

Gas Main Replacement Project  
Baker Street  
West Roxbury, Massachusetts

## **REQUEST FOR DETERMINATION OF APPLICABILITY**

National Grid  
40 Sylvan Road  
Waltham, Massachusetts

March 2022

**Tighe & Bond**

WO# 1213100  
N-5068-169  
March 23, 2022

Boston Conservation Commission  
1 City Hall Square  
Room 709  
Boston, Massachusetts 02201

Re: **Request for Determination of Applicability  
Gas Main Replacement Project  
Baker Street, West Roxbury, Massachusetts**

Dear Executive Director Moreno and Members of the Boston Conservation Commission:

On behalf of the Boston Gas Company, Tighe & Bond respectfully submits this Request for Determination of Applicability (RDA) for a proposed gas main replacement project within Baker Street and connecting roads, including Lasell Street, Capital Street, Farragut Street, Ellswood Street, Durant Street, Chesbrough Road, Amesbury Street, Baker Place, Cutter Road, and Dow Road in West Roxbury, Massachusetts.

This RDA is being filed because a portion of the proposed work in Baker Street will occur within the 100-foot Buffer Zone to a Bordering Vegetated Wetland (BVW). This area is regulated under the Massachusetts Wetlands Protection Act (WPA, M.G.L. c. 131 § 40) and the City of Boston Wetlands Protection Ordinance (Chapter VII) and their implementing regulations. All proposed work will be within previously paved areas with no anticipated impacts to nearby wetland resource areas.

Tighe & Bond respectfully requests that the Conservation Commission issue a Negative Determination confirming that the proposed work does not require the filing of a Notice of Intent.

This RDA application includes the following items:

- Attachment A – WPA Form 1 (certified digital signatures) and Filing Fee
- Attachment B – Figures and Site Plans
- Attachment C – Photographic Log
- Attachment D – Abutter Notification Information
- Attachment E – National Grid Best Management Practices

The following text discusses the wetland resource areas, proposed activities, and proposed protective measures.

## **Wetland Resource Areas**

Wetland resource areas were reviewed by a Tighe & Bond wetland scientist using publicly available data, including the Massachusetts Department of Environmental Protection (MassDEP) Online Map Viewer. These data were field verified during a delineation conducted on February 23, 2022. Please refer to Figure 3 in Attachment B for the locations of the resource areas and their respective buffers.

### **Bordering Vegetated Wetland (BVW)**

A BVW was delineated on the west side of Baker Street. Bordering on Sawbill Brook, this BVW is classified as a Freshwater Scrub-Shrub Wetland (PSS1E) and Freshwater Emergent Wetland (PEM1E) per the *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979). Wetland indicators observed included saturation, standing water,

water-stained leaves, and geomorphic position. Hydric soils (10YR 2/2, redoximorphic features 7.5YR 3/3) and hydrophytic vegetation including common reed (*Phragmites australis*), cattail (*Typha spp.*), and red maple (*Acer rubrum*) were also observed.

A small portion of the project area falls within the 100-foot Buffer Zone of a BVW adjacent to Sawmill Brook, which runs east-west of the project area across Baker Street. No adverse impacts to the BVW are anticipated as all work will be completed within the existing roadway.

### Rare Species

The project area does not fall within *Priority Habitats of Rare Species* or *Estimated Habitats of Rare Wildlife* based on a review of the Massachusetts Natural Heritage and Endangered Species Program (NHESP) Atlas (15th edition; August 1, 2021) and NHESP data available on MassGIS online (August 2021), as shown on Figure 2.

### Proposed Activities

The existing gas main within Baker Street is comprised of the following:

- 1,540 linear feet (lf) of 4-inch and 6-inch diameter low-pressure (LP) cast iron (CI) (1909/1928/1929) piping
- 365 lf of 6-inch diameter LP CI (1909) piping
- 1,165 lf of 6-inch diameter LP CI (1909) piping

A summary of the proposed activities is provided in the enclosed Table 1. A total of 3,580 lf of replacement gas main is proposed in Baker Street. The location of the project area is depicted on Figures 1 through 3 and in the Project Drawings provided in Attachment B.

### Project Area:

#### Baker Street

Approximately 2,050 lf of 12-inch diameter bare steel in Baker Street from Vermont Street to Brook Farm Road.

Approximately 365 lf of 8-inch diameter plastic in Baker Street from the existing 8-inch diameter plastic at Cotuit Street, to the existing 12-inch diameter bare steel in Vermont Street.

Approximately 1,165 lf of 8-inch diameter plastic in Baker Street from north of the railroad crossing at 270 Baker Street, to the existing 8-inch diameter coated steel at Rumford Road.

Only a portion of the proposed work on Baker Street is within the 100-foot Buffer Zone to BVW, at the intersection of Baker Street and Brook Farm Road. Work occurring in the Buffer Zone is depicted on Figure 3.

### Work Methodology

In general, the gas main replacement activities will entail the excavation of an approximately two-foot-wide trench for safe installation. The trench bottom will be excavated and graded such that the pipe will be supported for its entire length on undisturbed bottom at a depth of approximately three feet below surface grade. The trench will be excavated within the paved roadway footprints for all sites, with the precise locations of the gas lines to be determined in the field so that existing utilities can be avoided. The project involves relaying the existing gas mains and installation of new gas mains, as described above. The existing gas mains will be abandoned in place. Upon installation of the replacement mains, the trenches will be backfilled and restored in kind. Refer to the Project Drawings in Attachment B.

Equipment scheduled for use during the proposed construction and restoration of the trench include excavator and dump truck. Excavated material will be placed in the dump truck for removal to an off-site National Grid processing facility. Suitable soils and bedding materials are utilized in accordance with current gas pipe standards and the City of Boston requirements.

## Work Within Buffer Zone

Approximately 174 lf of work, or approximately 348 square feet (sf), is proposed within the 100-foot Buffer Zone. It is not anticipated that the proposed work will result in impacts to the BVW. The areas where the work is proposed consist entirely of existing paved roadways. The proposed work will not change the general characteristics of the area, as the entire project is contained within previously developed areas and will be subsurface. The site will be restored to pre-existing elevations.

## Protective Measures

Work will be conducted in accordance with National Grid's EG-303NE Best Management Practices document. Please refer to Attachment E for further details. During the gas line construction, erosion control measures (e.g., straw bales, silt fence, straw wattles, catch basin silt sack inserts) will be installed as deemed necessary.

## Climate Resiliency

The City of Boston has established an Ordinance Protecting Local Wetlands and Promoting Climate Change Adaptation in the City of Boston (Boston Wetlands Ordinance; City of Boston Code, Ordinances, Chapter 7-1.4) regarding activities within their jurisdiction as well as administrative procedures relative to proposed projects. The Ordinance directs the Boston Conservation Commission to consider future climate impacts like rising sea levels in applications for construction and is stricter than statewide standards. According to the Climate Ready Boston Map Explorer, the project area is not within any predicted coastal or stormwater flood zones.

Regardless, the underground infrastructure is designed in consideration of groundwater. Conduit ends are sealed watertight with a manufacturer-recommended material compatible with the gas main. Additionally, the pipes are manufactured to withstand extreme environments inclusive of water penetration. In this manner, the below ground infrastructure is designed and capable of withstanding potential climate change and future climate impacts.

## Application Requirements

As required under the City of Boston Wetlands Protection Ordinance, abutters to the project area have been notified via Certificate of Mailing, in accordance with abutter notification requirements. Copies of the abutter notification forms (English, Spanish with translation certification), the list of abutters, and Affidavit of Service (with certified digital signature) are enclosed in Attachment D.

As the project will be conducted entirely within public roadway rights-of-way (ROW) in existing Boston Gas Company easements, property owner notification is not warranted.

## Summary

We look forward to having the opportunity to discuss this project with the City of Boston Conservation Commission during the public hearing scheduled for April 6, 2022. We anticipate these materials are sufficient for the Commission to issue a Negative Determination, confirming that a Notice of Intent (NOI) will not be required for the proposed work to proceed. Should you have any questions regarding this application or require any additional information, please do not hesitate to contact me at (413) 250-2424 or via email at [MPCoady@tighebond.com](mailto:MPCoady@tighebond.com).

Sincerely,

**TIGHE & BOND, INC.**



Melissa P. Coady  
Project Manager

Enclosures

Copy: MassDEP NERO  
Jaime Walker, National Grid

**Table 1  
Boston Gas Company  
Gas Main Replacement  
West Roxbury, Massachusetts**

<b>Street</b>	<b>Gas Main Maintenance (linear feet)</b>	<b>Work within 100- foot Buffer Zone to BVW</b>
Baker Street from Brook Farm Road to Vermont Street	2,050 lf	<b>Yes (174 lf)</b>
Baker Street from Vermont Street to Cotuit Street	365 lf	No
Baker Street from Rumford Road to 270 Baker Street	1,165 lf	No



**ATTACHMENT A**

WPA FORM 1

FILING FEE



# WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

## A. General Information

**Important:**  
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Applicant:

Boston Gas Company (c/o Jaime Walker) jaime.walker@nationalgrid.com  
 Name E-Mail Address

40 Sylvan Road  
 Mailing Address

Waltham MA 02451  
 City/Town State Zip Code

(978) 551-1156  
 Phone Number Fax Number (if applicable)

2. Representative (if any):

Tighe & Bond, Inc.  
 Firm

Melissa Coady MPCoady@tighebond.com  
 Contact Name E-Mail Address

53 Southampton Road  
 Mailing Address

Westfield MA 01085  
 City/Town State Zip Code

(413) 572-3224  
 Phone Number Fax Number (if applicable)

## B. Determinations

1. I request the Boston Conservation Commission make the following determination(s). Check any that apply:

- a. whether the **area** depicted on plan(s) and/or map(s) referenced below is an area subject to jurisdiction of the Wetlands Protection Act.
- b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced below are accurately delineated.
- c. whether the **work** depicted on plan(s) referenced below is subject to the Wetlands Protection Act.
- d. whether the area and/or work depicted on plan(s) referenced below is subject to the jurisdiction of any **municipal wetlands ordinance** or **bylaw** of:

Boston  
Name of Municipality

- e. whether the following **scope of alternatives** is adequate for work in the Riverfront Area as depicted on referenced plan(s).



# WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

## C. Project Description

1. a. Project Location (use maps and plans to identify the location of the area subject to this request):

Baker Street, Lasell Street, Capital Street, Farragut Street, Ellswood Street, Durant Street, Chesbrough Street, Amesbury Street, Baker Place, Cutter Road, and Dow Road West Roxbury  
City/Town

Not applicable, roadway right-of-way  
Assessors Map/Plat Number Parcel/Lot Number

b. Area Description (use additional paper, if necessary):

Baker Street, Lasell Street, Capital Street, Farragut Street, Ellswood Street, Durant Street, Chesbrough Road, Amesbury Street, Baker Place, Cutter Road, and Dow Road all serve as residential and commercial areas. The project area is east of the Veterans of Foreign Wars Parkway.

c. Plan and/or Map Reference(s):

<u>Figure 1-Site Location</u>	<u>March 2022</u>
Title	Date
<u>Figure 2- Priority Resources</u>	<u>March 2022</u>
Title	Date
<u>Figure 3 - Site Plan</u>	<u>March 2022</u>
Title	Date

2. a. Work Description (use additional paper and/or provide plan(s) of work, if necessary):

Boston Gas Company proposes to replace an existing gas main within Baker Street and extend the main into adjacent roadways. Please refer to the attached cover letter for additional details.





## WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

### C. Project Description (cont.)

b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).

310 CMR 10.02(2)(a)(2) - Activities conducted to maintain, repair or replace, but not substantially change or enlarge an existing and lawfully located structure or facility used in the service of the public and used to provide electric, gas

310 CMR 10.02(2)(b)(2)(i) - Installation of underground utilities (e.g., electric, gas, water) within existing paved or unpaved roadways and private roadways/driveways, provided that all work is conducted within the roadway or driveway and that all trenches are closed at the completion of each workday

3. a. If this application is a Request for Determination of Scope of Alternatives for work in the Riverfront Area, indicate the one classification below that best describes the project.

- Single family house on a lot recorded on or before 8/1/96
- Single family house on a lot recorded after 8/1/96
- Expansion of an existing structure on a lot recorded after 8/1/96
- Project, other than a single family house or public project, where the applicant owned the lot before 8/7/96
- New agriculture or aquaculture project
- Public project where funds were appropriated prior to 8/7/96
- Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision
- Residential subdivision; institutional, industrial, or commercial project
- Municipal project
- District, county, state, or federal government project
- Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.

b. Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification above (use additional paper and/or attach appropriate documents, if necessary.)

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# WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

## D. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

I further certify that the property owner, if different from the applicant, and the appropriate DEP Regional Office were sent a complete copy of this Request (including all appropriate documentation) simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

Name and address of the property owner:

Boston Gas Company (c/o Jaime Walker)  
Name

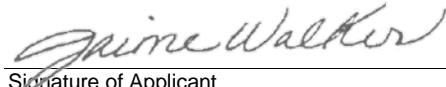
40 Sylvan Road  
Mailing Address


Waltham  
City/Town

MA 02451  
State Zip Code

Signatures:

I also understand that notification of this Request will be placed in a local newspaper at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.

 3/21/22  
Signature of Applicant Date

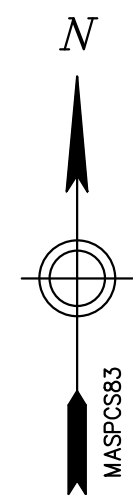
 3/21/22  
Signature of Representative (if any) Date

# PROPOSED GAS MAIN REPLACEMENT

## APPROXIMATELY 3,545' OF 4", 2,250' OF 8" PLASTIC & 2,050' OF 12" COATED STEEL - 22 PSIG

### 270-585 BAKER ST & 891-903 VFW PKWY, WEST ROXBURY, MA

#### W.O. NO. 1213100



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3	DPL-WRO-067813-1053 C-001	PROPOSED INSTALLATION PLAN	
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17	DPL-WRO-067813-1053 C-202	PROPOSED TIE-IN DETAILS	
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19	DPL-WRO-067813-1053 C-301	NATIONAL GRID STANDARD CONSTRUCTION DETAILS	
20	DPL-WRO-067813-1053 C-302	NATIONAL GRID STANDARD CONSTRUCTION DETAILS	
21	DPL-WRO-067813-1053 C-303	NATIONAL GRID STANDARD CONSTRUCTION DETAILS	
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23	DPL-WRO-067813-1053 C-305	NATIONAL GRID STANDARD CONSTRUCTION DETAILS	



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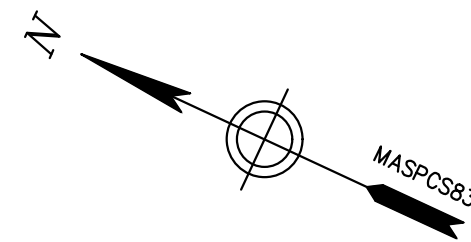
 Drawing Copyright © 2022 141 Longwater Drive, Suite 104 Norwell, MA 02061-1620 781-982-7700 • www.chacompanies.com	 4/6/2022 <small>UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS</small>	<table border="1"> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>DATE</th> <th>DR.BY</th> <th>CK.BY</th> <th>APP.BY</th> </tr> <tr> <td>2</td> <td>REVISED PER CLIENTS COMMENTS (DATED 03/30/2022)</td> <td>04/06/2022</td> <td>RA</td> <td>MLT</td> <td>GWP</td> </tr> <tr> <td>1</td> <td>REVISED PER CLIENTS COMMENTS (DATED 02/09/2022)</td> <td>02/11/2022</td> <td>RA</td> <td>MLT</td> <td>GWP</td> </tr> <tr> <td>0</td> <td>ISSUED FOR CONSTRUCTION</td> <td>01/20/2022</td> <td>RA</td> <td>MLT</td> <td>GWP</td> </tr> </table>	NO.	DESCRIPTION	DATE	DR.BY	CK.BY	APP.BY	2	REVISED PER CLIENTS COMMENTS (DATED 03/30/2022)	04/06/2022	RA	MLT	GWP	1	REVISED PER CLIENTS COMMENTS (DATED 02/09/2022)	02/11/2022	RA	MLT	GWP	0	ISSUED FOR CONSTRUCTION	01/20/2022	RA	MLT	GWP	BOSTON GAS COMPANY d/b/a  40 SYLVAN ROAD WALTHAM, MA 02451 <div style="border: 1px solid black; padding: 5px; display: inline-block; font-weight: bold;">FINAL</div>
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PROPOSED GAS MAIN REPLACEMENT 270-585 BAKER ST & 891-903 VFW PKWY WEST ROXBURY, MA					
<b>COVER SHEET</b>					
DWG SIZE	DESIGNER	ENGINEER	DATE:	ASSET I.D.	W.O. NO.:
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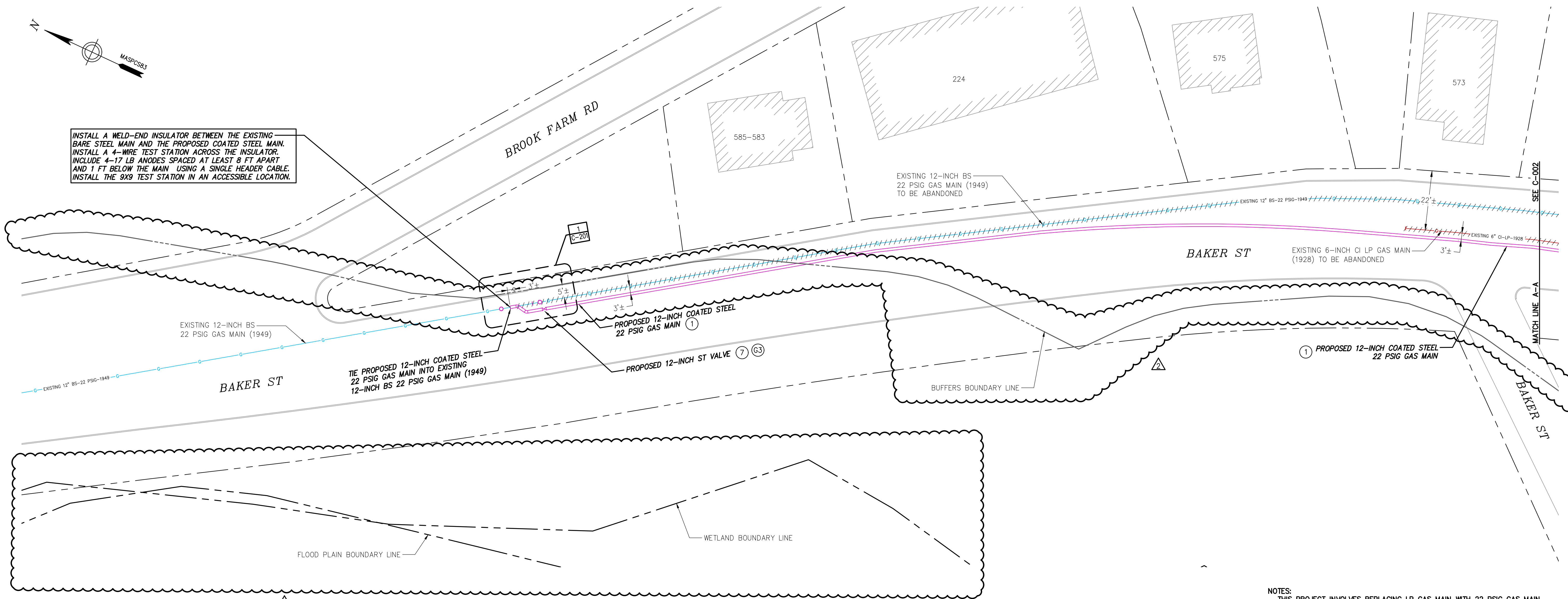
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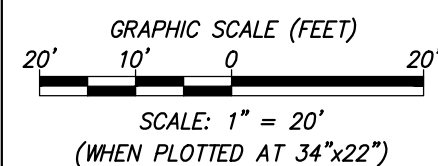
INSTALL A WELD-END INSULATOR BETWEEN THE EXISTING BARE STEEL MAIN AND THE PROPOSED COATED STEEL MAIN. INSTALL A 4-WIRE TEST STATION ACROSS THE INSULATOR. INCLUDE 4-17 LB ANODES SPACED AT LEAST 8 FT APART AND 1 FT BELOW THE MAIN USING A SINGLE HEADER CABLE. INSTALL THE 9X9 TEST STATION IN AN ACCESSIBLE LOCATION.



NOTES:  
 - THIS PROJECT INVOLVES REPLACING LP GAS MAIN WITH 22 PSIG GAS MAIN. ENSURE THAT ALL SERVICES ARE FITTED APPROPRIATELY WITH SERVICE REGULATORS PRIOR TO TRANSFERRING OVER FROM THE LP TO 22 PSIG SYSTEM.  
 - TOTAL FOOTAGE EXCEEDS 2500 FEET. CONTACT I&R FOR PICKLING PROCEDURE.

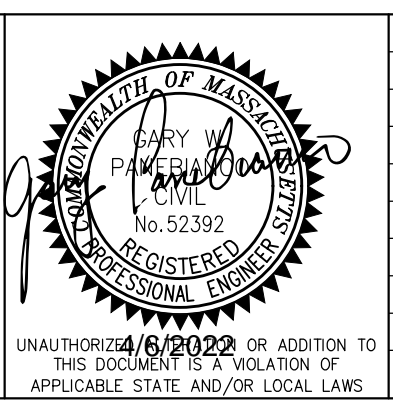
**LEGEND**

- EXISTING CS GAS TRANSITION FITTING
- EXISTING CS REDUCER
- EXISTING CS VALVE
- PROPOSED GAS CAP
- PROPOSED GAS TRANSITION FITTING
- PROPOSED GAS REDUCER
- PROPOSED GAS VALVE
- BUILDING LINE
- PROPERTY LINE
- RIGHT OF WAY LINE
- BUFFERS BOUNDARY LINE
- EXISTING WETLAND / FLOOD PLAIN BOUNDARY LINE
- EDGE OF PAVEMENT
- CURB LINE
- EXISTING CS GAS MAIN
- EXISTING GAS MAIN TO BE ABANDONED
- PROPOSED GAS LINE
- EXISTING PL GAS MAIN
- EXISTING CI GAS MAIN
- EXISTING BS GAS MAIN
- EXISTING CS CAP
- EXISTING BS GAS CAP
- EXISTING BS GAS TRANSITION FITTING
- EXISTING BS GAS REDUCER
- EXISTING BS GAS VALVE
- EXISTING PL GAS CAP
- EXISTING PL GAS TRANSITION FITTING
- EXISTING PL GAS REDUCER
- EXISTING PL GAS VALVE
- EXISTING CI GAS TRANSITION FITTING
- EXISTING CI GAS REDUCER
- EXISTING CI GAS VALVE
- EXISTING FIRE HYDRANT
- EXISTING CATCH BASIN
- EXISTING UTILITY POLE



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NO.	DESCRIPTION	DATE	DR.BY	CHK.BY	APP.BY
2	REVISED PER CLIENTS COMMENTS (DATED 03/30/2022)	04/06/2022	RA	MLT	GWP
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0	ISSUED FOR CONSTRUCTION	01/20/2022	RA	MLT	GWP

BOSTON GAS COMPANY  
 d/b/a  
**nationalgrid**  
 40 SYLVAN ROAD  
 WALTHAM, MA 02451

**FINAL**

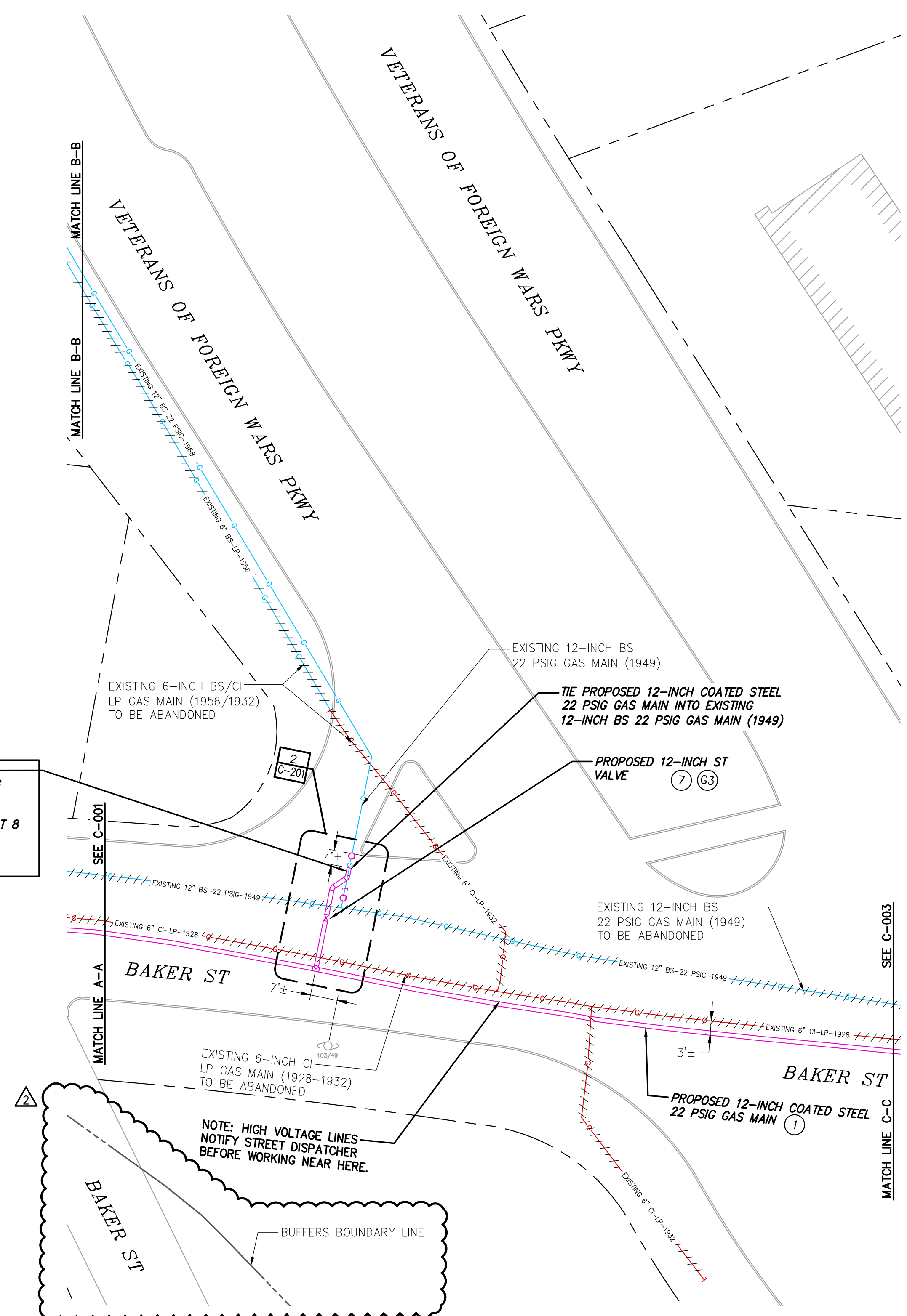
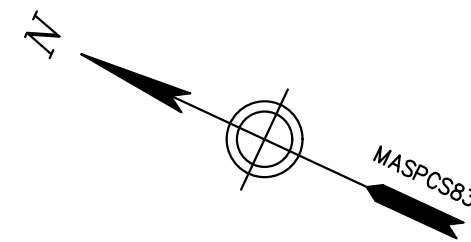
PROPOSED GAS MAIN REPLACEMENT  
 270-585 BAKER ST & 891-903 VFW PKWY  
 WEST ROXBURY, MA

**PROPOSED INSTALLATION PLAN**

DWG SIZE	DESIGNER	ENGINEER	DATE:	ASSET I.D.	W.O. NO.:
22"X34"	R.ALABADI	M.THOMPSON	01/20/2022	DISTRIBUTION	1213100

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DRAWING NO.	SHEET NO.
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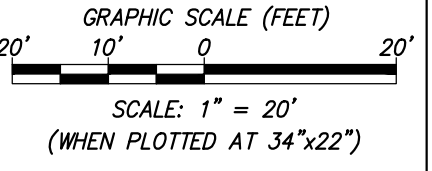
**CORROSION REQUIREMENTS:**  
 INSTALL A WELD-END INSULATOR BETWEEN THE EXISTING COATED STEEL MAIN AND THE PROPOSED COATED STEEL MAIN. INSTALL A 4-WIRE TEST STATION ACROSS THE INSULATOR. INCLUDE 4-17 LB ANODES SPACED AT LEAST 8 FT APART AND 1 FT BELOW THE MAIN USING A SINGLE HEADER CABLE. INSTALL THE 9X9 TEST STATION IN AN ACCESSIBLE LOCATION. MW00026

NOTE: HIGH VOLTAGE LINES NOTIFY STREET DISPATCHER BEFORE WORKING NEAR HERE.

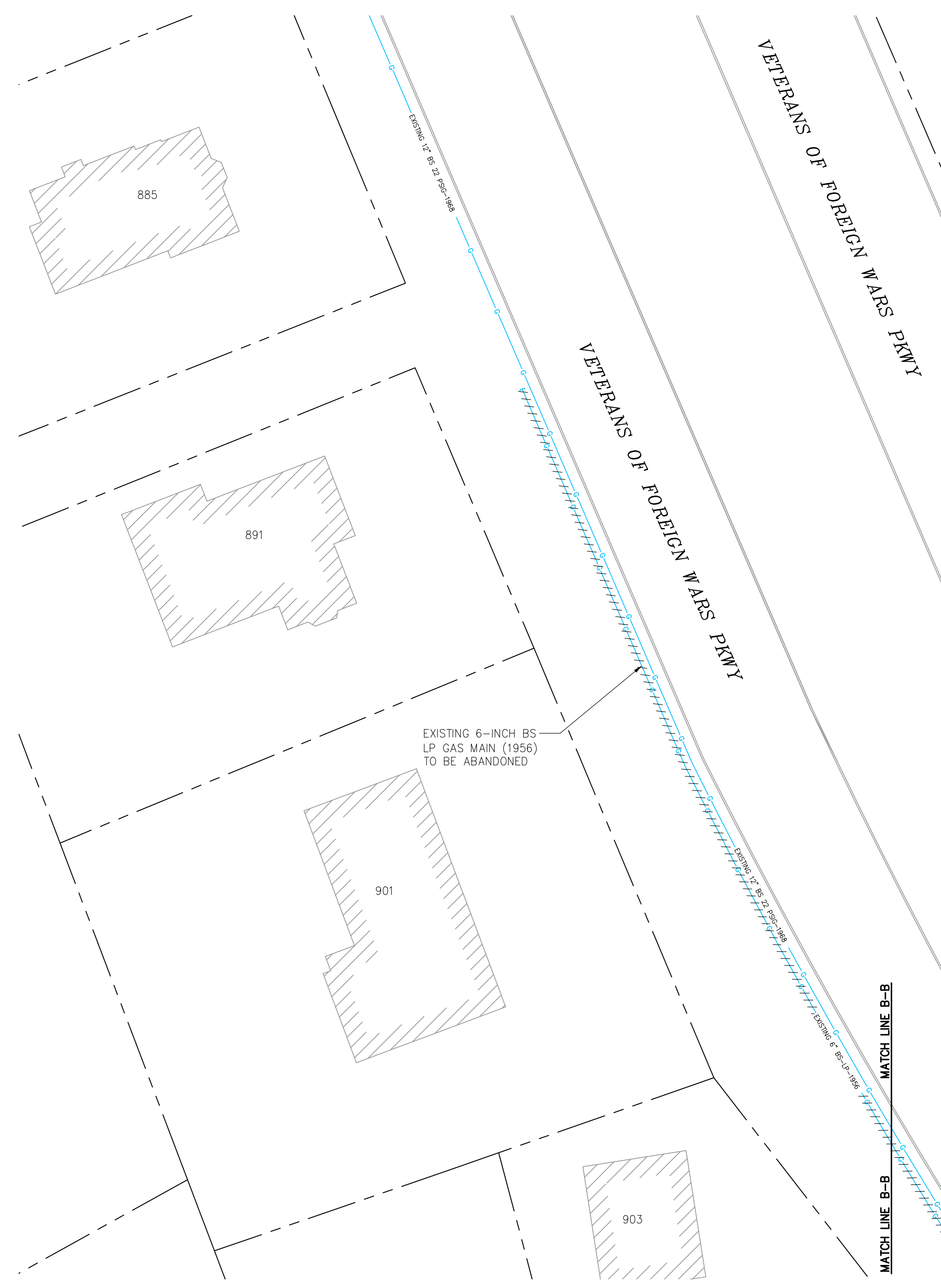
BUFFERS BOUNDARY LINE

**LEGEND**

<ul style="list-style-type: none"> <li>— EXISTING CS CAP</li> <li>— EXISTING CS GAS TRANSITION FITTING</li> <li>— EXISTING CS REDUCER</li> <li>— EXISTING CS VALVE</li> <li>— PROPOSED GAS CAP</li> <li>— PROPOSED GAS TRANSITION FITTING</li> <li>— PROPOSED GAS REDUCER</li> <li>— PROPOSED GAS VALVE</li> <li>— BUILDING LINE</li> <li>— PROPERTY LINE</li> <li>— RIGHT OF WAY LINE</li> <li>— BUFFERS BOUNDARY LINE</li> <li>— EDGE OF PAVEMENT</li> <li>— CURB LINE</li> <li>— EXISTING CS GAS MAIN</li> <li>— EXISTING GAS MAIN TO BE ABANDONED</li> <li>— PROPOSED GAS LINE</li> <li>— EXISTING PL GAS MAIN</li> <li>— EXISTING CI GAS MAIN</li> <li>— EXISTING BS GAS MAIN</li> </ul>	<ul style="list-style-type: none"> <li>— EXISTING BS GAS CAP</li> <li>— EXISTING BS GAS TRANSITION FITTING</li> <li>— EXISTING BS GAS REDUCER</li> <li>— EXISTING BS GAS VALVE</li> <li>— EXISTING PL GAS CAP</li> <li>— EXISTING PL GAS TRANSITION FITTING</li> <li>— EXISTING PL GAS REDUCER</li> <li>— EXISTING PL GAS VALVE</li> <li>— EXISTING CI GAS TRANSITION FITTING</li> <li>— EXISTING CI GAS REDUCER</li> <li>— EXISTING CI GAS VALVE</li> <li>— EXISTING FIRE HYDRANT</li> <li>— EXISTING CATCH BASIN</li> <li>— EXISTING UTILITY POLE</li> </ul>
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**NOTES:**  
 - THIS PROJECT INVOLVES REPLACING LP GAS MAIN WITH 22 PSIG GAS MAIN. ENSURE THAT ALL SERVICES ARE FITTED APPROPRIATELY WITH SERVICE REGULATORS PRIOR TO TRANSFERRING OVER FROM THE LP TO 22 PSIG SYSTEM.  
 - TOTAL FOOTAGE EXCEEDS 2500 FEET. CONTACT I&R FOR PICKLING PROCEDURE.



**NOTES:**  
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2	REVISED PER CLIENTS COMMENTS (DATED 03/30/2022)	04/06/2022	RA	MLT	GWP
1	REVISED PER CLIENTS COMMENTS (DATED 02/09/2022)	02/11/2022	RA	MLT	GWP
0	ISSUED FOR CONSTRUCTION	01/20/2022	RA	MLT	GWP

BOSTON GAS COMPANY  
 d/b/a  
**nationalgrid**  
 40 SYLVAN ROAD  
 WALTHAM, MA 02451

**FINAL**

PROPOSED GAS MAIN REPLACEMENT  
 270-585 BAKER ST & 891-903 VFW PKWY  
 WEST ROXBURY, MA

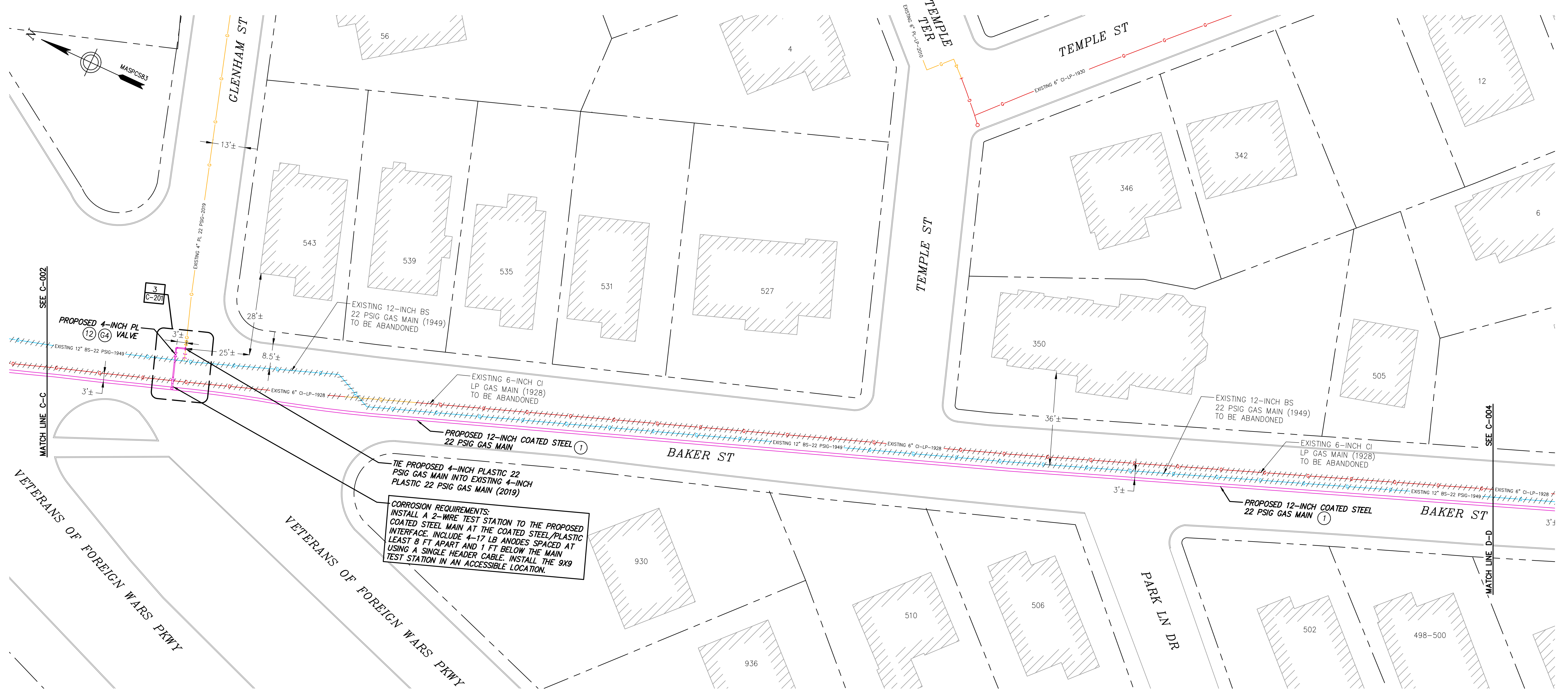
**PROPOSED INSTALLATION PLAN**

DWG SIZE	DESIGNER	ENGINEER	DATE	ASSET I.D.	W.O. NO.:
22"X34"	R.ALABADI	M.THOMPSON	01/20/2022	DISTRIBUTION	1213100

PAGE 4 OF 23

DRAWING NO.	SHEET NO.
DPL-WRO-067813-1053	C-002

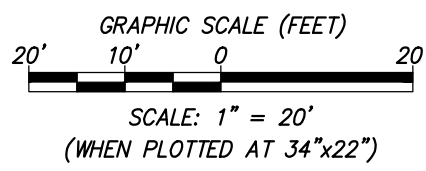
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**CORROSION REQUIREMENTS:**  
 INSTALL A 2-WIRE TEST STATION TO THE PROPOSED COATED STEEL MAIN AT THE COATED STEEL/PLASTIC INTERFACE. INCLUDE 4-17 LB ANODES SPACED AT LEAST 8 FT APART AND 1 FT BELOW THE MAIN USING A SINGLE HEADER CABLE. INSTALL THE 9X9 TEST STATION IN AN ACCESSIBLE LOCATION.

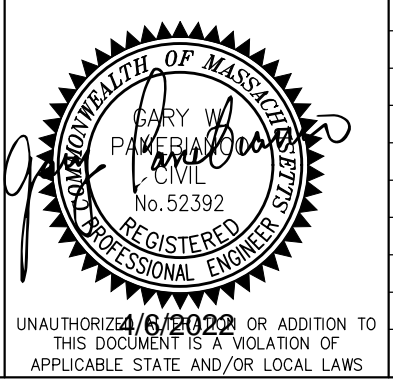
**NOTES:**  
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 - TOTAL FOOTAGE EXCEEDS 2500 FEET. CONTACT I&R FOR PICKLING PROCEDURE.

LEGEND	
	- EXISTING CS CAP
	- EXISTING BS GAS TRANSITION FITTING
	- EXISTING BS GAS REDUCER
	- EXISTING BS GAS VALVE
	- EXISTING PL GAS CAP
	- EXISTING PL GAS TRANSITION FITTING
	- EXISTING PL GAS REDUCER
	- EXISTING PL GAS VALVE
	- EXISTING CI GAS CAP
	- EXISTING CI GAS TRANSITION FITTING
	- EXISTING CI GAS REDUCER
	- EXISTING CI GAS VALVE
	- EXISTING FIRE HYDRANT
	- EXISTING CATCH BASIN
	- EXISTING UTILITY POLE
	- PROPOSED GAS CAP
	- PROPOSED GAS TRANSITION FITTING
	- PROPOSED GAS REDUCER
	- PROPOSED GAS VALVE
	- BUILDING LINE
	- PROPERTY LINE
	- RIGHT OF WAY LINE
	- EDGE OF PAVEMENT
	- CURB LINE
	- EXISTING CS GAS MAIN
	- EXISTING BS GAS MAIN TO BE ABANDONED
	- PROPOSED GAS LINE
	- EXISTING PL GAS MAIN
	- EXISTING CI GAS MAIN
	- EXISTING BS GAS MAIN



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BOSTON GAS COMPANY  
 d/b/a  
**nationalgrid**  
 40 SYLVAN ROAD  
 WALTHAM, MA 02451

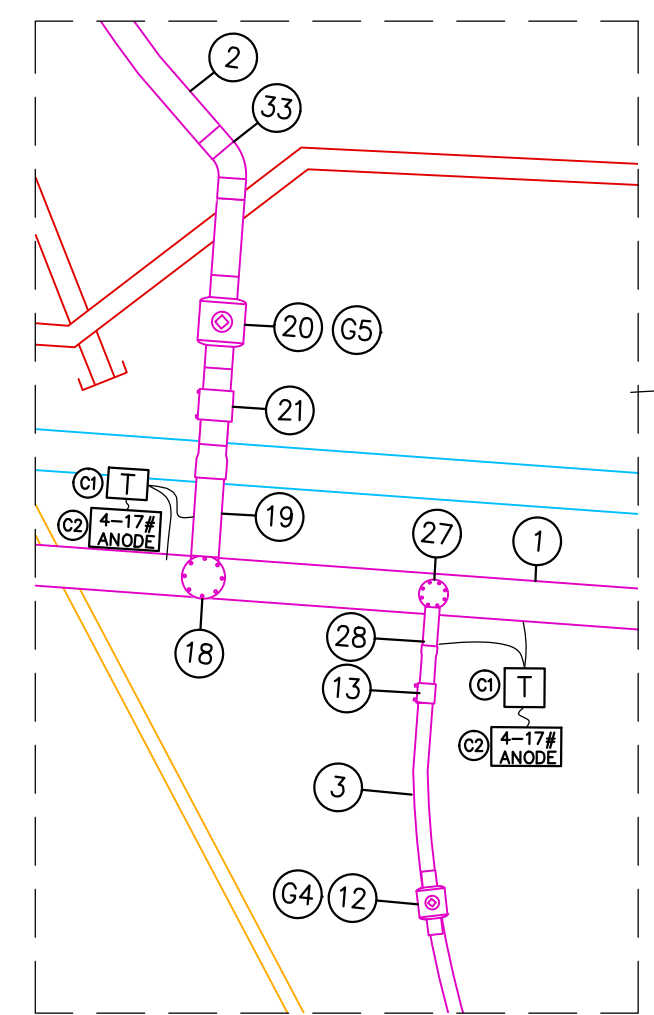
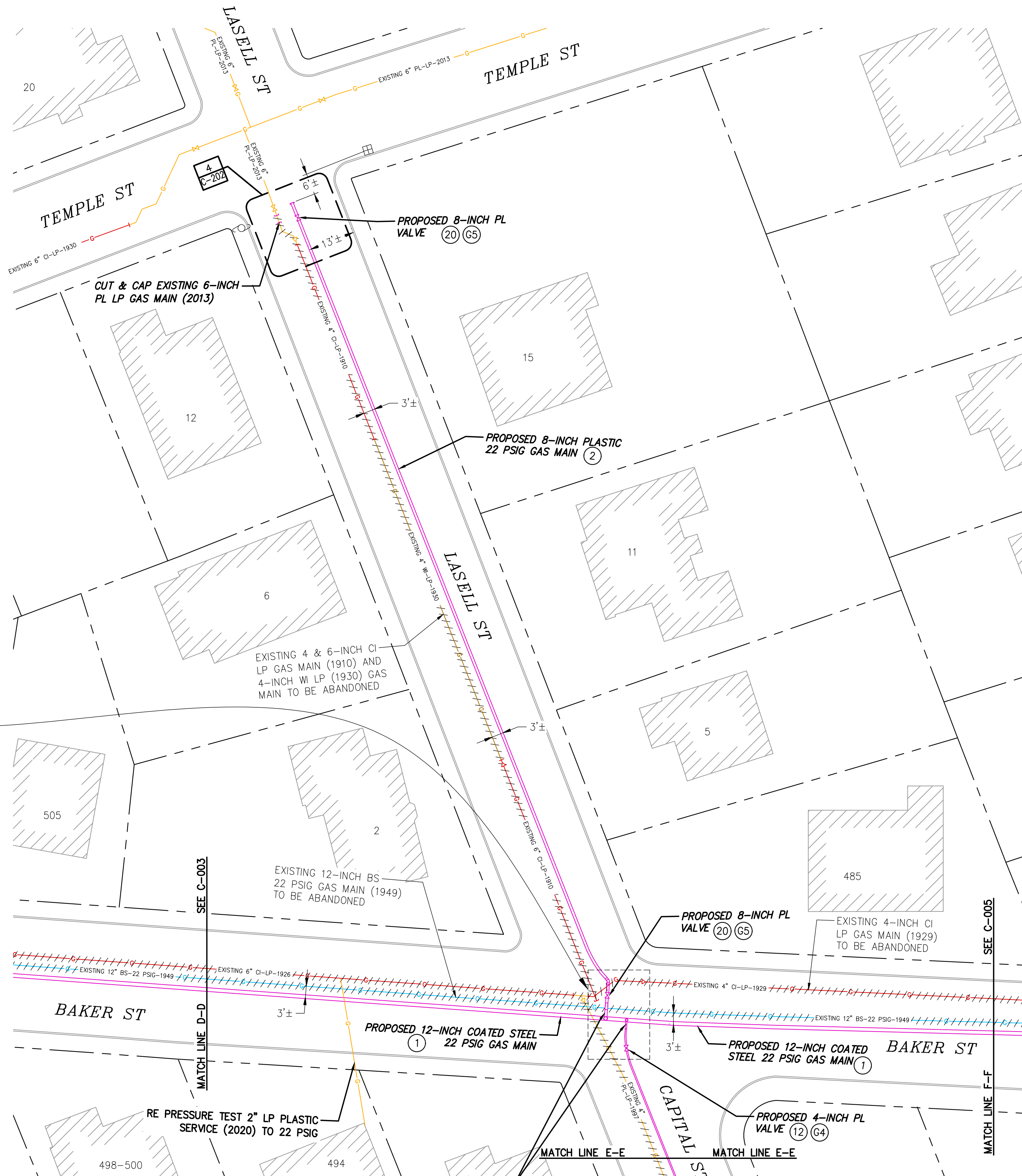
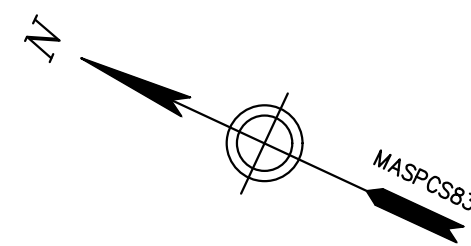
PROPOSED GAS MAIN REPLACEMENT  
 270-585 BAKER ST & 891-903 VFW PKWY  
 WEST ROXBURY, MA

**PROPOSED INSTALLATION PLAN**

DWG SIZE	DESIGNER	ENGINEER	DATE:	ASSET I.D.	W.O. NO.:
22"X34"	R.ALABADI	M.THOMPSON	01/20/2022	DISTRIBUTION	1213100

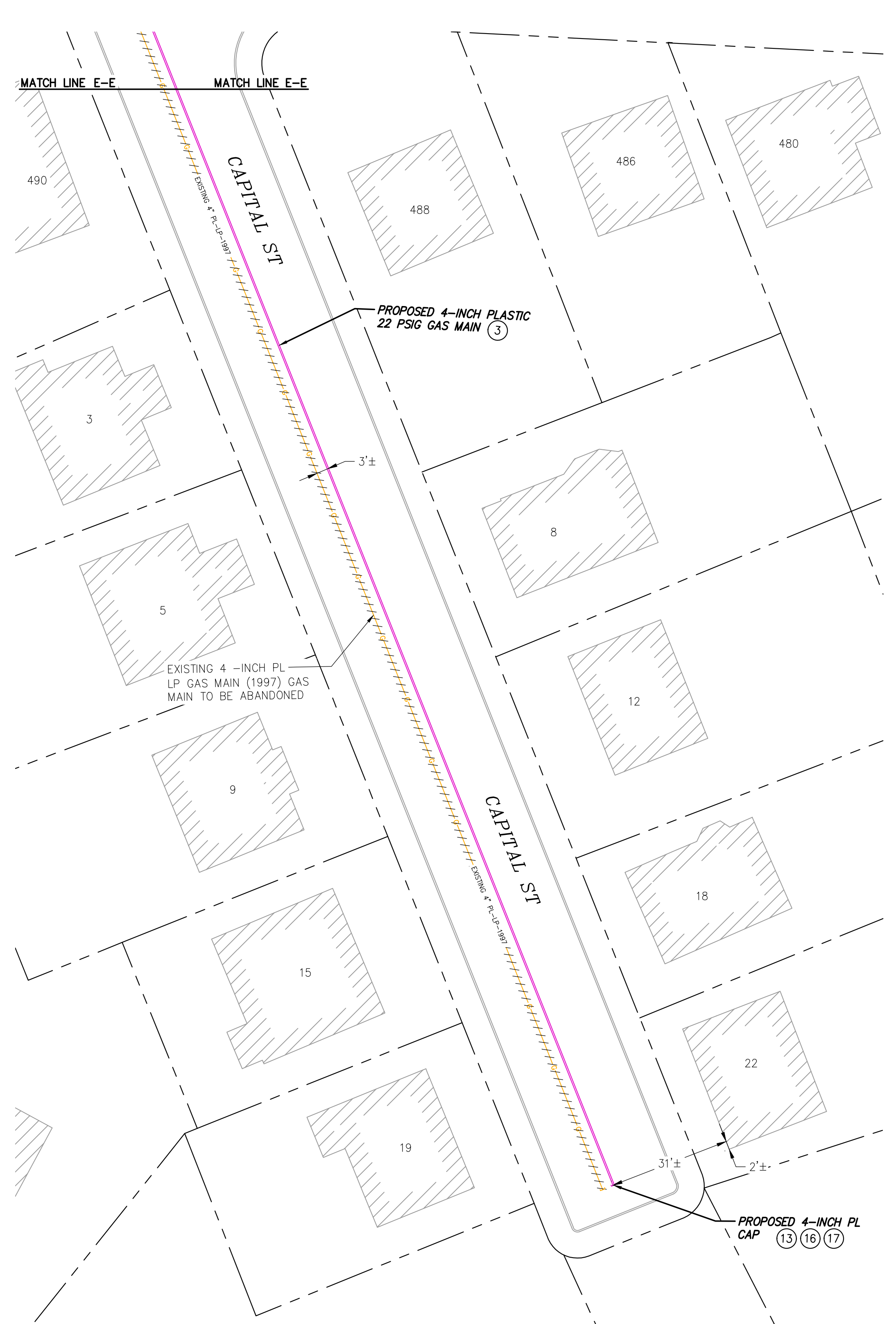
PAGE 5 OF 23	
DRAWING NO.	SHEET NO.
DPL-WRO-067813-1053	C-003

**FINAL**



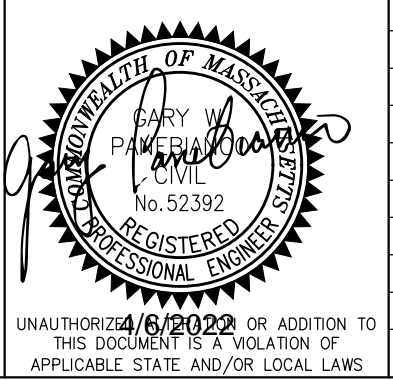
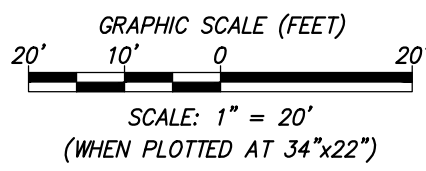
**CORROSION REQUIREMENTS:**  
 INSTALL A 2-WIRE TEST STATION TO THE PROPOSED 12"-CS-22# MAIN AT THE COATED STEEL/PLASTIC INTERFACE. INCLUDE 4-17 LB ANODES SPACED AT LEAST 8 FT APART AND 1 FT BELOW THE MAIN USING A SINGLE HEADER CABLE. INSTALL THE 9X9 TEST STATION IN AN ACCESSIBLE LOCATION.

**NOTES:**  
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LEGEND	
	- EXISTING CS CAP
	- EXISTING CS GAS TRANSITION FITTING
	- EXISTING CS REDUCER
	- EXISTING CS VALVE
	- PROPOSED GAS CAP
	- PROPOSED GAS TRANSITION FITTING
	- PROPOSED GAS REDUCER
	- PROPOSED GAS VALVE
	- BUILDING LINE
	- PROPERTY LINE
	- RIGHT OF WAY LINE
	- EDGE OF PAVEMENT
	- CURB LINE
	- EXISTING CS GAS MAIN
	- EXISTING GAS MAIN TO BE ABANDONED
	- PROPOSED GAS LINE
	- EXISTING PL GAS MAIN
	- EXISTING CI GAS MAIN
	- EXISTING BS GAS MAIN
	- EXISTING BS GAS CAP
	- EXISTING BS GAS TRANSITION FITTING
	- EXISTING BS GAS REDUCER
	- EXISTING BS GAS VALVE
	- EXISTING PL GAS CAP
	- EXISTING PL GAS TRANSITION FITTING
	- EXISTING PL GAS REDUCER
	- EXISTING PL GAS VALVE
	- EXISTING CI GAS CAP
	- EXISTING CI GAS TRANSITION FITTING
	- EXISTING CI GAS REDUCER
	- EXISTING CI GAS VALVE
	- EXISTING FIRE HYDRANT
	- EXISTING CATCH BASIN
	- EXISTING UTILITY POLE



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**nationalgrid**  
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**FINAL**

PROPOSED GAS MAIN REPLACEMENT  
 270-585 BAKER ST & 891-903 VFW PKWY  
 WEST ROXBURY, MA

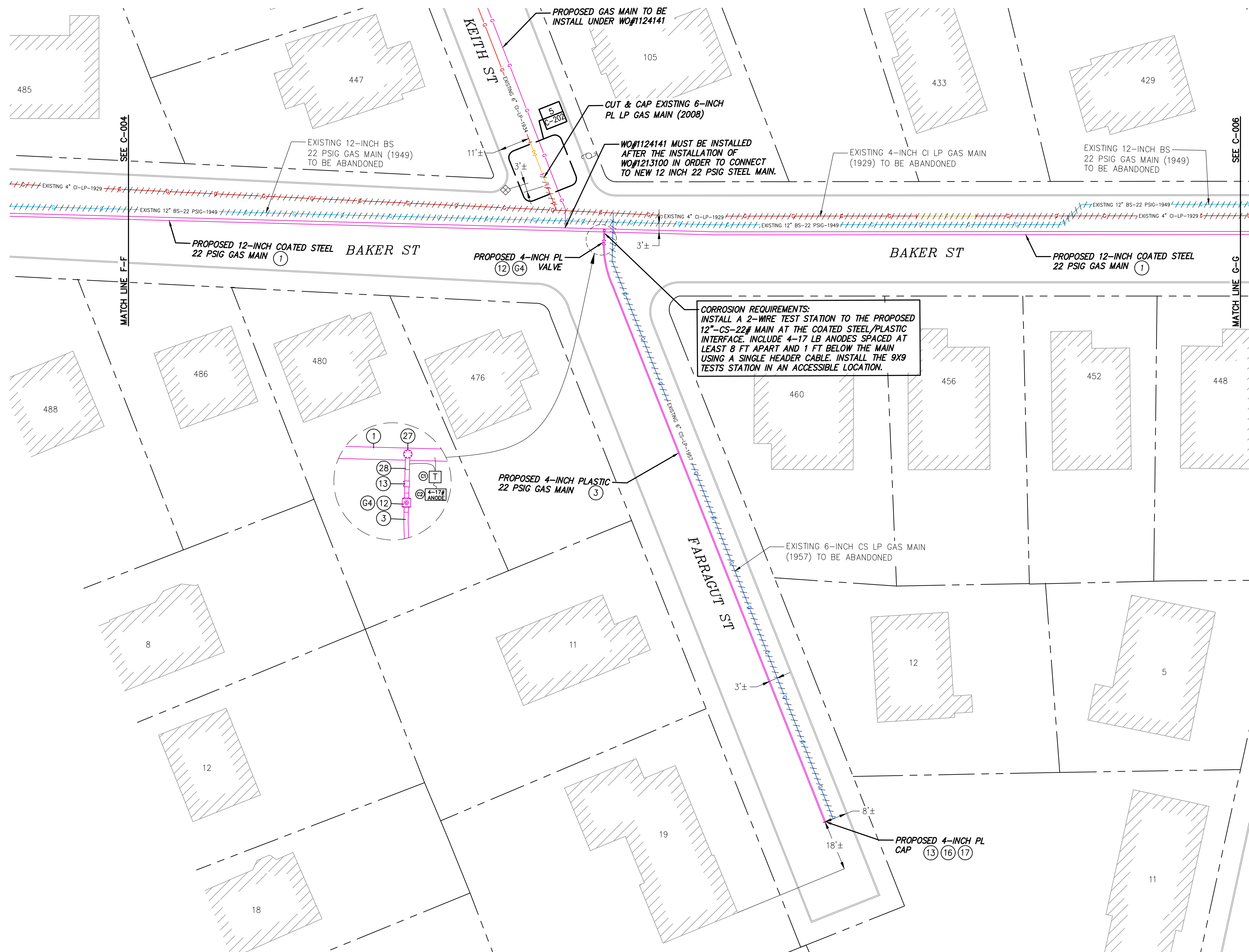
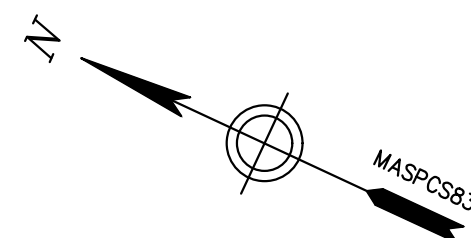
**PROPOSED INSTALLATION PLAN**

DWG SIZE	DESIGNER	ENGINEER	DATE	ASSET I.D.	W.O. NO.:
22"X34"	R.ALABADI	M.THOMPSON	01/20/2022	DISTRIBUTION	1213100

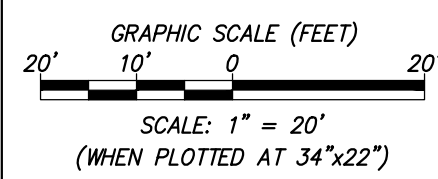
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DRAWING NO.	SHEET NO.
DPL-WRO-067813-1053	C-004



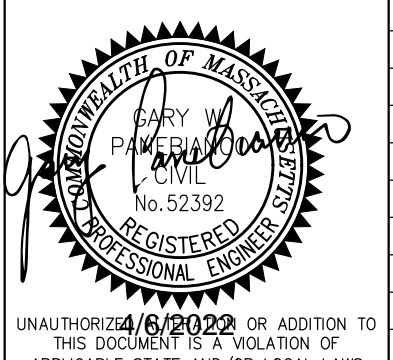


LEGEND	
	EXISTING CS CAP
	EXISTING BS GAS CAP
	EXISTING CS GAS TRANSITION FITTING
	EXISTING BS GAS TRANSITION FITTING
	EXISTING CS REDUCER
	EXISTING BS GAS REDUCER
	EXISTING CS VALVE
	EXISTING BS GAS VALVE
	PROPOSED GAS CAP
	PROPOSED GAS TRANSITION FITTING
	PROPOSED GAS REDUCER
	PROPOSED GAS VALVE
	BUILDING LINE
	PROPERTY LINE
	RIGHT OF WAY LINE
	EDGE OF PAVEMENT
	CURB LINE
	EXISTING CS GAS MAIN
	EXISTING BS GAS MAIN TO BE ABANDONED
	PROPOSED GAS LINE
	EXISTING PL GAS MAIN
	EXISTING CI GAS MAIN
	EXISTING BS GAS MAIN
	EXISTING BS GAS CAP
	EXISTING BS GAS TRANSITION FITTING
	EXISTING BS GAS REDUCER
	EXISTING BS GAS VALVE
	EXISTING PL GAS CAP
	EXISTING PL GAS TRANSITION FITTING
	EXISTING PL GAS REDUCER
	EXISTING PL GAS VALVE
	EXISTING CI GAS CAP
	EXISTING CI GAS TRANSITION FITTING
	EXISTING CI GAS REDUCER
	EXISTING CI GAS VALVE
	EXISTING FIRE HYDRANT
	EXISTING CATCH BASIN
	EXISTING UTILITY POLE



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BOSTON GAS COMPANY  
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PROPOSED GAS MAIN REPLACEMENT  
270-585 BAKER ST & 891-903 VFW PKWY  
WEST ROXBURY, MA

**PROPOSED INSTALLATION PLAN**

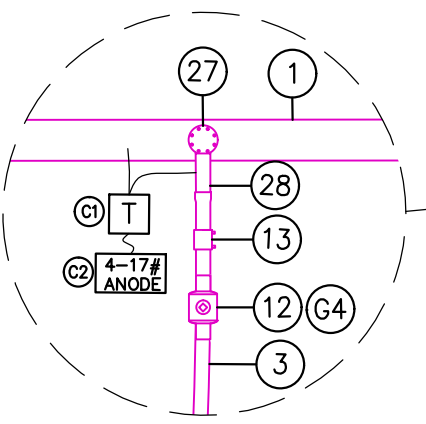
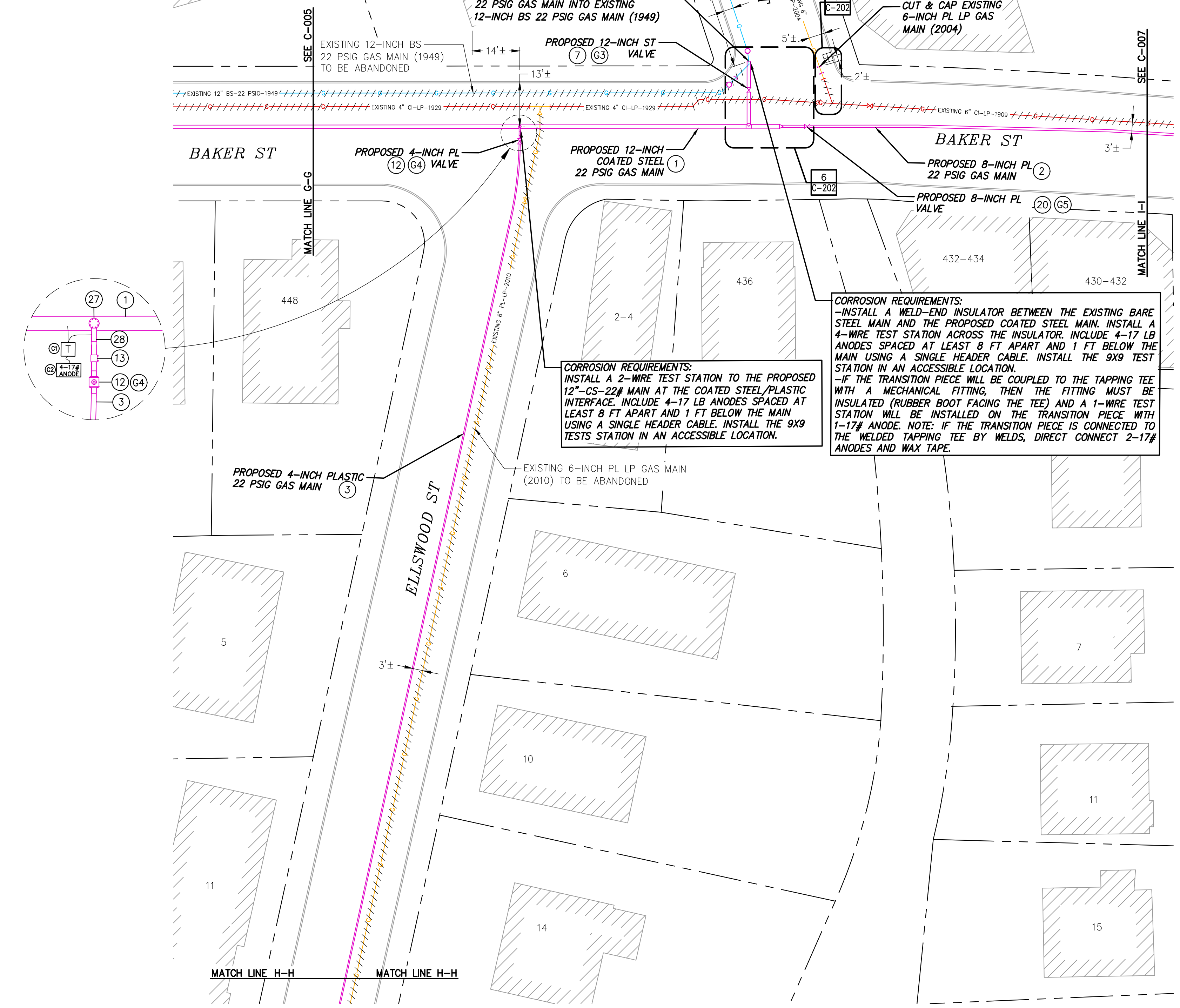
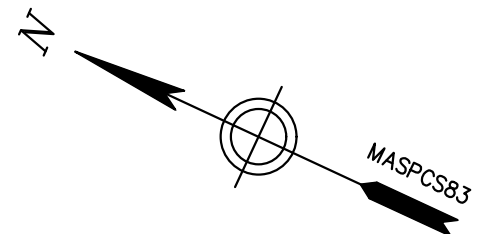
DWG SIZE	DESIGNER	ENGINEER	DATE	ASSET I.D.	W.O. NO.:
22" X 34"	R.ALABADI	M.THOMPSON	01/20/2022	DISTRIBUTION	1213100

PAGE 7 OF 23

DRAWING NO.	SHEET NO.
DPL-WRO-067813-1053	C-005

**NOTES:**  
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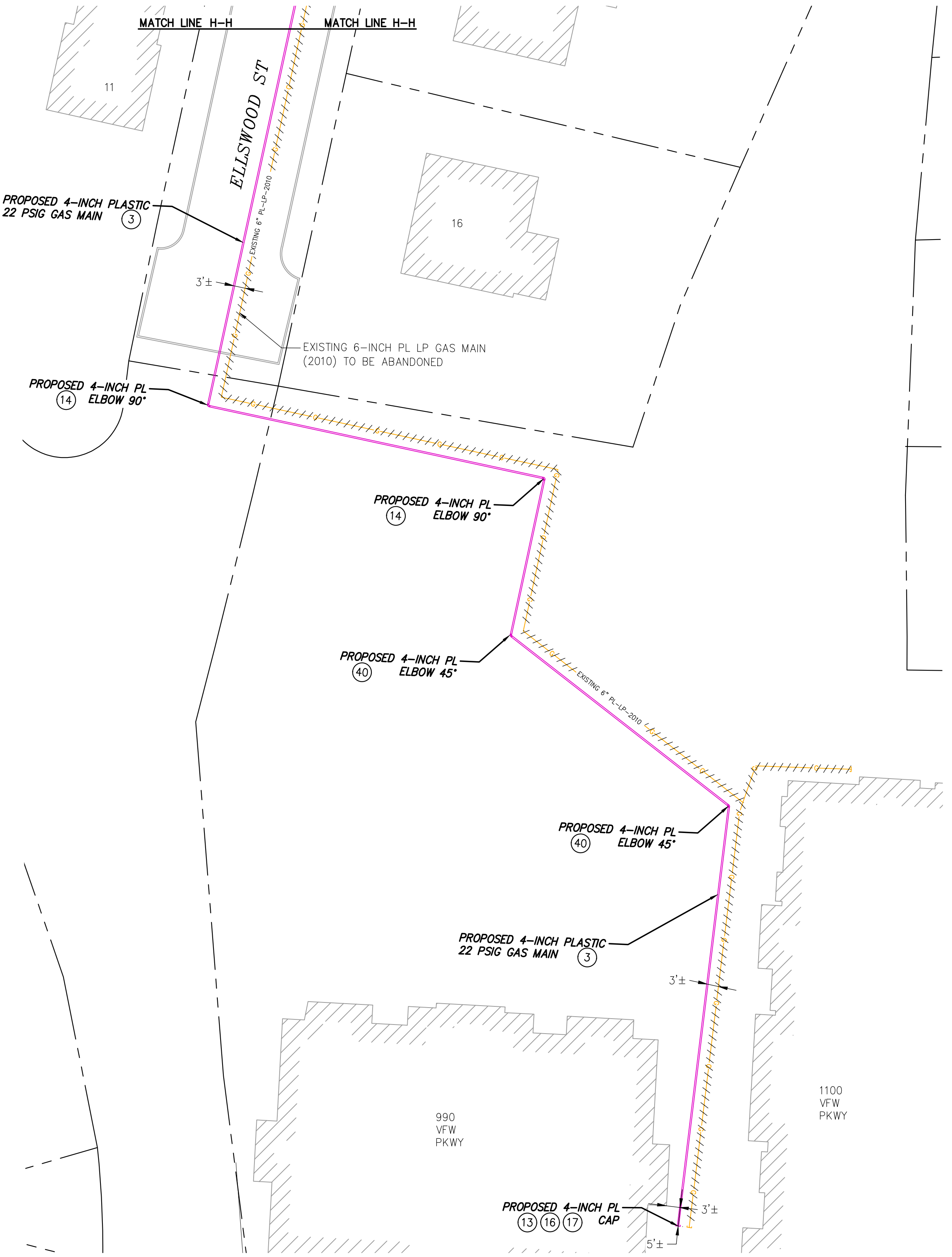
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**CORROSION REQUIREMENTS:**  
 -INSTALL A 2-WIRE TEST STATION TO THE PROPOSED 12"-CS-22# MAIN AT THE COATED STEEL/PLASTIC INTERFACE. INCLUDE 4-17 LB ANODES SPACED AT LEAST 8 FT APART AND 1 FT BELOW THE MAIN USING A SINGLE HEADER CABLE. INSTALL THE 9X9 TESTS STATION IN AN ACCESSIBLE LOCATION.

**CORROSION REQUIREMENTS:**  
 -INSTALL A WELD-END INSULATOR BETWEEN THE EXISTING BARE STEEL MAIN AND THE PROPOSED COATED STEEL MAIN. INSTALL A 4-WIRE TEST STATION ACROSS THE INSULATOR. INCLUDE 4-17 LB ANODES SPACED AT LEAST 8 FT APART AND 1 FT BELOW THE MAIN USING A SINGLE HEADER CABLE. INSTALL THE 9X9 TEST STATION IN AN ACCESSIBLE LOCATION.  
 -IF THE TRANSITION PIECE WILL BE COUPLED TO THE TAPPING TEE WITH A MECHANICAL FITTING, THEN THE FITTING MUST BE INSULATED (RUBBER BOOT FACING THE TEE) AND A 1-WIRE TEST STATION WILL BE INSTALLED ON THE TRANSITION PIECE WITH 1-17# ANODE. NOTE: IF THE TRANSITION PIECE IS CONNECTED TO THE WELDED TAPPING TEE BY WELDS, DIRECT CONNECT 2-17# ANODES AND WAX TAPE.

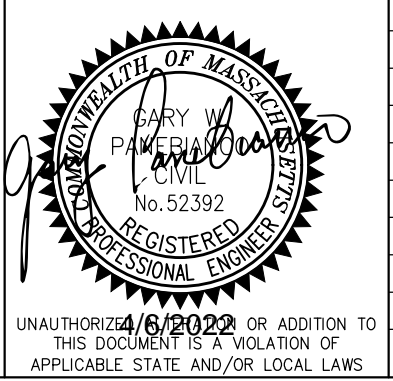
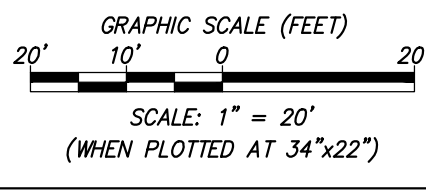
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**LEGEND**

	- EXISTING CS CAP		- EXISTING BS GAS CAP
	- EXISTING CS GAS TRANSITION FITTING		- EXISTING BS GAS TRANSITION FITTING
	- EXISTING CS REDUCER		- EXISTING BS GAS REDUCER
	- EXISTING CS VALVE		- EXISTING BS GAS VALVE
	- PROPOSED GAS CAP		- EXISTING PL GAS CAP
	- PROPOSED GAS TRANSITION FITTING		- EXISTING PL GAS TRANSITION FITTING
	- PROPOSED GAS REDUCER		- EXISTING PL GAS REDUCER
	- PROPOSED GAS VALVE		- EXISTING PL GAS VALVE
	- BUILDING LINE		- EXISTING CI GAS CAP
	- PROPERTY LINE		- EXISTING CI GAS TRANSITION FITTING
	- RIGHT OF WAY LINE		- EXISTING CI GAS REDUCER
	- EDGE OF PAVEMENT		- EXISTING CI GAS VALVE
	- CURB LINE		- EXISTING FIRE HYDRANT
	- EXISTING CS GAS MAIN TO BE ABANDONED		- EXISTING CATCH BASIN
	- PROPOSED GAS LINE		- EXISTING UTILITY POLE
	- EXISTING PL GAS MAIN		
	- EXISTING CI GAS MAIN		
	- EXISTING BS GAS MAIN		



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**FINAL**

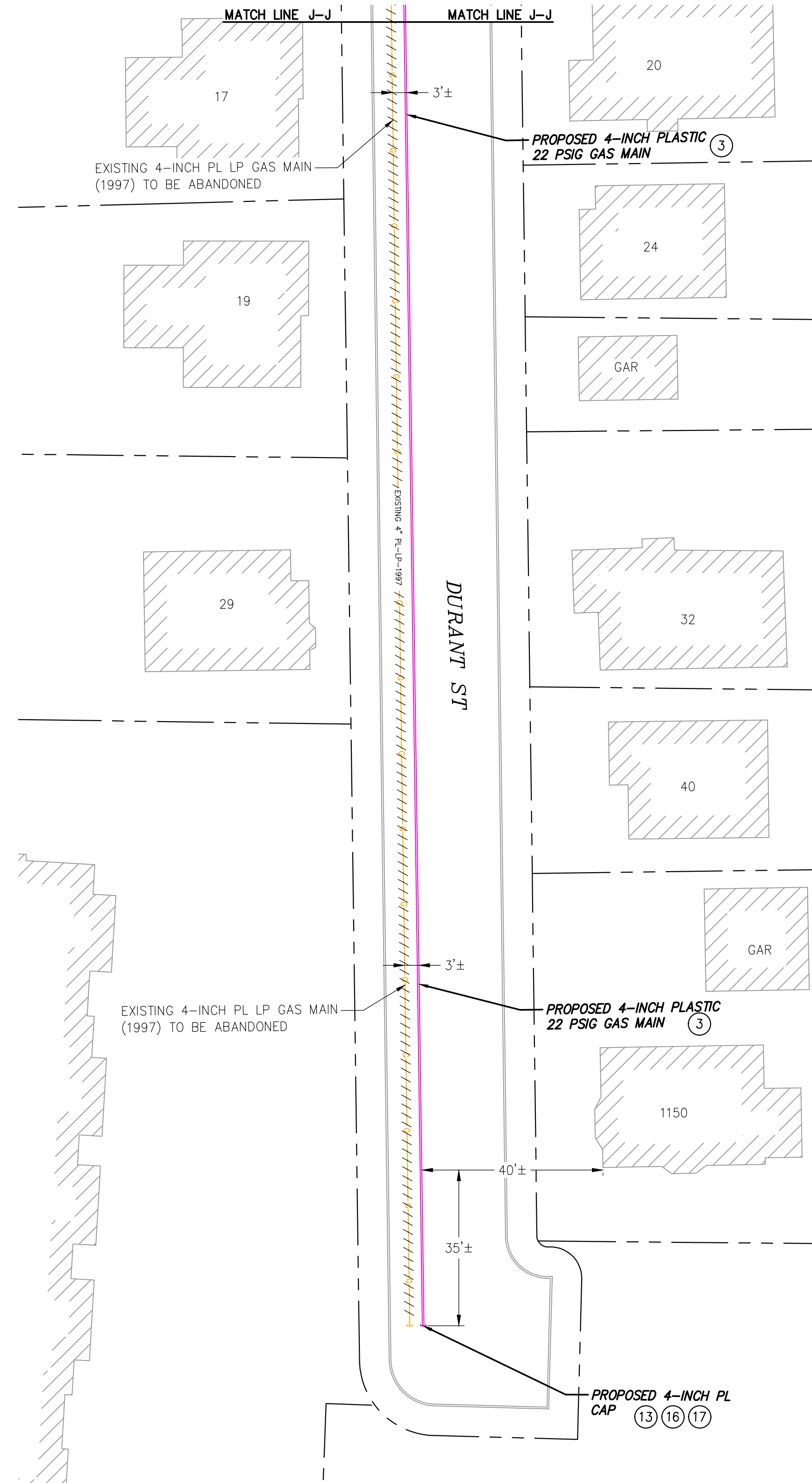
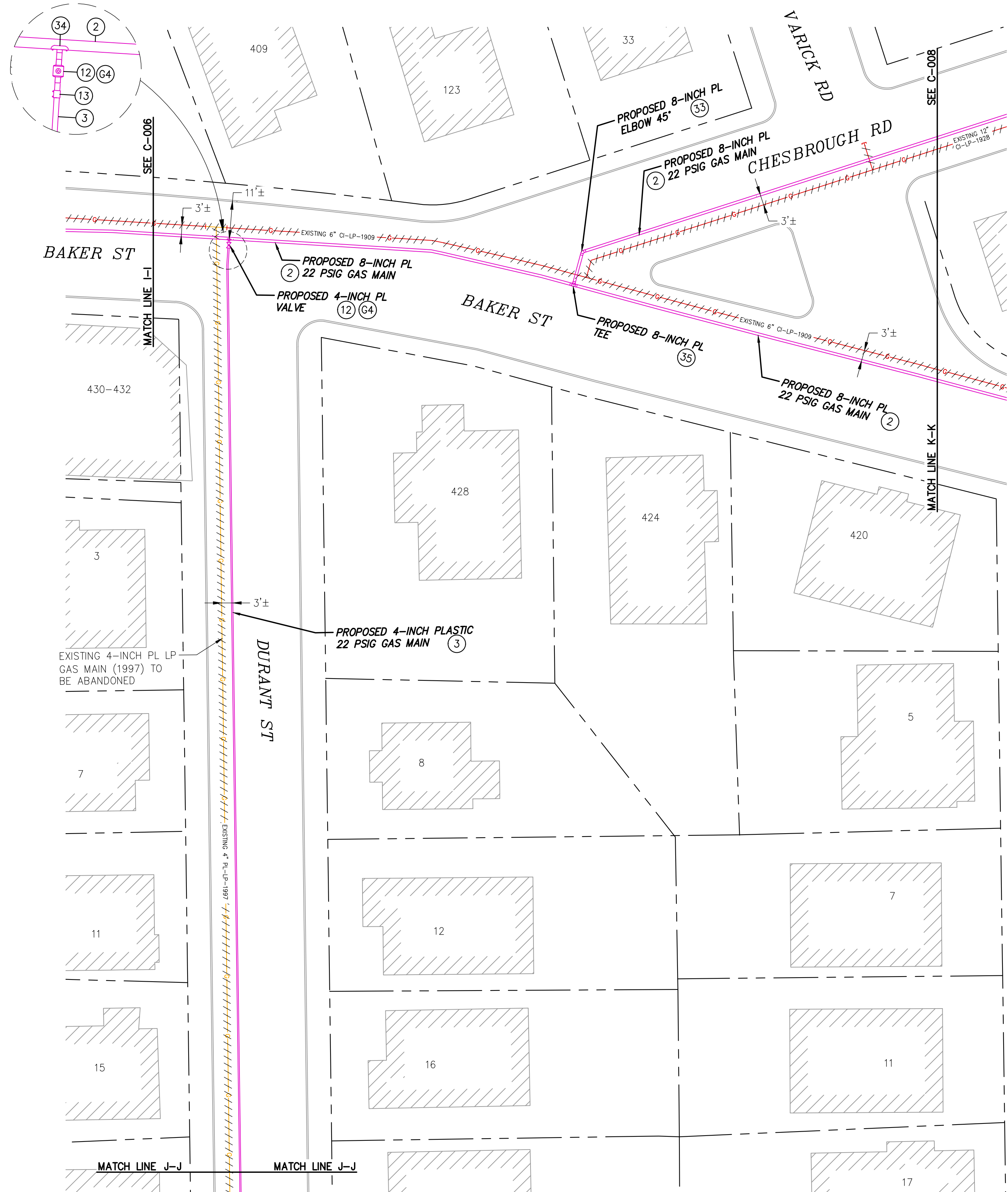
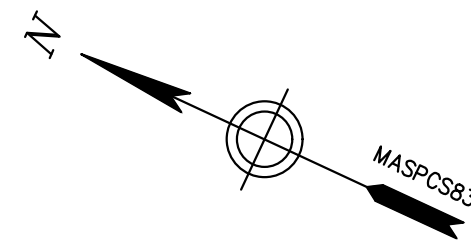
PROPOSED GAS MAIN REPLACEMENT  
 270-585 BAKER ST & 891-903 VFW PKWY  
 WEST ROXBURY, MA

**PROPOSED INSTALLATION PLAN**

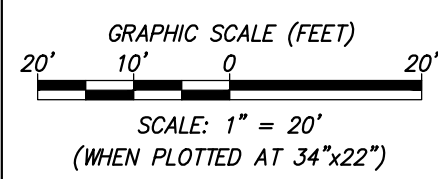
DWG SIZE	DESIGNER	ENGINEER	DATE	ASSET I.D.	W.O. NO.:
22"X34"	R.ALABADI	M.THOMPSON	01/20/2022	DISTRIBUTION	1213100

PAGE 8 OF 23

DRAWING NO.	SHEET NO.
DPL-WRO-067813-1053	C-006



LEGEND	
	- EXISTING CS CAP
	- EXISTING CS GAS TRANSITION FITTING
	- EXISTING CS REDUCER
	- EXISTING CS VALVE
	- PROPOSED GAS CAP
	- PROPOSED GAS TRANSITION FITTING
	- PROPOSED GAS REDUCER
	- PROPOSED GAS VALVE
	- BUILDING LINE
	- PROPERTY LINE
	- RIGHT OF WAY LINE
	- EDGE OF PAVEMENT
	- CURB LINE
	- EXISTING CS GAS MAIN
	- EXISTING GAS MAIN TO BE ABANDONED
	- PROPOSED GAS LINE
	- EXISTING PL GAS MAIN
	- EXISTING CI GAS MAIN
	- EXISTING BS GAS MAIN
	- EXISTING BS GAS CAP
	- EXISTING BS GAS TRANSITION FITTING
	- EXISTING BS GAS REDUCER
	- EXISTING BS GAS VALVE
	- EXISTING CI GAS CAP
	- EXISTING CI GAS TRANSITION FITTING
	- EXISTING CI GAS REDUCER
	- EXISTING CI GAS VALVE
	- EXISTING FIRE HYDRANT
	- EXISTING CATCH BASIN
	- EXISTING UTILITY POLE

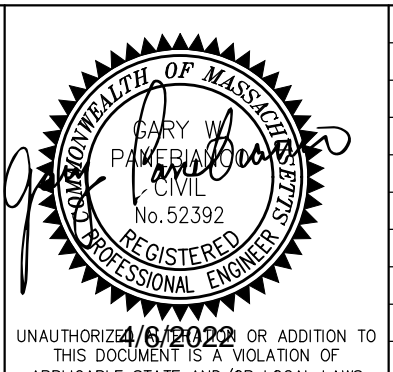


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**FINAL**

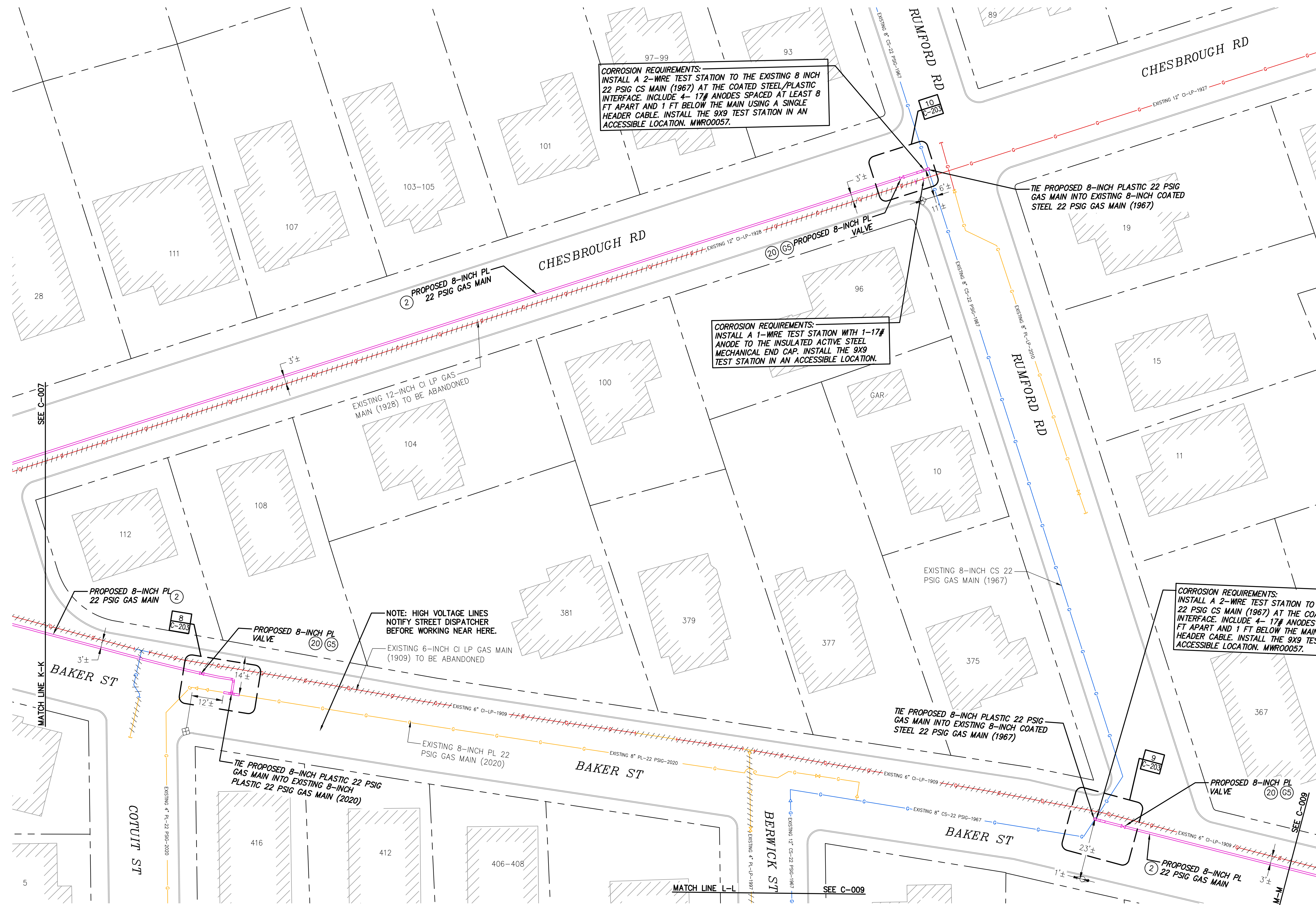
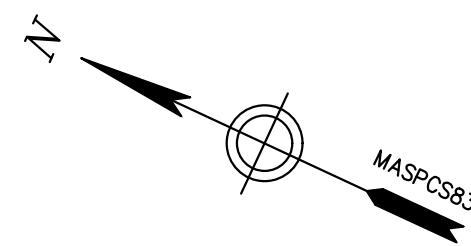
PROPOSED GAS MAIN REPLACEMENT  
 270-585 BAKER ST & 891-903 VFW PKWY  
 WEST ROXBURY, MA

**PROPOSED INSTALLATION PLAN**

DWG SIZE	DESIGNER	ENGINEER	DATE:	ASSET I.D.	W.O. NO.:
22"X34"	R.ALABADI	M.THOMPSON	01/20/2022	DISTRIBUTION	1213100

PAGE 9 OF 23

DRAWING NO.	SHEET NO.
DPL-WRO-067813-1053	C-007



**CORROSION REQUIREMENTS:**  
 INSTALL A 2-WIRE TEST STATION TO THE EXISTING 8 INCH 22 PSIG CS MAIN (1967) AT THE COATED STEEL/PLASTIC INTERFACE. INCLUDE 4- 17# ANODES SPACED AT LEAST 8 FT APART AND 1 FT BELOW THE MAIN USING A SINGLE HEADER CABLE. INSTALL THE 9X9 TEST STATION IN AN ACCESSIBLE LOCATION. MWRO0057.

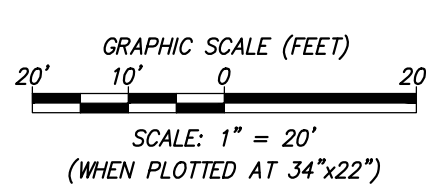
**CORROSION REQUIREMENTS:**  
 INSTALL A 1-WIRE TEST STATION WITH 1-17# ANODE TO THE INSULATED ACTIVE STEEL MECHANICAL END CAP. INSTALL THE 9X9 TEST STATION IN AN ACCESSIBLE LOCATION.

**CORROSION REQUIREMENTS:**  
 INSTALL A 2-WIRE TEST STATION TO THE EXISTING 8 INCH 22 PSIG CS MAIN (1967) AT THE COATED STEEL/PLASTIC INTERFACE. INCLUDE 4- 17# ANODES SPACED AT LEAST 8 FT APART AND 1 FT BELOW THE MAIN USING A SINGLE HEADER CABLE. INSTALL THE 9X9 TEST STATION IN AN ACCESSIBLE LOCATION. MWRO0057.

**NOTE:** HIGH VOLTAGE LINES NOTIFY STREET DISPATCHER BEFORE WORKING NEAR HERE.  
 EXISTING 6-INCH CI LP GAS MAIN (1909) TO BE ABANDONED

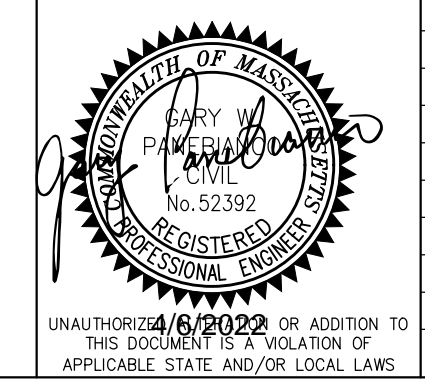
**NOTES:**  
 - THIS PROJECT INVOLVES REPLACING LP GAS MAIN WITH 22 PSIG GAS MAIN. ENSURE THAT ALL SERVICES ARE FITTED APPROPRIATELY WITH SERVICE REGULATORS PRIOR TO TRANSFERRING OVER FROM THE LP TO 22 PSIG SYSTEM.  
 - TOTAL FOOTAGE EXCEEDS 2500 FEET. CONTACT I&R FOR PICKLING PROCEDURE.

LEGEND	
	- EXISTING CS CAP
	- EXISTING CS GAS TRANSITION FITTING
	- EXISTING CS REDUCER
	- EXISTING CS VALVE
	- PROPOSED GAS CAP
	- PROPOSED GAS TRANSITION FITTING
	- PROPOSED GAS REDUCER
	- PROPOSED GAS VALVE
	- BUILDING LINE
	- PROPERTY LINE
	- RIGHT OF WAY LINE
	- EDGE OF PAVEMENT
	- CURB LINE
	- EXISTING CS GAS MAIN
	- EXISTING GAS MAIN TO BE ABANDONED
	- PROPOSED GAS LINE
	- EXISTING PL GAS MAIN
	- EXISTING CI GAS MAIN
	- EXISTING BS GAS MAIN
	- EXISTING BS GAS CAP
	- EXISTING BS GAS TRANSITION FITTING
	- EXISTING BS GAS REDUCER
	- EXISTING BS GAS VALVE
	- EXISTING PL GAS CAP
	- EXISTING PL GAS TRANSITION FITTING
	- EXISTING PL GAS REDUCER
	- EXISTING PL GAS VALVE
	- EXISTING CI GAS CAP
	- EXISTING CI GAS TRANSITION FITTING
	- EXISTING CI GAS REDUCER
	- EXISTING CI GAS VALVE
	- EXISTING FIRE HYDRANT
	- EXISTING CATCH BASIN
	- EXISTING UTILITY POLE



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2	REVISED PER CLIENTS COMMENTS (DATED 03/30/2022)	04/06/2022	RA	MLT	GWP
1	REVISED PER CLIENTS COMMENTS (DATED 02/09/2022)	02/11/2022	RA	MLT	GWP
0	ISSUED FOR CONSTRUCTION	01/20/2022	RA	MLT	GWP

BOSTON GAS COMPANY  
 d/b/a  
**nationalgrid**  
 40 SYLVAN ROAD  
 WALTHAM, MA 02451

**FINAL**

PROPOSED GAS MAIN REPLACEMENT  
 270-585 BAKER ST & 891-903 VFW PKWY  
 WEST ROXBURY, MA

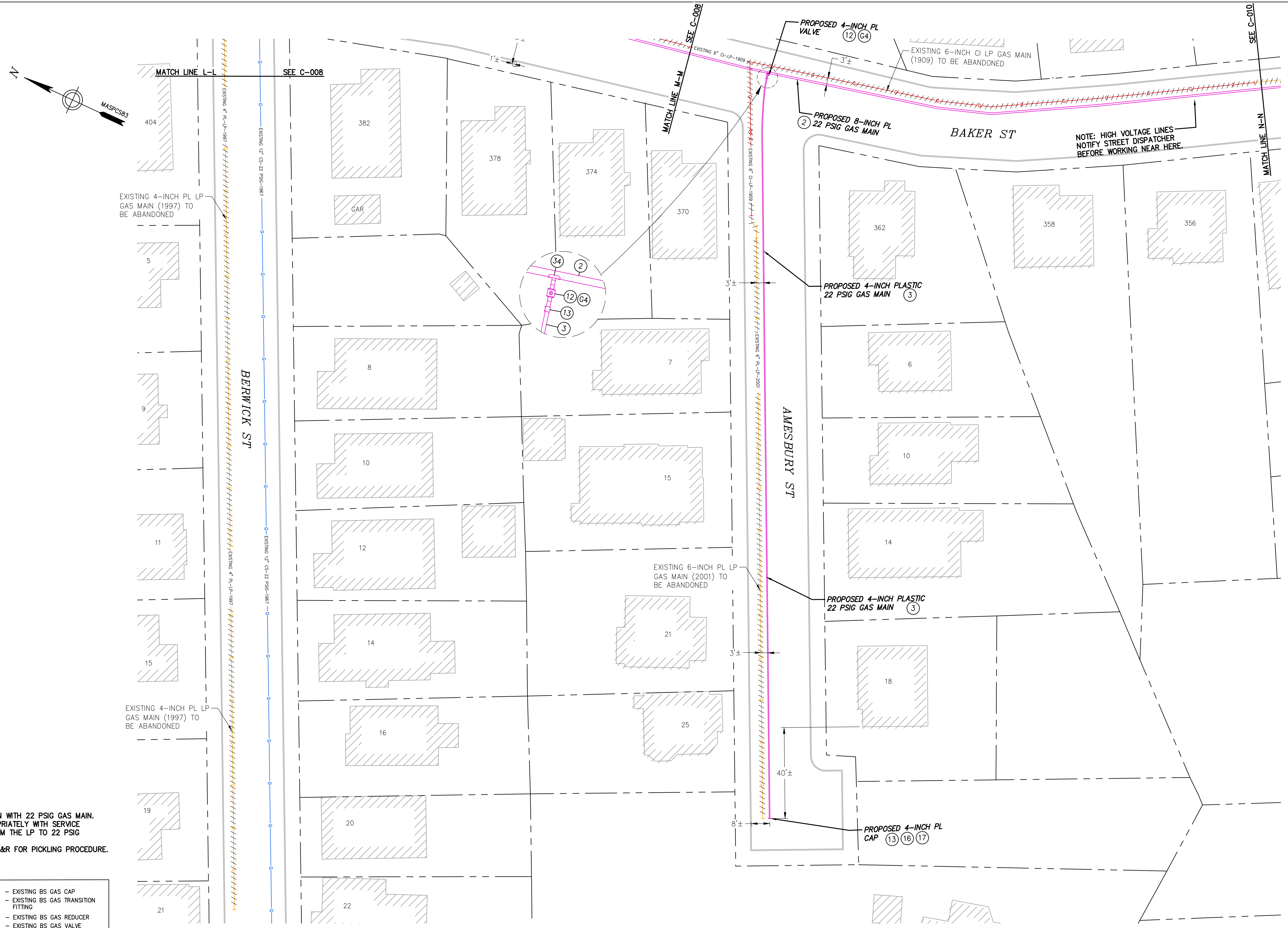
**PROPOSED INSTALLATION PLAN**

DWG SIZE	DESIGNER	ENGINEER	DATE:	ASSET I.D.	W.O. NO.:
22"x34"	R.ALABADI	M.THOMPSON	01/20/2022	DISTRIBUTION	1213100

PAGE 10 OF 23

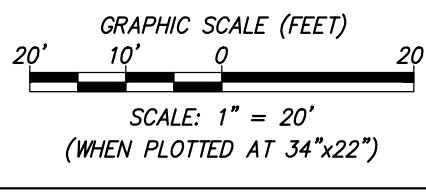
DRAWING NO.	SHEET NO.
DPL-WRO-067813-1053	C-008

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**NOTES:**  
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LEGEND	
	- EXISTING CS CAP
	- EXISTING CS GAS TRANSITION FITTING
	- EXISTING CS REDUCER
	- EXISTING CS VALVE
	- PROPOSED GAS CAP
	- PROPOSED GAS TRANSITION FITTING
	- PROPOSED GAS REDUCER
	- PROPOSED GAS VALVE
	- BUILDING LINE
	- PROPERTY LINE
	- RIGHT OF WAY LINE
	- EDGE OF PAVEMENT
	- CURB LINE
	- EXISTING CS GAS MAIN
	- EXISTING GAS MAIN TO BE ABANDONED
	- PROPOSED GAS LINE
	- EXISTING PL GAS MAIN
	- EXISTING CI GAS MAIN
	- EXISTING BS GAS MAIN
	- EXISTING BS GAS CAP
	- EXISTING BS GAS TRANSITION FITTING
	- EXISTING BS GAS REDUCER
	- EXISTING BS GAS VALVE
	- EXISTING PL GAS CAP
	- EXISTING PL GAS TRANSITION FITTING
	- EXISTING PL GAS REDUCER
	- EXISTING PL GAS VALVE
	- EXISTING CI GAS CAP
	- EXISTING CI GAS TRANSITION FITTING
	- EXISTING CI GAS REDUCER
	- EXISTING CI GAS VALVE
	- EXISTING FIRE HYDRANT
	- EXISTING CATCH BASIN
	- EXISTING UTILITY POLE



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BOSTON GAS COMPANY  
 d/b/a  
**nationalgrid**  
 40 SYLVAN ROAD  
 WALTHAM, MA 02451

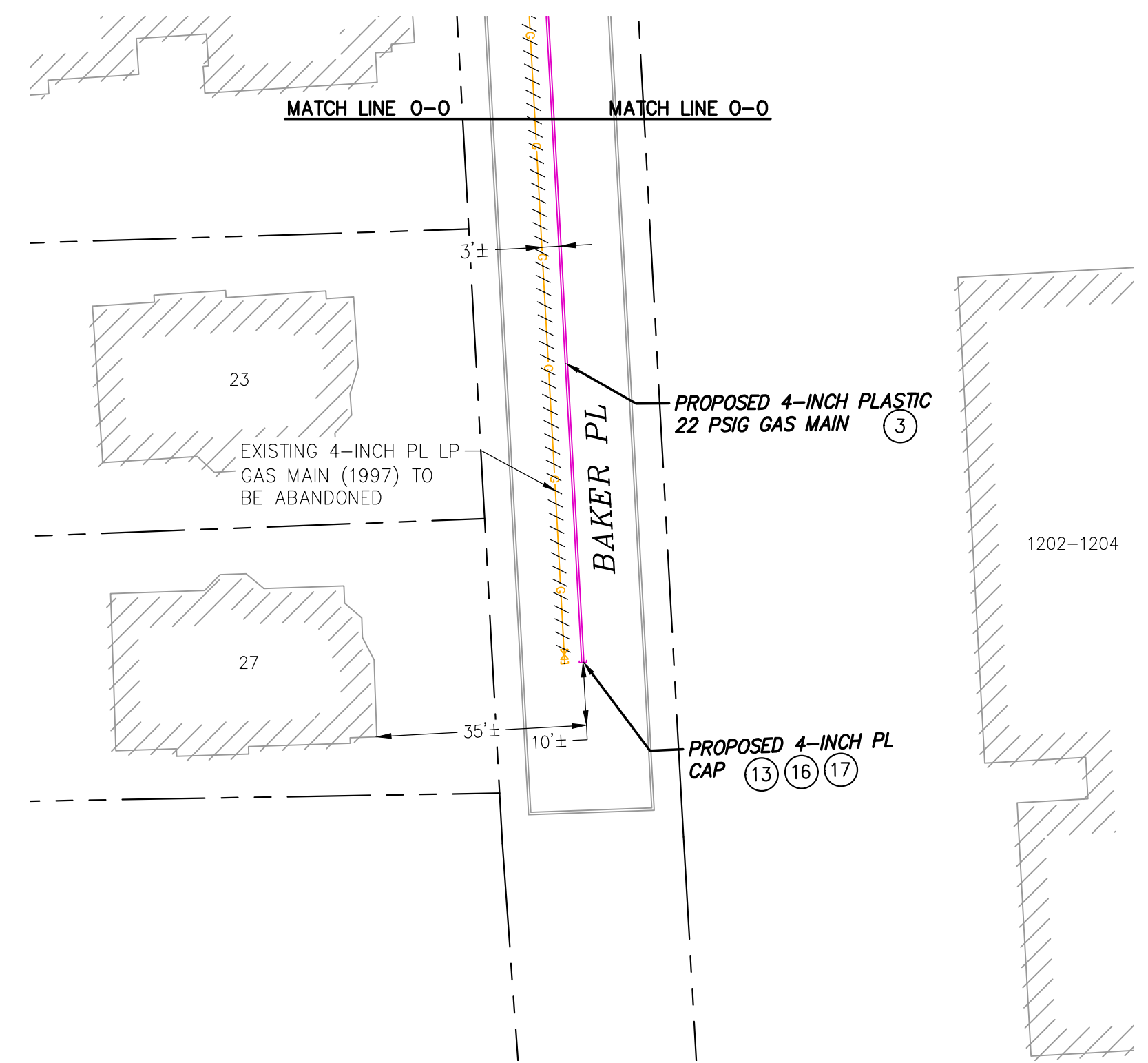
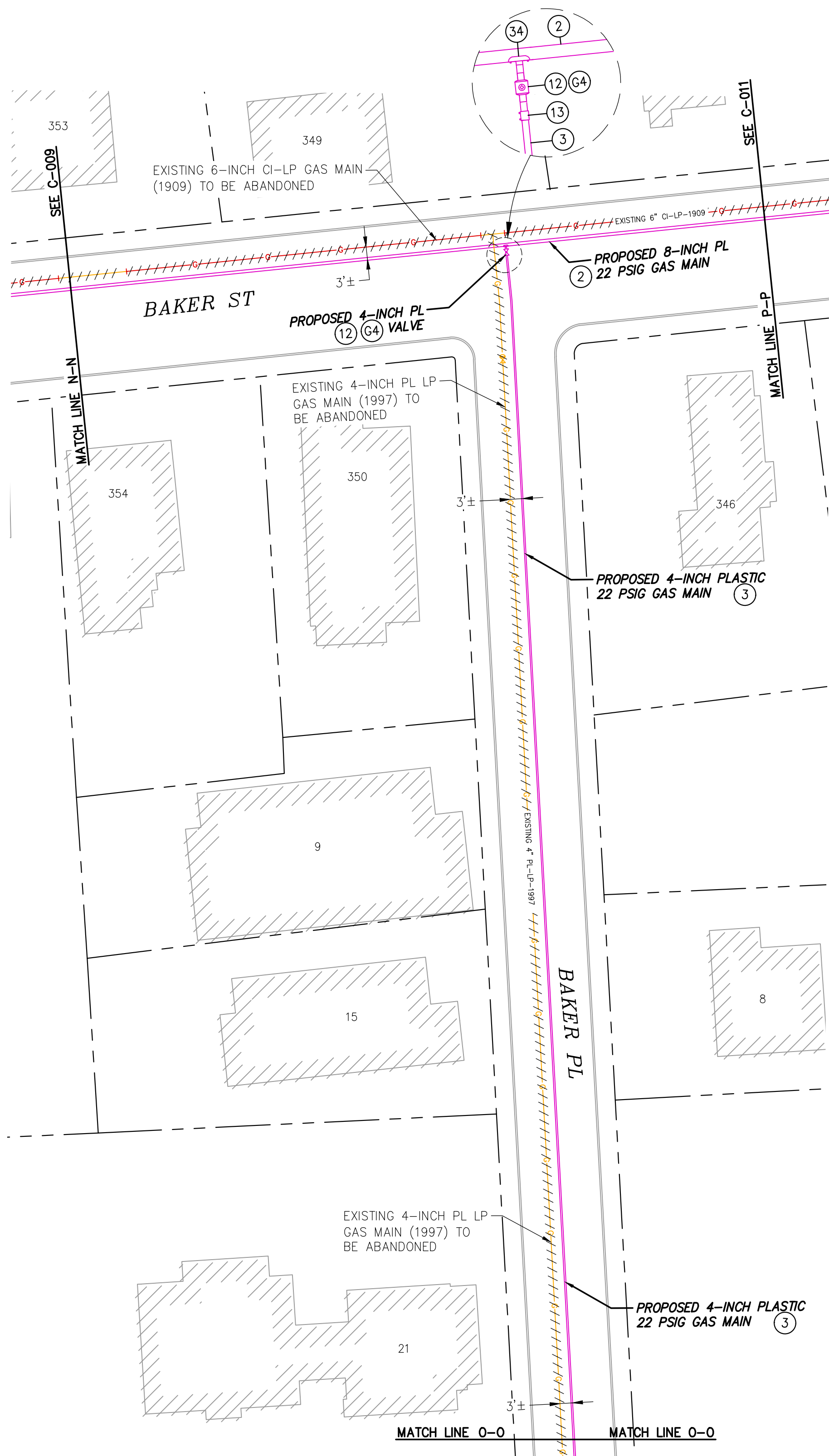
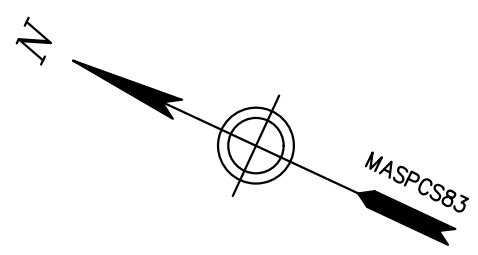
PROPOSED GAS MAIN REPLACEMENT  
 270-585 BAKER ST & 891-903 VFW PKWY  
 WEST ROXBURY, MA

**PROPOSED INSTALLATION PLAN**

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22"x34"	R.ALABADI	M.THOMPSON	01/20/2022	DISTRIBUTION	1213100

PAGE 11 OF 23

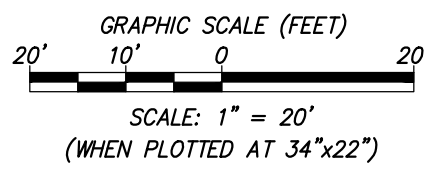
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DPL-WRO-067813-1053	C-009



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LEGEND	
	- EXISTING CS CAP
	- EXISTING CS GAS TRANSITION FITTING
	- EXISTING CS REDUCER
	- EXISTING CS VALVE
	- PROPOSED GAS CAP
	- PROPOSED GAS TRANSITION FITTING
	- PROPOSED GAS REDUCER
	- PROPOSED GAS VALVE
	- BUILDING LINE
	- PROPERTY LINE
	- RIGHT OF WAY LINE
	- EDGE OF PAVEMENT
	- CURB LINE
	- EXISTING CS GAS MAIN
	- EXISTING GAS MAIN TO BE ABANDONED
	- PROPOSED GAS LINE
	- EXISTING PL GAS MAIN
	- EXISTING CI GAS MAIN
	- EXISTING BS GAS MAIN
	- EXISTING BS GAS CAP
	- EXISTING BS GAS TRANSITION FITTING
	- EXISTING BS GAS REDUCER
	- EXISTING BS GAS VALVE
	- EXISTING PL GAS CAP
	- EXISTING PL GAS TRANSITION FITTING
	- EXISTING PL GAS REDUCER
	- EXISTING PL GAS VALVE
	- EXISTING CI GAS CAP
	- EXISTING CI GAS TRANSITION FITTING
	- EXISTING CI GAS REDUCER
	- EXISTING CI GAS VALVE
	- EXISTING FIRE HYDRANT
	- EXISTING CATCH BASIN
	- EXISTING UTILITY POLE



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**nationalgrid**  
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WALTHAM, MA 02451

PROPOSED GAS MAIN REPLACEMENT  
270-585 BAKER ST & 891-903 VFW PKWY  
WEST ROXBURY, MA

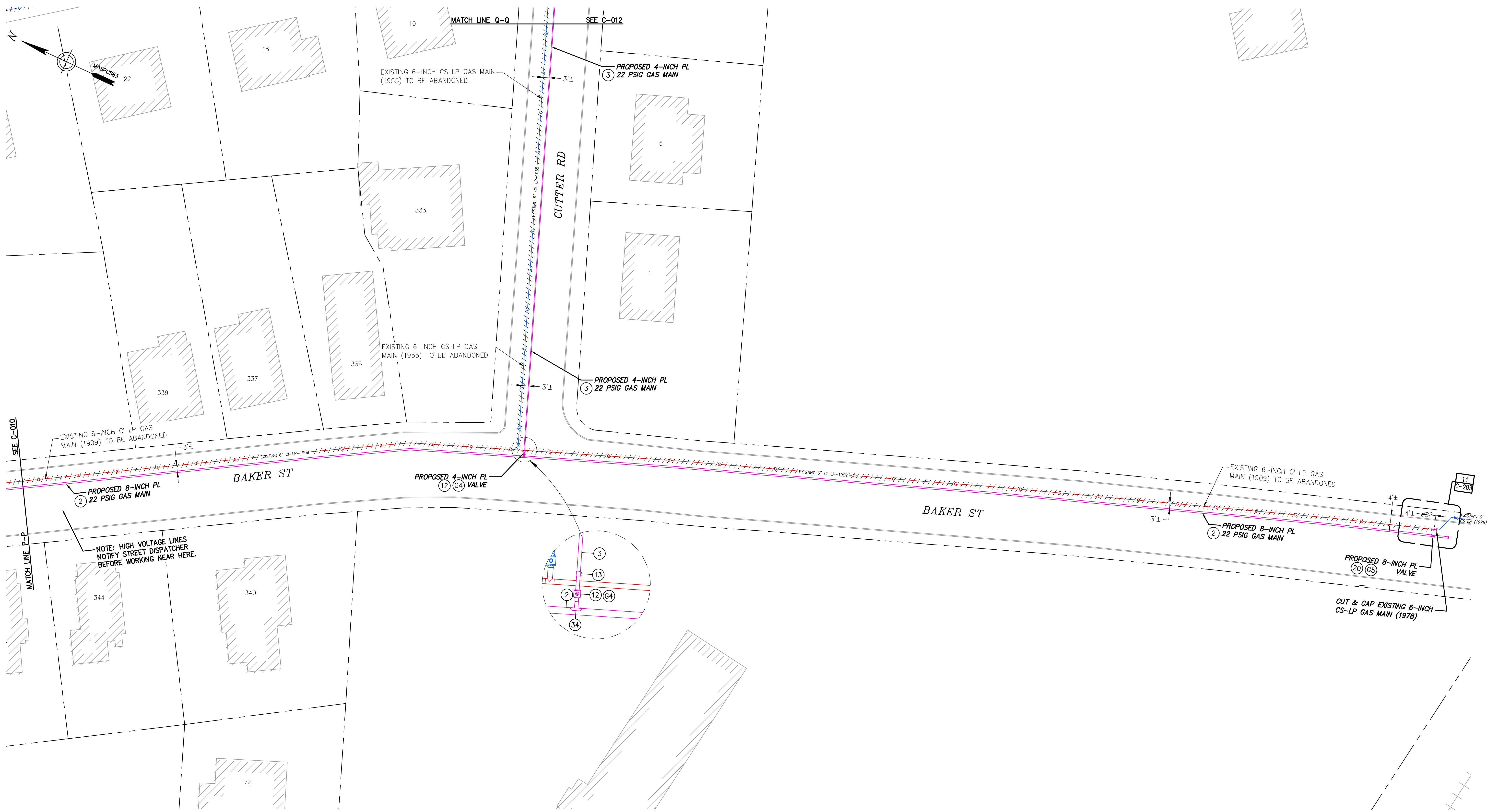
**PROPOSED INSTALLATION PLAN**

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DRAWING NO.	SHEET NO.
DPL-WRO-067813-1053	C-010

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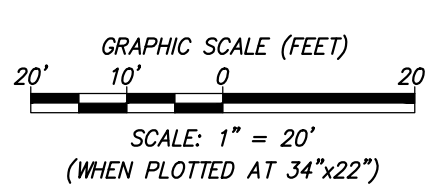
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MATCH LINE P-P

MATCH LINE Q-Q  
SEE C-012

11  
C-203

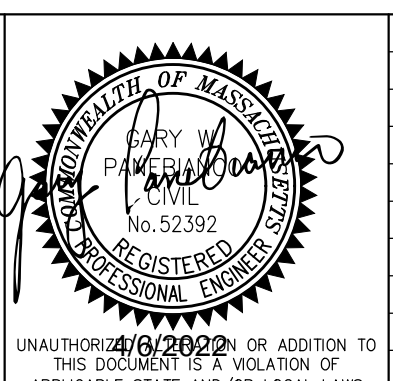
NOTE: HIGH VOLTAGE LINES  
NOTIFY STREET DISPATCHER  
BEFORE WORKING NEAR HERE.

LEGEND	
	EXISTING CS CAP
	EXISTING CS GAS TRANSITION FITTING
	EXISTING CS REDUCER
	EXISTING CS VALVE
	PROPOSED GAS CAP
	PROPOSED GAS TRANSITION FITTING
	PROPOSED GAS REDUCER
	PROPOSED GAS VALVE
	BUILDING LINE
	PROPERTY LINE
	RIGHT OF WAY LINE
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	CURB LINE
	EXISTING CS GAS MAIN
	EXISTING GAS MAIN TO BE ABANDONED
	PROPOSED GAS LINE
	EXISTING PL GAS MAIN
	EXISTING CI GAS MAIN
	EXISTING BS GAS MAIN
	EXISTING BS GAS CAP
	EXISTING BS GAS TRANSITION FITTING
	EXISTING BS GAS REDUCER
	EXISTING BS GAS VALVE
	EXISTING PL GAS CAP
	EXISTING PL GAS TRANSITION FITTING
	EXISTING PL GAS REDUCER
	EXISTING PL GAS VALVE
	EXISTING CI GAS CAP
	EXISTING CI GAS TRANSITION FITTING
	EXISTING CI GAS REDUCER
	EXISTING CI GAS VALVE
	EXISTING FIRE HYDRANT
	EXISTING CATCH BASIN
	EXISTING UTILITY POLE



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BOSTON GAS COMPANY  
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WEST ROXBURY, MA

**PROPOSED INSTALLATION PLAN**

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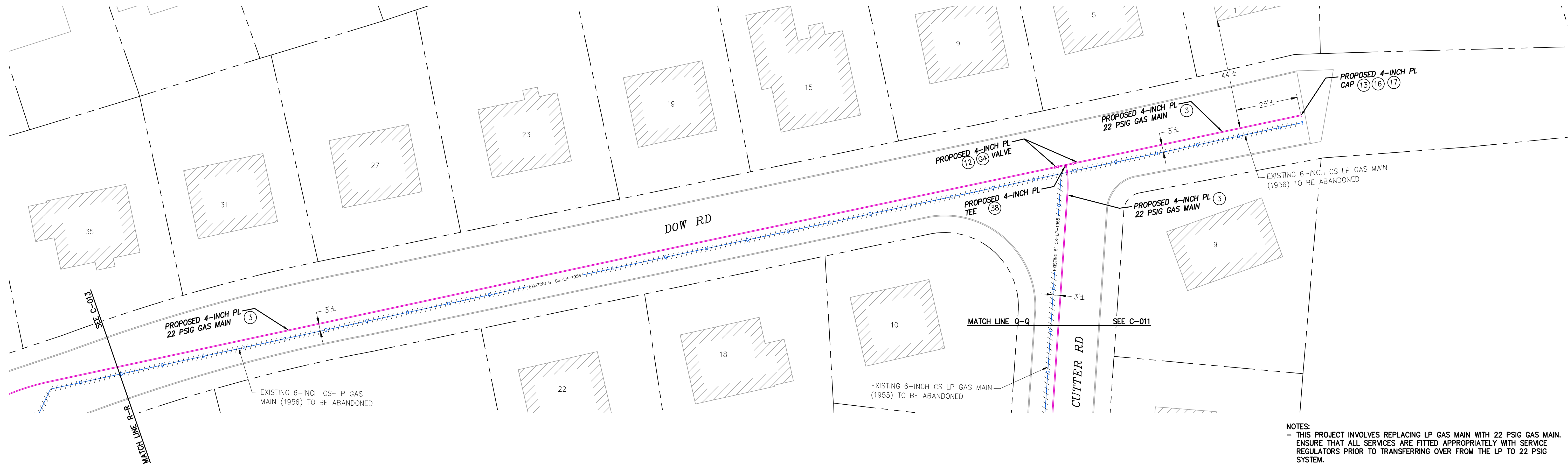
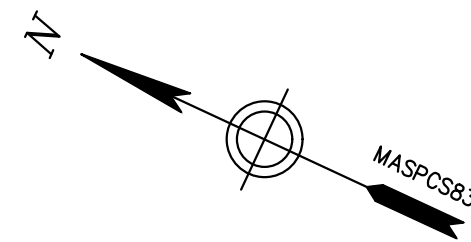
PAGE 13 OF 23

DRAWING NO.	SHEET NO.
DPL-WRO-067813-1053	C-011

NOTES:  
- THIS PROJECT INVOLVES REPLACING LP GAS MAIN WITH 22 PSIG GAS MAIN.  
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- TOTAL FOOTAGE EXCEEDS 2500 FEET. CONTACT I&R FOR PICKLING PROCEDURE.

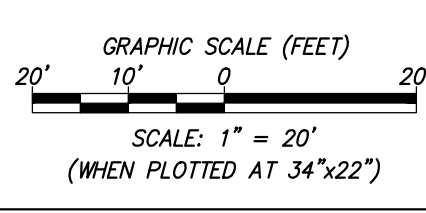
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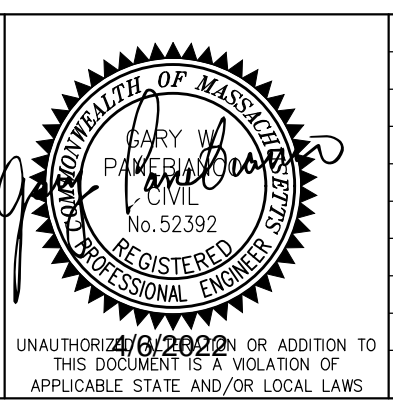
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LEGEND	
	- EXISTING CS CAP
	- EXISTING CS GAS TRANSITION FITTING
	- EXISTING CS REDUCER
	- EXISTING CS VALVE
	- PROPOSED GAS CAP
	- PROPOSED GAS TRANSITION FITTING
	- PROPOSED GAS REDUCER
	- PROPOSED GAS VALVE
	- BUILDING LINE
	- PROPERTY LINE
	- RIGHT OF WAY LINE
	- EDGE OF PAVEMENT
	- CURB LINE
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	- EXISTING GAS MAIN TO BE ABANDONED
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	- EXISTING PL GAS MAIN
	- EXISTING CI GAS MAIN
	- EXISTING BS GAS MAIN
	- EXISTING BS GAS CAP
	- EXISTING BS GAS TRANSITION FITTING
	- EXISTING BS GAS REDUCER
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	- EXISTING PL GAS REDUCER
	- EXISTING PL GAS VALVE
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	- EXISTING CI GAS TRANSITION FITTING
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BOSTON GAS COMPANY  
 d/b/a  
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 40 SYLVAN ROAD  
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PROPOSED GAS MAIN REPLACEMENT  
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 WEST ROXBURY, MA

**PROPOSED INSTALLATION PLAN**

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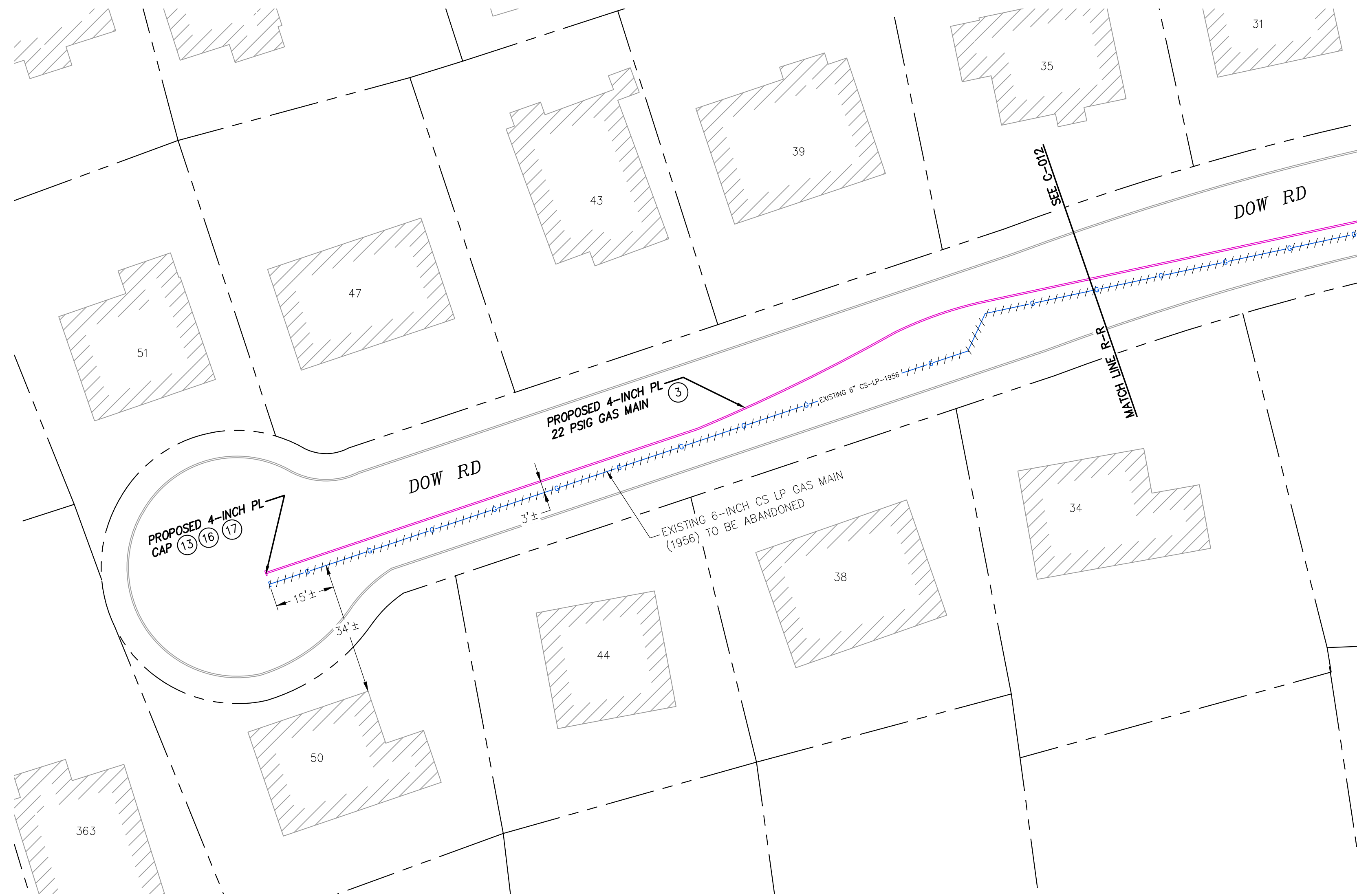
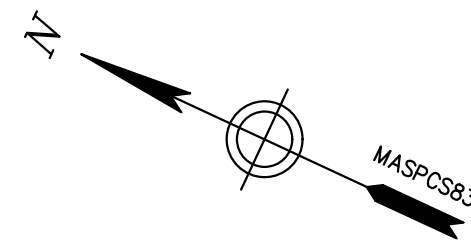
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DRAWING NO.	SHEET NO.
DPL-WRO-067813-1053	C-012

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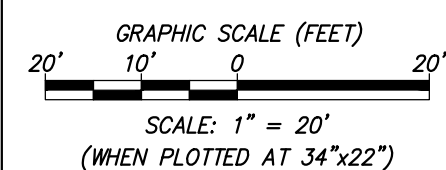
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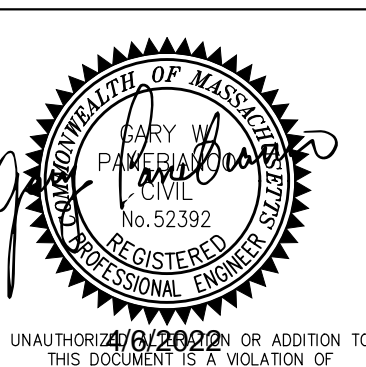
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LEGEND	
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	- EXISTING CS GAS TRANSITION FITTING
	- EXISTING CS REDUCER
	- EXISTING CS VALVE
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	- EXISTING CI GAS CAP
	- EXISTING CI GAS TRANSITION FITTING
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	- EXISTING FIRE HYDRANT
	- EXISTING CATCH BASIN
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 270-585 BAKER ST & 891-903 VFW PKWY  
 WEST ROXBURY, MA

**PROPOSED INSTALLATION PLAN**

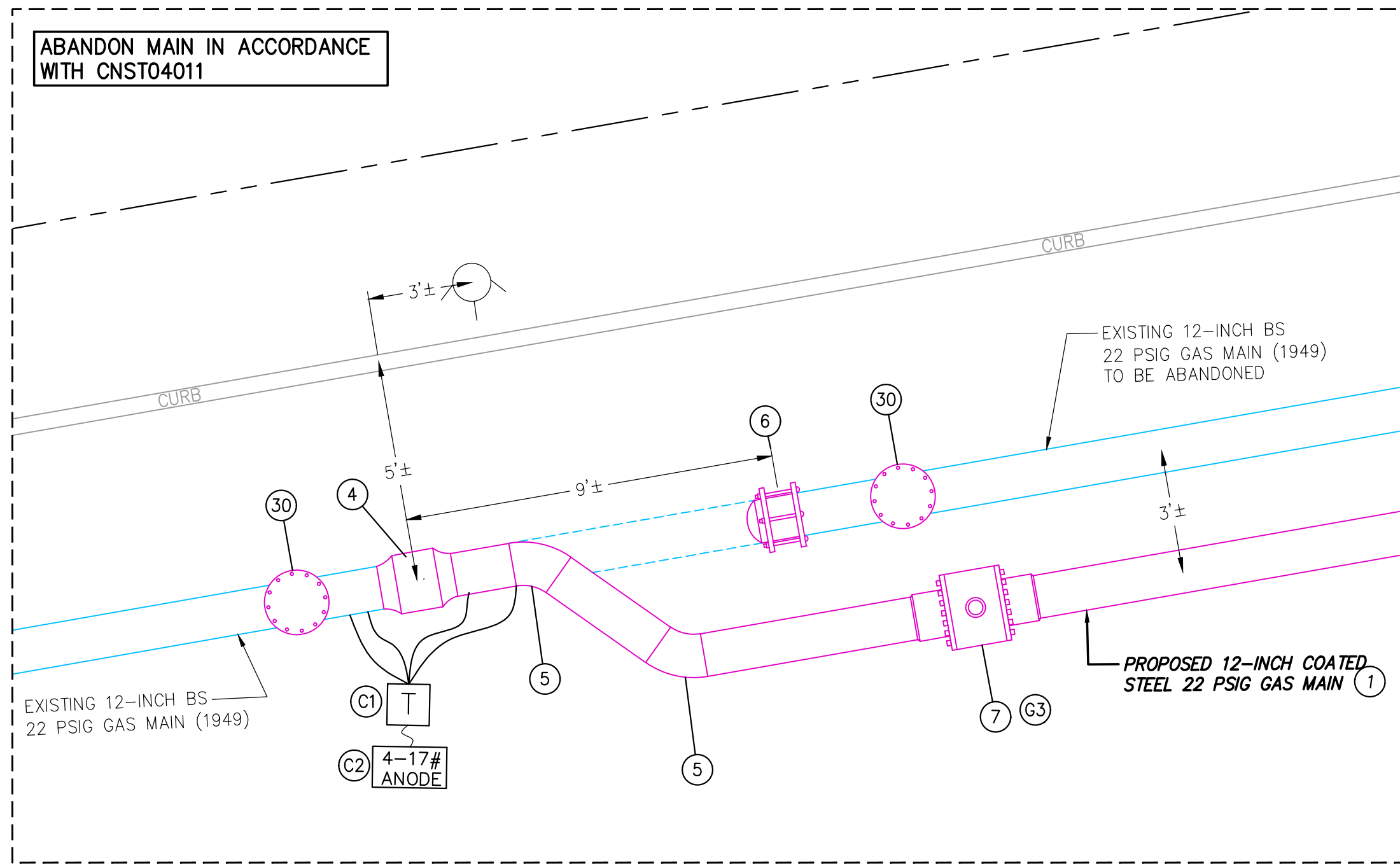
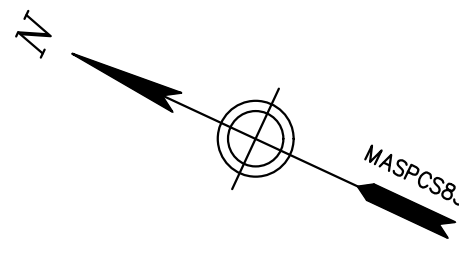
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22"X34"	R.ALABADI	M.THOMPSON	01/20/2022	DISTRIBUTION	1213100

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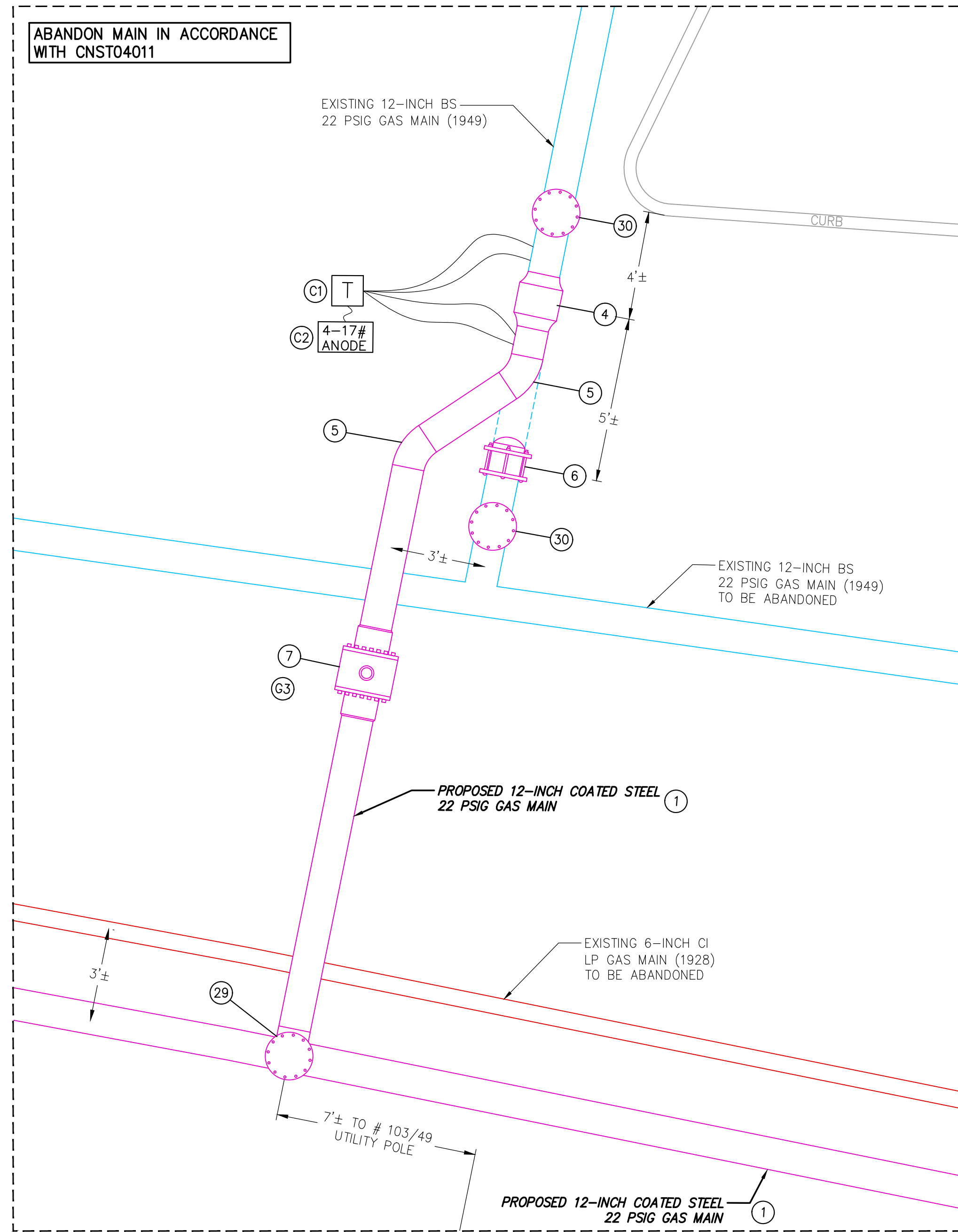
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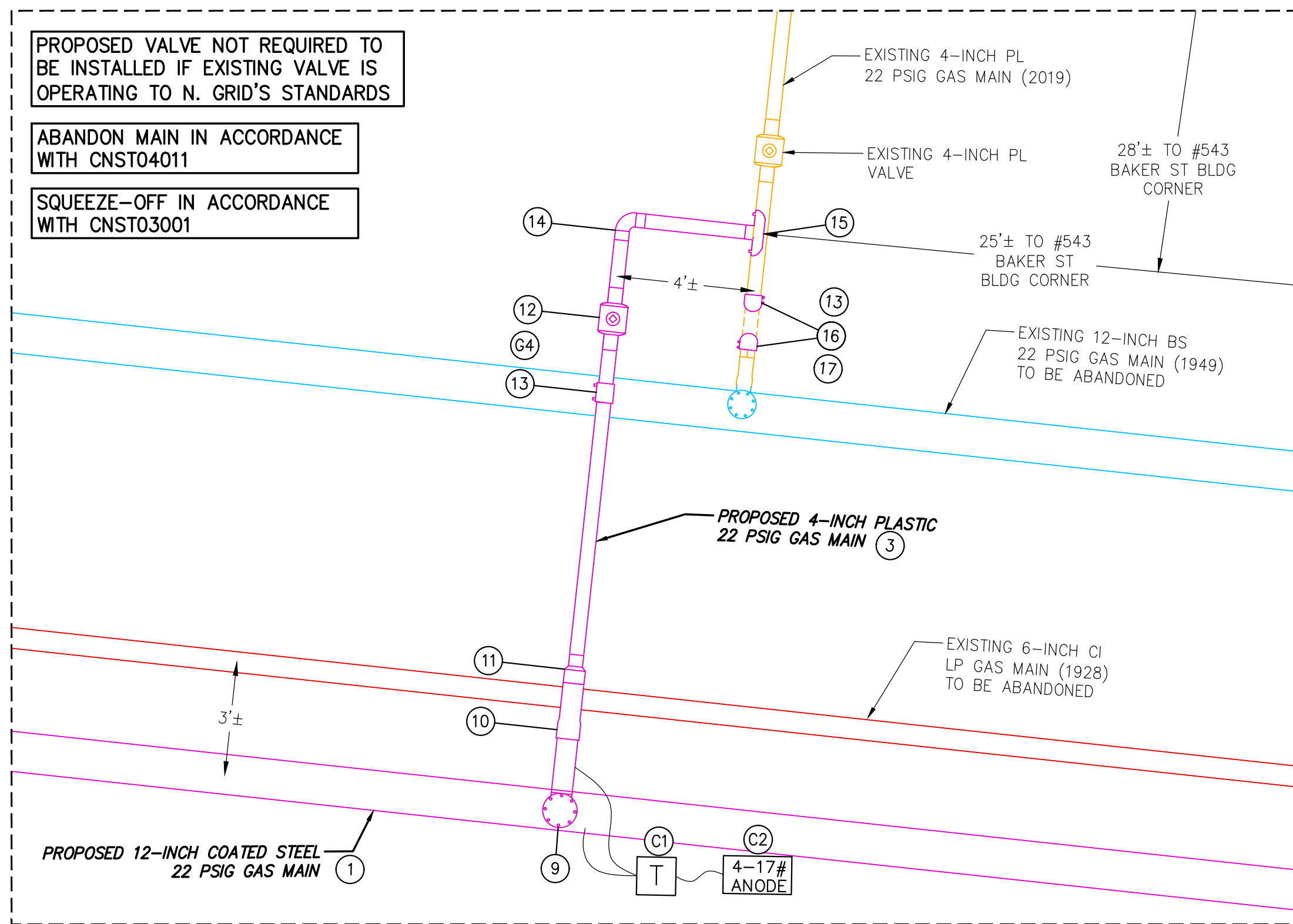
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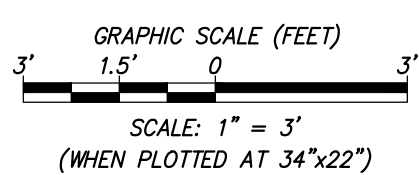
**1** PROPOSED TIE-IN AT BAKER STREET & BROOK FARM ROAD  
SCALE: 1"=3'



**2** PROPOSED TIE-IN AT BAKER STREET & VETERANS OF FOREIGN WARS PKWY  
SCALE: 1"=3'



**3** PROPOSED TIE-IN AT BAKER STREET & GLENHAM STREET  
SCALE: 1"=3'



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1	REVISED PER CLIENTS COMMENTS (DATED 02/09/2022)	02/11/2022	RA	MLT	GWP
0	ISSUED FOR CONSTRUCTION	01/20/2022	RA	MLT	GWP

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**nationalgrid**  
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WALTHAM, MA 02451

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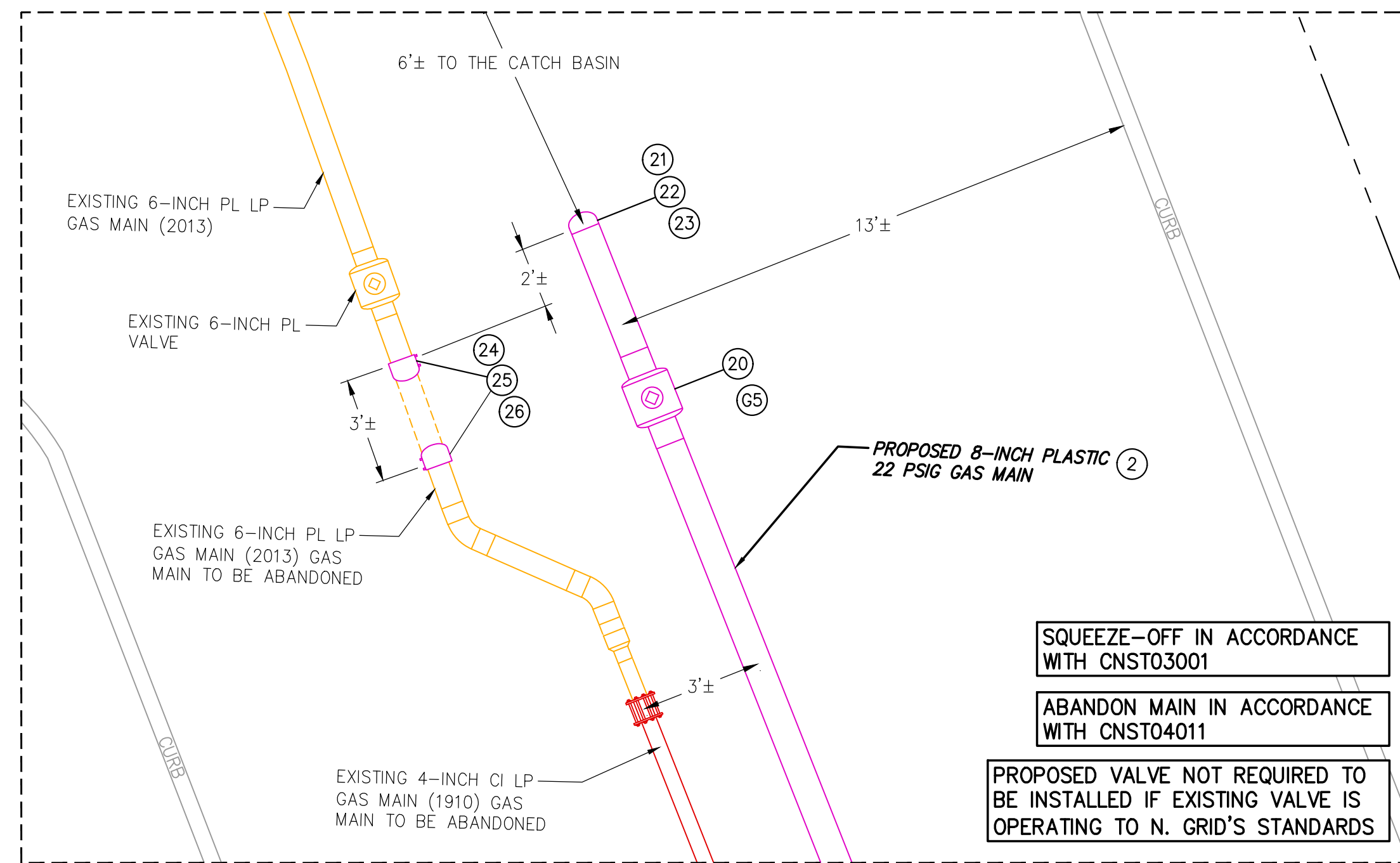
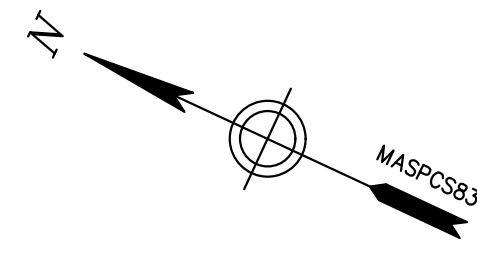
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270-585 BAKER ST & 891-903 VFW PKWY  
WEST ROXBURY, MA

**PROPOSED TIE-IN DETAILS**

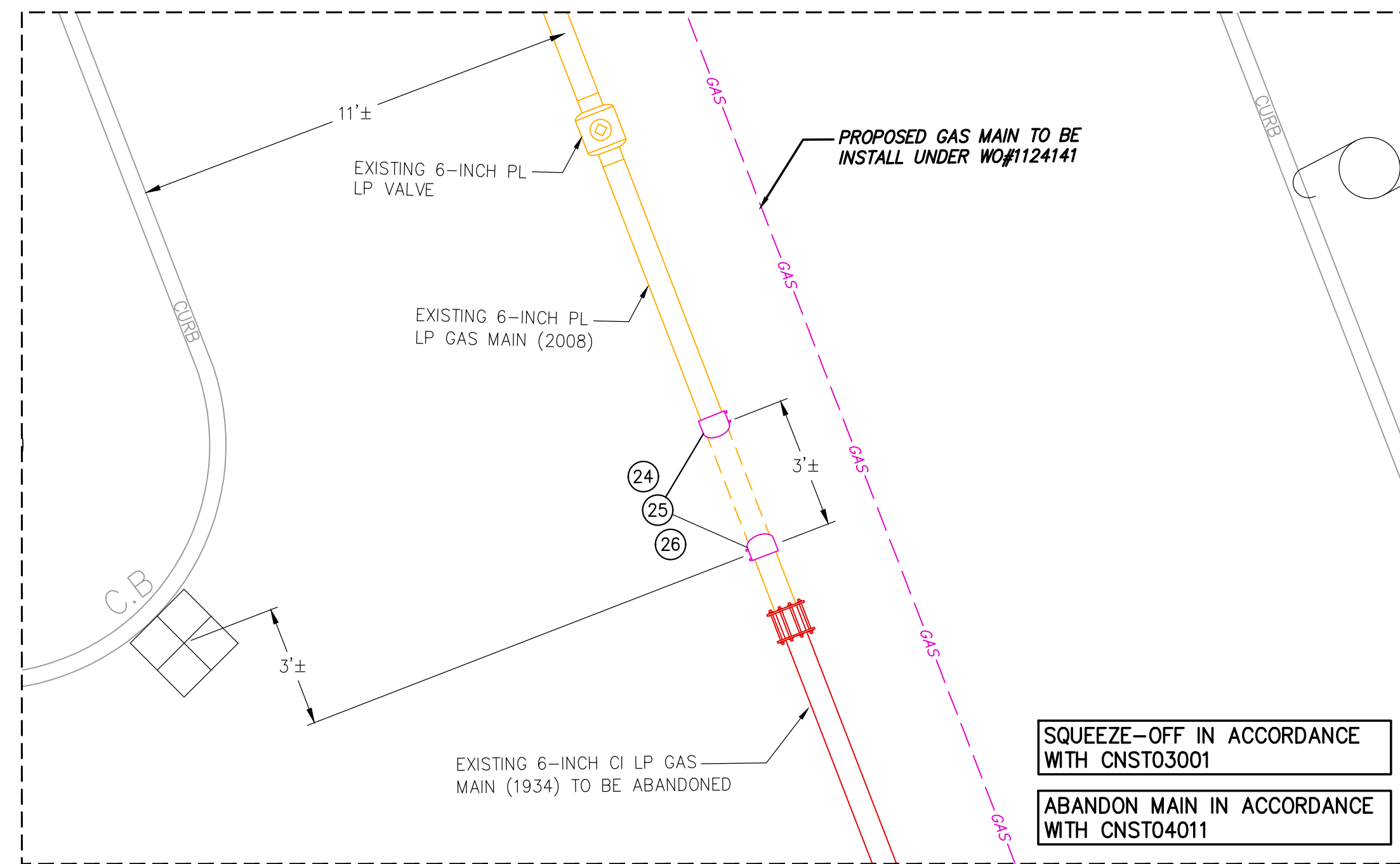
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22"X34"	R.ALABADI	M.THOMPSON	01/20/2022	DISTRIBUTION	1213100

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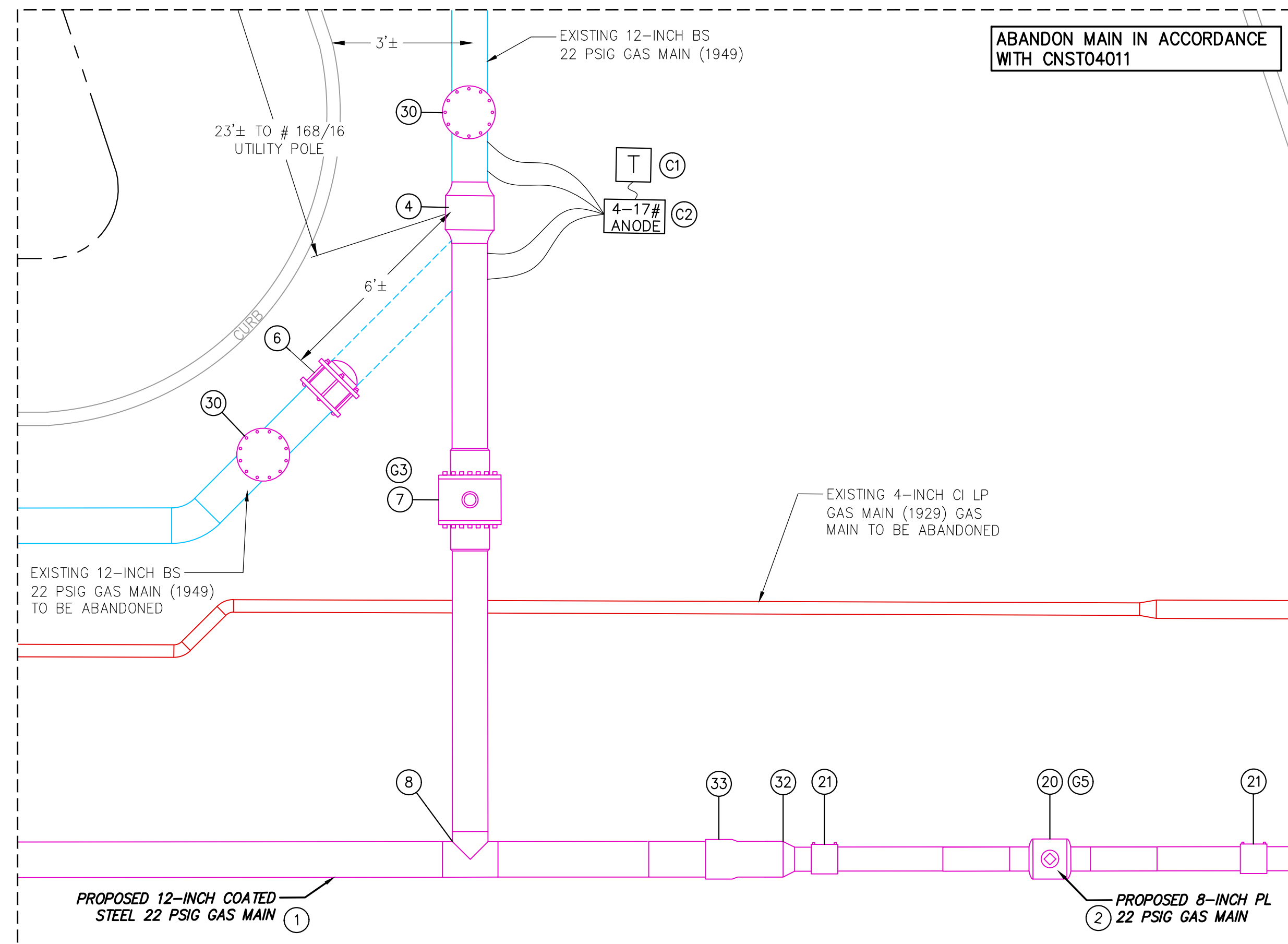
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DPL-WRO-067813-1053	C-201



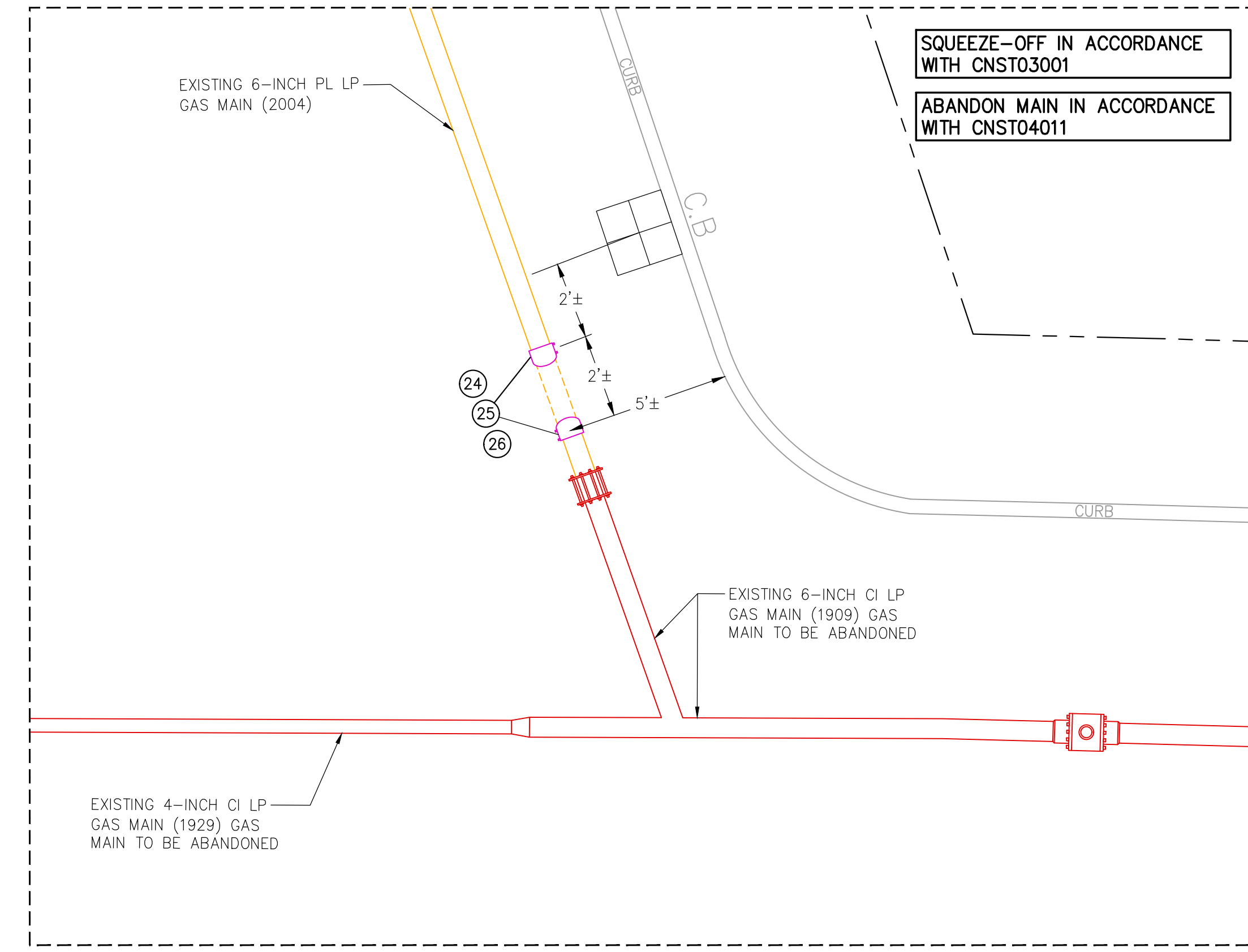
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SCALE: 1"=3'



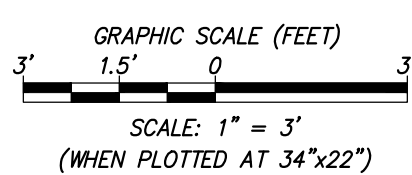
**5** PROPOSED CUT & CAP AT BAKER STREET & KEITH STREET  
SCALE: 1"=3'



**6** PROPOSED TIE-IN AT BAKER STREET & VERMONT STREET  
SCALE: 1"=3'



**7** PROPOSED CUT & CAP AT BAKER STREET & VERMONT STREET  
SCALE: 1"=3'



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1	REVISED PER CLIENTS COMMENTS (DATED 02/09/2022)	02/11/2022	RA	MLT	GWP
0	ISSUED FOR CONSTRUCTION	01/20/2022	RA	MLT	GWP

BOSTON GAS COMPANY  
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**nationalgrid**  
40 SYLVAN ROAD  
WALTHAM, MA 02451

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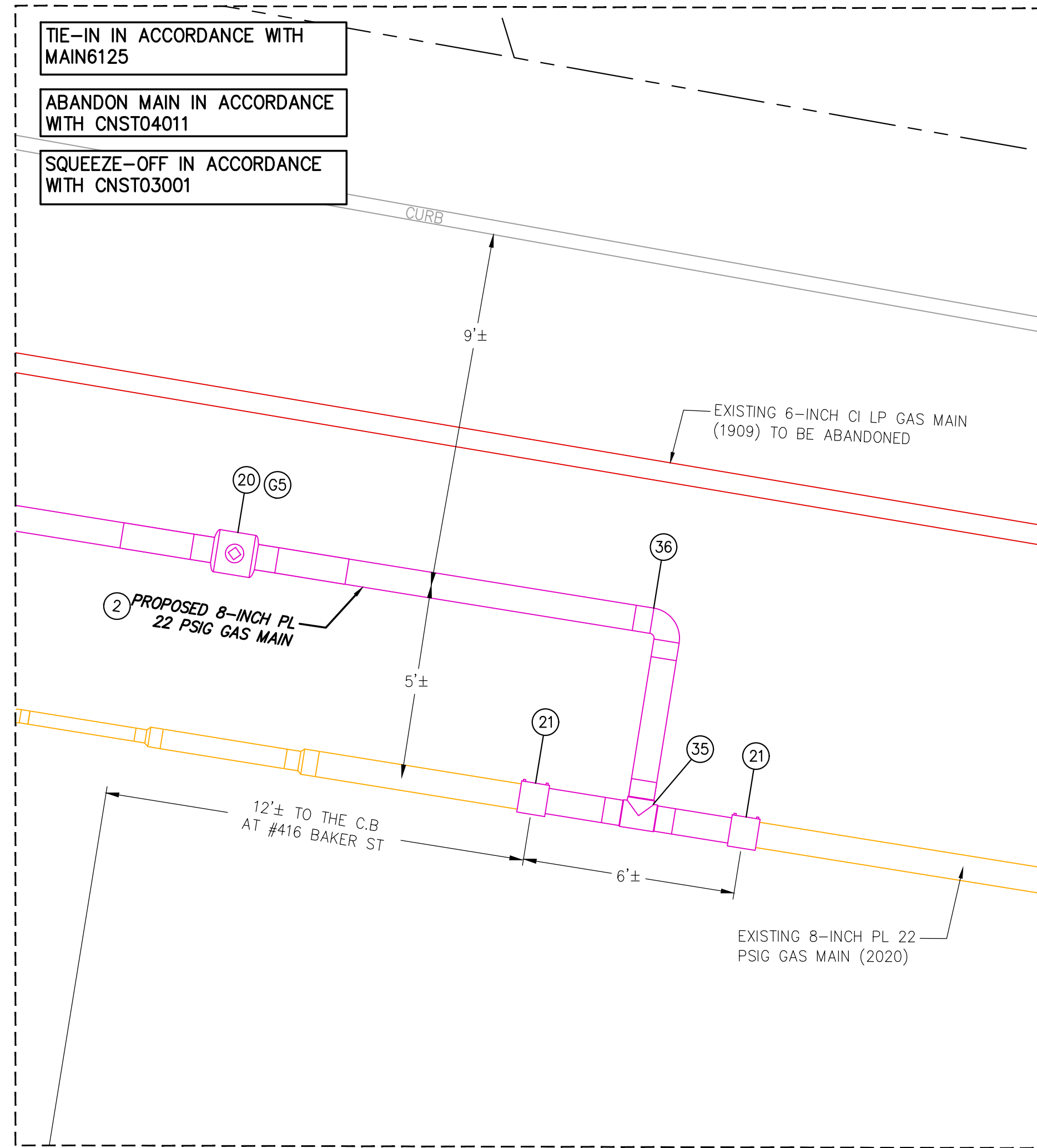
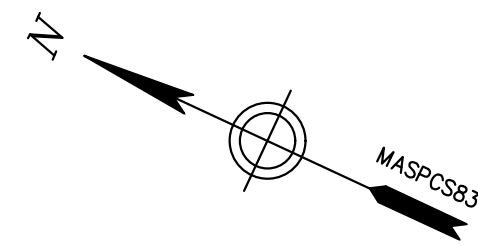
PROPOSED GAS MAIN REPLACEMENT  
270-585 BAKER ST & 891-903 VFW PKWY  
WEST ROXBURY, MA

**PROPOSED TIE-IN DETAILS**

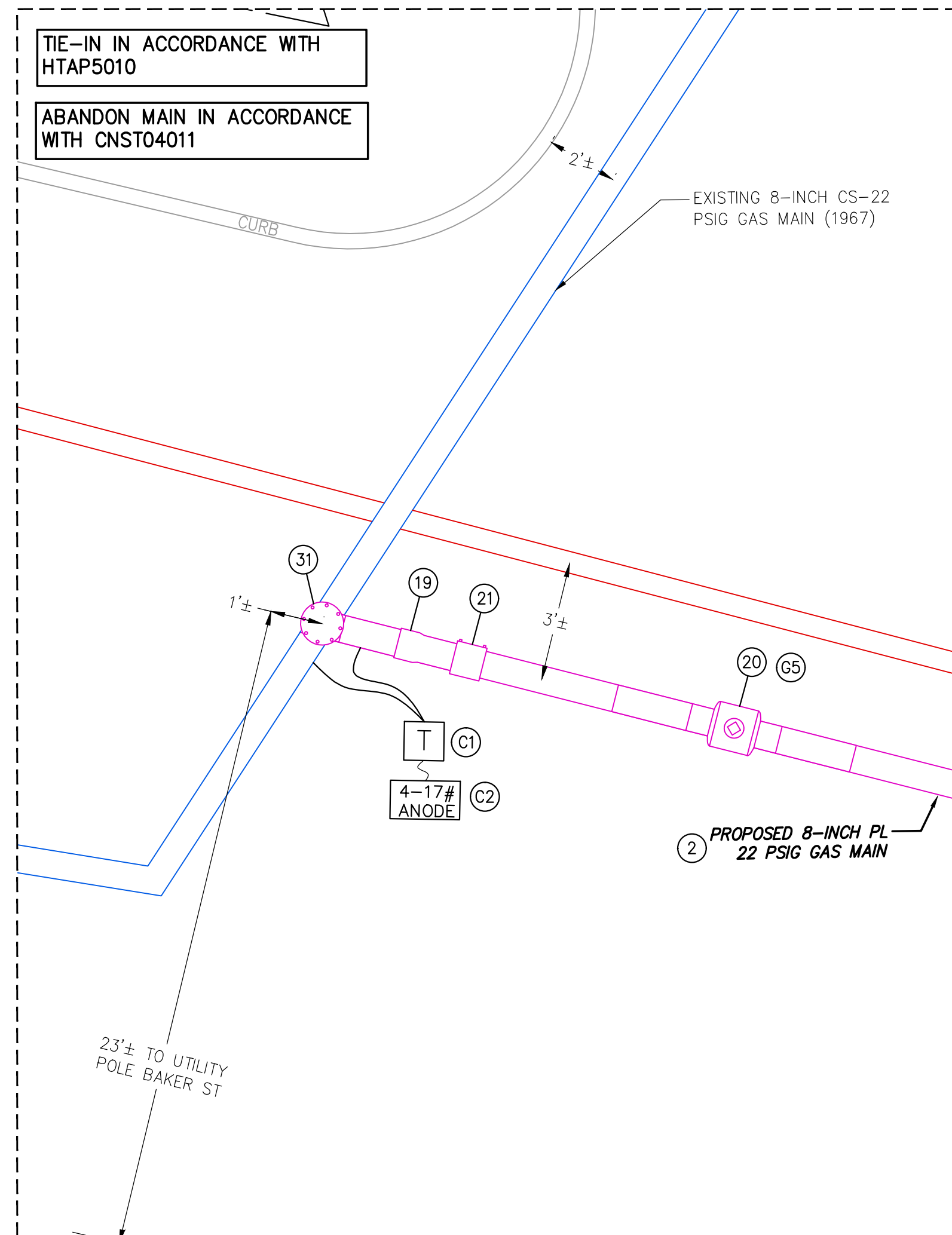
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22"X34"	R.ALABADI	M.THOMPSON	01/20/2022	DISTRIBUTION	1213100

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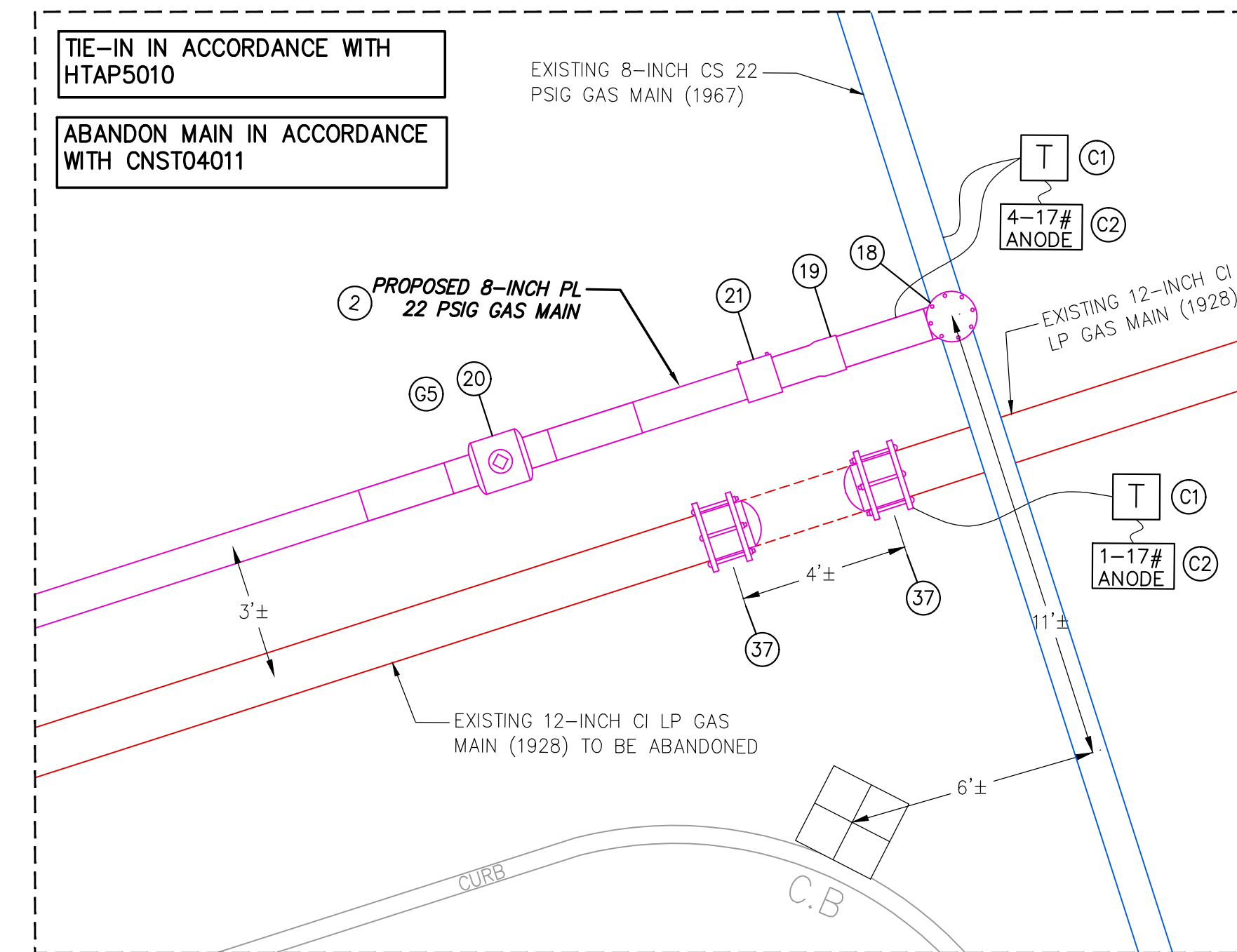
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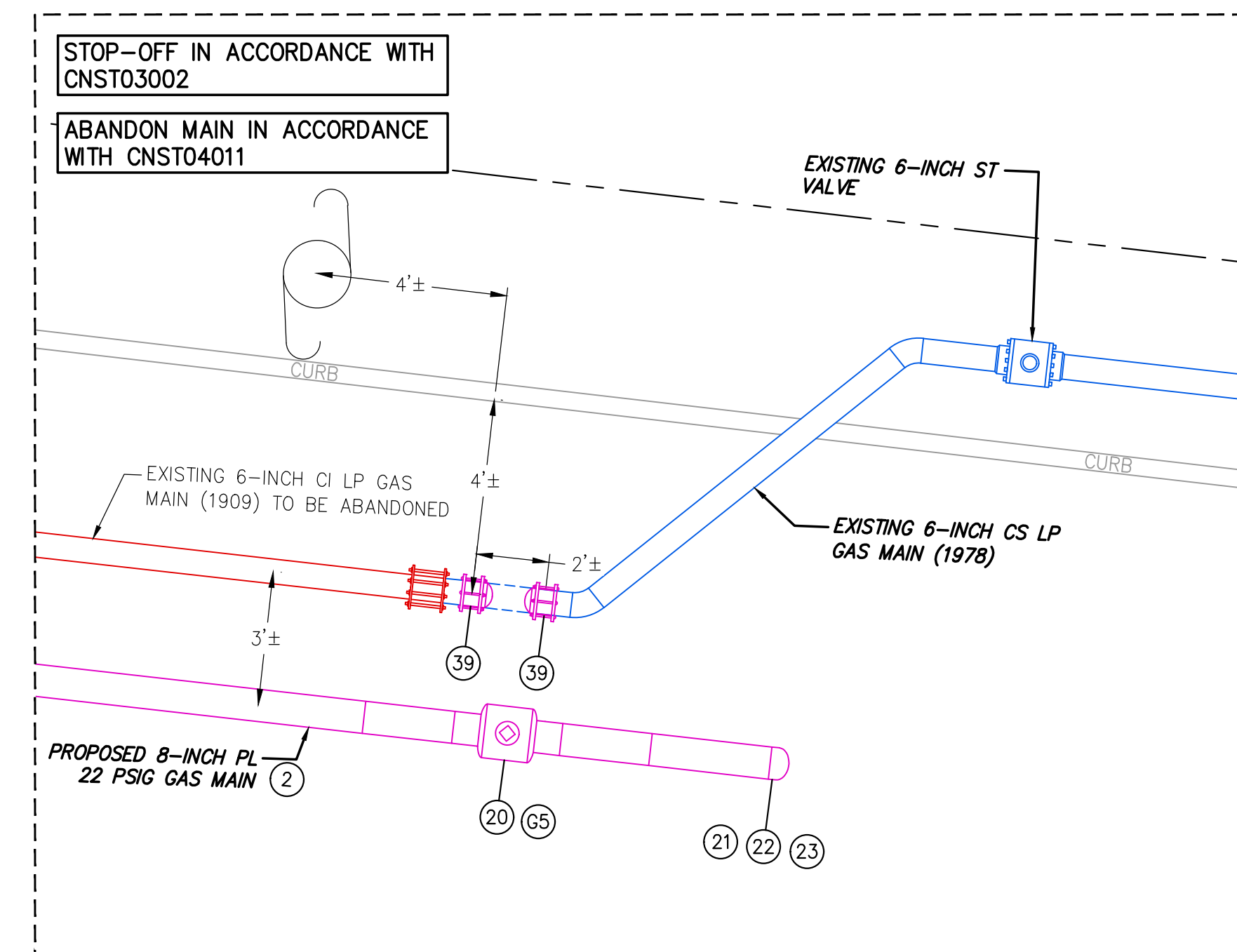
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SCALE: 1"=3'



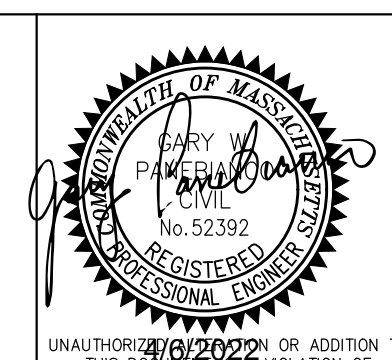
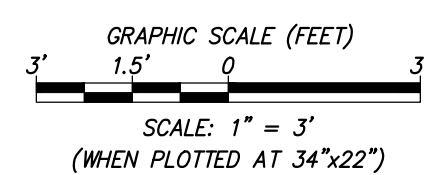
**9** PROPOSED TIE-IN AT BAKER STREET & RUMFORD ROAD  
SCALE: 1"=3'



**10** PROPOSED TIE-IN AT RUMFORD ROAD & CHESBROUGH ROAD  
SCALE: 1"=3'



**11** PROPOSED CUT & CAP NEAR #255 BAKER STREET  
SCALE: 1"=3'



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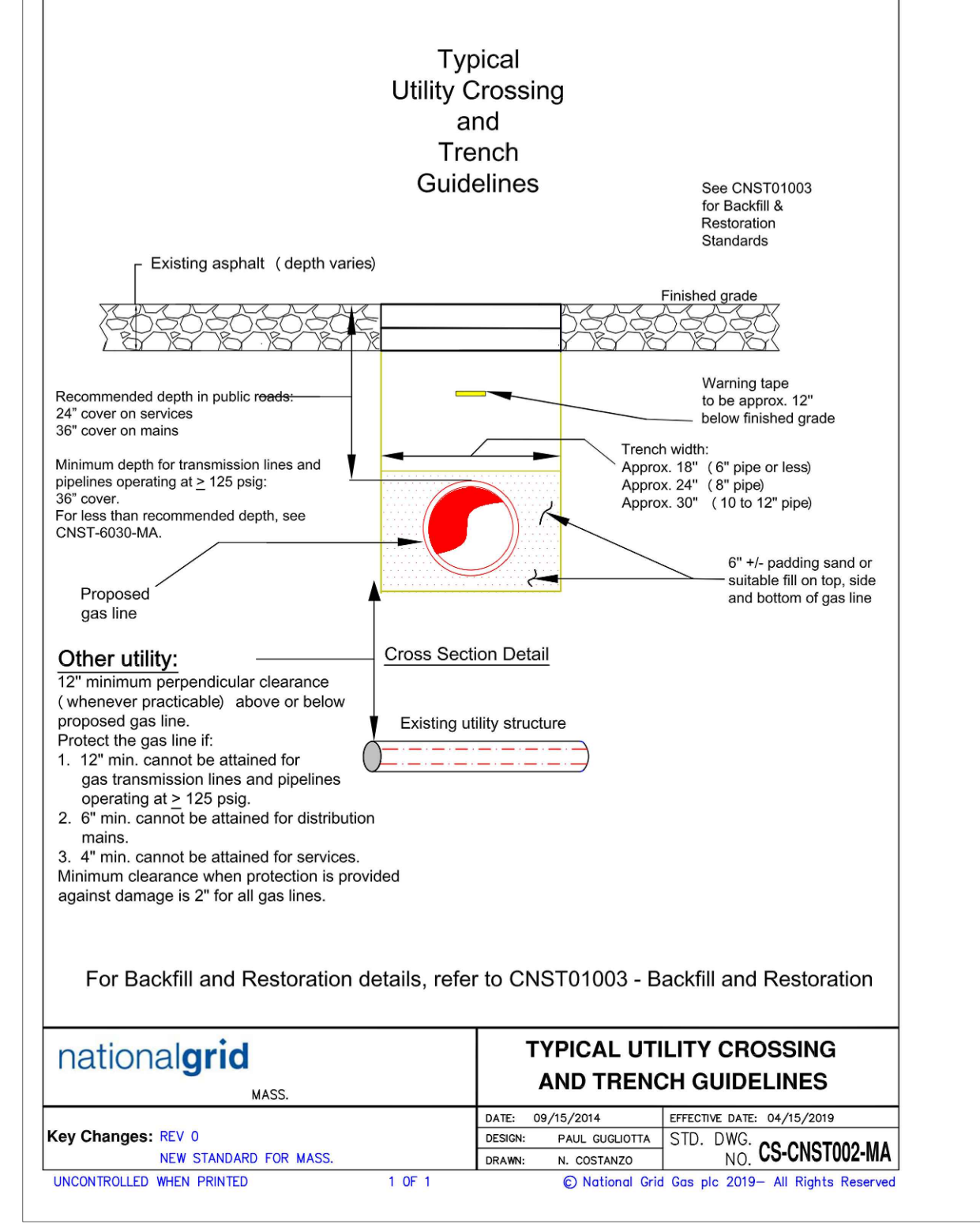
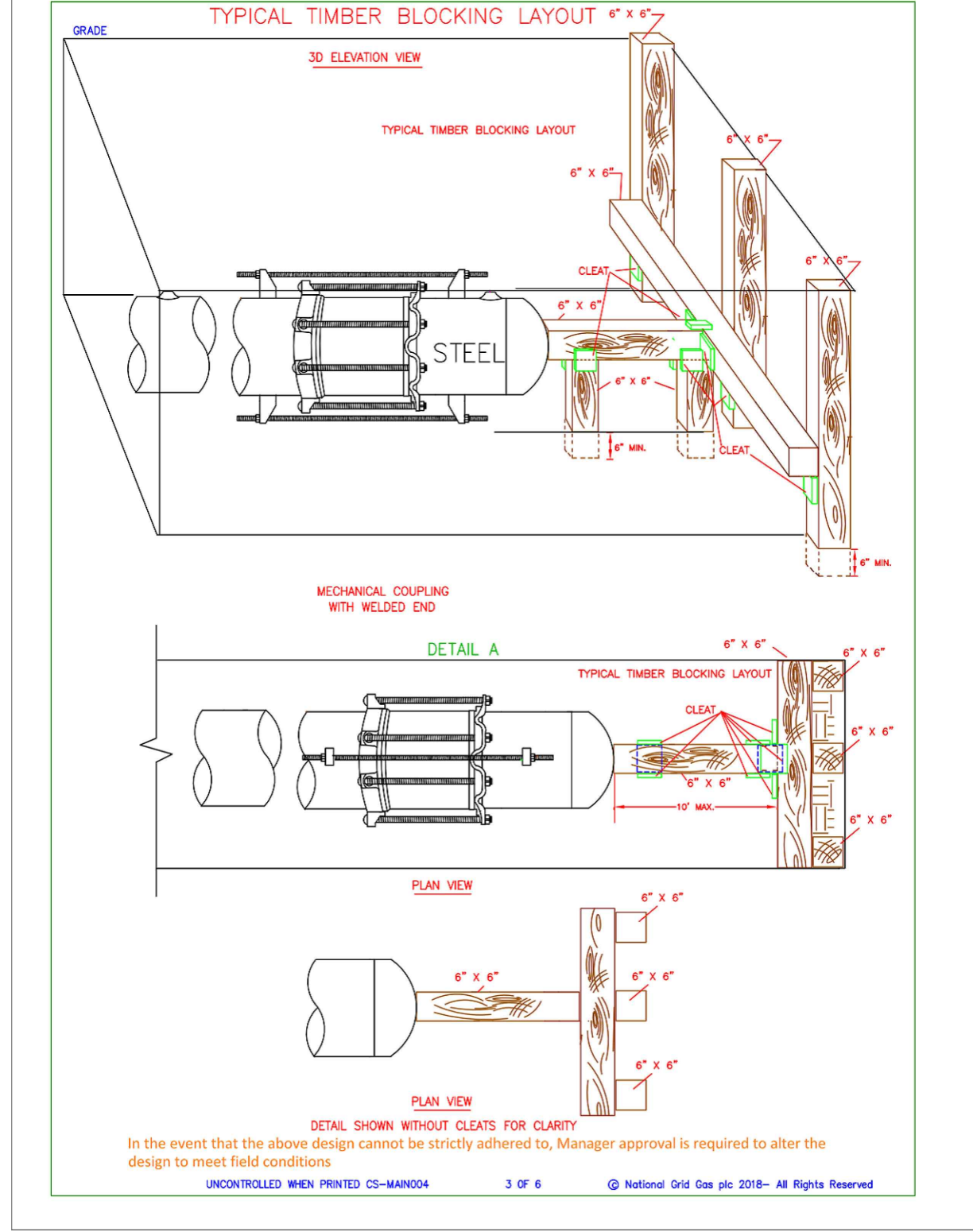
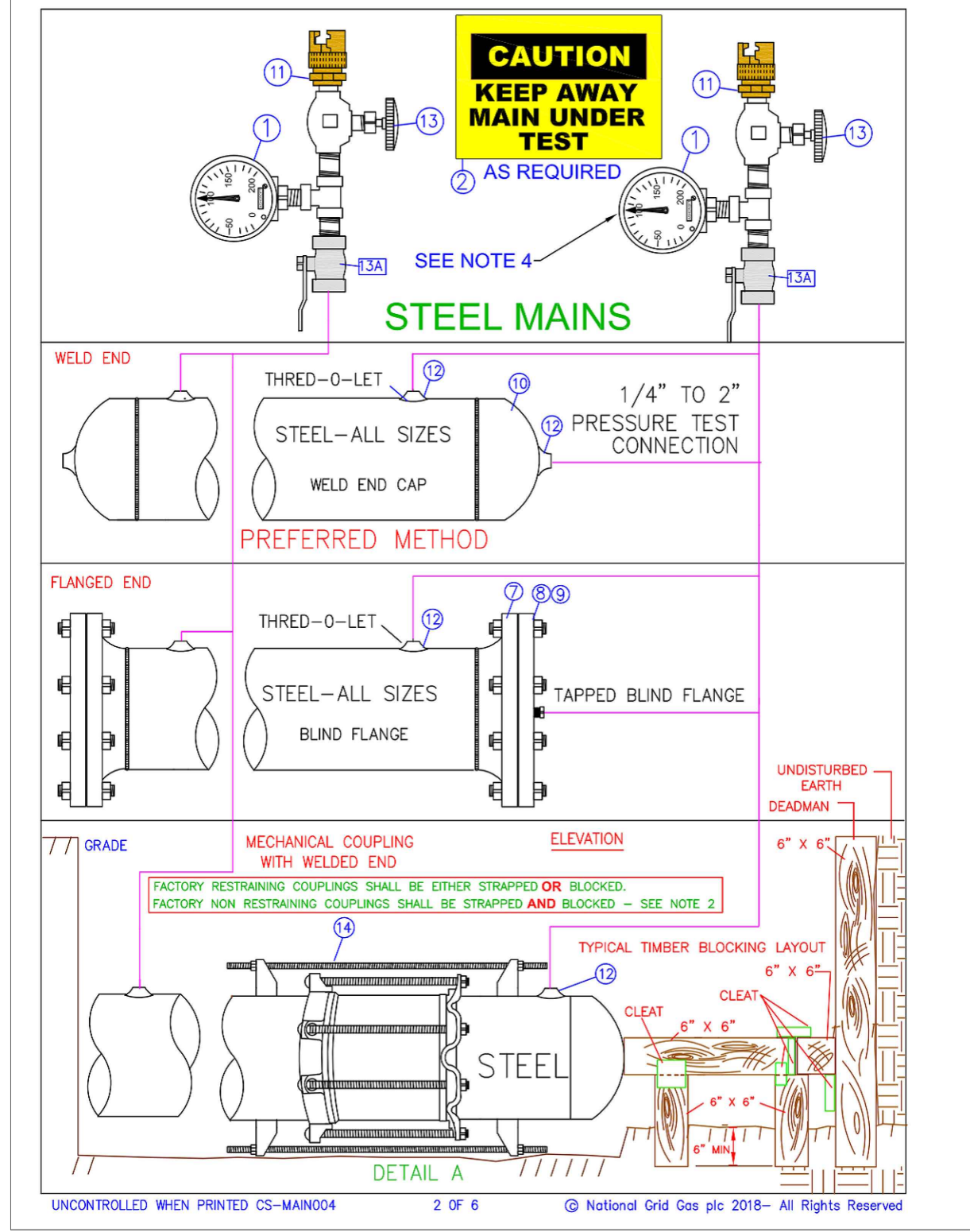
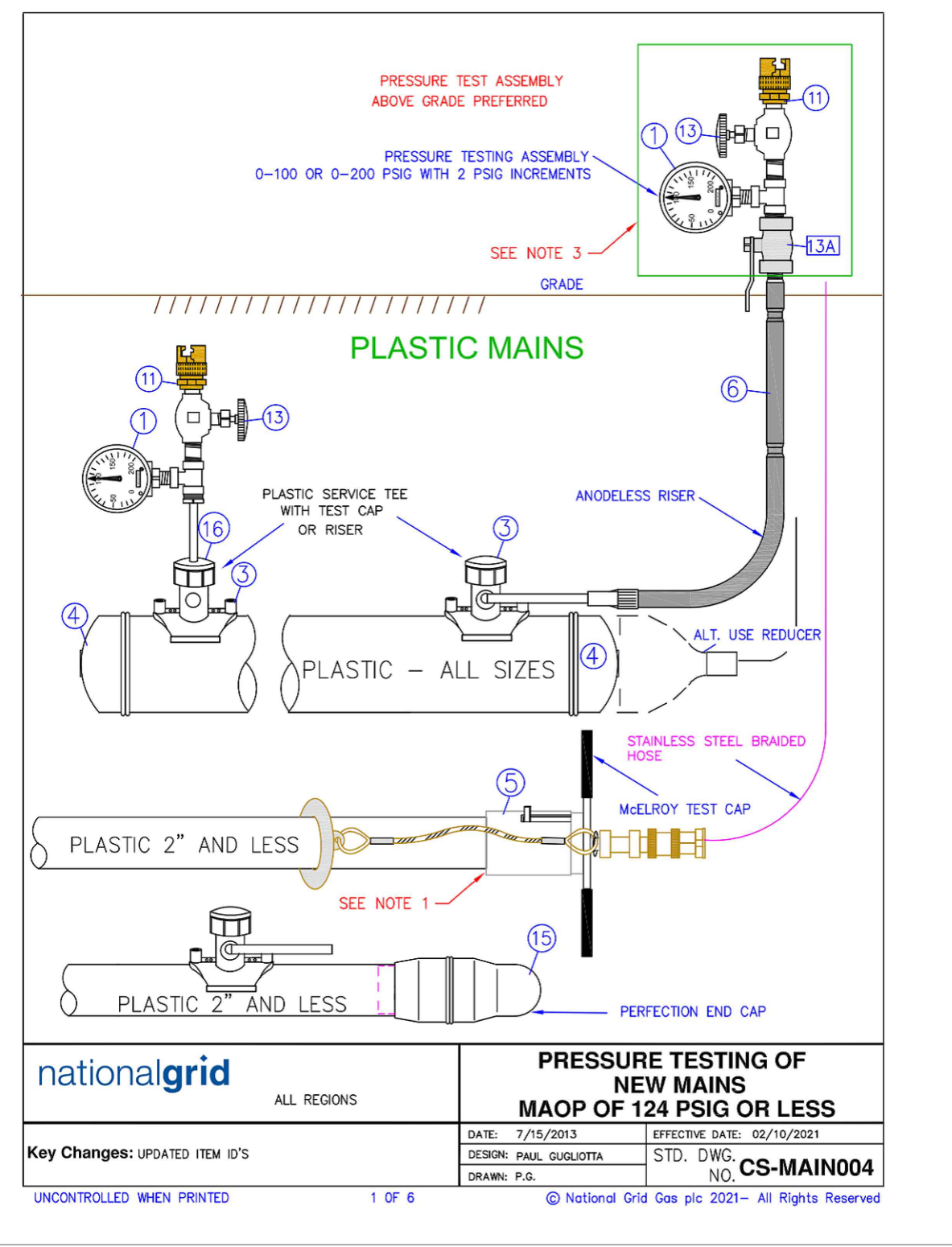
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WEST ROXBURY, MA

**PROPOSED TIE-IN DETAILS**

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DRAWING NO.	SHEET NO.
DPL-WRO-067813-1053	C-203



NOTES:

- INSTALL PER MELOROY MANUFACTURER'S INSTRUCTIONS.
- WHEN USING MECHANICAL COUPLINGS (AS SHOWN IN DETAIL A), NON-RESTRAINING COUPLING SHALL BE STRAPPED AND THE ENDS SHALL BE BLOCKED PER APPROVED STANDARD DRAWINGS. RESTRAINING COUPLINGS NEED TO BE EITHER STRAPPED OR BLOCKED. WHEN USING RESTRAINING COUPLINGS, STRAPPING NUTS SHOULD BE HAND TIGHT.
- ON EXISTING STEEL BLOCKING REFER TO THE TABLE BELOW FOR THE MINIMUM SAFE EMBEDMENT DISTANCE FROM THE WALL. WHEN BLOCKING IS REQUIRED FOR THE PRESSURE TEST, IF AN ALL WELDED SYSTEM CAN NOT BE CONFIRMED, THE WELDED OR FLANGED ENDS SHALL BE BLOCKED.

PIPE SIZE (INCHES)	MINIMUM SAFE DISTANCE FROM THE EXCAVATION WALL (FEET)
2	8
3	12
4	12
6	24
8	41
12	39

REFER TO CONSTRUCTION STANDARD FITS-6025 AND FITS-6015 FOR LIST OF COUPLINGS.

- IT IS RECOMMENDED THAT THE GAUGE ASSEMBLY BE ABOVE GRADE TO PREVENT PERSONNEL FROM ENTERING THE TRENCH WHILE THE PRESSURE TEST IS UNDERWAY.
- ONE PRESSURE TEST GAUGE AT EACH PIPE END IS RECOMMENDED TO VERIFY THE PRESSURE. ALL GAUGES SHALL BE 0-100 OR 0-200 PSIG RANGE (2 PSIG INCREMENTS BEGID IN NY STATE ONLY).
- REFER TO CNST04003 'PRESSURE TESTING OF MAINS OPERATING BELOW 125 PSIG' FOR TESTING AND DESIGN REQUIREMENTS.

ITEM	DESCRIPTION	SAP ITEM ID LI/MA/NYC	SAP ITEMS RI AND UNY	
1	PRESSURE GAUGE 5-100 OR 0-200 PSIG - 2 PSI INCREMENTS 0-200 PSIG STAINLESS STEEL 1/2" NPT 2-1/2" DIAL 0-200 PSIG STAINLESS STEEL 1/2" NPT 2-1/2" DIAL 0-100 PSIG STAINLESS STEEL 1/2" NPT	935486 935890 933240	NON STOCK TOOL ITEM TOOL ITEM NON STOCK	
2	WARN - WARNING PRESSURE TEST (AS REQUIRED IN FIELD)	934217 2X12 934218 4X12 934219 8X12 934231 8X12	NON STOCK NON STOCK NON STOCK NON STOCK	
3	TEE SERVICE - ELECTROFUSION YELLOW MD 1/2" CTS BUTT FUSE OUTLET 2" MAIN X 1/2" BUTT FUSE OUTLET LUMANYNYC 4" MAIN X 1/2" BUTT FUSE OUTLET LUMANYNYC 6" MAIN X 1/2" BUTT FUSE OUTLET LUMANYNYC 8" MAIN X 1/2" BUTT FUSE OUTLET LUMANYNYC	934232 1-1/4 X 1 934219 2X1 934218 4X1 934231 8X1 934232 8X1	NON STOCK NON STOCK NON STOCK NON STOCK NON STOCK	
4	TEE SERVICE - ELECTROFUSION BLACK HD 1" CTS BUTT FUSE OUTLET 2" MAIN X 1" IPS OUTLET MASS 3" MAIN X 1" IPS OUTLET MASS 4" MAIN X 1" IPS OUTLET MASS 6" MAIN X 1" IPS OUTLET MASS 8" MAIN X 1" IPS OUTLET MASS 12" MAIN X 1" IPS OUTLET LI, NYC, MA	932253 2X1 932228 3X1 932229 4X1 932226 6X1 932407 8X1 931831 12X1	NON STOCK NON STOCK NON STOCK NON STOCK NON STOCK NON STOCK NON STOCK	
5	TEE SERVICE - SADDLE FUSION HIGH DENSITY BLACK 1/2" CTS BUTT FUSE 2" MAIN X 1/2" OUTLET LI 4" MAIN X 1/2" OUTLET LI 6" MAIN X 1/2" OUTLET LI 8" MAIN X 1/2" OUTLET LI	934240 2X1 SDR 9 934240 4X1 SDR 9 934240 6X1 SDR 9 934241 8X1 SDR 9 931409 12X1	9315907 2X1 9315904 4X1 9315903 6X1 9315902 8X1 9314029 12X1	NON STOCK NON STOCK NON STOCK NON STOCK NON STOCK
6	TEE SERVICE MECHANICAL X PERFECTION OUTLET 2" MAIN X 1/2" OUTLET 4" MAIN X 1/2" OUTLET 6" MAIN X 1/2" OUTLET 8" MAIN X 1/2" OUTLET 2" MAIN X 1" OUTLET 4" MAIN X 1" OUTLET 6" MAIN X 1" OUTLET 8" MAIN X 1" OUTLET	NON STOCK NON STOCK NON STOCK NON STOCK 9315492 2X1 9315492 4X1 9315490 6X1 9308473 8X1 9308178 8X1	930684 2X1/2 930683 4X1/2 9308472 6X1/2 9308471 8X1/2 9315492 2X1 9315490 4X1 9308473 8X1 9308178 8X1	NON STOCK NON STOCK NON STOCK NON STOCK NON STOCK NON STOCK NON STOCK NON STOCK

ITEM	DESCRIPTION	ORACLE ITEM ID LI/MA/NYC	PEOPLESOFT ITEM RI AND UNY
4	CAP END PLASTIC MEDIUM DENSITY YELLOW BUTT FUSE 2" SDR 11 4" SDR 11 6" SDR 11 8" SDR 11.5 12" SDR 11.5	9339540 9339541 9339542 9339733 9339559 9339560	NON STOCK NON STOCK NON STOCK NON STOCK NON STOCK NON STOCK
5	CAP END PLASTIC HIGH DENSITY BLACK BUTT FUSION 2" SDR 9 4" SDR 9 6" SDR 9 8" SDR 9	9339538 9339539 9339536 9339537	NON STOCK NON STOCK NON STOCK NON STOCK
6	2" SDR 11 MASS RI & UNY 3" SDR 11 MASS RI & UNY 4" SDR 11 MASS RI & UNY 6" SDR 11 MASS RI & UNY 8" SDR 11 MASS RI 12" SDR 11 RI UNY	9312086 9310276 9312085 9312084 9310272 9308759	2" 9312085 3" 9310276 4" 9312086 6" 9312084 8" 9310272 12" 9308759
7	MELOROY TEST CAPS (165 PSIG MAX) 1-1/4" MODEL TP 2" MODEL TP-310 RISER	NON STOCK NON STOCK TP-308 TP-310 9344396 9340874 9340863 9320207 9318405 9318059 9306180	NON STOCK NON STOCK NON STOCK NON STOCK NON STOCK NON STOCK NON STOCK
8	FLANGE 150# WELD END FLAT FACE 2" 3" 4" 6" 8" 10" 12" 16" 20"	9314322 9314431 9314430 9308659 9308748 9308660 9322363 9322362	2" 9314322 3" 9314431 4" 9314430 6" 9308659 8" 9308748 10" 9308660 12" 9322363 MA 16" 9322362 MA 20" 9322362
9	BLIND FLANGE CLASS 150# ASTM A-105 2" FLAT FACE WITH NO CENTER NPT TAP 3" FLAT FACE WITH NO CENTER NPT TAP 4" FLAT FACE WITH NO CENTER NPT TAP 6" FLAT FACE WITH NO CENTER NPT TAP 2" FLAT FACE 3" FLAT FACE 4" FLAT FACE 6" FLAT FACE 8" FLAT FACE 12" FLAT FACE	9314344 9340114 9341435 9340482 9308674 9307751 9306252 9306182 9307750 9308748	NON STOCK NON STOCK NON STOCK NON STOCK NON STOCK NON STOCK NON STOCK NON STOCK NON STOCK NON STOCK
10	GASKETS 2" FULL FACE 150# 3" FULL FACE 150# 4" FULL FACE 150# 6" FULL FACE 150# 8" FULL FACE 150# 12" FULL FACE 150# 12" BCS TYPE 150#	9333167 9341158 9341159 9332599 9341168 9341165	2" 9315988 3" 9312067 4" 9315989 6" 9315988 8" 9341168 12" 9341165

ITEM	DESCRIPTION	ORACLE ITEM ID LI/MA/NYC	PEOPLESOFT ITEM RI AND UNY
10	END CAPS - STEEL WELD END STANDARD WALL - GRADE B 2" 3" 4" 6" 8" 10" 12" 16" 20"	9312095 9308719 9312096 9312094 9315182 9312092 9314824 9339597	2" 9312095 3" 9308719 4" 9312096 6" 9312094 8" 9315182 10" 9312092 12" 9314824 16" 9314824 20" 9339597
11	THOR FITTING 1/2" MALE NPT X HOSE CONNECTION 1/2" FEMALE X HOSE CONNECTION	0050409 0050401	NON STOCK NON STOCK
12	THRED-O-LET 12" - 6" X 1/2" 3000W PER ASTM A-105 GRADE B 10" - 6" X 1/2" 3000W PER ASTM A-105 GRADE B 8" - 12" X 1/2" 3000W PER ASTM A-105 GRADE B 2" X 1" 3000W PER ASTM A-105 GRADE B 10" - 6" X 1/2" 3000W PER ASTM A-105 GRADE B 30" 1/4" X 1/2" 3000W PER ASTM A-105 GRADE B	9341652 12-6X3/4 9341656 10-6X1 9342052 36-12X1 NON STOCK NON STOCK NON STOCK	NON STOCK NON STOCK NON STOCK NON STOCK NON STOCK NON STOCK
13	VALVE	NON STOCK	NON STOCK
13A	VALVE (OPTIONAL - TO SHUT OFF TEST ASSEMBLY)	NON STOCK	NON STOCK
14	LUG ASSEMBLY 78" X 24" LONG (LI ONLY) - SEE MAIN-6210 78" X 44" LONG (LI ONLY) - SEE MAIN-6210 LUG GREEN 3" - 8" MAIN 78" DIAM. (NYC ONLY - SEE MAIN-6230 & MAIN-6230) LUG YELLOW 10" - 30" MAIN 1-1/8" DIAM. (NYC ONLY - SEE MAIN-6230 & MAIN-6230) ROD 1/2" X 12" LONG (NYC ONLY) LUG ASSEMBLY 1/2" X 3" LONG	9342211 9342112 9357904 9357905 9338152 9308150 NON STOCK	NON STOCK NON STOCK NON STOCK NON STOCK NON STOCK NON STOCK NON STOCK
15	TEST CAP FOR SADDLE FUSION TEE - CENTRAL PLASTICS FOR SADDLE FUSION TEE - JIM EAGLE / POLY UPONOR FOR SADDLE FUSION TEE - PERFORMANCE PIPE TEES FOR HVTT (HIGH VOLUME TAPPING TEE) SADDLE FUSION CENTRAL PLASTICS FOR HVTT (HIGH VOLUME TAPPING TEE) SADDLE FUSION - JIM EAGLE / POLY UPONOR FOR HVTT (HIGH VOLUME TAPPING TEE) SADDLE FUSION PERFORMANCE PIPE TEES FOR HVTT (HIGH VOLUME TAPPING TEE) SADDLE FUSION PERFORMANCE PIPE TEES FOR ELECTROFUSION TEE FOR REPERCTION PATT MECHANICAL TEE (CAP FITS ALL MAIN SIZE & OUTLET SIZES OF PATT'S)	9325109 9325017 9341368 9384296 9384174 9323715 9384964 9381846 9339591	TOOL ROOM ITEM TOOL ROOM ITEM TOOL ROOM ITEM TOOL ROOM ITEM TOOL ROOM ITEM TOOL ROOM ITEM TOOL ROOM ITEM TOOL ROOM ITEM TOOL ROOM ITEM

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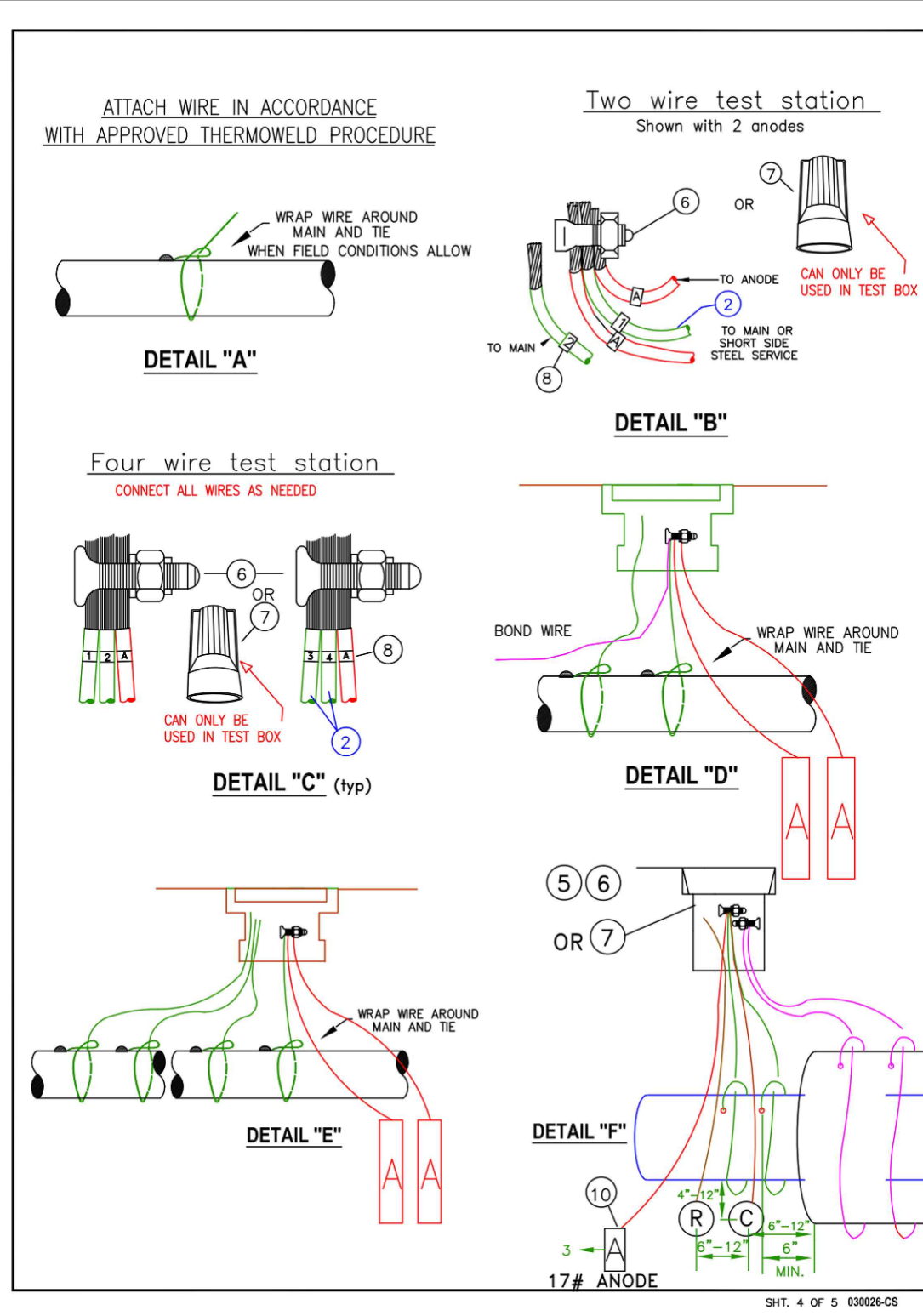
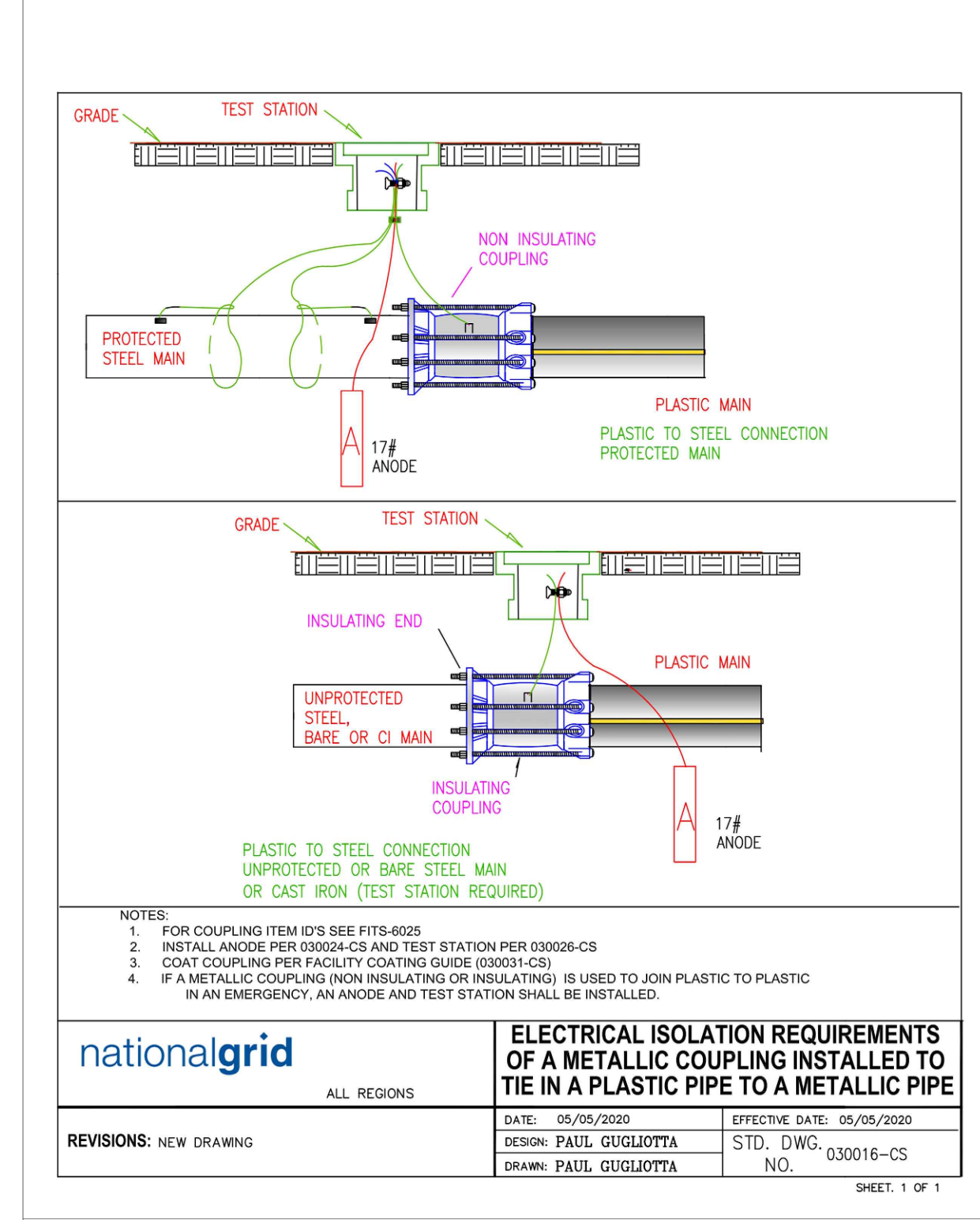
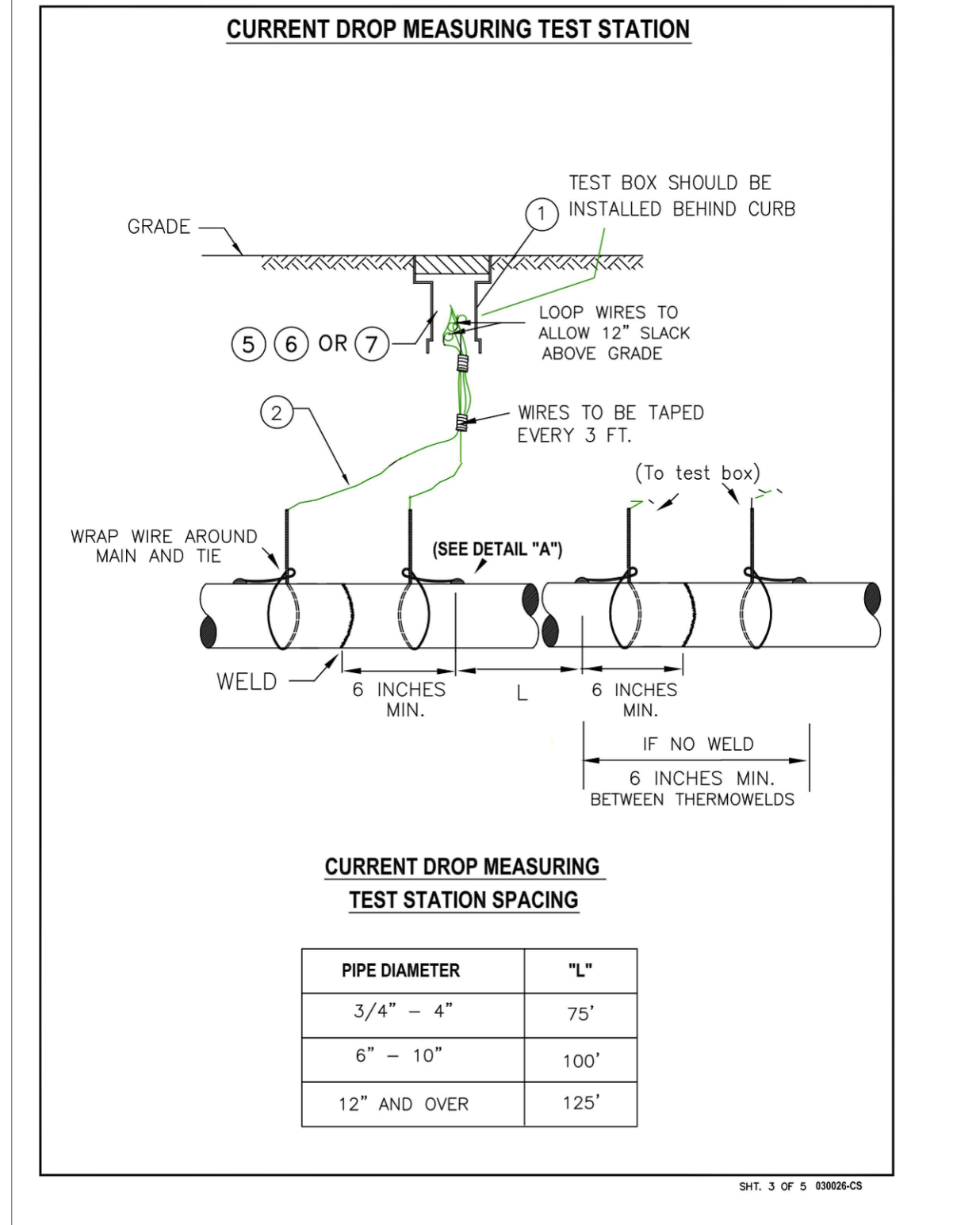
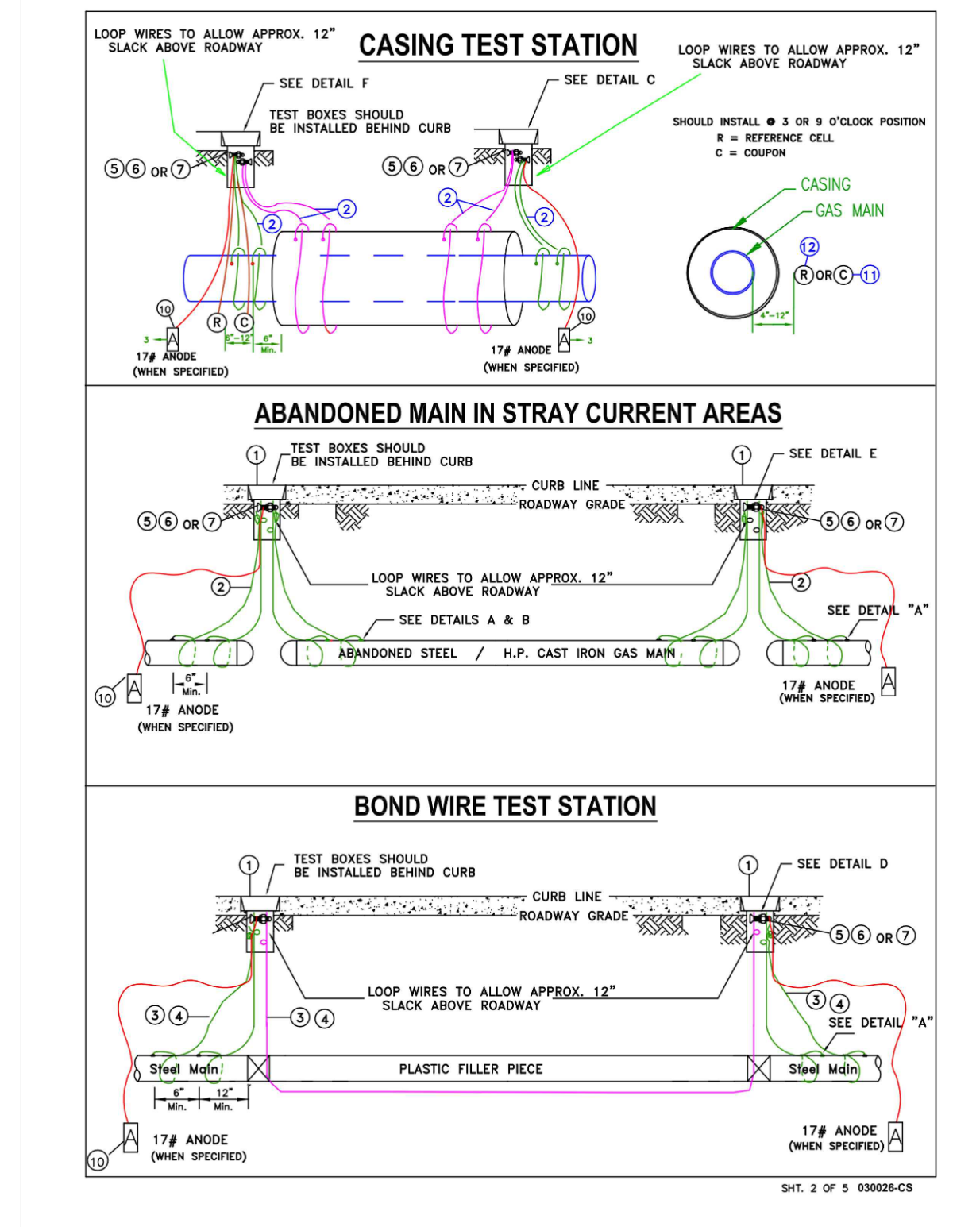
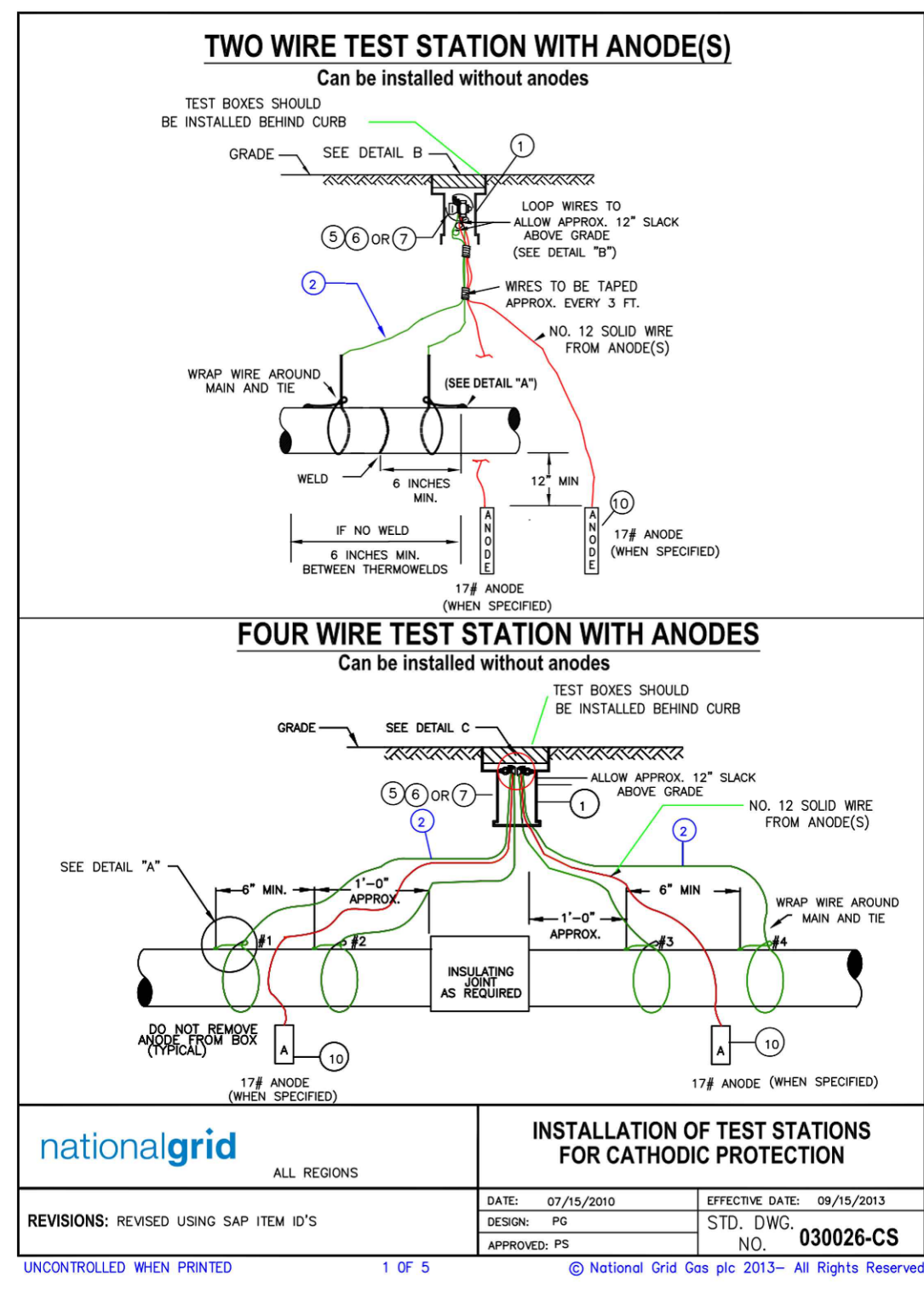
PROPOSED GAS MAIN REPLACEMENT 270-585 BAKER ST & 891-903 VFW PKWY WEST ROXBURY, MA

NATIONAL GRID STANDARD CONSTRUCTION DETAILS

PAGE 19 OF 23

DWG SIZE	DESIGNER	ENGINEER	DATE	ASSET I.D.	W.O. NO.:
22"X34"	R.ALABADI	M.THOMPSON	01/20/2022	DISTRIBUTION	1213100

DRAWING NO.	SHEET NO.
DPL-WRO-067813-1053	C-301

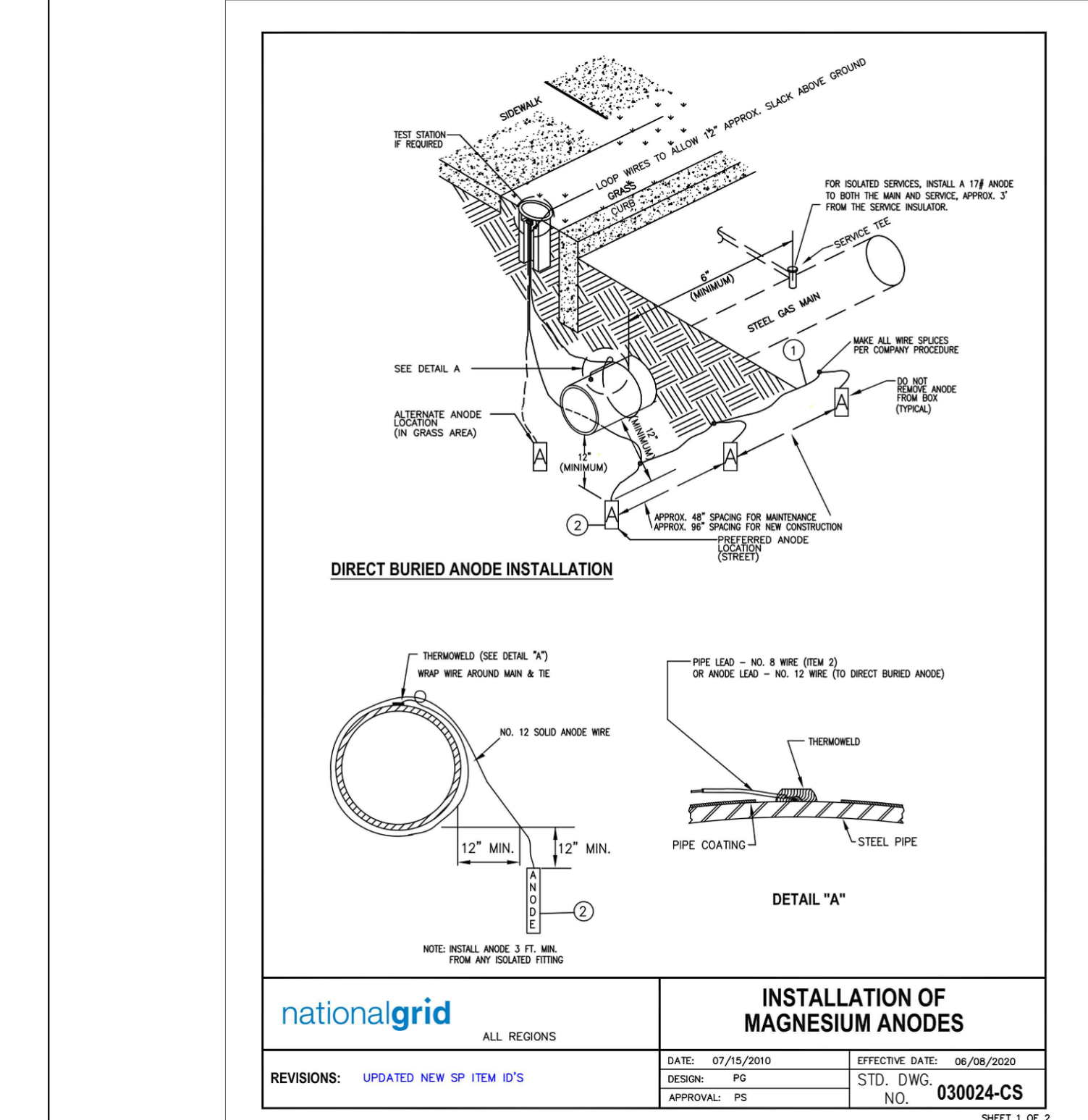


**MATERIAL LIST**

Description	Down State SAP Item ID	Upstate SAP Item ID	New England SAP Item ID	Rhode Island SAP Item ID	MATERIAL NOTES
1 TEST BOX WITH COVER	9339992	9312291	9339992	931209 or (Lg - 556) in Prov. 931208	NON LOCKING COVER. DISCARD FOOT PIECE.
TEST BOX 9" SQUARE HEAVY DUTY	9339391	9339391	9339391		WEIGHS 95 LBS. STREET USE, WITHOUT COVER
COVER FOR 9" SQUARE BOX	9339797	9339797	9339797		NON-LOCKING COVER
2 WIRE, NO. 8, 7 STRAND	9307539	9307539	9307539	9307539	TEST WIRE ONLY, NOT FOR GROUND BEDS. UPSTATE AND RI WIRE HAS 19 STRANDS.
3 WIRE, NO. 6, 7 STRAND	9311795	9311795	9311795	9311795	BOND WIRE ONLY, NOT FOR GROUND BEDS.
4 WIRE 1/0 - 19 STRAND 600 V-1/C	9334171	NON STOCK	9334171	NON STOCK	USE IN STRAY CURRENT AREAS
5 TAPE, PVC - 1/2" WIDE	9334056	9316070	9334056	9316070	NOT FOR PIPE COATING.
6 CONNECTOR, SPLIT BOLT, TYPE 6	9331578	9316630	9331578	NON STOCK	USE WITH NO. 6 CABLE
CONNECTOR, SPLIT BOLT, TYPE 1/01	9331612	9331612	9331612		USE WITH 1/0 CABLE
7 CONNECTOR, TWIST-ON WIRE NUT	9330683	9314631	9330683	9314631	
8 TAG, ADHESIVE NUMBER 1	9307918	9307918	9307918	9307918	LABEL WITH #1 (N) OR (E), CONSECUTIVELY TO (S) OR (W)
NUMBER 2	9307896	9307896	9307896	9307896	SEE DETAILS "B" AND "C"
NUMBER 3	9307895	9307895	9307895	9307895	
NUMBER 4	9307894	9307894	9307894	9307894	
LETTER A	9307893	9307893	9307893	9307893	USE TO LABEL ANODES
9 GROUNDING CELL	NON STOCK	9315642	NON STOCK	NON STOCK	AS SPECIFIED BY CORROSION ENGINEERING
10 ANODE, MAGNESIUM 17LBS	9311183	9311183	9311183	9311183	SATURATE WITH WATER BEFORE BACKFILL. ANODE MAY BE INSTALLED VERTICALLY OR HORIZONTALLY.
11 COUPON	9386100	By Corrosion	9386100	By Corrosion	MC MILLER OR EQUAL
12 REFERENCE CELL	9385758	By Corrosion	9385758	By Corrosion	BORIN MFRGR INC OR EQUAL

**INSTALLATION OF TEST STATIONS FOR CATHODIC PROTECTION**

DATE: 06/06/2020 EFFECTIVE DATE: 06/06/2020  
 DESIGN: PG STD. DWG. NO. 030026-CS  
 APPROVAL: PS



**MATERIAL LIST**

Description	Down State NY Item ID	Upstate NY Item ID	New England Item ID	Rhode Island Item ID	MATERIAL NOTES
1 CABLE NO. 8 - 1/C	9334425	9311214	9334425	9311214	Upstate and RI cable has 19 strands
2 ANODE, MAGNESIUM 17 LB	9311183	9311183	9311183	9311183	
3 ANODE, MAGNESIUM 3 LB	9315645	9315645	9315645	9315645	Use on Tracer wire and all isolated fittings.
4 ANODE, MAGNESIUM SPIKE 3 LB	9308624	9308624	9308624	9308624	Use on Service Risers ONLY
CLAMP, GROUNDING 1/2IN - 1IN DIA.	9386544	9386544	9386544	9386544	Grounding clamp for attaching spike anode lead wire to service riser
CLAMP, GROUNDING 1-1/4IN - 2IN DIA.	9386559	9386559	9386559	9386559	Grounding clamp for attaching spike anode lead wire to service riser

**INSTALLATION OF TEST STATIONS FOR CATHODIC PROTECTION**

DATE: 09/09/2020 EFFECTIVE DATE: 09/09/2020  
 DESIGN: PG STD. DWG. NO. 030024-CS  
 APPROVAL: PS

NATIONAL GRID  
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7/13/2021

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d/b/a  
**nationalgrid**  
40 SYLVAN ROAD  
WALTHAM, MA 02451

**FINAL**

PROPOSED GAS MAIN REPLACEMENT  
270-585 BAKER ST & 891-903 VFW PKWY  
WEST ROXBURY, MA

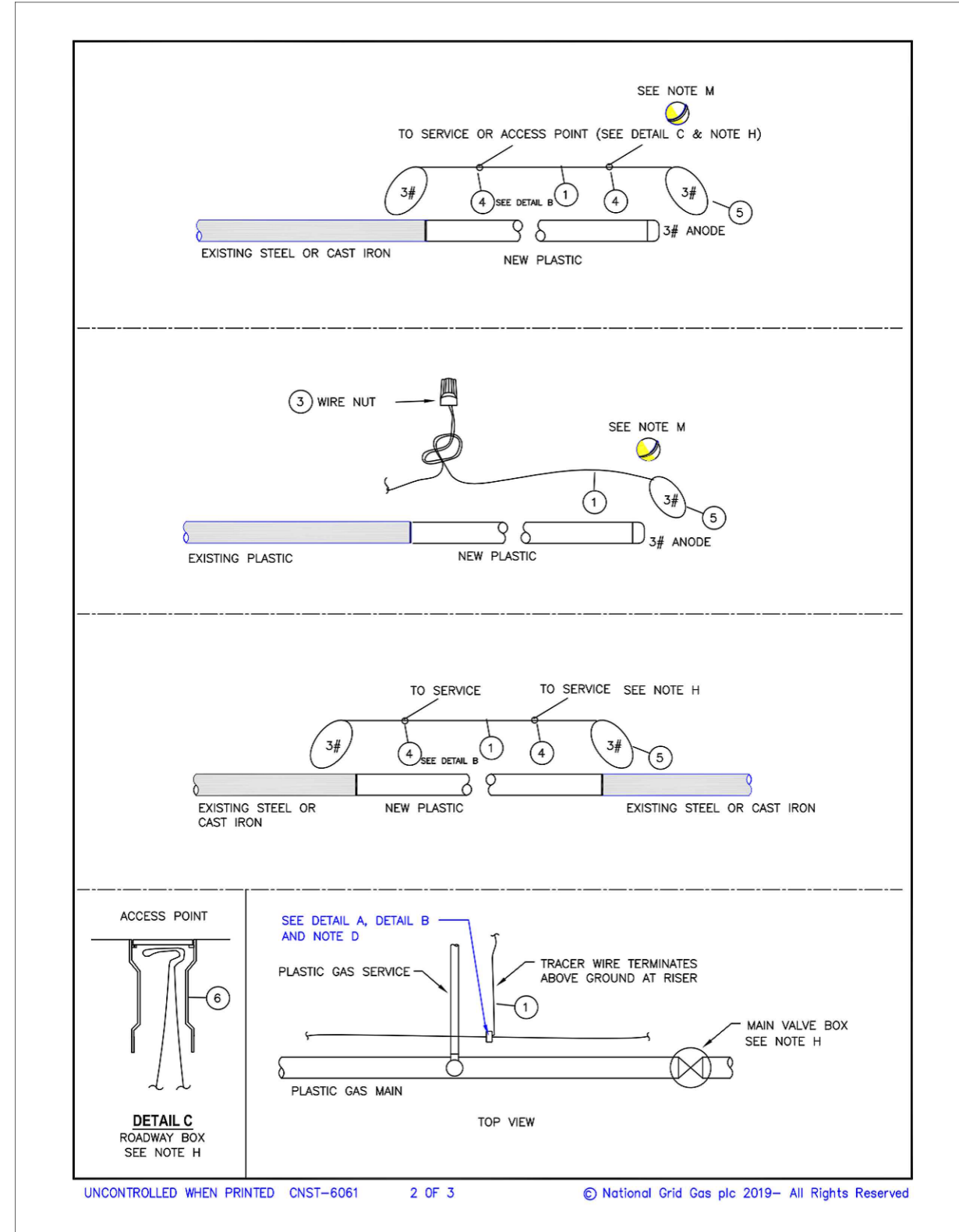
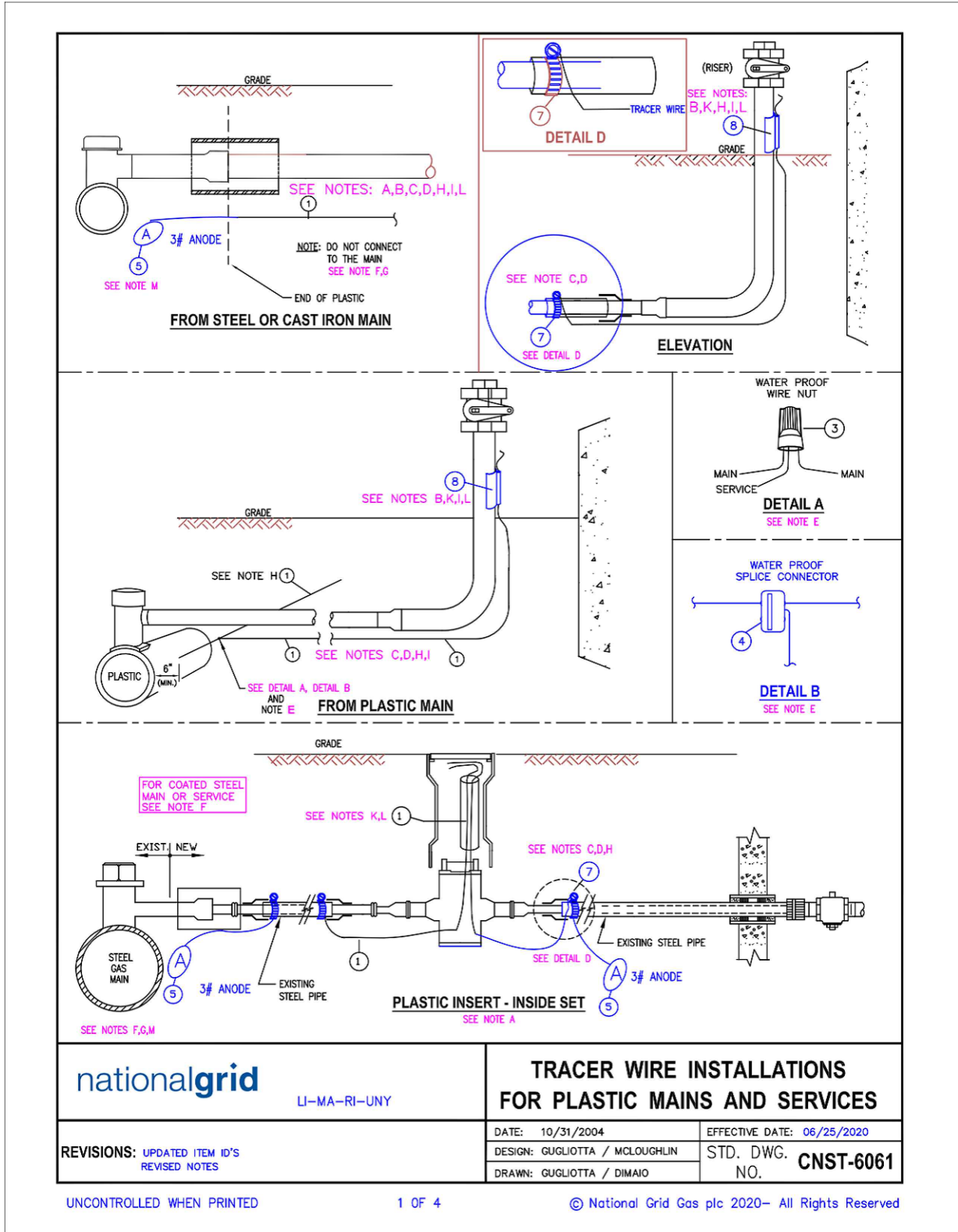
**NATIONAL GRID STANDARD  
CONSTRUCTION DETAILS**

DWG SIZE	DESIGNER	ENGINEER	DATE	ASSET I.D.	W.O. NO.:
22"x34"	R.ALABADI	M.THOMPSON	01/20/2022	DISTRIBUTION	1213100

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DRAWING NO.	SHEET NO.
DPL-WRO-067813-1053	C-302

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NO.	ITEM	SAP ITEM ID
8	TRACER WIRE SNAP, 2" (represents steel size)	9386134
8	TRACER WIRE SNAP, 1 1/2" (represents steel size)	9386156
8	TRACER WIRE SNAP, 1" (represents steel size)	9386150
8	TRACER WIRE SNAP, 3/4" (represents steel size)	9385568
7	CLAMP, STAINLESS	9331708
6	VALVE BOX, ROADWAY	9338990
5	ANODE, 3 LB MAGNESIUM	9315645
4	WIRE SPLICE CONNECTOR, WATERPROOF	9386938
3	WIRE NUT, PLASTIC, WATERPROOF	9321644
2	WIRE, DIRECTIONAL DRILL, STAINLESS, STRANDED 10 AWG	9314187
1	TRACER WIRE, DIRECT BURY, COPPER, 12 AWG	9315005

**BILL OF MATERIAL**

**A. Inside sets:** Terminate tracer wire in the curb valve box. Allow enough wire to extend 18" to 24" above grade.

**B. Outside Sets:** Tracer wire should be extended approximately 18" above grade at riser. Connect tracer wire to the riser using a "tracer snap", Item #8. If the appropriate tracer snap is not available, wrap or tie the tracer wire to the riser. Do not permanently attach tracer wire to the riser. Tracer wire should not exceed 6" above the point where it is secured to the riser.

**C. Partially tubed services:** When the abandoned portion of an existing steel service pipe is used as a sleeve for the new plastic, all cut out sections of the steel pipe to be inserted with plastic, shall be connected using a section of tracer wire to maintain continuity. If the existing service is coated steel, see [Installation of Test Stations for Cathodic Protection \[030026-CS\]](#) and [Installation of Test Stations for Cathodic Protection \[COR04003\]](#) or contact corrosion department for more guidance.

**D. Thermite welding of tracer wire to abandoned steel service is only acceptable prior to insertion of the plastic tubing. See [Installation of Test Stations for Cathodic Protection \[030026-CS\]](#).**

**E. Plastic Mains:** The service tracer wire shall be connected to the plastic main tracer wire using item #3 detail A or item #4 (detail B - preferred) in accordance with [Installing Wire Connections \[COR04004\]](#).

**F. Coated Steel Mains:** Do not connect the tracer wire to the steel main. See [Installation of Test Stations for Cathodic Protection \[030026-CS\]](#) and [Installation of Test Stations for Cathodic Protection \[COR04003\]](#) or contact corrosion department for more guidance.

**G. Cast Iron or Bare Steel Mains:** Do not connect the tracer wire to the main. It is required in LI and MA, and suggested in all other areas to terminate the tracing wire with a 3# anode.

**Tracer Wire Installation Notes**

**H.** Install tracer wire in close proximity to the plastic pipe. Approximately 4" to 6" away from the pipe. LI & MA - Above or alongside, UNY - alongside, RI - Under or alongside. Exception: For trenchless pipe installations, the minimum clearance is waived.

**I.** Maintain separation of approximately 4" from service riser. Do not permanently connect the tracer wire to the riser.

**J.** For horizontal directional drill installations, use stainless wire, item #2.

K. Tracer wire installed in boxes should allow enough wire to extend 18" to 24" above grade.

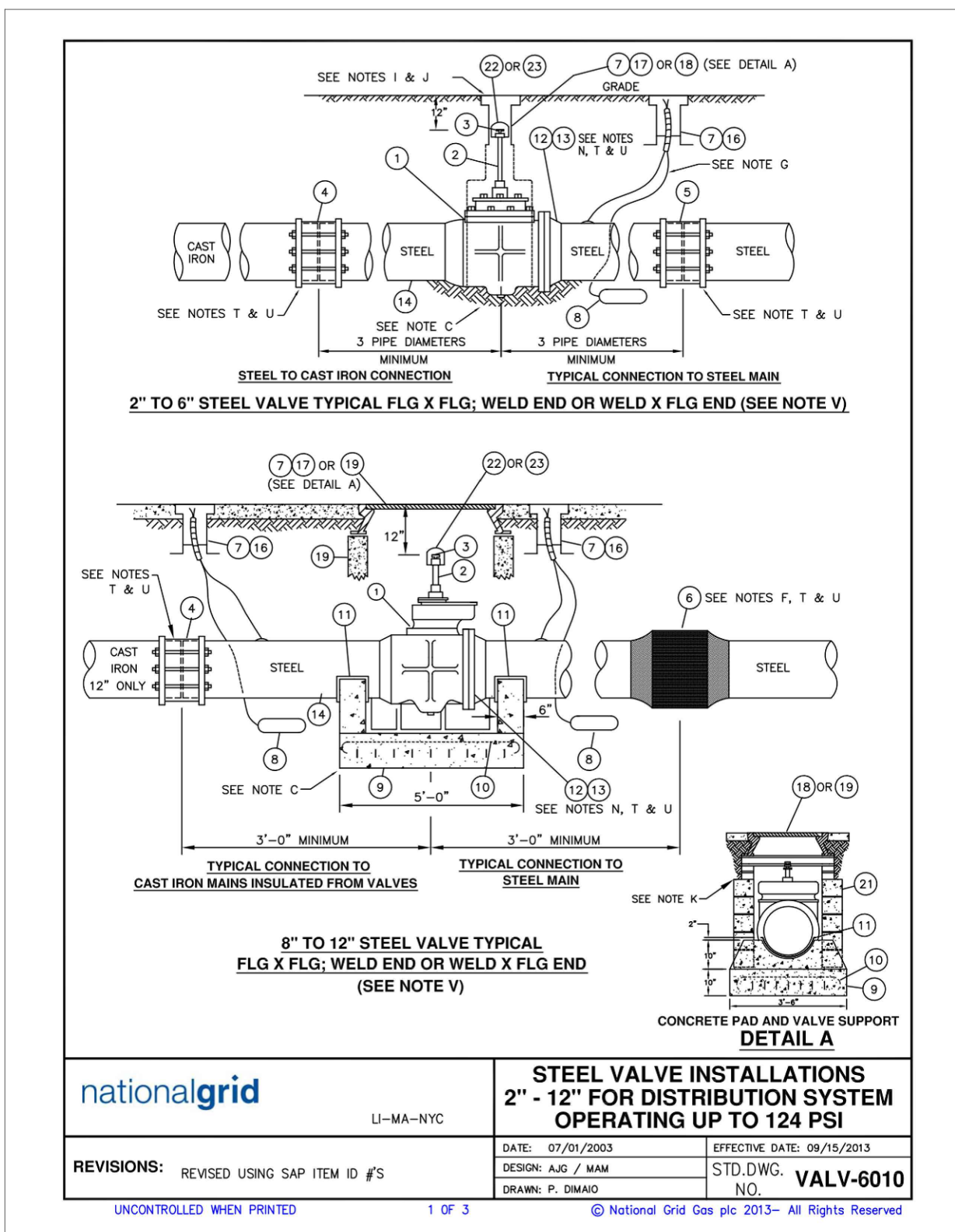
L. Verification: upon completion, the installer shall verify the location of the main or service using the tracer wire and locating device and perform a mark out using the conductive method.

M. LI and MA: Required to terminate the tracing wire with a 3# anode. This is to ground the tracer wire and increase signal strength when locating. This practice is recommended in all areas where signal strength is an issue.

**Regional Notes**

NYC ONLY: refer to [Installation of Marker Tapes and EMS Pipeline Locators for Mains and Services \[CNST6060-NYC\]](#) for installation of electronic marker ball in place of tracer wire.

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23	LOCKING DEVICE, KERDTEST WELD CAP TYPE, FITS 2"X2" SQUARE OPERATING NUTS WITH BUTTON HEAD LUBRICATING FITTINGS, OR KERDTEST THREADED SHANK, OR PLAIN 2"X2" OPERATOR, SECURE WITH HIGHFIELD OR INHERITITE LOCK. (SEE NOTE V)	9389368
22	LOCKING DEVICE, INHERITITE SQUARE CONNELL TYPE, FITS 2"X2" SQUARE OPERATING NUT WITH BUTTON HEAD LUBRICATING FITTING ONLY, SECURE WITH HIGHFIELD OR INHERITITE LOCK. (SEE NOTE V)	9339893
21	CEMENT BLOCK 8" X 8" X 16"	9339532
20	BALL VALVE - VARIOUS SIZES CONSULT GAS ENGINEERING	NON STOCK
19	30" PRECAST PIT IN NYC & LI, USE 30" NUT FOR 8" AND 12" NORMALLY CLOSED VALVES TO SATISFY CLEARANCE REQUIREMENTS TO INSTALL LOCKING DEVICE.	9338822
18	30" M.H. COVER IN NYC & LI, USE 18" NUT FOR 8" NORMALLY CLOSED VALVES TO SATISFY CLEARANCE REQUIREMENTS TO INSTALL LOCKING DEVICE.	9338888
17	18" PRECAST PIT IN NYC & LI, USE 18" NUT FOR 8" NORMALLY CLOSED VALVES TO SATISFY CLEARANCE REQUIREMENTS TO INSTALL LOCKING DEVICE.	9337759
16	18" M.H. COVER	9338888
15	COVER MARKED "GAS" (NON LOCKING FOR 178 BOX)	9339795
14	COVER MARKED "GAS TEST" (FOR 178 BOX)	9339797
13	PIPE, BARE STEEL	9342728
12	FLANGE, 150 # FLAT FACE	9349999
11	NEOPRENE, 1 1/4" BETWEEN TWO SHEETS OF 30 MIL POLYETHYLENE, OR FRP	9352939
10	STEEL REINFORCEMENT, 4" X 4" MESH #6 WIRE, 62 LB / 50' SPACERS	9341026
9	CONCRETE REINFORCED PAD WITH SUPPORTS, CLASS B CONCRETE	9341027
8	17 LB ANODE WITH TEST LEADS	9341027
7	BOSTON BOX 178 WITHOUT COVER (SEE NOTES O AND P)	9339391
6	WELD END INSULATING JOINT	156 WALL 2" 9341563
5	COUPLING INSULATING STEEL, SELF RESTRAINING (SEE NOTE L)	188 WALL 4" 9341582
4	COUPLING INSULATING, CI TO STEEL, SELF RESTRAINING (SEE NOTE Q)	288 WALL 6" 9341587
3	BUTTONHEAD LUBRICATING FITTING (INSTALLED BY I&R)	372 WALL 8" 9341595
2	1/2" HEAVY PIPE SCH. 80 (0.147 WALL)	2" 9385541
1	VALVE, PLUG	4" CS 9341480

**BILL OF MATERIAL**

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**NOTES:**

- AS REQUIRED, CONSULT GAS ENGINEERING FOR GAUGE / PURGE LINE REQUIREMENTS. IN NYC & LI, FOLLOW REGIONAL STDS. REG-4010 & 6020 AND PURG-4015 AS REQUIRED.
- IN NYC & LI, WHERE MANHOLES ARE USED, REFER TO FITS-6280, 6290, 6310, 6320, AND 6330 FOR FITS AND HARDWARE.
- WHERE VALVE BOXES ARE USED, ENSURE THEY ARE SUPPORTED ON WELL COMPACTED BACKFILL BASE. FOR MANHOLES, REFER TO THIS DRAWING FOR CONCRETE BASE.
- COAT PIPE & FITTINGS IN ACCORDANCE WITH APPROPRIATE NGRD STANDARDS.
- STRAPPING NON RESTRAINING COMPRESSION COUPLINGS MUST BE IN ACCORDANCE WITH APPROPRIATE NGRD REGIONAL STANDARDS.
- WELDING TO CONFORM TO NGRD SPECIFICATIONS.
- SEE NGRD STANDARD DRAWING 030024-CS FOR ANODE TEST LEAD INSTALLATION.
- ALL CONCRETE SHALL BE 1 1/2" TO 3 MIX. WATER CONTENT NOT TO EXCEED 6% GAL PER BAG OF CEMENT.
- CENTER OPERATING NUT IN VALVE BOX OR PIT.
- EXTEND LUBRICATING FITTINGS TO 12" BELOW GRADE. USE EXTRA HEAVY PIPE. (SCH. 80).
- INSTALL CONCRETE BLOCKS BETWEEN PAD AND BOTTOM OF PRECAST PIT ON ALL FOUR SIDES.
- WELDED CONSTRUCTION PREFERRED ON STEEL MAINS. SELF RESTRAINING OR STRAPPED NON RESTRAINING COUPLINGS ACCEPTABLE AS AN ALTERNATE. UP TO 80 PSI (0.11 AND 100 PSI (0.12)).
- FOR DISTRIBUTION MAINS, PLASTIC VALVES MAY BE PREFERRED WHEN REPLACING A STEEL VALVE. CONTACT GAS ENGINEERING PRIOR TO INSTALLATION. FLANGED ENDS SHOWN AS ALTERNATE END PREPARATION. WELD END PREFERRED.
- FLANGES ARE SHOWN AS AN OPTION. CONSULT THE CORROSION SECTION TO DETERMINE IF AN INSULATING GASKET IS REQUIRED.
- FOR VALVES UP TO 8" DIAMETER, IN NYC & LI AN 18" MANHOLE FRAME AND COVER MUST BE USED FOR ALL NORMALLY CLOSED VALVES FOR ADEQUATE CLEARANCE TO INSTALL A LOCKING DEVICE.
- FOR 8" AND 12" VALVES, IN NYC & LI A 30" MANHOLE FRAME AND COVER MUST BE USED FOR ALL NORMALLY CLOSED VALVES FOR ADEQUATE CLEARANCE TO INSTALL A LOCKING DEVICE.
- FOR VALVE INSTALLATION ON CAST IRON MAINS, TWO CAST IRON TO STEEL, SELF RESTRAINING OR STRAPPED NON RESTRAINING COUPLINGS SHALL BE USED.
- DELETED.
- THIS DRAWING CAN BE APPLIED TO THE INSTALLATION OF BALL VALVES.
- CONSULT CORROSION TO DETERMINE WHICH METHOD IS APPLICABLE FOR INSULATING THE MAIN.
- TEST STATIONS SHALL BE INSTALLED ON INSULATING FITTINGS AS PER LATEST NGRD CORROSION PROCEDURE.
- IN NYC AND LI REGIONS, ALL NEWLY INSTALLED NORMALLY CLOSED VALVES REQUIRE A LOCKING DEVICE AS SPECIFIED HEREIN. IN ADDITION, NORMALLY OPEN VALVES ARE TO BE LOCKED AFTER INSTALLATION USING THE DEVICES HEREIN IF DIRECTED BY MR. ON EXISTING SMALLER VALVE BOXES WHERE THE LOCKING DEVICES HEREIN WILL NOT FIT, MAINTENANCE TYPE RUBBER STOPPERS INSERTED INTO THE VALVE BOX ROUND EXTENSION TUBE. WILL SERVE AS AN ACCEPTABLE LOCKING DEVICE.

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BOSTON GAS COMPANY  
d/b/a  
**nationalgrid**  
40 SYLVAN ROAD  
WALTHAM, MA 02451

**FINAL**

PROPOSED GAS MAIN REPLACEMENT  
270-585 BAKER ST & 891-903 VFW PKWY  
WEST ROXBURY, MA

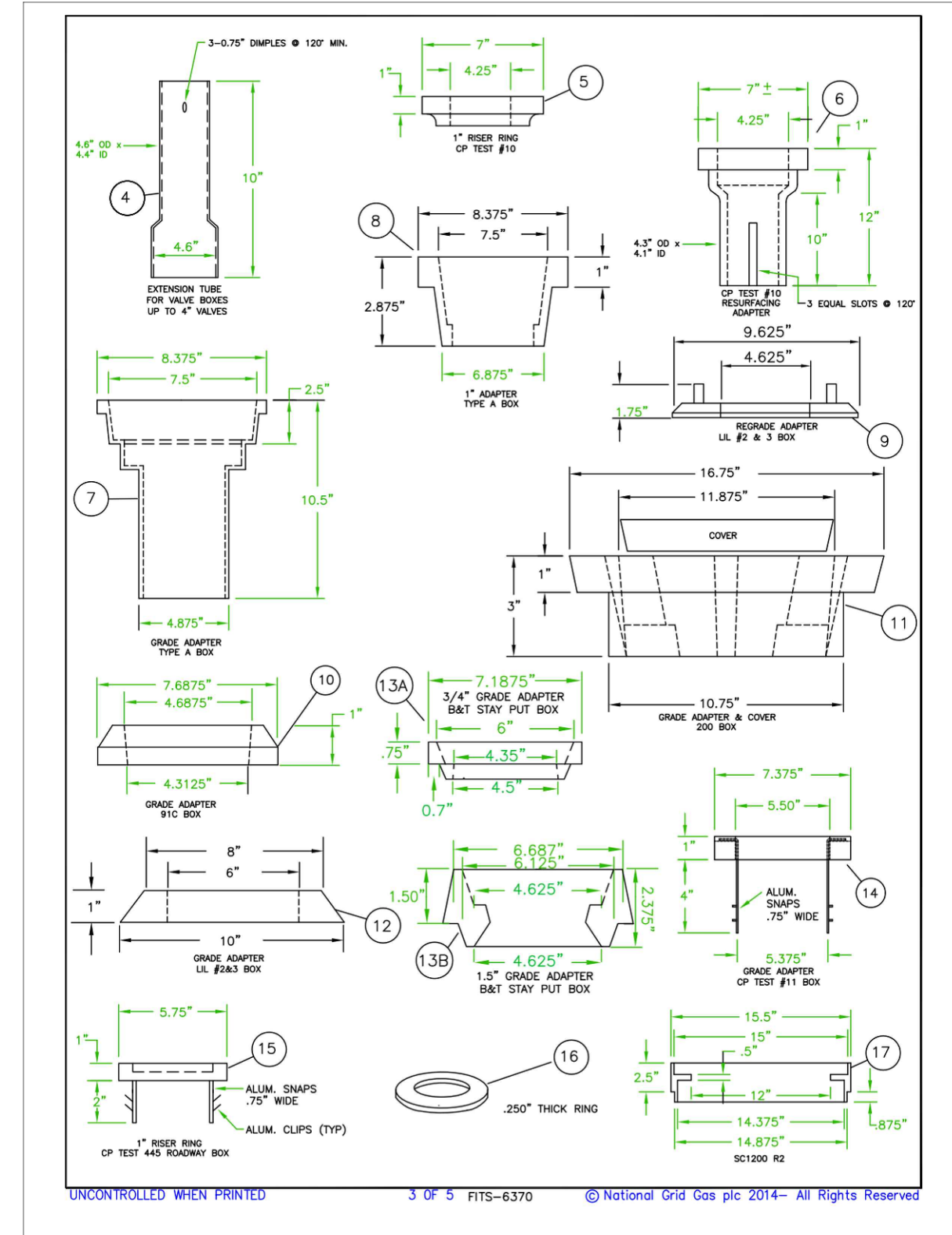
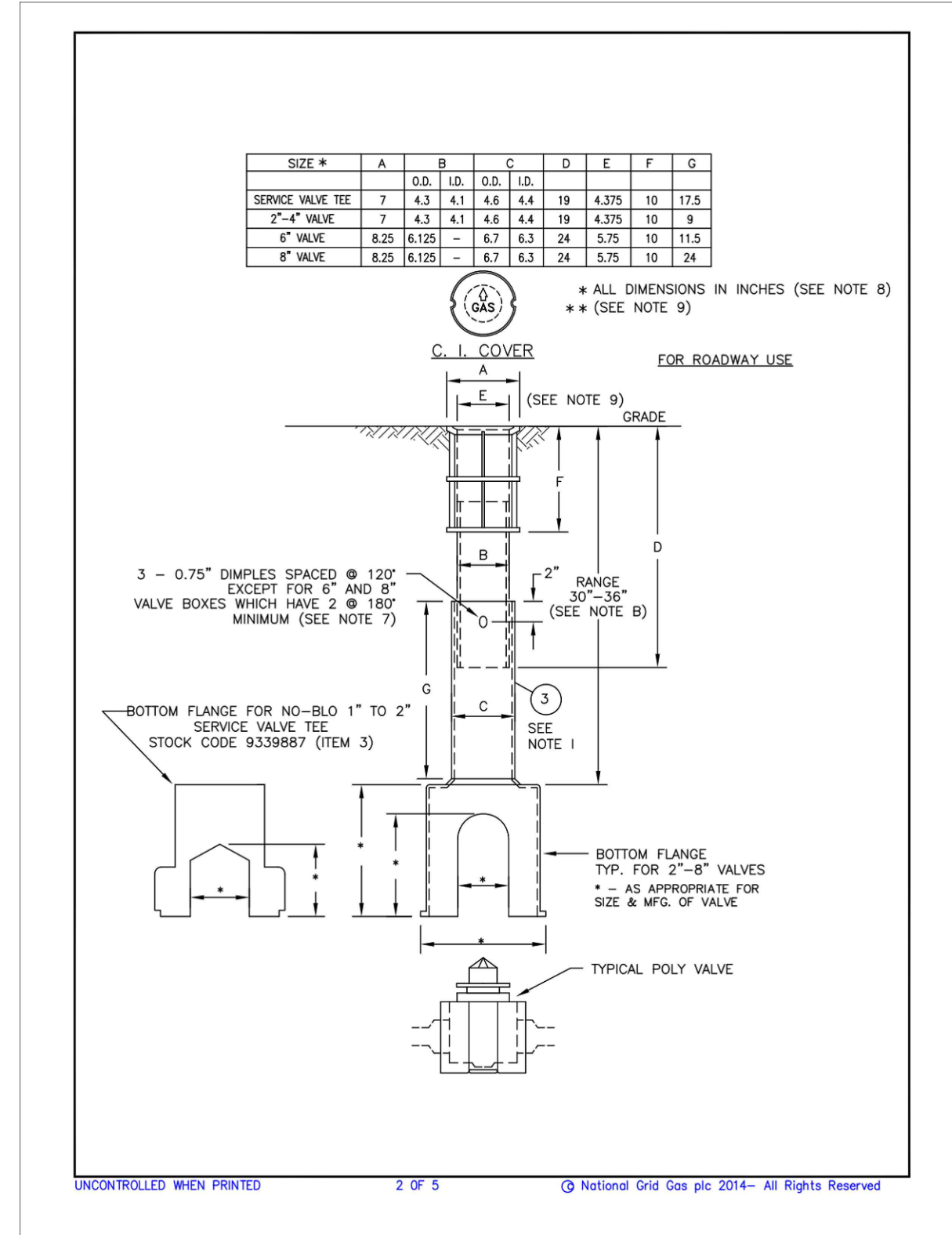
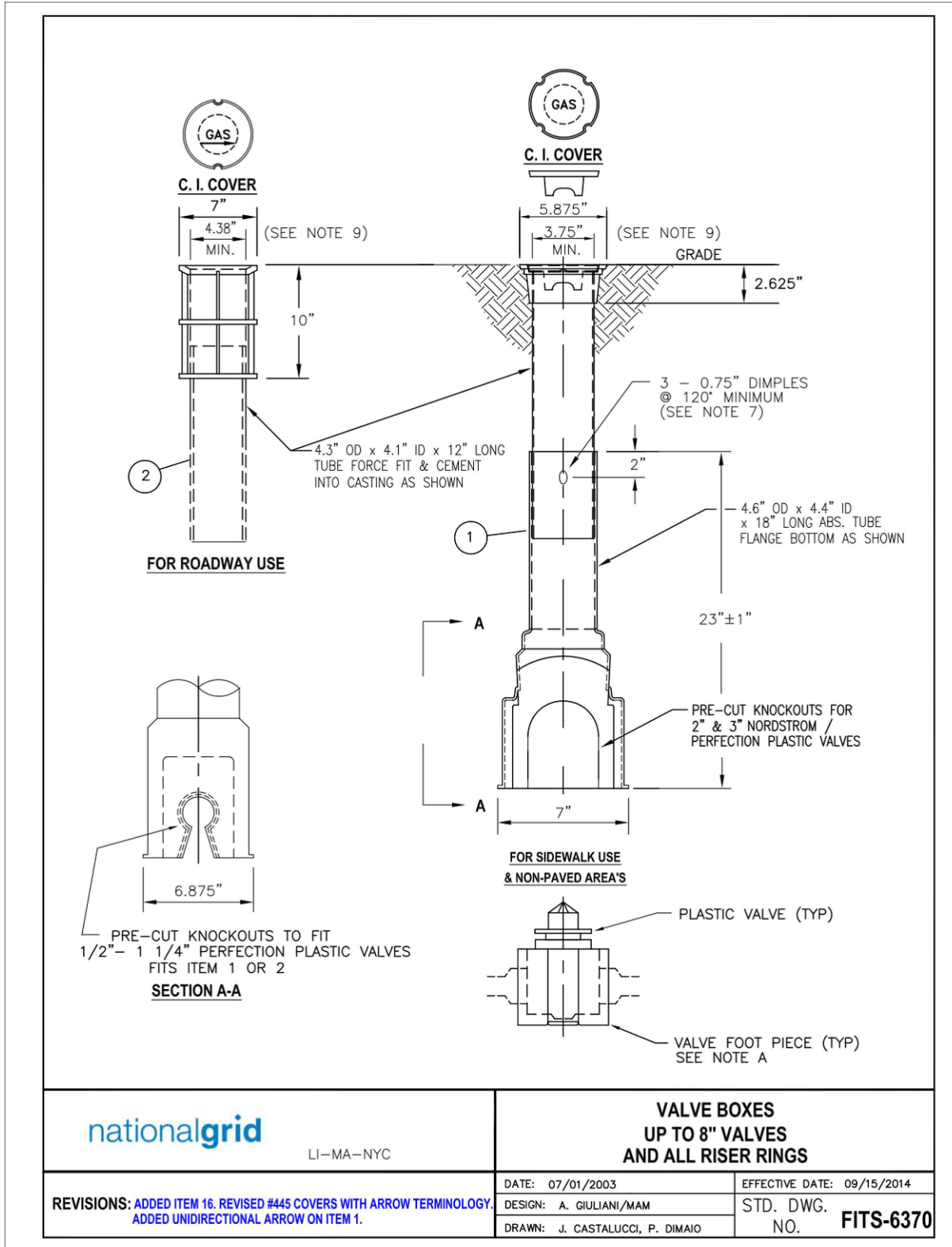
**NATIONAL GRID STANDARD CONSTRUCTION DETAILS**

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22"x34"	R.ALABADI	M.THOMPSON	01/20/2022	DISTRIBUTION	1213100

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DRAWING NO.	SHEET NO.
DPL-WRO-067813-1053	C-303

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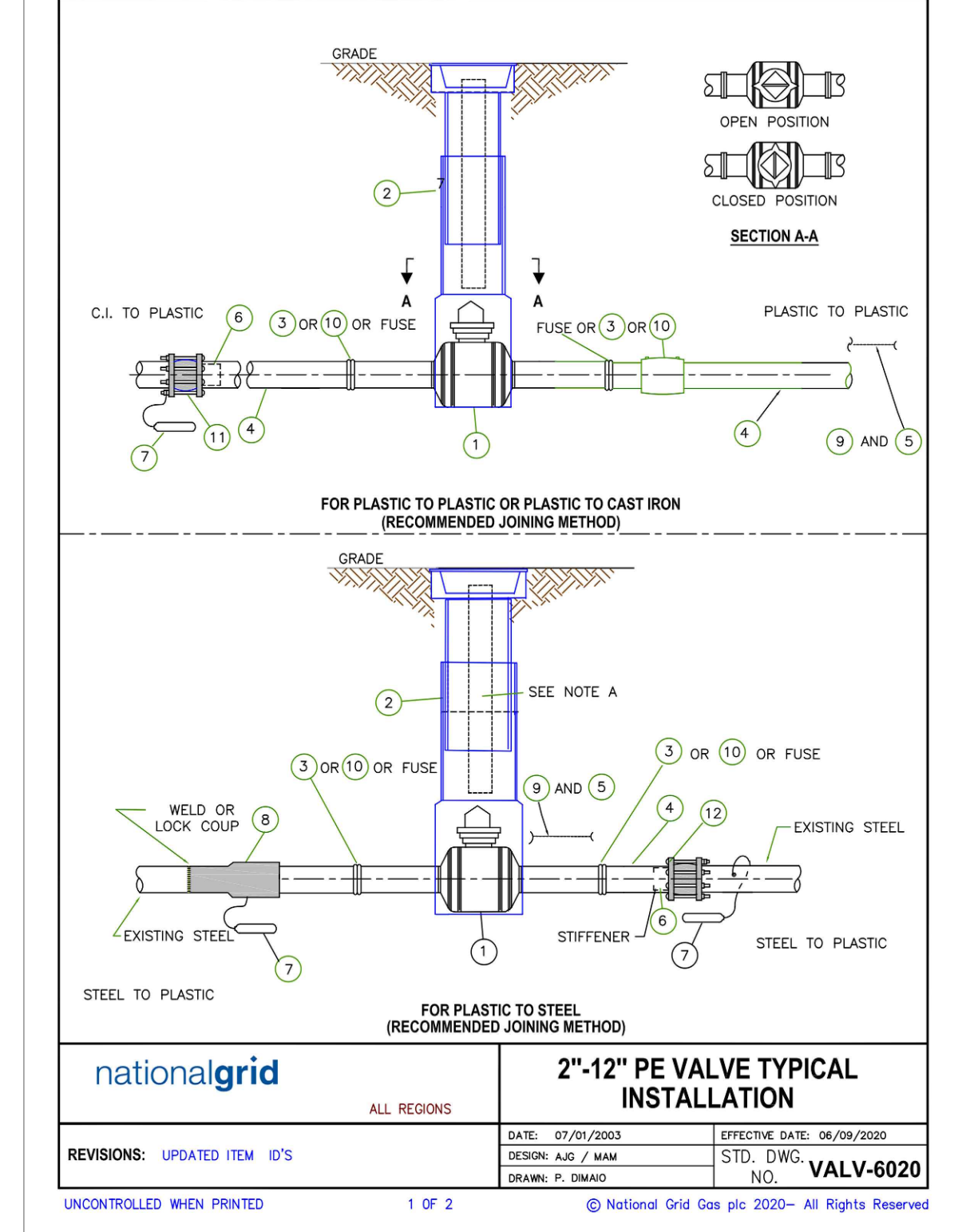
**INSTALLATION NOTES:**

- VALVE FOOT PIECE TO BE INSTALLED AROUND THE VALVE THEN INSERTED INTO THE BOTTOM FLANGE OF THE VALVE BOX.
- THE RANGE OF THE VALVE BOX FROM TOP OF GRADE TO TOP OF VALVE, IS 24\"/>

**MANUFACTURING NOTES:**

- ALL TOPS & BOTTOMS SHALL BE INTERCHANGEABLE.
- THE TOP OF THE BOX ASSEMBLY SHALL BE FABRICATED SO AS TO FIT INSIDE THE BOTTOM SECTION.
- MATERIAL SHALL CONFORM TO ASTM SPECIFICATIONS FOR GREY CAST IRON CASTINGS, DESIGNATED A88, CLASS 25.
- COVER SHALL CREATE A TIGHT FIT WITH TOP OF CASTING TO PREVENT RATTLING. FOR CODES 0339854 & 0339855 COVER SHALL BE OF VENTED DESIGN. FOR OTHER STOCK CODES THE COVER SHALL INCLUDE A DIRECTIONAL ARROW. THIS SHALL BE DESIGNED TO ALLOW THE ARROW TO BE POSITIONED AT 90 INTERVALS.
- ALL SURFACES SHALL BE COVERED WITH ONE COAT OF FLUORIDE HYDRA-T PROTECTIVE COATING, C-13E OR APPROVED EQUAL.
- THE PLASTIC USED FOR THE TUBES SHALL BE PROTECTED FROM UV RAYS & AID HAVE THE PROPER INHIBITORS TO PROTECT FROM BRITTLENESS AT ZERO DEGREES.
- DIMPLES SHALL BE FORMED SO AS TO EXERT ENOUGH PRESSURE ON INNER TUBE TO SUPPORT ENTIRE ASSEMBLY IN EXTENDED POSITION.
- DIMENSIONAL TOLERANCES: MANUFACTURE SHALL ADHERE TO THE FOLLOWING DIMENSIONAL TOLERANCES ALL PLASTIC TUBING SHALL BE  $\pm .0015$  TO THOSE SHOWN ON THE DRAWING. ALL CASTINGS SHALL BE MANUFACTURED TO WITHIN  $\pm .0025$  TO THE DIMENSIONS SHOWN ON THE DRAWING.
- DIMENSIONS SHALL BE CONSISTENT THROUGHOUT THE CASTING.
- TOP SECTION OF VALVE BOX SHALL HAVE THE PLASTIC TUBE FORCED FIT AND CEMENTED INTO THE CASTING. THIS JOINT SHALL BE CAPABLE OF WITHSTANDING A PULL OUT FORCE OF 20 POUNDS.
- MANUFACTURER SHALL SUBMIT SAMPLES TO THE ENGINEER FOR APPROVAL PRIOR TO BID ACCEPTANCE.
- STREET BOXES SHALL BE DESIGNED TO HANDLE TO AN H-20 ROADWAY LOADING.
- TOP FLANGE OF ROADWAY BOX SHALL BE FLAT AND WIDE ENOUGH TO ACCOMMODATE A 3/8\"/>

NO.	ITEM	N.G. CODE NO.
18	PENTAGON KEY FOR ITEMS 8B AND 11B (NOT SHOWN)	9354644
17	2\"/>	
16	VALVE BOX ADAPTER RING, 1/4\"/>	
15	ONE INCH GRADE ADAPTER & COVER FOR CP TEST #445 ROADWAY BOX - 1/8\"/>	
14	1\"/>	
13A	1/2\"/>	
13B	1/2\"/>	
12	1\"/>	
11	1\"/>	
10	1\"/>	
9	1 1/2\"/>	
8B	COVER, REPLACEMENT, LOCKING, MARKED \"GAS\" FOR 7-1/2\"/>	
8A	COVER, REPLACEMENT, MARKED \"GAS\" FOR 7-1/2\"/>	
7	2 - 1/2\"/>	
6	1\"/>	
5	1\"/>	
4	EXTENSION TUBE - FOR CP TEST #11 BOX	9326119
3	ROADWAY SERVICE BOX AND COVER FOR 1-1/2\"/>	
2	ROADWAY SERVICE BOX AND COVER FOR 1-1/2\"/>	
1	SIDEWALK VALVE BOX ASSEMBLY AND UNIDIRECTIONAL ARROW COVER FOR 1/2\"/>	



UNY AND RI	LI ONLY	LI, NYC AND NIE
<b>LP TO 100 PSIG HD</b> 9311203 12\"/>	<b>99 AND 124 PSIG HD</b> 9341706 8\"/>	<b>LI, NYC AND NIE</b> 9341704 12\"/>
<b>100 PSIG HIGH DENSITY (NE ONLY)</b> 9323610 4\"/>	<b>100 PSIG HIGH DENSITY (NE ONLY)</b> 9323611 6\"/>	<b>100 PSIG HIGH DENSITY (NE ONLY)</b> 9323612 8\"/>

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NATIONAL GRID STANDARD  
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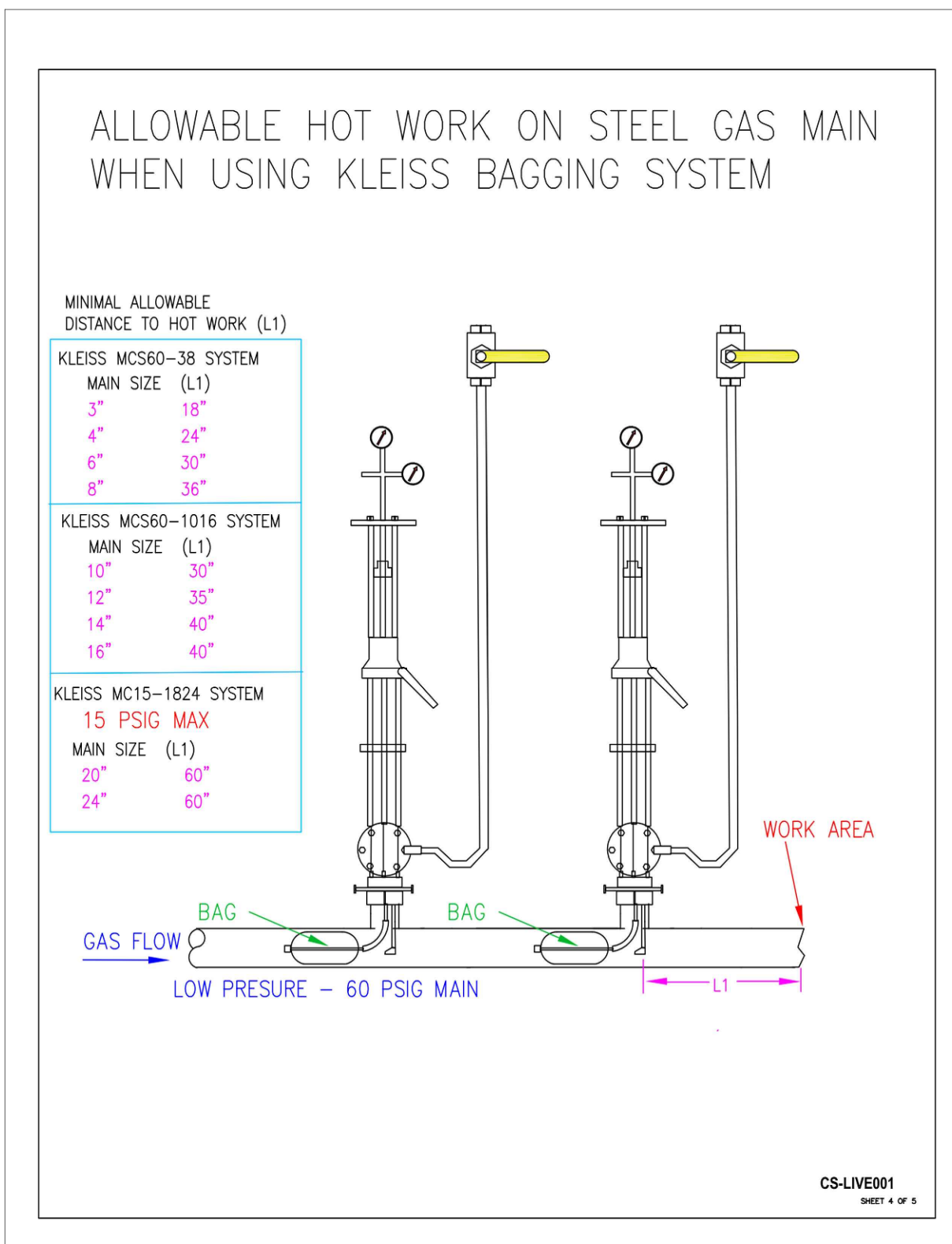
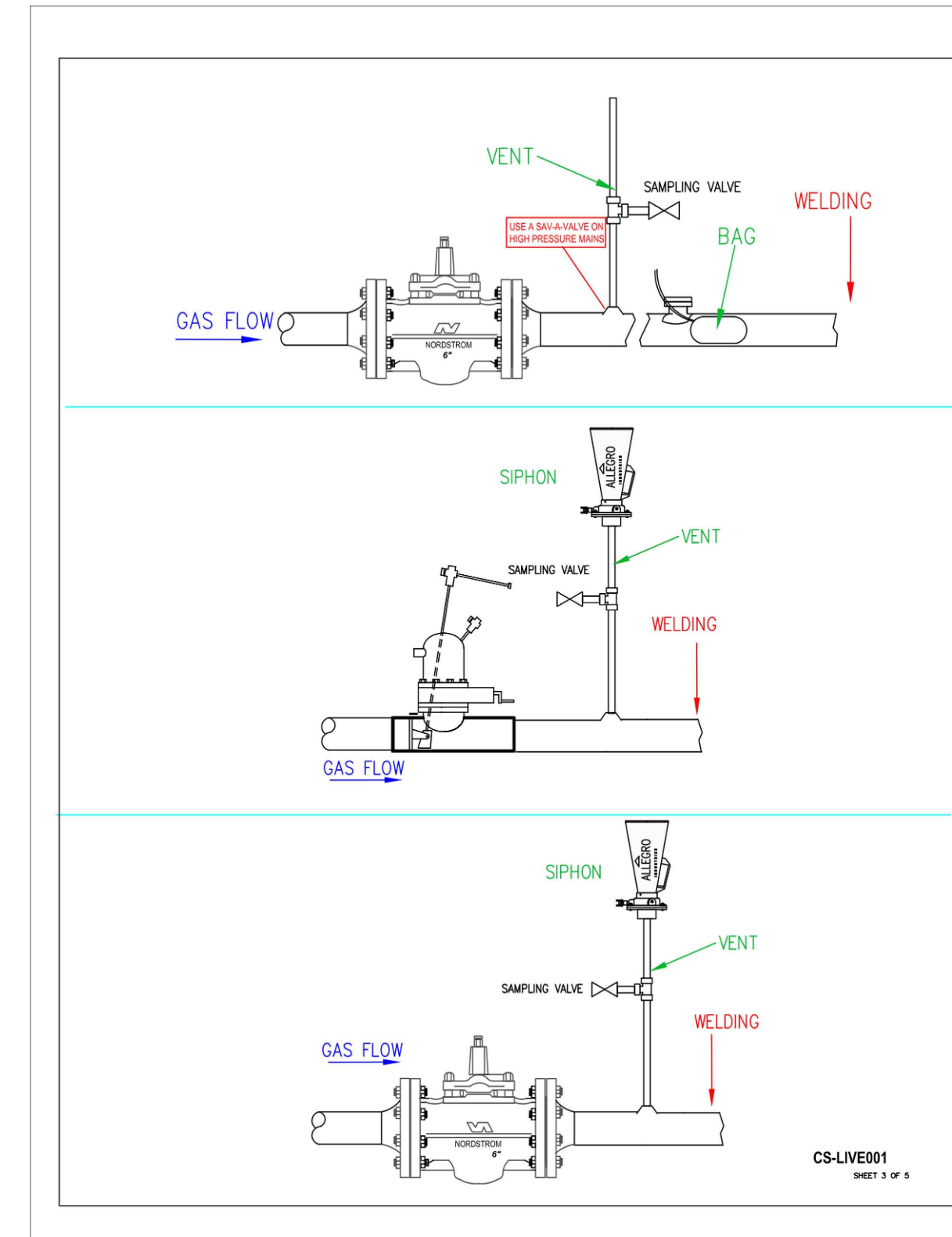
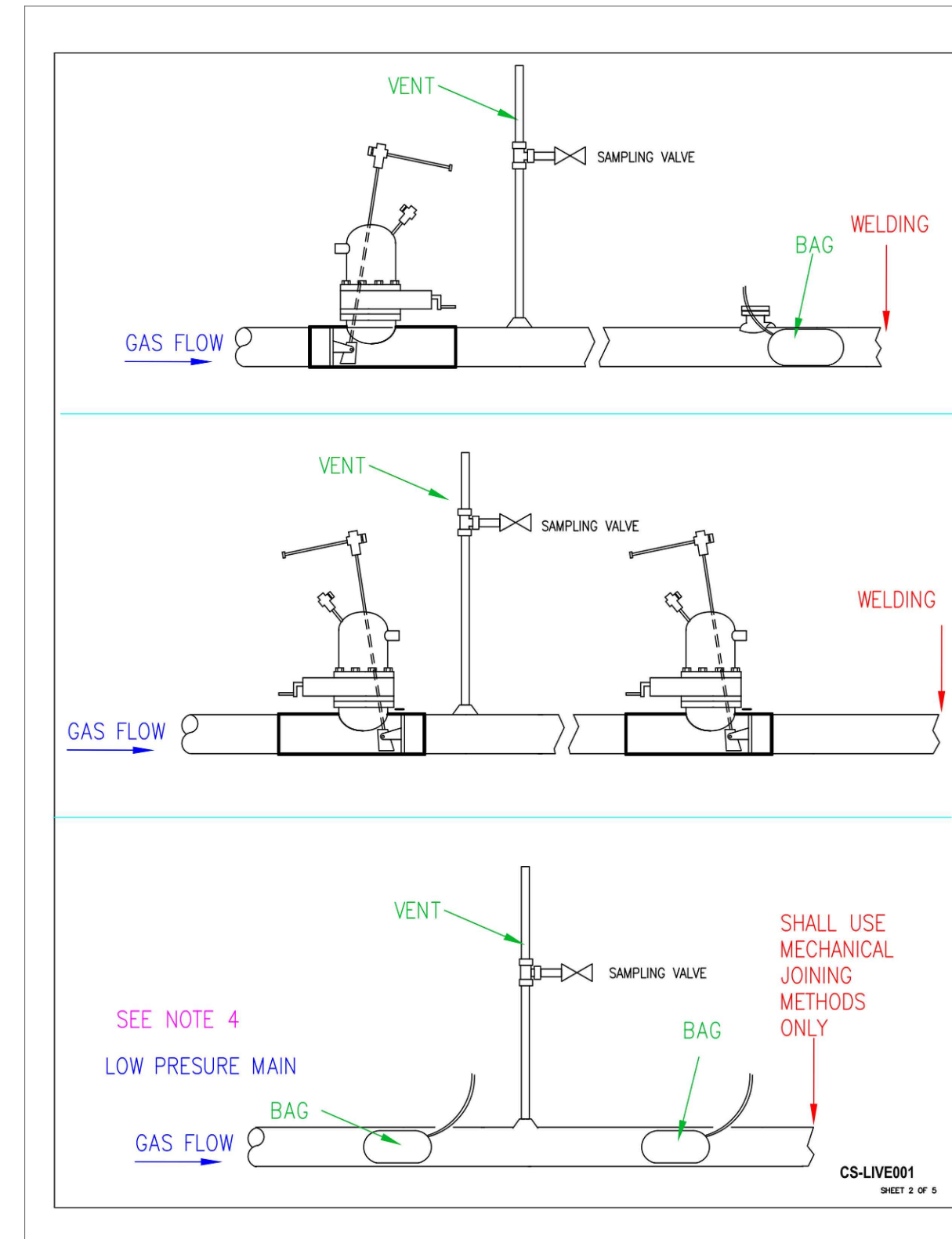
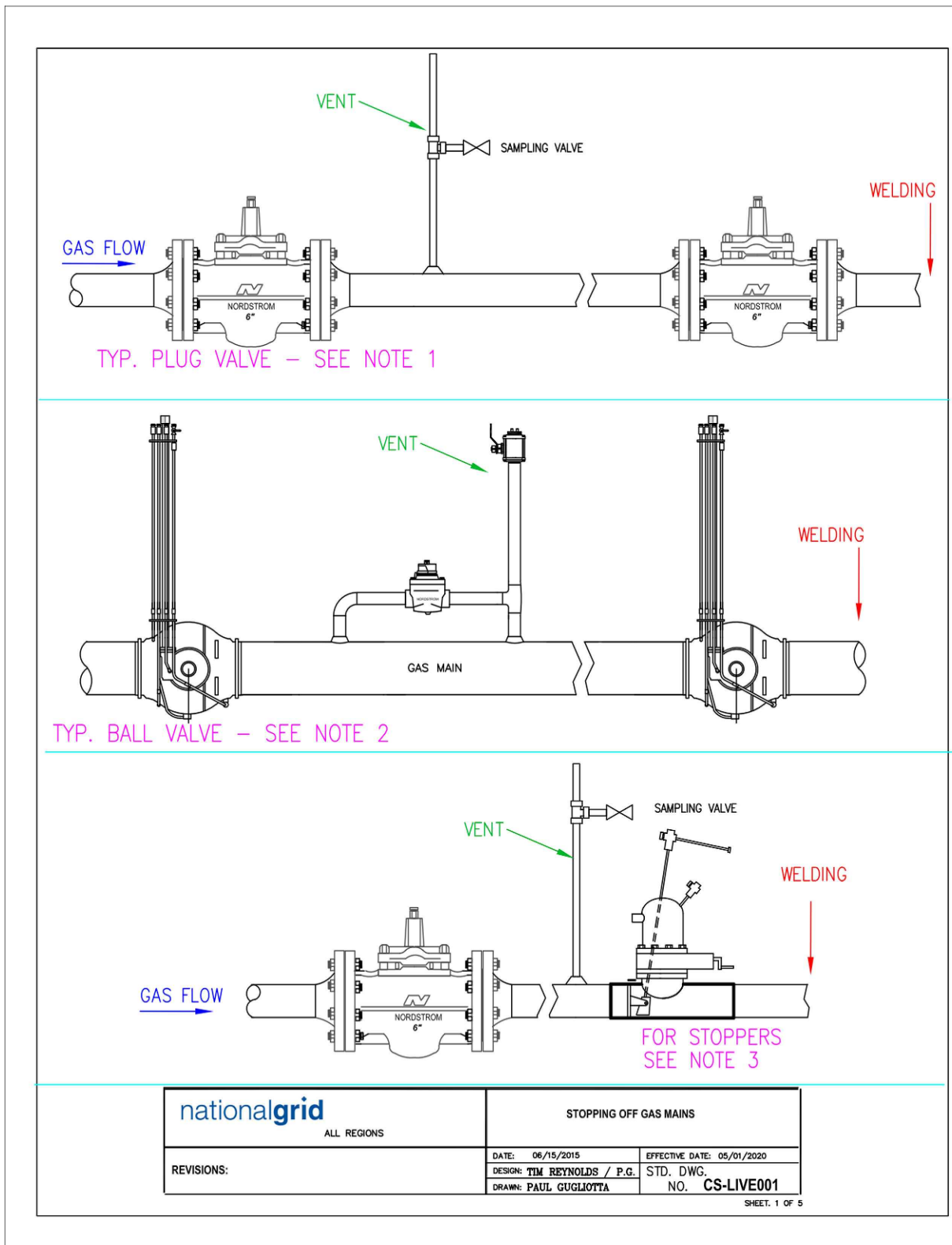
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DWG SIZE	DESIGNER	ENGINEER	DATE:	ASSET I.D.	W.O. NO.:
22"x34"	R.ALABADI	M.THOMPSON	01/20/2022	DISTRIBUTION	1213100

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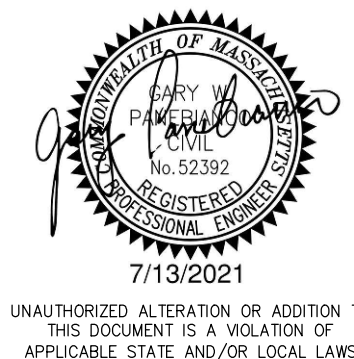


NOTES:

1. PLUG VALVES SHOULD BE GREASED PRIOR TO SHUTTING OFF TO INSURE TIGHT SHUTOFF.
2. USE THE BALL VALVE'S BLOCK AND BLEED AND / OR PURGE ASSEMBLY IF AVAILABLE TO VENT GAS BETWEEN THE TWO CLOSED VALVES.
3. REFER TO MANUFACTURER'S LITERATURE FOR PRESSURE LIMITS OF STOPPERS AND DRILLING EQUIPMENT.
4. WELDING SHALL NOT BE PERFORMED AGAINST A BAG WHERE THE BAG IS USED AS THE PRIMARY MEANS OF STOPPING THE GAS FLOW. SEE STOP-OFF OPERATIONS ON LOW PRESSURE MAINS [CNST-03002].

PAGE 5 OF 5 CS-LIVE001

NATIONAL GRID  
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**nationalgrid**  
40 SYLVAN ROAD  
WALTHAM, MA 02451

**FINAL**

PROPOSED GAS MAIN REPLACEMENT  
270-585 BAKER ST & 891-903 VFW PKWY  
WEST ROXBURY, MA

**NATIONAL GRID STANDARD  
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DRAWING NO.	SHEET NO.
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