

59 Bow Street, Somerville
800Amp 120-208V

WO#5515122

13.8kV Circuit 250-1N39H1

Conduit Path Sketch

Luis A. Escobar
8-31-2022

Not to Scale
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IMPORTANT CUSTOMER/CONTRACTOR NOTE:

Please leave a message on the conduit inspection line (617-541-7071), a minimum of 72 hours prior to starting construction, to arrange a required pre-construction meeting with an Eversource Inspector. All ductwork, grounding, transformer bases and manholes must be inspected by Eversource prior to backfilling or concrete encasement. All conduit must be installed per Eversource Standards:

DTR 76.650 & DTR 76.654

Customer to install an **HA300** Modified Manhole,
Per Eversource Standard **DTR 76.654**.

Customer to install secondary conduits from private property to **MH31770** to service entrance of **Building #59**.

Customer to purchase and install
Special Terminal Box.

Customer to install **2-4"** conduits encased in concrete from 2 feet within private property to Manhole **MH31770**, **L=60'+/-**.

Eversource to install **2-4"** conduits encased in concrete from Manhole **MH20747** to two feet within private property, **L=100'+/-**.

9-5", L=96'+/-,6SP?

2-4", L=120'+/-,1SP

**ENGINEERING DRAFT
NOT FOR
CONSTRUCTION**

#379 Somerville
Avenue

#59 Bow Street

Bow Street Place

New **MH31770**
(6'-6"x12'-6"x8")

P. Property

Sidewalk

MH23035
6.'x10'x8.2'

MH25443
11'x10'x10.6'

MH20747
6.2'x9.1'x8.2'

Bow Street

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From MH20651
4-5", L=363'+/-,2SP?

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[Cable Sketch](#)

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ENGINEERING DRAFT
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Eversource to install a **3-100kVA, 120-208V** Transformer Bank in **MH31770**.
Eversource to terminate Primary and Secondary cables at the transformer.

Customer to install 2 sets of **4#500MCM CU**, Secondary cables from **MH31770** to **Special Terminal Box**, **L=45'+/-**.

Customer to terminate Secondary cables on the source and load side of **Special Terminal Box**.

#59 Bow Street

MH31770
3-100kVA(3Φ)
120/280V

Bow Street Place

Eversource to install 3-way Loadbreak junctions & **4/0AL, 20'+/-**.

Eversource to install 2 sets of **3-4/0AL, 15kV** rated cable from public way Manholes **MH25443** to **MH20747**, Tot L=**200'+/-**.

P. Property

Sidewalk

MH23035
6.'x10'x8.2'

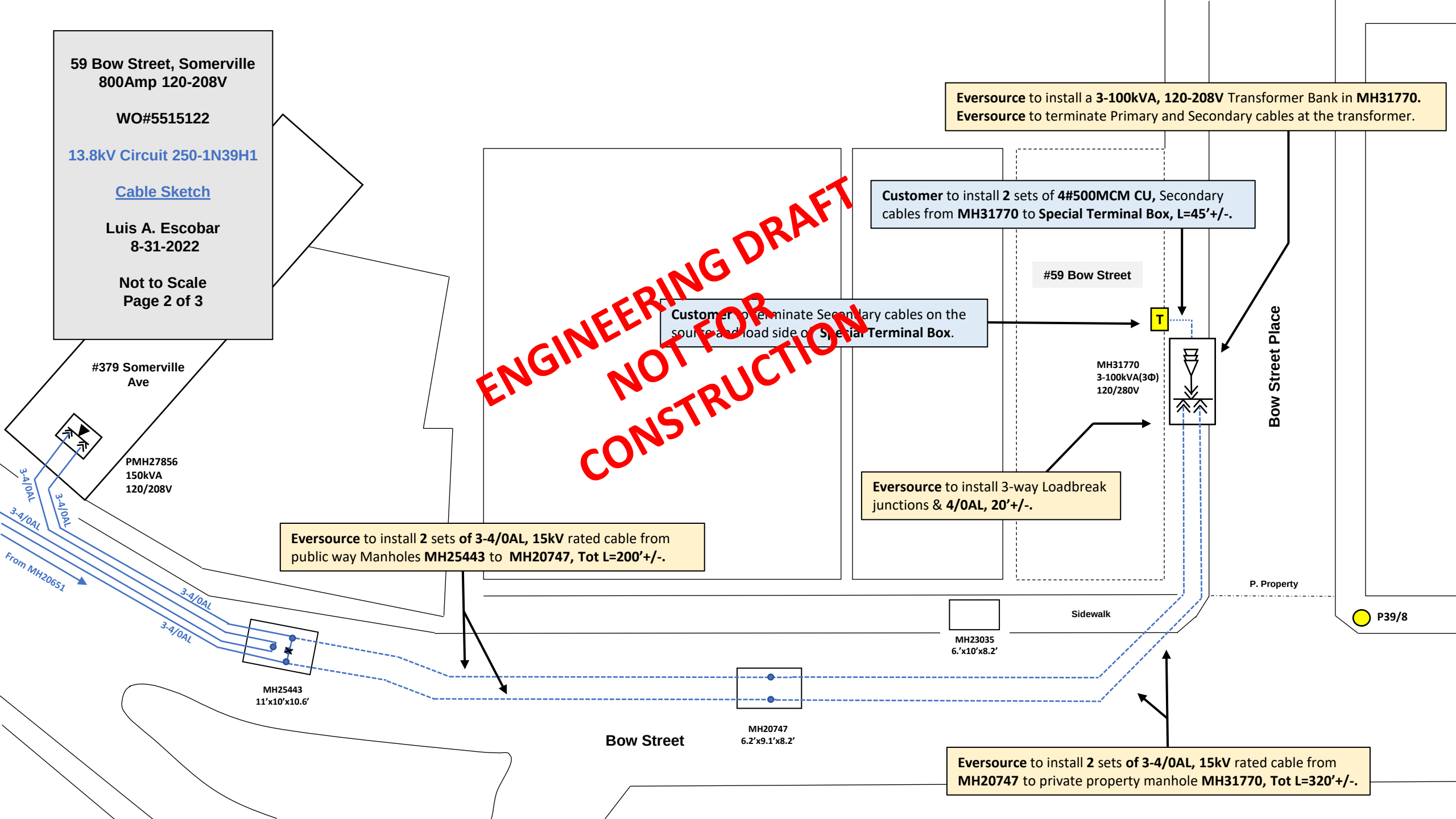
P39/8

MH25443
11'x10'x10.6'

MH20747
6.2'x9.1'x8.2'

Bow Street

Eversource to install 2 sets of **3-4/0AL, 15kV** rated cable from **MH20747** to private property manhole **MH31770**, Tot L=**320'+/-**.



One Line Diagram-Loops(13.8kV System),Somerville
Connected kVA Breakdown from Poles P112/1 to P269/1
250-1N39H1, 585-114H3, 250-1N39H2 & 250-1N39H3

Luis Escobar
Revised 8-31-2022
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Somerville Avenue

250-1N39H2/250-1N39H1

New Load being added under WO#540244

New Load, energized under WO#5324911

New Load being added under WO#5126751

XMH3015
3-50kVA(1ΦA,B,C)
Banked for 120/208V?

P269/1
3-100K
(Park Street)

MH20645
1-100kVA(1Φ-C)

MH31770
3-100kVA(3Φ)

MH31770
3-100kVA(3Φ)

New Load, energized under WO#239926

New Load being added under WO#5515122

New Load being added under WO#5708894

PME-9 Switch
PMH27795
(#599 Somerville Ave)

PMH24996
150kVA(3Φ)
120/208V

P112/1
3-100K
(Somerville Ave)

Close elbows at PMH23446
towards PMH1528.
Make new normal.

Open elbows at PMH15184
towards PMH2916
Make new normal.

585-114H3 (New normal)

250-1N39H2

585-114H3

585-114H3/250-1N39H3

KVA Totals	AΦ	BΦ	CΦ	ABC
Load Spread	100	200		300
Tot KVA per Φ	200	300	100	
Total kVAΣ				600

KVA Totals	AΦ	BΦ	CΦ	ABC
Load Spread				1062
Tot KVA per Φ	354	354	354	
Total kVAΣ				1062

250-1N39H3 (New normal)

250-1N39H1 (New normal)

KVA Totals	AΦ	BΦ	CΦ	ABC
Load Spread				1000
Tot KVA per Φ	333	333	333	
Total kVAΣ				1000

KVA Totals	AΦ	BΦ	CΦ	ABC
Load Spread	-100		100	-1086
Tot KVA per Φ	-462	362	462	
Total kVAΣ				-1286

Tot kVA Σ 2336