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PETER V. LACOUTURE

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placouture@rc.com

Via Hand Delivery

July 31, 2013

Mr. Nick Ucci
Principal Policy Associate
Energy Facility Siting Board
89 Jefferson Boulevard
Warwick, RI 02888

Re: In re: The Narragansett Electric Company d/b/a National Grid Notice of Intent to Construct a Loop Line of Less Than 1,000 Feet (Highland Drive Substation Loop Line)

Dear Nick:

I am enclosing for filing an original and ten (10) copies of the Notice of Intent pursuant to Rule 1.6(c) of the EFSB Rules of Practice and Procedure on behalf of National Grid for the Highland Drive Substation in Cumberland.

Please acknowledge receipt of this filing on the enclosed copy of this letter and the Notice of Intent and return them to me. Thank you.

Sincerely,

Peter V. Lacouture

PVL/blv
Enclosures

Copy to: Cumberland Town Council
Sandra M. Giovanelli, Cumberland Town Clerk
Thomas E. Hefner, Esq., Town Solicitor
Bess Gorman, Esq.
Christopher J. Novak, Esq.

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
ENERGY FACILITY SITING BOARD

In re: THE NARRAGANSETT ELECTRIC CO.
d/b/a NATIONAL GRID Notice of Intent to
Construct a Loop Line of Less Than 1,000 Feet
(Highland Drive Substation Loop Line)

NOTICE OF INTENT TO CONSTRUCT

In accordance with Rule 1.6(c) of the Rhode Island Energy Facility Siting Board ("EFSB") Rules of Practice and Procedure, The Narragansett Electric Company d/b/a National Grid ("Narragansett") hereby notifies the EFSB of Narragansett's intent to construct a 115kV loop line[1] of no more than 600 feet in Cumberland, Rhode Island ("Project"). The Project is required to serve a new 115/13.8 kV substation (the "Highland Drive Substation"), whose primary function is to provide load relief to address normal and contingency loading issues in the Cumberland, RI and Woonsocket, RI areas. The Project will mainly serve the Highland Corporate Park including the CVS Caremark Corporation ("CVS") facilities located therein. The new loop line will be supported by four new structures (#143A, #143B, #143C, and #143D) that will be constructed on Narragansett's existing right-of-way. The new loop line will be located on (i) property owned in fee by Narragansett and to be occupied by the proposed Highland Drive Substation and (ii) on property owned in fee by Cintas Corporation over which Narragansett holds an easement.

The Project does not constitute an "alteration" of a major energy facility. See Rule 1.2(d). Further, Narragansett believes that this Project will not result in any impact on the environment or the public health, safety and welfare, and, therefore, it does not require formal EFSB investigation or approval.

[1] A "loop line" is a line that "loops" from the main transmission line into a substation and back out to the transmission line.

Narragansett files this notice pursuant to EFSB Rule 1.6(c) regarding power lines of less than 1,000 feet with a capacity of 69 kV or more. According to the EFSB's rules, the EFSB shall act upon this Notice, and any objection filed thereto, no later than forty-five days following the filing of this Notice.

1. Identification of the Owner of the Facility

The owner of the relevant facilities is Narragansett, an affiliate of National Grid USA, Inc., 40 Sylvan Road, Waltham, Massachusetts 02451. The Project will be built within an existing transmission line right-of-way ("ROW") on property owned by Cintas Corporation over which Narragansett holds an easement for the construction and operation of transmission line facilities, and on property owned in fee by Narragansett on which the proposed Highland Drive Substation will be constructed. The ROW is presently occupied by two 115 kV transmission lines known as the J16 line and the R9 line. The four new structures for the new loop line will be installed within the existing alignment of the J16 line.

2. Detailed Description of the Proposed Facility

A. Length

The Project involves the construction of a loop line comprised of two supply lines, each no more than 300 feet in length, that will interconnect the new Highland Drive Substation to be constructed on property owned by Narragansett and located on Highland Corporate Drive, Cumberland, RI. The new loop line and substation will be interconnected with Narragansett's existing 115 kV J16 transmission line.

B. Route

Narragansett will install two single-pole vertical dead-end pull-off weathering steel structures (Pole #143A & #143D) each on foundations and approximately 80 feet above grade,

and two three-pole vertical dead-end pull-off wood structures (Pole #143B & #143C) each embedded into the soil and approximately 60 feet above grade. An aerial locus map showing the proposed location of the new structures, a draft site plan, and a cross-section of the new structures are attached hereto as Exhibit A. As shown, the two supply lines will be located approximately 50 feet apart and between structures 143 and 144 along the existing J16 line. Narragansett will then install approximately 600 circuit feet of 795 ACSR Drake conductor from the J16 transmission line to the new substation.

C. Function

The primary drivers for the new Highland Drive substation are normal and contingency distribution feeder loading issues and substation transformer contingency issues occurring either at the Riverside substation located at 1000 Florence Drive Extension in Woonsocket, RI or the Staples substation located at 25 Staples Road in Cumberland, RI. The substation transformer contingency issues exist at the Staples and Riverside substations under existing and forecasted load. Under normal conditions with current load, the Riverside substation distribution feeders exceed their ratings limits. Under forecasted load conditions, which include proposed additions at Highland Corporate Park, the distribution feeders at both the Riverside and Staples substations exceed their ratings limits. The cause of the aforementioned issues is centered at the Highland Corporate Park; large commercial customers in this park have significant normal and second feeder service needs, and future development to Highland Corporate Park is anticipated, as exemplified by CVS's current expansion plans.

The conceptual cost estimate for the Highland Drive Substation is $14.8M with a +50%/-25% tolerance. Because this substation is new construction, these costs are almost entirely capital costs. These estimated costs can be separated into transmission line costs of $1.1M,

transmission substation costs of $7.5M, distribution substation costs of $4.7M, and distribution line costs of $1.5M. The transmission line, transmission substation, and distribution substation costs will be used to serve all area customers. A portion of the distribution lines cost, $0.77M will be used to directly serve a new CVS facility.

With respect to cost recovery, Narragansett will be incurring capital, O&M and removal transmission and distribution costs associated with the construction of the new Highland Drive Substation. While a small portion of the distribution line costs are attributable to CVS, a contribution in aid of construction, or CIAC, calculated in accordance with Narragansett's approved method is not expected. The capital, O&M and removal transmission costs will be billed to New England Power Company, Narragansett's affiliated transmission company, in accordance with the FERC approved Integrated Facilities Agreement. The distribution capital costs will be recovered through the Company Infrastructure, Safety, and Reliability mechanism. Any remaining distribution O&M costs would not be separately recovered outside of Narragansett's base rates.

3. The Project Does Not Constitute a Major Energy Facility or an Alteration of a Major Energy Facility

Narragansett believes that the Project does not constitute an alteration of a major energy facility. The proposed loop line will be no more than 600 feet in length and the EFSB has expressly excluded power lines under 1000 feet in length from the definition of "alteration" in Rule 1.2(d): "The construction, modification or relocation of a power line of 69 kV or more which are less than 1000 feet in length shall not be treated as an alteration." As noted above, the work will occur entirely within the Narragansett fee-owned property and Narragansett's adjacent ROW that is already occupied by transmission lines and structures. In this sense, the Project is

substantially similar to another Narragansett project in which the EFSB determined that a transmission line under 1000 feet in length does not constitute an alteration of a major energy facility. See Docket SB 2013-1 (decision dated April 1, 2013).

Further, Narragansett believes that this Project will not result in any significant impact on the environment or the public health, safety and welfare, and, therefore, it does not constitute a "major energy facility" that in any way requires further formal EFSB investigation or approval.

CONCLUSION

For the reasons stated above, Narragansett respectfully requests that the EFSB enter an Order pursuant to EFSB Rule 1.6(e), accepting this Notice of Intent to Construct the new approximately 600-foot 115 kV loop line and ruling that the Project may proceed without any further review by the EFSB.

Respectfully submitted,

THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID

Bess Gorman, Assistant General Counsel (RI Bar #8751)
National Grid USA Service Company, Inc.
40 Sylvan Road
Waltham, MA 02451
Tel. 781-907-1834 · Fax 781-907-5701
bess.gorman@nationalgrid.com

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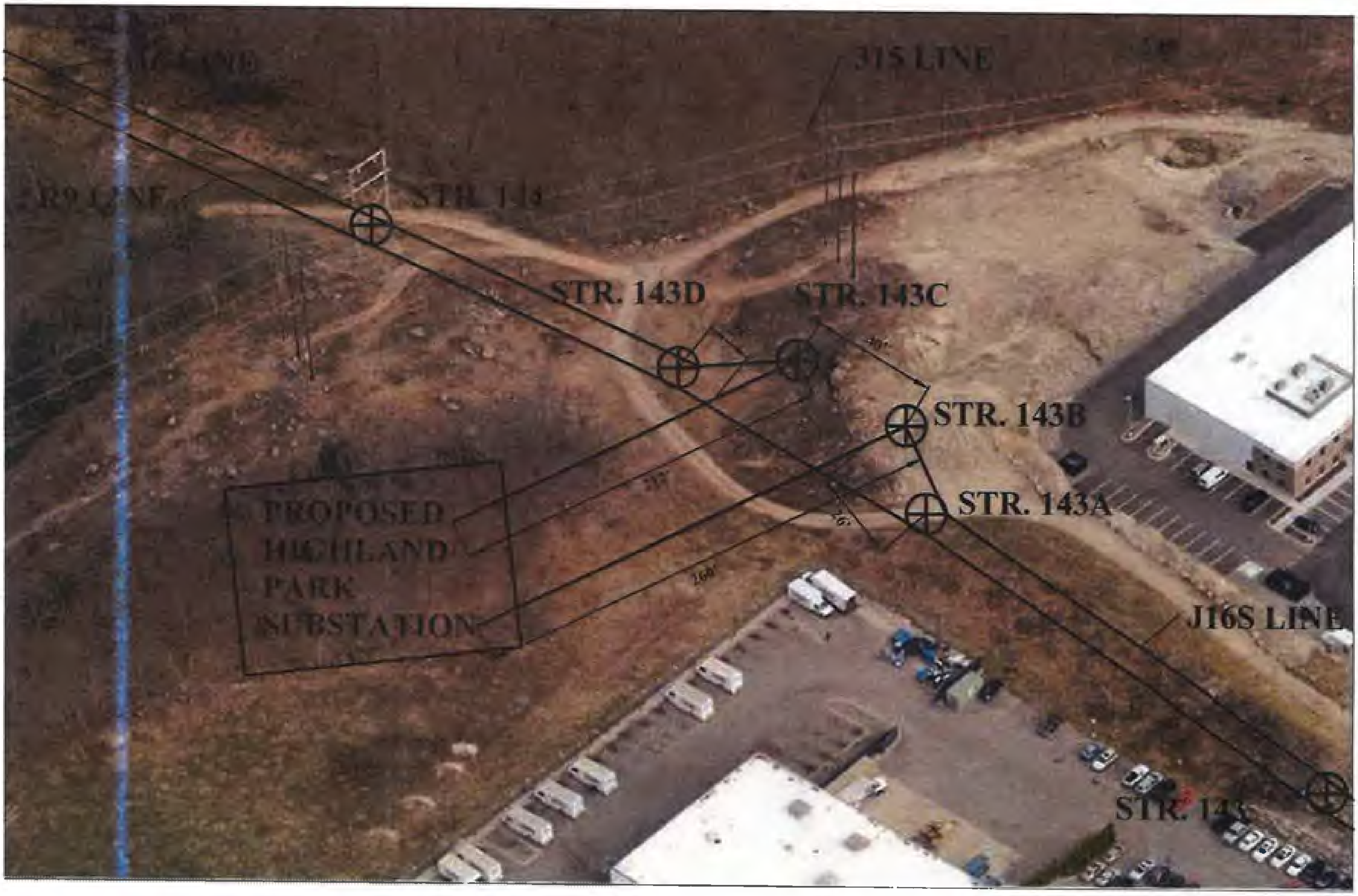

INCHES ON ORIGINAL

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115 KV, J16 and J16S LOOP

HIGHLAND PARK SUBSTATION
PROPOSED CONFIGURATION

400194-C-G-01

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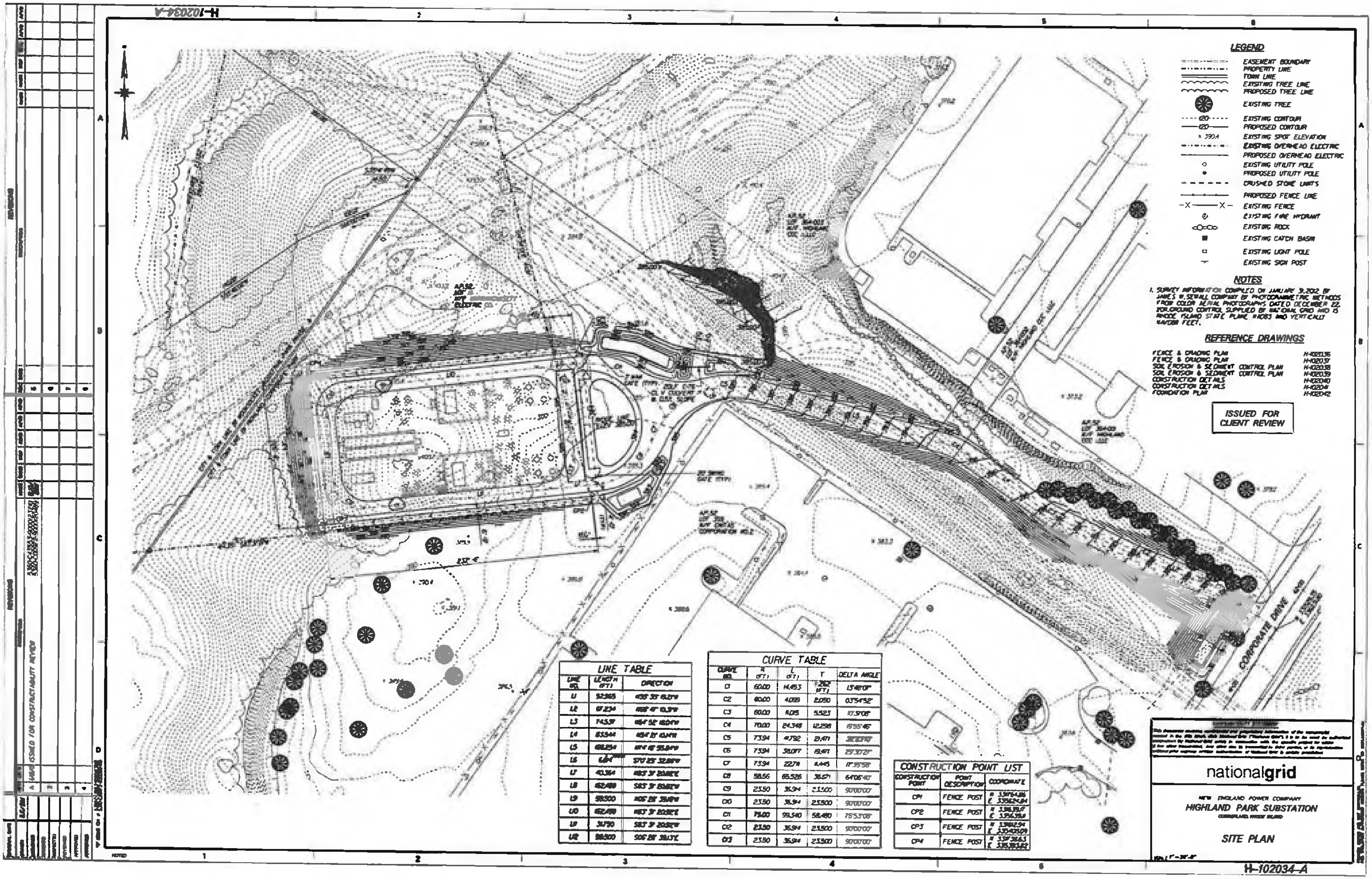

H-102034-A
LEGEND
EASEMENT BOUNDARY
PROPERTY LINE
TOWN LINE
EXISTING TREE LINE
PROPOSED TREE LINE
EXISTING TREE
EXISTING CONTOUR
PROPOSED CONTOUR
x 390.4
EXISTING SPOT ELEVATION
EXISTING OVERHEAD ELECTRIC
PROPOSED OVERHEAD ELECTRIC
EXISTING UTILITY POLE
PROPOSED UTILITY POLE
CRUSHED STONE LIMITS
PROPOSED FENCE LINE
EXISTING FENCE
EXISTING FIRE HYDRANT
EXISTING ROCK
EXISTING CATCH BASIN
EXISTING LIGHT POLE
EXISTING SIGN POST
NOTES
REFERENCE DRAWINGS
FENCE & GRADING PLAN H-102036
FENCE & GRADING PLAN H-102037
SOIL EROSION & SEDIMENT CONTROL PLAN H-102038
SOIL EROSION & SEDIMENT CONTROL PLAN H-102039
CONSTRUCTION DETAILS H-102040
CONSTRUCTION DETAILS H-102041
FOUNDATION PLAN H-102042
ISSUED FOR CLIENT REVIEW
CORPORATE DRIVE
ISSUED FOR CONSTRUCTABILITY REVIEW
nationalgrid
NEW ENGLAND POWER COMPANY
HIGHLAND PARK SUBSTATION
SITE PLAN
H-102034-A

LINE TABLE

LINE NO.	LENGTH (FT)	DIRECTION
L1	92.365	[illegible]
L2	97.234	[illegible]
L3	74.537	[illegible]
L4	83.544	[illegible]
L5	68.254	[illegible]
L6	6.84	S70 25' 32.89"W
L7	40.364	[illegible]
L8	62.490	[illegible]
L9	58.500	[illegible]
L10	62.490	[illegible]
L11	31.750	[illegible]
L12	58.500	[illegible]

CURVE TABLE

CURVE NO.	R (FT)	L (FT)	T (FT)	DELTA ANGLE
C1	60.00	14.453	7.262	13°48'07"
C2	60.00	4.099	2.050	03°54'52"
C3	60.00	11.015	5.523	10°31'08"
C4	70.00	24.348	12.298	19°55'46"
C5	73.94	41.792	21.471	[illegible]
C6	73.94	38.077	19.471	29°30'27"
C7	73.94	22.711	11.443	17°35'58"
C8	58.56	65.526	36.571	64°06'40"
C9	23.50	36.914	23.500	90°00'00"
C10	23.50	36.914	23.500	90°00'00"
C11	75.00	99.340	58.480	75°53'08"
C12	23.50	36.914	23.500	90°00'00"
C13	23.50	36.914	23.500	90°00'00"

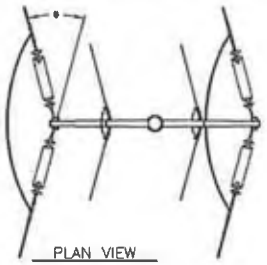
CONSTRUCTION POINT LIST

CONSTRUCTION POINT	POINT DESCRIPTION	COORDINATE
CP1	FENCE POST	N [illegible] E [illegible]
CP2	FENCE POST	N [illegible] E [illegible]
CP3	FENCE POST	N [illegible] E [illegible]
CP4	FENCE POST	N [illegible] E [illegible]

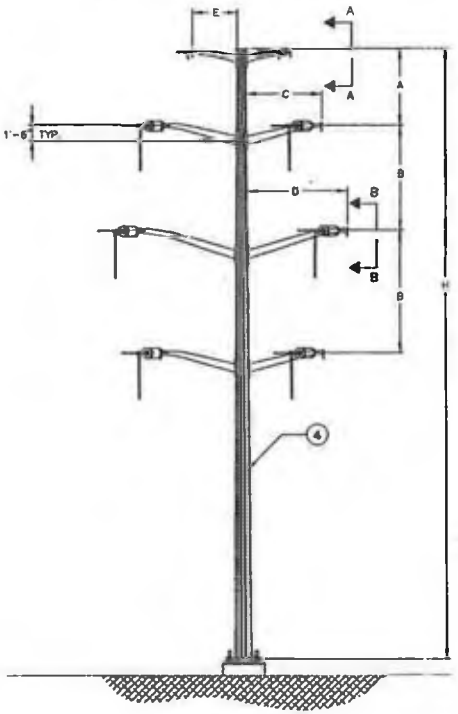
Structures 143A, 143D

D2.ST.DE.00

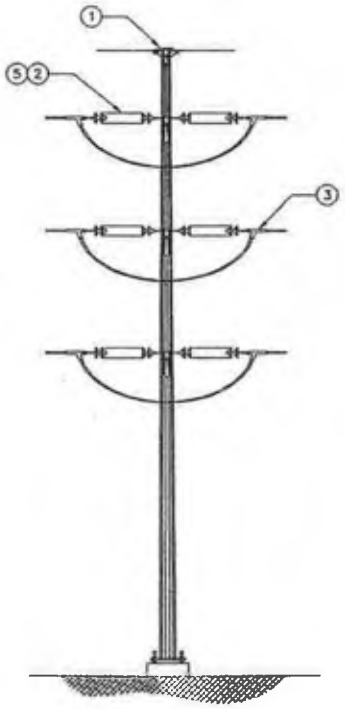
ASSEMBLY LIST								
TAG	CU ID	1	2	3	4	5	6	DESCRIPTION
1	SW.DE.CP.VA	2	2	2	2	2	2	SHIELDWIRE, DEADEND, COMPRESSION, VANG ATTACHED
2	IN.DE.SS.VA	6	6	6	-	6	-	INSULATOR, DEADEND, SINGLE STRING, VANG ATTACHED
	IN.DE.SS.VS	-	-	-	6	-	-	INSULATOR, DEADEND, SINGLE STRING, VANG ATTACHED - STATION POST
	IN.DE.EV.VS	-	-	-	-	-	6	INSULATOR, DEADEND, DOUBLE STRING EHV, VANG ATTACHED - STATION POST
3	CN.DE.CP.AC	12	12	12	12	12	24	CONDUCTOR, DEADEND, COMPRESSION, ADJUSTABLE CLEVIS
4	PO.ST	1	1	1	1	1	1	STRUCTURE, STEEL
5	CN.CL.PS	-	-	-	6	-	6	CONDUCTOR, CLAMP, STATION POST



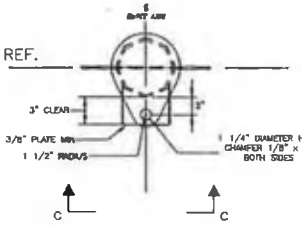
PLAN VIEW



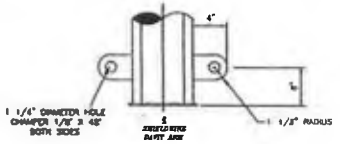
FRONT ELEVATION



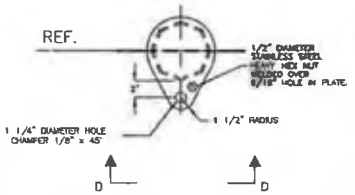
SIDE ELEVATION



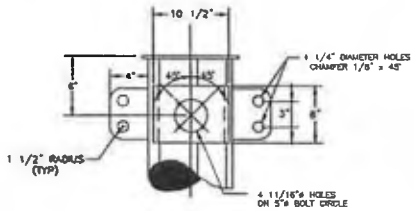
SECTION B–B
CONDUCTOR ATTACHMENT PLATES
TYPICAL 6 LOCATIONS



SECTION D–D



SECTION A–A
SHIELD WIRE ATTACHMENT PLATES
WITH GROUNDING NUTS
TYPICAL 2 LOCATIONS



SECTION C–C

DIMENSION TABLE								
	A	B	C	D	E	θ	DISCS	VOLTAGE
1	12'-0"	12'-0"	7'-6"	10'-6"	5'-6"	0° - 20°	10	115 kV
2	12'-0"	12'-0"	8'-0"	11'-0"	6'-0"	>20° - 40°	10	115 kV
3	12'-0"	12'-0"	8'-6"	11'-6"	6'-6"	>40° - 60°	10	115 kV
4	12'-0"	12'-0"	9'-0"	12'-0"	7'-0"	>60° - 80°	10	115 kV
5	20'-0"	25'-0"	13'-0"/COS(θ/2)	13'-0"/COS(θ/2)	9'-6"/COS(θ/2)	0° - 90°	17	230 kV
6	20'-0"	25'-0"	13'-0"/COS(θ/2)	13'-0"/COS(θ/2)	9'-6"/COS(θ/2)	0° - 90°	19	345 kV

MACRO UNIT
DOUBLE CIRCUIT DOUBLE SHIELDWIRE (D2)
STEEL (ST)
DEADEND (DE)

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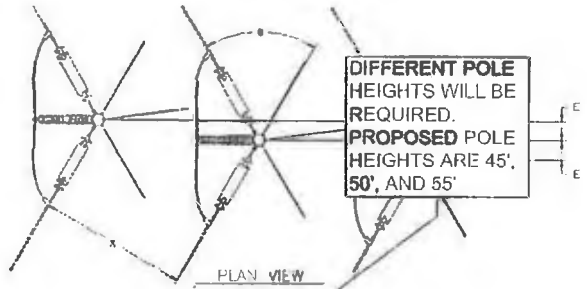
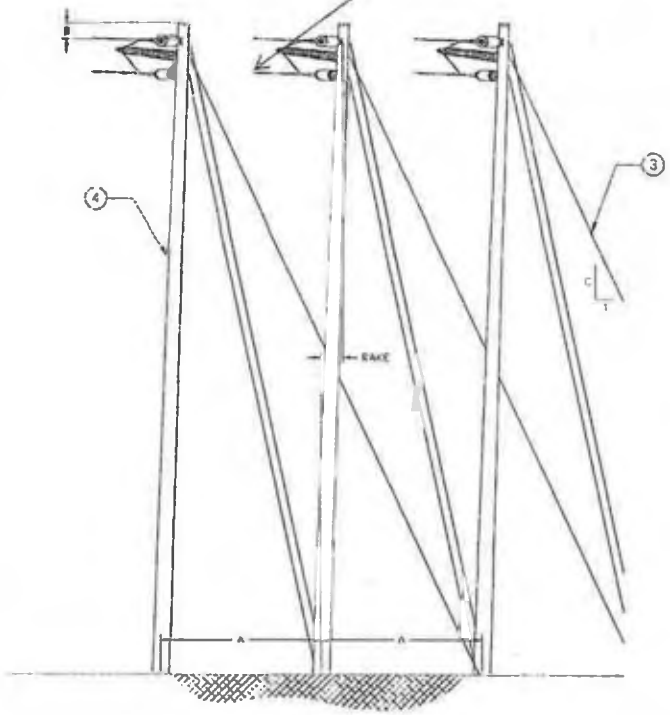
INCHES ON ORIGINAL

D2.ST.DE.00

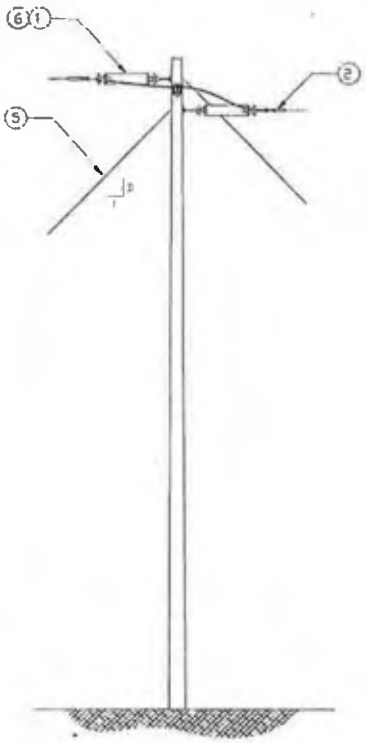
Structure H3C

HO.WD.D3.DO





FRONT ELEVATION



SIDE ELEVATION

ASSEMBLY LIST				
TAG	CU ID	1	2	DESCRIPTION
1	IN.DE.SS.PL	3	-	INSULATOR, DEADEND, SINGLE STRING, POLE ATTACHED WITH LINE POST
	IN.DE.SS.PA	-	3	INSULATOR, DEADEND, SINGLE STRING, POLE ATTACHED
2	CN.DE.CP.AC	6	6	CONDUCTOR, DEADEND, COMPRESSION ADJUSTABLE CLEVIS
3	GUID.IN.SN	3	3	GUY, INDIVIDUAL, INSULATED, SINGLE
4	PO.WD.ND	3	3	POLE, WOOD, NO DOWNLEAD
5	GU.ID.IN.SN	6	6	GUY, INDIVIDUAL, INSULATED, SINGLE
6	CN.CL.TR	3	-	CONDUCTOR, CLAMP, TRUNNION

DIMENSION TABLE										
	A	B	C	D	E	RAKE	X	θ	DISCS	VOLTAGE
1	X/COS(θ/2)	1'-10"	2	1	1'-6"	1'-8"	5'-0"	0° - 60°	6	69 kV
2	X/COS(θ/2)	1'-10"	2	1	1'-6"	1'-8"	5'-0"	60° - 90°	6	69 kV

MACRO UNIT
UNSHIELDED H-FRAME (HO)
WOOD (WD)
3 POLE DEADEND PULLOFF (D3)

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INCHES ON ORIGINAL

HO.WD.D3.DO

Structure 143B

400194-C-S-01

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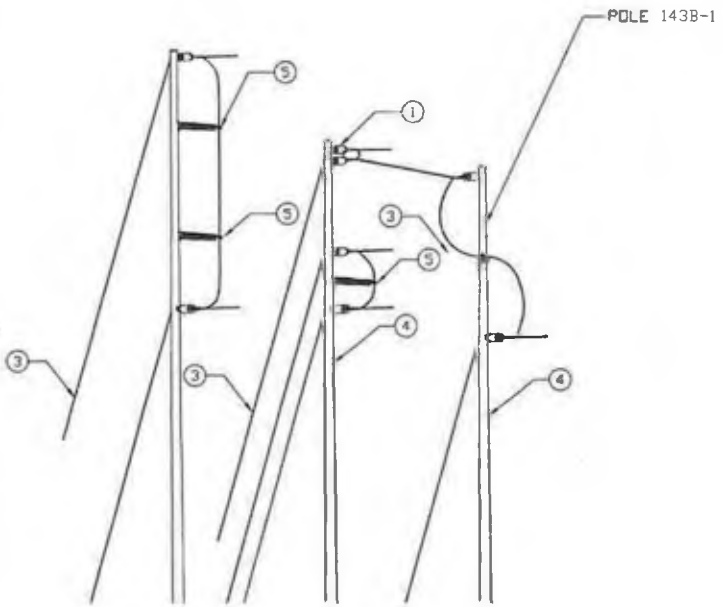
ASSEMBLY LIST						
TAG	CU ID	1	2	3	4	DESCRIPTION
1	IN.DE.SS.PL	3		3		INSULATOR, DEADEND, SINGLE STRING, POLE ATTACHED ANGLE - LINE POST
	IN.DE.SS.PA		3		3	INSULATOR, DEADEND, SINGLE STRING, POLE ATTACHED ANGLE
2	CN.DE.CP.AC	6	6	6	6	CONDUCTOR, DEADEND, COMPRESSION, ADJUSTABLE CLEVIS
3	GU.ID.IN.SN	6	6	6	6	GUY, INDIVIDUAL, INSULATED, SINGLE
4	PO.WD.ND	3	3	3	3	POLE, WOOD, NO DOWNLEAD
5	CN.CL.TR	3		3		CONDUCTOR, CLAMP, TRUNNION



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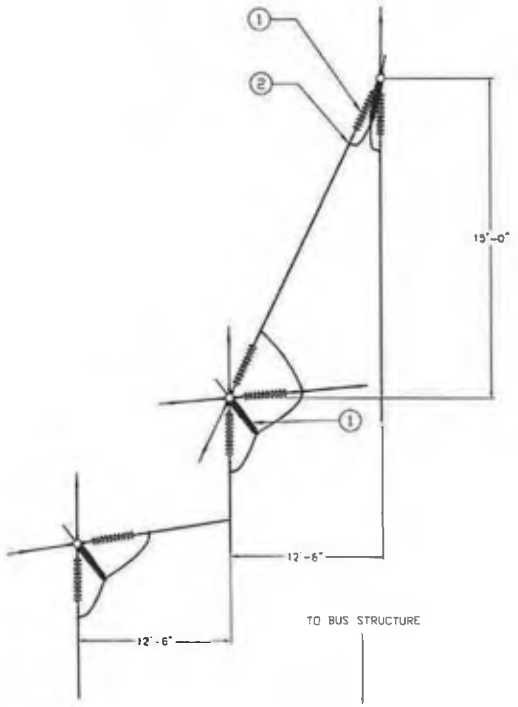

PLAN VIEW

J165 LOOP - HIGHLAND PARK SUBSTATION
STRUCTURE 143B - MACRO UNIT
UNSHIELDED
3 POLE DEADEND PULLOFF

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