part 3

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way (ROW)

3. Provide a drawing(s) of the ROW cross section showing typical transmission line structure placements referenced to the edge of the right-of-way. This drawing should include:

a. ROW width for each cross section drawing;

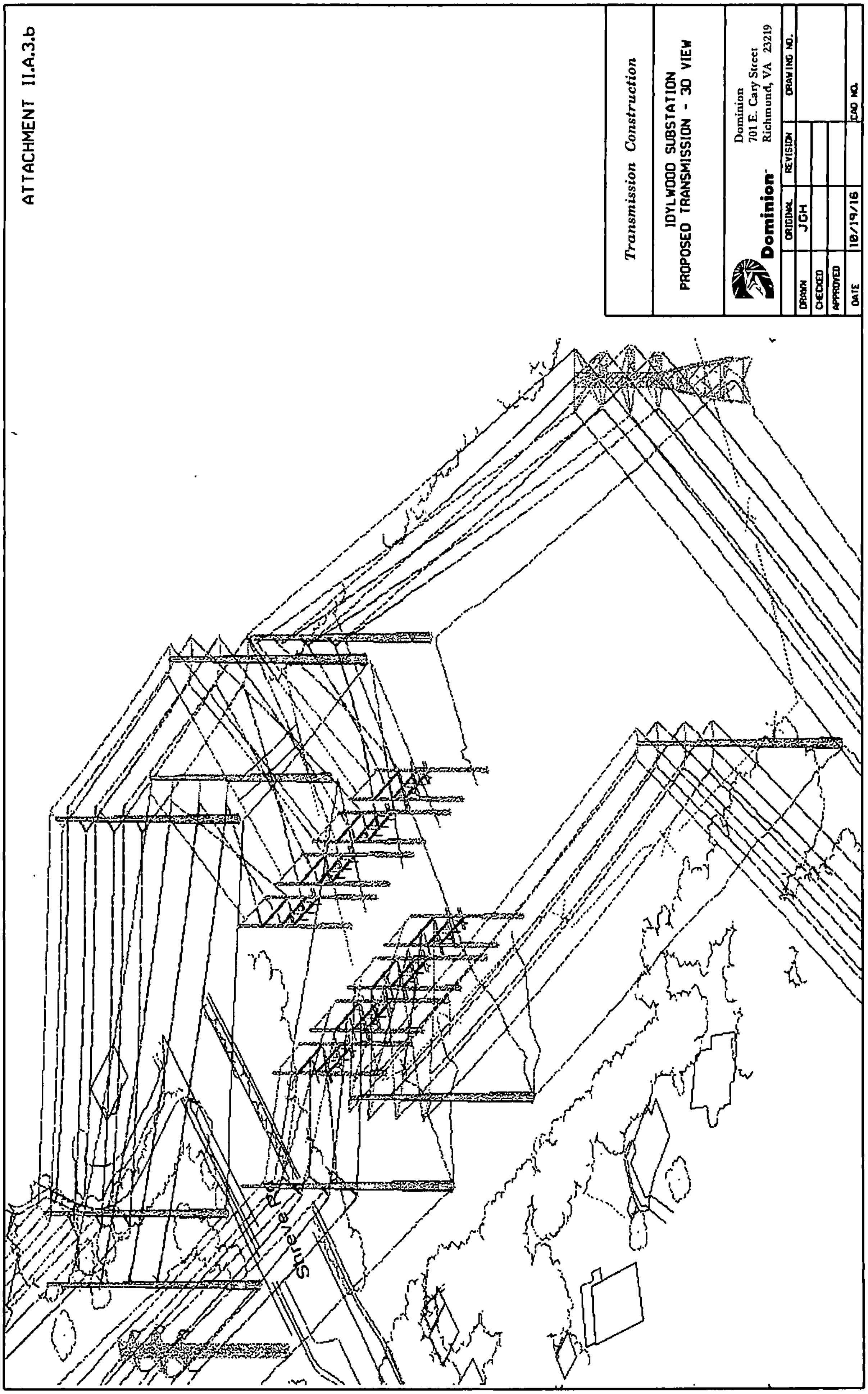
b. Lateral distance between the conductors and edge of ROW; and

c. Existing utility facilities on the ROW;

Response: With the exception of three structures located within the existing right-of-way adjacent to the Company's fee-owned property, the rearrangements associated with this Rebuild Project occur within the Company's Idylwood Substation property.

Three-dimensional views of the existing and proposed rearrangement work at Idylwood Substation occurring as part of this Rebuild Project are depicted in Attachments II.A.3.a and b, respectively.

Attachent II.A.3.a


ATTACHMENT II.A.3.b
Transmission Construction
IDYLWOOD SUBSTATION
PROPOSED TRANSMISSION - 3D VIEW
Dominion
Dominion
701 E. Cary Street
Richmond, VA 23219
ORIGINAL
REVISION
DRAWING NO.
DRAWN
JGH
CHECKED
APPROVED
DATE
10/19/16
CAD NO.

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way (ROW)

4. Detail what portions of the ROW are subject to existing easements and over what portions easements will be needed;

Response: The Company proposes to shift the existing Idylwood Substation footprint within Company-owned property for the Rebuild Project. The Company will make use of existing fee-owned property and right-of-way easements. No new easements will be required for the Idylwood Substation Rebuild Project. See Section II.B.3 for additional design details for the proposed structures.

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way (ROW)

5. Detail the proposed ROW clearing methods to be used and the ROW restoration and maintenance practices planned for the proposed project;

Response: The existing transmission facilities are located on property adjacent to developed residential property and Idylwood Substation. Clearing on the western portion of the right-of-way adjacent to the substation will be required to ensure proper blowout clearances are accounted for with the Rebuild Project.

Any clearing that is required will be accomplished by hand in wetland areas and within 100 feet of streams. Care will be taken not to leave debris in streams or wetland areas. Matting may be used for heavy equipment in these areas. Erosion control devices will be used on an ongoing basis during all clearing and construction activities.

Erosion control will be maintained, and temporary stabilization for all soil disturbing activities will be used until the right-of-way has been restored. Upon completion of the Rebuild Project, the Company will restore the right-of-way utilizing site rehabilitation procedures outlined in the Company's *General Erosion and Sedimentation Control Specifications for the Construction and Maintenance of Electric Transmission Lines* that is approved by the Virginia Department of Environmental Quality ("DEQ"). Time of year and weather conditions may affect when permanent stabilization takes place.

This right-of-way will continue to be maintained on a regular cycle to prevent interruptions to electric service and provide ready access to the right-of-way in order to patrol and make emergency repairs.

Separate from the Company's policies established for line clearing activities, the Board of Supervisors approved the Company's Special Exception application subject to certain development conditions. See Attachment III.E.1 for the County's development conditions relating to the right-of-way clearing, restoration, and maintenance for the Idylwood Substation Rebuild Project. See Section III.E for a description of the Company's Special Exception application approval process and Section I.A for information regarding the pending Special Exception Amendment.

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way (ROW)

6. Indicate the permitted uses of the ROW;

Response: Any non-transmission use will be permitted that:

- is in accordance with the terms of the easement agreement for the right-of-way;
- is consistent with the safe maintenance and operation of the transmission lines;
- will not restrict future line design flexibility; and
- will not permanently interfere with future construction.

Typical permitted uses, with conditions, of the rights-of-way include:

1) Agriculture
2) Nurseries
3) Bicycle trails
4) Parking lots
5) Other utility facilities
6) Recreational areas
7) Roadways
8) Fences with gates

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way (ROW)

7. Describe the Company's route selection procedures. Detail alternative routes considered. Describe the Company's efforts in considering these alternatives. Detail why the proposed route was selected and other alternatives were rejected.

Response: The Company's route selection for a transmission line relocation begins with a review of existing rights-of-way. This approach generally minimizes impacts on the natural and human environments and is consistent with FERC Guideline #1, which states that existing rights-of-way should be given priority when adding new transmission facilities, and § 56-46.1 of the Code of Virginia, which also promotes the use of existing rights-of-way for new transmission facilities. For the proposed the Idylwood Substation Rebuild Project, the existing right-of-way that currently contains the lines is adequate.

Because the existing rights-of-way and Company-owned property are adequate to complete the Rebuild Project, no new right-of-way is necessary.

The Company has reviewed available commercial and industrial properties within one mile of the proposed site. Included on Attachment II.A.7.a is a list of 107 parcels located within one mile of Idylwood Substation that are zoned either commercial or industrial and describes whether: (i) a specific parcel is developed or vacant, and (ii) the acreage is appropriate for development of a new substation site. The Company determined 2 acres was the minimum amount of acreage to develop a new substation site. Of the 107 parcels, only 15 parcels are vacant. Of those 15 vacant parcels, none satisfy the 2-acre threshold but some of the parcels are adjacent to one another and could be consolidated to create a suitable sized parcel for a substation. Both opportunities for consolidating parcels are located across Interstate 495 (Capital Beltway) from the existing transmission line corridor and would require a new transmission line. Taking into consideration the costs to acquire all of the necessary parcels, the anticipated timeline of Commission approval for a new transmission line, and new potential impacts from such a project, the Company rejected the alternative to develop a new substation. Attachment II.A.7.b contains the map showing commercial- or industrial- zoned parcels.

Idylwood Substation - "C-" or "I-" Zoned Parcels within 1 Mile of Substation

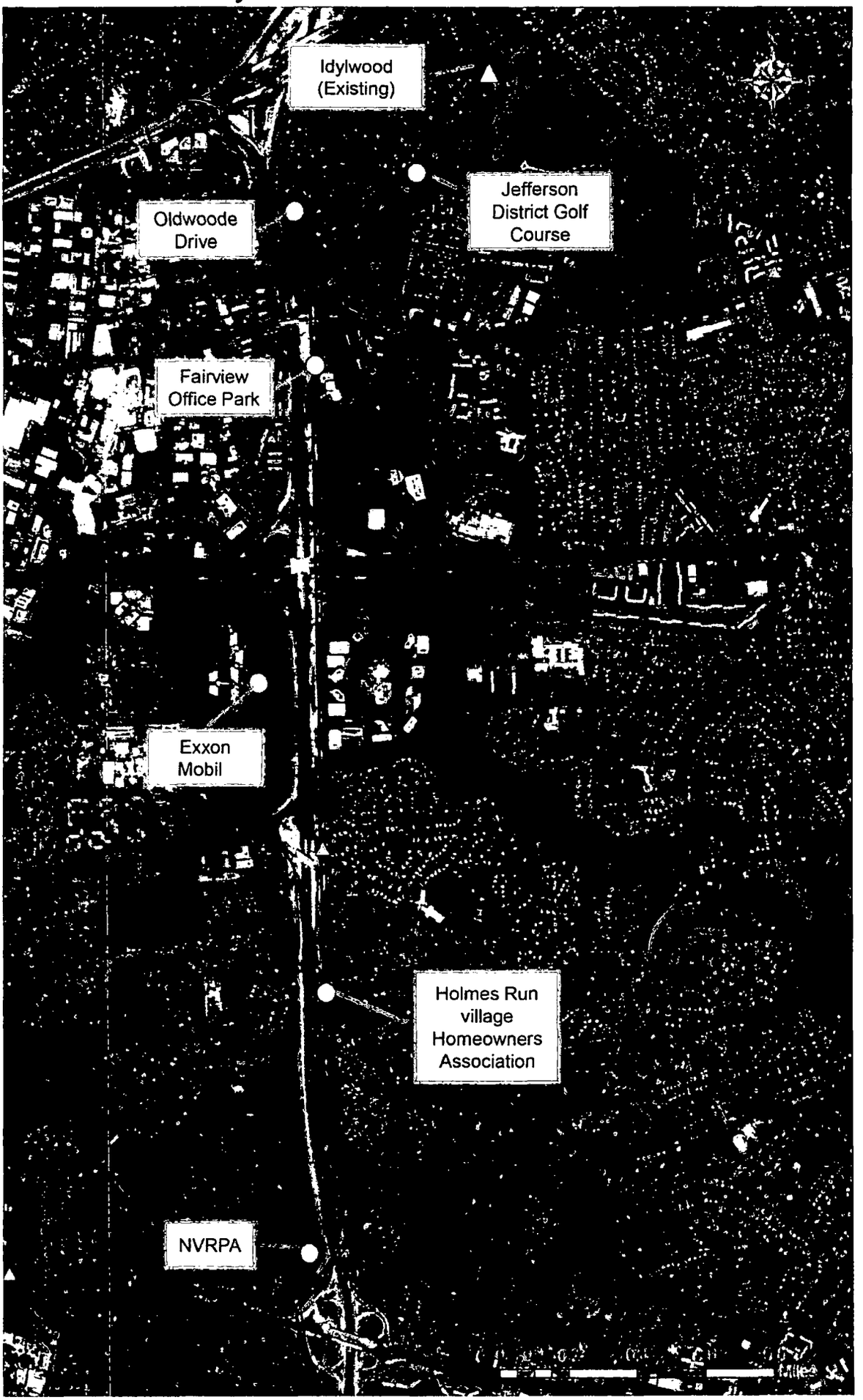
	Tax Map #	Zoning	Vacant?	Size (Ac.)	Reason Site Not Feasible
1	0501 01 0038	C-8	No (apartments)	3.57	Site is developed already
2	0492 11 0013A	C-8	No (auto repair shop)	0.36	Site is developed already; < 2 acres
3	0492 01 0096C	C-8	No (auto repair shop)	0.57	Site is developed already; < 2 acres
4	0492 01 0096B	C-8	No (auto repair shop)	0.53	Site is developed already; < 2 acres
5	0492 09 0001A	C-8	No (auto repair shop)	0.06	Site is developed already; < 2 acres
6	0503 15 C	C-8	No (auto repair shop)	0.49	Site is developed already; < 2 acres
7	0503 15 A2	C-8	No (auto repair shop)	0.31	Site is developed already; < 2 acres
8	0494 03 0007	I-5	No (automotive)	0.54	Site is developed already; < 2 acres
9	0503 18 0001	C-5	No (business services)	0.68	Site is developed already; < 2 acres
10	0501 01 0039E	C-8	No (carry out restaurant)	0.92	Site is developed already; < 2 acres
11	0494 01 0053	C-6	No (community center)	7.47	Site is developed already
12	0492 28 (1-10)	C-2	No (condominiums)	N/A	Site is developed already; < 2 acres
13	0492 39 (101-406)	C-3	No (condominiums)	N/A	Site is developed already; < 2 acres
14	0501 18 (1-15)	C-3	No (condominiums)	N/A	Site is developed already; < 2 acres
15	0501 01 0028	C-5	No (convenience store)	0.35	Site is developed already; < 2 acres
16	0492 01 0031A	I-5	No (gas station)	0.74	Site is developed already; < 2 acres
17	0492 01 0097	C-5	No (gas station)	0.46	Site is developed already; < 2 acres
18	0503 15 A1	C-8	No (gas station)	0.52	Site is developed already; < 2 acres
19	0501 01 0039A	C-8	No (gas station)	0.46	Site is developed already; < 2 acres
20	0501 01 0051B	C-6	No (gas station)	0.4	Site is developed already; < 2 acres
21	0494 14 0005	C-4	No (hotel)	3.07	Site is developed already
22	0494 01 0049F	C-3	No (hotel/restaurant)	2	Site is developed already; < 2 acres
23	0492 01 0071B	C-3	No (low rise office)	0.93	Site is developed already; < 2 acres
24	0492 01 0071A	C-3	No (low rise office)	0.99	Site is developed already; < 2 acres
25	0492 01 0072	C-3	No (low rise office)	0.94	Site is developed already; < 2 acres
26	0492 01 0066	C-3	No (low rise office)	0.04	Site is developed already; < 2 acres
27	0492 01 0077A	C-3	No (low rise office)	0.86	Site is developed already; < 2 acres
28	0492 01 0080A	I-3	No (low rise office)	0.74	Site is developed already; < 2 acres
29	0494 01 0044E1	C-3	No (low rise office)	2.71	Site is developed already
30	0494 01 0049G	C-3	No (low rise office)	1.28	Site is developed already; < 2 acres
31	0494 01 0028B	I-5	No (low rise office)	5.13	Site is developed already
32	0494 04 0001B	I-5	No (low rise office)	1.65	Site is developed already; < 2 acres
33	0494 04 0002	I-5	No (low rise office)	1.75	Site is developed already; < 2 acres
34	0494 04 0005A	I-5	No (low rise office)	0.57	Site is developed already; < 2 acres
35	0494 04 0006	I-5	No (low rise office)	0.97	Site is developed already; < 2 acres
36	0492 01 0094	Commercial	No (low rise office)	0.45	Site is developed already; < 2 acres
37	0492 11 0012A	C-8	No (low rise office)	0.56	Site is developed already; < 2 acres
38	0492 10 0001A	C-8	No (low rise office)	0.85	Site is developed already; < 2 acres
39	0501 23 B	C-3	No (low rise office)	0.07	Site is developed already; < 2 acres
40	0501 01 0041C	C-3	No (low rise office)	0.07	Site is developed already; < 2 acres
41	0501 01 0041D	C-3	No (low rise office)	1.07	Site is developed already; < 2 acres
42	0494 14 0003	C-4	No (medium/high rise office)	1.91	Site is developed already; < 2 acres
43	0494 14 0004	C-4	No (medium/high rise office)	6.25	Site is developed already
44	0494 01 0062C	C-4	No (medium/high rise office)	3.05	Site is developed already
45	0494 04 0003	I-5	No (mini warehouses)	0.49	Site is developed already; < 2 acres
46	0494 04 0004	I-5	No (mini warehouses)	0.47	Site is developed already; < 2 acres
47	0494 04 0007	I-5	No (mini warehouses)	0.42	Site is developed already; < 2 acres
48	0494 04 0008	I-5	No (mini warehouses)	0.94	Site is developed already; < 2 acres
49	0501 01 0026	I-4	No (mini warehouses)	3.16	Site is developed already

50	0492 01 0092A	C-8	No (neighborhood center)	1.89	Site is developed already; < 2 acres
51	0492 09 0001B	C-8	No (neighborhood center)	1.04	Site is developed already; < 2 acres
52	0501 01 0039B	C-8	No (neighborhood center)	1.97	Site is developed already; < 2 acres
53	0501 01 0039D	C-8	No (neighborhood center)	3.87	Site is developed already
54	0501 01 0051C	Commercial	No (neighborhood center)	4.94	Site is developed already
55	0494 01 0059A	I-3	No (office)	20	Site is developed already
56	0494 01 0059B	I-3	No (office)	13	Site is developed already
57	0494 01 0059C	I-3	No (office)	10.63	Site is developed already
58	0492 11 0013	C-8	No (office)	0.33	Site is developed already; < 2 acres
59	0503 18 0002A	C-3	No (office)	0.35	Site is developed already; < 2 acres
60	0403 01 0116	C-2	No (office)	0.17	Site is developed already; < 2 acres
61	0403 01 0117	C-2	No (office)	0.17	Site is developed already; < 2 acres
62	0103 01 0118	C-2	No (office)	0.17	Site is developed already; < 2 acres
63	0403 01 0118A	C-2	No (office)	0.17	Site is developed already; < 2 acres
64	0403 12 0018	I-6	No (other industrial)	0.46	Site is developed already; < 2 acres
65	0403 12 0019	I-6	No (other industrial)	0.31	Site is developed already; < 2 acres
66	0503 18 0002	C-3	No (private school)	1.23	Site is developed already; < 2 acres
67	0492 01 0031	C-8	No (regional center)	1.4	Site is developed already; < 2 acres
68	0494 01 0049E	C-3	No (restaurant)	1.49	Site is developed already; < 2 acres
69	0492 01 0028	I-5	No (retail)	3.91	Site is developed already
70	0492 01 0028A	C-8	No (retail)	0.23	Site is developed already; < 2 acres
71	0492 01 0027	C-8	No (retail)	0.28	Site is developed already; < 2 acres
72	0492 01 0026C	C-8	No (retail)	2.87	Site is developed already
73	0492 11 0010	C-8	No (retail)	0.43	Site is developed already; < 2 acres
74	0492 11 0010A	C-8	No (retail)	0.06	Site is developed already; < 2 acres
75	0492 11 0011A	C-8	No (retail)	0.68	Site is developed already; < 2 acres
76	0503 15 A4	C-8	No (retail)	0.21	Site is developed already; < 2 acres
77	0503 15 A5	C-8	No (retail)	0.21	Site is developed already; < 2 acres
78	0492 01 0073	C-3	No (single family residence)	0.49	Site is developed already; < 2 acres
79	0492 01 0095	C-8	No (specialty center)	0.74	Site is developed already; < 2 acres
80	0503 15 B	C-8	No (specialty center)	1.03	Site is developed already; < 2 acres
81	0503 01 0010	C-8	No (supermarket)	0.91	Site is developed already; < 2 acres
82	0494 01 0032	I-5	No (telephone/telcom)	4.6	Site is developed already
83	0492 26 (1-21)	I-5	No (warehousing/storage)	N/A	Site is developed already; < 2 acres
84	0494 03 0006	I-5	No (warehousing/storage)	0.48	Site is developed already; < 2 acres
85	0494 04 0001A	I-5	No (warehousing/storage)	1.19	Site is developed already; < 2 acres
86	0494 04 0005B	I-5	No (warehousing/storage)	1.12	Site is developed already; < 2 acres
87	0492 09 0002	C-8	No (warehousing/storage)	0.61	Site is developed already; < 2 acres
88	0492 09 0003	C-8	No (warehousing/storage)	0.61	Site is developed already; < 2 acres
89	0492 09 0004	I-4	No (warehousing/storage)	0.67	Site is developed already; < 2 acres
90	0492 09 0005	I-4	No (warehousing/storage)	0.67	Site is developed already; < 2 acres
91	0492 09 0006	I-4	No (warehousing/storage)	0.7	Site is developed already; < 2 acres
92	0403 12 0017	I-6	No (warehousing/storage)	0.33	Site is developed already; < 2 acres
93	0492 01 0074	C-3	Yes	0.09	< 2 acres
94	0492 01 0065	C-3	Yes	0.07	< 2 acres
95	0492 01 0031E	I-5	Yes	1.15	< 2 acres
96	0492 01 0031D	I-5	Yes	1.37	< 2 acres
97	0492 01 0032B	I-5	Yes	0.02	< 2 acres
98	0492 01 0034B	C-8	Yes	1.2	< 2 acres
99	0494 01 0038	I-5	Yes	0.91	< 2 acres
100	0494 01 0039	I-5	Yes	0.5	< 2 acres
101	0494 01 0040	I-5	Yes	0.5	< 2 acres

102	0494 01 0041	I-5	Yes	0.5	< 2 acres
103	0494 04 A	I-5	Yes	0.08	< 2 acres
104	0492 01 0093	C-8	Yes	0.48	< 2 acres
105	0492 09 0001C	C-8	Yes	0.03	< 2 acres
106	0492 09 0002A	C-8	Yes	0.13	< 2 acres
107	0492 09 0002B	C-8	Yes	0.13	< 2 acres

Idylwood Alternate Locations

Attachment II.A.7.b



II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way (ROW)

8. **Indicate how the construction of this transmission line complies with "Guidelines for the Protection of Natural, Historic, Scenic, and Recreational Values in the Design and Location of Rights-of-Way and Transmission Facilities" adopted by the Federal Power Commission in Order No. 414 issued November 27, 1970, and now applied by the Federal Energy Regulatory Commission. These guidelines may be found in Volume 44 of the Federal Power Commission Reports, page 1,491, or Volume 35 of the Federal Register, page 18,585 (December 8, 1970). Copies of the Guidelines may also be obtained from the Office of Public Information, Federal Energy Regulatory Commission, Washington, D.C. 20426. For reference purposes a copy of the guidelines is included.**

Response: The FERC guidelines are a tool routinely used by the Company in routing its transmission line projects.

FERC Guideline No. 1 states that existing right-of-way should be given priority when adding additional facilities. The Company utilized FERC Guideline No. 1 by siting the Idylwood Substation Rebuild Project within the Company's fee-simple owned property and existing right-of-way for the transmission corridors.

The Idylwood Substation Rebuild Project does not cross any site listed on the National Register of Historic Places. Thus, the Rebuild Project is consistent with Guideline No. 2 (where practical, rights-of-way should avoid sites listed on the National Register of Historic Places).

Through the development of the Rebuild Project, the Company has coordinated with local, state and federal agencies (Guideline No. 4 - where government land is involved the applicant should contact agencies early in the planning process), and the Company follows FERC construction methods on a site specific basis for typical construction projects (Guidelines Nos. 8, 10-16, 18, 22 and 23).

The Company utilizes FERC guidelines in the clearing of right-of-way, construction facilities and maintaining rights-of-way after construction. Moreover, secondary uses of the right-of-way that are consistent with the safe maintenance and operation of facilities are permitted (Guidelines Nos. 46-50).

II. DESCRIPTION OF THE PROPOSED PROJECT

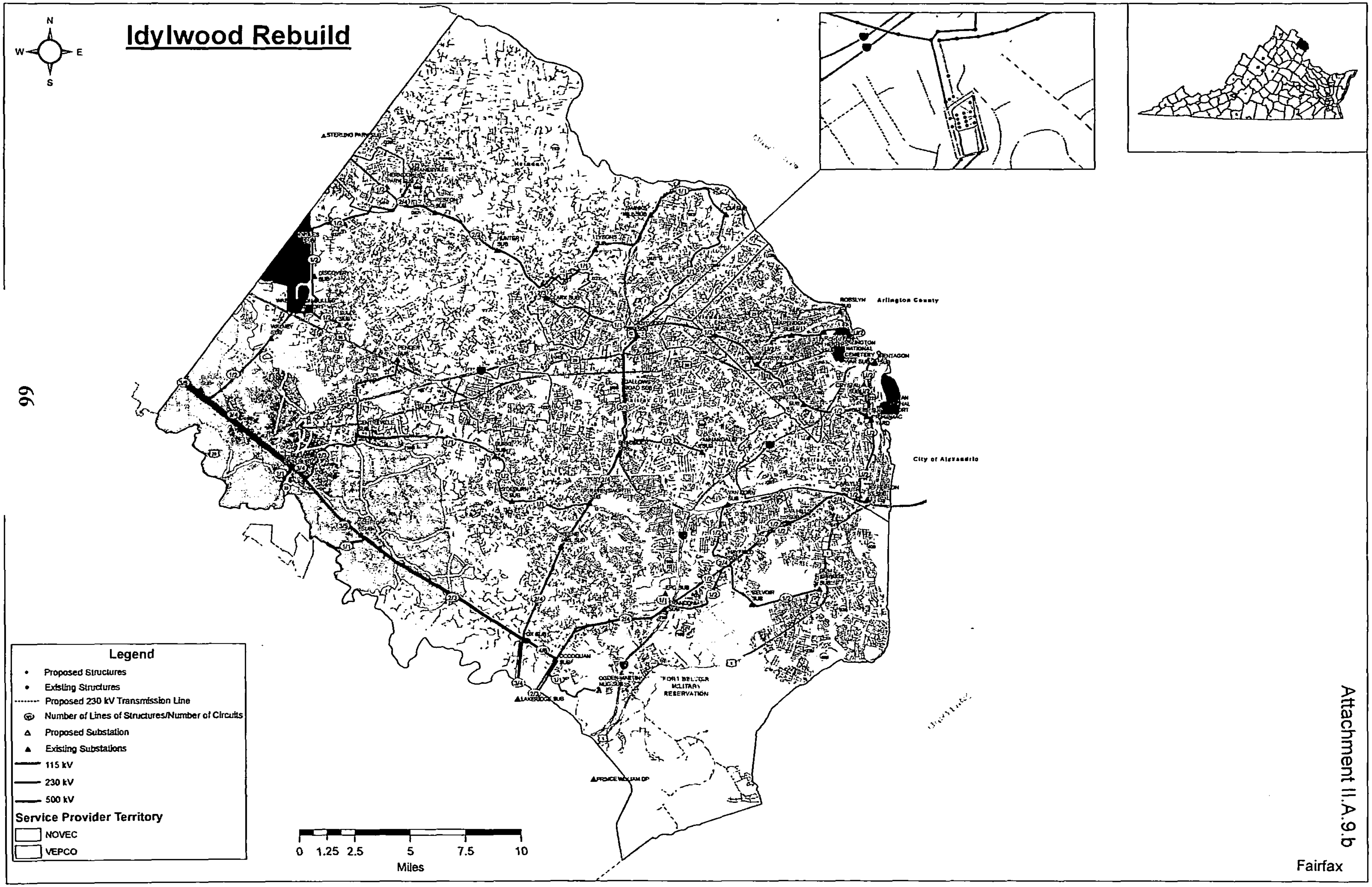
A. Right-of-way (ROW)

9. a. Detail counties and localities through which the line will pass. If any portion of the line will be located outside of the applicant's certificated service area: (1) advise of each electric utility affected; (2) whether any affected electric utility objects to such construction and (3) the length of line proposed to be located in the service area of an electric utility other than the applicant;

b. Provide three (3) copies of the Virginia Department of Transportation "General Highway Map" of each county and city through which the line will pass. On the maps show the proposed line and all previously approved and certificated facilities of the applicant. Also where the line will be located outside of the applicant's certificated service area; show the boundaries between the applicant and each affected electric utility. On each map showing the line outside of the applicant's certificated service area, have the appropriate individual of the affected electric utility sign if his/her company is not opposed to the proposed construction.

Response: a. The Idylwood Substation Rebuild Project will occur entirely within Fairfax County and is located within Dominion Virginia Power's service territory.

b. Three copies of the Virginia Department of Transportation ("VDOT") "General Highway Map" of Fairfax County are marked as required and have been submitted to the Commission's Division of Energy Regulation. This map reflects VDOT and other road data obtained from Navteq and County data. A reduced copy of the map is provided as Attachment II.A.9.b.



Idylwood Rebuild
N
W
E
S
Attachment II.A.9.b
Fairfax
Arlington County
City of Alexandria
FORT BELVOIR MILITARY RESERVATION
Legend
Proposed Structures
Existing Structures
Proposed 230 kV Transmission Line
Number of Lines of Structures/Number of Circuits
Proposed Substation
Existing Substations
115 kV
230 kV
500 kV
Service Provider Territory
NOVEC
VEPCO
0 1.25 2.5 5 7.5 10
Miles

II. DESCRIPTION OF THE PROPOSED PROJECT

B. Line Design and Operational Features

1. Detail number of circuits and their design voltage and transfer capabilities.

Response: The new portions of Lines #202, #207, #251, #266, #2035, #2097, and the renamed and renumbered Line #2164 will have a design voltage of 230 kV. These portions will utilize three phase 2-636 ACSR 24/7 conductor and have a transfer capability of 1047 MVA.

II. DESCRIPTION OF THE PROPOSED PROJECT

B. Line Design and Operational Features

2. Detail number, size(s), type(s), and typical configurations of conductors;

Response: Each of the proposed 230 kV Lines #202, #207, #251, #266, #2035, #2097, and the renamed and renumbered Line #2164 terminating at Idylwood Substation will have three phase twin-bundled 636 ACSR phase conductors arranged vertically on the proposed double circuit galvanized steel poles and horizontally on the substation backbones. Spans opposite of Idylwood Substation will be transferred. Additionally, each line will also have shield wire.

II. DESCRIPTION OF THE PROPOSED PROJECT

B. Line Design and Operational Features

3. With regard to the proposed supporting structures over each portion of the ROW provide:

a. types of structures;

b. length of ROW with each type of structure;

c. material for typical structure (steel, oxidizing steel, etc.);

d. foundation material;

e. width at cross arms of typical structure;

f. width at base of typical structures;

g. typical span length;

h. approximate average heights of structures;

i. a schematic drawing of each typical structure; and

j. minimum conductor-to-ground clearance under maximum operating conditions;

Response: See Attachments II.B.3.a through e for schematic drawings of typical structures.

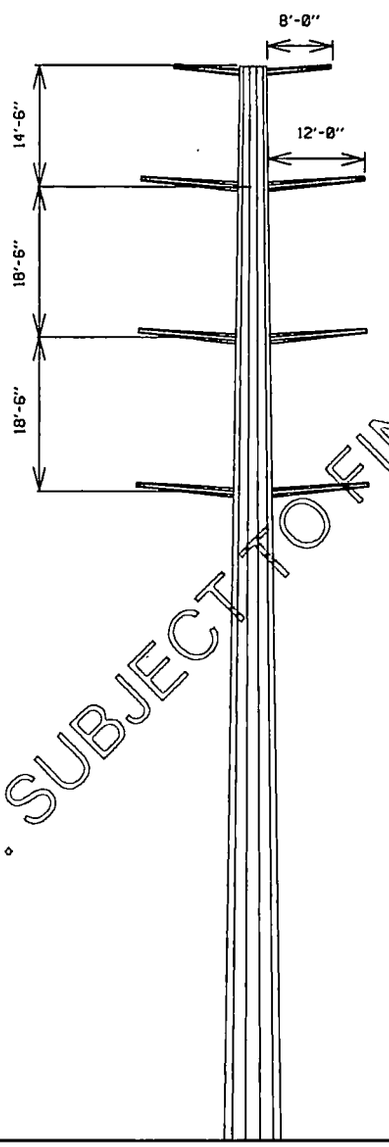
All structures will be galvanized steel with concrete foundations.

PROPOSED

Attachment II.B.3.a

LINES 251, 266, 207 & 2164

230KV TRANSMISSION LINE
DOUBLE CIRCUIT MONOPOLE



TYPICAL STRUCTURE

DRAWINGS AND HEIGHTS DO NOT INCLUDE FOUNDATION REVEAL

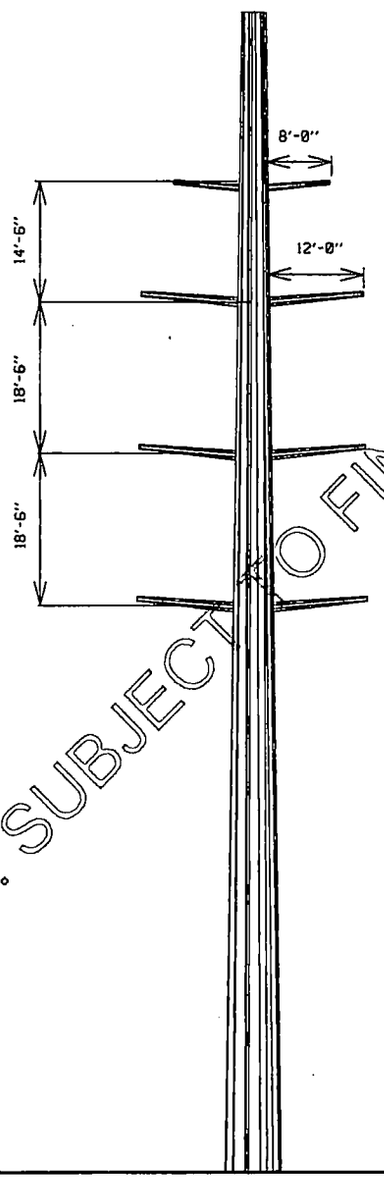
HEIGHT :	120 - 135 FEET
WIDTH AT CROSSARM :	APPROX. 26 -28 FEET
WIDTH AT BASE :	APPROX. 6 - 7 FEET

PROPOSED

Attachment II.B.3.b

LINES 202 & 2035

230KV TRANSMISSION LINE
DOUBLE CIRCUIT MONOPOLE
WITH ANTENNA



TYPICAL STRUCTURE

DRAWINGS AND HEIGHTS DO NOT INCLUDE FOUNDATION REVEAL

HEIGHT :	140 FEET
WIDTH AT CROSSARM :	APPROX. 26 -28 FEET
WIDTH AT BASE :	APPROX. 6 - 7 FEET

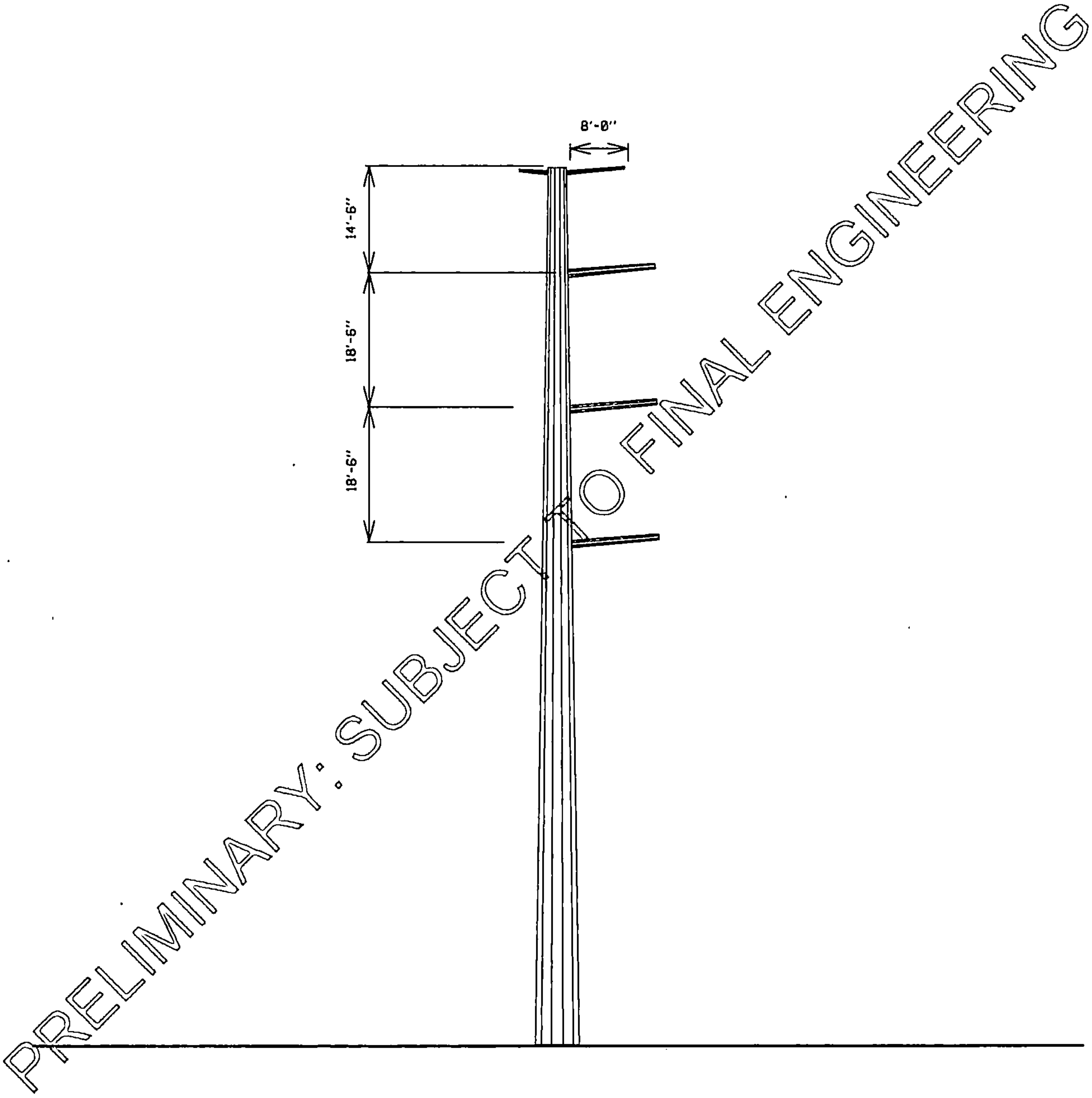
PROPOSED

Attachment II.B.3.c

LINES 2097

17011018

230KV TRANSMISSION LINE
SINGLE CIRCUIT MONOPOLE W/ ARMS



TYPICAL STRUCTURE

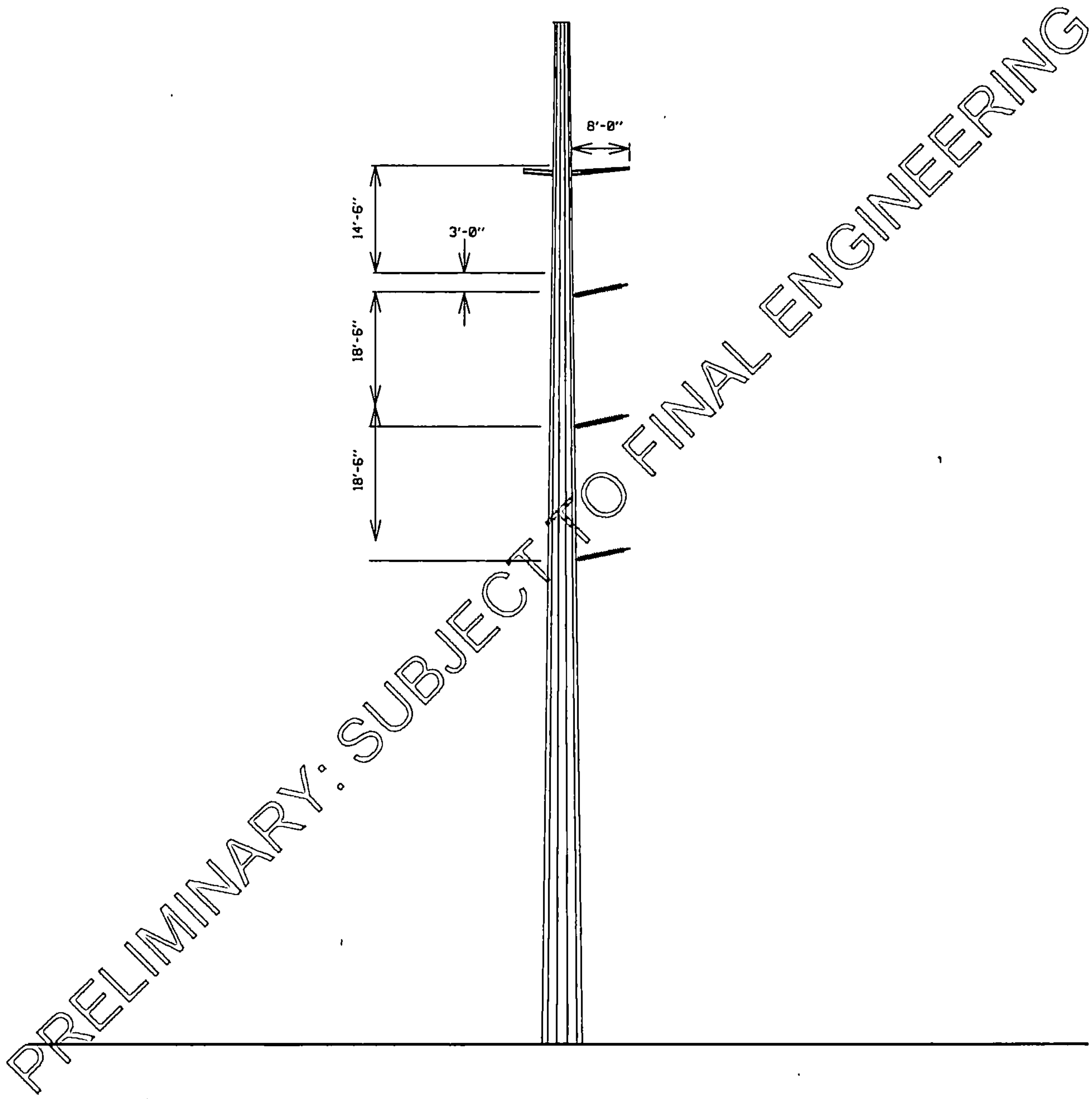
DRAWINGS AND HEIGHTS DO NOT INCLUDE FOUNDATION REVEAL

HEIGHT :	120 FEET
WIDTH AT CROSSARM :	APPROX. 20 FEET
WIDTH AT BASE :	APPROX. 6 - 7 FEET

$DGNSPEC$

PROPOSED

230KV TRANSMISSION LINE
SINGLE CIRCUIT MONOPOLE W/ VANGS
TEMPORARY ANTENNA STRUCTURE



TYPICAL STRUCTURE

DRAWINGS AND HEIGHTS DO NOT INCLUDE FOUNDATION REVEAL

HEIGHT :	140 FEET
WIDTH AT CROSSARM :	APPROX. 15 FEET
WIDTH AT BASE :	APPROX. 5.5 FEET

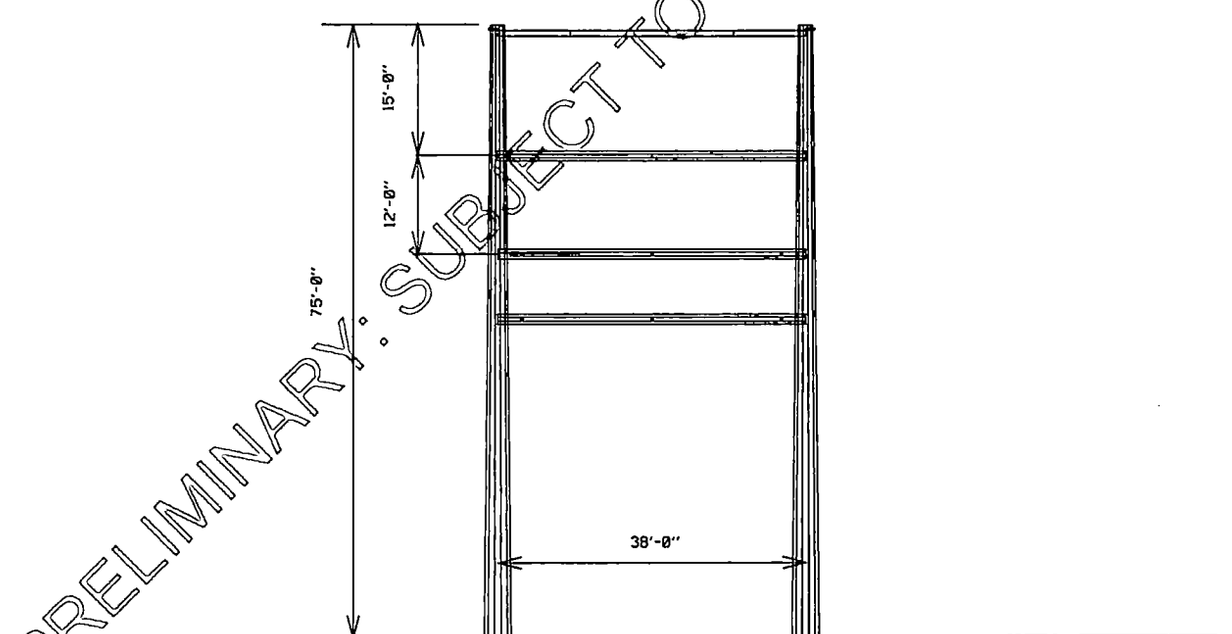
$DGNSPEC$

PROPOSED

Attachment II.B.3.e

LINES 202, 251, 266, 207, 2035, 2097 & 2164

230KV TRANSMISSION LINE
SINGLE CIRCUIT H-FRAME BACKBONE



TYPICAL STRUCTURE

DRAWINGS AND HEIGHTS DO NOT INCLUDE FOUNDATION REVEAL

HEIGHT :	75 FEET
WIDTH AT CROSSARM :	38 FEET
WIDTH AT BASE :	38 FEET

II. DESCRIPTION OF THE PROPOSED PROJECT

B. Line Design and Operational Features

4. Describe why the proposed structure type(s) was selected for this line.

Response: The proposed double circuit galvanized steel poles are similar to the existing double circuit steel lattice towers and poles on the existing Company-owned property and adjacent corridors.

The proposed single circuit galvanized steel poles allow lines to be located in the confined space of Idylwood Substation as part of the Rebuild Project.

The proposed single circuit galvanized steel H-frame backbones allow for horizontal conductor configuration when terminating into Idylwood Substation.

II. DESCRIPTION OF THE PROPOSED PROJECT

C. Describe and furnish plan drawings of all new substations, switching stations, and other ground facilities associated with the proposed project.

Response: This Rebuild Project requires the reconfiguration and relocation of existing Idylwood Substation.

At Idylwood Substation there are five 230 kV circuit breakers in a straight bus configuration, one 230 kV bus tie breaker, five 230 kV line terminals, one 230 kV 100 MVAR reactor, one 230 kV 178.2 MVAR capacitor bank, two 230 kV-34.5 kV 84 MVA transformers, one 230 kV-34.5 kV 168 MVA transformer, twelve 34.5 kV circuit breakers, one 34.5 kV-12.5 kV 14 MVA transformer, two 12.5 kV circuit breakers and ancillary equipment.

The equipment is configured with 230 kV Lines #207, #2035, and #2097 terminating at bus #5 and 230 kV Lines #202 and #251 terminating at bus #6. Breaker T562 serves as the bus tie breaker. The equipment connected on 230 kV bus #5 consists of the 230 kV shunt reactor and the 230 kV-34.5 kV, 168 MVA transformer. The equipment connected on 230 kV bus #6 consists of the 230 kV capacitor bank and two 230 kV-34.5 kV, 84 MVA transformers. Twelve 34.5 kV circuits originate from Idylwood Substation. Also, there is one 34.5 kV-12.5 kV, 14 MVA transformer and two 12.5 kV circuits. Additionally, Line #266 bypasses the substation.

The proposed substation layout will provide twelve 230 kV breakers in a breaker-and-a-half configuration to accommodate the five lines that currently terminate at this station and also the split Line #266 into Line #266 and the renamed and renumbered Line #2164. The existing shunt reactor, cap bank and distribution transformers will also be connected at the proposed 230 kV bus arrangement.

The existing substation fenced area is not adequate to install the required number of 230 kV breakers for this Rebuild Project using conventional equipment (air-insulated equipment). For this reason, 230 kV GIS will be used for this Rebuild Project. The ideal location for the proposed 230 kV GIS equipment is the area currently occupied by existing 230 kV lattice structures and equipment. Installing the GIS equipment at this location, however, will require a prolonged outage of the 230 kV buses and certain lines, which is not a viable option. The installation of the proposed equipment will be accomplished by shifting the substation to the north within Company-owned property, and relocating the distribution buses. This will provide a sufficient amount of green space at the upper yard for the installation of the proposed 230 kV GIS equipment and backbones.

The proposed area where distribution will be relocated is between the existing northernmost substation fence and Shreve road. This area is not large enough to accommodate 38 kV conventional equipment. To fit the distribution buses and

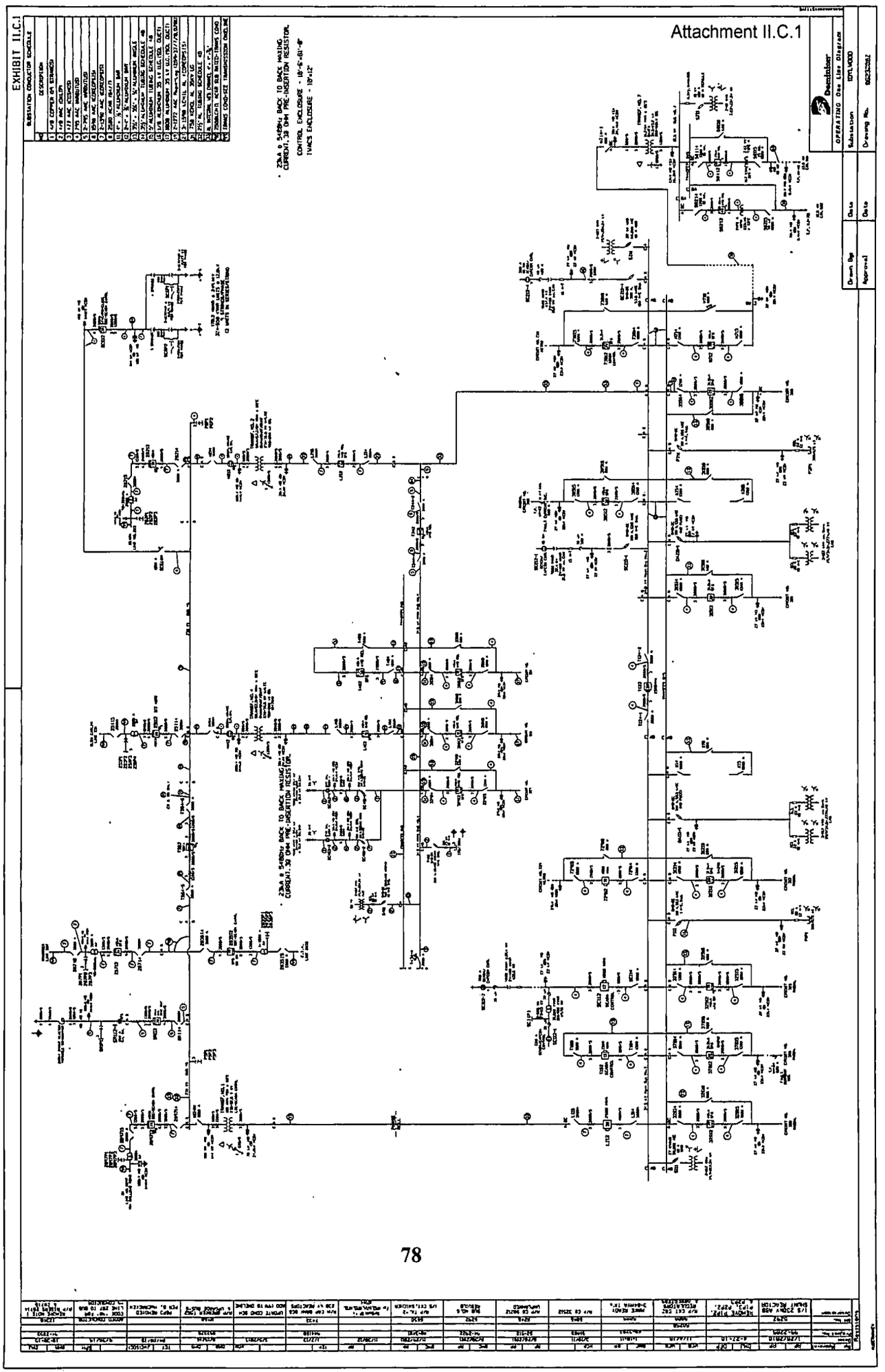
associated equipment at this location, 38 kV GIS switchgear will be installed. This will ensure that there is enough room to install the 38 kV GIS switchgear and the distribution transformers without creating a prolonged outage on the distribution buses. The area is currently occupied by multiple underground and overhead distribution circuits. These circuits will have to be relocated prior to the installation of the proposed 38 kV GIS switchgear and the installation of the new distribution transformers.

Given the proposed substation arrangement, there is no additional room to relocate the existing 34.5-12.5 kV transformer and associated equipment. A viable and cost-effective solution is to reconfigure existing Igloo Substation to accommodate some of the current 12.5 kV load from Idylwood Substation. The reconfiguration will require the replacement within the fence of the equipment currently installed at Igloo Substation.

Temporary re-arrangement of existing transmission lines and temporary construction of 230 kV buses will be required for this project.

The existing relay and control enclosure is not adequate for the proposed 230 kV equipment. A new 24 foot by 80 foot control enclosure will be installed to the north of the existing control enclosure. All the required communications, relays and control panels required for the 230 kV equipment will be installed at the proposed control enclosure. The distribution's relay and control equipment currently installed at this house will be replaced and relocated to the new 38 kV GIS enclosure. The existing control enclosure will be removed once the proposed enclosures are fully operational and the old enclosure is no longer needed.

One-line diagrams and general arrangement for existing Idylwood Substation are provided as Attachment II.C.1 and Attachment II.C.2, respectively. The proposed one-line for the 230 kV GIS is provided as Attachment II.C.3 and the proposed general arrangement for the substation as Attachment II.C.4. The proposed one-line diagram for the 38 kV GIS is provided as Attachment II.C.5.



Attachment II.C.2

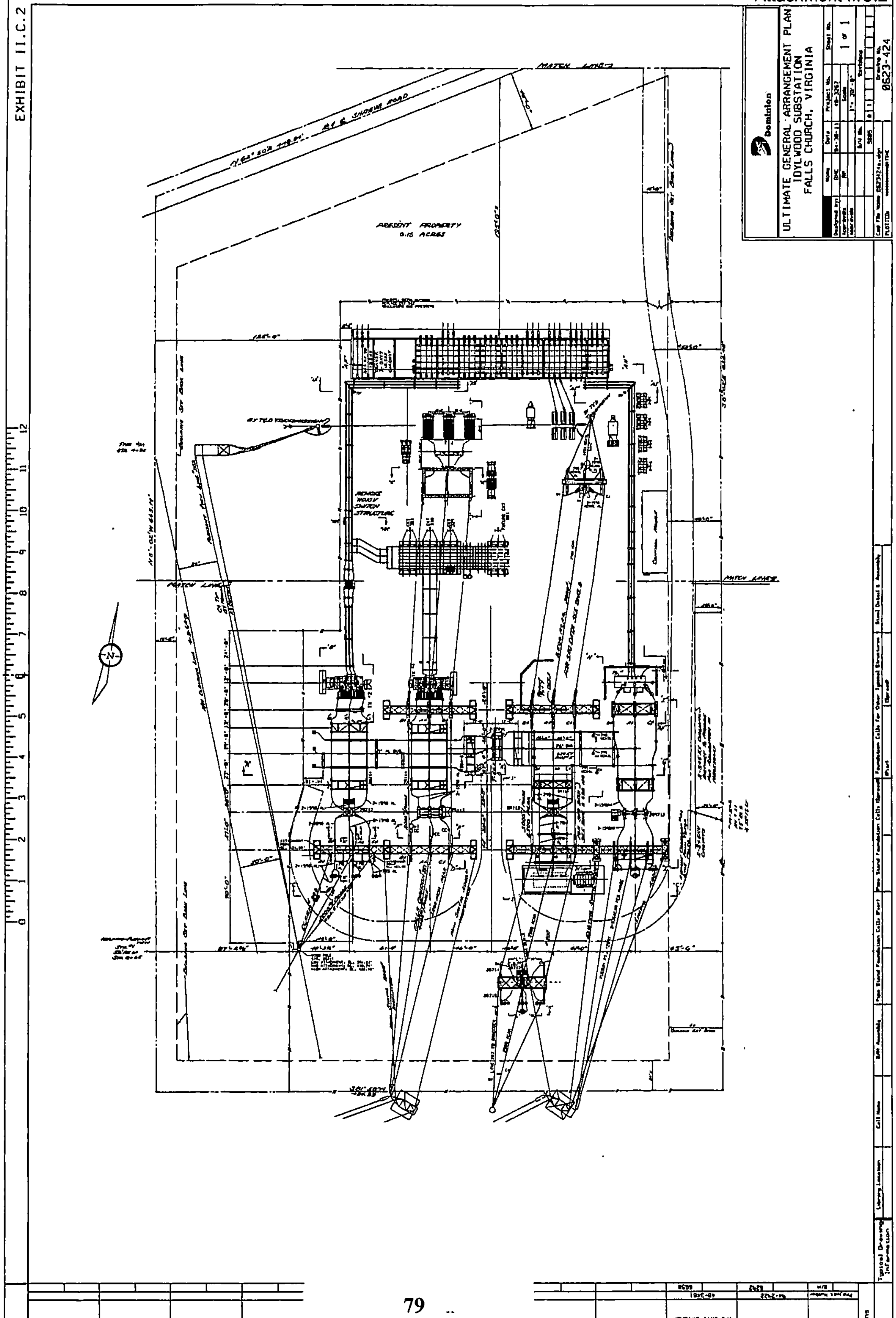
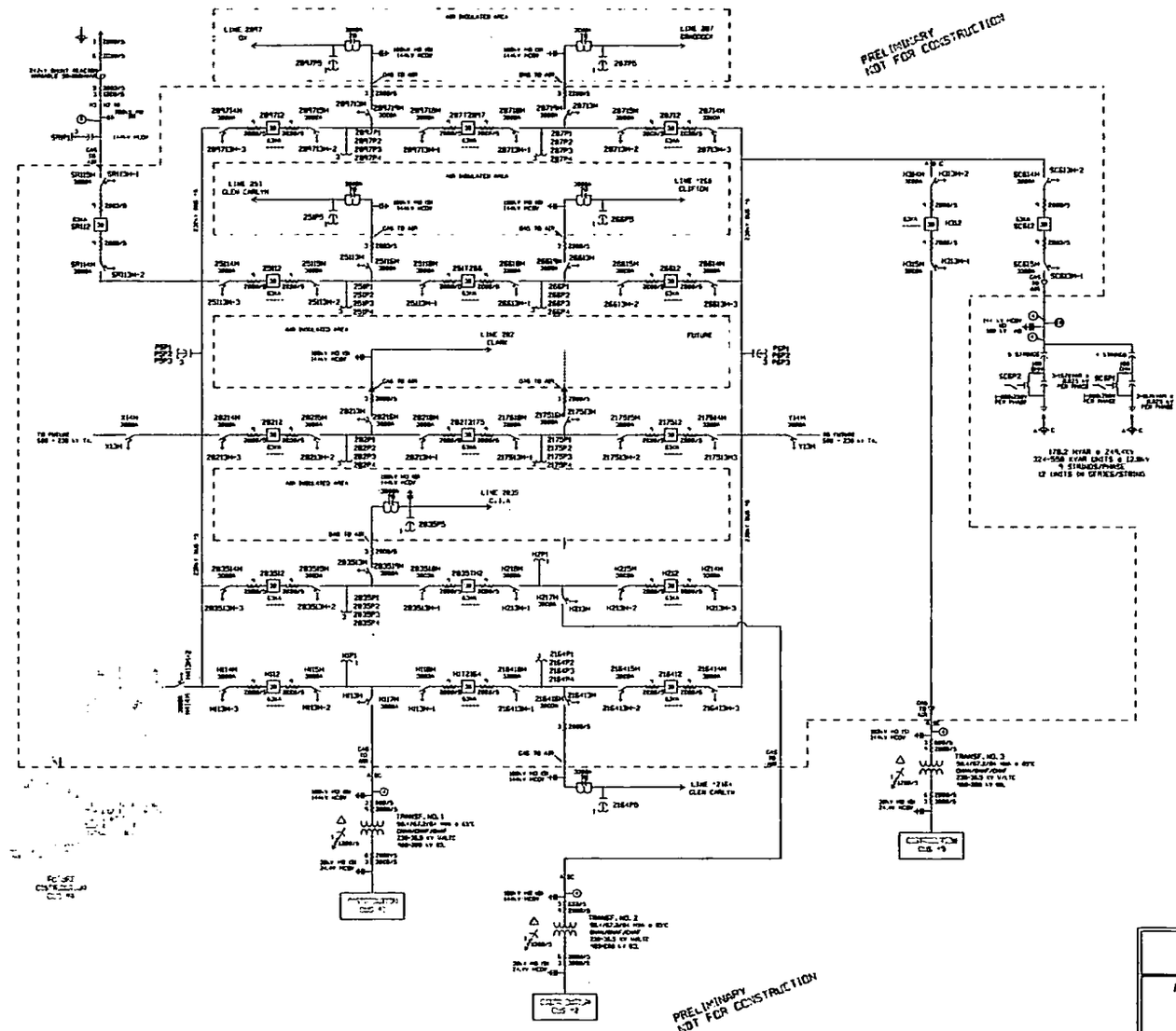


EXHIBIT II.C.3



SUBSTATION CONDUCTOR SCHEDULE	
MK	DESCRIPTION
2	1/0 AWC (SOLID)
4	795 AWC (ARBUTUS)
7	2-1590 AWC (CORDOVIS)
11	4" x .3" ALUMINUM BAR
13	3½" x 3½" x ½" ALUMINUM ANGLE
15	1/8 ALUMINUM 36 x 9 LVL HDG DUCTS

PROPOSED 230kV ONE LINE DIAGRAM

Dominion

Preliminary One Line Diagram

IDYLWOOD (230kV)

	Name	Date	Project No.	Sheet No.
Designed by	VY	5/22/15		
Approved			Scale	OF
Approved				
		B/M No.	Revisions	

Cad File Name

PLOTTED

Drawing No. C6230582_Prelim

Revisions

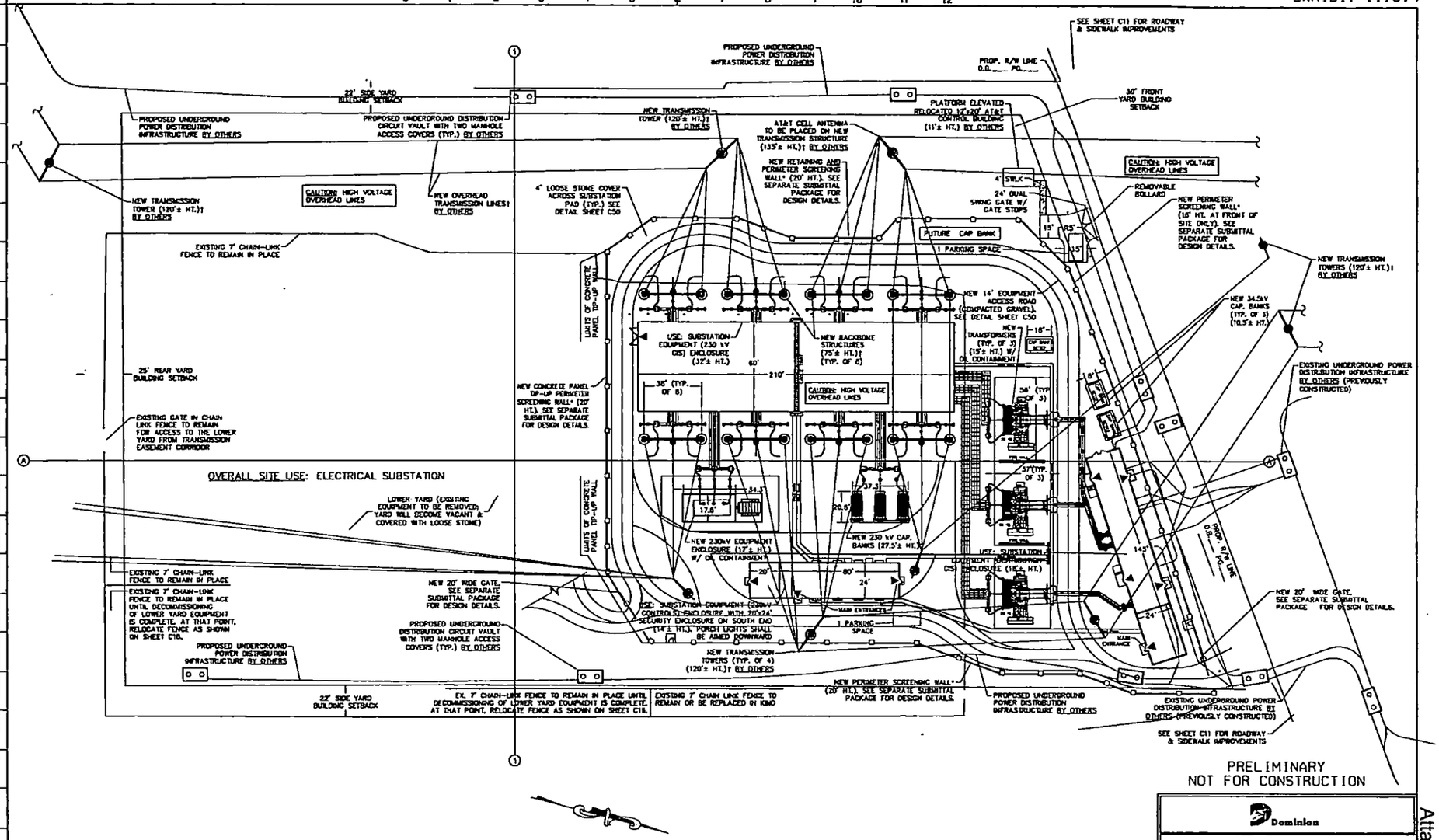
Typical Drawing Information	Library Location	Cell Name	B/M Assembly	Pipe Stand Foundation Cells (Part)	Pipe Stand Foundation Cells (Spread)	Foundation Cells for Other Typical Structures (Part)	Foundation Cells for Other Typical Structures (Spread)	Steel Detail & Assembly

80

Attachment II.C.3

1701101589

EXHIBIT II.C.4



PRELIMINARY
NOT FOR CONSTRUCTION

Dominion

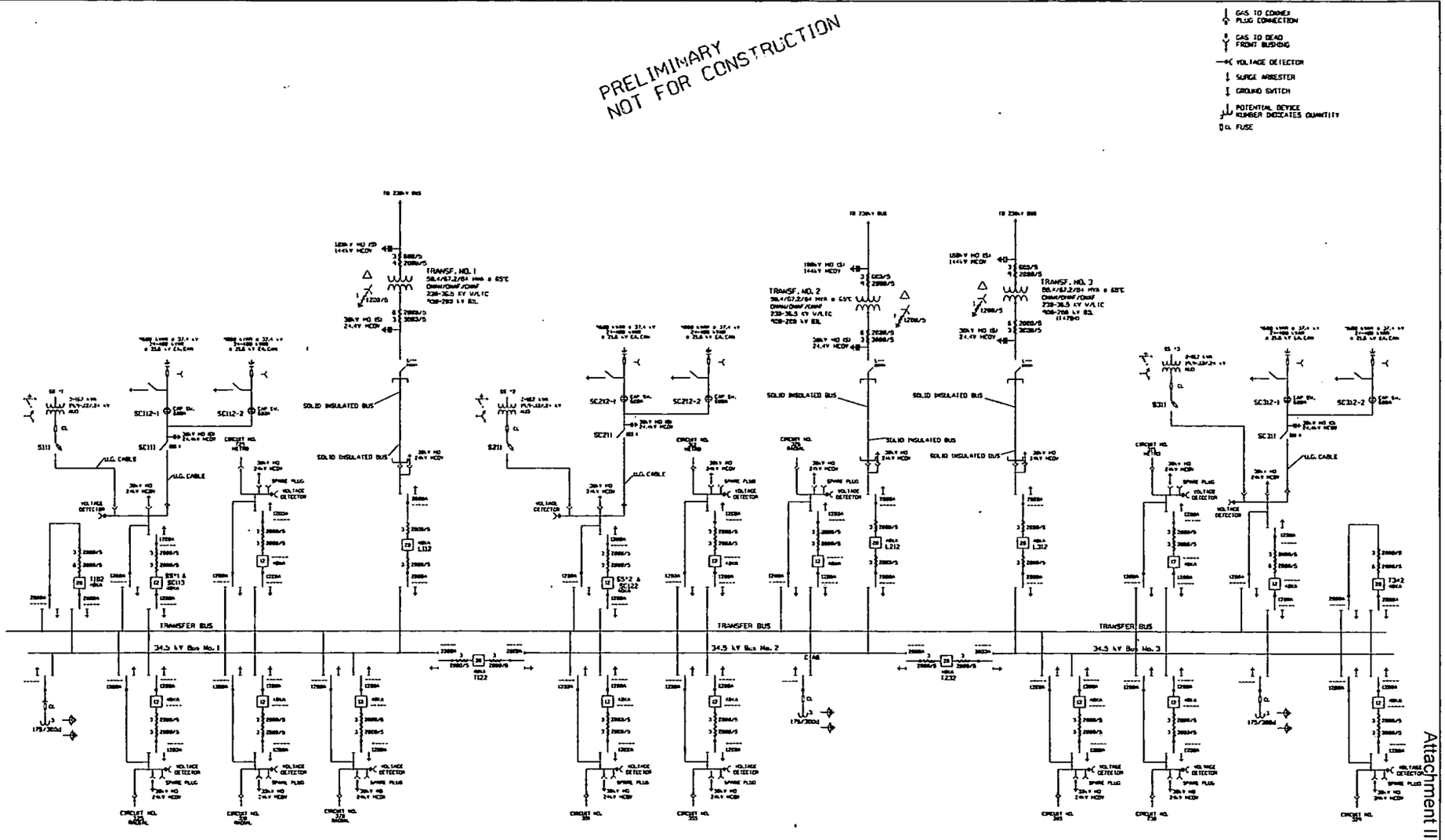
PROPOSED GENERAL ARRANGEMENT
IDYLWOOD SUBSTATION
FAIRFAX COUNTY, VIRGINIA

	Name	Date	Project No.	Sheet No.
Designed by	APV	11/05/13	99-2329	
Approved	WV	11/19/14	Scale	OF
Approved			1"=30'-0"	
			Revisions	

Typical Drawing Information | Library Location | Cell Name | B/M Assembly | Pipe Steel Foundation Cable Chart | Pipe Steel Foundation Cable Chart | Foundation Cable for Other Typical Structures | Steel Detail & Assembly

Attachment II.C.4

PRELIMINARY
NOT FOR CONSTRUCTION



Preliminary One Line Diagram

Attachment II.C.5

Drawn By: WY	Date: 4/13/15	Substation: DYLWOOD (38kV)	
Approved:	Date:	Drawing No.	

82

1701110180

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL AND HISTORIC FEATURES

A. Describe the character of the area which will be traversed by this line, including, land use, wetlands, etc. Provide the number of dwellings within 500 feet of the line for each route considered.

Response: The general character of the Idylwood Substation Rebuild Project area is predominantly densely populated suburban residential area.

The existing Idylwood Substation area drains to an unnamed tributary to Holmes Run, within the Cameron Run watershed, and then to the Potomac River. Grading and filling for relocation of a portion of the stream channel will allow for construction of the Rebuild Project, including the underground stormwater detention facility, and a screening wall. Fairfax County reviewed a floodplain study (number 011353-FP-001-1) prepared on behalf of Dominion Virginia Power and approved the study on October 16, 2015, which study is provided in Attachment III.A. In brief, the study confirmed that a 100-year storm would be contained within the Dominion Virginia Power property. No adjacent properties or buildings will be adversely impacted, nor will the water surface elevation of the 100-year flood level upstream and downstream be increased.

Dewberry Consultants LLC ("Dewberry") performed a wetlands and streams delineation on behalf of Dominion Virginia Power for the Rebuild Project and submitted a joint permit application ("JPA"). The Army Corps of Engineers ("Corps") determined the Rebuild Project satisfied the criteria contained in the Corps Nationwide Permit 12 (Attachment 2.D.1 to the DEQ Supplement).

On behalf of the Company, and as part of the JPA, Dewberry also conducted online database searches for threatened and endangered species in the vicinity of the Rebuild Project, including the U.S. Fish and Wildlife Service Information, Planning and Conservation system, the Virginia Department of Game and Inland Fisheries ("DGIF") Virginia Fish and Wildlife Information Service, the DGIF Northern Long-Eared Bat Winter Habitat and Roost Trees application, the Virginia Department of Conservation and Recreation Natural Heritage Data Explorer, and the Center for Conservation Biology Bald Eagle Nest Locator. The results are included as Attachment 2.F.1 to the DEQ Supplement.

In accordance and consultation with the *Guidelines for Assessing Impacts of Proposed Electric Transmission Lines and Associated Facilities of Historic Resources in the Commonwealth of Virginia (2008),* Dutton + Associates, LLC ("Dutton") prepared on behalf of Dominion Virginia Power a modified Stage I Pre-Application Analysis for the proposed Rebuild Project. This report was forwarded to Virginia Department of Historic Resources on October 27, 2016, and is included as Attachment 2.H.1 to the DEQ Supplement. The background archival research identified no National Historic Landmarks within the 1.5-mile

buffer; no resources listed on the National Register of Historic Places ("NRHP") within the 1.0-mile buffer; and one NRHP-eligible resource, the Washington and Old Dominion Railroad ("W&OD RR") Historic District, within the 0.5-mile buffer. Based upon the characteristics of the Rebuild Project, Dutton opined that the Rebuild Project will have minimal impact on the W&OD RR Historic District and recommends no additional Phase I architectural and archeological survey is warranted for this Rebuild Project.

For the Rebuild Project, there are three homes located within 100 feet of the centerline of the existing transmission corridors adjacent to Idylwood Substation for Lines #202, #207, #251, #266, #2035, #2097, and the renamed and renumbered Line #2164. There are 93 homes located within 500 feet of the centerline of the existing transmission corridors adjacent to Idylwood Substation for Lines #202, #207, #251, #266, #2035, #2097, and the renamed and renumbered Line #2164.

Idylwood Substation

FLOODPLAIN STUDY
FAIRVIEW LAKE TRIBUTARY

FAIRFAX COUNTY, VIRGINIA
011353-FPV-001-A-1

FLOODPLAIN STUDY NARRATIVE

PROJECT DESCRIPTION

THIS FLOODPLAIN STUDY (FPS) IS IN SUPPORT OF AND TRACKS WITH THE IDYLWOOD SUBSTATION EXPANSION SITE PLAN XXXX-SP-XXX PREPARED FOR DOMINION VIRGINIA POWER (DVP). THIS STUDY IS A REVISION TO APPROVED STUDY 011353-FP-001-1, SUBMITTED TO SUPPORT SPECIAL EXCEPTION PLAT AND 2232 PLAN 2014-PR-032. THE SITE IS LOCATED AT THE CORNER OF SHREVE ROAD AND HOLLY MANOR DRIVE. THE OVERALL PROJECT PROPOSES THE ADDITION AND ALTERATION OF SEVERAL TRANSMISSION STRUCTURES AS WELL AS RELOCATING AN EXISTING CONTROL BUILDING AND REALIGNING THE INTERNAL ACCESS ROAD. AS PART OF THE IMPROVEMENTS, THE EXISTING CROSSING OF SHREVE ROAD OVER FAIRVIEW LAKE TRIBUTARY WILL BE EXTENDED. APPROXIMATELY 125 FT OF THE MAIN CHANNEL OF FAIRVIEW LAKE TRIBUTARY WILL BE REALIGNED TO ACCOMMODATE THE IMPROVEMENTS. THE EXISTING FAIRFAX COUNTY FLOODPLAIN (UNMAPPED FEMA ZONE X) EXTENDS TO THE DOWNSTREAM LIMITS OF THE SITE .

FLOODPLAIN MAPPING / STUDY LIMITS

THE STUDY LIMITS OF FAIRVIEW LAKE TRIBUTARY EXTEND APPROXIMATELY 300 FT UPSTREAM AND DOWNSTREAM OF THE DVP PROPERTY LIMITS.

BASE MAPPING AND SURVEY

BASE MAPPING AND TOPO OF THE STUDY AREA WAS PERFORMED BY BURGESS & NIPLE, INC. IN JUNE AND JULY 2011. A MORE DETAILED STREAM SURVEY WAS CONDUCTED IN JULY 2013. IN AREAS WHERE DETAILED TOPOGRAPHIC SURVEY WAS NOT AVAILABLE, SUPPLEMENTAL CROSS SECTIONS WERE ALSO SURVEYED BY BURGESS & NIPLE, INC IN OCTOBER 2013 (SEE SHEET 20 FOR EXTENTS). THE COORDINATE GRID IS VIRGINIA STATE PLANE NORTH ZONE NAD 1983. THE VERTICAL DATUM IS BASED ON THE FINISHED FLOOR ELEVATION OF THE CONTROL HOUSE (SURVEY DATUM). TO CONVERT FROM THE SURVEY DATUM TO NGVD 1929, SUBTRACT 0.65 FT.

HYDROLOGY

NRCS METHODOLOGY WAS USED TO COMPUTE THE PEAK DISCHARGE FOR THE 100-YEAR STORM. USACE HEC-1 WAS USED TO CALCULATE FLOWS TO THE SHREVE ROAD CROSSING OF FAIRVIEW LAKE TRIBUTARY AS WELL AS THE DOWNSTREAM DVP PROPERTY BOUNDARY. A CUSTOM 24-HOUR RAINFALL DISTRIBUTION WAS CREATED FROM THE NOAA ATLAS 14 PRECIPITATION FREQUENCY DATA USING THE VIENNA TYSONS CORNER GAUGE.

HYDRAULICS

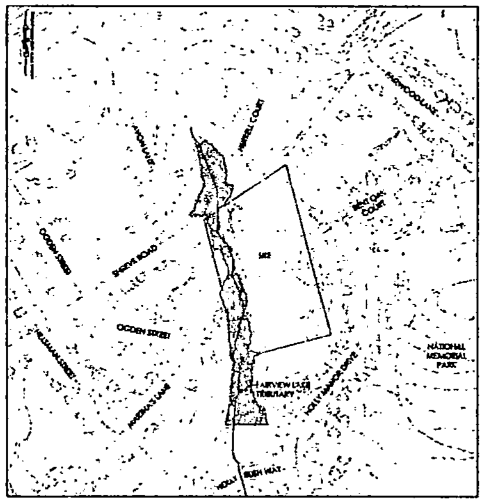
USACE HEC-RAS VERSION 4.1.0 WAS USED TO DETERMINE 100-YEAR WATER-SURFACE PROFILES FOR THIS FPS. THE MODEL CONSISTS OF TWO PLANS: EXISTING AND PROPOSED.

HEC-RAS CROSS-SECTIONS WERE CUT FROM A COMBINATION OF ONSITE TOPO AND OFFSITE FIELD SURVEYED CROSS-SECTIONS. BOTH ONSITE SURVEY AND SURVEYED CROSS-SECTIONS ARE IN THE SURVEY DATUM ESTABLISHED BY BURGESS & NIPLE, INC (B&N DATUM).

THE 100-YEAR STARTING CONDITION FOR THE EXISTING AND PROPOSED MODELS IS BASED ON A KNOWN WATER-SURFACE ELEVATION OF 356.50 FEET (NGVD 29) AS INTERPOLATED FROM 7864-FP-01 (SEE SHEET 14). THIS ELEVATION CONVERTS TO 357.15 FEET (B&N DATUM), WHICH IS USED IN THE HEC-RAS MODEL.

ROUGHNESS COEFFICIENTS ARE 0.10 AT A MINIMUM AS REQUIRED BY FAIRFAX COUNTY, AND ARE BASED ON A COMBINATION OF APPROVED 7864-FP-01 VALUES, FIELD RECONNAISSANCE AND AERIAL PHOTOGRAPHY. IN GENERAL, THE FLOODPLAIN IS URBANIZED AND INCLUDES A COMBINATION OF MANICURED LANDSCAPING, LIGHT BRUSH AND SCATTERED TREES. THE MAIN CHANNEL UPSTREAM OF THE SHREVE ROAD CROSSING IS PAVED, DOWNSTREAM THE CHANNEL IS PREDOMINANTLY STRAIGHT WITH LIGHT VEGETATION.

THE EXISTING CROSSING OF SHREVE ROAD IS A 33" RCP TO DUAL 30"X44" ELLIPTICAL CONCRETE PIPES, SEE SHEET 02 FOR DETAILS. THE PROPOSED SYSTEM WILL BE EXTENDED TO OUTFALL TO THE RELOCATED CHANNEL, SEE SHEET 03 FOR DETAILS. THE MAJORITY OF THE 100-YEAR FLOW AT THE CROSSING IS OVERLAND. IN ORDER TO MAP THE OVERLAND FLOW, THE MAXIMUM CAPACITY OF THE STORM SEWER SYSTEM WAS CALCULATED AND SUBTRACTED FROM THE TOTAL 100-YEAR FLOW TO SHREVE ROAD. THIS ADJUSTED 100-YEAR FLOW WAS RUN THROUGH THE HEC-RAS MODEL. IN BOTH EXISTING AND PROPOSED PLANS, THE MAXIMUM CAPACITY OF THE STORM SEWER SYSTEM WAS CALCULATED TO A POINT WHERE THE HGL AT THE UPSTREAM HEADWALL WAS JUST BELOW THE MINIMUM CROWN ELEVATION OF SHREVE ROAD. IN THE PROPOSED SYSTEM, THERE IS A JUNCTION WHERE THE EXISTING CROSSING CONVERGES WITH A PROPOSED 48" RCP. A HEC-1 MODEL WAS CREATED IN ORDER TO COMPUTE FLOWS THROUGH EACH BRANCH OF THE PROPOSED SYSTEM. RESULTING HEC-1 FLOWS WERE INPUT INTO THE HGL COMPUTATIONS, AND THE RAINFALL DEPTH IN THE HEC-1 MODEL WAS ADJUSTED UNTIL THE HGL CONVERGED WITH THE MINIMUM CROWN ELEVATION.



VICINITY MAP
SCALE : 1" = 250'

NOTES

1. NO USE SHALL BE MADE OF, NOR SHALL ANY IMPROVEMENTS BE MADE IN THE FLOODPLAIN WITHOUT SPECIFIC AUTHORIZATION FROM FAIRFAX COUNTY.
2. THIS FLOODPLAIN STUDY SUPPORTS THE IDYLWOOD SUBSTATION EXPANSION SITE PLAN FOR DOMINION VIRGINIA POWER (DVP) XXXX-SP-XXX.
3. THE FLOODPLAIN BOUNDARIES SHOWN HEREIN ARE BASED ON A SITE-SPECIFIC ENGINEERING FLOODPLAIN ANALYSIS THAT WAS PREPARED TO SUPPORT XXXX-SP-XXX.
4. INFORMATION PROVIDED IN THIS STUDY IS FOR FLOODPLAIN PURPOSES ONLY AND NOT TO BE USED FOR CONSTRUCTION.
5. THE MAP NUMBER OF THE APPLICABLE FEMA FIRM PANEL IS 51059C0165E DATED SEPTEMBER 17, 2010.

SHEET INDEX

FEE SCHEDULE

COUNTY NUMBER: 011353-FP-001		
TAX MAP REFERENCE NO. 0402 01 0151 & 0402 12 0001A		
WATERSHED: HOLMES RUN		
FLOODPLAIN STUDY REVIEW FEES		
COST PER UNIT	QUANTITY	FEE
$2.78 PER FT	1,384 FT	[illegible]
$[illegible] PER ROAD CROSSING (EXISTING AND PROPOSED)	2	$[illegible]
$[illegible] PER DAM	0	$0
TOTAL FEE (NOT TO EXCEED $11,[illegible])		$[illegible]

APPROVED
COUNTY OF FAIRFAX
LAND DEVELOPMENT SERVICES
ENVIRONMENTAL AND SITE REVIEW DIVISION
BY [signature]
DATE

Dewberry
Dewberry Consultants LLC

Dominion

DOMINION VIRGINIA POWER
Idylwood Substation
011353-FPV-001-A-1
FLOODPLAIN STUDY
FAIRVIEW LAKE TRIBUTARY
PROVIDENCE DISTRICT
FAIRFAX COUNTY, VIRGINIA

SEAL: SCOTT C. CLARKE, Lic. No. 011417, PROFESSIONAL ENGINEER, 7.16.15

No.	DATE	BY	Description
A	7/15/15	[illegible]	SITE PLAN

DRAWN BY: [illegible]
APPROVED BY: SCC
CHECKED BY: SCC
DATE: JULY 15, 2015
TITLE: COVER SHEET
PROJECT NO. 50058411
01
SHEET NO. 01 OF 23

11353-FPV-001-A-1

Attachment III.A

17010180

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL AND HISTORIC FEATURES

B. Advise of any public meetings the Company has had with neighborhood associations and officials of local, state or federal governments who would have an interest or responsibility with respect to affected area or areas.

Response: As part of its application process for the Special Exception, between June 2013 and May 2015, Dominion Virginia Power met with Providence District Board of Supervisor member Linda Smyth and her staff, the planning department, and various members of the public and community organizations to inform them of the Company's Special Exception application to perform the Idylwood Substation Rebuild Project. Following extensive input by local officials and members of the public, the Board of Supervisors approved the Company's application and granted the Special Exception. Outreach to these same officials and community members is on-going related to work associated with the site plan and with communication concerning this application to the Commission. See Attachment III.B.1 for a partial listing of touch points and milestones relating to the Special Exception application approval process for the Rebuild Project.

As described in Section I.A, on December 22, 2016, the Company filed with Fairfax County Department of Planning and Zoning a Special Exception Amendment application to incorporate the construction of a 230 kV high bus into the approved Special Exception. As part of the process for the Special Exception Amendment application and this application, the Company has communicated with Supervisor Smyth and her staff on a regular basis. The Company hosted a meeting with residential community members on December 15, 2016. On December 19, 2016, the Company sent letters, which were also transmitted electronically on December 21, 2016, to community members describing these processes. See Attachment III.B.1 for a partial listing of outreach concerning the Rebuild Project.

In addition to other communication described in this Section III.B, in accordance with Va. Code. § 15.2-2202 E, the Company sent a letter dated December 19, 2016, to Mr. Edward L. Long, Jr., Fairfax County Executive advising of the Company's intention to file this application and inviting the County to consult with the Company about the Idylwood Substation Rebuild Project. See Attachment III.B.2.

Finally, Dominion Virginia Power has launched a dedicated webpage for the Rebuild Project (www.dom.com, search "Shreve" or "Idylwood") to keep stakeholders up to date on details of the Rebuild Project. The Company also maintains a toll-free number and email address to answer any questions from the public.

IDYLWOOD SUBSTATION REBUILD & RE-ARRANGEMENT
PROJECT TOUCHPOINTS/MILESTONES (*partial listing*):

June/July 2013	Outreach to State and Local Officials Begins
July 2013	Project Website Launches & Public Outreach Begins
July/August 2013	Community Outreach, Letters, and Property Owner Phone Contacts Initiated
September 2013	Communication Continues with Area Neighbors, Including Homeowner Associations
November 2013	Dominion mails community letter
November 13, 2013	Dominion Hosts Open House
December 5, 2013	Dominion Attends Meeting with Holly Crest HOA; Most Affected Neighbors
Winter 2013/14	Secondary Photo Simulations Created and Circulated to Neighbors
January 28, 2014	Dominion attends Holly Crest HOA meeting
January 2014	Updated Project Communications Sent to Neighbor HOA's, Residents & Officials
February 7, 2014	Notice of Plans to Submit Permit Application to Fairfax County Sent to Neighbors; Application Submitted for Local Approval to Construct
February 18, 2014	Follow-up Meeting with homeowners association
February 2014	Local Distribution Work Communicated to Neighbors & Elected Officials; postcard
March 2014	Additional Simulation Circulated to Neighbors Reflecting Fewer Backbone Structures
March 28, 2014	Dominion Executive Meeting with Holly Crest HOA
April 2014	Landscaping Committee Meeting to Discuss Vegetation & Planting Options
Summer 2014	Refined Details of Local Distribution Work Communicated to Neighbors & Elected Officials
June 4, 2014	Wall Committee Meeting to Discuss Color, Texture, Height of Proposed Wall
August 13, 2014	Follow-up Meeting with homeowners association & Wall Committee
September 2, 2014	Dominion sends community update letter on distribution work
September 18, 2014	Meeting with County District Supervisor, County District Planning Commissioner and Staff
September 29, 2014	Conference call with HOA re: GIS enclosure, AT&T entrance, wall height, shared utility poles

November 12, 2014	Dominion Hosts Community Update Meeting
November 14, 2014	Holly Crest HOA complaint letter to County on EMF
January 7, 2015	Dominion community update mailing
January 23, 2015	Dominion open house invite mailing
Spring 2015	On-site landscaping discussions begin – to include Dominion Heights HOA
June 4, 2015	Dominion community letter mailing
August 2015	Update to Supervisor Smyth's office via email
September 4, 2015	Dominion site plan mailing
October 2015	Community update to Holly Crest HOA via email; landscape meetings continue
December 11, 2015	Dominion mails Forestry letter to neighbors
December 22, 2015	Dominion community letter mailed
January 2016	Tree removal update to community; Update to Wall Planning Committee
April 19, 2016	Dominion attends Holly Crest HOA meeting; discuss schedule, temporary high bus, sound wall, wall height; post materials to project website
June 1, 2016	Neighbor letter mailed
July 14, 2016	Dominion mails certified site plan letter
August 2016	Letter sent to County related to temporary high bus, seeking determination
November 2, 2016	Meeting with County representatives and attorney to discuss SCC filing
December 5, 2016	Dominion meeting with County Planning staff re: Special Exception Amendment (SEA)
December 8, 2016	Supervisor Smyth/County status update call
December 15, 2016	Dominion meeting with Hollycrest HOA Board regarding Special Exception Amendment (SEA), SCC filings, and early grading permit
December 19, 2016	Community mailing re: SEA, SCC filings, and early grading permit
December 21, 2016	Electronic transmission of December 19, 2016 letter to community members
December 22, 2016	SEA application filed with County

SAVE THE DATE

Dominion Virginia Power Open House

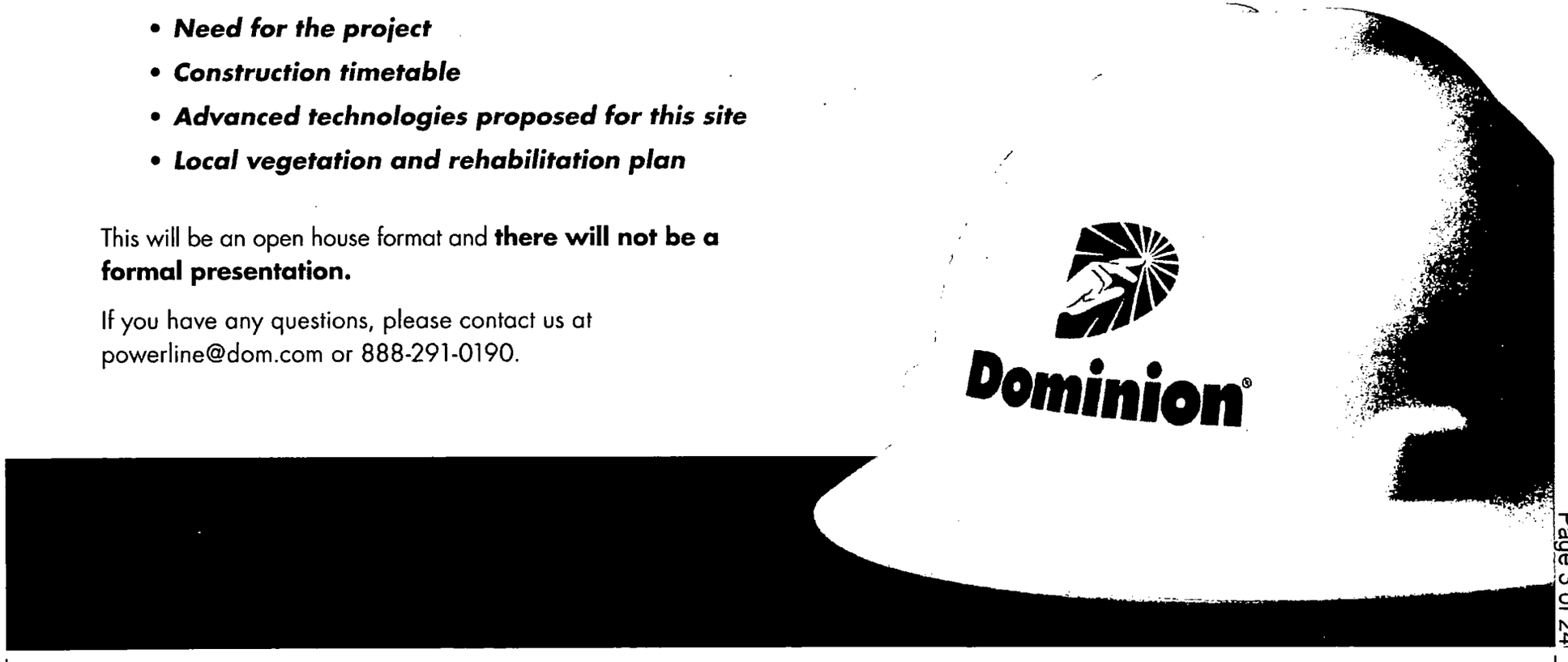
IDYLWOOD SUBSTATION AT SHREVE ROAD PROJECT

Please join us at **Timber Lane Elementary School, located at 2737 West Street in Falls Church, on Wednesday, November 13, any time between 6:00 p.m. – 8:30 p.m.** for information about the project and to view visual simulations of the site. Dominion subject matter experts will be on hand to share details, including:

- ***Need for the project***
- ***Construction timetable***
- ***Advanced technologies proposed for this site***
- ***Local vegetation and rehabilitation plan***

This will be an open house format and **there will not be a formal presentation.**

If you have any questions, please contact us at powerline@dom.com or 888-291-0190.



Dominion®

Dominion Virginia Power
P.O. Box 26666
Richmond, VA 23261

COMING SOON

Dominion Open House Event

90

Dominion

January 2, 2014

RE: Reliability Project – *Notice of Utility Work In & Around Idylwood Substation at Shreve Road*

Dear Neighbor:

Dominion is committed to continually improving service to our customers. To achieve this goal, Dominion has embarked on several projects to enhance the reliability of service in Fairfax County.

By now you are likely aware of a proposed electric transmission project affecting the Idylwood Substation at Shreve Road. As we work through final engineering and design for the permitting application process with the County, it is important that we begin assessing and preparing both distribution (poles typically holding multiple utility/cable lines found along major road corridors) and transmission (larger structures within existing right-of-way corridors) facilities.

Beginning in mid-January, you may see Dominion employees or contractors in and around the substation performing preliminary work related to this project. These "pre-construction" activities may include:

- Trimming/removal of vegetation/trees along Shreve Road by qualified arborists,
- Flagging or staking along the roadway and around the substation, and
- Pole/structure evaluation.

For more information about pre-construction activities, please refer to the enclosed brochure.

Thank you in advance for your patience as we work to better serve you and other residents and businesses in Fairfax. If you have any questions regarding this project, please send an email to **powerline@dom.com**. Or, you can call **1-888-291-0291** to speak with a member of our team.

Best Regards,

Tiffany Taylor-Minor
Manager, Electric Transmission Project Communications

Enclosure

Transmission construction typically requires access to public and private property. Dominion has prepared this document to provide property owners important information on our construction practices and the activities that occur before, during and after installation of our transmission facilities.

Pre-construction Activities

Initial Inspection

Prior to the actual construction schedule start date, Dominion employees or contractors will walk the distribution and transmission corridors to assess existing facilities.

Surveying and Staking

A crew utilizing medium-sized pickup trucks or small construction vehicles will mark and stake the affected area. For line-of-sight purposes, a limited amount of tree, shrub and crop clearing may be required.

Access Road Development

Existing roads will be used where practical. After construction is complete and the area is completely rehabilitated, we will restore roads and entrances to their original condition.

Site Preparation: Clearing and Grading

Access roads, structure work areas, and staging areas will be graded only where necessary. The trees along the edge, or just outside of the right-of-way that could possibly fall and contact the transmission line are referred to as danger trees and will be removed.

Construction will officially begin after all regulatory approvals and permits are obtained.

Reminder: Construction Begins Along Shreve Road

Earlier this month information went out to the community about upcoming construction along Shreve Road near Dominion's Idylwood Substation. This work includes placing several distribution structures and conduit/lines underground.

Construction will continue daily during the next several months between 9:30 a.m. – 3:00 p.m. near the corner of Shreve Road and Holly Manor Drive.* During this period, a lane of Shreve Road will be impacted.

As part of this work, trees along the northern side of the substation will be trimmed or removed to make room for the underground line work. Replacement trees and landscaping will be planted after completion of the project.

Our crews are committed to working safely and courteously in your neighborhood, and will utilize signage and flagmen during our work hours.

We appreciate your patience as we work to improve reliability and service in your area.

This work is separate from activities associated with the proposed expansion project, which is still under review for approval with Fairfax County.

If you have any questions about this project, you can contact our Transmission team by calling (888) 291–0190, or visit our website at dom.com, keyword: "Shreve."

** Schedules are subject to change based on weather conditions.*

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Construction Update

Work In and Around *Idylwood Substation at Shreve Road*

Over the last several months you may have noticed crews busy in and around the Idylwood Substation at Shreve Over the last several months you may have noticed crews busy in and around the Idylwood Substation at Shreve Road. As we've described, the Idylwood Substation is a critical electrical hub located at the intersection of two major transmission corridors.

Aside from activities associated with the proposed expansion project we introduced in the fall, there are a few general operational activities scheduled for the coming weeks, including a temporary equipment relocation project at the substation. Below is a brief summary of a few noteworthy dates of which we want to make you aware.

Early March 2014: Single day of heavy equipment delivery scheduled overnight between March 2nd – 3rd, based on VDOT permit requirements. A period of additional lighting and crew activity is expected. Our crews will operate courteously to minimize impact and inconvenience to neighbors.

April 2014: Single day of heavy equipment relocation.

Mid-July/Early August 2014: Distribution work to begin along Shreve Road.

Please look out for future notices in the mail and on our project page for details on future work.

We appreciate your patience as we complete this important work in your area. **Schedules are subject to change based on weather conditions.**

If you have any questions about this project, you can contact our Transmission team by calling (888) 291 – 0190, or visit our website at dom.com, keyword: "Shreve."

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