NEW WIRELESS COMMUNICATION FACILITY

"VERNON SUBSTATION"

13 VANDERHOOF COURT
VERNON, NJ 07462
BLOCK: 378 LOT:17
FORMALLY KNOWN AS BLOCK: 141 LOT: 12.02
SUSSEX COUNTY

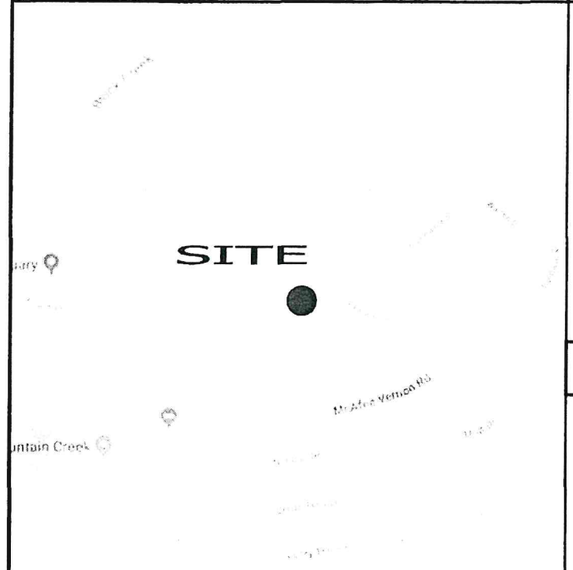
Diamond
Communications LLC

820 Morris Turnpike, Suite 104,
Short Hills, New Jersey 07078

T-Mobile
NORTHEAST LLC.

4 Sylvan Way
Parsippany, New Jersey 07054

SITE MAP



SITE KEY
NORTH
SCALE: 1"=500'-0" (SHEET SIZE 22" X 34")
SCALE: 1"=1000'-0" (SHEET SIZE 11" X 17")
0 350 500 1000
(IN FEET)

PROJECT CONTACTS

DIAMOND COMMUNICATIONS:

- **TOWER MANAGEMENT:** MELISSA COOKE (973) 544-6821
- **ATTORNEY:** PINILIS HALPERN LLP, 160 MORRIS STREET, MORRISTOWN, NJ 07960, JUDITH FAIRWEATHER (973) 401-1111

T-MOBILE:

- **REAL ESTATE:** ALEXA KOMAR (917) 969-7642
- **CITY:** VERNON TOWNSHIP MUNICIPAL OFFICE, 21 CHURCH STREET, VERNON, NJ 07462, (973) 764-4055

OWNER/APPLICANT INFORMATION

- **APPLICANT/LESSEE INFORMATION:** DIAMOND COMMUNICATION LLC, 820 MORRIS TURNPIKE, SUITE #104, SHORT HILLS, NJ 07078
- **CO-APPLICANT/LESSEE INFORMATION:** T-MOBILE NORTHEAST, LLC, 4 Sylvan Way, Parsippany, New Jersey 07054, Phone: (973) 397-4800
- **PROPERTY OWNER:** JCP&L C/O FE Service Tax Dept, 800 Cabin Hill Dr., Greensburg, PA 15601

SIGNATURE BLOCK

3

VERNON TOWNSHIP LAND USE BOARD
APPROVED AS A MAJOR SITE PLAN AT A REGULAR MEETING OF THE VERNON TOWNSHIP ON _____

BOARD CHAIRMAN DATE

BOARD SECRETARY DATE

ENGINEER DATE

SITE INFORMATION

- **SITE ADDRESS:** 13 VANDERHOOF COURT, VERNON, NJ 07462
- **MUNICIPAL ID:** BLOCK#: 378, LOT#: 17, *FORMALLY KNOWN AS* BLOCK#: 141, LOT#: 12.02, ZONE: "C-3" - OFFICE PROFESSIONAL
- **SITE COORDINATES:** 41°11'37.96"N, 74°29'57.80"W, DATUM: FAA-2C - NAD83
- **GROUND ELEVATION:** 478.9', DATUM: FAA-2C - NAVD, 1988
- **FLOOD PLAIN:** SUBJECT PARCEL LIES IN ZONE "X" AREAS DETERMINED TO BE OUTSIDE THE 0.2% PER THE FLOOD RATE INSURANCE MAP NUMBER 34037C0205E PANEL 205 OF 417 FOR SUSSEX COUNTY, NEW JERSEY, DATED SEPTEMBER 29, 2011
- THE SUBJECT PROPERTY IS LOCATED IN HIGHLANDS PLANNING AREA

SCOPE OF WORK

1. THE CONSTRUCTION OF A NEW WIRELESS COMMUNICATIONS FACILITY FOR DIAMOND COMMUNICATIONS AND T-MOBILE.
2. THE PROPOSED WIRELESS COMMUNICATIONS FACILITY IS NOT INTENDED FOR HUMAN OCCUPANCY AND WILL BE VISITED ONCE EVERY FOUR TO SIX WEEKS FOR ROUTINE MAINTENANCE.
3. THE FACILITY SHALL BE MONITORED FROM A REMOTE MONITORING FACILITY AND IN CASE OF AN EMERGENCY THE LOCAL FIRE OR POLICE DEPARTMENT WILL BE NOTIFIED.
4. CONNECTIONS FOR THE PROPOSED ELECTRIC AND TELEPHONE SERVICE ARE BASED ON SITE COORDINATION MEETINGS WITH THE LOCAL UTILITY COMPANIES.
5. THIS PROJECT DOES NOT REQUIRE ANY ADDITIONAL PARKING SPACES
6. THIS PROJECT DOES NOT INVOLVE POTABLE WATER AND WILL NOT PRODUCE ANY SEWAGE.
7. THIS TYPE/NATURE OF THE WIRELESS FACILITY REQUIRES SPECIALIZED TRAINED TECHNICIANS AND IS EXEMPT FROM ADA COMPLIANCE.

LIST OF DRAWINGS

Sheet	Title	Issue #	Date
Z1	COVER SHEET	4	09/21/20
Z2	TAX MAP & 200 FT PROPERTY OWNERS LIST	5	10/14/20
Z3	AERIAL AND ZONING MAP	4	09/21/20
Z4	SITE PLAN AND ZONING INFORMATION	5	10/14/20
Z5	COMPOUND PLAN AND SITE ELEVATION	5	10/14/20
Z6	EQUIPMENT CABINET SPECIFICATIONS	5	10/14/20
Z7	EQUIPMENT PLAN AND ELEVATION	5	10/14/20
Z8	ANTENNA PLAN AND SPECIFICATIONS	6	10/26/20
Z9	GENERATOR SPECIFICATIONS	3	05/21/19
Z10	MISCELLANEOUS SITE DETAILS	3	05/21/19
Z11	GRADING & TREE REMOVAL PLAN	3	05/21/19
Z12	SOIL & SEDIMENT CONTROL PLAN AND DETAILS	3	05/21/19
Z13	SOIL & SEDIMENT CONTROL NOTES	3	05/21/19
Z14	STEEP SLOPE PLAN	4	09/21/20

REFERENCE DRAWINGS:
1) FIELD MEASUREMENTS TAKEN ON 05/22/2018 BY FC Architects.
2) SITE IMPROVEMENTS AND LOCATIONS OF PROPERTY LINES ARE BASED A BOUNDARY SURVEY PREPARED BY JONATHAN MURPHY, LLC #GS26952 , JONATHAN MURPHY PROFESSIONAL LAND SURVEYING, 10505 LEAFWOOD PLACE, RALEIGH, NC 27613. TITLE "BOUNDARY SURVEY NJ208 VERNON SUB RFQ" BLOCK 141, LOT 12.02, VERNON TOWNSHIP, SUSSEX COUNTY, NEW JERSEY, DATED 09/27/2018

FCA ARCHITECTS
350 Clark Drive | Suite 304
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fcolasurdo@fcarchitectsinc.com
Frank Colasurdo Architects, Inc
10/26/20
Frank Colasurdo, RA Date
NJ Lic #13753
NY Lic #029379-1
PA Lic. #RA403655
MA Lic #32346
MD Lic #19079

APPLICANT/CLIENT:
Diamond Communications LLC
820 Morris Turnpike, Suite 104
Short Hills, NJ 07078
(973) 544-6817

CO-APPLICANT/CLIENT:
T-MOBILE NORTHEAST, LLC.
4 Sylvan Way
Parsippany, NJ 07054
(973) 397-4800

PROJECT:
PROPOSED WIRELESS COMMUNICATION FACILITY "VERNON SUBSTATION"
13 VANDERHOOF COURT, VERNON, NEW JERSEY 07462
BLOCK: 378 LOT:17
F.K.A BLOCK: 141 LOT: 12.02
SUSSEX COUNTY

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2	REV. 1 ZONING DRAWINGS PER TOWNSHIP ENGINEERS LETTER	03/13/19
1	FINAL ZONING DRAWINGS	09/27/18
0	PRELIMINARY ZONING DRAWINGS	09/26/18

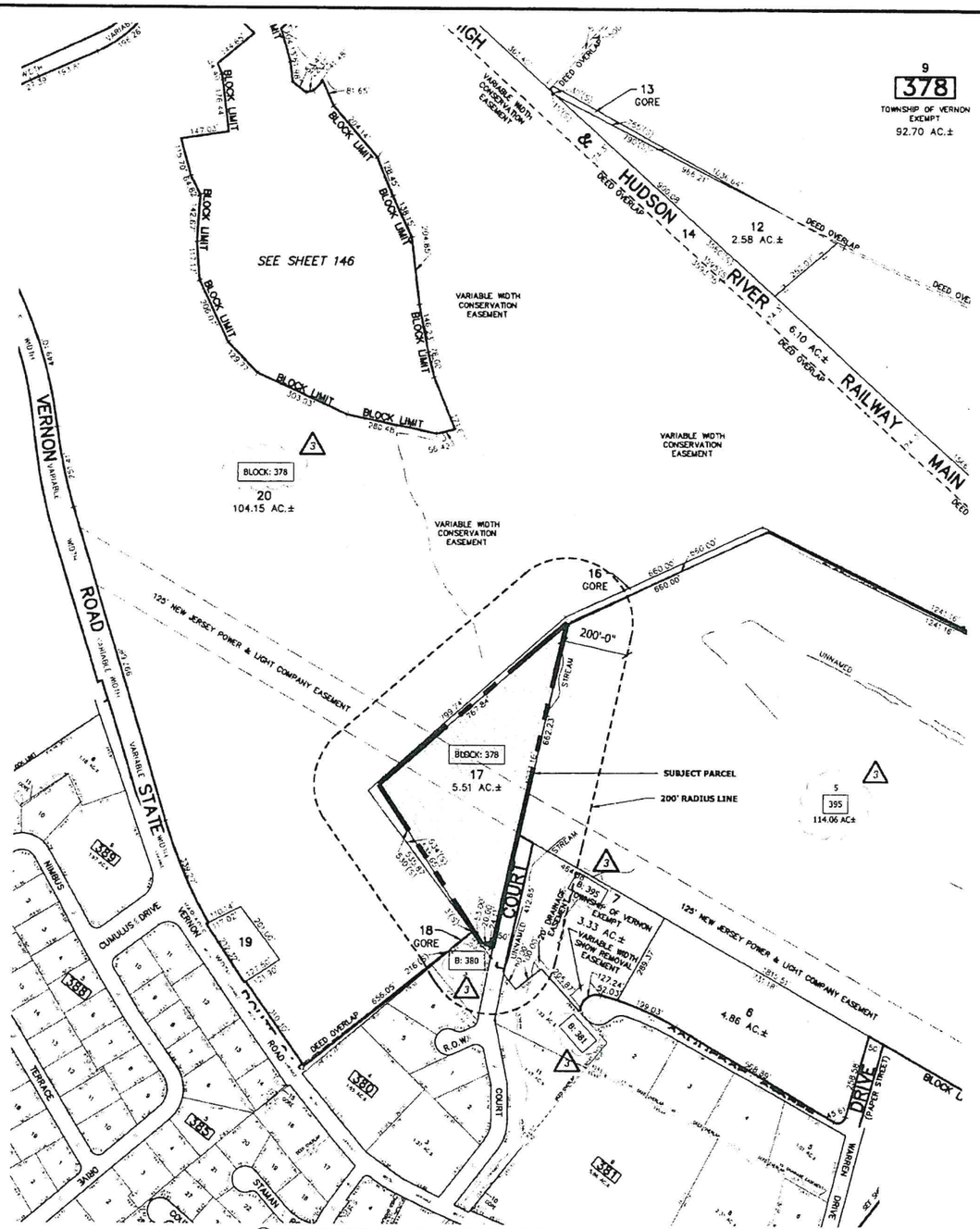
SHEET TITLE:
COVER SHEET

PROJECT No:
NJ208
NJ07320C

SITE DESIGNATION:
13 VANDERHOOF CT.

DRAWN BY: AMA
DATE: 09/26/18

SHEET No:
Z1



TAX MAP #145, 148, 149 - TOWNSHIP OF VERNON

NORTH

SCALE: 1"=200'-0" (SHEET SIZE 22" X 34")

SCALE: 1"=400'-0" (SHEET SIZE 11" X 17")

0 100 200 400 (IN FEET)

LIST OF PROPERTY OWNERS WITH 200' OF SUBJECT PARCEL

3 4

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10/26/20

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SHEET TITLE:

TAX MAP & 200 FT PROPERTY OWNERS LIST

PROJECT No. **NJ208**
NJ07320C

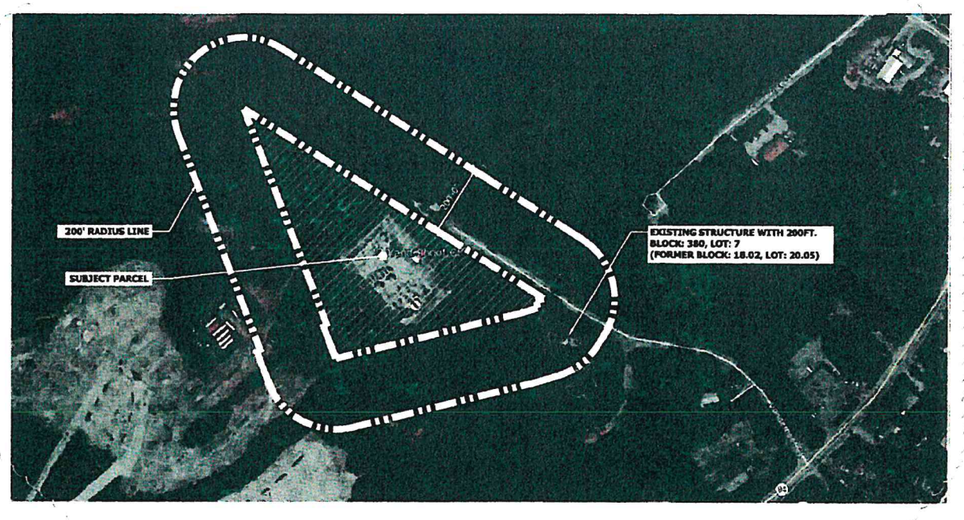
SITE DESIGNATION:

13 VANDERHOOF CT.

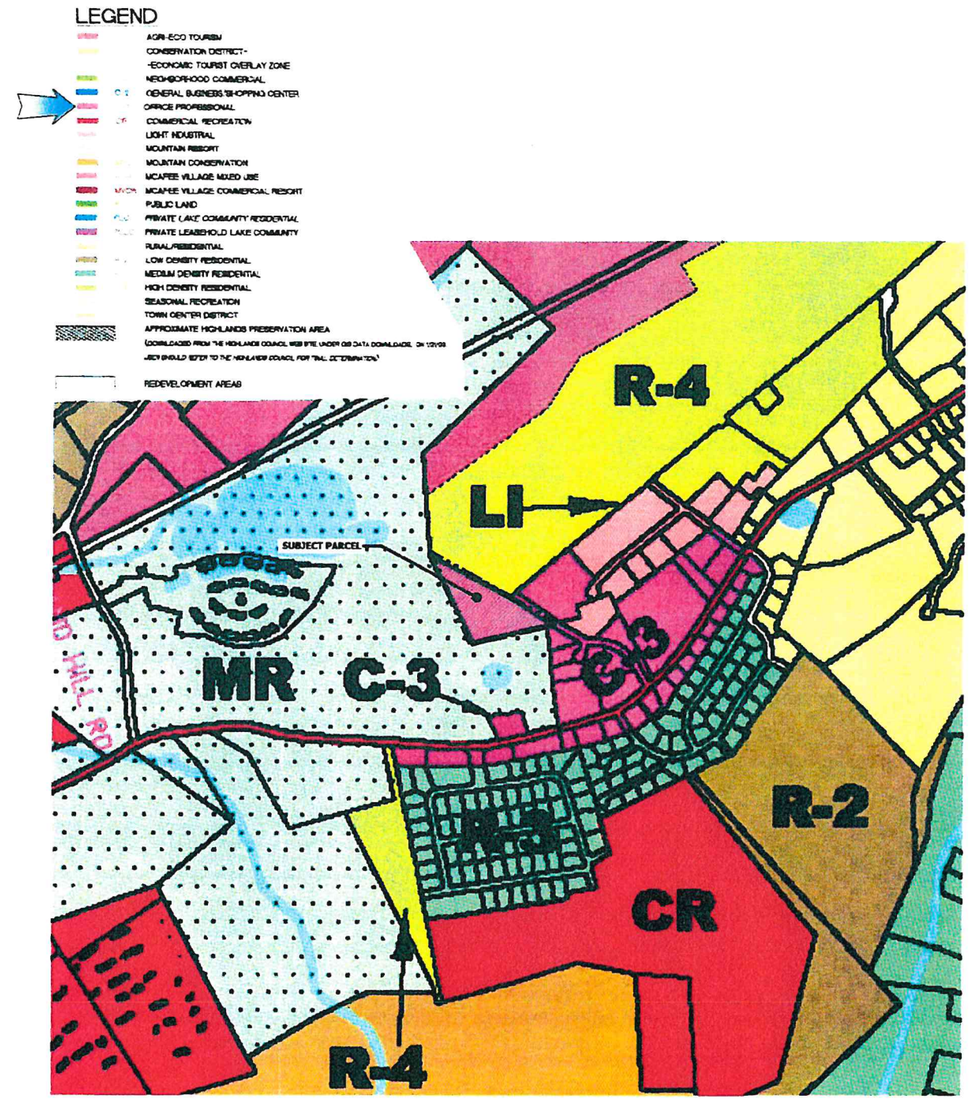
DRAWN BY	DATE
AMA	09/26/18

SHEET No:

Z2



AERIAL MAP
SCALE: 1"=200'-0" (SHEET SIZE 22" X 34")
SCALE: 1"=400'-0" (SHEET SIZE 11" X 17")



VERNON TOWNSHIP - ZONING MAP
SCALE: 1"=500'-0" (SHEET SIZE 22" X 34")
SCALE: 1"=1000'-0" (SHEET SIZE 11" X 17")

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10/26/2020
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13 VANDERHOOF COURT,
VERNON, NEW JERSEY 07462
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0	PRELIMINARY ZONING DRAWINGS	09/26/18

SHEET TITLE
AERIAL AND ZONING MAP

PROJECT No **NJ208**
NJ07320C

SITE DESIGNATION:
13 VANDERHOOF CT.

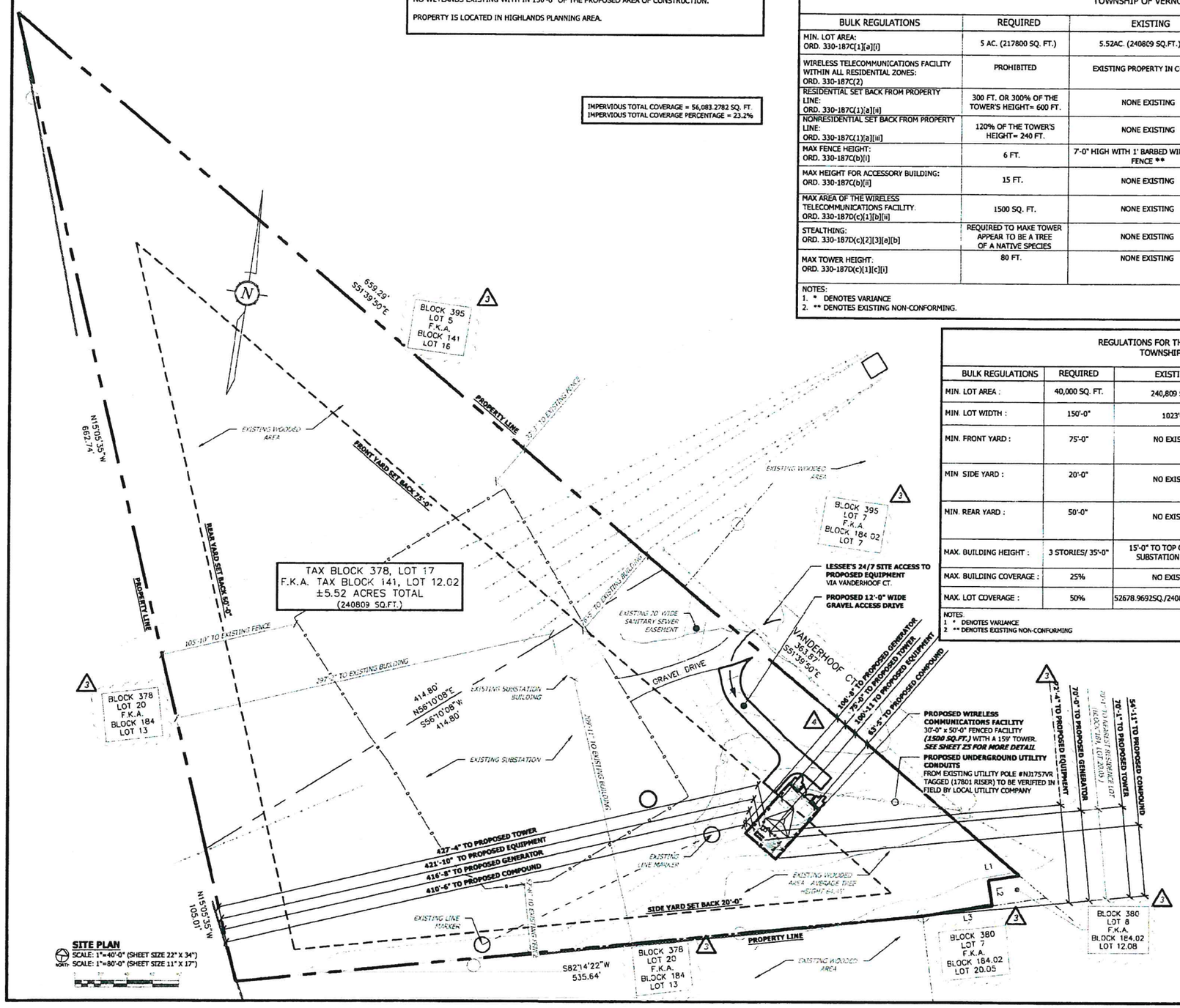
DRAWN BY: AMA
DATE: 09/26/18

SHEET No:
Z3

ENVIRONMENTAL NOTE:
NO WETLANDS EXISTING WITH IN 150'-0" OF THE PROPOSED AREA OF CONSTRUCTION.

PROPERTY IS LOCATED IN HIGHLANDS PLANNING AREA.

IMPERVIOUS TOTAL COVERAGE = 56,083.2782 SQ. FT.
IMPERVIOUS TOTAL COVERAGE PERCENTAGE = 23.2%



SITE PLAN
SCALE: 1"=40'-0" (SHEET SIZE 22" X 34")
SCALE: 1"=80'-0" (SHEET SIZE 11" X 17")

REGULATIONS FOR WIRELESS TELECOMMUNICATIONS FACILITIES
TOWNSHIP OF VERNON, NEW JERSEY

BULK REGULATIONS	REQUIRED	EXISTING	PROPOSED	COMMENTS
MIN. LOT AREA: ORD. 330-187C(1)[a][i]	5 AC. (217800 SQ. FT.)	5.52AC. (240809 SQ.FT.)	NO CHANGE	
WIRELESS TELECOMMUNICATIONS FACILITY WITHIN ALL RESIDENTIAL ZONES: ORD. 330-187C(2)	PROHIBITED	EXISTING PROPERTY IN C-3 ZONE	NO CHANGE	2
RESIDENTIAL SET BACK FROM PROPERTY LINE: ORD. 330-187C(1)[a][ii]	300 FT. OR 300% OF THE TOWER'S HEIGHT= 600 FT.	NONE EXISTING	70'-1" TO RESIDENTIAL PROPERTY LINE * BLOCK:380 LOT:7 *FORMALLY KNOWN AS BLOCK:184.02 LOT:20.05*	
NONRESIDENTIAL SET BACK FROM PROPERTY LINE: ORD. 330-187C(1)[a][iii]	120% OF THE TOWER'S HEIGHT= 240 FT.	NONE EXISTING	70'-1" TO NONRESIDENTIAL PROPERTY LINE * BLOCK:378 LOT:20 *FORMALLY KNOWN AS BLOCK:184 LOT:13*	
MAX FENCE HEIGHT: ORD. 330-187C(b)[i]	6 FT.	7'-0" HIGH WITH 1' BARBED WIRE EXISTING FENCE **	6'-0" FENCE	
MAX HEIGHT FOR ACCESSORY BUILDING: ORD. 330-187C(b)[ii]	15 FT.	NONE EXISTING	NO BUILDING PROPOSED 5'-11" TO TOP OF PROPOSED EQUIPMENT 8'-7" TO TOP OF PROPOSED GENERATOR	
MAX AREA OF THE WIRELESS TELECOMMUNICATIONS FACILITY: ORD. 330-187D(c)(1)[b][ii]	1500 SQ. FT.	NONE EXISTING	1500 SQ. FT. FENCE FACILITY	
STEALTHING: ORD. 330-187D(c)[2][3][a][b]	REQUIRED TO MAKE TOWER APPEAR TO BE A TREE OF A NATIVE SPECIES	NONE EXISTING	LATTICE TOWER	2
MAX TOWER HEIGHT: ORD. 330-187D(c)(1)[c][i]	80 FT.	NONE EXISTING	167 FT. AGL TO TOP OF LIGHTNING ROD * 160 FT. AGL TO TOP OF TOWER * 160 FT. AGL TO TOP OF ANTENNAS *	

NOTES:
1. * DENOTES VARIANCE
2. ** DENOTES EXISTING NON-CONFORMING.

REGULATIONS FOR THE "C-3"- OFFICE PROFESSIONAL
TOWNSHIP OF VERNON, NEW JERSEY

BULK REGULATIONS	REQUIRED	EXISTING	PROPOSED	COMMENTS
MIN. LOT AREA :	40,000 SQ. FT.	240,809 SQ.FT.	NO CHANGE	ORD. 330-161 SCHEDULE B
MIN. LOT WIDTH :	150'-0"	1023'-2"	NO CHANGE	ORD. 330-161 SCHEDULE B
MIN. FRONT YARD :	75'-0"	NO EXISTING	4 63'-5" TO PROPOSED COMPOUND * 75'-0" TO PROPOSED TOWER 100'-11 TO PROPOSED EQUIPMENT 106'-8" TO PROPOSED GENERATOR	ORD. 330-161 SCHEDULE B
MIN SIDE YARD :	20'-0"	NO EXISTING	3 54'-11" TO PROPOSED COMPOUND 70'-1" TO PROPOSED TOWER 72'-4" TO PROPOSED EQUIPMENT 70'-0" TO PROPOSED GENERATOR	ORD. 330-161 SCHEDULE B
MIN. REAR YARD :	50'-0"	NO EXISTING	410'-6" TO PROPOSED COMPOUND 427'-4" TO PROPOSED TOWER 421'-10" TO PROPOSED EQUIPMENT 416'-8" TO PROPOSED GENERATOR	ORD. 330-161 SCHEDULE B
MAX. BUILDING HEIGHT :	3 STORIES/ 35'-0"	15'-0" TO TOP OF EXISTING SUBSTATION BUILDING	4 NO BUILDING PROPOSED 5'-9" TO TOP OF PROPOSED EQUIPMENT 8'-7" TO TOP OF PROPOSED GENERATOR	ORD. 330-161 SCHEDULE B
MAX. BUILDING COVERAGE :	25%	NO EXISTING	NO CHANGE	ORD. 330-161 SCHEDULE B
MAX. LOT COVERAGE :	50%	52678.9692SQ./240809SQ. = 21.8%	56083.2782SQ./240809SQ. = 23.2%	ORD. 330-161 SCHEDULE B

NOTES:
1 * DENOTES VARIANCE
2 ** DENOTES EXISTING NON-CONFORMING

REFERENCE DRAWINGS:
1) FIELD MEASUREMENTS TAKEN ON 05/22/2018 BY FC Architects.
2) SITE IMPROVEMENTS AND LOCATIONS OF PROPERTY LINES ARE BASED A BOUNDARY SURVEY PREPARED BY JONATHAN NURPHY, LLC #GS26952 , JONATHAN MURPHY PROFESSIONAL LAND SURVEYING, 10505 LEAFWOOD PLACE, RALEIGH, NC 27613. TITLE "BOUNDARY SURVEY NJ208 VERNON SUB RFQ" BLOCK 141, LOT 12.02, VERNON TOWNSHIP, SUSSEX COUNTY, NEW JERSEY, DATED 09/27/2018

LINE TABLE

LINE	BEARING	LENGTH
L1	S79° 02' 10"W	24.11
L2	S10° 57' 50"E	20.00
L3	S79° 02' 10"W	53.00

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10/29/2020
Frank Colasurdo, RA Date
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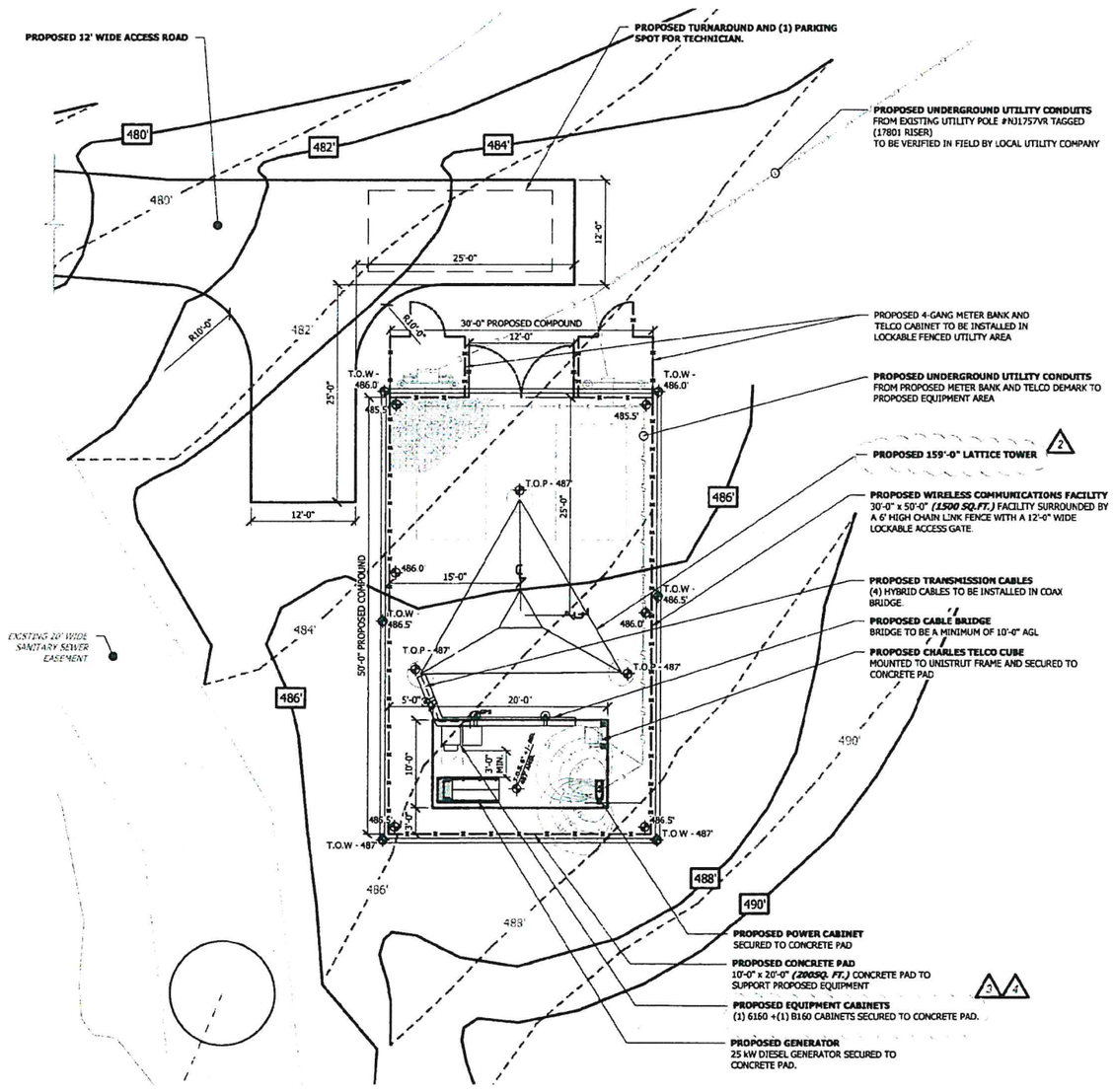
SHEET TITLE
SITE PLAN AND ZONING INFORMATION

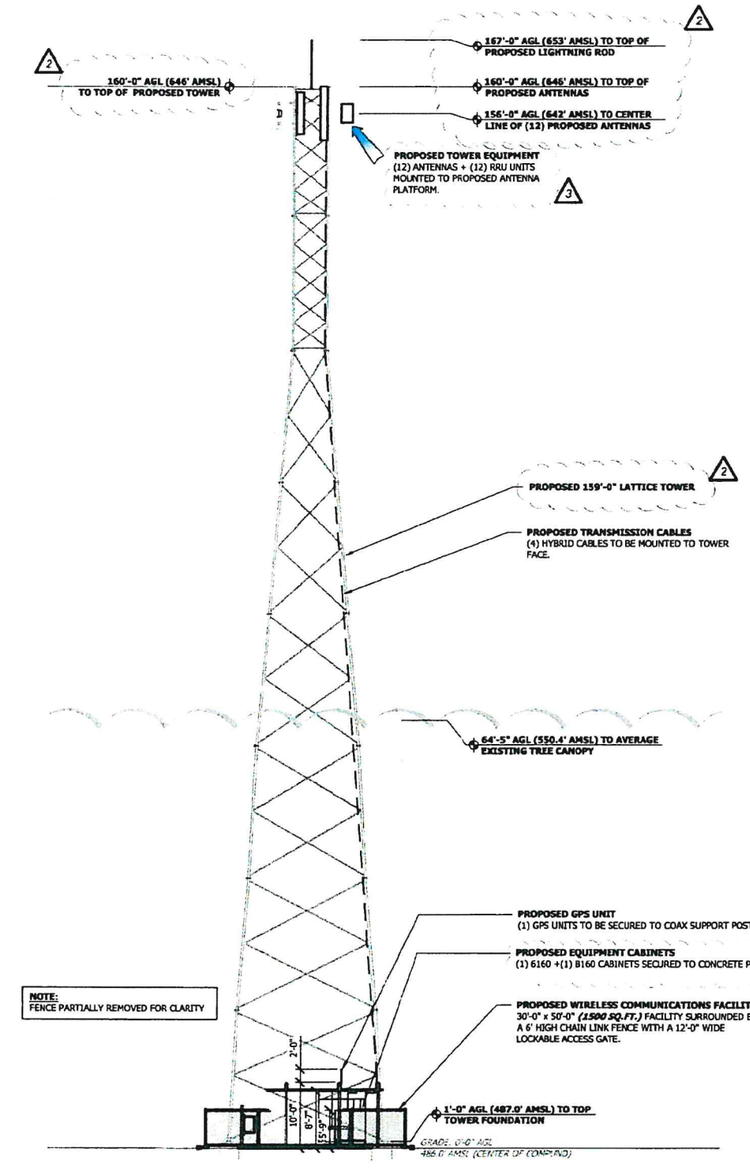
PROJECT No **NJ208 NJ07320C**
SITE DESIGNATION.
13 VANDERHOOF CT.

DRAWN BY: AMA
DATE 09/26/18

SHEET No:
Z4



EQUIPMENT COMPOUND PLAN
SCALE: 1/8"=1'-0" (SHEET SIZE 22" X 34")
SCALE: 1/16"=1'-0" (SHEET SIZE 11" X 17")



NOTE:
FENCE PARTIALLY REMOVED FOR CLARITY

SITE ELEVATION (LOOKING SOUTH WEST)
SCALE: 3/32"=1'-0" (SHEET SIZE 22" X 34")
SCALE: 1/16"=1'-0" (SHEET SIZE 11" X 17")

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SHEET TITLE
COMPOUND PLAN AND SITE ELEVATION

PROJECT No
NJ208
NJ07320C

SITE DESIGNATION
13 VANDERHOOF CT.

DRAWN BY: AMA
DATE: 09/26/18

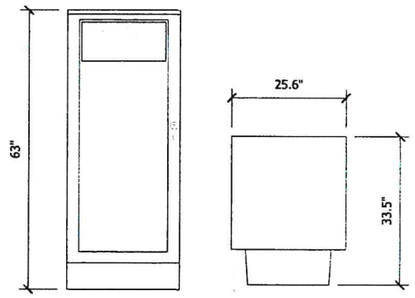
SHEET No
Z5

EQUIPMENT SPECIFICATIONS

IMAGE

ERICSSON 6160 SPECIFICATIONS

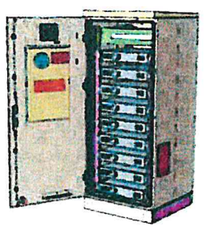
SPECIFICATION	CABINET
WEIGHT	320lbs (PLUS +/-285lbs FOR EQUIPMENT
DIMENSIONS	63"x25.6"x33.5"
ENCLOSURE POSITION	ALUMINUM
COLOR	POWER PAINT NCS 2002-B
DOOR	FRONT ACCESS
LOCK	PAD LOCK OR CYLINDER
INPUT POWER	<33kW



FRONT ELEVATION

CABINET FOOTPRINT

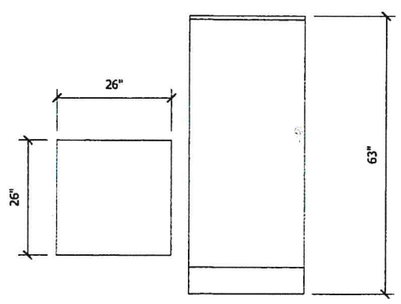
ERICSSON 6160 CABINET DETAILS
SCALE: 3/4"=1'-0", (SHEET SIZE 22" x 34")
SCALE: 3/8"=1'-0", (SHEET SIZE 11" x 17")



IMAGE

ERICSSON 160 SPECIFICATIONS

SPECIFICATION	CABINET
WEIGHT	295lbs (PLUS 3 STRINGS +/-1588lbs FOR BATTERIES
DIMENSIONS	63"x26"x26"
ENCLOSURE POSITION	GALVANIZED STEEL
COLOR	POWER PAINT NCS 2002-B
DOOR	FRONT ACCESS
LOCK	PAD LOCK OR CYLINDER
DC OUTPUT	-48VDC/200A
BATTERY BREAKERS	2X 125/2P



CABINET FOOTPRINT

FRONT ELEVATION

ERICSSON 160 CABINET DETAILS
SCALE: 3/4"=1'-0", (SHEET SIZE 22" x 34")
SCALE: 3/8"=1'-0", (SHEET SIZE 11" x 17")

FCA ARCHITECTS
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Frank Colasurdo Architects, Inc

Frank Colasurdo, RA Date
NJ Lic #13753
NY Lic #029379-1
PA Lic #RA403655
MA Lic #32346
MD Lic #19079

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Short Hills, NJ 07078
(973) 544-6817

CO-APPLICANT/CLIENT
T-MOBILE NORTHEAST, LLC.
4 Sylvan Way
Parsippany, NJ 07054
(973) 397-4800

PROJECT:
PROPOSED WIRELESS COMMUNICATION FACILITY
"VERNON SUBSTATION"
13 VANDERHOOF COURT,
VERNON, NEW JERSEY 07462
BLOCK: 378 LOT:17
F.K.A BLOCK: 141 LOT: 12.02
SUSSEX COUNTY

ISSUE NO	DESCRIPTION OF CHANGE	ISSUE DATE
6	REV 5 ZD - RF COMMENT	10/26/20
5	REV. 4 ZD - RF CHANGE REMOVAL OF CABINET	10/13/20
4	REV. 3 ZD - RF CHANGE & TOWNSHIP COMMENTS	09/21/20
3	REV. 2 ZONING DRAWINGS - TOWER HEIGHT	06/21/19
2	REV 1 ZONING DRAWINGS PER TOWNSHIP ENGINEERS LETTER	03/13/19
1	FINAL ZONING DRAWINGS	09/27/18
0	PRELIMINARY ZONING DRAWINGS	09/26/18

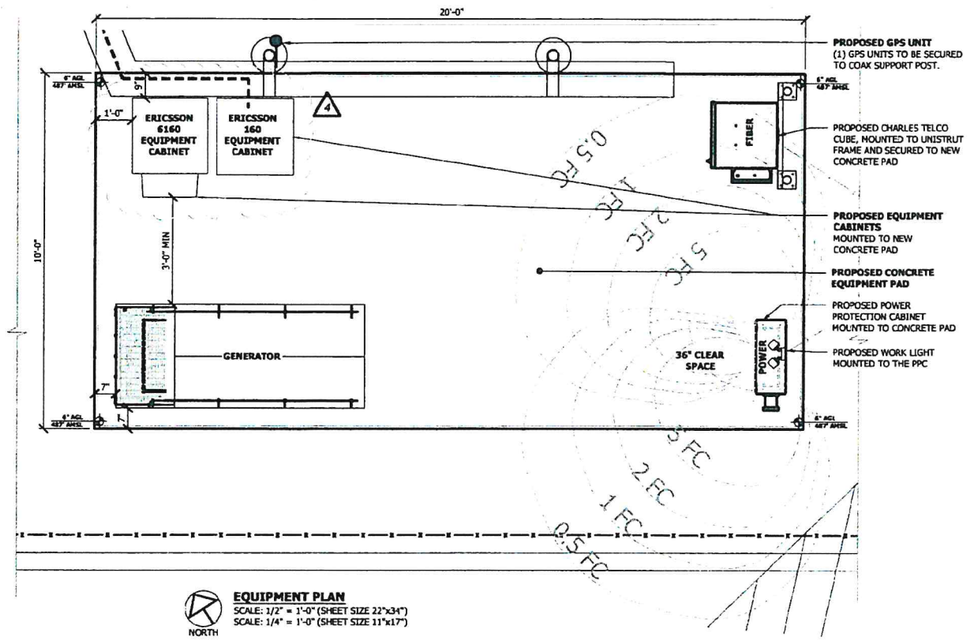
SHEET TITLE
EQUIPMENT CABINET SPECIFICATIONS

PROJECT No **NJ208 NJ07320C**

SITE DESIGNATION
13 VANDERHOOF CT.

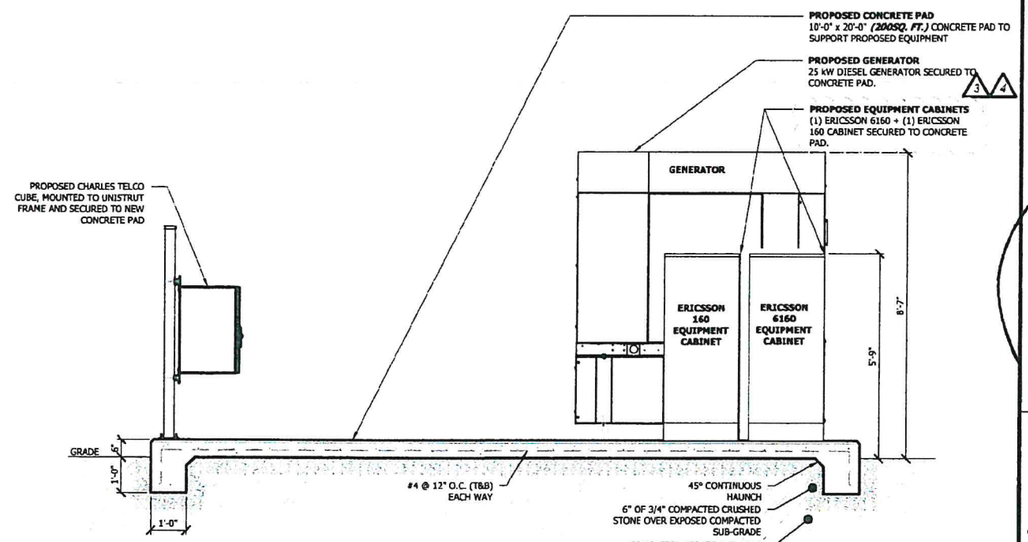
DRAWN BY	DATE
AMA	09/26/18

SHEET No
Z6

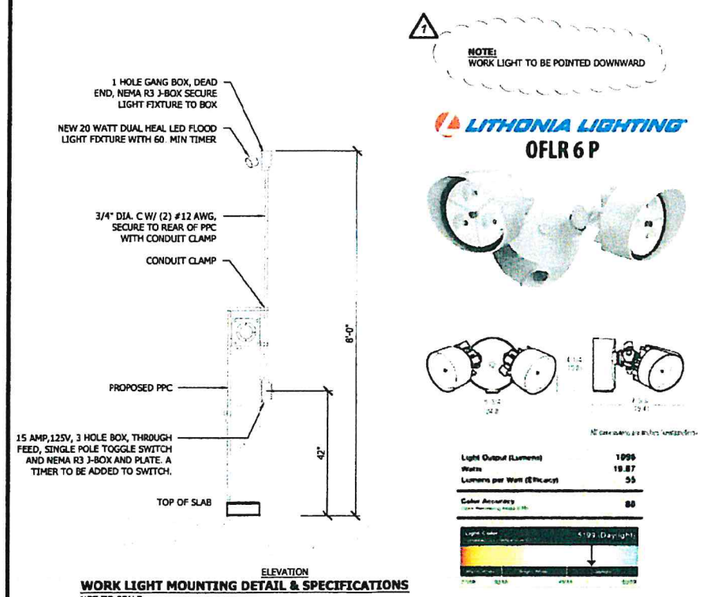


NORTH

EQUIPMENT PLAN
SCALE: 1/2" = 1'-0" (SHEET SIZE 22"x34")
SCALE: 1/4" = 1'-0" (SHEET SIZE 11"x17")

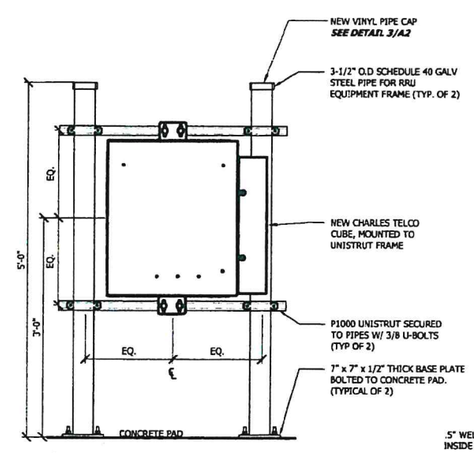


EQUIPMENT ELEVATION
SCALE: 1/2" = 1'-0" (SHEET SIZE 22" x 34")
SCALE: 1/4" = 1'-0" (SHEET SIZE 11" x 17")

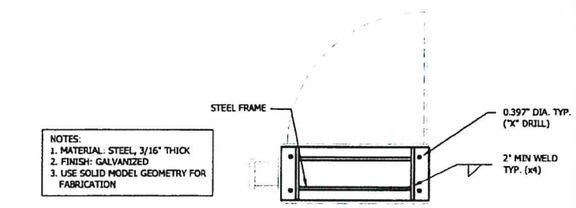


ELEVATION

WORK LIGHT MOUNTING DETAIL & SPECIFICATIONS
NOT TO SCALE

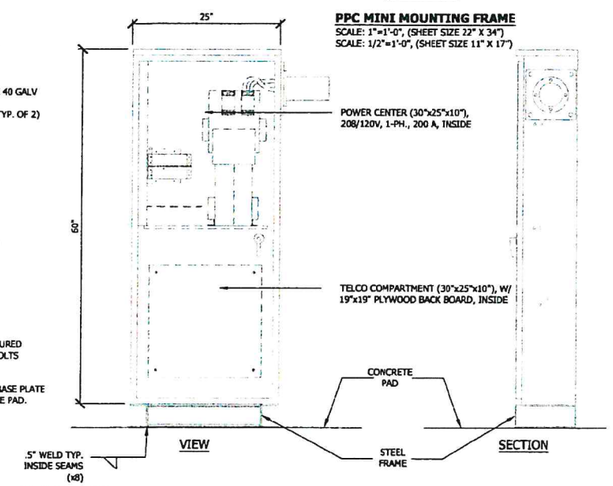


TELCO CUBE SPECIFICATIONS
NOT TO SCALE



NOTES:
1. MATERIAL: STEEL, 3/16" THICK
2. FINISH: GALVANIZED
3. USE SOLID MODEL GEOMETRY FOR FABRICATION

FRAME PLAN



PPC MINI MOUNTING FRAME
SCALE: 1"=1'-0", (SHEET SIZE 22" X 34")
SCALE: 1/2"=1'-0", (SHEET SIZE 11" X 17")

PPC MINI DETAIL
NO SCALE

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PROJECT
PROPOSED WIRELESS COMMUNICATION FACILITY
"VERNON SUBSTATION"
13 VANDERHOOF COURT,
VERNON, NEW JERSEY 07462
BLOCK: 378 LOT:17
F.K.A BLOCK: 141 LOT: 12.02
SUSSEX COUNTY

ISSUE NO	DESCRIPTION OF CHANGE	ISSUE DATE
6	REV. 5 ZD - RF COMMENT	10/26/20
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1	FINAL ZONING DRAWINGS	09/27/18
0	PRELIMINARY ZONING DRAWINGS	09/26/18

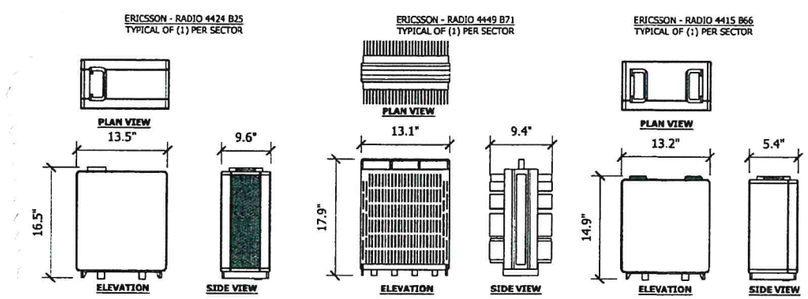
SHEET TITLE
EQUIPMENT PLAN AND ELEVATION

PROJECT No **NJ208 NJ07320C**

SITE DESIGNATION
13 VANDERHOOF CT.

DRAWN BY: AMA
DATE: 09/26/18

SHEET No
Z7

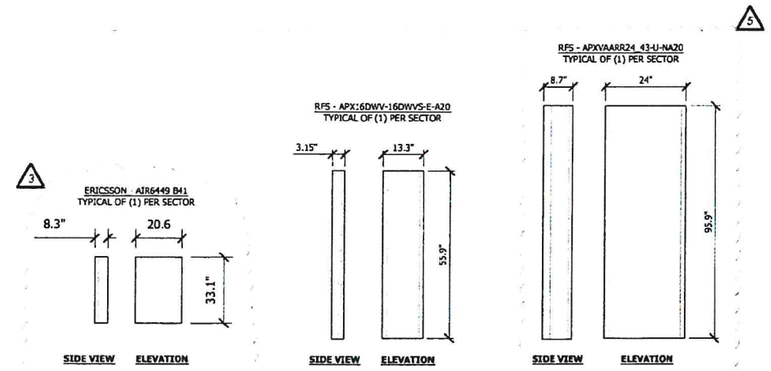


MECHANICAL SPECIFICATIONS:
1) HEIGHT = 16.5 IN
2) WIDTH = 13.5 IN
3) DEPTH = 9.6 IN
4) WEIGHT = 88 LBS
5) COLOR: LIGHT GRAY

MECHANICAL SPECIFICATIONS:
1) HEIGHT = 17.9 IN
2) WIDTH = 13.1 IN
3) DEPTH = 9.4 IN
4) WEIGHT = 74.9 LBS
5) COLOR: LIGHT GRAY

MECHANICAL SPECIFICATIONS:
1) HEIGHT = 14.9 IN
2) WIDTH = 13.2 IN
3) DEPTH = 5.4 IN
4) WEIGHT = 46.3 LBS
5) COLOR: LIGHT GRAY

RRU SPECIFICATIONS
NOT TO SCALE

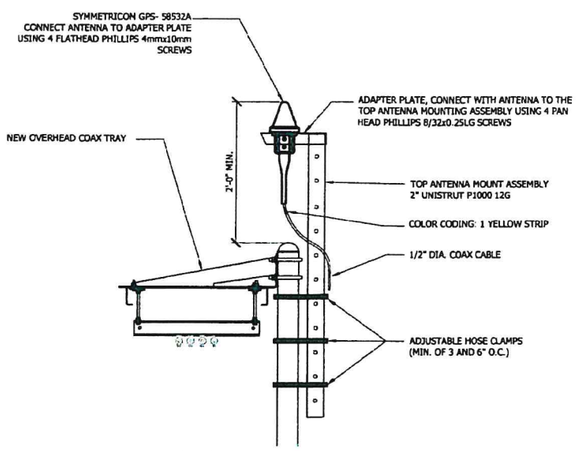


MECHANICAL SPECIFICATIONS:
1) HEIGHT = 33.1 IN
2) WIDTH = 20.6 IN
3) DEPTH = 8.3 IN
4) WEIGHT = 112 LBS
5) COLOR: LIGHT GRAY

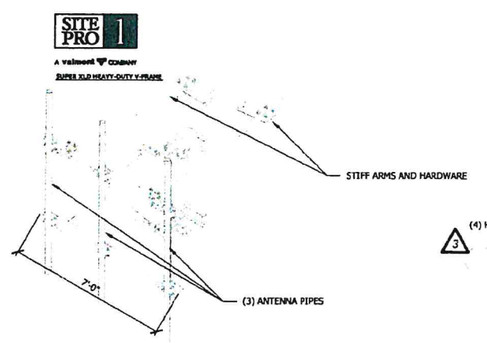
MECHANICAL SPECIFICATIONS:
1) HEIGHT = 55.9 IN
2) WIDTH = 13.3 IN
3) DEPTH = 3.15 IN
4) WEIGHT = 40.7 LBS
5) COLOR: LIGHT GRAY

MECHANICAL SPECIFICATIONS:
1) HEIGHT = 95.9 IN
2) WIDTH = 24 IN
3) DEPTH = 8.7 IN
4) WEIGHT = 128 LBS
5) COLOR: LIGHT GRAY

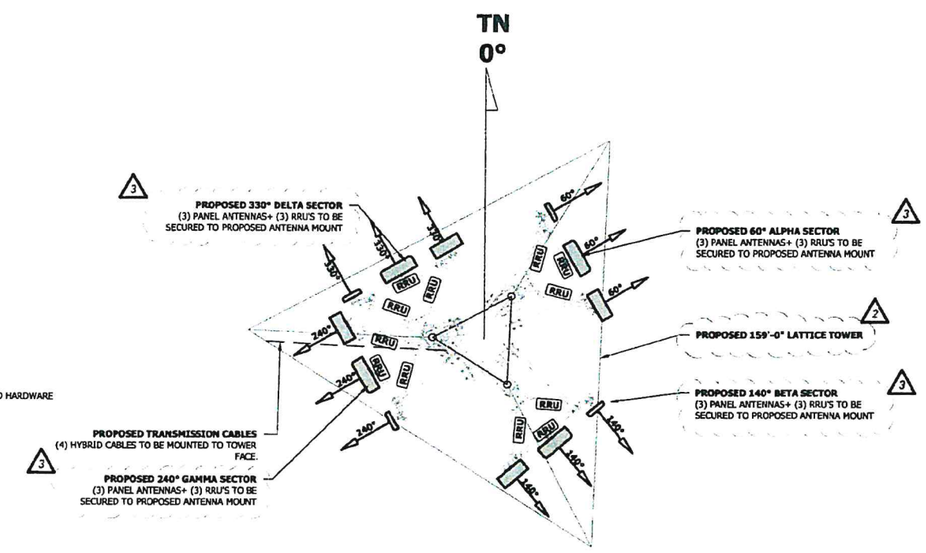
ANTENNA DETAILS
NOT TO SCALE.



GPS MOUNTING DETAIL
SCALE: AS NOTED



ANTENNA MOUNT
NOT TO SCALE



NORTH

ANTENNA PLAN
SCALE: 1/4" = 1'-0" (SHEET SIZE 22" x 34")
SCALE: 1/8" = 1'-0" (SHEET SIZE 11" x 17")

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PROJECT
PROPOSED WIRELESS COMMUNICATION FACILITY
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SHEET TITLE
ANTENNA PLAN AND SPECIFICATIONS

PROJECT No **NJ208**
NJ07320C

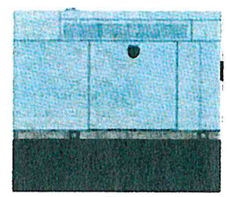
SITE DESIGNATION
13 VANDERHOOF CT.

DRAWN BY: AMA
DATE: 09/26/18

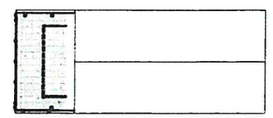
SHEET No
Z8

25 kW DIESEL GENERATOR 120/240V, 1 PHASE

GENERATOR TO BE INSTALLED WITH SOUND ATTENUATION ENCLOSURE AND CRITICAL GRADE MUFFLER ASSEMBLY



IMAGE



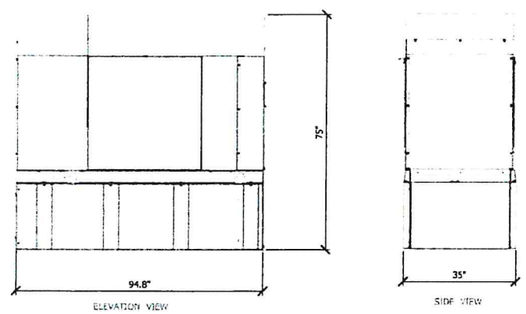
GENERATOR FOOTPRINT

POWER RATINGS

FUEL CONSUMPTION RATES*

Sound Emission Data

Rated Load Sound Output at 23ft dB(A) 65

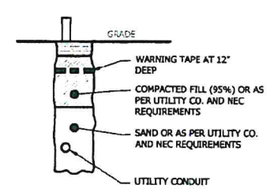


ELEVATION VIEW

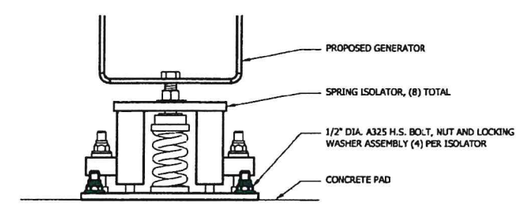
SIDE VIEW

GENERATOR DETAIL
SCALE: 1/2" = 1'-0", (SHEET SIZE 22"X34")
SCALE: 1/4" = 1'-0", (SHEET SIZE 11"X17"

NOTE: IF APPROVED BY CARRIER, THE GENERATOR CAN BE INSTALLED ON RUBBER VIBRATION PADS IN LIEU OF THE SPRINGS SHOWN



UTILITY TRENCH DETAIL
SCALE: 1/2" = 1'-0", (SHEET SIZE 22"x34")
SCALE: 1/4" = 1'-0", (SHEET SIZE 11"x17")



GENERATOR TIE DOWN DETAIL
SCALE: 3" = 1'-0" (SHEET SIZE 22"X34")
SCALE: 1 1/2" = 1'-0" (SHEET SIZE 11"X17")

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SHEET TITLE
GENERATOR SPECIFICATIONS

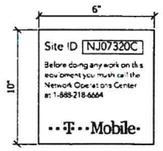
PROJECT No **NJ208**
NJ07320C

SITE DESIGNATION:
13 VANDERHOOF CT.

DRAWN BY: AMA
DATE: 09/26/18

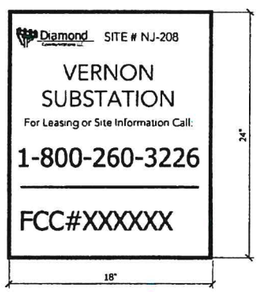
SHEET No:
Z9

NOTES:
1. SIGN SHALL BE MOUNTED ON FRONT SIDE OF EQUIPMENT DOOR.
2. MOUNTING HEIGHT TO BE 60" A.F.F.



CARRIER SITE IDENTIFICATION SIGN DETAIL
NOT TO SCALE

NOTES:
1. SIGN SHALL BE MOUNTED ON FRONT OF COMPOUND FENCE GATE.
2. MOUNTING HEIGHT TO BE 60" A.F.F.



COMPOUND IDENTIFICATION SIGN DETAIL
NOT TO SCALE

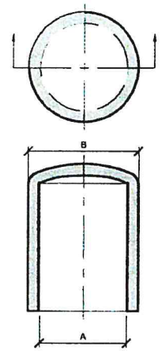
NOTE:
PIPE CAPS TO BE SECURED TO ALL PIPE OPENINGS

ROUND VINYL CAPS - VC SERIES

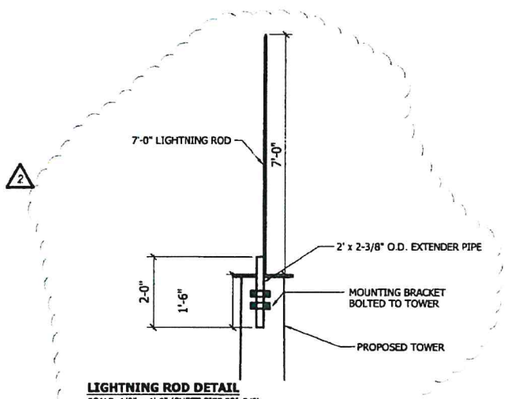
SERIES VC CAPS ARE EXTREMELY FLEXIBLE AND DURABLE PROTECTIVE CLOSURES WHICH ARE IDEAL FOR USE AS THREAD PROTECTORS, DUST AND MOISTURE SEALS, PIPE AND STUD END COLOR CODING, AND FOR MASKING DURING PAINTING OR PLATING OPERATIONS.
IF YOUR APPLICATION IS EXPOSED TO EXTREME HEAT, TRY OUR HVC SERIES. THE HVC SERIES IS MANUFACTURED IN OUR FLEXSOO® MATERIAL THAT OFFERS HEAT RESISTANCE UP TO AND BEYOND 500°F. CAPLUGS FLEXSOO® MATERIAL MAINTAINS THE SAME FLEXIBLE NATURE OF STANDARD VINYL, BUT OFFERS THE ADDED HEAT RESISTANCE FOR FINISHING APPLICATIONS SUCH AS POWDER COATING, E-COATING, AND MORE.
MATERIAL: VINYL
STANDARD COLOR: **BLACK**
OPTIONAL COLORS: WHITE, BROWN, ORANGE, GREEN, GRAY, BLUE, YELLOW, RED

MANUFACTURED BY CAPLUGS: 1-814-868-3671
COLOR: WHITE.

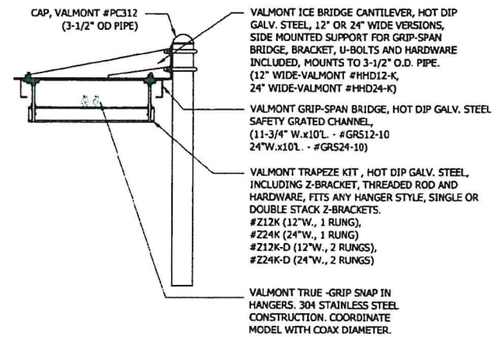
NOTE:
G.C. TO PURCHASE AND INSTALL CAP PLUGS AT NEW AND EXISTING ANTENNA SECTOR MOUNTS. (4) PER MOUNT. AFTER INSTALLATION THE G.C IS TO DRILL A 1/8" DIA. WEEP HOLE AT THE BASE OF EACH PIPE SUPPORT AT EACH EXISTING SECTOR FRAME.



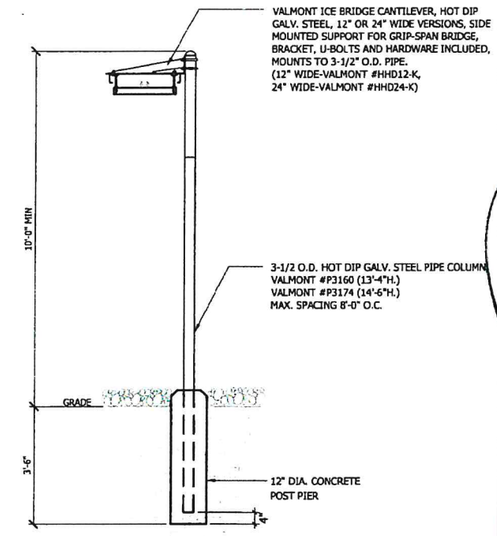
VINYL PIPE CAP DETAIL
NOT TO SCALE



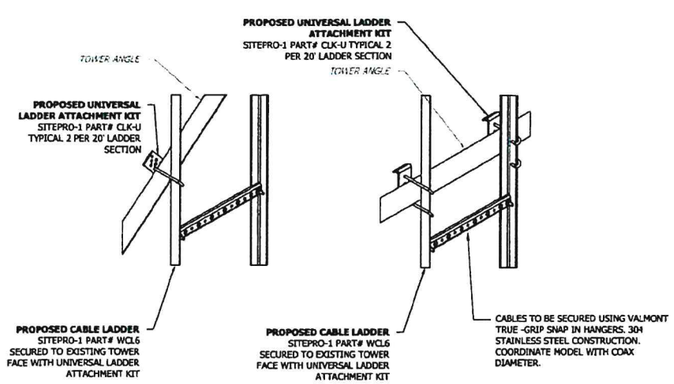
LIGHTNING ROD DETAIL
SCALE: 1/2" = 1'-0" (SHEET SIZE 22"x34")
SCALE: 1/4" = 1'-0" (SHEET SIZE 11"x17")



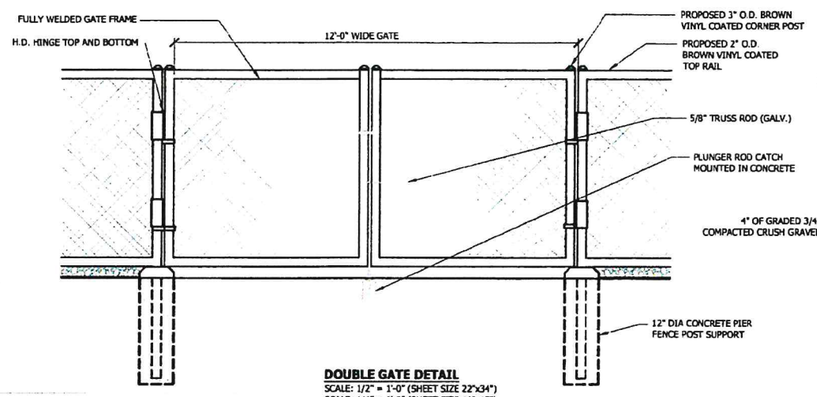
TRAPEZE COAX SUPPORT
NOT TO SCALE



OVERHEAD COAX SUPPORT TRAY
NOT TO SCALE

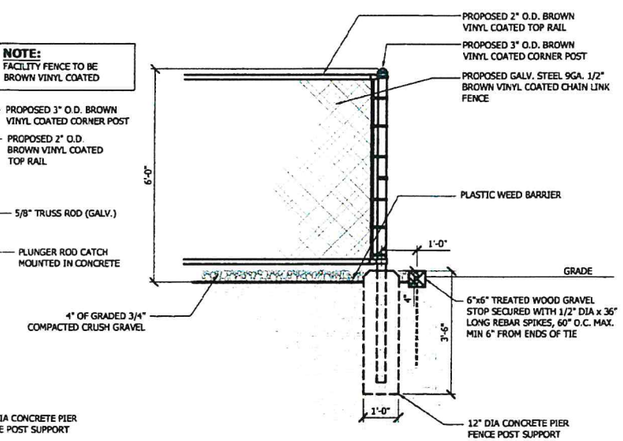


COAX SUPPORT ON TOWER LEG DETAIL
NO SCALE



DOUBLE GATE DETAIL
SCALE: 1/2" = 1'-0" (SHEET SIZE 22"x34")
SCALE: 1/4" = 1'-0" (SHEET SIZE 11"x17")

NOTE:
FACILITY FENCE TO BE BROWN VINYL COATED



COMPOUND FENCE DETAIL
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CO-APPLICANT/CLIENT
T-MOBILE NORTHEAST, LLC.
4 Sylvan Way
Parsippany, NJ 07054
(973) 397-4800

PROJECT:
PROPOSED WIRELESS COMMUNICATION FACILITY
"VERNON SUBSTATION"
13 VANDERHOOF COURT,
VERNON, NEW JERSEY 07462
BLOCK: 378 LOT:17
F.K.A BLOCK: 141 LOT: 12.02
SUSSEX COUNTY

ISSUE NO.	DESCRIPTION OF CHANGE	ISSUE DATE
6	REV 5 ZD - RF COMMENT	10/26/20
5	REV. 4 ZD - RF CHANGE REMOVAL OF CABINET	10/13/20
4	REV. 3 ZD - RF CHANGE & TOWNSHIP COMMENTS	09/21/20
3	REV. 2 ZONING DRAWINGS - TOWER HEIGHT	05/21/19
2	REV. 1 ZONING DRAWINGS PER TOWNSHIP ENGINEERS LETTER	03/13/19
1	FINAL ZONING DRAWINGS	09/27/18
0	PRELIMINARY ZONING DRAWINGS	09/26/18

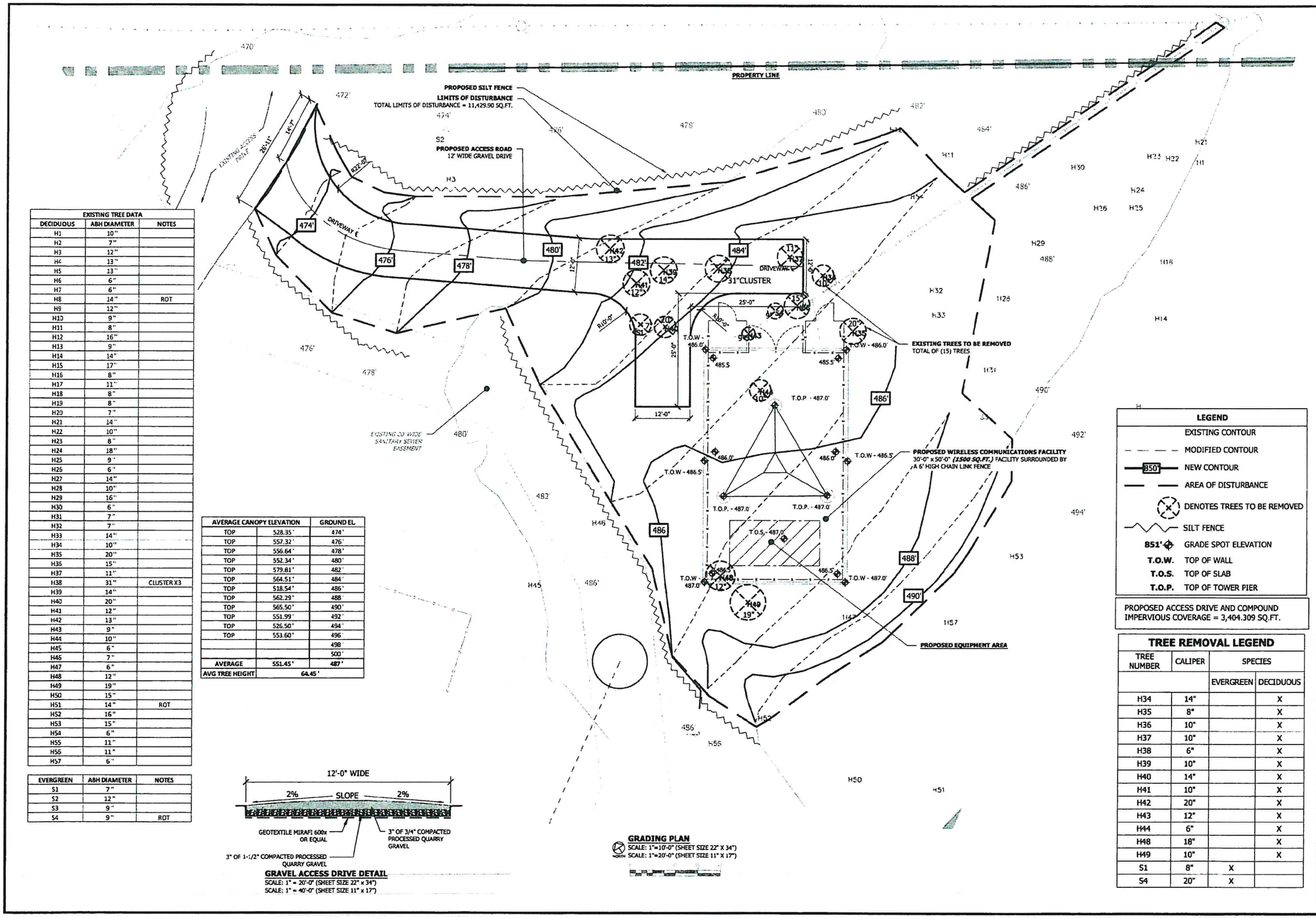
SHEET TITLE
MISCELLANEOUS SITE DETAILS

PROJECT No
NJ208
NJ07320C

SITE DESIGNATION
13 VANDERHOOF CT.

DRAWN BY: AMA
DATE: 09/26/18

SHEET No:
Z10



EXISTING TREE DATA		
DECIDUOUS	ABH DIAMETER	NOTES
H1	10"	
H2	7"	
H3	12"	
H4	13"	
H5	13"	
H6	6"	
H7	6"	
H8	14"	ROT
H9	12"	
H10	9"	
H11	8"	
H12	16"	
H13	9"	
H14	14"	
H15	17"	
H16	8"	
H17	11"	
H18	8"	
H19	8"	
H20	7"	
H21	14"	
H22	10"	
H23	8"	
H24	18"	
H25	9"	
H26	6"	
H27	14"	
H28	10"	
H29	16"	
H30	6"	
H31	7"	
H32	7"	
H33	14"	
H34	10"	
H35	20"	
H36	15"	
H37	11"	
H38	31"	CLUSTER X3
H39	14"	
H40	20"	
H41	12"	
H42	13"	
H43	9"	
H44	10"	
H45	6"	
H46	7"	
H47	6"	
H48	12"	
H49	19"	
H50	15"	
H51	14"	ROT
H52	16"	
H53	15"	
H54	6"	
H55	11"	
H56	11"	
H57	6"	

EVERGREEN	ABH DIAMETER	NOTES
S1	7"	
S2	12"	
S3	9"	
S4	9"	ROT

AVERAGE CANOPY ELEVATION		GROUND EL.
TOP	528.35'	474'
TOP	557.32'	476'
TOP	556.64'	478'
TOP	552.34'	480'
TOP	579.81'	482'
TOP	564.51'	484'
TOP	518.54'	486'
TOP	562.29'	488'
TOP	565.50'	490'
TOP	551.99'	492'
TOP	526.50'	494'
TOP	553.60'	496'
		498'
		500'
AVERAGE	551.45'	487'
AVG TREE HEIGHT	64.45'	

GRAVEL ACCESS DRIVE DETAIL
SCALE: 1" = 20'-0" (SHEET SIZE 22" x 34")
SCALE: 1" = 40'-0" (SHEET SIZE 11" x 17")

GRADING PLAN
SCALE: 1"=10'-0" (SHEET SIZE 22" X 34")
SCALE: 1"=20'-0" (SHEET SIZE 11" X 17")

LEGEND

- EXISTING CONTOUR
- MODIFIED CONTOUR
- 850' NEW CONTOUR
- AREA OF DISTURBANCE
- DENOTES TREES TO BE REMOVED
- SILT FENCE
- 851' GRADE SPOT ELEVATION
- T.O.W. TOP OF WALL
- T.O.S. TOP OF SLAB
- T.O.P. TOP OF TOWER PIER

PROPOSED ACCESS DRIVE AND COMPOUND IMPERVIOUS COVERAGE = 3,404.309 SQ.FT.

TREE REMOVAL LEGEND

TREE NUMBER	CALIPER	SPECIES	
		EVERGREEN	DECIDUOUS
H34	14"		X
H35	8"		X
H36	10"		X
H37	10"		X
H38	6"		X
H39	10"		X
H40	14"		X
H41	10"		X
H42	20"		X
H43	12"		X
H44	6"		X
H48	18"		X
H49	10"		X
S1	8"	X	
S4	20"	X	

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Frank Colasurdo, RA — Date
NJ Lic. #13753
NY Lic. #029379-1
PA Lic. #RA403655
MA Lic. #32346
MD Lic. #19079

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(973) 544-6817

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PROJECT
PROPOSED WIRELESS COMMUNICATION FACILITY
"VERNON SUBSTATION"
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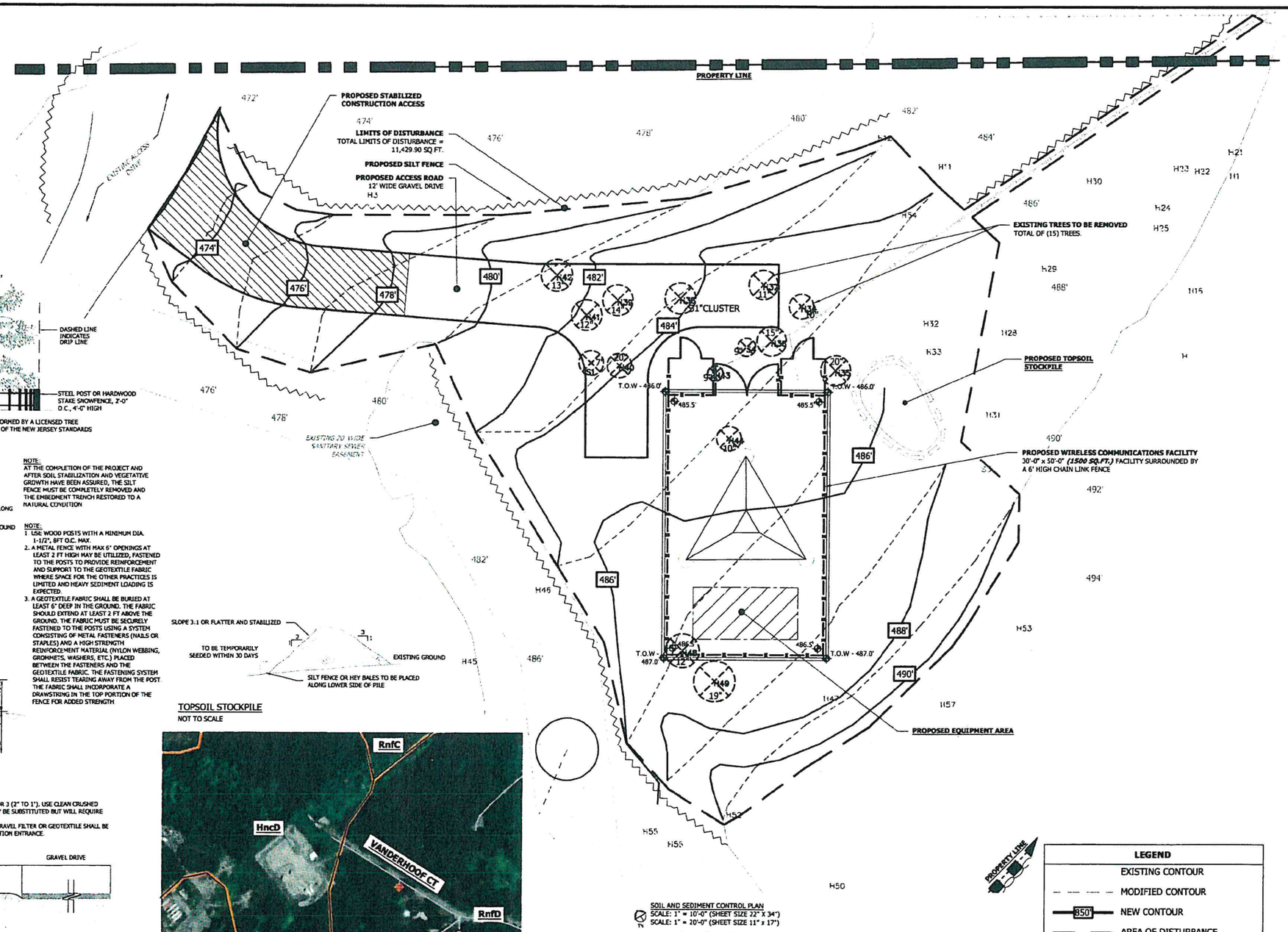
SHEET TITLE
GRADING AND TREE REMOVAL PLAN

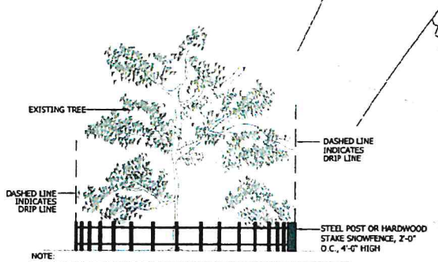
PROJECT No **NJ208**
NJ07320C

SITE DESIGNATION
13 VANDERHOOF CT.

DRAWN BY: AMA
DATE: 09/26/18

SHEET No:
Z11

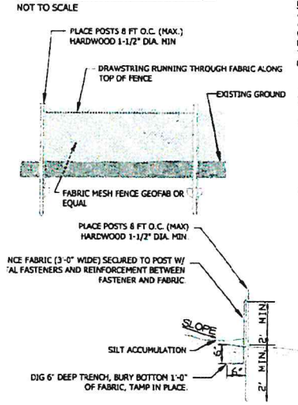




NOTE:
TRIMMING AND REMOVAL OF THE LIMBS SHALL BE PERFORMED BY A LICENSED TREE SURGEON AND IN ACCORDANCE WITH SECTION 9-1. 8.6 OF THE NEW JERSEY STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL.

TREE PROTECTION BARRIER FENCE

NOT TO SCALE



NOTE:
AT THE COMPLETION OF THE PROJECT AND AFTER SOIL STABILIZATION AND VEGETATIVE GROWTH HAVE BEEN ASSURED, THE SILT FENCE MUST BE COMPLETELY REMOVED AND THE EMBEDMENT TRENCH RESTORED TO A NATURAL CONDITION

NOTE:
1. USE WOOD POSTS WITH A MINIMUM DIA. 1-1/2", 8FT O.C. MAX.
2. A METAL FENCE WITH MAX 6" OPENINGS AT LEAST 2 FT HIGH MAY BE UTILIZED, FASTENED TO THE POSTS TO PROVIDE REINFORCEMENT AND SUPPORT TO THE GEOTEXTILE FABRIC WHERE SPACE FOR THE OTHER PRACTICES IS LIMITED AND HEAVY SEDIMENT LOADING IS EXPECTED
3. A GEOTEXTILE FABRIC SHALL BE BURIED AT LEAST 6" DEEP IN THE GROUND. THE FABRIC SHOULD EXTEND AT LEAST 2 FT ABOVE THE GROUND. THE FABRIC MUST BE SECURELY FASTENED TO THE POSTS USING A SYSTEM CONSISTING OF METAL FASTENERS (NAILS OR STAPLES) AND A HIGH STRENGTH REINFORCEMENT MATERIAL (NYLON WEBBING, GROMMETS, WASHERS, ETC.) PLACED BETWEEN THE FASTENERS AND THE GEOTEXTILE FABRIC. THE FASTENING SYSTEM SHALL RESIST TEARING AWAY FROM THE POST. THE FABRIC SHALL INCORPORATE A DRAWSTRING IN THE TOP PORTION OF THE FENCE FOR ADDED STRENGTH

SILT FENCE DETAIL

NOT TO SCALE

TOPSOIL STOCKPILE

NOT TO SCALE

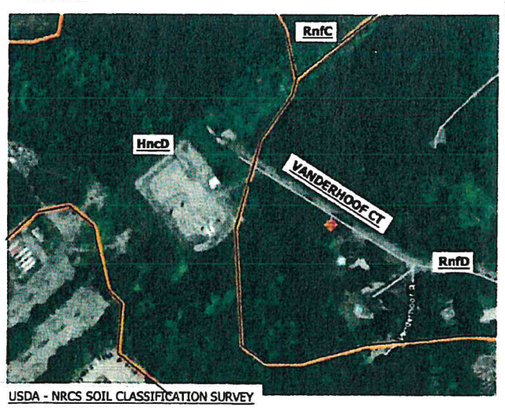
NOTE:
STONE SIZE- USE ASTM C-33, SIZE No. 2 (2-1/2" TO 1-1/2") OR 3 (2" TO 1"), USE CLEAN CRUSHED ANGULER STONE. CRUSHED CONCRETE OF SIMILAR SIZE MAY BE SUBSTITUTED BUT WILL REQUIRE MORE FREQUENT UPGRADING AND MAINTENANCE
AT POORLY DRAINED LOCATIONS, SUBSURFACE DRAINAGE GRAVEL FILTER OR GEOTEXTILE SHALL BE INSTALLED BEFORE INSTALLING THE STABILIZED CONSTRUCTION ENTRANCE.

TABLE 29-1

PERCENT SLOPE OF ROADWAY	LENGTH OF STONE REQUIRED	
	COARSE GRAINED SOILS (sands or gravels)	FINE GRAINED SOILS (clays or silts)
0 to 2%	50 ft	100 ft
2 to 5%	100 ft	200 ft
>5%	ENTIRE SURFACE STABILIZED WITH FABC BASE COURSE	

STABILIZED CONSTRUCTION ACCESS

NOT TO SCALE



USDA - NRCS SOIL CLASSIFICATION SURVEY

SCALE: 1"=200'-0" (SHEET SIZE 22" X 34")
SCALE: 1"=400'-0" (SHEET SIZE 11" X 17")

SOIL AND SEDIMENT CONTROL PLAN
SCALE: 1" = 10'-0" (SHEET SIZE 22" X 34")
SCALE: 1" = 20'-0" (SHEET SIZE 11" x 17")

LEGEND

- EXISTING CONTOUR
- MODIFIED CONTOUR
- 850' NEW CONTOUR
- AREA OF DISTURBANCE
- DENOTES TREES TO BE REMOVED
- 851' NEW SPOT ELEVATION
- SILT FENCE

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PA Lic #RA403655
MA Lic #32346
MD Lic #19079

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SHEET TITLE:
SOIL & SEDIMENT CONTROL PLAN AND DETAILS

PROJECT No **NJ208**
NJ07320C

SITE DESIGNATION
13 VANDERHOOF CT.

DRAWN BY: AMA
DATE: 09/26/18

SHEET No.
Z12

SOIL EROSION AND SEDIMENT CONTROL NOTES

ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES ON THIS PLAN SHALL BE IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.

ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY GRADING OPERATIONS AND INSTALLATION OF PROPOSED STRUCTURES OR UTILITIES AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.

ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE LEFT IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND/OR AREAS ARE STABILIZED.

THE APPLICABLE SOIL CONSERVATION DISTRICT SHALL BE CONTACTED 72 HOURS PRIOR TO THE START OF CONSTRUCTION FOR ANY LAND DISTURBING ACTIVITIES.

WORK DESCRIBED IN THIS NOTE SHALL BE IN ACCORDANCE WITH THE FOLLOWING PROVISIONS OF THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN N.J. (N.J. STATE SOIL CONSERVATION COMMITTEE - 6-14-72).

2.1-3 GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL
3.31 STANDARDS FOR STABILIZATION WITH MULCH ONLY
3.61 STANDARDS FOR MAINTAINING VEGETATION
3.21-25 STANDARDS FOR PERMANENT VEGETATIVE COVER
3.51-52 STANDARDS FOR TOP SOILING
4.11-12 STANDARDS FOR LAND GRADING

ANY CHANGES TO CERTIFIED SOIL EROSION AND SEDIMENT CONTROLS (S.E.S.C.) PLAN WILL REQUIRE THE SUBMISSION OF REVISED PLANS WHICH MEET ALL CURRENT S.E.S.C. STANDARDS TO THE DISTRICT FOR RECERTIFICATION. NO CERTIFICATE OF OCCUPANCY WILL BE ISSUED BEFORE THE PROVISIONS OF THE CERTIFIED S.E.S.C. PLANS HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES. ALL SITE WORK FOR SITE PLANS WILL HAVE TO BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE FOR THE ISSUANCE OF A CERTIFICATE OCCUPANCY BY THE MUNICIPALITY.

A CERTIFIED COPY OF THESE PLANS SHALL BE KEPT AT THE CONSTRUCTION SITE.

THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST BY SPRINKLING EXPOSED SOIL WITH WATER AS NEEDED. CONTRACTOR TO FURNISH WATER AND EQUIPMENT NECESSARY FOR THIS WORK.

STABILIZATION:

TRAFFIC CONTROL STANDARDS REQUIRE THE INSTALLATION OF A GRAVEL PAD OF 1-1/2" TO 2" STONE, AT ALL CONSTRUCTION DRIVEWAYS, IMMEDIATELY AFTER INITIAL SITE DISTURBANCE. SEE DETAIL ON SHEET SC1.
IN ORDER TO MINIMIZE DAMAGE FROM SOIL EROSION, EACH PORTION OF THE WORK SHALL BE STABILIZED IMMEDIATELY AFTER COMPLETION OF CONSTRUCTION.
ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED FOR MORE THAN 30 DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. MULCH IS TO BE USED AS NECESSARY FOR PROTECTION UNTIL SEEDING IS ESTABLISHED. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS SHALL BE MULCHED. IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS, A SUB-BASE COURSE WILL BE APPLIED IN ORDER TO STABILIZE STREETS, ROADS AND DRIVEWAYS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN 15 DAYS OF PRELIMINARY GRADING AFTER FINAL GRADING, ALL EXPOSED AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 10 DAYS. AT THAT TIME, IF ANY SOIL WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATION GROUND COVER, THEN IT SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS TO RENDER IT SUITABLE FOR PERMANENT VEGETATIVE STABILIZATION. SHOULD THIS PROCEDURE FAIL, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION SHALL BE EMPLOYED.

TOPSOIL:

REQUIRED ON ALL SURFACES TO BE STABILIZED BY SEEDING-6" MINIMUM THICKNESS, pH 5 TO 7, 3% ORGANIC FREE OF ANY SOLIDS LARGER THAN 1".

TEMPORARY PROTECTION BY MULCHING:
MULCH: SALT HAY OR SMALL GRAIN STRAW-NOT CHOPPED, 90-115 LB/1000 SF. LIQUID MULCH BINDER: EMULSIFIER ASPHALT SS-1, CSS-1, CMS-2, MS-2, RS-1, CRS-1 OR CRS-2, OR CUTBACK ASPHALT-RAPID CURING RC-70, RC-250 OR RC-800, OR MEDIUM CURING (MC-250 OR MC-800) 0.04 GAL/SY. IN AREAS WHERE SLOPES ARE STEEPER THAN 3 TO 1, THE RATE OF APPLICATION SHALL BE 0.075 GAL/SY.

MULCHING

MULCHING IS REQ. ON ALL SEEDING. MULCH WILL INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER & EARLIER ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED COMPLIANCE WITH THIS MULCHING REQUIREMENT.

A.) STRAW OR HAY
UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, OR SALT HAY TO BE APPLIED AT THE RATE OF 1-\ TO 2 TONS PER ACRE (70 TO 90 Lbs PER 1,000 SQ FT), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF LIQUID MULCH-BINDER (TRACKIFYING OR ADHESIVE AGANT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO PRESENCE OF WEED SEED.
APPLICATION. SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 85% OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQ FT SECTIONS AND DISTRIBUTE 70 TO 90 Lbs WITHIN EACH SECTION.
ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COSTS

1. LIQUID MULCH-BINDERS MAY BE USED TO ANCHOR SALT HAY, HAY OR STRAW MULCH.

A.) APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND MAY CATCH THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. THE REMAINDER OF THE AREA SHOULD BE UNIFORM IN APPEARANCE.
B.) USE ONE OF THE FOLLOWING:
1.) EMULSIFIED ASPHALT-(SS-1, CSS-1, CMS-2, MS-2, RS-1, RS-2, CRS-1, AND CRS-2). APPLY 0.04 GAL./SQ.YD. OR 194 GAL/ACRE ON FLAT AREAS & ON SLOPES LESS THAN 8 FT OR MORE HIGH, USE 0.075 GAL./SQYD. OR 363 GAL/ACRE. THESE MATERIALS MAY BE DIFFICULT TO APPLY UNIFORMLY AND WILL DISCOLOR SURFACES.

2.) ORGANIC AND VEGETABLE BASED BINDERS-NATURALLY OCCURRING, POWDER BASED HYDROPHILIC MATERIALS WHEN MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURFGRASS. USE AT RATES AND WEATHER CONDITIONS AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS. MANY OF NEW PRODUCTS ARE AVAILABLE, SOME OF WHICH MAY NEED FURTHER EVALUATION FOR USE IN THIS STATE.

3.) SYNTHETIC BINDERS-HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION TO MULCH, DRYING AND CURING SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. IT SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

NOTE: ALL NAMES GIVEN ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A RECOMMENDATION OF THESE PRODUCTS TO THE EXCLUSION OF OTHER PRODUCTS.

B.) WOOD-FIBER OR PAPER-FIBER MULCH
SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO GROWTH OR GERMINATION INHIBITING MATERIALS, USED AT THE RATE OF 1,500 POUNDS/ACRE (OR AS RECOMMENDED BY THE PRODUCT MANUFACTURER) AND MAY BE APPLIED BY A HYDROSEEDER. THE MULCH SHALL NOT BE MIXED IN THE TANK WITH SEED. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.

SEQUENCE OF CONSTRUCTION

DAY 1-7:
- CONSTRUCT SILT FENCE AROUND SITE AS SHOWN ON PLAN.
- CONSTRUCT WHEEL CLEANING PAD FOR VEHICLES AS SHOWN ON PLAN.

DAY 8-14:
- ROUGH GRADE SITE AND PROTECT STORM INLETS WITH INLET PROTECTION UNTIL CONSTRUCTION IS COMPLETE.

DAY 15 - 42:
- CONSTRUCT FACILITY/UTILITIES.
- MAINTAIN ALL SOIL EROSION CONTROL FACILITIES UNTIL CONSTRUCTION IS COMPLETE.

DAY 43-49:
- FINAL GRADE, SEEDING AND PLANTING

DAY 50-56:
- REMOVE SOIL AND SEDIMENT CONTROL DEVICES EXCEPT SOIL STABILITY MEASURES

SUSSEX COUNTY SOIL CONSERVATION DISTRICT

1. THE DISTRICT REPRESENTATIVE MUST BE AT THE PRECONSTRUCTION MEETING WITH THE TOWNSHIP ENGINEER, CONTRACTORS AND UTILITY REPRESENTATIVES. IF THE TOWNSHIP ENGINEER DOES NOT SCHEDULE A PRECONSTRUCTION MEETING, IT IS THE RESPONSIBILITY OF THE OWNER/APPLICANT TO SCHEDULE ONE PRIOR TO ANY LAND DISTURBANCE
2. ALL SEDIMENT AND EROSION CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE, IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
3. EXCAVATED SOIL MATERIAL SHALL NOT BE PLACED ADJACENT TO RIVERS, STREAMS OR BODIES OF WATER IN A MANNER THAT WILL CAUSE IT TO BE WASHED AWAY BY HIGH WATER OR RUNOFF. EXCESS BORROW MATERIAL REMOVED FROM THE CONSTRUCTION SITE SHALL BE STABILIZED AT THE SITE OF PLACEMENT.
4. ALL DISTURBED AREAS NOT SCHEDULED FOR CONSTRUCTION ACTIVITIES WITHIN 60 DAYS OF DISTURBANCE SHALL BE TEMPORARILY STABILIZED. (SEE TEMPORARY/PERMANENT SEEDING NOTES SC2.)
5. DURING THE NON-GROWING SEASON, THE MECHANISM TO BE UTILIZED FOR TEMPORARY STABILIZATION IS THE APPLICATION OF MULCH ONLY.
6. PERMANENT STABILIZATION (LOCATION AND DETAIL OF ALL PROPOSED NONSTRUCTURAL METHODS OF SOIL STABILIZATION - INCLUDING TYPES AND RATES OF LIME, FERTILIZER, SEED, AND MULCH TO BE APPLIED - REFER TO THE NJ SOIL EROSION AND SEDIMENT CONTROL STANDARD ENTITLED PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION)
7. ALL WORK TO BE DONE IN ACCORDANCE WITH THE "STANDARD FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY".
8. A CRUSHED-STONE VEHICLE WHEEL-CLEANING BLANKET WILL BE INSTALLED WHEREVER A CONSTRUCTION ACCESS DRIVE INTERSECTS A PAVED ROADWAY. THE BLANKET WILL BE OF SUFFICIENT SIZE TO REDUCE OFFSITE TRACKING OF SEDIMENT BY CONSTRUCTION TRAFFIC AND WILL BE MAINTAINED IN GOOD ORDER UNTIL ALL DRIVEWAY AREAS ARE STABILIZED. THE BLANKET SHALL BE COMPOSED OF ASTM C-33, SIZE NO.2 OR 3, NOT LESS THAN 6" DEEP AND NOT LESS THEN THE FULL WIDTH OF THE POINTS OF INGRESS OR EGRESS.
9. MULCHING SHALL BE DONE AT THE RATE OF 80 LBS./1000 SQUARE FEET WITH UNROTTED SALT HAY AND ANCHORED IMMEDIATELY AFTER PLACEMENT.
10. ALL REVISIONS, AFTER DISTRICT CERTIFICATION HAS BEEN GRANTED, SHALL BE FORWARDED TO THE SUSSEX COUNTY SOIL CONSERVATION DISTRICT FOR REVIEW. A LETTER OF EXPLANATION SHALL ACCOMPANY ALL REVISIONS
11. THE SUSSEX COUNTY SCD MUST BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF ANY LAND DISTURBING ACTIVITY.
12. THE OWNER/APPLICANT WILL OBTAIN THE DISTRICT ISSUED REPORT OF COMPLIANCE PRIOR TO ANY OCCUPANCY. THE DISTRICT REQUIRES AT LEAST ONE WEEK'S NOTICE BEFORE ISSUANCE.
13. ALL TOPSOIL STRIPPED AND STOCKPILED FOR USE IN FINAL GRADING SHALL RECEIVE TEMPORARY SEEDING.
14. TOTAL DISTURBED AREA = 7,399.7885 SQ.FT (0.169 ACRES).
15. DURING LAND DISTURBANCE ACTIVITIES OR CONSTRUCTION, ANY ADDITIONAL CONTROL MEASURES AS DEEMED NECESSARY TO PREVENT EROSION OR TO CONTROL SEDIMENTATION BEYOND THOSE SHOWN ON THE APPROVED PLANS SHALL BE INSTALLED AS DIRECTED BY THE MUNICIPAL ENGINEER OR SUSSEX COUNTY SOIL CONSERVATION DISTRICT.
16. THE APPLICANT IS REQUIRED TO HAVE A COPY OF THE CERTIFIED PLAN AT THE CONSTRUCTION SITE.
17. TO THE MAXIMUM EXTENT PRACTICAL, ALL VEGETATED AREA NOT NEEDED FOR CONSTRUCTION SHALL BE LEFT UNDISTURBED FOR AS LONG AS POSSIBLE.
18. FINAL STABILIZATION OF ALL LAND DISTURBANCES ASSOCIATED WITH UNDERGROUND UTILITIES, IRRESPECTIVE OF PHASING, IS THE ULTIMATE RESPONSIBILITY OF THE OWNER.
19. DUST IS TO BE CONTROLLED WITH WATER, CALCIUM CHLORIDE OR OTHER METHOD APPROVED BY THE SOIL CONSERVATION DISTRICT.
20. RESIDENTIAL DEVELOPMENT CONTROL MEASURES SHALL/WILL APPLY TO DWELLING CONSTRUCTION ON INDIVIDUAL LOTS AND NOTATION THAT SUCH CONTROL MEASURES SHALL APPLY TO SUBSEQUENT OWNERS IF TITLE IS CONVEYED.
21. FOR SUBDIVISION PROJECT (ROADWAY & DRAINAGE PLANS) - SOIL EROSION AND SEDIMENT CONTROL PLANS WILL BE DEVELOPED FOR EACH LOT AS DEVELOPED.

PROJECT RESPONSIBILITY

THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR ALL PERMANENT SOIL EROSION AND SEDIMENT CONTROL MEASURES AND THE FACILITY DURING THE CONSTRUCTION PHASE
THE PROPERTY OWNER WILL BE RESPONSIBLE FOR THE MAINTAINING THE GROUNDS AROUND THE FACILITY AFTER ALL CONSTRUCTION IS COMPLETE AND THE C.O. HAS BEEN ISSUED

STABILIZATION WITH MULCH ONLY

- DEFINITION: STABILIZING EXPOSED SOILS WITH NON-VEGETATIVE MATERIALS.
- PURPOSE: TO PROTECT EXPOSED SOIL SURFACES FROM EROSION DAMAGE AND TO REDUCE OFFSITE ENVIRONMENTAL DAMAGE.
- WATER QUALITY ENHANCEMENT: PROVIDES TEMPORARYMECHANICAL PROTECTION AGAINST WIND OR RAINFALL INDUCED SOIL EROSION UNTIL PERMANENT VEGETATIVE COVER MAY BE ESTABLISHED.
- WHERE APPLIBCABLE: THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO EROSION, WHERE THE SEASON AND OTHER CONDITIONS MAY NOT BE SUITABLE FOR GROWING AN EROSION-RESISTANT COVER OR WHERE STABILIZATION IS NEEDED FOR A SHORT PERIOD UNTIL MORE SUITABLE PROTECTION CAN BE APPLIED

METHODS AND MATERIALS:

1. SITE PREPARATION:
A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING.
B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.

2. PROTECTIVE MATERIALS:
A. UNROTTED SMALL-GRAIN STRAW, OR SALT HAY AT 2.0 TO 2.5 TONS/ACRE IS SPREAD UNIFORMLY AT 90 TO 115 Lbs/1,00 SQ FT AND ANCHORED WITH MULCH ANCHORING TOOL, LIQUID MULCH BINDERS, OR NETTING TIE DOWN. OTHER SUITABLE MATERIALS MAY BE USED IF APPROVED BY THE SOIL CONSERVATION DISTRICT.
B. ASPHALT EMULSION IS RECOMMENDED AT THE RATE OF 600 TO 1,200 GALLONS/ACRE. THIS IS SUITABLE FOR A LIMITED PERIOD OF TIME WHERE TRAVEL BY PEOPLE, ANIMALS, OR MACHINES IS NOT A PROBLEM.
C. SYNTHETIC OR ORGANIC SOIL STABILIZERS MAY BE UBSED UNDER SUITABLE CONDITIONS AS RECOMMENDED BY THE MANUFACTURER.
D. WOOD-FIBER OR PAPER-FIBER MULCH AT THE RATE OF 1,500 Lbs/ACRE (OR ACCORDING TO THE MANUFACTURER'S REQUIREMENTS) MAY BE APPLIED BY HYDROSEEDER.
E. MULCH NETTING, SUCH AS PAPER JUTE, EXCELSIOR, COTTON, OR PLASTIC, MAY BE USED.
F. WOODCHIPS APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 2" MAY BE USED. WOODCHIPS WILL NOT BE USED ON AREAS WHERE FLOWING WATER COULD WASH THEM INTO AN INLET AND PLUG IT.
G. GRAVEL, CRUSHED STONE, OR SLAG AT THE RATE OF 9 CUBIC YARDS /1,00 SQ. FT APPLIED UNIFORMLY TO A MIN. DEPTH 3" MAY BE USED. SIZE 2 OR 3 (ASTM C-33) IS RECOMMENDED.

STABILIZATION WITH MULCH ONLY CONT.

3. MULCH ANCHORING SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT OF HAY OR STRAW MULCH TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA AND STEEPNESS OF SLOPES
A. PEG AND TWINE: DRIVE 8 TO 10" WOODEN PEGS TO WITHIN 2 TO 3" OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRISS-CROSS AND SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH 2 OR MORE ROUND TURNS.
B. MULCH NETTING: STAPLE PAPER , COTTON, OR PLASTIC NETTINGS OVER MULCH. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED. NETTING IS USUALLY AVAILABLE IN ROLLS 4 FEET WIDE AND UP TO 300 FEET LONG.
C. CRIMPER MULCH ANCHORING COULTER TOOL: A TRACTOR-DRAWN IMPLEMENT ESPECIALLY DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE. THIS PRACTICE AFFORDS MAXIMUM EROSION CONTROL, BUT ITS USE IS LIMITED TO THOSE SLOPES UPON WHICH THE TRACTOR CAN OPERATE SAFELY. SOIL PENETRATION SHOULD BE ABOUT 3 TO 4". ON SLOPING LAND, THE OPERATION SHOULD BE ON THE CONTOUR.
D. LIQUID MULCH-BINDERS
1. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND CATCHES THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. REMAINDER OF AREA SHOULD BE UNIFORM IN APPEARANCE.
2. USE ONE OF THE FOLLOWING"
A. EMULSIFIED ASPHALT- (SS-1, CSS-1, CMS-2, MS-2, RS-1, RS-2, CRS-1, AND CRS-2). APPLY 0.04 GAL/SQ. YD. OR 194 GAL/ACRE ON FLAT AREAS AND ON SLOPES LESS THAN 8 FEET OR MORE HIGH, USE 0.075 GAL /SQ.YD OR 363 GAL/ACRE. THESE MATERIALS MAY BE DIFFICULT TO APPLY UNIFORMLY AND WILL DISCOLOR SURFACES.
B. ORGANIC AND VEGETABLE BASED BINDERS-NATURALLY OCCURRING, POWDER BASED HYDROPHILIC MATERIALS WHEN MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURFGRASS. USE AT RATES AND WEATHER CONDITIONS AS RECOMMENDED BY THE MANUFACTURER.
C. SYNTHETIC BINDERS-HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION TO MULCH, DRYING AND CURING SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. IT SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

DUST CONTROL

1. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST BY SPRINKLING EXPOSED SOIL WITH WATER AS NEEDED
2. THE CONTRACTOR IS TO FURNISH THE WATER AND EQUIPMENT NECESSARY FOR THIS WORK

TEMPORARY SEEDING

PURPOSE: TO TEMPORARILY STABILIZE THE SOIL AND REDUCE DAMAGE FROM WIND AND WATER EROSION UNTIL PERMANENT STABILIZATION IS ACCOMPLISHED.

WATER QUALITY ENHANCEMENT: PROVIDES TEMPORARY PROTECTION AGAINST THE IMPACT OF WIND AND RAIN, SLOWS THE OVER LAND MOVEMENT OF STORM WATER RUNOFF, INCREASES INFILTRATION AND RETAINS SOIL AND NUTRIENTS ON SITE, PROTECTING STREAMS OR OTHER STORM WATER CONVEYANCES.

WHERE APPLICABLE: ON EXPOSED SOILS THAT HAVE THE POTENTIAL FOR CAUSING OFF-SITE ENVIRONMENTAL DAMAGE.

METHODS AND MATERIALS:
1. SITE PREPARATION:
A.) GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING. (PG 19-1)
B.) INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.
C.) IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BEE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).

2. SEEDBED PREPARATION:
A.) APPLY GROUND LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS COOPERATIVE EXTENSION. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE. APPLY LIMESTONE AT THE RATE OF 2 TONS/ACRE UNLESS SOIL TESTING INDICATES OTHERWISE. CALCIUM CARBONATE IS THE EQUIVALENT AND STANDARD FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY CALCIUM AND MAGNESIUM TO GRASSES AND LEGUMES. TABLE BELOW IS A GENERAL GUIDELINE FOR LIMESTONE APPLICATION.

TABLE 7-1

LIMESTONE APPLICATION RATE BY SOIL TEXTURE		
SOIL TEXTURE	TONS/ACRE	LBS./1000 SQ. FT.
CLAY, CLAY LOAM, AND HIGH ORGANIC SOIL	3	135
SANDY LOAM, LOAM, SILT LOAM	2	90
LOAMY SAND, SAND	1	45

B.) WORK LINE AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4" WITH A DISC, SPRING TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.
C.) INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED IN ACCORDANCE WITH THE ABOVE.
D.) SOILS HIGH IN SULFIDES OR HAVING A PH OF 4 OR LESS REFER TO STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOIL, PG 1-1.

3. SEEDING:
A.) SELECT SEED FROM RECOMMENDATIONS IN TABLE 7-2:
TEMPORARY VEGETATIVE STABILIZATION GRASSES, SEEDING RATES, DATES AND DEPTH:

TABLE 7-2

SEED SELECTIONS	SEEDING RATE ① (pounds)		OPTIMUM SEEDING DATE ②③ Based on Plant Hardiness Zone			OPTIMUM SEED DEPTH ④ (inches)
	Per Acre	Per 1000 Sq. Ft.	ZONE 5b, 6a	ZONE 6b	ZONE 7a, b	
COOL SEASON GRASSES						
1 Perennial ryegrass	100	1.0	3/15-6/1 8/1-9/15	3/1-5/15 8/15-10/1	2/15-5/1 8/15-10/15	0.5

① SEEDING RATE FOR WARM SEASON GRASS, SELECTION 5-7 SHALL BE ADJUSTED TO REFLECT THE AMOUNT OF PURE LINE SEED (PLS) AS DETERMINED BY A GERMINATION TEST RESULT. NO ADJUSTMENT IS REQUIRED FOR COOL SEASON GRASSES.
② MAY BE PLANTED THROUGHOUT SUMMER IF SOIL MOISTURE IS ADEQUATE OR SEEDED AREA CAN BE IRRIGATED.
③ PLANT HARDINESS ZONE.
④ TWICE THE DEPTH FOR SANDY SOILS.

B.) CONVENTIONAL SEEDING. APPLY SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER. EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDINGS, SEE SHALL BE INCORPORATED INTO THE SOIL, TO A DEPTH OF 1/4" TO 1/2", BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4" DEEPER ON COARSE TEXTURED SOIL.
C.) HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK AR TRAILER MOUNTED TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORT FIBER MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. POOR SEED TO SOIL CONTACT OCCURS REDUCING SEED GERMINATION AND GROWTH. HYDROSEEDING MAY BE USED FOR AREAS TOO STEEP FOR CONVENTIONAL EQUIPMENT TO TRAVERSE OR TOO OBSTRUCTED WITH ROCKS, STUMPS, ETC.
D.) AFTER SEEDING, FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPPILARITY, AND IMPROVE SEEDING EMERGENCE. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.

PERMANENT SEEDING

PURPOSE: TO PERMANENTLY STABILIZE THE SOIL AND REDUCE DAMAGE FROM WIND AND WATER EROSION UNTIL PERMANENT STABILIZATION IS ACCOMPLISHED
WATER QUALITY ENHANCEMENT: PROVIDES TEMPORARY PROTECTION AGAINST THE IMPACT OF WIND AND RAIN, SLOWS THE OVER LAND MOVEMENT OF STORM WATER RUNOFF, INCREASES INFILTRATION AND RETAINS SOIL AND NUTRIENTS ON SITE, PROTECTING STREAMS OR OTHER STORM WATER CONVEYANCES.
WHERE APPLICABLE: ON EXPOSED SOILS THAT HAVE THE POTENTIAL FOR CAUSING OFF-SITE ENVIRONMENTAL DAMAGE.
METHODS AND MATERIALS:
1. SITE PREPARATION:
A.) GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING. (PG 19-1)
B.) INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.
C.) IMMEDIATELY PRIOR TO SEEDING AND TOP SOIL APPLICATION, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.)
2. SEEDBED PREPARATION.
A.) APPLY GROUND LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS COOPERATIVE EXTENSION. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE. APPLY LIMESTONE IN ACCORDANCE WITH TABLE 4-1 AND THE RESULTS OF SOIL TESTING. CALCIUM CARBONATE IS THE EQUIVALENT AND STANDARD FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY CALCIUM AND MAGNESIUM TO GRASSES AND LEGUMES. TABLE 4-1 BELOW IS A GENERAL GUIDELINE FOR LIMESTONE APPLICATION.

TABLE 4-1

LIMESTONE APPLICATION RATE BY SOIL TEXTURE		
SOIL TEXTURE	TONS/ACRE	LBS./1000 SQ. FT.
CLAY, CLAY LOAM, AND HIGH ORGANIC SOIL	3	135
SANDY LOAM, LOAM, SILT LOAM	2	90
LOAMY SAND, SAND	1	45

B.) WORK LINE AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4" WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED
C.) IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.)
D.) HIGH ACID PRODUCING SOIL.
SOILS HAVING A pH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM OF 12" OF SOIL HAVING A pH OF 5 OR MORE BEFORE INITIATING SEEDBED PREPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS. PG.1-1

3. SEEDING.
A.) SELECT A MIXTURE FROM TABLE 4-3 OR USE MIXTURE RECOMMENDED BY RUTGERS COOPERATIVE EXTENTION OR NATURAL RESOURCES CONSERVATION SERVICE WHICH IS APPROVED BY THE SOIL CONSERVATION DISTRICT. SEED GERMINATION SHALL HAVE BEEN TESTED WITHIN 12 MONTHS OF THE PLANTING DATE. NO SEED SHALL BE ACCEPTED WITH A GERMINATION TEST DATE MORE THAN 12 MONTHS OLD UNLESS RETESTED.
1. SEEDING RATES SPECIFIED ARE REQUIRED WHEN A REPORT OF COMPLIANCE IS REQUESTED PRIOR TO ACTUAL ESTABLISHMENT OF PERMANENT VEGETATION. UP TO 50% REDUCTION IN RATES MAY BE USED WHEN PERMANENT VEGETATION IS ESTABLISHED PRIOR TO REPORT OF COMPLIANCE INSPECTION. THESE RATES APPLY TO ALL METHODS OF SEEDING. ESTABLISHING PERMANENT VEGETATION MEANS 80% VEGETATIVE COVERAGE WITH THE SPECIFIED SEED MIXTURE FOR THE SEEDED AREA AND MOVED ONCE.
2. WARM SEASON MIXTURES ARE GRASSES AND LEGUMES WHICH MAXIMIZE GROWTH AT HIGH TEMPERATURES, GENERALLY 85 DEG F AND ABOVE.SEE TABLE 4-3, MIXTURES 1 TO 7. PLANTING RATES FOR WARM SEASON GRASSES SHALL BE THE AMOUNT OF PURE LIVE SEED (PLS) AS DETERMINED BY GEMINATION TESTING RESULTS.
3. COOL SEASON MIXTURES ARE GRASSES AND LEGUMES WHICH MAXIMIZE GROWTH AT TEMPERATURES BELOW 85 DEG. F. MANY GRASSES BECOME ACTIVE AT 65 DEG. F. SEE TABLE 3, MIXTURES 8-20. ADJUSTMENT OF PLANTING RATES TO COMPENSATE FOR THE AMOUNT OF PURE LIVE SEED IS NOT REQUIRED FOR COOL SEASON GRASSES.
B.) CONVENTIONAL SEEDING IS PERFORMED BY APPLYING SEED UNIFORMLY BY HAND, CYCLONE (CETRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER. EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL WITHIN 24 HOURS OF SEEDBED PREPARATION TO A DEPTH OF 1/4" TO 1/2", BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4" DEEPER ON COARSE TEXTURED SOIL.
C.) HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK OR TRAILER MOUNTED TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORT FIBERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. HYDROSEEDING IS NOT A PREFERED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. POOR SEED TO SOIL CONTACT OCCURS REDUCING SEED GERMINATION AND GROWTH. HYDROSEEDING MAY BE USED FOR AREAS TOO STEEP FOR CONVENTIONAL EQUIPMENT TO TRAVERSE OR TOO OBSTRUCTED WITH ROCKS, STUMPS, ETC.
D.) AFTER SEEDING, FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING EMERGENCE. THIS IS PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.

TABLE 4-2

PERMANENT STABILIZATION MIXTURES FOR VARIOUS USES			
APPLICATION	PLANTING MIXTURES BY SOIL DRAINAGE CLASS		
	EXCESSIVELY DRAINED	WELL TO MODERATELY WELL DRAINED	SOMEWHAT POORLY TO POORLY DRAINED
RESIDENTIAL/ COMMERCIAL LOTS	12, 14, 17	12, 14, 15, 16, 17	18
POND AND CHANNEL BANKS, DIKES, BERMS AND DAMS	2, 7, 8, 12	7, 8, 9, 10, 11, 17	2, 10, 18, 19
DRAINAGE DITCHES, SWALES DETENTION BASINS	2, 11, 13	2, 9, 11, 13, 14, 19	2, 10, 18, 19
FILTER STRIPS	14	13, 14	13, 14
GRASSES WATERWAY, SPILLWAYS	2, 3, 11, 12, 14	8, 9, 11, 12, 13, 14	2, 11, 13, 14
RECREATION AREAS ATHLETIC FIELDS	7, 14, 17, 20	14, 15, 16, 17, 20	18
SPECIAL PROBLES SITES STEEP SLOPES AND BANKS, ROADSITDES, BORROW AREAS	2, 3, 6, 8	2, 3, 7, 9, 10, 11, 12, 17, 20	2, 10
SAND AND GRAVEL PITS, SANITARY LANDFILLS	1, 2, 3, 4, 5, 6, 21	1, 2, 3, 4, 5, 6, 10, 17, 20	1, 2, 3, 4, 5, 6, 21
DREDGED MATERIALS, SPOILBANKS, BORROW AREAS	2, 3, 6, 20	2, 3, 5, 11	2, 10
STEAMBANKS AND SHORELINES	2, 10, 22, 23a	2, 10, 21b, 22, 23a, 23b	2, 10, 21a, 23a,b,c,d
UTILITY RIGHTS-OF-WAY	3, 9, 20	3, 9	10, 11, 19

TABLE 4-3

PERMANENT VEGETATIVE MIXTURES, PLANTING RATES AND PLANTING DATES													
SEED MIXTURE	SEEDING RATE (pounds)		PLANTING DATES O= Optimal Planting Period A= Acceptable Planting Period — PLANT HARDINESS ZONES									MAINTENANCE LEVEL /4	REMARKS
			ZONE 5b,6a			ZONE 6b			ZONE 7a,7b				
	Per Acre	Per 1000 SQ. FT.	3/15-5/31	6/1-7/31	8/1-10/31	3/1-4/30	5/1-8/14	8/15-11/15	2/1-4/30	5/1-8/14	8/15-11/30		
COOL SEASON SEED MIXTURES													
14. Turf-Type Tall fescue (Blend of 3 cultivars)	150	3.5	O	A	O	O	A	O	O	A	O	C-D	Use in managed filter strip for nutrient uptake.

MAINTENANCE LEVEL:
A. INTENSIVE MOVING (2-4 DAYS), FERTILIZATION, LIME, PEST CONTROL AND IRRIGATION (EXAMPLES-HIGH MAINTENANCE LAWNS, COMMERCIAL AND RECREATION AREAS, PUBLIC FACILITIES).
B. FREQUENT MOWING (4-7 DAYS), OCCASIONAL FERTILIZATION, LIME AND WEED CONTROL (EXAMPLES-HOME LAWNS, COMMERCIAL SITES, SCHOOL SITES).
C. PERIODIC MOWING (7-14 DAYS), OCCASIONAL FERTILIZATION AND LIME (EXAMPLES-HOME LAWNS AND PARKS).
D. INFREQUENT OR NO MOWING, FERTILIZATION AND LIME THE FIRST YEAR OF ESTABLISHMENT (EXAMPLES-ROADSIDES, RECREATION AREAS, PUBLIC OPEN SPACES).

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10/26/2020
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CO APPLICANT/CLIENT
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4 Sylvan Way
Parsippany, NJ 07054
(973) 397-4800

PROJECT
PROPOSED WIRELESS COMMUNICATION FACILITY "VERNON SUBSTATION"
13 VANDERHOOF COURT,
VERNON, NEW JERSEY 07462
BLOCK: 378 LOT:17
F.K.A BLOCK: 141 LOT: 12.02
SUSSEX COUNTY

ISSUE NO	DESCRIPTION OF CHANGE	ISSUE DATE
6	REV. 5 ZD - RF COMMENT	10/26/20
5	REV. 4 ZD - RF CHANGE REMOVAL OF CABINET	10/13/20
4	REV. 3 ZD - RF CHANGE & TOWNSHIP COMMENTS	09/21/20
3	REV. 2 ZONING DRAWINGS - TOWER HEIGHT	05/21/19
2	REV. 1 ZONING DRAWINGS PER TOWNSHIP ENGINEERS LETTER	03/13/19
1	FINAL ZONING DRAWINGS	09/27/18
0	PRELIMINARY ZONING DRAWINGS	09/26/18

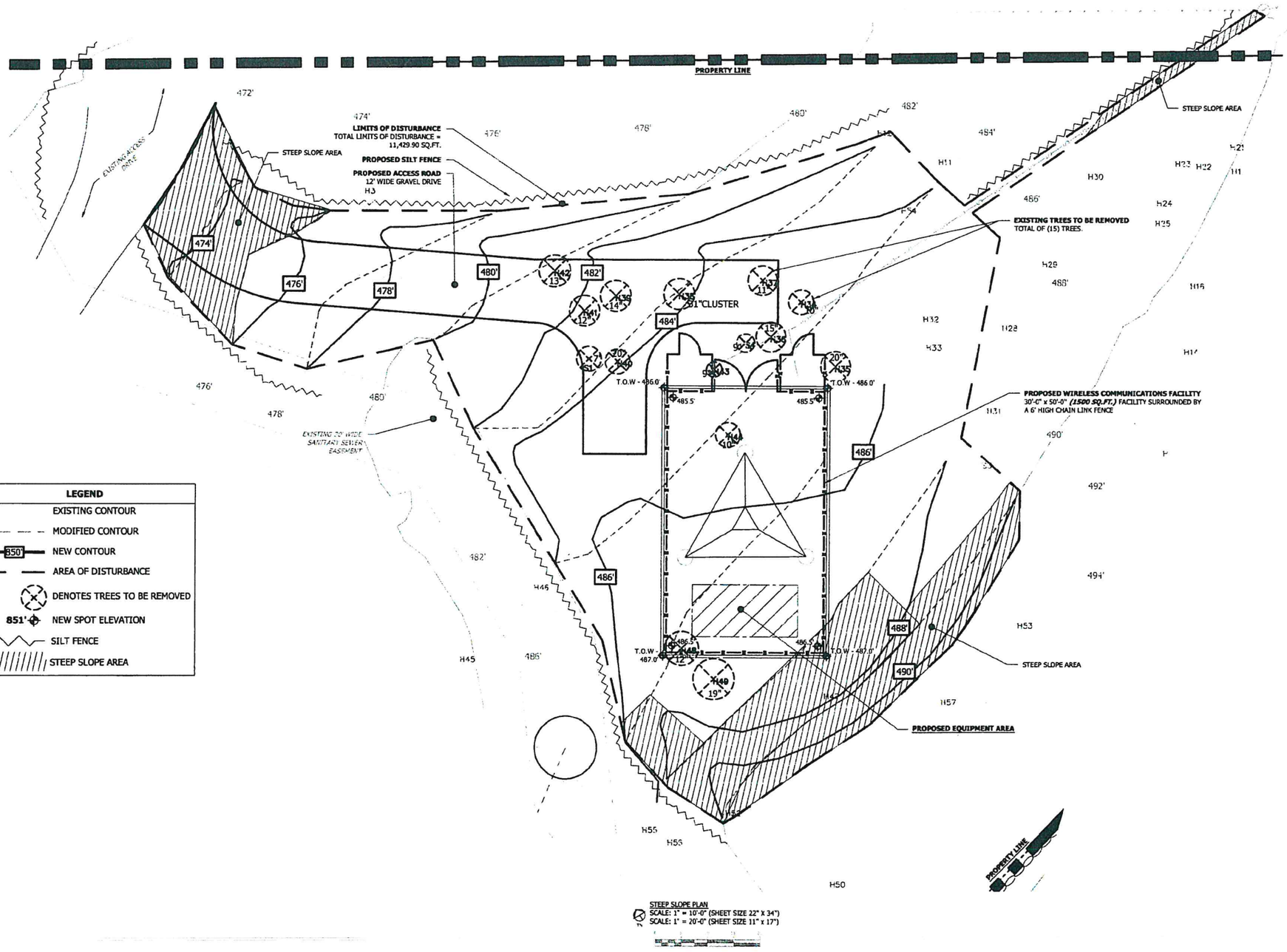
SHEET TITLE:
SOIL & SEDIMENT CONTROL NOTES

PROJECT No **NJ208 NJ07320C**

SITE DESIGNATION
13 VANDERHOOF CT.

DRAWN BY: AMA — DATE: 09/26/18

SHEET No
Z13



LEGEND	
	EXISTING CONTOUR
	MODIFIED CONTOUR
850'	NEW CONTOUR
	AREA OF DISTURBANCE
	DENOTES TREES TO BE REMOVED
851'	NEW SPOT ELEVATION
	SILT FENCE
	STEEP SLOPE AREA

FCA ARCHITECTS
350 Clark Drive | Suite 304
Mount Olive, NJ 07828
O 973-726-7164 | F 973-726-7204
fcolasurdo@fcarchitectsinc.com
Frank Colasurdo Architects, Inc

Frank Colasurdo, RA — Date

NJ Lic #13753
NY Lic #029379-1
PA Lic #RA403655
MA Lic #32346
MD Lic #19079

APPLICANT/CLIENT
Diamond Communications LLC
820 Morris Turnpike, Suite 104
Short Hills, NJ 07078
(973) 544-6817

CO-APPLICANT/CLIENT
T-MOBILE NORTHEAST, LLC.
4 Sylvan Way
Parsippany, NJ 07054
(973) 397-4800

PROJECT
PROPOSED WIRELESS COMMUNICATION FACILITY
"VERNON SUBSTATION"
13 VANDERHOOF COURT,
VERNON, NEW JERSEY 07462
BLOCK: 378 LOT:17
F.K.A BLOCK: 141 LOT: 12.02
SUSSEX COUNTY

ISSUE NO.	DESCRIPTION OF CHANGE	ISSUE DATE
6	REV. 5 ZD - RF COMMENT	10/26/20
5	REV. 4 ZD - RF CHANGE REMOVAL OF CABINET	10/13/20
4	REV. 3 ZD - RF CHANGE & TOWNSHIP COMMENTS	09/21/20
3	REV. 2 ZONING DRAWINGS - TOWER HEIGHT	05/21/19
2	REV. 1 ZONING DRAWINGS PER TOWNSHIP ENGINEERS LETTER	03/13/19
1	FINAL ZONING DRAWINGS	09/27/18
0	PRELIMINARY ZONING DRAWINGS	09/26/18

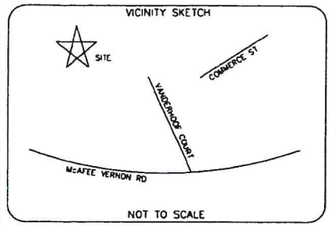
SHEET TITLE
STEEP SLOP PLAN

PROJECT No **NJ208**
NJ07320C

SITE DESIGNATION
13 VANDERHOOF CT.

DRAWN BY	DATE
AMA	09/26/18

SHEET No
Z14



PARCEL INFO

OWNER: NEW JERSEY POWER & LIGHT COMPANY, A COPORATION OF THE STATE OF NEW JERSEY

13 VANDERHOOF COURT, VENON NJ
DEED BOOK 900 PAGE 627
TAX ID NO: 141-12.02

ZONING

ZONING DISTRICT:

FEMA INFORMATION

PER REVIEW OF FIRM MAP #24037C0205E EFFECTIVE DATE: 09/29/2011, THIS PARCEL IS NOT IN A FLOOD HAZARD AREA. THE DESIGNATION IS ZONE "X"

SURVEYORS NOTES

1. BASIS OF BEARING:
BOOK 849 PAGE 633 & BOOK 661 PAGE 162

2. NO SUBSURFACE INVESTIGATION WAS PERFORMED TO LOCATE UNDERGROUND UTILITIES. UTILITIES SHOWN HEREON ARE LIMITED TO AND ARE PER OBSERVED EVIDENCE ONLY.

3. THIS SURVEY DOES REPRESENT A BOUNDARY SURVEY OF THE PARENT PARCEL.

4. ALL VISIBLE TELECOM EQUIPMENT AND IMPROVEMENTS ARE CONTAINED WITHIN THE DESCRIBED AREA.

5. ALL SYMBOLS SHOWN HEREON NOT DEPICTED TO SCALE.

LEGAL DESCRIPTION

LEGAL DESCRIPTION: FEE PARCEL (AS PROVIDED)

SITUATED IN THE COUNTY OF SUSSEX, STATE OF NEW JERSEY:

TRACT 1:

BEGINNING AT A POINT MARKING THE INTERSECTION OF THE SECOND COURSE AND THE THIRD COURSE OF A DESCRIPTION CONTAINED IN A DEED FROM ROBERT E. BALDWIN AND SHIRLEY N. BALDWIN, HIS WIFE, TO HAPPY VALLEY ASSOCIATES DATED MAY 15, 1969 AND RECORDED IN THE OFFICE OF THE CLERK OF SUSSEX COUNTY IN BOOK 849 OF DEEDS AT PAGE 633, ALSO BEING IN THE LINE OF LANDS NOW OR FORMERLY OF MARIO SCHETTINO AND RUNNING THENCE (1) ALONG A DIVISION LINE BETWEEN LANDS OF SAID MARIO SCHETTINO AND LANDS OF HAPPY VALLEY ASSOCIATES NORTH 15 DEGREES 05 MINUTES 35 SECONDS WEST 662.74 FEET; THENCE (2) SOUTH 51 DEGREES 39 MINUTES 50 SECONDS EAST 659.29 FEET TO A POINT IN THE LINE OF THE SECOND COURSE OF SAID HAPPY VALLEY ASSOCIATES TRACT; THENCE (3) ALONG THE SAME AND PARALLEL WITH AND DISTANT FIFTY FEET MEASURED AT RIGHT ANGLES FROM THE CENTERLINE OF AN EXISTING STEEL TOWER LINE OF NEW JERSEY POWER & LIGHT COMPANY SOUTH 56 DEGREES 10 MINUTES 08 SECONDS WEST 414.80 FEET TO THE POINT AND PLACE OF BEGINNING.

TRACT 2:

BEGINNING AT A POINT WHERE THE SECOND COURSE INTERSECTS THE THIRD COURSE OF TRACT ONE DESCRIBED IN DEED DATED SEPTEMBER 3, 1959, BETWEEN LESLIE DECKER ET UX. AND ROBERT E. BALDWIN ET UX. AND RECORDED IN THE SUSSEX COUNTY CLERK'S OFFICE IN BOOK 661 OF DEEDS AT PAGE 162; AND RUNNING THENCE (1) ALONG SAID SECOND COURSE AND A LINE OF LANDS NOW OR FORMERLY MARIO SCHETTINO NORTH 15 DEGREES 5 MINUTES 35 SECONDS WEST 105.01 FEET TO A POINT THE SAME MARKING A COMMON CORNER OF LANDS OF HAPPY VALLEY ASSOCIATES AND LANDS OF ROBERT E. BALDWIN ET UX; THENCE (2) ALONG A DIVISION LINE BETWEEN LANDS OF SAID ROBERT E. BALDWIN AND LANDS OF HAPPY VALLEY ASSOCIATES NORTH 56 DEGREES 10 MINUTES 8 SECONDS EAST 414.80 FEET TO A POINT IN THE SOUTHWESTERLY SIDELINE OF ROBERTS ROAD; THENCE (3) ALONG THE SAME SOUTH 51 DEGREES 39 MINUTES 50 SECONDS EAST 363.87 FEET TO A POINT; THENCE (4) SOUTH 79 DEGREES 2 MINUTES 10 SECONDS WEST 24.11 FEET; THENCE (5) SOUTH 10 DEGREES 57 MINUTES 50 SECONDS EAST 20.00 FEET; THENCE (6) SOUTH 79 DEGREES 2 MINUTES 10 SECONDS WEST 53 FEET TO A MONUMENT SAID POINT MARKING THE NORTHWESTERLY CORNER OF SECTION 4 OF "VERNON HEIGHTS" AS SHOWN ON MAP PREPARED BY AMISA M. GILPATRICK P.E. & L.S. DATED OCTOBER, 1965; THENCE (7) ALONG THE ABOVE MENTIONED THIRD COURSE OF TRACT ONE OF SAID BALDWIN SOUTH 82 DEGREES 14 MINUTES 22 SECONDS WEST 535.65 FEET TO THE POINT AND PLACE OF BEGINNING.

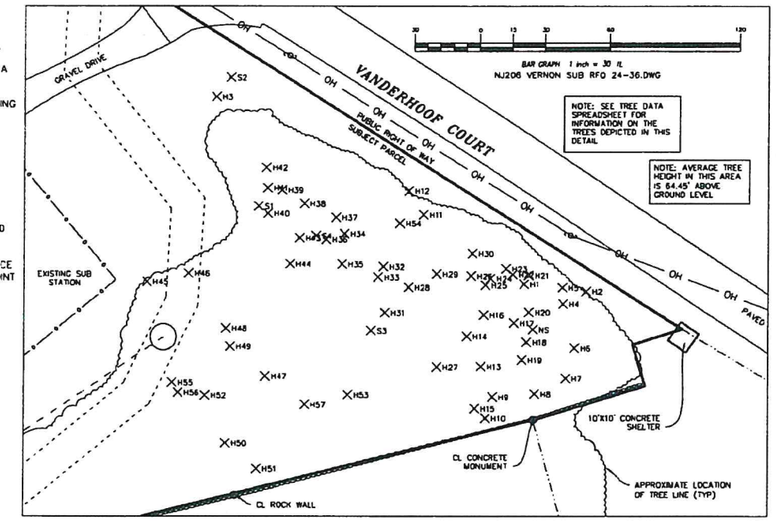
TAX ID NO: 141-12.02

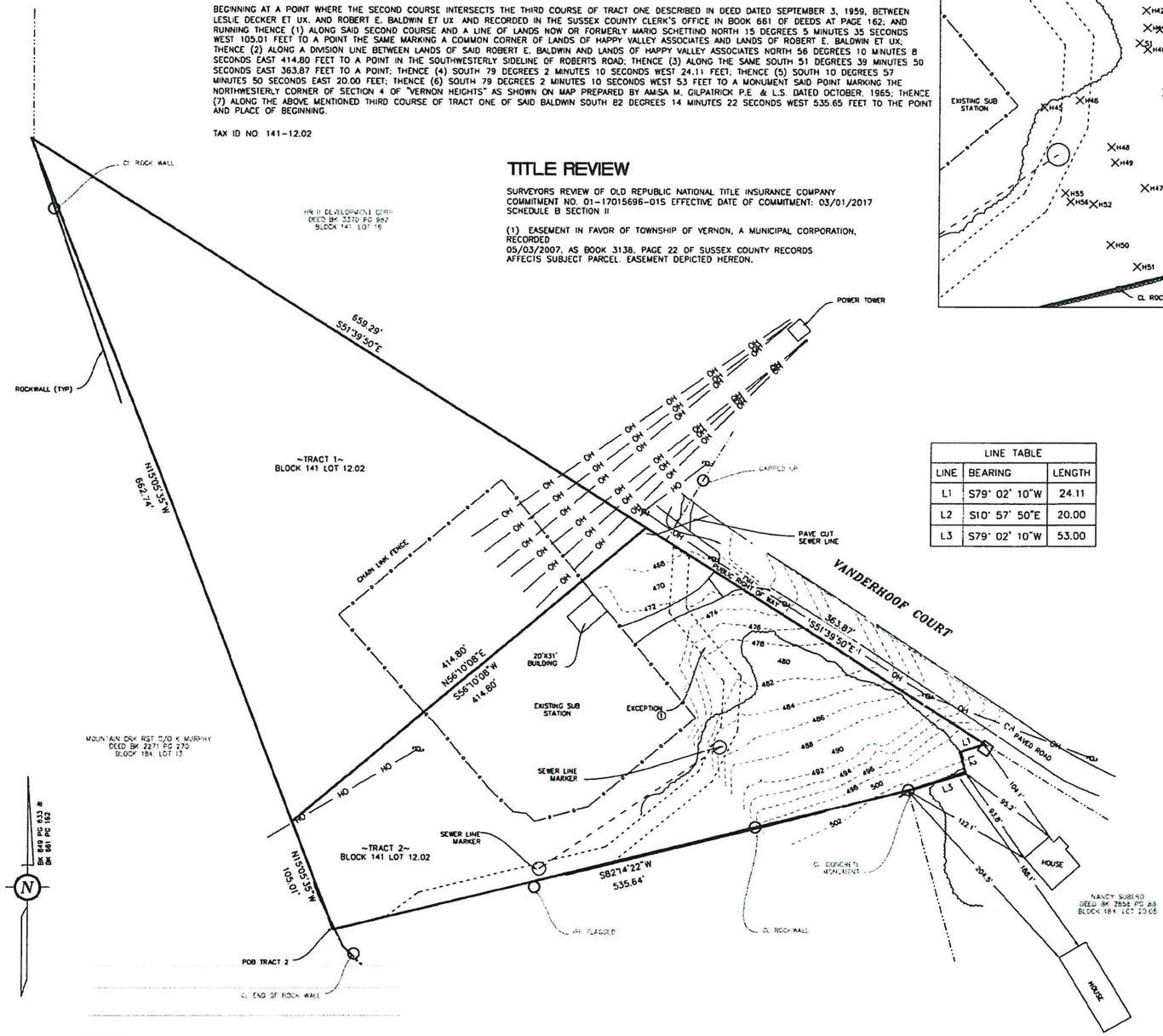
TITLE REVIEW

SURVEYORS REVIEW OF OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY
COMMITMENT NO. 01-17015696-01S EFFECTIVE DATE OF COMMITMENT: 03/01/2017
SCHEDULE B SECTION II

(1) EASEMENT IN FAVOR OF TOWNSHIP OF VERNON, A MUNICIPAL CORPORATION, RECORDED
05/03/2007, AS BOOK 3138, PAGE 22 OF SUSSEX COUNTY RECORDS
AFFECTS SUBJECT PARCEL. EASEMENT DEPICTED HEREON.

TREE AREA DETAIL





LINE TABLE		
LINE	BEARING	LENGTH
L1	S79° 02' 10"W	24.11
L2	S10° 57' 50"E	20.00
L3	S79° 02' 10"W	53.00

LEGEND OF SYMBOLS

- LIGHT POLE
- POLE
- WATER VALVE
- GAS ASSEMBLY
- WATER METER
- ELECTRIC APPARATUS
- OVERHEAD LINE
- FENCE LINE
- CATCH BASIN
- MANHOLE
- CLEANOUT
- TELEPHONE PED
- FIRE HYDRANT
- YARD INLET
- HANDICAPPED

NOTE - ANY UNDERGROUND LINES SHOWN ARE BASED ON SURFACE EVIDENCE. THIS SURVEYOR CANNOT CERTIFY TO LOCATION OF NON-VISIBLE STRUCTURES. IF UNDERGROUND LOCATION IS CRITICAL, THE LINE SHOULD BE EXPOSED AND AND VERIFIED. THIS SURVEYOR CANNOT ACCEPT LIABILITY FOR UNDERGROUND STRUCTURE LOCATION.

LEGEND OF NOMENCLATURE

- EXISTING BOUNDARY MONUMENT
- SET BOUNDARY MONUMENT
- CONCRETE MONUMENT
- EXISTING IRON PIPE
- EXISTING IRON REBAR
- R/W RIGHT OF WAY

UNLESS SIGNED, SEALED, AND DATED, THIS IS A PRELIMINARY PLAT AND NOT FOR RECORDING, SALES, OR CONVEYANCES.

JONATHAN MURPHY
Professional Land Surveying
10505 Leafwood Place (919) 280-8189
Raleigh NC 27613 FAX 995-9616
FBN# L-4382 E-MAIL : ralph@murphysurveyors.com

FILE NAME:NJ208 VERNON SUB RFQ 24-36.dwg

JAMES S. MURPHY
PLS NO. GS26952

STATE OF NEW JERSEY — JAMES S. MURPHY — No. GS26952 — PROFESSIONAL LAND SURVEYOR

BOUNDARY SURVEY
NJ208 VERNON SUB RFQ

TOWNSHIP OF VERNON, SUSSEX COUNTY, NEW JERSEY
9/25/2018 SCALE 1"=50"

BAR GRAPH 1 inch = 50 ft.
NJ208 VERNON SUB RFQ 24-36.DWG