

CITY OF LOWELL

PETITION

CITY COUNCIL

Gas Mains

Matthew Blaisdell

*Request to lease street gas mains
pressure regulator stations and
make SCADA System in the area of
In City Council intersection West Sixth St.
Lowell St.*

June 25, 2019

Read and hearing ordered for 7PM on

June 25, 2019

**Read, Hearing Held,
Referred to Wire In-
specter, Development
Services**

City Clerk

Review of Utility Company Request for New Conduit/Pole Location

Applicant Information

Utility Gas Electric Telephone

Project Address

Intersection of W. Sixth St and Jewett St -
 Moulton Square

(circle one) Other

Lowell, MA

Reason Reconstruction of gas pressure regulator station, associated piping, and installation of a SCADA system to comply with the latest National Grid safety standards

Date Submitted 5/10/19

Review done by Christine Clancy

Sidewalk Material

Note: material to be replaced in kind (Concrete in full panels)

Concrete Asphalt Other

Sidewalk Vaults present Y N

Work on Street under a Paving Moratorium Y N

Is this location within the Flood Plain? Y N

Are ADA requirements being met? Y N/A

*w. Sixth
 is (see
 comment 6
 below)
 N/A
 where
 applicable*

Comments

1. Refer to the attached revised plan that shows shrubs placed around the SCADA system and a flag pole and spot light installed in lieu of a tree replacement. These additions were requested by the Centralville Neighborhood groups. Flag pole installation and materials shall be coordinated with Engineering. Flag pole height shall be less than 16'.
2. Contractor shall notify adjacent property owners at least 72 hours prior to beginning work.
3. Contractor to mulch disturbed area
4. Type of shrubs around SCADA system to be coordinated with the City of Lowell
5. Restore any disturbed pavement markings
6. Pavement restoration requirements attached. Concrete panels to be replaced in full and per ADA compliance where feasible. West Sixth Street under moratorium. Any cuts into pavement require curb to curb restoration.

Outcome of Review

Approved

Approved with
 Comments

X

Denied

Christine Clancy, P.E.; City Engineer

Christine Clancy

National Grid Contact
Christopher Maher, Senior Supervisor Gas Instrumentation and Regulation
Christopher.Maher@nationalgrid.com
Cell # 617-839-5435

Petition of:

National Grid
775 Dutton St.
Lowell, MA 01854

For the request to reconstruct our gas pressure regulator station and add a SCADA (Supervisory Control and Data Acquisition) System in the public right of way. The installation is located in the island at the intersection of West Sixth St and Jewett St.

TO: Lowell City Clerks Office.

Respectfully represents the NATIONAL GRID of 775 Dutton Street, Lowell, Massachusetts, that it desires to replace our existing gas pressure regulator station in the island at the intersection of *West Sixth St* and *Jewett St*. The proposed installation will replace the existing regulator station with a new station meeting National Grid's latest safety standards. This installation includes a new SCADA system and the necessary sustaining and protecting fixtures, under and across the public way hereinafter named.

Wherefore it prays that after due notice and hearing as provided by law, it be granted permission to excavate the public right of way to run and maintain a gas pressure regulator station, together with such sustaining and protecting fixtures as it may find necessary for the safe running operation of our underground gas structure and SCADA box, said gas pressure regulator station to be located substantially in accordance with the attached plan named – "Prefabricated Regulator Station Replacement - Station #2680."

MAY 10 '19 AMB:32
ENGINEERS

NATIONAL GRID

BY 
Sr Supervisor Gas I&R

May 8, 2019

2019 MAY -9 PM 4: 10
CITY CLERK'S OFFICE
CITY OF LOWELL
MA 01854

ORDERED:

Notice having been given and public hearing held, as provided by law, that National Grid be and it is hereby granted permission to excavate the public right of way to install the new station as shown in the plan named "Prefabricated Regulator Station Replacement - Station #2680," under and across the public way hereinafter named as said Company may deem necessary, in public way or ways hereinafter referred to, as requested in petition with the said COMPANY dated, May 8, 2019.

Said gas pressure regulator station shall be located substantially in accordance with the attached plan named - "Prefabricated Regulator Station Replacement - Station #2680."

The following are public ways along which the gas pressure regulator station above referred to may be installed: the island located at West Sixth St and Jewett St on City Property, Lowell, Ma.

I hereby certify that the foregoing order was adopted at a meeting of the
.....
....., held on the day of.....,20.....
....., 20.....

Received and entered in the records of location orders of the City of Lowell, Ma.

Book.....Page.....

Attest:

.....hereby certify that on20....., at o'clock,..... M
At....., a public hearing was held on the petition of
NATIONAL GRID for permission to install gas pressure regulator station as described in the
order herewith recorded, and that I mailed at least seven days before said hearing a written notice
of the time and hearing to each of the owners of real estate (as determined by the last preceding
assessment for taxation) along the ways or parts of ways upon which the Company is permitted
to install gas pressure regulator station under said order. And that thereupon said order was duly
adopted.

.....
.....
.....

nationalGrid

May 2, 2019

Lowell City Clerks Office
375 Merrimack St
Lowell Ma 01852

To whom it may concern:

Enclosed please find a petition of National Grid covering the installation of a gas pressure regulator station.

If you have any questions regarding this permit please contact:

Christopher Maher
775 Dutton Street
Lowell, Ma 01854

Christopher.Maher@nationalgrid.com
Phone: 617-839-5435

If this petition meets with your approval, please return an executed copy to:

National Grid Contact:

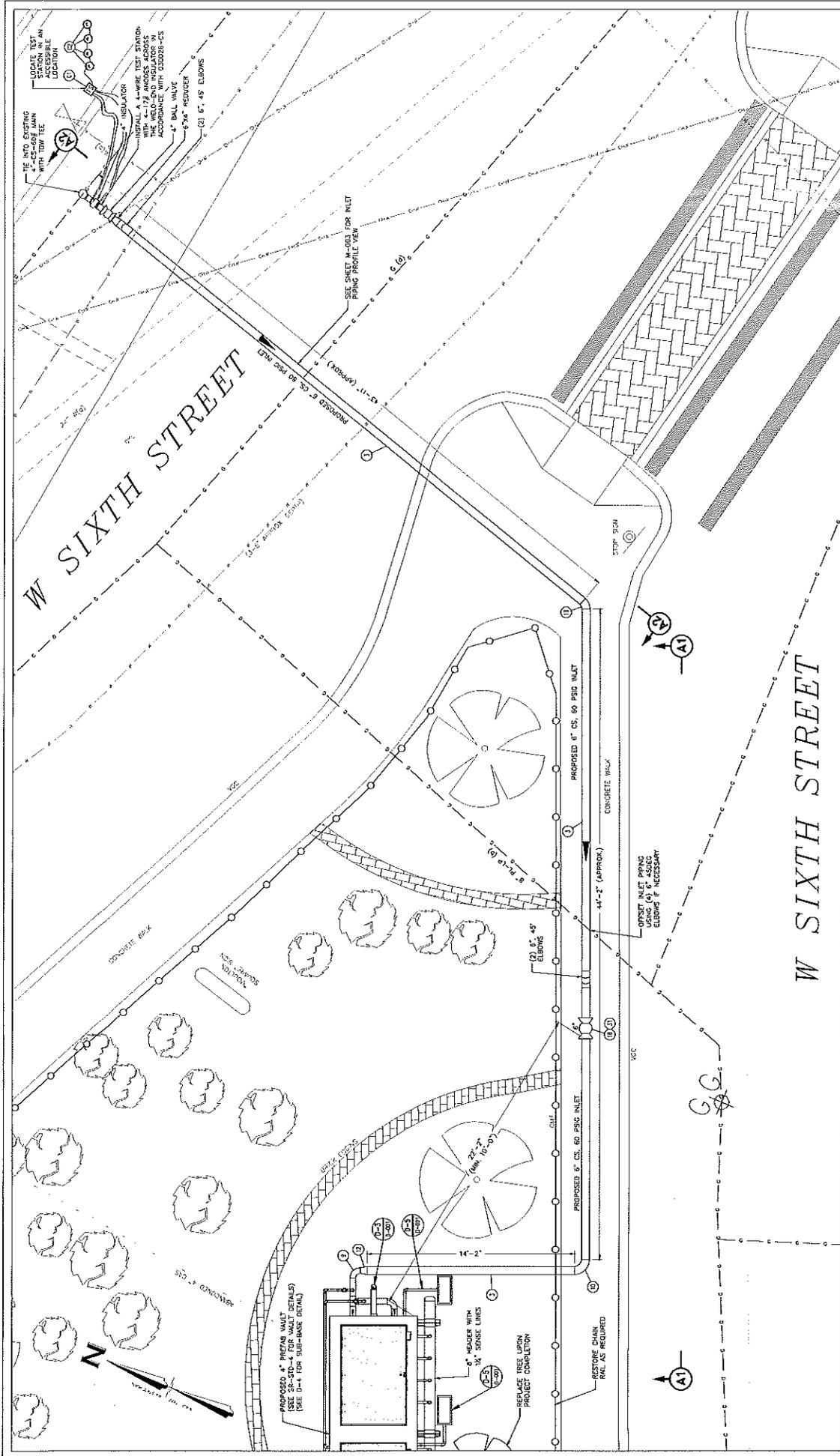
Christopher Maher
775 Dutton Street
Lowell, Ma 01854

Christopher.Maher@nationalgrid.com
Phone: 617-839-5435

Very truly yours,



Christopher Maher
Sr Supervisor Gas Instrumentation and Regulation



PAGE 2 OF 19

DRAWING NO. SHEET NO.

GRS-LOW-189726 M-001

STATION INSTALLATION & TIE-IN DETAILS

4" REGULATOR STATION REPLACEMENT
 STATION 100' WEST OF W 6TH ST.
 W 53RD ST. @ BOWEN ST.
 LONELL, MA

ENGINEER: DATE: ASSET ID: W.O. NO.:
 DESIGNED BY: R. KUCIUS 07/24/2018 189726 1000018726

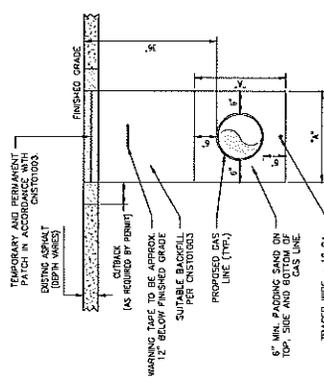
ISSUED FOR BID

NO.	DESCRIPTION	DATE	BY	CHKD
1	ISSUED FOR BID	07/27/2018	RE	RE
2	ISSUED FOR BID	07/27/2018	RE	RE

nationalgrid
 40 SALVEM ROAD
 WALTHAM, MA 02451

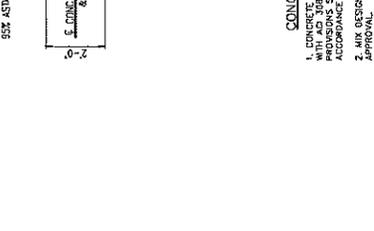
ISSUED FOR BID

SCALE 1" = 3'-0"



DETAIL 1
SCALE: 3/4" = 1'-0"
SCADA BOX ARRANGEMENT

- NOTES:
1. DRAIN PIPING SHALL BE FIELD ROUTED
 2. DRAIN PIPING AND DRYWELL SHALL BE PROVIDED BY CONTRACTOR
 3. PVC CENTER LINE TO BE MADE WITH FINISHED GRADE



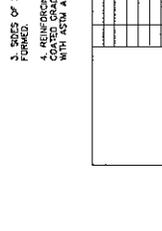
DETAIL 2
SCALE: 3/4" = 1'-0"
TRENCH GUIDELINES

PIPE SIZE	TRENCH DIMENSIONS
6" OR LESS	18"
8"	24"
10"	28"
12"	30"
14"	32"
16"	34"
18"	36"
20"	38"
24"	42"
30"	48"



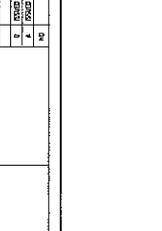
DETAIL 3
SCALE: 3/4" = 1'-0"
VENT POST INSTALLATION

- NOTES:
- A. VENT POST TO BE FABRICATED AND TYPED BY CONTRACTOR
 - B. VENT POST TO BE JUST BELOW OR AT GRADE
 - C. VENT POST TO BE SECURE TO PREVENT WIND FROM ENTERING
 - D. VENT POST CAP PER STATION WILL BE SPECIAL ORDER TO ACCOMMODATE ELECTRICAL CONTROL LINES



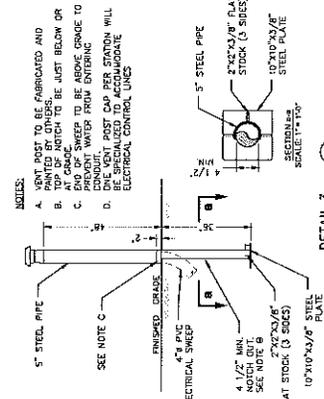
DETAIL 4
SCALE: 3/4" = 1'-0"
PROFILE OF CONNECTED SUB-BASE FOR PREFABRICATED REGULATOR VAULT

NOTE: APPROXIMATE WEIGHT OF VAULT = 32,000 - 40,000 LBS.

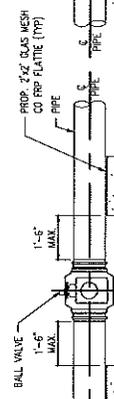


DETAIL 5
SCALE: 3/4" = 1'-0"
DRAIN PIPE INSTALLATION

- NOTES:
1. DRAIN PIPING SHALL BE FIELD ROUTED
 2. DRAIN PIPING AND DRYWELL SHALL BE PROVIDED BY CONTRACTOR
 3. PVC CENTER LINE TO BE MADE WITH FINISHED GRADE

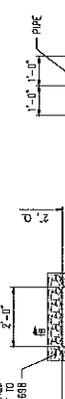


DETAIL 6
SCALE: 3/4" = 1'-0"
BALL VALVE CONCRETE SUPPORTS FOR 8" - 16" BALL VALVE

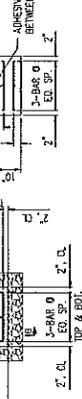


DETAIL 7
SCALE: 3/4" = 1'-0"
VALVE SUPPORTS

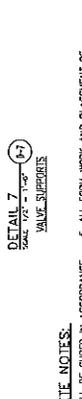
- CONCRETE NOTES:
1. CONCRETE SHALL BE CURED IN ACCORDANCE WITH ALL LOCAL CONCRETE CODES AND REGULATIONS AS WELL AS THE JOB SPECIFICATIONS.
 2. MIX DESIGN TO BE SUBMITTED FOR REVIEW & APPROVAL.
 3. SIZES OF SLAB FOUNDATION SHALL BE DETERMINED BY CONTRACTOR.
 4. ALL REBAR SHALL BE SPOKY WITH DEFORMATION CONFORMING TO ASTM A-305 WITH FINISH TO TOP AND BOTTOM BARS.
 5. CLEAR COVER TO TOP AND BOTTOM BARS.



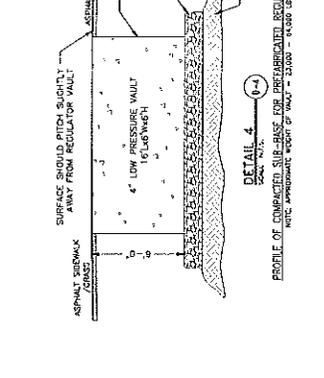
SECTION A-A
SCALE: 3/4" = 1'-0"



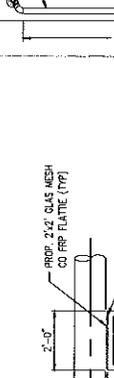
SECTION B-B
SCALE: 3/4" = 1'-0"



PLAN VIEW
SCALE: 3/4" = 1'-0"



DETAIL 8
SCALE: 3/4" = 1'-0"
ELECTRICAL SERVICE ENTRANCE DETAIL



DETAIL 9
SCALE: 3/4" = 1'-0"
GROUNDING DETAIL

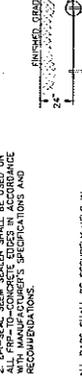
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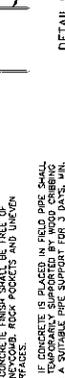
DETAIL 10
SCALE: 3/4" = 1'-0"
THERMOWELD CR-2 TYPE HOLD 84-5786



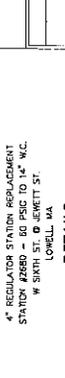
DETAIL 11
SCALE: 3/4" = 1'-0"
GROUND CONDUCTOR TO SCADA BOX



DETAIL 12
SCALE: 3/4" = 1'-0"
GROUND CONDUCTOR TO SCADA BOX



DETAIL 13
SCALE: 3/4" = 1'-0"
GROUND CONDUCTOR TO SCADA BOX



DETAIL 14
SCALE: 3/4" = 1'-0"
GROUND CONDUCTOR TO SCADA BOX



DETAIL 15
SCALE: 3/4" = 1'-0"
GROUND CONDUCTOR TO SCADA BOX

DETAILS

NO.	DATE	BY	CHKD.	APP'D.	DESCRIPTION
1					
2					
3					
4					
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15					

Christine Clancy, P.E., City Engineer

**CITY OF LOWELL ENGINEERING DEPARTMENT
TRENCH, ROADWAY, AND SIDEWALK REPAIR REQUIREMENTS**

Date: August 2018

Trench, roadway, and sidewalk repair work shall be completed under the observation of an inspector. The following information is supplemental to all pertinent City ordinances and the DPW/Engineering Department Permit Manual:

Roadway

- (1) Limits of trench excavations shall be sawcut prior to removing asphalt.
- (2) If lateral trench work is greater than 4' deep, the contractor shall backfill with flowable fill that does not contain fly ash. Flowable fill may be substituted with backfill if a full time inspector observes and documents the compaction of the trench.
- (3) The trench patch shall match the existing thickness of asphalt or minimum 4" (whichever is thicker) and shall be installed in lifts not to exceed 2". If there are cobblestones or concrete beneath the existing asphalt, the minimum thickness of asphalt shall be 6".
- (4) After a minimum of 60 days after the temporary trench is placed, permanent trench patch shall be placed with a paving machine and include the following:
 - a. Mill to a depth of 1.5" on either side of trench; extending to the limits of the centerline and to the curb line (or curb to curb if trench extends beyond the centerline); total mill width minimum parallel to the curb line is trench width plus 10'.
 - b. If there are multiple trenches within 30' of each other, mill shall be continuous through patches and extend a minimum of 5' beyond the trench limits.
- (5) Apply rubber sealing at joints where overlay limits meets existing pavement. For streets under a moratorium, apply infrared sealing at joints with existing pavement.
- (6) Restore disturbed pavement markings in kind.
- (7) *If the street is under a 5-year moratorium, the City Engineer or DPW Commissioner shall provide prior approval of any trench work (excludes emergency work).*
- (8) *If the street is anticipated for upcoming restoration, the City Engineer or DPW Commissioner can elect to adjust (lessen) the above restoration limit requirements.*

Sidewalk

- (1) All concrete sidewalk repairs shall replace the full panel. If disturbed panel is ADA compliant, repaired panel shall be ADA compliant.
- (2) All work completed in a pedestrian ramp shall replace the entire ramp including the detectible tile. Detectible tiles shall be cast iron.
- (3) All repair work completed on an asphalt sidewalk shall extend full to the back of sidewalk and be a minimum of 4' wide (running parallel to the curbing).
- (4) Concrete for sidewalk shall be fiber reinforced and shall have 2 coats of a water based 100% acrylate sealant applied per manufacturer's requirements. The sealant shall be applied a minimum of 30 days after the concrete is placed but no more than 45 days after the concrete is placed.
- (5) Restoration of granite curbing shall include concrete at the front and back of sidewalk.