

Appendix A: Maps and Drawings

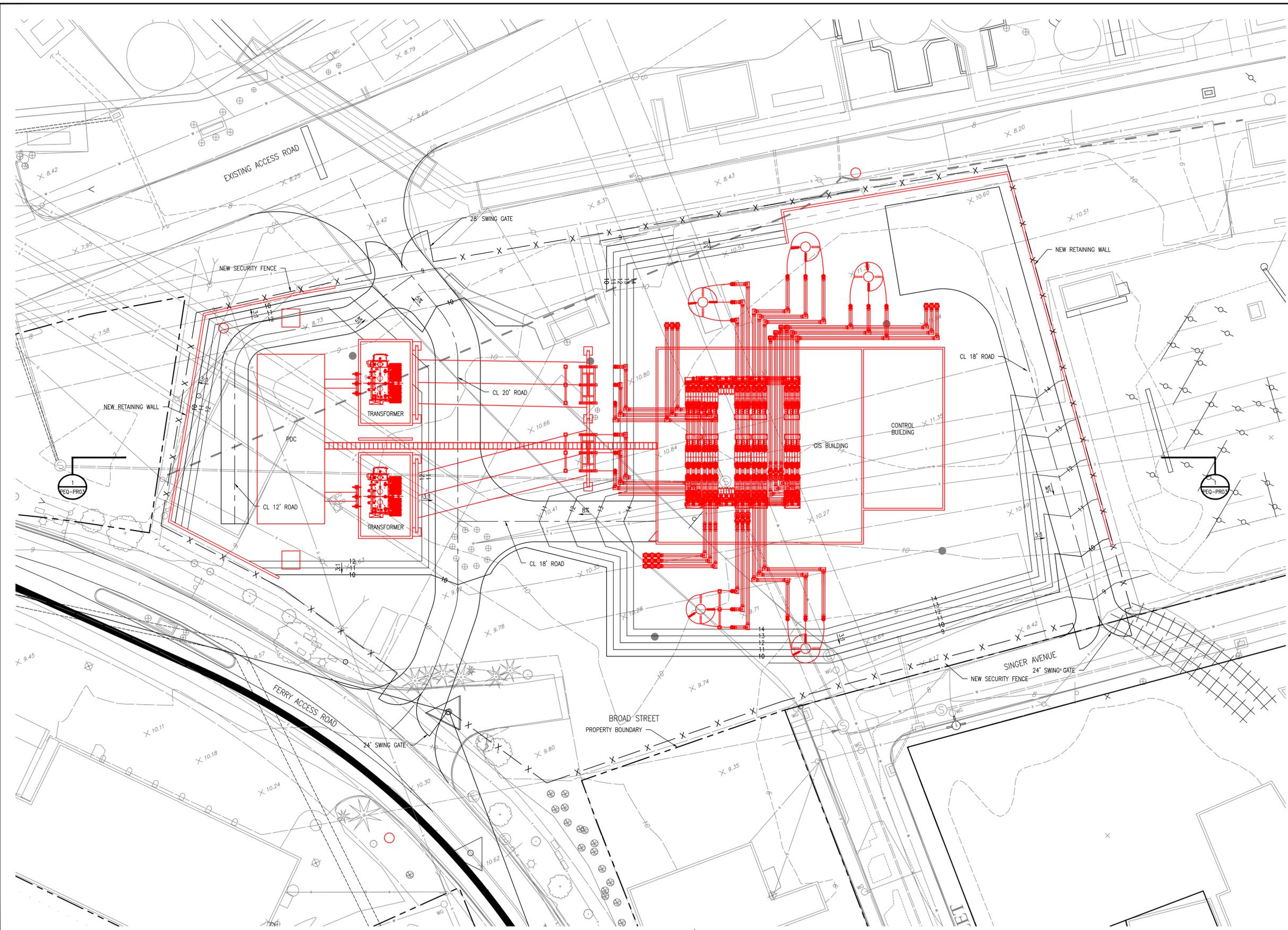
Appendix A.1: Substation Site Plan and Drawings

Appendix A.2: Substation Transmission Line Connections - Overhead

Appendix A.3: Substation Transmission Line Connections - Underground

Appendix A.4: FEMA Maps

Appendix A.1: Substation Site Plan and Drawings



NOTES

LEGEND

- ROAD
- ROAD CENTERLINE
- MAJOR CONTOUR
- MINOR CONTOUR
- NEW STRUCTURES
- NEW SECURITY FENCE
- PROPERTY BOUNDARY

NOT TO BE USED FOR CONSTRUCTION

REFERENCE DRAWINGS

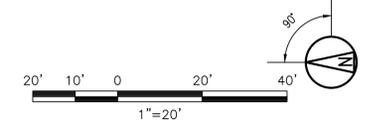
- PRELIMINARY CONCEPT - PRIMARY PLAN 1 PEQ-PRO1
- PRELIMINARY CONCEPT - PRIMARY PLAN 2 PEQ-PRO2
- PRELIMINARY CONCEPT - CROSS SECTIONS PEQ-PRO3
- PRELIMINARY CONCEPT - ALTERNATE PLAN 1 PEQ-ALTO1
- PRELIMINARY CONCEPT - ALTERNATE PLAN 2 PEQ-ALTO2



DESIGNER JDA DRAWN MEM
 CHECKED JBS DATE 01/18/18

PROJECT # 196968

| NO | DATE | REVISION | MEM | JBS | JDA | ALL |
|----|----------|-------------------------------------|-----|------|------|-------|
| A | 01/18/18 | ISSUED FOR UI REVIEW - PROJ #196968 | MEM | JBS | JDA | ALL |
| | | | DRN | CHKD | DESN | SUPR. |



NEW DRAWING

| No | Date | Revision | By | Chkd. | Engr. | Supv. |
|----|------|------------------------------|----|-------|-------|-------|
| - | - | PEQUONNOCK CONCEPTUAL DESIGN | - | - | - | - |



Drawn - Date - Scale: 1"=20'
 Chkd. - Design Engr. - Design Supv. -

PRELIMINARY CONCEPT
 PRIMARY PLAN
 PEQUONNOCK SUBSTATION
 CAD FILE NAME SEQUENCE No. DRAWING NUMBER
 - - - PEQ-PRO1



NOTES

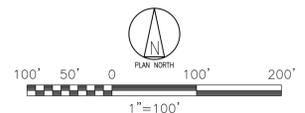
LEGEND

- OVERHEAD TRANSMISSION LINES
- - - - - OVERHEAD TRANSMISSION LINES TO BE REMOVED
- UNDERGROUND TRANSMISSION LINES
- - - - - UNDERGROUND TRANSMISSION LINES TO BE REMOVED
- ⊠ EXISTING TRANSMISSION STRUCTURE TO BE REMOVED
- ▨ EXISTING EQUIPMENT TO BE REMOVED

NOT TO BE USED FOR CONSTRUCTION

REFERENCE DRAWINGS

| | | | | | | | |
|--|----------|--|----------|-----|------|------|-------|
| BLACK & VEATCH Building a world of difference. | | | | | | | |
| DESIGNER | JDA | DRAWN | MEM | | | | |
| CHECKED | JBS | DATE | 01/30/18 | | | | |
| PROJECT # | 196968 | | | | | | |
| NO | DATE | REVISION | | DRN | CHKD | DESN | SUPR. |
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| B | 01/30/18 | UPDATED PER UI COMMENTS - PROJ #196968 | | ACG | JBS | NJW | ALL |
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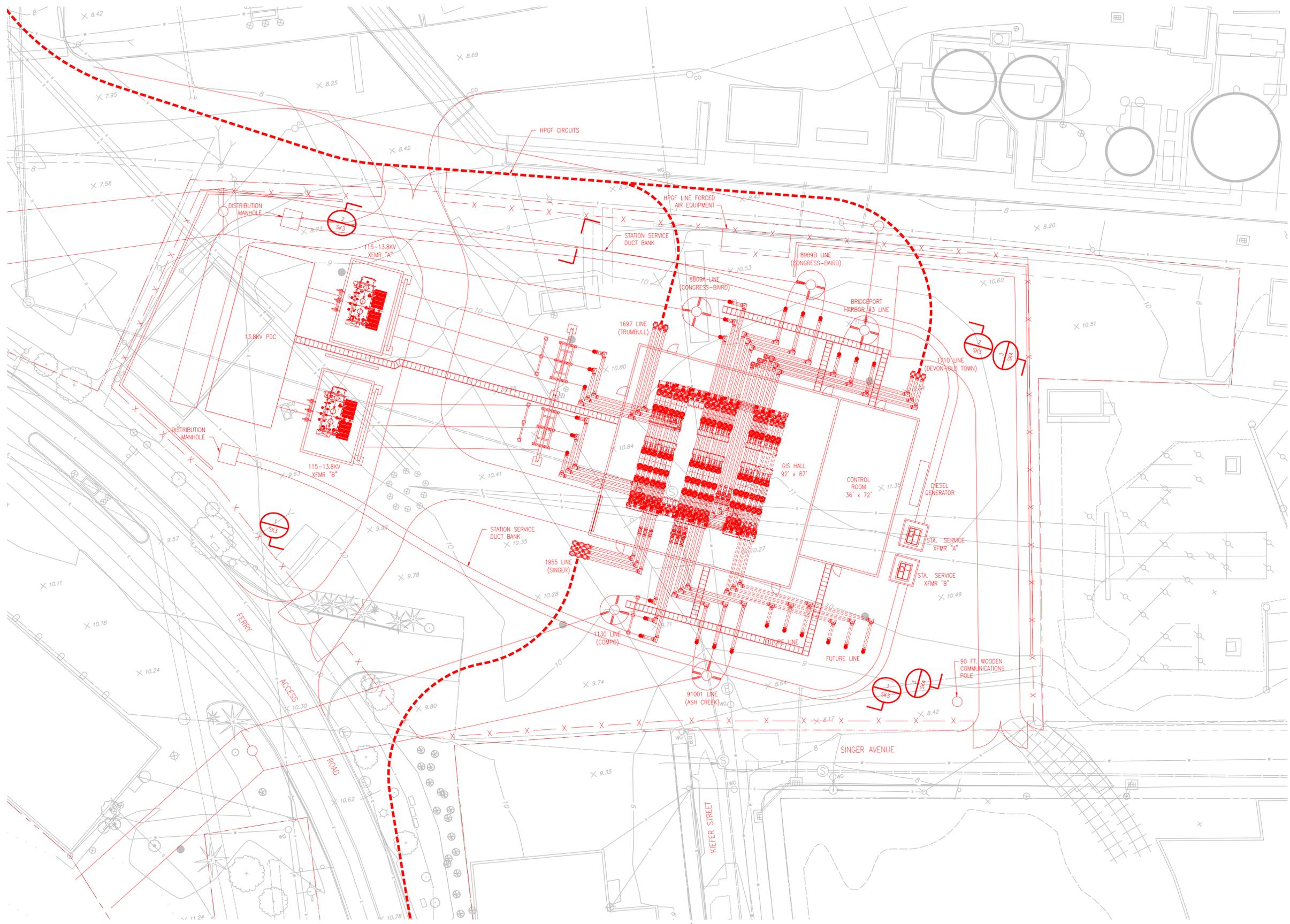
NEW DRAWING

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| | | | | | | |



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|-------|--|--------------|--|--------------|--|
| Drawn | | Date | | Scale: | |
| Chkd. | | Design Engr. | | Design Supv. | |

| | | |
|---|--------------|----------------|
| EXISTING EQUIPMENT PRIMARY SITE PEQUONNOCK SUBSTATION | | |
| CAD FILE NAME | SEQUENCE No. | DRAWING NUMBER |
| | | PEQ-PR-EXIST |



NOTES

LEGEND

- NEW EQUIPMENT
- - - - - PROPOSED UNDERGROUND TRANSMISSION ROUTE
- X - X - NEW SECURITY FENCE
- - - - - PROPERTY BOUNDARY
- - - - - FUTURE
- ▭ CABLE TRENCH

NOT TO BE USED FOR CONSTRUCTION
 THE DISTRIBUTION AND USE OF THE NATIVE FORMAT CAD FILE OF THIS DRAWING IS UNCONTROLLED. THE USER SHALL VERIFY TRACEABILITY OF THIS DRAWING TO THE LATEST CONTROLLED VERSION.

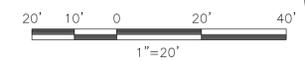
REFERENCE DRAWINGS



| | | | |
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| DESIGNER | NJW | DRAWN | ACG |
| CHECKED | JBS | DATE | 01/18/18 |

PROJECT # 196968

| NO. | DATE | REVISION | DRN | CHKD | DESN | SUPR. |
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| A | 01/05/18 | ISSUED FOR UI REVIEW - PROJ #196968 | ACG | JBS | NJW | ALL |



NEW DRAWING

| No. | Date | Revision | By | Chkd. | Engr. | Supv. |
|-----|------|------------------------------|----|-------|-------|-------|
| - | - | PEQUONNOCK CONCEPTUAL DESIGN | - | - | - | - |



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| Drawn | Date | Scale: 1"=20' |
| Chkd. | Design Engr. | Design Supv. |

| | | |
|--|--------------|----------------|
| PRELIMINARY CONCEPT SITE ARRANGEMENT STANDARD GIS-PRI SITE PEQUONNOCK SUBSTATION | | |
| CAD FILE NAME | SEQUENCE No. | DRAWING NUMBER |
| - | - | PEQ-PR-SK2 |



NOTES

LEGEND

- PROPERTY BOUNDARY
- NEW FENCE
- NEW EQUIPMENT
- EXISTING OVERHEAD TRANSMISSION
- NEW OVERHEAD TRANSMISSION
- EXISTING UNDERGROUND TRANSMISSION
- NEW UNDERGROUND TRANSMISSION
- EXISTING TRANSMISSION STRUCTURE
- NEW TRANSMISSION STRUCTURE

NOT TO BE USED FOR CONSTRUCTION

REFERENCE DRAWINGS



| | | | |
|-----------|--------|-------|----------|
| DESIGNER | JDA | DRAWN | MEM |
| CHECKED | JBS | DATE | 01/30/18 |
| PROJECT # | 196968 | | |

| | | | | | | |
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| B | 01/30/18 | UPDATED PER UI COMMENTS - PROJ #196968 | ACG | JBS | NJW | ALL |
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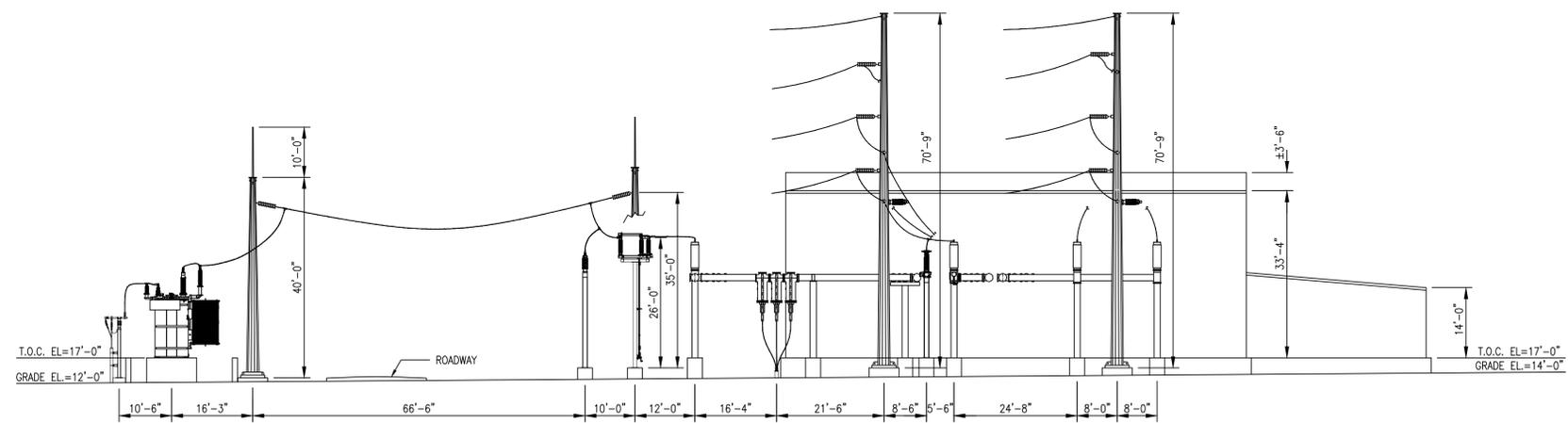
PLAN NORTH
 100' 50' 0 100' 200'
 1"=100'
NEW DRAWING

| | | | | | | |
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| No | Date | Revision | By | Chkd. | Engr. | Supv. |
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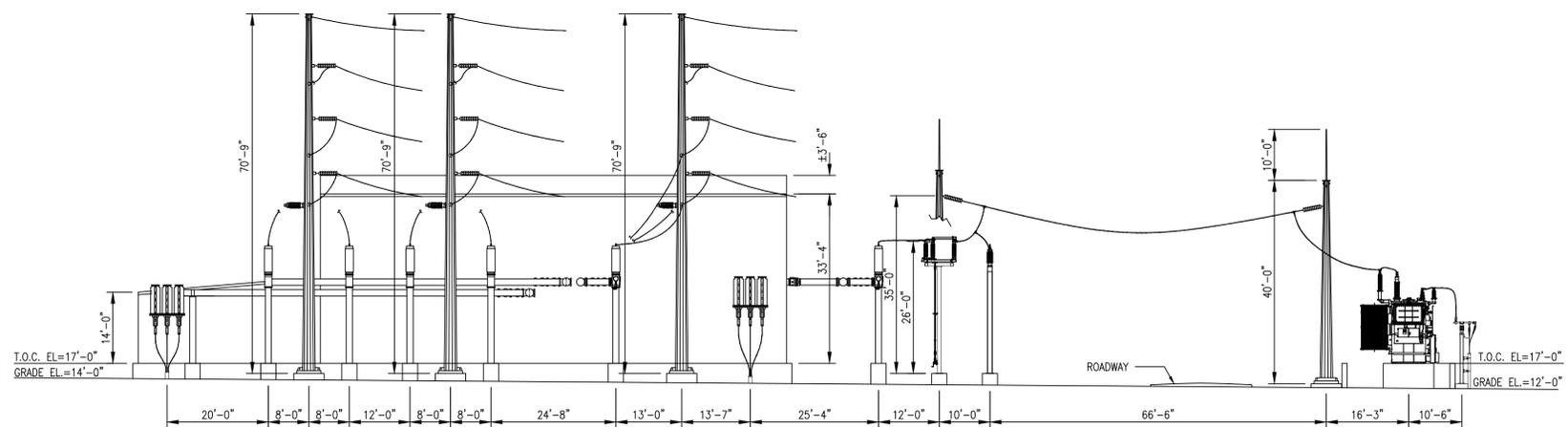
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| Drawn | Date | Scale: |
| | | |
| Chkd. | Design Engr. | Design Supv. |
| | | |

PRELIMINARY CONCEPT
 NEW EQUIPMENT
 PRIMARY SITE
 PEQUONNOCK SUBSTATION

| | | |
|---------------|--------------|----------------|
| CAD FILE NAME | SEQUENCE No. | DRAWING NUMBER |
| | | PEQ-PR-NEW |



SECTION 1



SECTION 2

NOT TO BE USED FOR CONSTRUCTION
 THE DISTRIBUTION AND USE OF THE NATIVE FORMAT CAD FILE OF THIS DRAWING IS UNCONTROLLED. THE USER SHALL VERIFY TRACEABILITY OF THIS DRAWING TO THE LATEST CONTROLLED VERSION.

REFERENCE DRAWINGS:
 SITE ARRANGEMENT SECTION 3

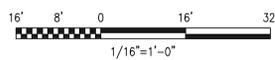
PEQ-PR-SK2
 PEQ-PR-SK4



DESIGNER: NJW
 DRAWN: GCL
 CHECKED: JBS
 DATE: 01/18/2018

PROJECT # 196968

| NO | DATE | REVISION | DRN | CHKD | DESN | SUPR. |
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| A | 01/05/18 | ISSUED FOR UI REVIEW - PROJ. #196968 | GGL | JBS | NJW | ALL |



NEW DRAWING

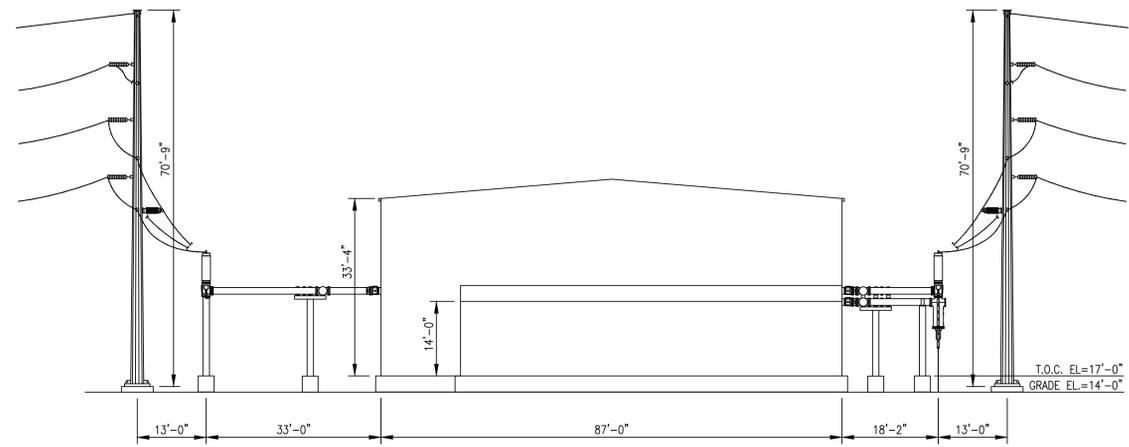
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| - | - | PEQUONNOCK CONCEPTUAL DESIGN | - | - | - | - |



Drawn: _____ Date: _____ Scale: 1/16"=1'-0"
 Chkd.: _____ Design Engr.: _____ Design Supv.: _____

PRELIMINARY CONCEPT
 SECTIONS 1 & 2
 STANDARD GIS - PRI. SITE
 PEQUONNOCK SUBSTATION

CAD FILE NAME: _____ SEQUENCE No.: _____ DRAWING NUMBER: PEQ-PR-SK3



SECTION 3

NOT TO BE USED FOR CONSTRUCTION
 THE DISTRIBUTION AND USE OF THE NATIVE FORMAT CAD FILE OF THIS DRAWING IS UNCONTROLLED. THE USER SHALL VERIFY TRACEABILITY OF THIS DRAWING TO THE LATEST CONTROLLED VERSION.

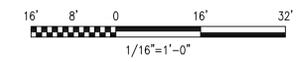
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 SITE ARRANGEMENT SECTIONS 1 & 2 PEQ-PR-SK2
 PEQ-PR-SK3



DESIGNER NJW DRAWN GCL
 CHECKED JBS DATE 01/018/2018

PROJECT # 196968

| NO | DATE | REVISION | DRN | CHKD | DESN | SUPR. |
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| A | 01/05/18 | ISSUED FOR UI REVIEW - PROJ. #196968 | GGL | JBS | NJW | ALL |



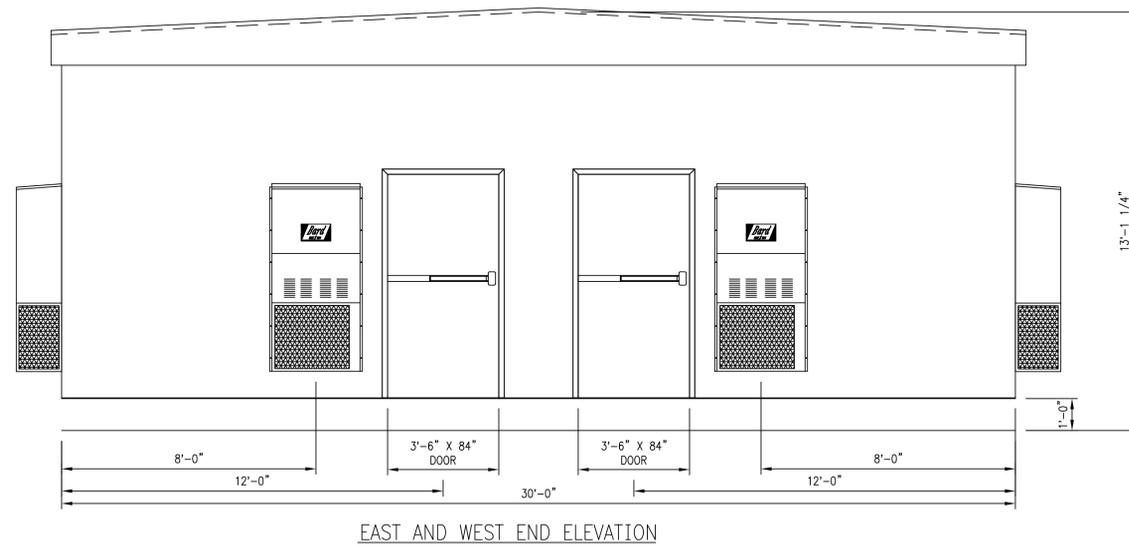
NEW DRAWING

| No | Date | Revision | By | Chkd. | Engr. | Supv. |
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| - | - | PEQUONNOCK CONCEPTUAL DESIGN | - | - | - | - |

Drawn _____ Date _____ Scale: 1/16"=1'-0"
 Chkd. _____ Design Engr. _____ Design Supv. _____

PRELIMINARY CONCEPT
 SECTION 3
 STANDARD GIS - PRI. SITE
 PEQUONNOCK SUBSTATION

CAD FILE NAME _____ SEQUENCE No. _____ DRAWING NUMBER
 PEQ-PR-SK4



PRELIMINARY

NOT TO BE USED FOR CONSTRUCTION

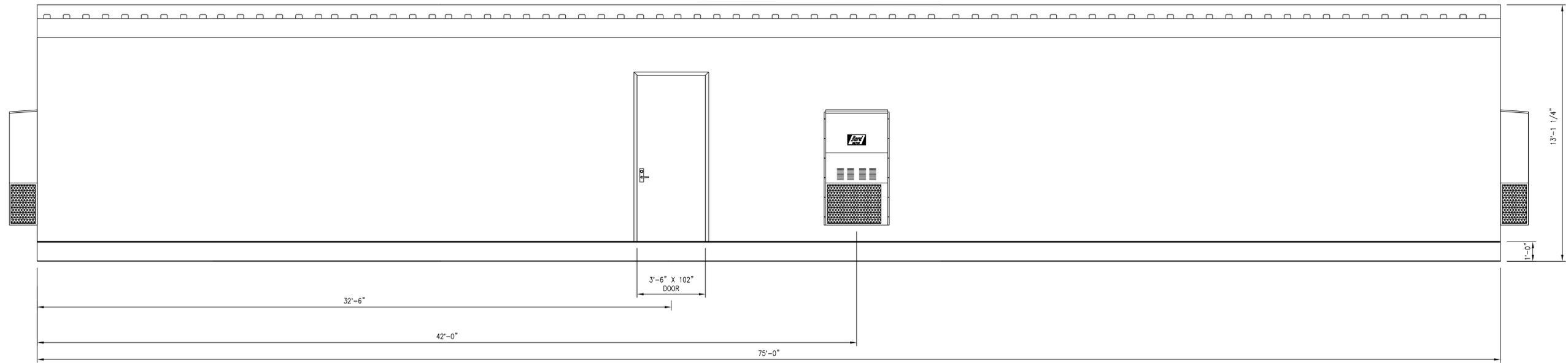
NEW DRAWING

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| DESIGNER | JBS | DRAWN | SLC | | | | |
| CHECKED | - | DATE | - | | | | |
| PROJECT # 196968 | | | | | | | |
| A | 01/04/2018 | ISSUED FOR REVIEW-PROJECT #196968-RELOCATION CONCEPTUAL DESIGN | SLC | - | JBS | MAV | |
| NO | DATE | REVISION | DRN | CHKD | DESN | SUPR. | |

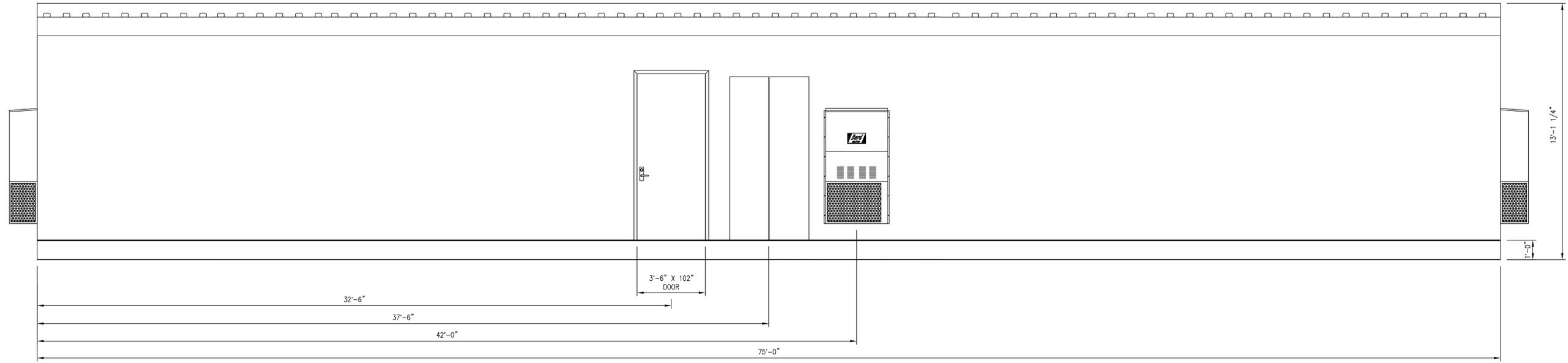
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| 1 | 01/2018 | RELOCATION CONCEPTUAL DESIGN | SLC | - | JBS | - | |
| No | Date | Revision | By | Chkd. | Engr. | Supv. | |

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| | | |
| Drawn | Date 01/03/2017 | Scale: 3/8"=1'-0" |
| Chkd. | Design Engr. | Design Supv. |

| | | |
|---------------------------------|--------------|----------------|
| EXTERIOR ELEVATIONS - END VIEWS | | |
| PEQUONNOCK PDC | | |
| CAD FILE NAME | SEQUENCE No. | DRAWING NUMBER |
| | - | PEQ-SK-PDC2 |



NORTH ELEVATION



SOUTH ELEVATION

PRELIMINARY

NOT TO BE USED FOR CONSTRUCTION

NEW DRAWING

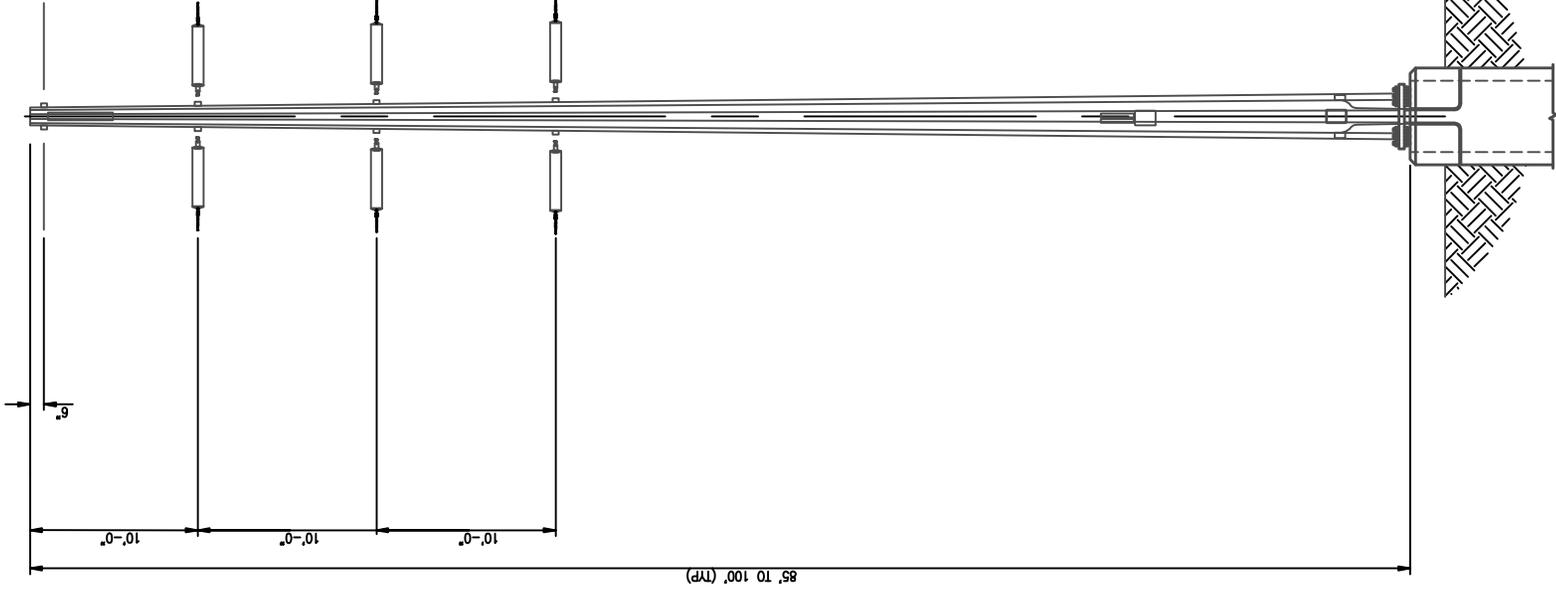
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| DESIGNER | JBS | DRAWN | SLC | | | | | | |
| CHECKED | - | DATE | - | | | | | | |
| PROJECT # 196968 | | | | | | | | | |
| A | 01/04/2018 | ISSUED FOR REVIEW-PROJECT #196968-RELOCATION CONCEPTUAL DESIGN | | | SLC | - | JBS | MAV | |
| NO | DATE | REVISION | | | DRN | CHKD | DES | SUPR. | |

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| 1 | 01/2018 | RELOCATION CONCEPTUAL DESIGN | SLC | - | JBS | - | | | |
| No | Date | Revision | By | Chkd. | Engr. | Supv. | | | |



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| Drawn | Date | Scale |
| | 01/03/2017 | 3/8"=1'-0" |
| Chkd. | Design Engr. | Design Supv. |

| | | |
|-----------------------------------|--------------|----------------|
| NORTH & SOUTH EXTERIOR ELEVATIONS | | |
| PEQUONNOCK PDC | | |
| CAD FILE NAME | SEQUENCE NO. | DRAWING NUMBER |
| | - | PEQ-SK-PDC1 |



ELEVATION



ENGINEER MAP DRAWN ALT
 CHECKED DATE 01/15/2018 NO DATE 01/15/2018

REVISIONS AND RECORD OF ISSUE

| REV | DESCRIPTION | DATE |
|-----|-------------|------|
| A | 01/15/2018 | NO |

DRAWING NUMBER

REV

PEQUONNOCK RELOCATION
 TYPICAL SINGLE CIRCUIT DEADEND

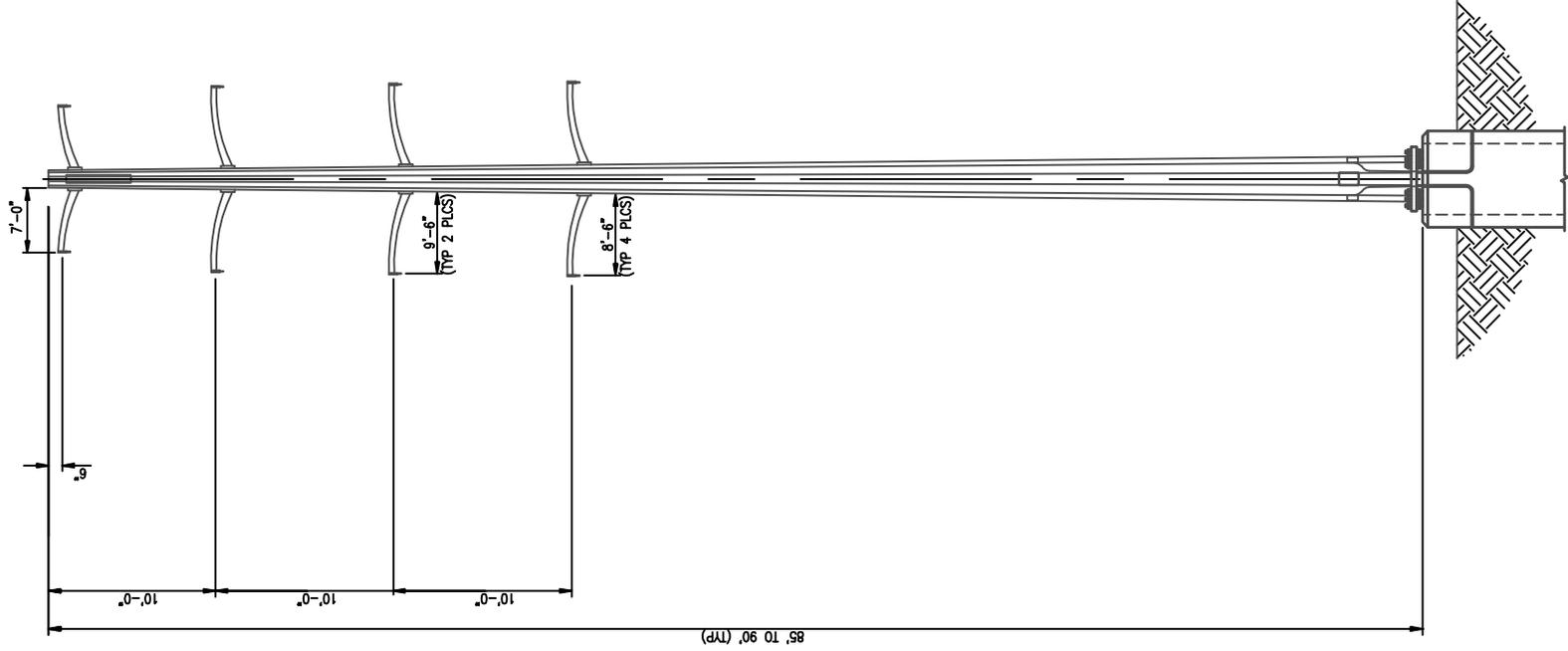
PROJECT

DRAWING NUMBER

REV

DRN DES CHK PDE APP

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ELEVATION



ENGINEER
 CHECKED
 MAP
 DATE

DRAWN
 ALT
 DATE

A
 NO
 DATE

REVISIONS AND RECORD OF ISSUE

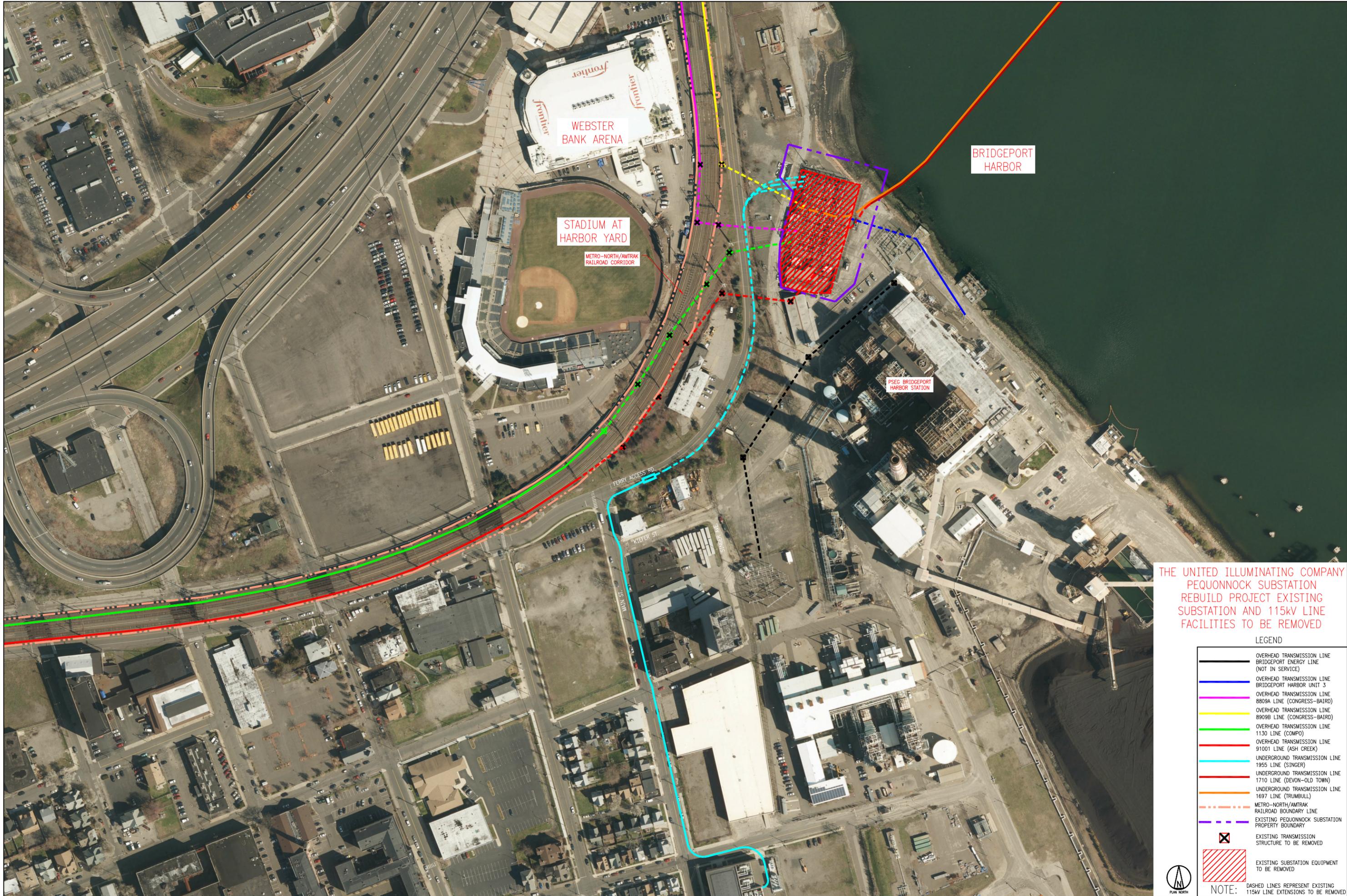
REV

DRAWING NUMBER

PROJECT

PEQUONNOCK RELOCATION
 TYPICAL DOUBLE CIRCUIT DEADEND

DRN
 DES
 CHK
 PDE
 APP



WEBSTER BANK ARENA

STADIUM AT HARBOR YARD

METRO-NORTH/AMTRAK RAILROAD CORRIDOR

PSEG BRIDGEPORT HARBOR STATION

BRIDGEPORT HARBOR

FERRY ACCESS RD.

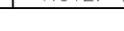
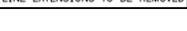
KIEPER ST.

SINGER ST.

WAY ST.

THE UNITED ILLUMINATING COMPANY
 PEQUONNOCK SUBSTATION
 REBUILD PROJECT EXISTING
 SUBSTATION AND 115KV LINE
 FACILITIES TO BE REMOVED

LEGEND

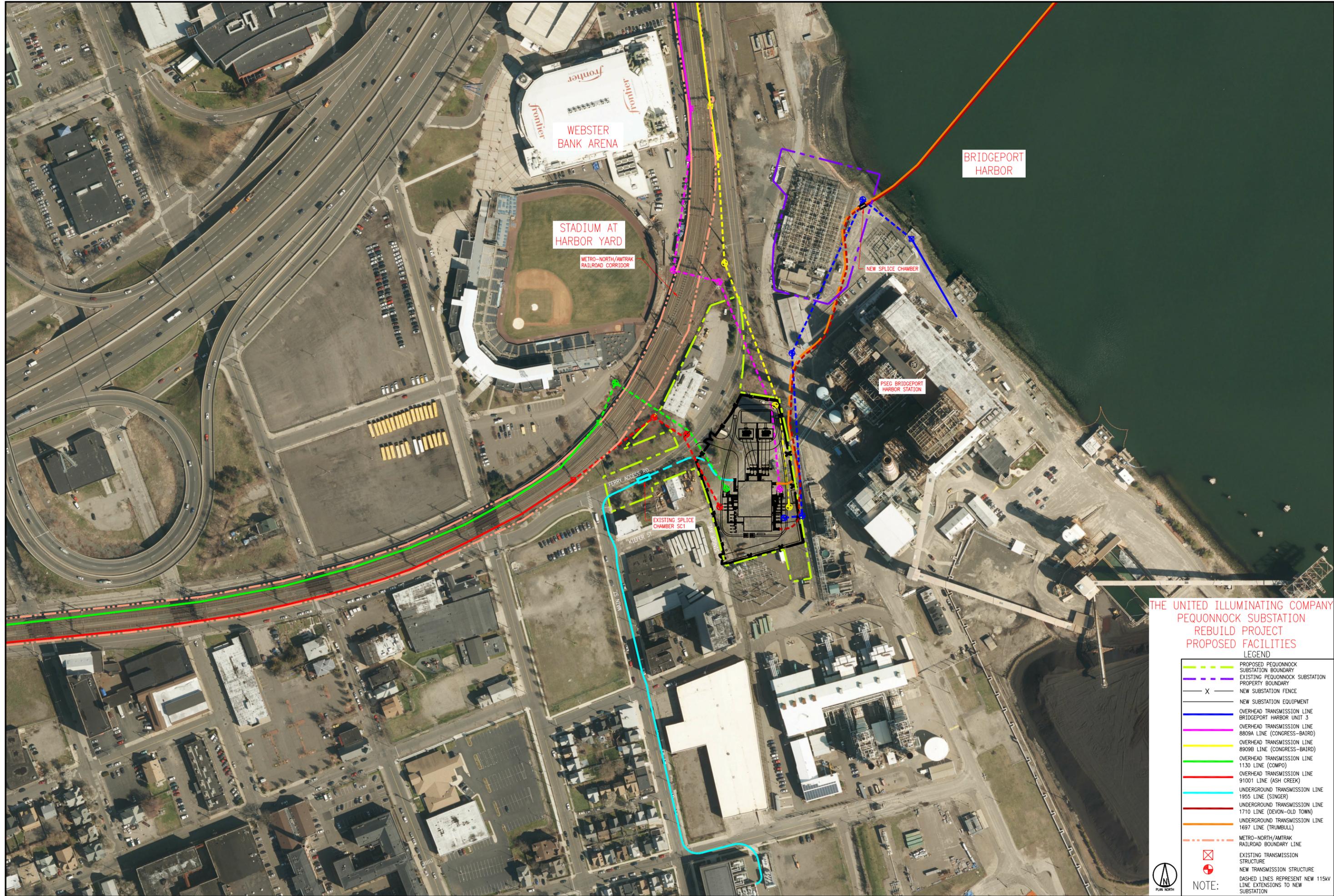
-  OVERHEAD TRANSMISSION LINE BRIDGEPORT ENERGY LINE (NOT IN SERVICE)
-  OVERHEAD TRANSMISSION LINE BRIDGEPORT HARBOR UNIT 3
-  OVERHEAD TRANSMISSION LINE 8809A LINE (CONGRESS-BAIRD)
-  OVERHEAD TRANSMISSION LINE 8909B LINE (CONGRESS-BAIRD)
-  OVERHEAD TRANSMISSION LINE 1130 LINE (COMPO)
-  OVERHEAD TRANSMISSION LINE 91001 LINE (ASH CREEK)
-  UNDERGROUND TRANSMISSION LINE 1955 LINE (SINGER)
-  UNDERGROUND TRANSMISSION LINE 1710 LINE (DEVON-OLD TOWN)
-  UNDERGROUND TRANSMISSION LINE 1697 LINE (TRUMBULL)
-  METRO-NORTH/AMTRAK RAILROAD BOUNDARY LINE
-  EXISTING PEQUONNOCK SUBSTATION PROPERTY BOUNDARY

 EXISTING TRANSMISSION STRUCTURE TO BE REMOVED

 EXISTING SUBSTATION EQUIPMENT TO BE REMOVED



NOTE: DASHED LINES REPRESENT EXISTING 115KV LINE EXTENSIONS TO BE REMOVED



WEBSTER BANK ARENA

STADIUM AT HARBOR YARD

METRO-NORTH/AMTRAK RAILROAD CORRIDOR

BRIDGEPORT HARBOR

NEW SPLICE CHAMBER

PSEG BRIDGEPORT HARBOR STATION

EXISTING SPLICE CHAMBER SC1

FERRY ACCESS RD

KIEFER ST

MAY ST

SINGER AVE

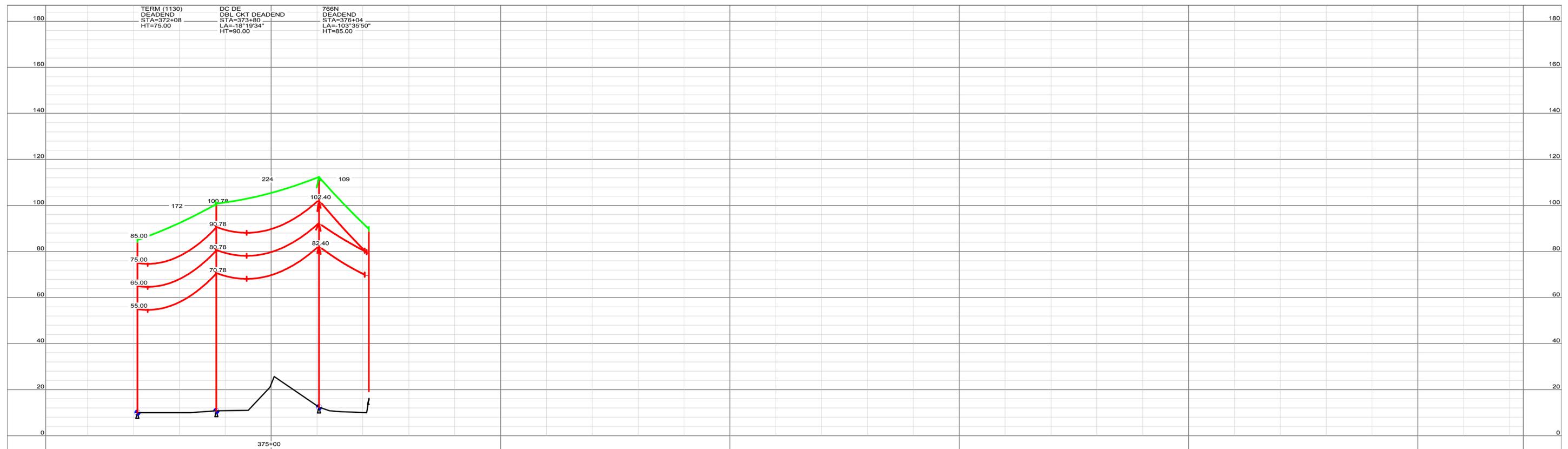
THE UNITED ILLUMINATING COMPANY
 PEQUONNOCK SUBSTATION
 REBUILD PROJECT
 PROPOSED FACILITIES
 LEGEND

- PROPOSED PEQUONNOCK SUBSTATION BOUNDARY
- EXISTING PEQUONNOCK SUBSTATION BOUNDARY
- X NEW SUBSTATION FENCE
- NEW SUBSTATION EQUIPMENT
- OVERHEAD TRANSMISSION LINE BRIDGEPORT HARBOR UNIT 3
- OVERHEAD TRANSMISSION LINE 8809A LINE (CONGRESS-BAIRD)
- OVERHEAD TRANSMISSION LINE 8909B LINE (CONGRESS-BAIRD)
- OVERHEAD TRANSMISSION LINE 1130 LINE (COMPO)
- OVERHEAD TRANSMISSION LINE 91001 LINE (ASH CREEK)
- UNDERGROUND TRANSMISSION LINE 1955 LINE (SINGER)
- UNDERGROUND TRANSMISSION LINE 1710 LINE (DEVON-OLD TOWN)
- UNDERGROUND TRANSMISSION LINE 1687 LINE (TRUMBULL)
- METRO-NORTH/AMTRAK RAILROAD BOUNDARY LINE

EXISTING TRANSMISSION STRUCTURE
+ NEW TRANSMISSION STRUCTURE
 DASHED LINES REPRESENT NEW 115KV LINE EXTENSIONS TO NEW SUBSTATION



Appendix A.2: Substation Transmission Line Connections - Overhead



100.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

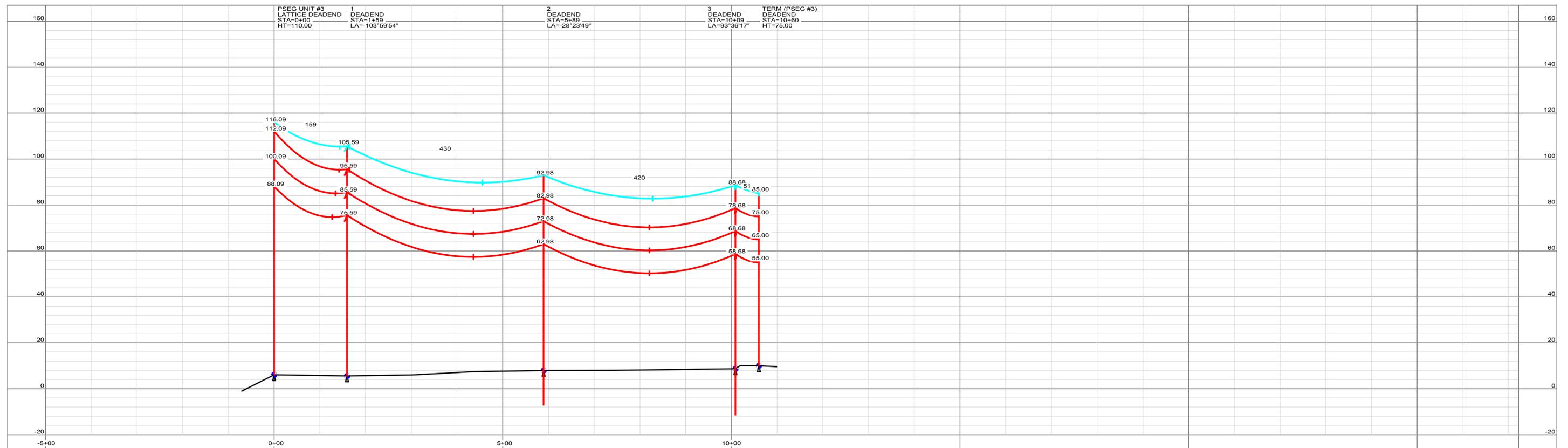
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| BLACK & VEATCH Building a world of difference. | | | | | | | |
| DESIGNER | DRAWN | | | | | | |
| CHECKED | DATE | | | | | | |
| PROJECT # | | | | | | | |
| A | 12/20/17 | ISSUE FOR REVIEW | | | | | |
| NO | DATE | REVISION | | | | | |
| | | | BV | | | | |
| | | | DRN | DESN | CHKD | SUPR. | |

| | | | | | | | |
|----|------|----------|----|-------|-------|-------|--|
| | | | | | | | |
| No | Date | Revision | By | Chkd. | Engr. | Supv. | |



Drawn _____ Date _____ Scale: **SEE PLAN**
Chkd. _____ Design Engr. _____ Design Supv. _____

| | | |
|--|--------------|-------------------|
| 1130 - PEQUONNOCK TO COMPO 115 KV TRANSMISSION LINE | | |
| PEQUONNOCK RELOCATION PLAN & PROFILE | | |
| CAD FILE NAME | SEQUENCE No. | DRAWING NUMBER |
| | | SK-1130-01 |



100.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



PRELIMINARY

NOT TO BE USED FOR CONSTRUCTION

| | | | | | | | |
|--|----------|------------------|--|-----|------|------|-------|
| BLACK & VEATCH Building a world of difference. | | | | | | | |
| DESIGNER | DRAWN | | | | | | |
| CHECKED | DATE | | | | | | |
| PROJECT # | | | | | | | |
| A | 12/20/17 | ISSUE FOR REVIEW | | BV | | | |
| NO | DATE | REVISION | | DRN | DESN | CHKD | SUPR. |

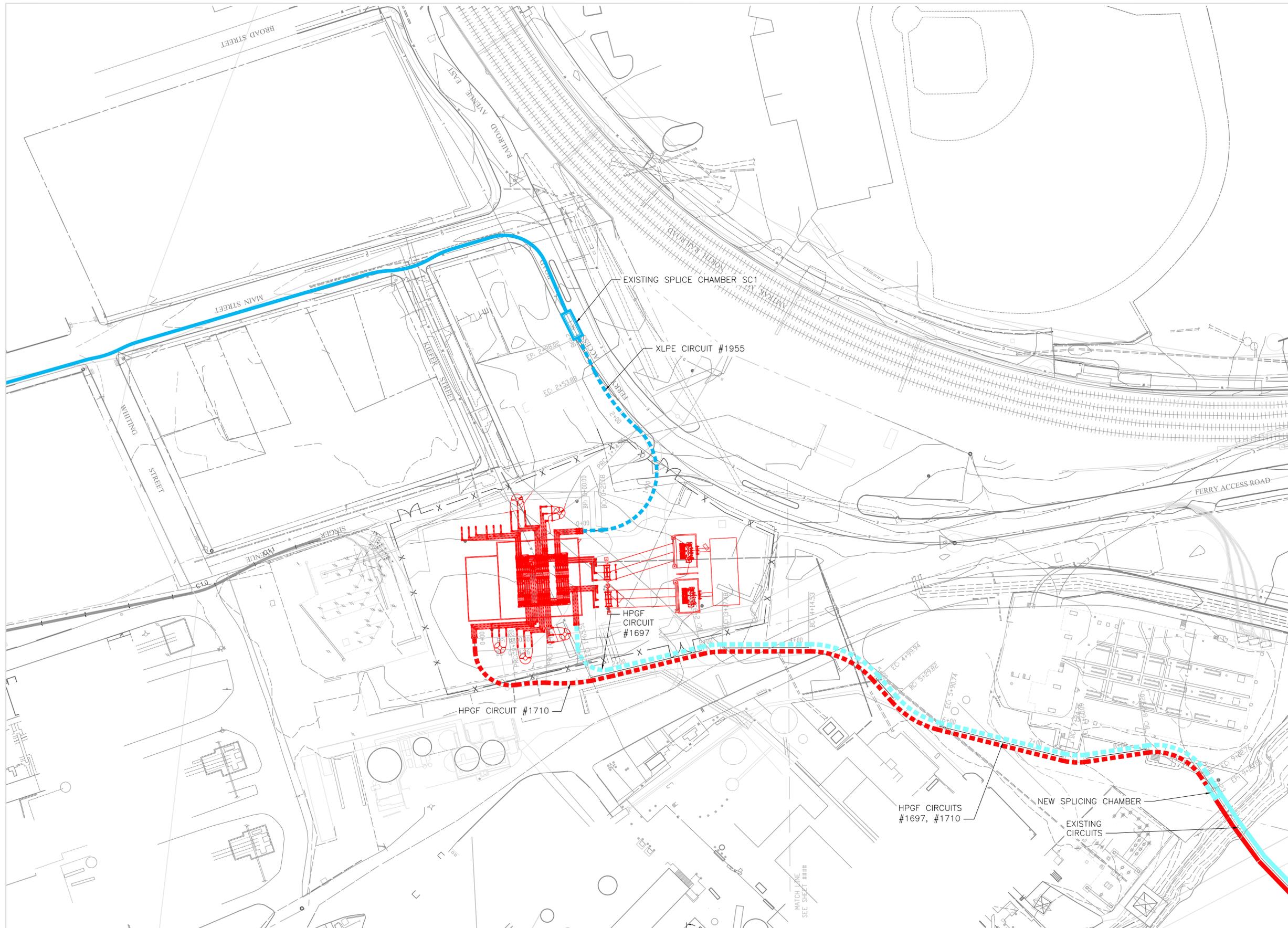
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| No | Date | Revision | By | Chkd. | Engr. | Supv. |
| | | | | | | |



Drawn _____ Date _____ Scale: **SEE PLAN**
Chkd. _____ Design Engr. _____ Design Supv. _____

| | | |
|--|--------------|--------------------|
| PSEG UNIT #3 TO PEQUONNOCK 115 KV TRANSMISSION LINE | | |
| PEQUONNOCK RELOCATION PLAN & PROFILE | | |
| CAD FILE NAME | SEQUENCE No. | DRAWING NUMBER |
| | | SK-UNIT3-01 |

Appendix A.3: Substation Transmission Line Connections - Underground



NOTES

LEGEND

| | |
|---------------------------|-----------------------------|
| — | ROAD |
| - - - | ROAD CENTERLINE |
| — 10 — | MAJOR CONTOUR |
| — 11 — | MINOR CONTOUR |
| — | NEW STRUCTURES |
| — X — X — | NEW SECURITY FENCE |
| — - - - | PROPERTY BOUNDARY |
| - - - - | EXISTING GRADE |
| - - - - - | FUTURE SUBSTATION GRADE |
| — (solid blue) — | EXISTING XLPE CIRCUIT #1955 |
| - - - (dashed blue) - - - | XLPE CIRCUIT #1955 |
| - - - (dashed cyan) - - - | HPGF CIRCUIT #1697 |
| - - - (dashed red) - - - | HPGF CIRCUIT #1710 |
| — (solid cyan) — | EXISTING HPGF CIRCUIT #1697 |
| — (solid red) — | EXISTING HPGF CIRCUIT #1710 |

NOT TO BE USED FOR CONSTRUCTION
 THE DISTRIBUTION AND USE OF THE NATIVE FORMAT CAD FILE OF THIS DRAWING IS UNCONTROLLED. THE USER SHALL VERIFY TRACEABILITY OF THIS DRAWING TO THE LATEST CONTROLLED VERSION.

REFERENCE DRAWINGS

BLACK & VEATCH
 Building a world of difference

DESIGNER: SX, DRAWN: RMB
 CHECKED: DATE: 12/08/17
 PROJECT # 196968

| NO. | DATE | REVISION | DRN | CHKD | DESN | SUPR. |
|-----|------|----------|-----|------|------|-------|
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| | | | | | | |

50' 25' 0 50' 100'
 1"=50'

NEW DRAWING

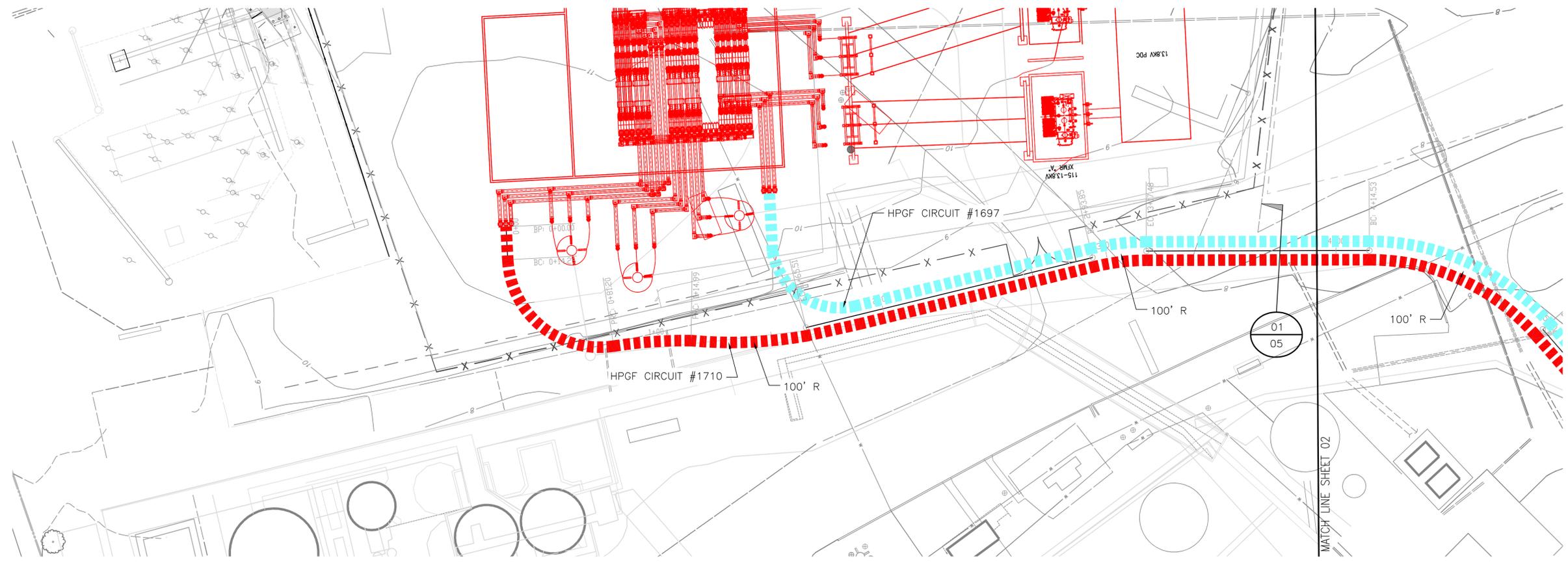
| No. | Date | Revision | By | Chkd. | Engr. | Supv. |
|-----|----------|--------------------------|-----|-------|-------|-------|
| B | 02/14/18 | ISSUED FOR CLIENT REVIEW | RMB | - | SX | - |
| A | 12/13/17 | ISSUED FOR CLIENT REVIEW | RMB | - | SX | - |

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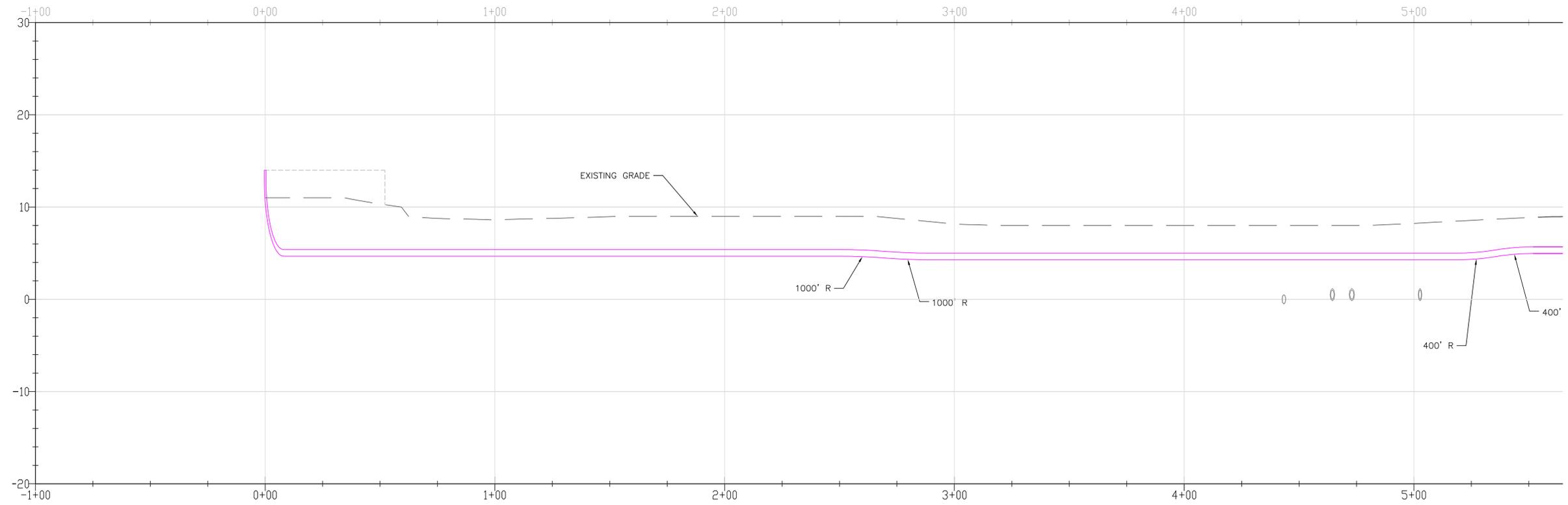
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 Chkd.: - , Design Engr.: SX, Design Supv.: -

PEQUONNOCK SUBSTATION
 RELOCATION PROJECT
 HPGF & XLPE ROUTE MAP
 PRIMARY SITE STANDARD SET

CAD FILE NAME: - , SEQUENCE No.: - , DRAWING NUMBER: PEQ-UG-SK-01



PLAN VIEW



PROFILE VIEW

NOTES

LEGEND

- ROAD
- ROAD CENTERLINE
- MAJOR CONTOUR
- MINOR CONTOUR
- NEW STRUCTURES
- NEW SECURITY FENCE
- PROPERTY BOUNDARY
- EXISTING GRADE
- FUTURE SUBSTATION GRADE
- HPGF CIRCUIT #1697
- HPGF CIRCUIT #1710

NOT TO BE USED FOR CONSTRUCTION
 THE DISTRIBUTION AND USE OF THE NATIVE FORMAT CAD FILE OF THIS DRAWING IS UNCONTROLLED. THE USER SHALL VERIFY TRACEABILITY OF THIS DRAWING TO THE LATEST CONTROLLED VERSION.

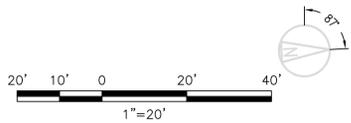
REFERENCE DRAWINGS



DESIGNER SX DRAWN RMB
 CHECKED DATE 12/08/17

PROJECT # 196968

| NO. | DATE | REVISION | DRN | CHKD | DESN | SUPR. |
|-----|------|----------|-----|------|------|-------|
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NEW DRAWING

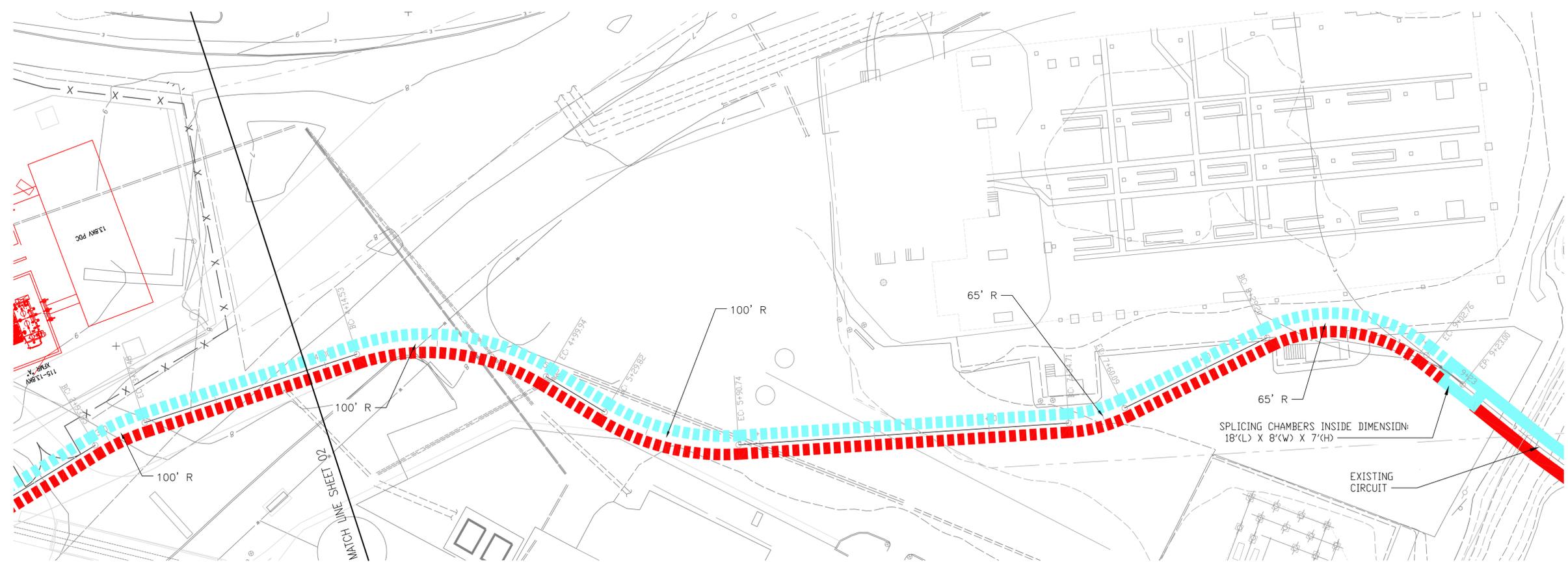
| No. | Date | Revision | By | Chkd. | Engr. | Supv. |
|-----|----------|--------------------------|-----|-------|-------|-------|
| B | 02/14/18 | ISSUED FOR CLIENT REVIEW | RMB | - | SX | - |
| A | 12/13/17 | ISSUED FOR CLIENT REVIEW | RMB | - | SX | - |



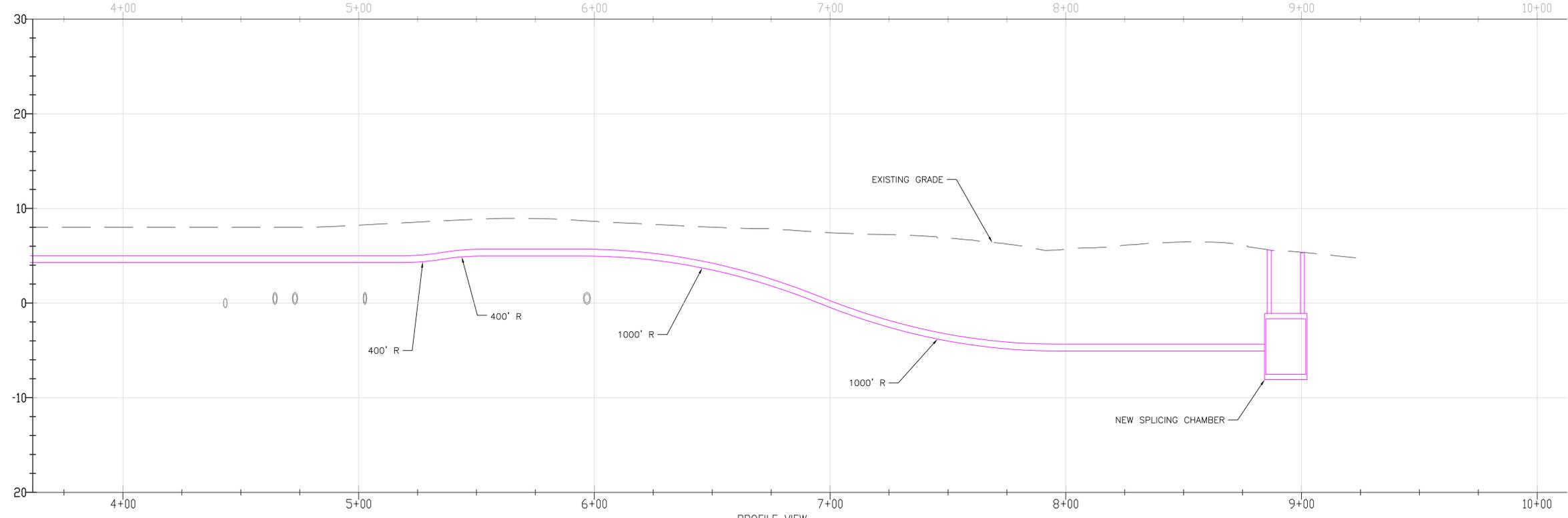
Drawn RMB Date 11/30/17 Scale: 1"=20'
 Design Engr. SX Design Supv. -

PEQUONNOCK SUBSTATION
 RELOCATION PROJECT
 HPGF CIRCUIT #1697 & #1710
 PLAN & PROFILE

| | | |
|---------------|--------------|----------------|
| CAD FILE NAME | SEQUENCE No. | DRAWING NUMBER |
| - | - | PEQ-UG-SK-02 |



PLAN VIEW



PROFILE VIEW

NOTES

LEGEND

- ROAD
- ROAD CENTERLINE
- MAJOR CONTOUR
- MINOR CONTOUR
- NEW STRUCTURES
- NEW SECURITY FENCE
- PROPERTY BOUNDARY
- EXISTING GRADE
- FUTURE SUBSTATION GRADE
- HPGF CIRCUIT #1697
- HPGF CIRCUIT #1710
- EXISTING HPGF CIRCUIT #1697
- EXISTING HPGF CIRCUIT #1710

NOT TO BE USED FOR CONSTRUCTION
 THE DISTRIBUTION AND USE OF THE NATIVE FORMAT CAD FILE OF THIS DRAWING IS UNCONTROLLED. THE USER SHALL VERIFY TRACEABILITY OF THIS DRAWING TO THE LATEST CONTROLLED VERSION.

REFERENCE DRAWINGS

| | | | | | | | | | |
|---|--------|----------|--------------------------|-----|------|------|------|--|--|
| BLACK & VEATCH Building a world of difference | | | | | | | | | |
| DESIGNER | SX | DRAWN | RMB | | | | | | |
| CHECKED | | DATE | 12/08/17 | | | | | | |
| PROJECT # | 196988 | | | | | | | | |
| | B | 02/14/18 | ISSUED FOR CLIENT REVIEW | RMB | - | SX | - | | |
| | A | 12/13/17 | ISSUED FOR CLIENT REVIEW | RMB | - | SX | - | | |
| | NO | DATE | REVISION | DRN | CHKD | DESJ | SUPR | | |

20' 10' 0 20' 40'
1"=20'

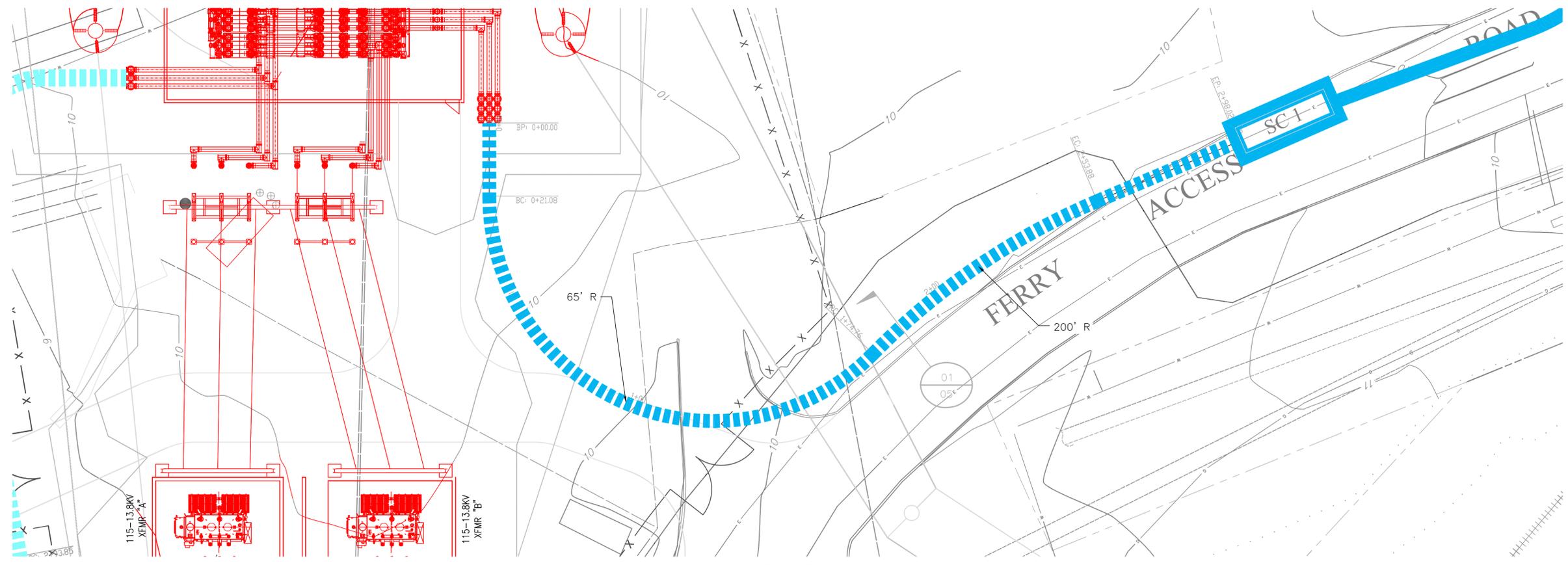
NEW DRAWING

| No | Date | Revision | By | Chkd. | Engr. | Supv. |
|----|------|----------|----|-------|-------|-------|
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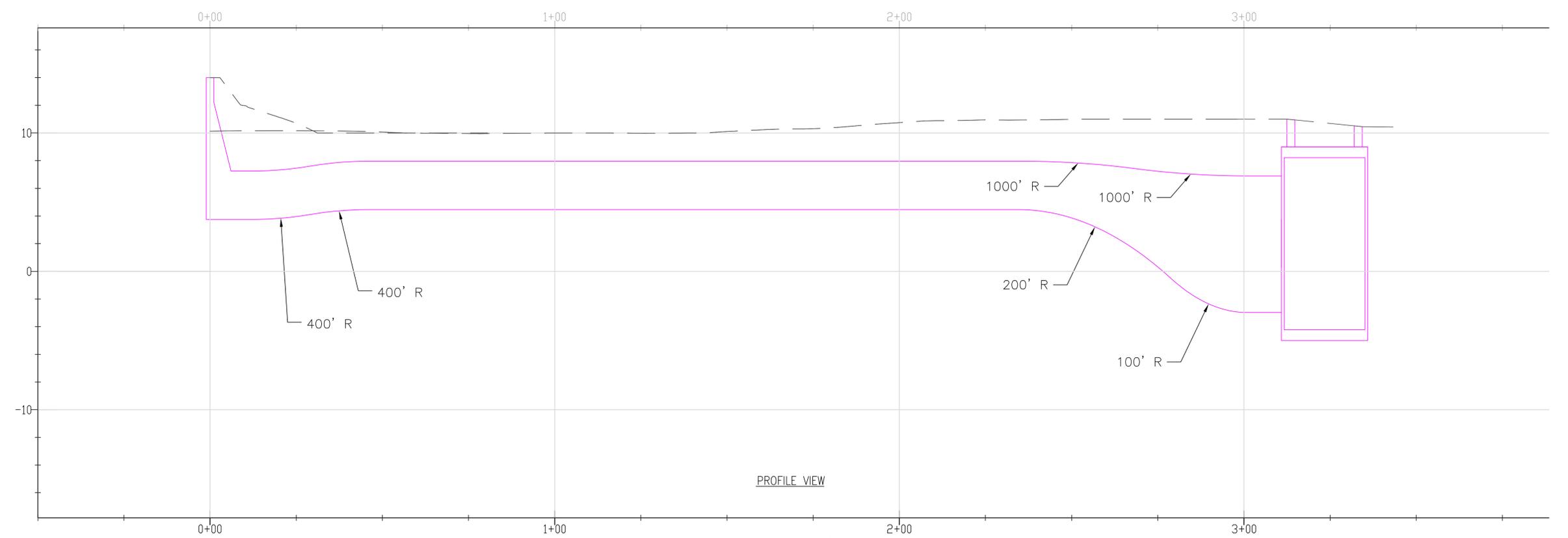


| | | | | | |
|-------|-----|--------------|----------|--------------|--------|
| Drawn | RMB | Date | 11/30/17 | Scale: | 1"=20' |
| Chkd. | - | Design Engr. | SX | Design Supv. | - |

| | | |
|---|--------------|----------------|
| PEQUONNOCK SUBSTATION RELOCATION PROJECT HPGF CIRCUIT #1697 & #1710 PLAN & PROFILE | | |
| CAD FILE NAME | SEQUENCE No. | DRAWING NUMBER |
| - | - | PEQ-UG-SK-03 |



PLAN VIEW



PROFILE VIEW

NOTES

LEGEND

- ROAD
- ROAD CENTERLINE
- MAJOR CONTOUR
- MINOR CONTOUR
- NEW STRUCTURES
- NEW SECURITY FENCE
- PROPERTY BOUNDARY
- EXISTING GRADE
- FUTURE SUBSTATION GRADE
- EXISTING XLPE CIRCUIT #1955
- XLPE CIRCUIT #1955

NOT TO BE USED FOR CONSTRUCTION
 THE DISTRIBUTION AND USE OF THE NATIVE FORMAT CAD FILE OF THIS DRAWING IS UNCONTROLLED. THE USER SHALL VERIFY TRACEABILITY OF THIS DRAWING TO THE LATEST CONTROLLED VERSION.

REFERENCE DRAWINGS

| | | | | | | | | | |
|--|--------|----------|--------------------------|-----|------|------|-------|--|--|
| BLACK & VEATCH Building a world of difference® | | | | | | | | | |
| DESIGNER | SX | DRAWN | RMB | | | | | | |
| CHECKED | | DATE | 12/08/17 | | | | | | |
| PROJECT # | 196988 | | | | | | | | |
| | B | 02/14/18 | ISSUED FOR CLIENT REVIEW | RMB | - | SX | - | | |
| | A | 12/13/17 | ISSUED FOR CLIENT REVIEW | RMB | - | SX | - | | |
| NO. | DATE | REVISION | | DRN | CHKD | DESN | SUPR. | | |

16' 8' 0 16' 32'

1"=16'

NEW DRAWING

| | | | | | | |
|-----|------|----------|----|-------|-------|-------|
| No. | Date | Revision | By | Chkd. | Engr. | Supv. |
| | | | | | | |

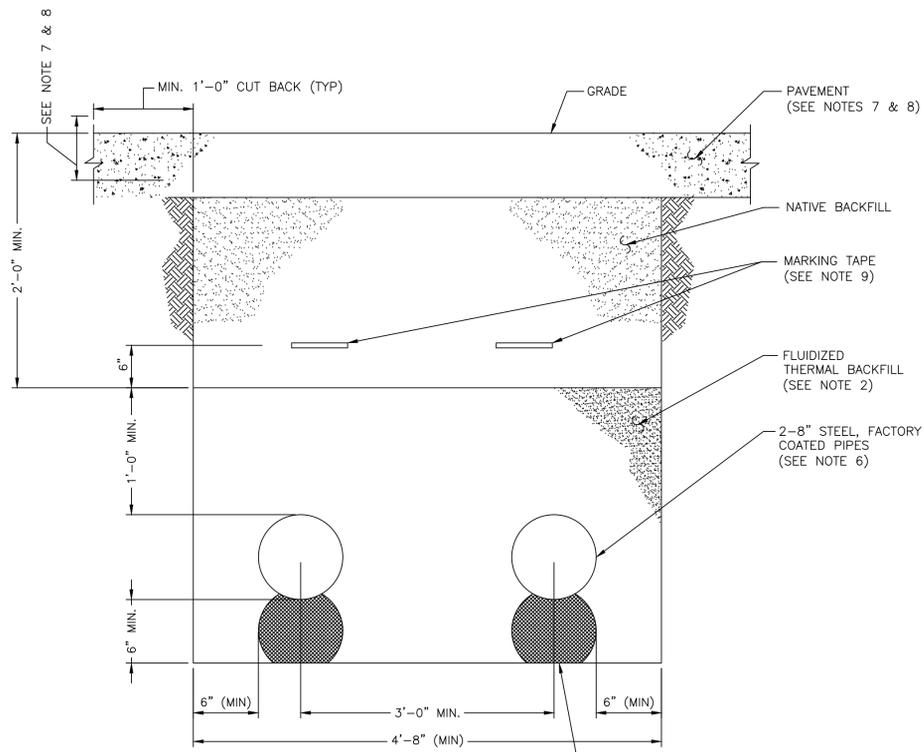


| | | | | | |
|-------|-----|--------------|----------|--------------|--------|
| Drawn | RMB | Date | 01/17/18 | Scale: | 1"=20' |
| Chkd. | - | Design Engr. | SX | Design Supv. | - |

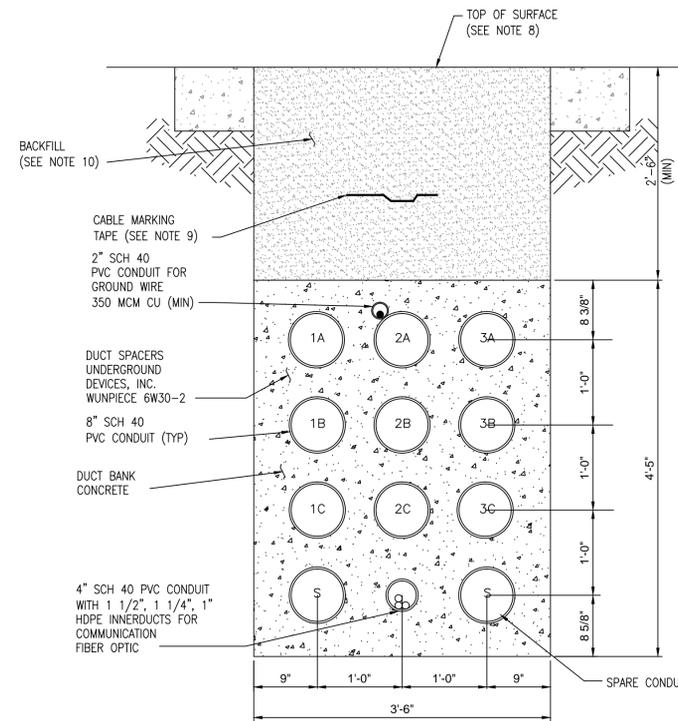
| | | |
|---|--------------|----------------|
| PEQUONNOCK SUBSTATION RELOCATION PROJECT XLPE CIRCUIT #1955 PLAN & PROFILE | | |
| CAD FILE NAME | SEQUENCE No. | DRAWING NUMBER |
| - | 1710,1690 | PEQ-UG-SK-04 |

NOTES:

- FOR GENERAL NOTES, SEE DWG LTR.
- FLUIDIZED THERMAL BACKFILL (FTB) SHALL BE USED FOR CABLE PIPE FILL MATERIAL, FTB SHALL BE AS SPECIFIED IN THE CONSTRUCTION SPECIFICATIONS.
- CONTRACTOR SHALL USE A DRY MIXTURE OF THE FTB BACKFILL AS SPECIFIED IN THE SPECIFICATIONS FOR SUPPORT BAGS.
- CONTRACTOR SHALL RESTORE PAVEMENT AROUND TRENCH TO MATCH EXISTING CONDITIONS. OWNER SHALL APPROVE CONTRACTORS INSTALLATION PRIOR TO STARTING RESTORATION ACTIVITIES.
- SEE PLAN AND PROFILE DRAWINGS FOR CABLE PIPE ELEVATIONS.
- PIPE TYPE CABLE PIPE CLASS AND COATINGS SHALL BE AS INDICATED IN THE SPECIFICATIONS.
- CABLE PIPE TRENCH IS LOCATED WITHIN CITY STREETS. PAVEMENT REPAIR SHALL BE PER CITY OF BRIDGEPORT STANDARDS.
- COMPLETED ROAD BASE, SUCH AS CRUSHED ROCK, SHALL BE USED UNDER ALL PAVEMENT. ROAD BASE MATERIALS SHALL BE ACCEPTABLE TO THE CITY OF BRIDGEPORT AND INSTALLED IN A MDOT APPROVED MANNER.
- CONTRACTOR TO INSTALL WARNING MARKING TAPE ABOVE EACH CABLE PIPE 0'-6" ABOVE THE CONTROLLED BACKFILL MATERIAL.
- FLOWABLE BACKFILL SHALL BE USED FOR THE FILL MATERIAL AS SPECIFIED IN THE CONSTRUCTION SPECIFICATION.



SECTION 1
TYPICAL HPGF PIPING
TRENCH SECTION
NOT TO SCALE



SECTION 2
TYPICAL XLPE CABLE
DUCT BANK SECTION
NOT TO SCALE

| | | | | | | | | | |
|--|----------|--------------------------|----------|-----|------|------|-------|--|--|
| BLACK & VEATCH Building a world of difference. | | | | | | | | | |
| DESIGNER | SX | DRAWN | RMB | | | | | | |
| CHECKED | | DATE | 12/08/17 | | | | | | |
| PROJECT # | 196968 | | | | | | | | |
| NO | DATE | REVISION | | DRN | CHKD | DESN | SUPR. | | |
| B | 02/14/18 | ISSUED FOR CLIENT REVIEW | | RMB | - | SX | - | | |
| A | 12/13/17 | ISSUED FOR CLIENT REVIEW | | RMB | - | SX | - | | |

NEW DRAWING

| | | | | | | |
|----|------|----------|----|-------|-------|-------|
| No | Date | Revision | By | Chkd. | Engr. | Supv. |
| | | | | | | |



| | | | | | |
|-------|-----|--------------|----------|--------------|---|
| Drawn | CBA | Date | 01/17/18 | Scale | - |
| Chkd. | - | Design Engr. | SX | Design Supv. | - |

| | | |
|---|--------------|----------------|
| PEQUONNOCK SUBSTATION RELOCATION PROJECT PIPELINE INSTALLATION TRENCH SECTIONS & DETAILS | | |
| CAD FILE NAME | SEQUENCE No. | DRAWING NUMBER |
| - | - | PEQ-UG-SK-05 |

Appendix A.4: FEMA Maps

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study Report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Connecticut State Plane Zone (FIPS zone 0600). The **horizontal datum** was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, NNGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov>.

Base map information shown on FIRM panels produced for this coastal study revision was derived from United States Geological Survey 2008 High Resolution Orthophotography produced from 1 foot pixel cells from photography dated April 2009. The projection used in the preparation of this map was Connecticut State Plane Feet, FIPS Zone 0600. The horizontal datum used was North American Datum of 1983 (NAD 83).

The AE Zone category has been divided by a **Limit of Moderate Wave Action (LIMWA)**. The LIMWA represents the approximate landward limit of the 1.5 foot breaking wave. The effects of wave hazards between the VE Zone and the LIMWA (or between the shoreline and the LIMWA for areas where VE Zones are not identified) will be similar to, but less severe than those in the VE Zone.

The **profile baselines** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the **profile baseline**, in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.

Based on updated topographic information, this map reflects more detailed and up-to-date **stream channel configurations and floodplain delineations** than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on the map. Also, the road to floodplain relationships for unrevised streams may differ from what is shown on previous maps.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at <http://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

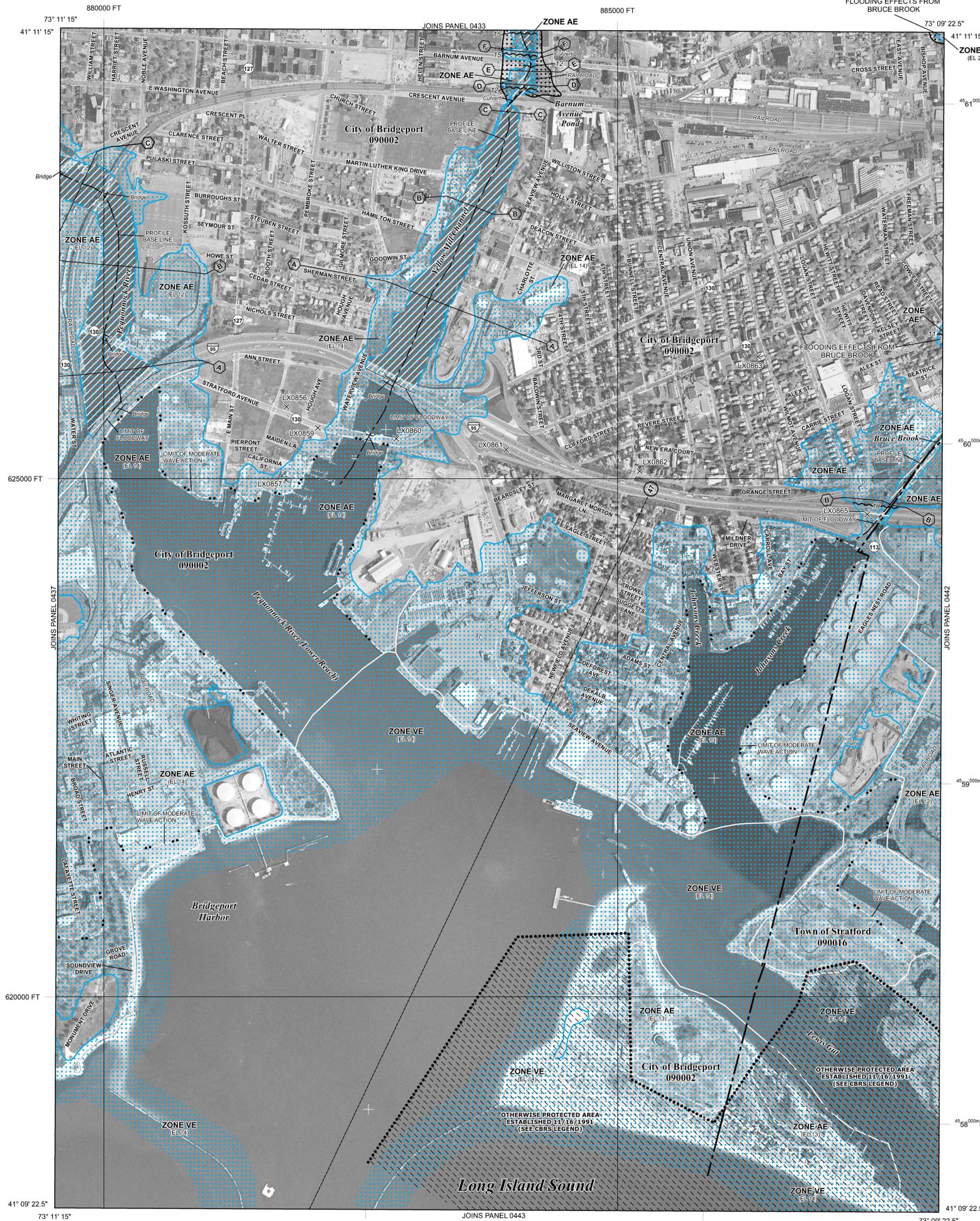
If you have **questions about this map**, how to order products, or the National Flood Insurance Program in general, please call the **FEMA Map Information eXchange (FMIX)** at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov/business/nfp>.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) LEGEND

11-16-1991 Otherwise Protected Area (OPA)
FLOOD INSURANCE NOT AVAILABLE FOR STRUCTURES NEWLY BUILT OR SUBSTANTIALLY IMPROVED ON OR AFTER NOVEMBER 16, 1991 IN DESIGNATED OPAs WITHIN THE CBRS.

Boundaries of the John H. Chafee Coastal Barrier Resources System (CBRS) shown on this FIRM were transferred from the official CBRS source map(s) for this area and are depicted on this FIRM for informational purposes only. The official CBRS maps are enacted by Congress via the Coastal Barrier Resources Act, as amended, and maintained by the U.S. Fish and Wildlife Service (FWS). The official CBRS maps used to determine whether or not an area is located within the CBRS are available for download at <http://www.fws.gov>. For an official determination of whether or not an area is located within the CBRS, or for any questions regarding the CBRS, please contact the FWS field office for this area at 603-223-2541.

Only coastal structures that are certified to provide protection from the 1-percent-annual-chance flood are shown on this panel. However, all structures taken into consideration for the purpose of coastal flood hazard analysis and mapping are present in the FIRM database in S_Gen_Struct.



LEGEND

- SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD. The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The base flood elevation is the water-surface elevation of the 1% annual chance flood.
- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR** Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently described. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.
- FLOODWAY AREAS IN ZONE AE
- The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment under construction; no Base Flood Elevations determined.
- OTHER FLOOD AREAS**
- ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- OTHER AREAS**
- ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.
- ZONE D** Areas in which flood hazards are undetermined, but possible.
- COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS
- OTHERWISE PROTECTED AREAS (OPAs)
- CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.
- 1% Annual Chance Floodplain Boundary
- 0.2% Annual Chance Floodplain Boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
- Limit of Moderate Wave Action
- Limit of Moderate Wave Action coincident with Zone Break
- 513 Base Flood Elevation line and value; elevation in feet* (EL 987)
- Base Flood Elevation value where uniform within zone; elevation in feet*
- *Referenced to the North American Vertical Datum of 1988
- A Cross section line
- 23 Transsect line
- 23 Culvert
- Bridge
- Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere
- 31000000 FT 5000-foot grid; Connecticut State Plane Feet Zone (FIPS Zone 0600), Lambert Conformal Conic projection
- 1000-meter Universal Transverse Mercator grid values, zone 18N
- Bench mark (see explanation in Notes to Users section of this FIRM panel)
- MAP REPOSITORIES
- Refer to Map Repositories list on Map Index
- EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
- June 18, 2010
- EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
- July 8, 2013 - to change Base Flood Elevations and Special Flood Hazard Areas, to change zone designations, to update the effects of wave action, to update corporate limits, to add roads and road names, to incorporate previously issued Letters of Map Revision and to modify Coastal Barrier Resources System units.
- For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.
- To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.
-
- MAP SCALE 1" = 500'
- 250 0 500 1000 FEET
- 150 0 150 300 METERS

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0441G

FIRM
FLOOD INSURANCE RATE MAP
FAIRFIELD COUNTY,
CONNECTICUT
(ALL JURISDICTIONS)

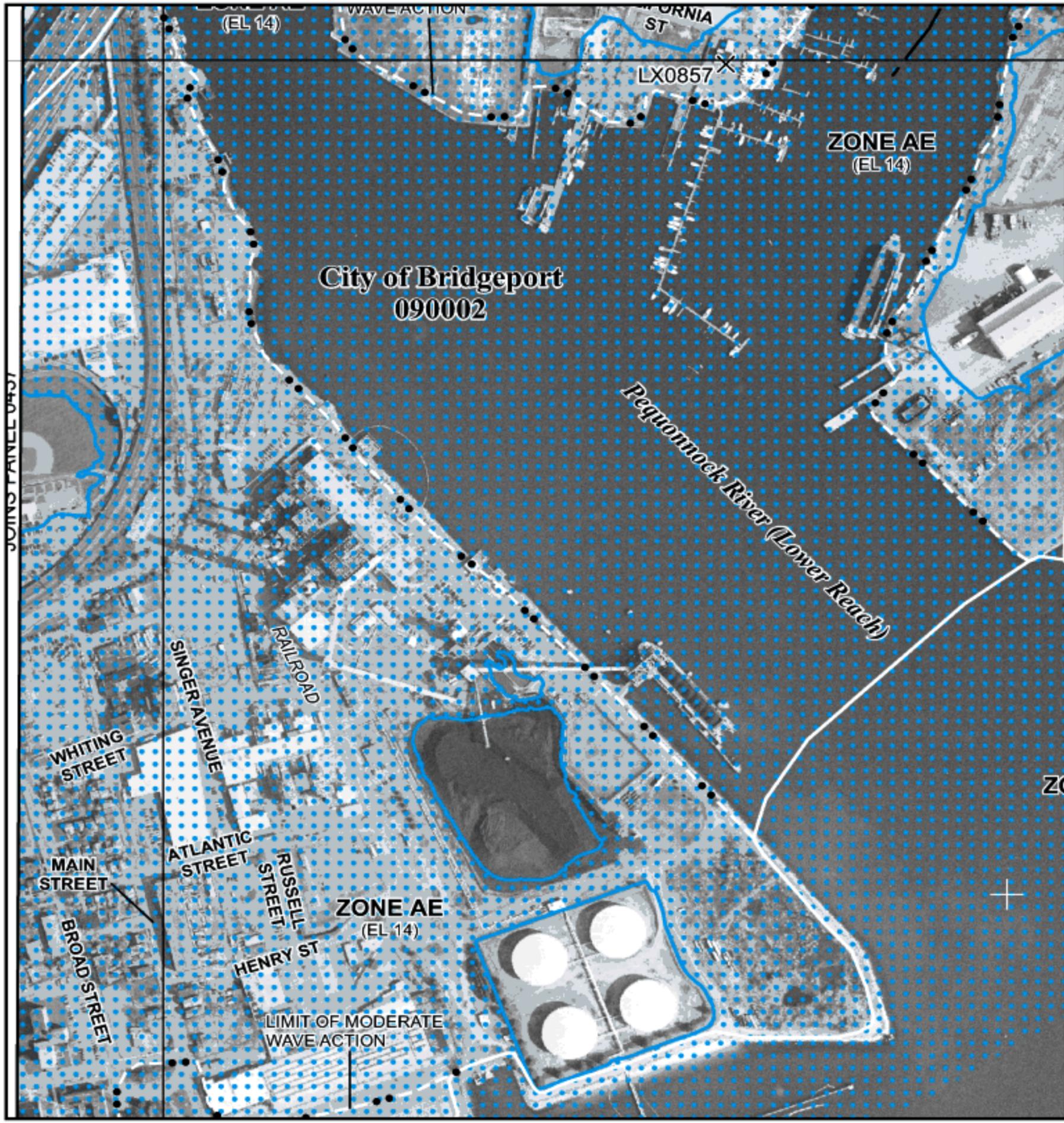
PANEL 441 OF 626
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

| CONTAINS: | COMMUNITY | NUMBER | PANEL | SUFFIX |
|-----------|---------------------|--------|-------|--------|
| | BRIDGEPORT, CITY OF | 090002 | 0441 | G |
| | STRATFORD, TOWN OF | 090016 | 0441 | G |

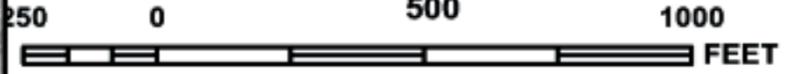
NOTE:
THIS MAP INCLUDES BOUNDARIES OF THE COASTAL BARRIER RESOURCES SYSTEM ESTABLISHED UNDER THE COASTAL BARRIER RESOURCES ACT OF 1982 AND/OR SUBSEQUENT ENABLING LEGISLATION.

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER 09001C0441G
MAP REVISED JULY 8, 2013
Federal Emergency Management Agency



MAP SCALE 1" = 500'



NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0441G

FIRM
FLOOD INSURANCE RATE MAP
FAIRFIELD COUNTY,
CONNECTICUT
(ALL JURISDICTIONS)

PANEL 441 OF 626
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

| COMMUNITY | NUMBER | PANEL | SUFFIX |
|---------------------|--------|-------|--------|
| BRIDGEPORT, CITY OF | 090002 | 0441 | G |
| STRATFORD, TOWN OF | 090016 | 0441 | G |

-NOTE-
 THIS MAP INCLUDES BOUNDARIES OF THE COASTAL BARRIER RESOURCES SYSTEM ESTABLISHED UNDER THE COASTAL BARRIER RESOURCES ACT OF 1982 AND/OR SUBSEQUENT ENABLING LEGISLATION.

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.



MAP NUMBER
09001C0441G
MAP REVISED
JULY 8, 2013

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov