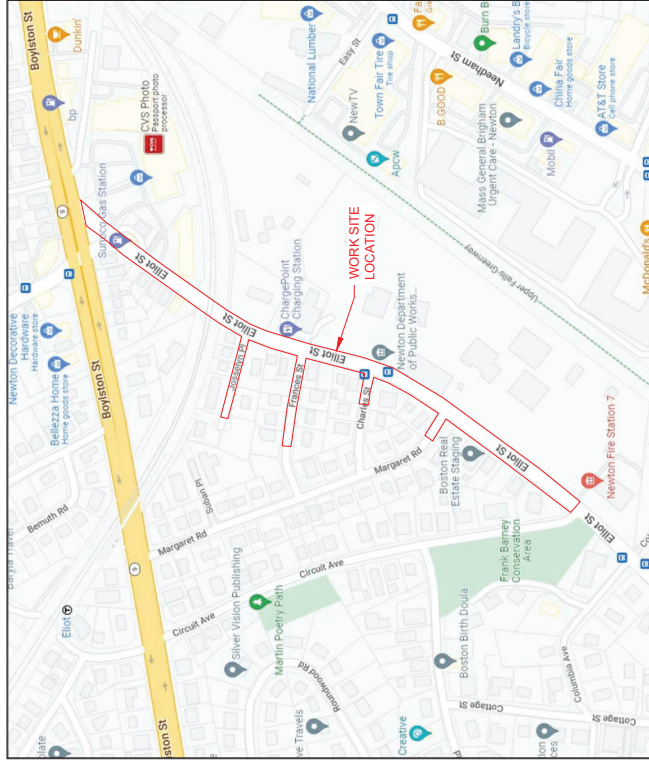


# CIRE101214 PROGRAM - MAIN & SERVICE REPLACEMENT 10/8/6/4" CI-LP, 6" PL-LP, 4" BS-LP & 4/3" CS-LP TO 8/4/2" PL-22# 3-144 ELLIOT ST, NEWTON, MA. W.O. NO.: 1444162



INDEX OF PAGES			
PAGE	DRAWING NO.	COVER PAGE	TITLE
1	CIR-NEW-1444162 C-01	COVER PAGE	
2	CIR-NEW-1444162 C-02	CONSTRUCTION NOTES AND BOM	
3	CIR-NEW-1444162 C-03	PROPOSED INSTALLATION PLAN OVERVIEW	
4	CIR-NEW-1444162 C-04	PROPOSED INSTALLATION PLAN	
5	CIR-NEW-1444162 C-05	PROPOSED INSTALLATION PLAN	
6	CIR-NEW-1444162 C-06	PROPOSED INSTALLATION PLAN	
7	CIR-NEW-1444162 C-07	PROPOSED INSTALLATION PLAN	
8	CIR-NEW-1444162 C-08	PROPOSED INSTALLATION PLAN	
9	CIR-NEW-1444162 C-09	PROPOSED TIE-IN DETAILS	
10	CIR-NEW-1444162 C-10	PROPOSED META CROSSING DETAILS	
11	CIR-NEW-1444162 C-11	STANDARD DETAILS	
12	CIR-NEW-1444162 C-12	STANDARD DETAILS	
13	CIR-NEW-1444162 C-13	STANDARD DETAILS	

PROJECT SUMMARY TABLE					
PROPOSED INSTALLATION			PROPOSED ABANDONMENT		
LENGTH (FT)	SIZE (IN)	TYPE	LENGTH (FT)	SIZE (IN)	TYPE
1,850	8	PL-22#	1,840	10	CHLP (1824)
630	4	PL-22#	10	6	CHLP (1824)
335	2	PL-22#	270	6	CHLP (1824/20)
			65	6	PLLP (2010)
			135	4	CHLP (1823)
			300	4	CSLP (1961)
			110	4	CSLP (1961)
2,815		TOTAL INSTALLATION (FT)	2,765		TOTAL ABANDONMENT (FT)



FIELD CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO ANY EXCAVATION. THE CONTRACTOR SHALL CONTACT THE DIGSAFE HOTLINE (800-221-4000) TO OBTAIN THE LOCATION OF ALL UTILITIES PRIOR TO ANY EXCAVATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND TO ASCERTAIN THE LOCATION OF ALL UTILITIES PRIOR TO ANY EXCAVATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND TO ASCERTAIN THE LOCATION OF ALL UTILITIES PRIOR TO ANY EXCAVATION.

THESE TEST PITS SHALL BE IN ADDITION TO THE SPECIFIED TEST PIT LOCATIONS AS NOTED ON THE PLANS AND SHALL BE PLACED AT THE LOCATION OF ANY SUSPECTED UTILITIES IN QUESTION. ADDITIONAL MEASURES TO DETERMINE THE LOCATION OF UTILITIES IN QUESTION.



215 GREENFIELD PARKWAY  
SUITE 102  
LIVERPOOL, N.Y. 13088



NO.	DATE	DESCRIPTION
1	10/07/2022	ISSUED FOR CONSTRUCTION
2	10/07/2022	ISSUED FOR CONSTRUCTION



10/8/6/4" CI-LP, 6" PL-LP, 4" BS-LP & 4/3" CS-LP TO 8/4/2" PL-22#  
3-144 ELLIOT ST  
NEWTON, MASSACHUSETTS  
COVER PAGE

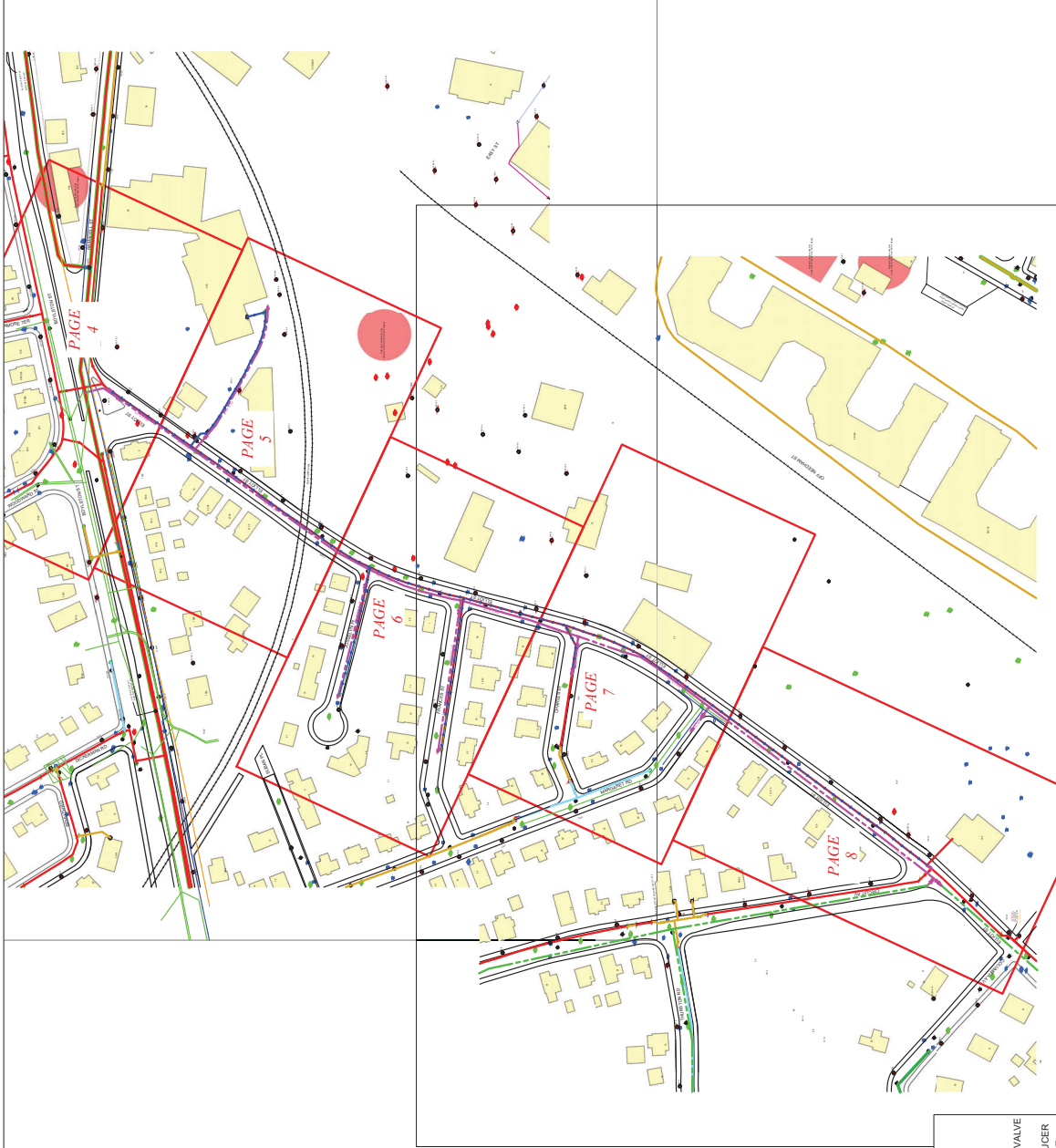
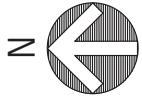
CIRE101214 PROGRAM, MAIN & SERVICE REPLACEMENT  
10/8/6/4" CI-LP, 6" PL-LP, 4" BS-LP & 4/3" CS-LP TO 8/4/2" PL-22#  
3-144 ELLIOT ST  
NEWTON, MASSACHUSETTS  
COVER PAGE

ENGINEER	DATE	W.D. NO.
C. CHEN	10/24/2022	1444162

DRAWING NO.  
CIR-NEW-1444162 G-001







- LEGEND:**
- EPICURE
  - PROPOSED GAS MAIN
  - GAS MAIN BY OTHER MO
  - PROPOSED WATER MAIN
  - PROPOSED SANITARY MAIN
  - EXISTING BS LP MAIN
  - EXISTING BS HP MAIN
  - EXISTING CLIP MAIN
  - EXISTING CS LP MAIN
  - EXISTING CS HP MAIN
  - EXISTING PL LP MAIN
  - EXISTING PL HP MAIN
  - WATER MAIN
  - SANITARY
  - DRAINAGE
  - TELECOM
- SANITARY MH
  - DRAINAGE MH
  - POLE
  - CATCH BASIN
  - HYDRANT
  - EXISTING GAS VALVE
  - EXISTING CAP
  - EXISTING REDUCER
  - NEW GAS VALVE
  - NEW REDUCER
  - SON ITEM#
  - TIE-IN#
  - PAGE#

PAGE 3 OF 13  
DRAWING NO.  
CIR-NEW-1444162 C-001

CIRE101214 PROGRAM, MAN & SERVICE REPLACEMENT  
10/8/6" 4" CI-LP, 6" PL-LP & 4/3" CS-LP TO 8/4/2" PL-22#  
3-14 ELLIOT ST  
NEWTON, MASSACHUSETTS

DESIGNER: JAE SMITH  
ENGINEER: C. CHEN  
DATE: 10/24/2022  
ASSET ID: XXXXXXXXXX  
W.D. NO.: 1444162

**nationalgrid**  
100 STATE ST  
NEWTOWN, MA 02459

**FINAL**

NO.	DATE	BY	CHK	DESCRIPTION
1	10/24/2022	JAE	C	ISSUED FOR CONSTRUCTION
2	10/24/2022	C	C	REVISION: SEE STEP 7, NEEDED CLARIFICATION TO NOTES & DETAILS, REVISION BMM
3	10/24/2022	JAE	C	ISSUED FOR CONSTRUCTION



**TRC**  
215 ORCHARD ST  
NEWTOWN, MA 02459  
TEL: 508.552.1234  
WWW.TRC-MA.COM

APPROXIMATE SCALE: 1" = 100' (WHEN PLOTTED 24" x 36")  
APPROXIMATE SCALE: 1" = 200' (WHEN PLOTTED 11" x 17")

**NOTE: THIS PROJECT INVOLVES REPLACING LP GAS MAIN WITH 22 PSIG GAS MAIN.**

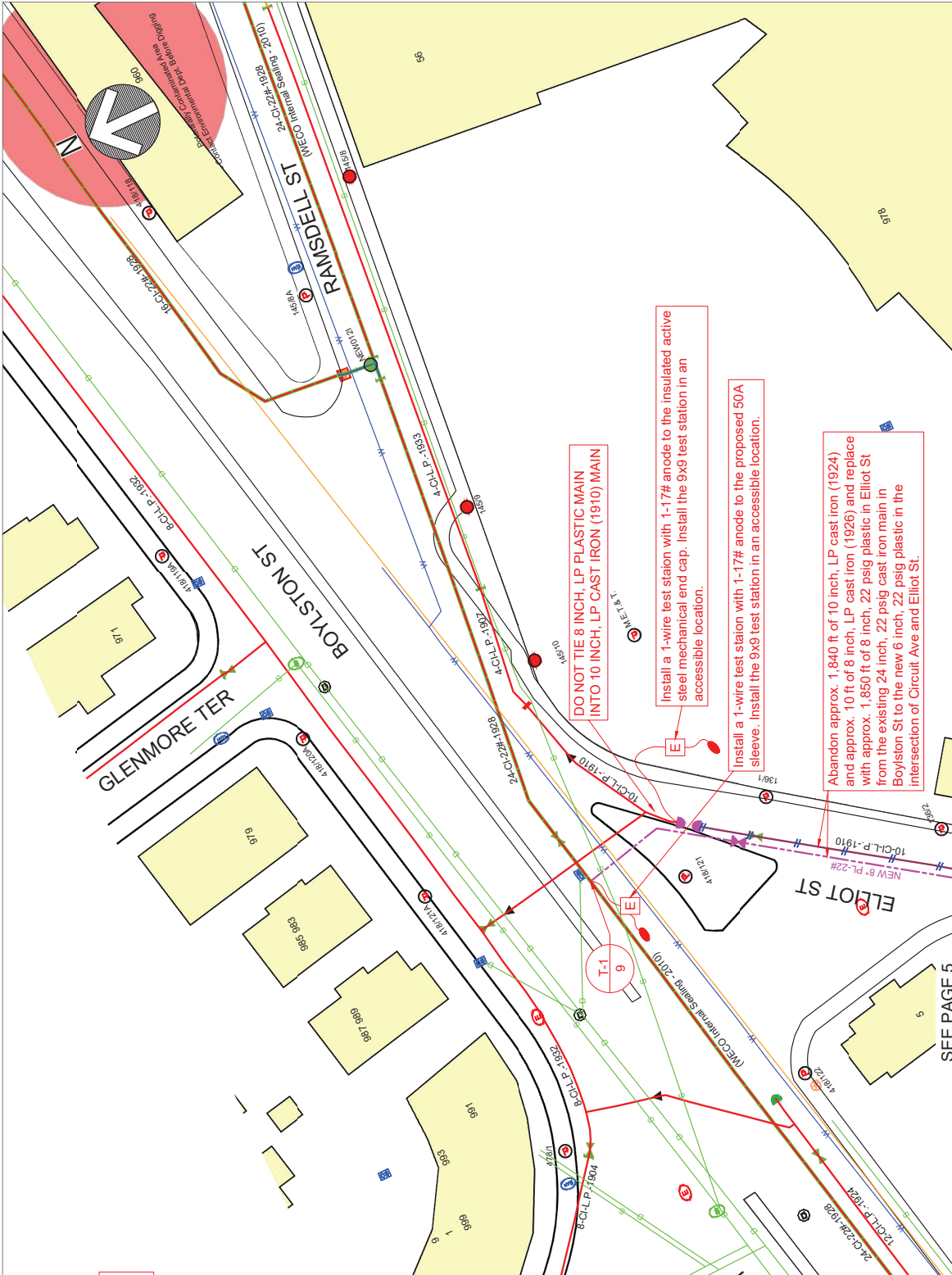
Ensure all services are relayed and correctly fitted with service regulators in accordance with ENG02001.

Project is over 25000 feet in length. Please contact I&R prior to excavating the project for supplemental odorization. INR06002 - Supplemental Odorization for New Piping.

MassDOT permit required for work within Boylston St.

MBTA permit required for work within Elliot St.

Gov. required for new main installations in Newton, MA for Margaret St.



- LEGEND:**
- EPICURE
  - PROPOSED GAS MAIN
  - GAS MAIN BY OTHER MO
  - POLE
  - CATCH-BASIN
  - HYDRANT
  - EXISTING GAS VALVE
  - EXISTING CAP
  - EXISTING REDUCER
  - NEW GAS VALVE
  - EXISTING CLIP MAIN
  - EXISTING CS LP MAIN
  - EXISTING CS HP MAIN
  - EXISTING PL LP MAIN
  - EXISTING PL HP MAIN
  - WATER MAIN
  - SANITARY
  - DRAINAGE
  - TELECOM

**TRC**  
215 GARDNER STREET  
LOWELL, MA 01854

**nationalgrid**  
100 STATE STREET  
LOWELL, MA 01854

**PROPOSED INSTALLATION PLAN**

DATE: 10/09/2022  
ENGINEER: JAE. SMITH  
ASSESSOR: C. CHEN

DATE: 10/09/2022  
ENGINEER: JAE. SMITH  
ASSESSOR: C. CHEN

ASSET ID: XXXXXXXXXX  
W.D. NO.: 1444162

DRAWING NO.: CIR-NEW-1444162 C-002

**FINAL**

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	10/09/2022	PL	ISSUED FOR CONSTRUCTION
2	10/09/2022	PL	ISSUED FOR CONSTRUCTION
3	10/09/2022	PL	ISSUED FOR CONSTRUCTION
4	10/09/2022	PL	ISSUED FOR CONSTRUCTION

PROJECT: CIRE101214 PROGRAM, MAIN & SERVICE REPLACEMENT  
 10/9/6" A" CI-LP, 6" BS-LP & 4/3" CS-LP TO 8/4/2" PL-22#  
 3-14 ELLIOT ST  
 NEWTON, MASSACHUSETTS

SCALE: 1" = 20' (WHEN PLOTTED 24" x 36")  
 APPROXIMATE SCALE: 1" = 20' (WHEN PLOTTED 11" x 17")

DATE: 10/09/2022  
 DRAWN BY: JAE. SMITH  
 CHECKED BY: C. CHEN  
 DATE: 10/09/2022

DATE: 10/09/2022  
 DRAWN BY: JAE. SMITH  
 CHECKED BY: C. CHEN  
 DATE: 10/09/2022

DATE: 10/09/2022  
 DRAWN BY: JAE. SMITH  
 CHECKED BY: C. CHEN  
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DATE: 10/09/2022  
 DRAWN BY: JAE. SMITH  
 CHECKED BY: C. CHEN  
 DATE: 10/09/2022

DATE: 10/09/2022  
 DRAWN BY: JAE. SMITH  
 CHECKED BY: C. CHEN  
 DATE: 10/09/2022

DATE: 10/09/2022  
 DRAWN BY: JAE. SMITH  
 CHECKED BY: C. CHEN  
 DATE: 10/09/2022

DATE: 10/09/2022  
 DRAWN BY: JAE. SMITH  
 CHECKED BY: C. CHEN  
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DATE: 10/09/2022  
 DRAWN BY: JAE. SMITH  
 CHECKED BY: C. CHEN  
 DATE: 10/09/2022

DATE: 10/09/2022  
 DRAWN BY: JAE. SMITH  
 CHECKED BY: C. CHEN  
 DATE: 10/09/2022

DATE: 10/09/2022  
 DRAWN BY: JAE. SMITH  
 CHECKED BY: C. CHEN  
 DATE: 10/09/2022

DATE: 10/09/2022  
 DRAWN BY: JAE. SMITH  
 CHECKED BY: C. CHEN  
 DATE: 10/09/2022

DATE: 10/09/2022  
 DRAWN BY: JAE. SMITH  
 CHECKED BY: C. CHEN  
 DATE: 10/09/2022



SEE PAGE 5

PAGE 4 OF 13

**NOTE: THIS PROJECT INVOLVES REPLACING LP GAS MAIN WITH 22 PSIG GAS MAIN.**

Ensure all services are relayed and correctly fitted with service regulators in accordance with ENG02001.

Project is over 25000 feet in length. Please contact I&R prior to excavating the project for supplemental odorization. INR06002 - Supplemental Odorization for New Piping.

MassDOT permit required for work within Boylston St.

MBTA permit required for work within Elliot St.

Gov. required for new main installations in Newton, MA for Margaret St.

Abandon approx. 1,840 ft of 10 inch, LP cast iron (1924) and approx. 10 ft of 8 inch, LP cast iron (1926) and replace with approx. 1,850 ft of 8 inch, 22 psig plastic in Elliot St from the existing 24 inch, 22 psig cast iron main in Boylston St to the new 6 inch, 22 psig plastic in the intersection of Circuit Ave and Elliot St.

Abandon approx. 35 ft of 3 inch, LP coated steel (1961) and approx. 300 ft of 4 inch, LP coated steel (1961) branched service with approx. 335 ft of 2 inch, 22 psig plastic to #978 Boylston St.

See MBTA Crossing Detail Page 10

SEE PAGE 4

SEE PAGE 6

**LEGEND:**

EPICURE	SANITARY MH
PROPOSED GAS MAIN	DRAINAGE MH
GAS MAIN BY OTHER MO	POLE
PROPOSED WATER MAIN	CATCH-BASIN
EXISTING GAS MAIN	HYDRANT
EXISTING BS LP MAIN	EXISTING GAS VALVE
EXISTING BS HP MAIN	EXISTING CAP
EXISTING CLIP MAIN	EXISTING REDUCER
EXISTING CS LP MAIN	NEW GAS VALVE
EXISTING CS HP MAIN	NEW REDUCER
EXISTING PL LP MAIN	EXISTING PL HP MAIN
EXISTING PL HP MAIN	WATER MAIN
SANITARY	SANITARY
DRAINAGE	DRAINAGE
TELECOM	TELECOM

215 ORIGINAL COPY  
UNOFFICIAL ACT. 3/06

APPROXIMATE SCALE: 1" = 20' (WHEN PLOTTED 24" x 36")  
APPROXIMATE SCALE: 1" = 40' (WHEN PLOTTED 11" x 17")



NO.	DATE	DESCRIPTION
1	10/07/2022	ISSUED FOR CONSTRUCTION
2	10/07/2022	REVISED STEP 7, ADDED LANDSCAPE PROTECTION TO NOTES & DETAILS, REVISED BOM
3	10/07/2022	REVISED BOM
4	10/07/2022	REVISED BOM

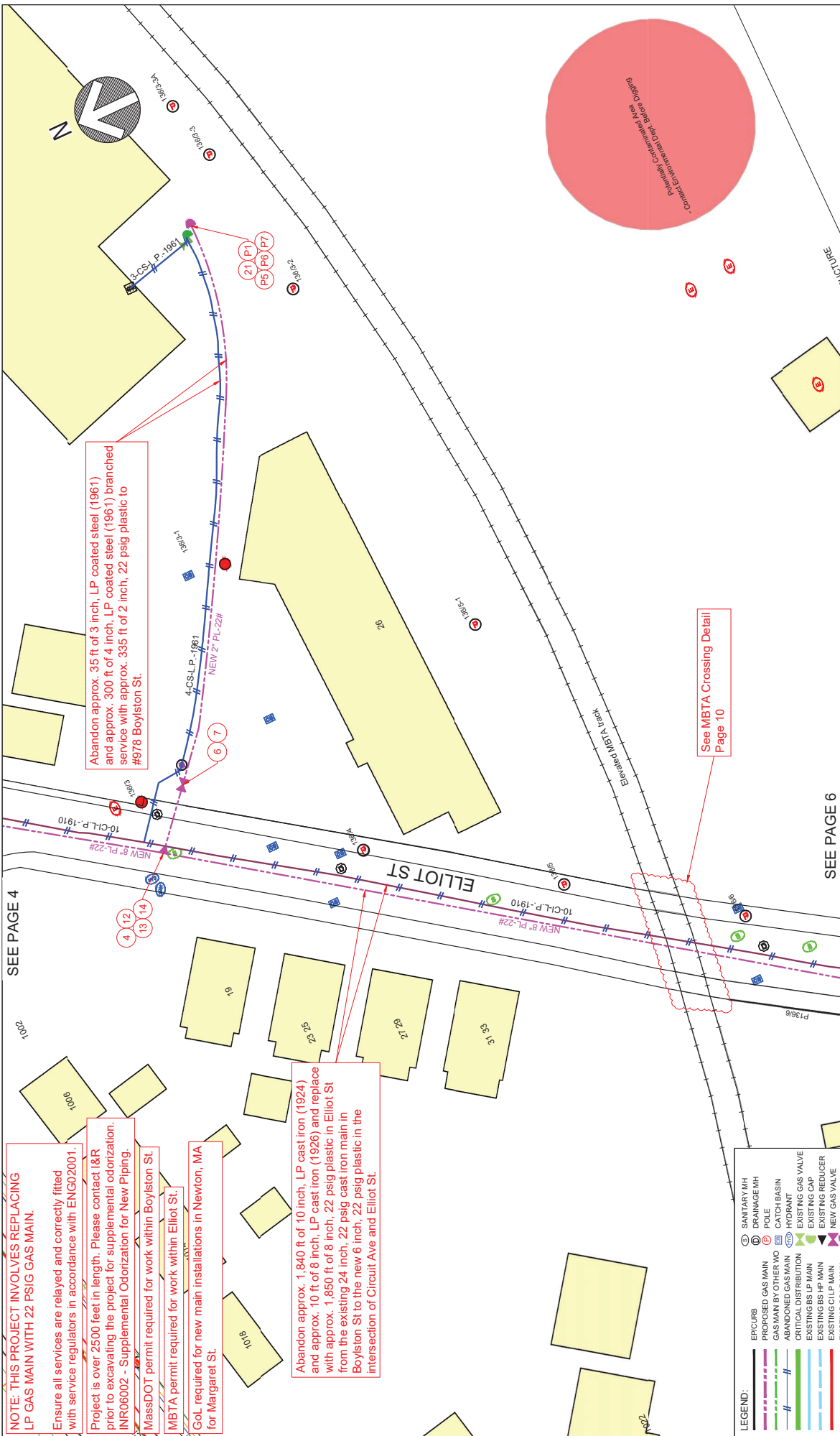
**nationalgrid**  
10/8/8/6/4" CI-LP, 6" BS-LP & 4/3" CS-LP TO 8/4/2" PL-22#  
3-14 ELLIOT ST  
NEWTON, MASSACHUSETTS

**PROPOSED INSTALLATION PLAN**

DESIGNER: JAE. SMITH  
ENGINEER: C. CHEN  
DATE: 10/07/2022  
ASSET ID: XXXXXXXXXX  
W.D. NO.: 1444162

**FINAL**

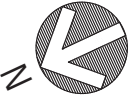
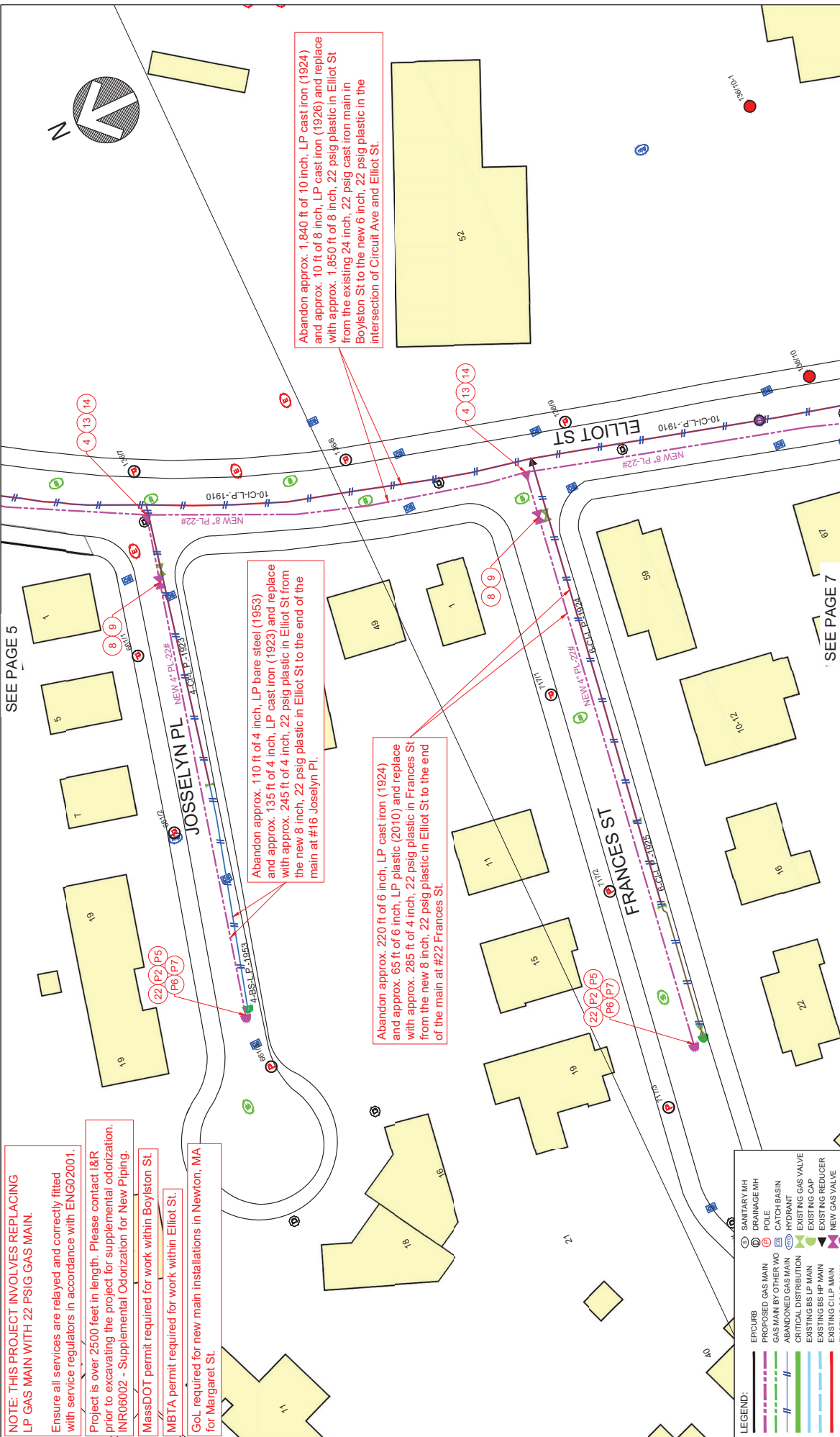
PAGE 5 OF 13  
DRAWING NO. CIR-NEW-1444162 C-003



**NOTE: THIS PROJECT INVOLVES REPLACING LP GAS MAIN WITH 22 PSIG GAS MAIN.**

Ensure all services are relayed and correctly fitted with service regulators in accordance with ENG02001. Project is over 25000 feet in length. Please contact I&R prior to excavating the project for supplemental odorization. INR06002 - Supplemental Odorization for New Piping. MassDOT permit required for work within Boylston St. MBTA permit required for work within Elliot St. Vol. required for new main installations in Newton, MA for Margaret St.

SEE PAGE 5



**LEGEND:**

(Symbol)	SANITARY MH
(Symbol)	DRAINAGE MH
(Symbol)	POLE
(Symbol)	CATCH-BASIN
(Symbol)	HYDRANT
(Symbol)	EXISTING GAS VALVE
(Symbol)	EXISTING CAP
(Symbol)	EXISTING REDUCER
(Symbol)	NEW GAS VALVE
(Symbol)	NEW REDUCER
(Symbol)	EXISTING CLIP MAIN
(Symbol)	EXISTING CS LP MAIN
(Symbol)	EXISTING PL LP MAIN
(Symbol)	EXISTING PL HP MAIN
(Symbol)	WATER MAIN
(Symbol)	SANITARY DRAINAGE
(Symbol)	TELECOM



**TRC**  
 215 ORIGINAL NEWBURY  
 URBAN PLANNING, INC.  
 100 STATE ST. SUITE 200  
 NEWTON, MA 02459  
 TEL: 617.552.1100  
 WWW.TRCINC.COM

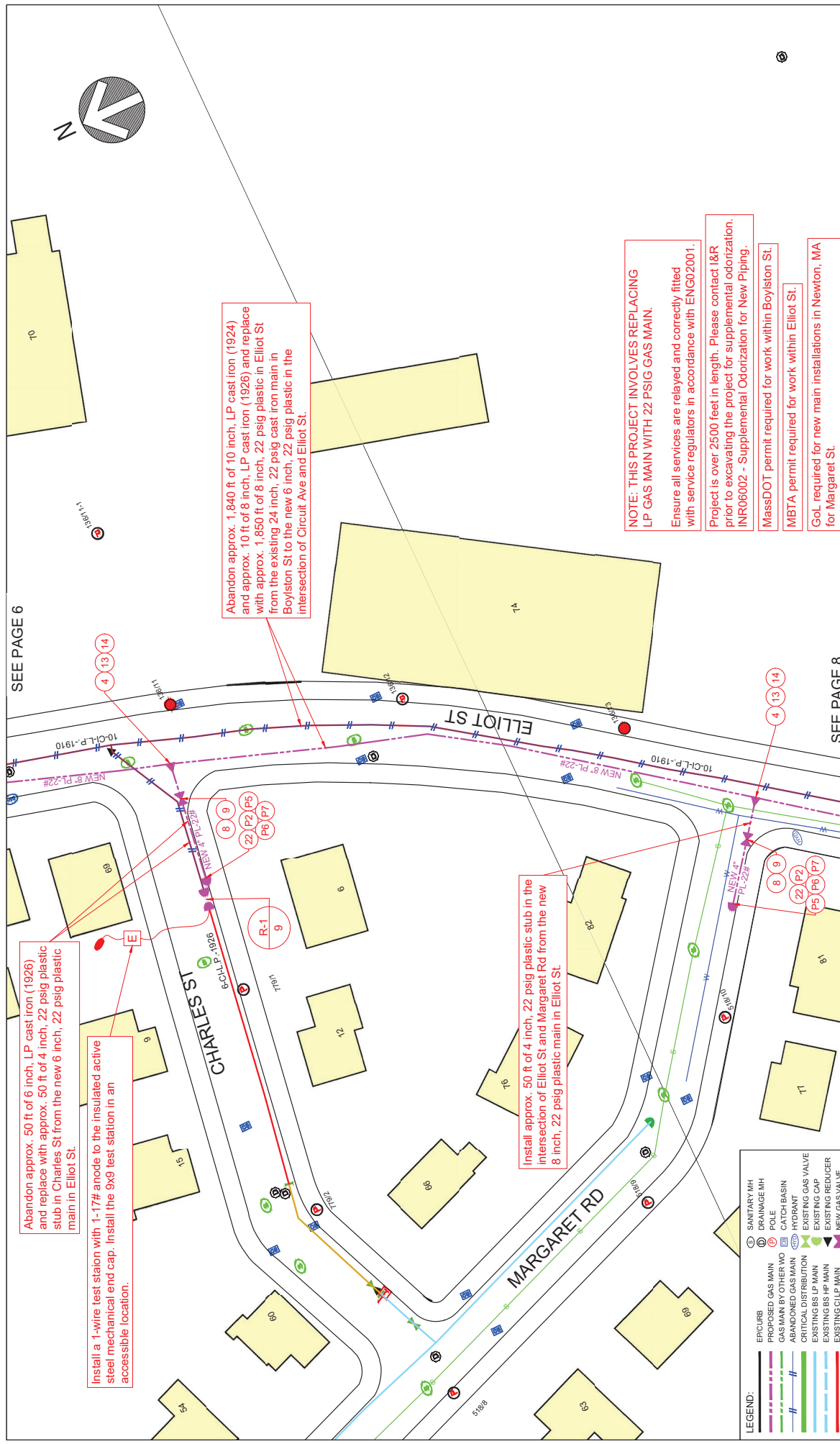
DATE: 10/07/2022  
 REVISION: 1  
 DESCRIPTION: REVISION 1 - REVISION 7, ADED GRAPHIC INDICATION TO NOTES & DETAILS, REISED BOM

**nationalgrid**  
 10/8/6/4" CI-LP, 6" PL-LP, 4" BS-LP & 4/3" CS-LP TO 8/4/2" PL-22#  
 3-144 ELLIOT ST  
 NEWTON, MASSACHUSETTS

**PROPOSED INSTALLATION PLAN**

ENGINEER: C. CHEN  
 DATE: 10/07/2022  
 ASSET ID: X00000000X  
 W.D. NO.: 1444162





SEE PAGE 6

SEE PAGE 8

Abandon approx. 50 ft of 6 inch, LP cast iron (1926) and replace with approx. 50 ft of 4 inch, 22 psig plastic stub in Charles St from the new 6 inch, 22 psig plastic main in Elliot St.

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.

Abandon approx. 1,840 ft of 10 inch, LP cast iron (1924) and approx. 10 ft of 8 inch, LP cast iron (1926) and replace with approx. 1,850 ft of 8 inch, 22 psig plastic in Elliot St from the existing 24 inch, 22 psig cast iron main in Boylston St to the new 6 inch, 22 psig plastic in the intersection of Circuit Ave and Elliot St.

Install approx. 50 ft of 4 inch, 22 psig plastic stub in the intersection of Elliot St and Margaret Rd from the new 8 inch, 22 psig plastic main in Elliot St.

**NOTE: THIS PROJECT INVOLVES REPLACING LP GAS MAIN WITH 22 PSIG GAS MAIN.**  
 Ensure all services are relayed and correctly fitted with service regulators in accordance with ENG02001.  
 Project is over 2500 feet in length. Please contact I&R prior to excavating the project for supplemental odorization. INR06002 - Supplemental Odorization for New Piping.  
 MassDOT permit required for work within Boylston St.  
 MBTA permit required for work within Elliot St.  
 GoL required for new main installations in Newton, MA for Margaret St.

**LEGEND:**

EPICURE	SANITARY MH
PROPOSED GAS MAIN	DRAINAGE MH
GAS MAIN BY OTHER MO	POLE
CONCRETE TRENCH	CATCH-BASIN
EXISTING GAS MAIN	HYDRANT
EXISTING BS LP MAIN	EXISTING GAS VALVE
EXISTING BS HP MAIN	EXISTING CAP
EXISTING CLIP MAIN	EXISTING REDUCER
EXISTING CS LP MAIN	NEW GAS VALVE
EXISTING CS HP MAIN	NEW REDUCER
EXISTING PL LP MAIN	BOM ITEM#
EXISTING PL HP MAIN	NEW ITEM#
WATER MAIN	EXISTING PL HP MAIN
SANITARY	WATER MAIN
DRAINAGE	SANITARY
TELECOM	TELECOM

**nationalgrid**  
 10/9/6/A\* CI-LP, 6" LP, 4" BS-LP & 4.7" CS-LP TO 8/4/2" PL-22#  
 3-14 ELLIOT ST  
 NEWTON, MASSACHUSETTS

**PROPOSED INSTALLATION PLAN**

DATE: 10/24/2022  
 ENGINEER: C. CHEN  
 CHECKER: J.S. SMITH

ASSET ID: XXXXXXXXXX  
 W.D. NO.: 1444162

DRAWING NO.: CIR-NEW-1444162 C-005

NO.	DATE	DESCRIPTION
1	10/24/2022	ISSUED FOR CONSTRUCTION
2	10/24/2022	REVISED STEP 7, ADDED CONDUIT PROTECTION TO NOTES & DETAILS, REVISED BOM
3	10/24/2022	REVISED
4	10/24/2022	REVISED
5	10/24/2022	REVISED
6	10/24/2022	REVISED
7	10/24/2022	REVISED
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27	10/24/2022	REVISED
28	10/24/2022	REVISED
29	10/24/2022	REVISED
30	10/24/2022	REVISED

**TRC**  
 215 ORCHARD STREET  
 WILMINGTON, MA 01973

APPROXIMATE SCALE: 1" = 40' (WHEN PLOTTED 24" x 36")  
 APPROXIMATE SCALE: 1" = 40' (WHEN PLOTTED 11" x 17")

**SEAL & DATE**

DATE: 10/24/2022

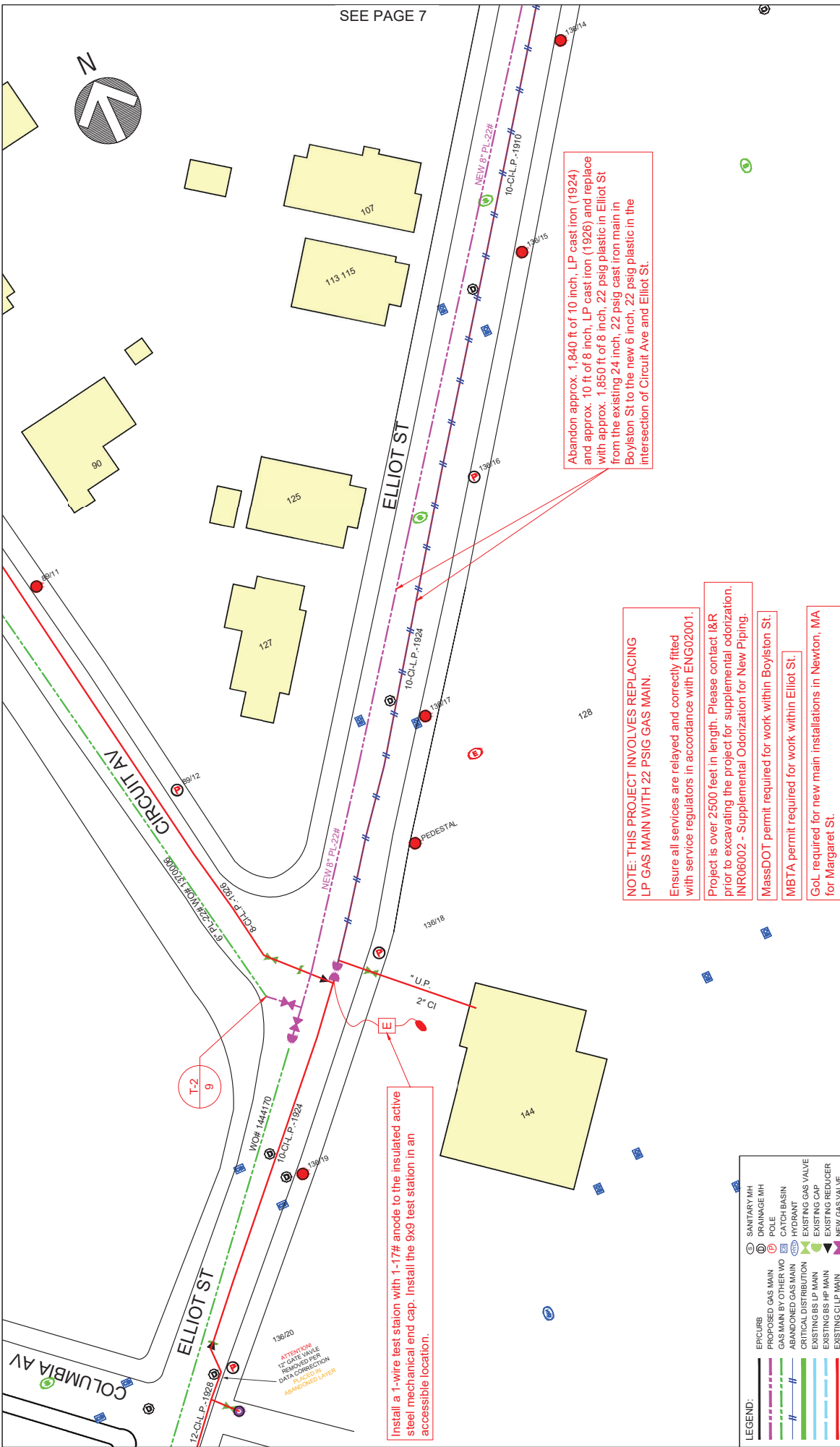
**PROPOSED INSTALLATION PLAN**

DATE: 10/24/2022  
 ENGINEER: C. CHEN  
 CHECKER: J.S. SMITH

**nationalgrid**  
 10/9/6/A\* CI-LP, 6" LP, 4" BS-LP & 4.7" CS-LP TO 8/4/2" PL-22#  
 3-14 ELLIOT ST  
 NEWTON, MASSACHUSETTS

**nationalgrid**  
 10/9/6/A\* CI-LP, 6" LP, 4" BS-LP & 4.7" CS-LP TO 8/4/2" PL-22#  
 3-14 ELLIOT ST  
 NEWTON, MASSACHUSETTS

**nationalgrid**  
 10/9/6/A\* CI-LP, 6" LP, 4" BS-LP & 4.7" CS-LP TO 8/4/2" PL-22#  
 3-14 ELLIOT ST  
 NEWTON, MASSACHUSETTS



Abandon approx. 1,840 ft of 10 inch, LP cast iron (1924) and approx. 10 ft of 8 inch, LP cast iron (1926) and replace with approx. 1,850 ft of 8 inch, 22 psig plastic in Elliot St from the existing 24 inch, 22 psig cast iron main in Boylston St to the new 6 inch, 22 psig plastic in the intersection of Circuit Ave and Elliot St.

**NOTE: THIS PROJECT INVOLVES REPLACING LP GAS MAIN WITH 22 PSIG GAS MAIN.**  
Ensure all services are relayed and correctly fitted with service regulators in accordance with ENG02001.

Project is over 2500 feet in length. Please contact I&R prior to excavating the project for supplemental odorization. INR06002 - Supplemental Odorization for New Piping.

MassDOT permit required for work within Boylston St.

MBTA permit required for work within Elliot St.

Gov. required for new main installations in Newton, MA for Margaret St.

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.

ATTENTION:  
12\"/>

**LEGEND:**

---	PROPOSED GAS MAIN
---	GAS MAIN BY OTHER WORK
---	PROPOSED WATER MAIN
---	EXISTING BS LP MAIN
---	EXISTING BS HP MAIN
---	EXISTING C.I.P. MAIN
---	EXISTING C.S.L.P. MAIN
---	EXISTING C.S.H.P. MAIN
---	EXISTING P.L.P. MAIN
---	EXISTING P.L.H.P. MAIN
---	WATER MAIN
---	SANITARY
---	DRAINAGE
---	TELECOM
---	SANITARY MH
---	DRAINAGE MH
---	POLE
---	CATCH-BASIN
---	HYDRANT
---	EXISTING GAS VALVE
---	EXISTING CAP
---	EXISTING REDUCER
---	NEW GAS VALVE
---	NEW CAP
---	NEW REDUCER
---	BOM ITEM#
---	TIE-IN#
---	PAGE#

CIRE101214 PROGRAM, MAIN & SERVICE REPLACEMENT  
10\"/>

**PROPOSED INSTALLATION PLAN**  
NEWTON, MASSACHUSETTS  
DATE: 06/24/2022  
ENGINEER: C. CHEN  
DESIGNER: J.E. SMITH  
ASSET ID: XXXXXXXXXX  
W.D. NO.: 1444162



NO.	DATE	DESCRIPTION	BY	CHK	APP
1	07/07/2022	ISSUED FOR CONSTRUCTION	JR	JR	JR
2	06/24/2022	REVISED STEP 7, ADDED LANDSCAPE PROTECTION TO NOTES & DETAILS, REVISED BOM	JR	JR	JR



**TRC**  
215 ORIGINAL COPY  
UNOFFICIAL ACT. 3/08  
APPROXIMATE SCALE: 1" = 20' (WHEN PLOTTED 24" x 36")  
APPROXIMATE SCALE: 1" = 40' (WHEN PLOTTED 11" x 17")

---	SANITARY MH
---	DRAINAGE MH
---	POLE
---	CATCH-BASIN
---	HYDRANT
---	EXISTING GAS VALVE
---	EXISTING CAP
---	EXISTING REDUCER
---	NEW GAS VALVE
---	NEW CAP
---	NEW REDUCER
---	BOM ITEM#
---	TIE-IN#
---	PAGE#



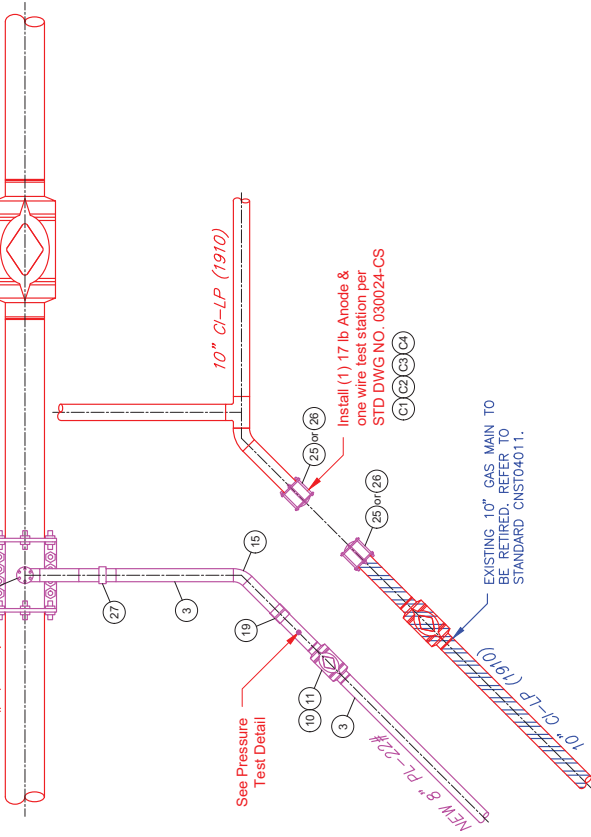


USE EXISTING VALVE FOR ISOLATION AND SQUEEZE-OFF IN ACCORDANCE WITH CNST03001 OR STOP-OFF IN ACCORDANCE WITH CNST03002

DO NOT TIE 8" PL-22# INTO 10" C-LP

Install (1) 17 lb Anode & one wire test station per STD DWG NO. 030024-CS (C1)(C2)(C3)(C4)

24" C-22# (1928)

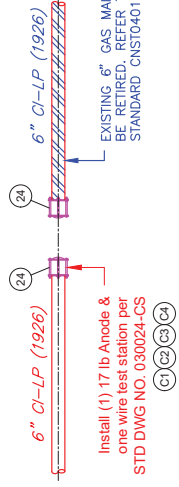


EXISTING 10" GAS MAIN TO BE RETIRED. REFER TO STANDARD CNST04011.

Tie-In Detail T-1  
Scale: 1" = 3'-0"



STOP-OFF IN ACCORDANCE WITH CNST03002

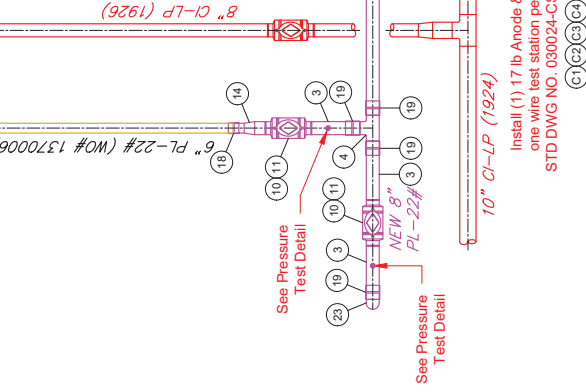


Install (1) 17 lb Anode & one wire test station per STD DWG NO. 030024-CS (C1)(C2)(C3)(C4)

6" C-LP (1926)

EXISTING 6" GAS MAIN TO BE RETIRED. REFER TO STANDARD CNST04011.

Retirement Detail R-1  
Scale: 1" = 3'-0"



EXISTING 10" GAS MAIN TO BE RETIRED. REFER TO STANDARD CNST04011.

10" C-LP (1924)

Install (1) 17 lb Anode & one wire test station per STD DWG NO. 030024-CS (C1)(C2)(C3)(C4)

Tie-In Detail T-2  
Scale: 1" = 3'-0"

TIE-IN ACCORDANCE WITH MAINB115  
USE EXISTING VALVE FOR ISOLATION AND SQUEEZE-OFF IN ACCORDANCE WITH CNST03001 OR STOP-OFF IN ACCORDANCE WITH CNST03002

DO NOT TIE 8" PL-22# INTO 8" OR 10" C-LP

INSTALL PROPOSED 8" VALVE TO FACILITATE CONNECTION TO 6" PLASTIC PROPOSED UNDER WO#1370006. VALVE NOT NEEDED IF A 6" VALVE IS INSTALLED UNDER WO#1370006.

LEGEND:

[Red line]	PROPOSED GAS MAIN
[Blue line]	ABANDONED GAS MAIN
[Green line]	EXISTING BS GAS MAIN
[Yellow line]	EXISTING CI GAS MAIN
[Purple line]	EXISTING CS GAS MAIN
[Orange line]	EXISTING PL GAS MAIN

CENTERLINE  
BILL OF MATERIALS  
ITEM NUMBER

TRC  
115 WASHINGTON STREET  
LOWELL, MA 01856

DATE: 10/24/2022  
SCALE: 1" = 3'-0"  
APPROXIMATE SCALES: 1" = 6" (WHEN PLOTTED 11" x 17")  
3" = 6" (WHEN PLOTTED 11" x 17")

NO.	DESCRIPTION	DATE	BY	CHK	APP
1	ISSUED FOR CONSTRUCTION	10/24/2022	JAE		
2	ISSUED FOR CONSTRUCTION	10/24/2022	JAE		
3	ISSUED FOR CONSTRUCTION	10/24/2022	JAE		
4	ISSUED FOR CONSTRUCTION	10/24/2022	JAE		
5	ISSUED FOR CONSTRUCTION	10/24/2022	JAE		
6	ISSUED FOR CONSTRUCTION	10/24/2022	JAE		
7	ISSUED FOR CONSTRUCTION	10/24/2022	JAE		
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37	ISSUED FOR CONSTRUCTION	10/24/2022	JAE		
38	ISSUED FOR CONSTRUCTION	10/24/2022	JAE		
39	ISSUED FOR CONSTRUCTION	10/24/2022	JAE		
40	ISSUED FOR CONSTRUCTION	10/24/2022	JAE		

nationalgrid  
100 STATE STREET  
LOWELL, MA 01856

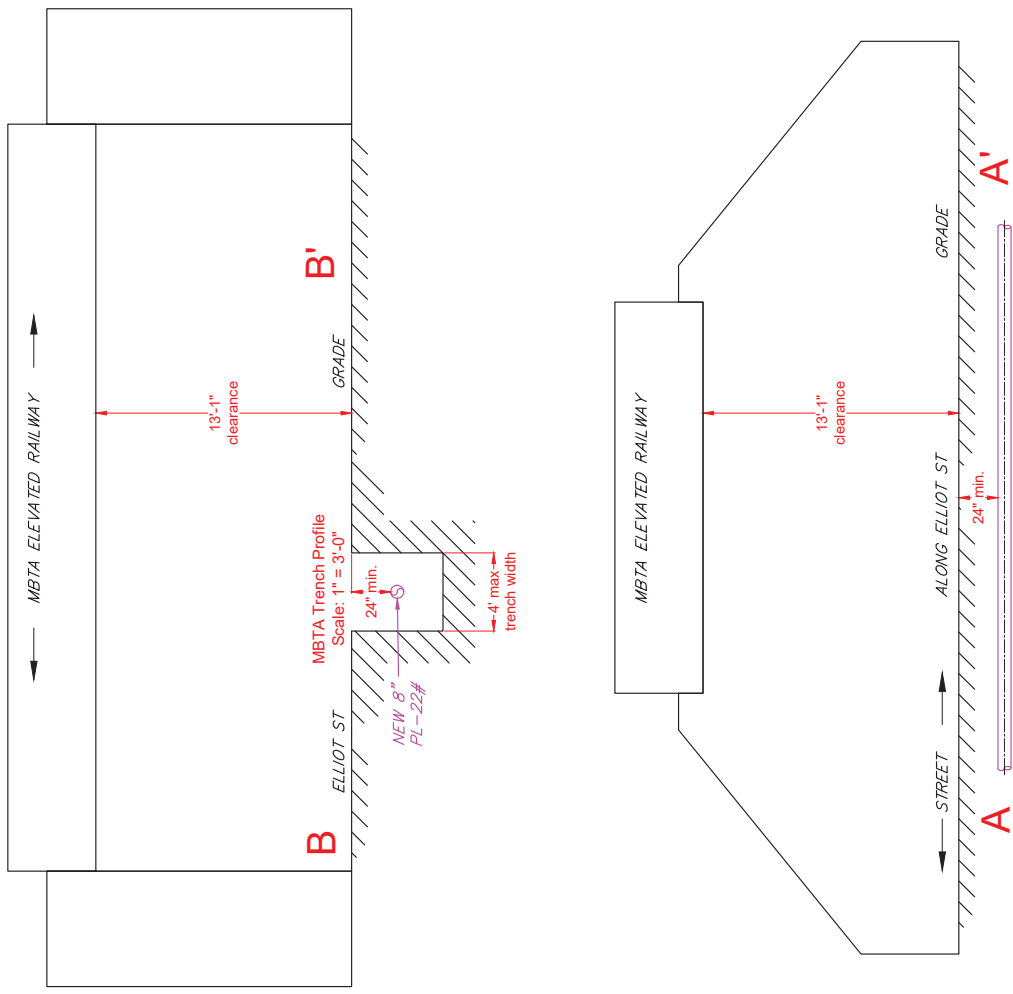
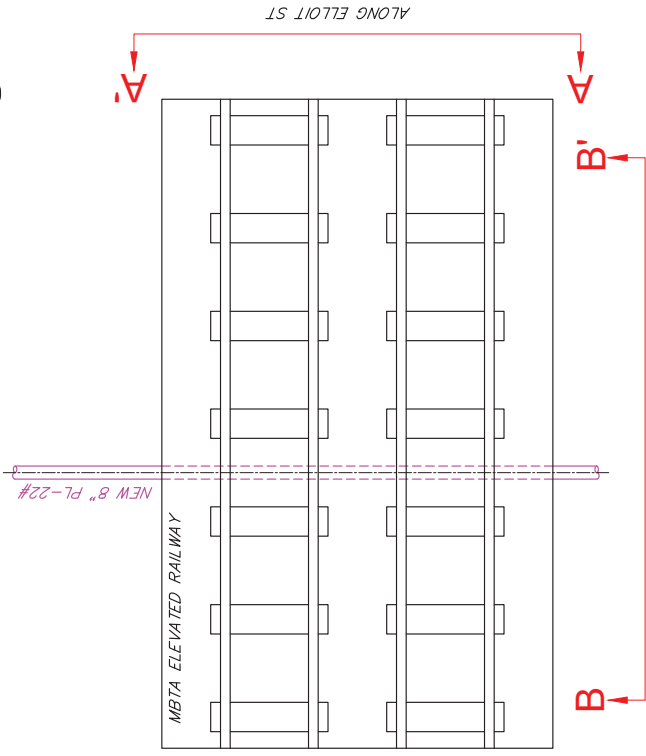
DESIGNER: JAE, SMITH  
ENGINEER: C. CHEN  
DATE: 10/24/2022  
ASSET ID: XXXXXXXXXX  
W.D. NO.: 144412

PROJECT: CIRE101214 PROGRAM, MAIN & SERVICE REPLACEMENT  
10/8/6/4" CI-LP, 6" PL-LP, 4" BS-LP & 4/2" CS-LP TO 8/1/2" PL-22#  
3-14 ELLIOT ST  
NEWTON, MASSACHUSETTS

PROPOSED TIE-IN DETAILS

DATE: 10/24/2022  
SCALE: 1" = 3'-0"

FINAL



Sheeting design shall be stamped by a Professional Engineer licensed in Massachusetts

MBTA TRACK CROSS-SECTION A-A'

Detail D-1  
 MBTA TRACK  
 CROSS-SECTION A-A'  
 (GAS CROSSING UNDER TRACK)  
 Scale: 1" = 3'-0"

**LEGEND:**

[Pink hatched]	PROPOSED GAS MAIN
[Blue hatched]	ABANDONED GAS MAIN
[Green hatched]	EXISTING BS GAS MAIN
[Red hatched]	EXISTING CI GAS MAIN
[Yellow hatched]	EXISTING CS GAS MAIN
[White hatched]	EXISTING PL GAS MAIN

**TRC**  
 215 WASHINGTON STREET  
 WASHINGTON, N.J. 07095

1" = 6" (WHEN PLOTTED 24" x 36")  
 APPROXIMATE SCALE: 1" = 6" (WHEN PLOTTED 11" x 17")



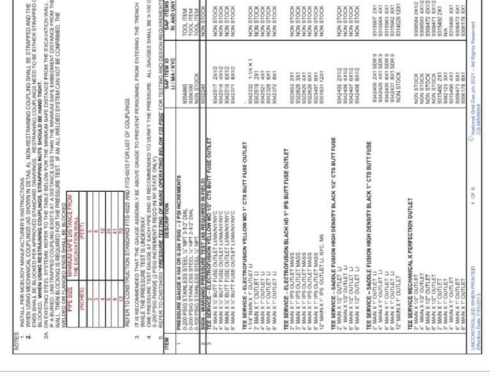
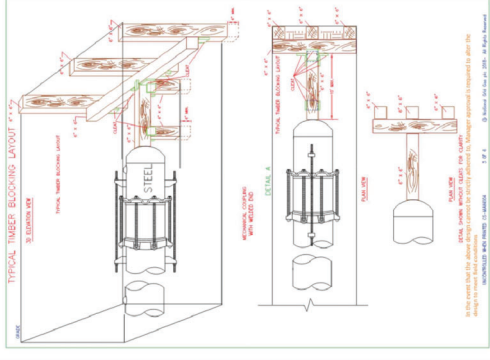
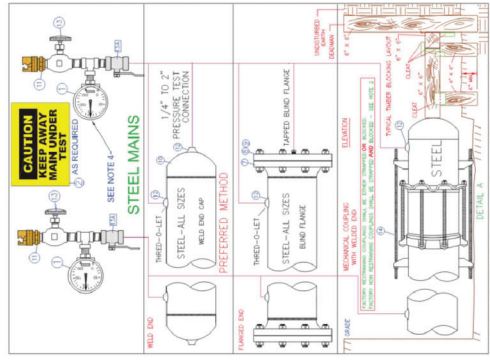
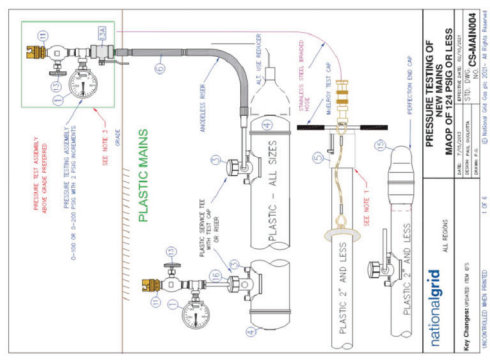
NO.	DATE	DESCRIPTION
1	10/17/2022	REVISED STEP 7, ADDED LANDSCAPE PROTECTION TO NOTES & DETAILS, REISED BSM
2	10/20/2022	ISSUED FOR CONSTRUCTION

**nationalgrid**  
 400 WASHINGTON STREET  
 WASHINGTON, N.J. 07095

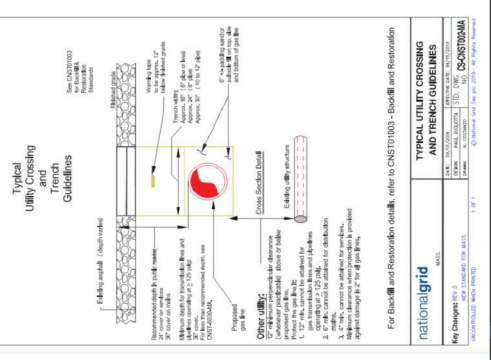
**FINAL**

**PROPOSED MBTA CROSSING DETAILS**

DRWG. SIZE	DESIGNER	ENGINEER	DATE	ASSET ID.	W.D. NO.
24"x36"	J.S. SMITH	C. CHEN	10/21/2022	XXXXXXXXXX	1444162



NO.	DESCRIPTION	PROJECT NO.	BY	DATE
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**nationalgrid**  
115 Cambridge Avenue  
Charlotte, NC 28203

**TRC**  
NOT TO SCALE

DATE: 10/01/2022  
BY: [Name]  
CHECKED BY: [Name]

NO.	DESCRIPTION	DATE	BY	CHK
1	REVISED STEP 7, ADDED CANTON PROTECTION TO NOTES & DETAILS, REUSED BIM	10/01/2022	[Name]	[Name]
2	ISSUED FOR CONSTRUCTION	10/01/2022	[Name]	[Name]

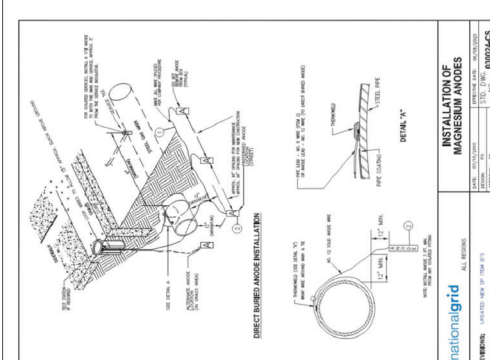
**nationalgrid**  
115 Cambridge Avenue  
Charlotte, NC 28203

**TRC**  
NOT TO SCALE

DATE: 10/01/2022  
BY: [Name]  
CHECKED BY: [Name]

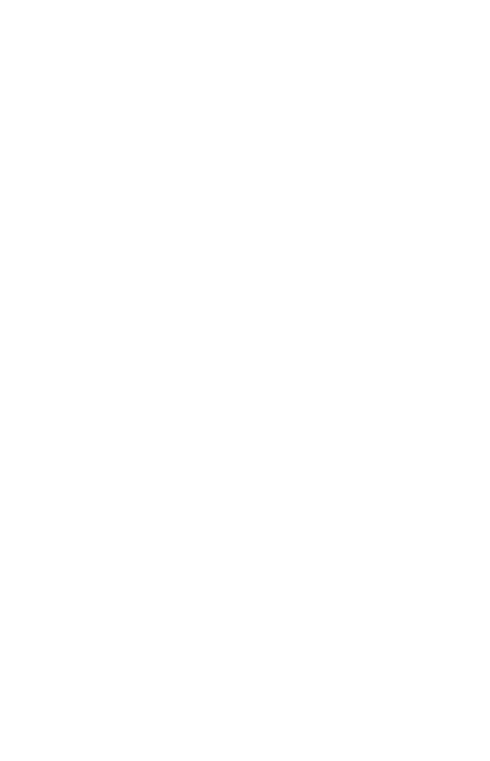






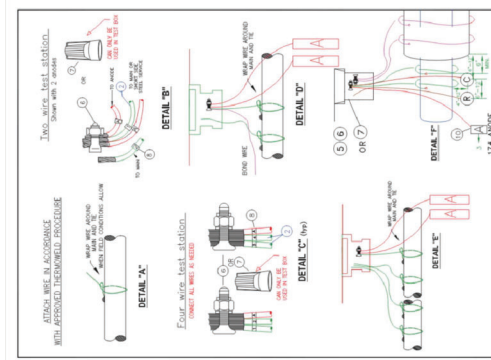
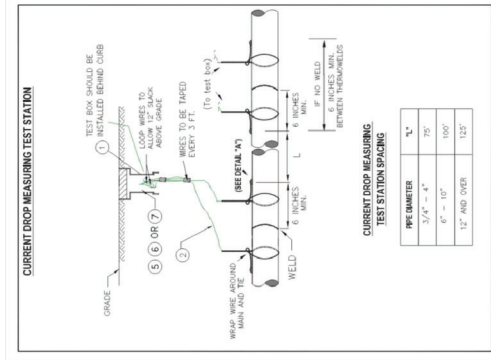
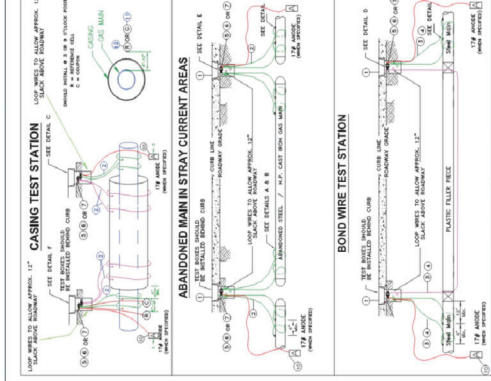
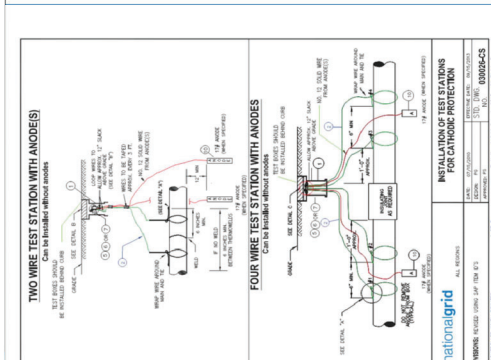
**MATERIAL LIST**

Description	Quantity	Part No.	Manufacturer	Notes
1. CABLE TIE 1/2" x 1/2"	100	1000000000	1000000000	
2. ANODE MANGANESE/ALUM	100	1000000000	1000000000	
3. ANODE MANGANESE/ALUM	100	1000000000	1000000000	
4. ANODE MANGANESE/ALUM	100	1000000000	1000000000	
5. ANODE MANGANESE/ALUM	100	1000000000	1000000000	
6. ANODE MANGANESE/ALUM	100	1000000000	1000000000	
7. CLAMP CIRCULAR/200	100	1000000000	1000000000	
8. CLAMP CIRCULAR/200	100	1000000000	1000000000	



**MATERIAL LIST**

Description	Quantity	Part No.	Manufacturer	Notes
1. CONNECTION WIRE	100	1000000000	1000000000	
2. TEST BOX 4"	100	1000000000	1000000000	
3. COVER FOR TEST BOX	100	1000000000	1000000000	
4. WIRE TIE 1/2" x 1/2"	100	1000000000	1000000000	
5. WIRE TIE 1/2" x 1/2"	100	1000000000	1000000000	
6. WIRE TIE 1/2" x 1/2"	100	1000000000	1000000000	
7. WIRE TIE 1/2" x 1/2"	100	1000000000	1000000000	
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16. WIRE TIE 1/2" x 1/2"	100	1000000000	1000000000	
17. WIRE TIE 1/2" x 1/2"	100	1000000000	1000000000	
18. WIRE TIE 1/2" x 1/2"	100	1000000000	1000000000	
19. WIRE TIE 1/2" x 1/2"	100	1000000000	1000000000	
20. WIRE TIE 1/2" x 1/2"	100	1000000000	1000000000	



**MATERIAL LIST**

Description	Quantity	Part No.	Manufacturer	Notes
1. CONNECTION WIRE	100	1000000000	1000000000	
2. TEST BOX 4"	100	1000000000	1000000000	
3. COVER FOR TEST BOX	100	1000000000	1000000000	
4. WIRE TIE 1/2" x 1/2"	100	1000000000	1000000000	
5. WIRE TIE 1/2" x 1/2"	100	1000000000	1000000000	
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15. WIRE TIE 1/2" x 1/2"	100	1000000000	1000000000	
16. WIRE TIE 1/2" x 1/2"	100	1000000000	1000000000	
17. WIRE TIE 1/2" x 1/2"	100	1000000000	1000000000	
18. WIRE TIE 1/2" x 1/2"	100	1000000000	1000000000	
19. WIRE TIE 1/2" x 1/2"	100	1000000000	1000000000	
20. WIRE TIE 1/2" x 1/2"	100	1000000000	1000000000	

**nationalgrid**

115 CANTON STREET  
LANSING, MI 48206

NOT TO SCALE

**TRC**

115 CANTON STREET  
LANSING, MI 48206

NOT TO SCALE

NO.	DESCRIPTION	DATE	BY	CHK
1	ISSUED FOR CONSTRUCTION	10/17/2022	PL	OS
2	REVISION STEP 7, ANODE CATHODE PROTECTION TO NOTES & DETAILS, REISED BWM	10/17/2022	PL	OS
3	ISSUED FOR CONSTRUCTION	10/17/2022	PL	OS

**nationalgrid**

115 CANTON STREET  
LANSING, MI 48206

NOT TO SCALE

**MATERIAL LIST**

Description	Quantity	Part No.	Manufacturer	Notes
1. CONNECTION WIRE	100	1000000000	1000000000	
2. TEST BOX 4"	100	1000000000	1000000000	
3. COVER FOR TEST BOX	100	1000000000	1000000000	
4. WIRE TIE 1/2" x 1/2"	100	1000000000	1000000000	
5. WIRE TIE 1/2" x 1/2"	100	1000000000	1000000000	
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