

KOP 5: SNEADS STORE ROAD, EAST A

PHOTO INFORMATION

Date Taken:	01/27/2022
Time:	3:00pm
Latitude:	36.9115°
Longitude:	-78.1665°
View Direction:	West, Southwest



KOP 6: LAUREL BRANCH ROAD, NORTH

PHOTO INFORMATION

Date Taken:	01/27/2022
Time:	2:00pm
Latitude:	36.9082°
Longitude:	-78.1802°
View Direction:	East



KOP 7: SNEADS STORE ROAD, WEST

PHOTO INFORMATION

Date Taken:	01/27/2022
Time:	10:00am
Latitude:	36.9094°
Longitude:	-78.1929°
View Direction:	North, Northeast



KOP 8: CRAIG MILL ROAD/VA 637

PHOTO INFORMATION

Date Taken:	01/27/2022
Time:	8:30am
Latitude:	36.9321°
Longitude:	-78.1442°
View Direction:	West



KOP 9: PLANK ROAD, CENTRAL

PHOTO INFORMATION

Date Taken:	01/27/2022
Time:	12:30pm
Latitude:	36.9275°
Longitude:	-78.1749°
View Direction:	Southeast



KOP 10: SNEADS STORE ROAD

PHOTO INFORMATION

Date Taken:	01/27/2022
Time:	3:15pm
Latitude:	36.9116°
Longitude:	-78.1657°
View Direction:	South



KOP 12: ORAL OAKS ROAD AT PLANK ROAD

PHOTO INFORMATION

Date Taken:	01/27/2022
Time:	11:50am
Latitude:	36.9156°
Longitude:	-78.1961°
View Direction:	East



KOP 13: SNEADS STORE ROAD

PHOTO INFORMATION

Date Taken:	01/27/2022
Time:	3:30pm
Latitude:	36.9122°
Longitude:	-78.1735°
View Direction:	North

TAB G

Preliminary Site Plan

LAUREL BRANCH SOLAR PROJECT
CONDITIONAL USE PERMIT SITE PLAN
PRELIMINARY - NOT FOR CONSTRUCTION

LUNENBURG COUNTY, VIRGINIA

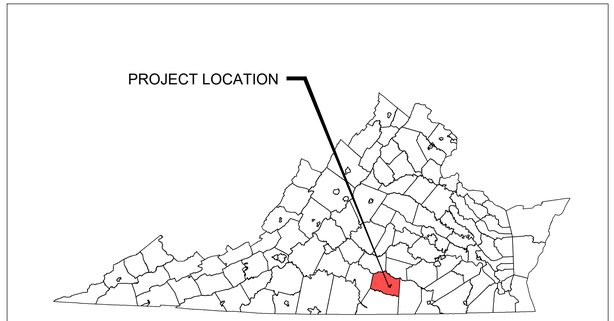
MAY 2022

SITE METRICS TO INCLUDE	ACRES	
TOTAL PROPERTY ACRES	2,189	
ESTIMATED ACRES WITHIN FENCE	750	
WETLAND ACRES	630	
LANDSCAPE BUFFER ACRES	124.7	
APPROXIMATE NUMBER OF MODULES	176,094	
ESTIMATED ACRES USED FOR SOLAR PANELS	165	
ACRES TO BE DISTURBED	791	
ESTIMATED FORESTED ACRES WITHIN LOD	399	
ESTIMATED AGRICULTURAL ACRES WITHIN LOD	108	
ESTIMATED FORESTED ACRES WITHIN FENCE	256	
ESTIMATED AGRICULTURAL ACRES WITHIN FENCE	86	
INVERTER SIZE	840 kW	
INVERTER QUANTITY	96	
AC CAPACITY	80 MW	
DC CAPACITY	95.97 MW	
LF OF FENCE	178,572	
LF OF ROAD	30,968	% OF SITE AREA
SF OF BUILDINGS	0	0
ACRES OF IMPERVIOUS AREA	19.3	0.01
ACRES OF CONSERVED OPEN SPACE	545.6	25

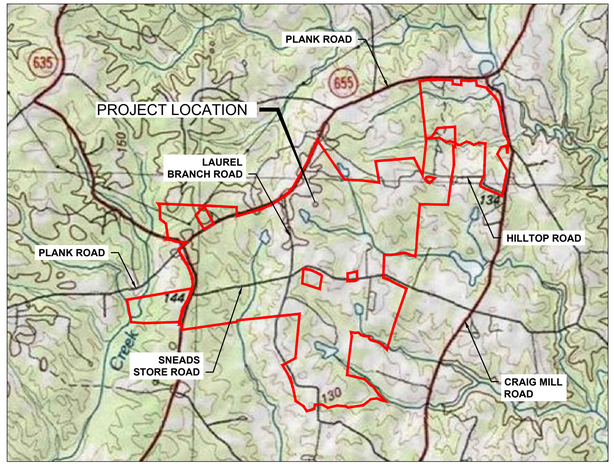
DRAWING INDEX	
SHEET No.	DRAWING TITLE
CP100	EXISTING CONDITIONS INDEX SHEET
CP200	POST-DEVELOPMENT CONDITIONS INDEX SHEET
CP300	ADJACENT PARCEL INFORMATION SHEET
CP101	EXISTING CONDITIONS PLAN SHEET
CP102	EXISTING CONDITIONS PLAN SHEET
CP103	EXISTING CONDITIONS PLAN SHEET
CP104	EXISTING CONDITIONS PLAN SHEET
CP105	EXISTING CONDITIONS PLAN SHEET
CP106	EXISTING CONDITIONS PLAN SHEET
CP107	EXISTING CONDITIONS PLAN SHEET
CP108	EXISTING CONDITIONS PLAN SHEET
CP201	POST-DEVELOPMENT CONDITION PLAN SHEET
CP202	POST-DEVELOPMENT CONDITION PLAN SHEET
CP203	POST-DEVELOPMENT CONDITION PLAN SHEET
CP204	POST-DEVELOPMENT CONDITION PLAN SHEET
CP205	POST-DEVELOPMENT CONDITION PLAN SHEET
CP206	POST-DEVELOPMENT CONDITION PLAN SHEET
CP207	POST-DEVELOPMENT CONDITION PLAN SHEET
CP208	POST-DEVELOPMENT CONDITION PLAN SHEET
CP301	LANDSCAPE BUFFER SHEET
CP302	DESKTOP EVALUATION UTILITY MAP
CP303	DRAFT GRADING PLAN SHEET
CP304	GENERAL NOTES AND DETAIL SHEET
CP305	GENERAL NOTES AND DETAIL SHEET
CP401	METES AND BOUNDS INDEX SHEET
CP402	METES AND BOUNDS

No.	Name	APN	Address	ZONING	Acreage	SHEET LOCATION
1[1]	Dixie Lee Farms Inc	038-0A-0-68	121 Laurel Branch Road	AGRI	83.8	CP101
2	Dixie Lee Farms Inc	038-0A-0-69	Null (owner address: 464 Laurel Branch Road)	AGRI	2.0	CP101
3	Dixie Lee Farms Inc	038-0A-0-68	464 Laurel Branch Road	AGRI	381.9	CP101, CP102, CP103, CP104
4	Campbell, James M.and Wanda S.	038-0A-0-5A	Null (owner address: 10668 Plank Road)	AGRI	80.0	CP102
5[2]	Dixie Lee Farms Inc	038-0A-0-54	Null (owner address: 464 Laurel Branch Road)	AGRI	191.7	CP102, CP104
6	Dixie Lee Farms Inc	038-0A-0-56B	Null (owner address: 464 Laurel Branch Road)	AGRI	9.0	CP102
7	Dixie Lee Farms Inc	046-0A-0-20	Null (owner address: 464 Laurel Branch Road)	AGRI	81.5	CP101, CP103
8	Wrenn, Mark E. or Robin Gunn	046-06-0-2	11668 Plank Road	AGRI	5.0	CP103
9	Wrenn, Robin G. or Mark Edwin	046-06-0-1	Null (owner address: 121 Laurel Branch Road)	AGRI	58.7	CP108, CP104
10	Long, Johnny K.	038-0A-0-67	Null (owner address: 3302 Laurel Branch Road)	AGRI	105.0	CP109, CP104
11	Long, Ronald E.	059-0A-0-1	1663 Sneads Store Road	AGRI	35.7	CP104, CP107
12[3]	Dixie Lee Farms Inc	038-0A-0-53	Null (owner address: 464 Laurel Branch Road)	AGRI	299.8	CP104, CP108
13	Richard, Hite T.	047-04-0-13	12052 Plank Road	AGRI	137.0	CP103, CP106
14	Lindberg, Stephen P. or Wendy A.	059-0A-0-1A	Null (owner address: PO Box 396, Chesterfield, VA 23832)	AGRI	119.2	CP103, CP104, CP106, CP107
15	Long, Johnny K.	038-0A-0-66A	Null (owner address: 3302 Laurel Branch Road)	AGRI	46.0	CP104
16	Dixie Lee Farms Inc	059-0A-0-27	Null (owner address: 464 Laurel Branch Road)	AGRI	100.0	CP104, CP107, CP108
17	Long, Johnny K.	047-04-0-81	13194 Plank Road	AGRI	5.0	CP105
18	Long, Johnny K.	047-04-0-81B	Null (owner address: 3302 Laurel Branch Road)	AGRI	86.3	CP105, CP106
19	Long, Johnny K.	047-04-0-3B	626 Hilltop Road	AGRI	88.6	CP106
20	Arthur, Bernard R. or Barbara D.	047-04-0-6	13476 Plank Road	AGRI	93.4	CP105, CP106
21	Spencer, Frank T.	047-04-0-81A	Null (owner address: 3610 Ghent Drive, Chesterfield, VA 23832)	AGRI	Easement Only	CP105, CP106
22	Harris, Michael G.	047-04-0-25	Null (owner address: 11592 Craig Mill Road)	AGRI	2.2	CP105
23	Harris, Michael G.	047-04-0-5	Null (owner address: 11592 Craig Mill Road)	AGRI	97.2	CP105, CP106
24[4]	Dicks, Teresa L Teres (Te)	047-04-0-12	Null (owner address: 709 Pleasant Way, Chesapeake, VA 23322)	AGRI	43.2	CP106
25[5]	Dicks, Teresa L Teres (Te)	038-0A-0-65	1364 Sneads Store Road	AGRI	132.3	CP104, CP107, CP108
26	Long, Ronald E.	038-0A-0-66B	167 Longs Lane	RES	3.0	CP104
27	Long, Ronald E.	038-0A-0-66C	85 Longs Road	RES	1.8	CP104

[1] - Anticipated parcel carve out of 224 acres
[2] - Anticipated parcel carve out of 30.7 acres
[3] - Anticipated parcel carve out of 25.3 acres
[4] - Anticipated parcel carve out of 3.3 acres
[5] - Anticipated parcel carve out of 20.6 acres



STATE VICINITY MAP
LAUREL BRANCH SOLAR PROJECT
LUNENBURG COUNTY , VIRGINIA



COUNTY VICINITY MAP
DISTRICT: COLUMBIAN GROVE
CASE NUMBER: CUP 2-22

PREPARED BY:

TETRA TECH

complex world | CLEAR SOLUTIONS™

4104 COX ROAD - SUITE 120, GLEN ALLEN, VA 23060
TEL: (804) 290-4321 | FAX: (804) 270-2739

PREPARED FOR:

Dominion Energy®

600 E CANAL STREET, RICHMOND, VA 23219

Dominion Energy

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GLEN ALLEN, VA 23060
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FAX: (804) 270-2739

STAMP:

COMMONWEALTH OF VIRGINIA
MICHAEL K. SHORT
Lic. No. 047828
05/17/2022
PROFESSIONAL ENGINEER

LAUREL BRANCH SOLAR PROJECT
DOMINION ENERGY VIRGINIA
LUNENBURG COUNTY
VIRGINIA

PROJECT NUMBERS:
194-1058-0025

SHEET TITLE:
COVER SHEET

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)
0 ½" 1"

THIS DOCUMENT IS THE PROPERTY OF TETRA TECH WHO HAS UNLIMITED RIGHTS. THIS DOCUMENT IS PROVIDED UPON CONDITION THAT IT WILL NEITHER BE REPRODUCED, COPIED, OR ISSUED TO A THIRD PARTY AND WILL BE USED SOLELY FOR THE ORIGINAL INTENDED PURPOSE.

NO.	REVISION	DATE	INIT.
00	CUP APPLICATION	05/17/2022	GAR

va811.com Dig With CARE

DATE:	05/17/2022
DRAWN BY:	GR
ENGINEER:	MS
APPROVED BY:	EO

PROJECT PHASE:
CONDITIONAL USE PERMIT SITE PLANS

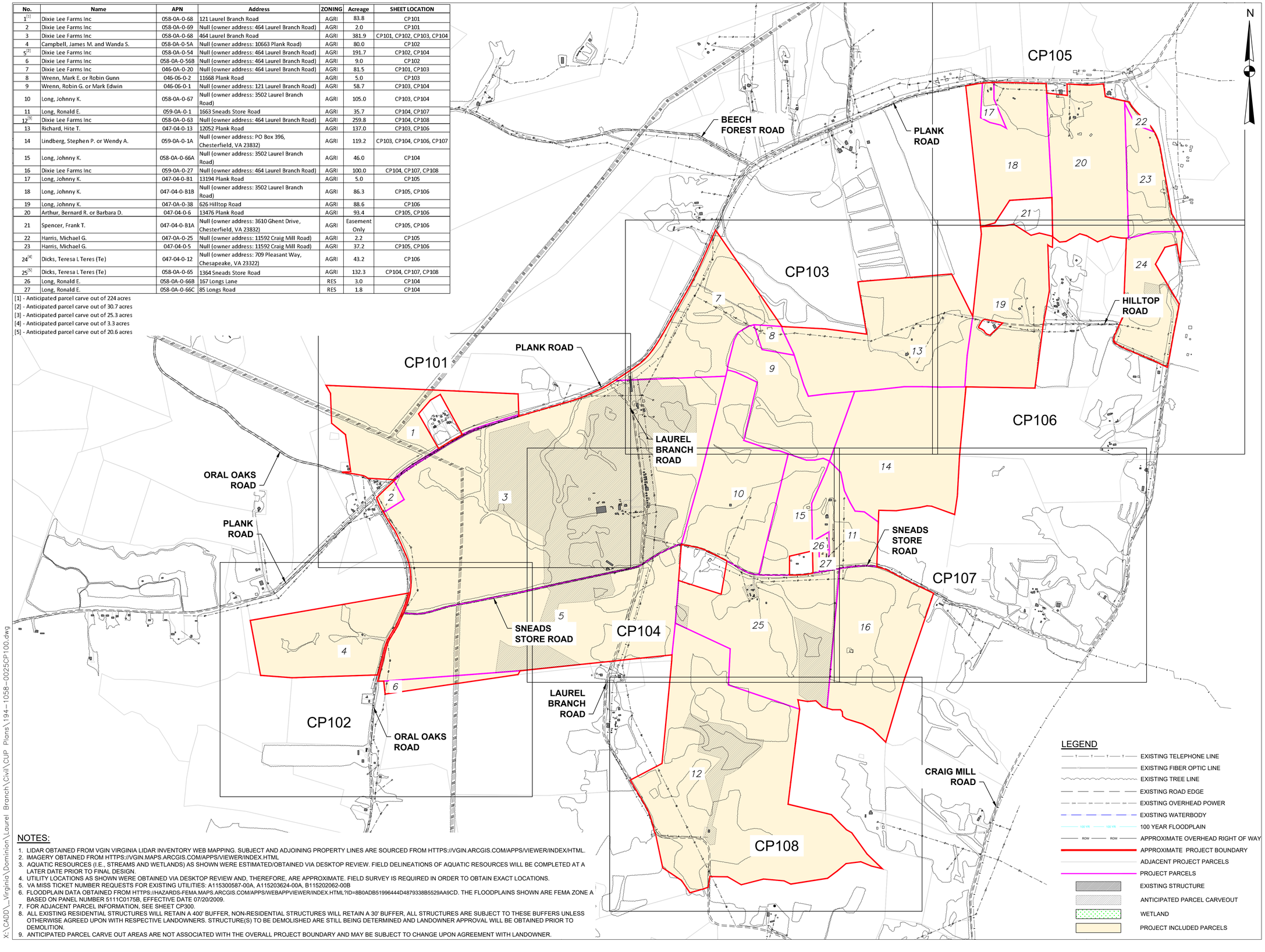
SCALE:
N/A

SHEET NO.:
CP000

X:\CADD_Virginia\Dominion\Laurel Branch\Civil\CUP Plans\194-1058-0025CP000.dwg

No.	Name	APN	Address	ZONING	Acreage	SHEET LOCATION
1[1]	Dixie Lee Farms Inc	058-0A-0-68	121 Laurel Branch Road	AGRI	83.8	CP101
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5[2]	Dixie Lee Farms Inc	058-0A-0-54	Null (owner address: 464 Laurel Branch Road)	AGRI	191.7	CP102, CP104
6	Dixie Lee Farms Inc	058-0A-0-56B	Null (owner address: 464 Laurel Branch Road)	AGRI	9.0	CP102
7	Dixie Lee Farms Inc	046-0A-0-20	Null (owner address: 464 Laurel Branch Road)	AGRI	81.5	CP101, CP103
8	Wrenn, Mark E. or Robin Gunn	046-06-0-2	11668 Plank Road	AGRI	5.0	CP103
9	Wrenn, Robin G. or Mark Edwin	046-06-0-1	Null (owner address: 121 Laurel Branch Road)	AGRI	58.7	CP103, CP104
10	Long, Johnny K.	058-0A-0-67	Null (owner address: 3502 Laurel Branch Road)	AGRI	105.0	CP103, CP104
11	Long, Ronald E.	059-0A-0-1	1663 Sneads Store Road	AGRI	35.7	CP104, CP107
12[3]	Dixie Lee Farms Inc	058-0A-0-63	Null (owner address: 464 Laurel Branch Road)	AGRI	259.8	CP104, CP108
13	Richard, Hite T.	047-04-0-13	12052 Plank Road	AGRI	137.0	CP103, CP106
14	Lindberg, Stephen P. or Wendy A.	059-0A-0-1A	Null (owner address: PO Box 396, Chesterfield, VA 23832)	AGRI	119.2	CP103, CP104, CP106, CP107
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18	Long, Johnny K.	047-04-0-B1B	Null (owner address: 3502 Laurel Branch Road)	AGRI	86.3	CP105, CP106
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[4] - Anticipated parcel carve out of 3.3 acres
[5] - Anticipated parcel carve out of 20.6 acres



NOTES:

1. LIDAR OBTAINED FROM VGIN VIRGINIA LIDAR INVENTORY WEB MAPPING. SUBJECT AND ADJOINING PROPERTY LINES ARE SOURCED FROM HTTPS://VGIN.ARCGIS.COM/APPS/VIEWER/INDEX/HTML.
2. IMAGERY OBTAINED FROM HTTPS://VGIN.MAPS.ARCGIS.COM/APPS/VIEWER/INDEX.HTML
3. AQUATIC RESOURCES (I.E., STREAMS AND WETLANDS) AS SHOWN WERE ESTIMATED/OBTAINED VIA DESKTOP REVIEW. FIELD DELINEATIONS OF AQUATIC RESOURCES WILL BE COMPLETED AT A LATER DATE PRIOR TO FINAL DESIGN.
4. UTILITY LOCATIONS AS SHOWN WERE OBTAINED VIA DESKTOP REVIEW AND, THEREFORE, ARE APPROXIMATE. FIELD SURVEY IS REQUIRED IN ORDER TO OBTAIN EXACT LOCATIONS.
5. VA MISS TICKET NUMBER REQUESTS FOR EXISTING UTILITIES: A115300587-00A, A115203624-00A, B115202062-00B
6. FLOODPLAIN DATA OBTAINED FROM HTTPS://HAZARDS-FEMA.MAPS.ARCGIS.COM/APPS/WEBAPPVIEWER/INDEX.HTML?ID=8B0ADB51996444D4879338B5529AA9CD. THE FLOODPLAINS SHOWN ARE FEMA ZONE A BASED ON PANEL NUMBER 5111C0175B, EFFECTIVE DATE 07/20/2009.
7. FOR ADJACENT PARCEL INFORMATION, SEE SHEET CP300.
8. ALL EXISTING RESIDENTIAL STRUCTURES WILL RETAIN A 400' BUFFER, NON-RESIDENTIAL STRUCTURES WILL RETAIN A 30' BUFFER, ALL STRUCTURES ARE SUBJECT TO THESE BUFFERS UNLESS OTHERWISE AGREED UPON WITH RESPECTIVE LANDOWNERS. STRUCTURE(S) TO BE DEMOLISHED ARE STILL BEING DETERMINED AND LANDOWNER APPROVAL WILL BE OBTAINED PRIOR TO DEMOLITION.
9. ANTICIPATED PARCEL CARVE OUT AREAS ARE NOT ASSOCIATED WITH THE OVERALL PROJECT BOUNDARY AND MAY BE SUBJECT TO CHANGE UPON AGREEMENT WITH LANDOWNER.

LEGEND

- EXISTING TELEPHONE LINE
- EXISTING FIBER OPTIC LINE
- EXISTING TREE LINE
- EXISTING ROAD EDGE
- EXISTING OVERHEAD POWER
- EXISTING WATERBODY
- 100 YEAR FLOODPLAIN
- APPROXIMATE OVERHEAD RIGHT OF WAY
- APPROXIMATE PROJECT BOUNDARY
- ADJACENT PROJECT PARCELS
- PROJECT PARCELS
- EXISTING STRUCTURE
- ANTICIPATED PARCEL CARVEOUT
- WETLAND
- PROJECT INCLUDED PARCELS

Dominion Energy

TETRA TECH

TETRA TECH, INC.
4101 COX ROAD,
SUITE 120
GLEN ALLEN, VA 23060
TEL: (804) 290-4321
FAX: (804) 270-2739

STAMP:

COMMONWEALTH OF VIRGINIA
MICHAEL K. SHORT
Lic. No. 047828
05/17/2022
PROFESSIONAL ENGINEER

LAUREL BRANCH SOLAR PROJECT

DOMINION ENERGY VIRGINIA
LUNENBURG COUNTY
VIRGINIA

PROJECT NUMBERS:
194-1058-0025

SHEET TITLE:
EXISTING CONDITIONS INDEX SHEET

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)
0 ½" 1"

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NO.	REVISION	DATE	INIT.
00	CUP APPLICATION	05/17/2022	GAR

va811.com Dig With CARE

DATE:	05/17/2022
DRAWN BY:	GR
ENGINEER:	MS
APPROVED BY:	EO

PROJECT PHASE:
CONDITIONAL USE PERMIT SITE PLANS

SCALE:
1" = 800'

SHEET NO.:
CP100

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N

MATCHLINE SHEET CP103

MATCHLINE SHEET CP104

MATCHLINE SHEET CP102

LAUREL BRANCH ROAD

ORAL OAKS ROAD

PLANK ROAD

DIXIE LEE FARMS INC
PARCEL ID: 058-0A-0-68
ZONING: AGRICULTURAL

DIXIE LEE FARMS INC
PARCEL ID: 058-0A-0-69
ZONING: AGRICULTURAL

DIXIE LEE FARMS INC
PARCEL ID: 058-0A-0-68
ZONING: AGRICULTURAL

475 500 450 100 YR

LEGEND

- EXISTING 25' CONTOUR
- EXISTING 5' CONTOUR
- EXISTING TREE LINE
- EXISTING ROAD EDGE
- EXISTING OVERHEAD POWER
- EXISTING WATERBODY
- EXISTING TELEPHONE LINE
- EXISTING FIBER OPTIC LINE
- 100 YEAR FLOODPLAIN
- APPROXIMATE OVERHEAD RIGHT OF WAY
- ADJACENT PROJECT PARCELS
- PROJECT PARCELS
- EXISTING STRUCTURE
- ANTICIPATED PARCEL CARVEOUT
- WETLAND
- PROJECT INCLUDED PARCELS

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LAUREL BRANCH SOLAR PROJECT

DOMINION ENERGY VIRGINIA
LUNENBURG COUNTY
VIRGINIA

PROJECT NUMBERS:
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DATE:	05/17/2022
DRAWN BY:	GR
ENGINEER:	MS
APPROVED BY:	EO

PROJECT PHASE:
CONDITIONAL USE PERMIT SITE PLANS

SCALE:
1" = 200'

SHEET NO.:
CP101

MATCHLINE SHEET CP101

MATCHLINE SHEET CP104

PLANK ROAD

SNEADS STORE ROAD

ORAL OAKS ROAD

CAMPBELL, JAMES M
PARCEL ID: 058-0A-0-5A
ZONING: AGRICULTURAL

DIXIE LEE FARMS INC
PARCEL ID: 058-0A-0-68
ZONING: AGRICULTURAL

DIXIE LEE FARMS INC
PARCEL ID: 058-0A-0-54
ZONING: AGRICULTURAL

DIXIE LEE FARMS INC
PARCEL ID: 058-0A-0-56B
ZONING: SINGLE FAMILY RESIDENCE

LEGEND

- EXISTING 25' CONTOUR
- EXISTING 5' CONTOUR
- EXISTING TREE LINE
- EXISTING ROAD EDGE
- EXISTING OVERHEAD POWER
- EXISTING WATERBODY
- EXISTING TELEPHONE LINE
- EXISTING FIBER OPTIC LINE
- 100 YEAR FLOODPLAIN
- APPROXIMATE OVERHEAD RIGHT OF WAY
- ADJACENT PROJECT PARCELS
- PROJECT PARCELS
- EXISTING STRUCTURE
- ANTICIPATED PARCEL CARVEOUT
- WETLAND
- PROJECT INCLUDED PARCELS

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Dominion Energy

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TETRA TECH, INC.
4101 COX ROAD,
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GLEN ALLEN, VA 23060
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LAUREL BRANCH SOLAR PROJECT

DOMINION ENERGY VIRGINIA
LUNENBURG COUNTY
VIRGINIA

PROJECT NUMBERS:
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va811.com Dig With CARE

DATE:	05/17/2022
DRAWN BY:	GR
ENGINEER:	MS
APPROVED BY:	EO

PROJECT PHASE:
CONDITIONAL USE PERMIT SITE PLANS

SCALE:
1" = 200'

SHEET NO.:
CP102

LEGEND

- EXISTING 25' CONTOUR
- EXISTING 5' CONTOUR
- EXISTING TREE LINE
- EXISTING ROAD EDGE
- EXISTING OVERHEAD POWER
- EXISTING WATERBODY
- EXISTING TELEPHONE LINE
- EXISTING FIBER OPTIC LINE
- 100 YEAR FLOODPLAIN
- APPROXIMATE OVERHEAD RIGHT OF WAY
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- PROJECT PARCELS
- EXISTING STRUCTURE
- ANTICIPATED PARCEL CARVEOUT
- WETLAND
- PROJECT INCLUDED PARCELS

N

MATCHLINE SHEET CP101

MATCHLINE SHEET CP106

PLANK ROAD

DIXIE LEE FARMS INC
PARCEL ID: 046-0A-0-20
ZONING: AGRICULTURAL

WRENN, MARK EDWIN
PARCEL ID: 046-06-0-2
ZONING: AGRICULTURAL

WRENN, ROBIN GUNN
PARCEL ID: 046-06-0-1
ZONING: AGRICULTURAL

RICHARD, T HITE J
PARCEL ID: 047-04-0-13
ZONING: AGRICULTURAL

LONG, JOHNNY K
PARCEL ID: 058-0A-0-67
ZONING: AGRICULTURAL

LINDBERG, STEPHEN P. OR WENDY A.
PARCEL ID: 059-0A-0-A1
ZONING: AGRICULTURAL

475

450

LAUREL BRANCH ROAD

MATCHLINE SHEET CP104

MATCHLINE SHEET CP104

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Dominion Energy®

TETRA TECH

TETRA TECH, INC.
4101 COX ROAD,
SUITE 120
GLEN ALLEN, VA 23060
TEL: (804) 290-4321
FAX: (804) 270-2739

STAMP:

COMMONWEALTH OF VIRGINIA
MICHAEL K. SHORT
Lic. No. 047828
05/17/2022
PROFESSIONAL ENGINEER

LAUREL BRANCH SOLAR PROJECT

DOMINION ENERGY VIRGINIA
LUNENBURG COUNTY
VIRGINIA

PROJECT NUMBERS:
194-1058-0025

SHEET TITLE:
EXISTING CONDITIONS PLAN SHEET

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)
0 ½" 1"

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NO.	REVISION	DATE	INIT.
00	CUP APPLICATION	05/17/2022	GAR

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DATE:	05/17/2022
DRAWN BY:	GR
ENGINEER:	MS
APPROVED BY:	EO

PROJECT PHASE:
CONDITIONAL USE PERMIT SITE PLANS

SCALE:
1" = 200'

SHEET NO.:
CP103

MATCHLINE SHEET CP103

MATCHLINE SHEET CP101

MATCHLINE SHEET CP107

MATCHLINE SHEET CP102

MATCHLINE SHEET CP108

N

DIXIE LEE FARMS INC
PARCEL ID: 058-0A-0-68
ZONING: AGRICULTURAL

LONG, JOHNNY K
PARCEL ID: 058-0A-0-67
ZONING: AGRICULTURAL

LONG, RONALD E
PARCEL ID: 059-0A-0-1
ZONING: AGRICULTURAL

LONG, RONALD E
PARCEL ID: 059-0A-0-66B
ZONING: RESIDENTIAL

LONG, RONALD E
PARCEL ID: 059-0A-0-66C
ZONING: RESIDENTIAL

LONG, JOHNNY K
PARCEL ID: 058-0A-0-66A
ZONING: AGRICULTURAL

DICKS, TERESA L TERES (TE)
PARCEL ID: 058-0A-0-65
ZONING: AGRICULTURAL

DIXIE LEE FARMS INC
PARCEL ID: 058-0A-0-54
ZONING: AGRICULTURAL

DIXIE LEE FARMS INC
PARCEL ID: 058-0A-0-63
ZONING: AGRICULTURAL

LAUREL BRANCH ROAD

SNEADS STORE ROAD

425 450 475

LEGEND

- EXISTING 25' CONTOUR
- EXISTING 5' CONTOUR
- EXISTING TREE LINE
- EXISTING ROAD EDGE
- EXISTING OVERHEAD POWER
- EXISTING WATERBODY
- EXISTING TELEPHONE LINE
- EXISTING FIBER OPTIC LINE
- 100 YEAR FLOODPLAIN
- APPROXIMATE OVERHEAD RIGHT OF WAY
- ADJACENT PROJECT PARCELS
- PROJECT PARCELS
- EXISTING STRUCTURE
- ANTICIPATED PARCEL CARVEOUT
- WETLAND
- PROJECT INCLUDED PARCELS

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05/17/2022
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LAUREL BRANCH SOLAR PROJECT

DOMINION ENERGY VIRGINIA
LUNENBURG COUNTY
VIRGINIA

PROJECT NUMBERS:
194-1058-0025

SHEET TITLE:

EXISTING CONDITIONS PLAN SHEET

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0 ½" 1"

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00	CUP APPLICATION	05/17/2022	GAR

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DATE:	05/17/2022
DRAWN BY:	GR
ENGINEER:	MS
APPROVED BY:	EO

PROJECT PHASE:
CONDITIONAL USE PERMIT SITE PLANS

SCALE:
1" = 200'

SHEET NO.:
CP104

PLANK ROAD

LONG, JOHNNY K
PARCEL ID: 047-04-0-B1
ZONING: AGRICULTURAL

LONG, JOHNNY K
PARCEL ID: 047-04-0-B1B
ZONING: AGRICULTURAL

ARTHUR, BERNARD R
PARCEL ID: 047-04-0-6
ZONING: AGRICULTURAL

HARRIS, MICHAEL G.
PARCEL ID: 047-0A-0-5
ZONING: AGRICULTURAL

HARRIS, MICHAEL G.
PARCEL ID: 047-04-0-25
ZONING: AGRICULTURAL

MATCHLINE SHEET CP106

N

LEGEND

- EXISTING 25' CONTOUR
- EXISTING 5' CONTOUR
- EXISTING TREE LINE
- EXISTING ROAD EDGE
- EXISTING OVERHEAD POWER
- EXISTING WATERBODY
- EXISTING TELEPHONE LINE
- EXISTING FIBER OPTIC LINE
- 100 YEAR FLOODPLAIN
- APPROXIMATE OVERHEAD RIGHT OF WAY
- ADJACENT PROJECT PARCELS
- PROJECT PARCELS
- EXISTING STRUCTURE
- ANTICIPATED PARCEL CARVEOUT
- WETLAND
- PROJECT INCLUDED PARCELS

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VIRGINIA

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ENGINEER:	MS
APPROVED BY:	EO

PROJECT PHASE:
CONDITIONAL USE PERMIT SITE PLANS

SCALE:
1" = 200'

SHEET NO.:
CP105

MATCHLINE SHEET CP105

MATCHLINE SHEET CP103

MATCHLINE SHEET CP107

ARTHUR, BERNARD R
PARCEL ID: 047-04-0-6
ZONING: AGRICULTURAL

HARRIS, MICHAEL G
PARCEL ID: 047-04-0-5
ZONING: AGRICULTURAL

LONG, JOHNNY K
PARCEL ID: 047-0A-0-38
ZONING: AGRICULTURAL

DICKS, TERESA L TERES (TE)
PARCEL ID: 047-04-0-12
ZONING: AGRICULTURAL

RICHARD, T HITE J
PARCEL ID: 047-04-0-13
ZONING: AGRICULTURAL

HILLTOP ROAD

LONG, JOHNNY K
PARCEL ID: 047-0A-0-38
ZONING: AGRICULTURAL

LINDBERG, STEPHEN P. OR WENDY A.
PARCEL ID: 059-0A-0-A1
ZONING: AGRICULTURAL

425
400

N

LEGEND

- EXISTING 25' CONTOUR
- EXISTING 5' CONTOUR
- EXISTING TREE LINE
- EXISTING ROAD EDGE
- EXISTING OVERHEAD POWER
- EXISTING WATERBODY
- EXISTING TELEPHONE LINE
- EXISTING FIBER OPTIC LINE
- 100 YEAR FLOODPLAIN
- APPROXIMATE OVERHEAD RIGHT OF WAY
- ADJACENT PROJECT PARCELS
- PROJECT PARCELS
- EXISTING STRUCTURE
- ANTICIPATED PARCEL CARVEOUT
- WETLAND
- PROJECT INCLUDED PARCELS

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05/17/2022
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LAUREL BRANCH SOLAR PROJECT

DOMINION ENERGY VIRGINIA
LUNENBURG COUNTY
VIRGINIA

PROJECT NUMBERS:
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DRAWN BY:	GR
ENGINEER:	MS
APPROVED BY:	EO

PROJECT PHASE:
CONDITIONAL USE PERMIT SITE PLANS

SCALE:
1" = 200'

SHEET NO.:
CP106

MATCHLINE SHEET CP103

MATCHLINE SHEET CP106

MATCHLINE SHEET CP104

MATCHLINE SHEET CP108

LINDBERG, STEPHEN P. OR WENDY A.
PARCEL ID: 059-0A-0-A1
ZONING: AGRICULTURAL

LONG, RONALD E
PARCEL ID: 059-0A-0-1
ZONING: AGRICULTURAL

DIXIE LEE FARMS INC
PARCEL ID: 059-0A-0-27
ZONING: AGRICULTURAL

SNEADS STORE ROAD

N

LEGEND

- EXISTING 25' CONTOUR
- EXISTING 5' CONTOUR
- EXISTING TREE LINE
- EXISTING ROAD EDGE
- EXISTING OVERHEAD POWER
- EXISTING WATERBODY
- EXISTING TELEPHONE LINE
- EXISTING FIBER OPTIC LINE
- 100 YEAR FLOODPLAIN
- APPROXIMATE OVERHEAD RIGHT OF WAY
- ADJACENT PROJECT PARCELS
- PROJECT PARCELS
- EXISTING STRUCTURE
- ANTICIPATED PARCEL CARVEOUT
- WETLAND
- PROJECT INCLUDED PARCELS

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LAUREL BRANCH SOLAR PROJECT

DOMINION ENERGY VIRGINIA

LUNENBURG COUNTY
VIRGINIA

PROJECT NUMBERS:
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ENGINEER:	MS
APPROVED BY:	EO

PROJECT PHASE:
CONDITIONAL USE PERMIT SITE PLANS

SCALE:
1" = 200'

SHEET NO.:
CP107

MATCHLINE SHEET CP104

MATCHLINE SHEET CP107

N

DICKS, TERESA L TERES (TE)
PARCEL ID: 058-0A-0-65
ZONING: AGRICULTURAL

DIXIE LEE FARMS INC
PARCEL ID: 059-0A-0-27
ZONING: AGRICULTURAL

DIXIE LEE FARMS INC
PARCEL ID: 058-0A-0-63
ZONING: AGRICULTURAL

DIXIE LEE FARMS INC
PARCEL ID: 058-0A-0-63
ZONING: AGRICULTURAL

LAUREL BRANCH ROAD

1000 400 425 450 375 525

LEGEND

- EXISTING 25' CONTOUR
- EXISTING 5' CONTOUR
- EXISTING TREE LINE
- EXISTING ROAD EDGE
- EXISTING OVERHEAD POWER
- EXISTING WATERBODY
- EXISTING TELEPHONE LINE
- EXISTING FIBER OPTIC LINE
- 100 YEAR FLOODPLAIN
- APPROXIMATE OVERHEAD RIGHT OF WAY
- ADJACENT PROJECT PARCELS
- PROJECT PARCELS
- EXISTING STRUCTURE
- ANTICIPATED PARCEL CARVEOUT
- WETLAND
- PROJECT INCLUDED PARCELS

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LAUREL BRANCH SOLAR PROJECT

DOMINION ENERGY VIRGINIA
LUNENBURG COUNTY
VIRGINIA

PROJECT NUMBERS:
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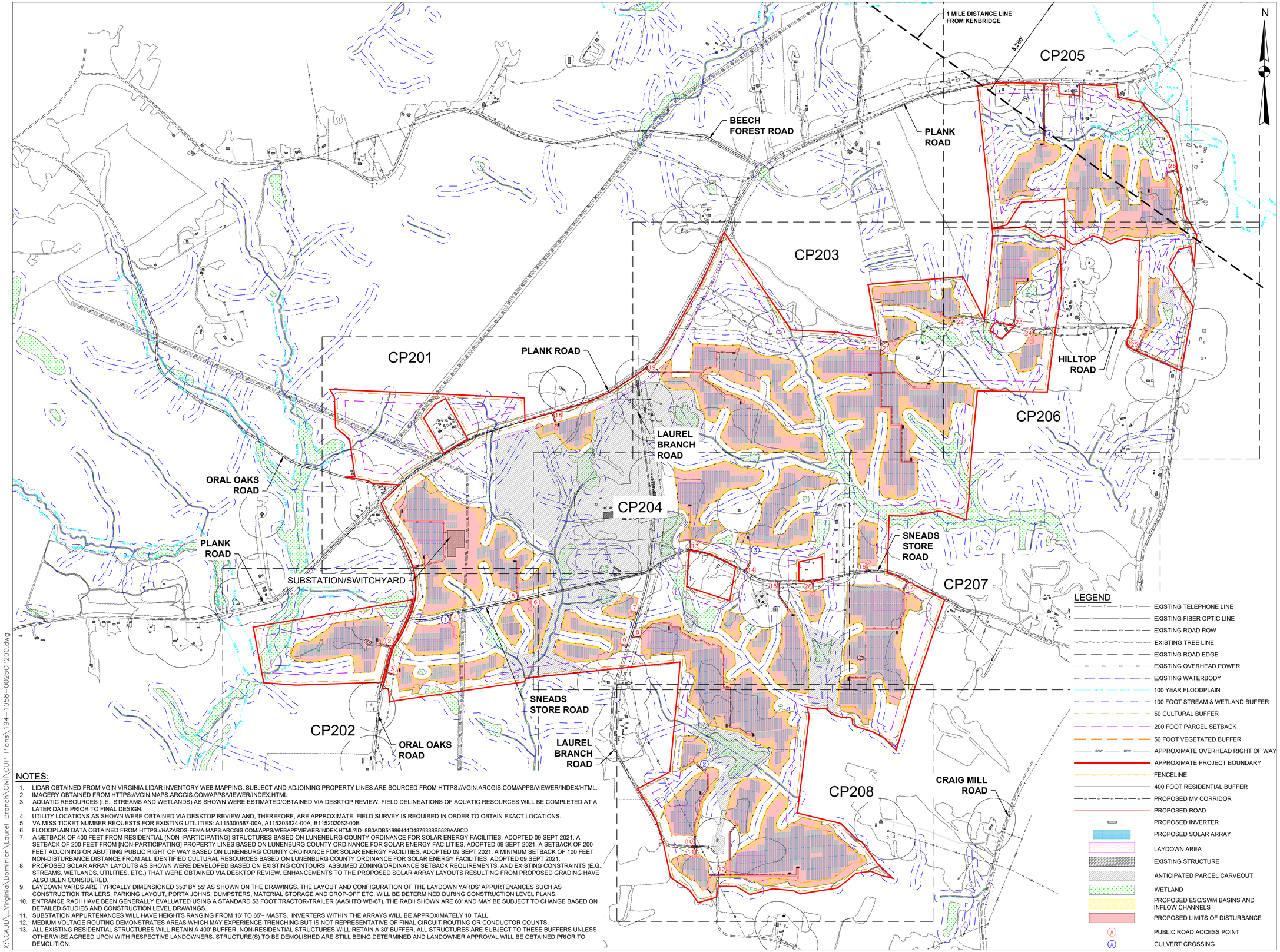
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DATE:	05/17/2022
DRAWN BY:	GR
ENGINEER:	MS
APPROVED BY:	EO

PROJECT PHASE:
CONDITIONAL USE PERMIT SITE PLANS

SCALE:
1" = 200'

SHEET NO.:
CP108



NOTES:

1. LIDAR OBTAINED FROM VGIN VIRGINIA LIDAR INVENTORY WEB MAPPING. SUBJECT AND ADJOINING PROPERTY LINES ARE SOURCED FROM HTTPS://VGIN.ARCGIS.COM/APPS/VIEWER/INDEX/HTML.
2. IMAGERY OBTAINED FROM HTTPS://VGIN.MAPS.ARCGIS.COM/APPS/VIEWER/INDEX.HTML
3. AQUATIC RESOURCES (I.E., STREAMS AND WETLANDS) AS SHOWN WERE ESTIMATED/OBTAINED VIA DESKTOP REVIEW. FIELD DELINEATIONS OF AQUATIC RESOURCES WILL BE COMPLETED AT A LATER DATE PRIOR TO FINAL DESIGN.
4. UTILITY LOCATIONS AS SHOWN WERE OBTAINED VIA DESKTOP REVIEW AND, THEREFORE, ARE APPROXIMATE. FIELD SURVEY IS REQUIRED IN ORDER TO OBTAIN EXACT LOCATIONS.
5. VA MISS TICKET NUMBER REQUESTS FOR EXISTING UTILITIES: A115300587-00A, A115203624-00A, B115202062-00B
6. FLOODPLAIN DATA OBTAINED FROM HTTPS://HAZARDS-FEMA.MAPS.ARCGIS.COM/APPS/WEBAPPVIEWER/INDEX.HTML?ID=8B0ADB51996444D4879338B5529AA9CD
7. A SETBACK OF 400 FEET FROM RESIDENTIAL (NON -PARTICIPATING) STRUCTURES BASED ON LUNENBURG COUNTY ORDINANCE FOR SOLAR ENERGY FACILITIES, ADOPTED 09 SEPT 2021. A SETBACK OF 200 FEET FROM [NON-PARTICIPATING] PROPERTY LINES BASED ON LUNENBURG COUNTY ORDINANCE FOR SOLAR ENERGY FACILITIES, ADOPTED 09 SEPT 2021. A SETBACK OF 200 FEET ADJOINING OR ABUTTING PUBLIC RIGHT OF WAY BASED ON LUNENBURG COUNTY ORDINANCE FOR SOLAR ENERGY FACILITIES, ADOPTED 09 SEPT 2021. A MINIMUM SETBACK OF 100 FEET NON-DISTURBANCE DISTANCE FROM ALL IDENTIFIED CULTURAL RESOURCES BASED ON LUNENBURG COUNTY ORDINANCE FOR SOLAR ENERGY FACILITIES, ADOPTED 09 SEPT 2021.
8. PROPOSED SOLAR ARRAY LAYOUTS AS SHOWN WERE DEVELOPED BASED ON EXISTING CONTOURS, ASSUMED ZONING/ORDINANCE SETBACK REQUIREMENTS, AND EXISTING CONSTRAINTS (E.G., STREAMS, WETLANDS, UTILITIES, ETC.) THAT WERE OBTAINED VIA DESKTOP REVIEW. ENHANCEMENTS TO THE PROPOSED SOLAR ARRAY LAYOUTS RESULTING FROM PROPOSED GRADING HAVE ALSO BEEN CONSIDERED.
9. LAYDOWN YARDS ARE TYPICALLY DIMENSIONED 350' BY 55' AS SHOWN ON THE DRAWINGS. THE LAYOUT AND CONFIGURATION OF THE LAYDOWN YARDS' APPURTENANCES SUCH AS CONSTRUCTION TRAILERS, PARKING LAYOUT, PORTA JOHNS, DUMPSTERS, MATERIAL STORAGE AND DROP-OFF ETC. WILL BE DETERMINED DURING CONSTRUCTION LEVEL PLANS.
10. ENTRANCE RADII HAVE BEEN GENERALLY EVALUATED USING A STANDARD 53 FOOT TRACTOR-TRAILER (AASHTO WB-67). THE RADII SHOWN ARE 60' AND MAY BE SUBJECT TO CHANGE BASED ON DETAILED STUDIES AND CONSTRUCTION LEVEL DRAWINGS.
11. SUBSTATION APPURTENANCES WILL HAVE HEIGHTS RANGING FROM 16' TO 65'+ MASTS. INVERTERS WITHIN THE ARRAYS WILL BE APPROXIMATELY 10' TALL.
12. MEDIUM VOLTAGE ROUTING DEMONSTRATES AREAS WHICH MAY EXPERIENCE TRENCHING BUT IS NOT REPRESENTATIVE OF FINAL CIRCUIT ROUTING OR CONDUCTOR COUNTS.
13. ALL EXISTING RESIDENTIAL STRUCTURES WILL RETAIN A 400' BUFFER, NON-RESIDENTIAL STRUCTURES WILL RETAIN A 30' BUFFER, ALL STRUCTURES ARE SUBJECT TO THESE BUFFERS UNLESS OTHERWISE AGREED UPON WITH RESPECTIVE LANDOWNERS. STRUCTURE(S) TO BE DEMOLISHED ARE STILL BEING DETERMINED AND LANDOWNER APPROVAL WILL BE OBTAINED PRIOR TO DEMOLITION.

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Dominion Energy

TETRA TECH

TETRA TECH, INC.
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STAMP:

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Lic. No. 047828
05/17/2022
PROFESSIONAL ENGINEER

LAUREL BRANCH SOLAR PROJECT

DOMINION ENERGY VIRGINIA
LUNENBURG COUNTY
VIRGINIA

PROJECT NUMBERS:
194-1058-0025

SHEET TITLE:
POST-DEVELOPMENT CONDITIONS INDEX SHEET

SHEET SIZE: ARCH "D"
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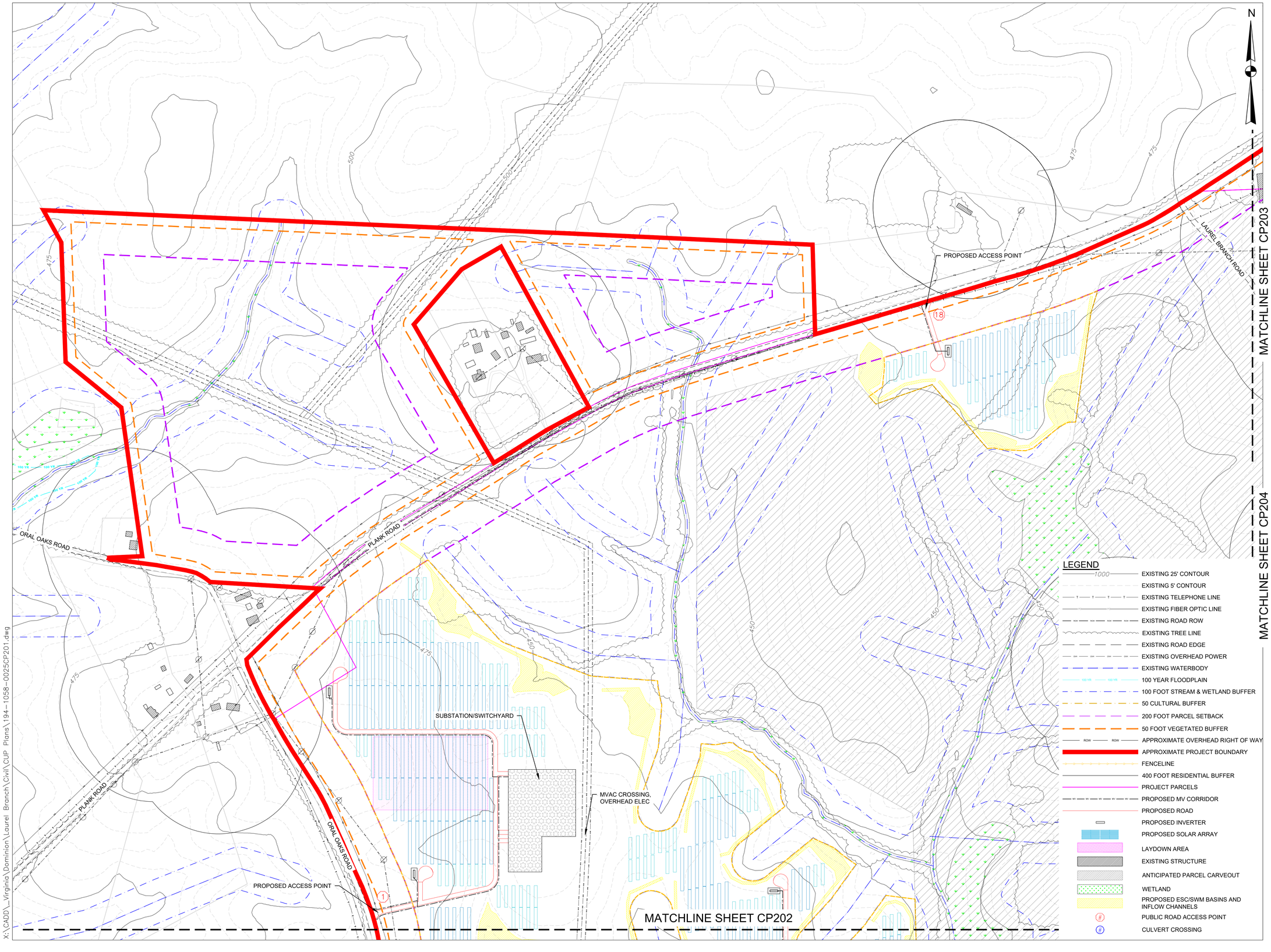
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DATE:	05/17/2022
DRAWN BY:	GR
ENGINEER:	MS
APPROVED BY:	EO

PROJECT PHASE:
CONDITIONAL USE PERMIT SITE PLANS

SCALE:
1" = 800'

SHEET NO.:
CP200



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Dominion Energy

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LAUREL BRANCH SOLAR PROJECT

DOMINION ENERGY VIRGINIA
LUNENBURG COUNTY
VIRGINIA

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PROJECT PHASE:
CONDITIONAL USE PERMIT SITE PLANS

SCALE:
1" = 200'

SHEET NO.:
CP201

MATCHLINE SHEET CP202

MATCHLINE SHEET CP204

PLANK ROAD

SNEADS STORE ROAD

ORAL OAKS ROAD

PROPOSED ACCESS POINT 1

PROPOSED ACCESS POINT 2

PROPOSED ACCESS POINT 3

PROPOSED ACCESS POINT 4

PROPOSED ACCESS POINT 5

PROPOSED ACCESS POINT 6

N

LEGEND

- EXISTING 25' CONTOUR
- EXISTING 5' CONTOUR
- EXISTING TELEPHONE LINE
- EXISTING FIBER OPTIC LINE
- EXISTING ROAD ROW
- EXISTING TREE LINE
- EXISTING ROAD EDGE
- EXISTING OVERHEAD POWER
- EXISTING WATERBODY
- 100 YEAR FLOODPLAIN
- 100 FOOT STREAM & WETLAND BUFFER
- 50 CULTURAL BUFFER
- 200 FOOT PARCEL SETBACK
- 50 FOOT VEGETATED BUFFER
- APPROXIMATE OVERHEAD RIGHT OF WAY
- APPROXIMATE PROJECT BOUNDARY
- FENCELINE
- 400 FOOT RESIDENTIAL BUFFER
- PROJECT PARCELS
- PROPOSED MV CORRIDOR
- PROPOSED ROAD
- PROPOSED INVERTER
- PROPOSED SOLAR ARRAY
- LAYDOWN AREA
- EXISTING STRUCTURE
- ANTICIPATED PARCEL CARVEOUT
- WETLAND
- PROPOSED ESC/SWM BASINS AND INFLOW CHANNELS
- PUBLIC ROAD ACCESS POINT
- CULVERT CROSSING

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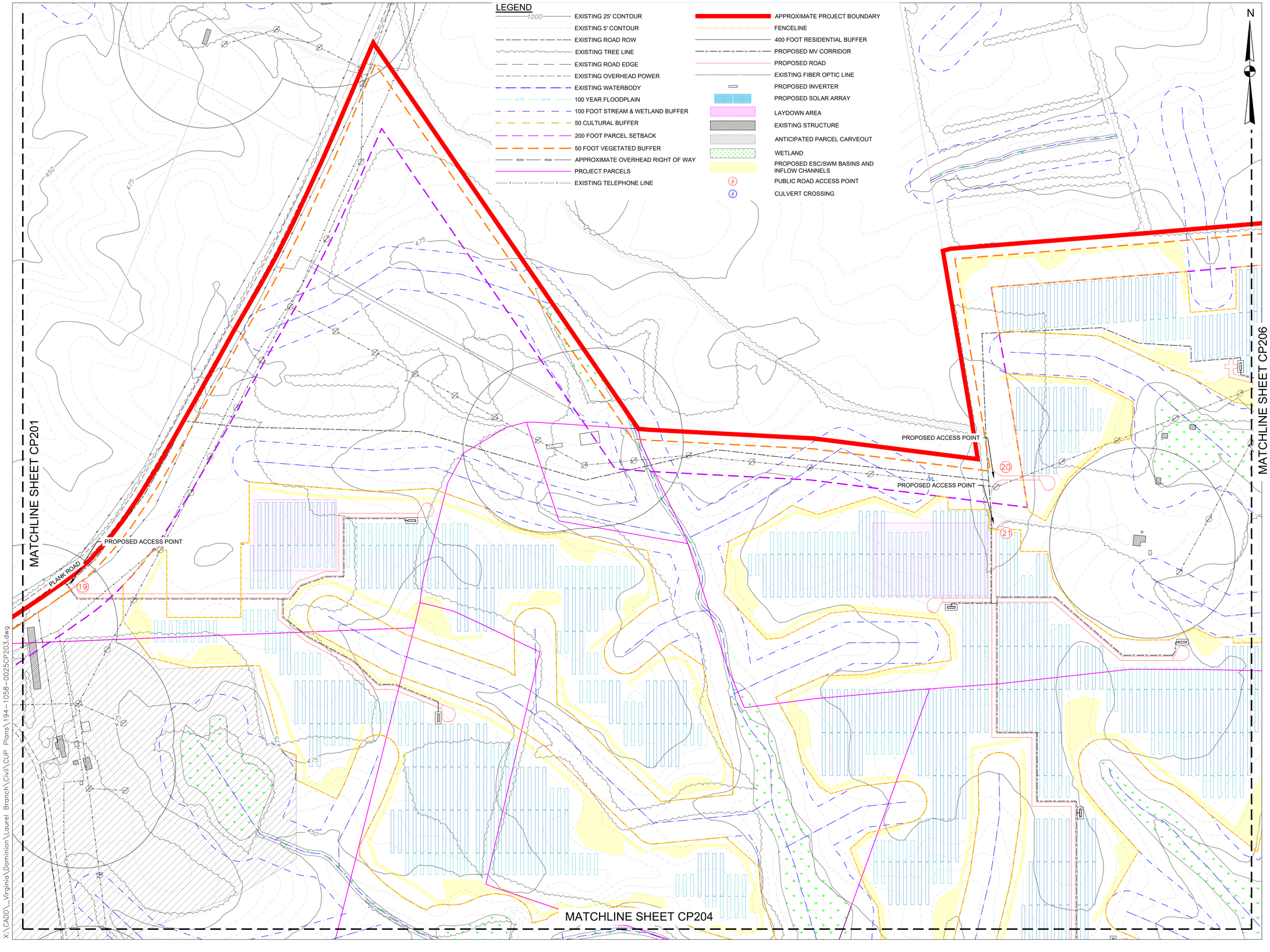
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DATE:	05/17/2022
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ENGINEER:	MS
APPROVED BY:	EO

PROJECT PHASE:
CONDITIONAL USE PERMIT SITE PLANS

SCALE:
1" = 200'

SHEET NO.:
CP202



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COMMONWEALTH OF VIRGINIA
MICHAEL K. SHORT
Lic. No. 047828
05/17/2022
PROFESSIONAL ENGINEER

LAUREL BRANCH SOLAR PROJECT

DOMINION ENERGY VIRGINIA
LUNENBURG COUNTY
VIRGINIA

PROJECT NUMBERS:
194-1058-0025

SHEET TITLE:
POST-DEVELOPMENT CONDITIONS PLAN SHEET

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)
0 ½" 1"

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PROJECT PHASE:
CONDITIONAL USE PERMIT SITE PLANS

SCALE:
1" = 200'

SHEET NO.:
CP203

MATCHLINE SHEET CP203

MATCHLINE SHEET CP201

MATCHLINE SHEET CP202

MATCHLINE SHEET CP207

MATCHLINE SHEET CP208

N

LAUREL BRANCH ROAD

SNEADS STORE ROAD

PROPOSED ACCESS POINT (13)

PROPOSED ACCESS POINT (14)

PROPOSED ACCESS POINT (15)

PROPOSED ACCESS POINT (28)

PROPOSED ACCESS POINT (7)

PROPOSED ACCESS POINT (8)

PROPOSED ACCESS POINT (9)

LEGEND

- EXISTING 25' CONTOUR
- EXISTING 5' CONTOUR
- EXISTING ROAD ROW
- EXISTING TREE LINE
- EXISTING ROAD EDGE
- EXISTING OVERHEAD POWER
- EXISTING WATERBODY
- 100 YEAR FLOODPLAIN
- 100 FOOT STREAM & WETLAND BUFFER
- 50 CULTURAL BUFFER
- 200 FOOT PARCEL SETBACK
- 50 FOOT VEGETATED BUFFER
- APPROXIMATE OVERHEAD RIGHT OF WAY
- PROJECT PARCELS
- EXISTING TELEPHONE LINE
- APPROXIMATE PROJECT BOUNDARY
- FENCELINE
- 400 FOOT RESIDENTIAL BUFFER
- PROPOSED MV CORRIDOR
- PROPOSED ROAD
- EXISTING FIBER OPTIC LINE
- PROPOSED INVERTER
- PROPOSED SOLAR ARRAY
- LAYDOWN AREA
- EXISTING STRUCTURE
- ANTICIPATED PARCEL CARVEOUT
- WETLAND
- PROPOSED ESC/SWM BASINS AND INFLOW CHANNELS
- PUBLIC ROAD ACCESS POINT
- CULVERT CROSSING

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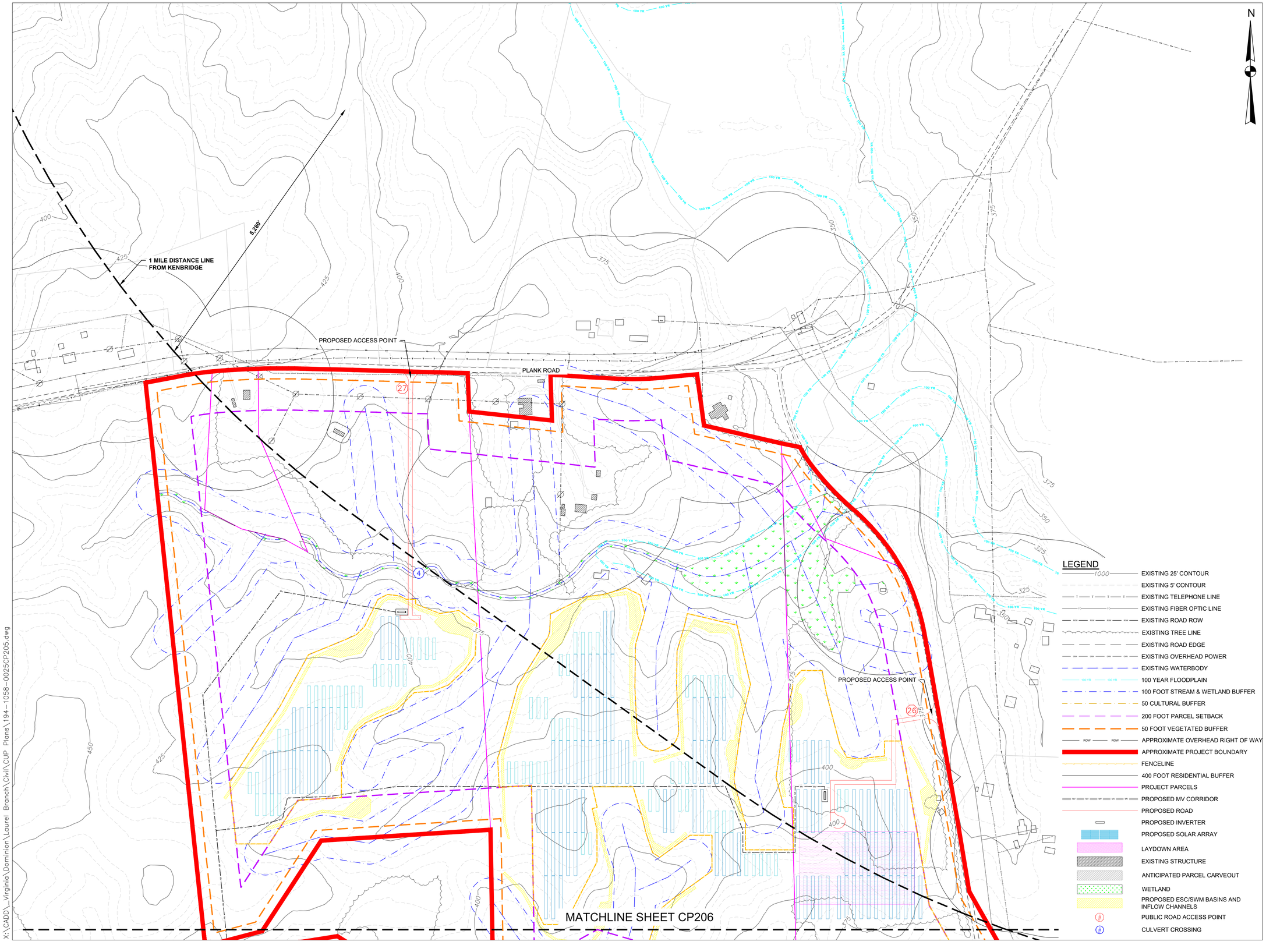
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ENGINEER:	MS
APPROVED BY:	EO

PROJECT PHASE:
CONDITIONAL USE PERMIT SITE PLANS

SCALE:
1" = 200'

SHEET NO.:
CP204

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SCALE:
1" = 200'

SHEET NO.:
CP205

MATCHLINE SHEET CP205

MATCHLINE SHEET CP203

MATCHLINE SHEET CP207

PROPOSED ACCESS POINT

PROPOSED ACCESS POINT

PROPOSED ACCESS POINT

PROPOSED ACCESS POINT

HILLTOP ROAD

22

23

24

25

425

400

N

LEGEND

- EXISTING 25' CONTOUR
- EXISTING 5' CONTOUR
- EXISTING TELEPHONE LINE
- EXISTING FIBER OPTIC LINE
- EXISTING ROAD ROW
- EXISTING TREE LINE
- EXISTING ROAD EDGE
- EXISTING OVERHEAD POWER
- EXISTING WATERBODY
- 100 YEAR FLOODPLAIN
- 100 FOOT STREAM & WETLAND BUFFER
- 50 CULTURAL BUFFER
- 200 FOOT PARCEL SETBACK
- 50 FOOT VEGETATED BUFFER
- APPROXIMATE OVERHEAD RIGHT OF WAY
- APPROXIMATE PROJECT BOUNDARY
- FENCELINE
- 400 FOOT RESIDENTIAL BUFFER
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- PROPOSED MV CORRIDOR
- PROPOSED ROAD
- PROPOSED INVERTER
- PROPOSED SOLAR ARRAY
- LAYDOWN AREA
- EXISTING STRUCTURE
- ANTICIPATED PARCEL CARVEOUT
- WETLAND
- PROPOSED ESC/SWM BASINS AND INFLOW CHANNELS
- PUBLIC ROAD ACCESS POINT
- CULVERT CROSSING

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SCALE:
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SHEET NO.:
CP206

MATCHLINE SHEET CP206

MATCHLINE SHEET CP204

MATCHLINE SHEET CP208

PROPOSED ACCESS POINT

PROPOSED ACCESS POINT

SNEADS STORE ROAD

N

LEGEND

- EXISTING 25' CONTOUR
- EXISTING 5' CONTOUR
- EXISTING TELEPHONE LINE
- EXISTING FIBER OPTIC LINE
- EXISTING ROAD ROW
- EXISTING TREE LINE
- EXISTING ROAD EDGE
- EXISTING OVERHEAD POWER
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LUNENBURG COUNTY
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CONDITIONAL USE PERMIT SITE PLANS

SCALE:
1" = 200'

SHEET NO.:
CP207

MATCHLINE SHEET CP204

MATCHLINE SHEET CP207

N

LAUREL BRANCH ROAD

PROPOSED ACCESS POINT

PROPOSED ACCESS POINT

PROPOSED ACCESS POINT

425

400

375

450

150

LEGEND

- EXISTING TELEPHONE LINE
- EXISTING FIBER OPTIC LINE
- EXISTING ROAD ROW
- EXISTING TREE LINE
- EXISTING ROAD EDGE
- EXISTING OVERHEAD POWER
- EXISTING WATERBODY
- 100 YEAR FLOODPLAIN
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- 400 FOOT RESIDENTIAL BUFFER
- PROPOSED MV CORRIDOR
- PROPOSED ROAD
- PROPOSED INVERTER
- PROPOSED SOLAR ARRAY
- LAYDOWN AREA
- EXISTING STRUCTURE
- ANTICIPATED PARCEL CARVEOUT
- WETLAND
- PROPOSED ESC/SWM BASINS AND INFLOW CHANNELS
- PROPOSED LIMITS OF DISTURBANCE
- PUBLIC ROAD ACCESS POINT
- CULVERT CROSSING

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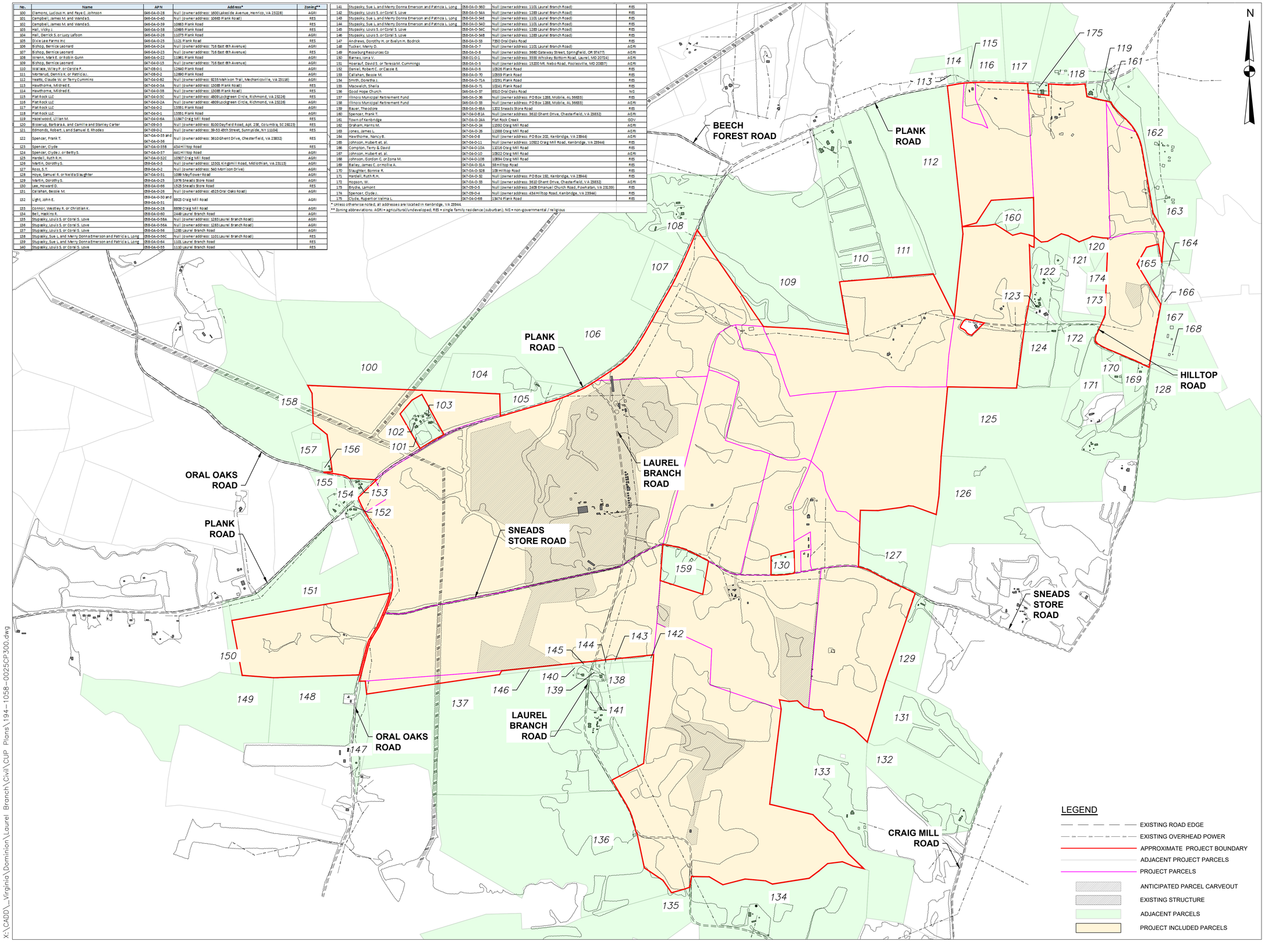
SCALE:
1" = 200'

SHEET NO.:
CP208

No.	Name	APN	Address*	Zoning**
100	Clemons, LuCious H. and Faye C. Johnson	066-0A-0-28	Null (owner address: 1600 Lakeside Avenue, Henrico, VA 23228)	AGRI
101	Campbell, James M. and Wanda S.	066-0A-0-40	Null (owner address: 10683 Plank Road)	RES
102	Campbell, James M. and Wanda S.	066-0A-0-39	10663 Plank Road	RES
103	Hall, Vicky J.	066-0A-0-38	10685 Plank Road	RES
104	Hall, Derrick S. or Lucy Lafoon	066-0A-0-26	11075 Plank Road	AGRI
105	Dixie Lee Farms inc	066-0A-0-25	1125 Plank Road	RES
106	Bishop, Bernice Leonard	066-0A-0-24	Null (owner address: 716 East 8th Avenue)	AGRI
107	Bishop, Bernice Leonard	066-0A-0-23	Null (owner address: 716 East 8th Avenue)	RES
108	Wrenn, Mark E. or Robin Gunn	066-0A-0-22	11961 Plank Road	RES
109	Bishop, Bernice Leonard	047-0A-0-15	Null (owner address: 716 East 8th Avenue)	AGRI
110	Wallace, Wiley P. or Carole F.	047-0A-0-1	12660 Plank Road	AGRI
111	Morteruel, Dennis K. or Patricia J.	047-0A-0-2	12680 Plank Road	AGRI
112	Yeatts, Claude W. or Terry Cummins	047-0A-0-82	Null (owner address: 9235 Mahixon Trail, Mechanicsville, VA 23116)	AGRI
113	Hawthorne, Mildred E.	047-0A-0-3A	Null (owner address: 13088 Plank Road)	RES
114	Hawthorne, Mildred E.	047-0A-0-3B	Null (owner address: 13088 Plank Road)	RES
115	Flat Rock LLC	047-0A-0-3C	Null (owner address: 4809 Lockgreen Circle, Richmond, VA 23226)	RES
116	Flat Rock LLC	047-0A-0-2A	Null (owner address: 4809 Lockgreen Circle, Richmond, VA 23226)	AGRI
117	Flat Rock LLC	047-0A-0-2	13951 Plank Road	AGRI
118	Flat Rock LLC	047-0A-0-1	13951 Plank Road	AGRI
119	Hazelwood, Lillian M.	047-0A-0-6A	11367 Craig Mill Road	RES
120	Riserup, Barbara A. and Camille and Stanley Carter	047-0A-0-3	Null (owner address: 8100 Mayfield Road, Apt. 23E, Columbia, SC 29223)	RES
121	Edmonds, Robert L. and Samuel E. Rhodes	047-0B-0-2	Null (owner address: 39-53 45th Street, Sunnyside, NY 11104)	RES
122	Spencer, Frank T.	047-0A-0-3S and 047-0A-0-56	Null (owner address: 3610 Ghent Drive, Chesterfield, VA 23832)	RES
123	Spencer, Clyde	047-0A-0-55B	434 Hilltop Road	RES
124	Spencer, Clyde J. or Betty S.	047-0A-0-37	444 Hilltop Road	AGRI
125	Hardell, Ruth R.H.	047-0A-0-32C	10907 Craig Mill Road	AGRI
126	Martin, Dorothy S.	059-0A-0-5	Null (owner address: 15301 Kingsmill Road, Midlothian, VA 23113)	AGRI
127	Ross, S.T.	059-0A-0-2	Null (owner address: 560 Morrison Drive)	AGRI
128	Hoyle, Samuel R. or Nelda Slaughter	047-0A-0-31	1098 Mayflower Road	AGRI
129	Martin, Dorothy S.	059-0A-0-25	1676 Sneads Store Road	AGRI
130	Lee, Howard D.	058-0A-0-66	1525 Sneads Store Road	RES
131	Callahan, Bessie M.	059-0A-0-26	Null (owner address: 4525 Oral Oaks Road)	AGRI
132	Light, John E.	059-0A-0-30 and 059-0A-0-31	8925 Craig Mill Road	AGRI
133	Connor, Westley R. or Christian K.	059-0A-0-28	8870 Craig Mill Road	AGRI
134	Bell, Hankins R.	058-0A-0-60	2449 Laurel Branch Road	AGRI
135	Stupasky, Louis S. or Coral S. Love	058-0A-0-58A	Null (owner address: 1283 Laurel Branch Road)	AGRI
136	Stupasky, Louis S. or Coral S. Love	058-0A-0-56A	Null (owner address: 1283 Laurel Branch Road)	AGRI
137	Stupasky, Louis S. or Coral S. Love	058-0A-0-56	1285 Laurel Branch Road	AGRI
138	Stupasky, Sue L. and Merry Donna Emerson and Patricia L. Long	058-0A-0-56C	Null (owner address: 1101 Laurel Branch Road)	RES
139	Stupasky, Sue L. and Merry Donna Emerson and Patricia L. Long	058-0A-0-64	1101 Laurel Branch Road	RES
140	Stupasky, Louis S. or Coral S. Love	058-0A-0-55	1130 Laurel Branch Road	RES
141	Stupasky, Sue L. and Merry Donna Emerson and Patricia L. Long	058-0A-0-56D	Null (owner address: 1101 Laurel Branch Road)	RES
142	Stupasky, Louis S. or Coral S. Love	058-0A-0-56A	Null (owner address: 1283 Laurel Branch Road)	RES
143	Stupasky, Sue L. and Merry Donna Emerson and Patricia L. Long	058-0A-0-54E	Null (owner address: 1101 Laurel Branch Road)	RES
144	Stupasky, Sue L. and Merry Donna Emerson and Patricia L. Long	058-0A-0-54D	Null (owner address: 1101 Laurel Branch Road)	RES
145	Stupasky, Louis S. or Coral S. Love	058-0A-0-54C	Null (owner address: 1283 Laurel Branch Road)	RES
146	Stupasky, Louis S. or Coral S. Love	058-0A-0-54B	Null (owner address: 1283 Laurel Branch Road)	RES
147	Andrews, Dorothy H. or Evelyn H. Bodrick	058-0A-0-53	7350 Oral Oaks Road	RES
148	Tucker, Merry D.	058-0A-0-7	Null (owner address: 1101 Laurel Branch Road)	AGRI
149	Roseburg Resources Co.	058-0A-0-8	Null (owner address: 3660 Gateway Street, Springfield, OR 97477)	AGRI
150	Barnes, Iona V.	058-01-0-1	Null (owner address: 3555 Whiskey Bottom Road, Laurel, MD 20724)	AGRI
151	Hoerauf, David S. or Teresa M. Cummings	058-0A-0-5	Null (owner address: 15200 Mt. Nebo Road, Poolesville, MD 20837)	AGRI
152	Daniel, Robert C. or Cassie E.	058-0A-0-6	10326 Plank Road	RES
153	Callahan, Bessie M.	058-0A-0-70	10359 Plank Road	RES
154	Smith, Doretha J.	058-0A-0-71A	10291 Plank Road	RES
155	Macwelch, Sheila	058-0A-0-71	10241 Plank Road	RES
156	Good Hope Church	048-0A-0-37	9310 Oral Oaks Road	INS
157	Illinois Municipal Retirement Fund	065-0A-0-36	Null (owner address: PO Box 1288, Mobile, AL 36633)	RES
158	Illinois Municipal Retirement Fund	065-0A-0-33	Null (owner address: PO Box 1288, Mobile, AL 36633)	AGRI
159	Bauer, Theodore	058-0A-0-65A	1301 Sneads Store Road	RES
160	Spencer, Frank T.	047-0A-0-81A	Null (owner address: 3610 Ghent Drive, Chesterfield, VA 23832)	AGRI
161	Town of Kenbridge	047-0A-0-24A	Flat Rock Creek	GOV
162	Graham, Harris M.	047-0A-0-24	11592 Craig Mill Road	AGRI
163	Jones, James L.	047-0A-0-26	11388 Craig Mill Road	AGRI
164	Hawthorne, Nancy B.	047-0A-0-8	Null (owner address: PO Box 202, Kenbridge, VA 23944)	AGRI
165	Johnson, Hubert et al.	047-0A-0-11	Null (owner address: 10922 Craig Mill Road, Kenbridge, VA 23944)	RES
166	Compton, Terry & David	047-0A-0-10A	11016 Craig Mill Road	RES
167	Johnson, Hubert et al.	047-0A-0-10	10922 Craig Mill Road	AGRI
168	Johnson, Gordon C. or Zona M.	047-0A-0-10B	10894 Craig Mill Road	RES
169	Bailey, James C. or Hollie A.	047-0A-0-31A	58 Hilltop Road	RES
170	Slaughter, Bonnie R.	047-0A-0-32B	109 Hilltop Road	RES
171	Hardell, Ruth R.H.	047-0A-0-32	Null (owner address: PO Box 192, Kenbridge, VA 23944)	RES
172	Hopson, W.	047-0A-0-33	Null (owner address: 3610 Ghent Drive, Chesterfield, VA 23832)	AGRI
173	Brydie, Lamont	047-09-0-5	Null (owner address: 2420 Emanuel Church Road, Powhatan, VA 23139)	RES
174	Spencer, Clyde J.	047-09-0-4	Null (owner address: 434 Hilltop Road, Kenbridge, VA 23944)	RES
175	Clyde, Rupert or Velma L.	047-0A-0-6B	13674 Plank Road	RES

* Unless otherwise noted, all addresses are located in Kenbridge, VA 23944.

** Zoning abbreviations: AGRI = agricultural/undeveloped; RES = single family residence (suburban); NG = non-governmental / religious



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LUNENBURG COUNTY
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CONDITIONAL USE PERMIT SITE PLANS

SCALE:
1" = 800'

SHEET NO.:
CP300

PLANT LIST

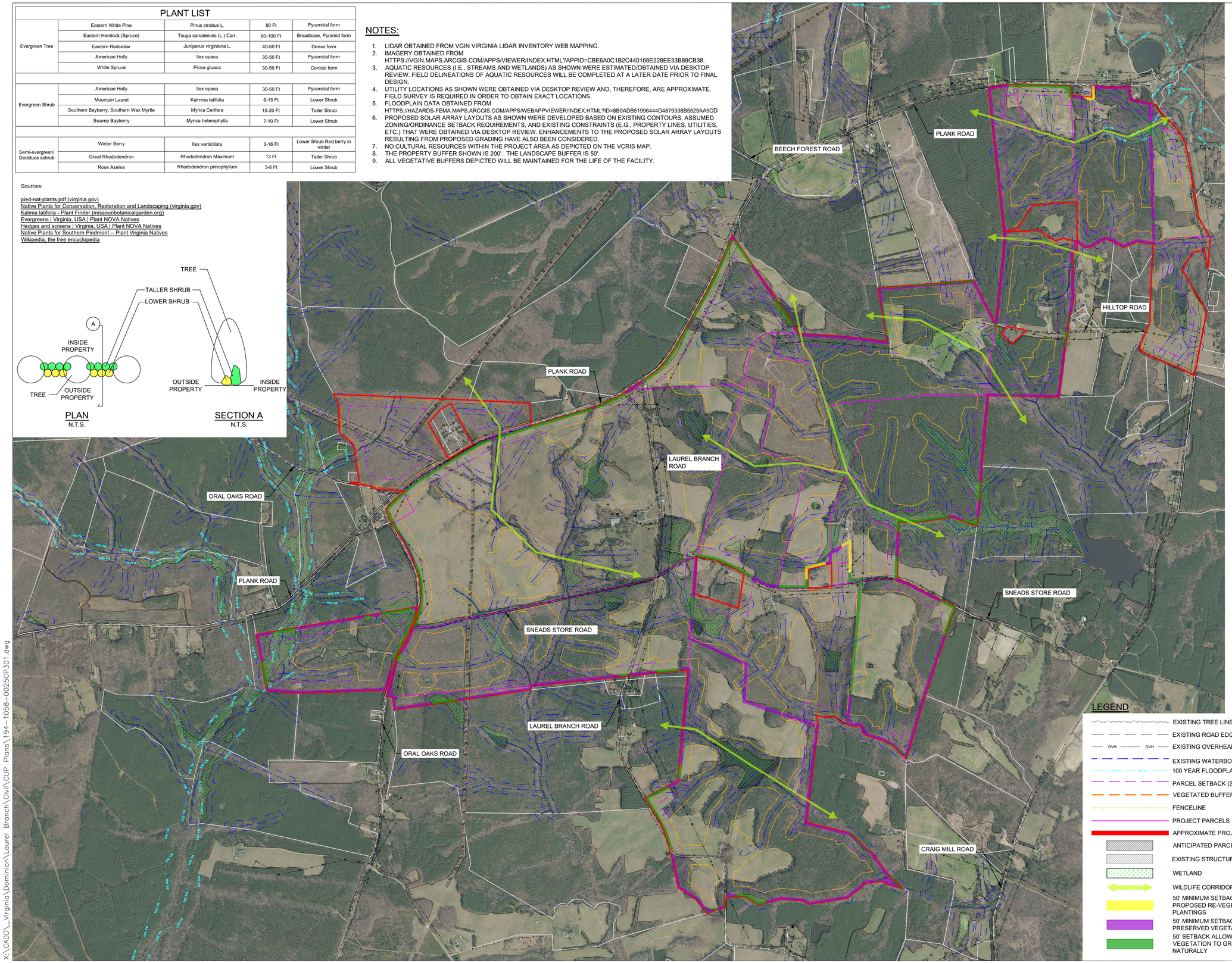
Evergreen Tree	Eastern White Pine	Pinus strobus L.	80 Ft	Pyramidal form
	Eastern Hemlock (Spruce)	Tsuga canadensis (L.) Carr.	60-100 Ft	Broadbase, Pyramid form
	Eastern Redcedar	Juniperus virginiana L.	40-60 Ft	Dense form
	American Holly	Ilex opaca	30-50 Ft	Pyramidal form
	White Spruce	Picea gluaca	30-50 Ft	Conical form
Evergreen Shrub	American Holly	Ilex opaca	30-50 Ft	Pyramidal form
	Mountain Laurel	Kalmina latifolia	6-15 Ft	Lower Shrub
	Southern Bayberry, Southern Wax Myrtle	Myrica Cerifera	15-20 Ft	Taller Shrub
	Swamp Bayberry	Myrica heterophylla	7-10 Ft	Lower Shrub
Semi-evergreen/ Deciduos schrub	Winter Berry	Ilex verticillata	3-16 Ft	Lower Shrub Red berry in winter
	Great Rhododendron	Rhododendron Maximum	13 Ft	Taller Shrub
	Rose Azelea	Rhododendron prinophyllum	3-8 Ft	Lower Shrub

NOTES:

1. LIDAR OBTAINED FROM VGIN VIRGINIA LIDAR INVENTORY WEB MAPPING.
2. IMAGERY OBTAINED FROM HTTPS://VGIN.MAPS.ARCGIS.COM/APPS/VIEWER/INDEX.HTML?APPID=CBE6A0C1B2C440168E228EE33B89CB38.
3. AQUATIC RESOURCES (I.E., STREAMS AND WETLANDS) AS SHOWN WERE ESTIMATED/OBTAINED VIA DESKTOP REVIEW. FIELD DELINEATIONS OF AQUATIC RESOURCES WILL BE COMPLETED AT A LATER DATE PRIOR TO FINAL DESIGN.
4. UTILITY LOCATIONS AS SHOWN WERE OBTAINED VIA DESKTOP REVIEW AND, THEREFORE, ARE APPROXIMATE. FIELD SURVEY IS REQUIRED IN ORDER TO OBTAIN EXACT LOCATIONS.
5. FLOODPLAIN DATA OBTAINED FROM HTTPS://HAZARDS-FEMA.MAPS.ARCGIS.COM/APPS/WEBAPPVIEWER/INDEX.HTML?ID=8B0ADB51996444D4879338B5529AA9CD
6. PROPOSED SOLAR ARRAY LAYOUTS AS SHOWN WERE DEVELOPED BASED ON EXISTING CONTOURS, ASSUMED ZONING/ORDINANCE SETBACK REQUIREMENTS, AND EXISTING CONSTRAINTS (E.G., PROPERTY LINES, UTILITIES, ETC.) THAT WERE OBTAINED VIA DESKTOP REVIEW. ENHANCEMENTS TO THE PROPOSED SOLAR ARRAY LAYOUTS RESULTING FROM PROPOSED GRADING HAVE ALSO BEEN CONSIDERED.
7. NO CULTURAL RESOURCES WITHIN THE PROJECT AREA AS DEPICTED ON THE VCRIS MAP.
8. THE PROPERTY BUFFER SHOWN IS 200'. THE LANDSCAPE BUFFER IS 50'.
9. ALL VEGETATIVE BUFFERS DEPICTED WILL BE MAINTAINED FOR THE LIFE OF THE FACILITY.

Sources:

pied-nat-plants.pdf (virginia.gov)
Native Plants for Conservation, Restoration and Landscaping (virginia.gov)
Kalmia latifolia - Plant Finder (missouribotanicalgarden.org)
Evergreens | Virginia, USA | Plant NOVA Natives
Hedges and screens | Virginia, USA | Plant NOVA Natives
Native Plants for Southern Piedmont -- Plant Virginia Natives
Wikipedia, the free encyclopedia



N

Dominion Energy®

TETRA TECH

TETRA TECH, INC.
4101 COX ROAD,
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FAX: (804) 270-2739

STAMP:

COMMONWEALTH OF VIRGINIA
MICHAEL K. SHORT
Lic. No. 047828
05/17/2022
PROFESSIONAL ENGINEER

LAUREL BRANCH SOLAR PROJECT

DOMINION ENERGY VIRGINIA
LUNENBURG COUNTY
VIRGINIA

PROJECT NUMBERS:
194-1058-0025

SHEET TITLE:
LANDSCAPE BUFFER SHEET

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)
0 ½" 1"

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NO.	REVISION	DATE	INIT.
00	CUP APPLICATION	05/17/2022	GAR

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DATE:	05/17/2022
DRAWN BY:	GR
ENGINEER:	MS
APPROVED BY:	EO

PROJECT PHASE:
CONDITIONAL USE PERMIT SITE PLANS

SCALE:
1" = 800'

SHEET NO.:
CP301

X:\CADD_Virginia\Dominion\Laurel Branch\Civil\CUP Plans\194-1058-0025CP301.dwg

LEGEND

- APPROXIMATE EXISTING 25' CONTOUR
- APPROXIMATE EXISTING 5' CONTOUR
- APPROXIMATE EXISTING LUMEN FIBER UNDERGROUND
- APPROXIMATE EXISTING LUMEN FIBER OVERHEAD
- APPROXIMATE EXISTING KINEX TELECOM
- APPROXIMATE EXISTING CENTURY LINK UNDERGROUND
- APPROXIMATE EXISTING CENTURY LINK OVERHEAD
- APPROXIMATE EXISTING DOMINION OVERHEAD
- APPROXIMATE EXISTING DOMINION TRANSMISSION
- APPROXIMATE EXISTING OVERHEAD POWER
- APPROXIMATE PROPERTY LINE
- APPROXIMATE EXISTING ROAD EDGE
- APPROXIMATE EXISTING ELECTRIC POLE
- EXISTING STRUCTURE

BEECH FOREST ROAD

PLANK ROAD

HILLTOP ROAD

ORAL OAKS ROAD

LAUREL BRANCH ROAD

CRAIG MILL ROAD

SNEADS STORE ROAD

ORAL OAKS ROAD

PLANK ROAD

SNEADS STORE ROAD

LAUREL BRANCH ROAD

NOTES:

- THE UTILITY LOCATIONS SHOWN WERE OBTAINED THROUGH A DESKTOP SURVEY.
- UTILITY LOCATIONS ARE APPROXIMATE AND FIELD SURVEY IS REQUIRED TO OBTAIN LOCATIONS.
- ALTA FIELD SURVEY IS CURRENTLY IN PROGRESS. UTILITY EASEMENTS WILL BE REVISED PENDING RESULTS OF ALTA SURVEY WHEN COMPLETED

REFERENCE:

- LIDAR OBTAINED FROM VGIN VIRGINIA LIDAR INVENTORY WEB MAPPING
- IMAGERY OBTAINED FROM HTTPS://WWW.ARCGIS.COM/APPS/VIEWER/INDEX.HTML?APPID=CBE6A0C1B2C440168E228EE33B89CB38
- VA MISS TICKET NUMBERS: A115300920-00A, A115300961-00A (RESPONDED: CENTURY LINK, DOM, KINEX, LUMEN)

X:\CADD_Virginia\Dominion\Laurel Branch\Civil\CUP Plans\194-1058-0025CP302.dwg

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STAMP:

COMMONWEALTH OF VIRGINIA
MICHAEL K. SHORT
Lic. No. 047828
05/17/2022
PROFESSIONAL ENGINEER

LAUREL BRANCH SOLAR PROJECT

DOMINION ENERGY VIRGINIA
LUNENBURG COUNTY
VIRGINIA

PROJECT NUMBERS:
194-1058-0025

SHEET TITLE:
DESKTOP EVALUATION UTILITY MAP

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)
0 ½" 1"

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00	CUP APPLICATION	05/17/2022	GAR

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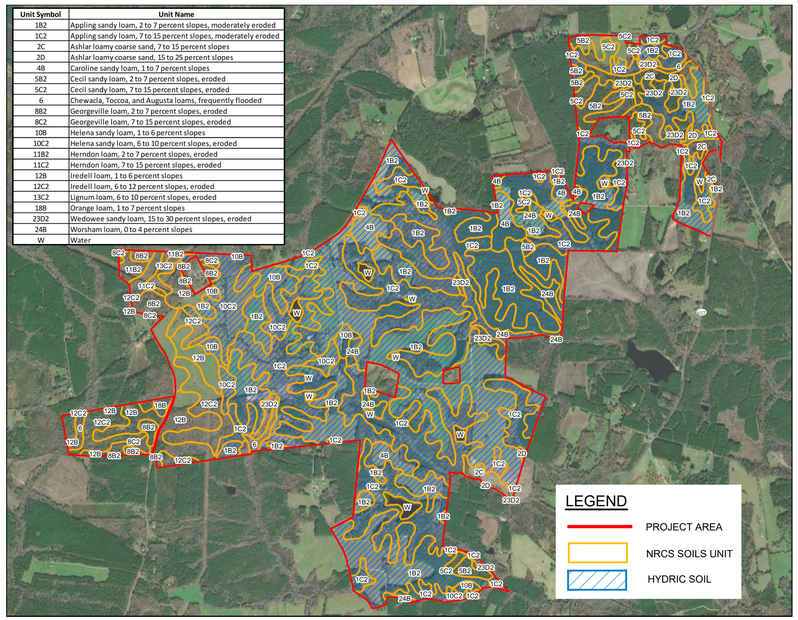
DATE:	05/17/2022
DRAWN BY:	GR
ENGINEER:	MS
APPROVED BY:	EO

PROJECT PHASE:
CONDITIONAL USE PERMIT SITE PLANS

SCALE:
1" = 800'

SHEET NO.:
CP302

Unit Symbol	Unit Name
1B2	Appling sandy loam, 2 to 7 percent slopes, moderately eroded
1C2	Appling sandy loam, 7 to 15 percent slopes, moderately eroded
2C	Ashlar loamy coarse sand, 7 to 15 percent slopes
2D	Ashlar loamy coarse sand, 15 to 25 percent slopes
4B	Caroline sandy loam, 1 to 7 percent slopes
5B2	Cecil sandy loam, 2 to 7 percent slopes, eroded
5C2	Cecil sandy loam, 7 to 15 percent slopes, eroded
6	Chewacla, Toccoa, and Augusta loams, frequently flooded
8B2	Georgeville loam, 2 to 7 percent slopes, eroded
8C2	Georgeville loam, 7 to 15 percent slopes, eroded
10B	Helena sandy loam, 1 to 6 percent slopes
10C2	Helena sandy loam, 6 to 10 percent slopes, eroded
11B2	Herndon loam, 2 to 7 percent slopes, eroded
11C2	Herndon loam, 7 to 15 percent slopes, eroded
12B	Iredell loam, 1 to 6 percent slopes
12C2	Iredell loam, 6 to 12 percent slopes, eroded
13C2	Lignum loam, 6 to 10 percent slopes, eroded
18B	Orange loam, 1 to 7 percent slopes
23D2	Wedowee sandy loam, 15 to 30 percent slopes, eroded
24B	Worsham loam, 0 to 4 percent slopes
W	Water



BEECH FOREST ROAD
PLANK ROAD
HILLTOP ROAD
LAUREL BRANCH ROAD
ORAL OAKS ROAD
SUBSTATION/SWITCHYARD
SNEADS STORE ROAD
CRAIG MILL ROAD

LEGEND
- EXISTING ROAD EDGE
- EXISTING OVERHEAD POWER
- APPROXIMATE PROJECT BOUNDARY
- PROPOSED ESC/SWM BASINS AND INFLOW CHANNELS
- ANTICIPATED PARCEL CARVEOUT
- EXISTING STRUCTURE
- STEEP SLOPE AREAS (SEE NOTE 2)

NOTES:
1. IN PLACES OF CUT AND FILL, TOPSOIL SHALL BE STOCKPILED AND RE-SPREAD ONCE FINISHED ELEVATIONS ARE ACHIEVED. THE LOCATION OF SOIL STOCKPILES WILL BE DETERMINED DURING CONSTRUCTION LEVEL PLANS.
2. STEEP SLOPE AREAS REPRESENT SLOPES GREATER THAN 12% AND HAVE AN AREA OF 5,000 SQUARE FOOT OR LESS. AREAS OF EXCESSIVE SLOPE AND OVER 5,000 SQUARE FEET WILL NOT BE COVERED WITH MODULES AND ARE NOT DEPICTED. MINIMUM GRADING IS EXPECTED TO MEET TRACKER TOLERANCES AND WILL BE DETERMINED DURING CONSTRUCTION LEVEL PLANS.

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05/17/2022
PROFESSIONAL ENGINEER

LAUREL BRANCH SOLAR PROJECT

DOMINION ENERGY VIRGINIA
LUNENBURG COUNTY
VIRGINIA

PROJECT NUMBERS:
194-1058-0025

SHEET TITLE:
DRAFT GRADING PLAN SHEET

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)
0 ½" 1"

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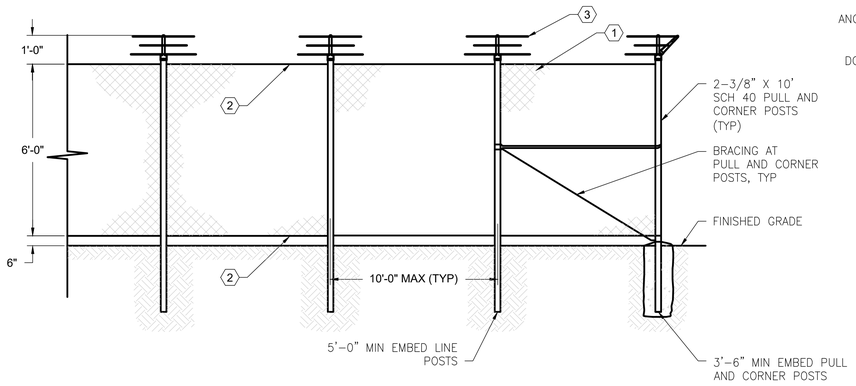
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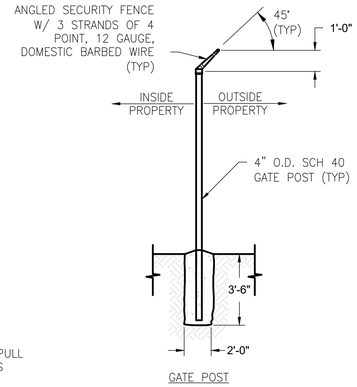
DATE:	05/17/2022
DRAWN BY:	GR
ENGINEER:	MS
APPROVED BY:	EO

PROJECT PHASE:
CONDITIONAL USE PERMIT SITE PLANS

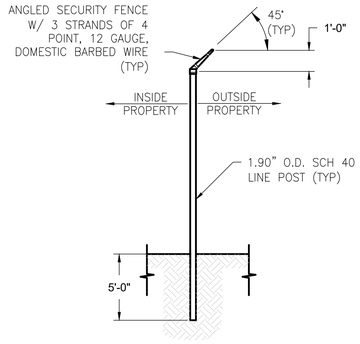
SCALE:
1" = 800'

SHEET NO.:
CP303





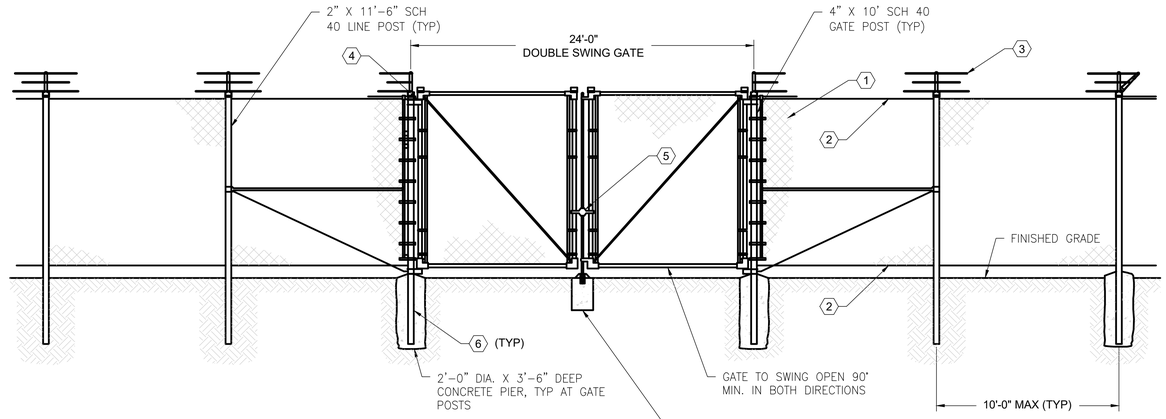
GATE POST



LINE POST

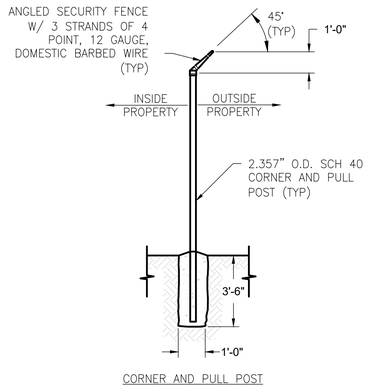
KEYED NOTE(S):

1. WIRE FABRIC – 11 GAUGE, 2" MESH GALVANIZED ASTM A392, CLASS 2;
2. NO. 7 GAUGE COIL TENSION WIRE. (BOTTOM WIRE SHALL BE INSTALLED 4" MAX FROM FINISHED GRADE.)
3. THREE STRANDS OF BARBED WIRE MOUNTED ON 45 DEGREE EXTENSION ARMS. THE UPPER STRAND SHALL BE APPROXIMATELY 12 IN. OUT FROM THE FENCE AND 12 IN. ABOVE THE TOP OF THE FABRIC.
4. CLAMPED GATE HINGES SHALL BE WELDED TO PREVENT SETTLEMENT AND SLIPPAGE.
5. THE MAIN SITE ENTRANCE WILL HAVE A MANUALLY OPERATED SWINGING GATE.
6. POSTS SHALL BE STEEL PIPE, ASTM F1083 STANDARD WEIGHT. POSTS SHALL BE DRIVEN INTO UNDISTURBED SUBGRADE SOIL FOR LINE POSTS OR SET IN 2'–0" DIA. X 3'–6" MIN DEEP CONCRETE FOR CORNER AND GATE POST.
   - LINE POSTS – 1 1/2" SCH 40 (O.D. = 1 7/8")
   - GATE POSTS – 3 1/2" SCH 40 (O.D. = 4")
   - CORNER AND PULL POSTS – 2" SCH 40 (O.D. = 2 3/8")
7. SCREENING SHALL BE USED ON WASTE RECEPTACLES TO PREVENT VIEW FROM PUBLIC RESIDENCIES AND ROADS.

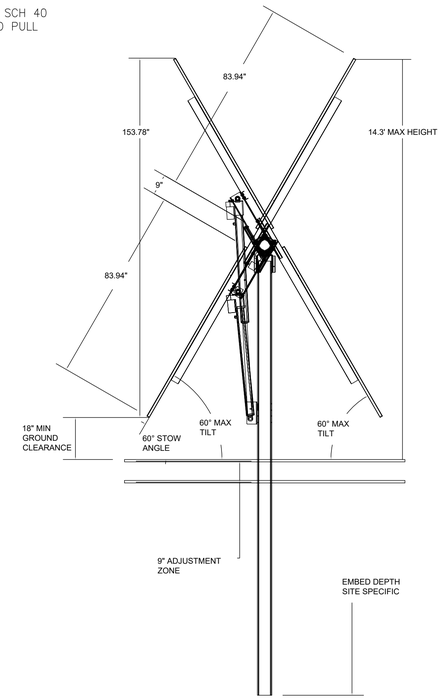


A FENCE AND GATE DETAILS

SCALE: NTS



CORNER AND PULL POST



B TRACKER ELEVATION VIEW

SCALE: NTS

NOTE: THE MAXIMUM HEIGHT OF THE LOWEST EDGE OF PHOTOVOLTAIC PANELS SHALL BE 10' AS MEASURED FROM THE FINISHED GRADE AND SHALL NOT EXCEED A HEIGHT OF 15', WHICH SHALL BE MEASURED FROM THE HIGHEST NATURAL GRADE BELOW EACH SOLAR PANEL IN ACCORDANCE WITH THE ORDINANCE.

SITE CONDITIONS:
WIND SPEED: TBD
SNOW LOAD: 0psf
CORROSION CATEGORY: TBD
MIN SITE TEMP: –8C
AZIMUTH: 180C

PV MODULE SPECIFICATIONS:
MODULE: BIFACIAL MONOCRYSTALLINE
MODULE QTY: 176,094

ELECTRICAL CHARACTERISTICS (STC)
RATED POWER: 530W
OPEN CIRCUIT VOLTAGE: 49.2V
SHORT CIRCUIT CURRENT: 13.71A
VOLTAGE AT MAX. POWER: 41.35V
CURRENT AT MAX. POWER: 12.82A
MODULE EFFICIENCY: 20.7%

DIMENSIONS:
L=2256MM, W=1133MM, T=35MM

MOUNTING SYSTEM SPECIFICATION:
RACKING CONFIG: TRACKER
TRACKER TYPE: GAMECHANGE GENIUS 1P
TYPE 1: 108 MODULES, 4 STRINGS
TYPE 2: 54 MODULES, 2 STRING

±60° TRACKER RANGE OF MOTION

PITCH: 37.5.0FT
INTER ROW SPACING: 15.3FT
GCR: 0.42

INVERTER SPECIFICATION:
840kW INVERTER @25°C
4 to 6 INVERTERS PER SKID
INVERTER QTY: 96
3.36 TO 5.04MVA EACH AC STATION @25°C

TRANSFORMER SPECIFICATION:
TRANSFORMER QTY: 22

SYSTEM SUMMARY (APPROX):
SYSTEM SIZE (AC):80.0MW
SYSTEM SIZE (DC):95.97MW
STRINGS: 6,522
DC VOLTAGE: 1500V
DC/AC RATIO: 1.19

Dominion Energy

TETRA TECH
TETRA TECH, INC.
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GLEN ALLEN, VA 23060
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FAX: (804) 270-2739

STAMP:

COMMONWEALTH OF VIRGINIA
MICHAEL K. SHORT
Lic. No. 047828
05/17/2022
PROFESSIONAL ENGINEER

LAUREL BRANCH SOLAR PROJECT

DOMINION ENERGY VIRGINIA
LUNENBURG COUNTY
VIRGINIA

PROJECT NUMBERS:
194-1058-0025

SHEET TITLE:
GENERAL NOTES AND DETAIL SHEET

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)
0 ½" 1"

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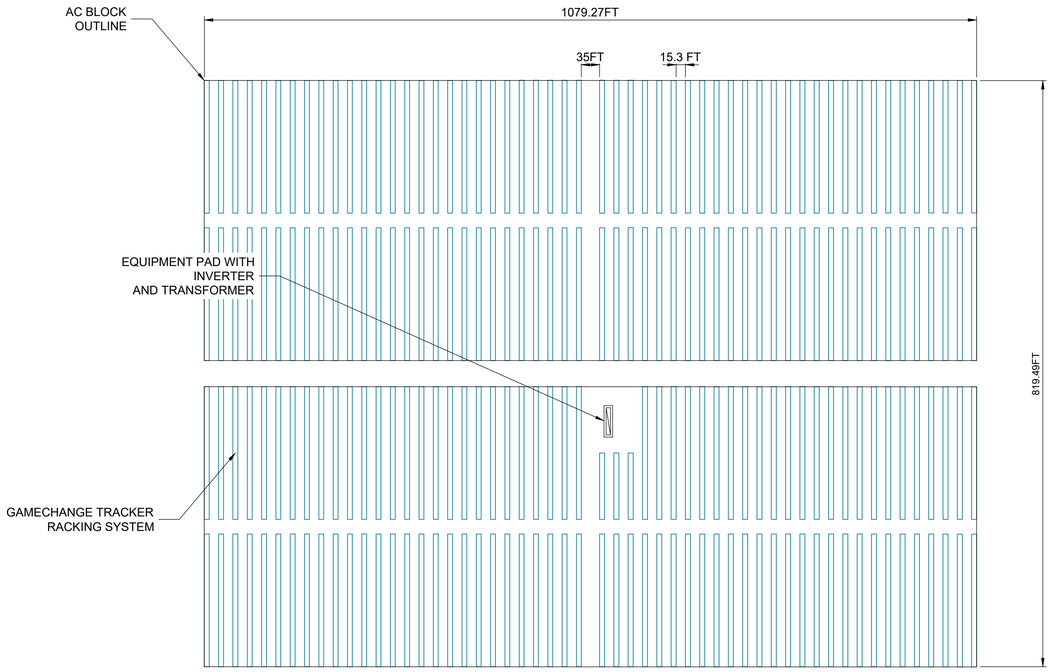
DATE:	05/17/2022
DRAWN BY:	GR
ENGINEER:	MS
APPROVED BY:	EO

PROJECT PHASE:
CONDITIONAL USE PERMIT SITE PLANS

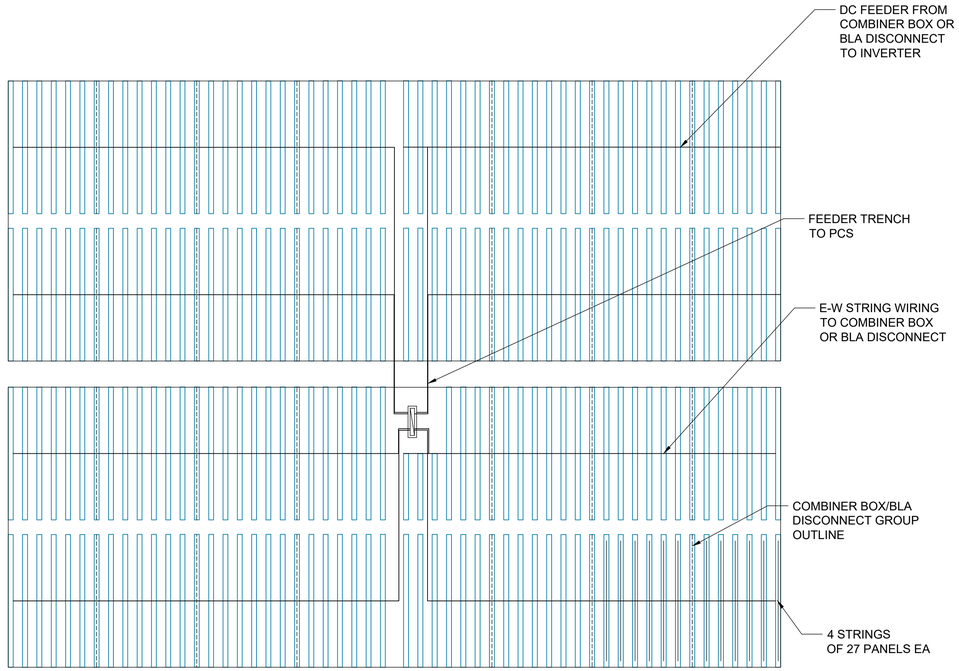
SCALE:
N.T.S.

SHEET NO.:
CP304

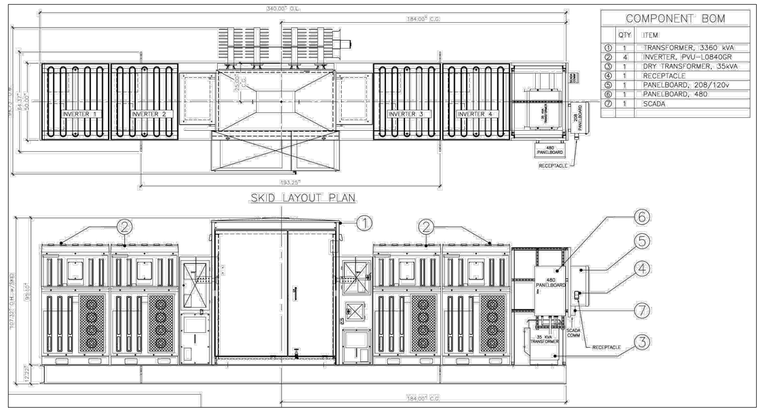
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TYPICAL BLOCK 5.04MW AC MECHANICAL LAYOUT

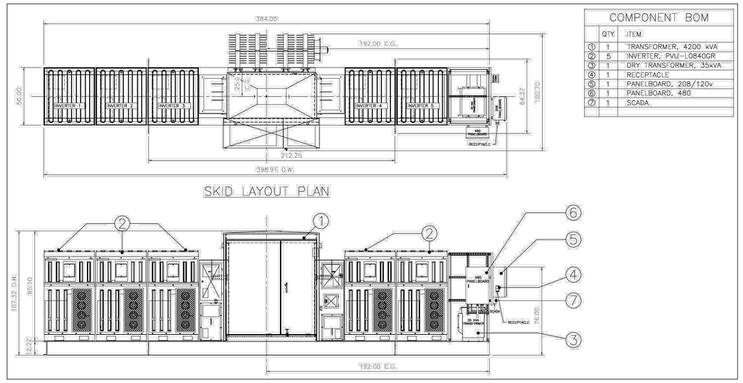


TYPICAL BLOCK 5.04MW AC ELECTRICAL LAYOUT



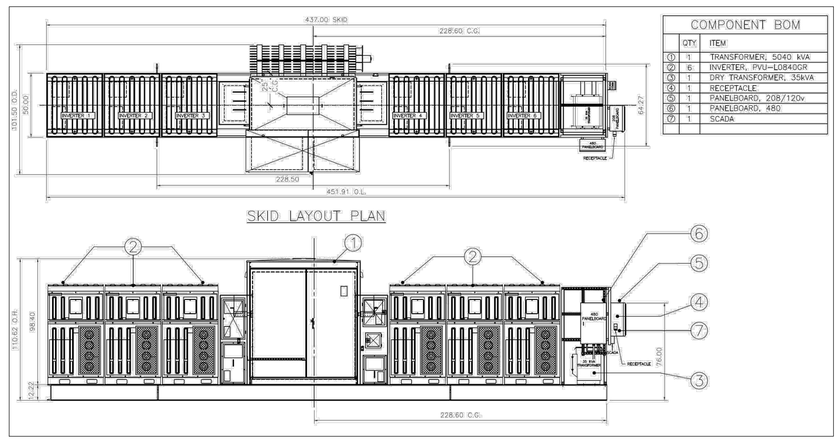
INVERTER DETAIL OPTION 1

SCALE: NTS



INVERTER DETAIL OPTION 2

SCALE: NTS



INVERTER DETAIL OPTION 3

SCALE: NTS

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APPROVED BY:	EO

PROJECT PHASE:
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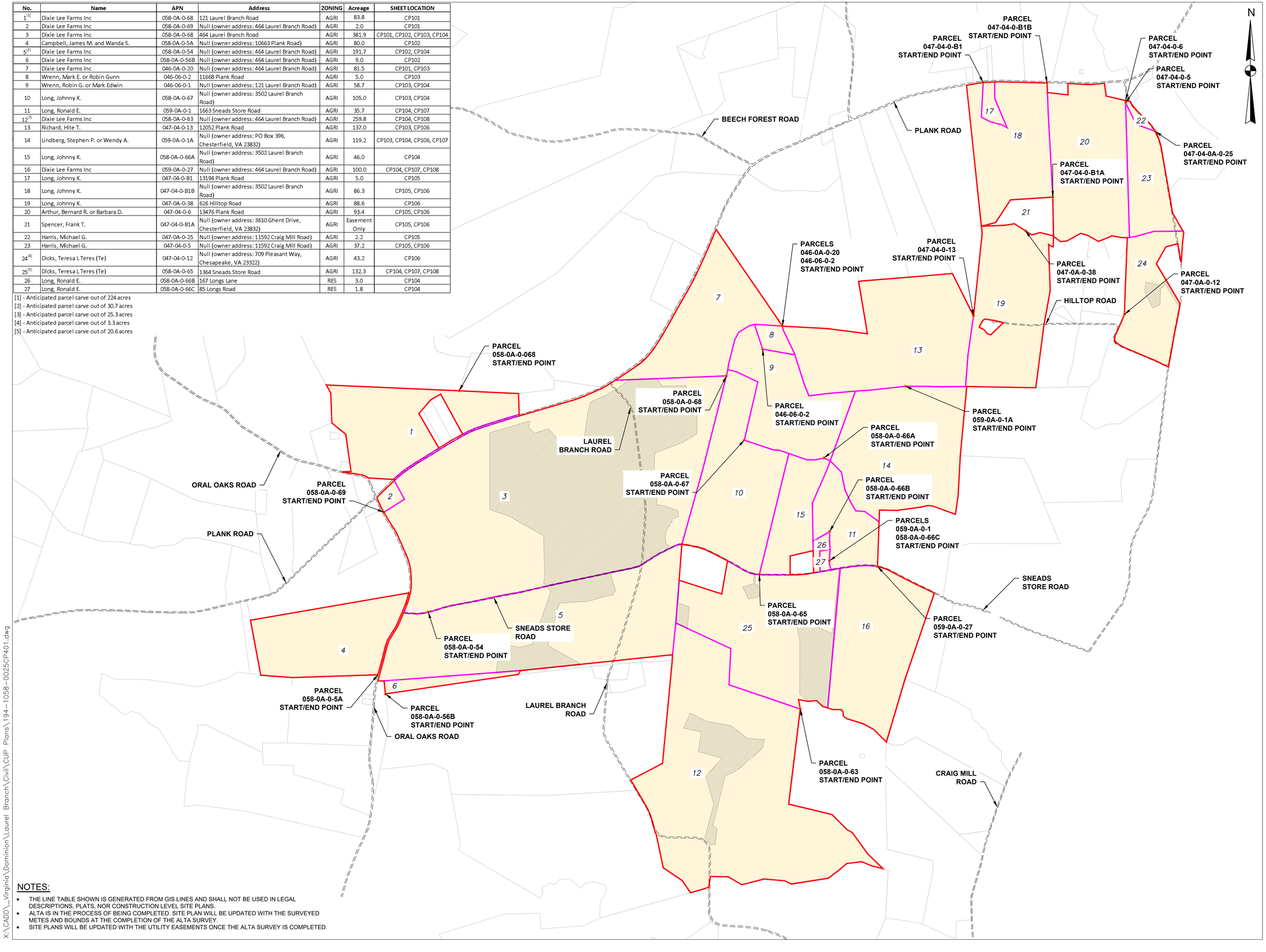
SCALE:
N.T.S.

SHEET NO.:
CP305

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No.	Name	APN	Address	ZONING	Acreage	SHEET LOCATION
1[1]	Dixie Lee Farms Inc	058-0A-0-68	121 Laurel Branch Road	AGRI	83.8	CP101
2	Dixie Lee Farms Inc	058-0A-0-69	Null (owner address: 464 Laurel Branch Road)	AGRI	2.0	CP101
3	Dixie Lee Farms Inc	058-0A-0-68	464 Laurel Branch Road	AGRI	381.9	CP101, CP102, CP103, CP104
4	Campbell, James M. and Wanda S.	058-0A-0-5A	Null (owner address: 10663 Plank Road)	AGRI	80.0	CP102
5[2]	Dixie Lee Farms Inc	058-0A-0-54	Null (owner address: 464 Laurel Branch Road)	AGRI	191.7	CP102, CP104
6	Dixie Lee Farms Inc	058-0A-0-56B	Null (owner address: 464 Laurel Branch Road)	AGRI	9.0	CP102
7	Dixie Lee Farms Inc	046-0A-0-20	Null (owner address: 464 Laurel Branch Road)	AGRI	81.5	CP101, CP103
8	Wrenn, Mark E. or Robin Gunn	046-06-0-2	11668 Plank Road	AGRI	5.0	CP103
9	Wrenn, Robin G. or Mark Edwin	046-06-0-1	Null (owner address: 121 Laurel Branch Road)	AGRI	58.7	CP103, CP104
10	Long, Johnny K.	058-0A-0-67	Null (owner address: 3502 Laurel Branch Road)	AGRI	105.0	CP103, CP104
11	Long, Ronald E.	059-0A-0-1	1663 Sneads Store Road	AGRI	35.7	CP104, CP107
12[3]	Dixie Lee Farms Inc	058-0A-0-63	Null (owner address: 464 Laurel Branch Road)	AGRI	259.8	CP104, CP108
13	Richard, Hite T.	047-04-0-13	12052 Plank Road	AGRI	137.0	CP103, CP106
14	Lindberg, Stephen P. or Wendy A.	059-0A-0-1A	Null (owner address: PO Box 396, Chesterfield, VA 23832)	AGRI	119.2	CP103, CP104, CP106, CP107
15	Long, Johnny K.	058-0A-0-66A	Null (owner address: 3502 Laurel Branch Road)	AGRI	46.0	CP104
16	Dixie Lee Farms Inc	059-0A-0-27	Null (owner address: 464 Laurel Branch Road)	AGRI	100.0	CP104, CP107, CP108
17	Long, Johnny K.	047-04-0-B1	13194 Plank Road	AGRI	5.0	CP105
18	Long, Johnny K.	047-04-0-B1B	Null (owner address: 3502 Laurel Branch Road)	AGRI	86.3	CP105, CP106
19	Long, Johnny K.	047-0A-0-38	626 Hilltop Road	AGRI	88.6	CP106
20	Arthur, Bernard R. or Barbara D.	047-04-0-6	13476 Plank Road	AGRI	93.4	CP105, CP106
21	Spencer, Frank T.	047-04-0-B1A	Null (owner address: 3610 Ghent Drive, Chesterfield, VA 23832)	AGRI	Easement Only	CP105, CP106
22	Harris, Michael G.	047-0A-0-25	Null (owner address: 11592 Craig Mill Road)	AGRI	2.2	CP105
23	Harris, Michael G.	047-04-0-5	Null (owner address: 11592 Craig Mill Road)	AGRI	37.2	CP105, CP106
24[4]	Dicks, Teresa L Teres (Te)	047-04-0-12	Null (owner address: 709 Pleasant Way, Chesapeake, VA 23322)	AGRI	43.2	CP106
25[5]	Dicks, Teresa L Teres (Te)	058-0A-0-65	1364 Sneads Store Road	AGRI	132.3	CP104, CP107, CP108
26	Long, Ronald E.	058-0A-0-66B	167 Longs Lane	RES	3.0	CP104
27	Long, Ronald E.	058-0A-0-66C	85 Longs Road	RES	1.8	CP104

[1] - Anticipated parcel carve out of 224 acres
[2] - Anticipated parcel carve out of 30.7 acres
[3] - Anticipated parcel carve out of 25.3 acres
[4] - Anticipated parcel carve out of 3.3 acres
[5] - Anticipated parcel carve out of 20.6 acres



NOTES:

- THE LINE TABLE SHOWN IS GENERATED FROM GIS LINES AND SHALL NOT BE USED IN LEGAL DESCRIPTIONS, PLATS, NOR CONSTRUCTION LEVEL SITE PLANS.
- ALTA IS IN THE PROCESS OF BEING COMPLETED. SITE PLAN WILL BE UPDATED WITH THE SURVEYED METES AND BOUNDS AT THE COMPLETION OF THE ALTA SURVEY.
- SITE PLANS WILL BE UPDATED WITH THE UTILITY EASEMENTS ONCE THE ALTA SURVEY IS COMPLETED.

X:\CADD_Virginia\Dominion\Laurel Branch\Civil\CUP Plans\194-1058-0025CP401.dwg

Dominion Energy®

TETRA TECH

TETRA TECH, INC.
4101 COX ROAD,
SUITE 120
GLEN ALLEN, VA 23060
TEL: (804) 290-4321
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STAMP:

COMMONWEALTH OF VIRGINIA
MICHAEL K. SHORT
Lic. No. 047828
05/17/2022
PROFESSIONAL ENGINEER

LAUREL BRANCH SOLAR PROJECT

DOMINION ENERGY VIRGINIA
LUNENBURG COUNTY
VIRGINIA

PROJECT NUMBERS:
194-1058-0025

SHEET TITLE:
METES AND BOUNDS INDEX SHEET

SHEET SIZE: ARCH "D" 24" X 36" (610 x 914)
0 ½" 1"

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NO.	REVISION	DATE	INIT.
00	CUP APPLICATION	05/17/2022	GAR

va811.com Dig With GARE

DATE:	05/17/2022
DRAWN BY:	GR
ENGINEER:	MS
APPROVED BY:	EO

PROJECT PHASE:
CONDITIONAL USE PERMIT SITE PLANS

SCALE:
1" = 800'

SHEET NO.:
CP401

(1) APN: 058-0A-0-68		
Line #	Length (FT)	Direction
L1	2551	N87° 28' 12"W
L2	177	S28° 55' 25"E
L3	574	S2° 04' 32"E
L4	191	S50° 54' 28"E
L5	154	S50° 28' 50"E
L6	536	S8° 01' 20"E
L7	185	S7° 58' 37"E
L8	169	S87° 27' 19"W
L9	72	S79° 00' 03"E
L10	105	S82° 33' 21"E
L11	109	S81° 22' 49"E
L12	96	S80° 12' 43"E
L13	53	S75° 02' 05"E
L14	79	S57° 12' 21"E
L15	486	S86° 34' 50"E
L16	112	N48° 39' 11"E
L17	66	N50° 43' 50"E
L18	64	N50° 45' 05"E
L19	70	N53° 02' 45"E
L20	66	N55° 21' 17"E
L21	138	N56° 19' 02"E
L22	158	N58° 32' 42"E
L23	81	N59° 47' 29"E
L24	143	N57° 32' 55"E
L25	166	N58° 00' 14"E
L26	768	N29° 57' 35"W
L27	102	N41° 01' 46"E
L28	248	N40° 46' 57"E
L29	218	N60° 04' 03"E
L30	879	S28° 41' 19"E
L31	35	N61° 43' 14"E
L32	80	N62° 58' 28"E
L33	153	N66° 18' 25"E
L34	166	N70° 48' 12"E
L35	717	N72° 41' 17"E
L36	397	N1° 38' 15"W
L37	1143	N87° 20' 03"W

(2) APN: 058-0A-0-69		
Line #	Length (FT)	Direction
L38	466	N57° 45' 44"E
L39	408	N28° 28' 37"W
L40	239	S46° 28' 53"W
L41	222	S45° 24' 26"W
L42	85	S17° 39' 19"E
L43	116	S24° 58' 13"E
L44	116	S29° 22' 05"E

(6) APN: 058-0A-0-56B		
Line #	Length (FT)	Direction
L158	2579	N81° 40' 14"E
L159	85	N29° 44' 33"E
L160	2628	S85° 39' 38"W
L161	250	S6° 04' 34"E

(17) APN: 047-04-0-B1		
Line #	Length (FT)	Direction
L368	665	S3° 07' 30"W
L369	200	S62° 43' 08"E
L370	212	S76° 28' 05"E
L371	127	S61° 07' 12"E
L372	609	N22° 49' 35"W
L373	319	N0° 25' 32"W
L374	88	S87° 35' 46"W
L375	133	S86° 01' 49"W

(3) APN: 058-0A-0-68		
Line #	Length (FT)	Direction
L45	2135	S87° 45' 13"W
L46	318	S59° 03' 47"W
L47	305	S66° 10' 34"W
L48	295	S69° 42' 41"W
L49	452	S73° 45' 12"W
L50	523	S73° 36' 18"W
L51	791	S72° 57' 37"W
L52	165	S70° 40' 39"W
L53	150	S66° 22' 07"W
L54	79	S62° 36' 33"W
L55	252	S60° 26' 52"W
L56	276	S58° 52' 56"W
L57	202	S58° 19' 12"W
L58	143	S57° 32' 55"W
L59	80	S60° 50' 54"W
L60	157	S58° 20' 01"W
L61	138	S56° 11' 22"W
L62	66	S55° 04' 48"W
L63	65	S53° 14' 28"W
L64	66	S51° 58' 41"W
L65	66	S49° 11' 13"W
L66	111	S48° 57' 12"W
L67	408	S28° 28' 37"E
L68	466	S57° 45' 44"W
L69	198	S30° 28' 00"E
L70	284	S31° 23' 15"E
L71	198	S24° 27' 23"E
L72	231	S23° 51' 43"E
L73	113	S21° 00' 39"E
L74	134	S14° 56' 23"E
L75	193	S6° 59' 18"E
L76	182	S1° 03' 50"E
L77	113	S6° 52' 42"W
L78	104	S12° 31' 20"W
L79	106	S17° 13' 16"W
L80	84	S19° 55' 55"W
L81	136	S21° 28' 21"W
L82	76	S84° 54' 55"E
L83	166	S86° 49' 35"E
L84	94	N87° 16' 03"E
L85	139	N78° 50' 17"E
L86	442	N74° 09' 08"E
L87	220	N79° 14' 27"E
L88	271	N79° 11' 17"E
L89	745	N78° 38' 05"E
L90	1024	N77° 40' 18"E
L91	638	N78° 15' 18"E
L92	322	N77° 35' 48"E
L93	302	N78° 39' 41"E
L94	106	N76° 58' 52"E
L95	129	N69° 03' 38"E
L96	126	N55° 37' 05"E
L97	140	N56° 41' 16"E
L98	135	N60° 09' 07"E
L99	300	N63° 22' 20"E
L100	112	N68° 01' 24"E
L101	63	N85° 59' 12"E
L102	1472	N15° 35' 26"E
L157	1872	N14° 10' 34"E

(8) APN: 046-06-0-2		
Line #	Length (FT)	Direction
L181	334	N86° 15' 09"W
L182	204	N87° 04' 28"W
L183	499	S18° 14' 33"E
L184	628	S80° 00' 41"E
L185	600	N23° 24' 26"W

(4) APN: 058-0A-0-5A		
Line #	Length (FT)	Direction
L105	293	N15° 23' 57"E
L106	249	N13° 56' 03"E
L107	79	N17° 32' 46"E
L108	80	N20° 12' 34"E
L109	101	N31° 08' 47"E
L110	128	N32° 09' 20"E
L111	101	N29° 55' 39"E
L112	265	N23° 49' 16"E
L113	135	N21° 41' 27"E
L114	64	N19° 49' 27"E
L115	62	N18° 48' 20"E
L116	64	N16° 05' 33"E
L117	70	N13° 37' 30"E
L118	3083	S80° 13' 20"W
L119	1075	S10° 36' 48"E
L120	605	S85° 42' 20"E
L121	1645	N88° 07' 27"E

(5) APN: 058-0A-0-54		
Line #	Length (FT)	Direction
L122	139	S78° 50' 17"W
L123	94	S87° 16' 03"W
L124	166	N86° 49' 35"W
L125	76	N84° 54' 55"W
L126	260	S23° 37' 59"W
L127	104	S29° 41' 29"W
L128	135	S32° 17' 39"W
L129	91	S30° 52' 30"W
L130	84	S21° 20' 14"W
L131	76	S17° 47' 01"W
L132	249	S13° 56' 03"W
L133	294	S15° 19' 35"W
L134	116	S14° 32' 11"W
L135	118	N89° 08' 33"E
L136	2628	N85° 39' 38"E
L137	2933	N84° 01' 07"E
L138	612	N5° 58' 39"E
L139	823	N4° 23' 13"E
L140	692	N4° 22' 34"E
L142	63	S85° 59' 12"W
L143	112	S68° 01' 24"W
L144	300	S63° 22' 20"W
L145	135	S60° 09' 07"W
L146	140	S56° 41' 16"W
L147	126	S55° 37' 05"W
L148	129	S69° 03' 38"W
L149	106	S76° 58' 52"W
L150	302	S78° 39' 41"W
L151	322	S77° 35' 48"W
L152	638	S78° 15' 18"W
L153	1024	S77° 40' 18"W
L154	745	S78° 38' 05"W
L155	271	S79° 11' 17"W
L156	220	S79° 14' 27"W
L162	442	S74° 09' 08"W

(26) APN: 058-0A-0-66B		
Line #	Length (FT)	Direction
L551	368	S59° 47' 18"W
L552	180	S1° 00' 54"E
L553	429	S1° 00' 54"E
L554	126	N80° 02' 40"E
L555	398	N0° 51' 00"W
L556	201	N79° 57' 07"E
L557	339	N1° 30' 10"W

(7) APN: 046-0A-0-20		
Line #	Length (FT)	Direction
L163	2249	N34° 26' 48"W
L164	597	S23° 27' 36"W
L165	691	S26° 18' 54"W
L166	625	S29° 28' 41"W
L167	384	S29° 30' 12"W
L168	363	S33° 41' 14"W
L169	273	S43° 13' 02"W
L170	199	S53° 59' 37"W
L171	417	S56° 26' 02"W
L172	2135	N87° 45' 13"E
L173	124	N13° 17' 40"E
L174	101	N7° 06' 33"E
L175	491	N14° 16' 52"E
L176	161	N27° 57' 33"E
L177	239	N58° 35' 44"E
L178	102	N75° 35' 06"E
L179	204	S87° 04' 28"E
L180	334	S86° 15' 09"E

(9) APN: 046-06-0-2		
Line #	Length (FT)	Direction
L187	499	N18° 14' 33"W
L188	102	S75° 35' 06"W
L189	239	S58° 35' 44"W
L190	161	S27° 57' 33"W
L191	491	S14° 16' 52"W
L192	101	S7° 06' 33"W
L193	62	S77° 12' 38"E
L194	211	S70° 09' 11"E
L195	352	S64° 26' 47"E
L196	1145	S13° 05' 39"W
L197	552	S71° 06' 59"E
L198	49	S72° 08' 05"E
L199	108	S87° 14' 43"E
L200	188	S71° 14' 23"E
L201	367	S70° 45' 35"E
L202	167	N89° 47' 54"E
L203	57	N77° 09' 46"E
L204	105	N78° 19' 11"E
L205	133	S65° 32' 44"E
L206	1423	N19° 50' 50"E
L207	554	S85° 04' 06"W
L208	341	S82° 51' 44"W
L209	833	N18° 59' 30"W
L326	628	N80° 00' 41"W

(13) APN: 047-04-0-13		
Line #	Length (FT)	Direction
L290	909	N26° 31' 03"W
L291	831	S85° 05' 22"W
L292	975	S85° 03' 27"W
L293	730	S9° 37' 29"E
L294	285	S9° 11' 13"E
L295	203	N82° 47' 57"W
L296	590	N82° 47' 55"W
L297	845	N86° 52' 04"W
L298	600	S23° 24' 26"E
L299	833	S18° 59' 30"E
L300	341	N82° 51' 44"E
L301	554	N85° 04' 06"E
L302	964	N84° 24' 43"E
L303	1156	S89° 46' 38"E
L304	613	N4° 15' 44"E
L305	598	N8° 07' 06"E
L306	156	N8° 02' 21"E

(10) APN: 058-0A-0-67		
Line #	Length (FT)	Direction
L212	1145	N13° 05' 39"E
L213	352	N64° 26' 47"W
L214	211	N70° 09' 11"W
L215	62	N77° 12' 38"W
L216	124	S13° 17' 40"W
L217	1872	S14° 10' 34"W
L218	1472	S15° 35' 26"W
L219	82	S82° 50' 26"E
L220	128	S78° 49' 53"E
L221	101	S78° 35' 19"E
L222	138	S72° 31' 43"E
L223	170	S64° 48' 15"E
L224	101	S62° 52' 30"E
L225	101	S62° 52' 35"E
L226	120	S62° 19' 47"E
L227	194	S60° 30' 34"E
L228	252	S60° 48' 07"E
L229	80	S71° 28' 00"E
L230	148	S81° 52' 12"E
L231	2392	N13° 41' 13"E
L232	188	N71° 14' 23"W
L233	108	N87° 14' 43"W
L234	49	N72° 08' 05"W
L344	552	N71° 06' 59"W

(11) APN: 059-0A-0-1		
Line #	Length (FT)	Direction
L239	42	S2° 30' 22"E
L240	53	S7° 51' 06"E
L241	86	S15° 42' 53"E
L242	181	N79° 29' 14"E
L243	218	N81° 44' 17"E
L244	144	N83° 56' 23"E
L245	144	N87° 55' 14"E
L246	137	S87° 17' 39"E
L247	76	S81° 44' 48"E
L248	860	N1° 59' 14"E
L250	333	N54° 07' 15"W
L251	181	N85° 01' 49"W
L252	189	N29° 44' 42"W
L253	252	N25° 46' 10"W
L254	359	N11° 18' 36"W
L255	304	N45° 00' 24"W
L256	187	S19° 50' 50"W
L257	693	S23° 44' 11"W
L258	734	S1° 00' 54"E
L259	368	N59° 47' 18"E
L260	339	S1° 30' 10"E
L261	77	S2° 51' 32"W
L262	102	S4° 33' 39"W
L325	42	S2° 14' 09"W

(14) APN: 059-0A-0-1A		
Line #	Length (FT)	Direction
L307	964	S84° 24' 43"W
L308	1423	S19° 50' 50"W
L309	304	S45° 00' 24"E
L310	359	S11° 18' 36"E
L311	252	S25° 46' 10"E
L312	189	S29° 44' 42"E
L313	181	S85° 01' 49"E
L314	333	S54° 07' 15"E
L315	226	N2° 00' 25"E
L316	333	S88° 43' 19"E
L317	466	N82° 16' 41"E
L318	137	N76° 45' 34"E
L319	86	S84° 48' 20"E
L320	471	S69° 57' 12"E
L321	359	N8° 26' 55"E
L322	772	N3° 10' 54"E
L323	1331	N4° 20' 12"E
L324	1156	N89° 46' 38"W

(12) APN: 058-0A-0-63		
Line #	Length (FT)	Direction
L263	1445	N71° 11' 11"W
L264	695	N2° 52' 53"E
L265	1165	N65° 00' 13"W
L266	612	S5° 58' 39"W
L267	2097	S5° 16' 03"W
L268	686	S62° 27' 25"W
L269	623	S30° 08' 17"E
L270	254	S21° 57' 28"E
L271	279	S16° 26' 10"E
L272	658	S11° 55' 48"E
L273	435	S56° 02' 33"E
L274	285	S34° 20' 00"E
L275	371	N73° 03' 04"E
L276	206	N7° 53' 16"E
L277	344	S88° 48' 31"E
L278	301	S59° 38' 39"E
L279	444	N75° 40' 43"E
L280	530	S79° 28' 54"E
L281	715	N81° 05' 23"E
L282	455	N51° 32' 17"E
L283	287	N82° 50' 14"E
L284	430	S71° 56' 33"E
L285	406	N45° 59' 02"W
L286	502	N35° 44' 41"W
L287	525	N48° 22' 06"W
L288	854	N76° 27' 45"W
L289	1839	N6° 55' 24"E

(24) APN: 047-04-0-12		
Line #	Length (FT)	Direction
L482	395	S23° 19' 16"W
L483	35	S33° 58' 46"W
L484	27	S10° 22' 37"W
L485	29	S10° 22' 39"W
L486	17	S16° 34' 43"W
L487	12	S8° 26' 48"W
L488	12	S0° 22' 18"E
L489	12	S9° 11' 36"E
L490	12	S17° 56' 56"E
L491	12	S26° 43' 51"E
L492	12	S35° 30' 41"E
L493	17	S45° 46' 55"E
L494	8	S54° 33' 59"E
L495	24	S59° 18' 18"E
L496	17	S59° 18' 21"E
L497	1061	S65° 27' 40"E
L498	491	N10° 17' 31"E
L499	474	N10° 50' 07"E
L500	269	N10° 16' 08"E
L501	896	N30° 41' 40"W
L502	371	N29° 24' 45"E
L503	237	N75° 05' 44"E
L504	366	S10° 18' 09"E
L505	364	N3° 57' 39"E
L506	214	N6° 24' 16"E
L507	33	N29° 35' 35"W
L508	76	S87° 46' 51"W
L509	103	S88° 36' 30"W
L510	200	S89° 50' 04"W
L511	173	S89° 50' 04"W
L512	387	S74° 32' 59"W
L513	102	S81° 59' 29"W
L514	41	S81° 59' 27"W
L515	205	S2° 16' 34"W
L516	859	S2° 16' 34"W
L517	408	S1° 42' 22"W

(15) APN: 058-0A-0-66A		
Line #	Length (FT)	Direction
L328	105	S78° 19' 11"W
L329	57	S77° 09' 46"W
L330	167	S89° 47' 54"W
L331	367	N70° 45' 35"W
L332	2392	S13° 41' 13"W
L333	96	S87° 04' 29"E
L334	189	S89° 21' 30"E
L335	177	N89° 47' 58"E
L336	126	N89° 58' 03"E
L337	364	N0° 19' 34"E
L338	454	N76° 58' 48"E
L339	180	N1° 00' 53"W
L340	734	N1° 00' 54"W
L341	693	N23° 44' 11"E
L342	187	N19° 50' 50"E
L343	133	N65° 32' 44"W

(16) APN: 059-0A-0-27		
Line #	Length (FT)	Direction
L345	76	N81° 44' 48"W
L346	137	N87° 17' 39"W
L347	144	S87° 55' 14"W
L348	144	S83° 56' 23"W
L349	218	S81° 44' 17"W
L350	2693	S5° 06' 27"W
L351	103	S72° 54' 40"E
L352	158	N89° 47' 50"E
L353	50	S41° 56' 46"E
L354	88	S5° 39' 51"E
L355	83	S53° 12' 32"E
L356	332	S72° 39' 16"E
L357	228	S61° 24' 47"E
L358	341	S45° 20' 54"E
L359	1249	N16° 30' 44"E
L360	1756	N18° 49' 56"E
L361	405	N64° 23' 44"W
L362	319	N63° 16' 48"W
L363	223	N61° 56' 10"W
L364	82	N65° 16' 55"W
L365	116	N71° 21' 25"W
L366	62	N75° 50' 33"W

(25) APN: 058-0A-0-65		
Line #	Length (FT)	Direction
L519	148	N81° 52' 12"W
L520	80	N71° 28' 00"W
L521	252	N60° 48' 07"W
L522	194	N60° 30' 34"W
L523	649	S9° 48' 04"W
L524	861	N72° 03' 18"W
L525	823	S4° 23' 13"W
L526	1165	S65° 00' 13"E
L527	695	S2° 52' 53"W
L528	1445	S71° 11' 11"E
L529	107	N10° 05' 30"W
L530	76	N10° 19' 11"W
L531	185	S80° 15' 57"E
L532	163	N85° 23' 38"E
L533	168	S46° 59' 13"E
L534	97	S73° 35' 42"E
L535	2693	N5° 06' 27"E
L536	181	S79° 29' 14"W
L537	213	S80° 49' 07"W
L538	126	S80° 02' 40"W
L539	140	S81° 00' 37"W
L540	93	S84° 41' 07"W
L541	118	S87° 05' 44"W
L542	103	S89° 35' 36"W
L543	126	S89° 58' 03"W
L544	177	S89° 47' 58"W
L545	189	N89° 21' 30"W
L546	96	N87° 04' 29"W

(18) APN: 047-04-0-B1B		
Line #	Length (FT)	Direction
L376	432	N88° 25' 26"W
L377	215	N88° 30' 04"W
L378	183	N88° 37' 03"W
L379	175	S89° 34' 13"W
L380	319	S0° 25' 32"E
L381	609	S22° 49' 35"E
L382	127	N61° 07' 12"W
L383	212	N76° 28' 05"W
L384	200	N62° 43' 08"W
L385	665	N3° 07' 30"E
L386	180	S81° 21' 31"W
L387	144	S79° 20' 11"W
L388	2721	S6° 01' 41"E
L389	283	N75° 10' 05"E
L390	519	N33° 07' 56"E
L391	814	N86° 19' 56"E
L392	2010	N2° 55' 19"W
L393	185	N2° 19' 31"W

(19) APN: 047-0A-0-38		
Line #	Length (FT)	Direction
L395	251	N57° 16' 21"W
L396	172	S81° 02' 41"W
L397	55	S85° 11' 47"W
L398	411	S87° 39' 47"W
L399	143	S5° 57' 00"E
L400	1587	S6° 02' 34"W
L401	156	S8° 02' 21"W
L402	598	S8° 07' 06"W
L403	613	S4° 15' 44"W
L404	22	N89° 36' 15"E
L405	1325	S88° 58' 09"E
L406	1229	N7° 26' 53"E
L407	308	N10° 19' 44"E
L408	352	N10° 19' 44"E
L409	884	N1° 58' 12"W
L410	48	S54° 09' 45"E
L411	53	S70° 49' 16"E
L412	203	N1° 13' 30"E
L413	24	N55° 05' 50"W
L414	242	N76° 02' 19"W
L415	168	S74° 41' 24"W
L416	144	N57° 14' 58"W

(20) APN: 047-04-0-6		
Line #	Length (FT)	Direction
L417	381	N76° 58' 51"W
L418	248	N7° 50' 22"W
L419	75	S84° 51' 20"W
L420	100	S84° 17' 07"W
L421	53	S85° 55' 31"W
L422	80	S88° 30' 22"W
L423	89	N88° 15' 52"W
L424	117	N86° 53' 23"W
L425	89	N86° 20' 18"W
L426	100	N87° 15' 43"W
L427	219	S1° 51' 02"E
L428	400	N83° 47' 43"W
L429	2010	S2° 55' 19"E
L430	753	S1° 03' 29"E
L431	169	S52° 48' 30"E
L432	122	N84° 07' 54"E
L433	305	N61° 04' 18"E
L434	178	S70° 32' 45"E
L435	197	S60° 54' 27"E
L436	273	N66° 50' 16"E
L437	203	S80° 39' 33"E
L438	103	S88° 01' 24"E
L439	41	N81° 59' 29"E
L440	2584	N1° 38' 49"W
L441	45	N1° 34' 15"W

(21) APN: 047-04-0-B1A		
Line #	Length (FT)	Direction
L391	814	N86° 19' 56"E
L390	519	N33° 07' 56"E
L389	283	N75° 10' 05"E
L398	411	S87° 39' 47"W
L397	55	S85° 11' 47"W
L396	172	S81° 02' 41"W
L395	251	N57° 16' 21"W
L416	144	N57° 14' 58"W
L415	168	S74° 41' 24"W
L414	242	N76° 02' 19"W
L413	24	N55° 05' 50"W
L430	753	S1° 03' 29"E

(22) APN: 047-04-0-25		
Line #	Length (FT)	Direction
L444	58	N31° 04' 16"W
L445	42	N34° 02' 42"W
L446	47	N36° 57' 59"W
L447	47	N39° 15' 56"W
L448	63	N41° 57' 57"W
L449	63	N45° 02' 46"W
L450	66	N48° 13' 25"W
L451	69	N46° 55' 01"W
L452	69	N44° 06' 23"W
L453	69	N41° 17' 49"W
L454	69	N38° 29' 03"W
L455	94	N31° 46' 18"W
L456	91	N78° 26' 54"W
L457	45	S1° 34' 15"E
L458	151	S26° 52' 01"E
L459	310	S26° 52' 01"E
L460	387	S69° 16' 53"E

(23) APN: 047-04-0-5		
Line #	Length (FT)	Direction
L462	2584	S1° 38' 49"E
L463	102	N81° 59' 29"E
L464	387	N74° 32' 59"E
L465	173	N89° 50' 04"E
L466	200	N89° 50' 04"E
L467	103	N88° 36' 30"E
L468	76	N87° 46' 51"E
L469	406	N29° 35' 36"W
L470	1262	N9° 50' 56"W
L471	63	N12° 26' 58"W
L472	47	N15° 13' 43"W
L473	47	N17° 36' 21"W
L474	47	N19° 58' 46"W
L475	47	N22° 21' 38"W
L476	47	N24° 43' 57"W
L477	37	N31° 04' 16"W
L478	387	N69° 16' 53"E
L479	310	N26° 52' 01"W
L480	151	N26° 52' 01"W

(27) APN: 058-0A-0-66C		
Line #	Length (FT)	Direction
L325	42	S2° 14' 09"W
L262	102	S4° 33' 39"W
L261	77	S2° 51' 32"W
L556	201	N79° 57' 07"E
L555	398	N0° 51' 00"W
L537	213	S80° 49' 07"W
L241	86	S15° 42' 53"E
L240	53	S7° 51' 06"E
L239	42	S2° 30' 22"E

NOTES:

- THE LINE TABLE SHOWN IS GENERATED FROM GIS LINES AND SHALL NOT BE USED IN LEGAL DESCRIPTIONS, PLATS, NOR CONSTRUCTION LEVEL SITE PLANS.
- ALTA IS IN THE PROCESS OF BEING COMPLETED. SITE PLAN WILL BE UPDATED WITH THE SURVEYED METES AND BOUNDS AT THE TIME OF THE COMPLETION OF THE ALTA SURVEY

X:\CADD_Virginia\Dominion\Laurel Branch\Civil\CUP Plans\194-1058-0025CP402.dwg

Dominion Energy®

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COMMONWEALTH OF VIRGINIA
MICHAEL K. SHORT
Lic. No. 047828
05/17/2022
PROFESSIONAL ENGINEER

LAUREL BRANCH SOLAR PROJECT

DOMINION ENERGY VIRGINIA
LUNENBURG COUNTY
VIRGINIA

PROJECT NUMBERS:
194-1058-0025

SHEET TITLE:
METES AND BOUNDS

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)
0 ½" 1"

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NO.	REVISION	DATE	INIT.
00	CUP APPLICATION	05/17/2022	GAR

va811.com Dig With CARE

DATE:	05/17/2022
DRAWN BY:	GR
ENGINEER:	MS
APPROVED BY:	EO

PROJECT PHASE:
CONDITIONAL USE PERMIT SITE PLANS

SCALE:
NTS

SHEET NO.:
CP402

TAB H

Traffic Study

Transportation Assessment

Laurel Branch Solar Project

May 20, 2022

Prepared for

Dominion Energy®

600 E Canal Street
Richmond, VA 23219

Prepared by

TETRA TECH

4101 Cox Road, Suite 120
Glen Allen, VA 23060

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Appendix C: Public Transportation Information

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Acronyms and Abbreviations

3D	three-dimensional
ADT	average daily traffic
BABS	Blackstone Area Bus System
CUP	Conditional Use Permit
GIS	geographic information system
GPS	global positioning system
KOP	key observation point
MWac	megawatts (alternating current)
O&M	operations and maintenance
Project Area	The 2,189± acres of privately-owned land where the proposed Project is located
Project	Laurel Branch Solar Project
STAA	Surface Transportation Assistance Act
VDOT	Virginia Department of Transportation
vpd	vehicles per day

1.0 OVERVIEW

Tetra Tech has prepared the following transportation assessment for the proposed Laurel Branch Solar project (the "Project") to be located on Routes 635 (Oral Oaks Road), 646 (Laurel Branch Road), 647 (Sneads Store Road), 655 (Plank Road) and 637 (Craig Mill Road) and Hilltop Road in Lunenburg County, Virginia. The project site is comprised of approximately 2,189 acres (based on the current project boundary) and currently supports agricultural land with several single-family homes. Access to the site parcels is currently provided via several driveways and agricultural access ways. The proposed project calls for the redevelopment of existing agricultural land to support the construction of an 80 megawatt (MWac) solar photovoltaic power generation facility. Some of the existing single-family homes and several agricultural buildings on-site will be removed. As part of the project, 28 driveways will be constructed on the adjacent roadway system to provide temporary construction access and permanent operations and maintenance (O&M) access to the site.

As part of this assessment, Tetra Tech developed vehicle trip generation estimates associated with the proposed project's anticipated peak construction workforce levels (estimated at up to 150 construction workers). Tetra Tech also reviewed existing traffic volumes and public transportation in the vicinity of the project site. Potential truck haul routes were also identified between the site parcels and the regional highway system to reduce construction-related traffic impacts.

The project is anticipated to generate approximately 486 vehicle trips on a typical weekday day with 149 vehicle trips occurring during the weekday morning and weekday evening commuter peak hours. This equates to approximately two to three new vehicle trips per minute during peak commuting hours. These estimates conservatively assume that all construction workers would arrive within the same hour and depart within the same hour. Additionally, there are several routes connecting the site to the regional roadway system thereby reducing impacts to any single roadway segment or intersection. Peak construction activities are currently anticipated to occur for a period of approximately two to three months. The remainder of the construction period is anticipated to generate fewer vehicle trips. The adjacent roadways are anticipated to have ample capacity to accommodate the temporary increase in daily and peak hour traffic. These trip generation estimates assume 50 daily delivery trips and six delivery trips during each of the peak hours during the peak two to three months of construction activity.

2.0 PROJECT DESCRIPTION

The project calls for the construction of a proposed 80 MWac solar photovoltaic power generation facility to be located on Routes 635 (Oral Oaks Road), 646 (Laurel Branch Road), 647 (Sneads Store Road), 655 (Plank Road) and637 (Craig Mill Road) and Hilltop Road in Lunenburg County, Virginia. The project site location in the context of the surrounding area roadways is shown in Figure 1. The project site currently supports agricultural fields and several single-family homes. Access to the site parcels is currently provided via several driveways and agricultural access ways.

The proposed project calls for the redevelopment of existing agricultural land to support the construction of an 80 MWac solar photovoltaic power generation facility. Some of the existing single-

family homes and agricultural buildings on-site will be removed. As part of the project, 28 driveways will be constructed on the adjacent roadway system to provide temporary construction access and permanent O&M access to the site including three driveways on Oral Oaks Road, six driveways on Laurel Branch Road, three driveways on Plank Road, nine driveways on Sneads Store Road, one driveway on Craig Mill Road and six driveways on Hilltop Road.

2.1 Existing Traffic Volumes

The site parcels are accessed by Routes 635 (Oral Oaks Road), 646 (Laurel Branch Road), 647 (Sneads Store Road), 655 (Plank Road) and 637 (Craig Mill Road) and Hilltop Road. These primary roadways serving the site are under Virginia Department of Transportation (VDOT) ownership and allow for two-way travel.

The estimated Average Daily Traffic (ADT) volume estimates for the study area roadways are summarized in Table 1 based on the most recent publicly available data from VDOT. VDOT traffic volume data is provided in Appendix A.

Table 1 Estimated Average Daily Traffic (ADT) Volumes

Roadway	ADT (vehicles per day)
Route 637 (east of Route 655)	1,100
Route 655	540
Route 637 (south of Route 655)	580
Route 635 (south of Route 655)	440
Route 635 (north of Route 655)	310
Sneads Store Road (east of Route 646)	100
Route 646	70
Route 647	20
Hilltop Road	40

Source: VDOT

2.2 Vehicle Trip Generation

The project will consist of three phases: construction, O&M, and decommissioning. The highest volume of site-related trips will occur during the peak construction phase of the project. Therefore, the trip generation for the peak construction phase workforce levels were estimated for this assessment.

Vehicle trip generation estimates for the project were developed based on anticipated construction operations for the project. Construction of the proposed solar facility is expected to include grading, panel installation, inspections, and equipment deliveries. It is anticipated that, at peak operations, the site could experience construction workforce levels of up to 150 construction workers at one time. Construction hours of operation are assumed to generally be 7 AM to 5 PM with construction workers arriving prior to 7 AM and departing after 5 PM. Since the peak hours of the adjacent street traffic are expected to occur sometime during the peak commuting periods of 7 AM to 9 AM and 4 PM to 6 PM, it is expected that the majority of construction workers would be arriving and departing the site outside of the typical weekday morning and weekday evening commuter peak hours of the adjacent street.

However, to present a conservative assessment of potential traffic increases associated with the project, it is assumed that all the construction workers would arrive during the weekday morning peak hour and depart during the weekday evening peak hour. The supporting trip generation calculations and assumptions for the proposed project's peak construction workforce levels are provided in Appendix B.

The Blackstone Area Bus System (BABS) operates public transit service in nearby Lunenburg County. BABS operates the Town and Country bus service on Route 637 which travels from Kenbridge to Victoria. The site is approximately 2 miles southwest of this public transportation service with the closest stop located at the W. 7th Avenue and Broad Street intersection in Kenbridge. For the purposes of this assessment, it was assumed that no construction workers would use public transit to access the site. Public transportation information is provided in Appendix C.

It is anticipated that some construction workers would arrive and depart the site together (carpooling). For purposes of this assessment, it was assumed that 10 percent of the construction workers will carpool to travel to/from the site with two workers per vehicle. Table 1 presents a summary of the trip generation estimates for the project's peak construction workforce activities.

Table 2 Trip Generation Summary – Peak Construction Period

Time Period/ Direction	Project Trips			
	Workforce Trips[1]	Non-Heavy Vehicle Deliveries[2]	Heavy Vehicles[3]	Total
Weekday AM Peak Hour				
Enter	143	1	2	146
Exit	0	1	2	3
Total	**143**	**2**	**4**	**149**
Weekday PM Peak Hour				
Enter	0	1	2	3
Exit	143	1	2	146
Total	**143**	**2**	**4**	**149**
Weekday Daily				
Enter	218	5	20	243
Exit	218	5	20	243
Total	**436**	**10**	**40**	**486**

1 Assumed 150 construction workers per day. Conservatively assumed trips overlap with adjacent street peaks. Peak construction activities are currently anticipated to occur for a period of approximately two to three months. The remainder of the construction period is anticipated to generate fewer vehicle trips.
2 Assumed 5 deliveries per day with 40 percent of trips occurring during peak hours.
3 Assumed 20 deliveries per day spread evenly throughout day.

As shown in Table 1, the peak construction activity for the proposed solar facility is expected to generate 486 new vehicle trips (243 entering and 243 exiting) on a typical weekday, with approximately 149 new vehicle trips (146 entering and 3 exiting) during the weekday morning peak hour and 149 new vehicle trips (3 entering and 146 exiting) during the weekday evening peak hour. These trip generation estimates assume 50 daily delivery trips and six delivery trips during each of the peak hours. The adjacent roadways are anticipated to have ample capacity to accommodate the temporary increase in daily and peak hour traffic with the project estimated to generate

approximately two to three additional trips every minute during peak hours. Additionally, there are several routes connecting the site to the regional roadway system thereby reducing impacts to any single roadway segment or intersection.

Post-Construction Conditions. Routine post-construction O&M activities at the site are not anticipated to result in a measurable increase in vehicle traffic. The number of maintenance workers traveling to the site is anticipated to be low and impacts to local traffic are not expected. The proposed solar facility will be unmanned during routine O&M and would only be inspected periodically. Therefore, the site is not expected to add a noticeable increase to existing traffic under typical O&M conditions. Personnel would be on site as necessary for any maintenance and repairs. Additionally, impacts resulting from decommissioning of the project are expected to be similar to or less than those experienced during construction.

2.3 Truck Haul Routes

The construction of the proposed solar facility will require large vehicle deliveries for a variety of materials that may include concrete, solar panels, earth materials, building materials, etc. Tetra Tech identified potential truck haul routes between the site parcels and the regional roadway system for these larger vehicles. For purposes of this assessment, it was assumed that the deliveries would originate from three primary geographical areas: Richmond, VA, Lynchburg, VA, and Raleigh, NC. Factors considered in developing potential truck haul routes are summarized below. Separate inbound and outbound travel routes are provided where appropriate.

- Prioritize designated Surface Transportation Assistance Act (STAA) truck routes from the VDOT database.
- Avoid roadway segments having bridge height and weight limitations based on a review of the VDOT database.
- Minimize impacts to schools, traffic signals, and areas with pedestrian activity.
- Minimize turns at locations with geometric limitations.

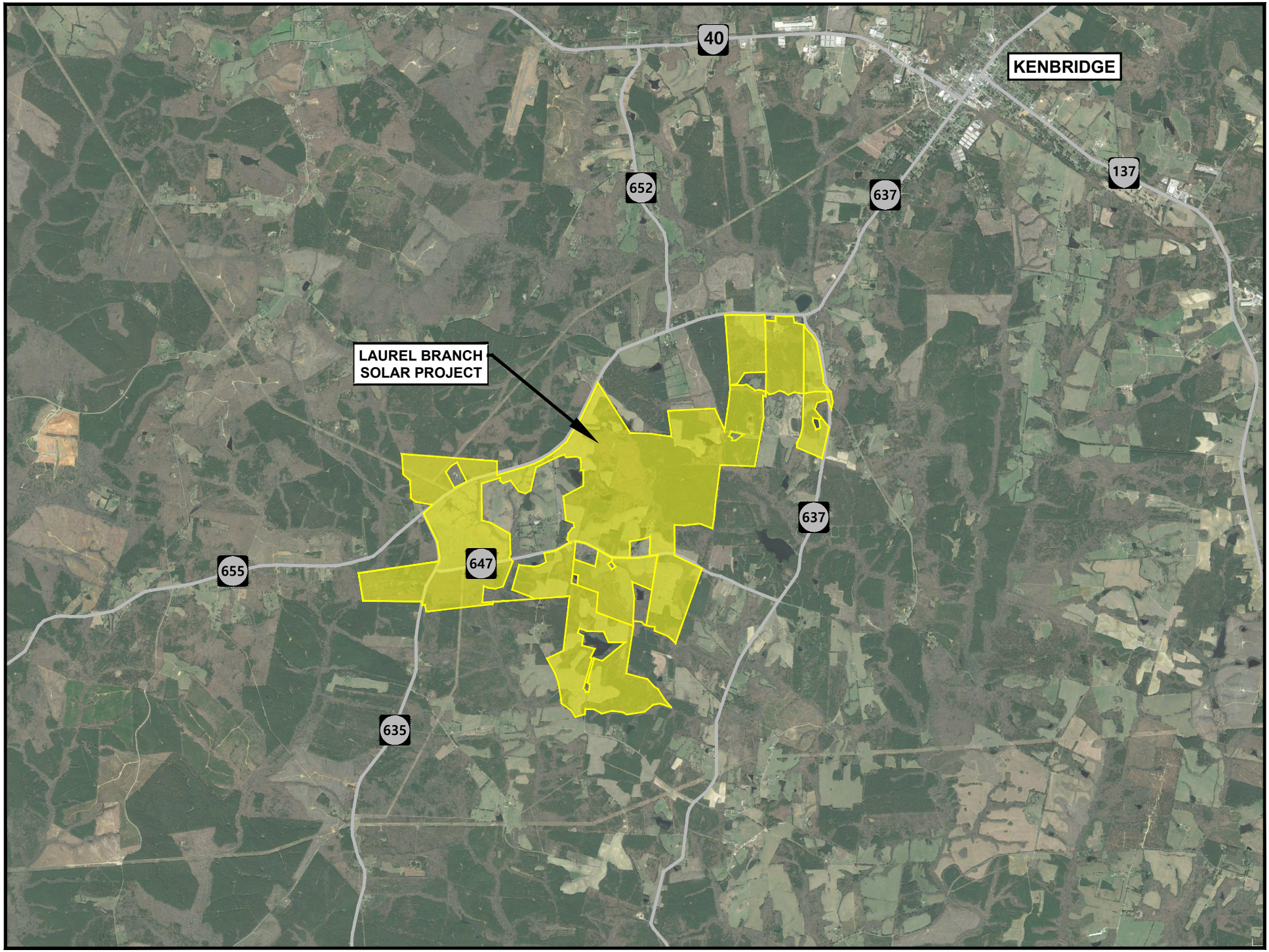
The potential regional truck haul routes are shown in Figure 2. The potential local truck haul routes to/from the proposed site driveways are shown in Figure 3. A preliminary Construction Traffic Management Plan (CTMP) has been prepared for the project and is provided in Appendix D.

3.0 CONCLUSIONS

The peak construction workforce levels for the proposed 80 MWac solar photovoltaic power generation facility is expected to generate approximately 149 trips during the weekday morning peak hour and 149 trips during the weekday evening peak hour during peak construction workforce activity. This equates to approximately two to three new vehicle trips per minute during peak hours. Peak construction activities are currently anticipated to occur for a period of approximately two to three months. The remainder of the construction period is anticipated to generate fewer vehicle trips. These trip generation estimates are conservative as the majority of peak hour trips are likely to occur outside of the typical weekday commuter peak hours of the adjacent street traffic and do not take credit for possible vehicle trip reductions associated with use of available public transportation. The

project will generate even less traffic post construction with routine inspection and maintenance of the solar panels and supporting equipment. Additionally, there are several routes connecting the site to the regional roadway system thereby reducing impacts to any single roadway segment or intersection. As part of the project, 28 driveways will be constructed to provide temporary construction access and permanent O&M access to the site from the public roadway network including three driveways on Oral Oaks Road, six driveways on Laurel Branch Road, three driveways on Plank Road, nine driveways on Sneads Store Road, one driveway on Craig Mill Road and six driveways on Hilltop Road. The adjacent roadways are anticipated to have ample capacity to accommodate the temporary increase in daily and peak hour traffic with existing daily traffic volumes of 20 vehicles per day (vpd) to 1,100 vpd. Potential truck haul routes were identified between the site parcels and the regional highway system to reduce construction-related traffic impacts.

FIGURES



TETRA TECH

Laurel Branch Solar Project
Lunenburg County, Virginia

SITE LOCUS

FIGURE
1

TO/FROM WEST
TOWARDS LYNCHBURG

TO/FROM NORTH
TOWARDS RICHMOND

TO/FROM SOUTH
TOWARDS RALEIGH

SITE
(SEE FIG. 3)

BLACKSTONE
SEE INSERT

VICTORIA

KENBRIDGE

SOUTH HILL

15 360 662 723 49 460 40 652 137 655 637 613 138 46 1 85 58

Legend (Truck Routes)

- To/From South
- Alt. 1 To/From North
- Alt. 2 To/From North
- Alt. 1 To/From West
- Alt. 2 To/From West

TETRA TECH

Lunenburg County, Virginia

Laurel Branch Solar
Potential Regional Truck Haul Routes

FIGURE
2

652

637

637

655

647

635

Legend

- Regional Truck Routes
- Local Truck Haul Routes
- Local Roadways
- Proposed Site Driveways

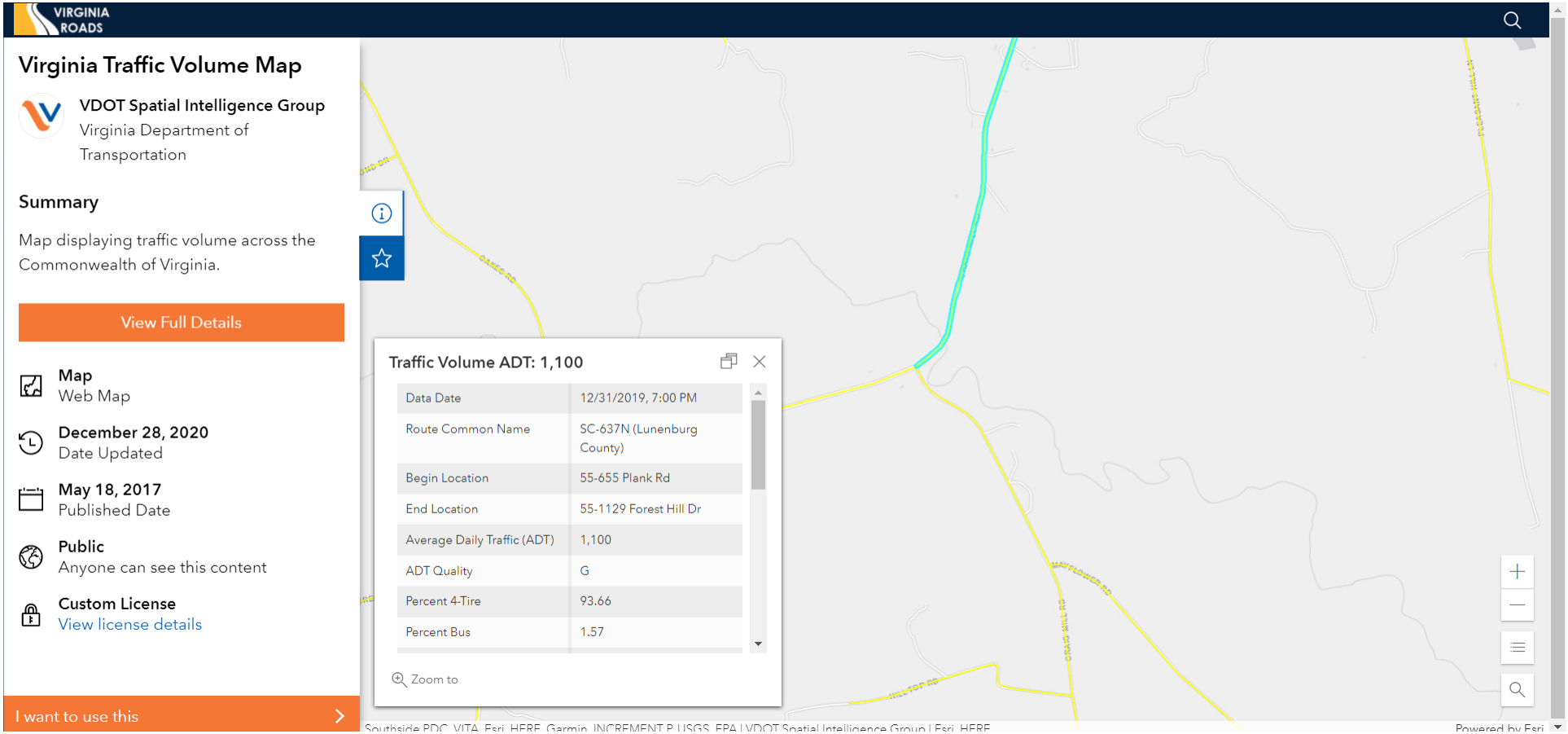
TETRA TECH

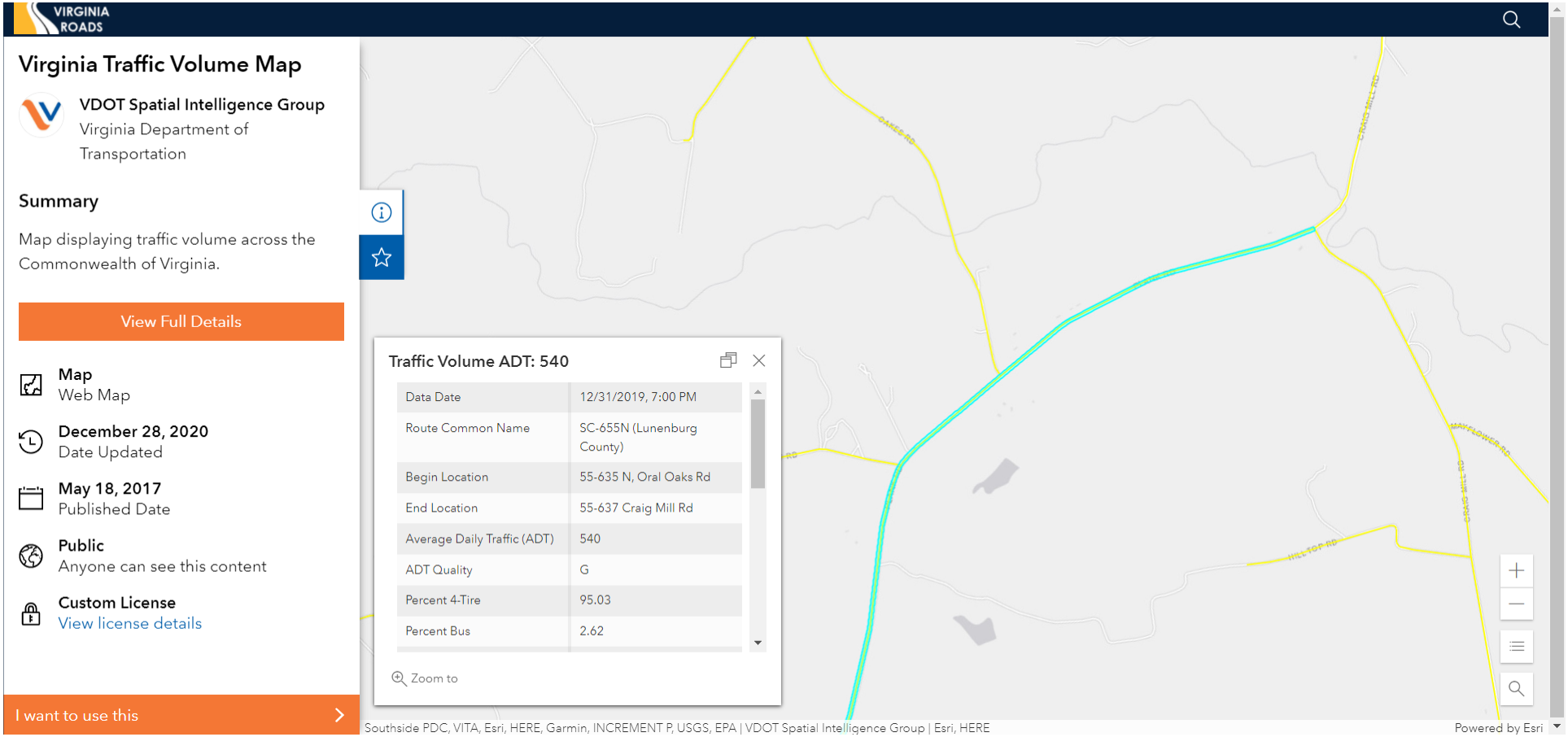
Lunenburg County, Virginia

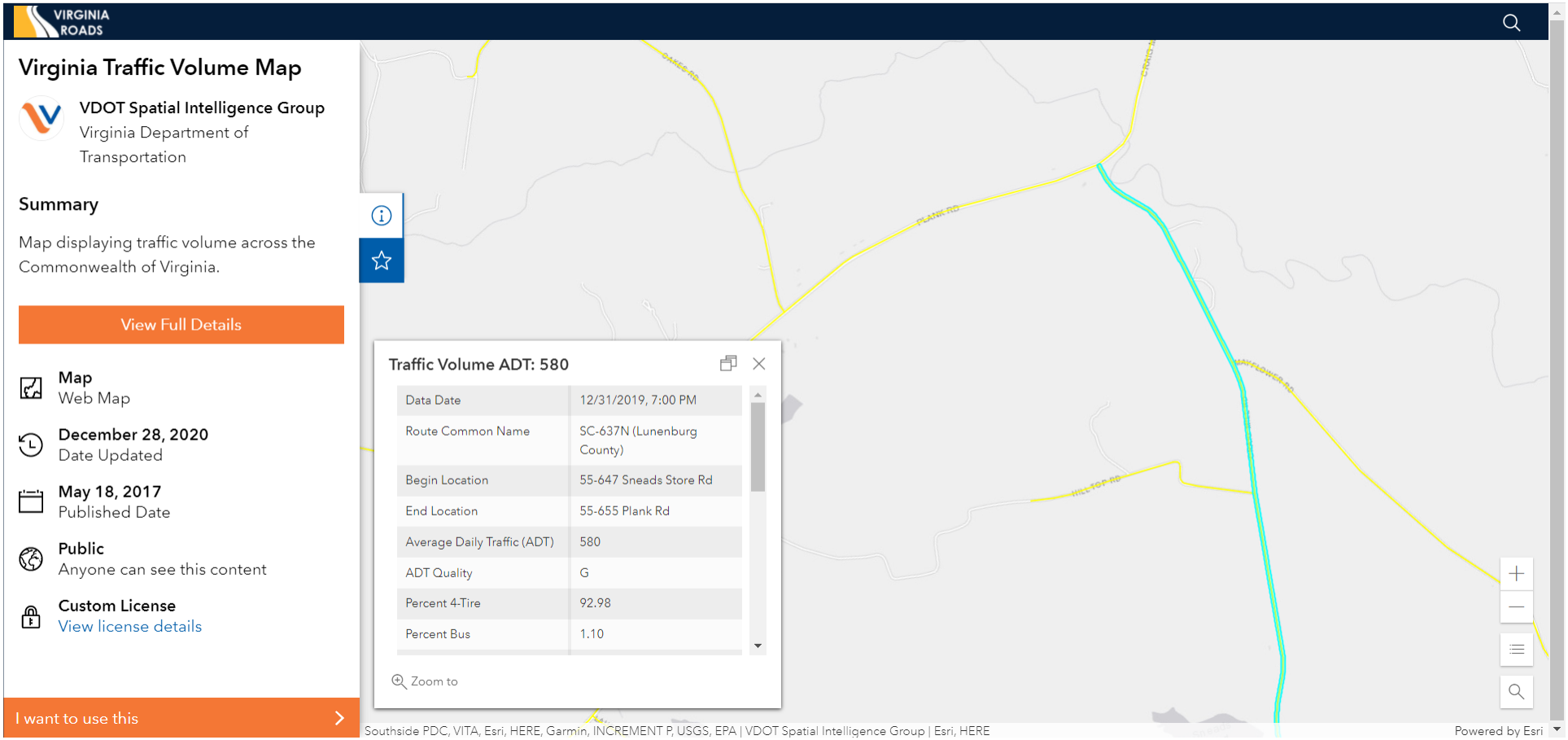
Laurel Branch Solar
Potential Local Truck Haul Routes

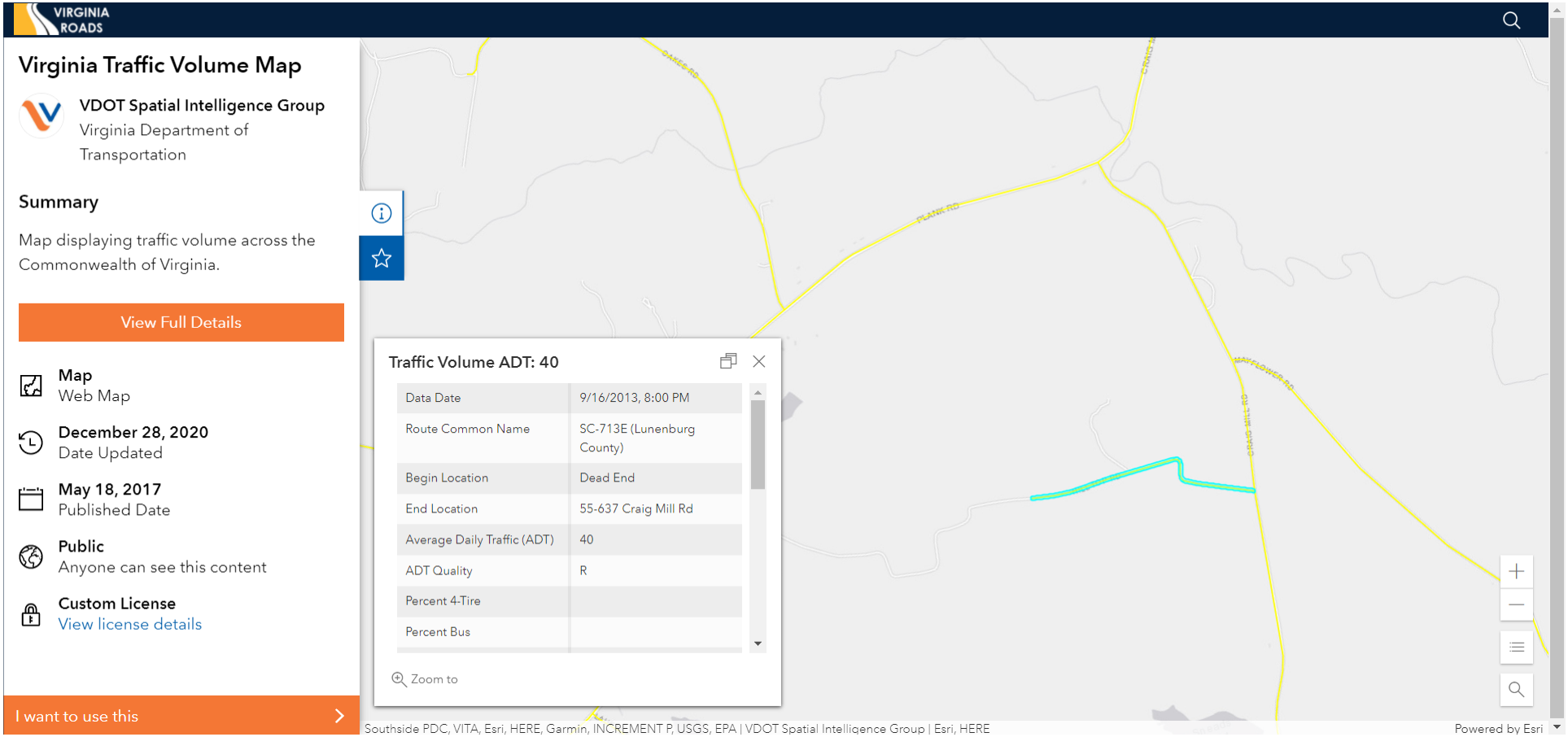
FIGURE
3

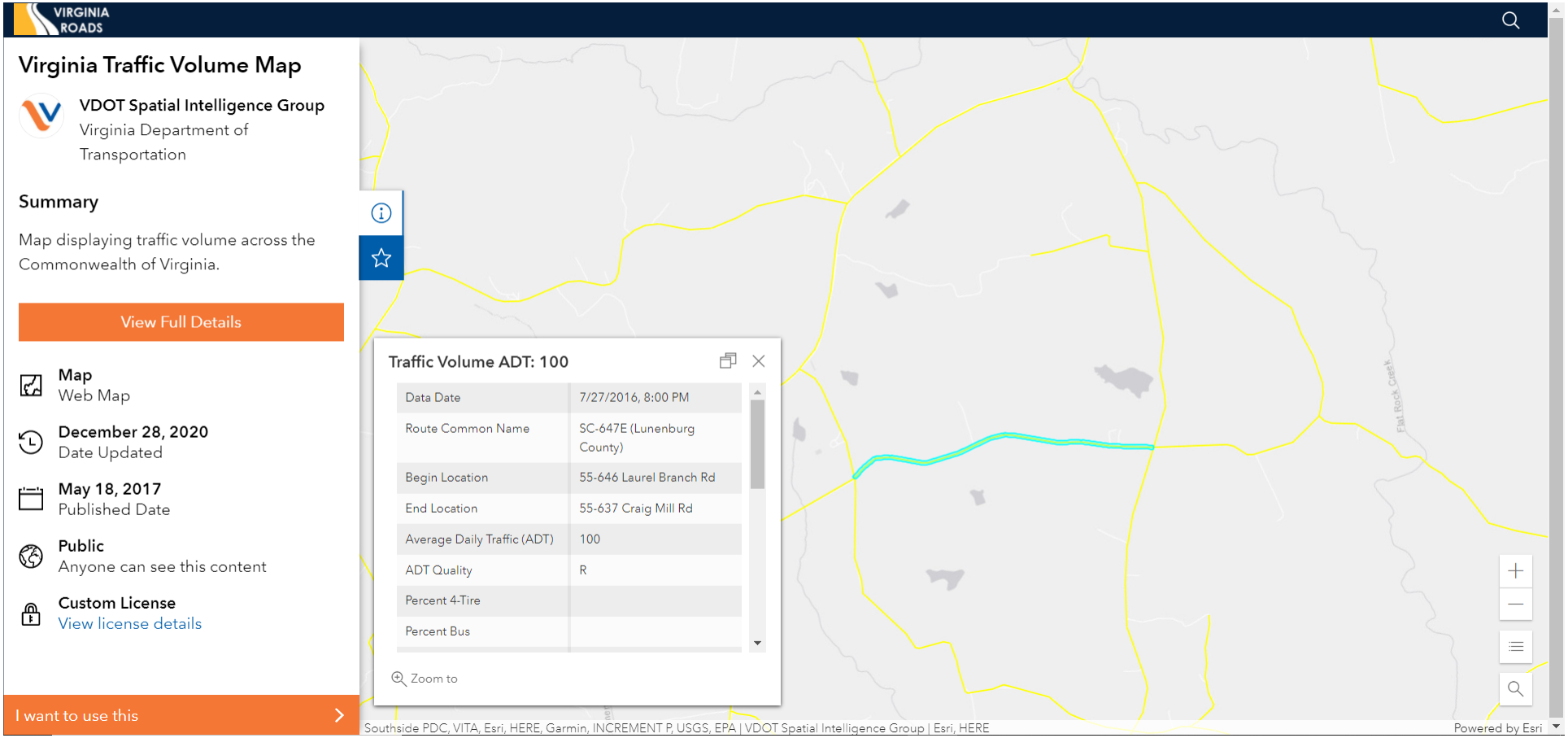
APPENDIX A: VDOT TRAFFIC VOLUME DATA

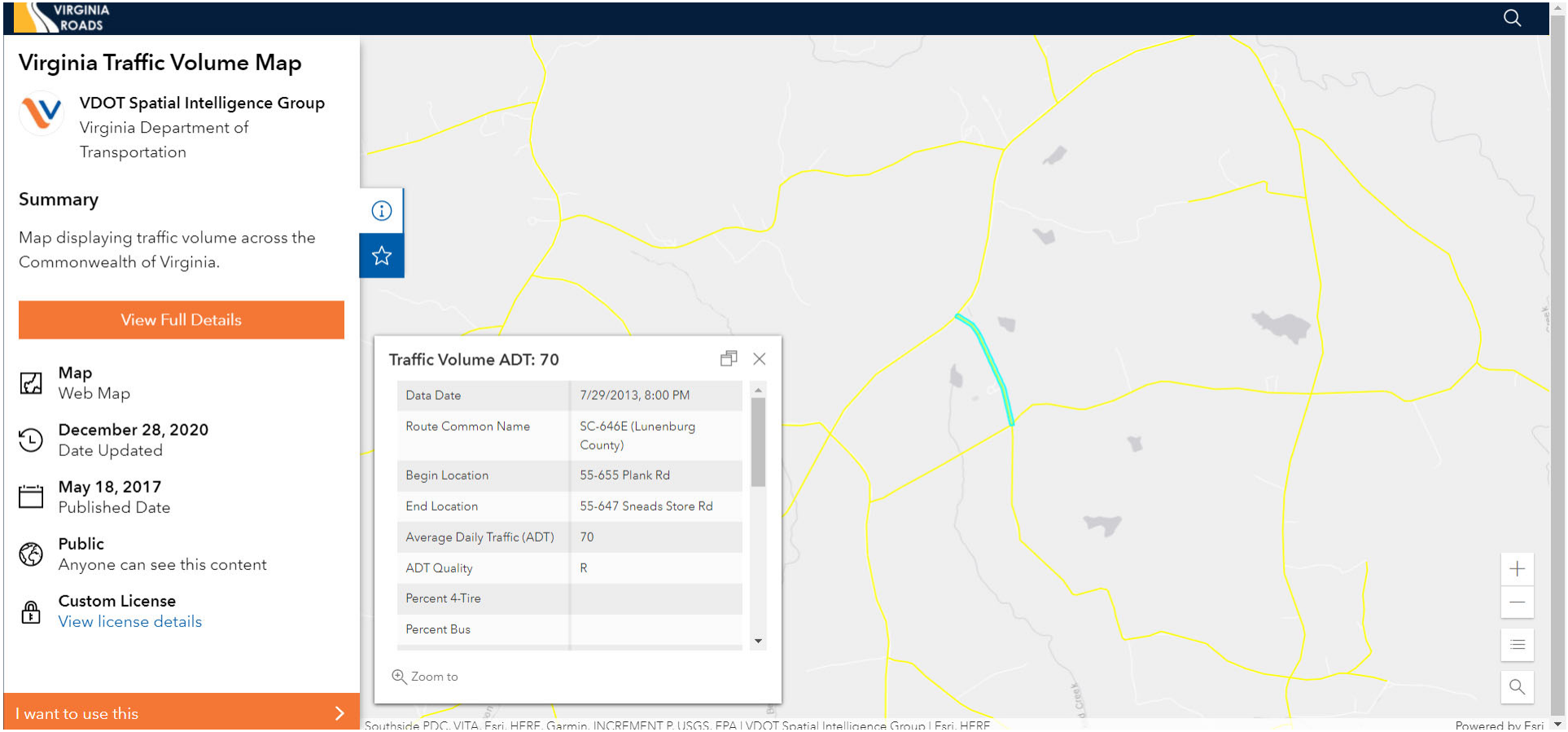

VIRGINIA ROADS
Virginia Traffic Volume Map
VDOT Spatial Intelligence Group
Virginia Department of Transportation
Summary
Map displaying traffic volume across the Commonwealth of Virginia.
View Full Details
Map
Web Map
December 28, 2020
Date Updated
May 18, 2017
Published Date
Public
Anyone can see this content
Custom License
View license details
I want to use this
Traffic Volume ADT: 1,100
Data Date 12/31/2019, 7:00 PM
Route Common Name SC-637N (Lunenburg County)
Begin Location 55-655 Plank Rd
End Location 55-1129 Forest Hill Dr
Average Daily Traffic (ADT) 1,100
ADT Quality G
Percent 4-Tire 93.66
Percent Bus 1.57
Zoom to
Powered by Esri

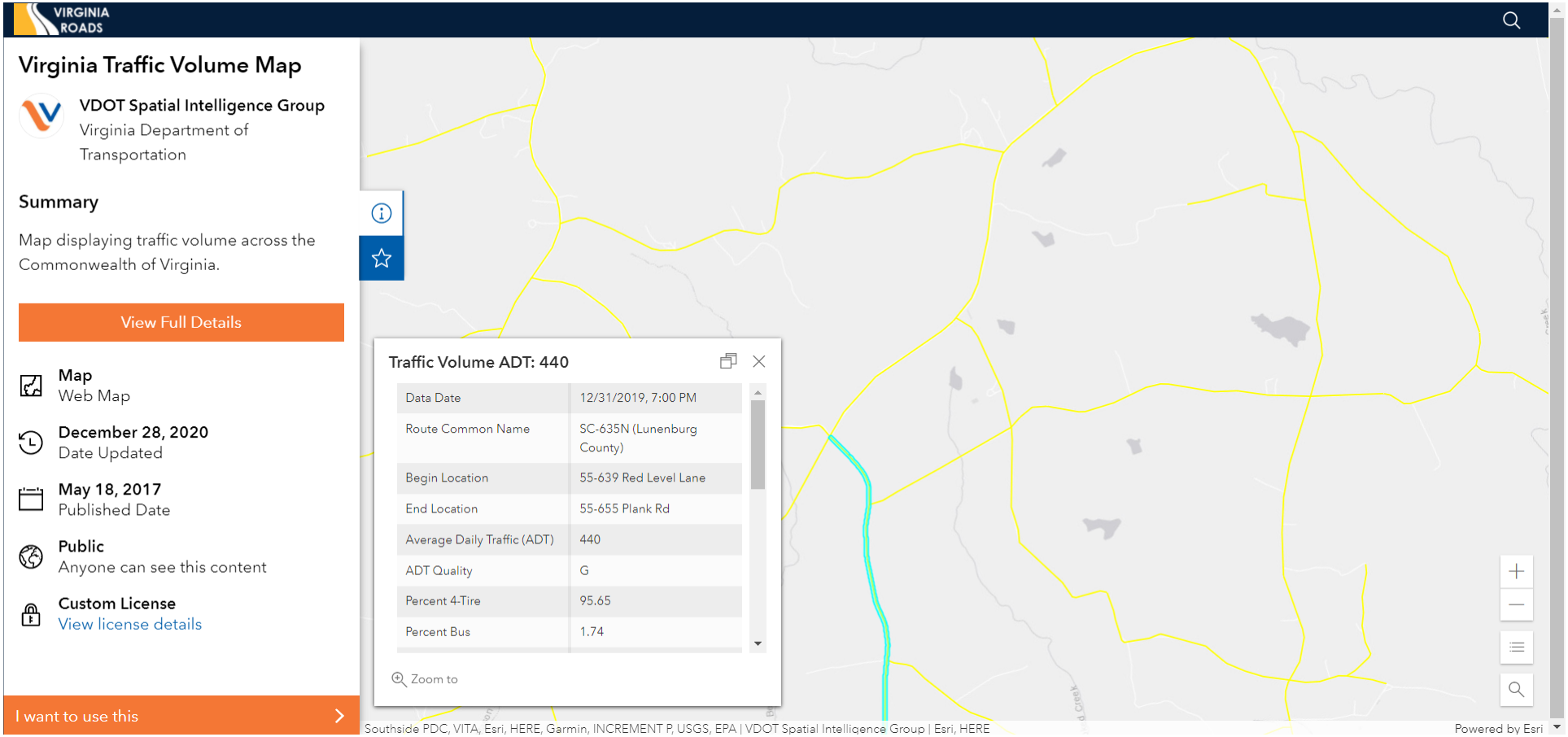

VIRGINIA ROADS
Virginia Traffic Volume Map
VDOT Spatial Intelligence Group
Virginia Department of Transportation
Summary
Map displaying traffic volume across the Commonwealth of Virginia.
View Full Details
Map
Web Map
December 28, 2020
Date Updated
May 18, 2017
Published Date
Public
Anyone can see this content
Custom License
View license details
I want to use this
Traffic Volume ADT: 540
Data Date 12/31/2019, 7:00 PM
Route Common Name SC-655N (Lunenburg County)
Begin Location 55-635 N, Oral Oaks Rd
End Location 55-637 Craig Mill Rd
Average Daily Traffic (ADT) 540
ADT Quality G
Percent 4-Tire 95.03
Percent Bus 2.62
Zoom to
Southside PDC, VITA, Esri, HERE, Garmin, INCREMENT P, USGS, EPA | VDOT Spatial Intelligence Group | Esri, HERE
Powered by Esri

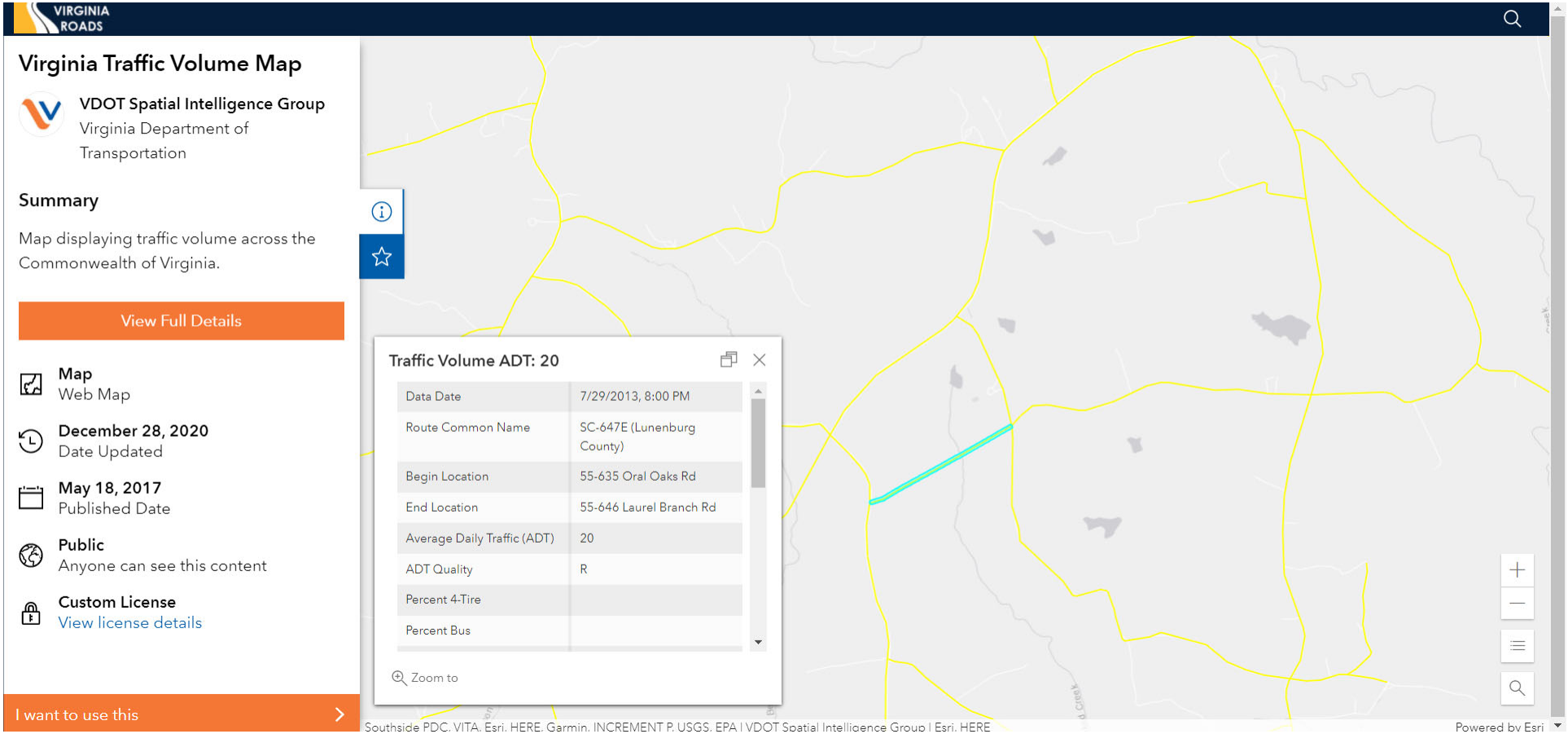

VIRGINIA ROADS
Virginia Traffic Volume Map
VDOT Spatial Intelligence Group
Virginia Department of Transportation
Summary
Map displaying traffic volume across the Commonwealth of Virginia.
View Full Details
Map
Web Map
December 28, 2020
Date Updated
May 18, 2017
Published Date
Public
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I want to use this
Traffic Volume ADT: 580
Data Date 12/31/2019, 7:00 PM
Route Common Name SC-637N (Lunenburg County)
Begin Location 55-647 Sneads Store Rd
End Location 55-655 Plank Rd
Average Daily Traffic (ADT) 580
ADT Quality G
Percent 4-Tire 92.98
Percent Bus 1.10
Zoom to
PLANK RD
HILLTOP RD
Southside PDC, VITA, Esri, HERE, Garmin, INCREMENT P, USGS, EPA | VDOT Spatial Intelligence Group | Esri, HERE
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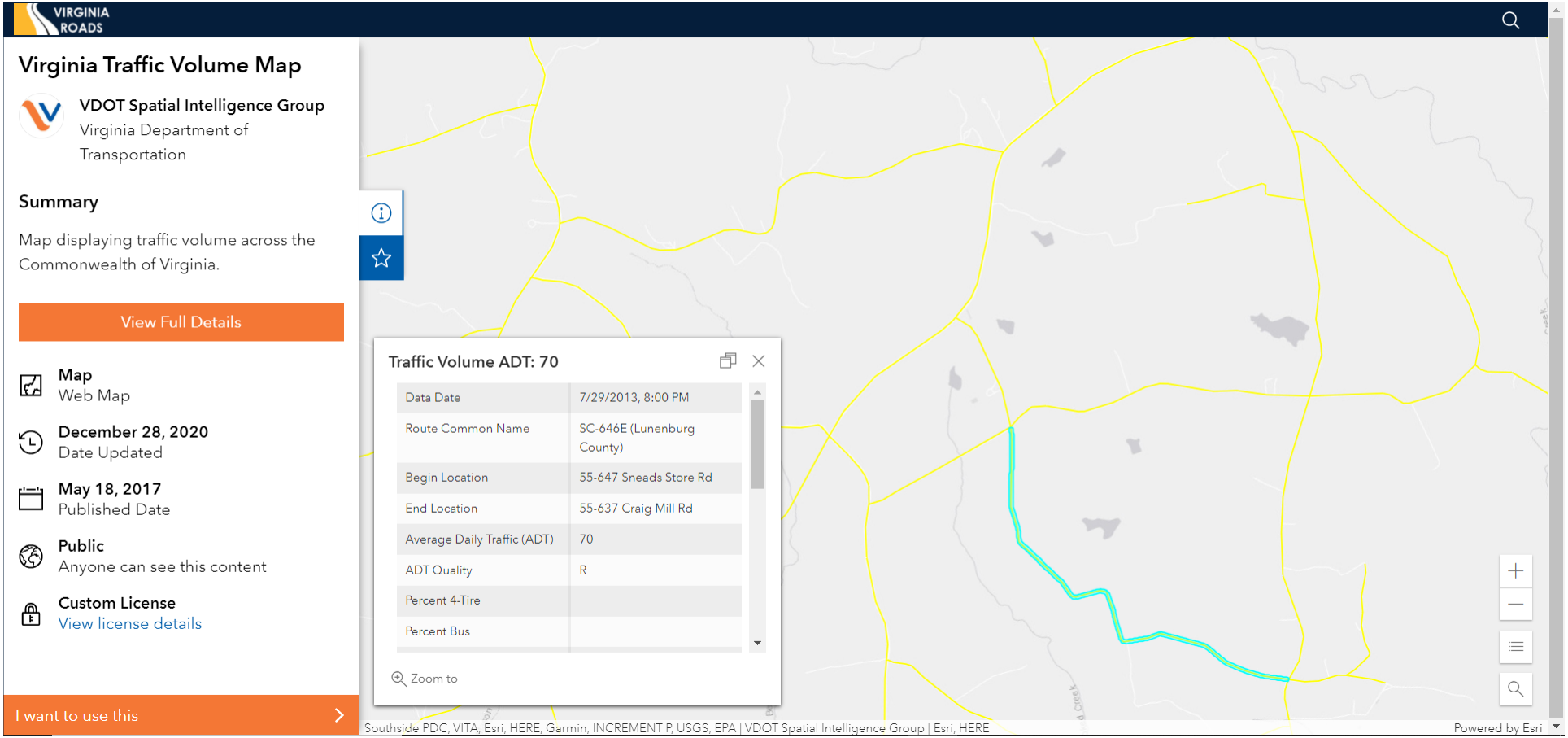

VIRGINIA ROADS
Virginia Traffic Volume Map
VDOT Spatial Intelligence Group
Virginia Department of Transportation
Summary
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View Full Details
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Web Map
December 28, 2020
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May 18, 2017
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I want to use this
Traffic Volume ADT: 40
Data Date 9/16/2013, 8:00 PM
Route Common Name SC-713E (Lunenburg County)
Begin Location Dead End
End Location 55-637 Craig Mill Rd
Average Daily Traffic (ADT) 40
ADT Quality R
Percent 4-Tire
Percent Bus
Zoom to
PLANK RD
Southside PDC, VITA, Esri, HERE, Garmin, INCREMENT P, USGS, EPA | VDOT Spatial Intelligence Group | Esri, HERE
Powered by Esri

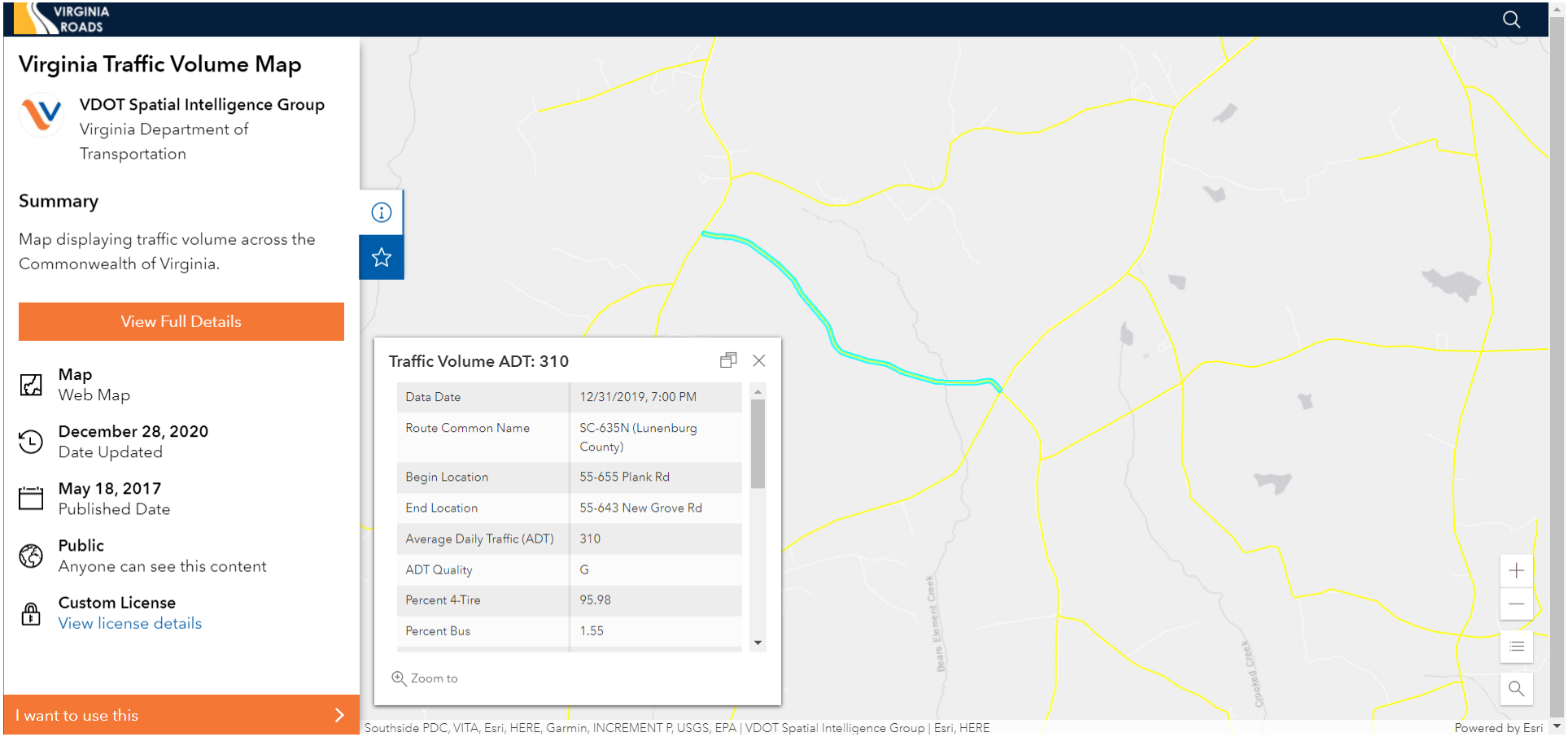

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VDOT Spatial Intelligence Group
Virginia Department of Transportation
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May 18, 2017
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I want to use this
Traffic Volume ADT: 100
Data Date 7/27/2016, 8:00 PM
Route Common Name SC-647E (Lunenburg County)
Begin Location 55-646 Laurel Branch Rd
End Location 55-637 Craig Mill Rd
Average Daily Traffic (ADT) 100
ADT Quality R
Percent 4-Tire
Percent Bus
Zoom to
Flat Rock Creek
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Traffic Volume ADT: 70
Data Date 7/29/2013, 8:00 PM
Route Common Name SC-646E (Lunenburg County)
Begin Location 55-655 Plank Rd
End Location 55-647 Sneads Store Rd
Average Daily Traffic (ADT) 70
ADT Quality R
Percent 4-Tire
Percent Bus
Zoom to
Southside PDC, VITA, Esri, HERE, Garmin, INCREMENT P, USGS, EPA | VDOT Spatial Intelligence Group | Esri, HERE
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Traffic Volume ADT: 440
Data Date 12/31/2019, 7:00 PM
Route Common Name SC-635N (Lunenburg County)
Begin Location 55-639 Red Level Lane
End Location 55-655 Plank Rd
Average Daily Traffic (ADT) 440
ADT Quality G
Percent 4-Tire 95.65
Percent Bus 1.74
Zoom to
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Virginia Department of Transportation
Summary
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Traffic Volume ADT: 20
Data Date 7/29/2013, 8:00 PM
Route Common Name SC-647E (Lunenburg County)
Begin Location 55-635 Oral Oaks Rd
End Location 55-646 Laurel Branch Rd
Average Daily Traffic (ADT) 20
ADT Quality R
Percent 4-Tire
Percent Bus
Zoom to
Southside PDC, VITA, Esri, HERE, Garmin, INCREMENT P, USGS, EPA | VDOT Spatial Intelligence Group | Esri, HERE
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Virginia Traffic Volume Map
VDOT Spatial Intelligence Group
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Map
Web Map
December 28, 2020
Date Updated
May 18, 2017
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Traffic Volume ADT: 70
Data Date 7/29/2013, 8:00 PM
Route Common Name SC-646E (Lunenburg County)
Begin Location 55-647 Sneads Store Rd
End Location 55-637 Craig Mill Rd
Average Daily Traffic (ADT) 70
ADT Quality R
Percent 4-Tire
Percent Bus
Zoom to
Southside PDC, VITA, Esri, HERE, Garmin, INCREMENT P, USGS, EPA | VDOT Spatial Intelligence Group | Esri, HERE
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VIRGINIA ROADS
Virginia Traffic Volume Map
VDOT Spatial Intelligence Group
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Summary
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View Full Details
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Web Map
December 28, 2020
Date Updated
May 18, 2017
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I want to use this
Traffic Volume ADT: 310
Data Date 12/31/2019, 7:00 PM
Route Common Name SC-635N (Lunenburg County)
Begin Location 55-655 Plank Rd
End Location 55-643 New Grove Rd
Average Daily Traffic (ADT) 310
ADT Quality G
Percent 4-Tire 95.98
Percent Bus 1.55
Zoom to
Beans Element Creek
Cooked Creek
Southside PDC, VITA, Esri, HERE, Garmin, INCREMENT P, USGS, EPA | VDOT Spatial Intelligence Group | Esri, HERE
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APPENDIX B: TRIP GENERATION CALCULATIONS

Peak Construction Workforce Trip Generation Calculations and Assumptions

Proposed Dominion Laurel Branch Solar Facility - Lunenburg County, VA

	Construction Site Driveway Trips				
	Workforce Trips	Non-Heavy Vehicle Deliveries	Heavy Vehicle Deliveries	Total	CALCULATIONS
AM Peak Hour:					
Enter	143	1	2	146	(150 workers x 100% arrive x (100% - 10% carpool x 1 vehicle/2 carpool workers)) + (3 Delivery Vehicles arrive) = 146
Exit	0	1	2	3	(150 workers x 0% depart) + (3 Delivery Vehicles depart) = 3
Total	143	2	4	149	
PM Peak Hour:					
Enter	0	1	2	3	(150 workers x 0% arrive) + (3 Delivery Vehicles arrive) = 3
Exit	143	1	2	146	(150 workers x 100% depart x (100% - 10% carpool x 1 vehicle/2 carpool workers)) + (3 Delivery Vehicles depart) = 146
Total	143	2	4	149	
Weekday Daily:					
Enter	218	5	20	243	(150 workers x 100% arrive in AM x (100% - 10% carpool x 1 vehicle/2 carpool workers)) + (150 workers x 50% return from lunch/errands midday) + (25 Delivery Vehicles arrive) = 243
Exit	218	5	20	243	(150 workers x 100% depart in PM x (100% - 10% carpool x 1 vehicle/2 carpool workers)) + (35 workers x 50% leave for lunch/errands midday) + (25 Delivery Vehicles depart) = 243
Total	436	10	40	486	

Construction Assumption	AM Peak Hour	PM Peak Hour	Off-Peak	Notes
# of Peak Workers On-Site at One Time:	150	150	150	Assume 150 tradespeople per day
% Workers Arriving:	100%	0%	50%	Assumed hours of operation 7am-5pm (may be longer). Peak Hours of adjacent street traffic assumed to occur between is 7am-9am and 4pm-6pm. Therefore, the majority of construction worker traffic is likely to occur outside of the morning peak hour of adjacent street traffic and some may depart after the evening peak hour. However, as a conservative measure, assumed 100 percent of workers arrive after 7am and depart before 6pm. As a conservative measure, assumed half of workforce depart and return once during off-peak times. Assumed none of the workers get picked up/dropped off.
% Workers Departing:	0%	100%	50%	Assumed hours of operation 7am-5pm (may be longer). Peak Hours of adjacent street traffic assumed to occur between is 7am-9am and 4pm-6pm. Therefore, the majority of construction worker traffic is likely to occur outside of the morning peak hour of adjacent street traffic and some may depart after the evening peak hour. However, as a conservative measure, assumed 100 percent of workers arrive after 7am and depart before 6pm. As a conservative measure, assumed half of workforce depart and return once during off-peak times. Assumed none of the workers get picked up/dropped off.
% Carpool[1]:	10.0%	10.0%	0.0%	Assumed 10% carpooling during commuting
Carpool VOR[2]:	2.00	2.00	1.00	Assumed two workers per car during commuting
# Shuttle Trips:	0	0	0	Assumed all workers and deliveries will occur via the construction driveway; no laydown site is proposed
# Truck Deliveries:	2	2	16	Assumed worker hours of operation 7am-5pm and assumed 20 deliveries per day that would be distributed evenly throughout the day.
# Non-Truck Deliveries:	1	1	3	Occasionally, non-heavy vehicle deliveries will occur. For trip generation analysis purposes, assumed 5 deliveries per day. Conservatively assumed some occurs during peak hours of adjacent street traffic.

[1]Enter % per population - formulas above account for VOR

[2]VOR for carpoolers only

NOTE: Assumes an 80 MW AC facility with 9 months of peak construction and 2 to 3 months of ramp-up/ramp-down construction activity

Source: Tetra Tech

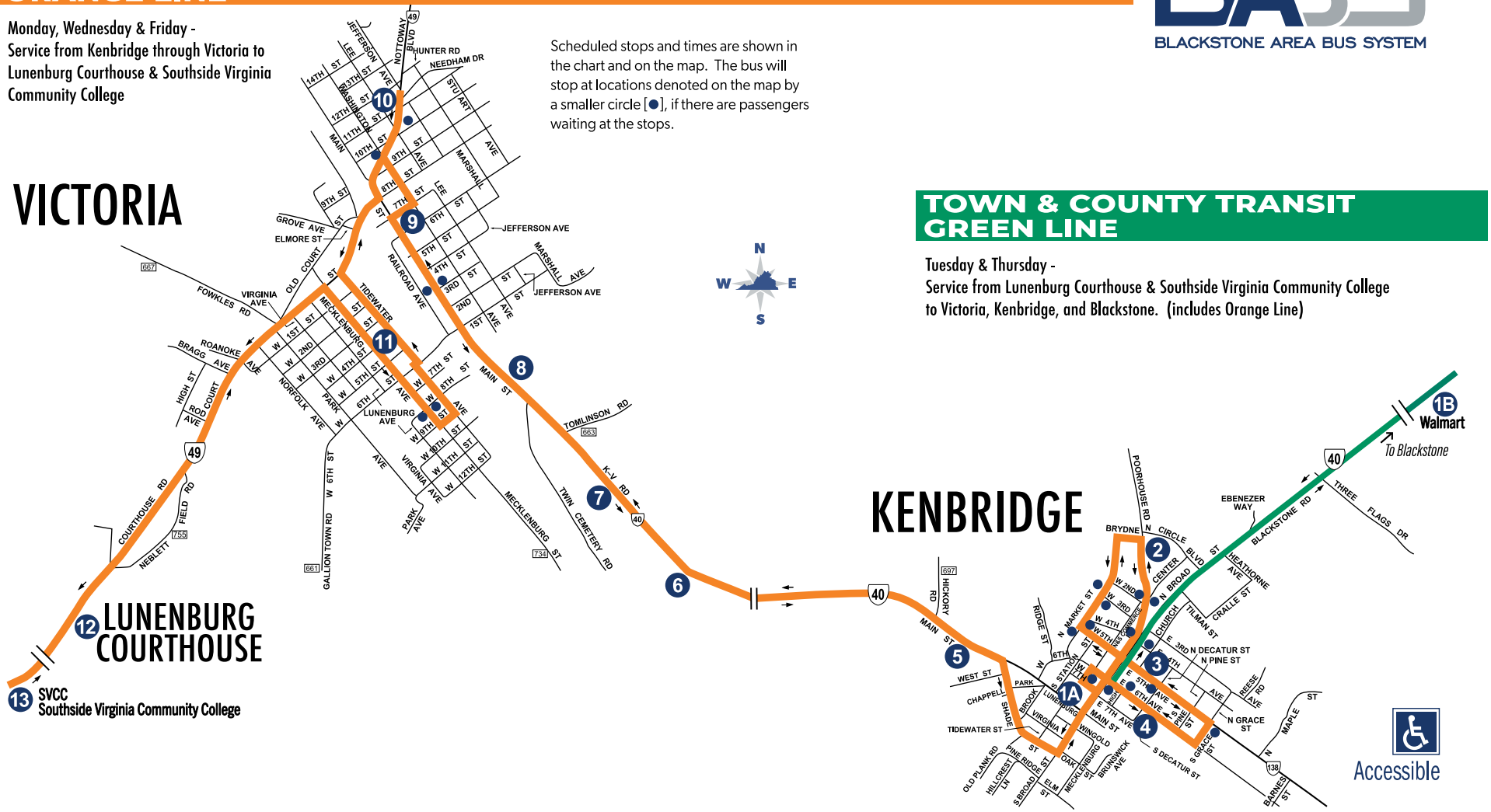
APPENDIX C: PUBLIC TRANSPORTATION INFORMATION

TOWN & COUNTY TRANSIT
ORANGE LINE

Monday, Wednesday & Friday -
Service from Kenbridge through Victoria to Lunenburg Courthouse & Southside Virginia Community College

Scheduled stops and times are shown in the chart and on the map. The bus will stop at locations denoted on the map by a smaller circle [●], if there are passengers waiting at the stops.

BABS
BLACKSTONE AREA BUS SYSTEM



TOWN & COUNTY TRANSIT
GREEN LINE

Tuesday & Thursday -
Service from Lunenburg Courthouse & Southside Virginia Community College to Victoria, Kenbridge, and Blackstone. (includes Orange Line)

Accessible

TOWN & COUNTY TRANSIT

Servicing the County of Lunenburg and the Towns of Kenbridge and Victoria, this route operates from 7:00 AM to 4:15 PM on Monday, Wednesday, Friday, and on Tuesday and Thursday until 4:45 PM. On Tuesday and Thursday this route travels to the Town of Blackstone.

ORANGE LINE
Mon, Wed, Fri

	AM						PM			
1A W. 7th St. & Broad St.	7:00	9:00	–	10:15	–	11:30	1:00	2:20	–	4:15
2 Kenbridge Elementary	7:02	8:53	9:02	10:13	10:17	11:27	1:02	2:13	2:22	4:13
3 Mildred's Meals	7:04	8:51	9:04	10:11	10:19	11:25	1:04	2:11	2:24	4:11
4 Kenbridge Family Practice	7:06	8:49	9:06	10:09	10:21	11:23	1:06	2:09	2:26	4:09
5 Southside Shopping Center	7:10	8:45	9:10	10:05	10:25	11:19	1:10	2:05	2:30	4:05
6 Community Health Center	7:15	8:40	9:15	10:00	10:30	11:14	1:15	2:00	2:35	4:00
7 Village Estates Apts.	7:18	8:37	9:18	9:58	10:32	11:12	1:18	1:58	2:37	3:58
8 Food Lion, Victoria	7:20	8:35	9:20	9:55	10:35	11:09	1:20	1:55	2:40	3:55
9 Victoria Public Library	7:22	8:33	9:22	9:53	10:37	11:07	1:22	1:53	2:42	3:53
10 Vaughn's Grocery	7:25	8:30	9:25	9:50	10:40	11:00	1:25	1:50	2:45	3:50
11 Victoria Place Apts.	7:28	8:27	9:28	9:47	10:43	10:59	1:28	1:47	2:48	3:47
12 Lunenburg Co. Courthouse	7:35	8:20	9:40	–	10:50	–	1:40	–	2:55	3:40
13 SVCC	8:00	–	–	–	–	–	–	–	3:25	–

GREEN LINE
Tues, Thurs

	AM						PM			
1B Walmart, Blackstone	–	–	–	10:35	–	–	–	2:35	–	–
1A W. 7th St. & Broad St.	7:00	9:00	–	10:15	10:50	12:10	1:00	2:20	2:50	4:45
2 Kenbridge Elementary	7:02	8:53	9:02	10:13	10:52	12:08	1:02	2:13	2:52	4:43
3 Mildred's Meals	7:04	8:51	9:04	10:11	10:54	12:06	1:04	2:11	2:54	4:41
4 Kenbridge Family Practice	7:06	8:49	9:06	10:09	10:56	12:04	1:06	2:09	2:56	4:39
5 Southside Shopping Center	7:10	8:45	9:10	10:05	11:00	12:00	1:10	2:05	3:00	4:35
6 Community Health Center	7:15	8:40	9:15	10:00	11:05	11:55	1:15	2:00	3:05	4:30
7 Village Estates Apts.	7:18	8:37	9:18	9:58	11:07	11:52	1:18	1:58	3:07	4:28
8 Food Lion, Victoria	7:20	8:35	9:20	9:55	11:10	11:49	1:20	1:55	3:10	4:25
9 Victoria Public Library	7:22	8:33	9:22	9:53	11:12	11:47	1:22	1:53	3:12	4:23
10 Vaughn's Grocery	7:25	8:30	9:25	9:50	11:15	11:40	1:25	1:50	3:15	4:20
11 Victoria Place Apts.	7:28	8:27	9:28	9:47	11:18	11:37	1:28	1:47	3:18	4:17
12 Lunenburg Co. Courthouse	7:35	8:20	9:40	–	11:30	–	1:40	–	3:25	4:10
13 SVCC	8:00	–	–	–	–	–	–	–	3:50	–

APPENDIX D: CONSTRUCTION MANAGEMENT PLAN

1.1 Introduction

Virginia Electric and Power Company (d/b/a Dominion Energy Virginia)("Dominion") is proposing an 80 MWac utility-scale solar facility known as "Laurel Branch Solar" (the "Project") in Lunenburg County, Virginia (the "County"). The project will be located to the southwest of the Town of Kenbridge on 2,189 acres of land along Routes 635 (Oral Oaks Road), 646 (Laurel Branch Road), 647 (Sneads Store Road), 655 (Plank Road) and637 (Craig Mill Road) and Hilltop Road in Lunenburg County, Virginia. Project construction is projected to begin the second quarter of 2023 and last approximately 12 months with nine months of typical construction and two to three months of ramp up/ramp down activity. Peak construction activity is anticipated to occur over a two to three-month period.

1.2 Construction Traffic Haul Routes

The construction of the proposed solar facility will require large vehicle deliveries for a variety of materials that may include concrete, solar panels, earth materials, building materials, etc. Tetra Tech identified potential truck haul routes between the site parcels and the regional roadway system for these larger vehicles. For purposes of this assessment, it was assumed that the deliveries would originate from three primary geographical areas: Richmond, VA, Lynchburg, VA, and Raleigh, NC. Factors considered in developing potential truck haul routes are summarized below. Separate inbound and outbound travel routes are provided where appropriate.

- Prioritize designated Surface Transportation Assistance Act (STAA) truck routes from the VDOT database.
- Avoid roadway segments having bridge height and weight limitations based on a review of the VDOT database.
- Minimize impacts to schools, traffic signals, and areas with pedestrian activity.
- Minimize turns at locations with geometric limitations.

The potential regional truck haul routes are shown in Figure 1. The potential local truck haul routes to/from the proposed site driveways are shown in Figure 2.

When accessing the site via Route 406 to the north, all construction traffic (employees, subcontractors, delivery companies, etc.) associated with the project will be instructed to use N West Avenue (Route 606) when entering the site and Cox Road when exiting the site. This will minimize disruptions to downtown Blackstone and avoid potential safety issues with the limited queue storage for Route 406 westbound left-turn movements onto Cox Road.

The final approved truck route map will be distributed to all construction employees and subcontractors to ensure the appropriate routes will be used to access the site. Signage is proposed to guide project-related traffic and make existing roadway users aware of the increased traffic levels and trucking activity during the construction phase. A preliminary signage plan is presented in the Attachments. The signage plan will be subject to review and approval by the Virginia Department of Transportation (VDOT).

1.3 Construction Office, Staging and Employee Parking

The project is currently at the conceptual level. It is anticipated that parking for the construction-related activity (employees and deliveries) will occur entirely on-site. laydown yards are currently proposed all of which will be located within the project boundaries. The laydown yards are typically dimensioned 350 feet by 55 feet. The layout and configuration of the laydown yards' appurtenances such as construction trailers, parking layout, porta johns, dumpsters, material storage and drop-off, etc. will be determined during the construction level plan preparation. The proposed signage plan will also be updated, if needed, during the development of the construction-level plans.

A central parking field is not proposed since the project will consist of numerous solar panel pods. Employees are expected to park at the pod in which they are assigned to on each day of construction. The pods will be accessed via 28 proposed driveways including three driveways on Oral Oaks Road, six driveways on Laurel Branch Road, three driveways on Plank Road, nine driveways on Sneads Store Road, one driveway on Craig Mill Road and six driveways on Hilltop Road. Delivery vehicles will also use the proposed driveways to deliver materials. The proposed signage plan provided in the Attachments includes warning signs to alert motorists of slower moving heavy vehicles in the area.

The project will consist of three phases: construction, O&M, and decommissioning. The highest volume of site-related trips will occur during the peak construction phase of the project. A Transportation Assessment was prepared as part of the Lunenburg County conditional use permit (CUP) review process which included a detailed vehicle trip generation analysis for the peak construction activity anticipated for the project. A summary of the vehicle trip generation estimates provided in the May 2022 Transportation Assessment is provided in Table 1 for reference. These estimates conservatively assume that all construction workers would arrive within the same hour and depart within the same hour. Additionally, there are several routes connecting the site to the regional roadway system thereby reducing impacts to any single roadway segment or intersection. Peak construction activities are currently anticipated to occur for a period of approximately two to three months. The remainder of the construction period is anticipated to generate fewer vehicle trips.

Table 1 Trip Generation Summary – Peak Construction Period

Time Period/ Direction	Project Trips			
	Workforce Trips[1]	Non-Heavy Vehicle Deliveries[2]	Heavy Vehicles[3]	Total
Weekday AM Peak Hour				
Enter	143	1	2	146
Exit	0	1	2	3
Total	**143**	**2**	**4**	**149**
Weekday PM Peak Hour				
Enter	0	1	2	3
Exit	143	1	2	146
Total	**143**	**2**	**4**	**149**
Weekday Daily				
Enter	218	5	20	243
Exit	218	5	20	243
Total	**436**	**10**	**40**	**486**

1 Assumed 150 construction workers per day. Conservatively assumed trips overlap with adjacent street peaks. Peak construction activities are currently anticipated to occur for a period of approximately two to three months. The remainder of the construction period is anticipated to generate fewer vehicle trips.
2 Assumed 5 deliveries per day with 40 percent of trips occurring during peak hours.
3 Assumed 20 deliveries per day spread evenly throughout day.

Over the course of the approximate 12-month construction schedule, the volume of daily truck counts will vary, but is anticipated to be up to 20 trucks per day during peak construction days.

1.4 Public Road Evaluation: Pre- and Post-Construction

The project commits to conducting a photographic and video evaluation of the condition of the existing secondary roadways immediately leading to the site as shown in Figure 3. The project is anticipated to begin construction during second quarter 2023. The pre-construction road evaluation on the roadways shown in Figure 3 will be conducted closer to the beginning of the project's construction activity. The specific date of the evaluation will be determined in consultation with VDOT staff during the construction plan preparation phase.

TAB I

Decommissioning and Reclamation Plan

Laurel Branch Solar Project

Decommissioning and Reclamation Plan

May 20, 2022

Prepared for

Lunenburg County, Virginia

Prepared by

Dominion Energy®

TETRA TECH

4101 Cox Road, Suite 120
Glen Allen, VA 23060

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Appendix A: Decommissioning Estimate

Acronyms and Abbreviations

MW	megawatt
PV	photovoltaic
Project	Laurel Branch Solar Project
DC	direct current
AC	alternating current
SCADA	Supervisory Control and Data Acquisition
BMP	best management practice
bgs	below ground surface
SF	square feet
LF	linear feet
ea	each
NA	not applicable

1.0 INTRODUCTION

Dominion Energy Virginia ("Dominion") will construct, own, and operate the approximately 80-megawatt (MW) capacity photovoltaic ("PV") Laurel Branch Solar Project ("Project"). The Project will encompass approximately 791 acres in Lunenburg County, on a portion of twenty-five (25) parcels in Lunenburg County, Virginia (the "County") totaling approximately 2,189 acres. Dominion provides this draft Decommissioning and Reclamation Plan is provided to comply with the County's Ordinance for Solar Energy Facilities (the "Solar Ordinance").[1] The required Decommissioning Estimate (See Section 5) is provided as Appendix A.

Prior to operation, a final Decommissioning and Reclamation Plan (the "Final Plan") will be provided to the Zoning Administrator for review and approval. Once approved, the Final Plan and the Decommissioning Estimate will be reviewed once every five (5) years by an independent third party.

2.0 PROJECT BACKGROUND

The Project is located to the southwest of the Town of Kenbridge, between Plank Road and Sneads Store Road and along Oral Oaks Road. The solar facility will consist of approximately 176,094 solar modules, associated solar module racking system and foundations, 96 solar inverters, 22 medium voltage step-up transformers, and associated electrical equipment and materials necessary to collect the energy produced. The facility will be secure, surrounded by a 7-foot tall chain link and barbed wire fence (i.e. 6-foot tall plus 1 foot of barbed wire). The anticipated life of the Project is 35 years, based on typical life spans of solar facilities.

3.0 EXISTING SITE CONDITIONS

The Project lease will encompass approximately 2,189 acres. Land use prior to development was primarily timber and agriculture. The Project study area consists of moderate topography as it lies on multiple ridges and stream valleys. Neighboring land uses include timbering and agriculture.

4.0 DESCRIPTION OF WORK TO CONSTRUCT LARGE SCALE SOLAR FACILITY

4.1 Major Activities

4.1.1 Cable Trenching

Trenching requirements for the electrical cables and telecommunication lines would consist of a trench up to approximately three feet deep and one to four feet wide. The trenches would be filled with base material above and below the conductors and communications lines to ensure adequate thermal conductivity and electrical insulating characteristics. The topsoil from trench excavation would be set aside before the trench is backfilled and would ultimately comprise the uppermost layer

[1] See Solar Ordinance Section 4.3.e (Draft Decommissioning and Reclamation Plan).

of the trench. Any excess material from the foundation and trench excavations will be incorporated onsite and will not be exported.

4.1.2 Foundations

The solar modules will be installed on steel racking structures. The posts for the racking structures will be driven approximately 9 feet into the ground using a post-driving machine. The solar inverters and medium voltage step-up transformers will be set on concrete pads, which are typically 12 to 18 inches deep.

4.1.3 Modules Racking System

Galvanized beams and other structural members will be bolted to the foundation posts of the racking system. The solar modules will then be mounted on these structural members using different pieces of hardware.

4.1.4 Solar Inverters and Medium Voltage Step-Up Transformers

The solar inverters and medium voltage step-up transformers will be offloaded from delivery trucks and placed on concrete foundations. These pieces of equipment will be bolted to the concrete foundations. The underground electrical and communication cables will be routed and connected to these pieces of equipment.

4.2 System Overview and Components

Photovoltaic is a solar energy technology. Solar energy technology refers to the generation of electrical current from sun light. PV solar modules absorb sunlight and use silicone cells to generate electrical current. The PV modules are mounted on a single axis tracking racking system, which allows the modules to track the sun throughout the day. System components are described below.

4.2.1 Combiner Boxes

Combiner boxes allow for the paralleling of multiple conductors/feeder inputs and allow for fewer outputs.

4.2.2 Inverters

Inverters are high-speed switching and power conversion devices which transform direct current (DC) to alternating current (AC). In the case of the Project, there are 96 solar inverters.

4.2.3 Transformers, Recloser, Disconnect Switch

Transformers are an apparatus for reducing or increasing the voltage of an alternating current. There are 22 medium voltage step-up transformers on this Project for distribution to the electrical grid. The Recloser and Disconnect Switches are protection devices that allow for isolation of the solar farm from the wider distribution system.

4.2.4 Underground Cables and Conduits

Underground power (AC and DC) cables, communication and grounding cables on the Project will be either direct buried or placed in conduit. The cables will be rated in accordance with their application.

The cables will be located in a conduit as per code when transitioning from below grade to above grade.

4.2.5 Access and Internal Roads

The Project will have internal roads to provide access to facility equipment. Internal access roads will be constructed using an aggregate base over compacted native soils.

4.2.6 Buildings and Enclosures

The Project will not contain any permanent occupied building structures after construction is complete and the plant is operating. The site may have storage containers used for storing spare parts and materials, but these will not be affixed to a foundation. Except for periodic maintenance, the site is unmanned.

4.2.7 Security Fencing

To ensure security of the facility, the property will be fenced with six-foot-high chain link fencing topped by one foot of three-stranded barbed wire. Access to the site will be controlled via locked access gates.

4.2.8 Project Life

The facility has an estimated useful life of at least 35 years with an opportunity for extension depending on equipment replacements or refurbishments.

4.2.9 SCADA and Communications Equipment Enclosure

Supervisory Control and Data Acquisition (SCADA) refers to the entire communication and control components. The SCADA equipment for the solar farm will be mounted inside of an enclosure that measures approximately 24 feet long by 10.5 feet wide. The enclosure is affixed to a foundation or mounted on piles, depending on soil conditions. The SCADA system includes an internet router, server(s), a firewall, battery backup, and other hardware to monitor the solar farm.

5.0 DECOMMISSIONING PROCESS

Decommissioning consists of the removal of above- and below-ground facility components, management of excess wastes and materials, and the restoration of ground surface irregularities and herbaceous vegetation. As per the lease agreement with the landowner, the Project area is to be restored in a manner consistent with its condition prior to facility construction. Decommissioning activities are expected to take between 10 to 12 months. The estimated deconstruction schedule is as follows: Site Preparation - 2 weeks; Equipment Removal - 8 to 10 months; Site Restoration and Waste Management - 1 to 2 months.

Removal of all physical improvements will be done in accordance with applicable regulations of the time. Prior to initiating decommissioning, notice will be provided to the Zoning Administrator by certified mail of the proposed date of discontinued operations and plans for removal. An estimated construction schedule and a traffic study modelling the decommissioning processes will be provided

for review by County staff (in cooperation with the Virginia Department of Transportation if deemed necessary).

5.1 Site Preparation

Site preparation activities include installing erosion and sediment control best management practices (BMPs) and vegetation clearance. Prior to decommissioning, the site will be visually inspected to determine if vegetation clearance is needed to access equipment. Appropriate temporary erosion and sedimentation control (construction-related) BMPs will be used during the decommissioning phase of the Project. The BMPs will be inspected on a regular basis to ensure proper erosion and sediment control during the decommissioning effort.

5.2 Equipment Removal

After the facility has been disconnected and isolated from the utility power grid and all electrical components have been disconnected within the facility, equipment will be dismantled and removed. As described in this section, removal of all solar electric systems, buildings, cabling, electrical components, security barriers, roads, foundations, pilings, and any other associated facilities shall be removed. Decommissioning will be undertaken by licensed subcontractors using similar techniques and equipment to those used in the construction of the Project.

Primary equipment and materials to be removed as part of decommissioning are included in the following Table 1.

Table 1. Primary Equipment to be Removed

Component	Quantity
Solar Modules (71.2 lb ea)	176,094 ea
Steel Trackers (101 LF)	789 ea
Steel Trackers (202 LF)	1,236 ea
Steel Piles	13,000 ea
MV cable length	10,000 LF
Inverters and foundations	96 ea
Transformers and foundations	22 ea
Substation footprint	55,000 SF
Access Road	30,968 LF
Perimeter Fence	178,572 LF

Equipment removal of primary components is described further in the following subsections:

5.2.1 Disassembly and Removal of Solar Modules

Removal of approximately 176,094 solar modules will be completed by manual labor. The module components will be mechanically disconnected from the solar array and transferred to a staging location for transporting to an offsite facility. Panels suitable for reuse will be sold for market value and panels not suitable for reuse will be processed at an offsite facility for recycling. The Project will use silicon-based solar PV modules. The modules will be electrically and mechanically disconnected from the solar array and packaged for shipment per manufacturer's requirements.

5.2.2 Disassembly and Removal of Tracking System

The racking structure consists of approximately 2,025 steel trackers mounted on approximately 13,000 steel piles. The trackers total 329,361 feet in length. All of these materials can be recycled and/or reused. Disassembly and removal of the racking structure will be performed manually.

5.2.3 Removal of Steel Piles/Posts

Approximately 13,000 steel piles associated with the tracking system are estimated for removal. Steel piles will be completely removed by hoisting with a piece of heavy equipment. Steel piles are assumed to be 15 feet, imbedded to a depth of 9 feet below ground surface (bgs). Steel components will be segregated and transferred to a staging location for offsite recycling.

5.2.4 Removal of Inverters and Transformers

Twenty-two transformers and 96 inverters and associated concrete foundations will be removed and transferred to a staging location for offsite disposal or recycling at an approved facility.

5.2.5 Removal of Substation

The substation will be mechanically disassembled with the use of support equipment for hoisting components. Steel will be segregated for offsite recycling or sold for scrap. The substation site restoration will include the removal of the gravel and concrete foundation, soil preparation, grading, and seeding.

5.2.6 Below-ground Electrical Cables

Electrical cabling is typically installed underground, installed in aboveground cable trays, or attached to the module racking structure. It is assumed that all cabling and conduit will be installed at a minimum depth of 4 feet bgs. Below ground conduit and cable will be removed.

5.2.7 Above-ground Transmission Lines and Poles

The Project does not include an above ground transmission line. As such, removal of overhead transmission lines and poles are not included in this Plan.

5.2.8 Access Road Excavation and Removal

Within the Project limits, access roads will be removed and restored as part of decommissioning. The Project includes an estimated 30,968 linear feet of access roads. Gravel associated with the access roads will be stockpiled for recycling or reuse. Underlying geotextile fabric will be collected for offsite disposal.

5.2.9 Perimeter Fence Removal

Approximately 178,572 linear feet of steel fencing will be removed from the site. Gates will be removed as whole units and welded wire fabric will be cut to manageable sized pieces and staged. Fencing will be assessed prior to dismantling to determine if the fencing can be stored and reused on other construction sites. If reuse is not deemed practical, the fencing will be dismantled and recycled or sold for scrap.

The following describes the methods for dismantling and removal of various Project Components:

PV arrays and associated equipment

- Disconnect all wiring, cables and electrical interconnections.
- Remove PV arrays from racks.
- Dismantle and remove all racks and extract all pile-drive support structures (see Equipment foundations).

Inverter units

- Remove inverter units from bases.
- Remove concrete foundations (see Equipment foundations).

Generation Tie-Line cables

- All above ground cables will be removed and transported off-site to an approved recycling facility or landfill.
- Underground cable runs will be removed in their entirety. Removed cable will be recycled or taken to a landfill as appropriate.

Equipment foundations

- The inverter units and pile-drive support structures for the solar arrays will have foundations that require removal. Other underground infrastructure requiring removal may include concrete protective electrical structures. Any foundation structures and below ground concrete will be fully removed from the ground and the affected area will be backfilled as necessary with native soil.

Access roads

- Landowners shall be consulted to determine if any access roads are desired to remain in place for future use.
- Should roads be removed, all aggregate and other underlying materials (e.g. geotextile fabric) will be excavated.
- As necessary, all compacted areas will be disced or tilled to restore soil densities consistent with the surrounding area. Topsoil will be distributed to provide substantially similar growing media as was present within the areas prior to site disturbance.

Other components

- Fences, gates, and guards will be removed.

5.3 Site Restoration

The current Project area is primarily used for agricultural purposes. The area will be restored to a similar state such that this use could be resumed. Any land used for agricultural purposes prior to construction of the Project will be returned to a tillable condition so that it is suitable for agricultural or forestal uses. The site shall be graded and re-seeded or replanted within twelve (12) months of removal of solar facilities to restore it to as natural a pre-development condition as possible. Re-grading and re-seeding or replanting shall be initiated within a six-month period of removal of equipment. Any exception to site restoration, such as leaving access roads in place or re-seeded or

replanted must be requested by the landowner in writing, and this request must be approved by the Board of Supervisors.

5.4 Managing Excess Materials and Waste

A variety of excess materials and wastes will be generated during decommissioning. To the extent practicable, Dominion will coordinate with manufacturers, contractors, waste firms, and other entities to maximize the reuse and/or recycling of materials. Those materials deemed reusable/recyclable will be transported offsite and managed at approved receiving facilities following all applicable federal, state, and county waste management regulations of the time.

All residual waste will be removed by a licensed contractor and transported to an approved landfill. No waste materials will remain on the Project site.

The following main waste streams will be generated from decommissioning the solar facility:

5.4.1 PV Panels

The Project will coordinate the collection and reuse and/or recycling of the PV modules and for minimizing the potential for modules to be discarded. If there is no possibility for reuse, PV panels will either be returned to the manufacturer for appropriate recycling/disposal or will be transported to a recycling facility where the glass, metal and semiconductor will be recycled. Best management practices at the time of decommissioning shall be utilized.

5.4.2 Racking and Supports

All steel racks and pile-driven supports will be transported offsite and recycled at an approved recycling facility.

5.4.3 Inverters

All metal components of the inverters will be recycled at an approved recycling facility to the extent practical. Transformers will be transported off-site for reuse. If no reuse option is available, transformers will be recycled or disposed at an approved facility.

5.4.4 Gravel and Aggregates

Should access roads be removed, any used gravel or aggregates will be tested for contamination prior to removal. All uncontaminated materials will be transported offsite for salvage processing and then reused for construction fill. In the unlikely event that the used gravel or aggregates are found to be contaminated, these will be disposed at an approved facility.

5.4.5 Concrete

All concrete, including all foundations, will be broken down and transported to an approved landfill or recycling facility.

5.4.6 Cables and Wiring

All copper and/or aluminum wiring and associated electronic equipment (e.g., isolation switches, fuses, metering) will be recycled to the extent practical. Any materials not deemed recyclable will be disposed of at an approved landfill.

5.4.7 Fencing

All fencing materials will be recycled at a metal recycling facility to the extent practical.

5.4.8 Debris and Residual Waste

Any remaining debris or residual waste will be collected and all recyclable materials will be sorted. All sorted materials will be removed and sent to either an approved recycling or disposal facility. Any hazardous material from the property shall be disposed of in accordance with federal and state law.

Approximately 6,614 tons of steel are estimated to be generated, primarily from steel piles, fence, and racking structure. Additional steel sources include conduit, substation components, and storage containers. It is assumed storage containers will be reused on other projects. Steel will be accumulated in the staging area and salvaged for market value or recycled.

Approximately 4,444 tons of concrete will be generated from building and equipment foundations. Concrete will be broken into manageably sized pieces and staged for offsite recycling or disposal.

Used equipment, including inverters and transformers will be sold for market value or recycled. Prior to offsite recycling of transformers, oil will be removed from units, collected in appropriate containers, and transported to an approved recycling facility.

Approximately 6,117 cubic yards of gravel are estimated to be recovered from the access road. The gravel will be stockpiled and loaded for recycling or reuse elsewhere. It is assumed gravel will be used on another project and transportation will be managed by others.

General construction and demolition debris are anticipated to be generated as part of decommissioning. Construction and demolition debris will be disposed at an approved offsite disposal facility.

5.5 Decommissioning Estimate and Financial Assurance

5.5.1 The estimated cost of decommissioning and reclamation in current dollars (excluding salvage value) is attached as Appendix A (the “Decommissioning Estimate”). The Decommissioning Estimate includes a mechanism for calculating increased removal costs due to inflation.

5.5.2 The Decommissioning Estimate shall be reviewed and recalculated, as may be necessary, every five (5) years.

5.5.3 Dominion shall ensure that funds will be available for decommissioning and reclamation as set forth herein and in Exhibit A by providing evidence to the Zoning Administrator that it has an investment grade credit rating with Moody’s and/or Standard and Poor’s. If the Project is subsequently sold to a non-investment grade entity, the decommissioning surety requirements set forth in subsection 5.5.4 will be required.

5.5.4 If a decommissioning surety is required pursuant to Section 5.5.3 above, a performance bond issued by a surety registered with the Virginia Commissioner of Insurance (and on the authorized insurance provider list published by the Commissioner) shall be provided to the County. The performance bond will be in an amount equal to 100% of the Decommissioning

Estimate (as calculated at the time) and will be for a term of one (1) year and will be continuously renewed, extended, or replaced. The performance bond will remain in effect until site restoration is completed and the site is restored in accordance with this plan, unless all or a portion of the bond is earlier released by the County as set forth in Section 5.5.5 below.

5.5.5 The bond surety shall be updated when the Decommissioning Estimate is updated. If the recalculated estimated cost exceeds the original estimated cost by ten percent (10%), then the bond shall be increased accordingly to satisfy the new cost estimate. If the recalculated estimated cost is less than ninety percent (90%) of the original estimated cost, then the County may approve reducing the amount of the bond to the recalculated estimate of cost. The County shall release the bond upon on the owner's or occupant's compliance with the Final Plan. The County may approve the partial release of the bond.

APPENDIX A: DECOMMISSIONING ESTIMATE

Decommissioning Cost Estimate Summary

This decommissioning cost estimate was developed based on 2021 Quarter 4 cost data. Actual costs and revenues will be dependent on salvage values and labor, equipment, and material cost at the time of decommissioning. Limited project design details were available during the preparation of this cost estimate; therefore, various assumptions on components and quantities were made and are included based on similarly sized solar projects. These primary assumptions are included in Table B-1.

Table B-1. Solar Project Components and Quantity Assumptions

Component	Quantity
Facility Capacity	80 MWac
Basis of Rates	2021 Q4 rates for Roanoke, VA
Solar Modules (71.2 lb ea)	176,094 ea
Module Type	Bifacial Monocrystalline
Modules assumed for reuse	95%
Modules assumed for recycling	5%
Steel Trackers (101 LF)	789 ea
Steel Trackers (202 LF)	1,236 ea
Steel Piles	13,000 ea
MV cable length	10,000 LF
Transmission line and poles	NA
Inverters	96 ea
Transformers	22 ea
Substation footprint	55,000 SF
Switchyard footprint (1)	75,000 SF
Access Road	30,968 LF
Perimeter Fence	178,572 LF

(1) The switchyard will not be decommissioned. Removal is not included in the estimate.

The cost and salvage estimates and associated assumptions are summarized in the following sections.

Decommissioning Costs

Decommissioning costs include labor, equipment, and materials associated with decommissioning, as well as transportation and disposal costs for system components that are not sold for salvage. The major decommissioning activities include site preparation, equipment removal, site restoration, waste management, and overhead and management. These major activities are outlined in Table B-2.

Costs for damages to public roads are not included in the decommissioning estimate. Transportation services requiring use of public roads would be performed by subcontractors. If the subcontractor causes damage to public roads as a result of their work on this project, they would be responsible for repair of any damages.

Overhead and management costs include supervision and coordination, operating expenses for necessary equipment and facilities, and costs associated with obtaining preconstruction permits.

Table B-2. Estimated Decommissioning Costs

Item	Extended Cost
Site Preparation	
Materials	$18,652
Labor	$34,486
Equipment	$9,955
Equipment Removal	
Materials	$314,680
Labor	$1,293,370
Equipment	$1,489,182
Site Restoration	
Materials	$378,279
Labor	$25,969
Equipment	$309,426
Waste Management	
Materials	$213,772
Labor	-
Equipment	-
Total Decommissioning Cost (with overhead and management)	**$4,087,771**

Decommissioning Salvage

Upon decommissioning, many of the materials and components of the solar facility may be able to be sold for salvage/reuse. The total salvage value is estimated to be $17,652,758 as outlined in Table B-3.

Table B-3. Estimated Decommissioning Salvage Costs

Item	Extended Salvage
Equipment Salvage	
Steel Salvage	$793,689
Copper Salvage	$13,066
Solar Modules	$16,846,002
Total Salvage Value	**$17,652,758 (-)**

Decommissioning Cost Summary and Financial Assurance

The total decommissioning estimate including labor, materials, equipment, and disposal costs, without any reduction for salvage value is $4,087,771. A detailed cost breakdown is provided in this attachment.

Upon the fifth anniversary of the Project's commissioning, and every fifth year thereafter until the Project's decommissioning, the applicant will engage a professional engineer licensed in the Commonwealth of Virginia to recertify the decommissioning cost estimate.

The applicant proposes to fund the final security amount through a Performance Bond issued by a surety registered with the Virginia Commissioner of Insurance and is, at the time of delivery of the bond, on the authorized insurance provider list published by the Commissioner. The Performance Bond will be in an amount equal to 100% of the estimated decommissioning and reclamation cost. The Performance Bond will be for a term of one year and will be continuously renewed, extended, or replaced so that it remains in effect for the remaining term of the agreement or until the secured decommissioning obligations are satisfied, whichever occurs later. The value of the security shall be based on the most recent estimated cost of decommissioning the solar farm. The security shall remain in effect until site restoration is completed and the site is restored to pre-construction conditions.

Inflation Adjusted Amount

The total present value decommissioning cost without any reduction for salvage value is $4,087,771. The adjusted decommissioning costs after 35 years at a 2% inflation rate (compounded annually) is $8,175,091.

The following formula is used as a mechanism to calculate increased removal costs due to inflation:

$$FV = PV\ (1 + r)^n$$

Where:

FV = Future Value

PV = Present Value

r = interest rate per period (assumed average of 2% per year)

n = number of compounding periods (years)

Detailed Cost Summary

Laurel Branch Solar
Data Release: **Unit Cost Estimate by WBS**

Quantity	Description	Unit	Material	Labor	Equipment	Unit Rate Total	Ext. Mat.	Ext. Labor	Ext. Equip.	Ext. Total	Data Release	CCI Location	Notes
Laurel Branch Solar > Site Preparation													
30968	Synthetic erosion control, silt fence, install and remove, 3' high	L.F.	$ 0.57	$ 1.09	$ 0.29	$ 1.95	$ 17,651.76	$ 33,755.12	$ 8,980.72	$ 60,387.60	Year 2021 Quarter 4	VIRGINIA / ROANOKE (240-241)	assumed for use along length of access road
1	Staging Area Setup	Ea.	$ 1,000.00	$ -	$ -	$ 1,000.00	$ 1,000.00	$ -	$ -	$ 1,000.00	Year 2021 Quarter 4	VIRGINIA / ROANOKE (240-241)	
5	Selective tree and shrub removal, selective clearing brush mowing, light density, tractor with rotary mower, excludes removal offsite	Acre	$ -	$ 146.20	$ 194.93	$ 341.13	$ -	$ 731.00	$ 974.65	$ 1,705.65	Year 2021 Quarter 4	VIRGINIA / ROANOKE (240-241)	
Laurel Branch Solar > Site Preparation Subtotal							***$ 18,651.76***	***$ 34,486.12***	***$ 9,955.37***	***$ 63,093.25***			
Laurel Branch Solar > Equipment Removal													
231	Rent backhoe-loader 45 to 60 HP 3/4 CY capacity, Incl. Hourly Oper. Cost.	Week	$ -	$ -	$ 1,132.91	$ 1,132.91	$ -	$ -	$ 261,702.21	$ 261,702.21	Year 2021 Quarter 4	VIRGINIA / ROANOKE (240-241)	Assume 6614 tons steel, 6269 tons PV modules(71.2lb x 176094 module), and 4444 tons of concrete (assume 60,000SF foundations) = 17327 tons of material. Assume 0.25 ton per load = 69308 loads. 69308 loads at 6 loads per hour =11551 hours at 50 hour weeks = 231 weeks.
578	Rent loader, skid steer, wheeled, 10 CF, 30 HP, Incl. Hourly Oper. Cost.	Week	$ -	$ -	$ 940.53	$ 940.53	$ -	$ -	$ 543,626.34	$ 543,626.34	Year 2021 Quarter 4	VIRGINIA / ROANOKE (240-241)	To move equipment and materials across site to interim staging areas - assume 0.1 tons per load and 6 loads per hour for 17327 tons of material =28878 hours = 578 weeks
599	Field personnel, general purpose laborer, average	Week	$ -	$ 872.50	$ -	$ 872.50	$ -	$ 522,627.50	$ -	$ 522,627.50	Year 2021 Quarter 4	VIRGINIA / ROANOKE (240-241)	Disassemble modules and racking system (6 modules per hour at 176094 modules = 29349 hours), unbolting of transformers and inverters (5 hours each, 118 items = 590 hours), fence cutting (NA - accounted for in separate line item) = 29939 labor hours = 599 labor weeks (50 hrs/wk).
217	Crane crew, daily use for small jobs, 12-ton truck-mounted hydraulic crane, portal to portal	Day	$ -	$ 244.30	$ 770.28	$ 1,014.58	$ -	$ 53,013.10	$ 167,150.76	$ 220,163.86	Year 2021 Quarter 4	VIRGINIA / ROANOKE (240-241)	Remove 13000 steel piles/60 per day = 217 10 hour days
231	Rent front end loader, 4WD, art. frame, diesel, 1 - 1.25 CY 70 HP, Incl. Hourly Oper. Cost.	Week	$ -	$ -	$ 1,601.00	$ 1,601.00	$ -	$ -	$ 369,831.00	$ 369,831.00	Year 2021 Quarter 4	VIRGINIA / ROANOKE (240-241)	Loader for movement to staging area and for offsite loading - 17327 tons of material. Assume 0.25 ton per load = 69308 loads at 6 loads per hr, 50 hour weeks = 231 weeks.
60000	Deconstruction of concrete, floors, concrete slab on grade, rod reinforcement, 4" thick, up to 2 stories, excludes handling, packaging or disposal costs	S.F.	$ -	$ 2.23	$ 0.93	$ 3.16	$ -	$ 133,800.00	$ 55,800.00	$ 189,600.00	Year 2021 Quarter 4	VIRGINIA / ROANOKE (240-241)	assumes 60000 SF concrete foundations
178572	Fencing demolition, remove chain link posts & fabric, 8' to 10' high	L.F.	$ -	$ 1.59	$ 0.51	$ 2.10	$ -	$ 283,929.48	$ 91,071.72	$ 375,001.20	Year 2021 Quarter 4	VIRGINIA / ROANOKE (240-241)	
626888	PV EOL processing for recycling	Lb.	$ 0.17	$ -	$ -	$ 0.17	$ 106,570.88	$ -	$ -	$ 106,570.88	Year 2021 Quarter 4	VIRGINIA / ROANOKE (240-241)	5% of panels will be recycled / require processing at 71.2 lb each. EOL processing fee is based on a salvage and reuse value analysis provided for another project in 2020.
16008	Transportation of PV modules to recycling facility	C.Y.	$ 13.00	$ -	$ -	$ 13.00	$ 208,108.73	$ -	$ -	$ 208,108.73	Year 2021 Quarter 4	VIRGINIA / ROANOKE (240-241)	11 panels per CY. Assume facility is 1 hr away
1	Overhead and Management	Ea.	$ -	$ 300,000.00	$ -	$ 300,000.00	$ -	$ 300,000.00	$ -	$ 300,000.00	Year 2021 Quarter 4	VIRGINIA / ROANOKE (240-241)	
Laurel Branch Solar > Equipment Removal Subtotal							***$ 314,679.61***	***$ 1,293,370.08***	***$ 1,489,182.03***	***$ 3,097,231.72***			
Laurel Branch Solar > Site Restoration													
43	Rent water truck, off highway, 6000 gallon capacity, Incl. Hourly Oper. Cost.	Week	$ -	$ -	$ 5,695.32	$ 5,695.32	$ -	$ -	$ 244,898.76	$ 244,898.76	Year 2021 Quarter 4	VIRGINIA / ROANOKE (240-241)	assume 10 mo duration
61721	Topsoil placement and grading, loam or topsoil screened, 6" deep, furnish and place, truck dumped	S.Y.	$ 5.95	$ 0.33	$ 0.57	$ 6.85	$ 367,239.95	$ 20,367.93	$ 35,180.97	$ 422,788.85	Year 2021 Quarter 4	VIRGINIA / ROANOKE (240-241)	coverage of access road (495488 SF = 55054 SY) and removed foundations (60000 SF = 6667 SY) = 61721 SY
15	Seeding, mechanical seeding, 215 lb./acre	Acre	$ 735.93	$ 173.60	$ 186.54	$ 1,096.07	$ 11,038.95	$ 2,604.00	$ 2,798.10	$ 16,441.05	Year 2021 Quarter 4	VIRGINIA / ROANOKE (240-241)	
6117	Excavation, bulk, scrapers, bank measure, sand and gravel, 5,000' haul, 21 C.Y. bucket, self propelled scrapers, 1/4 push dozer	B.C.Y.	$ -	$ 0.49	$ 4.34	$ 4.83	$ -	$ 2,997.33	$ 26,547.78	$ 29,545.11	Year 2021 Quarter 4	VIRGINIA / ROANOKE (240-241)	removal of gravel from access rd 4", 30968 LF
Laurel Branch Solar > Site Restoration Subtotal							***$ 378,278.90***	***$ 25,969.26***	***$ 309,425.61***	***$ 713,673.77***			
Laurel Branch Solar > Waste Management													

130	Selective demolition, rubbish handling, dumpster, 40 C.Y., 10 ton capacity, weekly rental, includes one dump per week, cost to be added to demolition cost	Week	$ 775.00	$ -	$ -	$ 775.00	$ 100,750.00	$ -	$ -	$ 100,750.00	Year 2021 Quarter 4	VIRGINIA / ROANOKE (240-241)	assume 5 dumpster full time for 6 mo, geotextile, C&D debris, etc
8664	Transportation 1 hour away	C.Y.	$ 13.00	$ -	$ -	$ 13.00	$ 112,632.00	$ -	$ -	$ 112,632.00	Year 2021 Quarter 4	VIRGINIA / ROANOKE (240-241)	Transportation for steel, concrete, and used equipment recycling, 17327 tons material, assume 8664 CY
50	Hazardous waste cleanup/pickup/disposal, liquid pickup, vacuum truck, stainless steel tank, transportation in 6900 gallon bulk truck	Mile	$ 7.81	$ -	$ -	$ 7.81	$ 390.50	$ -	$ -	$ 390.50	Year 2021 Quarter 4	VIRGINIA / ROANOKE (240-241)	assume 50 miles to disposal facility
Laurel Branch Solar > Waste Management Subtotal							***$ 213,772.50***	***$ -***	***$ -***	***$ 213,772.50***			
Grand Total						***$ 314,521.91***	***$ 925,382.77***	***$ 1,353,825.46***	***$ 1,808,563.01***	***$ 4,087,771.24***			