

Jennedy S. Johnson
Assistant General Counsel

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PEO Energy
2301 Market Street / S23-1
Philadelphia, PA 19103

August 27, 2021

Via E-Filing

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, Second Floor
Harrisburg, PA 17120

RE: Letter of Notification of PECO Energy Company, Filed Pursuant to 52 Pa. Code Chapter 57 Subchapter G, for Approval to Relocate Four Transmission Structures in Middletown Township, Bucks County, Pennsylvania that Will Conflict with PennDOT's New Route 1 Bridge
Docket No. A-2021-

Dear Secretary Chiavetta:

Enclosed for filing on behalf of PECO Energy Company is a Letter of Notification ("LON") requesting approval to Relocate Four Transmission Structures in Middletown Township, Bucks County, Pennsylvania that Will Conflict with PennDOT's New Route 1 Bridge. This LON is filed pursuant to the Pennsylvania Public Utility Commission's regulations at 52 Pa. Code § 57.72(d)(1). Please note that due to necessary transmission outages, PECO is seeking expedited consideration of this filing.

Copies of this LON and a Notice of Filing have been served upon the parties as required by 52 Pa. Code § 57.74 and indicated on the enclosed Certificate of Service. Confidential Attachment 2 to the LON has been emailed directly to Secretary Chiavetta.

Should you have any questions concerning this matter, please contact me at the address or telephone number provided above.

Respectfully submitted,



Jennedy S. Johnson
Enclosures

cc: Parties of Record

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**LETTER OF NOTIFICATION OF :
PECO ENERGY COMPANY, FILED :
PURSUANT TO 52 PA. CODE :
CHAPTER 57 SUBCHAPTER G, FOR :
APPROVAL TO RELOCATE :
FOUR TRANSMISSION : Docket No. A-2021-_____
STRUCTURES IN MIDDLETOWN :
TOWNSHIP, BUCKS COUNTY, :
PENNSYLVANIA THAT WILL :
CONFLICT WITH PENNDOT'S NEW :
ROUTE 1 BRIDGE :**

CERTIFICATE OF SERVICE

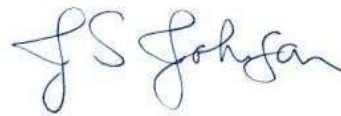
I hereby certify that on this date, a true and correct copy of the foregoing *Letter of Notification of PECO Energy Company* has been served upon the following persons, in the manner indicated, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant):

VIA FIRST CLASS (& ELECTRONIC MAIL WHERE EMAIL IS LISTED):

<p>Richard A. Kanaskie, Director* Pennsylvania Public Utility Commission Bureau of Investigation and Enforcement Commonwealth Keystone Building 400 North Street Harrisburg, PA 17120 rkanaskie@pa.gov</p>	<p>Teresa Reed Wagner, Executive Director* Office of Small Business Advocate 555 Walnut Street 1st Floor, Forum Place Harrisburg, PA 17101 tereswagne@pa.gov</p>
<p>Christine M. Hoover, Esq.* Office of Consumer Advocate 555 Walnut Street 5th Floor, Forum Place Harrisburg, PA 17101-1923 choover@paoca.org</p>	<p>Sandy Morgan, Code Enforcement Officer Middletown Township Code Enforcement 3 Municipal Way Langhorne, PA 19047 smorgan@middletownbucks.org</p>
<p>Tom Tosti, Chairperson, Township of Middletown Board of Supervisors 3 Municipal Way Langhorne, PA 19047 ttosti@middletownbucks.org</p>	<p>Patrick J. Ennis, P.E., C.F.M., Director of Building & Zoning Middletown Township Department of Building & Zoning 3 Municipal Way Langhorne, PA 19047 pjennis@middletownbucks.org</p>

Stephanie Teoli Kuhls, Chief Executive Officer Middletown Township Office of the Township Manager 3 Municipal Way Langhorne, PA 19047 steoli@middletownbucks.org	Tom Piacentino, Chairperson Middletown Township Building & Zoning Planning Commission 3 Municipal Way Langhorne, PA 19047
Diane M. Ellis-Marseglia, Chair Bucks County Board of Commissioners 55 E. Court Street, 1 st Floor Doylestown, PA 18901 CommEllisMarseglia@buckscounty.org	Department of Environmental Protection Rachel Carson State Office Building 400 Market Street Harrisburg, PA 17101
Yassmin Gramian, Secretary Department of Transportation Keystone Building 400 North Street, 5 th Floor Harrisburg, PA 17120	Nancy Moses, Chairman Historical and Museum Commission State Museum Building 300 North Street Harrisburg, PA 17120

* Served electronically only.



Dated: August 27, 2021

Jennedy S. Johnson (PA No. 203098)
PECO Energy Company
2301 Market Street, S23-1
Philadelphia, PA 19103
Phone: 215.841.4353
Fax: 215.568.3389
jennedy.johnson@exeloncorp.com

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PENNSYLVANIA PUBLIC UTILITY COMMISSION**

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ROUTE 1 BRIDGE :**

LETTER OF NOTIFICATION

TO THE PENNSYLVANIA PUBLIC UTILITY COMMISSION:

PECO Energy Company (“PECO” or “Company”) hereby files this Letter of Notification, pursuant to 52 Pa. Code § 57.72(d), to request approval of the Pennsylvania Public Utility Commission (“Commission”) to relocated four transmission structures that conflict with PennDOT’s new Route 1 Bridge near Neshaminy Hills in Middletown Township, Bucks County (the “Project”). Due to the scheduled transmission outage needed to complete construction, PECO is requesting expedited treatment of this filing – by the October 7, 2021 Public Meeting. In further support of the siting authority requested herein, PECO states as follows:

I. INTRODUCTION

1. This Letter of Notification is filed by PECO, a public utility that provides electric distribution, transmission, and default services in Pennsylvania subject to the regulatory jurisdiction of the Commission.

2. PECO's address is 2301 Market Street, Philadelphia, Pennsylvania 19103.
3. PECO's attorney in this matter authorized to receive notices and communications

on its behalf is:

Jennedy S. Johnson
PECO Energy Company
2301 Market Street, S23-1
Philadelphia, PA 19103
215.841.4353
jennedy.johnson@exeloncorp.com

PECO agrees to accept electronic service in this proceeding.

4. PECO furnishes electric service to approximately 1.6 million customers throughout its certificated service territory, which includes all or portions of five counties and encompasses approximately 2,100 square miles in southeastern Pennsylvania with a population of approximately four million people. PECO is a "public utility" and an "electric distribution company" as defined in Sections 102 and 2803 of the Pennsylvania Public Utility Code, 66 Pa. C.S. §§ 102 and 2803.

5. PECO owns 1,067 miles of transmission lines operating at 69 kilovolts ("kV") or higher, 472 substations, approximately 9,000 miles of underground distribution cable, and approximately 13,000 miles of aerial distribution lines operating at less than 69 kV.

6. This Letter of Notification includes the following accompanying attachments:

- Attachment 1 Plan, Profile, and Structure Drawings
- Attachment 2 Letter of Notification Filing Checklist

7. This Letter of Notification and accompanying Attachments, which are incorporated herein by reference, contain all the information required by 52 Pa. Code § 57.72(d)(4).

II. THE PROJECT

A. Need for the Project

8. This project involves the relocation of four transmission structures (PECO Structures 21-17, 21-18, 21-19, and 21-20) that will conflict with PennDOT's proposed new Route 1 Bridge near Neshaminy Hills in Middletown Township, Bucks County. PECO's existing 220-22 line longitudinally traverses along the CSX and SEPTA corridor from PECO's Woodbourn Substation to its Byberry Substation, a length of 8.51 miles. PECO's transmission structures also support two SEPTA catenary lines and two feeder circuits. The coordinates of the crossing are 40.150378, -74.949340. The project is needed as PennDOT has requested that PECO relocate its Structures to permit PennDOT to construct the new Route 1 bridge per their desired alignment.

B. Description of the Proposed Project

9. PennDOT has requested that PECO relocate Structures 21-18 and 21-19 to permit them to reconstruct the Route 1 bridge over the ROW. The new bridge, which is wider and taller than the existing bridge, will require the transmission conductors to be located higher, and the new structure locations will increase the span length over the bridge. Adjacent Structures 21-17 and 21-20 will also need be replaced and relocated to accommodate the new loading due to the relocation of Structures 21-18 and 21-19. The total length of construction is approximately 1000 ft. A map of the proposed Project is provided in Attachment 1.

10. New Structures 21-18 and 21-19 will be 12.83' and 14.42' taller than the existing structures, respectively, and new Structures 21-17 and 21-20 will be 5.33' and 3.83' shorter than the existing structures, respectively. *See* PECO Attachment 1, which contains structure erection drawings and the location of the proposed structures in relationship to existing structures.

11. PECO estimates the project costs to be \$4.0 million. \$1.1 million of that total is attributable to materials (e.g., new monopoles, foundation, and appurtenances). The remaining \$2.9 million is attributable to direct labor – primarily design and engineering, railroad reviews and flagging, civil and site work, and electrical construction – and allocated PECO overhead and management costs. PennDOT will be reimbursing PECO for the cost of the project. PECO will own and build the proposed project

12. Upon Commission approval, the Project has a scheduled construction start date of October 25, 2021. Due to the scheduled transmission outage needed to complete construction, PECO is requesting expedited treatment of this filing – by the Commission’s October 7, 2021 Public Meeting.

III. HEALTH AND SAFETY

13. The proposed Project will not create any unreasonable risk of danger to the public health or safety.

14. The design, construction, and operation of the Project will meet or be better than the requirements specified in the latest revision of the National Electrical Safety Code (“NESC”) and all applicable safety standards established by the Occupational Safety and Health Administration (“OSHA”). All work shall be done in accordance with NESC, OSHA, and any applicable local, state, or federal requirements.

15. Consistent with its Engineering Practice EPP-2090, PECO will construct the Project for ground clearances that exceed the requirements of NESC-2017 and the existing conductor will not be replaced. With respect to vertical clearances, PECO designs its facilities to meet the NESC rules, plus a minimum of 3 additional feet of vertical clearance. Similarly, PECO adds a minimum of 2 additional feet of beyond the NESC horizontal clearance rules.

IV. DESCRIPTION OF THE PROJECT AREA

16. The Project area is on CSX property adjacent the new Route 1 Bridge near Neshaminy Hills in Middletown Township, Bucks County. The coordinates of the crossing are 40.150378, -74.949340. PECO has an easement for the 220-22 line at this location and is working with CSX to update its existing easement to reflect the new structure locations and heights.

17. PECO does not anticipate vegetation management being required as a result of this LON.

18. The closest airport to the Project area is the Northeast Philadelphia airport, which is located approximately 5.1 miles southwest of the Project area. PECO does not anticipate any interference with airport operations because of the distance from the Project area. PECO will file any required documentation with the Federal Aviation Administration and the Pennsylvania Department of Transportation, Bureau of Aviation.

19. The Project will not traverse or affect any unique geological or scenic areas.

20. The proposed Project will not affect any state lands, national parks, state parks, local parks, recreational areas, or natural landmarks.

21. The Project is not expected to have any impacts on communications towers, pipelines, or other utilities.

22. No 100-year floodplains are located within the Project area.

V. NOTICE

23. Copies of this Letter of Notification will be served on the governmental agencies, municipalities, and other public entities in accordance with 52 Pa. Code § 57.72(d)(3).

VI. LETTER OF NOTIFICATION

24. PECO is proceeding by means of a Letter of Notification, instead of a full

Application, pursuant to the Commission's regulations at 52 Pa. Code § 57.72(d)(1)(vi).

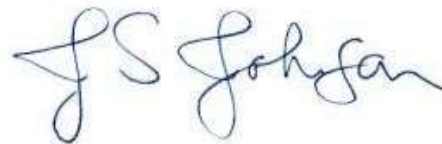
25. The proposed Project qualifies for use of a Letter of Notification because the new High Voltage transmission structure impacts less than two miles of the circuit.

26. This Letter of Notification is filed on the date set forth below. As provided in 52 Pa. Code § 57.72(d)(5), the Commission will review and, by order, approve or disapprove this Letter of Notification. If the Commission approves this Letter of Notification the proposed Project will be constructed as proposed herein without the formal application process set forth at 52 Pa. Code §§ 57.71 et seq.

VII. CONCLUSION

WHEREFORE, PECO Energy Company respectfully requests Pennsylvania Public Utility Commission approval to relocate four transmission structures in Middletown Township, Bucks County, Pennsylvania that will conflict with PennDOT's new Route 1 Bridge as explained above and in the Attachments hereto.

Respectfully submitted,



Anthony E. Gay (Pa. No. 74624)
Jack R. Garfinkle (Pa. No. 81892)
Jennedy S. Johnson (Pa. No. 203098)
PECO Energy Company
2301 Market Street
Philadelphia, PA 19103
215.841.4353 (bus)
215.568.3389 (fax)
anthony.gay@exeloncorp.com
jack.garfinkle@exeloncorp.com
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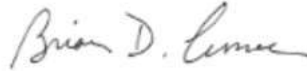
Dated: August 27, 2021

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VERIFICATION

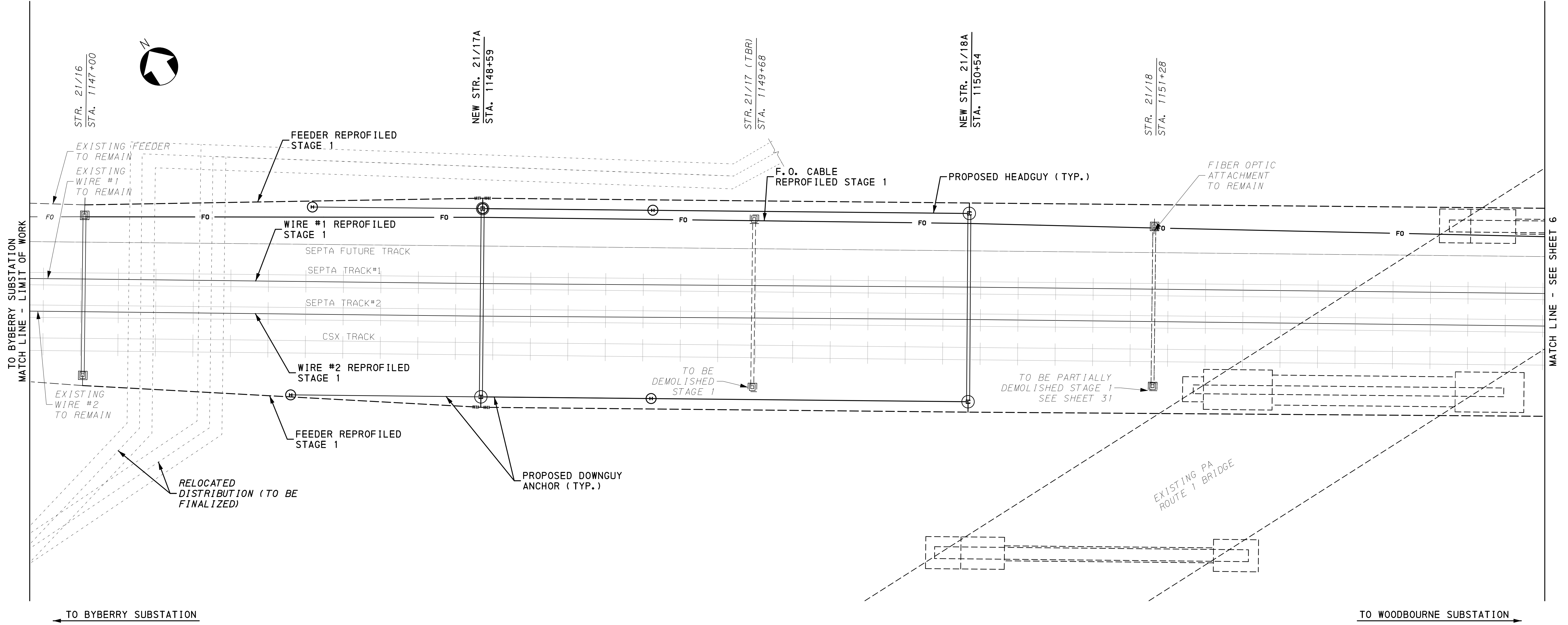
I, Brian D. Crowe, hereby declare that I am Vice President of Transmission and Substation for PECO Energy Company; hereby state that the fact set forth in the above-captioned Letter of Notification are true and correct to the best of my knowledge, information and belief, and that I expect to be able to prove the same at hearing if held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).



Date: Aug. 27, 2021

Brian D. Crowe
Vice President of Transmission
and Substation

Attachment 1 Structure Locations (Existing and Proposed) Plan View Sheet 1 of 2



PROPOSED CATENARY PLAN (STAGE 1)

SCALE: 1" = 20'

WORK STATEMENT:

1. INSTALL NEW FOUNDATIONS FOR STRUCTURES 21/17A, 21/18A, 21/18B, 21/19A AND 21/20A. INCLUDING DOWNGUY FOUNDATIONS FOR STRUCTURES 21/17A AND 21/20A. (PECO)
2. INSTALL ALL REQUIRED STEEL PER STRUCTURAL SEDs FOR STRUCTURES 21/17A, 21/18A, 21/19A AND 21/20A. (PECO)
3. INSTALL DOWN GUYS ON STRUCTURES 21/17A AND 21/20A TO CORRESPONDING DOWN GUY FOUNDATIONS. (PECO)
4. INSTALL HEAD GUYS FROM 21/17A TO 21/18A AND 21/20A TO 21/19A. (PECO)
5. REPROFILE EXISTING STATIC WIRE TO NEW STRUCTURE 21/17A AND 21/20A. REMOVE EXISTING STATIC WIRE BETWEEN NEW STRUCTURES 21/17A AND 21/20A. INSTALL NEW #75 ALUMOWLED STATIC WIRE FROM 21/17A TO 21/20A. (PECO)
6. CUT IN DEADENDS AT NEW STRUCTURES 21/17A AND 21/20A, AND REPROFILE EXISTING PECO TRANSMISSION WIRE FROM 21/17A TO 21/20A. (PECO)
7. REPROFILE EXISTING SEPTA SIGNAL POWER FROM 21/16 TO 21/18 AND FROM 21/19 TO 21/21. EXISTING TRANSITION TO UNDERGROUND CONDUIT TO REMAIN.
8. REPROFILE EXISTING CATENARY AND FIBER OPTIC TO NEW STRUCTURES WITH A TEMPORARY CONNECTION ON THE EAST GIRDER OF THE EXISTING BRIDGE.
9. DEMOLISH EXISTING STRUCTURES 21/17 AND 21/20. PARTIALLY DEMOLISH EXISTING STRUCTURES 21/18 AND 21/19. SEE DEMOLITION SEDs FOR DEMO LIMITS. (PECO)

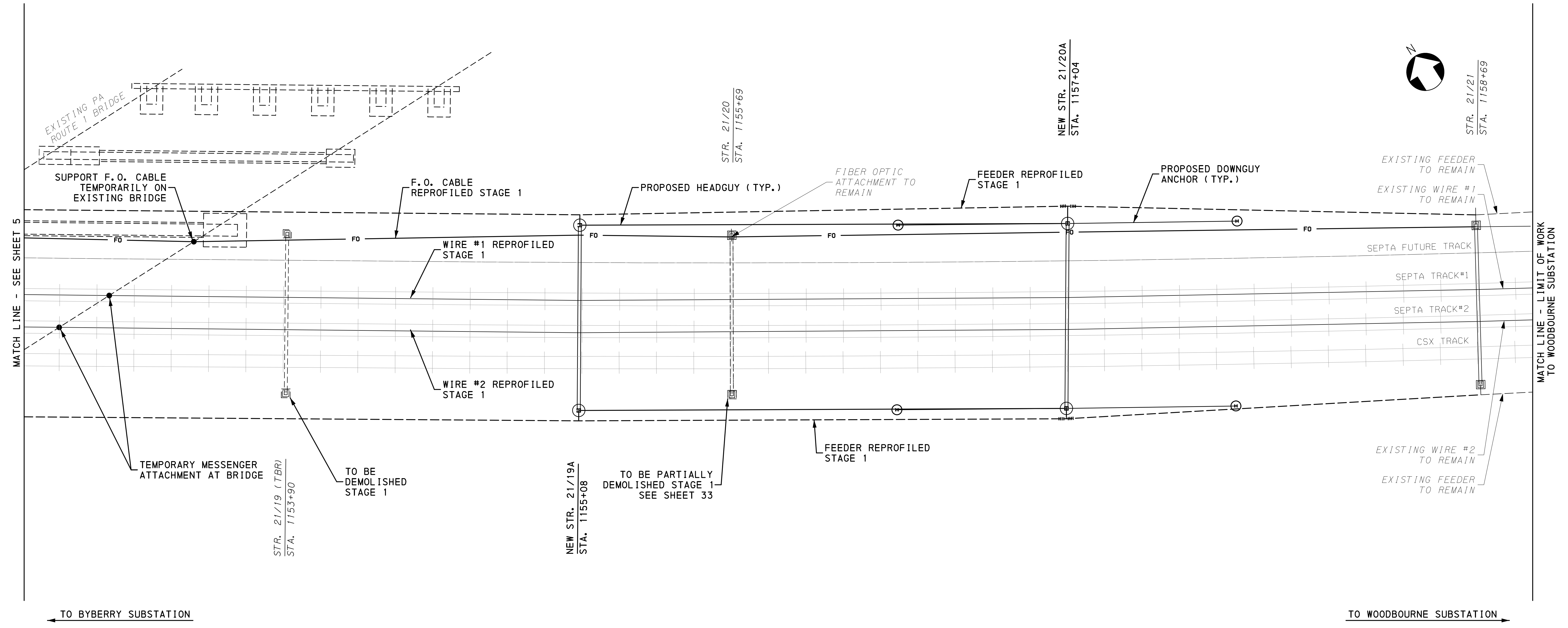
NOTES:

1. FOR GENERAL NOTES, SYMBOLS AND ABBREVIATIONS, SEE SHEET 1.

TABLE OF ADDITIONS & CHANGES USE ONLY PRINTS SHOWING LATEST DATE					
NO.	DATE	DESCRIPTION	REV'D	CHK'D	APP'D
A	4/12/21	EC-253187, WO-17069131 GANNETT FLEMING ADDED THIS DRAWING 80% IFA	-	-	-
B	5/20/21	EC-253187, WO-17069131 GANNETT FLEMING ADDED THIS DRAWING 100% IFA	-	-	-
C	8/06/21	EC-253187, WO-17069131 GANNETT FLEMING REVISED THIS DRAWING 100% IFA	-	-	-

TRANSMISSION		INDEX F- _____	
BYBERRY TO WOODBOURNE 220-22			
PROPOSED CAT. PLAN (STAGE 1) - SHEET 1 OF 2			
PECO Energy Company			
SCALE	DESIGN	CADD	CHECKED
MPM	MWH	GMS	SJM
APPROVED	APPROVED	APPROVED	APPROVED
APPROVED	APPROVED	APPROVED	APPROVED
SHEET 5 OF		C-273867-A	

Attachment 1 Structure Locations (Existing and Proposed) Plan View Sheet 2 of 2



PROPOSED CATENARY PLAN (STAGE 1)
SCALE: 1" = 20'

WORK STATEMENT:

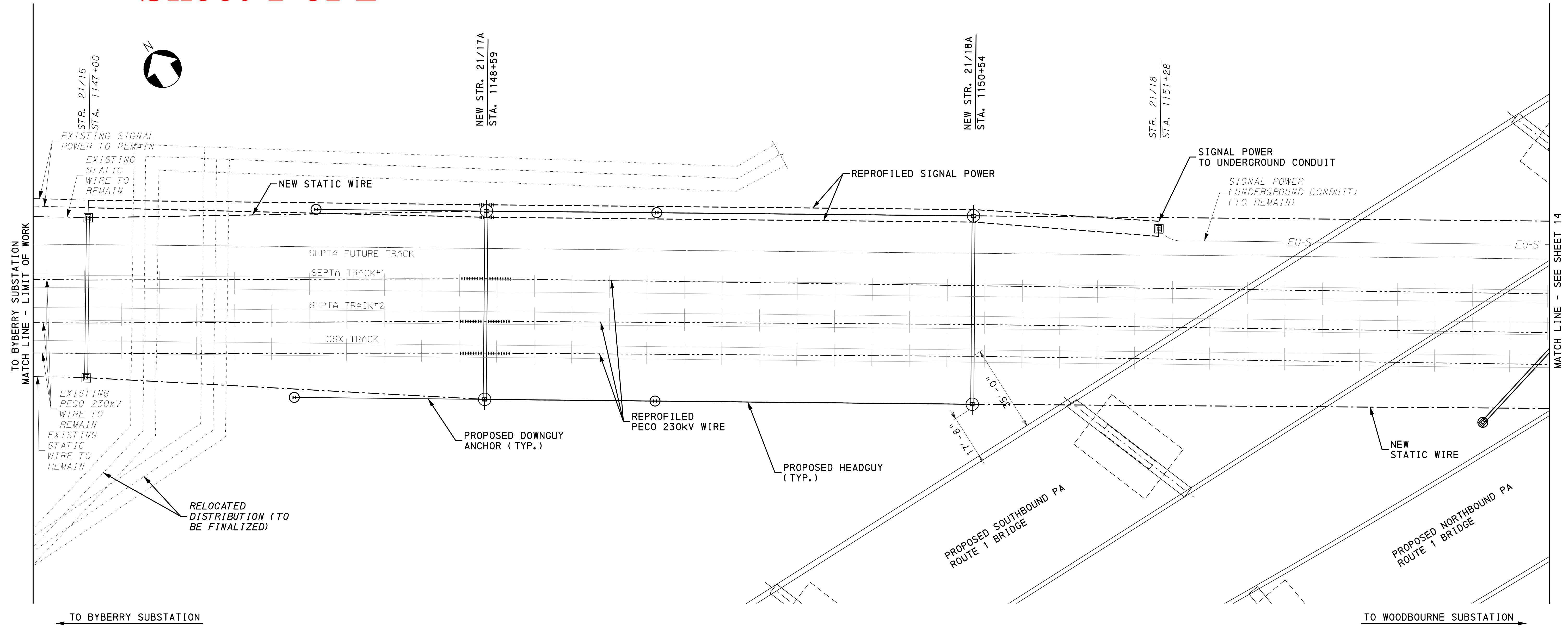
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5. REPROFILE EXISTING STATIC WIRE TO NEW STRUCTURE 21/17A AND 21/20A. REMOVE EXISTING STATIC WIRE BETWEEN NEW STRUCTURES 21/17A AND 21/20A. INSTALL NEW #5 ALUMOWLED STATIC WIRE FROM 21/17A TO 21/20A. (PECO)
6. CUT IN DEADENDS AT NEW STRUCTURES 21/17A AND 21/20A, AND REPROFILE EXISTING PECO TRANSMISSION WIRE FROM 21/17A TO 21/20A. (PECO)
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B	5/20/21	EC-253187, WO-17069131 GANNETT FLEMING ADDED THIS DRAWING 100% IFA	-	-	-
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TRANSMISSION		INDEX F- _____	
BYBERRY TO WOODBOURNE 220-22 PROPOSED CAT. PLAN (STAGE 1) - SHEET 2 OF 2			
PECO Energy Company			
SCALE	DESIGN	CADD	CHECKED
MPM	MWH	GMS	SJM
APPROVED	APPROVED	APPROVED	APPROVED
APPROVED	APPROVED	APPROVED	APPROVED
SHEET 6 OF		C-273867-A	

Attachment 1 Proposed Transmission Design Plan Sheet 1 of 2



PROPOSED TRANSMISSION PLAN
SCALE: 1" = 20'

WORK STATEMENT:

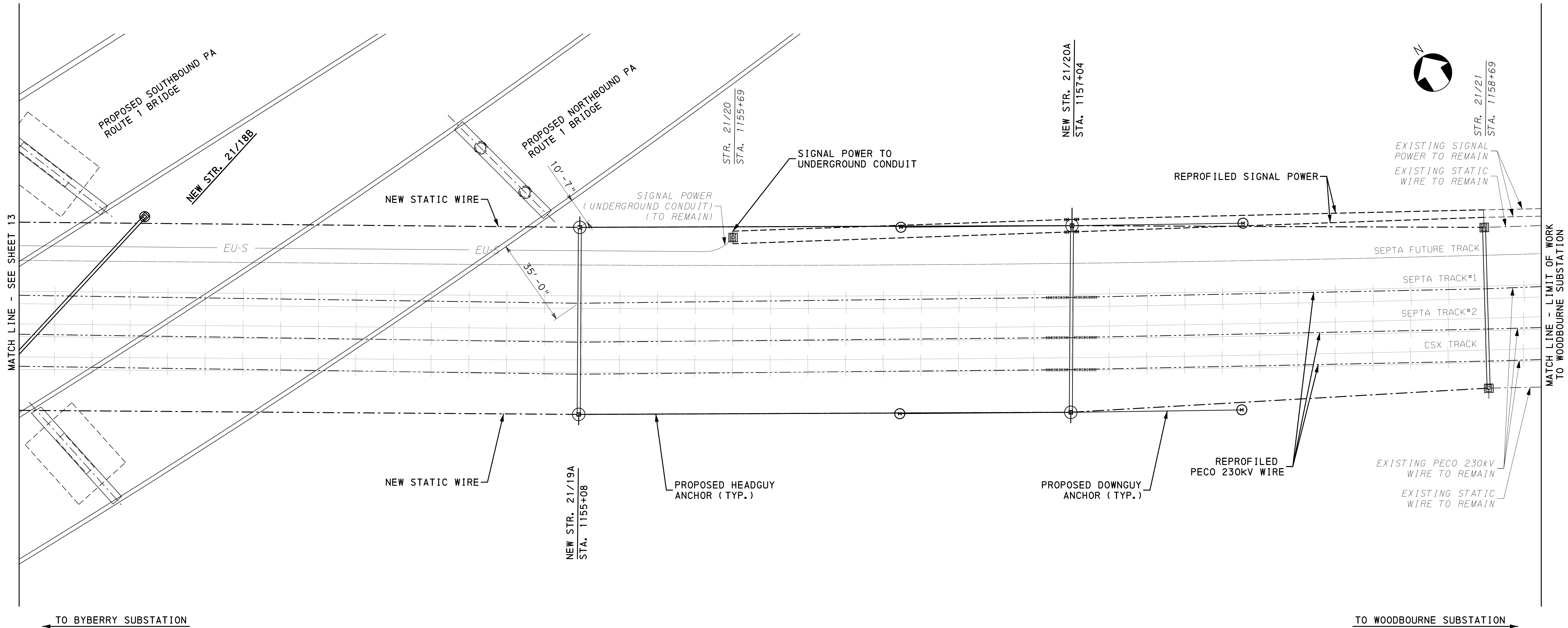
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TRANSMISSION		INDEX F- _____	
BYBERRY TO WOODBOURNE 220-22 PROPOSED TRANSMISSION PLAN - SHEET 1 OF 2			
PECO Energy Company			
SCALE	DESIGN	CADD	CHECKED
MPM	MWH	GMS	SJM
APPROVED	APPROVED	APPROVED	APPROVED
APPROVED	APPROVED	APPROVED	APPROVED
SHEET 13 OF		C-273867-A	

Attachment 1 Proposed Transmission Design Plan Sheet 2 of 2



PROPOSED TRANSMISSION PLAN

SCALE: 1" = 20'

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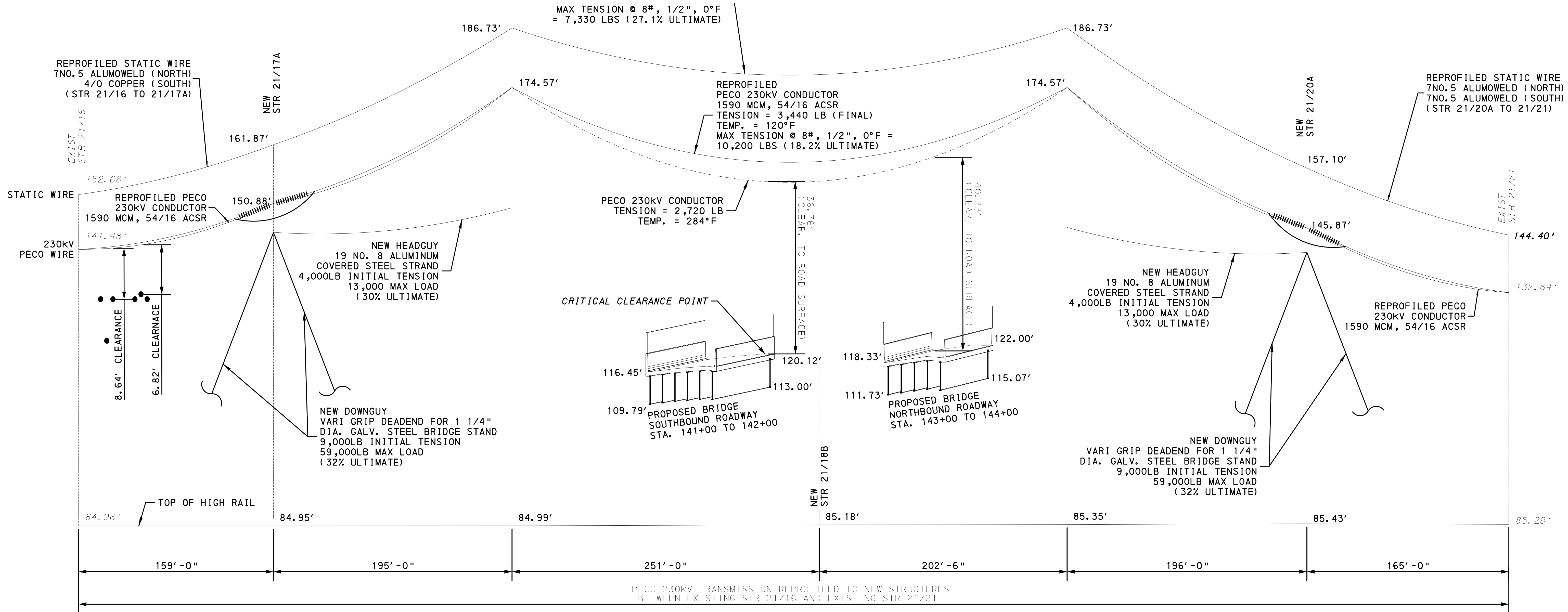
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SCALE	DESIGN	CADD	CHECKED
MPM	MWH	GMS	SJM
INSPECTED	APPROVED	DATE	
		05/20/21	
APPROVED _____	APPROVED _____		
APPROVED _____	APPROVED _____		
APPROVED _____	APPROVED _____		
SHEET 14 OF	C-273867-A		

Attachment 1 Proposed PECO Transmission Design Profile

Attachment 1
Page 5 of 10

TO BYBERRY SUBSTATION

TO WOODBOURNE SUBSTATION



PROPOSED PECO 230KV - ALL PHASES

X SCALE: 1" = 40'
Y SCALE: 1" = 10'
(CRITICAL CLEARANCE SHOWN)

CONDUCTOR PARTICULARS		
DESCRIPTION	230KV PECO TRANSMISSION CABLE	OVERHEAD GROUND (STATIC)
SIZE	1590 MCM	7 NO. 5 AWG
MATERIAL	ALUMINIUM/STEEL	ALUMOWELD
MAKE-UP	54 STRAND (AL) 19 STRAND (STEEL)	-
OVERALL DIAMETER - IN	1.545	0.546
CROSS SECTION AREA - IN ²	1.4072	0.1819
WEIGHT - LB/FT (NO ICE)	2.044	0.5249
NORMAL TENSION - LB (60°F NO WIND)	4600	1250
TENSION AT MAX. TEMP - LB (120°F)	3440	1050
TENSION AT 284°F TEMP - LB	2720	780
BREAKING STRENGTH - LB	56000	27030

- 230KV 1590 MCM TRANSMISSION WIRE TENSIONS BASED ON PECO STRINGING TENSIONS. SEE D-185641-4.
- PROPOSED 7 NO. 5 AWG STATIC WIRE TENSIONS CALCULATED FOR SAG EQUAL TO OR LESS THAN THE 230KV TRANSMISSION.
- TENSIONS SHOWN IN THIS CHART ARE FINAL TENSIONS.

NOTE:

- FOR GENERAL NOTES, SYMBOLS AND ABBREVIATIONS SEE SHEET 1.
- THE NEW BRIDGE ELEVATIONS ARE BASED ON PROPOSED BRIDGE DESIGN.
- CONDUCTOR DATA BASED ON RECORD DRAWINGS D-185641-4 AND C-185639-1 RECEIVED FROM PECO UNLESS NOTED OTHERWISE.
- WIRE CLEARANCES ARE MEASURED TO TOP OF BRIDGE DECK. FINAL WIRE CLEARANCES TO BE RECORDED BY CONTRACTOR CONSTRUCTION OF NEW BRIDGE AND NEW WIRE PROFILES.

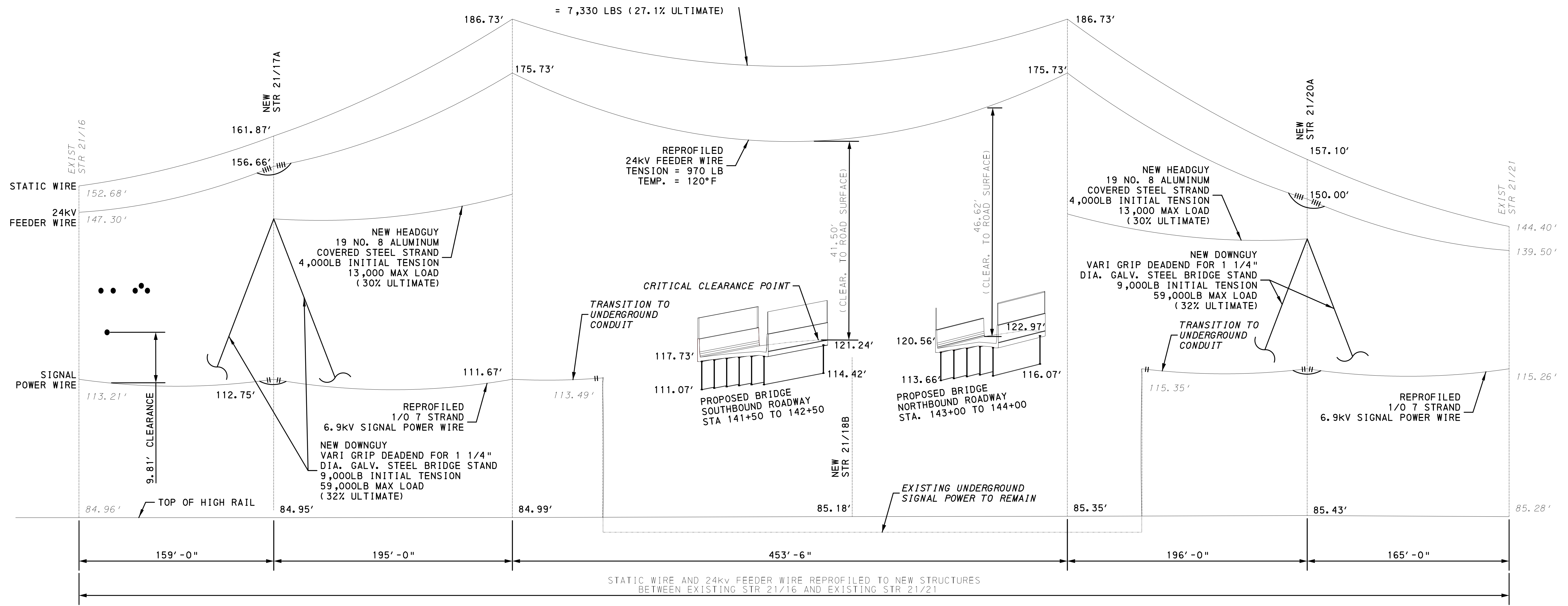
TABLE OF ADDITIONS & CHANGES USE ONLY PRINTS SHOWING LATEST DATE				
NO.	DATE	DESCRIPTION	REV'D	CHK'D
A	4/12/21	EC-253187, WO-17069131 GANNETT FLEMING ADDED THIS DRAWING 80% IFA	-	-
B	5/20/21	EC-253187, WO-17069131 GANNETT FLEMING ADDED THIS DRAWING 100% IFA	-	-
C	8/06/21	EC-253187, WO-17069131 GANNETT FLEMING REVISED THIS DRAWING 100% IFA	-	-

TRANSMISSION		INDEX F- _____	
BYBERRY TO WOODBOURNE 220-22 PROPOSED TRANSMISSION PROFILE			
PECO Energy Company			
SCALE	DESIGN	CADD	CHECKED
MPM	MWH	GMS	SJM
INSPECTED	APPROVED	DATE	
		05/20/21	
APPROVED _____	APPROVED _____		
APPROVED _____	APPROVED _____		
APPROVED _____	APPROVED _____		
SHEET 20 OF		C-273867-A	

Attachment 1 Proposed SEPTA Feeder Design Profile

← TO BYBERRY SUBSTATION

→ TO WOODBOURNE SUBSTATION



PROPOSED ANCILLARY PROFILE (NORTH)

X SCALE: 1" = 40'
Y SCALE: 1" = 10'

CONDUCTOR PARTICULARS			
DESCRIPTION	OVERHEAD GROUND (STATIC)	24kV SEPTA FEEDER	6.9kV SIGNAL POWER
SIZE	7 NO. 5 AWG	336.4 MCM	7 NO. 1 AWG
MATERIAL	ALUMOWELD	ALUMINIUM/STEEL	COPPER
MAKE-UP	-	30 STRAND (AL) 7-STRAND (STEEL)	-
OVERALL DIAMETER - IN	0.546	0.741	0.368
CROSS SECTION AREA - IN ²	0.1819	0.3259	0.08269
WEIGHT - LB/FT (NO ICE)	0.5249	0.5271	0.326
NORMAL TENSION - LB (60°F NO WIND)	1250	1180	725
TENSION AT MAX. TEMP - LB (120°F)	1050	970	428
TENSION AT 284°F TEMP - LB	780	700	226
BREAKING STRENGTH - LB	27030	17800	3801

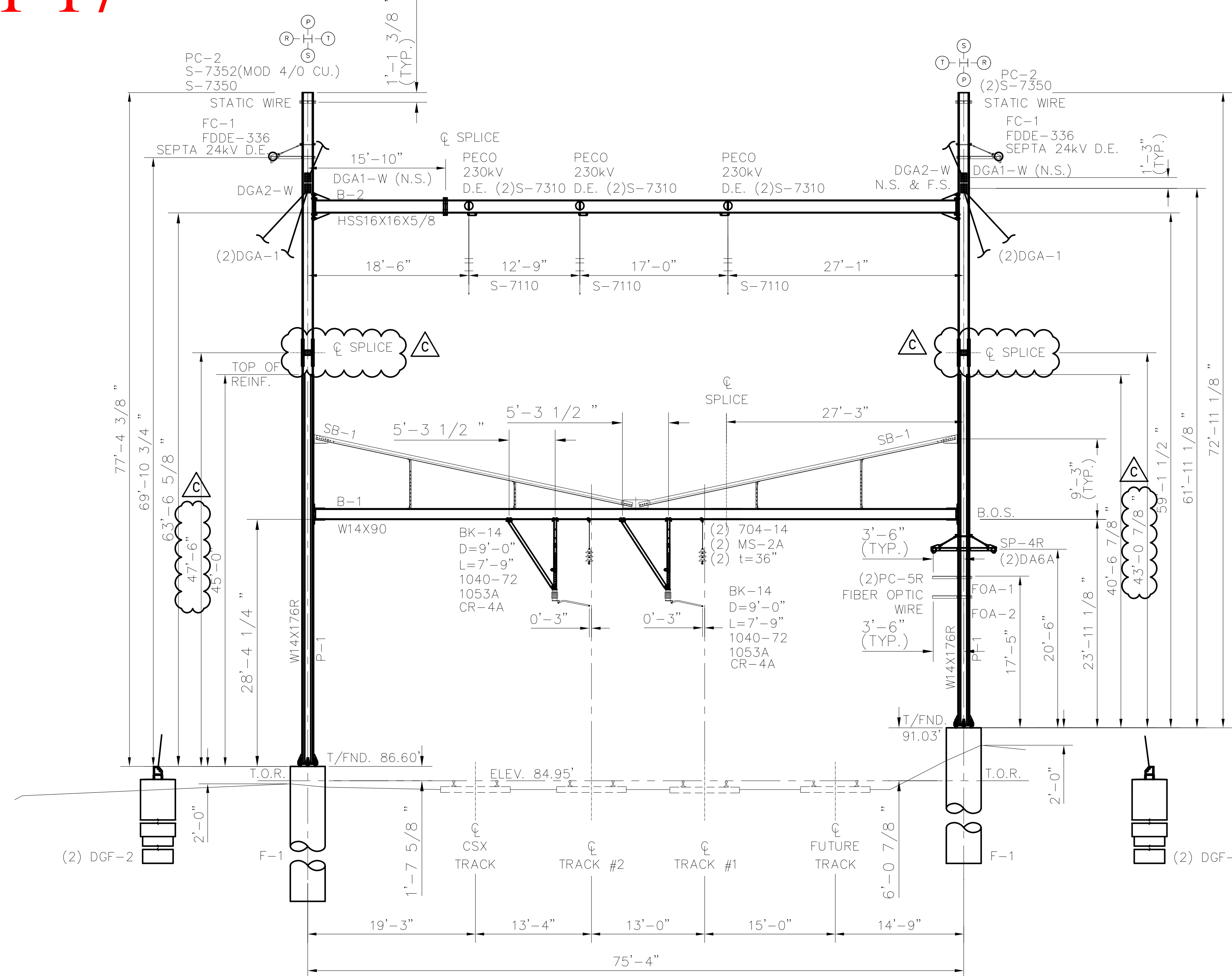
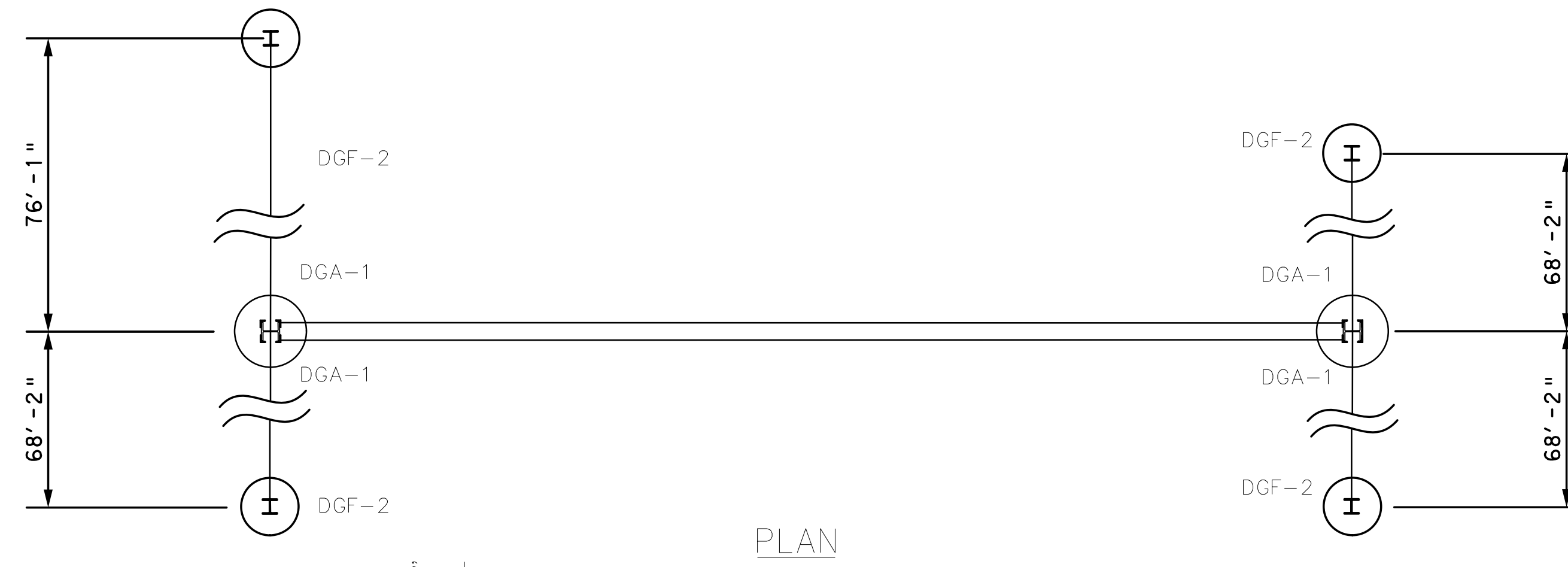
1. PROPOSED 24kV 336.4 MCM FEEDER WIRE TENSIONS PER 5' SAG OVER 300' SPAN CALCULATION.
2. PROPOSED 7 NO. 5 AWG STATIC WIRE TENSIONS CALCULATED FOR SAG EQUAL TO OR LESS THAN THE 230kV TRANSMISSION.
3. TENSIONS SHOWN IN THIS CHART ARE FINAL TENSIONS.

- NOTE:
1. FOR GENERAL NOTES, SYMBOLS AND ABBREVIATIONS SEE SHEET 1.
 2. THE NEW BRIDGE ELEVATIONS ARE BASED ON PROPOSED BRIDGE DESIGN.
 3. CONDUCTOR DATA BASED ON RECORD DRAWINGS D-185641-4 AND C-185639-1 RECEIVED FROM PECO UNLESS NOTED OTHERWISE.
 4. WIRE CLEARANCES ARE MEASURED TO TOP OF BRIDGE DECK. FINAL WIRE CLEARANCES TO BE RECORDED BY CONTRACTOR CONSTRUCTION OF NEW BRIDGE AND NEW WIRE PROFILES.

NO.	DATE	DESCRIPTION	REV'D	CHK'D	APP'D
A	4/12/21	EC-253187, WO-17069131 GANNETT FLEMING ADDED THIS DRAWING 60% IFA	-	-	-
B	5/20/21	EC-253187, WO-17069131 GANNETT FLEMING ADDED THIS DRAWING 100% IFA	-	-	-
C	8/06/21	EC-253187, WO-17069131 GANNETT FLEMING REVISED THIS DRAWING 100% IFA	-	-	-

TRANSMISSION		INDEX F- _____	
BYBERRY TO WOODBOURNE 220-22 PROPOSED ANCILLARY PROFILE - NORTH			
PECO Energy Company			
SCALE	DESIGN	CADD	CHECKED
MPM	MWH	GMS	SJM
INSPECTED	APPROVED	DATE	
		05/20/21	
APPROVED	APPROVED		
APPROVED	APPROVED		
APPROVED	APPROVED		
SHEET 21 OF		C-273867-A	

Attachment 1 Proposed Structure 21-17



ROUTE 220-22				
BILL OF MATERIAL				
UTILITY RESPONSIBILITY	MARK	DESCRIPTION	REFERENCE DRAWING	QTY
PECO	P-1	STEEL POLE W14X176 REINFORCED	SHEET 40	2
PECO	B-1	STEEL BEAM W14X90	SHEET 41	1
PECO	B-2	STEEL BEAM HSS16X16X5/8	SHEET 42	1
PECO	SB-1	SAG BRACE	SHEET 43	2
PECO	F-1	FOUNDATION	SHEET 51	2
SEPTA	FC-1	FEEDER SUPPORT ARM ASSEMBLY	SHEET 44	2
SEPTA	704-14	BEAM SLIDING CONNECTION	BDS-001	2
SEPTA	MS-2A	MESSENGER SUPPORT ASSEMBLY	SHEET 34	2
SEPTA	FDDE-336	FEEDER DEADEND ASSEMBLY	SHEET 34	2
SEPTA	FOA-1	FIBER OPTIC ASSEMBLY	SHEET 36	1
SEPTA	FOA-2	FIBER OPTIC ASSEMBLY	SHEET 36	1
SEPTA	DA6A(MOD)	SIGNAL POWER DEADEND ASSEMBLY	SHEET 34	2
PECO	S-7350	GROUND WIRE DEADEND ASSEMBLY	SHEET 38	3
PECO	S-7352(MOD)	GROUND WIRE DEADEND ASSEMBLY	SHEET 38	1
PECO	S-7310	230KV CONDUCTOR DEADEND ASSEMBLY	SHEET 37	6
PECO	S-7110	230KV SUSPENSION ASSEMBLY	SHEET 37	3
SEPTA	CR-4A	CONTACT WIRE REGISTRATION	SHEET 34	2
SEPTA	BK-14	DROP BRACKET ASSEMBLY	SHEET 35	2
SEPTA	1040-72	DROP BRACKET	SHEET 35	2
SEPTA	1053A	EXTENSION BRACKET	SHEET 35	2
SEPTA	SP-4R	REINFORCED SIGNAL POWER SUPPORT ARM	SHEET 45	1
PECO	DGF-2	DOWNGUY ANCHOR FOUNDATION	SHEET 52	4
PECO	DGA1-W	DOWNGUY BRACKET	SHEET 46	2
PECO	DGA2-W	DOWNGUY BRACKET	SHEET 46	2
PECO	DGA-1	DOWNGUY ANCHOR ASSEMBLY	SHEET 46	4
PECO	PC-2	POLE CLAMP	SHEET 47	2
SEPTA	PC-5R	REINFORCED POLE CLAMP	SHEET 47	2

* PECO MATERIAL TO INCLUDE 5% EXTRA MATERIAL DUE TO BREAKAGE OR DAMAGE

STRUCTURE 21/17A
STA. 1148+59
LOOKING TOWARDS NESHAMINY STATION
LOOKING TOWARDS BYBERRY SUBSTATION

PROPOSED		
WIRE #	2	1
BOTTOM OF STEEL	30'-0"	30'-0 1/2"
MESSENGER HEIGHT	24'-11"	24'-11 3/4"
CONTACT HEIGHT	20'-0"	20'-0"

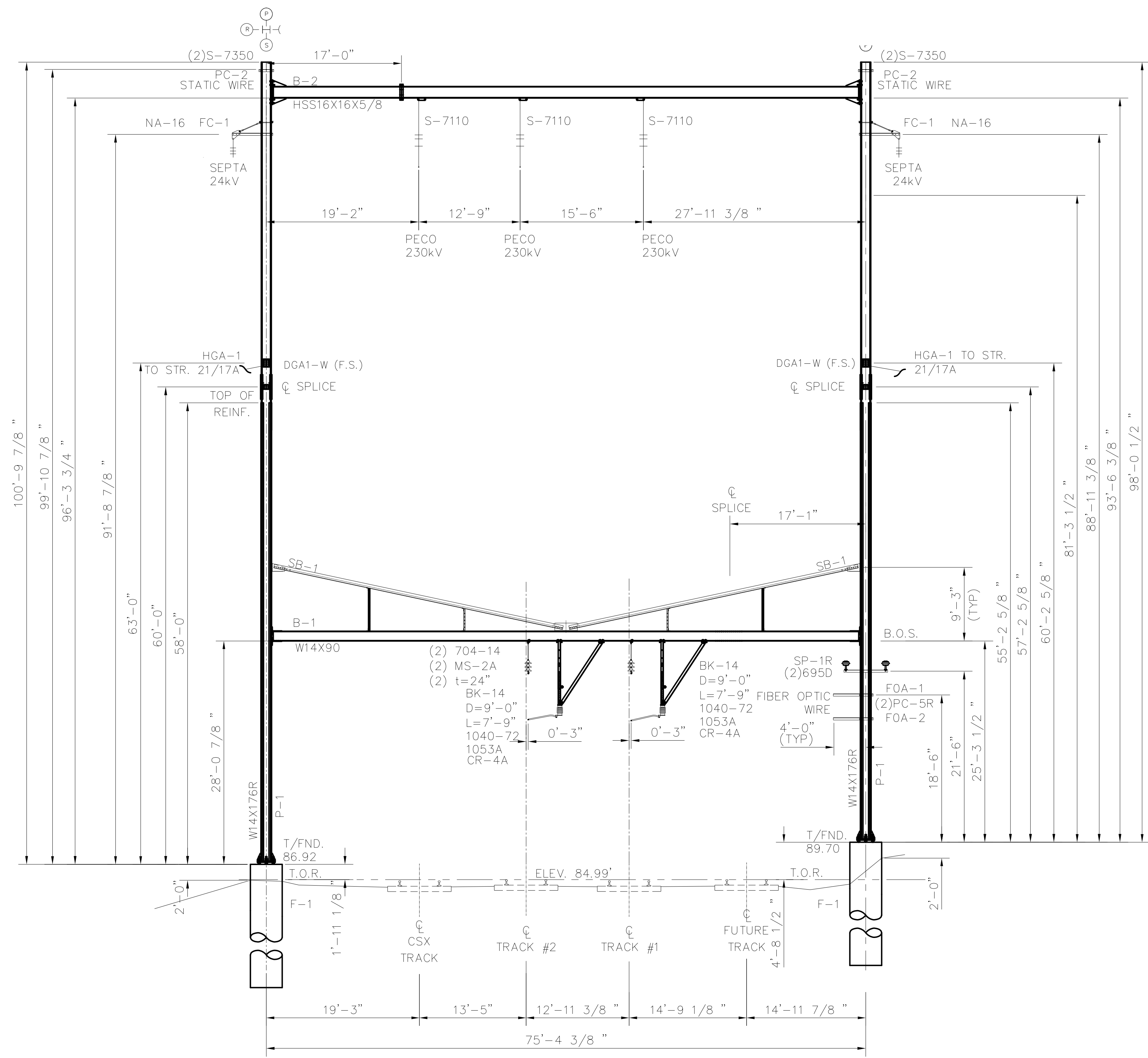
- NOTES:
- FOR GENERAL NOTES, SYMBOLS AND ABBREVIATIONS, SEE SHEET 1.

NO.	DATE	DESCRIPTION	REV'D	CHK'D	APP'D
A	4/12/21	EC-253187, WO-17069131 GANNETT FLEMING ADDED THIS DRAWING 60% IFA	-	-	-
B	5/20/21	EC-253187, WO-17069131 GANNETT FLEMING ADDED THIS DRAWING 100% IFA	-	-	-
C	8/06/21	EC-253187, WO-17069131 GANNETT FLEMING REVISED THIS DRAWING 100% IFA	-	-	-

TRANSMISSION		INDEX F- _____	
BYBERRY TO WOODBOURNE 220-22 STRUCTURE ERECTION DIAGRAM - STR. 21/17A			
PECO Energy Company			
SCALE	DESIGN	CADD	CHECKED
MPM	MWH	GMS	SJM
INSPECTED	APPROVED	DATE	
		05/20/21	
APPROVED _____		APPROVED _____	
APPROVED _____		APPROVED _____	
APPROVED _____		APPROVED _____	
SHEET 23 OF		C-273867-A	

Attachment 1 Proposed Structure 21-18

Attachment 1
Page 8 of 10



ROUTE 220-22				
BILL OF MATERIAL				
UTILITY RESPONSIBILITY	MARK	DESCRIPTION	REFERENCE DRAWING	QTY
PECO	P-1	STEEL POLE W14X176 REINF.	SHEET 40	2
PECO	B-1	STEEL BEAM W14X90	SHEET 41	1
PECO	B-2	STEEL BEAM HSS 16X16	SHEET 42	1
PECO	SB-1	SAG BRACE	SHEET 43	2
PECO	F-1	FOUNDATION	SHEET 51	2
SEPTA	FC-1	FEEDER SUPPORT ARM ASSEMBLY	SHEET 44	2
SEPTA	SP-1R	SIGNAL POWER SUPPORT ARM	SHEET 45	1
SEPTA	704-14	BEAM SLIDING CONNECTION	BDS-001	2
SEPTA	MS-2A	MESSENGER SUPPORT ASSEMBLY	SHEET 34	2
SEPTA	NA16	FEEDER SUPPORT ASSEMBLY	BDO-108	2
SEPTA	695D	SIGNAL POWER SUPPORT ASSEMBLY	BDO-106	2
SEPTA	FOA-1	FIBER OPTIC ASSEMBLY	SHEET 36	1
SEPTA	FOA-2	FIBER OPTIC ASSEMBLY	SHEET 36	1
PECO	S-7350	GROUND WIRE DEADEND ASSEMBLY	SHEET 38	4
PECO	S-7110	230KV CONDUCTOR SUSPENSION ASSEMBLY	SHEET 37	3
SEPTA	CR-4A	CONTACT WIRE REGISTRATION	SHEET 34	2
SEPTA	BK-14	DROP BRACKET ASSEMBLY	SHEET 35	2
SEPTA	1040-72	DROP BRACKET	SHEET 35	2
SEPTA	1053A	EXTENSION BRACKET	SHEET 35	2
PECO	HGA-1	HEAD GUY ANCHOR ASSEMBLY	SHEET 49	2
PECO	DGA1-W	DOWN GUY BRACKET	SHEET 46	2
PECO	PC-2	POLE CLAMP	SHEET 47	2
SEPTA	PC-5R	REINFORCED POLE CLAMP	SHEET 47	2

* PECO MATERIAL TO INCLUDE 5% EXTRA MATERIAL DUE TO BREAKAGE OR DAMAGE

STRUCTURE 21/18A
STA. 1150+54
LOOKING TOWARDS NESHAMINY STATION
LOOKING TOWARDS BYBERRY SUBSTATION

PROPOSED		
WIRE #	2	1
BOTTOM OF STEEL	30'-0"	30'-1 1/2"
MESSENGER HEIGHT	25'-11"	26'-0 1/2"
CONTACT HEIGHT	20'-0"	20'-0"

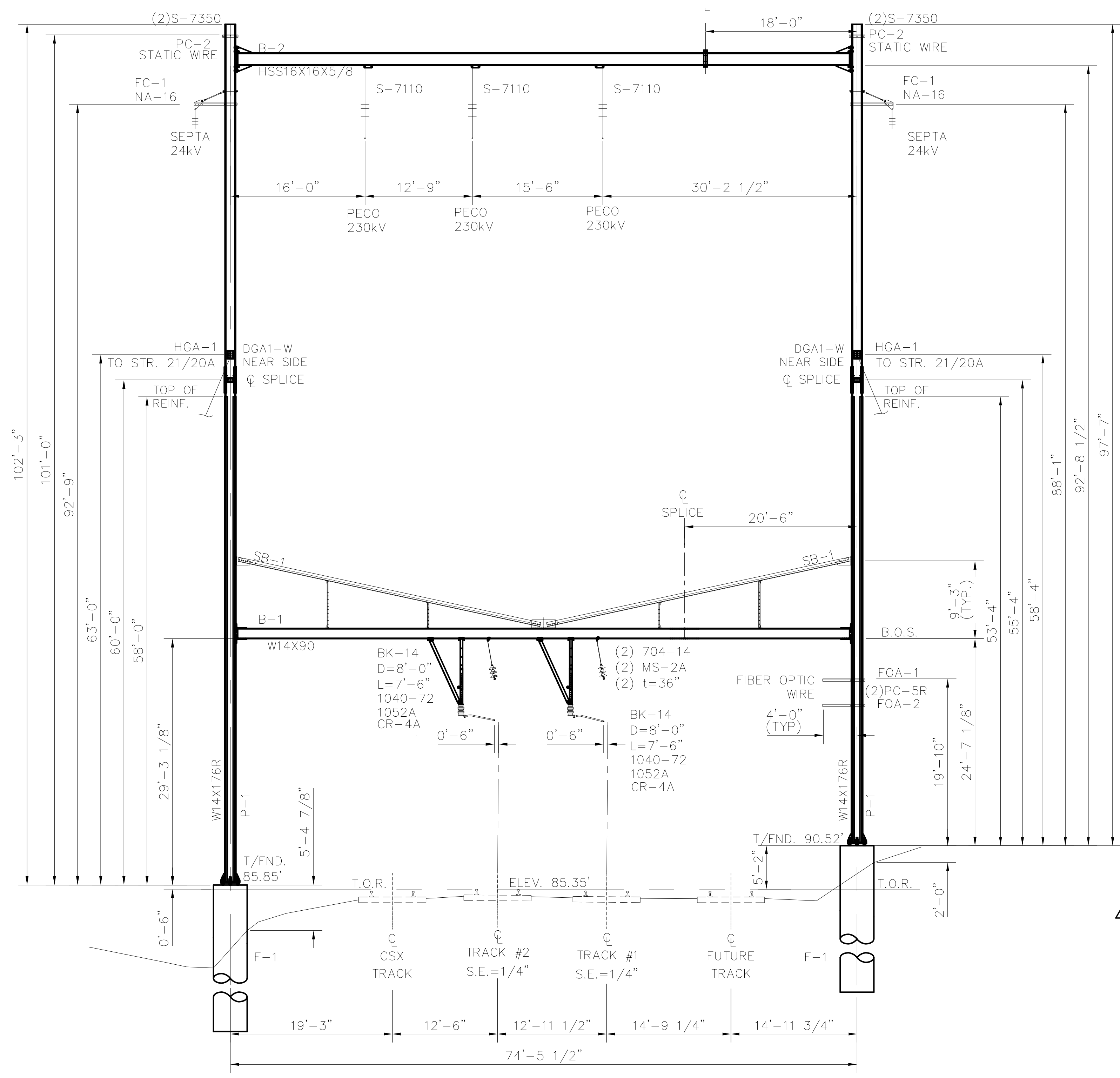
NOTES:
1. FOR GENERAL NOTES, SYMBOLS AND ABBREVIATIONS, SEE SHEET 1.

NO.	DATE	DESCRIPTION	REV'D	CHK'D	APP'D
A	4/12/21	EC-253187, WO-17069131 GANNETT FLEMING ADDED THIS DRAWING 60% IFA	-	-	-
B	5/20/21	EC-253187, WO-17069131 GANNETT FLEMING ADDED THIS DRAWING 100% IFA	-	-	-
C	8/06/21	EC-253187, WO-17069131 GANNETT FLEMING REVISED THIS DRAWING 100% IFA	-	-	-

TRANSMISSION		INDEX F- _____	
BYBERRY TO WOODBOURNE 220-22 STRUCTURE ERECTION DIAGRAM - STR. 21/18A			
PECO Energy Company			
SCALE	DESIGN	CADD	CHECKED
MPM	MWH	GMS	SJM
INSPECTED	APPROVED	DATE	
		05/20/21	
APPROVED _____		APPROVED _____	
APPROVED _____		APPROVED _____	
APPROVED _____		APPROVED _____	
SHEET 24 OF		C-273867-A	

Attachment 1 Proposed Structure 21-19

**Attachment 1
Page 9 of 10**



ROUTE 220-22				
BILL OF MATERIAL				
UTILITY RESPONSIBILITY	MARK	DESCRIPTION	REFERENCE DRAWING	QTY
PECO	P-1	STEEL POLE W14X176 REINF.	SHEET 40	2
PECO	B-1	STEEL BEAM W14X90	SHEET 41	1
PECO	B-2	STEEL BEAM HSS 16X16	SHEET 42	1
PECO	SB-1	SAG BRACE	SHEET 43	2
PECO	F-1	FOUNDATION	SHEET 51	2
SEPTA	FC-1	FEEDER SUPPORT ARM ASSEMBLY	SHEET 44	2
SEPTA	704-14	BEAM SLIDING CONNECTION	BDS-001	2
SEPTA	MS-2A	MESSENGER SUPPORT ASSEMBLY	SHEET 34	2
SEPTA	NA16	FEEDER SUPPORT ASSEMBLY	BDO-108	2
SEPTA	FOA-1	FIBER OPTIC ASSEMBLY	SHEET 36	1
SEPTA	FOA-2	FIBER OPTIC ASSEMBLY	SHEET 36	1
PECO	S-7350	GROUND WIRE DEADEND ASSEMBLY	SHEET 38	4
PECO	S-7110	230KV CONDUCTOR SUSPENSION ASSEMBLY	SHEET 37	3
SEPTA	CR-4A	CONTACT WIRE REGISTRATION	SHEET 34	2
SEPTA	BK-14	DROP BRACKET ASSEMBLY	SHEET 35	2
SEPTA	1040-72	DROP BRACKET	SHEET 35	2
SEPTA	1052A	EXTENSION BRACKET	SHEET 35	2
PECO	HGA-1	HEAD GUY ANCHOR ASSEMBLY	SHEET 49	2
PECO	DGA1-W	DOWN GUY BRACKET	SHEET 46	2
PECO	PC-2	POLE CLAMP	SHEET 47	2
SEPTA	PC-5R	REINFORCED POLE CLAMP	SHEET 47	2

* PECO MATERIAL TO INCLUDE 5% EXTRA MATERIAL DUE TO BREAKAGE OR DAMAGE

BILL OF MATERIAL FOR TEMPORARY STAGING				
UTILITY RESPONSIBILITY	MARK	DESCRIPTION	REFERENCE DRAWING	QTY
SEPTA	4235-70	FEEDER POST INSULATOR	SHEET 36	2
SEPTA	FC-1T	FEEDER SUPPORT ARM	SHEET 44	2

STRUCTURE 21/19A
STA. 1155+08
LOOKING TOWARDS NESHAMINY STATION
LOOKING TOWARDS BYBERRY SUBSTATION

PROPOSED		
WIRE #	2	1
BOTTOM OF STEEL	29'-9 1/4"	29'-11 1/4"
MESSENGER HEIGHT	24'-8 1/4"	24'-10 1/4"
CONTACT HEIGHT	20'-0"	20'-0"

- NOTES:**
- FOR GENERAL NOTES, SYMBOLS AND ABBREVIATIONS, SEE SHEET 1.

TABLE OF ADDITIONS & CHANGES USE ONLY PRINTS SHOWING LATEST DATE		TRANSMISSION		INDEX F- _____	
NO.	DATE	DESCRIPTION	REV'D	CHK'D	APP'D
A	4/12/21	EC-253187, WO-17069131 GANNETT FLEMING ADDED THIS DRAWING 60% IFA	-	-	-
B	5/20/21	EC-253187, WO-17069131 GANNETT FLEMING ADDED THIS DRAWING 100% IFA	-	-	-
C	8/06/21	EC-253187, WO-17069131 GANNETT FLEMING REVISED THIS DRAWING 100% IFA	-	-	-

**BYBERRY TO WOODBOURNE
220-22
STRUCTURE ERECTION DIAGRAM - STR. 21/19A**

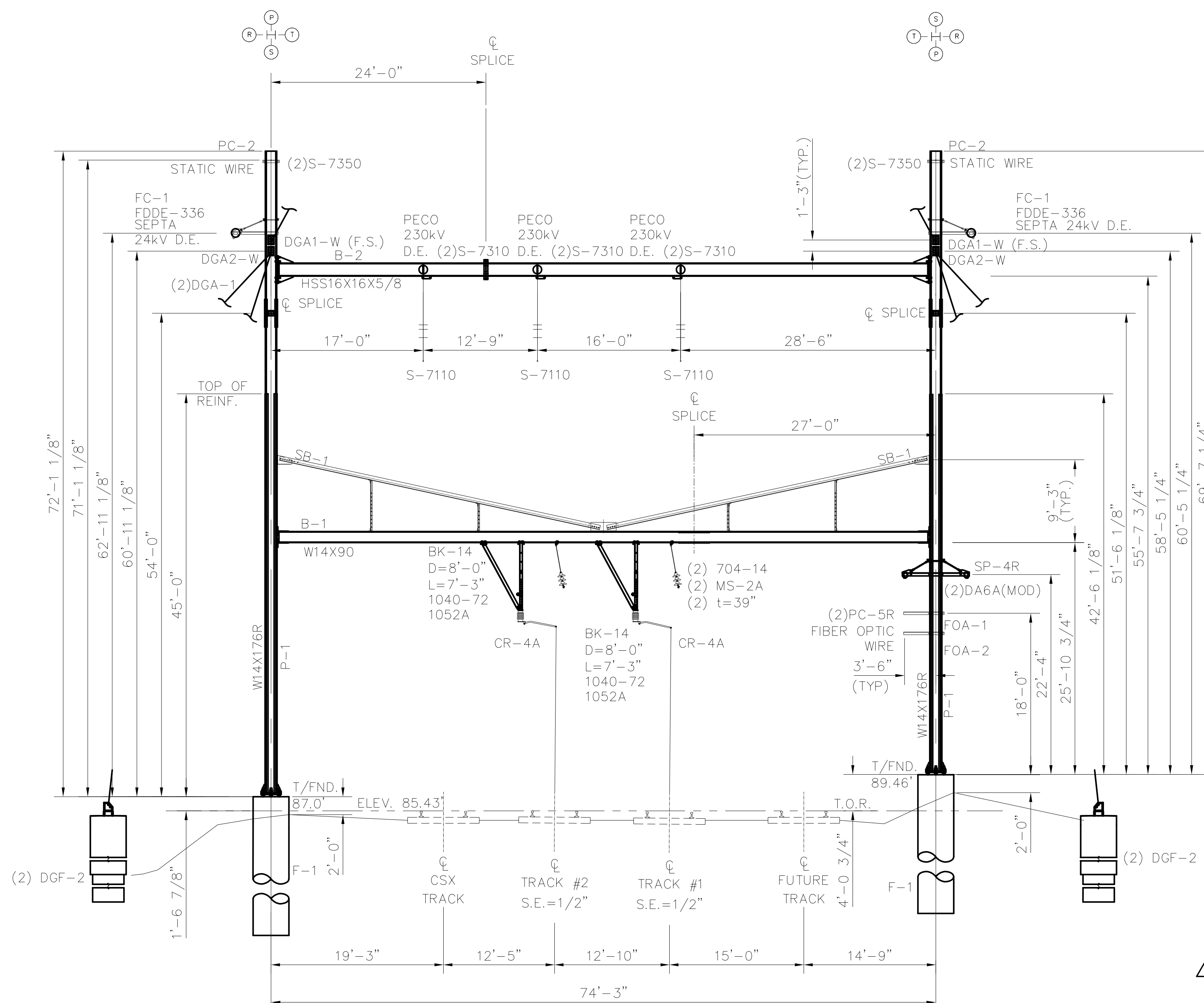
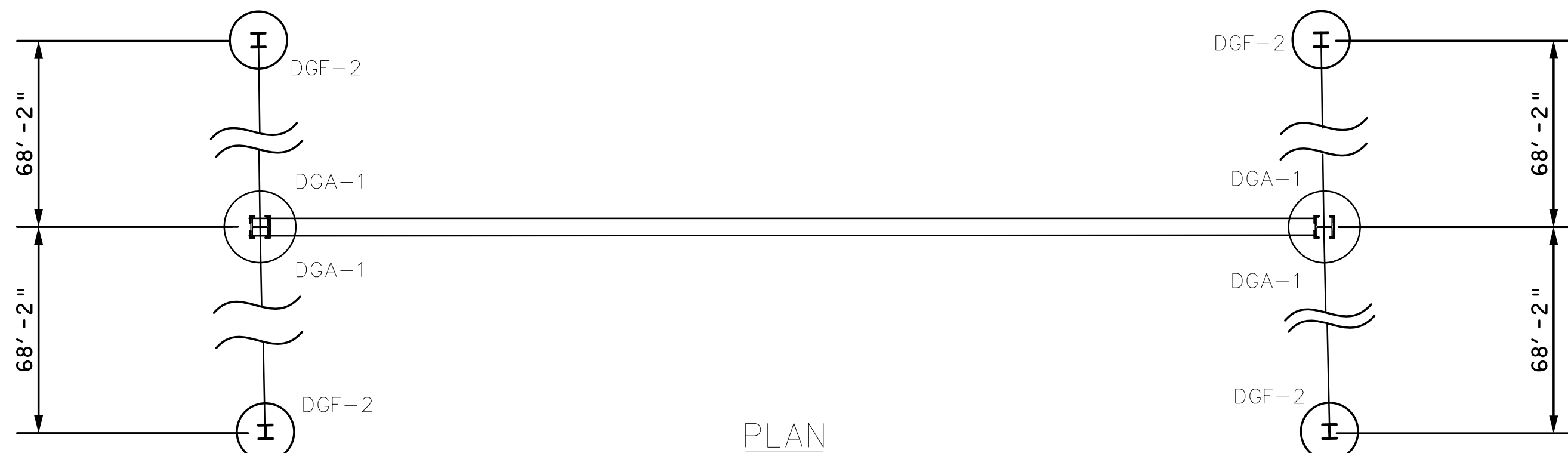
PECO Energy Company

SCALE	DESIGN	CADD	CHECKED	INSPECTED	APPROVED	DATE
	MPM	MWH	GMS	SJM	-	05/20/21

APPROVED _____ APPROVED _____
APPROVED _____ APPROVED _____
APPROVED _____ APPROVED _____

SHEET 28 OF _____ C-273867-A

Attachment 1 Proposed Structure 21-20



BILL OF MATERIAL				
UTILITY RESPONSIBILITY	MARK	DESCRIPTION	REFERENCE DRAWING	QTY
PECO	P-1	STEEL POLE W14X176 REINFORCED	SHEET 40	2
PECO	B-1	STEEL BEAM W14X90	SHEET 41	1
PECO	B-2	STEEL BEAM HSS16X16X5/8	SHEET 42	1
PECO	SB-1	SAG BRACE	SHEET 43	2
PECO	F-1	FOUNDATION	SHEET 51	2
SEPTA	FC-1	FEEDER SUPPORT ARM ASSEMBLY	SHEET 44	2
SEPTA	704-14	BEAM SLIDING CONNECTION	BDS-001	2
SEPTA	MS-2A	MESSENGER SUPPORT ASSEMBLY	SHEET 34	2
SEPTA	FDDE-336	FEEDER DEADEND ASSEMBLY	SHEET 34	2
SEPTA	FOA-1	FIBER OPTIC ASSEMBLY	SHEET 36	1
SEPTA	FOA-2	FIBER OPTIC ASSEMBLY	SHEET 36	1
SEPTA	DA6A	SIGNAL POWER DEADEND ASSEMBLY	SHEET 34	2
PECO	S-7350	GROUND WIRE DEADEND ASSEMBLY	SHEET 38	2
PECO	S-7310	230KV CONDUCTOR DEADEND ASSEMBLY	SHEET 37	6
PECO	S-7110	230KV SUSPENSION ASSEMBLY	SHEET 37	3
SEPTA	CR-4A	CONTACT WIRE REGISTRATION	SHEET 34	2
SEPTA	BK-14	DROP BRACKET ASSEMBLY	SHEET 35	2
SEPTA	1040-72	DROP BRACKET	SHEET 35	2
SEPTA	1052A	EXTENSION BRACKET	SHEET 35	2
SEPTA	SP-4R	SIGNAL POWER SUPPORT ARM	SHEET 45	1
PECO	DGF-2	DOWNGUY ANCHOR FOUNDATION	SHEET 52	4
PECO	DGA1-W	DOWNGUY BRACKET	SHEET 46	2
PECO	DGA2-W	DOWNGUY BRACKET	SHEET 46	2
PECO	DGA-1	DOWNGUY ANCHOR ASSEMBLY	SHEET 46	4
PECO	PC-2	POLE CLAMP	SHEET 47	2
SEPTA	PC-5R	REINFORCED POLE CLAMP	SHEET 47	2

* PECO MATERIAL TO INCLUDE 5% EXTRA MATERIAL DUE TO BREAKAGE OR DAMAGE

BILL OF MATERIAL FOR TEMPORARY STAGING				
UTILITY RESPONSIBILITY	MARK	DESCRIPTION	REFERENCE DRAWING	QTY
SEPTA	4235-70	FEEDER POST INSULATOR	SHEET 36	2
SEPTA	FC-1T	FEEDER SUPPORT ARM	SHEET 44	2

STRUCTURE 21/20A
STA. 1157+04
LOOKING TOWARDS NESHAMINY STATION
LOOKING TOWARDS BYBERRY SUBSTATION

PROPOSED		
WIRE #	2	1
BOTTOM OF STEEL	29'-11 1/2"	30'-1"
MESSENGER HEIGHT	24'-10 1/2"	25'-0"
CONTACT HEIGHT	20'-6"	20'-6"

- NOTES:
- FOR GENERAL NOTES, SYMBOLS AND ABBREVIATIONS, SEE SHEET 1.

NO.	DATE	DESCRIPTION	REV'D	CHK'D	APP'D
A	4/12/21	EC-253187, WO-17069131 GANNETT FLEMING ADDED THIS DRAWING 60% IFA	-	-	-
B	5/20/21	EC-253187, WO-17069131 GANNETT FLEMING ADDED THIS DRAWING 100% IFA	-	-	-
C	8/06/21	EC-253187, WO-17069131 GANNETT FLEMING REVISED THIS DRAWING 100% IFA	-	-	-

TRANSMISSION		INDEX F- _____	
BYBERRY TO WOODBOURNE 220-22 STRUCTURE ERECTION DIAGRAM - STR. 21/20A			
PECO Energy Company			
SCALE	DESIGN	CADD	CHECKED
MPM	MWH	GMS	SJM
INSPECTED	APPROVED	DATE	
		05/20/21	
APPROVED _____	APPROVED _____		
APPROVED _____	APPROVED _____		
APPROVED _____	APPROVED _____		
SHEET 29 OF		C-273867-A	

Letter of Notification Filing Checklist
PECO 220-22 LON Application

In an effort to facilitate the Commission's review process for a Letter of Notification (LON) for the Siting and Construction of Electric Transmission Lines, the following checklist may be consulted by the applicant. The applicable regulatory requirements for a LON application are found in 52 Pa. Code §§ 57.71-77. The checklist is provided to streamline the review process by anticipating requests for additional information that may arise from Commission staff. The checklist does not create additional mandates or regulatory requirements for approval of a LON.

1. Provide the name of the applicant and the address of its principal business office.

PECO Energy Company
2301 Market Street
Philadelphia, PA 19103

2. Name, title and business address of the attorney of the applicant and the person authorized to receive notice and communications with respect to the application if other than the attorney or the applicant.

Jennedy S. Johnson
Assistant General Counsel
PECO Energy Company
2301 Market Street, S23-1
Philadelphia, PA 19103
215-841-4353
jennedy.johnson@exeloncorp.com
PA Bar No. 203098

3. General description of the proposed route of the HV line, to include the number of route miles, the right-of-way width and the location of the proposed HV line within each city, borough, town and township traversed. Describe which sections of 52 Pa. Code §57.72(d)(1)(i)-(iv) the applicant believes are applicable.

This project involves the relocation of four transmission structures (PECO Structures 21-17, 21-18, 21-19, and 21-20) that will conflict with PennDOT's proposed new Route 1 Bridge near Neshaminy Hills in Middletown Township, Bucks County. PECO's existing 220-22 line longitudinally traverses along the CSX and SEPTA corridor from PECO's Woodbourn Substation to its Byberry Substation, a length of 8.51 miles. PECO's transmission structures also support two SEPTA catenary lines and two feeder circuits. The coordinates of the crossing are 40.150378, -74.949340.

PennDOT has requested that PECO relocate Structures 21-18 and 21-19 to permit them to reconstruct the Route 1 bridge over the ROW. The new bridge, which will be wider

and taller than the existing bridge, will require the transmission conductors to be located higher, and the new structure locations will increase the span length over the bridge. Adjacent Structures 21-17 and 21-20 will also need be replaced and relocated to accommodate the new loading due to the relocation of Structures 21-18 and 21-19. The total length of construction is approximately 1000 ft.

The proposed project is located entirely within the Middletown Township, Bucks County, Pennsylvania.

This application is made pursuant to two provisions of 52 Pa. Code §57.72(d)(1):

- 52 Pa. Code §57.72(d)(1)(v): An HV line which is to be reconducted or reconstructed so long as the size, character, design or configuration of the proposed HV line does not substantially alter the right-of-way. *See* PECO answer to Question 11, below, for evidence that this project does not substantially alter the right-of-way.
- 52 Pa. Code §57.72(d)(1)(vi): An HV line having a proposed route of 2 miles or less. *Note:* The route of this project work is approximately 0.19 miles.

4. Provide a general statement of the need for the proposed HV line in meeting identified present and future demands for service, of how the proposed HV line will meet that need and of the engineering justification for the proposed line.

The existing 220-22 line is operated at 230 kV and is part of the national bulk electric system. PennDOT has requested that PECO relocate Structures 21-18 and 21-19 as they conflict with PennDOT's proposed new Route 1 bridge alignment in Middletown Township. The new bridge will require the transmission conductors to be located higher, and the new structure locations will increase the span length over the bridge. Adjacent Structures 21-17 and 21-20 will also need be replaced and relocated to accommodate the new loading due to the relocation of Structures 21-18 and 21-19. New Structures 21-18 and 21-19 will be 12.83' and 14.42' taller than the existing structures, respectively, and new Structures 21-17 and 21-20 will be 5.33' and 3.83' shorter than the existing structures, respectively. *See* PECO Answer to Question 6, below for more detail on structure height.

See PECO Answer to Question 23, below, for further discussion of alternatives considered.

5. Please provide an engineering assessment of the project including information to address the following:

- a) Provide an analysis of minimum conductor clearances and conductor thermal ratings.**
- b) Provide engineering design criteria and parameters such as vertical clearance to ground.**

- c) **Provide an explanation as to how the project will be in compliance with the current NESC and, where applicable, information on how the applicant’s design specifications and safety rules may exceed NESC suggested standards for transmission lines**

- a) Provide an analysis of minimum conductor clearances and conductor thermal ratings.

Conductor clearances for the project meet or exceed the requirement of PECO’s Engineering Practice EPP-2090 OHT Design Clearances. The clearance requirement in EPP-2090 exceeds the requirements of NESC-2017. Examples of PECO clearance requirements are provided in subsection b, below. The existing conductor will not be replaced.

- b) Provide engineering design criteria and parameters such as vertical clearance to ground.

Ground, Farmland	22.4’
Roadways, Driveways, Parking lots	22.4’
Railroads, above top or rail	30.4’
Area not accessible by vehicles	18.4’

The existing rating will remain as no new conductor is required. The existing conductor will be transferred to the new structures.

- c) Provide an explanation as to how the project will be in compliance with the current NESC and, where applicable, information on how the applicant’s design specifications and safety rules may exceed NESC suggested standards for transmission lines.

The ROW width for the proposed project is governed by the conductor displacement due to wind with the assumption that buildings can be erected on the easement line regardless of local municipality building setback requirements. The ROW width varies along the modified segment, but the ROW provided exceeds the requirements of the NESC and PECO’s Engineering Practice EPP-2090 “OHT Design Clearances” and will provide access for line maintenance, repair and vegetation management

- 6. If applicable, provide the current height of the structures expected to be replaced, the proposed height of the new structures to be installed and the height of the structures to remain in place. Provide the number of structures proposed vs. current number of structures. Provide the location and footprint of the current structures compared to the proposed structures.**

The new structures will be installed, as described in the table below. The existing structures will be removed once the new structure has been erected and the conductors are transferred over.

Structure Number	Existing Structure Height (ft)	New Structure Height (ft)	Structure Relocation Location (offset from existing)
21-17	78'-3"	72'-11"	109 ft west on CSX ROW
21-18	83'-2"	96'-0"	74 ft west on CSX ROW
21-19	83'-2"	97'-7"	118 ft east on CSX ROW
21-20	73'-5"	69'-7"	135 ft east on CSX ROW

See also PECO Attachment 1, which consists of the proposed plan, profile, structure erection drawings and the location of the proposed structures in relationship to existing structures. PECO Attachment 1 is also being provided to Commission Staff in electronic format for convenience as it can be enlarged to focus on specific areas of the project plan.

- 7. If applicable, state if any properties/easements that did not previously have structures will now have a structure. State if the easement agreement allows for structures on these properties that did not previously have a structure. Explain the Company’s process of informing the property owners that a structure will be placed on the easement to their property.**

All proposed new structures will be located on the existing CSX railroad easement. PECO is working with CSX to update its existing easement to reflect the new structure locations and heights.

- 8. If applicable, what is the PJM project ID No. for the proposed project? Has this project been submitted to the PJM Transmission Expansion Advisory Committee (TEAC)? If so, please provide a description of the project as submitted to the TEAC. If this project is part of a larger project, summarize the larger project of which the LON is a part. Please describe how this project may mitigate potential planning criteria violations.**

This project does not affect transmission flows. The project therefore does not involve potential planning criteria and is not subject to PJM review or approval. It has not been submitted to PJM or any PJM committee.

This project is also not part of a larger project.

- 9. Provide a breakdown of project costs. Please explain who will own, finance and build the proposed project.**

PECO estimates the project costs to be \$4.0 million. \$1.1 million of that total is attributable to materials (e.g., new monopoles, foundation, and appurtenances). The remaining \$2.9 million is attributable to direct labor – primarily design and engineering, railroad reviews and flagging, civil and site work, and electrical construction – and allocated PECO overhead and management costs. PennDOT will be reimbursing PECO for the cost of the project. PECO will own and build the proposed project.

10. If available at the time the LON is filed, please provide a copy of any comments received from state or local officials.

Not applicable. No comments have been received.

11. Please provide the anticipated construction commencement date and the proposed in-service date of the project.

This project requires a transmission outage. The outage for the structure erection and wire transfer work is currently scheduled for 10/25/2021 to 11/23/2021.

12. Provide evidence to show that the size, character, design and configuration of the proposed HV line will not substantially alter its existing right-of-way, if applicable. Please identify all alterations necessary to the existing right-of-way.

The project involves relocation of four existing structures as described in Question 6, above. No other changes are proposed. The conductors will remain in a similar location. *See* PECO Attachment 1.

13. A statement identifying the filing date on which the filing of the LON was or is to be made and a statement as found in 57.72(d)(iv) regarding the Commission's review.

PECO's Letter of Notification filing is being made today, August 27, 2021. PECO understands that, pursuant to 57.72(d)(iv), the Commission will review and, by order, approve or disapprove a letter of notification. If the Commission approves a letter of notification, the four new structures shall be constructed and the existing HV conductors will be transferred without the application process set forth in this subchapter. If the Commission does not approve the letter of notification, its order shall direct the applicant to comply with the application process set forth in this subchapter.

14. Provide the number of streams and/or wetlands that will be crossed. Describe how these will be addressed. Will any endangered or threatened species be affected? If a PNDI is required, please provide the results.

Not applicable. No streams or wetlands will be crossed as part of the project.

15. Indicate the number of circuits on the proposed line. Note that if only one is being installed at this time, another LON may be needed when the second circuit is added.

This project involves the construction of four new portal frame structures with one 230 kV transmission circuit.

16. Please provide a copy of the certificate of service.

The certificate of service is attached to the filing.

- 17. Provide the specific NERC or other regulatory standard criteria which is driving the proposed project (e.g. TPL-004-1, P.2).**

Not applicable.

- 18. Explain why the NERC, or other regulatory standard, violation, is now an issue where it wasn't previously.**

Not applicable.

- 19. Explain whether the proposed project meets NERC or PJM minimum planning criteria or whether it exceeds these criteria to meet transmission owner planning criteria. If the project exceeds either of these minimum planning criteria to meet transmission owner criteria, provide a detailed explanation as to why.**

This project does not affect transmission flows and is thus not subject to PJM minimum planning criteria. *See* PECO Answer to Question 8, above.

- 20. Explain whether load growth in the area has led to any change in circumstances as it relates to the need for the proposed project. If so, quantify these load growth impacts.**

Not applicable. This project is not related to load growth.

- 21. State the age and anticipated service life and describe the overall health of the transmission line facilities to be replaced. Additionally, include information related to conditions which may have accelerated aging or led to premature failure of the facilities (e.g. corrosive environment).**

The need for this project is not related to the age or condition of the existing structures.

The age of the transmission structures predates PECO occupying the structures. The structures were originally erected as part of the Reading Railroad's electrification of the Philadelphia to New York "New York Branch" in the early 1930s. The PECO circuit was added to the existing railroad structures in 1968.

PECO's maintenance procedures require a comprehensive inspection on all transmission structures on a 5-year periodicity. The last inspection on the 220-22 line was performed in 2021. The line and structures were found to be in acceptable/satisfactory condition. The service life of the new transmission monopoles and appurtenances is expected to be more than 60 years.

- 22. Provide information regarding any unplanned outages on the subject transmission facilities over the previous 5 years (or more), including the duration, cause, whether service to customers was interrupted by outages on the subject transmission line(s),**

and if so, the number and type of customers which were impacted. Additionally, explain whether the proposed project would mitigate the effects of these outages.

There have been three unplanned outages on this line in the prior 10 years, none of which involved this section of the line or would have been mitigated by this project. No customers lost service during these outages; the PJM transmission system absorbed the outage and continued to operate without interruption. The date, cause, and duration of the outages were as follows:

*****BEGIN CONFIDENTIAL INFORMATION*****

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*****END CONFIDENTIAL INFORMATION*****

23. Explain whether alternative solutions were considered. If so, provide a brief description of the alternative(s) and provide a detailed explanation of why the chosen solution was selected.

No alternate solutions were considered.

24. Explain whether any of the loads served by the transmission facilities to be replaced are considered to be critical customers.

The 220-22 line is an integrated part of the PJM transmission system and thus does not serve individual customers.

25. Quantify the anticipated increase in reliability in terms of customer average interruption duration index, system average interruption duration index, and system average interruption frequency index.

Not applicable. The 220-22 line has not experienced any outages related to these structures.

26. If a transmission owner customer requested the proposed project and is not paying the entire cost, explain why the costs will be assumed by other transmission owner customers.

PennDOT will be reimbursing PECO for the cost of the project.

27. Provide a detailed description of the methodology used to determine that the subject transmission facilities have reached the end of their useful service life. Additionally, provide any survival curves or utility specific data used in this determination.

Not applicable. The need for this project is not related to the useful service life of the existing structures.

Revised October 2018