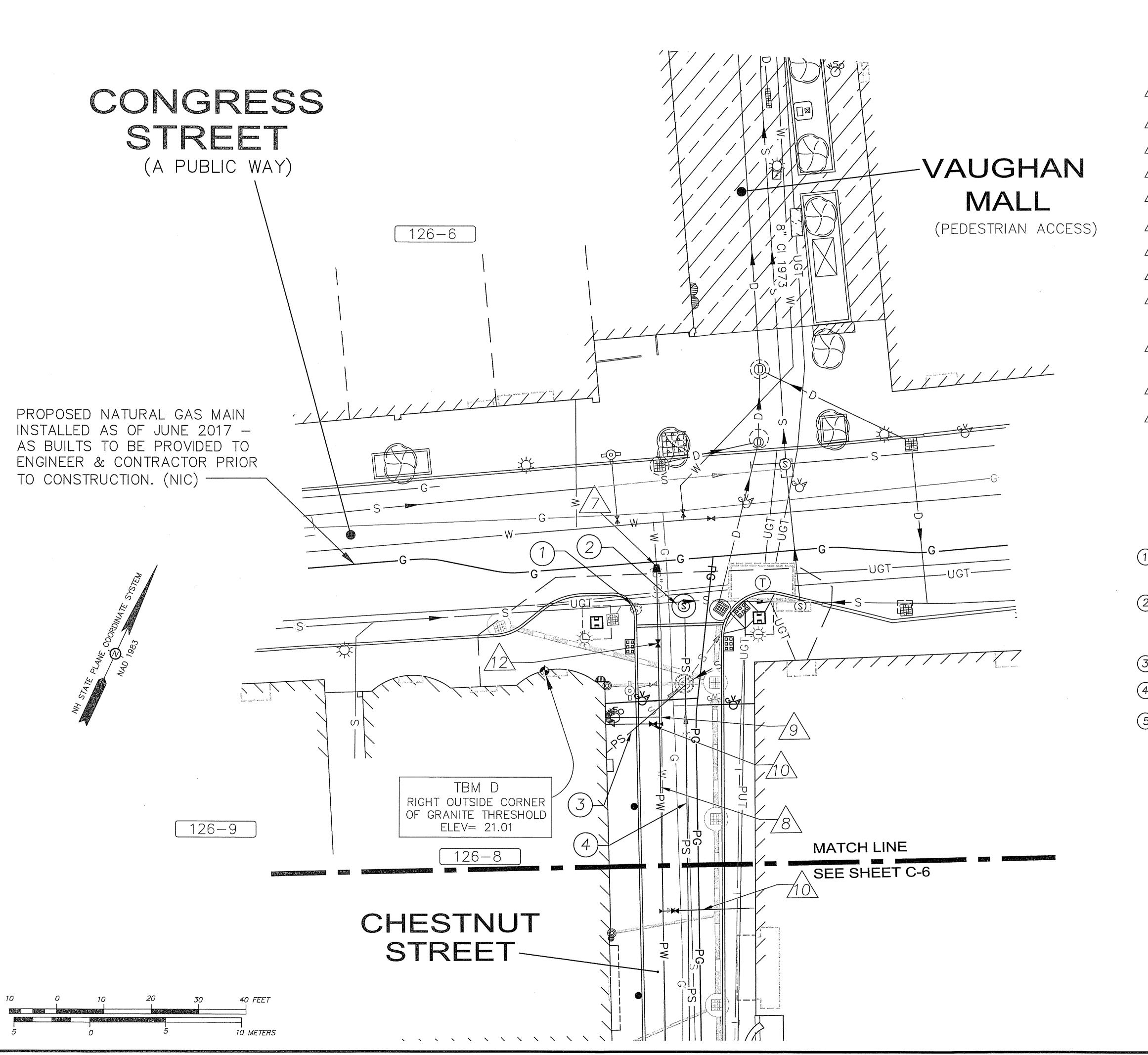
SHEET NUMBER:

C-1









WATER KEY
SEE SHEET C-6 FOR ADDITIONAL NOTES

NOT USED

FURNISH AND INSTALL 6" \times 8" REDUCER TO TRANSITION FROM EXISTING PIPE TO NEW 8" D.I. PIPE

FURNISH AND INSTALL 8" DI WATER MAIN

FURNISH AND INSTALL WATER SERVICE LATERAL FOR EXISTING BUSINESSES. MATCH TO EXISTING SIZES UNLESS OTHERWISE INDICATED. APPROXIMATE LOCATIONS AS SHOWN ON PLANS.

FURNISH AND INSTALL FIRE SUPPRESSION SERVICE LATERAL, TEE & GATE VALVE FOR EXISTING BUSINESSES. MATCH TO EXISTING SIZES UNLESS OTHERWISE INDICATED ON THE PLANS. APPROXIMATE LOCATIONS DEPICTED ON THE PLANS

FURNISH AND INSTALL 2" CURB STOP

FURNISH AND INSTALL 8" GATE VALVE

SEWER KEY

- SMH 2 STRUCTURE TO BE REMOVED CONNECT INLET AND OUT WITH 6" PVC SDR 21 MATCH TO EXISTING FLOWLINE
- SMH P1 RIM 19.70 INV. IN = 14.30 (SMH P7) INV. IN = 14.25 \pm (FROM FORMER SMH 2 - MATCH TO EXIST.) INV. OUT = 14.25 \pm (MATCH TO EXISTING)
- INSTALL SERVICE WYE CONNECTION
- 168 LF x 8" PVC, SDR 21, S=0.041
- 5 THRU 8 NOT USED

ENGINEERING, INC.

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ISSUED FOR:

ISSUE DATE:

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JUNE 16, 2017

EDW 03/21/17

DRAWING FILE: 4087-ADD ALT.DWG

 $22" \times 34" - 1" = 10"$ $11" \times 17" - 1" = 20"$



CITY OF PORTSMOUTH 1 JUNKINS AVENUE PORTSMOUTH, N.H. 03801

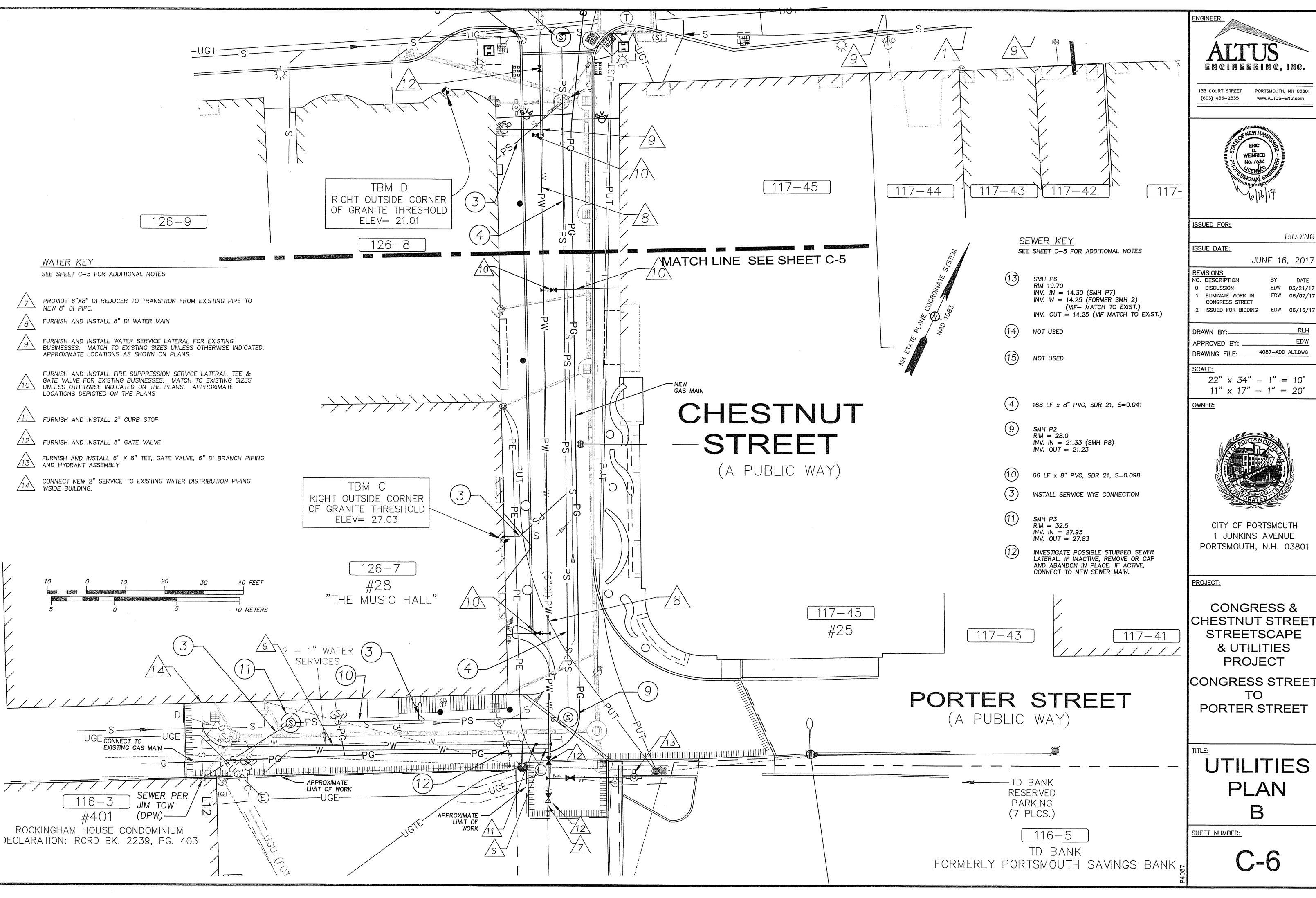
PROJECT:

CONGRESS & CHESTNUT STREET STREETSCAPE & UTILITIES **PROJECT**

CONGRESS STREET TO PORTER STREET

UTILITIES PLAN

SHEET NUMBER:



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BIDDING

JUNE 16, 2017 EDW 03/21/17

 $22" \times 34" - 1" = 10"$ $11" \times 17" - 1" = 20"$

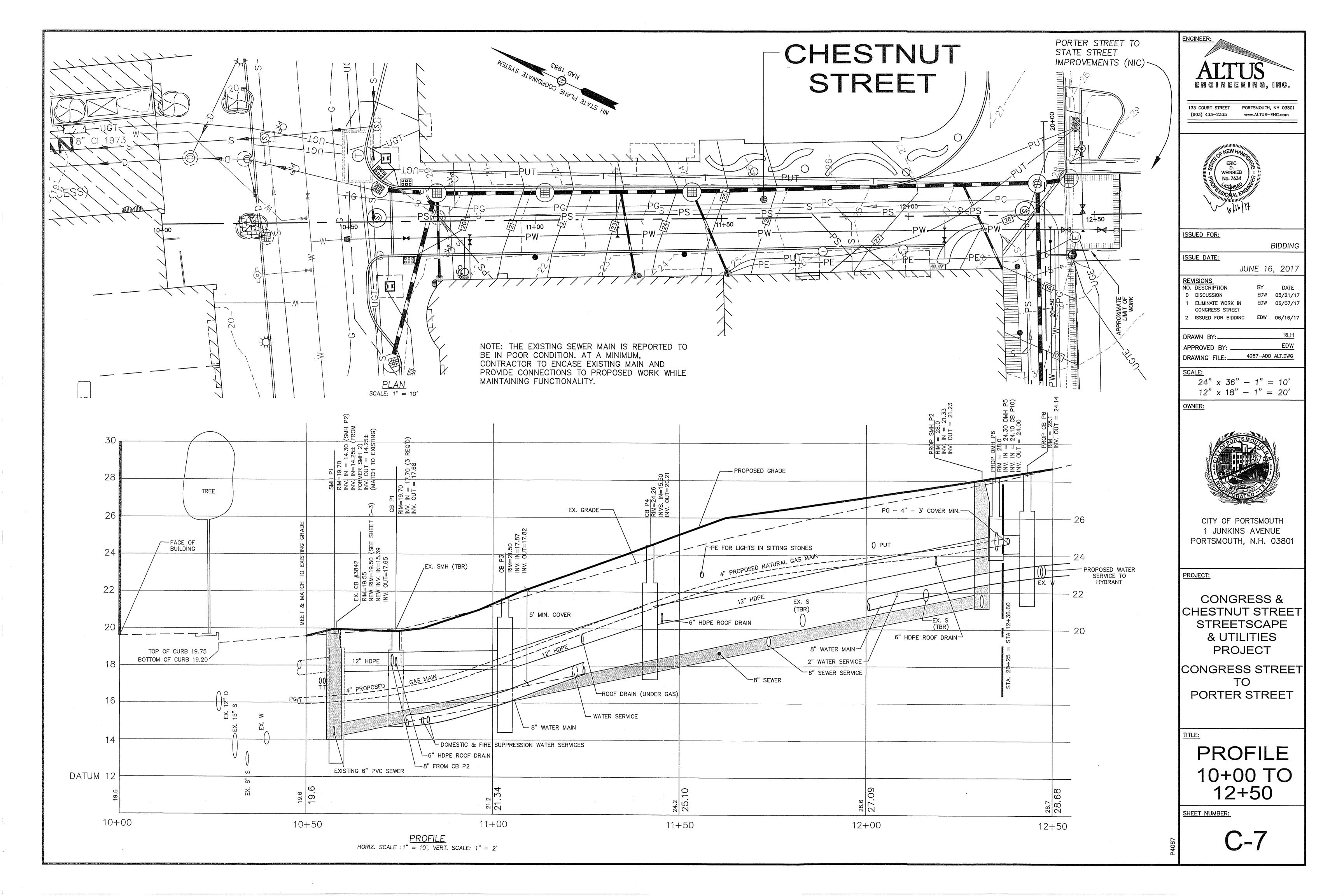


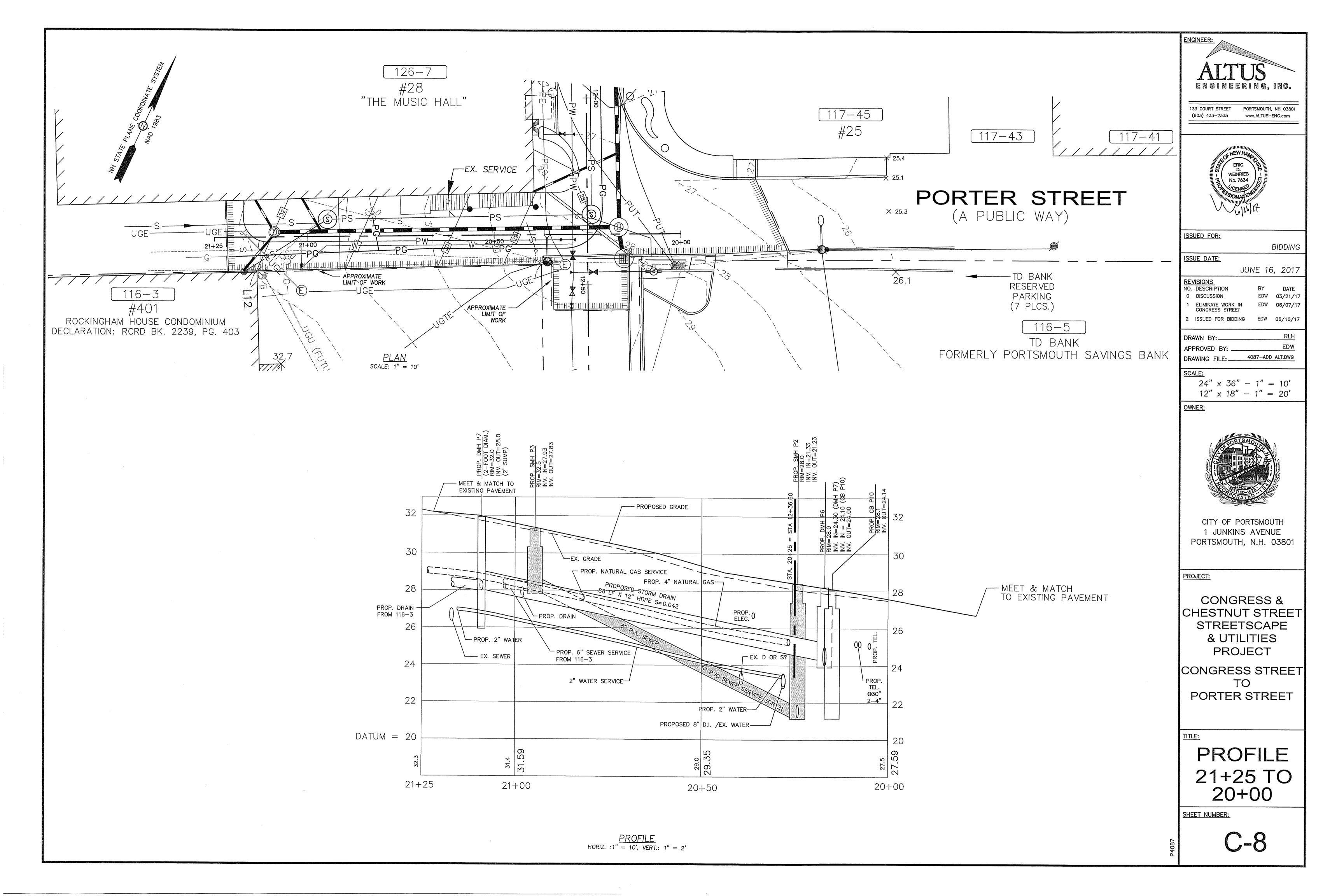
1 JUNKINS AVENUE PORTSMOUTH, N.H. 03801

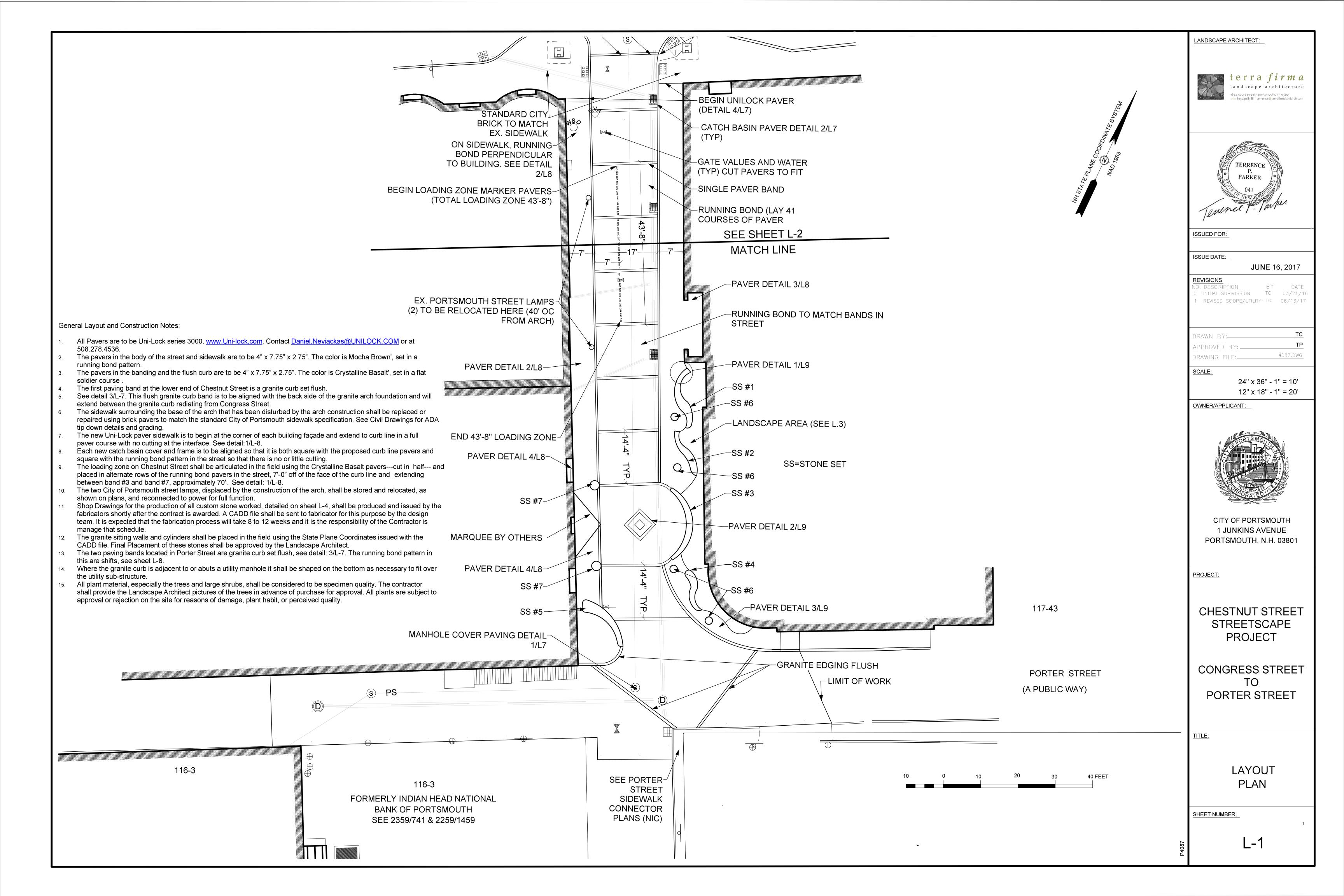
CONGRESS & CHESTNUT STREET STREETSCAPE & UTILITIES PROJECT

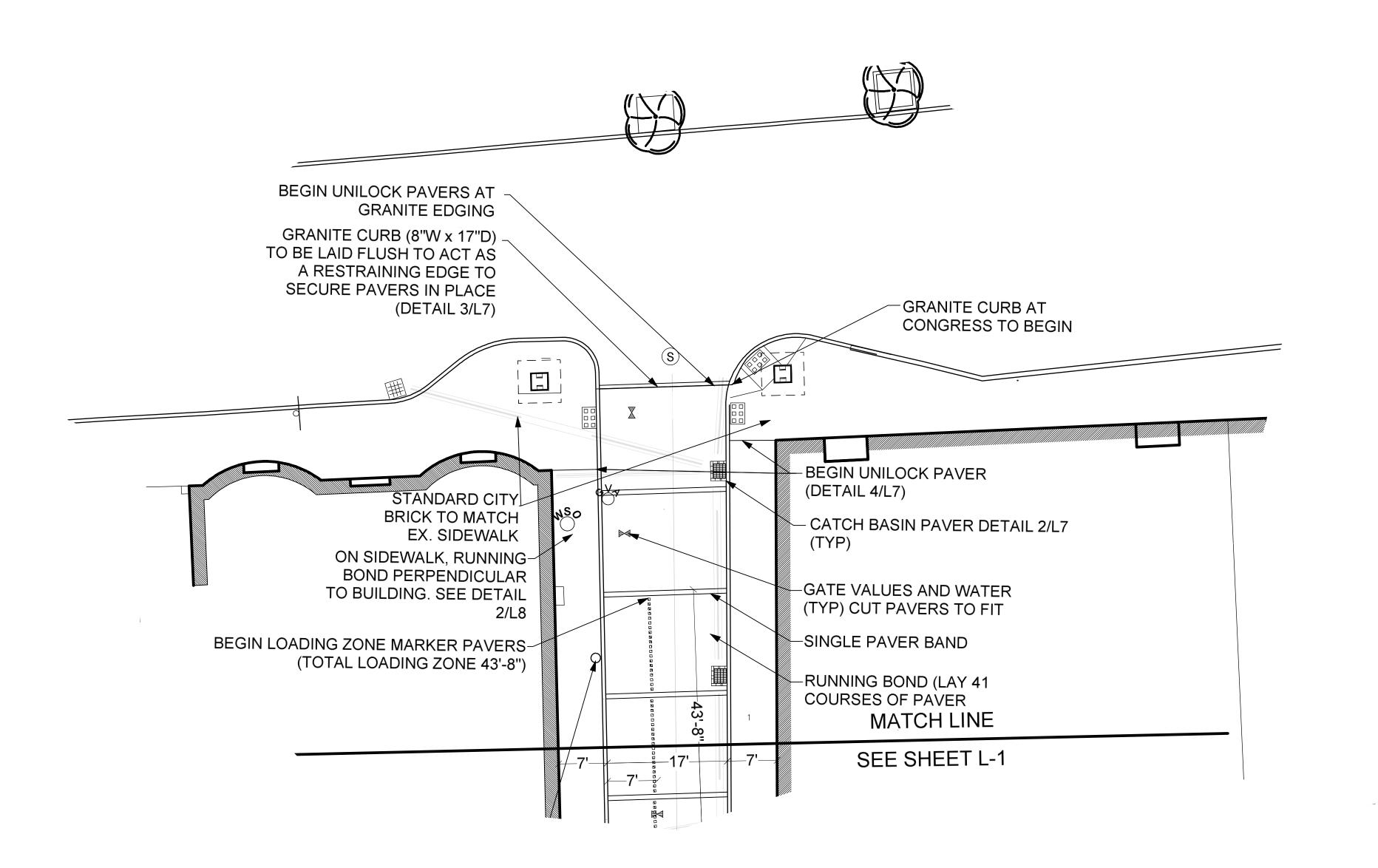
CONGRESS STREET PORTER STREET

> UTILITIES PLAN



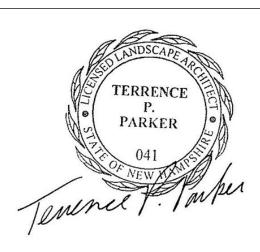






LANDSCAPE ARCHITECT:





ISSUED FOR:

ISSUE DATE:

REVISIONS
NO DESCRIPTION BY DATE

JUNE 16, 2017

1 REVISED SCOPE/UTILITY TC 06/16/17

INITIAL SUBMISSION TC 03/21/16

DRAWN BY: TC

APPROVED BY: TP

DRAWING FILE: 4087.DWG

SCALE:

24" x 36" - 1" = 10' 12" x 18" - 1" = 20'

OWNER/APPLICANT:



CITY OF PORTSMOUTH
1 JUNKINS AVENUE
PORTSMOUTH, N.H. 03801

PROJECT:

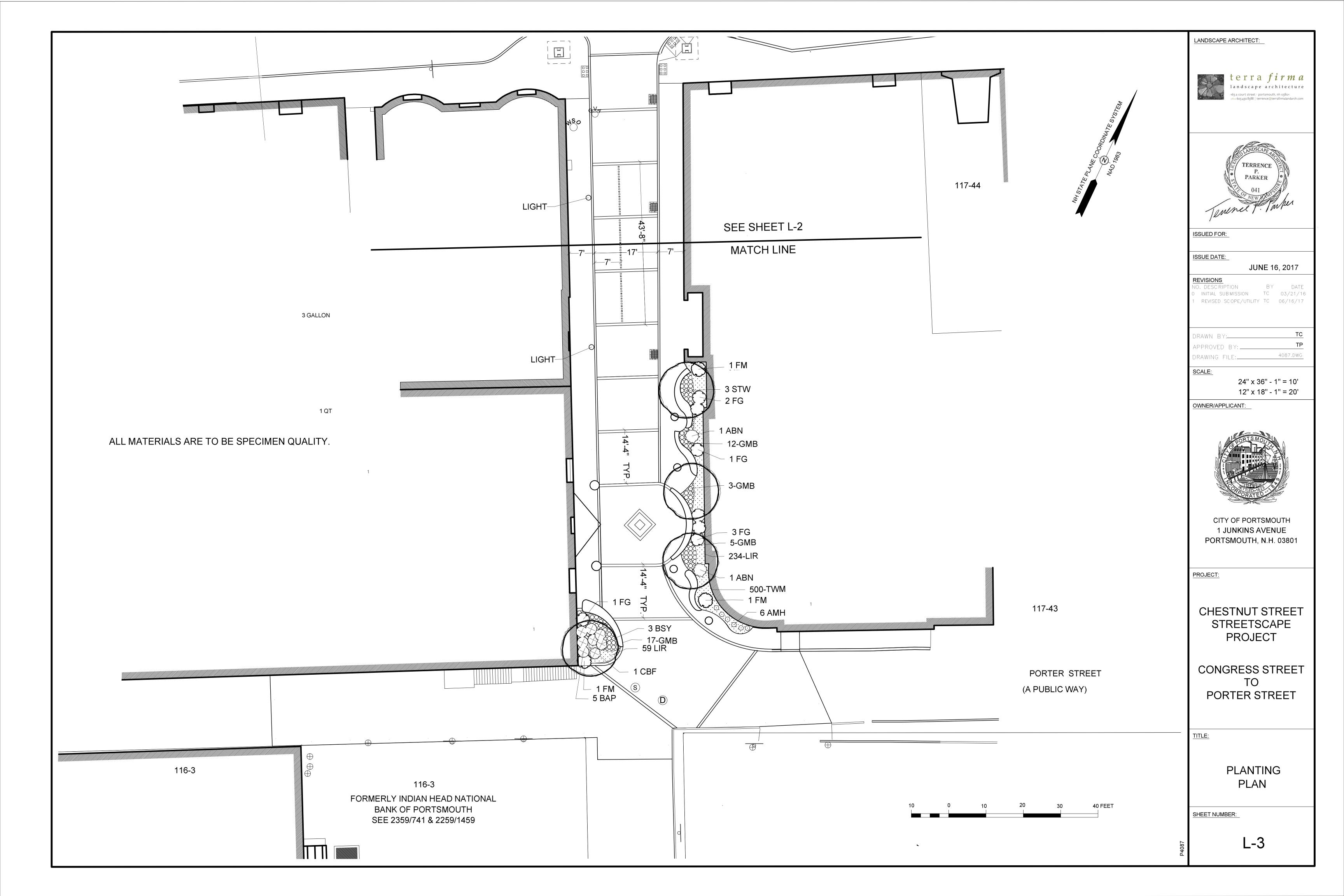
CHESTNUT STREET STREETSCAPE PROJECT

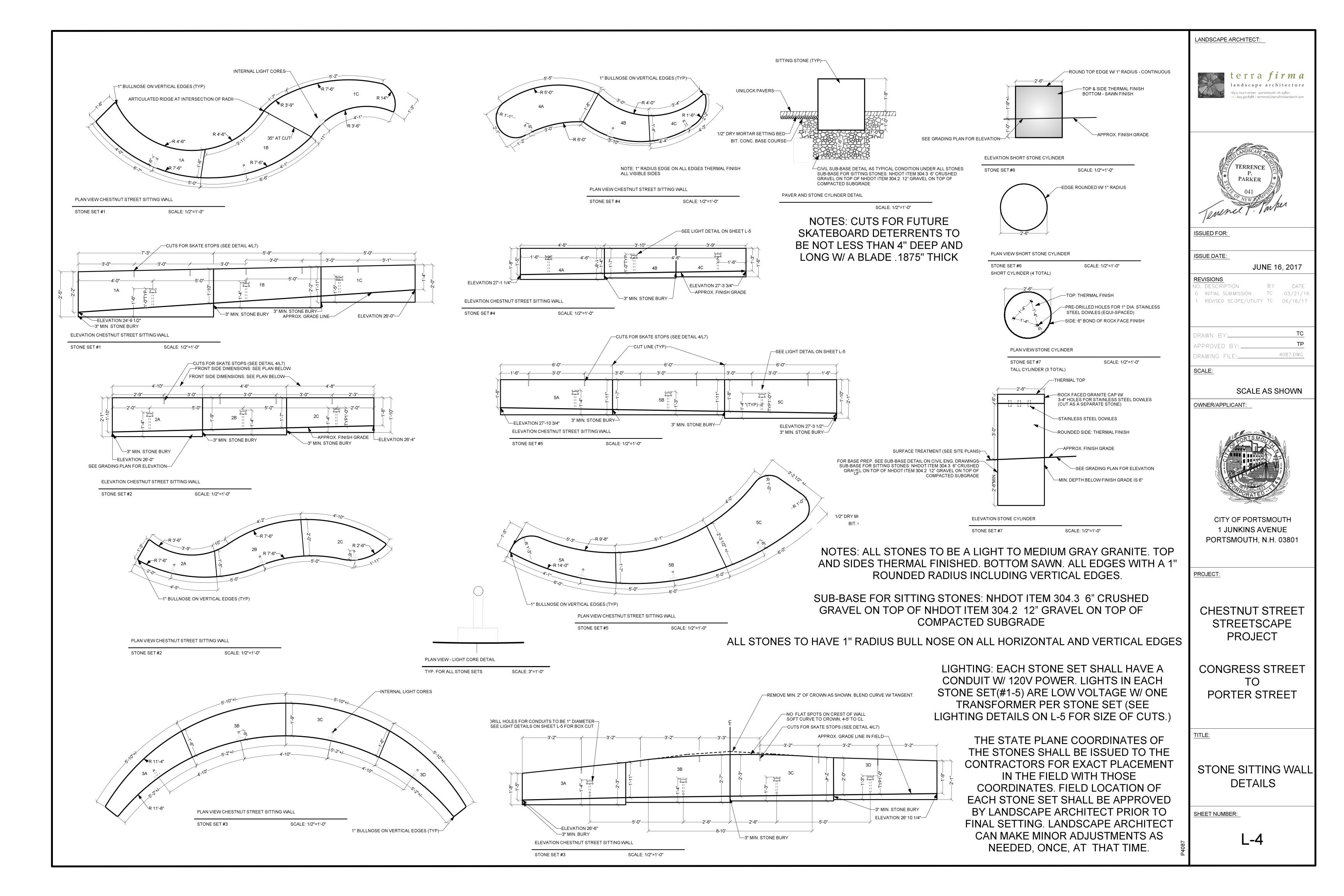
CONGRESS STREET TO PORTER STREET

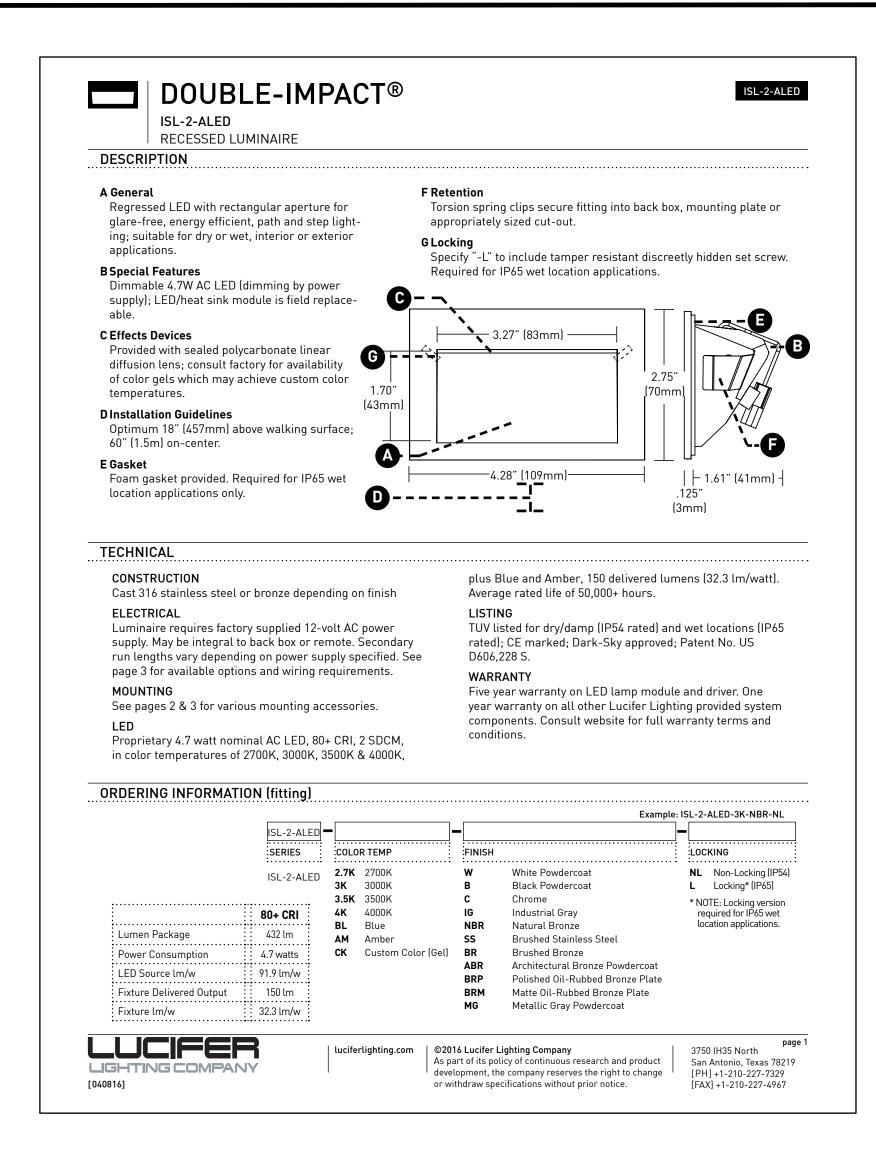
LANDSCAPE PLAN

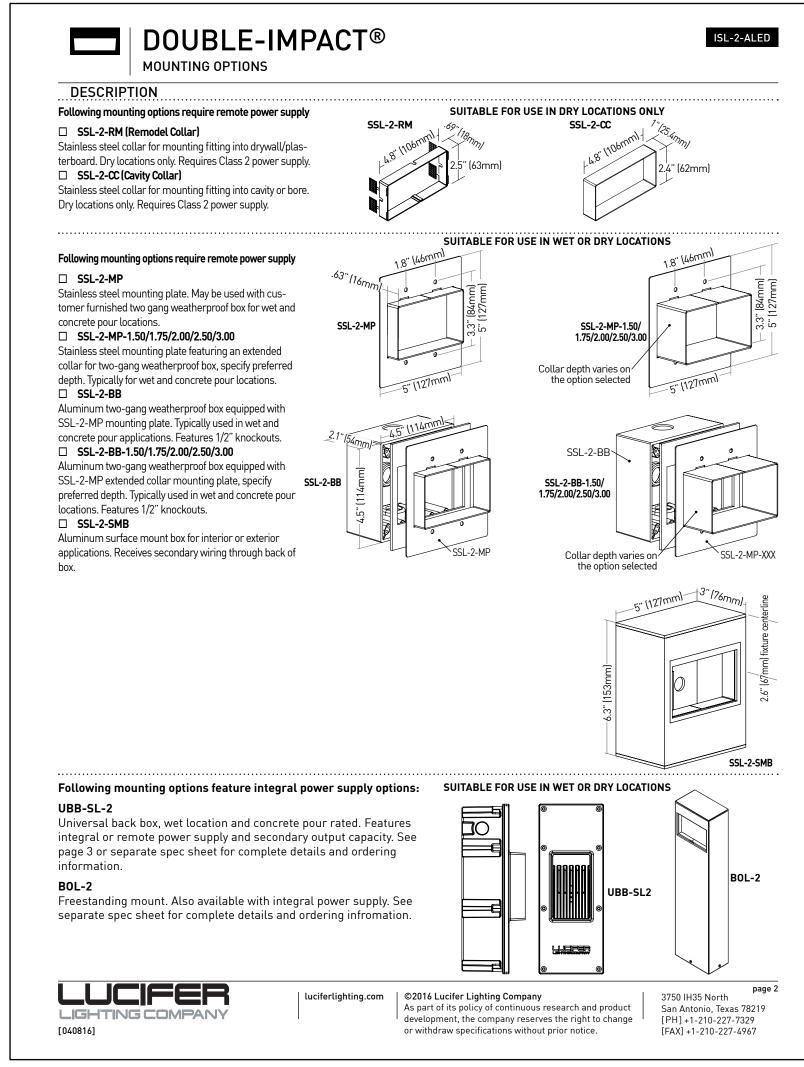
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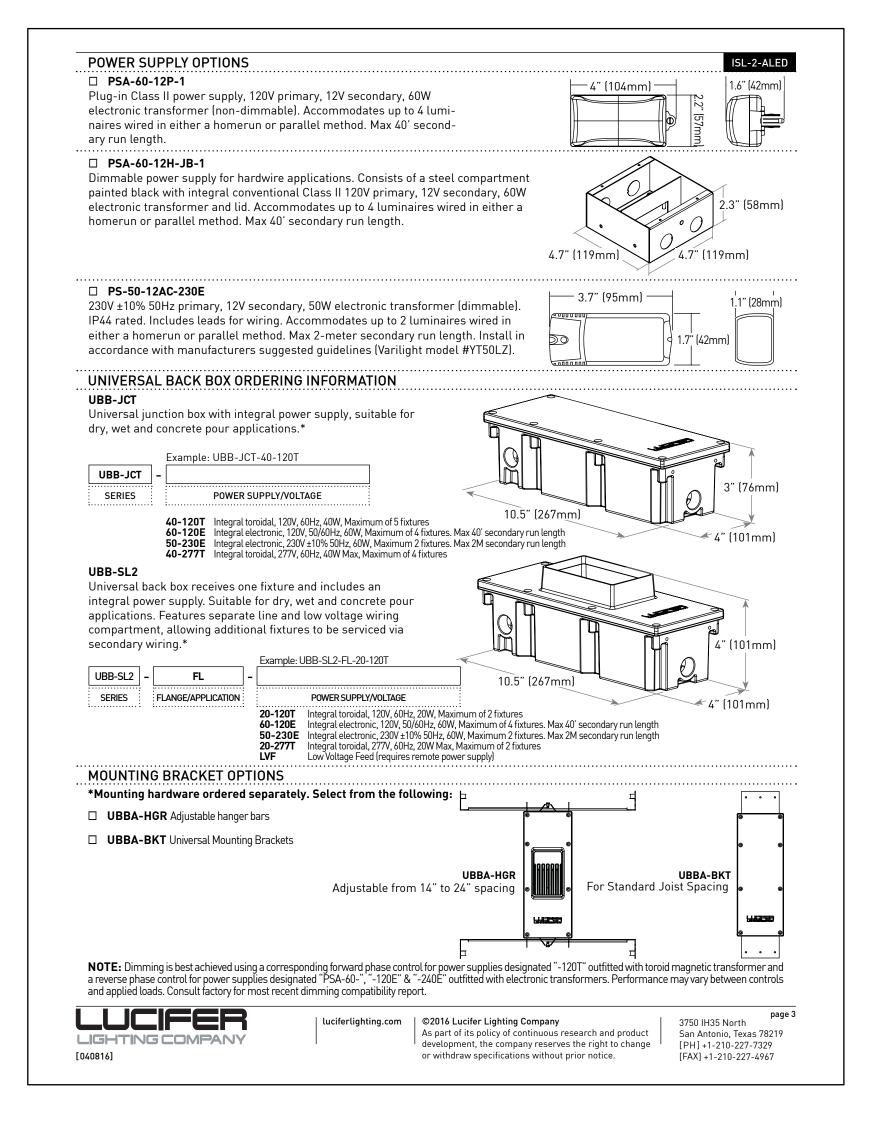
L-2











WALL LIGHT DETAIL

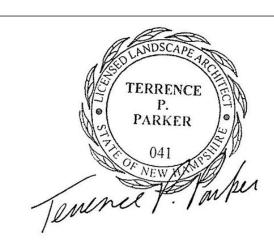


WALL LIGHT DETAIL

SCALE: 3"=1'-0"

LANDSCAPE ARCHITECT:





ISSUED FOR:

ISSUE DATE:

JUNE 16, 2017

REVISIONS

NO. DESCRIPTION BY DATE

O INITIAL SUBMISSION TC 03/21/16

1 REVISED SCOPE/UTILITY TC 06/16/17

DRAWN BY: TC

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DRAWING FILE: 4087.DWG

SCALE:

SCALE AS SHOWN

OWNER/APPLICANT:



CITY OF PORTSMOUTH

1 JUNKINS AVENUE
PORTSMOUTH, N.H. 03801

PROJECT:

CHESTNUT STREET STREETSCAPE PROJECT

CONGRESS STREET
TO
PORTER STREET

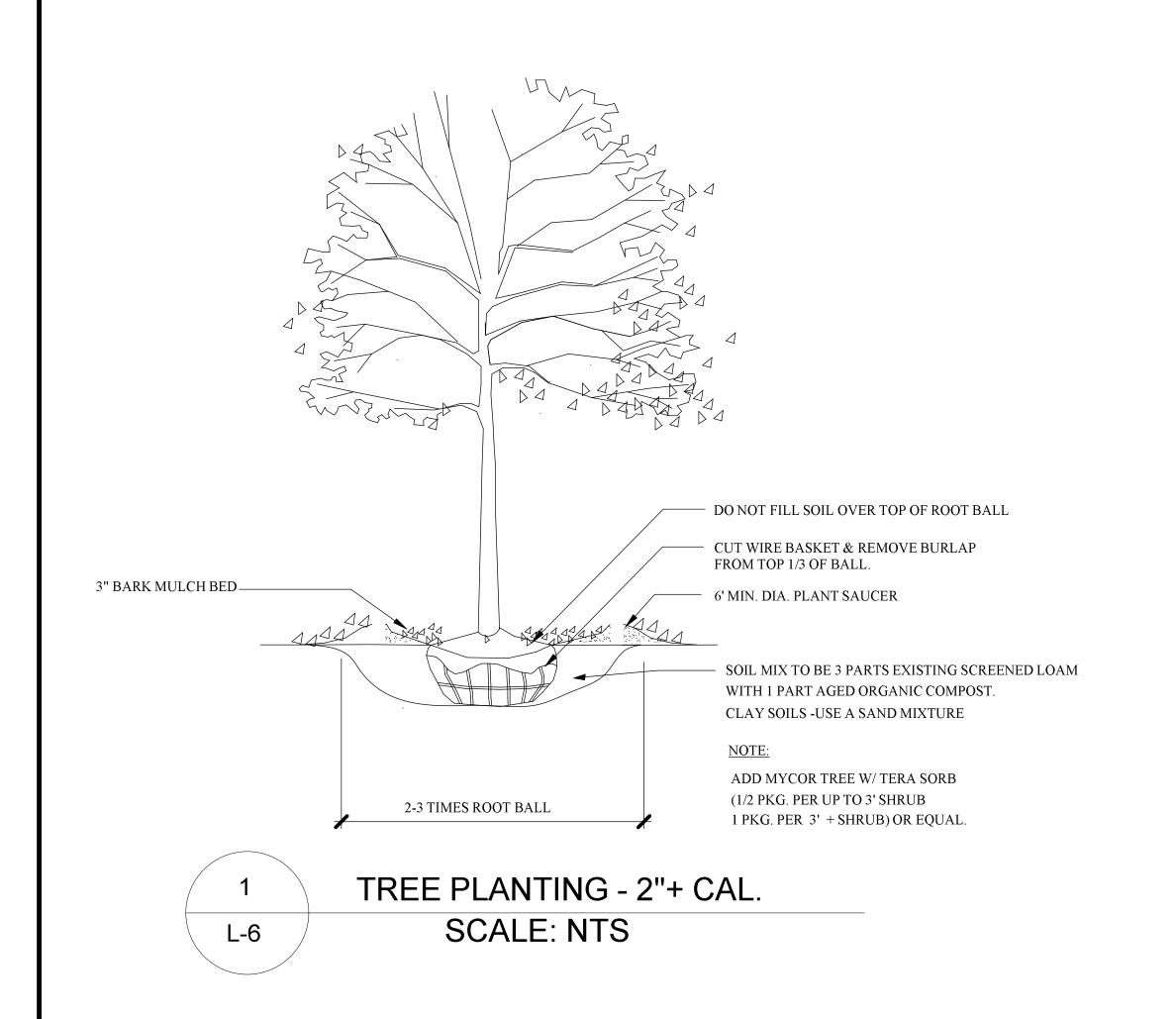
TITLE:

LIGHTING DETAILS

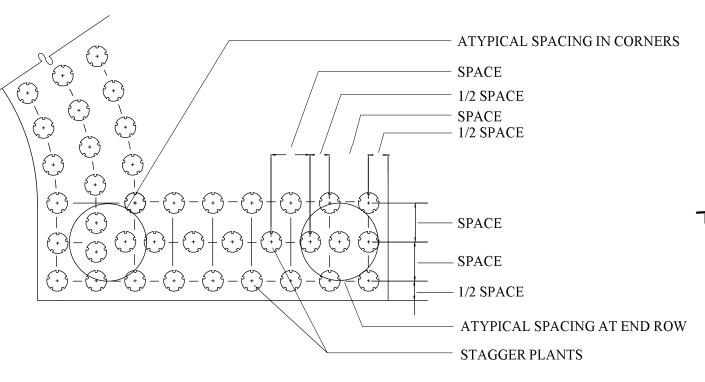
SHEET NUMBER:

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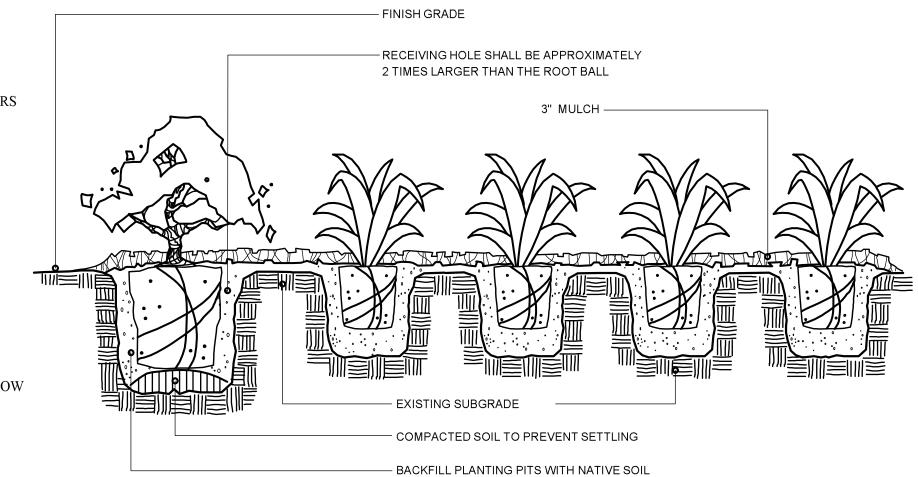
SOIL MIX TO BE 3 PARTS EXISTING SCREENED LOAM WITH 1 PART AGED ORGANIC COMPOST CLAY SOILS -USE A SAND MIXTURE APPLY 3" MIN. BARK MULCH PEEL & CUT BURLAP FROM TOP 1/3 OF BALL. ADD BONE MEAL TO SOIL MIX ADD MYCOR TREE W/ TERA SORB (1/2 PKG. PER UP TO 3' SHRUB 1 PKG. PER 3' + SHRUB) OR EQUAL 2-3 TIMES ROOT BALL **B&B SHRUB PLANTING** SCALE: NTS



NOTES:

1. PLACE PLANTS IN BED AS SHOWN, SPACING AS SPECIFIED IN PLANT SCHEDULE. 2. GROUNDCOVER SHALL BE TRIANGULAR SPACED IN ROWS PARALLEL TO STRAIGHT EDGES AND SHALL BE EVENLY SPACED IN ROWS PARALLEL TO CURVE EDGES.

GROUND COVER SPACING DETAIL SCALE: NTS



NOTE: SHRUBS SHALL BE PLANTED A MINIMUM OF 1" & NO MORE THAN 2" ABOVE FINISH GRADE, DEPENDING UPON SITE CONDITIONS.

L-6

SHRUB/GROUND COVER PLANTING DETAIL SCALE: NTS

LANDSCAPE NOTES:

1. THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK. 2. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTINGS SHOWN ON THE DRAWINGS.

3. ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.

4. ALL PLANT SUBSTITUTIONS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT. 5. ALL PLANT MATERIALS SHALL BE EXACTLY AS SPECIFIED BY THE LANDSCAPE ARCHITECT. IF PLANT SPECIES CULTIVARS ARE FOUND TO VARY FROM THAT SPECIFIED AT ANY TIME DURING THE GUARANTEE PERIOD, THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO HAVE THE CONTRACTOR REPLACE THAT PLANT MATERIAL. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANT DELIVERED TO THE SITE FOR AESTHETIC REASONS BEFORE PLANTING. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR THE QUALITY FOR ALL THE

6. PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, UPON DELIVERY OR AT THE JOB SITE WHILE WORK IS ON-GOING TO CONFORMITY TO SPECIFIED QUALITY, SIZE AND VARIETY. 7. PLANTS FURNISHED IN CONTAINERS SHALL HAVE THE ROOTS WELL ESTABLISHED IN THE SOIL MASS AND SHALL HAVE AT LEAST ONE (1) GROWING SEASON. ROOT-BOUND PLANTS OR INADEQUATELY SIZED CONTAINERS TO SUPPORT THE PLANT MAY BE DEEMED UNACCEPTABLE.

8. NO PLANT SHALL BE PUT IN THE GROUND BEFORE GRADING HAS BEEN FINISHED AND APPROVED BY THE LANDSCAPE ARCHITECT.

9. ALL PLANTS SHALL BE INSTALLED AND DETAILED PER PROJECT SPECIFICATIONS

10. ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24-HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL BE WATERED WEEKLY, OR MORE OFTEN IF NECESSARY, DURING THE FIRST GROWING

11. ALL PLANTS SHALL BE GUARANTEED BY THE CONTRACTOR FOR NOT LESS THAN ONE FULL YEAR FROM THE TIME OF PROVISIONAL ACCEPTANCE. DURING THIS TIME, THE OWNER SHALL MAINTAIN ALL PLANT MATERIALS IN THE ABOVE MANNER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSPECT THE PLANTS TO ENSURE PROPER CARE. IF THE CONTRACTOR IS DISSATISFIED WITH THE CARE GIVEN, HE SHALL IMMEDIATELY, AND IN SUFFICIENT TIME TO PERMIT THE CONDITION TO BE RECTIFIED, NOTIFY THE LANDSCAPE ARCHITECT IN WRITING OR OTHERWISE FORFEIT HIS CLAIM. LANDSCAPE CONTRACTOR SHALL PRUNE PLANTINGS OF DEAD LIMBS OR TWIGS DURING THE FIRST YEAR OF GROWTH.

12. FINAL ACCEPTANCE BY THE LANDSCAPE ARCHITECT WILL BE MADE UPON THE CONTRACTOR'S REQUEST AFTER ALL CORRECTIVE WORK HAS BEEN COMPLETED.

13. LANDSCAPE CONTRACTOR SHOULD REPLACE DEAD PLANTINGS IMMEDIATELY UPON OWNER DIRECTION WITHIN THE WARRANTY PERIOD AND AGAIN AT THE END OF THE GUARANTEE PERIOD, THE CONTRACTOR SHALL HAVE REPLACED ANY PLANT MATERIAL THAT IS MISSING, NOT TRUE TO SIZE AS SPECIFIED, THAT HAVE DIED, THAT HAVE LOST THEIR NATURAL SHAPE DUE TO DEAD BRANCHES, EXCESSIVE PRUNING OR INADEQUATE OR IMPROPER CARE, OR THAT ARE, IN THE OPINION OF THE LANDSCAPE ARCHITECT, IN UNHEALTHY OR UNSIGHTLY CONDITION.

14. ALL LANDSCAPE AREAS TO BE GRASS COMMON TO REGION EXCEPT FOR INTERIOR LANDSCAPED ISLANDS OR WHERE OTHER PLANT MATERIAL IS CALLED FOR.

15. ALL TREES AND SHRUBS TO BE PLANTED IN MULCH BEDS WITH DEFINED AND CUT EDGES TO SEPARATE TURF GRASS AREAS.

16. FOR ANY LANDSCAPE AREA SO DESIGNATED TO REMAIN, WHETHER ON OR OFF-SITE, REMOVE WEEDS, ROCKS, CONSTRUCTION ITEMS, ETC., THEN APPLY GRASS SEED OR PINE BARK MULCH AS DEPICTED ON PLANS.

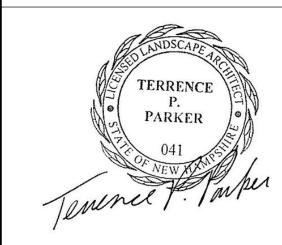
17. LANDSCAPE CONTRACTOR SHALL FEED AND PRUNE EX. TREES, ON OR JUST OFF SITE, THAT HAVE

EXPERIENCED ROOT BASE INTRUSION OR DAMAGE DURING CONSTRUCTION IMMEDIATELY AND FOR THE DURATION OF THE WARRANTY PERIOD AT THE DIRECTION OF THE LANDSCAPE ARCHITECT. 18. EXISTING TREES TO REMAIN SHALL BE PROTECTED WITH TEMPORARY SNOW FENCING AT THE EDGE OF THE EX. TREE CANOPY THE CONTRACTOR SHALL NOT STORE VEHICLES OR MATERIALS WITHIN THE LANDSCAPED

ADDITIONAL COST TO THE OWNER.

19. ALL MULCH AREAS SHALL RECEIVE A 2" LAYER OF SHREDDED PINE BARK MULCH. 20. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH PROJECT SPECIFICATIONS. landscape architecture

LANDSCAPE ARCHITECT:



SSUED FOR:

SSUE DATE:

REVISIONS INITIAL SUBMISSION TC 03/21/16 REVISED SCOPE/UTILITY TC 06/16/17

JUNE 16, 2017

4087.DWG RAWING FILE:_

SCALE:

SCALE AS SHOWN

OWNER/APPLICANT:



CITY OF PORTSMOUTH 1 JUNKINS AVENUE PORTSMOUTH, N.H. 03801

PROJECT:

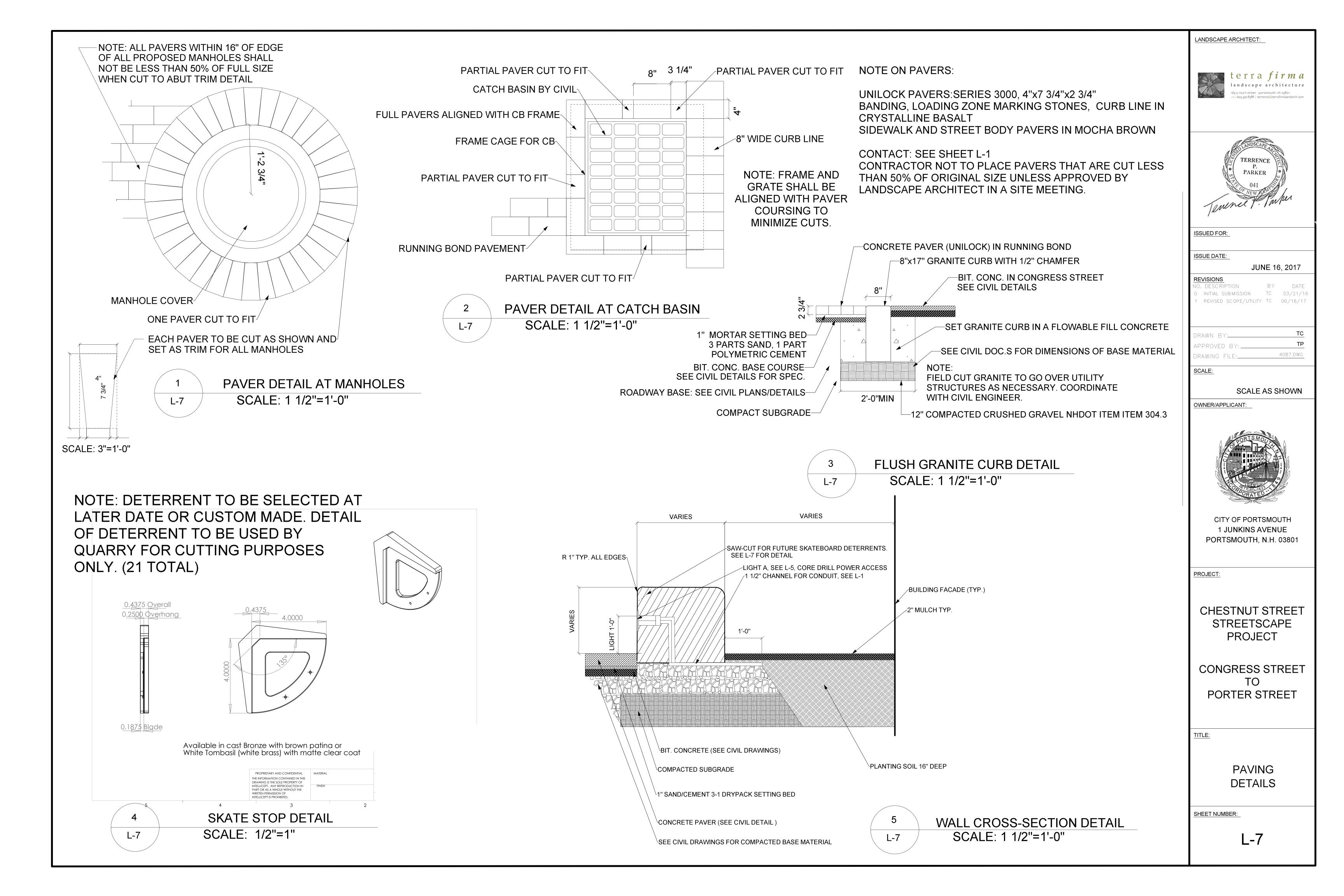
CHESTNUT STREET STREETSCAPE **PROJECT**

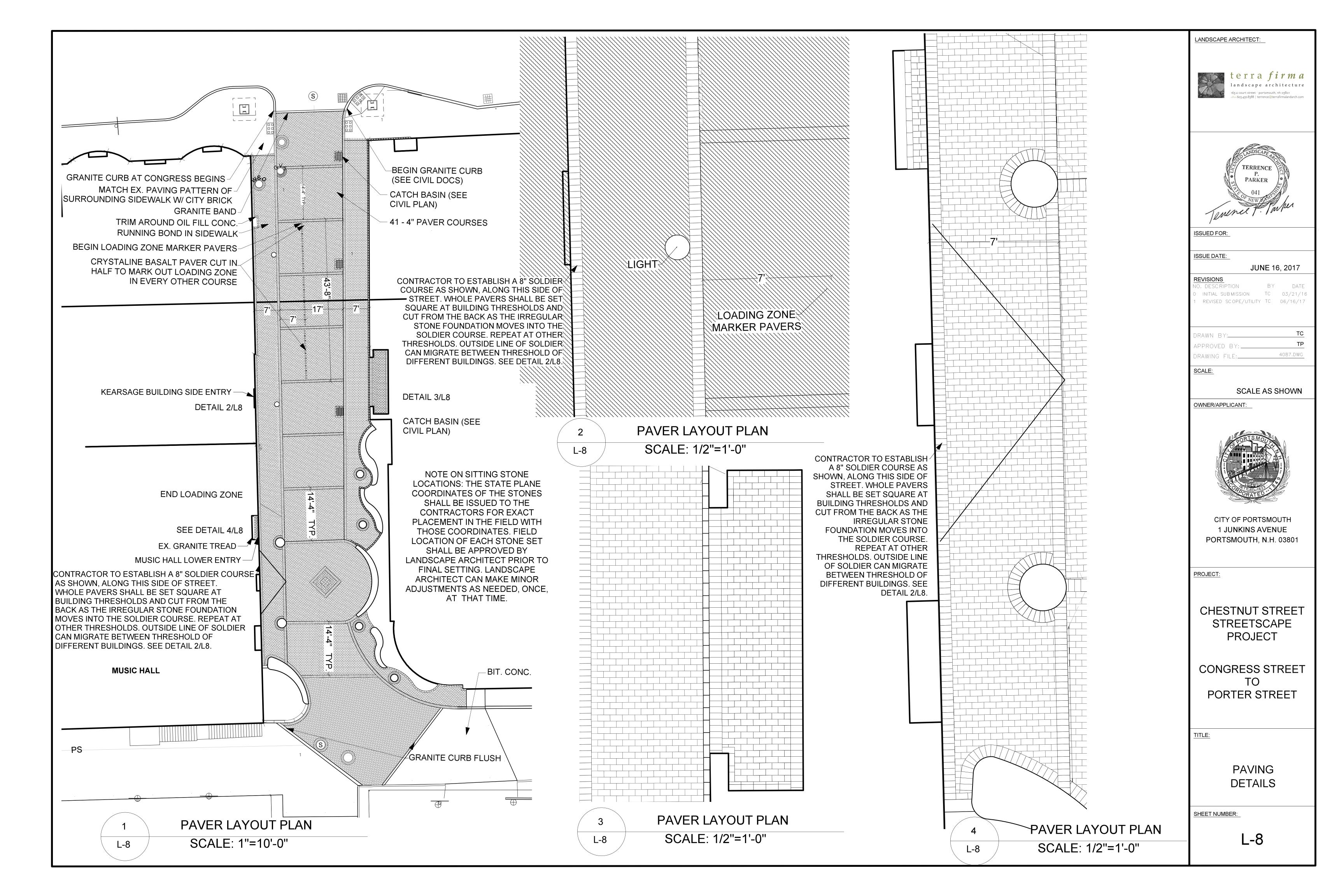
CONGRESS STREET PORTER STREET

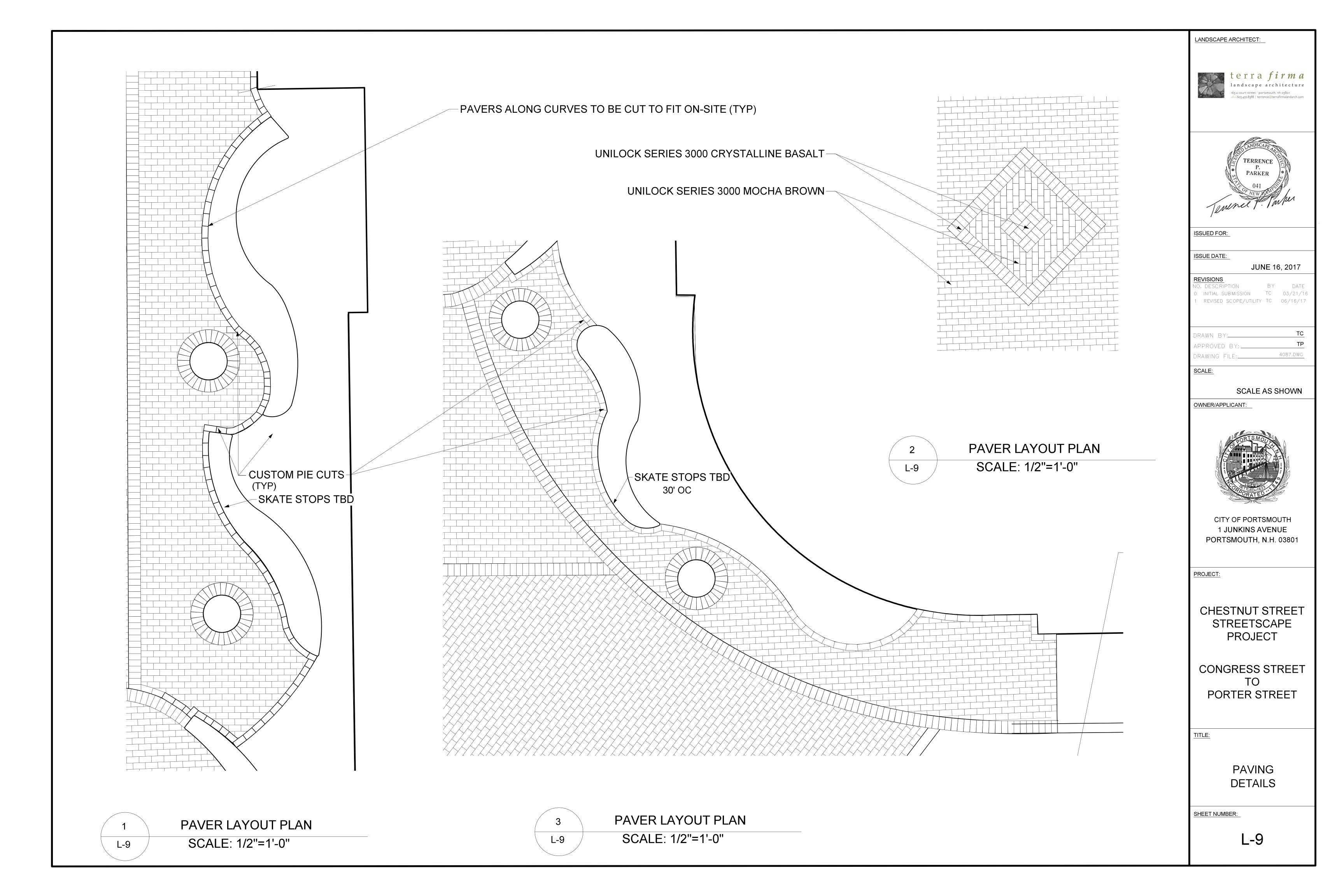
PLANTING DETAILS

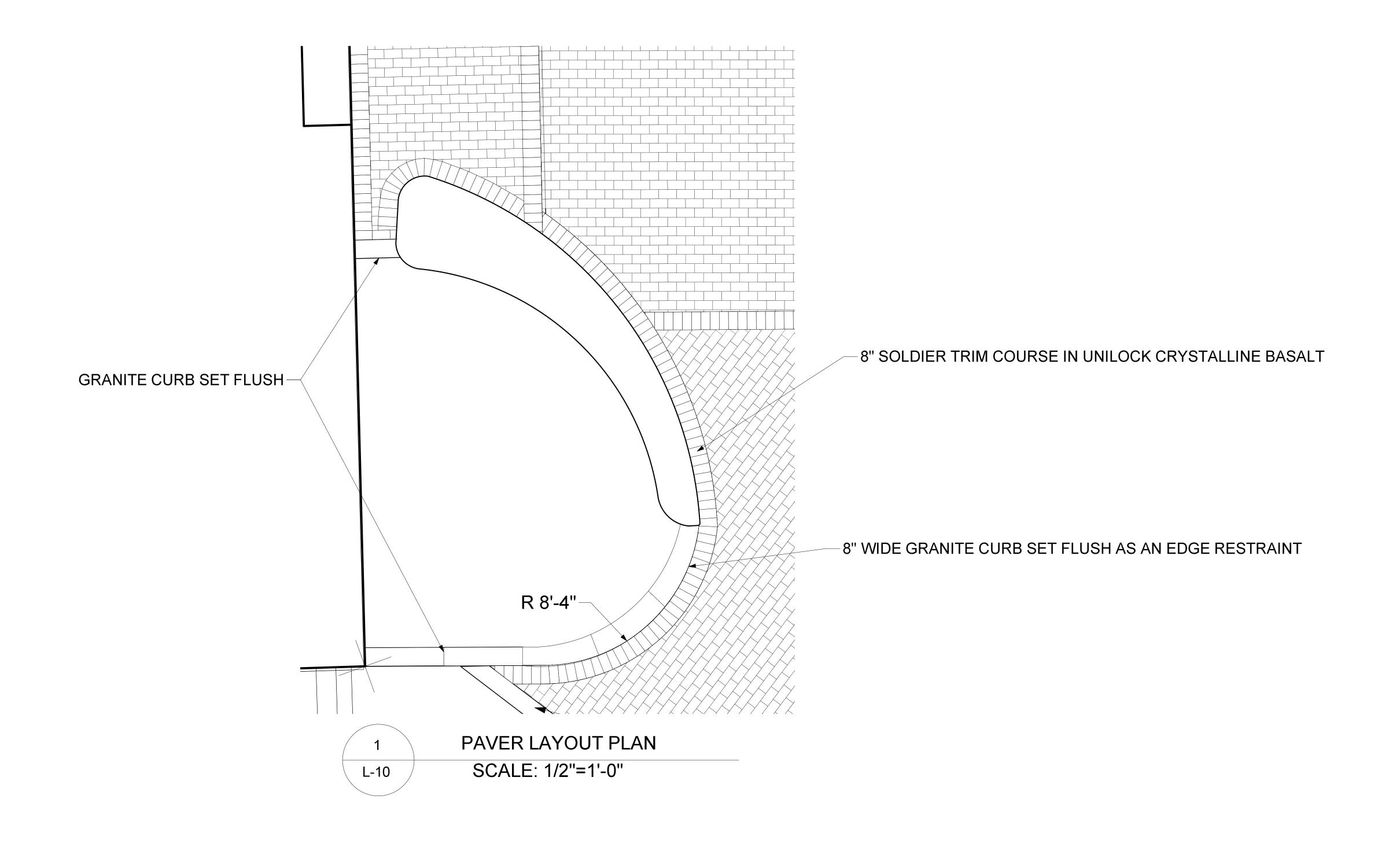
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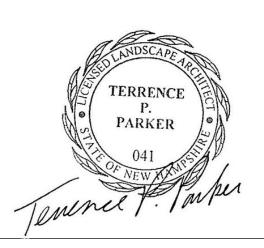






LANDSCAPE ARCHITECT:





ISSUED FOR:

ISSUE DATE:

REVISIONSNO. DESCRIPTIONBYDATE0 INITIAL SUBMISSIONTC03/21/161 REVISED SCOPE/UTILITYTC06/16/17

JUNE 16, 2017

PRAWN BY: TO

SCALE

SCALE AS SHOWN

OWNER/APPLICAN



CITY OF PORTSMOUTH
1 JUNKINS AVENUE
PORTSMOUTH, N.H. 03801

PROJECT:

CHESTNUT STREET STREETSCAPE PROJECT

CONGRESS STREET TO PORTER STREET

TIT

PAVING DETAILS

SHEET NUMBER:

L-10

SEDIMENT AND EROSION CONTROL NOTES

PROJECT NAME AND LOCATION

CONGRESS & CHESTNUT STREET STREETSCAPE & UTILITIES PROJECT CONGRESS STREET TO PORTER STREET PORTSMOUTH, NEW HAMPSHIRE

LATITUDE: 043' 04' 34" N LONGITUDE: 070' 45' 34" W

CITY OF PORTSMOUTH 1 JUNKINS AVENUE PORTSMOUTH, NH 03801

DESCRIPTION

The project consists of creating a pedestrian connector from Congress Street to Porter Street within the context of adjacent public and private streetscape and parking area improvements, Existing adjacent parking areas and associated improvements, including storm water management treatment enhancements and utility upgrades are included.

DISTURBED AREA

The total area to be disturbed for the pedestrian connector improvements is approximately ±15,000 SF (±0.34 acres) including on-site improvements at property and/or building interfaces.

PROJECT PHASING

The proposed project will be completed in a single phase

NAME OF RECEIVING WATER

The site drains to the closed municipal drainage system in Congress Street and leaving the area through the Vaughn Mall.

SEQUENCE OF MAJOR ACTIVITIES

- 1. Install temporary erosion control measures including inlet sediment filters as noted on the plan. All temporary erosion control measures shall be maintained in good working condition for the duration of the project.
- 2. Reclaim/remove existing paved surfaces.
- 3. Perform all required demolition activities. 4. Construct drainage structures, utility improvements & pavement base course materials.
- 5. Install base course paving, hardscape elements, sidewalks & curbing. 6. Install architectural paver surfaces.
- 7. Loam (6" min) and seed all disturbed areas not paved or otherwise stabilized.
- 8. Install top course paving.
- 9. When all construction activity is complete and site is stabilized, remove all temporary erosion control measures and any sediment that has been trapped by these devices.

TEMPORARY EROSION & SEDIMENT CONTROL AND STABILIZATION PRACTICES

All work shall be in accordance with state and local permits. Work shall conform to the practices described in the "New Hampshire Stormwater Manual, Volumes 1 - 3", issued December 2008, as amended. As indicated in the sequence of Major Activities, the silt fences shall be installed prior to commencing any clearing or grading of the site. Structural controls shall be installed concurrently with the applicable activity. Once construction activity ceases permanently in an area, silt fences and any earth/dikes will be removed once permanent measures are established.

During construction, all storm drain inlets shall be provided with inlet protection.

INSTALLATION, MAINTENANCE AND INSPECTION PROCEDURES FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES

A. GENERAL

These are general inspection and maintenance practices that shall be used to implement the

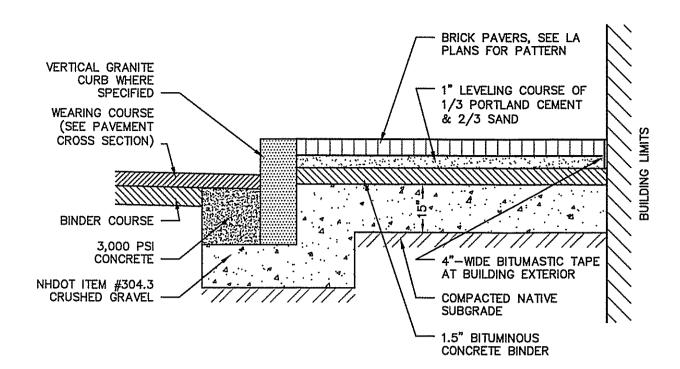
- 1. The smallest practical portion of the site shall be denuded at one time. 2. All control measures shall be inspected at least once each week and following any storm event
- of 0.25 inches or greater. 3. All measures shall be maintained in good working order; if a repair is necessary, it will be
- initiated within 24 hours. 4. Built-up sediment shall be removed from silt fence or other barriers when it has reached
- one—third the height of the fence or bale, or when "bulges" occur.
- 5. All diversion dikes shall be inspected and any breaches promptly repaired. 6. Temporary seeding and planting shall be inspected for bare spots, washouts, and unhealthy
- 7. The owner's authorized engineer shall inspect the site on a periodic basis to review compliance with the Plans.
- 8. An area shall be considered stable if one of the following has occurred: a. Base coarse gravels have been installed in areas to be paved;
- b. A minimum of 85% vegetated growth as been established;
- c. A minimum of 3 inches of non-erosive material such as stone of riprap has been installed;
- d. Erosion control blankets have been properly installed.
- 9. The length of time of exposure of area disturbed during construction shall not exceed 45 days.

B. PERMANENT SEEDING -

SEE LANDSCAPE PLANS AND SPECIFICATIONS

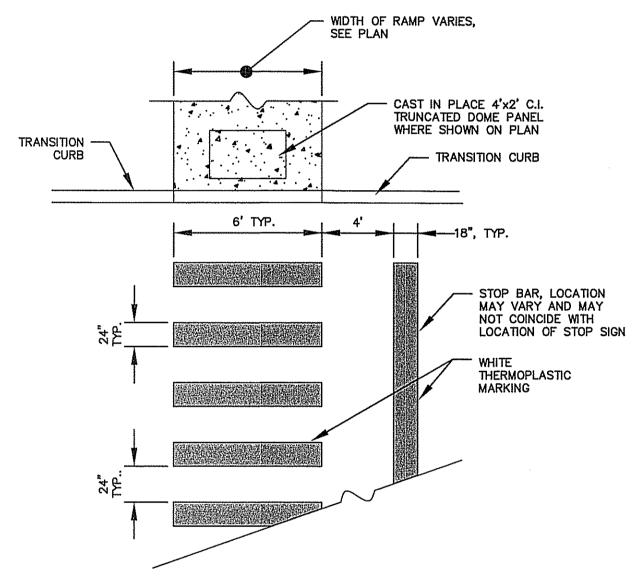
WINTER CONSTRUCTION NOTES

- 1. All proposed vegetated areas which do not exhibit a minimum of 85% vegetative growth by October 15th, or which are disturbed after October 15th, shall be stabilized by seeding and installing erosion control blankets on slopes greater than 3:1, and elsewhere seeding and placing 3 to 4 tons of mulch per acre, secured with anchored netting. The installation of erosion control blankets or mulch and netting shall not occur over accumulated snow or on frozen ground and shall be completed in advance of thaw or spring melt events;
- 2. All ditches or swales which do not exhibit a minimum of 85% vegetative growth by October 15th, or which are disturbed after October 15th, shall be stabilized temporarily with stone or erosion control blankets appropriate for the design flow conditions; and
- 3. After November 15th, incomplete road or parking surfaces where work has stopped for the winter season shall be protected with a minimum of 3 inches of crushed gravel per NHDOT Item 304.3.

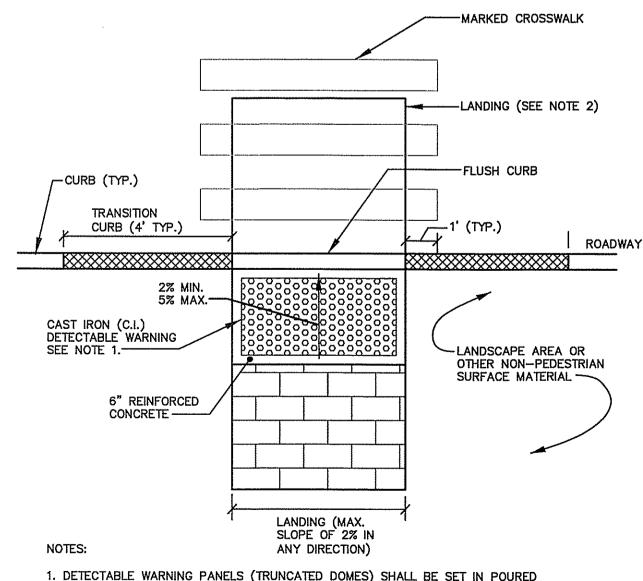


BRICK SIDEWALK DETAIL

NOT TO SCALE



CROSSWALK TYPE B DETAIL NOT TO SCALE

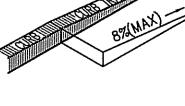


1. DETECTABLE WARNING PANELS (TRUNCATED DOMES) SHALL BE SET IN POURED CONCRETE FOR THE CURB RAMP WITH 3" OF CONCRETE AROUND THE PERIMETER OF THE PANEL ASSEMBLY. ALIGN PANELS ON A SQUARE GRID IN ROWS PERPENDICULAR TO DIRECTION OF TRAVEL.

2. LANDING SHALL HAVE A MAX. SLOPE OF 2% IN ANY DIRECTION. LANDINGS SHALL BE 5' LONG (MIN.) BY WIDTH OF SIDEWALK (3' MIN.), A 5' WIDTH SHALL BE PROVIDED WHERE SPACE PERMITS, TO MATCH WIDTH OF PROPOSED SIDEWALK.

CURB RAMP (TYPE 'T')

NOT TO SCALE



CURB RAMP (TYPE 'F')

NOT TO SCALE

NOT TO SCALE

ON RAMPS THAT ARE

TRAVEL. ON RAMPS

TRUNCATED

INTEGRAL DOME

 $0.2" \pm 0.02"$

PERPENDICULAR WITH THE CURB LINE, THE DOME

PATTERN SHALL BE IN-LINE

WITH THE DIRECTION OF

INTERSECTING CURBS ON A

THE DIRECTION OF TRAVEL

TO THE EXTENT PRACTICAL

NOT TO SCALE

SHALL BE IN-LINE WITH

RADIUS, THE DOME PATTERN

1.6" MIN.

2.4" MAX.

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PLAN VIEW

0.9" MIN. 1.4" MAX.

TRUNCATED DOME

1. BASE-TO-BASE SPACING SHALL BE 0.65" MINIMUM BETWEEN DOMES.

SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE

2. ALL SIDEWALK CURB RAMPS SHALL HAVE DETECTABLE WARNING

DIRECTION OF TRAVEL 24 INCHES FROM THE BACK OF CURB.

1. THE MAXIMUM ALLOWABLE CROSS SLOPE OF AN ACCESSIBLE ROUTE (SIDEWALK) AND CURB SHALL BE 1.5%.

2. THE MAXIMUM ALLOWABLE SLOPE OF AN ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.

3. THE MAXIMUM ALLOWABLE SLOPE OF AN ACCESSIBLE ROUTE (SIDEWALK) CURB RAMP SHALL BE 8%

7. ALL CURB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH AMERICANS WITH DISABILITIES ACT

8. FLUSH CURB SECTIONS SHALL HAVE A MAXIMUM LIP REVEAL OF 1/2" AT THE EDGE OF PAVEMENT.

9. EDGES OF SIDEWALK FOOTINGS ALONG FLUSH CURBS SHALL BE HAUNCHED SO AS TO EXTEND TO A

MAXIMUM OF 65% OF THE BASE DIAMETER.

BETWEEEN 6" AND 8" FROM THE CURB LINE.

4. WARNING PANELS TO BE CAST IRON.

DETECTABLE WARNING DETAIL

NOTES APPLICABLE TO ALL CURB RAMPS:

(ADA) AND ALL APPLICABLE CODES.

MINIMUM DEPTH OF 1' BELOW FINISH GRADE.

10. NO RAMP SHALL BE LESS THAN 4' IN WIDTH.

CURB RAMP NOTES

4. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.

6. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.

5. BASE OF RAMP SHALL BE GRADED TO PREVENT THE PONDING OF WATER.

3. THE TOP WIDTH OF THE DOME SHALL BE A MINIMUM OF 50% AND A

5. PANEL SHALL BE INSTALLED SO THAT THE EDGE CLOSEST TO THE CURB LINE IS

DETECTABLE WARNING NOTES:

DETECTABLE

1.6" MIN.

2.4" MAX.

WARNING

DEVICES, LATEST EDITION.

LIFTING STRAP STANDARD FABRIC DANDY BAG II OR OF ORANGE WOVEN APPROVED EQUAL MONOFILAMENT DUMPING STRAP -ALLOWS FOR EASY REMOVAL OF CONTENTS

ALL CATCH BASINS AND DRAIN INLETS WITHIN OR ADJACENT TO THE PROJECT THAT HAVE THE POTENTIAL TO RECEIVE SURFACE RUNOFF FROM EXPOSED EXCAVATED AREAS SHALL BE PROTECTED.

INSTALLATION AND MAINTENANCE:

INSTALLATION: REMOVE THE GRATE FROM CATCH BASIN. IF USING OPTIONAL OIL ABSORBENTS; PLACE ABSORBENT PILLOW IN UNIT. STAND GRATE ON END. MOVE THE TOP LIFTING STRAPS OUT OF THE WAY AND PLACE THE GRATE INTO CATCH BASIN INSERT SO THE GRATE IS BELOW THE TOP STRAPS AND ABOVE THE LOWER STRAPS. HOLDING THE LIFTING DEVICES, INSERT THE GRATE INTO THE INLET.

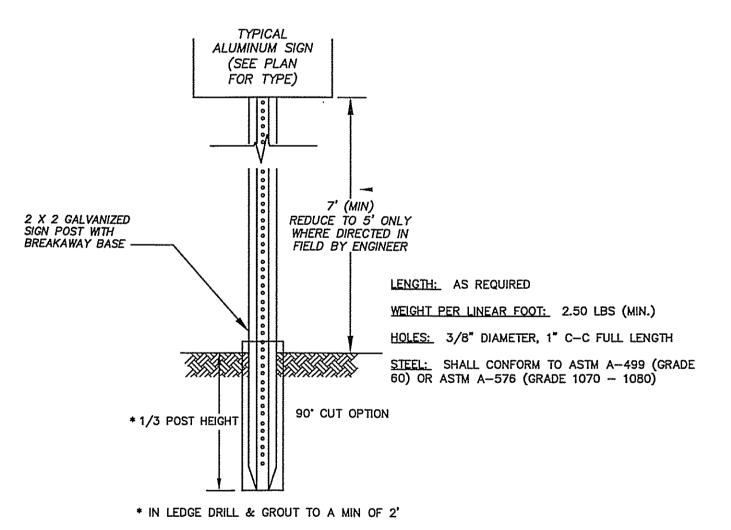
MAINTENANCE: REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM VICINITY OF THE UNIT AFTER EACH STORM EVENT. AFTER EACH STORM EVENT AND AT REGULAR INTERVALS, LOOK INTO THE CATCH BASIN INSERT. IF THE CONTAINMENT AREA IS MORE THAN 1/3 FULL OF SEDIMENT, THE UNIT MUST BE EMPTIED. TO EMPTY THE UNIT, LIFT THE UNIT OUT OF THE INLET USING THE LIFTING STRAPS AND REMOVE THE GRATE. IF USING OPTIONAL ABSORBENTS; REPLACE ABSORBENT WHEN NEAR SATURATION.

UNACCEPTABLE INLET PROTECTION METHOD;

A SIMPLE SHEET OF GEOTEXTILE UNDER THE GRATE IS NOT ACCEPTABLE.

STORM DRAIN INLET PROTECTION

NOT TO SCALE



SIGN POST

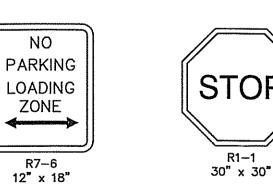
DO NOT

ENTER

R5-1

30" x 30"

NOT TO SCALE



NOTE: 1. ALL SIGNS SHALL MEET THE REQUIREMENTS OF AND BE INSTALLED AS INDICATED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL

PORTSMOUTH, NH 03801 133 COURT STREET (603) 433-2335 www.ALTUS-ENG.com WEINRIEB

ENGINEERING, INC.

No. 7634

ISSUED FOR:

ISSUE DATE:

JUNE 16, 2017

BIDDING

REVISIONS DATE NO. DESCRIPTION EDW 03/21/17 0 DISCUSSION EDW 06/16/17 ISSUED FOR BIDDING

RLH EDW 4087DS-ALT.DWG DRAWING FILE: .

24" × 36" - N.T.S. 11" x 17" - N.T.S.

OWNER:



CITY OF PORTSMOUTH 1 JUNKINS AVENUE PORTSMOUTH, N.H. 03801

PROJECT:

CONGRESS & CHESTNUT STREET STREETSCAPE & UTILITIES **PROJECT**

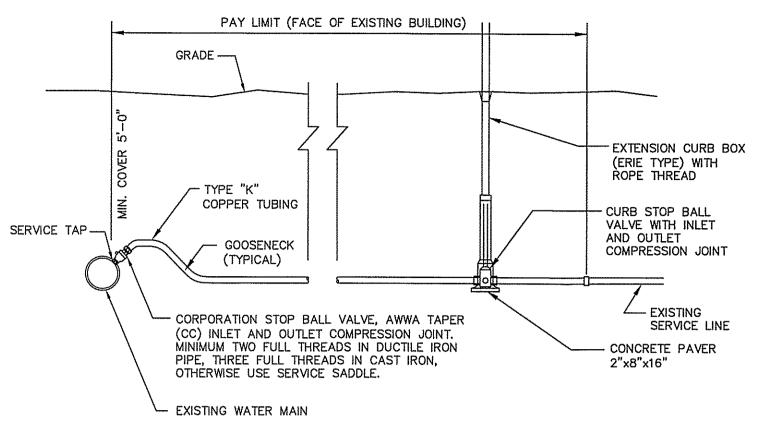
CONGRESS STREET TO PORTER STREET

DETAIL SHEET

SHEET NUMBER:

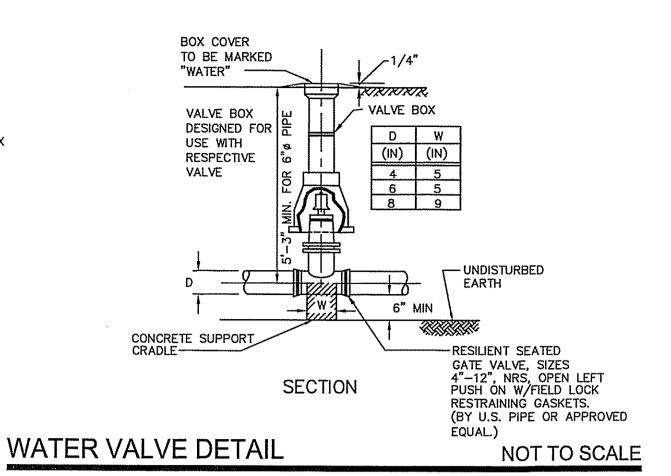
SIGN DETAILS

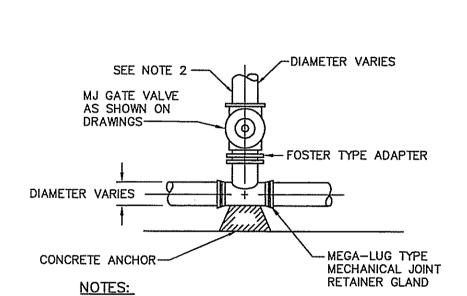
NOT TO SCALE



- PROVIDE NEW LINE USING CONTINUOUS LENGTHS OF COPPER. NO COUPLING ALLOWED IN ROADWAY WITHOUT APPROVAL OF ENGINEER.
- 2. TAPS TO BE MADE AT APPROXIMATELY 2:00 & 10:00
- 3. PROVIDE FOR SERVICE LINE CONTRACTION AND EXPANSION BY INSTALLING "S" IN SERVICE LINE NEAR MAIN.
- 4. IF SERVICE IS INSTALLED WITH LESS THAN 5' COVER, INSULATE OVER LINE.
- 5. REMOVE EXISTING CURB STOP.
- 6. CONNECT CURB STOP TO EXISTING SERVICE LINE AT PROPERTY LINE OR AT LOCATION APPROVED BY THE ENGINEER (NO COUPLING WITHOUT APPROVAL OF ENGINEER) AFTER PRESSURE TESTING AND DISINFECTION.
- 7. SHUT OFF EXISTING CORPORATION AND REMOVE OR ABANDON EXISTING SERVICE
- 8. CURB BOX SHALL BE SET IN THE GRASS/LANDSCAPE AREA BETWEEN CURB AND SIDEWALK UNLESS DIRECTED OTHERWISE.
- 9. 2" OR LARGER SERVICE CONNECTIONS SHALL USE A STAINLESS STEEL SERVICE

SERVICE CONNECTION DETAIL NOT TO SCALE

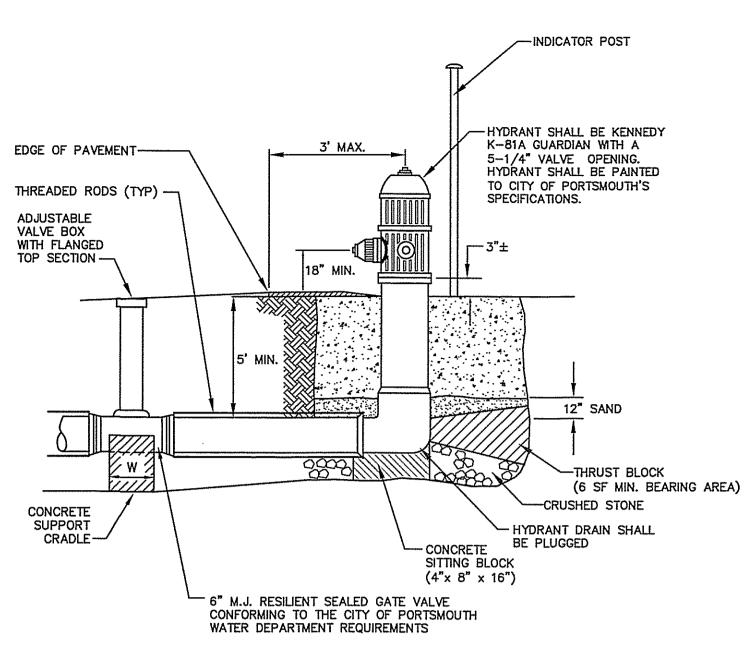




1. GATE VALVES SHALL OPEN RIGHT, PER CITY STANDARDS.

2. BRANCH PIPING SHALL BE MECHANICALLY RESTRAINED AS NOTED UNDER THRUST BLOCK DETAIL REQUIREMENTS.

TEE & GATE VALVE ASSEMBLY DETAIL NOT TO SCALE



<u>NOTES</u>

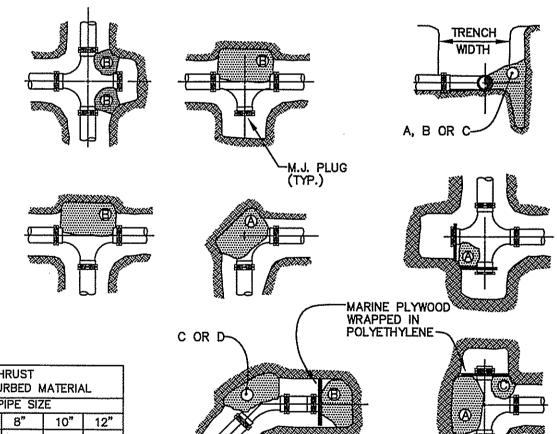
- 1. HYDRANT INSTALLATION AND OPERATION TO CONFORM TO REGULATIONS OF THE CITY OF PORTSMOUTH WATER & FIRE DEPARTMENTS. (KENNEDY K-811 GUARDIAN)
- 2. GATE VALVES & HYDRANTS TO OPEN RIGHT (CLOCKWISE).
- 3. HYDRANTS SHALL BE DELIVERED FROM FACTORY WITHOUT DRAIN HOLES.
- 4. LOCATE HYDRANTS A MINIMUM OF 18" BEHIND CURBING UNLESS OTHERWISE

5. REVIEW HYDRANT LOCATIONS WITH ENGINEER PRIOR TO INSTALLATION.

FIRE HYDRANT

NOT TO SCALE

(IN) (IN)



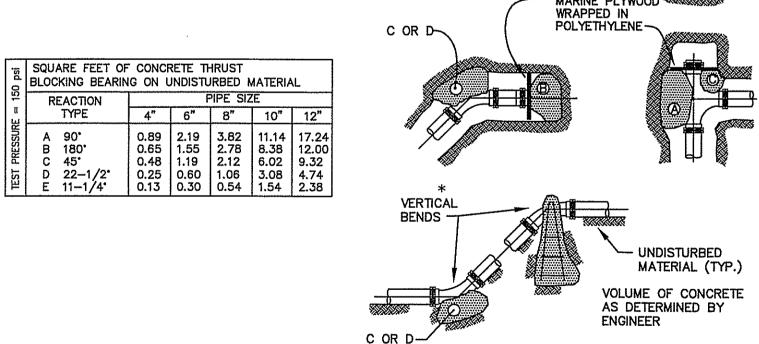
HORIZ	ONTA	L BEI	NDS:	
NOMINAL PIPE		BE	ND ANGL	E
DIAMETER	90.	45*	22.5*	11.25
4"	6'	3'	2'	1'
6"	9'	4'	2'	2'
8"	11'	5'	3'	2'
10"	13'	6'	3'	2'
12"	16'	7'	3'	2'
16"	20'	9'	4'	2'

	RE	DUCE	RS:		
NOMINAL DIAM.	NOM.	DIAM. OF	SMALL	PIPE (N	OTE 9)
OF LARGE PIPE	4"	6"	8"	10"	12"
8"	17'	10'	_		-
10"	23'	17'	10'		_
12"	29'	24'	18'	10'	_
16"	39'	36'	31'	28'	18'

DEAD ENDS:				
NOMINAL PIPE DIAMETER	RESTRAINED LENGTH (ft)			
4"	13'			
6 *	18'			
8*	23'			
10"	28'			
12"	33'			
16"	43'			

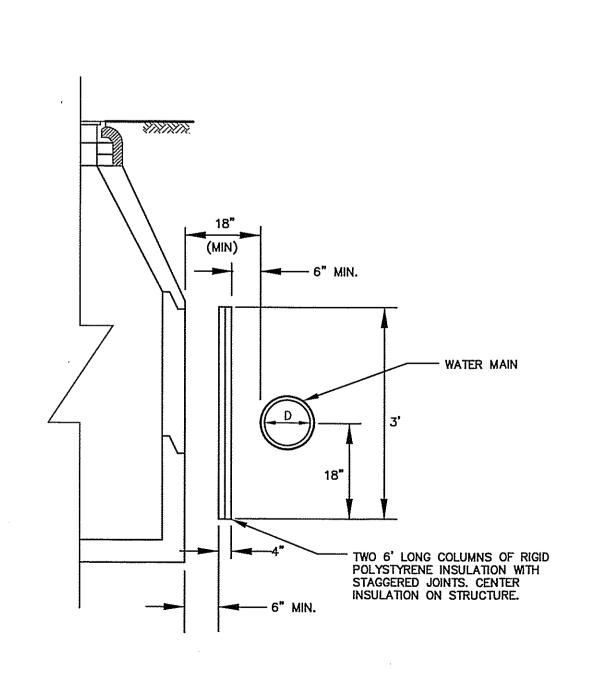
	TE	ES:		
NOMINAL DIAM.	NOMIN	AL BRAN	CH DIAM	ETER
OF LARGE PIPE	8"	10"	12"	16"
8"	6'	_		_
10"	8'	11'		_
12"	1'	7'	16'	_
16"	1'	1'	9'	28'

THRUST BLOCKING DETAIL



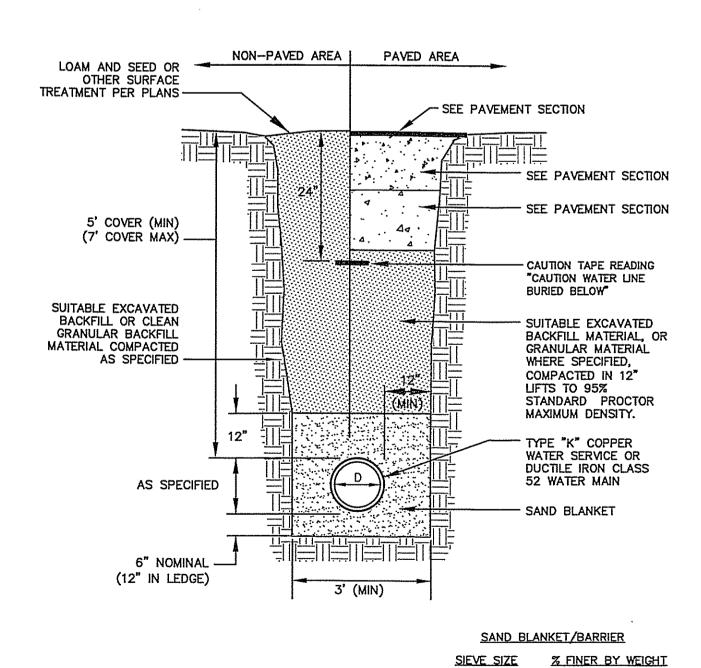
- 1. POUR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL, WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL. NO JOINTS SHALL BE COVERED WITH CONCRETE.
- 2. ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING. 5. PLACE BOARD IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCKS.
- 4. WHERE M.J. PIPE IS USED, M.J. PLUG WITH RETAINER GLAND MAY BE SUBSTITUTED FOR END BLOCKINGS. 5. POLYETHYLENE (6 MIL) SHALL BE PLACED AROUND FITTINGS PRIOR TO CONCRETE PLACEMENT.
- 6. CITY OF PORTSMOUTH WATER DEPARTMENT REQUIRES INSTALLATION OF MECHANICALLY RESTRAINED JOINTS AND
- CONCRETE ANCHORS FOR THRUST RESTRAINT AT FITTINGS, TEES, BENDS, ETC. 7. ALL FITTINGS SHALL HAVE MECHANICAL RESTRAINING GLANDS AT ALL ENDS AND A MINIMUM OF ONE JOINT SHALL BE RESTRAINED BEYOND EACH SIDE OF FITTING.
- 8. PIPE EXTENDING FROM ALL FITTINGS SHALL BE MECHANICALLY RESTRAINED TO THE MINIMUM LENGTHS SHOWN.
 9. ALL MINIMUM LENGTHS SHOWN WERE CALCULATED USING THE EBAA IRON RESTRAINT LENGTH CALCULATOR VERSION 6.3
 BASED ON THE FOLLOWING CRITERIA: DUCTILE IRON PIPE, TYPE 4 TRENCH, 5 FOOT DEPTH OF BURY, A TEST PRESSURE OF 150 PSI AND SOILS CONSISTING OF WELL GRADED SANDS AND GRAVELLY SANDS WITH LITTLE OR NO FINES.
- 10. ENGINEER RESERVES THE RIGHT O MODIFY RESTRAINT LENGTHS REQUIRED BASED ON VARYING TRENCH CONDITIONS. DEPTH OF BURY OR PIPE MATERIALS. 11. FOR REDUCERS, RESTRAIN LENGTH SHOWN IS FOR THE LARGER PIPE.
- 12. MECHANICALLY RESTRAIN ONE JOINT ON EITHER SIDE OF THE NOMINAL PIPE OF TEE AT A MINIMUM DISTANCE OF 5'

NOT TO SCALE



WATER MAIN INSULATION AT STRUCTURE

NOT TO SCALE



- 1. BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99,
- 2. WATER MAINS SHALL BE POLY WRAPPED.
- 3. WATER MAINS SHALL HAVE 3 WEDGES PER JOINT.

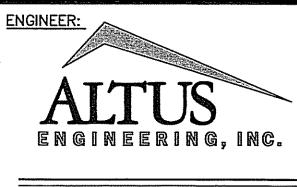
WATER MAIN TRENCH

NOT TO SCALE

90 - 100

0 - 15

200



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ISSUED FOR:

ISSUE DATE:

JUNE 16, 2017

REVISIONS NO. DESCRIPTION DATE EDW 03/21/17 0 DISCUSSION EDW 06/16/17 ISSUED FOR BIDDING

BIDDING

DRAWN BY: EDW APPROVED BY: 4087DS-ALT.DWG DRAWING FILE:

SCALE:

24" × 36" - N.T.S. 11" × 17" - N.T.S.

OWNER:



CITY OF PORTSMOUTH 1 JUNKINS AVENUE PORTSMOUTH, N.H. 03801

PROJECT:

CONGRESS & CHESTNUT STREET STREETSCAPE & UTILITIES **PROJECT**

CONGRESS STREET TO PORTER STREET

TITLE:

DETAIL SHEET

SHEET NUMBER:

MANHOLE NOTES:

- IT IS THE INTENTION OF THE NHDES THAT THE MANHOLE, INCLUDING ALL COMPONENT PARTS, HAVE ADEQUATE SPACE STRENGTH AND LEAKPROOF QUALITIES CONSIDERED NECESSARY BY THE COMMISSION FOR THE INTENDED SERVICE, SPACE REQUIREMENTS AND CONFIGURATIONS, SHALL BE AS SHOWN ON THE DRAWING. MANHOLES MAY BE AN ASSEMBLY OF PRECAST SECTIONS, WITH OR WITHOUT STEEL REINFORCEMENT, WITH ADEQUATE JOINTING, OR CONCRETE CAST MONOLITHICALLY IN PLACE WITH OR WITHOUT REINFORCEMENT IN ANY APPROVED MANHOLE. THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND LOADS OF 8 TONS (H-20 LOADING) WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MAN-HOLE CONTINUOUSLY FOR THE LIFE OF THE STRUCTURE, A PERIOD GENERALLY IN EXCESS OF 25 YEARS IS TO BE UNDERSTOOD IN BOTH CASES.
- BARRELS AND CONE SECTIONS SHALL BE PRECAST REINFORCED.
- PRECAST CONCRETE BARREL SECTIONS, CONES AND BASES SHALL
- LEAKAGE TEST SHALL BE PERFORMED IN ACCORDANCE WITH THE TOWN'S STANDARD SPECIFICATIONS.
- INVERTS AND SHELVES MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW AT CHANGES IN DIRECTION. THE INVERTS SHALL BE LAID OUT IN CURVES, OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY.
- 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) LETTER "S" FOR SEWERS OR "D" FOR DRAINS SHALL BE PLAINLY CAST INTO THE CENTER OF EACH
- BEDDING SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33.

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" TO 1/2" SHALL BE USED.

CONCRETE FOR DROP SUPPORT SHALL CONFORM TO THE REQUIREMENT FOR CLASS A (3000 LBS.) CONCRETE OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AS FOLLOWS:

6.0 BAGS PER CUBIC YARD 5.75 GALLONS PER BAG CEMENT MAXIMUM SIZE OF AGGREGATE 1 INCH

FLEXIBLE JOINT A FLEXIBLE JOINT SHALL BE PROVIDED WITHIN THE FOLLOWING DISTANCES:

RCP & CI PIPE - ALL SIZES - 48" AC & VC PIPE - UP THROUGH 12" DIAMETER - 18" AC & VC PIPE - LARGER THAN 12" DIAMETER - 36"

NOTE: NO MANHOLE STEPS.

2'-0" MIN.

4'-0" MAX.

2 LAYERS OF BUTYL RUBBER -

2'-6" MIN.

JOINT COMPOUND (TYP.)

(SEE DETAIL-B)

SEE DETAIL-A FOR

APPROVED JOINTING METHODS

ADJUST TO GRADE WITH BRICK.

2 COURSES (MINIMUM) MAXIMUM 12" ADJUSTMENT

- SHALLOW MANHOLE IN LIEU OF A CONE SECTION, WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED HAVING AN ECCENTRIC ENTRANCE OPENING AND CAPABLE OF SUPPORTING H-20 LOADS.
- 11. WHERE SOFT OR YIELDING MATERIAL IS ENCOUNTERED & WHEN DIRECTED BY ENGINEER, INSTALL DOUBLE LAYER OF TENSAR TX160 GEOGRID OR APPROVED EQUAL & INCREASE CRUSHED STONE BEDDING TO 18".

- 32" CLEAR OPENING PAMREX

PORTSMOUTH STANDARD

5" MIN.

--- 6" BEDDING OF 1/2" TO

TYPICAL SECTION

3/4" CRUSHED STONE (SEE NOTE)

COVER WITH "SEWER" STAMPED IN 8" LETTERS & FRAME - CITY OF

FRAME TO BE SET

IN BED OF MORTAR

-MORTAR ALL AROUND

-ECCENTRIC CONE

---- STEEL REINFORCED

1" ABOVE CROWN OF

INVERT IS A SMOOTH

INVERT. INVERT BRICKS

SHALL BE LAID ON EDGE.

CONTINUATION OF THE SEWER

SECTION B-B

HIGHEST PIPE

LOAM AREA PAVED AREA 4" COMPACTED LOAM & SEED-SEE PAVEMENT SECTION SEE PAVEMENT SECTION - SEE PAVEMENT SECTION CLEAN GRANULAR BACKFILL MATERIAL COMPACTED AS SPECIFIED ----SEE NOTE 13-SAND BLANKET 12" + D/2 MIN. AS SPECIFIED BELOW UNDISTURBED SOIL-CRUSHED STONE BEDDING AS SPECIFIED FOR FULL WIDTH OF THE TRENCH UP TO SPRINGLINE OF PIPE, SEE NOTE 12-6" BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK

BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99,

(WHICHEVER IS GREATER)

- ROCK SUBGRADE (TEMPLATE)

SAND BLANKET		CRUSHED	STONE BEDDING *	
SIEVE SIZE	% FINER BY	WEIGHT	SIEVE SIZE	% PASSING BY WEIG
1/2"	90 -	100	. 1"	100
200	0 —	15	3/4"	90 - 100
			3/8"	20 - 55
			# 4	0 - 10
			# 8	0 - 5
		STONE SIZE #0 SPECIFICATIONS		

SEWER TRENCH SECTION

STANDARD TRENCH NOTES:

0-10%

DIRECTED BY ENGINEER.

INVERT AND SHELF TO BE

PLACED AFTER LEAKAGE TEST

SEWER MANHOLE DETAILS

NOT TO SCALE

- 1. ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE: BACKFILL AS STATED IN THE TECHNICAL SPECIFICATIONS OR AS SHOWN OF THE DRAWING.
- 2. BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33, STONE SIZE NO. 67. PASSING 1 INCH SCREEN PASSING 3/4 INCH SCREEN 20 - 55% PASSING 3/8 INCH SCREEN

PASSING #8 SIEVE 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.

PASSING #4 SIEVE

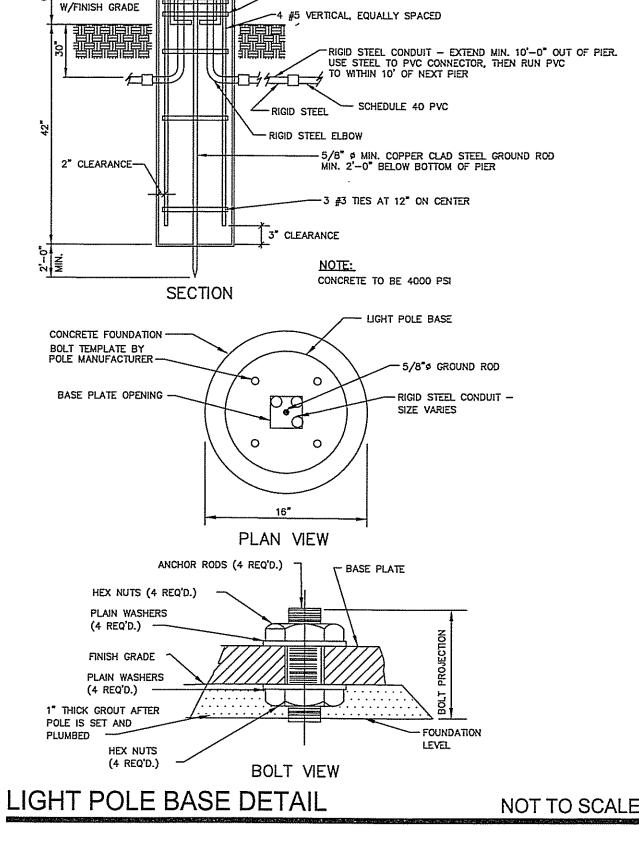
- 3. SAND BLANKET: CLEAN SAND FREE FROM ORGANIC MATTER, SO GRADED THAT 90 100% PASSES 1/2 INCH SIEVE AND NOT MORE THAN 15% WILL PASS A #200 SIEVE. BLANKET MAY BE OMITTED FOR CAST-IRON, DUCTILE IRON, AND REINFORCED CONCRETE PIPE PROVIDED HOWEVER, THAT NO STONE LARGER THAN 2" IS IN CONTACT WITH THE PIPE.
- 4. 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; ALL ROCKS OVER 6 INCHES IN LARGEST DIMENSION; AND ANY MATERIAL WHICH, AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION.
- 5. 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.
- 6. SHEETING, IF REQUIRED: WHERE SHEETING IS PLACED ALONGSIDE THE PIPE AND EXTENDS BELOW MID-DIAMETER, IT SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION 1 FOOT ABOVE THE TOP OF PIPE. WHERE SHEETING IS ORDERED BY THE ENGINEER TO BE LEFT IN PLACE, IT SHALL BE CUT OFF AT LEAST 3 FEET BELOW FINISHED GRADE, BUT NOT LESS THAT 1 FOOT ABOVE THE TOP OF THE PIPE.
- 7. W = MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES. FOR PIPES GREATER THAN 15 INCHES IN NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE OUTSIDE DIAMETER (O.D.) ALSO, W SHALL BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.
- 8. FOR CROSS COUNTRY CONSTRUCTION, BACKFILL OR FILL SHALL BE MOUNDED TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
- 9. CONCRETE FOR ENCASEMENT SHALL CONFORM TO THE NEW HAMPSHIRE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS STANDARD SPECIFICATION REQUIREMENTS FOR CLASS A (3000#) CONCRETE AS FOLLOWS: CEMENT: 6.0 BAGS PER CUBIC YARD WATER: 5.75 GALLONS PER BAG CEMENT MAXIMUM SIZE OF AGGREGATE: 1 INCH CONCRETE ENCASEMENT IS NOT ALLOWED FOR PVC PIPE.
- 10. CONCRETE FULL ENCASEMENT: IF FULL ENCASEMENT IS UTILIZED, DEPTH OF CONCRETE BELOW PIPE SHALL BE 1/4 I.D. (4" MINIMUM). BLOCK SUPPORT SHALL BE SOLID
- 11. NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES DESIGN STANDARDS REQUIRE TEN FEET (10') SEPARATION BETWEEN WATER AND SEWER. REFER TO CITY'S STANDARD SPECIFICATIONS FOR METHODS OF PROTECTION IN AREAS THAT CANNOT MEET THESE
- 12. NON-WOVEN CONSTRUCTION FABRIC WHERE DIRECTED BY ENGINEER. PROVIDE 12" OVERLAP. 13. 2" x 24" WIDE CLOSED CELL RIGID BOARD INSULATION WHERE SHOWN ON PLANS OR AS

PROVIDE COVER (EJW LA0910-000 OR EQUAL)

WITH "SEWER" OR "DRAIN" AS APPROPRIATE CAST INTO COVER. SET COVER 1/8" BELOW FINISH GRADE.

KOR-N-SEAL JOINT SLEEVE

(OR EQUAL)



-BOND GROUND ROD TO LIGHT STANDARD AND EACH RACEWAY WITH #8CU MIN.

-FOUR 3/4"x24" ANCHOR BOLTS

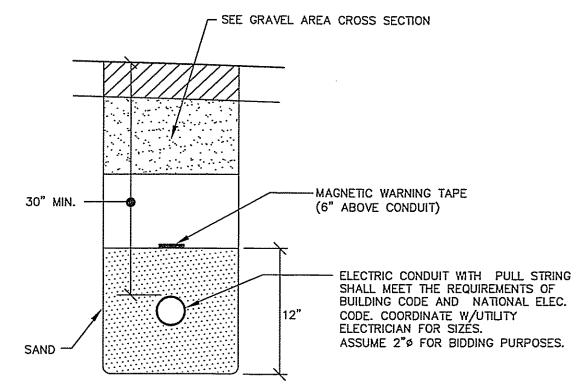
__4 #3 TIES AT 6" ON CENTER

BURR THREADS AFTER SETTING POLE. BOLT TEMPLATE BY POLE MANUFACTURER.

SEE BOLT VIEW -

3/4" CHAMFER -

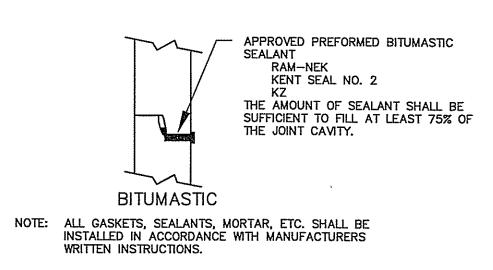
POLE BASE SHALL



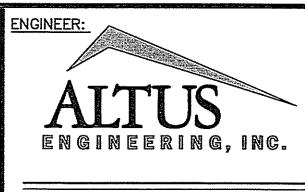
BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.

SAND BLANKET/BARRIER SIEVE SIZE % FINER BY WEIGHT 90 - 100

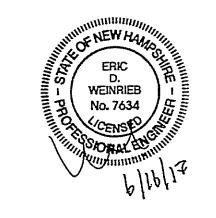
ELECTRICAL TRENCH SECTION NOT TO SCALE



DETAIL-B (APPROVED MANHOLE SECTION JOINTING METHODS)



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ISSUED FOR:

ISSUE DATE:

NO. DESCRIPTION

JUNE 16, 2017

BIDDING

DATE

EDW 03/21/1 O DISCUSSION EDW 06/16/17 ISSUED FOR BIDDING

RLH DRAWN BY: EDW APPROVED BY: ___ 4087DS-ALT.DWG DRAWING FILE: ____

> 24" x 36" - N.T.S. 11" x 17" - N.T.S.



CITY OF PORTSMOUTH 1 JUNKINS AVENUE PORTSMOUTH, N.H. 03801

PROJECT:

CONGRESS & CHESTNUT STREET STREETSCAPE & UTILITIES **PROJECT**

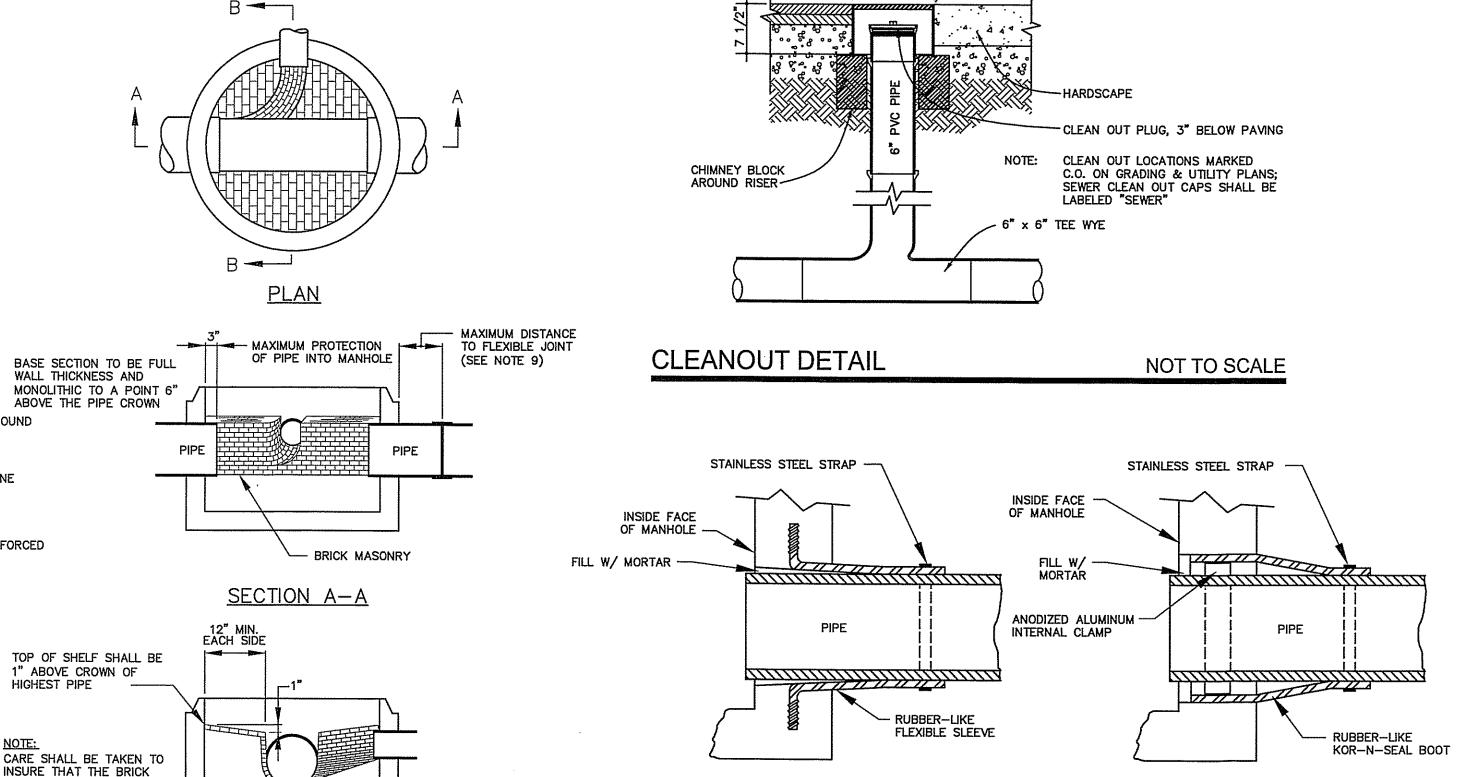
CONGRESS STREET TO PORTER STREET

TITLE:

DETAIL SHEET

SHEET NUMBER:

D-3



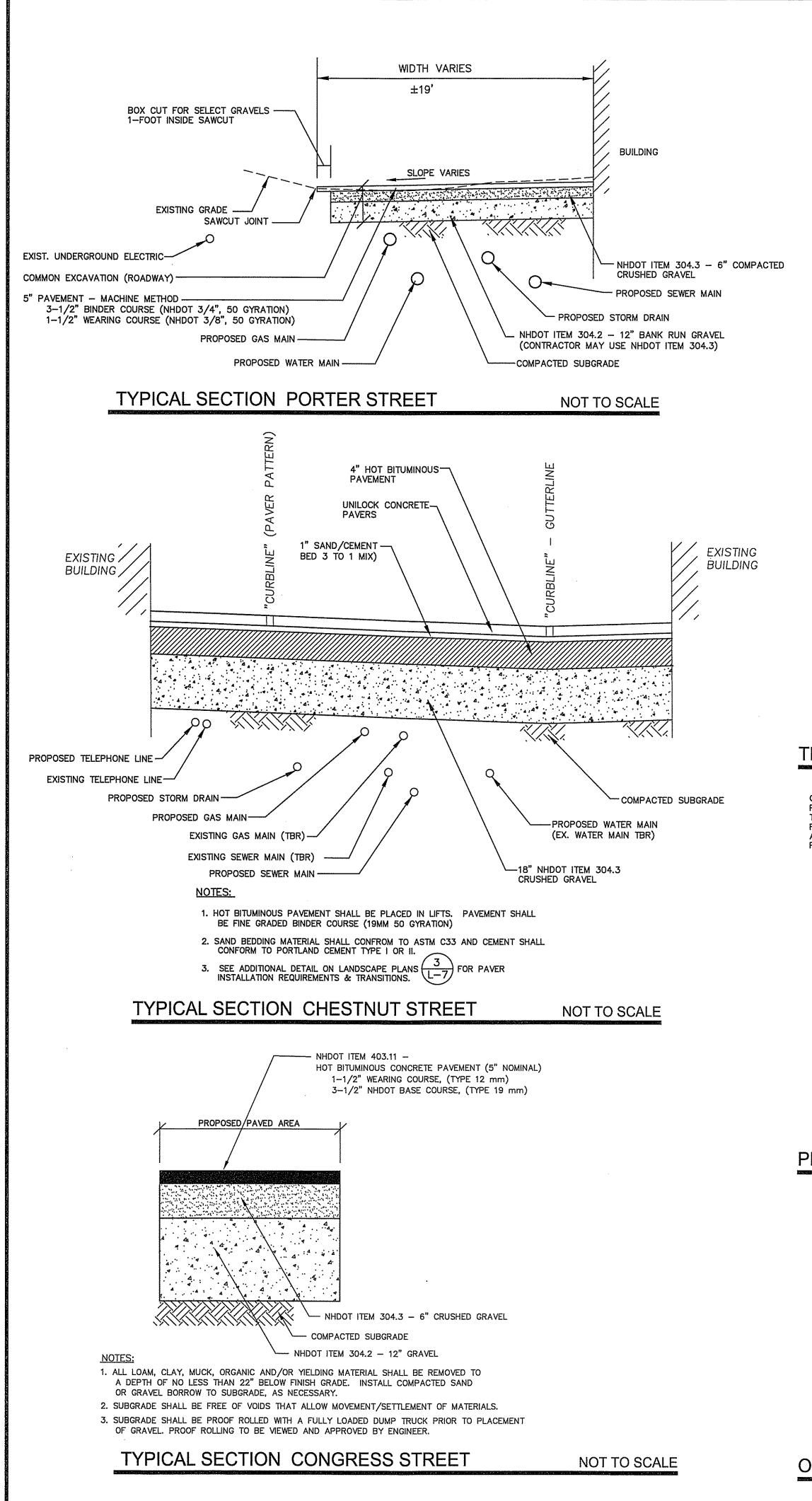
LOCK-JOINT FLEXIBLE MANHOLE SLEEVE

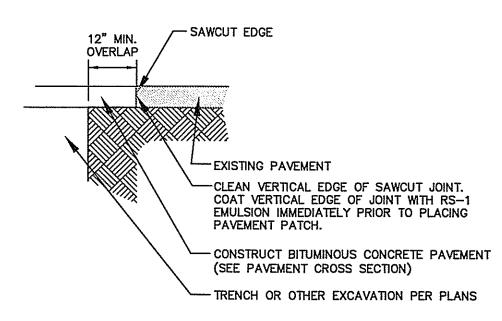
(OR EQUAL)

NOTE: ALL GASKETS, SEALANTS, MORTAR, ETC. SHALL BE

DETAIL-A

INSTALLED IN ACCORDANCE WITH MANUFACTURERS





TYPICAL PAVEMENT SAWCUT NOT TO SCALE

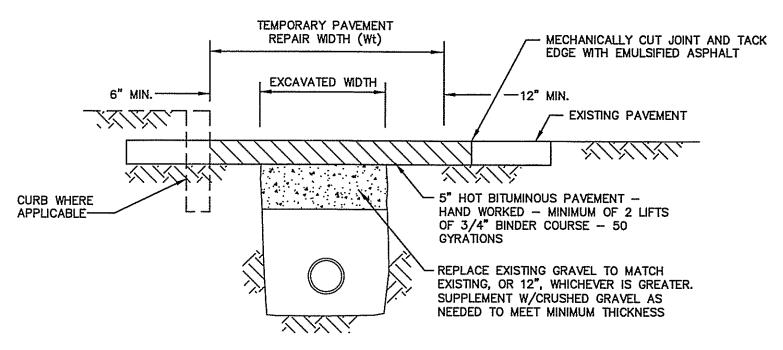
PIPE I.D. Wt (INCHES) Wp (INCHES) 1-21 INCHES Wt (INCHES) Wp (INCHES) 24-30 INCHES Wt (INCHES) Wp (INCHES)

> 30 INCHES | Wt (INCHES) | Wp (INCHES)

THE DIMENSIONS SHOWN SHALL BE CONSIDERED MAXIMUM PAVEMENT PAYMENT WIDTHS FOR 0-10' DEEP CONSTRUCTION. WE AND WE SHALL BE INCREASED BY 4'-0" FOR

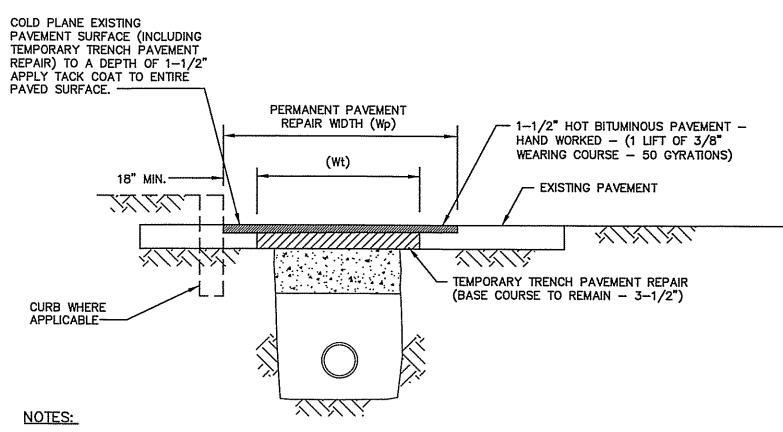
FOR TRENCHES 15' TO 20' IN DEPTH.

TRENCHES 10' TO 15' IN DEPTH AND BY 8'-0"



TEMPORARY TRENCH PAVEMENT REPAIR

NOT TO SCALE

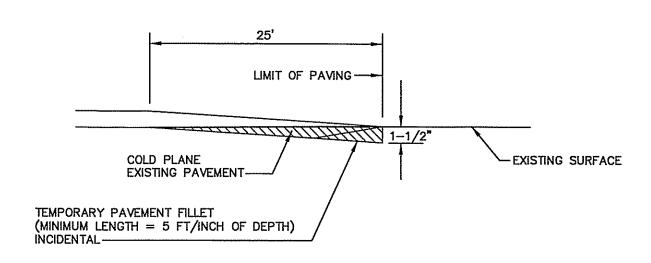


1. ALL PAVEMENT REMOVAL SHALL BE PRECEDED BY MECHANICAL SAW CUTTING.

2. ALL TEMPORARY, DAMAGED OR DEFECTIVE PAVEMENT SHALL BE REMOVED PRIOR TO PLACEMENT OF PERMANENT TRENCH REPAIRS.

PERMANENT TRENCH PAVEMENT REPAIR

NOT TO SCALE

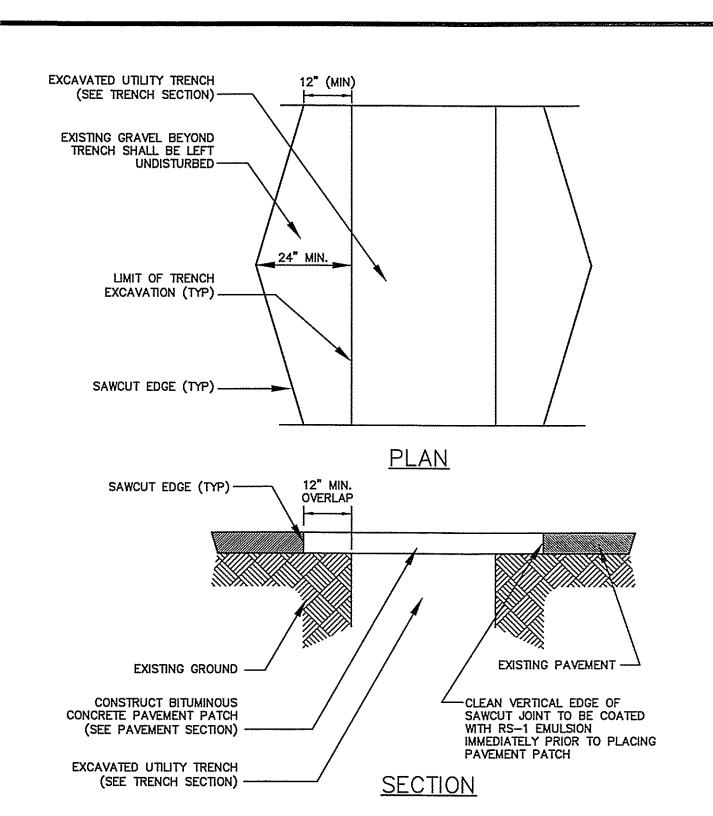


NOTE:

THE LENGTH OF THE TAPER MAY BE ADJUSTED AS ORDERED TO PROVIDE FOR VARYING FIELD CONDITIONS OR CHANGES IN SINGLE COURSE DEPTH.

OVERLAY PAVEMENT MATCH

NOT TO SCALE

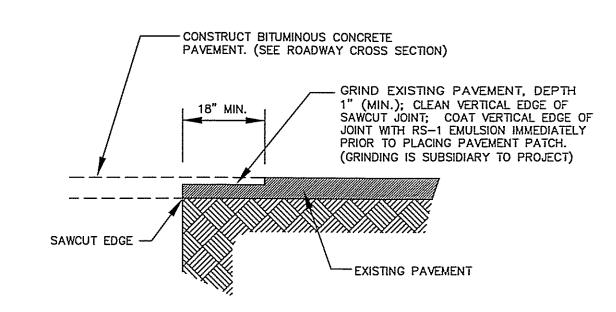


<u>NOTES</u>

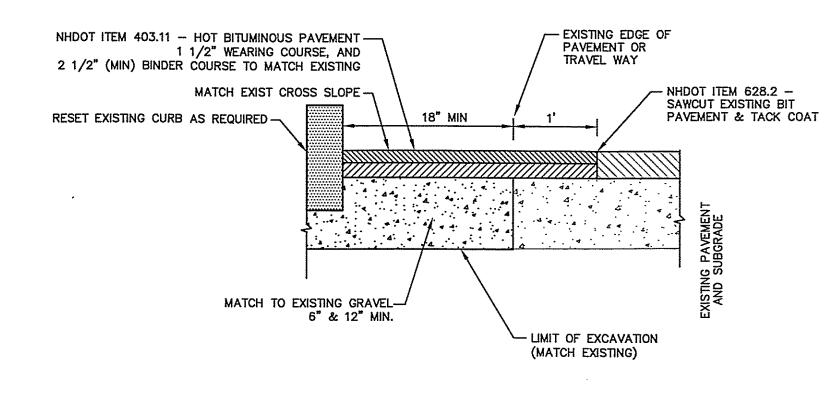
- 1. MACHINE CUT EXISTING PAVEMENT.
- 2. ALL TEMPORARY, DAMAGED OR DEFECTIVE PAVEMENT SHALL BE REMOVED PRIOR TO PLACEMENT OF PERMANENT TRENCH REPAIRS.
- 3. DIAMOND PATCHES, SHALL BE REQUIRED FOR ALL TRENCHES CROSSING ROADWAY. DIAMOND PATCHES SHALL MEET NHDOT REQUIREMENTS.

TYPICAL TRENCH PATCH

NOT TO SCALE



TYPICAL PAVEMENT TRANSITION DETAIL NOT TO SCALE



SAWCUT AND PAVEMENT PATCH

NOT TO SCALE

ALTUS
ENGINEERING, INC.

133 COURT STREET PORTSMOUTH, NH 03801 (603) 433-2335 www.ALTUS-ENG.com



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0 DISCUSSION EDW 03/21/17

1 ISSUED FOR BIDDING EDW 06/16/17

DRAWN BY: RLH

APPROVED BY: EDW

DRAWING FILE: 4087DS-ALT.DWG

<u>SCALE:</u> 24" x 36" - N.T.S. 11" x 17" - N.T.S.

OWNER:



CITY OF PORTSMOUTH

1 JUNKINS AVENUE
PORTSMOUTH, N.H. 03801

PROJECT:

CONGRESS &
CHESTNUT STREET
STREETSCAPE
& UTILITIES
PROJECT

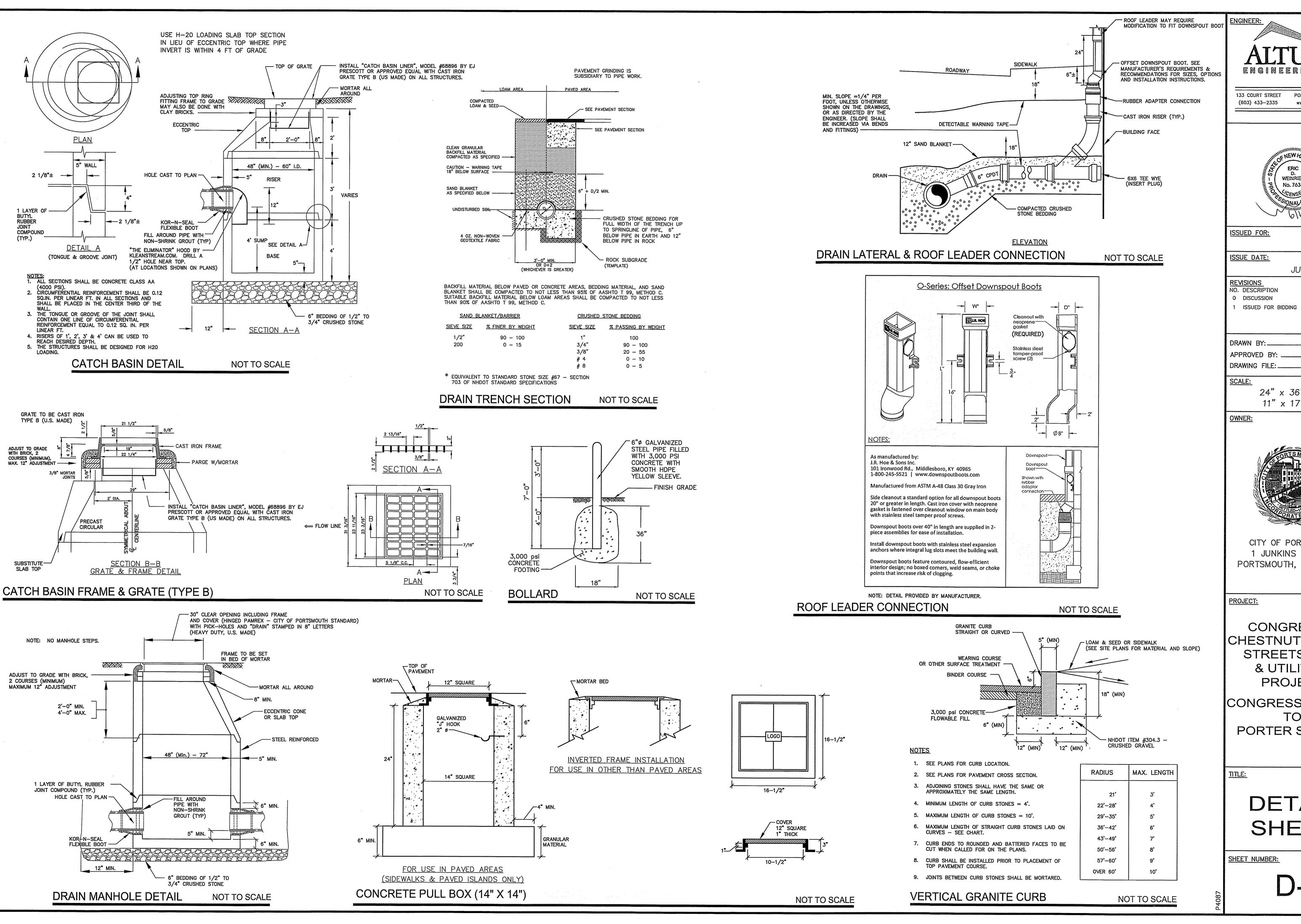
CONGRESS STREET TO PORTER STREET

ППЕ

DETAIL SHEET

SHEET NUMBER:

D-4



ENGINEERING, INC.

133 COURT STREET PORTSMOUTH, NH 03801 www.ALTUS-ENG.com



JUNE 16, 2017

BIDDING

DATE

EDW 06/16/17

EDW 03/21/17

EDW 4087DS-ALT.DWG

> $24" \times 36" - N.T.S.$ 11" x 17" - N.T.S.



CITY OF PORTSMOUTH 1 JUNKINS AVENUE PORTSMOUTH, N.H. 03801

CONGRESS & CHESTNUT STREET STREETSCAPE & UTILITIES **PROJECT**

CONGRESS STREET TO PORTER STREET

> DETAIL SHEET

> > D-5

GENERAL

ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF ALL APPLICABLE STATE AND LOCAL CODES, INCLUDING BUT NOT LIMITED TO:

2009 INTERNATIONAL BUILDING CODE ANSI/ASCE 7-05

ACI 318-08 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"

- 2. ANY DISCREPANCIES BETWEEN THE ABOVE LISTED CODES AND THE CONSTRUCTION DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION BEFORE PROCEEDING WITH AFFECTED WORK.
- 3. ALL WORK SHALL BE PERFORMED BY PERSONS QUALIFIED IN THEIR TRADE AND LICENSED TO PRACTICE SUCH TRADE IN THE STATE IN WHICH THE PROJECT IS LOCATED.
- 4. THESE DRAWINGS SHALL BE USED IN CONJUNCTION WITH ANY ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS IN ADDITION TO SPECIFICATIONS AND ANY SHOP DRAWINGS PROVIDED BY SUBCONTRACTORS AND SUPPLIERS.
- 5. ALL DIMENSIONS, ELEVATIONS, AND CONDITIONS SHALL BE VERIFIED IN THE FIELD BY THE GENERAL CONTRACTOR (G.C.) AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION BEFORE PROCEEDING WITH THE AFFECTED PART OF
- 6. UNLESS OTHERWISE NOTED, DETAILS, SECTIONS, AND NOTES SHOWN ON THESE DRAWINGS SHALL BE CONSIDERED TYPICAL FOR ALL SIMILAR DETAILS.
- 7. ALL SHOP DRAWINGS PROVIDED BY OTHERS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO THE FABRICATION OF MATERIAL OR THE PURCHASE OF NON-RETURNABLE STOCK. QUANTITY AND DIMENSIONAL REVIEW IS THE CONTRACTOR'S RESPONSIBILITY.
- 8. ANY AND ALL TEMPORARY BRACING OR SHORING WHICH IS NEEDED TO HOLD THE STRUCTURE IN A SAFE AND STABLE POSITION UNTIL THE STRUCTURE IS COMPLETE, IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. CONSULT INDEPENDENT ENGINEER IF DESIGN ASSISTANCE OR REVIEW IS NEEDED.
- 9. THE BUILDING PERMIT APPLICANT (e.g. OWNER, CONTRACTOR) MUST PROVIDE SPECIAL INSPECTIONS PER THE REQUIREMENTS OF CHAPTER 17 OF THE 2009 INTERNATIONAL BUILDING CODE AND FURNISH INSPECTION REPORTS TO THE CODE OFFICIAL AND TO THE ENGINEER OF RECORD. THE TESTING/INSPECTION AGENCY(S) MUST BE APPROVED BY THE ENGINEER OF RECORD. A SCHEDULE OF SPECIAL INSPECTIONS SHALL BE SUBMITTED TO ENGINEER FOR REVIEW AND APPROVAL, OR PROVIDED BY ENGINEER UPON REQUEST.

DESIGN LOADS

THE STRUCTURE IS DESIGNED IN ACCORDANCE WITH 2009 IBC TO CARRY ALL THE DEAD LOADS OF THE VARIOUS STRUCTURAL, ARCHITECTURAL, MECHANICAL, AND OTHER SYSTEMS AND THE FOLLOWING MINIMUM LIVE LOADS:

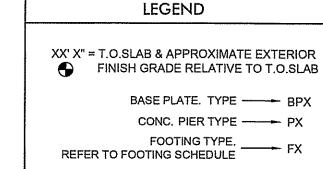
BASIC GROUND SNOW LOAD 50 PSF Ce = 1.0 Ct = 1.0ls = 1.0WIND SPEED = 110 MPH EXPOSURE "B" lw = 1.0SEISMIC SITE CLASS "D" le = 1.0SDs = 0.360SD1 = 0.125SEISMIC DESIGN CAT. "C"

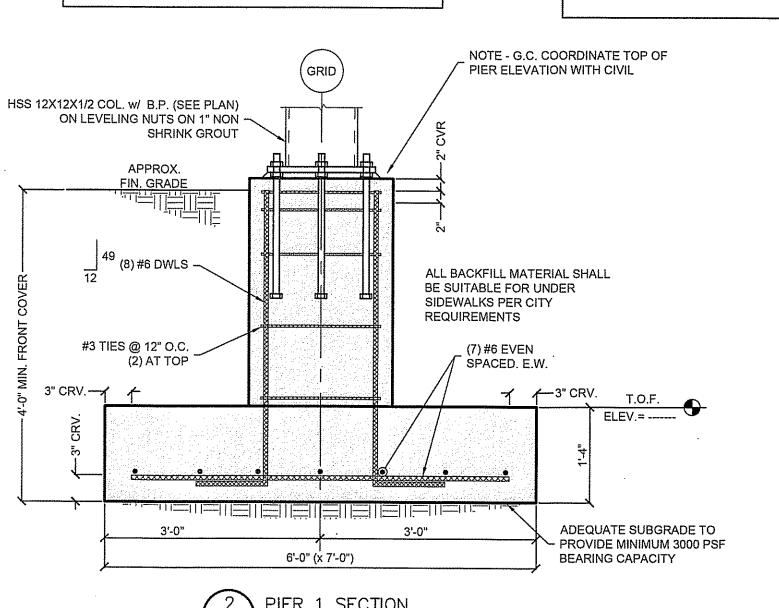
SOIL BEARING

- ALL FOOTINGS SHALL BE CARRIED DOWN TO REST ON UNDISTURBED SOIL OR SHALL BEAR ON STRUCTURAL FILL COMPACTED IN 12" LAYERS TO 95% COMPACTION. THE UNDERLYING SOILS AND THE STRUCTURAL FILL SHALL HAVE A MINIMUM SAFE LOAD BEARING CAPACITY OF 3000 PSF.
- REMOVE ALL EXISTING TOPSOIL, PAVEMENT, ORGANIC MATERIALS, OR OTHER SOIL THAT APPEAR TO BE UNSUITABLE PRIOR TO PREPARING THE FOOTING GRADE.
- 3. IF ANY ADVERSE SOIL CONDITIONS ARE ENCOUNTERED WHICH EXTEND BELOW FOOTING LEVEL. SUCH AS THOSE LISTED ABOVE, THE GENERAL CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY FOR DETERMINATION OF HOW TO REMEDY THE CONDITION BEFORE CONTINUATION OF THE WORK.
- NO FOOTINGS SHALL BE PLACED IN WATER OR ON FROZEN GROUND. ALL EXTERIOR CONSTRUCTION SHALL BE CARRIED DOWN TO A MINIMUM OF FOUR (4) FEET BELOW FINISHED. ADJACENT EXTERIOR GRADE.
- 5. A GEOTECHNICAL ENGINEER SHALL PROVIDE VERIFICATION THAT SOILS ARE SUITABLE FOR DESIGN LOAD. CONTRACTOR OR OWNER SHALL ASSUME FULL RESPONSIBILITY IF A GEOTECHNICAL ENGINEER IS NOT RETAINED.

FOOTING SCHEDULE REINFORCING SIZE 7-0"x6'-0"x1'-4" (7) #6 BARS E.W. PROVIDE BARS EACH WAY, SPACED EVENLY, TIED IN MAT, AT 3" CLEAR FROM BOTTOM OF FOOTING (U.N.O.)

FTG.





CAST-IN-PLACE-CONCRETE 1. ALL WORK SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"

(ACI 318-08) AND "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 301) 2. ALL FOOTINGS ARE TO REST ON UNDISTURBED SOIL OR CLEAN GRANULAR FILL COMPACTED IN LAYERS OF 12" OR LESS TO 95% COMPACTION.

1. STRUCTURAL STEEL WORK SHALL CONFORM TO "SPECIFICATIONS FOR DESIGN, FABRICATION,

2. STRUCTURAL STEEL SHALL BE NEW STEEL CONFORMING TO THE FOLLOWING:

C. ANCHOR RODS - ASTM F1554 GRADE 36 (HEADED BOLTS)

STRUCTURAL TUBES - ASTM A500, GRADE B

CONSTRUCTION GROUT BEFORE APPLICATION OF LOADS.

CONFORMING TO E70XX, LOW HYDROGEN..

A. ROLLED SHAPES AND PLATES - ASTM A36 (EXCEPT AS NOTED BELOW)

3. VOIDS BENEATH COLUMN BASE PLATES SHALL BE DRY PACKED WITH NON-SHRINK

AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS (AISC CURRENT EDITION)", "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS (AISC CURRENT EDITION)", AND "STRUCTURAL

4. WELDED CONNECTIONS SHALL BE MADE BY AWS QUALIFIED WELDERS USING FILLER MATERIAL

5. ALL HSS COLUMNS SHALL BE SEALED TO PREVENT WATER PENETRATION DURING CONSTRUCTION

OR DURING SERVICE AND SHALL BE PROVIDED WITH A DRAIN HOLE NEAR THE BASE ON SIDE OF

- 3. MINIMUM CONCRETE PROTECTION FOR REINFORCING STEEL SHALL BE AS FOLLOWS: CONCRETE CAST AGAINST EARTH: 3 INCHES FORMED CONCRETE EXPOSED TO EARTH OR WEATHER: 1-1/2 INCHES FOR #5 BARS AND SMALLER
- 4. CALCIUM CHLORIDE IS PROHIBITED IN ANY CONCRETE MIX.

2 INCHES FOR #6 BARS AND GREATER

- 5. CONCRETE SHALL BE ADEQUATELY PROTECTED FROM HOT OR COLD WEATHER AS REQUIRED BY ACI PUBLICATIONS 305 AND 306, RESPECTIVELY.
- 6. ALL CONCRETE FOR FOOTINGS AND PIERS SHALL BE NORMAL-WEIGHT, 3/4" AGGREGATE AND ATTAIN A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS (U.N.O.). CYLINDERS SHALL BE TAKEN AND TESTED IN ACCORDANCE WITH ACI RECOMMENDATIONS.
- 7. ALL CONCRETE SHALL BE CURED BY AN APPROVED METHOD AS PRESCRIBED BY ACI.
- 8. MID-RANGE WATER REDUCERS (MRWR) ARE REQUIRED FOR ALL CONCRETE MIXES EXCEPT

9. MAXIMUM WATER TO CEMENT RATIO FOR MIXES WITH MRWR: FOR 3000 PSI CONCRETE FOR 4000 PSI CONCRETE

MAXIMUM WATER TO CEMENT RATIO FOR MIXES W/OUT MRWR (PERMITTED FOR FOOTINGS ONLY): FOR 3000 PSI CONCRETE 0.53

10. MINIMUM CEMENT QUANTITIES: FOR 3000 PSI CONCRETE FOR 4000 PSI CONCRETE

STRUCTURAL STEEL

WELDING CODE (AWS D1.1-04)".

517 LB./CY 611 LB./CY

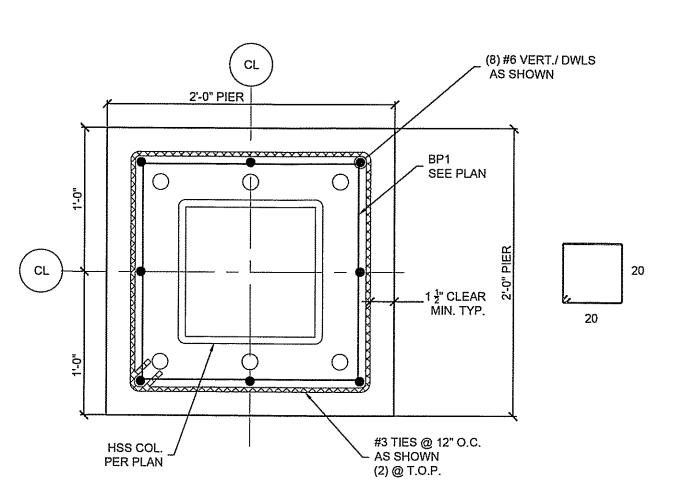
11. MAXIMUM CONCRETE SLUMP: FOR MIXES WITH MRWR FOR MIXES WITHOUT MRWR

12. REINFORCING BARS AND ALL EMBEDDED ITEMS, INCLUDING ANCHOR BOLTS, MUST BE ACCURATELY PLACED AND ADEQUATELY SUPPORTED BEFORE CONCRETE IS PLACED. "WET-STICKING" OF ANCHOR BOLTS OR VERTICAL PIER REINFORCING IS NOT ACCEPTABLE

REINFORCING STEEL

1. ALL REINFORCING SHALL BE DEFORMED BARS CONFORMING TO ASTM A615 GRADE 60.

NOTE - EXACT POSITIONING OF THE FOOTINGS IN RELATION TO BUILDINGS MUST BE DETERMINED BY OTHERS 34' 2" (G.C. CONFIRM)



FOUNDATION

SCHEDULE OF SPECIAL INSPECTIONS

PORTSMOUTH MUSIC HALL ARCHWAY LOCATION: PORTSMOUTH NH

STRUCTURAL ENGINEER OF RECORD (SER): JEFFREY S. NAWROCKI, PE

THIS STATEMENT OF SPECIAL INSPECTIONS IS SUBMITTED AS A CONDITION FOR PERMIT ISSUANCE IN ACCORDANCE WITH THE SPECIAL INSPECTION REQUIREMENTS OF THE 2009 INTERNATIONAL BUILDING CODE. IT INCLUDES A SCHEDULE OF SPECIAL INSPECTION SERVICES APPLICABLE TO THIS PROJECT AS WELL AS THE NAME OF SPECIAL INSPECTORS AND THE IDENTITY OF OTHER APPROVED AGENCIES INTENDED TO BE RETAINED FOR CONDUCTING THESE SERVICES.

THE SPECIAL INSPECTOR SHALL KEEP RECORDS OF ALL INSPECTIONS AND SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, STRUCTURAL ENGINEER AND ARCHITECT OF RECORD. DISCOVERED DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR.

A FINAL REPORT OF SPECIAL INSPECTIONS BY THE SPECIAL INSPECTOR(S) DOCUMENTING COMPLETION OF ALL REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED PRIOR TO ISSUANCE OF A CERTIFICATE OF USE AND OCCUPANCY.

THE SPECIAL INSPECTOR, WHO IS GENERALLY EMPLOYED BY THE PRIMARY TESTING AGENCY, MAY USE VARIOUS INSPECTORS WHO ARE FAMILIAR WITH EACH CATEGORY OF WORK. IF SPECIAL INSPECTIONS ARE ALSO PERFORMED BY AGENTS WHO ARE NOT EMPLOYED BY PRIMARY TESTING AGENCY, EACH OF THESE ADDITIONAL SPECIAL INSPECTORS SHALL ISSUE A FINAL REPORT FOR THEIR CATEGORY OF INSPECTION. ONLY AFTER THE FINAL REPORT(S) HAS(HAVE) BEEN ISSUED BY THE SPECIAL INSPECTOR(S) CAN THE ARCHITECT AND EOR ISSUE FINAL AFFIDAVITS FOR THE PROJECT COMPLETION.

JOB SITE SAFETY AND MEANS AND METHODS OF CONSTRUCTION ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.

SCHEDULE OF SPECIAL INSPECTION SERVICES

THE FOLLOWING TABLES COMPRISE THE REQUIRED SCHEDULE OF SPECIAL INSPECTIONS FOR THIS PROJECT. THE CONSTRUCTION DIVISIONS WHICH REQUIRE SPECIAL INSPECTIONS FOR THIS PROJECT ARE AS FOLLOW:

SOILS AND FOUNDATIONS CAST-IN-PLACE CONCRETE

INSPECTION AGENTS	FIRM	ADDRESS
1. SPECIAL INSPECTOR*	TBD	TBD
2. TESTING LABORATORY	TBD	TBD
3. STRUCTURAL ENGINEER	JSN ASSOCIATES, INC.	ONE AUTUMN STREET PORTSMOUTH, NH 03801 (603) 433-8639

NOTE: THE INSPECTION AND TESTING AGENT SHALL BE ENGAGED BY THE OWNER OR THE OWNER'S AGENT, AND NOT BY THE CONTRACTOR OR SUBCONTRACTOR WHOSE WORK IS TO BE INSPECTED OR TESTED. ANY CONFLICT OF INTEREST MUST BE DISCLOSED TO THE BUILDING OFFICIAL, PRIOR TO COMMENCING WORK.

* THE SPECIAL INSPECTOR IS GENERALLY AN EMPLOYEE OF THE TESTING AND GEOTECHNICAL

SEISMIC DESIGN CATEGORY: BASIC WIND SPEED: 110 MPH WIND EXPOSURE CATEGORY:

QUALIFICATIONS OF INSPECTORS AND TESTING TECHNICIANS

THE QUALIFICATIONS OF ALL PERSONNEL PERFORMING SPECIAL INSPECTION ACTIVITIES ARE SUBJECT TO THE APPROVAL OF THE BUILDING OFFICIAL. THE CREDENTIALS OF ALL INSPECTORS AND TESTING TECHNICIANS SHALL BE PROVIDED IF REQUESTED.

IT IS RECOMMENDED THAT THE PERSON ADMINISTERING THE SPECIAL INSPECTIONS PROGRAM BE A PROFESSIONAL ENGINEER EXPERIENCED IN THE DESIGN OF BUILDINGS.

	1. WELDING	1	PERFORM VISUAL INSPECTION OF ALL WELDS IN ACCORDANCE WITH AWS D1.1. SUBMIT WELDER QUALIFICATION STATEMENTS. ADDITIONALLY, THE TESTING
FOUNDATION NOTES:			AGENCY (TO BE APPROVED BY JSN ASSOCIATES, INC.) MUST PERFORM A
SEE SHEET S1.0 FOR ADDITIONAL STRUCTURAL NOTES AND SCHEDULE OF SPECIAL INSPECTIONS.			VISUAL INSPECTION OF ALL FIELD WELDS. MULTI PASS WELDS OR WELDS GREATER THAN 5/16* MUST BE SPOT TESTED AT A
2. SEE S1.0 FOR FOUNDATION SECTIONS AND DETAILS.			RATE OF ONE TEST PER MEMBER USING TO MAGNETIC PARTICLE METHOD. ONE HUNDRED PERCENT (100%) OF ALL FIELD
3. BASE PLATES SHALL BE LEVELED WITH NUTS . PACK VOID BETWEEN BOT. OF BASE PLATE AND TOP OF PIER SOLID WITH NON-SHRINK GROUT.			AND SHOP FULL PENETRATION WELDS MU BE TESTED USING THE ULTRASONIC METHOD.

1.	SEE SHEET S1.0 FOR ADDITIONAL STRUCTURAL
	NOTES AND SCHEDULE OF SPECIAL INSPECTIONS.

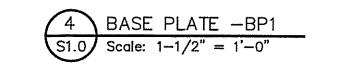
- 2. SEE S1 DETAIL BASE
- PACK '
- MAINTAIN A MINIMUM OF 4'-0" FROST COVER FROM GRADE TO BOTTOM OF FOOTING AT ALL FOOTING

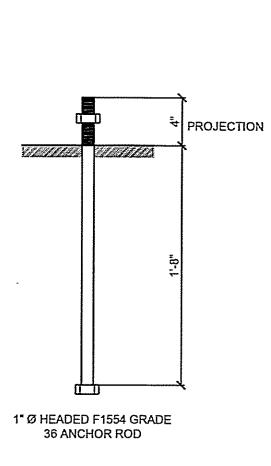
5. AFTER EXCAVATION CONTACT JSN FOR ANY

FOOTING SIZES, DEPTHS, ETC. MAY NEED

MODIFICATIONS IF UTILITIES ARE ENCOUNTERED.

BP1 (6) -1 5 Ø HOLES FOR > 11/2" -1/2" -1/2" -1/4
(6) -1 $\frac{5}{16}$ " Ø HOLES FOR — $\frac{1}{2}$ " $\frac{7}{2}$ " $\frac{1}{2}$ " $\frac{1}{2}$ " $\frac{1}{2}$ " $\frac{1}{4}$
CL
HSS12x12x 1/2 COL. (SEE PLAN) 1'-6"





TYPE 1 ANCHOR BOLT DETAIL

SOILS AND FOUNDATIONS

ITEM	AGENT NO.	SCOPE
1. SHALLOW FOUNDATIONS	1	VERIFY THAT UNSUITABLE BEARING MATERIALS ARE REMOVED. VERIFY THE SOIL LOAD-BEARING CAPACITY COINCIDES WITH THAT IDENTIFIED IN THE CONSTRUCTION DOCUMENTS.
2. CONTROLLED STRUCTURAL FILL	1	INSPECT COMPACTED FILL OPERATIONS TO VERIFY THE FILL MATERIAL, LIFT HEIGHTS, AND LEVEL OF COMPACTION ARE IN CONFORMANCE WITH THE REQUIREMENTS OF CONSTRUCTION.

CAST-IN-PLACE CONCRETE

ITEM	AGENT NO.	SCOPE
1. MIX DESIGN	3	REVIEW FOR COMPLIANCE WITH CONSTRUCTION DOCUMENTS.
2. MATERIAL CERTIFICATION	3	REVIEW FOR COMPLIANCE WITH CONSTRUCTION DOCUMENTS.
3. REINFORCEMENT INSTALLATION	1	REVIEW THE INSTALLATION OF THE REINFORCING STEEL FOR COMPLIANCE W THE CONSTRUCTION DOCUMENTS AND TH APPROVED SHOP DRAWINGS. REVIEW FOR 100% OF PIERS & PIER FOOTINGS.
4. CAST-IN-PLACE ANCHORS	1	VISUALLY INSPECT CAST-IN ANCHORS PRI TO CONCRETE PLACEMENT. VERIFY LOCATION OF ANCHORS IS IN ACCORDANC WITH CONSTRUCTION DOCUMENTS, AND EDGE DISTANCE AND SPACING REQUIREMENTS ARE MET. VERIFY THE CORRECT ANCHOR SIZE, TYPE, AND EMBEDMENT IS USED.
5. FORMWORK GEOMETRY	1	REVIEW GEOMETRY FOR COMPLIANCE WITHE STRUCTURAL CONSTRUCTION DOCUMENTS. CONDUCT REVIEW WHEN REINFORCING STEEL INSTALLATION IS BEINEVIEWED.
6. CONCRETE PLACEMENT	1	INSPECT THE PLACEMENT OF CONCRETE IS CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS. TEST SLUMP AND TEMPERATURE OF EACH BATCH. TEST AIR CONTENT WHEN COMPRESSIVE STRENGTH TEST SPECIMENS ARE MOLDED.
7. EVALUATION OF CONCRETE STRENGTH	1	OBTAIN ONE SET OF (4) STANDARD CYLINDERS FOR EACH COMPRESSIVE STRENGTH TEST. TEST ONE SPECIMEN AT 7-DAYS, (2) AT 28-DAYS, AND RETAIN ONE I RESERVE FOR LATER TESTING IF REQUIRE
		IN COLD WEATHER, TEST CYLINDERS SHAL BE FIELD CURED. ADDITIONAL CYLINDERS SHALL BE TAKEN AND LABORATORY CURE PER ACI REQUIREMENTS.
		TESTING FREQUENCY: (1) COMPRESSIVE STRENGTH TEST SHOULD BE PERFORMED FOR EACH DAY'S POUR EXCEEDING 5 CU. \ AND (1) ADD'L SET FOR EACH 50 CU. YDS. MORE THAN THE FIRST 25 CU. YDS.
8. CURING AND PLACEMENT	1	VERIFY THE CONCRETE IS ADEQUATELY PROTECTED UNDER HOT AND COLD WEAT CONDITIONS AS INDICATED IN THE CONCR SPECIFICATIONS. VERIFY THAT SLABS ARE CURED IN ACCORDANCE WITH ACI RECOMMENDED STANDARD PROCEDURES

ITEM	AGENT NO.	SCOPE
1. WELDING	1	PERFORM VISUAL INSPECTION OF ALL WELDS IN ACCORDANCE WITH AWS D1.1. SUBMIT WELDER QUALIFICATION STATEMENTS. ADDITIONALLY, THE TESTING AGENCY (TO BE APPROVED BY JSN ASSOCIATES, INC.) MUST PERFORM A VISUAL INSPECTION OF ALL FIELD WELDS. MULTI PASS WELDS OR WELDS GREATER THAN 5/16" MUST BE SPOT TESTED AT A RATE OF ONE TEST PER MEMBER USING THE MAGNETIC PARTICLE METHOD. ONE HUNDRED PERCENT (100%) OF ALL FIELD AND SHOP FULL PENETRATION WELDS MUST BE TESTED USING THE ULTRASONIC METHOD.

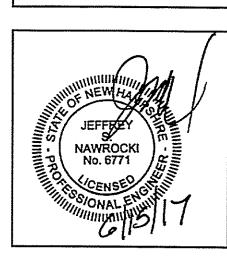


www.jsneng.com Client: TERRA FIRMA Landscape Arch.

163a Court Street

Portsmouth, NH

RCHW S



06/15/17 Scale: As Noted Design By: Approved By: -

Revisions

GEN. NOTES-SPECIAL INSPECTION ARCHWAY FND. PLAN SECTIONS & DETAILS

Project No: 170219