



October 15, 2021

Maine Land Use Planning Commission
c/o Karen E. Bolstridge, Environmental Specialist III
Maine Dept. of Agriculture, Conservation & Forestry
106 Hogan Road, Suite 8
Bangor, ME 04401

**Re: Rising Tide Towers, LLC; DP 5050-B Telecommunications Facility Proposal
—Supplemental Filing Concerning Alternative Tower Option**

Dear Commissioners:

In light of the questions posed and issues flagged as part of the September 7, 2021 public hearing on DP 5050-B by LUPC and members of the public, it appears that there is strong interest in exploring whether it would be feasible for Rising Tide Towers, LLC, to construct a shorter, unlit telecommunications tower that meets the FirstNet connectivity and coverage requirements, even if such a tower is located within the D-RS2 subdistrict.

As stated in Attorney Dixon's oral and written testimony during the public hearing, Rising Tide has interpreted DP 5050 (the Commission's denial of Rising Tide's original proposal in Dallas Plantation) to mean that the Dallas Hill D-RS2 subdistrict is entirely "off-limits" to any type of tower development project. To the extent this interpretation does not accurately reflect the Commission's findings in DP 5050 or to the extent those findings do not inform the Commission's decision on this pending application, Rising Tide is willing to construct an 190-foot tall unlit telecommunications tower located within the D-RS2 subdistrict.

Accordingly, and pursuant to the Commission Chair's Second Procedural Order, enclosed please find additional information concerning this alternative tower option for the Commission's consideration.¹

Respectfully submitted,



Jim Hebert / Black Diamond Consultants, Inc.

¹ To be clear, this supplemental filing is neither a replacement application nor a withdrawal of Rising Tide's pending application for a 300-foot tall FAA-lighted tower in the M-GN subdistrict. Rather, Rising Tide is providing the Commission with additional information about an alternative tower option as part of its alternatives analysis in response to LUPC staff, review agency, and public comments. Rising Tide is requesting that the Commission, after notice and public comment, deliberate on the merits of this alternative tower option. Should the Commission find that the alternative tower meets all applicable criteria (including, specifically, the requirement under Section 10.21,N,3,c(23) of Chapter 10 that permitted utility facilities must be compatible with residential uses), then Rising Tide requests that the Commission grant a LUPC permit authorizing construction of the alternative tower. If, however, the Commission finds that the alternative tower does not meet applicable criteria, Rising Tide requests that the Commission deliberate on the pending 300-foot tower proposed to be located in the M-GN subdistrict and grant a LUPC permit for the pending tower proposal.

RISING TIDE TOWERS, LLC
SUPPLEMENTAL FILING TO THE LAND USE PLANNING COMMISSION
ADDITIONAL INFORMATION REGARDING ALTERNATIVE TOWER OPTION

October 15, 2021

	<u>Tab No.</u>
Summary of Compliance with Applicable Review Criteria	A
Location & Zoning Maps, Site Survey, Site Plan Drawings, and Site Photographs	B
Second Amendment to Lease Agreement	C
MHPC Concurrence Letter	D
Visual Impact Assessment	E
Telecommunication Needs Analysis	F
Soils Report & Survey	G
Erosion & Sedimentation Control Plan	H
Wildlife & Rare Species Assessment	I
Notice of Supplemental Filing	J

A

**SUMMARY OF COMPLIANCE
WITH APPLICABLE REVIEW CRITERIA**

ALTERNATIVE TOWER OPTION: A SUMMARY OF COMPLIANCE WITH RELEVANT APPROVAL CRITERIA AND LAND USE STANDARDS

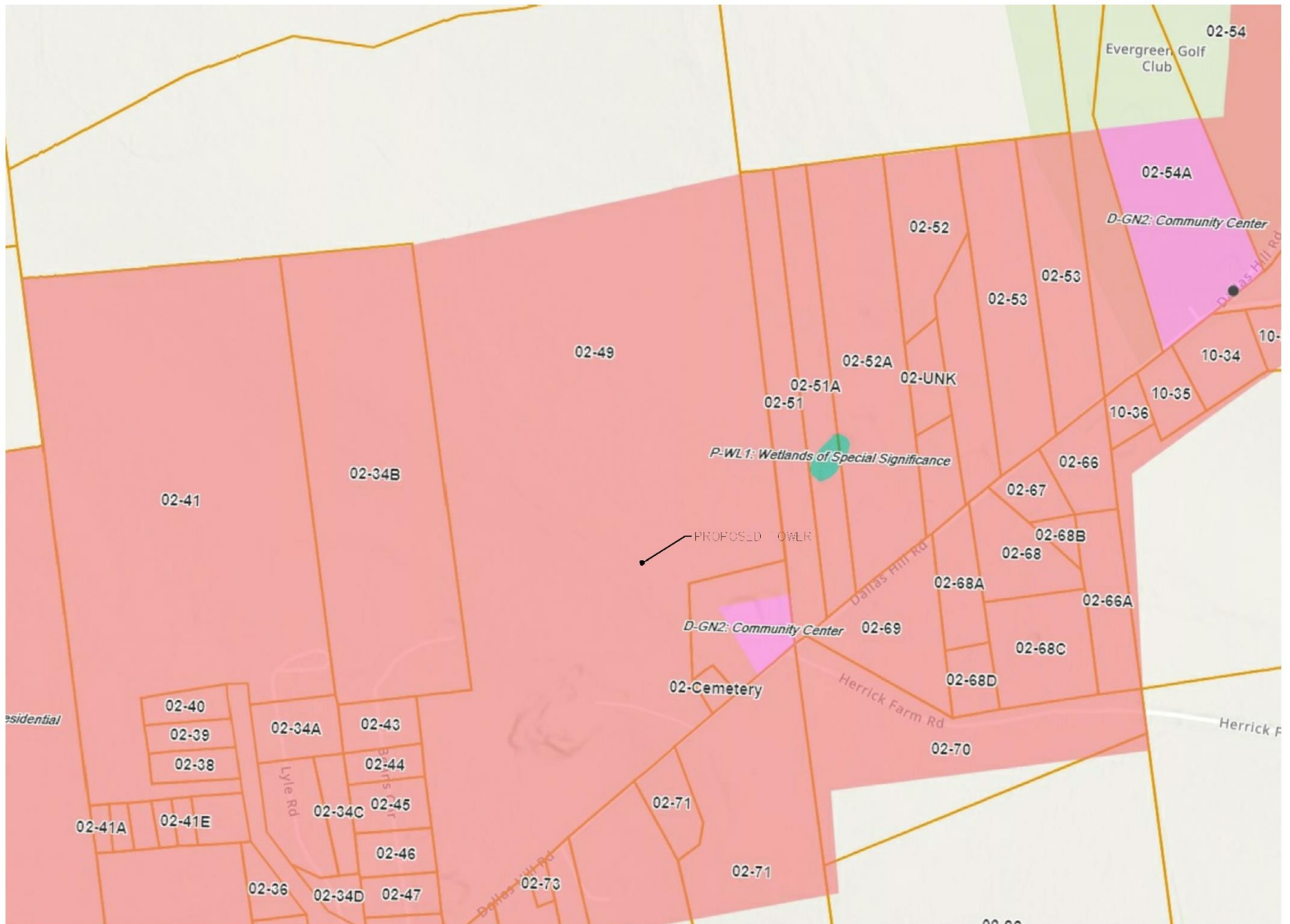
ZONING DESIGNATION		Cross-references:
<p>Community Residential Development (D-RS2) Subdistrict (10.21,N)</p>	<p>The alternative 190-foot tall lattice support telecommunications tower is proposed to be located in the D-RS2 subdistrict. Utility facilities (defined to include cell towers) are allowed in the D-RS2 subdistrict with a permit if they are found to be compatible with residential uses. See Section 10.21,N,3,c(23). The alternative tower has been sited to be as far away from the nearest residential dwelling (approximately 800 feet) as is practicable, taking into account (1) the topography and elevation necessary to close the FirstNet coverage gap, (2) a tower height that does not trigger FAA lighting requirements, and (3) the infeasibility of siting the tower on any other parcel within the ½-mile search ring mandated by AT&T/FirstNet. Due to the nature of the project, portions of the tower are likely to be visible from some nearby residential dwellings; however, the siting and design of the tower (including that will not be lit) will mitigate any adverse impacts to nearby existing residential uses in the D-RS2 subdistrict.</p>	<ul style="list-style-type: none"> • Attachment B (Location & Zoning Maps) • Attachment F (Telecommunications Needs Analysis) • Attachment E (Visual Impact Analysis)
GENERAL CRITERIA FOR APPROVAL (10.24) AND DEVELOPMENT STANDARDS (10.25)		
<p>Right, Title or Interest (10.24)</p>	<p>Rising Tide has entered into a Second Amendment to Lease Agreement with the landowner to lease a 40,000 square foot portion of Tax Map 2, Lot 49. The Second Amendment also includes a 50-foot wide access and utility easement along the length of the proposed driveway. Rising Tide has sufficient right, title or interest to give it a legally cognizable expectation of having the power to use the leased premises to construct the alternative tower.</p>	<ul style="list-style-type: none"> • Attachment C (Second Amendment to Lease Agreement)
<p>Land Division History (10.24)</p>	<p>For the reasons set forth in Rising Tide’s application, the alternative tower will not create a subdivision.</p>	<ul style="list-style-type: none"> • Written Testimony of A. Dixon, [9/17/21] Exh. 1
<p>Technical & Financial Capacity (10.24,A & 10.25,C)</p>	<p><u>Technical Capacity</u>: As described in Rising Tide’s application, Rising Tide retained qualified consultants, contractors and staff to design and construct the alternative tower in accordance with approved plans.</p> <p><u>Financial Capacity</u>: As described in Rising Tide’s application, Rising Tide has demonstrated adequate financial capacity to construct a telecommunications tower at an estimated total construction and decommissioning cost of \$515,000. This cost estimate includes provision for constructing a 300-foot tall tower and a much longer road, which the alternative tower design will not require. Rising Tide therefore has adequate financial resources to construct the alternative tower in compliance with all environmental laws and rules.</p>	<ul style="list-style-type: none"> • Written Testimony of A. Dixon, [9/17/21] Exh. 1

<p>Comprehensive Land Use Plan (CLUP) (10.24,E)</p>	<p>For the reasons set forth in Rising Tide’s application, the alternative tower satisfies the applicable policy objectives of the CLUP.</p>	<ul style="list-style-type: none"> • Written Testimony of A. Dixon, [9/17/21] Exh. 1
<p>Public Health, Safety, & General Welfare; Impact on Services (CLUP, § 4.3,E & 10.25,H)</p>	<p>For the reasons set forth in Rising Tide’s application, the alternative tower satisfies the general public health, safety, and welfare standards, and the normal operation of the project will place no undue burden on local public facilities and services.</p>	<ul style="list-style-type: none"> • Written Testimony of A. Dixon, [9/17/21] Exh. 1
<p>Vehicular Circulation, Access, & Parking (10.24,B & 10.25,D; <i>see also</i> 10.27,D)</p>	<p>Vehicle access to and circulation within the alternative tower site will be infrequent and will require, at most, the use of 2-3 vehicles during a heavy maintenance or troubleshooting event. Therefore, only one entrance/exit is provided from the public access way (Hill Road) to the project site. The new driveway and parking area provide for safe and efficient vehicular access to and circulation within the site. In sum, adequate provision has been made for loading, parking and circulation; traffic movement in, on, and from the site; and the alternative tower project will not cause congestion or unsafe transportation conditions.</p>	<ul style="list-style-type: none"> • Attachment B (Survey, Site Plans)
<p>Harmonious Fit; Existing Uses, Scenic Character, Natural Character & Cultural Resources (10.24,C & 10.25,E)</p>	<p><u>Historic Resources</u>: Black Diamond Consultants has conducted a Section 106 historic preservation evaluation of the alternative tower location, which concludes that the alternative tower will have no adverse impact on historic resources. The alternative tower design has also been submitted to MHPC for review, and the agency has found that there will be no historic properties affected. (Please refer to the attached concurrence letter.)</p> <p><u>Scenic Character</u>: Terrence DeWan of TJD&A has prepared a viewshed map and assessment of the alternative tower. The assessment was conducted in accordance with LUPC staff guidance. It is the expert opinion of Mr. DeWan that the alternative tower will not have an undue adverse effect on the scenic character of the area. While the alternative tower will be visible from certain vantage points due to the nature of the project, the tower has been sited and designed to reasonably minimize its visual impact on the surrounding area and to fit harmoniously into the existing natural environment. By keeping the tower under 200 feet in height, FAA lighting will no longer be required. (Note: Rising Tide has filed a request for an FAA no-hazard determination letter for the alternative tower, which will be provided to LUPC upon receipt.)</p>	<ul style="list-style-type: none"> • Attachment D (MHPC Concurrence) • Attachment E (Visual Impact Assessment) • Attachment F (Telecommunication Needs Analysis)
<p>Noise & Lighting (10.25,F)</p>	<p>For the reasons set forth in Rising Tide’s application, the alternative tower satisfies the noise requirements of Section 10.25,F. Additionally, no exterior lighting is proposed with the alternative tower.</p>	<ul style="list-style-type: none"> • Written Testimony of A. Dixon, [9/17/21] Exh. 1
<p>Soil Suitability (10.24,D & 10.25,G)</p>	<p>Main-Land Development Consultants conducted a Class A high-intensity soil survey in the alternative tower siting area, and a Class L soil survey for the driveway area. Although the soils have a “very limited” to “somewhat limited” potential rating for nonresidential development, the driveway has been designed to</p>	<ul style="list-style-type: none"> • Attachment G (Soil Survey & Report)

	<p>account for these soil conditions. The driveway design will adequately support the short project construction period and the infrequent vehicle use post-construction. In addition, the alternative tower will be designed and constructed in compliance with ANSI standard ANSI/TIA-22-G, <i>Structural Standard for Antenna Supporting Structures and Antennas</i>, which among other things requires for the tower foundation design consideration of the soil survey results and the soil geotechnical studies that will be conducted after permits are secured for the project. Therefore, the soils on the leased parcel are suitable for the construction of the tower and driveway.</p>	
Phosphorus Control (10.25,L)	<p>Because the alternative tower and driveway will create a disturbed area of approximately 0.5 acres in the direct watershed of Haley Pond, a phosphorus control plan is not required for the alternative tower option, and the standards of Section 10.25,L are met.</p>	
Erosion & Sedimentation Control (10.24,D & 10.25,M)	<p>Black Diamond Consultants submitted engineered site plans with environmental and civil details and an erosion & sedimentation control plan for the alternative tower, all in conformance with Section 10.25,M.</p>	<ul style="list-style-type: none"> • Attachment B (Site Plans) • Attachment H (E/S Control Plan)
Protected Natural Resources (10.25,P)	<p>Black Diamond Consultants conducted a wildlife and rare species assessment for the alternative tower option and concluded that the alternative tower is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. Additionally, the project site is located outside of any designated 100-year floodplain. Because the project will disturb less than 0.5-acres of area, no wetlands analysis was conducted. In sum, the alternative tower will have no unreasonable adverse impacts on any protected natural resources.</p>	<ul style="list-style-type: none"> • Attachment I (Wildlife & Rare Species Assessment)
DIMENSIONAL REQUIREMENTS (10.26)		
Minimum Lot Size	<p>The alternative tower meets the minimum lot size of 40,000 square feet pursuant to Section 10.26,A,2.</p>	
Minimum Setbacks	<p>The alternative tower meets all minimum setbacks pursuant to Section 10.26,D.</p>	
Maximum Height	<p>Structures containing no floor area such as towers may exceed the maximum height; thus, the alternative tower meets the requirements of Section 10.26,F,4,a.</p>	
ACTIVITY-SPECIFIC STANDARDS (10.27)		
Signs (10.27,J)	<p>No advertising signage is proposed at the alternative tower facility. The project will include four small cautionary and regulatory signs, identical to those proposed for the 300-foot tall tower. The placement of these signs will not produce undue adverse impacts on the resources and uses in the area.</p>	<ul style="list-style-type: none"> • Written Testimony of A. Dixon, [9/17/21] Exh. 1

B

LOCATION & ZONING MAPS, SITE SURVEY,
SITE PLAN DRAWINGS, AND SITE PHOTOGRAPHS



Aerial Photograph

N44° 57' 56.9"
W70° 36' 12.52"

Proposed 190' Tower

Google Earth

Earth Point

1000 ft



Land Use Guidance Map

Dallas Pt.

T2 R2 WBKP
Franklin County



Maine Department of Agriculture, Conservation and Forestry
LAND USE PLANNING COMMISSION
Augusta, Maine 04333-0022
(207) 287-2631
TTY (888) 577-6690
<http://www.maine.gov/doc/lupc>

Legend

Development Subdistricts		Protection Subdistricts	
	D-ES Extended Settlement		P-AR Aquifer Recharge
	D-GN2 Community Center Development		P-FP Flood Prone
	D-PD Planned		P-FW Fish and Wildlife
	D-RS Residential		P-GP Great Pond
	D-RS2 Community Residential Development		P-MA Mountain Area
	D-RS3 Residential Recreation		P-SL2 75 feet Shoreland - Minor
			P-WL1 Wetlands - Significant
			P-WL2 Wetlands - Scrub-shrub
			P-WL3 Wetlands - Forested
Management Subdistricts			
	M-GN General		
	Water body		
	Improved road		
	Unimproved road		
	Trail		
			Areas designated as two or more protection zones are annotated with each zone, e.g. P-FP/FW/WL1, P-FP/SL1, etc., where necessary
			Subdistrict boundary
			Zoning amendment

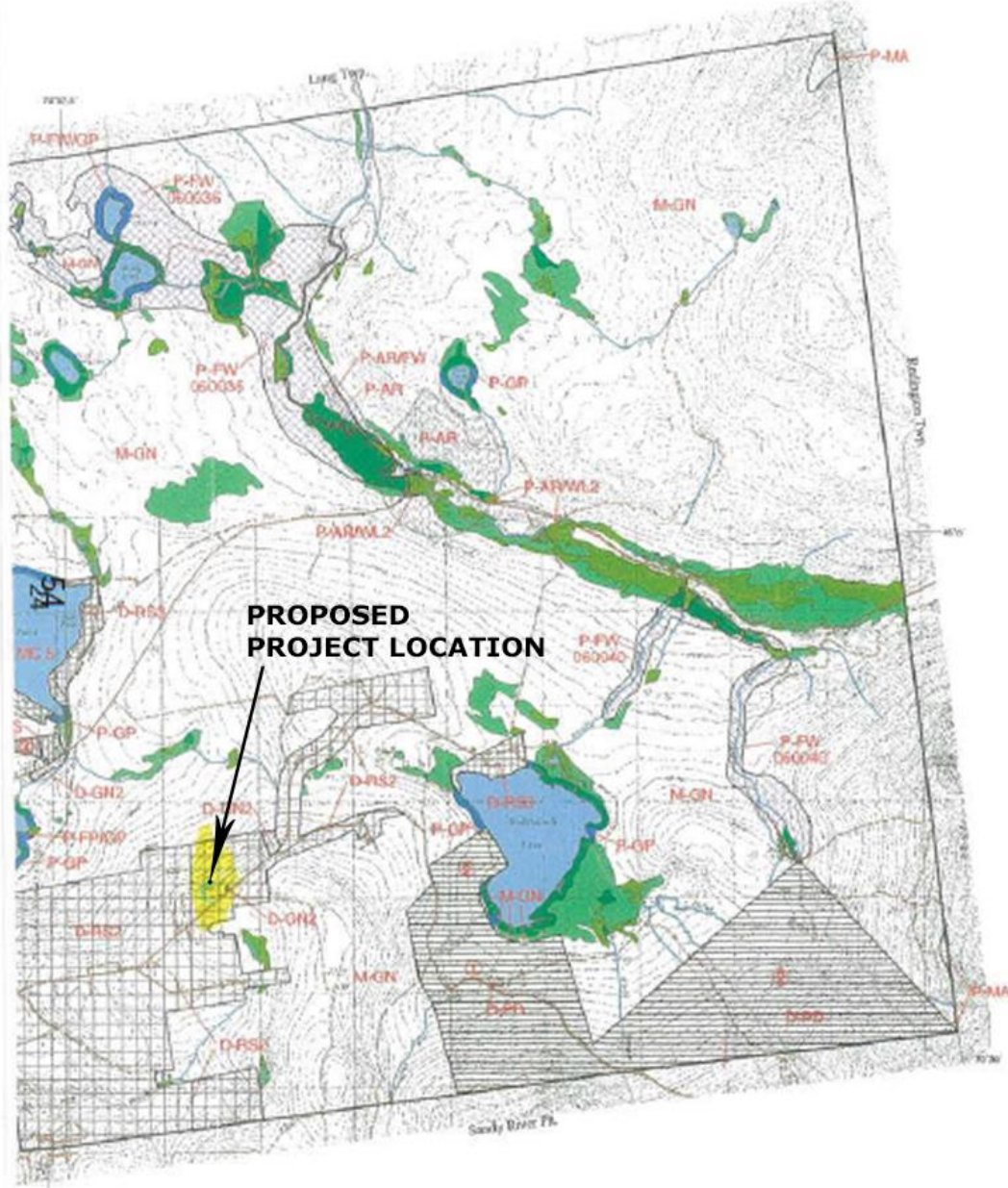
Topographic base, roads and trails from U.S. Geological Survey 7.5-minute map series

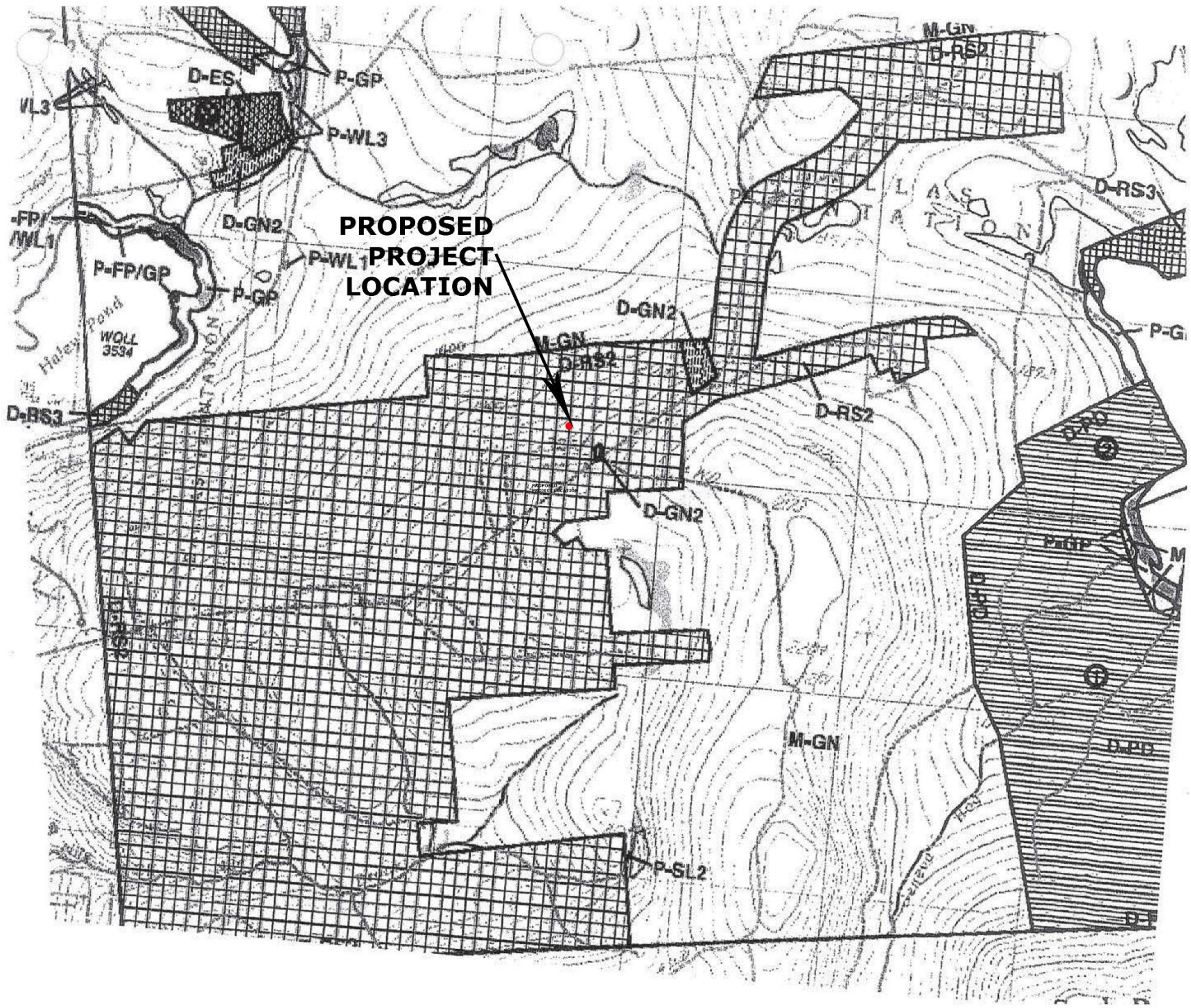
For the purpose of simplicity, this map does not show the Wetland Protection Subdistricts for areas identified pursuant to Section 10.16.K.2 such as beds of rivers, lakes, and other water bodies, and freshwater wetlands within 25 feet of stream channels, which are nevertheless within P-WL Subdistricts.

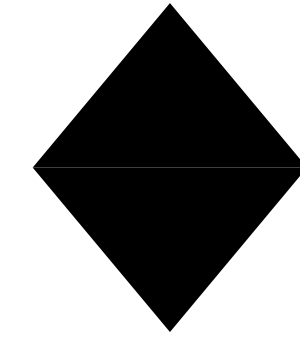
NOTE: The Federal Emergency Management Agency has prepared flood hazard boundary maps or flood insurance rate maps for this township as part of the National Flood Insurance Program (NFIP). The Maine Land Use Planning Commission participates in the NFIP on behalf of the entire jurisdiction, and all property owners must comply with the requirements of the program. A copy of the NFIP map(s) may be obtained from the Commission.

This map is a reduced version of the official Land Use Guidance Map. It is not certified to be a true and correct copy. Full size official LUPC Land Use Guidance Maps are available from the Commission at its Augusta office. Potential applicants unsure of their zoning should request a full size map from the Augusta office.

Land Use Guidance Map last amended on July 24, 2005







BLACK DIAMOND CONSULTANTS INC

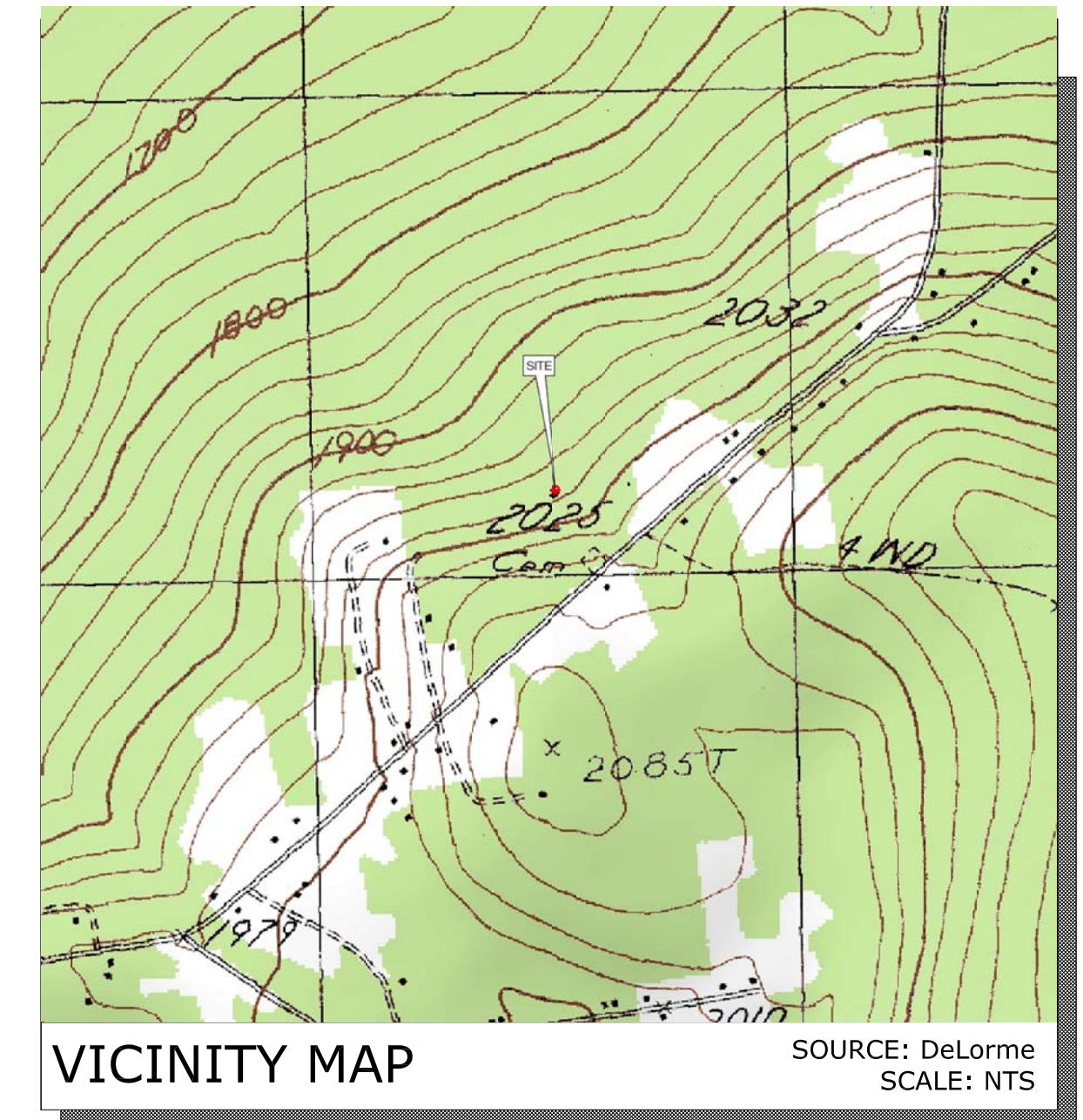
www.BlackDiamond.net
47 Enterprise Avenue PO Box 57
Gardiner, ME 04345

tel 207.582.0056 fax 207.582.9098

BDC PROJECT
RT-13

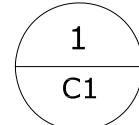
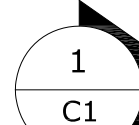
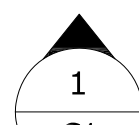
RISING TIDE TOWERS

SITE NAME: DALLAS PLANTATION
SITE NUMBER: N/A
LATITUDE: 44° 57' 56.90"
LONGITUDE: 70° 36' 12.52"



DIRECTIONS: (FROM INTERSTATE 95):
Head north on I-95 Take Exit 113 for ME-3 toward Augusta/Belfast (0.2 mi)
Keep left at the fork, follow signs for I-95 (292 ft) At the traffic circle, take
3rd exit onto ME-3 (0.4 mi) At the traffic circle, take the 1st exit onto
ME-3/Old Belgrade Rd (1.1 mi) Turn right onto me-27 N/Civic Center
Drive/New Belgrade Rd (22.4 mi) Turn left onto US-2 W (9.7 mi) Turn right
onto Bridge St (0.2 mi) Turn right onto Town Farm Road (3.2 mi) Turn left
onto ME-4 N (28.0 mi) Turn right onto Dallas Hill Rd (1.9 mi) Turn left onto
tower access road. End at tower site.

LEGEND

-  **1**
C1 **DETAIL NUMBER**
SHEET ON WHICH DETAIL APPEARS
-  **1**
C1 **SECTION NUMBER**
SHEET ON WHICH SECTION APPEARS
-  **1**
C1 **ELEVATION NUMBER**
SHEET ON WHICH ELEVATION APPEARS

PROJECT INFORMATION

SITE ADDRESS
DALLAS HILL ROAD
DALLAS PLANTATION, MAINE 04970

APPLICANT
RISING TIDE TOWERS, LLC
c/o BLACK DIAMOND CONSULTANTS, INC
312 WATER STREET, PO BOX 57
GARDINER, MAINE 04345

TOWER OWNER
RISING TIDE TOWERS, LLC
5 MILK STREET, SUITE 420
PORTLAND, MAINE 04101

PROPERTY OWNER
MARK BEAUREGARD, INC.
P.O. BOX BOX 304
RANGELEY, MAINE 04970

WIRELESS PROVIDER
WIRELESS PARTNERS FN LLC
(FIRSTNET SPECTRUM)
5 MILK STREET, SUITE 420
PORTLAND, MAINE 04101

ELECTRICAL COMPANY
CENTRAL MAINE POWER CO.
83 EDISON DRIVE
AUGUSTA, MAINE 04330
207.623.3521

TELEPHONE COMPANY
CONSOLIDATED COMMUNICATIONS
627 ROUTE 3
SOUTH CHINA, MAINE 04358
866.984.3901

DRAWING INDEX

- COVERSHEET**
CVR-7 COVERSHEET
- SURVEY**
S1-7 PLOT PLAN
- CIVIL**
C1.1-3 SITE PLAN
C1.4-2 ACCESS ROAD PROFILE
C2-4 COMPOUND LAYOUT PLAN
C3-1 MODULAR PLATFORM DETAILS
C4-0 FENCE, PLATFORM CANOPY
AND ICE BRIDGE DETAILS
C5-4 ENVIRONMENTAL AND
CIVIL DETAILS
- ARCHITECTURAL**
A1-5 TOWER ELEVATION AND ANTENNA
LOCATION SECTION
- ELECTRICAL**
E1-1 ELECTRICAL AND TELCO DETAILS
E2-0 ELECTRICAL METER DETAILS
E3-2 GROUNDING DETAILS

ABBREVIATIONS

<ul style="list-style-type: none"> @ - AT A/C - AIR CONDITIONING ALUM - ALUMINUM AMSL - ABOVE MEAN SEA LEVEL AMC - ACCESS MASTER CONTROL BLDG - BUILDING BTS - BARE TINNED STRANDED CAM - CAMERA CE - CAMERA ENCLOSURE CL - CENTERLINE CMP - CORRUGATED METAL PIPE CONC - CONCRETE DJA - DIAMETER DP - DISTRIBUTION PANEL DVR - DIGITAL VIDEO RECORDER DWG - DRAWING EDP - EMERGENCY DISTRIBUTION PANEL EGB - EXTERNAL GROUND BAR EGR - EXTERNAL GROUND RING EF - EACH FACE EW - EACH WAY ELEV - ELEVATION ELE - ELECTRICAL ETC - ETCETERA FC - FIBER CONVERTER FCDAT - FIBER CONVERTER, DATA 	<ul style="list-style-type: none"> FCT - FIBER CONVERTER, TELEPHONE FE - FIBER ENCLOSURE FNDN - FOUNDATION FTG - FOOTING GALV - GALVANIZED GFI - GND FAULT INTERRUPTER GH - GATEHOUSE GND - GROUND HR - HOUR HT - HEIGHT IGB - ISOLATED GROUND BAR LC - LIGHTING CONTACTOR LP - LIGHTING PANEL MAX - MAXIMUM MECH - MECHANICAL MIGB - MASTER ISOLATION GROUND BAR MIN - MINIMUM MISC - MISCELLANEOUS MON - MONITOR MRF - MANUFACTURER MS - MATRIX SWITCH NIC - NOT IN CONTRACT NTS - NOT TO SCALE OC - ON CENTER PAS - PRIMARY ALARM STATION PC - POINT OF CURVE PDE - POWER DISTRIBUTION ENCLOSURE 	<ul style="list-style-type: none"> PM - POLE MOUNTED PS - POWER SUPPLY PT - POINT OF TANGENT QTY - QUANTITY QUAD - QUADSPITTER R - RADIUS RR - RAILROAD SC - SEALED CONCRETE SF - SILTATION FENCE SOB - SECURITY OPERATIONS BUILDING SP - SECURITY PANEL SPEC - SPECIFICATION TYP - TYPICAL UPS - UNINTERRUPTABLE POWER SUPPLY VIF - VERIFY IN FIELD WM - WALL MOUNTED UNO - UNLESS NOTED OTHERWISE
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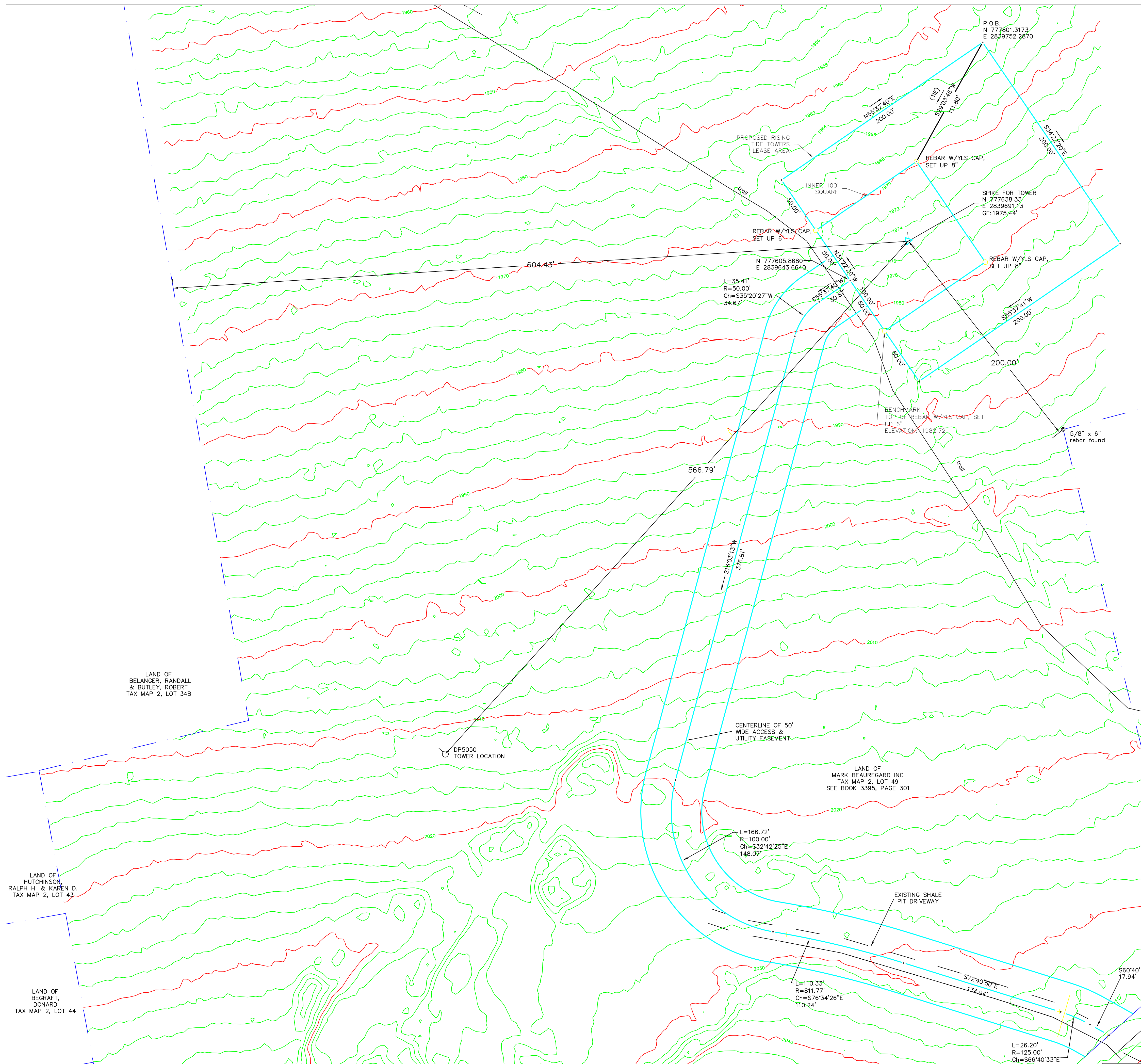
PDF PRINTS
SCALE MAY VARY DUE TO
INDIVIDUAL PRINTER SETTINGS

REV	DATE	BY	CHK'D	REV'D	APP'D	REV	DATE	BY	CHK'D	REV'D	APP'D	REV	DATE	BY	CHK'D	REV'D	APP'D
5	03/06/21	AMJ	AMC	TR	JRH	6	06/24/21	MJM	AMC	TR	JRH	7	10/14/21	MJM	AMC	TR	JRH
4	11/12/20	MJM	AMJ	TR	JRH	3	03/13/20	MJM	AMJ	TR	JRH	2	06/02/19	MJM	AMJ	-	-
REVISION NOTES: SEE ECO 21-009																	
REVISION NOTES: SEE ECO 21-034																	
REVISION NOTES: SEE ECO 21-104																	
REVISION NOTES: SEE ECO 20-032																	
REVISION NOTES: SEE ECO 20-013																	
REVISION NOTES: SEE ECO 19-023																	
REVISION NOTES: SEE ECO 19-001																	
REVISION NOTES: ORIGINAL ISSUE.																	

BDC PROJECT(S)	BDC PROPOSAL(S)
RT-13	N/A
BDC JOB ORDER(S)	CLIENT DATA
TR-096	SITE NAME: DALLAS PLANTATION SITE NUMBER: N/A

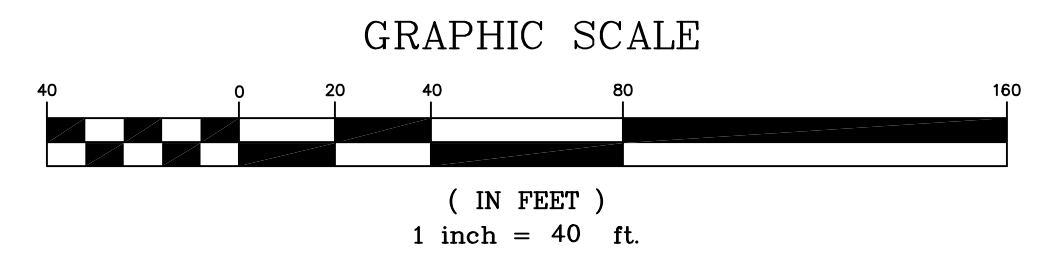
APPROVED: LAND USE PLANNING COMMISSION	
SIGNED	DATE
SIGNED	DATE
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SIGNED	DATE
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SIGNED	DATE

PROJECT NUMBER RT-13
SHEET NUMBER CVR

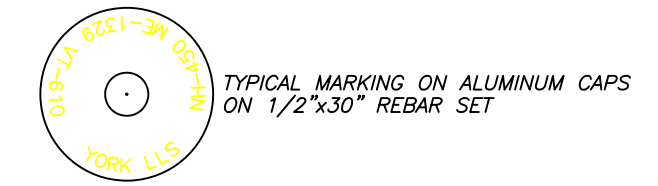


Description of Rising Tide Towers Lease Area:
 The Lease Area is located 525 feet more or less northwesterly of the Dallas Hill Road in Dallas Plantation, Franklin County, Maine, being more particularly described as follows:
 Beginning at a point at the most northerly corner of the herein described Lease Area. Said point is located at N 777801.3173, E 2839752.2870, Maine State Plane Grid, (West) and is witnessed by an iron pin located S29°03'46"W, 111.80 feet distant, marking the most northerly corner of the inner 100 foot square of the proposed Wireless Partners Lease area.
 Thence S34°22'20"E for 200.00 feet to a point.
 Thence S55°37'41"W for 200.00 feet to a point.
 Thence N34°22'20"W for 200.00 feet to a point.
 Thence N55°37'41"E for 200.00 feet to the point of beginning.
 Meaning and intending to be 40000 square feet of lease area.
 Bearings are based on Maine State Plane Grid (West), NAD83.

Description of Access and Utility Easement:
 The Easement is located on the northwesterly side of Dallas Hill Road in Dallas Plantation, Franklin County, Maine, being more particularly described as follows:
 Said Easement is 50 feet in width, being 25 feet on both sides, and parallel with the described centerline. The sidelines of the 50 foot wide Easement either extend or are shortened to intersect with easement lines and road sidelines.
 Beginning at a point located N34°22'20"W, 100.00 feet distant from the most southerly corner of the Rising Tide Towers Lease Area described above. Said Beginning point is also located at N 777605.8680, E 2839643.6640, and is witnessed by an iron pin located S34°22'20"E, 50.00 feet distant, marking the most southerly corner of the inner 100 foot square of the proposed Rising Tide Towers Lease Area.
 Thence S55°37'40"W for 30.87 feet to a point.
 Thence southwest along the arc of a curve to the left for 35.41 feet to a point. Said curve has a radius of 50.00 feet and a long chord of S35°20'27"W, 34.67 feet.
 Thence S15°03'13"W for 376.81 feet to a point.
 Thence southeast along the arc of a curve to the left for 166.72 feet to a point. Said curve has a radius of 100.00 feet and a long chord of S32°42'25"E, 148.07 feet.
 Thence southeast along the arc of a curve to the right for 110.33 feet to a point. Said curve has a radius of 811.77 feet and a long chord of S76°34'26"E, 110.24 feet.
 Thence S72°40'50"E for 134.94 feet to a point.
 Thence southeast along the arc of a curve to the right for 26.20 feet to a point. Said curve has a radius of 125.00 feet and a long chord of S66°40'33"E, 26.15 feet.
 Thence S60°40'17"E for 17.94 feet to the terminus point on the westerly sideline of Dallas Hill Road.
 Bearings are based on Maine State Plane Grid (West), NAD83.



NOTES:
 NORTH IS MAINE STATE PLANE GRID (WEST), NAD83 BASED ON OPUS DERIVED POSITION OF A SURVEY CONTROL POINT ESTABLISHED AS PART OF THIS PROJECT. VERTICAL DATUM IS NAVD83(OPUS).
 2' TOPOGRAPHY FROM PUBLICLY ACCESSIBLE LIDAR DATA, FIELD VERIFIED IN THE TOWER VICINITY.



LAND OF BELANGER, RANDALL & BUTLEY, ROBERT TAX MAP 2, LOT 34B

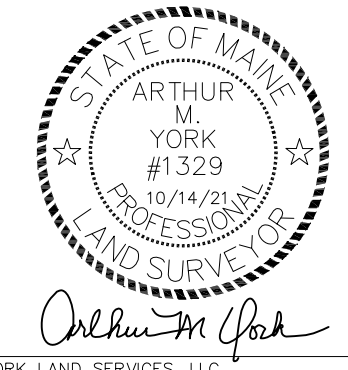
LAND OF DALLAS PLANTATION TOWNSHIP TAX MAP 2, LOT 50

LAND OF HUTCHINSON, RALPH H. & KAREN D. TAX MAP 2, LOT 43

LAND OF BEGRAFT, DONARD TAX MAP 2, LOT 44

LAND OF MARK BEAUREGARD INC TAX MAP 2, LOT 49 SEE BOOK 3395, PAGE 301

LAND OF DALLAS PLANTATION TOWNSHIP TAX MAP 2, LOT CEM



YORK LAND SERVICES, LLC
 ARTHUR M. YORK, L.S.
 1214 STREET, SUITE 03570
 BERLIN, NEW HAMPSHIRE 03570
 603.752.7282

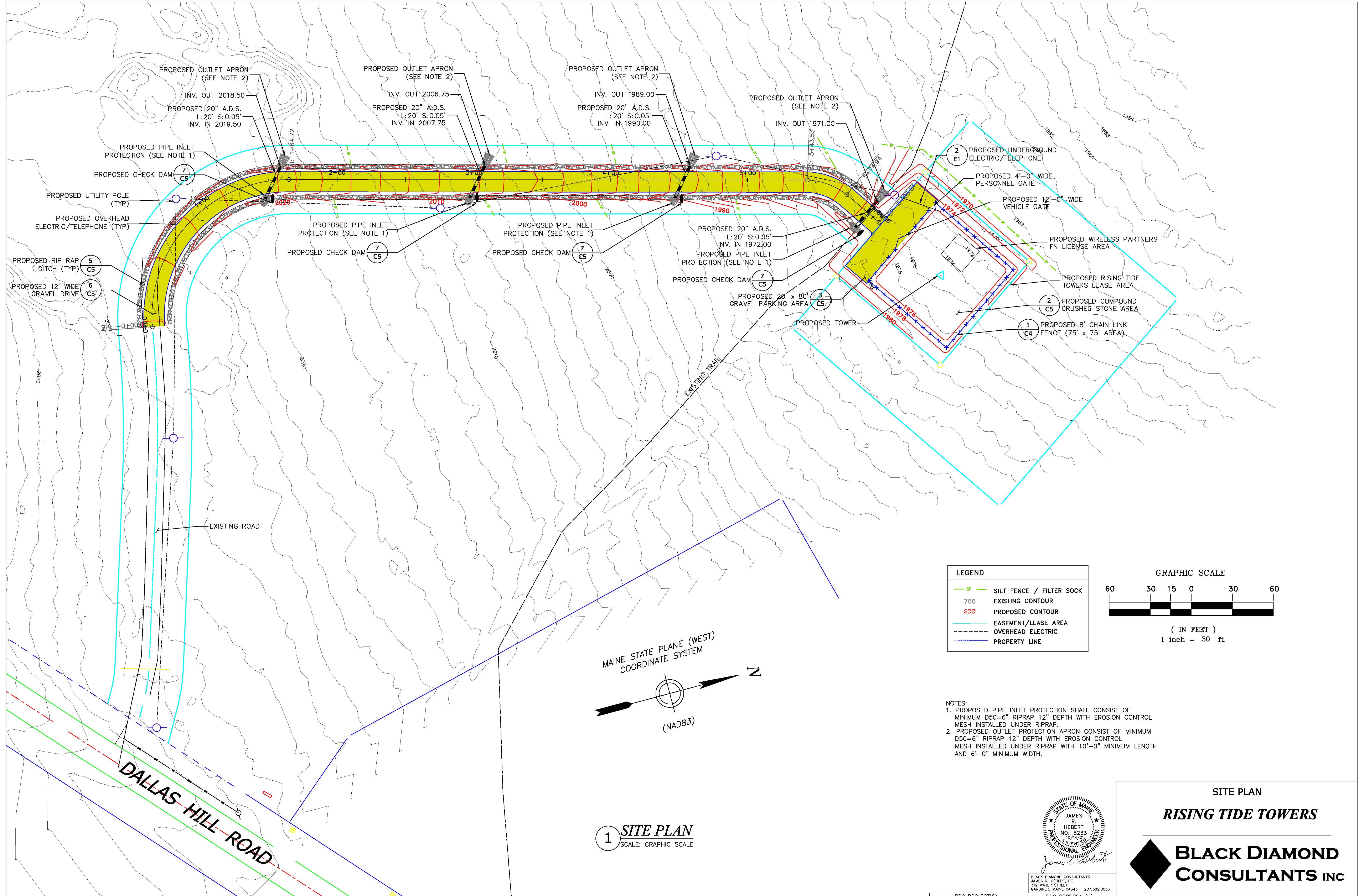
PLOT PLAN
RISING TIDE TOWERS

BLACK DIAMOND CONSULTANTS INC

Classification: **UNCLASSIFIED**
 Quality Category: **NON-Q**
 SITE NAME: DALLAS PLANTATION
 SITE NUMBER: N/A

REV	DATE	BY	CHK'D	REV'D	APP'D	REV	DATE	BY	CHK'D	REV'D	APP'D	REV	DATE	BY	CHK'D	REV'D	APP'D	REV	DATE	BY	CHK'D	REV'D	APP'D	REV	DATE	BY	CHK'D	REV'D	APP'D	REV	DATE	BY	CHK'D	REV'D	APP'D	REV	DATE	BY	CHK'D	REV'D	APP'D																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
1	10/14/23	AM				2	10/14/23	AM				3	10/14/23	AM				4	10/27/23	AM				5	10/27/23	AM				6	10/27/23	AM				7	10/27/23	AM				8	10/27/23	AM				9	10/27/23	AM				10	10/27/23	AM				11	10/27/23	AM				12	10/27/23	AM				13	10/27/23	AM				14	10/27/23	AM				15	10/27/23	AM				16	10/27/23	AM				17	10/27/23	AM				18	10/27/23	AM				19	10/27/23	AM				20	10/27/23	AM				21	10/27/23	AM				22	10/27/23	AM				23	10/27/23	AM				24	10/27/23	AM				25	10/27/23	AM				26	10/27/23	AM				27	10/27/23	AM				28	10/27/23	AM				29	10/27/23	AM				30	10/27/23	AM				31	10/27/23	AM				32	10/27/23	AM				33	10/27/23	AM				34	10/27/23	AM				35	10/27/23	AM				36	10/27/23	AM				37	10/27/23	AM				38	10/27/23	AM				39	10/27/23	AM				40	10/27/23	AM				41	10/27/23	AM				42	10/27/23	AM				43	10/27/23	AM				44	10/27/23	AM				45	10/27/23	AM				46	10/27/23	AM				47	10/27/23	AM				48	10/27/23	AM				49	10/27/23	AM				50	10/27/23	AM				51	10/27/23	AM				52	10/27/23	AM				53	10/27/23	AM				54	10/27/23	AM				55	10/27/23	AM				56	10/27/23	AM				57	10/27/23	AM				58	10/27/23	AM				59	10/27/23	AM				60	10/27/23	AM				61	10/27/23	AM				62	10/27/23	AM				63	10/27/23	AM				64	10/27/23	AM				65	10/27/23	AM				66	10/27/23	AM				67	10/27/23	AM				68	10/27/23	AM				69	10/27/23	AM				70	10/27/23	AM				71	10/27/23	AM				72	10/27/23	AM				73	10/27/23	AM				74	10/27/23	AM				75	10/27/23	AM				76	10/27/23	AM				77	10/27/23	AM				78	10/27/23	AM				79	10/27/23	AM				80	10/27/23	AM				81	10/27/23	AM				82	10/27/23	AM				83	10/27/23	AM				84	10/27/23	AM				85	10/27/23	AM				86	10/27/23	AM				87	10/27/23	AM				88	10/27/23	AM				89	10/27/23	AM				90	10/27/23	AM				91	10/27/23	AM				92	10/27/23	AM				93	10/27/23	AM				94	10/27/23	AM				95	10/27/23	AM				96	10/27/23	AM				97	10/27/23	AM				98	10/27/23	AM				99	10/27/23	AM				100	10/27/23	AM			

PROJECT NUMBER: RT-13
 SHEET NUMBER: S1
 CLIENT DATA: DALLAS PLANTATION
 SITE NUMBER: N/A



Classification: **UNCLASSIFIED**
 Quality Category: **NON-Q**

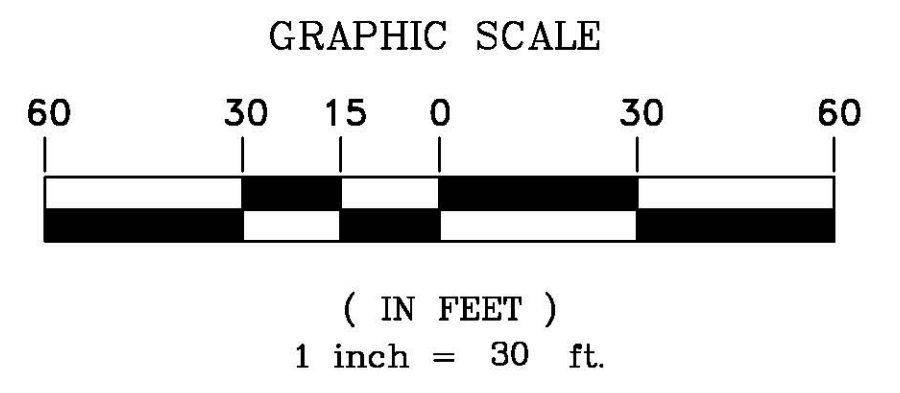
SITE NAME: DALLAS PLANTATION
 SITE NUMBER: N/A

1 SITE PLAN
 SCALE: GRAPHIC SCALE

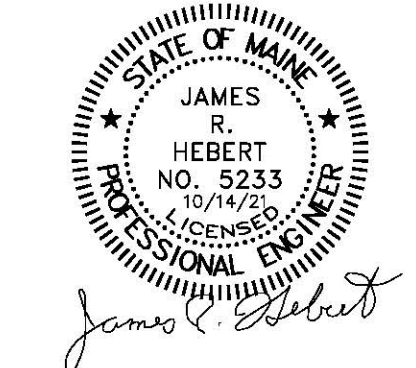
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3	10/14/21	AMC	MJM	TR	JRH	2	08/20/21	AMC	AMC	TR	JRH	1	09/17/21	AMC	AMC	TR	JRH
REVISION NOTES: ECO #21-036																	
REVISION NOTES: ECO #21-022																	
REVISION NOTES: ECO #21-002																	
REVISION NOTES: ORIGINAL ISSUE																	

LEGEND

5'	SILT FENCE / FILTER SOCK
700	EXISTING CONTOUR
699	PROPOSED CONTOUR
---	EASEMENT/LEASE AREA
---	OVERHEAD ELECTRIC
---	PROPERTY LINE



- NOTES:**
- PROPOSED PIPE INLET PROTECTION SHALL CONSIST OF MINIMUM D50=6" RIPRAP 12" DEPTH WITH EROSION CONTROL MESH INSTALLED UNDER RIPRAP.
 - PROPOSED OUTLET PROTECTION APRON CONSIST OF MINIMUM D50=6" RIPRAP 12" DEPTH WITH EROSION CONTROL MESH INSTALLED UNDER RIPRAP WITH 10'-0" MINIMUM LENGTH AND 6'-0" MINIMUM WIDTH.



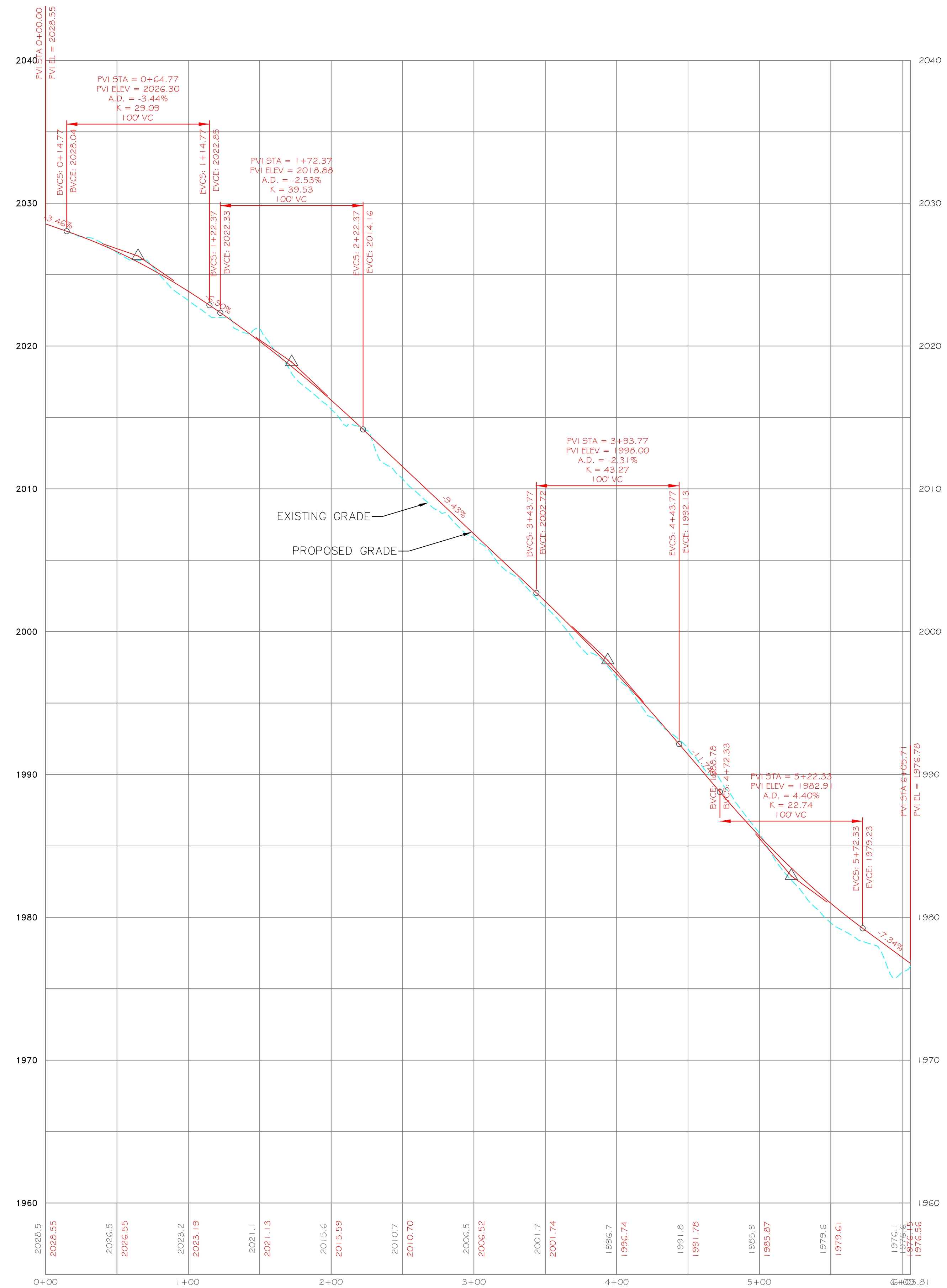
BLACK DIAMOND CONSULTANTS
 JAMES R. HEBERT, PE
 31/2 WATER STREET
 GARDNER, MAINE 04345 207.582.0056

BDC PROJECT(S)	N/A
BDC JOB ORDER(S)	CLIENT DATA
SITE NAME:	DALLAS PLANTATION
SITE NUMBER:	N/A

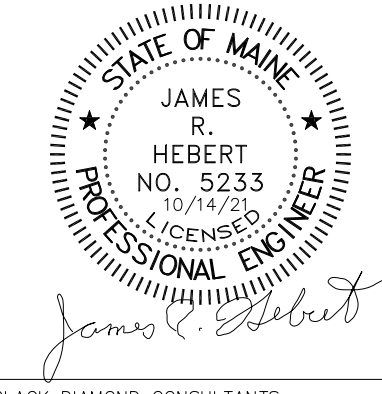
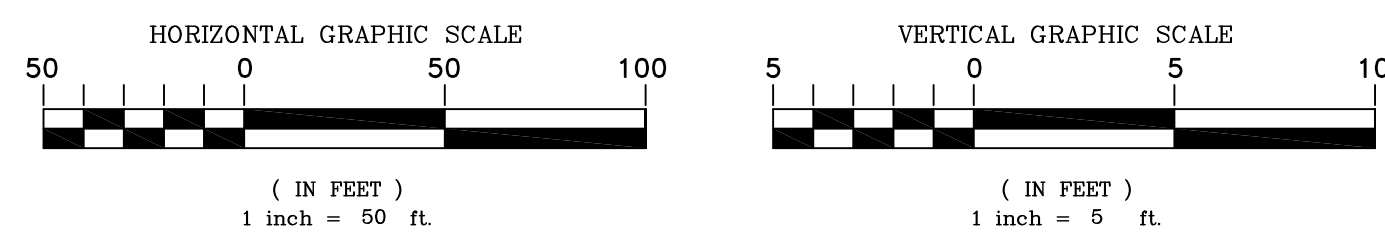
SITE PLAN
RISING TIDE TOWERS

BLACK DIAMOND CONSULTANTS INC

PROJECT NUMBER: RT-13
 SHEET NUMBER: C1.1

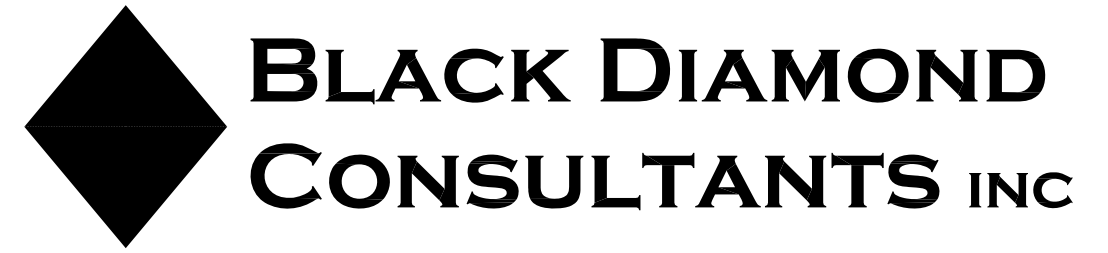


1 ACCESS ROAD PROFILE
SCALE: GRAPHIC SCALE



BLACK DIAMOND CONSULTANTS
 JAMES R. HEBERT, PE
 312 WATER STREET
 GARDINER, MAINE 04345 207.582.0056

ACCESS ROAD PROFILE
RISING TIDE TOWERS



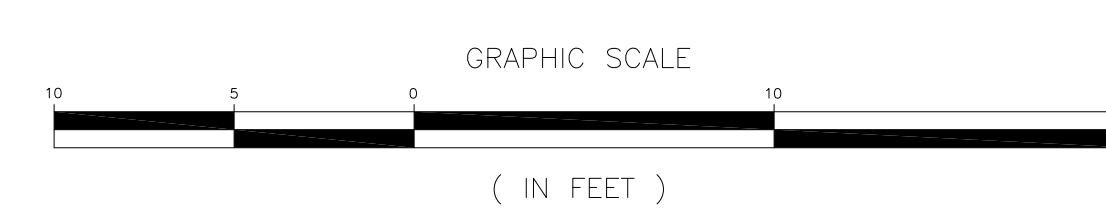
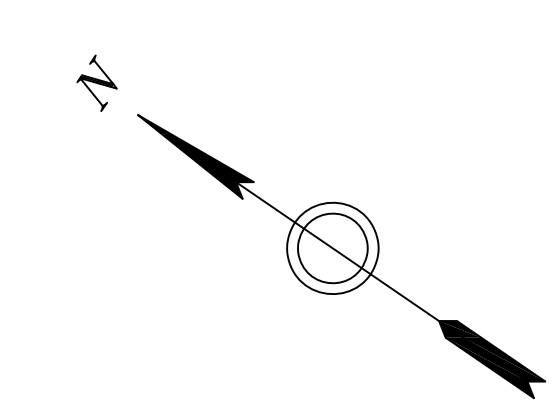
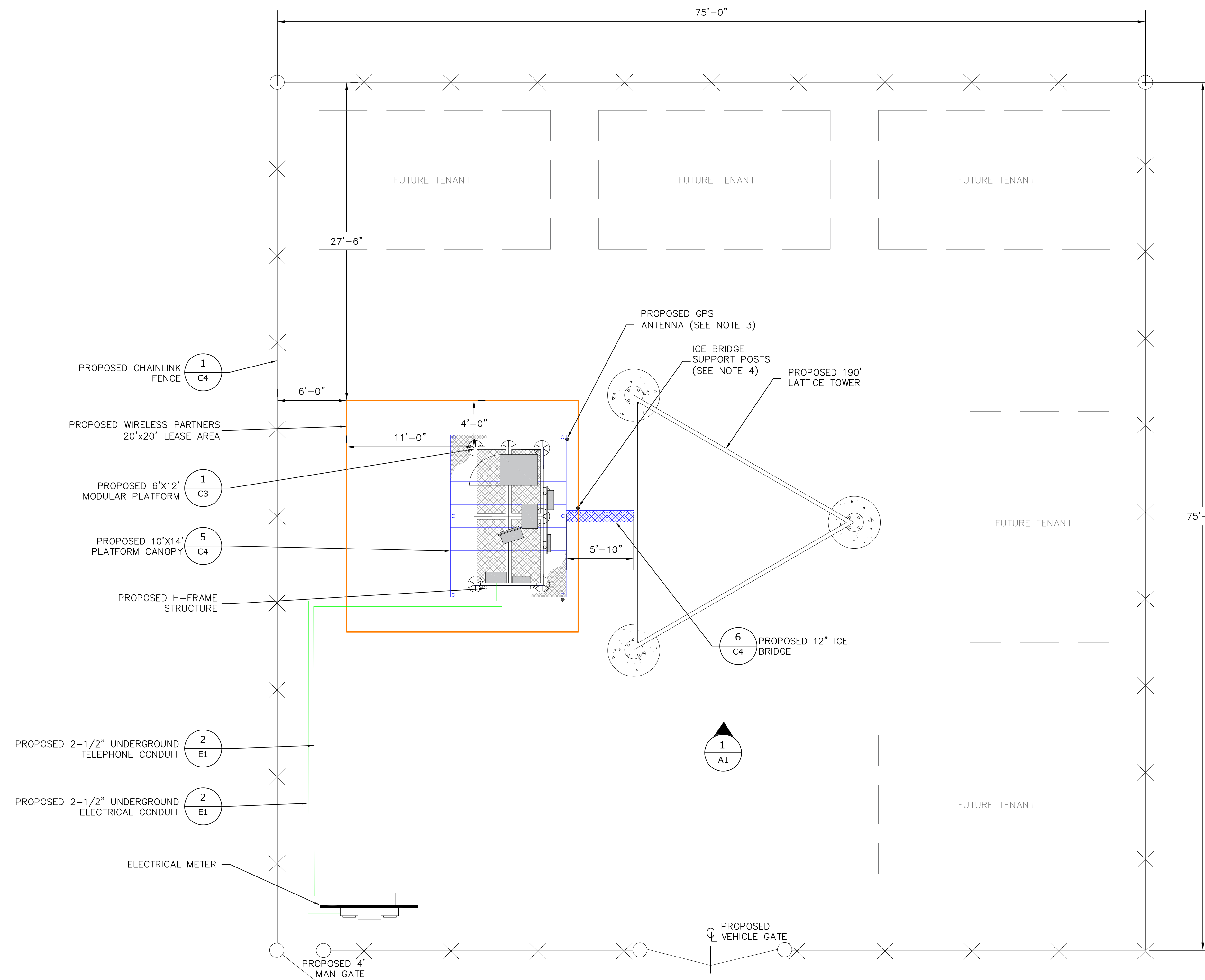
PROJECT NUMBER RT-13
 SHEET NUMBER C1.4

Classification: **UNCLASSIFIED**
 Quality Category: **NON-Q**
 SITE NAME: DALLAS PLANTATION
 SITE NUMBER: N/A

REV	DATE	BY	CHK'D	REV'D	APP'D	REV	DATE	BY	CHK'D	REV'D	APP'D	REV	DATE	BY	CHK'D	REV'D	APP'D
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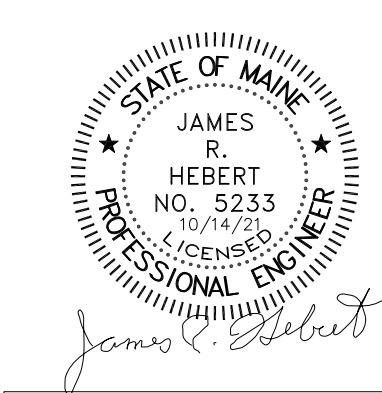
REVISION NOTES: ECO #21-036
 REVISION NOTES: ECO #21-002
 REVISION NOTES: ORIGINAL ISSUE.

RT-13	BDC PROJECT(S)	N/A	BDC PROPOSAL(S)
18-096	BDC JOB ORDER(S)	CLIENT DATA	
		SITE NAME:	DALLAS PLANTATION
		SITE NUMBER:	N/A



COMPOUND LAYOUT PLAN
SCALE: GRAPHIC SCALE

- NOTES:
- CONTRACTOR SHALL VERIFY EXISTING BURIED UTILITIES PRIOR TO CONSTRUCTION ACTIVITIES. (DIG SAFE UNDERGROUND SERVICE ALERT: (1-888-344-7233)).
 - ALL MEASUREMENTS ARE APPROXIMATE.
 - GPS SHALL BE FIELD LOCATED ON PLATFORM CANOPY.
 - TYPICAL ICE BRIDGE SUPPORT POST LAYOUT SHOWN. CONTRACTOR SHALL VERIFY LAYOUT WITH ICE BRIDGE MANUFACTURER PRIOR TO CONSTRUCTION.



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COMPOUND LAYOUT PLAN
RISING TIDE TOWERS

BLACK DIAMOND CONSULTANTS INC

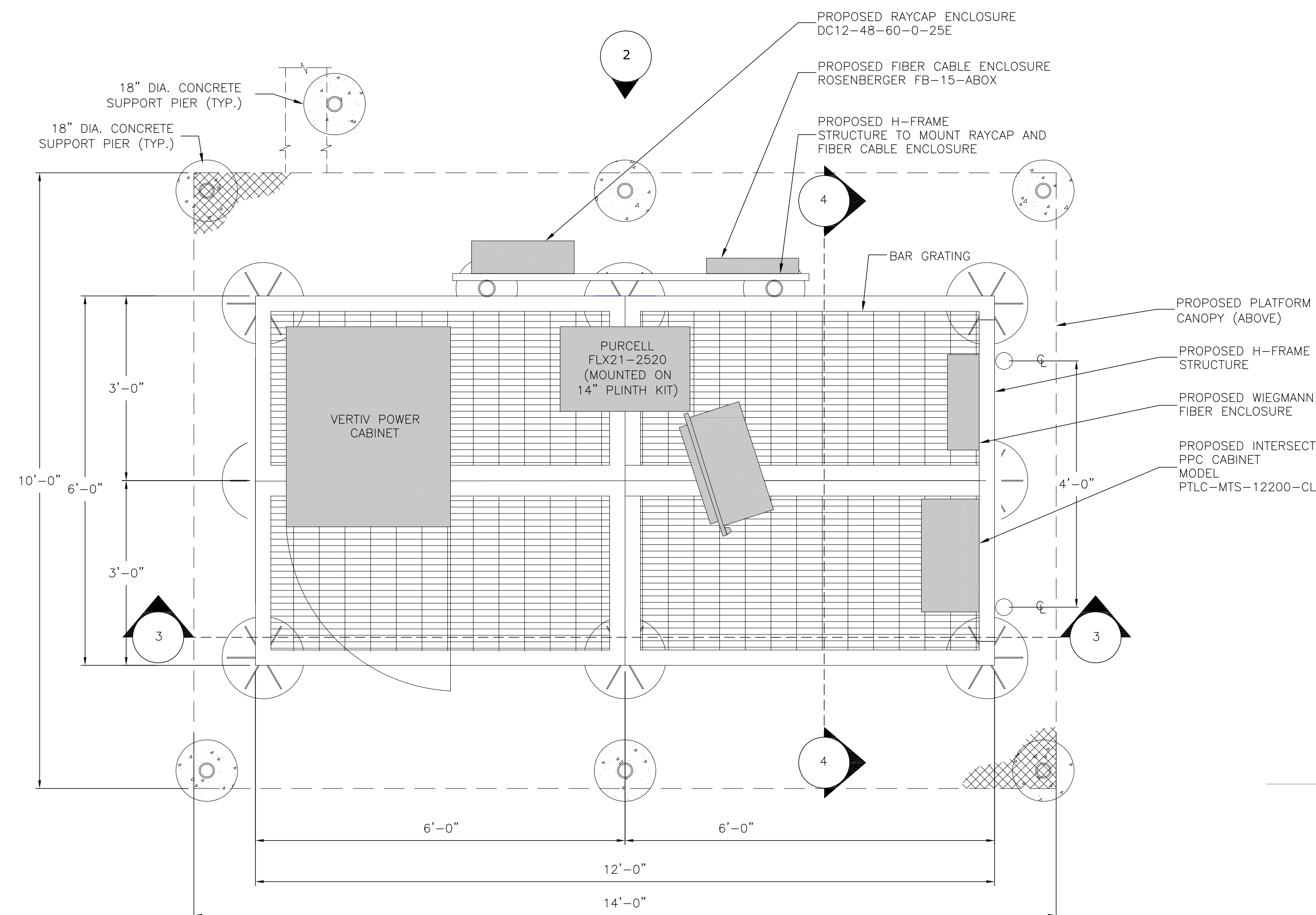
PROJECT NUMBER RT-13
SHEET NUMBER C2

Classification: **UNCLASSIFIED** SITE NAME: DALLAS PLANTATION
Quality Category: **NON-Q** SITE NUMBER: N/A

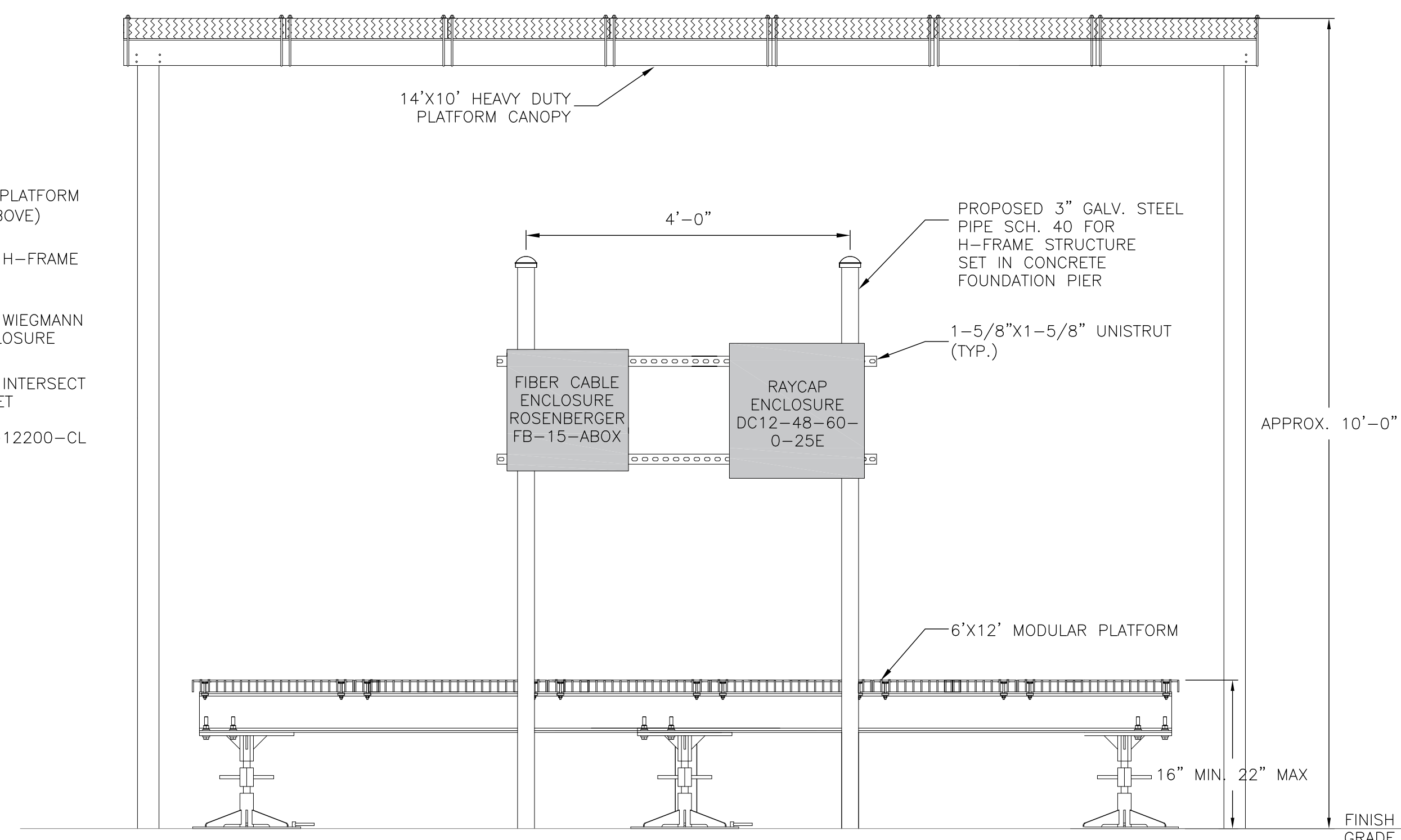
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4	10/14/20	MMH	AMC	TR	JRH	3	10/24/20	MMH	AMC	TR	JRH	2	11/10/20	MMH	AMC	TR	JRH	1	03/22/21	MMH	AMC	TR	JRH	0	07/20/19	MMH	AMC	TR	JRH

REVISION NOTES: SEE ECO # 21-036. REVISION NOTES: SEE ECO # 21-034. REVISION NOTES: SEE ECO # 20-032. REVISION NOTES: SEE ECO # 20-013. REVISION NOTES: ORIGINAL ISSUE.

RT-13	BDC PROJECT(S)	N/A	BDC PROPOSAL(S)
18-096	BDC JOB ORDER(S)		CLIENT DATA
	SITE NAME:	DALLAS PLANTATION	
	SITE NUMBER:	N/A	

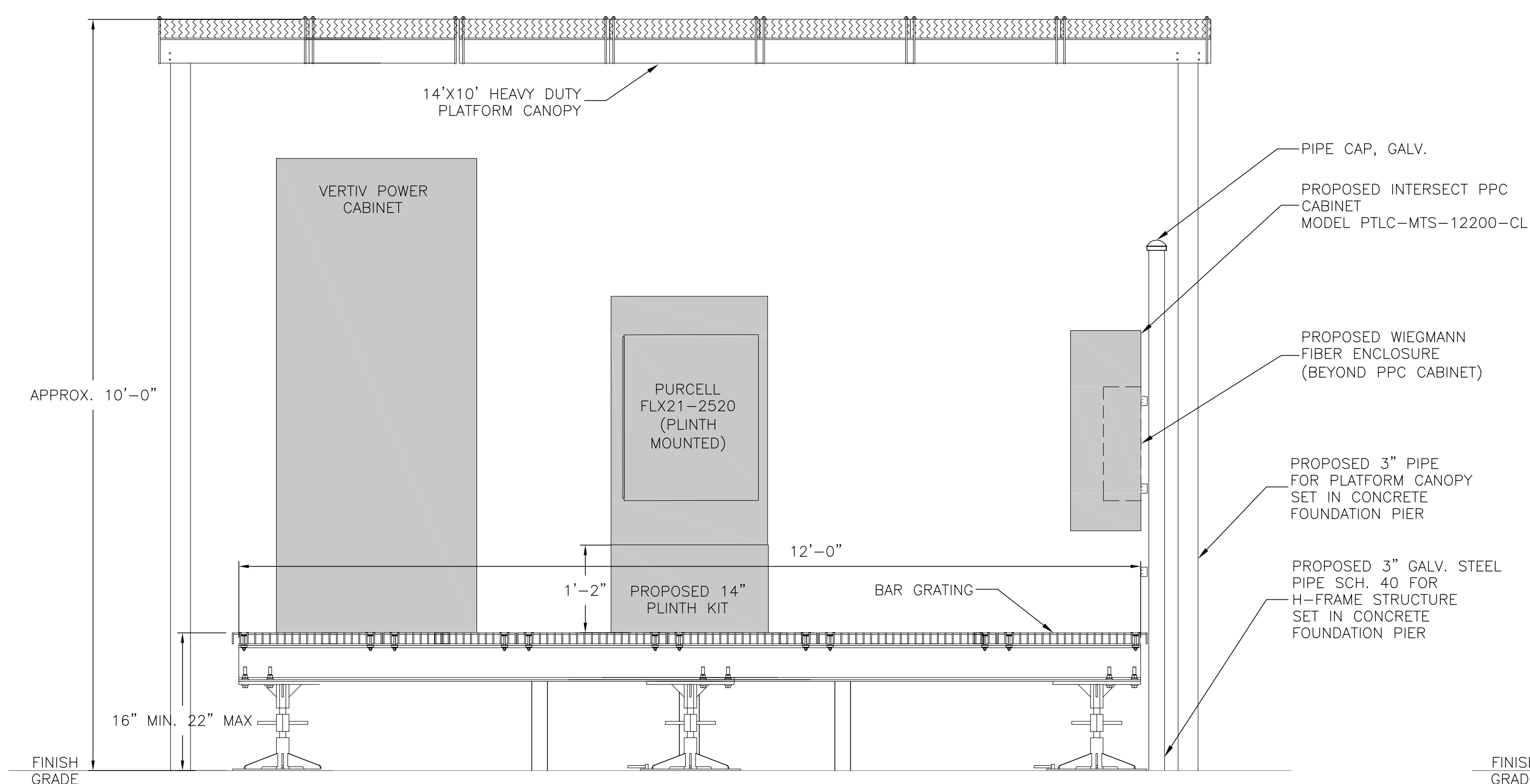


1 MODULAR PLATFORM PLAN VIEW
SCALE: NTS



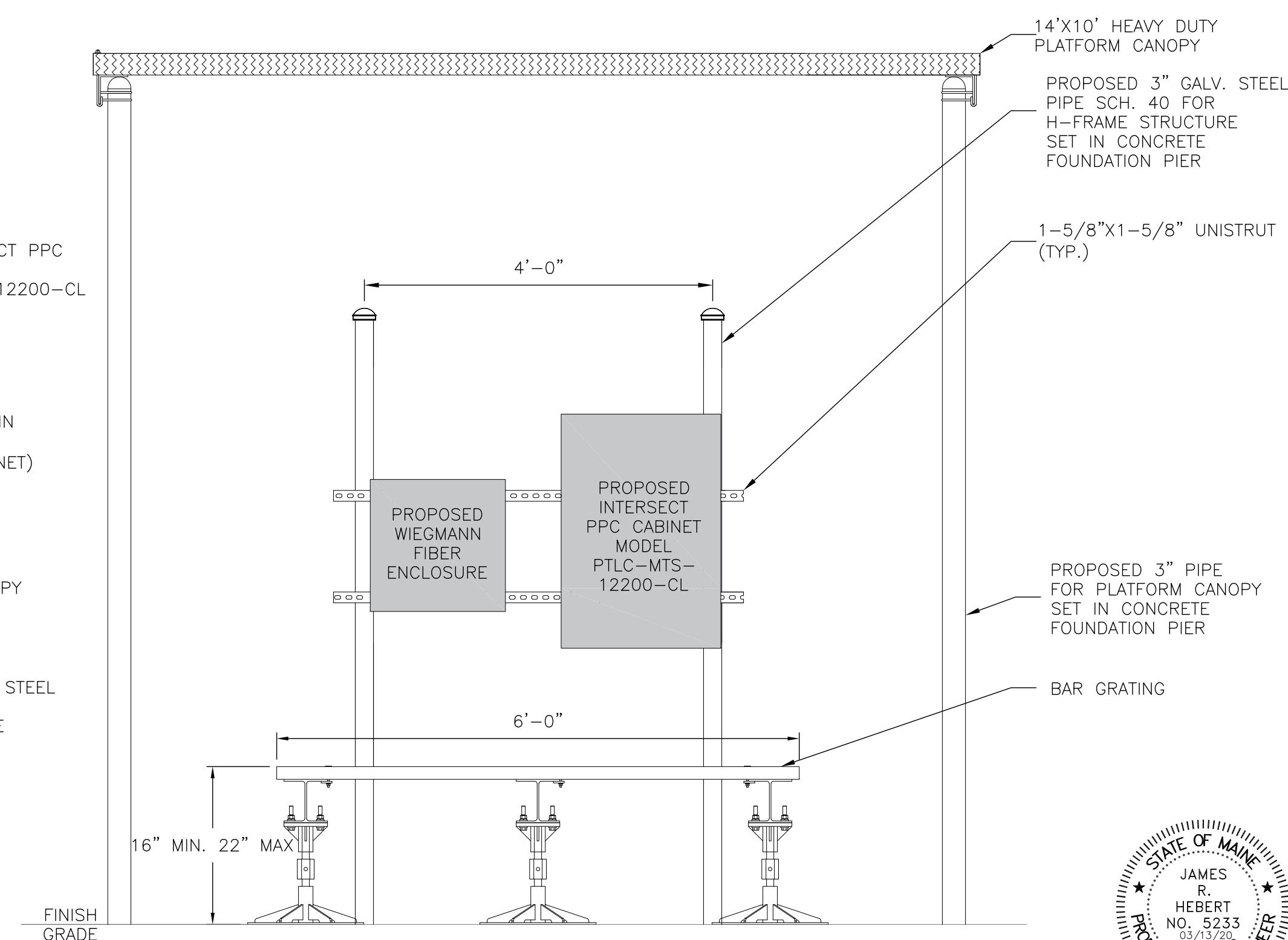
2 RAYCAP AND FIBER CABLE ENCLOSURE ELEVATION
SCALE: NTS

ELEVATION NOTE: INFORMATION OMITTED FOR CLARITY.

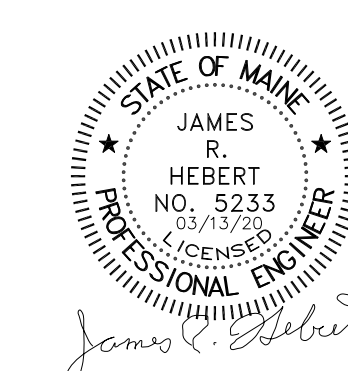


3 MODULAR PLATFORM FRONT ELEVATION
SCALE: NTS

ELEVATION NOTE: INFORMATION OMITTED FOR CLARITY.



4 MODULAR PLATFORM SIDE ELEVATION
SCALE: NTS



BLACK DIAMOND CONSULTANTS
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MODULAR PLATFORM DETAILS
RISING TIDE TOWERS



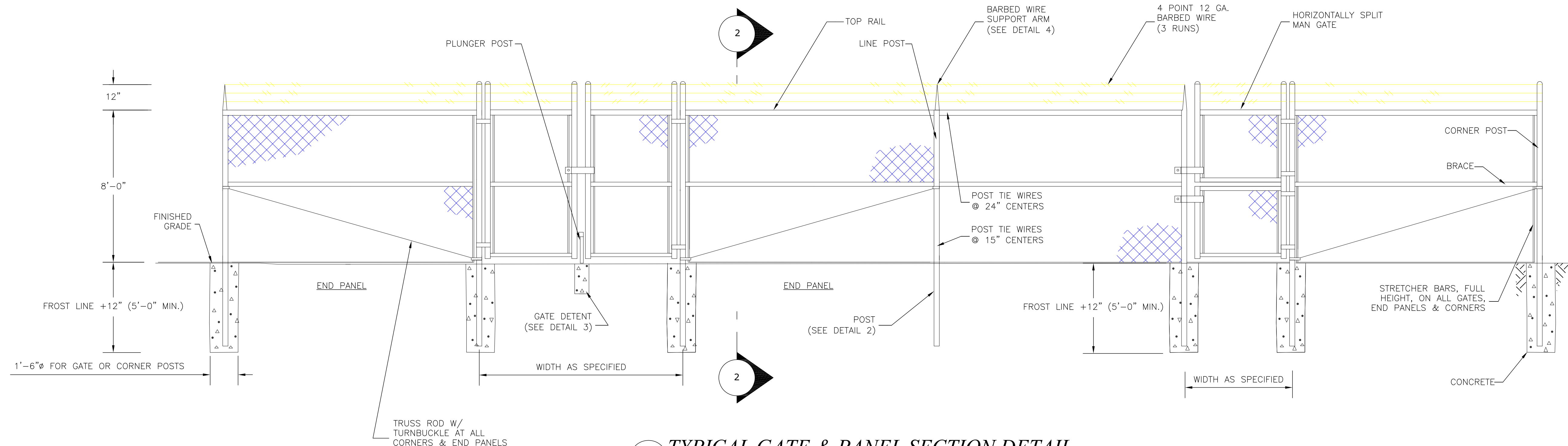
PROJECT NUMBER RT-13
SHEET NUMBER C3

Classification: UNCLASSIFIED
Quality Category: NON-Q

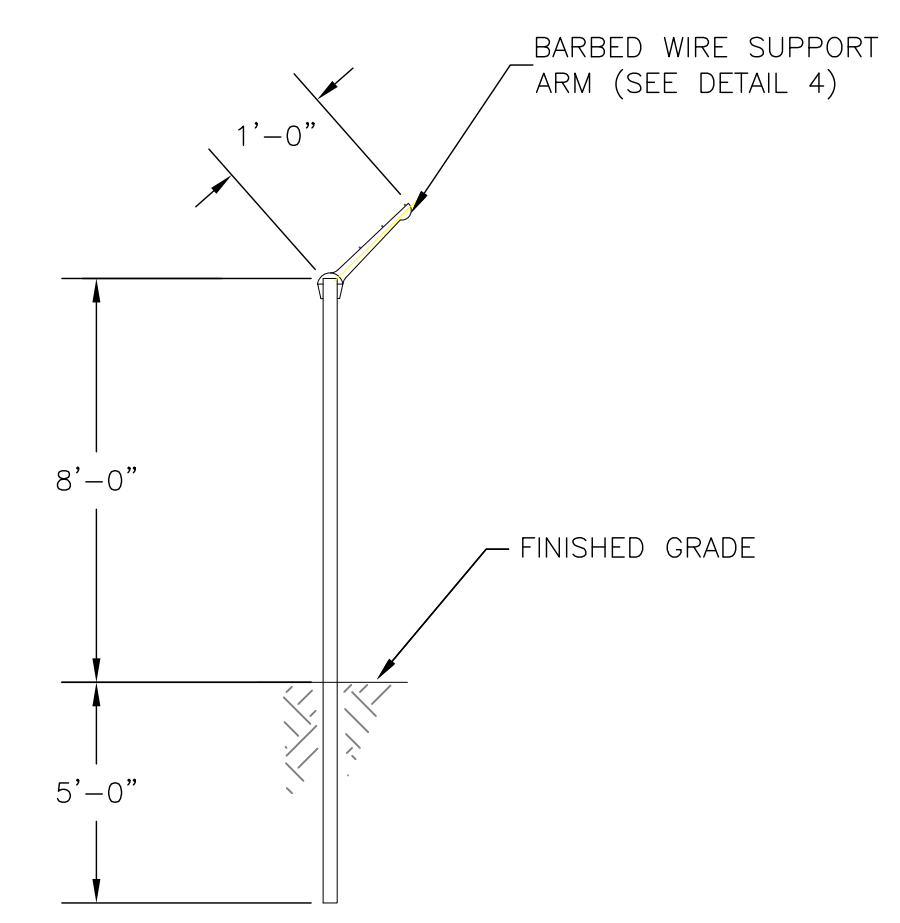
SITE NAME: DALLAS PLANTATION
SITE NUMBER: N/A

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1	03/13/20	MM	AM	TR	JRH	0	03/20/18	MM	AM	TR	JRH
REVISION NOTES: SET ECO # 20-013						REVISION NOTES: ORIGINAL ISSUE					

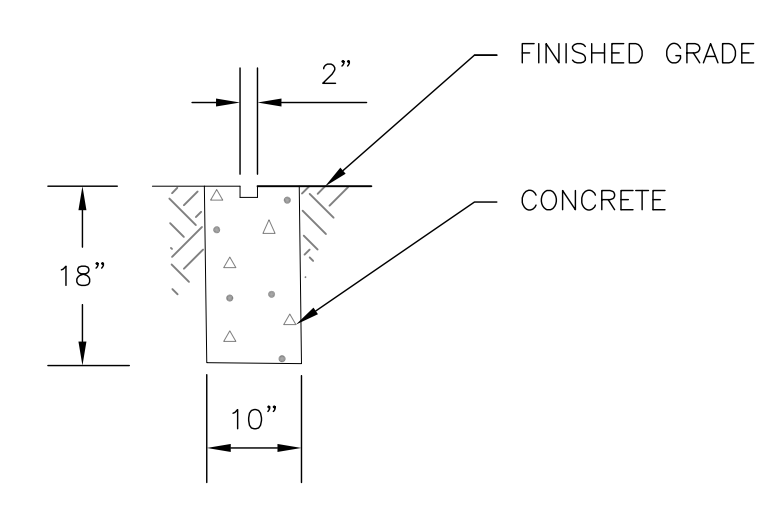
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BDC JOB ORDER(S)		CLIENT DATA	
		SITE NAME:	DALLAS PLANTATION
		SITE NUMBER:	N/A



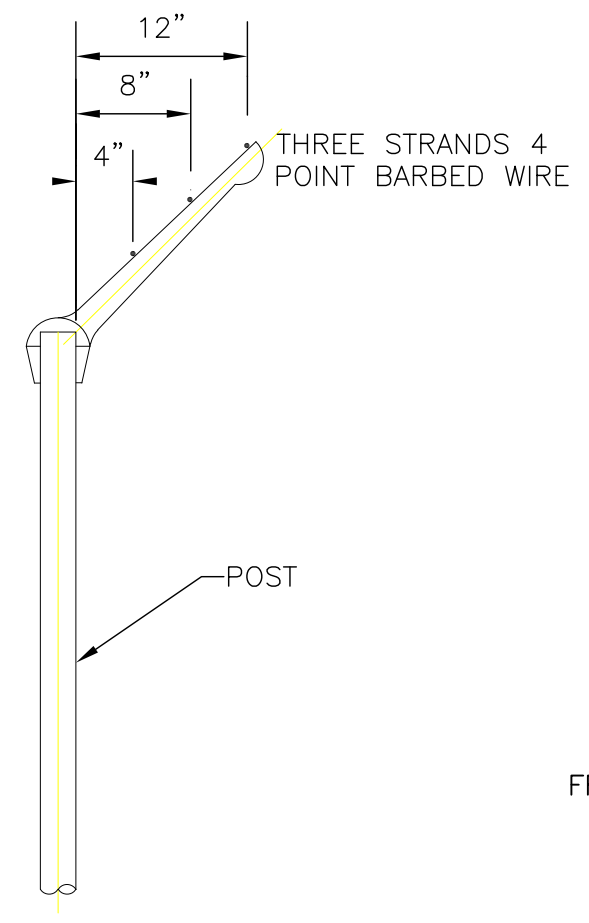
1 TYPICAL GATE & PANEL SECTION DETAIL
SCALE: NTS



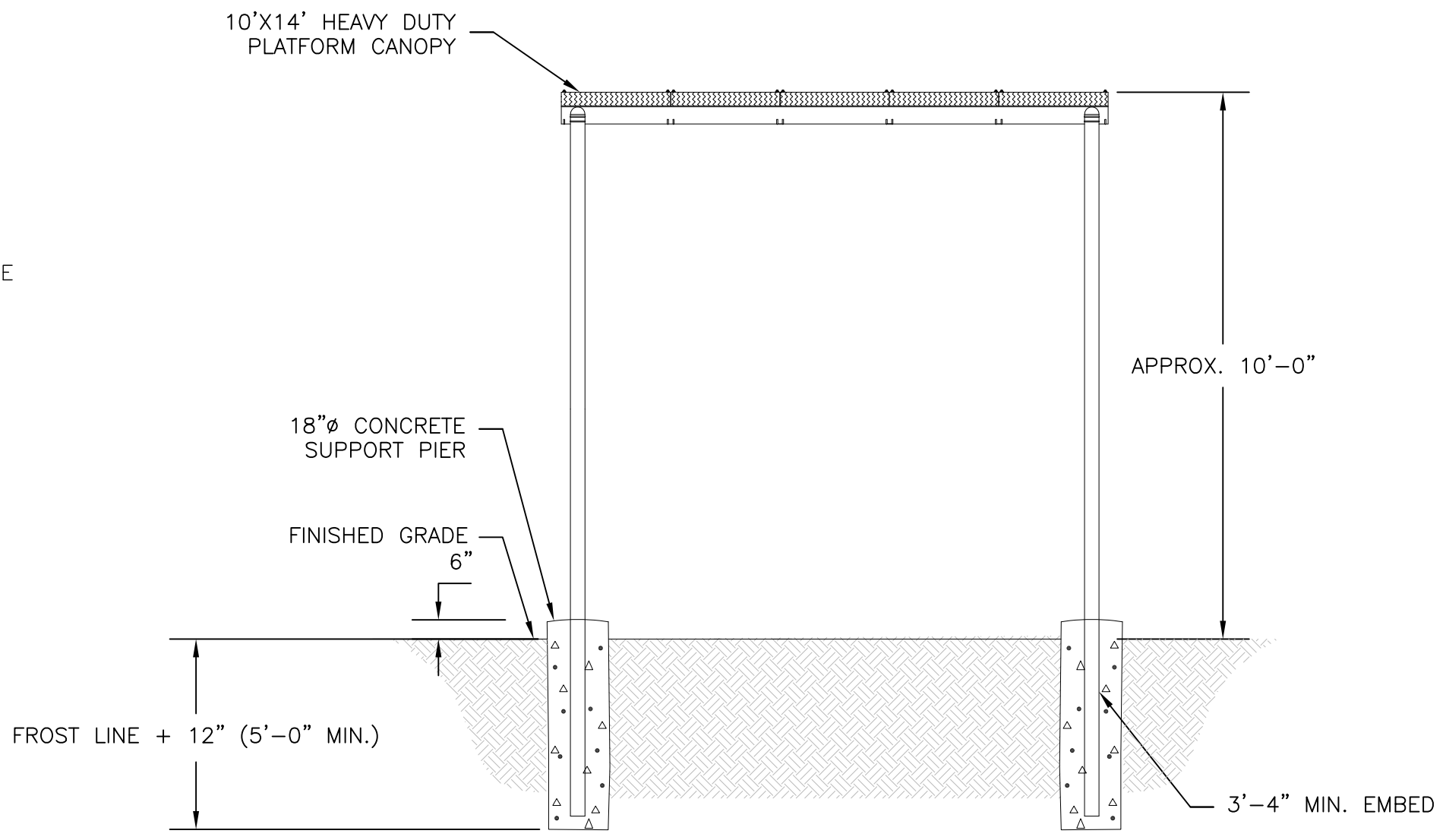
2 FENCE CROSS SECTION
SCALE: NTS



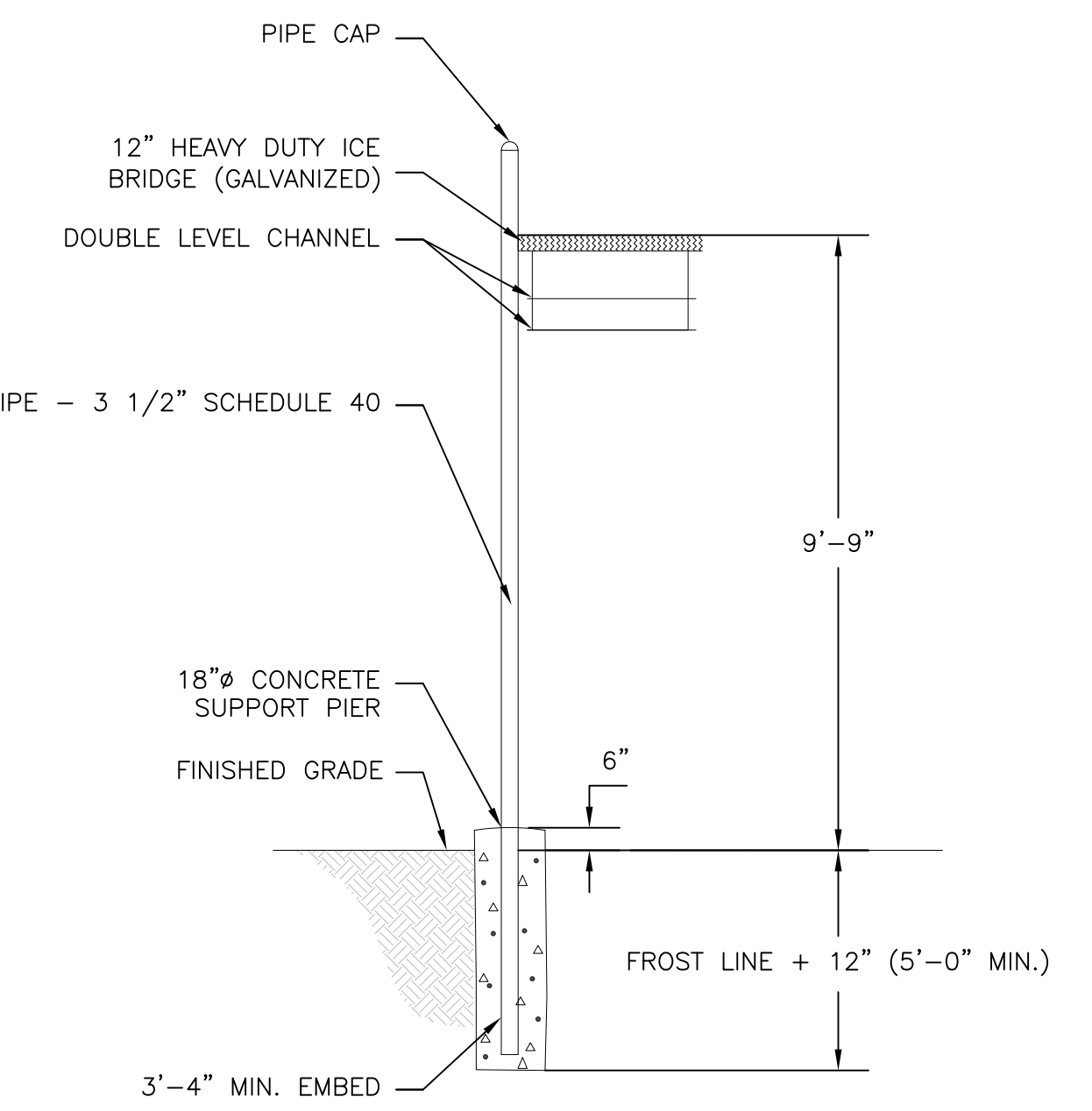
3 GATE DETENT
SCALE: NTS



4 BARBED WIRE SUPPORT ARM
SCALE: NTS

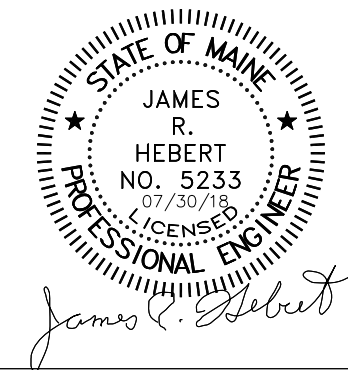


5 PLATFORM CANOPY DETAIL
SCALE: NTS



6 ICE BRIDGE DETAIL
SCALE: NTS

- FENCE NOTES:**
1. FENCE CONSTRUCTION SHALL BE PLUMB, STRAIGHT, AND STRUCTURALLY SOUND.
 2. FENCE FABRIC SHALL USE A BOTTOM TENSION WIRE AND BARBED WIRE. FENCING SHALL BE TIGHT AND CONTINUOUS.
 3. FENCE, FENCE FABRIC AND BARBED WIRE SHALL BE BONDED TO THE FACILITY OR TOWER EXTERNAL GROUND RING (EGR) AT EACH CORNER ON INSIDE OF FENCING COMPOUND.
 4. ALL ENTRY GATES SHALL BE BONDED TO THE MAIN FENCE ASSEMBLY BY A METAL STRAP.
 5. TWO HOLE COMPRESSION LUGS CAN BE USED IN PLACE OF EXOTHERMIC WELDS DUE TO THINNESS OF METAL.
 6. FENCE SHALL CONFORM TO LOCAL ZONING REGULATIONS.
 7. ALL STEEL TO BE GALVANIZED.



BLACK DIAMOND CONSULTANTS
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Quality Category: **NON-Q** SITE NUMBER: N/A

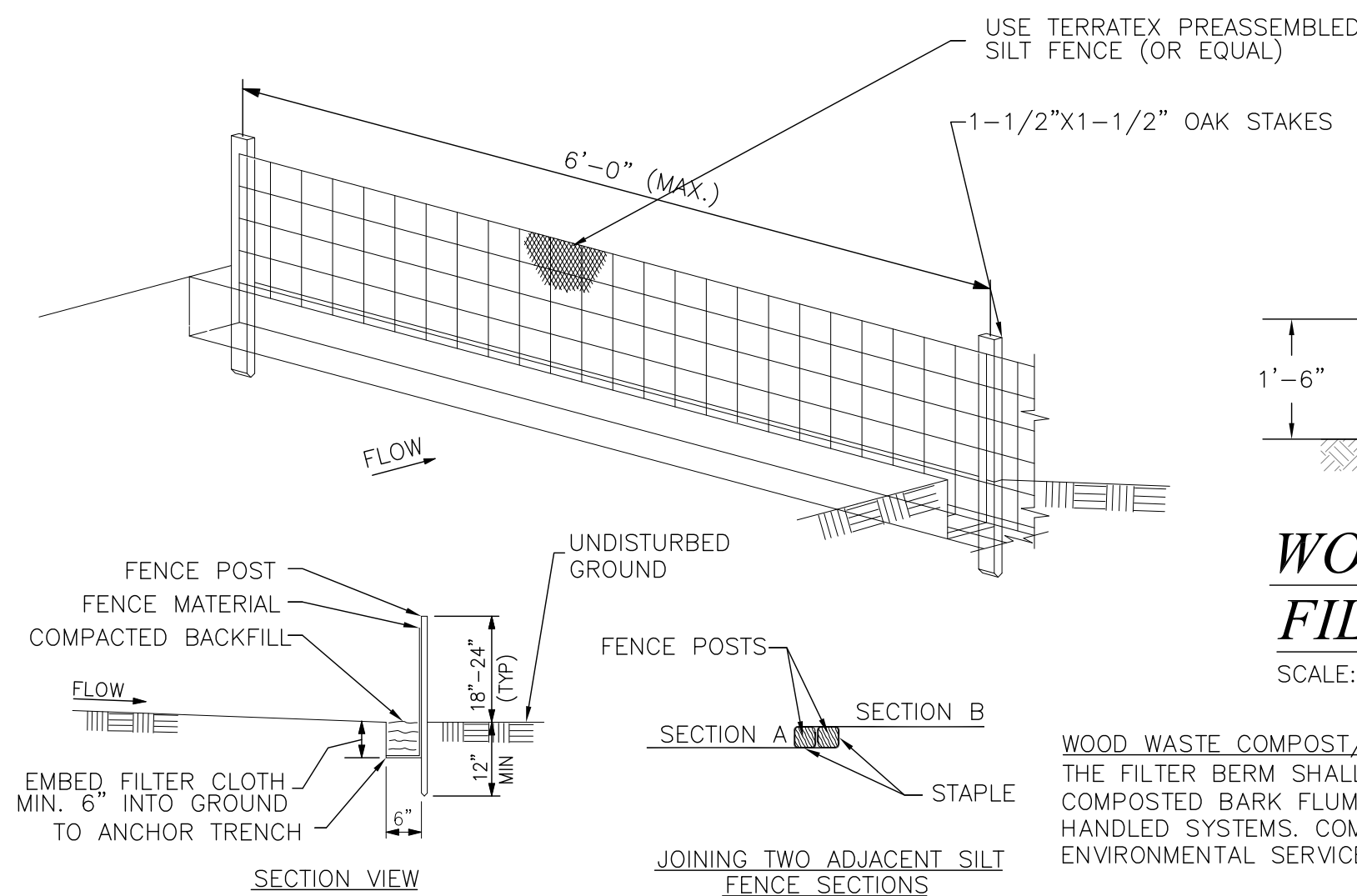
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REVISION NOTES: ORIGINAL ISSUE.						BDC JOB ORDER(S)	CLIENT DATA
						18-096	SITE NAME: DALLAS PLANTATION SITE NUMBER: N/A

FENCE, PLATFORM CANOPY AND ICE BRIDGE DETAILS

RISING TIDE TOWERS

BLACK DIAMOND CONSULTANTS INC

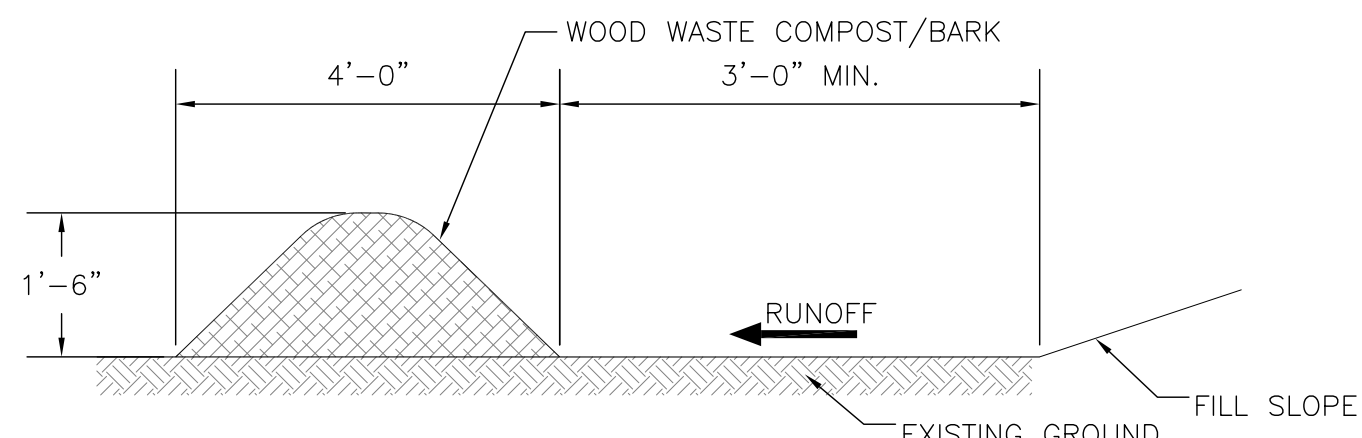
PROJECT NUMBER: RT-13
SHEET NUMBER: C4



1 SILT FENCE DETAIL
SCALE: NTS

NOTES:

1. SILT FENCE AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
2. SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDING.
4. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC. SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.



WOOD WASTE COMPOST/BARK FILTER BERM ALTERNATIVE
SCALE: NTS

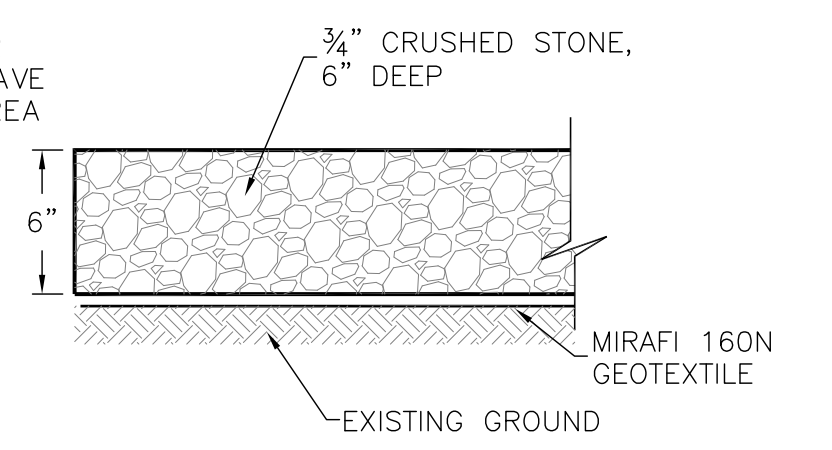
WOOD WASTE COMPOST/BARK FILTER BERMS NOTES:
THE FILTER BERM SHALL CONSIST OF A WOOD WASTE COMPOST/BARK MULCH MIX OR RECYCLED COMPOSTED BARK FLUME GRIT AND FRAGMENTED WOOD GENERATED FROM WATER-FLUME LOG HANDLED SYSTEMS. COMPOSTED MIXES CAN BE USED UPON APPROVAL OF THE OFFICE OF ENVIRONMENTAL SERVICES LANDSCAPE UNIT.

THE MIX SHALL CONFORM TO THE FOLLOWING STANDARDS:

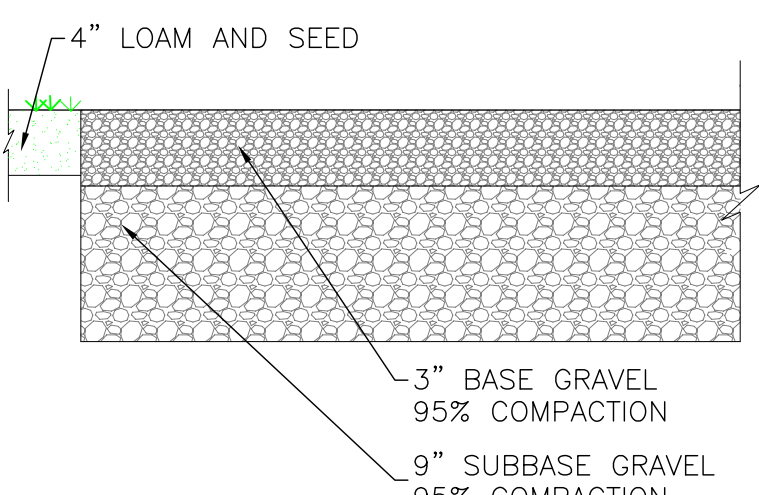
- A. MOISTURE CONTENT - 30-60%
- B. pH - 5.0-8.0
- C. SCREEN SIZE - 100% LESS THAN 3", MAXIMUM 70% LESS THAN 1".
- D. NO LESS THAN 40% ORGANIC MATERIAL (DRY WEIGHT) BY LOSS OF IGNITION
- E. NO STONES LARGER THAN 2" IN DIAMETER

THE COMPOSTED BERM SHALL BE PLACED, UNCOMPACTED, ALONG A RELATIVELY LEVEL CONTOUR.

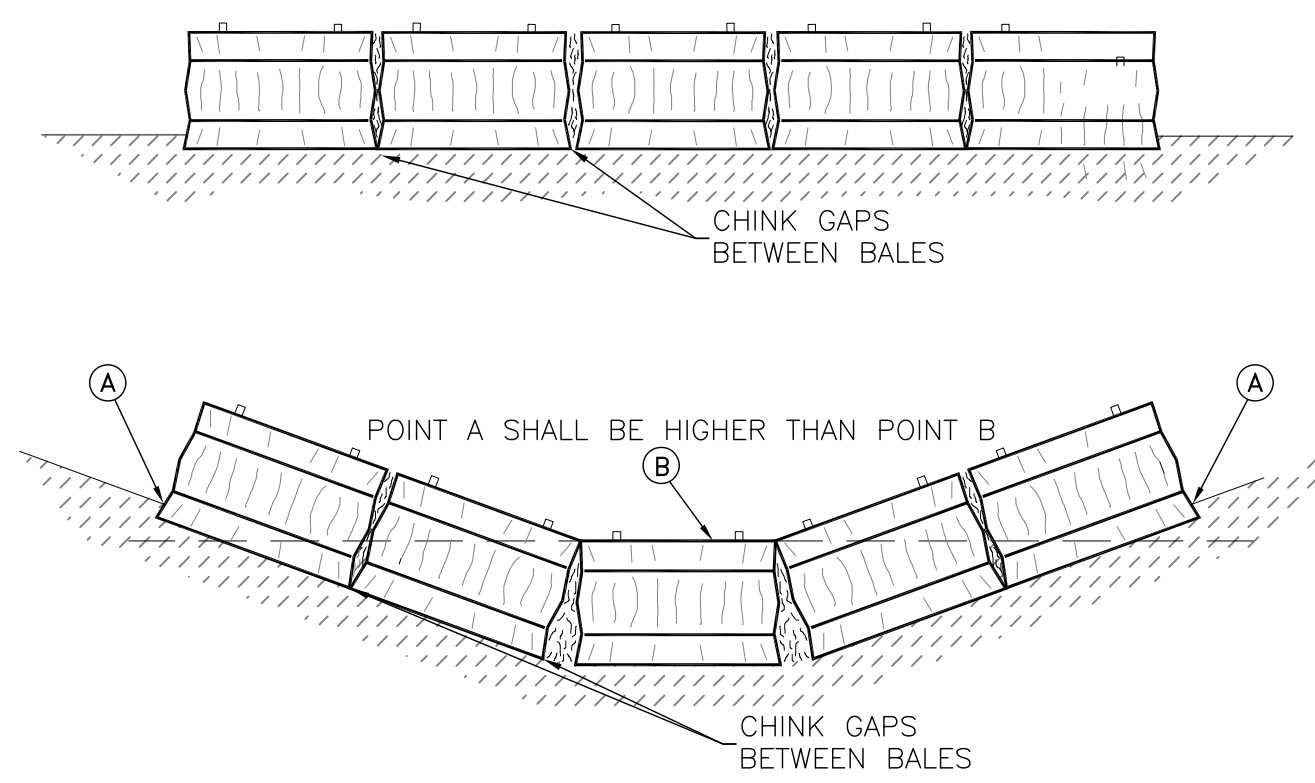
NOTE:
WOOD WASTE COMPOST/BARK FILTER BERMS MAY BE USED IN COMBINATION WITH SILT FENCE TO IMPROVE SEDIMENT REMOVAL AND PREVENT CLOGGING OF THE WOOD WASTE COMPOST/BARK BERM BY LARGER SEDIMENT PARTICLES. (SILT FENCE PLACED TO FILTER RUNOFF BEFORE WOOD WASTE COMPOST/BARK).



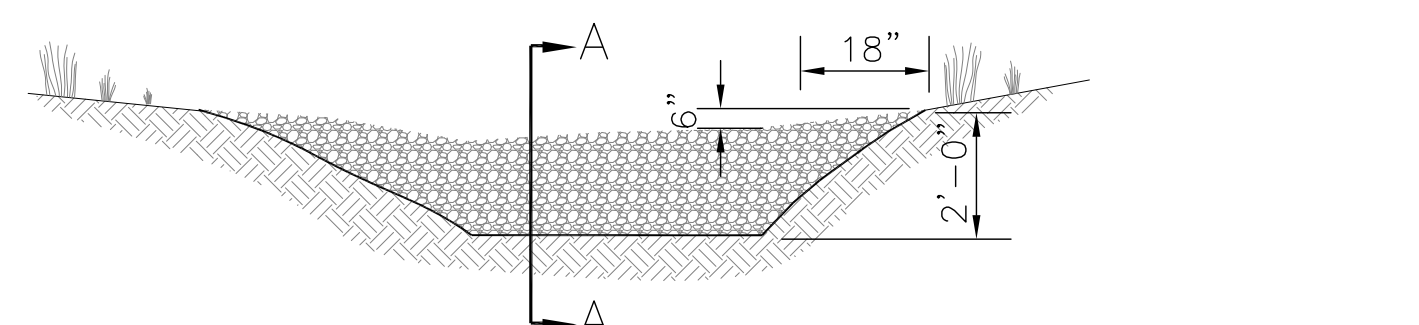
2 COMPOUND CRUSHED STONE SECTION
SCALE: NTS



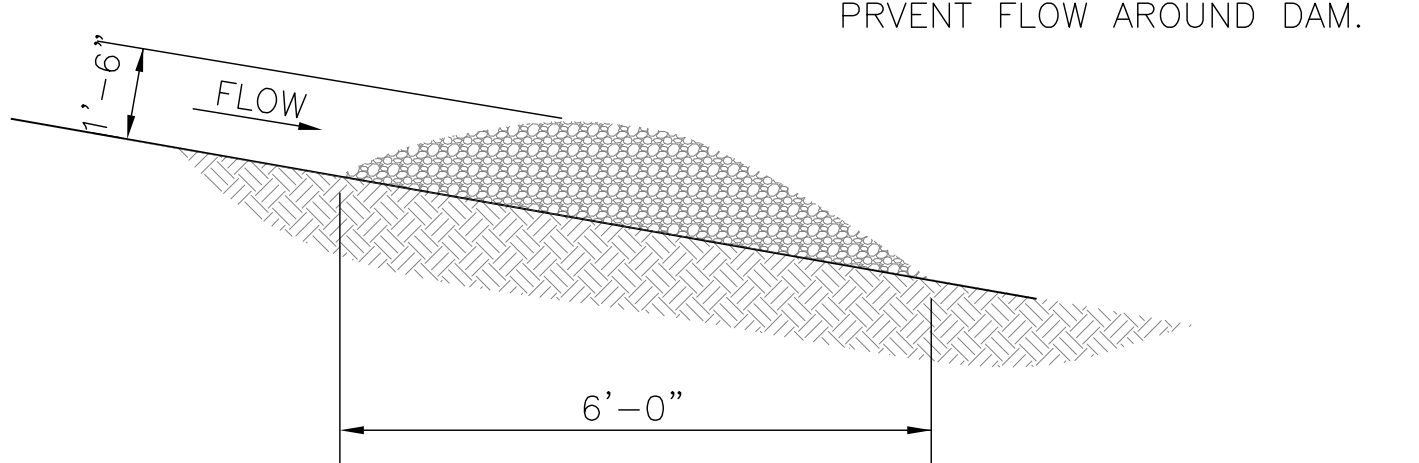
3 PARKING AREA DETAIL
SCALE: NTS



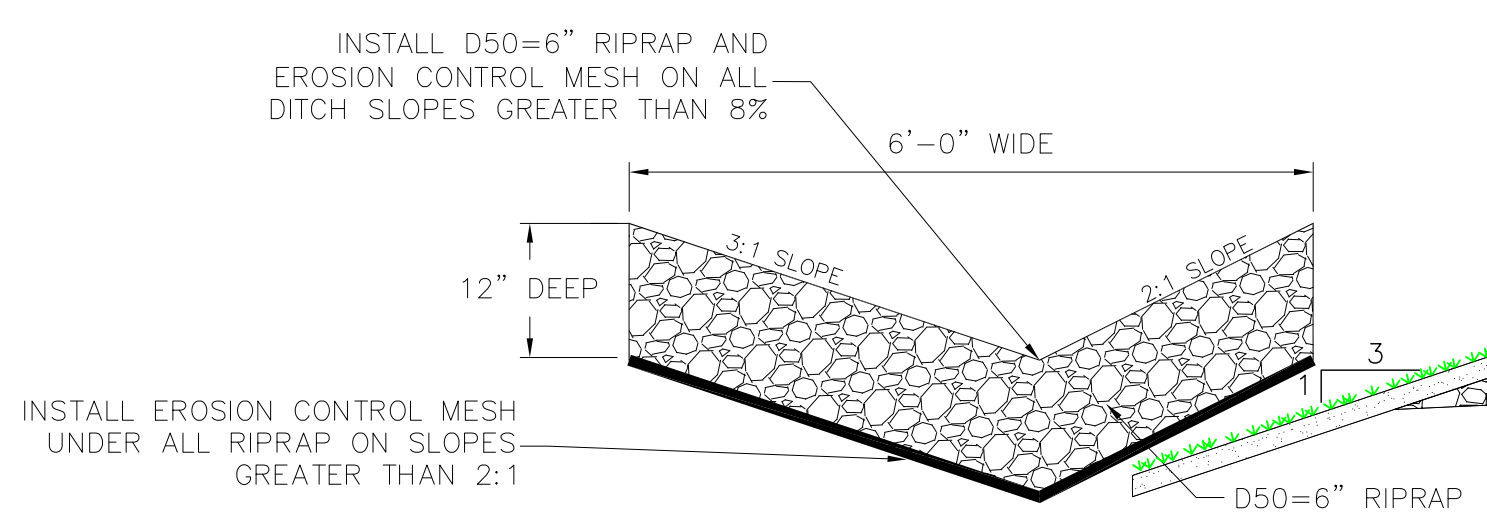
4 DITCH BALE BARRIER
SCALE: NTS



NOTE: KEY STONE INTO CHANNEL BANKS AND EXTEND THE ABUTMENTS A MINIMUM OF 18" TO PREVENT FLOW AROUND DAM.



7 TYPICAL CHECK DAM
SCALE: NTS



5 RIP-RAP DITCH SECTION
SCALE: NTS

6 TYPICAL ROAD SECTION
SCALE: NTS

OVER-WINTER CONSTRUCTION AND STABILIZATION

IF THE CONSTRUCTION SITE IS NOT STABILIZED BY NOVEMBER 15 THEN THE SITE NEEDS TO BE PROTECTED WITH OVER-WINTER STABILIZATION. THE WINTER CONSTRUCTION PERIOD IS FROM NOVEMBER 1 THROUGH APRIL 15. IF CONSTRUCTION IS CONDUCTED DURING THE WINTER CONSTRUCTION PERIOD, LIMIT CONSTRUCTION EXPOSED AREAS TO ONLY THOSE AREAS REQUIRED FOR TELECOMMUNICATIONS FACILITY INSTALLATION, SUCH AS: ACCESS GRAVEL ROAD CONSTRUCTION, INSTALLATION OF UTILITIES, AND INSTALLATION OF TOWER, SHELTER AND EQUIPMENT. FINAL SITE GRADING, PERMANENT MEASURES FOR EROSION CONTROL, CONSTRUCTION AND STABILIZATION OF DITCHES AND CHANNELS SHALL BE PROVIDED AFTER WINTER CONSTRUCTION PERIOD. REFER TO MAINE EROSION AND SEDIMENT CONTROL BMP FOR ADDITIONAL INFORMATION ON OVER-WINTER CONSTRUCTION AND STABILIZATION.

SEDIMENT BARRIERS: DURING FROZEN CONDITION, SEDIMENT BARRIERS MAY CONSIST OF EROSION CONTROL MIX BERMS OR ANY OTHER RECOGNIZED SEDIMENT BARRIERS IF FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES OR SILT FENCES.

MULCHING: HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE THAT IS TWICE THE NORMAL NON-WINTER PERIOD ACCEPTED RATE AND SHALL BE PROPERLY ANCHORED. EROSION CONTROL MIX, IF USED, MUST BE APPLIED WITH A MINIMUM 4 INCH THICKNESS. ANY SNOW WILL BE REMOVED DOWN TO ONE INCH DEPTH OR LESS PRIOR TO MULCHING APPLICATION. STOCKPILES OF SOIL WILL BE SIMILARLY MULCHED.

STOCKPILING, HAUL ROADS, BORROW AREAS: THE CONTRACTOR SHALL VERIFY THAT STOCKPILING, HAUL ROAD, AND BORROW AREAS SHALL NOT BE LOCATED IN WETLANDS AND AREAS OF CONCENTRATED FLOWS, SILT FENCES, MULCHING, AND OTHER EROSION CONTROL MEASURES SHALL BE PROVIDED TO PROVIDE SEDIMENTATION CONTROL TO THESE AREAS.

DUST CONTROL: THE EXPOSED SOIL SURFACE SHALL BE MOISTENED PERIODICALLY WITH ADEQUATE WATER TO CONTROL DUST.

SITE EROSION/STABILIZATION MAINTENANCE: THE CONTRACTOR SHALL INSPECT THE AREAS ROUTINELY AND ESPECIALLY AFTER RAIN EVENTS AND SHALL REPAIR THE SEDIMENTATION CONTROLS, AS NECESSARY. THE CONTRACTOR SHALL MAINTAIN THE TEMPORARY AND PERMANENT SITE EROSION AND STABILIZATION CONTROLS UNTIL FINAL ACCEPTANCE OF THE WORK. MAINTENANCE SHALL INCLUDE PROVIDING PROTECTION AGAINST SITE TRAFFIC AND REPAIRING DAMAGES TO CONTROLS RESULTING FROM RAIN, WIND, OR OTHER EVENTS. DAMAGED AREAS SHALL BE REPAIRED TO RE-ESTABLISH SOIL CONDITIONS AND GRADES AND SHALL INCLUDE RE-ESTABLISHING THE TEMPORARY OR PERMANENT FERTILIZING, LIMING, SEEDING, MULCHING CONDITIONS OBTAINED PRIOR TO THE DAMAGES.

TEMPORARY MEASURES FOR EROSION CONTROL:

THESE TEMPORARY MEASURES WILL PROTECT THE AREA UNTIL MORE PERMANENT SITE STABILIZATION MEASURES ARE ESTABLISHED. THE FOLLOWING MEASURES SHALL BE USED FOR TEMPORARY SITE STABILIZATION. REFER TO MAINE EROSION AND SEDIMENT CONTROL BMP A-1 AND A-2 FOR ADDITIONAL INFORMATION ON TEMPORARY MEASURES FOR EROSION CONTROL.

TEMPORARY SEEDING: GRADE AND PREPARE AREA AS NEEDED TO PROVIDE FOR SEEDING. APPLY 10-10-10 FERTILIZER AT THE RATE OF 13.8#/1000FT², APPLY LIMESTONE AT THE RATE OF 138#/1000FT², APPLY WINTER RYE AT THE RATE OF 2 1/2 #/1000FT². NOTE - SEEDING RATE MUST BE INCREASED BY 10% WHEN HYDRO-SEEDING. AFTER SEEDING, APPLY TEMPORARY HAY OR STRAW MULCHING AS FOLLOWS:

TEMPORARY MULCHING: APPLY HAY OR STRAW MULCHING OVER THE EXPOSED AREA AT THE RATE OF 2 BALES/1000FT² TO COVER 75 TO 90% OF THE GROUND SURFACE. SECURE MULCH BY TRACKING, NETTING, OR PEG AND TWINE, AS NECESSARY, TO PREVENT LOSS OF COVER OVER EXPOSED AREA.

PERMANENT MEASURES FOR EROSION CONTROL:

FOR DISTURBED AREAS WITH SLOPES GREATER THAN 2:1, EROSION CONTROLS AND AREA STABILIZATION SHALL BE PROVIDED AS SHOWN BY THE SITE PLAN.

PERMANENT SEEDING: PROVIDE PERMANENT SEEDING AS EACH CONSTRUCTION AREA IS BROUGHT TO FINISH GRADE. PREPARE AREA AS NEEDED TO PROVIDE FOR SEEDING. APPLY 10-20-20 FERTILIZER AT THE RATE OF 18.4#/1000FT², APPLY LIMESTONE AT THE RATE OF 138#/1000FT², APPLY A MIXTURE OF KENTUCKY BLUEGRASS (45%), GREENT REED FESQUE (45%), AND PERENNIAL RYEGRASS (10%) AT THE RATE OF 1#/1000FT². NOTE - SEEDING RATE MUST BE INCREASED BY 10% WHEN HYDRO-SEEDING. AFTER SEEDING, APPLY TEMPORARY HAY OR STRAW MULCHING AS FOLLOWS: **TEMPORARY MULCHING:** APPLY HAY OR STRAW MULCHING OVER THE EXPOSED AREA AT THE RATE OF 2 BALES/1000FT² TO COVER 75 TO 90% OF THE GROUND SURFACE. SECURE MULCH BY TRACKING, NETTING, OR PEG AND TWINE, AS NECESSARY, TO PREVENT LOSS OF COVER OVER EXPOSED AREA.

OVER-WINTER STABILIZATION OF DITCHES AND CHANNELS: ALL DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15 OR STABILIZED WITH STONE RIP RAP LAYER.

CONSTRUCTION SCHEDULE

(IN FOLLOWING SEQUENCE, COORDINATE WITH OTHER CONSTRUCTION ACTIVITIES, MAINTAIN CONTINUOUSLY)

1. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE.
2. INSTALL SILT FENCE/FILTER SOCKS PROJECT WIDE.
3. PROVIDE SITE CLEARING.
4. PROVIDE SITE GRADING.
5. STOCKPILE LOAM, PLACE SILT FENCE OR FILTER SOCKS AT TOE.
6. SITE BLASTING AND PRIMARY EARTHWORK.
7. INSTALL DRAINAGE SYSTEM IMPROVEMENTS.
8. INSTALL DRAINAGE SYSTEM EROSION CONTROL MEASURES.
9. PROVIDE PRIMARY SLOPE STABILIZATION AND MULCHING OR TEMPORARY SEEDING.
10. FINAL SITE GRADING, PERMANENT SLOPE PROTECTION, PERMANENT SEEDING.
11. AFTER SITE IS STABILIZED AND COMPLETE, REMOVE TEMPORARY EROSION CONTROL MEASURES.

PIPE INLET PROTECTION

INLET PROTECTION, (RIPRAP D50=6") SHALL EXTEND AT LEAST ONE PIPE DIAMETER BEYOND THE CONDUIT. RIPRAP SHALL BE INSTALLED IN ACCORDANCE WITH THE STATE OF MAINE "BMP". RIPRAP PROTECTION SHALL BE UNDERLAIN WITH MIRAFIX 600X GEOTEXTILE FABRIC TO PREVENT PILING THROUGH THE BACKFILL MATERIAL.

GENERAL NOTES:

AGGREGATE FOR GRAVEL BASE:

AGGREGATE FOR GRAVEL BASE SHALL BE SCREENED OR CRUSHED GRAVEL OF HARD DURABLE PARTICLES FREE FROM VEGETABLE MATTER, LUMPS OR BALLS OF CLAY AND OTHER DELETERIOUS SUBSTANCES. THE GRADATION OF THE PART THAT PASSES A 3 INCH SIEVE SHALL MEET THE GRADING REQUIREMENTS OF THE FOLLOWING TABLE:

SIEVE DESIGNATION	PERCENTAGE BY WEIGHT PASSING SQUARE MESH SIEVE	
	TYPE A AGGREGATE	TYPE D AGGREGATE
3/8 INCH	45-70	---
1/2 INCH	30-55	25-70
No. 40	0-20	0-30
No. 200	0-5	0-5

TYPE "A" AGGREGATE SHALL NOT CONTAIN PARTICLES WHICH WILL NOT PASS THE 2 INCH SQUARE MESH SIEVE.

TYPE "D" AGGREGATE SHALL NOT CONTAIN PARTICLES WHICH WILL NOT PASS THE 6 INCH SQUARE MESH SIEVE.

EACH LAYER AS APPLIED SHALL BE ROLLED WITH A 20 TON ROLLER. THE MATERIAL AS SPREAD SHALL BE WELL MIXED WITH NO POCKETS OF EITHER FINE OR COARSE MATERIAL. OVER SIZED STONES SHALL BE REMOVED FROM THE AGGREGATE.

EACH LAYER OF AGGREGATE SHALL BE PLACED OVER THE FULL WIDTH OF THE SECTION. AGGREGATE BASE AND SUB-BASE COURSES MAY BE PLACED UPON FROZEN SURFACES WHEN SUCH SURFACES HAVE BEEN PROPERLY CONSTRUCTED.

THE SURFACE OF EACH LAYER SHALL BE MAINTAINED DURING COMPACTION OPERATIONS IN SUCH A MANNER THAT A UNIFORM TEXTURE IS PRODUCED AND THE AGGREGATE IS FIRMLY KEYED. THE MOISTURE CONTENT OF THE MATERIAL SHALL BE MAINTAINED AT THE PROPER PERCENT TO ATTAIN THE REQUIRED COMPACTION AND STABILITY. COMPACTION OF EACH LAYER SHALL BE CONTINUED UNTIL DENSITY OF NOT LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557 "MODIFIED PROCTOR DENSITY" HAS BEEN ACHIEVED FOR THE FULL WIDTH AND DEPTH OF EACH LAYER AS APPLIED.

THE SURFACE TOLERANCE OF EACH BASE COURSE AS APPLIED SHALL BE 3/8 INCHES ABOVE OR BELOW THE REQUIRED TEMPLATE LINES.

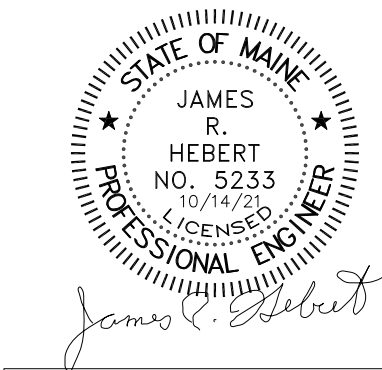
AGGREGATE FOR SUB-BASE:

AGGREGATE FOR SUB-BASE SHALL BE TYPE "D" (MDOT). IT SHALL BE FREE FROM VEGETABLE MATTER, LUMPS OR BALLS OF CLAY AND OTHER DELETERIOUS SUBSTANCES.

COMMON BORROW: COMMON BORROW SHALL CONSIST OF EARTH, SUITABLE FOR EMBANKMENT CONSTRUCTION. IT SHALL BE FREE FROM FROZEN MATERIAL, PERISHABLE RUBBISH, PEAT AND OTHER UNSUITABLE MATERIAL.

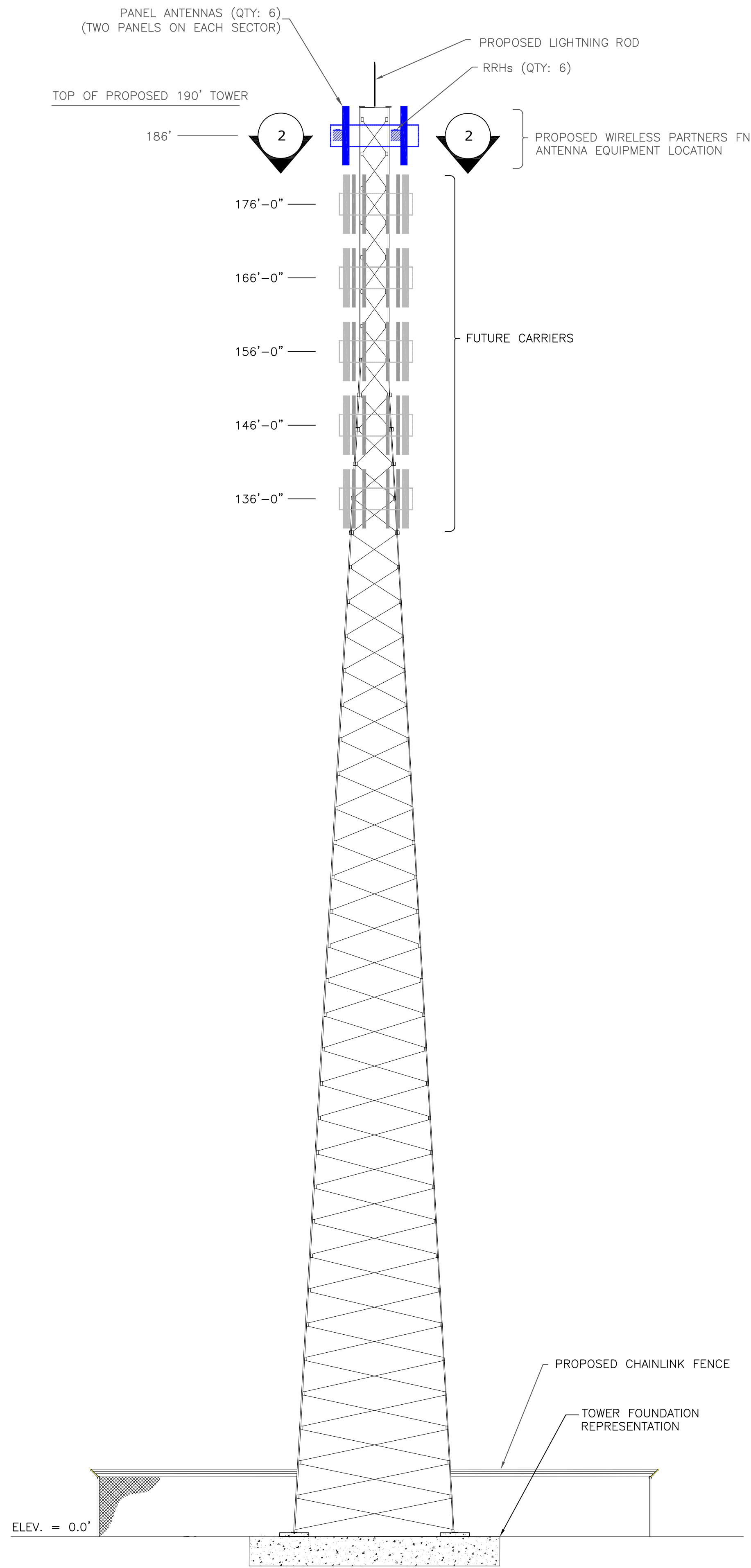
THE MOISTURE CONTENT SHALL BE SUFFICIENT TO PROVIDE THE REQUIRED COMPACTION AND STABLE EMBANKMENT. IN NO CASE SHALL THE MOISTURE CONTENT EXCEED 4 PERCENT ABOVE OPTIMUM.

ALL COMMON BORROW AND GRAVEL AREAS TO BE COMPACTED TO 95% OF ITS MAX. DRY DENSITY AS DETERMINED BY ASTM D-1557 "MODIFIED PROCTOR DENSITY". PLACE IN 9" TO 12" LIFTS.



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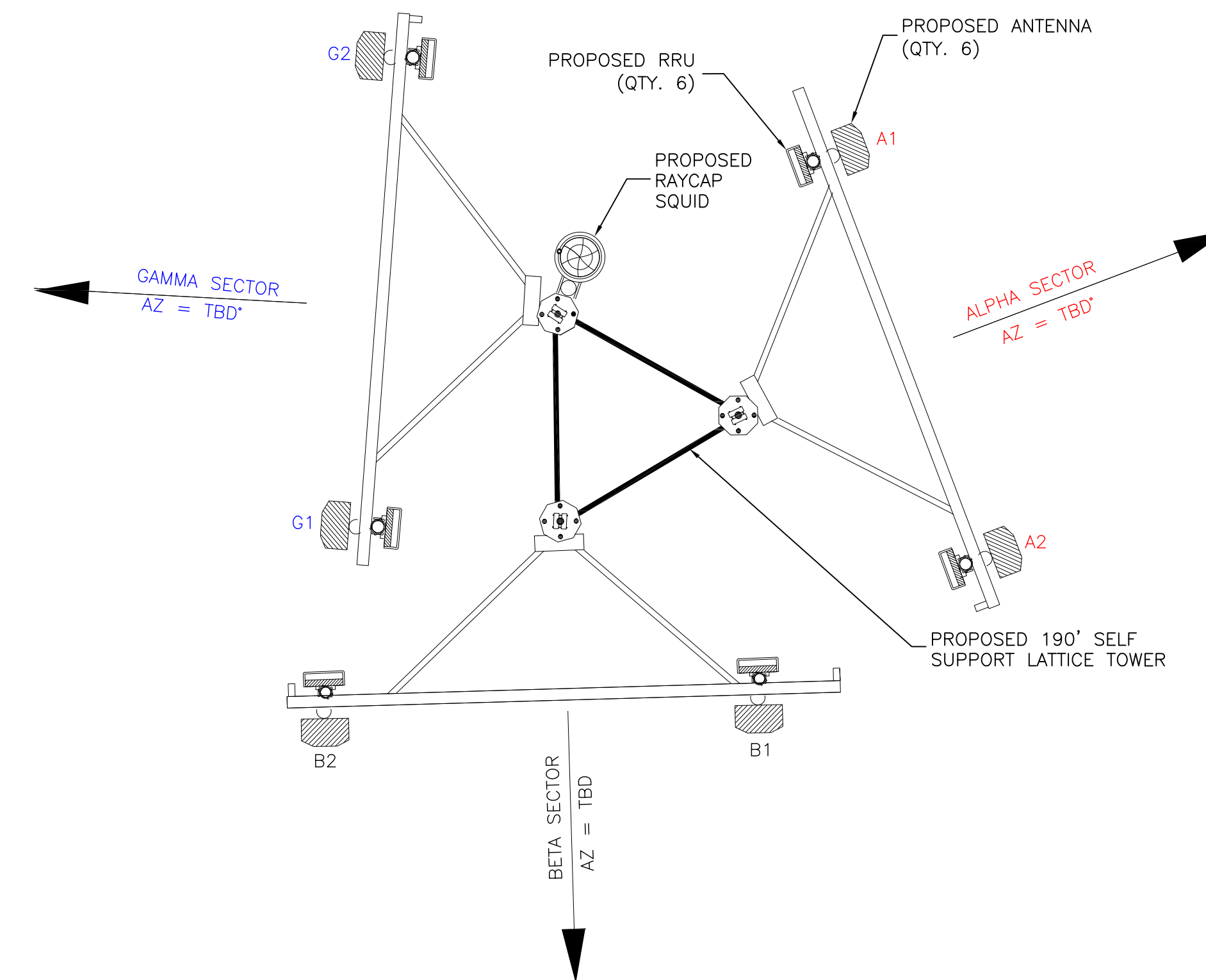
ENVIRONMENTAL AND CIVIL DETAILS
RISING TIDE TOWERS
BLACK DIAMOND CONSULTANTS INC



1 PROPOSED TOWER ELEVATION
SCALE: NTS

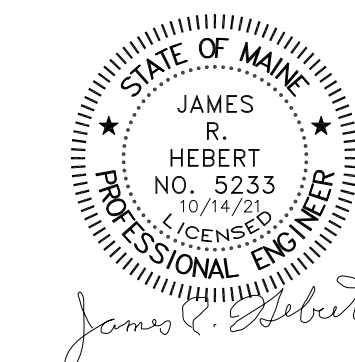
ANTENNA, CABLE AND TOWER EQUIPMENT SCHEDULE				
ANTENNA MARK	SECTOR	ANTENNA EQUIPMENT	RAD CENTER	CABLE
A1	ALPHA	TPA65R-BU8D	186'	JUMPER CABLE
-	ALPHA	ERICSSON 4478 RRU	-	DC, FIBER, COAX JUMPER
A2	ALPHA	TPA65R-BU8D	186'	JUMPER CABLE
-	ALPHA	ERICSSON 4449 RRU	-	DC, FIBER, COAX JUMPER
B1	BETA	TPA65R-BU8D	186'	JUMPER CABLE
-	BETA	ERICSSON 4478 RRU	-	DC, FIBER, COAX JUMPER
B2	BETA	TPA65R-BU8D	186'	JUMPER CABLE
-	BETA	ERICSSON 4449 RRU	-	DC, FIBER, COAX JUMPER
G1	GAMMA	TPA65R-BU8D	186'	JUMPER CABLE
-	GAMMA	ERICSSON 4478 RRU	-	DC, FIBER, COAX JUMPER
G2	GAMMA	TPA65R-BU8D	186'	JUMPER CABLE
-	GAMMA	ERICSSON 4449 RRU	-	DC, FIBER, COAX JUMPER
-	-	RAYCAP STRIKESORB DC9-48-60-24-8C-EV	186'	(1) 18 PAIR FIBER OPTIC TRUNK CABLE
-	MOUNT	C10737011CV-BOOM	186'	-

NOTE: ICE BRIDGE LENGTH IS 5'-10"



2 ANTENNA LOCATION SECTION
SCALE: NTS

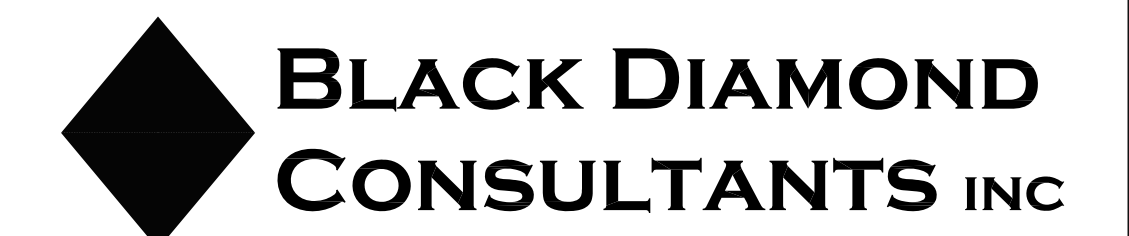
- TOWER NOTES:**
1. TOWER ELEVATION PLAN SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL REFER TO TOWER MANUFACTURER DRAWINGS FOR COMPLETE INSTALLATION AND BILL OF MATERIAL INFORMATION.
 2. TOWER MINIMUM DESIGN SPECIFICATIONS SHALL BE IN ACCORDANCE WITH ANSI/TIA/EIA 222-G "STRUCTURAL STANDARDS FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS, REVISION G" AND GOVERNING FEDERAL, STATE, AND LOCAL CODE REQUIREMENTS.
 3. TOWER MANUFACTURER SHALL BE RESPONSIBLE FOR DESIGN AND STRUCTURAL COMPONENTS OF TOWER.
 4. PROPOSED TOWER LIGHT SHALL BE DUAL LIGHTING SYSTEM DESIGNED TO LUMINATE RED AT NIGHT TIME AND HAVE MEDIUM INTENSITY FLASHING WHITE LIGHT FOR DAYTIME AND TWILIGHT.



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TOWER ELEVATION AND ANTENNA LOCATION SECTION

RISING TIDE TOWERS

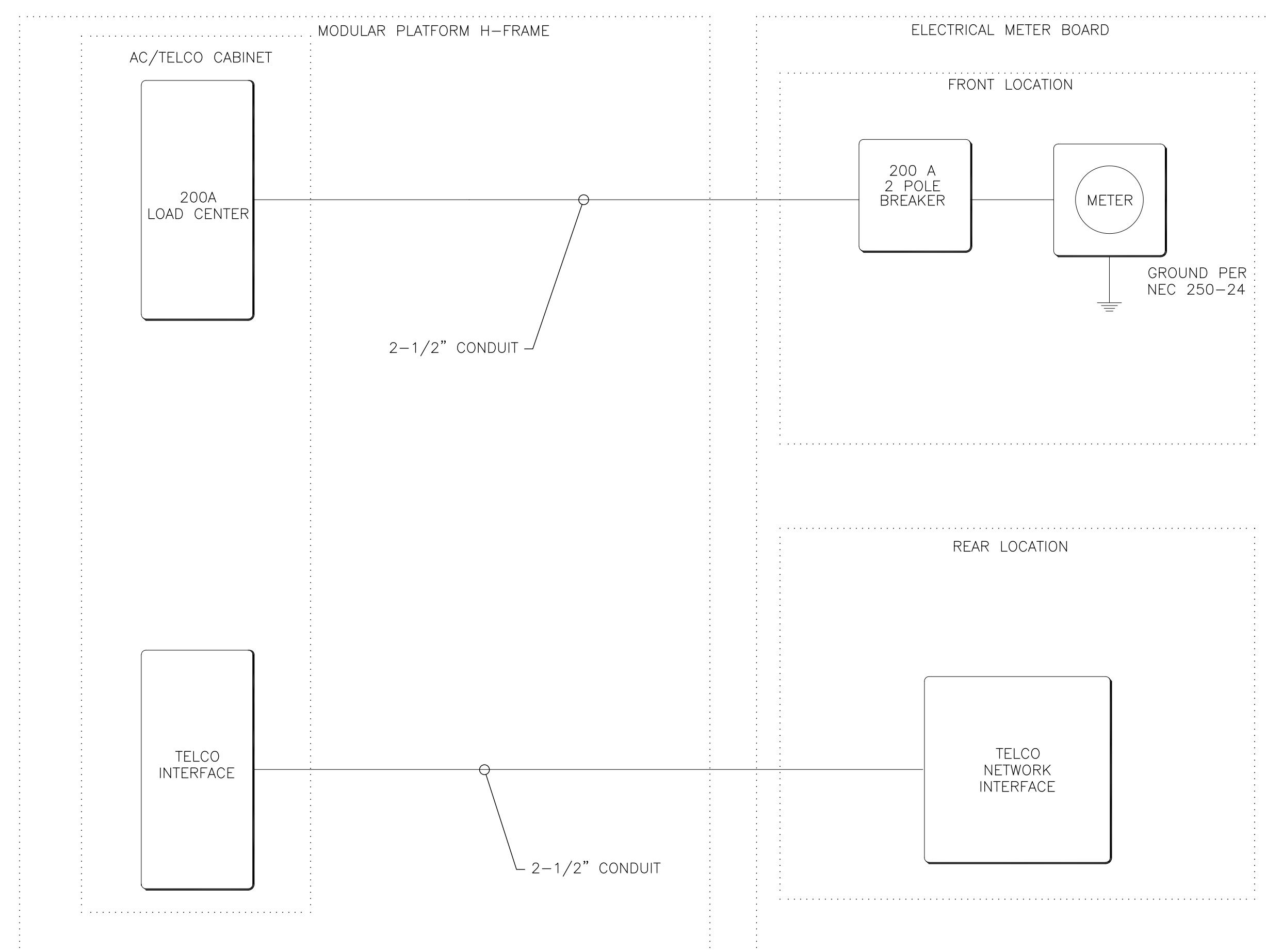


PROJECT NUMBER RT-13
SHEET NUMBER A1

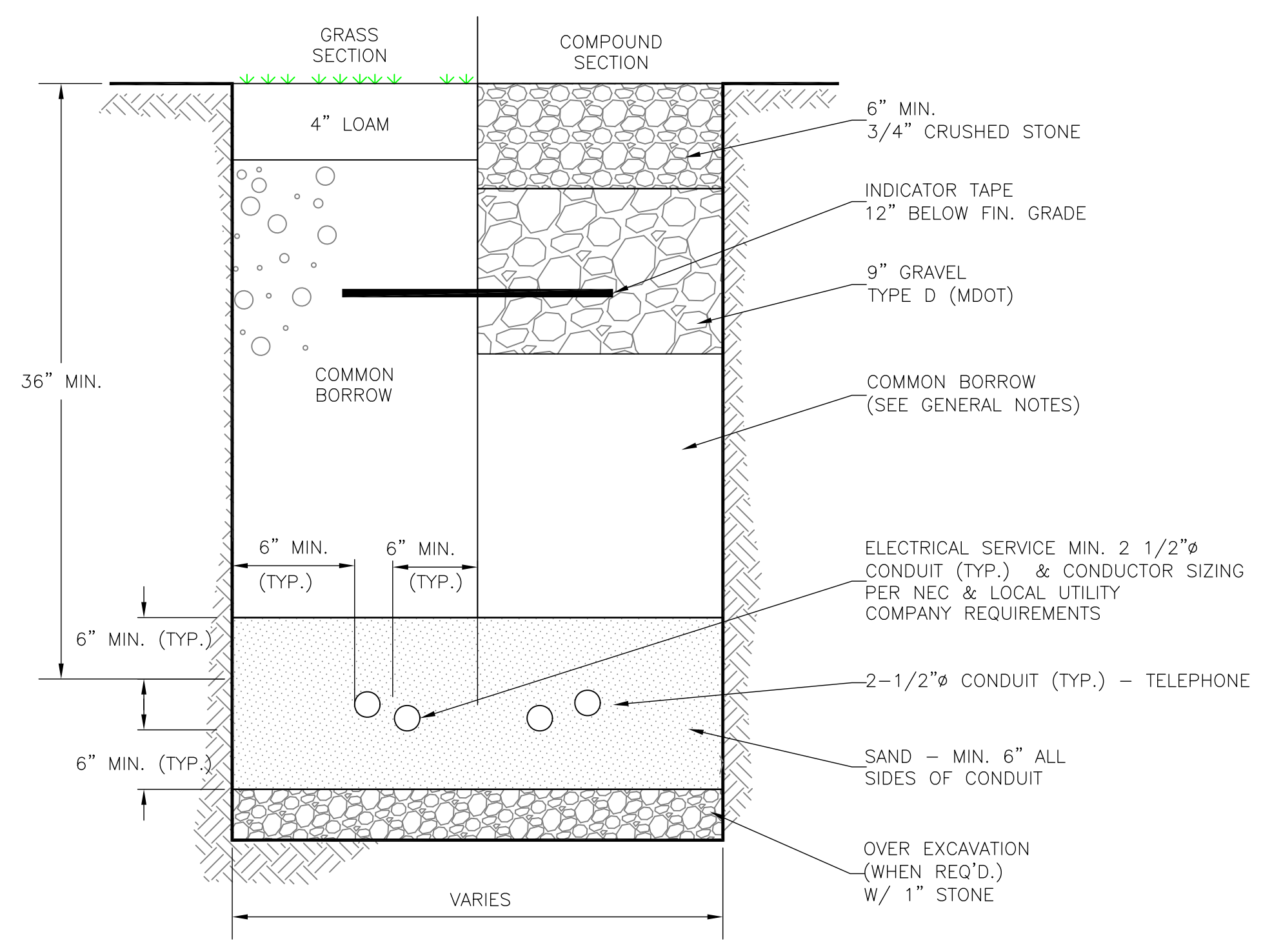
Classification: UNCLASSIFIED
Quality Category: NON-Q
SITE NAME: DALLAS PLANTATION
SITE NUMBER: N/A

REV	DATE	BY	CHK'D	REV'D	APP'D	REV	DATE	BY	CHK'D	REV'D	APP'D	REV	DATE	BY	CHK'D	REV'D	APP'D	REV	DATE	BY	CHK'D	REV'D	APP'D	REV	DATE	BY	CHK'D	REV'D	APP'D
5	10/14/21	MJM	AMC	TR	JRH	4	09/24/21	MJM	AMC	TR	JRH	3	11/10/20	MJM	AMC	TR	JRH	2	03/10/20	MJM	AMC	TR	JRH	1	02/02/19	MJM	AMC	TR	JRH

RT-13	BDC PROJECT(S)	N/A	BDC PROPOSAL(S)
18-096	BDC JOB ORDER(S)		CLIENT DATA
		SITE NAME: DALLAS PLANTATION	SITE NUMBER: N/A



1 ELECTRICAL AND TELCO RISER DIAGRAM
SCALE: NTS



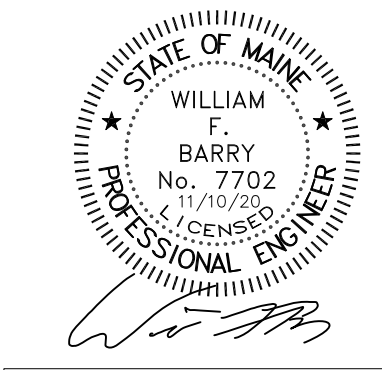
2 TYPICAL ELECTRICAL/TELEPHONE TRENCH SECTION
SCALE: NTS

- TRENCH NOTES:**
1. CONTRACTOR SHALL COMPLY WITH OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION REGULATIONS PERTAINING TO THE EXCAVATION OF ALL TRENCHES. CONTRACTOR SHALL ALLOW FOR PAYMENT OF ADDITIONAL EXCAVATION, TRENCH BOXES, AND BACKFILL WITH REGARD TO COMPLYING WITH ALL OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION STANDARDS.
 2. ALL COMMON BORROW AND GRAVEL AREAS TO BE COMPACTED TO 95% OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557 "MODIFIED PROCTOR DENSITY". PLACE IN 9" TO 12" LIFTS.

- GENERAL ELECTRICAL AND TELCO NOTES:**
1. ALL TELCO CONDUITS SHALL BE 4"Ø UNLESS OTHERWISE NOTED.
 2. CONTRACTOR SHALL INSTALL ALL CONDUITS AND WIRES AS SHOWN AS CONTINUOUS COPPER CONDUCTOR RUNS UNLESS OTHERWISE NOTED.
 3. CONDUIT AND PULL STRINGS SHALL BE INSTALLED BY CONTRACTOR.
 4. ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST NATIONAL ELECTRIC CODE, ALL LOCAL AND STATE CODES, LAWS AND ORDINANCES.
 5. POWER SERVICE REQUIREMENTS SHALL BE COMMERCIAL 120/240 VAC NOMINAL, SINGLE PHASE AND 3 WIRE WITH 800 AMP RATING.
 6. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL CONDUIT ROUTING WITH LOCAL UTILITY COMPANIES AND WITH PROJECT MANAGER/DESIGNEE.
 7. UTILITY SERVICES SHOWN ARE PROPOSED, THE ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT TELEPHONE AND ELECTRICAL SERVICE CONNECTION POINTS, ROUTING, CONDUIT SIZE, CONDUCTOR TYPE AND SIZE, AND ASSOCIATED REQUIREMENTS WITH UTILITY COMPANIES.
 8. ALL CONDUITS ROUTED BELOW GRADE SHALL TRANSITION TO RIGID GALVANIZED STEEL CONDUIT ABOVE GRADE WITH EXPANSION SLEEVES.
 9. ALL METAL CONDUIT BUSHINGS SHALL BE PROVIDED WITH GROUNDING BUSHINGS.
 10. GENERAL CONTRACTOR SHALL PROVIDE ALL DIRECT BURIED CONDUITS WITH PLASTIC WARNING TAPE IDENTIFYING CONTENTS. TAPE COLORS SHALL BE ORANGE FOR TELEPHONE AND RED FOR ELECTRICAL.
 11. CONTRACTOR SHALL VERIFY EXISTING BURIED UTILITIES PRIOR TO CONSTRUCTION (DIG SAFE UNDERGROUND SERVICE ALERT: 1-888-DIG-SAFE; 1-888-344-7233).
 12. SEAL ALL SERVICE ENTRANCES INTO THE CABINET FOLLOWING INSTALLATION.
 13. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY NEC AND LOCAL UTILITY.
 14. ALL MATERIALS SHALL BE U.L. LISTED.
 15. PENETRATIONS IN FIRE RATED WALLS SHALL BE SEALED IN ACCORDANCE WITH ALL APPLICABLE CODES.
 16. THESE PLANS ARE DIAGRAMMATIC ONLY, FOLLOW AS CLOSELY AS POSSIBLE. CONTRACTOR SHALL ENSURE THAT ACCESS TO EQUIPMENT IS MAINTAINED IN ACCORDANCE WITH MANUFACTURER SPECIFICATION AND ALL APPLICABLE CODES.
 17. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN PERFECT CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIAL SHALL BE LISTED AND APPROVED BY UNDERWRITER LABORATORY AND SHALL BEAR THE INSPECTION LABEL.
 18. POWER WIRE AND CABLE CONDUCTORS SHALL BE COPPER #12 AWG MINIMUM UNLESS SPECIFIED OTHERWISE ON THE DRAWINGS. CONDUCTORS #10 AWG AND SMALLER SHALL BE SOLID.
 19. ALL CONDUCTORS LARGER THAN #10 SHALL BE STRANDED COPPER WITH THWN 600 VOLT INSULATION UNLESS OTHERWISE SPECIFIED.
 20. ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING OF NOT LESS THAN THE MAXIMUM SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED, AND A MINIMUM OF 10,000 A.I.C. COORDINATE SHORT CIRCUIT REQUIREMENTS WITH LOCAL UTILITY.
 21. CONTRACTOR SHALL PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF ELECTRICAL WORK.
 22. IN DRILLING HOLES INTO CONCRETE WHETHER FOR FASTENING OR ANCHORING PURPOSES, OR PENETRATION THROUGH THE FLOOR FOR CONDUIT RUNS, PIPING RUNS, ETC. IT MUST BE CLEARLY UNDERSTOOD THAT REINFORCEMENT STEEL WILL NOT BE DRILLED INTO, CUT OR DAMAGED UNDER ANY CIRCUMSTANCES.
 23. LOCATION OF REINFORCING STEEL ARE NOT DEFINITELY KNOWN AND, THEREFORE, MUST BE SEARCHED FOR BY APPROPRIATE METHODS AND EQUIPMENT.
 24. PULL ROPE SHALL BE 3/8" OR LARGER AND MUST BE INSTALLED IN TERMINATED CONDUIT END TO END.
 25. CONTRACTOR SHALL FASTEN CONDUIT TO BACK OF H-FRAME AND CAP FOR FUTURE USE.

Classification: **UNCLASSIFIED** SITE NAME: DALLAS PLANTATION
Quality Category: **NON-Q** SITE NUMBER: N/A

REV	DATE	BY	CHK'D	REV'D	APP'D	REV	DATE	BY	CHK'D	REV'D	APP'D
1	11/10/20	WFB				1	01/20/11	WFB			
REVISION NOTES: SEE EOD 20-032.						REVISION NOTES: ORIGINAL ISSUE.					



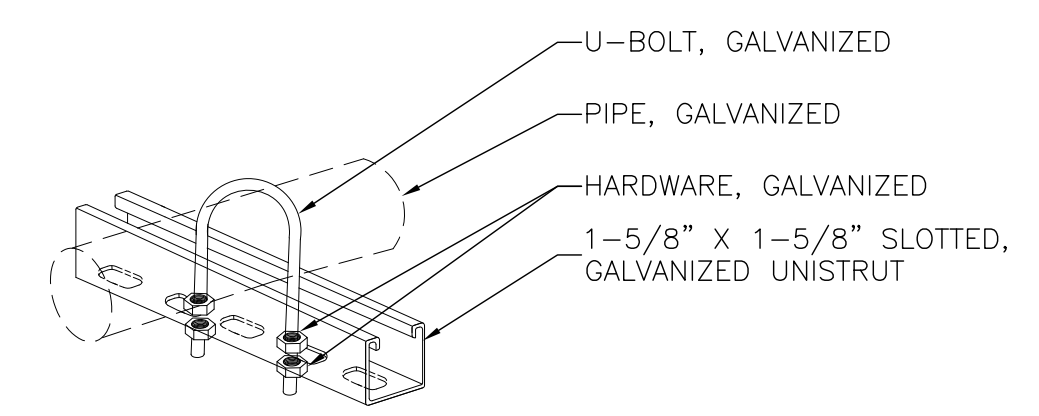
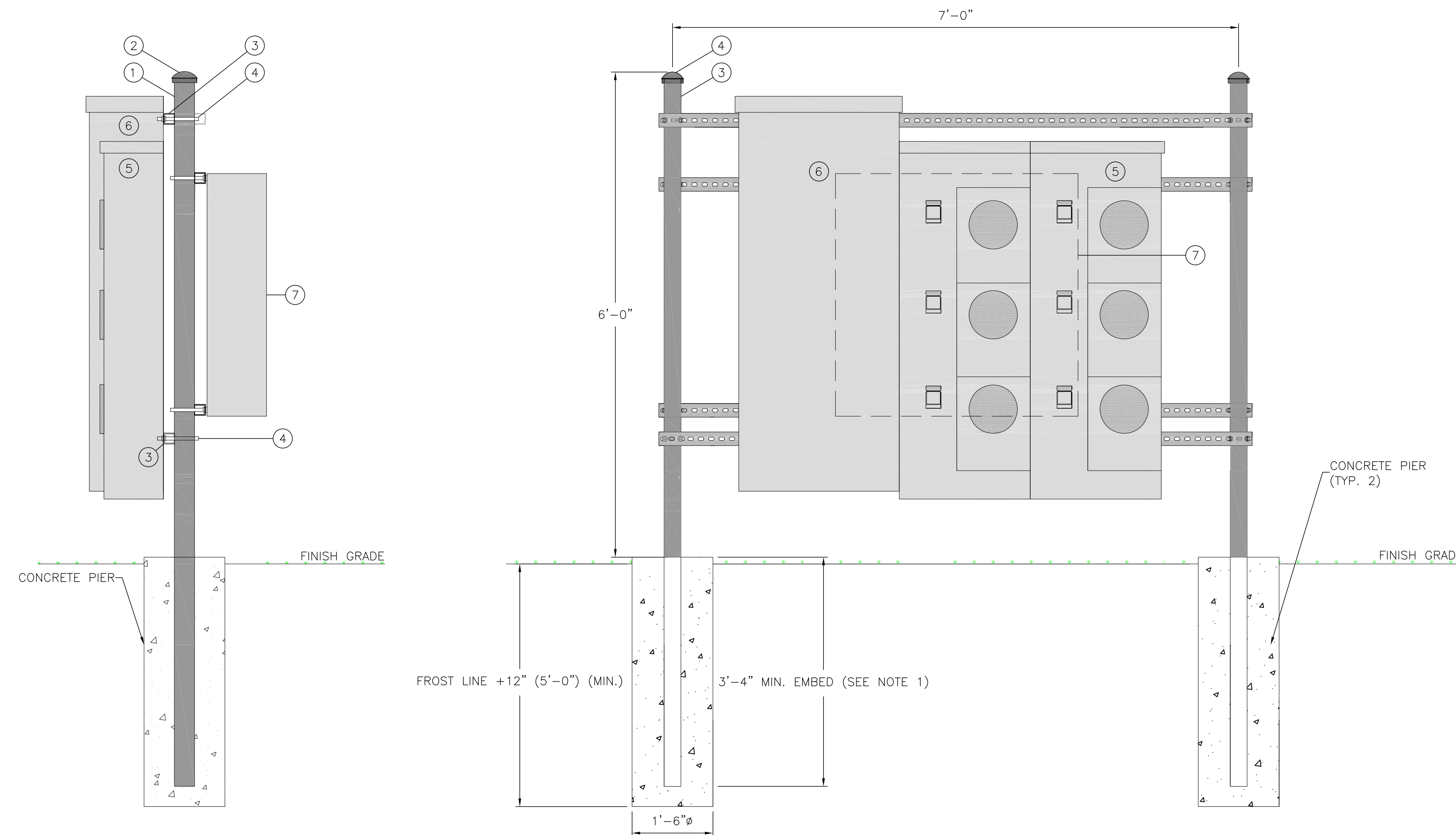
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RF-13	BDC PROJECT(S)	N/A	BDC PROPOSAL(S)
18-096	BDC JOB ORDER(S)		CLIENT DATA
	SITE NAME:	DALLAS PLANTATION	
	SITE NUMBER:	N/A	

ELECTRICAL AND TELCO DETAILS
RISING TIDE TOWERS

BLACK DIAMOND CONSULTANTS INC

PROJECT NUMBER: RT-13
SHEET NUMBER: E1



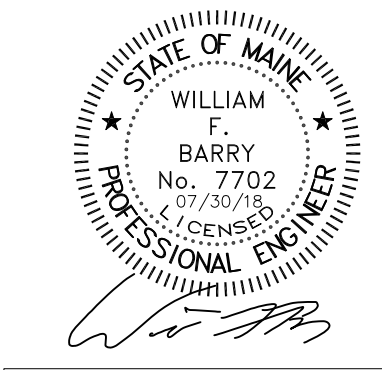
UNISTRUT AND GALVANIZED PIPE CONNECTION DETAIL
SCALE: NTS

ELECTRICAL METER BOARD SIDE ELEVATION
SCALE: NTS

ELECTRICAL METER BOARD FRONT ELEVATION
SCALE: NTS

ITEM	DESCRIPTION
1	PIPE, SCHEDULE 40, GALVANIZED, 3"
2	CAP, GALVANIZED, 3"
3	CHANNEL, 1-5/8"x1-5/8", SLOTTED HOLE, GALVANIZED
4	U-BOLT, FOR 3" PIPE, GALVANIZED, WITH HARDWARE
5	ELECTRICAL METER ENCLOSURE, SIX GANG
6	ELECTRICAL DISTRIBUTION ENCLOSURE
7	TELCO ENCLOSURE NEMA 3R 36"x36"x12"

NOTES:
1. FOR BURIED LEDGE AT LESS THAN 3'-6", CORE LEDGE WITH 4-1/2" X 8" DEEP HOLES AND GROUT. #3 REINFORCING STEEL WITH #3 TIES AT 6" O.C.



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REV	DATE	BY	CHK'D	REV'D	APP'D	BDC PROJECT(S)	BDC PROPOSAL(S)
A	03/11/18	AMD	AKC	-	-	RT-13	N/A
REVISION NOTES: FOR REVIEW.						BDC JOB ORDER(S)	CLIENT DATA
						18-096	SITE NAME: DALLAS PLANTATION SITE NUMBER: N/A

Classification: **UNCLASSIFIED** SITE NAME: DALLAS PLANTATION
Quality Category: **NON-Q** SITE NUMBER: N/A

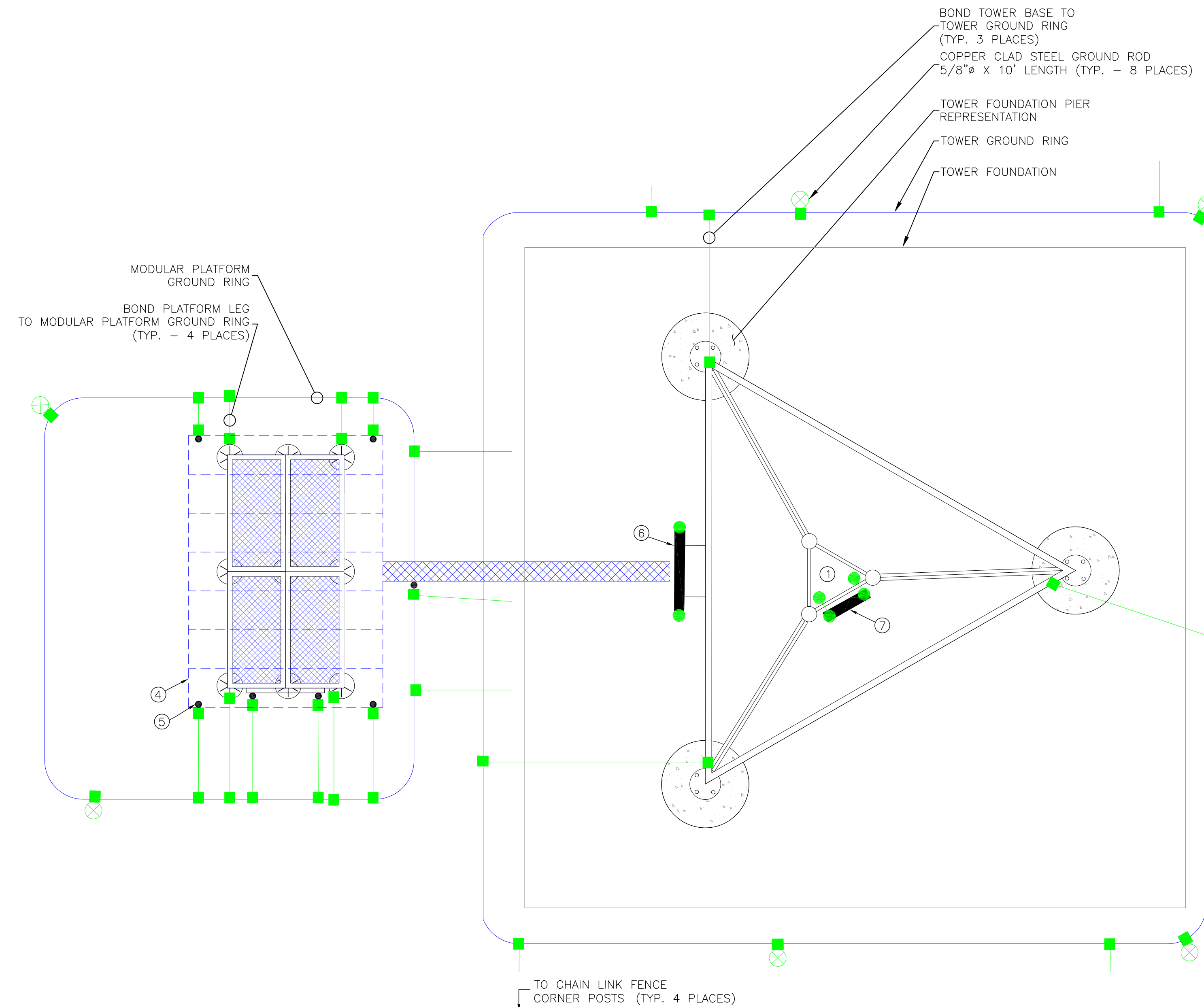
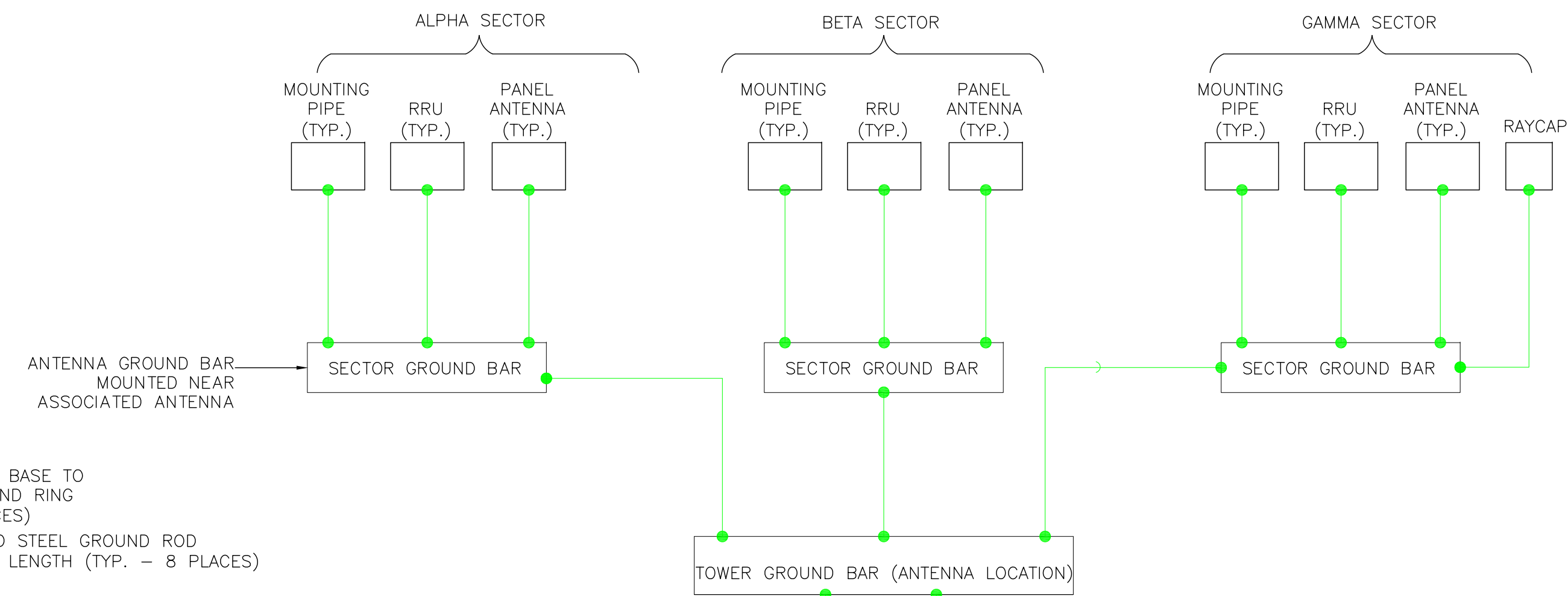
ELECTRICAL METER DETAILS
RISING TIDE TOWERS

BLACK DIAMOND CONSULTANTS INC

PROJECT NUMBER RT-13
SHEET NUMBER E2

ITEM LIST
NO. DESCRIPTION
1 TOWER
2 ICE BRIDGE, BOND EACH SECTION
3 ICE BRIDGE SUPPORT
4 10'X14' PLATFORM CANOPY
5 PLATFORM CANOPY SUPPORT
6 TOWER BASE GROUND BAR (TOWER BASE LOCATION)
7 TOWER TOP GROUND BAR (ANTENNA LOCATION)

LEGEND
■ EXOTHERMIC CONNECTION
● MECHANICAL CONNECTION
⊗ GROUND ROD

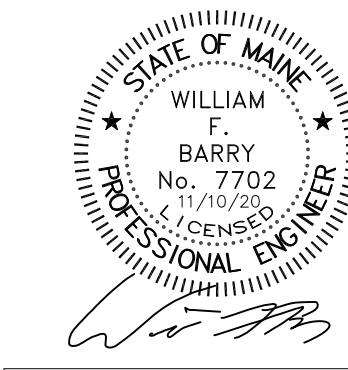


GROUNDING LAYOUT
SCALE: NTS

GROUNDING DIAGRAM
SCALE: NTS

NOTES:

- GROUNDING INSTALLATION AND CONSTRUCTION MAY VARY DUE TO SITE SPECIFIC CONDITIONS. ALL DETAILS ARE SHOWN DIAGRAMMATICALLY.
- ALL GROUND WIRE SHALL BE BARE #2/0 AWG COPPER WIRE UNLESS OTHERWISE NOTED.
- ALL GROUND WIRES SHALL PROVIDE A STRAIGHT, DOWNWARD PATH TO GROUND WITH GRADUAL BENDS AS REQUIRED. GROUND WIRES SHALL NOT BE LOOPED OR SHARPLY BENT.
- GROUNDING SYSTEMS (TOWER GROUND RING) SHALL BE TESTED. AN EARTH RESISTANCE TESTER USING THE THREE-POINT TEST METHOD SHALL BE USED. TESTS SHALL BE COMBINED WITH SOIL RESISTIVITY TESTING. DOCUMENTATION TO BE PRESENTED RECORDING SUBSYSTEMS GROUND RESISTIVITY VIA A FALL-OF-POTENTIAL TEST OF 10 OHMS OR LESS AND SOIL RESISTIVITY RESULTS.
- ALL UNDERGROUND CONNECTIONS AND/OR GROUND RODS SHALL BE CADWELDED AND INSPECTED BY PROJECT MANAGER/DESIGNEE PRIOR TO BACKFILLING.
- ALL GROUND LEADS SHALL BE ATTACHED TO GROUND BARS USING TWO HOLE LUGS. CORROSION INHIBITING CONDUCTIVE COMPOUND SHALL BE APPLIED BETWEEN THE LUG AND GROUND BAR.
- ALL EXPOSED #2/0 CONDUCTOR SHALL BE PLACED IN NON-METALLIC CONDUIT WITH THE EXPOSED OPEN ENDS SEALED.
- GROUND RING LOCATION SHALL BE 2 FEET FROM MODULAR PLATFORM. MINIMUM LENGTH OF GROUND RING IS TWENTY FEET.
- ALL CADWELD CONNECTIONS TO GALVANIZED MATERIAL SHALL BE PROPERLY PREPARED TO ASSURE A SATISFACTORY CADWELD. THE CADWELD CONNECTION SHALL BE COATED WITH A COLD GALVANIZING SPRAY TO PREVENT CORROSION.
- COPPER CLAD GROUND RODS SHALL BE 5/8"Ø X 10' LONG AND BE DRIVEN INTO THE GROUND. TOP OF GRADE OR 6" BELOW AVERAGE FROST DEPTH (WHICHEVER IS GREATER).
- GROUND RODS SHALL BE SYMMETRICALLY PLACED AROUND THE TOWER FOUNDATION AT A MINIMUM 20' DISTANCE.
- ALL GROUNDING CONDUCTORS SHALL BE INSTALLED IN 3/4 INCH SCH 40 PVC CONDUIT TO 12" BELOW GRADE. ATTACH PVC CONDUIT WITH GALVANIZED "C" CLAMPS.
- FENCES SHALL BE BONDED TO THE FACILITY OR TOWER EXTERNAL GROUND RING AT EACH CORNER ON INSIDE OF FENCED COMPOUND.
- ALL ENTRY GATES SHALL BE BONDED TO THE MAIN FENCE ASSEMBLY BY A METAL STRAP.
- GROUNDING CONDUCTORS SHALL HAVE A MINIMUM BEND RADIUS OF 8"
- CONTRACTOR SHALL NOT DISTURB EXISTING GROUND SYSTEM AND ANY DAMAGE SHALL BE REPAIRED AT NO ADDITIONAL COST.



BLACK DIAMOND CONSULTANTS
WILLIAM F. BARRY, PE
312 WATER STREET
GARDONER, MAINE 04345 207.582.0556

GROUNDING DETAILS
RISING TIDE TOWERS

BLACK DIAMOND CONSULTANTS INC

Classification: **UNCLASSIFIED** SITE NAME: DALLAS PLANTATION
Quality Category: **NON-Q** SITE NUMBER: N/A

REV	DATE	BY	CHK'D	REV'D	APP'D	REV	DATE	BY	CHK'D	REV'D	APP'D	REV	DATE	BY	CHK'D	REV'D	APP'D
1	11/10/20	WFB	AMG	TR	WFB	1	03/13/21	WFB	AMG	TR	WFB	2	07/20/21	WFB	AMG	TR	WFB
REVISION NOTES: SEE EOD # 20-032						REVISION NOTES: SET EOD # 20-013						REVISION NOTES: ORIGINAL ISSUE					

RF-13	BDC PROJECT(S)	N/A	BDC PROPOSAL(S)
18-096	BDC JOB ORDER(S)		CLIENT DATA
	SITE NAME:	DALLAS PLANTATION	
	SITE NUMBER:	N/A	

PROJECT NUMBER: RT-13
SHEET NUMBER: E3



LOOKING NORTH FROM TOWER SITE 10/5/21



LOOKING SOUTH FROM TOWER SITE 10/5/21

1105R



LOOKING EAST FROM TOWER SITE 10/5/21

#2107



LOOKING WEST FROM TOWER SITE 10/5/21



SKIPPED ROAD LOOKING WEST FROM 10/5/21
TOWER SITE TOWARDS SHALE PIT.



SKIDDED ROAD LOOKING EAST
TOWARDS TOWER SITE

10/5/24

C

SECOND AMENDMENT TO LEASE AGREEMENT

SECOND AMENDMENT TO LEASE AGREEMENT

This Second Amendment to Lease Agreement (the “Second Amendment”) is entered into as of this 12th day of October, 2021, by **Rising Tide Towers, LLC** (“Tenant”) and **Mark Beauregard, Inc.** (“Landlord”).

WHEREAS, Mark Beauregard, Inc. (“Landlord”) and Rising Tide Towers, LLC (“Tenant”) entered into a certain Lease Agreement fully executed on December 4, 2018 with respect to certain land located off Dallas Hill Road in Dallas Plantation, County of Franklin, and State of Maine, as amended by the First Amendment to the Lease Agreement dated December 17, 2020 (collectively, the “Lease”); and

WHEREAS, pursuant to Section 1(d) of the Lease, Tenant has the right to amend the Lease from time to time by substituting a revised Exhibit A upon notice to Landlord; and

WHEREAS, Tenant has submitted a supplemental filing to the Land Use Planning Commission (the “LUPC”) indicating its willingness to construct a telecommunications tower located within that portion of Landlord’s premises described in the Exhibit A attached hereto (“Tenant’s Alternative Tower Option”); and

WHEREAS, provided that the LUPC grants its approval of Tenant’s Alternative Tower Option no later than December 31, 2021, Tenant intends to substitute the Exhibit A attached hereto for the Exhibit A of the Lease;

NOW THEREFORE, the Parties hereby desire to further amend the Lease as follows:

1. Provided that the LUPC grants its approval of Tenant’s Alternative Tower Option no later than December 31, 2021, Exhibit A of the Lease shall be deemed to be amended in its entirety and shall thereafter be replaced with the Exhibit A attached hereto. Tenant shall provide Landlord with notice of the LUPC’s approval of Tenant’s Tower Option on or before December 31, 2021. However, Tenant’s failure to provide notice to Landlord thereof shall not affect the deemed amendment and replacement of Exhibit A.
2. Pursuant to Section 24(c) of the Lease, upon Tenant’s request, Landlord agrees to execute a memorandum of lease, or an amended and restated memorandum of lease, as the case may be, providing record notice of the amended Exhibit A.
3. Except as amended hereby, the Lease shall remain in full force and effect.

IN WITNESS WHEREOF, this Second Amendment has been executed as of the date first noted above by the authorized representatives of Tenant and Landlord.

[SIGNATURE PAGES TO FOLLOW]

WITNESS:

"Tenant"

**Rising Tide Towers, LLC, a Maine
limited liability company**

[Handwritten Signature]

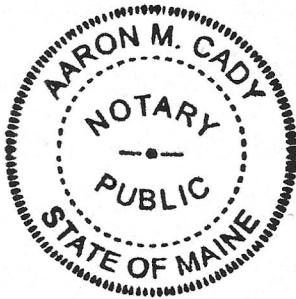
By: *Todd B. Rich*
Name: *Todd B. Rich*
Its: *Rep.*

STATE OF MAINE

COUNTY OF CUMBERLAND

OCTOBER 15, 2021

Then personally appeared the above named TODD RICH, as REP of
Rising Tide Towers, LLC, as aforesaid, and acknowledged the foregoing instrument to be his
free act and deed in his said capacity and the free act and deed of said Rising Tide Towers, LLC.



Before me, *Aaron M. Cady*

Attorney at Law/Notary Public

Print Name: AARON M. CADY

MY COMMISSION EXPIRES 14 FEB 2027

WITNESS:

“Landlord”

Cynthia Egan

Mark Beaugard, Inc, a Maine corporation

By: Mark Beaugard
Name: Mark Beaugard
Its:

STATE OF Maine

COUNTY OF Franklin

October 12, 2021

Then personally appeared the above named Mark Beaugard, Owner of Mark Beaugard, Inc., as aforesaid, and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of said Mark Beaugard, Inc.

Before me,

Cynthia Egan

Attorney at Law/Notary Public

Print Name:

CYNTHIA EGAN
NOTARY PUBLIC
STATE OF MAINE
MY COMM. EXP. JULY 22, 2025

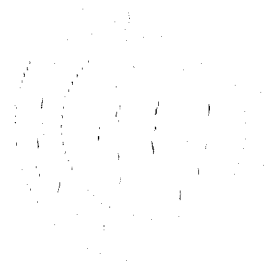


EXHIBIT A

Description of Rising Tide Towers Lease Area:

The Lease Area is located 525 feet more or less northwesterly of the Dallas Hill Road in Dallas Plantation, Franklin County, Maine, being more particularly described as follows:

Beginning at a point at the most northerly corner of the herein described Lease Area. Said point is located at N 777801.3173, E 2839752.287, Maine State Plane Grid, (West) and is witnessed by an iron pin located S29°03'46"W, 111.80 feet distant, marking the most northerly corner of the inner 100 foot square of the proposed Wireless Partners Lease area.

Thence S34°22'20"E for 200.00 feet to a point.

Thence S55°37'41"W for 200.00 feet to a point.

Thence N34°22'20"W for 200.00 feet to a point.

Thence N55°37'41"E for 200.00 feet to the point of beginning.

Meaning and intending to be 40000 square feet of lease area.

Bearings are based on Maine State Plane Grid (West), NAD83.

Description of Access and Utility Easement:

The Easement is located on the northwesterly side of Dallas Hill Road in Dallas Plantation, Franklin County, Maine, being more particularly described as follows:

Said Easement is 50 feet in width, being 25 feet on both sides, and parallel with the described centerline. The sidelines of the 50 foot wide Easement either extend or are shortened to intersect with easement lines and road sidelines.

Beginning at a point located N34°22'20"W, 100.00 feet distant from the most southerly corner of the Rising Tide Towers Lease Area described above. Said Beginning point is also located at N 777605.8680, E 2839643.6640, and is witnessed by an iron pin located S34°22'20"E, 50.00 feet distant, marking the most southerly corner of the inner 100 foot square of the proposed Rising Tide Towers Lease Area.

Thence S55°37'40"W for 30.87 feet to a point.

Thence southwesterly along the arc of a curve to the left for 35.41 feet to a point. Said curve has a radius of 50.00 feet and a long chord of S35°20'27"W, 34.67 feet.

Thence S15°03'13"W for 376.81 feet to a point.

Thence southeasterly along the arc of a curve to the left for 166.72 feet to a point. Said curve has a radius of 100.00 feet and a long chord of S32°42'25"E, 148.07 feet.

Thence southeasterly along the arc of a curve to the right for 110.33 feet to a point. Said curve has a radius of 811.77 feet and a long chord of S76°34'26"E, 110.24 feet.

Thence S72°40'50"E for 134.94 feet to a point.

Thence southeasterly along the arc of a curve to the right for 26.20 to a point. Said curve has a radius of 125.00 feet and a long chord of S66°40'33"E, 26.15 feet.

Thence S60°40'17"E for 17.94 feet to the terminus point on the westerly sideline of Dallas Hill Road.

Bearings are based on Maine State Plane Grid (West), NAD83.

D

MHPC CONCURRENCE LETTER



MAINE HISTORIC PRESERVATION COMMISSION
55 CAPITOL STREET
65 STATE HOUSE STATION
AUGUSTA, MAINE
04333

JANET T. MILLS
GOVERNOR

KIRK F. MOHNEY
DIRECTOR

September 30, 2021

Ms. Megan J. McGuire
Black Diamond Consultants, Inc.
PO Box 57
Gardiner, ME 04345

Project: MHPC# 1642-21 Rising Tide Towers; off of Dallas Hill Road
Proposed Telecommunications Facility
Town: Dallas Plt, ME

Dear Ms. McGuire:

In response to your recent request, I have reviewed the information received September 28, 2021 to initiate consultation on the above referenced project pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended.

Based on the information submitted, I have concluded that there will be no historic properties (architectural or archaeological) affected by this proposed undertaking, as defined by Section 106.

Please contact me at (207)287-3811 or kirk.mohney@maine.gov, if you have any questions regarding this matter.

Sincerely,

Kirk F. Mohney
State Historic Preservation Officer



COR 21-007

Revision #0

Project: RT-13

Contract: N/A

PO Number: N/A

2021 09 28

Megan Rideout
Maine Historic Preservation Commission
55 Capital Street
Augusta, ME 04333

Topic: Additional Review and Concurrence Request for a Tower move

Subject: Proposed Telecommunications Facility; Tower Move in Dallas Plantation, Maine MHPC# 0899-18

Dear Megan:

Revision 0 of the Section 106 report for the proposed telecommunications facility to be located in Dallas Plantation, Maine assessed the proposed undertaking of a 190' Lattice Tower with a required 1/2 mile radius Area of Potential Effect (APE). The report was delivered on October 5, 2018 and was reviewed on October 9, 2018 which concluded that SHPO concurred with the original findings that there were no historic properties affected within the project's APE. Please refer to Attachment 1, *MHPC Concurrence Letter*.

The project has been through a number of iterations to accommodate permitting (see MHPC concurrence 0917-20 for the latest). However, after many efforts with the Land Use Planning Commission, all parties have agreed that the original location (MHPC 0899-18) was the better of the two options, and therefore we would like to return closer to this area. With this said, the new location of the proposed tower will be approximately 570' away from the original location in the northeast direction. The new coordinates are approximately N44° 57' 56.64" W70° 36' 12.89". Black Diamond Consultants is asking for an additional review to concur that the 570 foot move from the original location will have no effect on our original findings. Please refer to Attachment 3 "*Topo Map*" and Attachment 4 "*Plot Plan Sketch*".

Sincerely,

A handwritten signature in black ink that reads "Megan J. McGuire".

(electronic signature, see File COR 21-007 for original signature)

Megan J. McGuire
Black Diamond Consultants, Inc.

Attachment(s): Attachment 1 (MHPC Concurrence Letter for 0899-18)
Attachment 2 (MHPC Concurrence Letter for 0917-20)
Attachment 3 (Topo Map of Old Locations previously reviewed with concurrences, and the proposed location)
Attachment 4 (Plot Plan)

c: N/A

BLACK DIAMOND CONSULTANTS, INC.

47 Enterprise Avenue, Gardiner, Maine 04345 Phone: 207-582-0056 Fax: 207-582-9098

ATTACHMENT 1



MAINE HISTORIC PRESERVATION COMMISSION
55 CAPITOL STREET
65 STATE HOUSE STATION
AUGUSTA, MAINE
04333

PAUL R. LEPAGE
GOVERNOR

KIRK F. MOHNEY
DIRECTOR

October 9, 2018

Ms. Megan McGuire
Black Diamond Consultants, Inc.
P.O. Box 57
Gardiner, ME 04345

Project: MHPC# 0899-18 - Rising Tide Towers; Off of Dallas Hill Road
Proposed Telecommunications Facility
Town: Dallas Plt, ME

Dear Ms. McGuire:

In response to your recent request, I have reviewed the information received October 5, 2018 to continue consultation on the above referenced project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA), and the FCC's Nationwide Programmatic Agreement (PA).

Based on the information submitted, I have concluded that there will be **no historic properties affected** by the proposed undertaking, as defined by Section 106.

Please note that our comments above only apply to the federal Section 106 review process. State and local permitting processes are completely separate and stand-alone from Section 106. State agencies and local municipalities may utilize different regulations and definitions of historic properties and the area of potential effects. Potentially eligible historic properties may be given consideration in those review processes.

Please contact Megan Rideout of my staff if we can be of further assistance in this matter.

Sincerely,

A handwritten signature in black ink that reads 'Kirk F. Mohney'.

Kirk F. Mohney
State Historic Preservation Officer

ATTACHMENT 2



JANET T. MILLS
GOVERNOR

MAINE HISTORIC PRESERVATION COMMISSION
55 CAPITOL STREET
65 STATE HOUSE STATION
AUGUSTA, MAINE
04333

KIRK F. MOHNEY
DIRECTOR

October 19, 2020

Ms. Megan McGuire
Black Diamond Consultants, Inc.
P.O. Box 57
Gardiner, ME 04345

Project: MHPC# 0971-20 Rising Tide Towers; Off from Dallas Hill Road
Proposed Telecommunications Facility
Town: Dallas Plt, ME

Dear Ms. McGuire:

In response to your recent request, I have reviewed the information received October 13, 2020 to continue consultation on the above referenced project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA), and the FCC's Nationwide Programmatic Agreement (PA).

Based on the information submitted, I have concluded that there will be **no historic properties affected** by the proposed undertaking, as defined by Section 106.

Please note that our comments above only apply to the federal Section 106 review process. State and local permitting processes are completely separate and stand-alone from Section 106. State agencies and local municipalities may utilize different regulations and definitions of historic properties and the area of potential effects. Potentially eligible historic properties may be given consideration in those review processes.

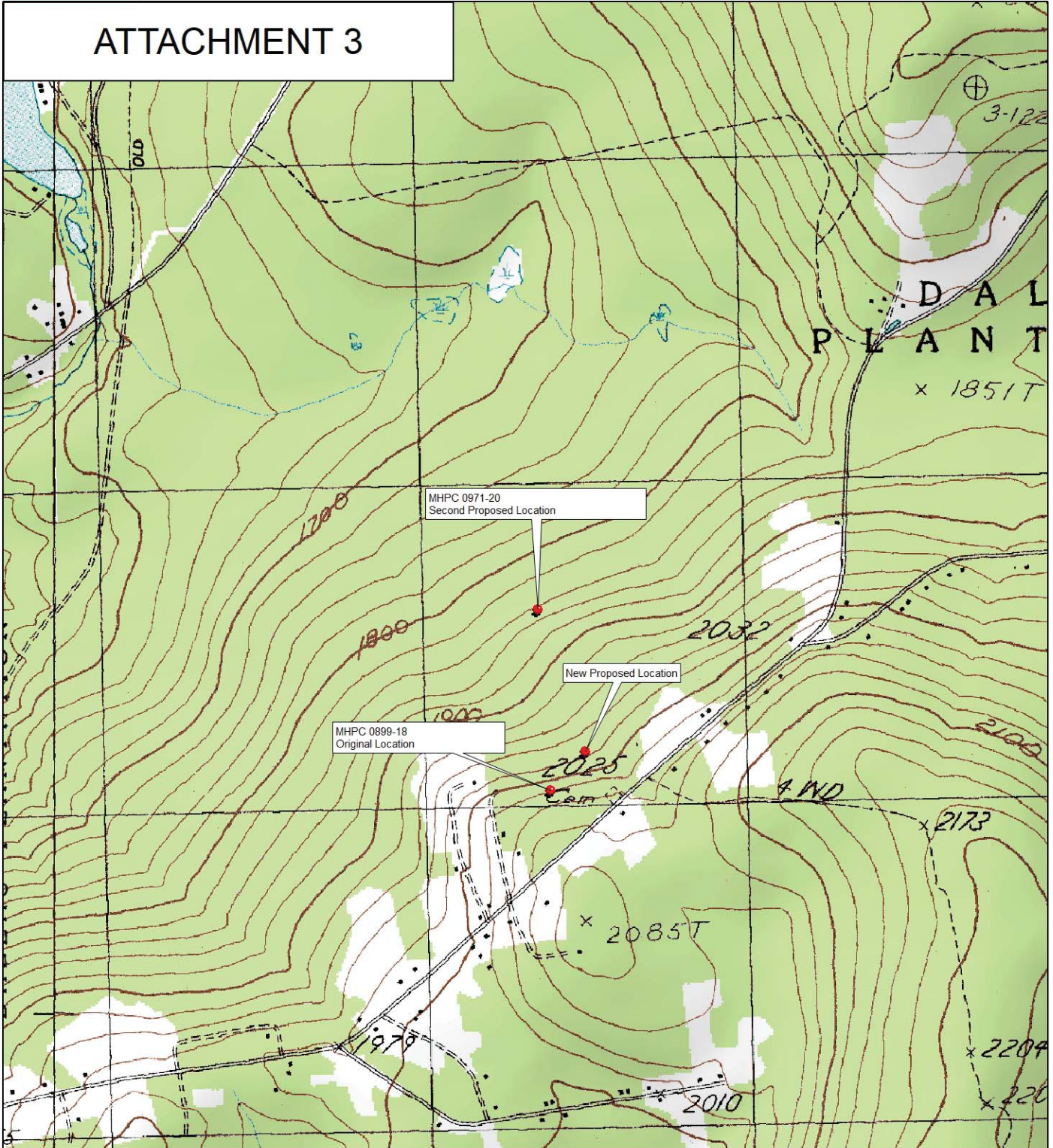
Please contact Megan Rideout of my staff if we can be of further assistance in this matter.

Sincerely,

A handwritten signature in black ink that reads "Kirk F. Mohney".

Kirk F. Mohney
State Historic Preservation Officer

ATTACHMENT 3



New Proposed Location - 190' Lattice Tower
N44° 57' 56.64"
W70° 36' 12.89"
Approx. 570' away from the original tower location

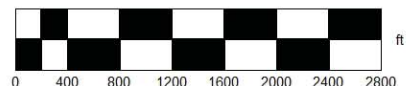
Data use subject to license.

© DeLorme. XMap® 8.

www.delorme.com

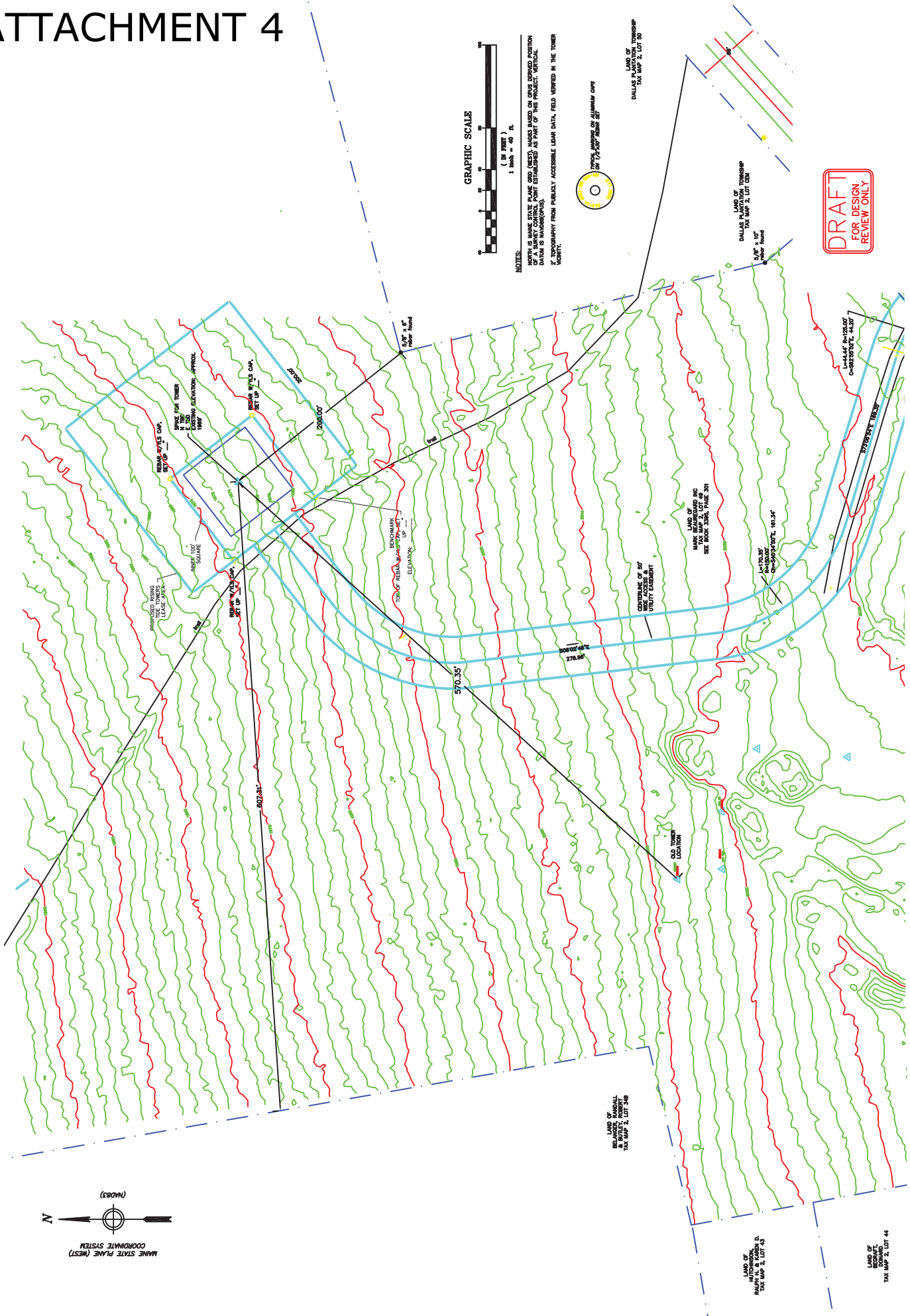
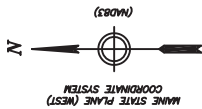


MN (15.3° W)



Data Zoom 13-5

ATTACHMENT 4



GRAPHIC SCALE



NOTES:
 1. HORIZONTAL AND VERTICAL CURVES WERE BASED ON THE CENTER POINT OF A SURVEY CONTROL POINT ESTABLISHED AS PART OF THIS PROJECT. VERTICAL CURVES WERE BASED ON THE CENTER POINT OF A SURVEY CONTROL POINT ESTABLISHED AS PART OF THIS PROJECT. VERTICAL CURVES WERE BASED ON THE CENTER POINT OF A SURVEY CONTROL POINT ESTABLISHED AS PART OF THIS PROJECT. VERTICAL CURVES WERE BASED ON THE CENTER POINT OF A SURVEY CONTROL POINT ESTABLISHED AS PART OF THIS PROJECT.



DALLAS P. LAND OF TOWNSHIP
 TAX MAP 2, LOT 50

DALLAS P. LAND OF TOWNSHIP
 TAX MAP 2, LOT 50A

DRAFT
 FOR DESIGN
 REVIEW ONLY

LAND OF DALLAS P. LAND OF TOWNSHIP
 TAX MAP 2, LOT 50B

LAND OF MARYANN INC
 TAX MAP 2, LOT 43

LAND OF MARYANN INC
 TAX MAP 2, LOT 44

E

VISUAL IMPACT ASSESSMENT

October 14, 2021

TO: Megan McGuire / Black Diamond Consultants
FR: Terry DeWan / TJD&A
RE: **DALLAS PLT • VISUAL IMPACT OF REVISED TOWER LOCATION**

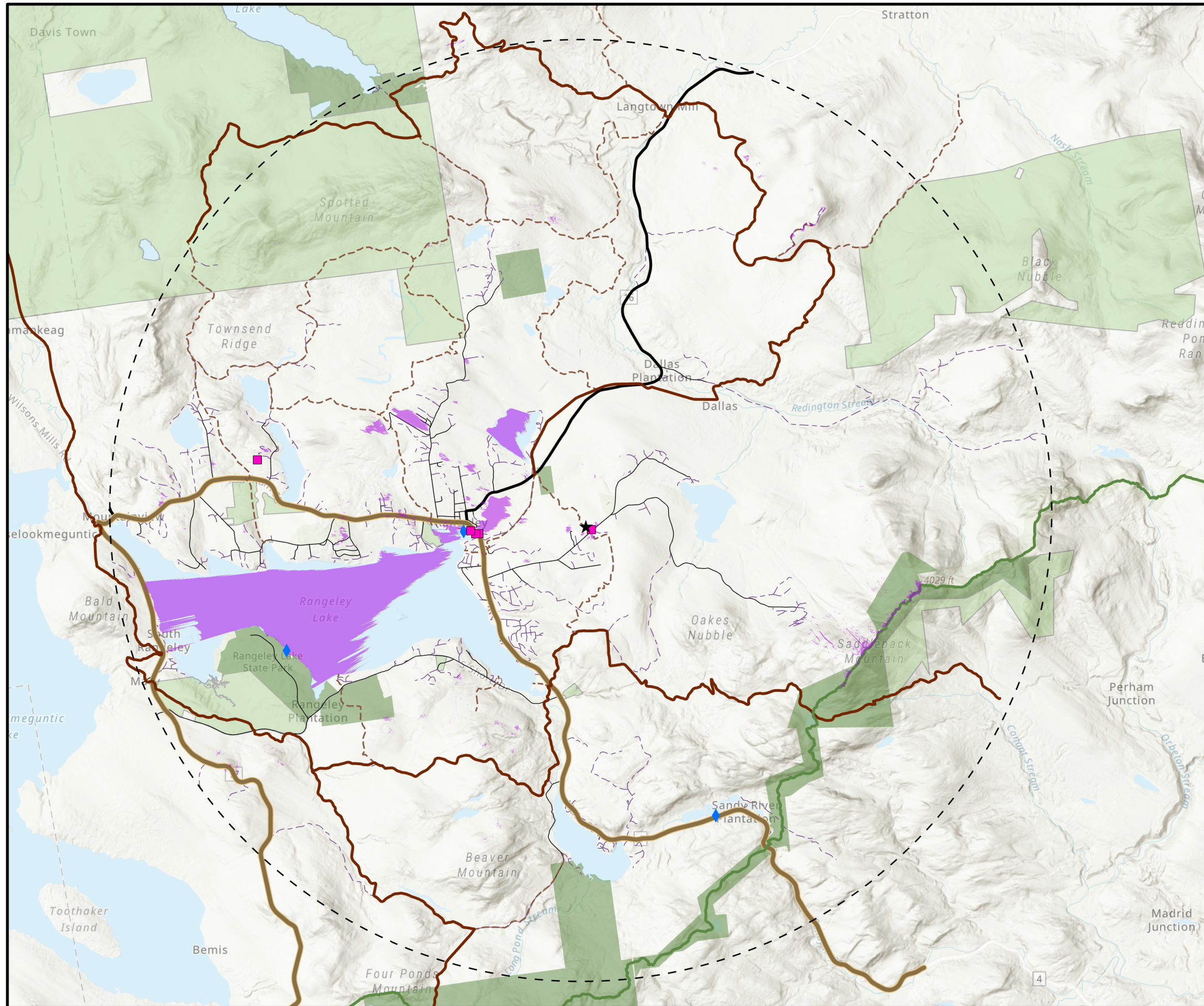
Based upon the revised tower location received from Black Diamond, TJD&A prepared a revised viewshed map showing where the top of the proposed 190' communications tower would be visible from.

The viewshed map indicates that the tower would still be technically visible from portions of the Appalachian Trail, Saddleback Ski Area, and Rangeley Lake State Park. However, as we demonstrated on the photosimulation from the State Park, at the viewing distances involved, the latticework structure should not be noticeable to the average person.

Since the tower no longer exceeds a height of 200 feet, FAA lighting will no longer be required, thus eliminating a significant visual concern for local residents.

It is our professional opinion that the proposed Dallas PLT communications tower should not present an unreasonable adverse visual effect on the surrounding scenic resources.





DALLAS PLANTATION TOWER

ALTERNATIVE TOWER VIEWSHED MAP

Legend

- APE (8 mi)
- Tower (Alternative Location)
- National Register
- Boat Launches
- Scenic Byways
- Local Snowmobile Trails
- ITS Trail
- Appalachian Trail
- Secondary Roads
- Local Roads
- Private or Gated Roads
- Public Conserved Lands
- Private Conserved Land

Potential Visibility



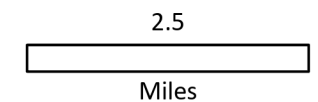
Notes

Map shows potential areas of visibility of any portion of the tower described within eight miles. The analysis relies on the screening effects of both topography and surface data (accounting for vegetation and structures such as buildings).

The analysis is based on a Digital Surface Model (DSM) processed at 3 ft resolution from first return LIDAR data acquired from the USGS National Map. The view height is set at 5 ft above ground level elevation.

The viewshed represents where a viewer may see any portion of the communication tower within 8 miles.

Potential visibility needs to be confirmed with field investigations and other visualization techniques.



tjd&a
Landscape Architects & Planners
121 West Main Street, Yarmouth, ME 04096
207-846-0757 www.tjda.net

F

TELECOMMUNICATIONS NEEDS ANALYSIS

ALTERNATIVE TOWER OPTION TELECOMMUNICATIONS NEEDS ANALYSIS

Rising Tide Towers, LLC has entered into a contract with AT&T to provide FirstNet coverage to the Dallas Plantation area. Reference is made to Attachment 15 of the DP 5050-B application, which describes the FirstNet program and Rising Tide's role in this program (Part I), the existing radio-frequency (rf) coverage conditions and the existence of a substantial gap in FirstNet Band 14 network coverage in the Dallas Plantation area (Part II), and explains why, under the Federal Telecommunications Act of 1996, LUPC is preempted from denying this application (Part V) (the "Original Analysis").

This supplemental filing addresses the alternative tower option—a 190-foot tall unlit telecommunications tower proposed to be located in the D-RS2 subdistrict. Below, we explain the process by which Rising Tide selected the subject site for locating the alternative tower and describes the rf coverage of the alternative tower.

Evaluation of Available Properties to Site the Alternative Tower

As discussed in the Original Analysis and further explained as part of testimony presented on behalf of Rising Tide during the public hearing on DP 5050-B, Rising Tide conducted testing and analysis and determined that the gap in FirstNet Band 14 coverage can be remedied by locating a tower on Dallas Hill. In short, Rising Tide needed to find a site that would be able to close the significant FirstNet coverage gap in the Dallas Plantation area. Rising Tide was required to limit its search to a ½-mile "search ring" that was identified by FirstNet/AT&T where a telecommunications tower must be located in order to achieve the necessary rf coverage. This search ring is located on Dallas Hill.

Prior to the public hearing (for the reasons explained in the Original Analysis), Rising Tide had excluded from its siting consideration any parcels of land within the search ring that were located in the Dallas Hill D-RS2 subdistrict. As part of this supplemental filing, Rising Tide re-evaluated all properties within the search ring to assess which properties could be available for development of the alternative tower without consideration of the D-RS2 subdistrict as a limiting tower siting factor.

To identify potential sites for the alternative tower, Rising Tide reviewed each parcel of land within the search ring against the following criteria:

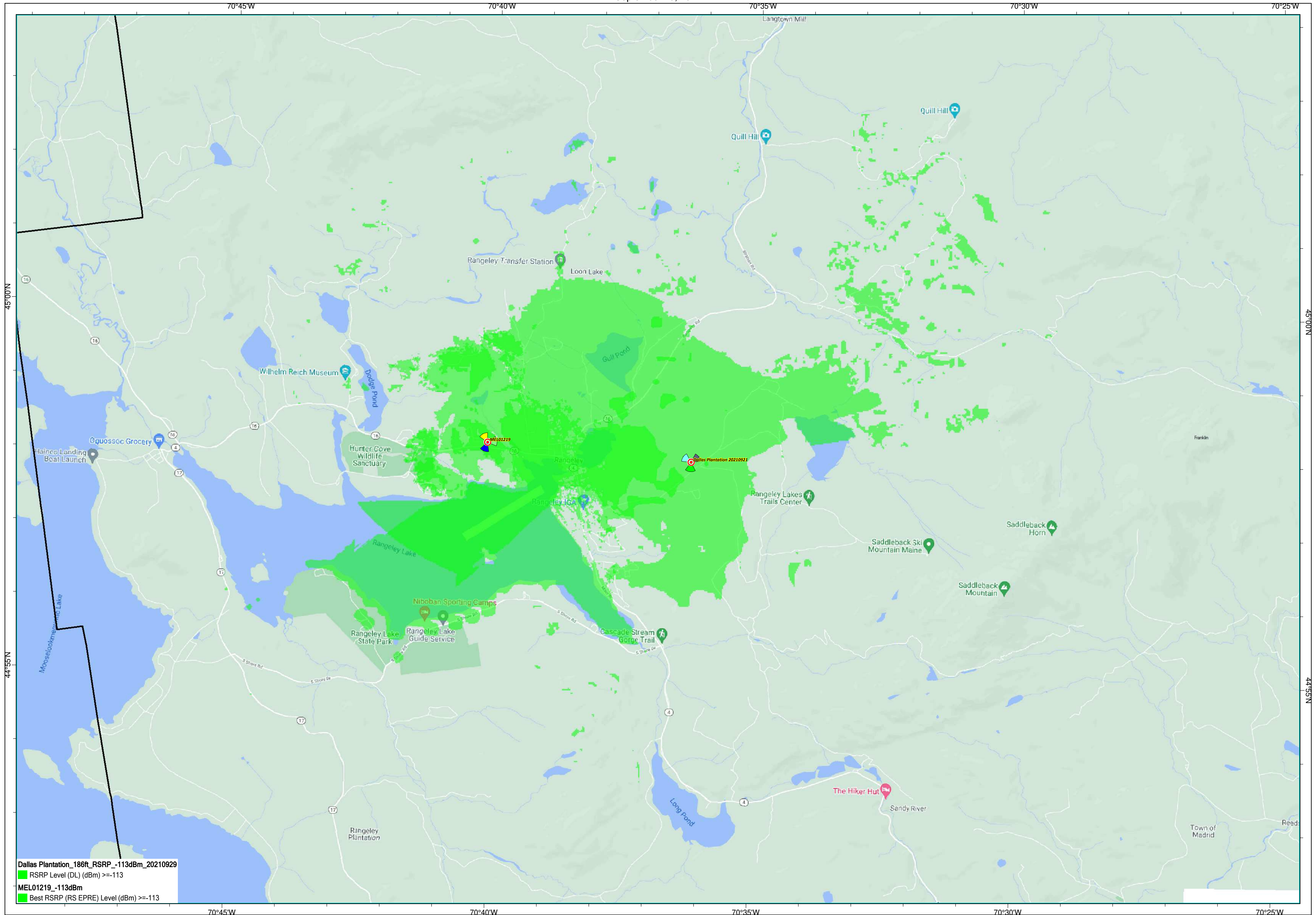
1. Does the parcel meet title insurance requirements, such as being accessible by a public road?
2. Is the parcel free of physical or environmental limitations, such as significant wetlands?
3. Is the parcel high enough in elevation to provide the required FirstNet Band 14 network coverage absent a taller tower?
4. Is the landowner willing to lease space for the project?

Even when the D-RS2 zoning of the parcels within the search ring was not considered, only one lot within the search ring met these revised criteria: the selected alternative tower site. Accordingly, to meet its FirstNet coverage mandate, Rising Tide must locate the proposed 300-foot tall lighted tower within the identified M-GN subdistrict site on the Beauregard parcel, or the alternative 190-foot tall unlit tower within the identified D-RS2 subdistrict site on the Beauregard parcel.

Radiofrequency Coverage Map

Rising Tide has prepared an rf coverage map, attached hereto, showing the FirstNet coverage after the alternative tower is constructed. The methodology for preparing this map is the same as the methodology set forth in the Original Analysis for the rf coverage maps included therein.

Wireless Partners Maine
RSRP Coverage Footprint
Existing MEL01219 Site in Rangely, ME
Dallas Plantation with Antenna Centerline - 186 ft
Band 14 LTE Design Scenario (10MHz FDD) with UE @ 5'
September 29, 2021



Dallas Plantation_186ft_RSRP_-113dBm_20210929
RSRP Level (DL) (dBm) >= -113
MEL01219_-113dBm
Best RSRP (RS EPRE) Level (dBm) >= -113

Scale: 1:56,514
0 0.5 1 1.5mi

G

SOILS REPORT & SURVEY



MAIN-LAND

DEVELOPMENT
CONSULTANTS, INC.

ENGINEERS, SURVEYORS, SCIENTISTS

P.O. BOX Q LIVERMORE FALLS, ME 04254
TEL: (207) 897-6752/FAX: (207) 897-5404
WWW.MAIN-LANDDCI.COM

RIISING TIDE TOWER CLASS A & L HIGH INTENSITY SOIL SURVEY Dallas Hill Road, Dallas Plantation, Maine

PROJECT OVERVIEW

A Class A & L High Intensity Soil Survey was completed for Black Diamond Consultants. The survey was conducted to provide resource data for permit, planning, design, and construction of a Communications Tower. This information is submitted to meet the requirements of the Maine Land Use Planning Commission (LUPC) Supplement S-2. A Class A high intensity soil survey was conducted within the area proposed for disturbance at the communications tower. A Class L soil survey was completed within the access driveway from Dallas Hill Road

Access to the project area is via an existing gravel road utilized by a bedrock quarry. The project area is comprised of moderately well to poorly drained silt loam textured dense basal till soils which varied in depths to bedrock. Parent materials consisted of slate and shale.

RESOURCES AND METHODOLOGY

Preliminary Data

Data made available by the Maine Office of GIS was consulted to review the site prior to the soil survey field work, this data included National Wetlands Inventory (NWI) wetlands, USDA Natural Resource Conservation Soil Survey Maps, and digital aerial photography.

Standards for Soil Survey

Soil surveying methods were completed in accordance with the *Maine Association of Professional Soil Scientist Standards for Soil Surveys* (March 2009) The Class A High Intensity Soil Survey incorporates the following standards, among others:

1. *Map units will not contain dissimilar limiting individual inclusions larger than 1/8 acres. Dissimilar limiting inclusions may total more than 1/8 acres per map unit delineation, in the aggregate, if not contiguous.*
2. *A map scale of 1-inch equals 100 feet or larger.*
 - The scale for this project map is 1"=40'
3. *Ground control-as determined by the mapper*
 - Test pit and boring locations were captured with a Sub-meter handheld Trimble GPS Unit.
4. *Base map -as determined by the mapper.*

- The base map used in this soil survey involves property boundaries and 2 feet contour data provided by Black Diamond Consultants. The soils map was drafted in AutoCAD 2020.

A Class L Soil Survey for linear portions of development incorporates the following standards:

1. *Class L soil survey map units shall be made on the basis of parent material, slope, soil texture, soil depth to dense till or bedrock (whichever is shallowest) and soil wetness (drainage class and/or oxyaquic conditions) at the Class A High Intensity Map Unit size. The preferred method of naming the soil map units is by assigning a soil series name or names for complexes. If soils are classified to the series level in remote areas not readily accessible to equipment and/or without road cuts, it shall be noted in the narrative that soils were classified by shallow observations only.*
2. *Scale is 1 inch equals 100 feet or larger (e.g. 1" = 50').*
3. *Ground Control – base line and test pits for which detailed data are recorded are located to sub-meter accuracy under the direction of a qualified professional.*
4. *Base map with two-foot contour lines.*

Mapping Process and Soil Boundary Placement

Soil investigations were completed using a machine excavator and hand tools (screw auger). All recorded test locations were marked with survey tape. Locations of test sites were focused on areas of proposed development, position in landscape, and unique landforms.

Map units were determined by soil characterization, slope classes. Soil investigations completed for this project match well with the soil series shown on the USDA, Natural Resources Conservation Service (NRCS) medium intensity soil map for Franklin County.

Soil boundary line placement was determined by slope classes, map units, vegetation, and landforms. Additional hand auger borings were completed to verify soils. These borings were recorded but not shown in the soils map or logs. Once these breaks in soil boundaries were determined a soil map was drafted using AutoCAD 2020.



RESULTS

Attached to this report are summary logs of all test borings and pits presented on DEP Form E & F.

The following soils were interpreted on the property. Abbreviation that represents the symbols used to identify map units within the project area are shown in the parenthesis:

Chesuncook series (Ch)

Telos-Monarda Complex (TU)

Monarda series (Mr)

Udorthents (Ud)

The following represent slope classes:

A = 0-3%

B = 3-8%

C = 8-15%

D = 15-20%

E = >20%

To assist with determining slope breaks, an AutoCAD function that processes 2' contour data was used to group slopes into the above categories.

Soil Suitability/Limitations:

The proposed land use of the development on Dallas Hill Road in Dallas Plantation involves the construction of a communications tower and driveway to access the site. LUPC regulations require an on-site soil survey to identify the development potential rating for each soil type within the area.

The soil types found within the project area are rated as “very limited” and “somewhat limited” for non-residential developments using the Natural Resource Conservation Service potential ratings. These ratings are based on slope classifications, surface stoniness, and depth to saturated zones that were observed on-site. The limitations of the soil map units are as summarized:

Chesuncook Series (Ch): Chesuncook soils are suitable for the proposed development but present limitations. These soils contain many stones and boulders and will require larger excavators to work. The loamy textures of these soils can result in frost action during the colder months. Slopes in this map unit vary between 8% to 20%, a suitable range for the proposed development. Seasonal high-water tables can be between 16” to 40” from the soil surface.

Telos Series (Te): Telos soils are not suitable for the proposed development and are very limited. These soils contain many stones and boulders and will require larger excavators to work. The loamy textures of these soils can result in frost action during the colder months. Slopes in this map unit vary between 8% to 15%. Seasonal high-water tables can be between 7” to 16” from the soil surface, these depths are not suitable for structures with subsurface foundations and



require engineered solutions such as the addition of coarse-grained material to raise the foundation above grade or foundation drains.

Monarda Series (Mr): Monarda soils are unsuitable for the proposed development and present limitations. These soils contain many stones and boulders and will require larger excavators to work. The loamy textures and high organic matter content of these soils can result in frost action during the colder months. Slopes in this map unit vary between 3% to 8%. Seasonal high-water tables can be between 0" to 7" from the soil surface, these depths are not suitable for subsurface foundations and may require engineered solutions such as the addition of coarse-grained material to raise the foundation above grade or foundation drains. Wetlands are often associated with this soil series as these soils are classified as hydric.

Udorthents Loamy (Ud): Udorthent soils are soils that have been modified or placed by human activity. In this case they are soils that are associated with the existing gravel pit and existing ATV trail. These soils consist of coarse material and loamy native material and vary in textures. Development is generally suitable in these soils. Slopes in these soils vary from 3% to greater than 20%. Soils that are associated with Udorthents soils include Telos and Monarda soils. In these associations the limitations of the native soils (Telos, Monarda) should be used when designing within these associations.

Telos-Monarda Complex (TU): Soils in the Telos-Monarda Complex are not suitable for the proposed development and are very limited. These soils contain many stones and boulders and will require larger excavators to work. The loamy textures of these soils can result in frost action during the colder months. Slopes in this map unit vary between 8% to 15%. Seasonal high-water tables can be between 7" to 16" from the soil surface. These soils also show signs of oxyaquic conditions, meaning the ground water in these soils must be properly managed. These depths are not suitable for structures with subsurface foundations and require engineered solutions such as the addition of coarse-grained material to raise the foundation above grade or methods to drain the site and manage ground water.

CONCLUSION

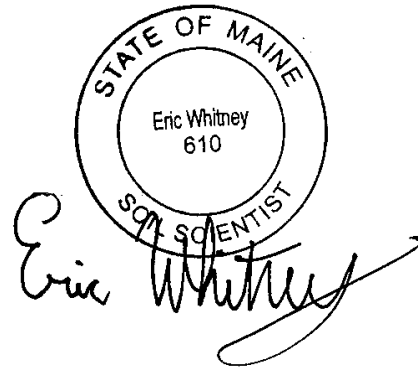
A Class A & B High Intensity Soil Survey was completed for Black Diamond Consultants. The survey was conducted to provide resource data for permit, planning, design, and construction of a Communications Tower and access driveway. This information is submitted to meet the requirements of the Maine Land Use Planning Commission (LUPC) Supplement S-2. A Class A high intensity soil survey was conducted within the proposed communications tower area. A class L soil survey was conducted within the proposed access driveway leading to the communications tower.

Soils in the project area are generally poorly drained to moderately well drained on mountains. These soils are formed in loamy glacial till. Telos soils were mapped at the proposed communications tower, Telos soils are un-suitable for the proposed development. In order to build the communications tower within Telos soils it is recommended that ground water is intercepted with an engineered drainage system. Hydric soils, and slopes greater than 20% are limitations for the proposed development. See the soil test pit logs, soil map, and map unit descriptions associated with this report.



SOIL SCIENTIST CERTIFICATION STATEMENT

The accompanying soil profile descriptions, soil survey map, and this soil narrative report entitled **RISING TIDE TOWER-Class A & L High Intensity Soil Survey** were done in accordance with the standards adopted by the Maine Association of Professional Soil Scientist, March 2009, as amended and prepared by Eric R.T. Whitney S.S #610. Eric Whitney certifies that the report meets the appropriate mapping standards for Class A & L Soil Surveys in Maine.



A circular professional seal for the State of Maine. The outer ring contains the text "STATE OF MAINE" at the top and "SOIL SCIENTIST" at the bottom. The inner circle contains the name "Eric Whitney" and the number "610". Below the seal is a handwritten signature in cursive that reads "Eric Whitney".



MAP UNIT DESCRIPTIONS

Chesuncook Series (ChC, ChD) <i>Coarse-loamy, isotic Aquic Haplorthods</i>	
<u>Setting</u>	
Parent Material:	Basal glacial till derived from slate and metamorphic rock
Landform:	On till plains, hills, ridges, and mountains
Slope Ranges:	8-15% (C) 15-20% (D)
Depth to Bedrock:	Very Deep (>40")

<u>Water Related Properties</u>	
Drainage Class:	Moderately Well Drained
Hydrologic Soil Group:	C
Hydrologic Conductivity:	moderately high or high in the solum, and low to moderately high in the dense substratum
Flooding Frequency:	None, flooding is not probable

<u>Typical Profile Description</u>	
Surface:	Black, highly decomposed organic material
Subsurface:	Pinkish gray to dark reddish brown, fine sandy loam to silt loam textured.
Subsoil:	Dark yellowish-brown gravelly silt loam in the upper part and olive brown gravelly loam grading to mottled, olive brown gravelly loam in the lower part
Substratum:	Firm, olive gravelly fine sandy loam or silt loam textured.

<u>Inclusions</u>	
Similar:	Shirley, Elliotsville, Thorndike
Dissimilar:	Monarda, Telos



Telos Series (TeC)	
<i>Loamy, mixed, active, acid, shallow Aeric Cryaquepts</i>	
Setting	
Parent Material:	Basal glacial till derived from slate and metamorphic rock
Landform:	On till plains, hills, ridges, and mountains
Slope Ranges:	8-15% (C)
Depth to Bedrock:	Very Deep (>40")

Water Related Properties	
Drainage Class:	Somewhat Poorly Drained
Hydrologic Soil Group:	D
Hydrologic Conductivity:	Moderately high or high in the solum and low to moderately high in the substratum
Flooding Frequency:	None, flooding is not probable

Typical Profile Description	
Surface:	Black, highly decomposed organic material. Many surface boulders and stones
Subsurface:	mottled, dark grayish brown gravelly fine sandy loam.
Subsoil:	Dark brown silt loam in the upper part, mottled, dark yellowish brown silt loam in the middle part, and mottled, light olive brown silt loam in the lower part
Substratum:	Firm, mottled, olive gravelly silt loam

Inclusions	
Similar:	Monarda
Dissimilar:	Thorndike, Elliotsville



Monarda Series (MrB)	
<i>Loamy, mixed, active, acid, frigid, shallow Aeric Endoaquepts</i>	
Setting	
Parent Material:	Basal glacial till derived from slate and metamorphic rock
Landform:	Lower slopes or in slight depressions on till plains
Slope Ranges:	3-8% (B)
Depth to Bedrock:	Very Deep (>40")

Water Related Properties	
Drainage Class:	Poorly Drained
Hydrologic Soil Group:	D
Hydrologic Conductivity:	Moderate permeability in the surface layer and subsoil and very slow to moderately slow in the substratum
Flooding Frequency:	None, flooding is not probable

Typical Profile Description	
Surface:	Dark reddish brown to black highly decomposed organic material
Subsurface:	Mottled, grayish brown gravelly silt loam and dark grayish brown silt loam
Subsoil:	Dark reddish brown fine sandy loam or silt loam in the upper part, brown fine sandy loam or silt loam in the middle part, and mottled, dark yellowish brown gravelly fine sandy loam in the lower part.
Substratum:	Firm, mottled, olive silt loam to a depth of 65 inches or more

Inclusions	
Similar:	Telos
Dissimilar:	Chesuncook, Thorndike



Udorthents Loamy (UdB, UdC) <i>Udorthents</i>	
Setting	
Parent Material:	Basal glacial till derived from slate and metamorphic rock under coarse gravel material.
Landform:	Variety of landscapes
Slope Ranges:	15-20% (D) 8-15% (C)
Depth to Bedrock:	Very Deep (>40")

Water Related Properties	
Drainage Class:	Somewhat Poorly Drained
Hydrologic Soil Group:	D
Hydrologic Conductivity:	Moderately high or high in the solum and low to moderately high in the substratum
Flooding Frequency:	None, flooding is not probable

Typical Profile Description	
Surface:	Coarse gravel material used for driveway and roads
Subsurface:	mottled, dark grayish brown gravelly fine sandy loam.
Subsoil:	Dark brown silt loam in the upper part, mottled, dark yellowish brown silt loam in the middle part, and mottled, light olive brown silt loam in the lower part
Substratum:	Firm, mottled, olive gravelly silt loam

Inclusions	
Similar:	Monarda, Telos, Chesuncook
Dissimilar:	None



Telos-Monarda Complex (TUC)	
<i>Loamy, mixed, active, acid, shallow Aeric Cryaquepts</i>	
<i>Loamy, mixed, active, acid, frigid, shallow Aeric Endoaquepts</i>	
Setting	
Parent Material:	Basal glacial till derived from slate and metamorphic rock
Landform:	On till plains, hills, ridges, and mountains
Slope Ranges:	8-15% (C)
Depth to Bedrock:	Very Deep (>40")

Water Related Properties	
Drainage Class:	Somewhat Poorly Drained to Poorly Drained
Hydrologic Soil Group:	D
Hydrologic Conductivity:	Moderately high or high in the solum and low to moderately high in the substratum
Flooding Frequency:	None, flooding is not probable

Typical Profile Description	
Surface:	Black, highly decomposed organic material. Many surface boulders and stones
Subsurface:	mottled, dark grayish brown gravelly fine sandy loam.
Subsoil:	Dark brown silt loam in the upper part, mottled, dark yellowish brown silt loam in the middle part, and mottled, light olive brown silt loam in the lower part
Substratum:	Firm, mottled, olive gravelly silt loam

Inclusions	
Similar:	Monarda
Dissimilar:	Thorndike, Elliotsville





September 28th, 2021



Photo 1. Area of proposed access road.



Photo 2. TPA-1 location.



Photo 3. TPA-3 soil profile.



Photo 4. Area of Monarda soils.



Photo 5. TPA-4 Soil profile.

SOIL PROFILE / CLASSIFICATION INFORMATION

SOIL SCIENTIST DESCRIPTION OF SOIL CONDITIONS AT PROJECT SITES

Project Name: Communications Tower Applicant Name: Black Diamond Project Location (municipality): Dallas Plantation TWP

Exploration Symbol # TPA-1 Test Pit Boring Probe
3 " Organic horizon thickness Ground surface elev. 1899
48 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
A	10YR 3/2	Fine Sandy Loam	Granular	Friable	
Bw	5Y 4/2	Silt Loam	Blocky		Common, Prominent
Cd	5Y 4/3		Platy	Firm	

Soil Series/Phase Name: Telos Limiting Factor: 12 " Depth Groundwater Restrictive Layer Bedrock

Drainage Class: ED SED WD MWD SPD PD VPD Slope: 10 Percent Hydric Soil: No Yes Hydrologic: D Soil Group

Exploration Symbol # TPA-2 Test Pit Boring Probe
2 " Organic horizon thickness Ground surface elev. 1906
52 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
A	10YR 3/2	Fine Sandy Loam	Granular	Friable	
Bw	5Y 4/2	Silt Loam	Blocky		Few, faint
Cd	5Y 4/3		Platy	Firm	Common, Prominent

Soil Series/Phase Name: Telos Limiting Factor: 14 " Depth Groundwater Restrictive Layer Bedrock

Drainage Class: ED SED WD MWD SPD PD VPD Slope: 10 Percent Hydric Soil: No Yes Hydrologic: D Soil Group

Exploration Symbol # TPA-3 Test Pit Boring Probe
2 " Organic horizon thickness Ground surface elev. 1899
40 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	5Y 3/1	Silt Loam	Granular	Friable	
Bt	5Y 4/3		Platy	Firm	Few, faint

Soil Series/Phase Name: Monarda Limiting Factor: 7 " Depth Groundwater Restrictive Layer Bedrock

Drainage Class: ED SED WD MWD SPD PD VPD Slope: 8 Percent Hydric Soil: No Yes Hydrologic: D Soil Group

Exploration Symbol # TPA-4 Test Pit Boring Probe
2 " Organic horizon thickness Ground surface elev. 1918
48 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
A	2.5Y	Fine Sandy Loam	Blocky	Friable	
B	5Y 4/3				Few, faint
C	5Y 5/3	Silt Loam	Platy	Firm	Faint

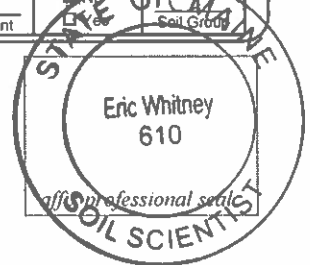
Soil Series/Phase Name: Chesapeake Limiting Factor: 20 " Depth Groundwater Restrictive Layer Bedrock

Drainage Class: ED SED WD MWD SPD PD VPD Slope: 10 Percent Hydric Soil: No Yes Hydrologic: D Soil Group

SOIL SCIENTIST INFORMATION AND SIGNATURE

Eric Whitney
 Signature
ERIC R.T. WHITNEY
 Name Printed

10/8/2021
 Date
610
 SS License No.



SOIL PROFILE / CLASSIFICATION INFORMATION

SOIL SCIENTIST DESCRIPTION OF SOIL CONDITIONS AT PROJECT SITES

Project Name: Communications Tower

Applicant Name: Black Diamond

Project Location (municipality): Dallas Plantation TWP

Exploration Symbol # TPA-5 Test Pit Boring Probe
2 " Organic horizon thickness Ground surface elev. 1933'
40 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	2.5Y 3/3	Fine Sandy	Blocky		
Bw	5Y 4/3	Loam			
Cd	5Y 3/2	Silt Loam	Platy	Firm	Few Faint
POSSIBLE LEDGE					

Soil Series/Phase Name: Chesuncook Limiting Factor: 18 " Groundwater Restrictive Layer Bedrock
 Drainage Class: ED SED WD MWD SPD PD VPD Slope: 19 Percent Hydric Soil: No Yes Hydrologic: C Soil Group

Exploration Symbol # _____ Test Pit Boring Probe
 _____ " Organic horizon thickness Ground surface elev. _____
 _____ " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
(Blank profile)					

Soil Series/Phase Name: _____ Limiting Factor: _____ " Groundwater Restrictive Layer Bedrock
 Drainage Class: ED SED WD MWD SPD PD VPD Slope: _____ Percent Hydric Soil: No Yes Hydrologic: _____ Soil Group

Exploration Symbol # _____ Test Pit Boring Probe
 _____ " Organic horizon thickness Ground surface elev. _____
 _____ " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
(Blank profile)					

Soil Series/Phase Name: _____ Limiting Factor: _____ " Groundwater Restrictive Layer Bedrock
 Drainage Class: ED SED WD MWD SPD PD VPD Slope: _____ Percent Hydric Soil: No Yes Hydrologic: _____ Soil Group

Exploration Symbol # _____ Test Pit Boring Probe
 _____ " Organic horizon thickness Ground surface elev. _____
 _____ " Depth: of exploration, or to refusal

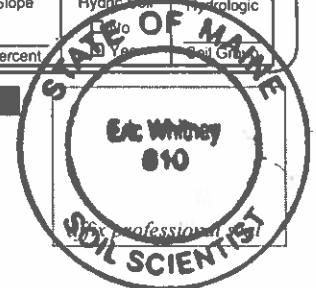
Horizon	Color	Texture	Structure	Consistence	Redox
(Blank profile)					

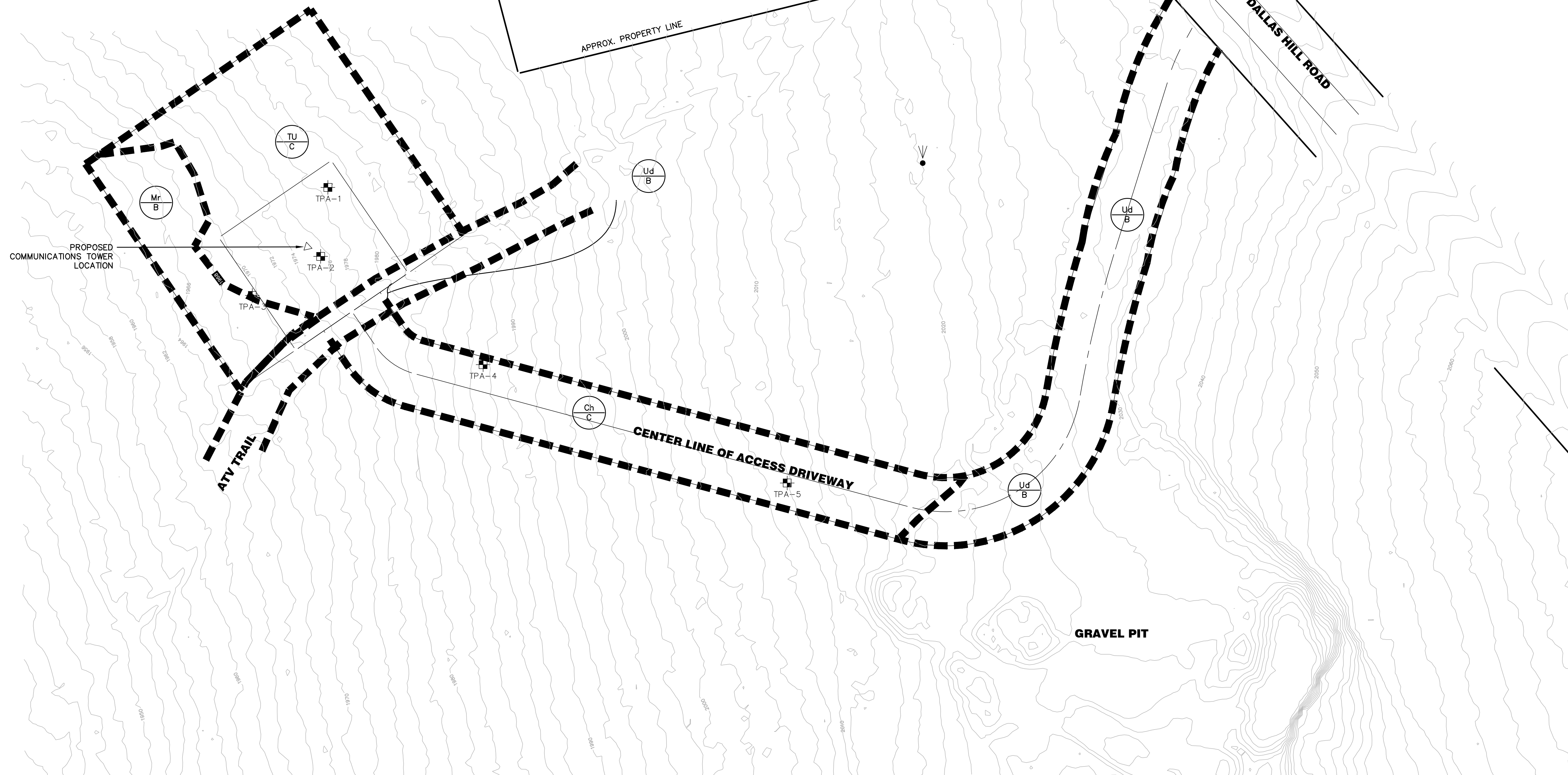
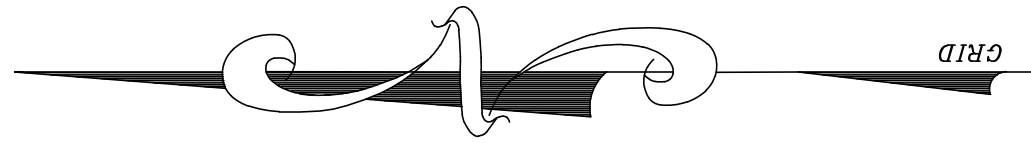
Soil Series/Phase Name: _____ Limiting Factor: _____ " Groundwater Restrictive Layer Bedrock
 Drainage Class: ED SED WD MWD SPD PD VPD Slope: _____ Percent Hydric Soil: No Yes Hydrologic: _____ Soil Group

SOIL SCIENTIST INFORMATION AND SIGNATURE

Eric Whitney
 Signature
ERIC R.T. WHITNEY
 Name Printed

10/8/2021
 Date
610
 SS License No.





LEGEND

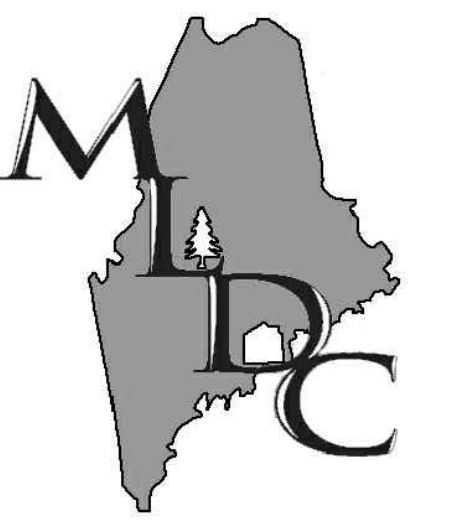
- 490 — MAJOR CONTOUR LINE
- MINOR CONTOUR LINE
- - - SOILS BOUNDARY
- - - EDGE OF GRAVEL
- - - CENTER OF PROPOSED ROAD
- TP-1 SOIL TEST PIT

SOIL MAP UNITS

- Ud B UDORTHENTS LOAMY B SLOPE, 3%-8%
- Ch C CHESUNCOOK SERIES C SLOPE, 8%-15%
- TM C TELOS-MONARDA COMPLEX C SLOPE, 8%-15%
- Mr B MONARDA SERIES B SLOPE, 3%-8%

NOTES

1. ALL BEARINGS ARE REFERENCED TO MAINE STATE GRID, WEST ZONE, NAD83
2. CONTOURS, PROPERTY LINE BOUNDARY, AND PROPOSED DEVELOPMENT LAYOUT WERE PROVIDED BY BLACK DIAMOND CONSULTANTS.
3. SOIL SURVEY REPORT IS AN INTEGRAL PART OF HIGH INTENSITY SOIL MAPPING. SEE SOIL REPORT.
4. MONARDA SOIL SERIES ARE CLASSIFIED AS HYDRIC SOILS.



MAIN-LAND
DEVELOPMENT
CONSULTANTS, INC.

69 MAIN ST. LIVERMORE FALLS, MAINE
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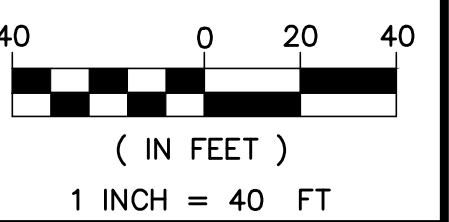
PROJECT
RIDING TIDE TOWER

DALLAS HILL ROAD, DALLAS
PLANTATION, MAINE

MADE FOR
**BLACK DIAMOND
CONSULTANTS**

312 WATER STREET,
GARDINER, MAINE

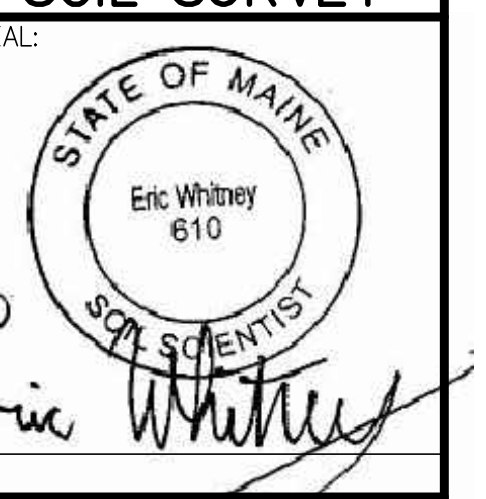
DRAWING SCALE:



SUBMISSION NOTES:
SUBMISSION 1: 2021-10-14 ERTW
ISSUED FOR CLIENT REVIEW

PROJ. MGR: ERTW
DRAWN BY: ERTW & SOH
CHECKED BY: RWD
SUBMISSION NO. 1
SUBMISSION DATE: 2021-10-7
SUBMITTED FOR: REVIEW

NOT FOR CONSTRUCTION
**CLASS A & L
HIGH INTENSITY
SOIL SURVEY**



DRAWING NO.
E1.1
MLDC NO. 20-291 1 OF 1

H

EROSION & SEDIMENTATION CONTROL PLAN

EROSION AND SEDIMENTATION CONTROL PLAN FOR TELECOMMUNICATIONS FACILITY LOCATED AT DALLAS PLANTATION

(PLAN DEVELOPED IAW LUPC Chapter 10, § 10.25,M,4)

This Erosion and Sedimentation Control Plan has been developed to conform with Maine LUPC requirements relative to erosion and sedimentation control measures to be implemented throughout the course of the project, including site preparation, construction, cleanup, and final site stabilization.

The project erosion and sedimentation control measures to be provided at the work site include the installation and maintenance of temporary silt fencing/filter socks, ditch hay bales, stormwater road turnouts, check dams, culverts, turnout or culvert outlet aprons, and placement of road ditch rip-rap. All to be installed at the site in accordance with the approved project site engineering drawings.

Site inspections and corrective actions shall be performed by a Maine Professional Engineer with knowledge of site erosion and sedimentation control measures. Site inspections shall be performed to determine the effectiveness of the erosion and sedimentation control plan and measures. All corrective actions shall be maintained with the inspection logs. Documentation of inspections and corrective actions shall be maintained for a minimum period of 6 months after all permanent control measures have been effectively implemented.

Inspections shall be conducted:

1. at least once a week and after each rainfall event accumulating more than ½ inch of precipitation, until all permanent control measures have been effectively implemented,
2. at start of construction or land-disturbing activity,
3. during the installation of sedimentation and erosion control measures, and
4. at the completion of final grading or close of the construction season.

Inspection areas:

- Inspect installed silt fencing/filter sock barriers and ditch hay bales to assure barriers continue to prevent site sediment runoff to adjacent property areas.
- Maintain silt fencing/filter socks and ditch hay bale barriers by removing accumulated sediment and inspecting barriers for continued barrier integrity. Repair or replace barriers as necessary until disturbed areas are permanently stabilized.
- Inspect any site dirt stockpiling sediment barriers to ensure continued integrity and sediment barrier operation.
- Inspect installation of culverts, road turnouts, check dams, outlet aprons, and rip-rap for proper stormwater and sediment control.
- Inspect operation of culverts, road turnouts, check dams, outlet aprons, and rip-rap after rain event to verify proper stormwater and sediment control.

Additional inspections areas for winter construction period from Nov. 1 through April 15:

- Verify all areas to be vegetated in Spring are protected with a hay erosion control blanket at the rate of at least 150# of hay per 1000 ft² of exposed soils.
- Verify that all newly exposed ditches and channels are lined with a layer of stone rip-rap.
- Verify that all soil stockpiles are mulched for over winter protection with hay at twice the normal rate. Twice normal rate is equal to 4 bales per 1000 ft² of exposed soils.

I

WILDLIFE & RARE SPECIES ASSESSMENT



BLACK DIAMOND CONSULTANTS INC

TECHNICAL REPORT

TR# 21-016

Revision #00

Report Type: Federal Wildlife and Rare Species Assessment
Project Location: Dallas Plantation, Maine
Report Date: 2021 10 06
QA Category: Non-Q

Client: Rising Tide Towers, LLC
Project: RT-13
JO Number: 20-021
Cell Site: N/A
Classification: Unclassified

TITLE

Federal Wildlife and Rare Species Assessment Maine Field Office Project Review Process

Rising Tide Towers, LLC Proposed Telecommunications Facility 190' Lattice Tower Dallas Plantation, Maine

Prepared for:

Rising Tide Towers, LLC
5 Milk Street, Suite 420
Portland, Maine 04101

Prepared By:

Black Diamond Consultants, Inc.
47 Enterprise Avenue
PO Box 57
Gardiner, ME 04345

Table of Contents

Section Titles	Page Number
Executive Summary	3
Objective	4
Technical Approach	4
Conclusion	4
References	5

Attachments

Attachment No.	Attachments	No. of Pages
1	Step 1 – Action Area	2
2	Step 2 – Official Species List	7
3	Step 3 – Determination of Present or Not Present Species and/or Suitable Habitat in Action Area	1
4	Step 4 – Maine Field Office’s Bald Eagle Map	2
5	Step 5 – Species Summary Table	2
6	Northern Long Eared Bat Consultation	7
7	Canada Lynx Suitable Habitat Impact Assessment	13
8	Qualifications of Environmental Engineer	3

Executive Summary

Black Diamond Consultants, Inc. has performed this evaluation, assessment and report in accordance with the U.S Fish and Wildlife Service – Maine Field Office review process. This review package is for a proposed wireless telecommunications facility and 190' Lattice Tower off from Dallas Hill Road in Dallas Plantation, Maine. The site will consist of a 75'x75' compound area surrounding the proposed tower and is located within forested woodlands. The developed area will be approximately 100'x100' of land area and will consist of a 50' wide utility and access easement. Access will be from Dallas Hill Road to the site via a newly constructed access road utilizing a snowmobile trail and extended off the existing shale pit driveway.

The Ecological Services review is performed to determine whether the facility and structure is located within any endangered and threatened species habitat. Endangered and threatened species and their habitats are protected by Section 7(a)(2) of the Endangered Species Act (ESA). Section 9 of the Endangered Species Act prohibits unauthorized taking of listed species. This assessment is to ensure that any action which is authorized, funded or carried out is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat.

The final 4(d) ruling for Northern Long-Eared Bats states tree removal activities result in incidental take of Northern Long-Eared Bats when the activity either occurs within 0.25 mile of known hibernacula, or cuts or destroys known, occupied maternity roost trees or any other trees within 150-foot radius from the maternity roost tree during the pup season (June 1 through July 31). Since tree removal activities resulting from the project will not occur within 0.25 mile of a known hibernacula, as there are no known hibernacula documented in the project action area at this time, and tree removal will be conducted outside of the June 1 through July 31 pup season, the proposed project will not result in incidental take as defined in the final 4(d) ruling. As such, the proposed project is not likely to adversely affect the Northern Long-Eared Bat but may have minimal direct impacts to the suitable habitat. Refer to Attachment 6, Streamlined Consultation for Northern Long-Eared Bats.

Additionally, the information gathered by Black Diamond Consultants from this assessment indicates that there may be an affect but not likely an adverse effect on the threatened Canada Lynx when implementing the proposed specific project conservation measures for the construction of the proposed facility in Dallas Plantation, Maine. Refer to Attachment 7, Canada Lynx Suitable Habitat Impact Assessment for more detailed information on this species.

Inspection & Evaluation Performed By:



Chad J. Hébert
Black Diamond Consultants, Inc.



Date

Technical Report Prepared By:



Megan J. McGuire
Black Diamond Consultants, Inc.

10/6/21

Date

Technical Report Reviewed By:



James R. Hébert
Black Diamond Consultants, Inc.

10/6/21

Date

Objective

The assessment has been developed to verify compliance with the U.S. Fish and Wildlife Service –Maine Field Office Review Package under Section 7 of the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C 1531 et seq.). The assessment evaluated the effect of the proposed wireless telecommunications equipment and 190' Lattice Tower in Dallas Plantation, Maine on any endangered and threatened species or their habitat. This report documents the results of the Federal Wildlife and Rare Species assessment and review package.

Technical Approach

The assessment and report were developed in accordance with the U.S. Fish and Wildlife Service –Maine Field Office review process. The assessment process included the gathering and evaluation of information from the Maine Field Office web-based instructions on Species Lists and Project Reviews.

Conclusion

The assessment has been developed to verify compliance with the U.S. Fish and Wildlife Service –Maine Field Office Review Package under Section 7 of the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C 1531 et seq.). The assessment evaluated the effect of the proposed wireless telecommunications equipment and 190' Lattice tower in Dallas Plantation, Maine on any endangered and threatened species or their critical habitat.

The final 4(d) ruling for Northern Long-Eared Bats states tree removal activities result in incidental take of Northern Long-Eared Bats when the activity either occurs within 0.25 mile of known hibernacula, or cuts or destroys known, occupied maternity roost trees or any other trees within 150-foot radius from the maternity roost tree during the pup season (June 1 through July 31). Since tree removal activities resulting from the project will not occur within 0.25 mile of a known hibernacula, as there are no known hibernacula documented in the project action area at this time, and tree removal will be conducted outside of the June 1 through July 31 pup season, the proposed project will not result in incidental take as defined in the final 4(d) ruling. As such, the proposed project is not likely to adversely affect the Northern Long-Eared Bat but may have minimal direct impacts to the suitable habitat. Refer to Attachment 6, Streamlined Consultation for Northern Long-Eared Bats. Additionally, the information gathered by Black Diamond Consultants from this assessment indicates that there may be an affect but not likely an adverse effect on the threatened Canada Lynx when implementing the proposed specific project conservation measures for the construction of the proposed facility in Dallas Plantation, Maine. Refer to

Attachment 7, Canada Lynx Suitable Habitat Impact Assessment for more detailed information on this species.

Reference(s)

United States Department of the Interior – Maine Field Office – Ecological Services Web Based process

Rising Tide Towers, LLC Document – “Scope of Work for Compliance with the FCC’s Environmental Rule.

ATTACHMENT 1

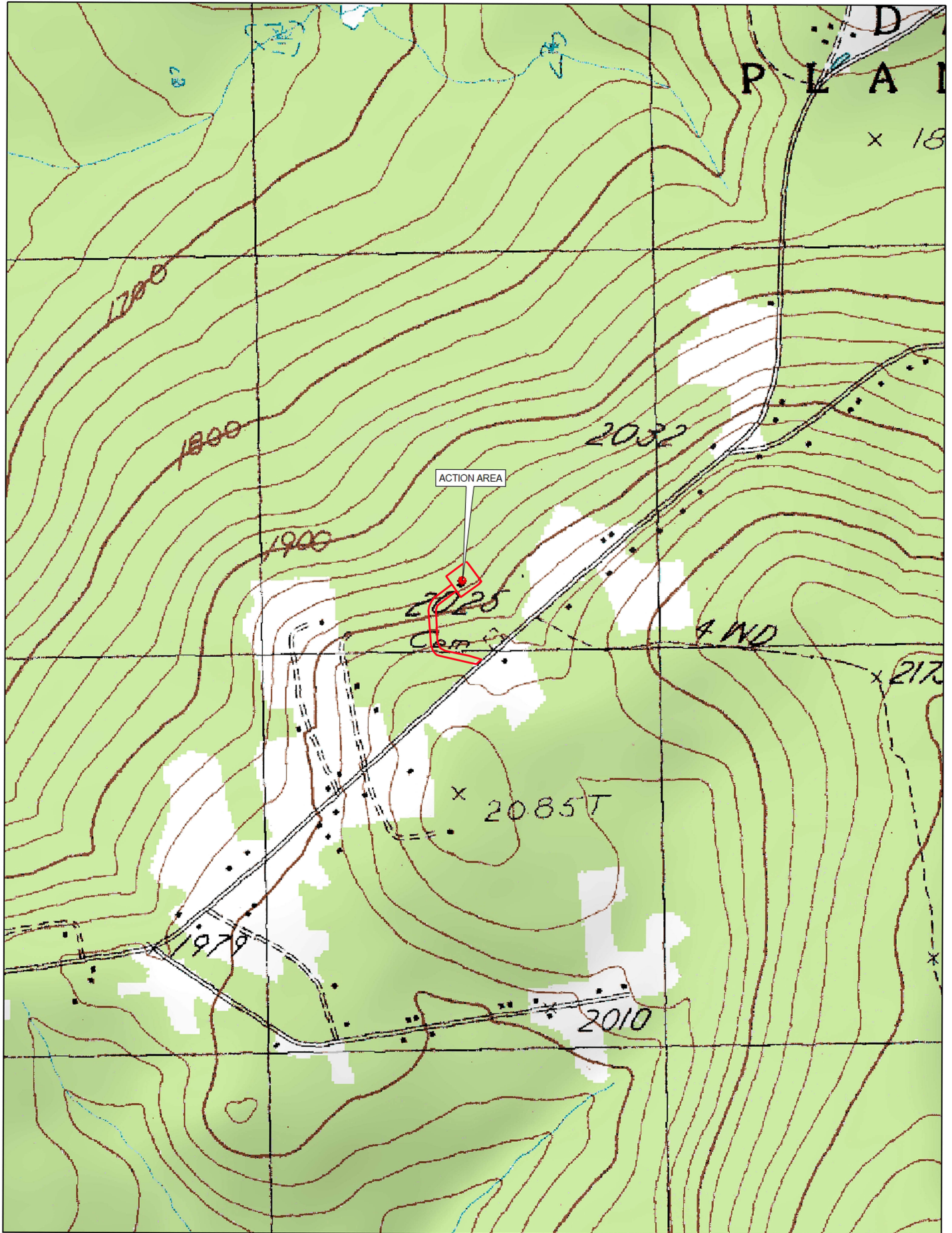
(Step 1 of the Maine Field Office Online Project Review)

Action Area

(No. of Pages Total – 2)

Provide a topographic map depicting the Action Area of the proposed undertaking depicting ground disturbance, changes in water quality and quantity, air quality impacts, lighting effects and noise disturbance.

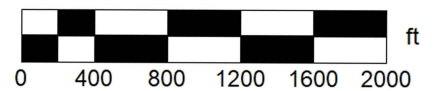
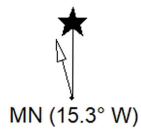
The developed area will be limited to an approximate 100'x100' land area, which will consist of a 75'x75' compound, grading extending from the immediate outskirts of the compound, a 20'x75' gravel parking area, along with approximate 980 feet of utility and access easement extending from Dallas Hill Road to the proposed site. Light, noise, air and water quality/quantity disturbances are not concerns for this project.



Data use subject to license.

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Data Zoom 14-0

ATTACHMENT 2

(Step 2 of the Maine Field Office Online Project Review)

Official Species List

(No. of Pages Total – 7)

Provide the Official Species List from The United States Department of the Interior Fish and Wildlife Service.

See attached for the Official Species List.



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Maine Ecological Services Field Office

P. O. Box A

East Orland, ME 04431

Phone: (207) 469-7300 Fax: (207) 902-1588

<http://www.fws.gov/mainefieldoffice/index.html>

In Reply Refer To:

October 05, 2021

Consultation Code: 05E1ME00-2022-SLI-0013

Event Code: 05E1ME00-2022-E-00038

Project Name: RT-13 Dallas Plantation

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies the threatened, endangered, candidate, and proposed species and designated or proposed critical habitat that may occur within the boundary of your proposed project or may be affected by your proposed project. This species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC Web site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the Endangered Species Consultation Handbook at: <http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

This species list also identifies candidate species under review for listing and those species that the Service considers species of concern. Candidate species have no protection under the Act but are included for consideration because they could be listed prior to completion of your project. Species of concern are those taxa whose conservation status is of concern to the Service (i.e., species previously known as Category 2 candidates), but for which further information is needed.

If a proposed project may affect only candidate species or species of concern, you are not required to prepare a Biological Assessment or biological evaluation or to consult with the Service. However, the Service recommends minimizing effects to these species to prevent future conflicts. Therefore, if early evaluation indicates that a project will affect a candidate species or species of concern, you may wish to request technical assistance from this office to identify appropriate minimization measures.

Please be aware that bald and golden eagles are not protected under the Endangered Species Act but are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.). Projects affecting these species may require development of an eagle conservation plan: http://www.fws.gov/windenergy/eagle_guidance.html Information on the location of bald eagle nests in Maine can be found on the Maine Field Office Web site: <http://www.fws.gov/mainefieldoffice/Project%20review4.html>

Additionally, wind energy projects should follow the wind energy guidelines: <http://www.fws.gov/windenergy/> for minimizing impacts to migratory birds and bats. Projects may require development of an avian and bat protection plan.

Migratory birds are also a Service trust resource. Under the Migratory Bird Treaty Act, construction activities in grassland, wetland, stream, woodland, and other habitats that would result in the take of migratory birds, eggs, young, or active nests should be avoided. Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm> and at:

<http://www.towerkill.com>; and at:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Maine Ecological Services Field Office

P. O. Box A

East Orland, ME 04431

(207) 469-7300

Project Summary

Consultation Code: 05E1ME00-2022-SLI-0013

Event Code: Some(05E1ME00-2022-E-00038)

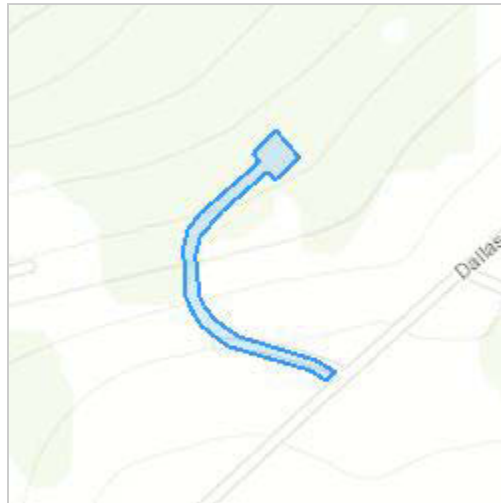
Project Name: RT-13 Dallas Plantation

Project Type: COMMUNICATIONS TOWER

Project Description: Proposed Telecommunications Facility - 190' Lattice Tower to be located within a 75'x75' secure locked and fenced in compound. Site will disturb approximately 0.51 acres of land which includes a 100'x100' cleared area and a 12' road to be constructed within a 50' wide utility and access easement. The road will extend approximately 680' off an existing driveway and will follow along an existing woods trail to be upgraded.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@44.9650245,-70.6044615813274,14z>



Counties: Franklin County, Maine

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Canada Lynx <i>Lynx canadensis</i> Population: Wherever Found in Contiguous U.S. There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3652	Threatened
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

ATTACHMENT 3

(Step 3 of the Maine Field Office Online Project Review)

Determination of Present or Not Present Species and/or Suitable Habitat in the Action Area

(No. of Pages Total – 1)

Provide the listed species fact sheets to determine whether you can conclude whether your action area contains the species or its habitat.

The Official Species List (see Step 2 attachment) identified two threatened species, the Canada Lynx and the Northern Long-eared Bat.

Canada Lynx:

During the July 1, 2020 Suitable Habitat Assessment, it was determined that the project area does not have typical suitable habitat features for the threatened species due to the fact that the area is mature forest with little undergrowth (approximately 5% understory density/closure) to support snowshoe hare populations. Because it is unlikely that snowshoe hare populations is plentiful in the project location, given the lack of suitable habitat for the hares, it is also unlikely that Canada Lynx would reside in the project area, as snowshoe hare is their primary prey. Due to the fact Canada Lynx are rare at the Southern edge of their range in Maine and given the limited size of the proposed project, and that this project area is not designated as critical habitat, the proposed project will have insignificant direct impact on any potential suitable habitat.

Northern Long-Eared Bats (NLEB):

Based on existing information, there are no known hibernacula in the project action area documented at this time. The proposed telecommunications facility located in Dallas Plantation, Maine will begin and complete tree cutting outside of the pup season (June 1 through July 31). As determined by the Northern Long-Eared Bat final 4(d) ruling, tree-removal activities result in incidental take of Northern Long-Eared Bats when the activity either occurs within 0.25 mile of a known hibernacula, or cuts or destroys known, occupied maternity roost trees or any other trees within 150-foot radius from the maternity roost tree during the pup season (June 1 through July 31). Since tree removal activities resulting from the project will not occur within 0.25 mile of a known hibernacula and tree removal will be conducted outside of the June 1 through July 31 pup season, the proposed project will not result in incidental take as defined in the final 4(d) ruling. As such, the proposed project is not likely to adversely affect the Northern Long-Eared Bat but may have minimal direct impacts to the 0.25 acres of suitable habitat.

ATTACHMENT 4

(Step 4 of the Maine Field Office Online Project Review)

Maine Field Office's Bald Eagle Map

(No. of Pages Total – 2)

Provide a map indicating whether or not there is any known Bald Eagle's nest located within or near 660' of the action area.

The Maine Field Office's Bald Eagle Map Tool does not show any known Bald Eagle's Nest near the proposed telecommunications facility in Dallas Plantation and exceeds far greater measures than 660' to the nearest nest. See attached Map of Dallas Plantation in relationship to known Bald Eagle's Nest from the database.



Nest ID #847A is located approximately 3.5 miles away from the proposed project in the Southwesterly direction. The Nest is located on a small island in Rangeley Lake.

ATTACHMENT 5

(Step 5 of the Maine Field Office Online Project Review)

Species Summary Table

(No. of Pages Total – 2)

Provide the completed Species Summary Table from the information gathered to assess if the proposed undertaking will have an effect on listed species or result in the destruction of critical habitat.

See attached Species Summary Table.

Species Summary Table – example of a project where further review and response by the Maine Field Office is necessary.

Your name: Rising Tide Towers c/o Black Diamond Consultants, Inc.

Project name used in IPaC: RT-13 Dallas Plantation

Date: October 5, 2021

Step 2 Listed or candidate species that are likely present according to the Official Species List from IPaC? “No Species” or IPaC species list Bald eagle nests from Step 4.	Step 2 Is your action area in critical habitat (only for Canada lynx or Atlantic salmon)? Yes or No	Step 3A Is suitable habitat for listed or candidate species present in your action area? “suitable habitat present” “suitable habitat not present” “Don’t know”	Step 3B Does the species occur in your action area? “Species present” “Species not present” “Don’t know”	Step 4 Is your project likely to take or disturb eagles and require an Eagle Act permit? “Will not disturb” “May disturb” “Don’t know”	Step 5 Determinations for the Endangered Species Act and Eagle Act – only Federal agencies complete this column “No effect” “May affect”	Notes and Documentation (provide additional information if needed)
Canada lynx	No	Don’t Know	Don’t know		May Affect (not likely to adversely affect)	See Notes
Northern Long Eared Bats	No	Suitable habitat present	Don’t Know		May Affect (not likely to adversely affect)	See Notes
Bald eagle	No	Don’t Know	Species Not Present	Will Not Disturb		Action area is 3.5 miles from bald eagle nest 847A
Monarch Butterfly	No	Don’t Know	Don’t Know			There are generally no section 7 requirements for candidate species

Northern Long Eared Bats Notes:

- 1) Tree cutting will be conducted outside the pup season (June 1-July 31)
- 2) There are no hibernacula within .25 mile of the proposed undertaking.

Based on this conservation measure, as defined in the Northern Long Eared Bat final 4(d) ruling, the proposed project will not result in incidental take.

Canada Lynx:

- 1) Area to be developed may affect but not likely have an adverse effect on the Canada Lynx known to be in the area since the project area is mature Forests with little to no undergrowth for snowshoe hares, Canada Lynx’ primary prey.

- 2) Canada Lynx are rare at their southern edge of their range in Maine

Based on these environment conditions, there would be insignificant impact to the Canada Lynx known to be in the area. Refer to the *Suitable Habitat Impact Assessment* for documentation on Habitat Assessment findings.

ATTACHMENT 6

Suitable Habitat Impact Assessment

(No. of Pages Total – 7)

If Step 5 *Species Summary Table* resulted in a “Suitable Habitat Present” and/or “Species Present” in Column Step 3A and Step 3B, conduct the Summer Survey Guidance, Phase 1 Summer Habitat Assessment.

Step 5 *Species Summary Table* resulted in a “Suitable Habitat Present” and “Species Present” for the Northern Long-Eared Bat in the Step 3 column. In order to address Step 3, the Streamlined Consultation for Northern Long-Eared Bats has been supplied from the USFWS to provide an efficient means to ensure that federal agencies proposed actions are consistent with those evaluated in the programmatic intra-Service consultation for the final 4(d) rule. If the appropriate Service Field Office does not respond asking for additional information, then the Federal Agency may rely on the Biological Opinion to fulfill the project-specific section 7(a)(2) responsibilities.

Species Present:

The data collected suggests there is suitable habitat for the Northern Long-Eared Bat (NELB), but as determined by the Northern Long-Eared Bat final 4(d) ruling, tree removal activities result in the incidental take of the Northern Long-Eared Bats when the activity either occurs within 0.25 mile of a known hibernacula, or cuts or destroys known occupied maternity roost trees or any trees within 150-foot radius from the maternity roost tree during pup season (June 1 through July 31). Since tree removal activities resulting from the project will not occur within 0.25 mile of a known hibernacula and tree removal will be conducted outside of the June 1 through July 31 pup season, the proposed project will not result in incidental take as defined by the final 4(d) ruling. As such the proposed project is not likely to adversely affect the Northern Long-Eared Bat.

Suitable Habitat Present:

The project will impact approximately 0.51 acres of land. Because the project is small in size and will have limited tree removal, there will be minimal direct effect to the suitable habitat for the Northern Long-Eared Bat.



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Maine Ecological Services Field Office

P. O. Box A

East Orland, ME 04431

Phone: (207) 469-7300 Fax: (207) 902-1588

<http://www.fws.gov/mainefieldoffice/index.html>

In Reply Refer To:

October 05, 2021

Consultation code: 05E1ME00-2022-TA-0013

Event Code: 05E1ME00-2022-E-00039

Project Name: RT-13 Dallas Plantation

Subject: Verification letter for the 'RT-13 Dallas Plantation' project under the January 5, 2016, Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-eared Bat and Activities Excepted from Take Prohibitions.

Dear Megan McGuire:

The U.S. Fish and Wildlife Service (Service) received on October 05, 2021 your effects determination for the 'RT-13 Dallas Plantation' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. This IPaC key assists users in determining whether a Federal action is consistent with the activities analyzed in the Service's January 5, 2016, Programmatic Biological Opinion (PBO). The PBO addresses activities excepted from "take"^[1] prohibitions applicable to the northern long-eared bat under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, the Action is consistent with activities analyzed in the PBO. The Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the PBO satisfies and concludes your responsibilities for this Action under ESA Section 7(a)(2) with respect to the northern long-eared bat.

Please report to our office any changes to the information about the Action that you submitted in IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation. If the Action is not completed within one year of the date of this letter, you must update and resubmit the information required in the IPaC key.

This IPaC-assisted determination allows you to rely on the PBO for compliance with ESA Section 7(a)(2) only for the northern long-eared bat. It **does not** apply to the following ESA-protected species that also may occur in the Action area:

- Canada Lynx *Lynx canadensis* Threatened
- Monarch Butterfly *Danaus plexippus* Candidate

If the Action may affect other federally listed species besides the northern long-eared bat, a proposed species, and/or designated critical habitat, additional consultation between you and this Service office is required. If the Action may disturb bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act is recommended.

[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

RT-13 Dallas Plantation

2. Description

The following description was provided for the project 'RT-13 Dallas Plantation':

Proposed Telecommunications Facility - 190' Lattice Tower to be located within a 75'x75' secure locked and fenced in compound. Site will disturb approximately 0.51 acres of land which includes a 100'x100' cleared area and a 12' road to be constructed within a 50' wide utility and access easement. The road will extend approximately 680' off an existing driveway and will follow along an existing woods trail to be upgraded.

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@44.9650245,-70.6044615813274,14z>

**Determination Key Result**

This Federal Action may affect the northern long-eared bat in a manner consistent with the description of activities addressed by the Service's PBO dated January 5, 2016. Any taking that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o). Therefore, the PBO satisfies your responsibilities for this Action under ESA Section 7(a)(2) relative to the northern long-eared bat.

Determination Key Description: Northern Long-eared Bat 4(d) Rule

This key was last updated in IPaC on May 15, 2017. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for Federal actions is to assist determinations as to whether proposed actions are consistent with those analyzed in the Service's PBO dated January 5, 2016.

Federal actions that may cause prohibited take of northern long-eared bats, affect ESA-listed species other than the northern long-eared bat, or affect any designated critical habitat, require ESA Section 7(a)(2) consultation in addition to the use of this key. Federal actions that may affect species proposed for listing or critical habitat proposed for designation may require a conference under ESA Section 7(a)(4).

Determination Key Result

This project may affect the threatened Northern long-eared bat; therefore, consultation with the Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.) is required. However, based on the information you provided, this project may rely on the Service's January 5, 2016, *Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-Eared Bat and Activities Excepted from Take Prohibitions* to fulfill its Section 7(a)(2) consultation obligation.

Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?

Yes

2. Have you determined that the proposed action will have "no effect" on the northern long-eared bat? (If you are unsure select "No")

No

3. Will your activity purposefully **Take** northern long-eared bats?

No

4. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?

Automatically answered

No

5. [Semantic] Is the project action area located within 0.25 miles of a known northern long-eared bat hibernaculum?

Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency

Automatically answered

No

6. [Semantic] Is the project action area located within 150 feet of a known occupied northern long-eared bat maternity roost tree?

Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency

Automatically answered

No

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:

0.51

2. If known, estimated acres of forest conversion from April 1 to October 31

0.51

3. If known, estimated acres of forest conversion from June 1 to July 31

0

If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?

0

ATTACHMENT 7

Suitable Habitat Impact Assessment

(No. of Pages Total – 13)

If Step 5 *Species Summary Table* resulted in a “Suitable Habitat Present” and/or “Species Present” in Column Step 3A and Step 3B, conduct a Suitable Habitat Assessment.

Step 5 *Species Summary Table* resulted in a “Suitable Habitat Present” and “Species Present” for the Canada Lynx in the Step 3 columns. In order to address Step 3, a Suitable Habitat Impact Assessment report was conducted. The Suitable Habitat Impact Assessment collected data from the project action area which includes the 200’x200’ leased area, and a 50’x980’ utility and access easement. The assessment findings are documented in Technical Report 21-015 *Suitable Habitat Impact Assessment Canada Lynx (Lynx Canadensis)*

Species Present:

The ECOs IPAC database indicates the proposed project area is not designated critical habitat for the Canada Lynx within the project area. Additionally, the data collected from the assessment suggests that the project area is not the typical suitable habitat for Canada Lynx due to the fact that the area is of mature forest with little undergrowth to support snowshoe hare populations. Because it is unlikely that snowshoe hare populations is plentiful in the project location, given the lack of suitable habitat for the hares, it can be assumed that Canada Lynx would not typically migrate to the location, as snowshoe hare is their primary prey.

Suitable Habitat Present:

The developed area of the project will impact approximately 0.51 acres of land. One hundred percent of the project area to be developed is relatively thinned out due to previous work done on the existing snowmobile trail. The area to be developed was determined to be of mature forests with little undergrowth to support snowshoe hare populations. Because it is unlikely that snowshoe hare populations is plentiful in the project location, given the lack of suitable habitat for them, it is also unlikely that the Canada Lynx would forage in the area and thus it would not be typical for them to migrate in the location. Because the project is small in size and the forest conditions are as such, there will be minimal direct effect to the Canada Lynx habitat.



TECHNICAL REPORT

TR# 21-015

Revision #00

Report Type: Suitable Habitat Impact Analysis
Project Location: Dallas Plantation, Maine
Report Date: 2021 10 06
QA Category: Non-Q

Client Name: Rising Tide Towers
Project Number: RT-13
JO Number: 20-021
Site Number: N/A
Classification: UNCLASSIFIED

TITLE

Suitable Habitat Impact Analysis Canada Lynx (Lynx Canadensis)

Rising Tide Towers LLC Proposed Telecommunications Facility 190' Lattice Tower Dallas Plantation, Maine

Prepared for:

Rising Tide Towers LLC
5 Milk Street, Suite 420
Portland, Maine 04101

Prepared By:

Black Diamond Consultants, Inc.
47 Enterprise Avenue
PO Box 57
Gardiner, Maine 04345

Table of Contents

Section Titles	Page Number
Executive Summary	3
Description of the Study Area	4
Background Information	4
Methods	4
Results and Discussion	5
Summary and Conclusions	6

Attachments

Attachment No.	Attachments	No. of Pages
1	Maps	3
2	Photographs	3

1.0 Executive Summary

Black Diamond Consultants, Inc. conducted an assessment of habitat suitability for the federally threatened Canada Lynx (*Lynx Canadensis*) on Dallas Hill Road in Dallas Plantation, Franklin County, Maine. (Attachment 1, Exhibit A). The purpose of this report is to provide a description of the amount of suitable habitat present within the project area and surrounding landscape and to determine the potential effects of the proposed telecommunications facility, if any, on Canada Lynx habitat.

1.1 *Project Overview*

Black Diamond Consultants, Inc. has initiated the proposed telecommunications facility on behalf of Rising Tide Towers, LLC. The proposed telecommunications facility will consist of the construction of a proposed 190' Lattice tower in Dallas Plantation, Maine. The developed area will be limited to an approximate 100'x100;' inner square within a larger 200'x200' foot lease area and a 50 foot wide utility and access easement from Dallas Hill Road to the proposed project area. The site access easement is approximately 980' in length. The proposed project is located within a Temperate Deciduous Forest with a mix of coniferous trees.

1.2 *Purpose and Need*

The purpose of this project is to provide service and improve coverage for mobile wireless communication to the Dallas Plantation, Maine and surrounding areas.

Inspection & Evaluation Performed By:



Chad J. Hébert (Environmental Engineer)
Black Diamond Consultants, Inc.



Date

Technical Report Prepared By:



Megan J. McGuire 10/6/21
Black Diamond Consultants, Inc.

Technical Report Reviewed By:



James R. Hébert (P.E.) 10/6/21
Black Diamond Consultants, Inc. Date

2.0 Description of the Study Area

The proposed project is located in Dallas Plantation, Franklin County, Maine. Land use within the immediate surrounding area is forested woodlands. The study area is classified as Temperate Deciduous Forest with prominent tree species consisting mostly Beech, Birch and Ash with scatterings of coniferous trees species, Fir and Spruce.

3.0 Background Information

3.1 Characteristics of Canada Lynx Habitat

The Canada Lynx habitat consists mostly of early to mid-successional spruce-fir forest, 12 to 30 years after a major forest disturbance such as wildfires or timber harvests. Ideal habitat encompasses dense understory that supports large populations of snowshoe hare, Canada Lynx's primary food. Snowshoe hares tend to occur in habitats where dense stands of young conifers provide shelter, and where they can forage on conifer boughs that protrude above several feet of snow. The species need persistent deep, powdery snow. On the contrary, lynx use mature forests with dense undercover and downed wood for denning. Denning habitat generally consists of log piles, windfalls, or dense vegetation for security of their kittens.

Although Canada Lynx's critical habitat and the species itself is more commonly found in Canada in Boreal Forests, the species and their habitat have been found in the lower 48 states of the U.S., more specially Northern Maine, Minnesota, Montana and Idaho. However, where the Boreal Forests transition to temperate forest types, lynx populations cannot be sustained. Therefore, Lynx are rare at the southern edge of their range in Maine.

4.0 Methods

4.1 Canada Lynx Habitat Assessment

The first step in calculating potential direct impacts is to assess the habitat which may be impacted by the proposed project. The methodology used in this report *follows guidelines and information provided in the US Fish and Wildlife Service, Maine Field Office Canada Lynx Habitat management Guidelines for Maine.*

Habitat was evaluated in one particular area located in the center of the 200'x200' proposed lease area ("Sample Site"). Only one sample point was established because it covers the entire project area. Data collected from this point consisted of an evaluation of the following parameters:

1. Average % understory cover
2. Dominant tree species in the forest
3. Apparent forest stage of maturity

GPS coordinates and representative photos (Attachment 2) from the sample site were obtained.

4.2 *Canada Lynx Impact Analysis*

The habitat assessment was conducted on October 5, 2021.

Direct Effects

The Sample Site within the project boundary was plotted using aerial photography and overlaid with the site survey illustration. Additionally, site analysis during site walks and photography were evaluated and overlaid on the site plan as well. Tree clearing limits is calculated based on patches overlaid on the forested areas to be evaluated for habitat impacted by the proposed undertaking. This approach was used to determine the total loss of Canada Lynx potential suitable habitat.

Direct impacts on the Canada Lynx habitat include habitat fragmentation (splitting of large blocks into smaller blocks of forested areas) and loss of connectivity between forested blocks. Fragmentation is caused by geological processes that slowly alter the layout of the physical environment and can alter the habitat for many species. Attachment 1, Exhibit B shows the 5 mile radius landscape from the proposed project in relationship to surrounding forests.

5.0 Results and Discussion

5.1 *Habitat Assessment*

The Canada Lynx habitat assessment area includes the Sample Site established at the center of the 200'x200' leased area. The entire project encompasses approximately 1.92 acres of land. The 1.92 acres of action area consists of a 40,000 square foot leased parcel (0.92 acres) and an approximate 48,955 square foot access and utility easement (1.12 acres). However, only approximately 0.51 acres of the 1.92 acres will be developed area, where tree clearing will be needed. Of this developed area, 100% is relatively densely wooded. The deciduous trees within the project boundaries are mostly of Beech, Birch and Ash, but the dominant coniferous tree species is the spruce tree. Overall, the lease area and access and utility easement appear to be located within a mature forest with little to no young undergrowth.

The average percentage of the canopy density at the understory level, less than 15', within the action area, is approximately 5%.

Because the area has little to no young undergrowth, the snowshoe hare population is likely to be scarce, therefore, making the area unbecoming for the Canada Lynx species. Based on the data collected, the scale of the project, limited tree removal and forest conditions and maturity, the project was determined to have insignificant direct impact on the possible suitable habitat for the Canada Lynx.

5.2 *Impact Analysis*

Direct Impacts

The undertaking will have no direct impacts on the Canada Lynx because it is unlikely that the species would be present at the time of tree removal or construction.

6.0 Summary and Conclusions

Based on the data collected, the size of the project, and the forest conditions and maturity within the proposed lease area and easements, it has been determined that the project area does not have typical suitable habitat for the Canada Lynx. Due to the seemingly insignificant impacts, the undertaking may effect but not likely adversely affect the Canada Lynx species and any potential suitable habitat.

ATTACHMENT 1

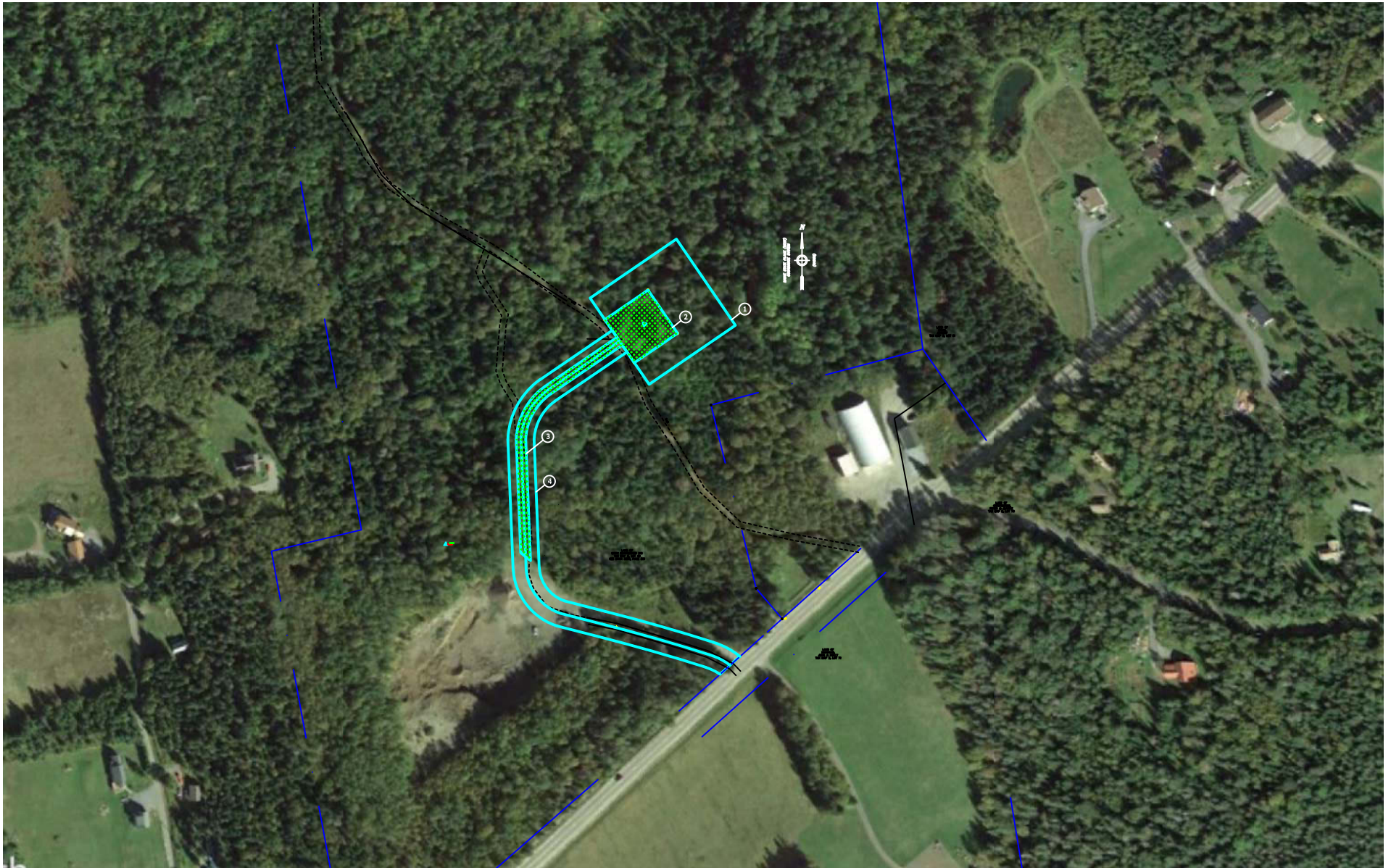
Maps

(No. of Pages Total – 3)

List and attach project associated maps.

Exhibit A – Site Plan

Exhibit B – 5 Mile Radius Landscape Map



ID DESCRIPTION

1. 200'X200' LEASE AREA
2. 100'X100' INNER SQUARE (TREE CLEARING LIMITS)
3. ROAD TO BE EXTENDED/UPGRADED FOR PROJECT, SHADED AREA IS TREE CLEARING
4. 50' WIDE UTILITY/ACCESS EASEMENT

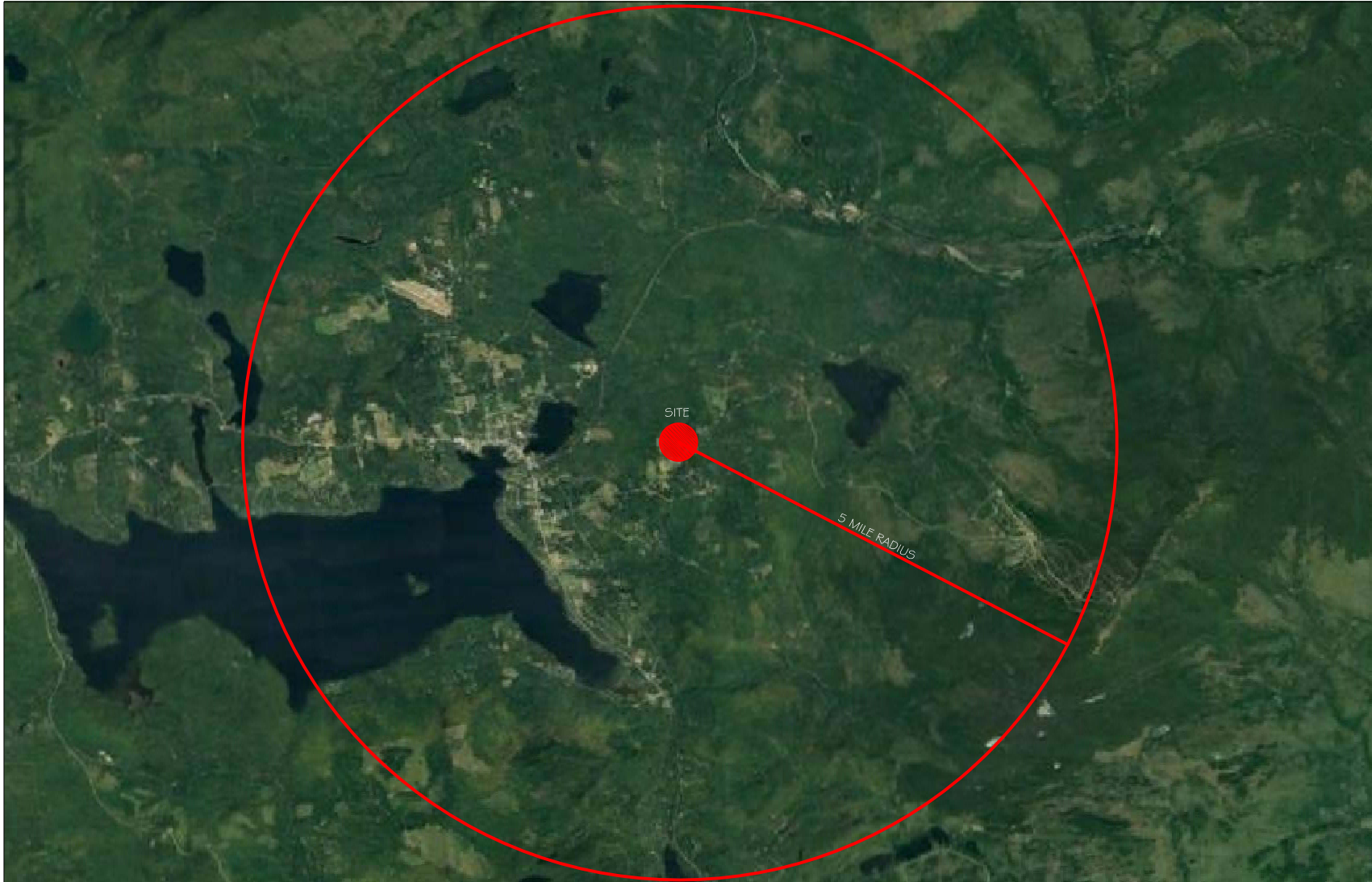


EXHIBIT INDICATES THE PROPOSED PROJECT WILL NOT CREATE HABITAT FRAGMENTATION.

ATTACHMENT 2 Photographs

(No. of Pages Total – 3)

Provide photographs of the Understory section per sample site and identify any unique site features that may be helpful in determining the suitability of habitat.

Exhibit A – Photographs



Figure 1. Photograph looking East at the location of the proposed Dallas Plantation, Maine Telecommunications Facility in Franklin County, Maine.



Figure 2. Photograph looking north up the existing woods road from the location of the proposed Dallas Plantation, Maine Telecommunications Facility in Franklin County, Maine.



Figure 3. Photograph looking south toward the existing shale pit from the location of the proposed Dallas Plantation, Maine Telecommunications Facility in Franklin County, Maine.

ATTACHMENT 8

Qualifications of Environmental Engineer

(No. of Pages Total – 3)

Chad J. Hébert

467 Whitefield Road
Pittston, Maine 04345

Birth Date: December 31, 1973

Home: (207) 582-4638

Office: (207) 582-0056

Qualification Summary

I am offering the services of a young worker with a wide array of environmental, radiological, industrial safety, hazardous material, hazardous waste and telecommunications experience. I have demonstrated high standards of performance, excellent interpersonal skills, as well as team playing and the ability to work well with all levels of the organization. My strongest assets are my eagerness and ability to learn quickly, as well as trouble shooting and problem solving abilities. I have worked in the nuclear, industrial and telecommunications areas for the past several years and am currently employed by Black Diamond Consultants Incorporated. I offer a variety of experience as illustrated below.

Education

I graduated from the University of Maine at Orono, with a Bachelor of Science degree in Natural Resources in May 1997. My Bachelor of Science concentration was Marine Resources. My major included studies in soil, aquatic, terrestrial, plant, animal sciences and chemistry. I completed my Masters of Business Administration degree at New Hampshire College in May of 2000.

Experience

- 12/05 to Present Black Diamond Consultants, Inc.
Project Manager. Activities include oversight of all aspects of Telecommunication facility construction. This includes oversight of site construction, including access road construction and utilities installation, compound layout and construction, tower foundation construction, site grounding installation and testing, tower and shelter installation and cell site turnover.
- 8/02 to 12/05 Black Diamond Consultants Inc.
Manager of Business Operations. Responsible for all business activities of Black Diamond. This includes payroll, accounts receivable, accounts payable, marketing, proposals, Human Resource Management & 401(k) administration and any other day to day activities which may arise.
- 8/00-8/02 Black Diamond Consultants, Inc.
Environmental Compliance Engineer. Recently working at the Maine Yankee Atomic Power Plant on the Decommissioning Project. Responsible for site compliance with all federal, state and local construction and development permits. Duties also include acquiring federal, state and local permits needed for the decommissioning of Maine Yankee. Responsible for site wide field inspections, incorporating all relevant Best Management Practices and all related items to the Spill Prevention Control and Countermeasure Plan (SPCC). Worked closely with the Resource Conservation Recovery Act (RCRA) team and aided in sampling and analytical efforts. Was responsible for all duties of the Demolition Project Manager during his absence. This included oversight of large component removal, oversight of building demolition, concrete and below grade demolition as well as oversight of the use of explosives on sight.
- 10/99-7/00 Stone & Webster
Training Supervisor. Working at the Maine Yankee Atomic Power decommissioning project. Responsibilities included writing and revising procedures and training materials / lesson plans, as well as resolving training program deficiencies and scheduling and coordinating site wide training.
- 6/98 – 8/99 Environmental Management Inc.
Industrial Hygienist. Supervisor responsible for oversight and inspection of the asbestos removal project at Maine Yankee Atomic Power Company. Previously certified by the State of Maine, Department of Environmental Protection, as an asbestos supervisor and air monitor.
- 3/98 - 5/98 GTS Duratek

Health Physics Technician. Junior HP Technician responsible for the collection, survey and release of radioactive material at Vermont Yankee Atomic Power Company. Other duties included radiological surveys of contaminated areas and equipment, as well as personnel decontamination. Proficient with the use of several radiological surveying instruments.

10/97 -3/98

GTS Duratek

Download Technician. Responsibilities included collection, compilation, and downloading site characterization data for the Maine Yankee Site Characterization Project. I also aided in data analyses of Site Characterization Surveys, and assisted in soil sampling and analyses.

12/96 - 1/97

Maine Yankee Atomic Power Company

Hazardous Waste Department. Intern responsible for completion of a major revision to the Material Safety Data Sheet system at Maine Yankee Atomic Power Company. Other responsibilities included control of chemicals entering the plant and proper disposal of chemicals leaving the plant.

5/96 - 8/96

Maine Yankee Atomic Power Company

Hazardous Waste Department. Summer Intern responsible for initiation of a major revision to the Material Safety Data Sheet system at Maine Yankee Atomic Power Company. Additional duties included laboratory work, which consisted of Titration of Chlorides

12/94 - 1/95

Maine Yankee Atomic Power Company

Environmental Licensing Department. Summer Intern responsible for the completion of a major revision of the On-Site Spill Plan at Maine Yankee Atomic Power Company.

5/94 - 8/94

Maine Yankee Atomic Power Company

Environmental Licensing Department. Summer Intern responsible for the collection of data for the continued revision of the Maine Yankee Atomic Power Company On-Site Spill Plan. Also aided in the Clean Water Proposal, for the Maine Yankee Atomic Power Company drinking water system.

12/93 - 1/94

Maine Yankee Atomic Power Company

Environmental Licensing Department. Summer Intern responsible for initiation of a major revision to the Maine Yankee Atomic Power Company On-Site Spill Plan.

5/93 - 8/93

Maine Yankee Atomic Power Company.

Environmental Licensing Department. Summer Intern tasked with supporting the creation of a report to the Nuclear Regulatory Commission concerning the fatality to an endangered species (Short-Nosed Sturgeon). Additionally responsible for assisting in a project designed to deter Osprey from nesting on plant equipment, and relocating Osprey nested on routinely used components.

Certificates

I am certified in OSHA Construction Health and Safety, OSHA Hazardous Waste Training and Maine Erosion Controls.

Software Experience

I have experience with Windows 95, Word, Access, Excel, Word Perfect, Paradox, Netscape and other software programs.

J

NOTICE OF SUPPLEMENTAL FILING

**NOTICE OF SUPPLEMENTAL FILING
WITH THE MAINE LAND USE PLANNING COMMISSION**

This is to notify you that Rising Tide Towers, LLC, located at 5 Milk Street, Suite 420, Portland, ME 04101, has filed additional information concerning its previously-filed application for a development permit to construct a telecommunications facility with the Maine Land Use Planning Commission, pursuant to provisions of 12 M.R.S. Section 685-B; the Commission's rule Chapter 10, *Land Use Districts and Standards*; and the Commission Chair's Second Procedural Order in the Matter of Development Permit DP 5050-B, dated September 24, 2021.

The supplemental filing provides additional information regarding an alternative tower option—namely, a 190-foot tall, unlit telecommunications tower located in Dallas Plantation, Maine.

The supplemental filing will be filed for public inspection at the Maine Land Use Planning Commission's Downeast Regional Office, located at 106 Hogan Road, Suite 8, Bangor, ME 04401 (Tel. (207) 215-4685; FAX (207) 941-4222), on October 15, 2021.

Pursuant to the Second Procedural Order, the hearing record will remain open until October 29, 2021 at 5:00 P.M. for interested persons to file comments on any additional information supplied by the Applicant, and until November 6, 2021 at 5:00 P.M. for statements in rebuttal to comments filed by the October 29th deadline.

For questions about submitting written comments, requesting a public hearing, or for any additional information, please contact Karen Bolstridge at karen.bolstridge@maine.gov or 207-215-4685.

The Maine Land Use Planning Commission's legal authority is established by 12 M.R.S. Section 683-A.

This Notice of Supplemental Filing was delivered, via USPS first class mail, by Rising Tide Towers, LLC to the property owners within 1,000 feet of the lease area (identified on the next page), the Dallas Plantation assessors, the Franklin County Commissioners, and the landowner Mark Beauregard on October 15, 2021.

LIST OF ABUTTERS AND PROPERTY OWNERS WITHIN 1000' OF LEASE AREA

Map/Lot	Owner of Parcel	Mailing Address
002 / 034B	Robert Butley & Randall Belanger	PO Box 1243 Rangeley, ME 04970
002 / 041	Donna C. & Robert A. Coleman	PO Box 3 Susquehanna PA 18847
002 / 043	Ralph H. & Karen D Hutchinson	53 Blanchard Road Cumberland, Maine 04021
002 / 044	Donald Begraft	RD 4, 1 Curtis Drive Vernon, NJ 07462
002 / 045	Donald, Douglas and Dennis Begraft	1030 RT 619 Newton, NJ 07860
002 / 046	David L. St. Marie	PO Box 976 Rangeley, ME 04970
002 / 047	Marie and Terry Sullivan	12 Roundy Street., #3 Beverly MA 01915
002 / 048	Mark Beauregard, Inc.	PO Box 304 Rangeley, Maine 04970
002 / 049	Mark Beauregard, Inc.	PO Box 304 Rangeley, Maine 04970
002 / 050	Town of Dallas Plantation Township	436 Dallas Hill Road Rangeley, ME 04970
002 / 051	Jeffery Gahm	281 Washington Street Norwell, MA 02061
002 / 051A	John W. Thompson c/o Mat. Whse	281 Washington Street Norwell, MA 02061
002 / 052	Lynn and Paul Noyes	PO Box 825 Rangeley, Maine 04970
002 / 052A	Karen Noyes & Henry Yankowsky	PO Box 526 Rangeley, ME 04970
002 / 052C	Kirk Ellis	PO Box 162 Rangeley, Maine 04970
002 / 030 002 / 057 002 / 058	Nancy Bessey According to town, lot 57 and 58 are apart of Lot 30. See reference map from town	PO Box 169 Rangeley, ME 04970
002 / 068A	Bradley Kennett	PO Box 929 Rangeley, Maine 04970
002 / 069	Richard E. Jakshtis & Kathleen M. Denney	PO Box 545 Hardwick, MA 01037
002 / 070	Peter N & Jeanine S Christensen	PO Box 870 Rangeley, ME 04970
002 / 071.1	John L & Holly L Margolis	4 Cherry Hill Terrace Waterville, ME 04901
002 / 071.2	Eric R and Lori Ann Page	7 Cove Landing Kittery, ME 03904
002 / 071.3	John L & Holly L Margolis	4 Cherry Hill Terrace Waterville, ME 04901
002 / 072	Jonathan B & Linda M. Stevens	PO Box 1263 Rangeley, ME 04970

LIST OF ABUTTERS AND PROPERTY OWNERS WITHIN 1000' OF LEASE AREA

002 / 073	Central Maine Power Co.	One City Center – 5 th Floor Portland, ME 04101
002 / 074	Barbara Dias	26 Kimball Street Sanford, ME 04073
002 / 075	Thomas & Susan Ackley	5 Howe Street Fryeburg, ME 04937
002 / 082	Devin & Valentine Isgro-Desplat	PO Box 5423 Oquossoc, Maine 04964
004 / 027	John M. Russell and Elizabeth Jennison Schwalbe C. & S. Hunger	PO Box 844, Franconia, NH 03580
004 / 028	Delbert Ellis	PO Box 6, Rangeley, ME 04970