

Bob Arle
878-1751

Form # P 04

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK CITY OF PORTLAND

Please Read Application And Notes, If Any, Attached

BUILDING DEPARTMENT

PERMIT

Permit Number: 040137

This is to certify that Saga Communications Of/Construction
has permission to Erect 364' high radio tower with six guy anchors and remove existing 364' high radio tower.
AT 0 Lane Ave 302 A006001

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statutes of Maine and of the ordinances of the City of Portland regulating the construction, maintenance and use of buildings and structures, and of the application on file in this department.

Apply to Public Works for street line and grade if nature of work requires such information.

Notification of inspection must be given and work on permit must be completed before this building or part thereof is occupied or closed-in. 24 HOUR NOTICE IS REQUIRED.

A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

OTHER REQUIRED APPROVALS

Fire Dept. JLK P.F.D. 2/2/04
Health Dept. _____
Appeal Board _____
Other _____
Department Name _____

[Signature]
Director - Building & Inspection Services
2/20/04

PENALTY FOR REMOVING THIS CARD

City of Portland, Maine - Building or Use Permit Application

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

PERMIT ISSUED

Permit No: 04-0137	Issue Date: FEB 20 2004	CBL: 302 A006001
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Location of Construction: 0 Lane Ave	Owner Name: Saga Communications Of	Owner Address: 420 Western Ave	Phone: CITY OF PORTLAND 207-774-4561
Business Name: n/a	Contractor Name: CPM Constructors	Contractor Address: 30 Bonney Rd. Freeport	Phone: 2078650000
Lessee/Buyer's Name n/a	Phone: n/a	Permit Type: Alterations - Commercial	Zone: B4

Past Use: Commercial / Radio Tower	Proposed Use: Radio Tower / Replacement of 364' high radio tower with six guy anchors and remove existing 364' high radio tower	Permit Fee: \$1,596.00	Cost of Work: \$174,250.00	CEO District: 5
		FIRE DEPT: <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied	INSPECTION: Use Group: U Type: 2c Tower 2/20/04	

Proposed Project Description:
Erect 364' high radio tower with six guy anchors and remove existing 364' high radio tower.

Signature: *Jay Kelley*

Signature: *[Handwritten Signature]*

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

Action: Approved Approved w/Conditions Denied

Signature: _____ Date: _____

Permit Taken By: gg	Date Applied For: 02/18/2004	Zoning Approval	
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<p>1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.</p> <p>2. Building permits do not include plumbing, septic or electrical work.</p> <p>3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..</p>	<p>Special Zone or Reviews</p> <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetland <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan <input type="checkbox"/> Major <input type="checkbox"/> Minor <input type="checkbox"/> MM <input type="checkbox"/> Tower <p>Date: <i>2/19/04</i></p>	<p>Zoning Appeal</p> <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied <p>Date: _____</p>	<p>Historic Preservation</p> <input checked="" type="checkbox"/> Not in District or Landmark <input type="checkbox"/> Does Not Require Review <input type="checkbox"/> Requires Review <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied <p>Date: _____</p>
	<p><i>A) not to increase the existing legal NPS conformity height</i></p> <p><i>B) to replace with one year of demolition of existing tower</i></p> <p><i>Set plan exemption approved by planning</i></p>		

CERTIFICATION

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT	ADDRESS	DATE	PHONE
RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE		DATE	PHONE

City of Portland, Maine - Building or Use Permit

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No: 04-0137	Date Applied For: 02/18/2004	CBL: 302 A006001
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Location of Construction: 0 Lane Ave	Owner Name: Saga Communications Of	Owner Address: 420 Western Ave	Phone: 207-774-4561
Business Name: n/a	Contractor Name: CPM Constructors	Contractor Address: 30 Bonney Rd. Freeport	Phone: (207) 865-0000
Lessee/Buyer's Name: n/a	Phone: n/a	Permit Type: Alterations - Commercial	

Proposed Use: Radio Tower / Replacement of 364' high radio tower with six guy anchors and remove existing 364' high radio tower	Proposed Project Description: Erect 364' high radio tower with six guy anchors and remove existing 364' high radio tower.
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Dept: Zoning **Status:** Approved with Conditions **Reviewer:** Marge Schmuckal **Approval Date:** 02/19/2004**Note:** **Ok to Issue:**

- 1) The height is legally nonconforming. You will have one year to replace this tower to the same height or lower.
- 2) The all portions of the old tower shall be removed immediately when the new tower replacement has been completed.
- 3) This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.

Dept: Building **Status:** Approved with Conditions **Reviewer:** Mike Nugent **Approval Date:** 02/20/2004**Note:** **Ok to Issue:**

- 1) Field inspections reports generated by special inspections must be forwarded to this office.

Dept: Fire **Status:** Pending **Reviewer:** Jay Kelley **Approval Date:** 02/20/2004**Note:** **Ok to Issue:**

DEPT. OF CITY PLANNING
FEB 18 2004
RECEIVED

All Purpose Building Permit Application

If you or the property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before permits of any kind are accepted.

Location/Address of Construction: <u>236 LANE AVENUE</u>			<i>roughly the site</i>	
Total Square Footage of Proposed Structure <u>86 FT²</u>		Square Footage of Lot <u>32.35 ACRES ±</u>		
Tax Assessor's Chart, Block & Lot		Owner: <u>SAGA COMMUNICATIONS OF NEW ENGLAND LLC</u>		Telephone: <u>(207) 774-4561</u>
Chart#	Block#	Lot#		
<u>302</u>	<u>A</u>	<u>006</u>	Applicant name, address & telephone: <u>ROBERT ARLEDGE ASSOCIATED DESIGN PARTNERS 80 LEIGHTON ROAD FALMOUTH, ME 04105</u>	
<u>304</u>	<u>B</u>	<u>027</u>	Cost Of Work: <u>\$ 174,250.00</u>	
<u>305</u>	<u>D</u>	<u>003</u>	Fee: <u>\$ 1,568</u>	
Current use: <u>RADIO TOWER</u>		<u>(207) 878-1751</u>		<u>\$ 1596.00</u>
If the location is currently vacant, what was prior use: <u>N/A</u>				
Approximately how long has it been vacant: <u>N/A</u>				
Proposed use: <u>REPLACEMENT RADIO TOWER (SAME HEIGHT)</u>				
Project description: <u>ERECT A 364' HIGH RADIO TOWER WITH SIX GUY ANCHORS AND REMOVE EXISTING 364' HIGH RADIO TOWER</u>				
Contractor's name, address & telephone: <u>CPM CONSTRUCTORS, 30 BONNEY ST. (207) 865-0000, FREEPORT, ME 04032</u>				
Who should we contact when the permit is ready: <u>ROBERT ARLEDGE</u>				
Mailing address: <u>ASSOCIATED DESIGN PARTNERS 80 LEIGHTON ROAD FALMOUTH, MAINE 04105</u>				
We will contact you by phone when the permit is ready. You must come in and pick up the permit and review the requirements before starting any work, with a Plan Reviewer. A stop work order will be issued and a \$100.00 fee if any work starts before the permit is picked up. PHONE: (207) 878-1751 <i>xx call</i>				

IF THE REQUIRED INFORMATION IS NOT INCLUDED IN THE SUBMISSIONS THE PERMIT WILL BE AUTOMATICALLY DENIED AT THE DISCRETION OF THE BUILDING/PLANNING DEPARTMENT, WE MAY REQUIRE ADDITIONAL INFORMATION IN ORDER TO APPROVE THIS PERMIT.

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

Signature of applicant: *Robert Arledge* Date: 17 FEB 2004

This is NOT a permit, you may not commence ANY work until the permit is issued. If you are in a Historic District you may be subject to additional permitting and fees with the Planning Department on the 4th floor of City Hall



CITY OF PORTLAND
BUILDING CODE CERTIFICATE
389 Congress St., Room 315
Portland, Maine 04101

TO: Inspector of Buildings City of Portland, Maine
Department of Planning & Urban Development
Division of Housing & Community Service

FROM DESIGNER: ASSOCIATED DESIGN PARTNERS, INC.
80 LEIGHTON ROAD, FALMOUTH, MAINE

DATE: 17 FEBRUARY 2004

Job Name: WGAN TOWER REPLACEMENT

Address of Construction: 236 LANE AVENUE

THE BOCA NATIONAL BUILDING CODE / 1999 (FOURTEENTH EDITION)

Construction project was designed according to the building code criteria listed below:

Building Code and Year BOCA-99 Use Group Classification(s) UTILITY & MISC

Type of Construction COYED SPACE FRAME Bldg. Height 364 FT Bldg. Sq. Footage 86 FT²

Seismic Hazard Exposure Group I Seismic Performance Category C

Roof Snow Load Per Sq. Ft. N/A Dead Load Per Sq. Ft. N/A

Basic Wind Speed (mph) 90 Effective Velocity Pressure Per Sq. Ft. 21 to 41

Floor Live Load Per Sq. Ft. N/A

Structure has full sprinkler system? Yes No Alarm System? Yes No

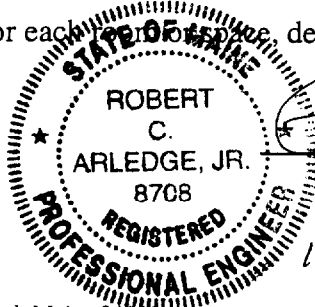
Sprinkler & Alarm systems must be installed according to BOCA and NFPA Standards with approval from the Portland Fire Department.

Is Structure being considered unlimited area building: Yes No

If mixed use, what subsection of 313 is being considered: N/A

List Occupant loading for each type of space designed into this project. N/A

(SEAL)



Robert Arledge
Designers Stamp & Signature

17 FEB 04



CITY OF PORTLAND
BUILDING CODE CERTIFICATE
389 Congress St., Room 315
Portland, Maine 04101

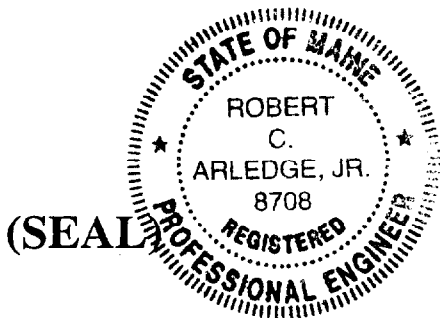
ACCESSIBILITY CERTIFICATE

Designer: ASSOCIATED DESIGN PARTNERS, INC.

Address of Project: 236 LANE AVENUE

Nature of Project: GUYED SPACE FRAME RADIO
TOWER REPLACEMENT

The technical submissions covering the proposed construction work as described above have been designed in compliance with applicable referenced standards found in the Maine Human Rights Law and Federal Americans with Disability Act.



Signature: *Robert C. Arledge, Jr.*

Title: STRUCTURAL ENGINEER

Firm: ASSOCIATED DESIGN PARTNERS

Address: 80 LEIGHTON ROAD

FALMOUTH, MAINE 04105

Phone: (207) 878-1751



CITY OF PORTLAND
BUILDING CODE CERTIFICATE
389 Congress St., Room 315
Portland, Maine 04101

TO: Inspector of Buildings City of Portland, Maine
Department of Planning & Urban Development
Division of Housing & Community Service

FROM: ASSOCIATED DESIGN PARTNERS, INC.

RE: Certificate of Design

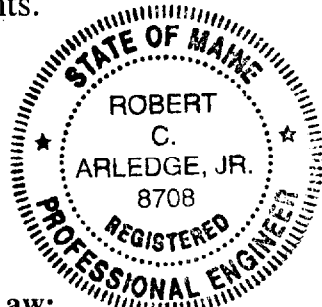
DATE: 17 FEB 2004

These plans and / or specifications covering construction work on:

WGAN TOWER REPLACEMENT

Have been designed and drawn up by the undersigned, a Maine registered Architect / Engineer according to the BOCA National Building Code / 1999 (Fourteenth Edition) and local amendments.

(SEAL)



Signature: Robert C. Arledge, Jr.

Title: STRUCTURAL ENGINEER

Firm: ASSOCIATED DESIGN PARTNERS

Address: 80 LEIGHTON ROAD
FALMOUTH, MAINE 04105

As per Maine State Law:

\$50,000.00 or more in new construction, repair expansion, addition, or modification for Building or Structures, shall be prepared by a registered design Professional.

04014 WGAN Tower Replacement Project

Schedule of Special Inspections

Reports of special inspections to conform to §1705.1.2 of BOCA 1999

Tower Fabrication (To be performed by W. Gray Hodge, Maine P.E.)

- Review quality control procedures
- Review fabrication control procedures
- Confirm that fabrication conforms to approved drawings, project specifications, BOCA-99 and ANSI/TIA/EIA-222-F
- Verify that welds conform to AWS D1.1-98

Anchor Rod Fabrication (To be performed by Robert Arledge, Maine P.E.)

- Review quality control procedures
- Review fabrication control procedures
- Confirm that fabrication conforms to approved drawings, project specifications, BOCA-99 and ANSI/TIA/EIA-222-F

Tower and Anchor Foundations (To be performed by Robert Arledge, Maine P.E.)

- Verify that reinforcing steel is the grade and configuration as shown on the drawings
- Verify that the excavations to earth-form the anchors are the proper depth and dimensions
- Verify that embedments are set properly
- Review concrete mix design and delivery invoice
- Provide for quality testing of concrete delivered on site

Tower Erection (To be performed by Robert Arledge, Maine P.E.)

- Verify that the tower components were not damaged in transit
- Verify that the tower is erected in conformance with ANSI/TIA/EIA-222-F

Pile Driving (To be performed by Tim Boyce, Maine P.E.)

- Verify pile spacing and location
- Verify pile size and material are in accordance with construction documents
- Supervise driving of the piles and cut-off elevation
- Verify that piles have been installed per BOCA-99, §1816 et. Seq.

PILE SET CRITERIA
WGAN TOWER FOUNDATION
LANE AVE
PORTLAND, ME
FEBRUARY 19, 2004

H.B. FLEMING
Contracting • Engineering
SO. PORTLAND, MAINE

ENGINEERING NEWS RECORD FORMULA

HAMMER 2,300 LB drop HAMMER

$$P = 2WH / (S + 0.1)$$

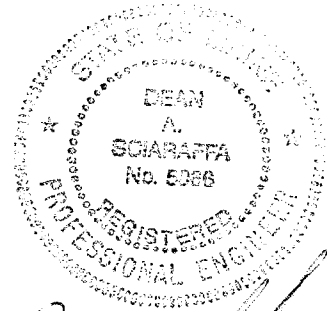
P = 40^{TON} / 80,000^{LB} pile capacity

W = 2,300^{LB} RAM WEIGHT

H = 6 foot STROKE

S = SET CRITERIA (inches/blow)

$$S = \frac{2(2,300)6}{80,000} - 0.1 = .245 \text{ inches/blow} \text{ or } 4.08 \text{ blows/inch}$$



A handwritten signature in black ink, appearing to read "Dean A. Sciarappa".

2/19/04

- USE 5 blows/inch for 6 consecutive inches with a 6 foot hammer stroke or 6 blows for any 1/2" of movement or 2 blows with no movement.



DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND AND WATER QUALITY

FIELD DETERMINATION ID 2443

Field Determination Form

CONTACT

ROBERT ARLEDGE

80 LEIGHTON ROAD

FALMOUTH ME 04105

TELEPHONE

PROPERTY OWNER

PORTLAND RADIO GROUP

ME

STAFF GALLANT II, FRED

RESOURCE FW

DIRECTIONS

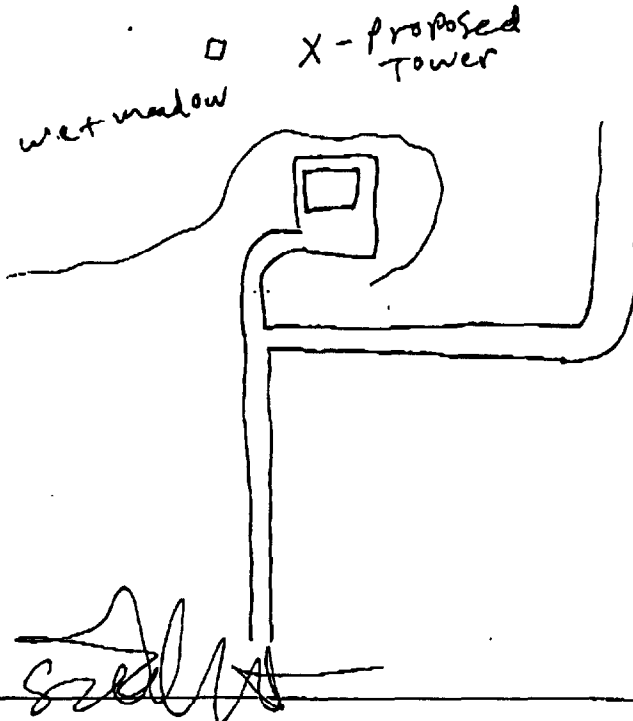
Forrest avenue west from interstate. Past
Riverside School take a left onto Lane
Avenue. Proceed to end.

TOWN PORTLAND

MAP 302 LOT 6

MEMO

Erosion control devices must be installed and maintained on the project site during any soil disturbance activity. This property contains wet meadow and scrub-shrub wetland. The proposal to construct a new radio tower on the property would not trigger the need for a permit from the Department if less than 4,300 square feet of wetland is altered during construction of the new tower.



Name: _____

RECEIVED 2/11/2004

SITE VISIT 2/11/2004

COMPLETED 2/11/2004

04014 WGAN Tower Replacement Project

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Reports of special inspections to conform to §1705.1.2 of BOCA 1999

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S.W. COLE
ENGINEERING, INC.

• Geotechnical Engineering • Field & Lab Testing • Scientific & Environmental Consulting

04-0059

February 13, 2004

Associated Design Partners
Attn: Bob Arledge, P.E.
80 Leighton Road
Falmouth, Maine 04105

Subject: Preliminary Geotechnical Recommendations
WGAN Guyed Tower
Lane Avenue
Portland, Maine

Dear Bob,

As requested, this letter is provided in advance of our geotechnical report in order to assist the project schedule. The purpose of our work was to provide geotechnical recommendations relative to foundations associated with the proposed guyed tower. The contents of this letter are subject to the limitations set forth in Attachment A.

SUBSURFACE FINDINGS

At this time, we have completed a subsurface investigation of the tower site and soils laboratory testing is nearing completion. Our subsurface investigation included the making of seven test boring locations at the approximate locations shown on the plan attached as Sheet 1. Logs of the explorations are attached as Sheets 2 through 9. A log of a rock core sample obtained at B-4 is attached as Sheet 10. A key to the notes and symbols on the logs is attached as Sheet 11.

PRELIMINARY EVALUATION AND RECOMMENDATIONS

Based on our understanding of the project and the subsurface findings, we recommend the tower base be founded on HP8x36 driven 50 ksi steel H-piles with an allowable axial capacity of 80 kips or less. The H-pile should be fitted with cast steel driving tips and driven to practical refusal on sound bedrock. Based on the subsurface findings, we recommend the reinforced concrete guy anchors be designed considering a net allowable soil bearing pressure of 1.0 ksf or less with a base friction factor of 0.3. For guy anchors cast against undisturbed native stiff to very stiff brown silty clay (earth

GRAY, ME OFFICE

286 Portland Road, Gray, ME 04039-9586 ■ Tel (207) 657-2866 ■ Fax (207) 657-2840 ■ E-Mail infogray@swcole.com ■ www.swcole.com

Other offices in Augusta, Bangor, and Caribou, Maine & Somersworth, New Hampshire



04-0059
February 13, 2004

formed), we recommend a passive earth pressure coefficient of 1.0 and a buoyant unit weight of soil of 58 pcf with a design water level at foot above existing ground. As discussed, we recommend the base of the concrete guy anchors be cast 5 feet below existing grade with a one-foot deep base key to increase passive resistance extending below the base of the guy anchor. S.W.COLE ENGINEERING, INC. must observe the guy anchor subgrade and perform hand vane shear tests to a depth of at least 5 feet below the subgrade prior to placing foundation concrete.

For frost protection, we recommend the concrete guy anchors and tower base be cast at least 5 feet below exterior grades. We recommend that a horizontal layer of 2-inch thick extruded polystyrene foundation insulation be installed over the guy anchor and tower base foundations to provide additional frost protection. The foundation insulation should be covered with at least 2 feet of clay fill soils with the surface sloped to promote surface drainage away from the guy anchors and tower base.

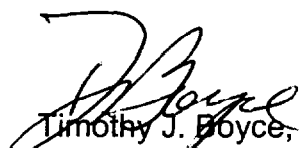
Based on preliminary laboratory results, we estimate the guy anchors may experience 1 to 2 inches of post-construction settlement if founded on properly prepared subgrades. As discussed, we recommend that guy anchors be surveyed on an annual basis to assess post-construction settlement and the need to adjust the guy wires. During the first year, the guy anchors should be monitored quarterly for settlement.

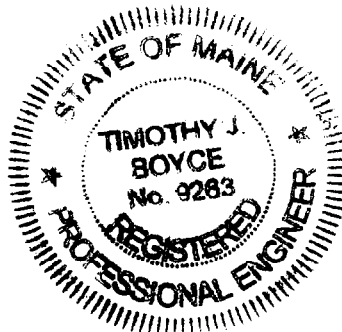
CLOSURE

We trust this letter meets your current needs. We anticipate completion of our geotechnical report following completion of our laboratory testing during the week of February 23, 2004. Please call if you have any question or require additional assistance.

Sincerely,

S.W.COLE ENGINEERING, INC.


Timothy J. Boyce, P.E.
Senior Geotechnical Engineer



Enc(11)

Attachment A

Limitations

This report has been prepared for the exclusive use of Associated Design Partners for specific application to the Proposed WGAN Guyed Tower on Lane Avenue in Portland, Maine as described herein. S.W.COLE ENGINEERING, INC. has endeavored to conduct the work in accordance with generally accepted soil and foundation engineering practices. No other warranty, expressed or implied, is made.

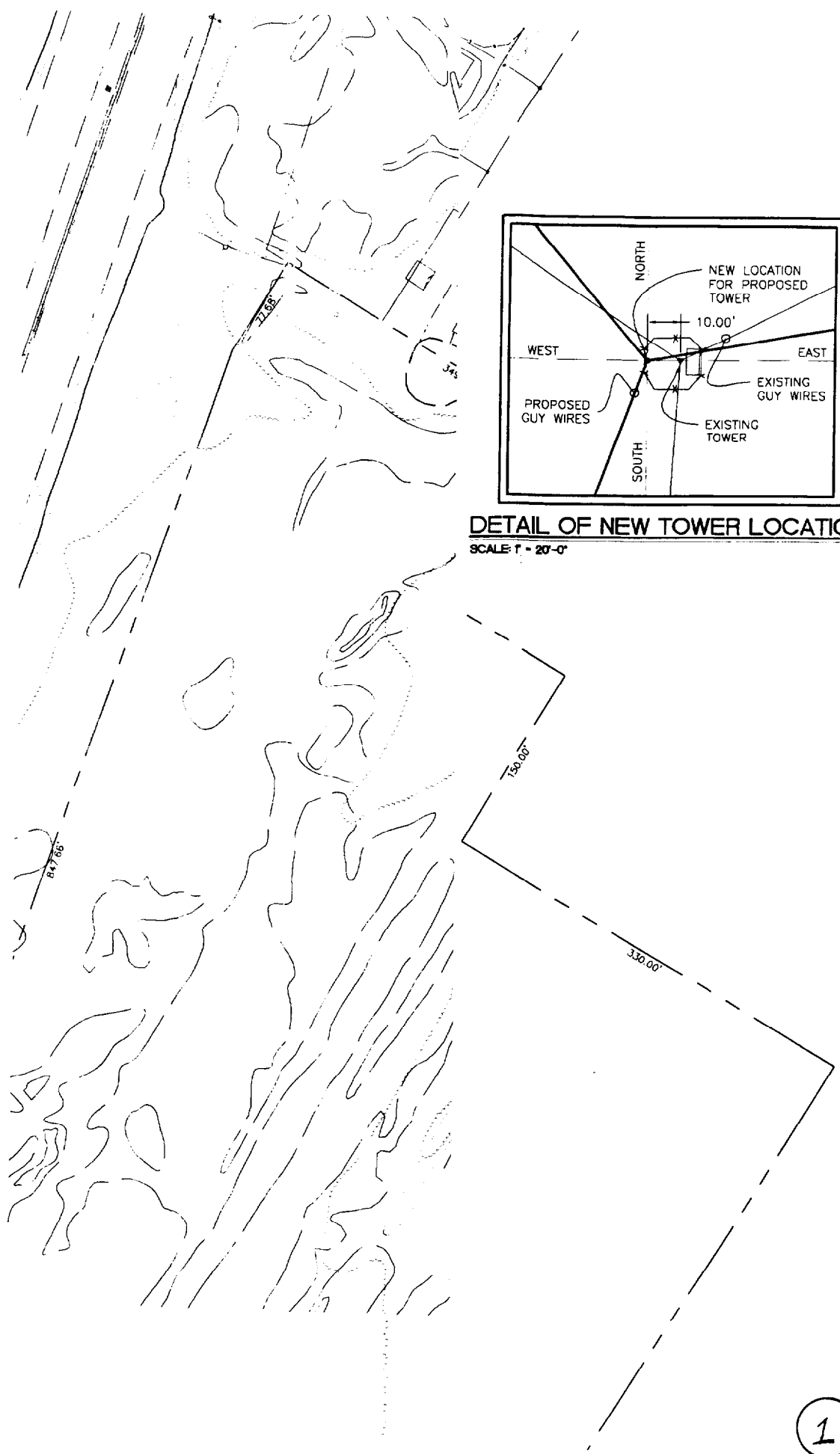
The soil profiles described in the report are intended to convey general trends in subsurface conditions. The boundaries between strata are approximate and are based upon interpretation of exploration data and samples.

Observations have been made during exploration work to assess site groundwater levels. Fluctuations in water levels will occur due to variations in rainfall, temperature, and other factors.

The analyses performed during this investigation and recommendations presented in this report are based in part upon the data obtained from subsurface explorations made at the site. Variations in subsurface conditions may occur between explorations and may not become evident until construction. If variations in subsurface conditions become evident after submission of this report, it will be necessary to evaluate their nature and to review the recommendations of this report.

S.W.COLE ENGINEERING, INC.'s scope of work has not included the investigation, detection, or prevention of any Biological Pollutants at the project site or in any existing or proposed structure at the site. The term "Biological Pollutants" includes, but is not limited to, molds, fungi, spores, bacteria, and viruses, and the byproducts of any such biological organisms.

Recommendations contained in this report are based substantially upon information provided by others regarding the proposed project. In the event that any changes are made in the design, nature, or location of the proposed project, S.W.COLE ENGINEERING, INC. should review such changes as they relate to analyses associated with this report. Recommendations contained in this report shall not be considered valid unless the changes are reviewed by S.W.COLE ENGINEERING, INC.



DETAIL OF NEW TOWER LOCATION
 SCALE: 1" = 20'-0"

ASSOCIATED DESIGN PARTNERS INC.
 Office: (207) 878-1751
 80 Leighton Road Falmouth, Maine 04105 Fax: (207) 878-1788
 E-Mail: adp@cdperengineering.com

THIS DRAWING, DESIGN AND ELECTRONIC FILE ARE THE PROPERTY OF ASSOCIATED DESIGN PARTNERS INC. THE REPRODUCTION, COPYING OR IN ANY OTHER USE OF THIS DOCUMENT WITHOUT WRITTEN CONSENT IS PROHIBITED.

PROJECT: **WGAN TOWER REPLACEMENT**
LANE AVENUE, PORTLAND
 FOR: PORTLAND RADIO GROUP

SHEET TITLE:
PARTIAL PLAN OF PROPERTY AND
PROPOSED LOCATION OF NEW TOWER AND ANCHORS

NO	BY	REVISIONS DESCRIPTION	DATE
1			
2			
3			

DATE : 02-09-04
 SCALE : AS NOTED
 DESIGN BY: B. ARLEDGE
 DRAWN BY: A. BENNETT
 FILE #: 04014-06-PR-C100
 PROJECT NUMBER:
04014
 SHEET NO:
C100

1



BORING LOG

BORING NO.: **B-1**
 SHEET: 1 OF 1
 PROJECT NO.: 04-0059
 DATE START: 1/29/04
 DATE FINISH: 1/29/04
 ELEVATION: NO SURVEY
 SWC REP.: KBG

PROJECT / CLIENT: PORTLAND RADIO GROUP TOWER / ASSOCIATED DESIGN PARTNERS
 LOCATION: 236 LANE AVENUE, PORTLAND, MAINE
 DRILLING CO.: GREAT WORKS TEST BORING, INC. DRILLER: PETE MICHAUD

CASING: TYPE NW SIZE I.D. 4" HAMMER WT. 140lb HAMMER FALL 30"
 SAMPLER: SS SIZE I.D. 1 3/8" HAMMER WT. 140lb HAMMER FALL 30"
 CORE BARREL: _____

WATER LEVEL INFORMATION
 SOILS SATURATED AT 8' +/-

CASING BLOWS PER FOOT	SAMPLE				SAMPLER BLOWS PER 6"				DEPTH	STRATA & TEST DATA	
	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24			
CASING									.5'	BROWN CLAYEY TOPSOIL WITH ORGANICS	
↓	1D	24"	24"	4.0'	3	6	5	6		MOTTLED BROWN SILTY CLAY WITH SAND SEAMS DESICCATED -VERY STIFF- q _p = 4 - 5 ksf	
OPEN HOLE	2D	24"	22"	7.0'	3	7	7	8		q _p = 5 - 7 ksf	
↓	3D	24"	24"	9.0'	9	11	9	9	9.5'	-STIFF- q _p = 3 - 5 ksf	
	4D	24"	24"	12.0'	WOH/24"						GRAY SILTY CLAY WITH SAND SEAMS -MEDIUM- q _p < .5 ksf
				3.5" x 7" VANE	13.8'					S _v = .54 / .08 ksf	
				3.5" x 7" VANE	14.6'					S _v = .78 / .08 ksf	
	5D	24"	24"	17.0'	WOR/18"		WOH				
	6D	20"	20"	21.3'	1	2	35/4"		20.2'		
									21.0'	-LOOSE- GRAY SILTY SAND AND CLAY	
									23.0'	WEATHERED ROCK [ADVANCED BORING WITH ROLLER CONE]	
										REFUSAL AT 23.0' PROBABLE BEDROCK	

SAMPLES: SOIL CLASSIFIED BY:
 D = SPLIT SPOON DRILLER - VISUALLY
 C = 3" SHELBY TUBE SOIL TECH. - VISUALLY
 U = 3.5" SHELBY TUBE LABORATORY TEST

REMARKS: 2- FEET OF FROST PRESENT DURING EXPLORATION WORK
 STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL.
 BORING NO.: **B-1**



BORING LOG

BORING NO.: **B-2**
 SHEET: 1 OF 2
 PROJECT NO.: 04-0059
 DATE START: 1/29/04
 DATE FINISH: 1/29/04
 ELEVATION: NO SURVEY
 SWC REP.: KBG

PROJECT / CLIENT: PORTLAND RADIO GROUP TOWER / ASSOCIATED DESIGN PARTNERS
 LOCATION: 236 LANE AVENUE, PORTLAND, MAINE
 DRILLING CO.: GREAT WORKS TEST BORING, INC. DRILLER: PETE MICHAUD

CASING: TYPE NW SIZE I.D. 4" HAMMER WT. 140lb HAMMER FALL 30"
 SAMPLER: SS 1 3/8" 140lb 30"
 CORE BARREL: _____

WATER LEVEL INFORMATION
 SOILS SATURATED AT 8' +/-

CASING BLOWS PER FOOT	SAMPLE				SAMPLER BLOWS PER 6"				DEPTH	STRATA & TEST DATA
	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24		
CASING									.5'	BROWN CLAYEY TOPSOIL WITH ORGANICS
↓	1D	24"	24"	5.0'	3	6	6	5		MOTTLED BROWN SILTY CLAY WITH SAND SEAMS DESICCATED
OPEN HOLE	2D	24"	20"	7.0'	1	3	3	5		~STIFF TO VERY STIFF~
↓	3D	24"	22"	9.0'	5	6	7	7	8.9'	$q_p = 3 - 4 \text{ ksf}$
				3.5" x 7" VANE	10.8'					$S_v = 1.09 / .16 \text{ ksf}$
				3.5" x 7" VANE	11.6'					$S_v = .22 / .12 \text{ ksf}$
	1C	24"	24"	15.0'						GRAY SILTY CLAY WITH BLACK STAINING AND SHELLS
				3.5" x 7" VANE	15.8'					$S_v = .41 / .01 \text{ ksf}$
				3.5" x 7" VANE	16.6'					$S_v = .38 / .03 \text{ ksf}$
				3.5" x 7" VANE	20.8'					$S_v = .55 / 0 \text{ ksf}$
				3.5" x 7" VANE	21.6'					$S_v = .60 / 0 \text{ ksf}$
	4D	24"	24"	27.0'						WOR / 24"
	5D	24"	24"	32.0'						WOR / 24"
	2C	24"	24"	36.0'						
	6D	24"	24"	38.0'						WOR / 24"

SAMPLES: D = SPLIT SPOON
 C = 3" SHELBY TUBE
 U = 3.5" SHELBY TUBE

SOIL CLASSIFIED BY: DRILLER - VISUALLY
 SOIL TECH. - VISUALLY
 LABORATORY TEST

REMARKS: 2- FEET OF FROST PRESENT DURING EXPLORATION WORK

STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL.



BORING LOG

BORING NO.: **B-3**
 SHEET: 1 OF 1
 PROJECT NO.: 04-0059
 DATE START: 1/29/04
 DATE FINISH: 1/29/04
 ELEVATION: NO SURVEY
 SWC REP.: KBG

PROJECT / CLIENT: PORTLAND RADIO GROUP TOWER / ASSOCIATED DESIGN PARTNERS
 LOCATION: 236 LANE AVENUE, PORTLAND, MAINE
 DRILLING CO.: GREAT WORKS TEST BORING, INC. DRILLER: PETE MICHAUD

WATER LEVEL INFORMATION
 SOILS SATURATED AT 8' +/-

CASING: TYPE NW SIZE I.D. 4" HAMMER WT. 140lb HAMMER FALL 30"
 SAMPLER: SS 1 3/8" 140lb 30"
 CORE BARREL: _____

CASING BLOWS PER FOOT	SAMPLE				SAMPLER BLOWS PER 6"				DEPTH	STRATA & TEST DATA	
	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24			
									.5'	BROWN CLAYEY TOPSOIL WITH ORGANICS	
↓	1D	24"	24"	4.0'	4	4	6	8		MOTTLED BROWN SILTY CLAY WITH SAND SEAMS DESICCATED q _p = 5 ksf	
	OPEN HOLE										
	2D	24"	24"	7.0'	5	8	9	9		~VERY STIFF~ q _p = 6 - 7 ksf	
↓	3D	24"	24"	9.0'	10	11	11	9		q _p = 4 - 4.5 ksf	
									11.0'	~MEDIUM~ q _p = .5 ksf	
	4D	24"	24"	12.0'	WOH / 24"						GRAY SILTY CLAY WITH SAND SEAMS q _p < .5 ksf
				2" x 3.5" VANE	13.5'					S _v = .28 / .06 ksf	
				2" x 3.5" VANE	14.0'					S _v = .28 / .06 ksf	
									15.0'	~SOFT~	
	5D	24"	24"	17.0'	1	1	1 / 12"			GRAY SILTY SAND AND CLAY ~LOOSE~	
									22.5'		
									23.0'	WEATHERED ROCK REFUSAL AT 23.0' PROBABLE BEDROCK	

SAMPLES: SOIL CLASSIFIED BY: REMARKS: 2- FEET OF FROST PRESENT DURING EXPLORATION WORK

D = SPLIT SPOON
 C = 3" SHELBY TUBE
 U = 3.5" SHELBY TUBE

DRILLER - VISUALLY
 SOIL TECH. - VISUALLY
 LABORATORY TEST

STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL.

5

BORING NO.: **B-3**



BORING LOG

BORING NO.: **B-4**
 SHEET: **1 OF 1**
 PROJECT NO.: **04-0059**
 DATE START: **1/29/04**
 DATE FINISH: **1/29/04**
 ELEVATION: **NO SURVEY**
 SWC REP.: **KBG**

PROJECT / CLIENT: PORTLAND RADIO GROUP TOWER / ASSOCIATED DESIGN PARTNERS
 LOCATION: 236 LANE AVENUE, PORTLAND, MAINE
 DRILLING CO.: GREAT WORKS TEST BORING, INC. DRILLER: PETE MICHAUD

	TYPE	SIZE I.D.	HAMMER WT.	HAMMER FALL
CASING:	NW	4"		
SAMPLER:	SS	1 3/8"	140lb	30"
CORE BARREL:	N	2"		

WATER LEVEL INFORMATION
 SOILS SATURATED AT 8' +/-

CASING BLOWS PER FOOT	SAMPLE				SAMPLER BLOWS PER 6"				DEPTH	STRATA & TEST DATA
	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24		
CASING									.5'	3/4-INCH CRUSHED STONE (FILL)
									1.0'	BROWN FINE SAND TRACE SILT (FILL)
	1D	24"	23"	4.0'	2	5	6	7		MOTTLED BROWN SILTY CLAY WITH SAND SEAMS DESICCATED -STIFF- q _p = 3 - 5 ksf
OPEN HOLE	2D	24"	24"	7.0'	3	3	3	4		q _p = 2.5 - 3 ksf
	3D	24"	24"	9.0'	5	5	9	6		q _p = 3 ksf
	4D	24"	24"	12.0'	1	1	1	1	10.8'	-MEDIUM- q _p = 1 ksf
	1C	24"	24"	15.0'						GRAY SILTY CLAY WITH SAND SEAMS -SOFT- S _v = .31 / .06 ksf S _v = .28 / .06ksf S _v = .25 / .03 ksf S _v = .19 / .03 ksf
	2" x 3.5" VANE			15.5'						
	2" x 3.5" VANE			16.0'						
	2" x 3.5" VANE			20.5'						
	2" x 3.5" VANE			21.0'					24.0'	
	5D	24"	20"	27.0'	1 / 12"		1 / 12"			GRAY SILTY SAND AND CLAY -LOOSE-
									27.5'	
									28.5'	WEATHERED ROCK
										BEDROCK [SEE SHEET 10 FOR ROCK CORE LOG]
	1R	60"	60"	33.5'					33.5'	
										BOTTOM OF EXPLORATION AT 33.5'

SAMPLES: SOIL CLASSIFIED BY:
 D = SPLIT SPOON
 C = 3" SHELBY TUBE
 U = 3.5" SHELBY TUBE

DRILLER - VISUALLY
 SOIL TECH. - VISUALLY
 LABORATORY TEST

REMARKS: 2- FEET OF FROST PRESENT DURING EXPLORATION WORK

STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL.

6



BORING LOG

BORING NO.: **B-5**
 SHEET: **1 OF 1**
 PROJECT NO.: **04-0059**
 DATE START: **1/29/04**
 DATE FINISH: **1/29/04**
 ELEVATION: **NO SURVEY**
 SWC REP.: **KBG**

PROJECT / CLIENT: PORTLAND RADIO GROUP TOWER / ASSOCIATED DESIGN PARTNERS
 LOCATION: 236 LANE AVENUE, PORTLAND, MAINE
 DRILLING CO.: GREAT WORKS TEST BORING, INC. DRILLER: PETE MICHAUD

CASING: _____
 SAMPLER: SS 1 3/8" 140lb 30"
 CORE BARREL: _____

WATER LEVEL INFORMATION
 SOILS SATURATED AT 8' +/-

CASING BLOWS PER FOOT	SAMPLE				SAMPLER BLOWS PER 6"				DEPTH	STRATA & TEST DATA	
	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24			
SSA									5'	BROWN CLAYEY TOPSOIL WITH ORGANICS	
	1D	24"	24"	4.0'	2	4	6	6		MOTTLED BROWN SILTY CLAY WITH SAND SEAMS DESICCATED q _p = 4 - 5 ksf	
	2D	24"	22"	7.0'	3	5	7	7		-VERY STIFF- q _p = 5 - 6ksf	
	3D	24"	24"	9.0'	7	6	6	6	9.0'	-STIFF TO MEDIUM- q _p = 1.5 - 3 ksf	
	4D	24"	24"	12.0'	WOH / 24"						GRAY SILTY CLAY WITH SAND SEAMS WITH BLACK STAINING AND SHELLS q _p < .5 ksf
	2" x 3.5" VANE			12.5'						S _v = .37 / .03 ksf	
	2" x 3.5" VANE			13.0'						S _v = .34 / .03ksf	
ROD PROBE										ROD PROBE: HYD PUSH TO 31' 31' - 32' 7 32' - 33' 5 33' - 34' 6 34' - 35' 6 35' - 36' 7 36' - 37' 11 37' - 38' 26	
									38.0'	REFUSAL AT 38.0' PROBABLE BEDROCK	

SAMPLES: _____ SOIL CLASSIFIED BY: _____
 D = SPLIT SPOON DRILLER - VISUALLY
 C = 3" SHELBY TUBE SOIL TECH. - VISUALLY
 U = 3.5" SHELBY TUBE LABORATORY TEST

REMARKS: **2- FEET OF FROST PRESENT DURING EXPLORATION WORK**
 STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL.
 BORING NO.: **B-5**



BORING LOG

BORING NO.: B-6
 SHEET: 1 OF 1
 PROJECT NO.: 04-0059
 DATE START: 1/29/04
 DATE FINISH: 1/29/04
 ELEVATION: NO SURVEY
 SWC REP.: KBG

PROJECT / CLIENT: PORTLAND RADIO GROUP TOWER / ASSOCIATED DESIGN PARTNERS
 LOCATION: 236 LANE AVENUE, PORTLAND, MAINE
 DRILLING CO.: GREAT WORKS TEST BORING, INC. DRILLER: PETE MICHAUD

CASING: _____
 SAMPLER: SS 1 3/8" 140lb 30"
 CORE BARREL: _____

WATER LEVEL INFORMATION
 SOILS SATURATED AT 8' +/-

CASING BLOWS PER FOOT	SAMPLE				SAMPLER BLOWS PER 6"				DEPTH	STRATA & TEST DATA
	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24		
SSA									.5'	BROWN CLAYEY TOPSOIL WITH ORGANICS
↓	1D	24"	24"	4.0'	3	5	5	5		MOTTLED BROWN SILTY CLAY WITH SAND SEAMS DESICCATED $q_p = 4 - 6$ ksf
	2D	24"	24"	7.0'	3	4	4	6		-VERY STIFF- $q_p = 4.5 - 6.5$ ksf
	3D	24"	24"	9.0'	4	5	8	8		-STIFF- $q_p = 2.5 - 3.5$ ksf
	4D	24"	24"	12.0'	1	1	1	1	10.8'	GRAY SILTY CLAY WITH SAND SEAMS $q_p < .5$ ksf
	2" x 3.5" VANE									$S_v = .53 / .16$ ksf
	2" x 3.5" VANE									$S_v = .56 / .22$ ksf
ROD										ROD PROBE:
PROBE										HYD PUSH TO 22'
↓										22' - 23' 11
										23' - 24' 7
										24' - 25' 8
									25.5'	REFUSAL AT 25.5' PROBABLE BEDROCK

SAMPLES: _____ SOIL CLASSIFIED BY: _____
 D = SPLIT SPOON
 C = 3" SHELBY TUBE
 U = 3.5" SHELBY TUBE

DRILLER - VISUALLY
 SOIL TECH. - VISUALLY
 LABORATORY TEST

REMARKS: 2-FEET OF FROST PRESENT DURING EXPLORATION WORK

STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL.

8

BORING NO.: B-6



BORING LOG

BORING NO.: **B-7**
 SHEET: 1 OF 1
 PROJECT NO.: 04-0059
 DATE START: 1/29/04
 DATE FINISH: 1/29/04
 ELEVATION: NO SURVEY
 SWC REP.: KBG

PROJECT / CLIENT: PORTLAND RADIO GROUP TOWER / ASSOCIATED DESIGN PARTNERS
 LOCATION: 236 LANE AVENUE, PORTLAND, MAINE
 DRILLING CO.: GREAT WORKS TEST BORING, INC. DRILLER: PETE MICHAUD

WATER LEVEL INFORMATION
 SOILS SATURATED AT 8' +/-

CASING: _____
 SAMPLER: SS 1 3/8" 140lb 30"
 CORE BARREL: _____




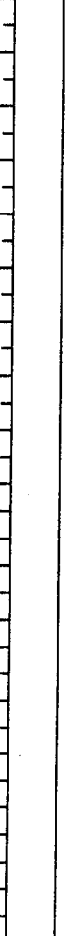
CASING BLOWS PER FOOT	SAMPLE				SAMPLER BLOWS PER 6"				DEPTH	STRATA & TEST DATA
	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24		
SSA									.5'	BROWN CLAYEY TOPSOIL WITH ORGANICS
↓	1D	24"	24"	4.0'	3	5	6	7		MOTTLED BROWN SILTY CLAY WITH SAND SEAMS DESICCATED ~VERY STIFF~ ~STIFF TO MEDIUM~
	2D	24"	24"	7.0'	5	7	6	6		$q_p = 4.5 - 5.5 \text{ ksf}$ $q_p = 5 - 6 \text{ ksf}$
	3D	24"	24"	11.0'	3	2	2	2		$q_p = 3 - .5 \text{ ksf}$
	2" x 3.5" VANE			12.0'					12.0'	$S_v = .78 / 22 \text{ ksf}$
ROD PROBE										ROD PROBE: PROBABLE GRAY SILTY CLAY
↓										HYD PUSH TO 13'
										13' - 14' 2 19' - 20' 20
										14' - 15' 2 20' - 21' 6
										15' - 16' 2 21' - 22' 6
										16' - 17' 3 22' - 23' 7
										17' - 18' 3
										18' - 19' 3
									23.2'	REFUSAL AT 23.2' PROBABLE BEDROCK

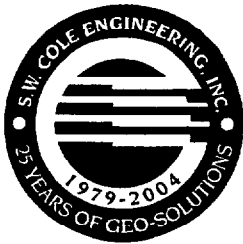
SAMPLES: _____ SOIL CLASSIFIED BY: _____
 D = SPLIT SPOON DRILLER - VISUALLY
 C = 3" SHELBY TUBE SOIL TECH. - VISUALLY
 U = 3.5" SHELBY TUBE LABORATORY TEST

REMARKS: 2-FEET OF FROST PRESENT DURING EXPLORATION WORK
 STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL.
 BORING NO.: **B-7**

PROJECT NAME / LOCATION: PORTLAND RADIO GROUP TOWER / LANE STREET PORTLAND, MAINE

 LOGGED BY KBG DATE 1/30/04
 CHECKED BY GWB DATE 1/30/04

DEPTH BELOW SURFACE (ft)	CORE RUN	CORE INTERVAL (in)	CORE RECOVERY (in)	RQD%	ROCK QUALITY	GRAPHIC LOG	ROCK DESCRIPTION AND IDENTIFICATION
28.5' 	1R	60	60	43 / 60 72%	FAIR		INTERBEDDED SANDSTONE AND LIMESTONE LIGHT GRAYISH BLACK SLIGHTLY WEATHERED MODERATELY HARD FRACTURE ANGLES 0 - 10° FROM HORIZONTAL
33.5' 							BOTTOM OF EXPLORATION AT 33.5'



KEY TO THE NOTES & SYMBOLS

Test Boring and Test Pit Explorations

All stratification lines represent the approximate boundary between soil types and the transition may be gradual.

Key to Symbols Used:

w	-	water content, percent (dry weight basis)
q _u	-	unconfined compressive strength, kips/sq. ft. - based on laboratory unconfined compressive test
S _v	-	field vane shear strength, kips/sq. ft.
L _v	-	lab vane shear strength, kips/sq. ft.
q _p	-	unconfined compressive strength, kips/sq. ft. based on pocket penetrometer test
O	-	organic content, percent (dry weight basis)
W _L	-	liquid limit - Atterberg test
W _P	-	plastic limit - Atterberg test
WOH	-	advance by weight of hammer
WOM	-	advance by weight of man
WOR	-	advance by weight of rods
HYD	-	advance by force of hydraulic piston on drill
RQD	-	Rock Quality Designator - an index of the quality of a rock mass. RQD is computed from recovered core samples.
γ _T	-	total soil weight
γ _B	-	buoyant soil weight
HSA	-	Hollow Stem Auger
HW	-	4" Casing
NW	-	3" Casing
SS	-	split-spoon sampler

Description of Proportions:

0 to 5% TRACE

5 to 12% SOME

12 to 35% "Y"

35+% AND

REFUSAL: Test Boring Explorations - Refusal depth indicates that depth at which, in the drill foreman's opinion, sufficient resistance to the advance of the casing, auger, probe rod or sampler was encountered to render further advance impossible or impracticable by the procedures and equipment being used.

REFUSAL: Test Pit Explorations - Refusal depth indicates that depth at which sufficient resistance to the advance of the backhoe bucket was encountered to render further advance impossible or impracticable by the procedures and equipment being used.

Although refusal may indicate the encountering of the bedrock surface, it may indicate the striking of large cobbles, boulders, very dense or cemented soil, or other buried natural or man-made objects or it may indicate the encountering of a harder zone after penetrating a considerable depth through a weathered or disintegrated zone of the bedrock.

PH# (812) 853-0595
 FAX# (812) 853-6652
 2895 HIGHWAY 281
 NEWBURGH, NY 17530

CENTRAL TOWER
 ELECTRICAL COMPANY

ELEVATION VIEW & FEEDLINE ARRANGEMENT
 PORTLAND, ME. (WGAN)

DWG NO. G2043T-1
 REV 0

DO NOT SCALE DRAWING

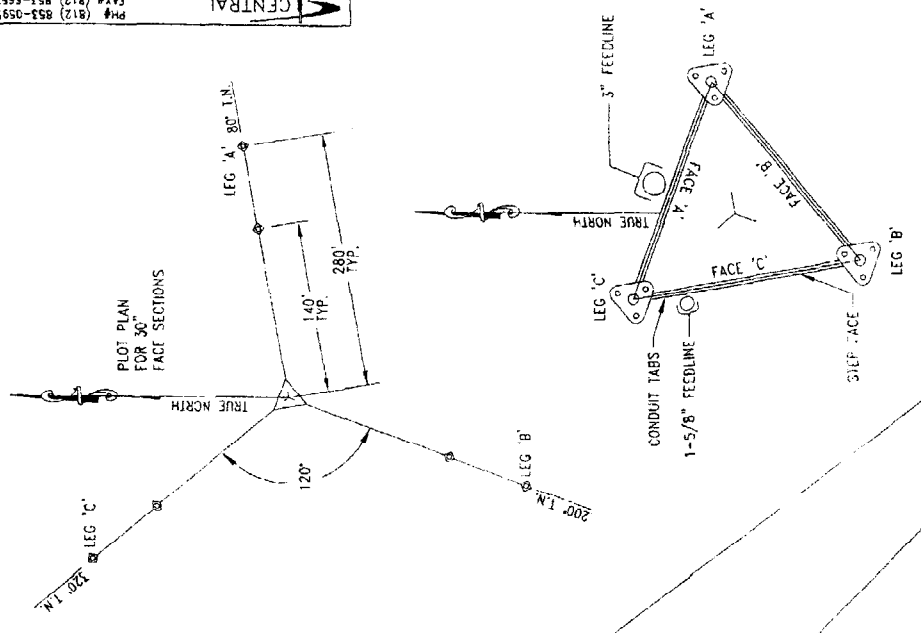
DATE	DESCRIPTION	DATE	APP.	DATE	DATE
7-10-04					

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES

TOLERANCES: X.XX ± 1/16" BURNED HOLES #1/16" X.X ± 3/32" DRILLED HOLES #1/32" X ± .002 ANGLES ± .005

THIS DRAWING IS THE PROPERTY OF THE COMPANY. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFIC TO WHICH IT IS ISSUED. IT IS TO BE KEPT IN CONFIDENTIAL COMPANY RECORDS.

W. GRAY
 REGISTERED PROFESSIONAL ENGINEER
 STATE OF MAINE
 8632



364' A.G.L. (358' STEEL HEIGHT)

SECTION #	CONFIGURATION	LIGHTING	PAINT: BAND WIDTH (S1.14)
1		A-2/3 RED LIGHTS	ORANGE
2			ORANGE
3			WHITE
4			ORANGE
5			WHITE
6			ORANGE
7			WHITE
8			ORANGE
9			WHITE
10			ORANGE
11			WHITE
12			ORANGE
13			WHITE
14			ORANGE
15			WHITE
16			ORANGE
17			WHITE
18			ORANGE

325' 246' 186' 98'

3/8" E.H.S. (6.08 kips) 7/16" E.H.S. (9.55 kips) 1/2" E.H.S. (12.42 kips) 5/8" E.H.S. (19.91 kips)

6" TOP OF INSULATOR

3' 140' 280'

1.00 kips 78.00 kips 10.00 kips 22.00 kips

BASE REACTIONS ANCHOR REACTIONS ANCHOR REACTIONS

DETAILED INFORMATION CHART

GUY CHART

GUY ELEVATION	GUY SIZE	PREFORM SIZE	ROCKET SOCKET	T-BUCKLE SIZE	OPEN BRIDGE STRAND SOCKET	THIMBLE SIZE	SHACKLE SIZE	POURED SOCKET SIZE	GUY EAR PLATE	GUY EAR HOLE #	GUY EAR WELD SIZE	CUT WIRE LENGTHS			GUY WIRE TOTAL FT	INITIAL TENSION, (LBS.)		
												LEG "A"	LEG "B"	LEG "C"		30' F	60' F	90' F
86'	3/8 E.H.S.	3/8 E.H.S.	N/A	3/4	N/A	1/2	N/A	N/A	5-9-075-21KB (5 X 9 X 3/4)	7/8	3/8	195'	195'	195'	585'	1770	1540	1310
166'	7/16 E.H.S.	7/16 E.H.S.	N/A	3/4	N/A	1/2	N/A	N/A	5-9-075-30KB (5 X 9 X 3/4)	7/8	3/8	250'	250'	250'	750'	2270	2080	1890
246'	1/2 E.H.S.	1/2 E.H.S.	N/A	7/8	N/A	5/8	N/A	N/A	5-9-075-42KN (5 X 9 X 3/4)	1-3/8	3/8	405'	405'	405'	1215'	3015	2690	2365
325'	5/8 E.H.S.	5/8 E.H.S.	N/A	1	N/A	3/4	N/A	N/A	5-9-075-42KN (5 X 9 X 3/4)	1-3/8	3/8	460'	460'	460'	1380'	4625	4240	3855

TOWER MEMBERS CHART

CONFIGURATION	ELEVATION	FACE	LEG	DIAGONALS	GIRTS					TYP. WEIGHT (LBS) PER 20' SECTION
					FACE 1 (CONDUIT/FEEDLINE)	FACE 2 (FEEDLINE)	FACE 3 (STANDARD)	STEPS		
1	6' - 306'	30	1-3/4	5/8	5/8 : SEE NOTE (6)	5/8 : SEE NOTE (5)	5/8	3/4		825
2	306' - 325'	30	1-3/4	5/8	5/8	5/8 : SEE NOTE (5)	5/8	3/4		825
3	325' - 344.5'	24	1-3/4	3/4	5/8	5/8 : SEE NOTE (5)	5/8	3/4		875
4	344.5' - 364'	24	1-3/4	5/8	5/8	5/8	5/8	3/4		825

TOWER INSULATOR CHART

GUY ELEV.	INSULATED ANCHOR		INSULATED TOWER		INSULATED GUY WIRE		JOHNNY BALL SPACING (STARTING FROM TWR.)
	INSULATOR SIZE	# REQ'D	INSULATOR SIZE	# REQ'D	J.B. SIZE	# REQ'D	
86'	N/A	N/A	21 kip X 3'	3	20 kip	6 TOTAL	65'
166'	N/A	N/A	30 kip X 3'	3	35 kip	9 TOTAL	65'
246'	N/A	N/A	42 kip X 3'	3	35 kip	15 TOTAL	65'
325'	N/A	N/A	42 kip X 3'	3	50 kip	18 TOTAL	65'

*** FIRST JOHNNY BALL SPACED 65' FROM TOWER END, THEN 65' SPACING THEREAFTER TO ANCHOR.

ANTENNA INFORMATION

ANTENNA	ELEVATION	LINE
(1) DCR-CAR (FM)	359' - 329'	3
(1) 6' GRID DISH	300'	1-5/8

GUY & MEMBER CHART NOTES:

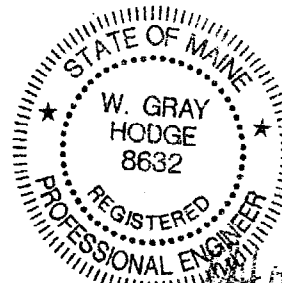
- 1) ALL MATERIAL IS MADE OF SOLID ROUND UNLESS NOTED OTHERWISE.
- 2) ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE.
- 3) ALL LEG & LEG FLANGE PL MATERIAL IS A-572 GRADE 50 (Fy ≥ 50 ksi). ALL INNER MEMBER & PLATE MATERIAL IS ASTM A36 (Fy ≥ 36 ksi).
- 4) ALL SECTIONS ARE 6-BAY X-BRACED (38-1/2" BAYS).
- 5) INTEGRAL TABS REQUIRED ON FACE 2 FOR FEEDLINE FROM 0' - 338.5'.
- 6) INTEGRAL TABS REQUIRED ON FACE 1 FOR FEEDLINE FROM 0' - 300'.
- 7) 1-1/8" HORIZONTALS REQUIRED ABOVE AND BELOW ALL GUY POINTS.

MARKING NOTES:

- 1) BASE SECTION IS TO BE STAMPED @ THE BASE PLATE. ALL OTHER SECTIONS ARE STAMPED AT THE TOP.
- 2) SECTION LABELING SYSTEM INFORMATION IS GIVEN IN THE DETAILED INFORMATION CHART. THE LABELING SYSTEM IS TO BE USED FOR PROPER IDENTIFICATION OF ALL SECTIONS AND TO ENSURE PROPER INSTALLATION.

THIS STRUCTURE IS DESIGNED TO MEET ANSI/EIA-222-F STANDARDS FOR A BASIC WIND SPEED OF 90 MPH WITH 1/2" ICE.

THIS STRUCTURE IS DESIGNED IN ACCORDANCE TO BOCA 99 STANDARDS FOR A WIND SPEED OF 90 MPH.



REV #	DESCRIPTION	DATE	APP.	DRAWN	DATE
	J.J.B.	2-10-04			
	CHECK				
	APPROVAL				

PH# (812) 853-0595
 FAX# (812) 853-6652
 2855 HIGHWAY 261
 NEWBURGH, IN. 47630

TITLE
 DETAIL INFORMATION CHART
 PORTLAND, ME. (WGAN)

DWG NO. G2043T-2

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

TOLERANCES
 .XX ± 5/32" ANGLES ± .2°
 .XX ± 5/32" DRILLED HOLES ± .015"
 .XXX ± 1/16" BURNED HOLES ± .015"

COMPANY CONFIDENTIAL INFORMATION CONTAINED HEREIN IS CONFIDENTIAL AND IS TO BE USED SOLELY FOR THE PURPOSE PROVIDED AND IT IS NOT TO BE DISCLOSED TO OTHERS WITHOUT THE PRIOR WRITTEN CONSENT OF SPX CORPORATION

THIRD ANGLE PROJECTION

REV 0

DC NOT SCALE DRAWING

ERITower Hodge Design Associates, P.C. 22 Chestnut Street Evansville, Indiana 47713-1022 Phone: 812.422.2558 FAX: 812.422.3337	Job 358' Guyed Tower for Central Tower (HDA 04G-0007 CTI 16347 G2043)	Page 1 of 3
	Project Portland (Westbrook), Cumberland County, ME (for SAGA Communications)	Date 16:00:40 02/17/04
	Client Central Tower, A Dielectric Company	Designed by Gray Hodge

Tower Pressures - No Ice

$G_H = 1.077$

Section Elevation	z	Kz	qz	AG	F a c e	AF	AR	Aleg	Leg %	CAAA In Face ft ²	CAAA Out Face ft ²
ft	ft		psf	ft ²	e	ft ²	ft ²	ft ²			
L1 358'-338'6"	348'3"	1.961	41	41.844	A	0.000	8.980	5.688	63.33	0.000	0.000
					B	0.000	8.980		63.33		
					C	0.000	10.457		54.39		
L2 338'6"-319'	328'9"	1.929	40	41.844	A	0.000	11.880	5.688	47.87	0.000	0.000
					B	0.000	9.647		58.96		
					C	0.000	11.094		51.27		
T1 319'-300'	309'6"	1.896	39	50.271	A	0.000	13.534	5.542	40.95	0.000	0.000
					B	0.000	9.142		60.62		
					C	0.000	10.601		52.28		
T2 300'-280'	290'	1.861	39	52.917	A	0.000	13.846	5.833	42.13	0.000	0.000
					B	0.000	9.176		63.57		
					C	0.000	13.800		42.27		
T3 280'-260'	270'	1.823	38	52.917	A	0.000	13.846	5.833	42.13	0.000	0.000
					B	0.000	9.176		63.57		
					C	0.000	13.800		42.27		
T4 260'-240'	250'	1.783	37	52.917	A	0.000	14.135	5.833	41.27	0.000	0.000
					B	0.000	9.499		61.41		
					C	0.000	14.089		41.40		
T5 240'-220'	230'	1.741	36	52.917	A	0.000	14.135	5.833	41.27	0.000	0.000
					B	0.000	9.499		61.41		
					C	0.000	14.089		41.40		
T6 220'-200'	210'	1.697	35	52.917	A	0.000	13.846	5.833	42.13	0.000	0.000
					B	0.000	9.176		63.57		
					C	0.000	13.800		42.27		
T7 200'-180'	190'	1.649	34	52.917	A	0.000	13.846	5.833	42.13	0.000	0.000
					B	0.000	9.176		63.57		
					C	0.000	13.800		42.27		
T8 180'-160'	170'	1.597	33	52.917	A	0.000	14.135	5.833	41.27	0.000	0.000
					B	0.000	9.499		61.41		
					C	0.000	14.089		41.40		
T9 160'-140'	150'	1.541	32	52.917	A	0.000	14.135	5.833	41.27	0.000	0.000
					B	0.000	9.499		61.41		
					C	0.000	14.089		41.40		
T10 140'-120'	130'	1.48	31	52.917	A	0.000	13.846	5.833	42.13	0.000	0.000
					B	0.000	9.176		63.57		
					C	0.000	13.800		42.27		
T11 120'-100'	110'	1.411	29	52.917	A	0.000	13.846	5.833	42.13	0.000	0.000
					B	0.000	9.176		63.57		
					C	0.000	13.800		42.27		
T12 100'-80'	90'	1.332	28	52.917	A	0.000	14.135	5.833	41.27	0.000	0.000
					B	0.000	9.499		61.41		
					C	0.000	14.089		41.40		
T13 80'-60'	70'	1.24	26	52.917	A	0.000	14.135	5.833	41.27	0.000	0.000
					B	0.000	9.499		61.41		
					C	0.000	14.089		41.40		
T14 60'-40'	50'	1.126	23	52.917	A	0.000	13.846	5.833	42.13	0.000	0.000
					B	0.000	9.176		63.57		
					C	0.000	13.800		42.27		
T15 40'-20'	30'	1	21	52.917	A	0.000	13.846	5.833	42.13	0.000	0.000
					B	0.000	9.176		63.57		
					C	0.000	13.800		42.27		
T16 20'-16'8"	18'3"	1	21	8.819	A	0.000	2.272	0.972	42.79	0.000	0.000

ERITower Hodge Design Associates, P.C. 22 Chestnut Street Evansville, Indiana 47713-1022 Phone: 812.422.2558 FAX: 812.422.3337	Job 358' Guyed Tower for Central Tower (HDA 04G-0007 CTI 16347 G2043)	Page 2 of 3
	Project Portland (Westbrook), Cumberland County, ME (for SAGA Communications)	Date 16:00:40 02/17/04
	Client Central Tower, A Dielectric Company	Designed by Gray Hodge

Section Elevation	z	K _Z	q _Z	A _G	F a c e	A _F	A _R	A _{leg}	Leg %	C _A A _i In Face ft ²	C _A A _o Out Face ft ²
ft	ft		psf	ft ²		ft ²	ft ²	ft ²			
1/32"	31/32"				B	0.000	1.490		65.27		
					C	0.000	2.264		42.94		
T17 16'-8-1/32"-13'-31/32"	15'	1	21	8.819	A	0.000	2.298	0.972	42.31	0.000	0.000
					B	0.000	1.519		42.45		
					C	0.000	2.290		42.45		
T18 13'-3-31/32"-10'	11'-8-1/32"	1	21	8.819	A	0.000	2.298	0.972	42.31	0.000	0.000
					B	0.000	1.519		64.02		
					C	0.000	2.290		42.45		
T19 10'-6'-8-1/32"	8'-3-31/32"	1	21	8.819	A	0.000	1.519	0.972	64.02	0.000	0.000
					B	0.000	1.519		64.02		
					C	0.000	1.519		64.02		
T20 6'-8-1/32"-5'	5'-9-31/32"	1	21	4.410	A	0.000	0.917	0.486	53.03	0.000	0.000
					B	0.000	0.917		53.03		
					C	0.000	0.917		53.03		
T21 5'-0'	2'6"	1	21	7.002	A	4.086	1.533	1.518	27.02	0.000	0.000
					B	4.086	1.533		27.02		
					C	4.086	1.533		27.02		

Tower Pressure - With Ice

$G_H = 1.077$

Section Elevation	z	K _Z	q _Z	l _Z	A _G	F a c e	A _F	A _R	A _{leg}	Leg %	C _A A _i In Face ft ²	C _A A _o Out Face ft ²
ft	ft		psf	in	ft ²		ft ²	ft ²	ft ²			
L1 358'-338'6"	348'3"	1.961	30	0.5000	43.469	A	0.000	17.498	8.938	51.08	0.000	0.000
						B	0.000	17.498		51.08		
						C	0.000	19.979		44.73		
L2 338'6"-319'	328'9"	1.929	30	0.5000	43.469	A	0.000	20.654	8.938	43.27	0.000	0.000
						B	0.000	18.165		49.20		
						C	0.000	20.585		43.42		
T1 319'-300'	309'6"	1.896	29	0.5000	51.854	A	0.000	22.632	8.708	38.48	0.000	0.000
						B	0.000	17.508		49.74		
						C	0.000	20.064		43.40		
T2 300'-280'	290'	1.861	29	0.5000	54.583	A	0.000	23.281	9.167	39.37	0.000	0.000
						B	0.000	17.798		51.50		
						C	0.000	24.608		37.25		
T3 280'-260'	270'	1.823	28	0.5000	54.583	A	0.000	23.281	9.167	39.37	0.000	0.000
						B	0.000	17.798		51.50		
						C	0.000	24.608		37.25		
T4 260'-240'	250'	1.783	28	0.5000	54.583	A	0.000	23.559	9.167	38.91	0.000	0.000
						B	0.000	18.121		50.59		
						C	0.000	24.874		36.85		
T5 240'-220'	230'	1.741	27	0.5000	54.583	A	0.000	23.559	9.167	38.91	0.000	0.000
						B	0.000	18.121		50.59		
						C	0.000	24.874		36.85		
T6 220'-200'	210'	1.697	26	0.5000	54.583	A	0.000	23.281	9.167	39.37	0.000	0.000
						B	0.000	17.798		51.50		
						C	0.000	24.608		37.25		
T7 200'-180'	190'	1.649	26	0.5000	54.583	A	0.000	23.281	9.167	39.37	0.000	0.000
						B	0.000	17.798		51.50		
						C	0.000	24.608		37.25		
T8 180'-160'	170'	1.597	25	0.5000	54.583	A	0.000	23.559	9.167	38.91	0.000	0.000
						B	0.000	18.121		50.59		
						C	0.000	24.874		36.85		

ERITower Hodge Design Associates, P.C. 22 Chestnut Street Evansville, Indiana 47713-1022 Phone: 812.422.2558 FAX: 812.422.3337	Job 358' Guyed Tower for Central Tower (HDA 04G-0007 CTI 16347 G2043)	Page 3 of 3
	Project Portland (Westbrook), Cumberland County, ME (for SAGA Communications)	Date 16:00:40 02/17/04
	Client Central Tower, A Dielectric Company	Designed by Gray Hodge

Section Elevation	z	K _Z	q _z	t _z	A _G	F a c e	A _F	A _R	A _{R2}	Leg %	C _A A _A In Face ft ²	C _A A _A Out Face ft ²
ft	ft		psf	in	ft ²		ft ²	ft ²	ft ²			
T9 160'-140'	150'	1.541	24	0.5000	54.583	A	0.000	23.559	9.167	38.91	0.000	0.000
						B	0.000	18.121		50.59		
						C	0.000	24.874		36.85		
T10 140'-120'	130'	1.48	23	0.5000	54.583	A	0.000	23.281	9.167	39.37	0.000	0.000
						B	0.000	17.798		51.50		
						C	0.000	24.608		37.25		
T11 120'-100'	110'	1.411	22	0.5000	54.583	A	0.000	23.281	9.167	39.37	0.000	0.000
						B	0.000	17.798		51.50		
						C	0.000	24.608		37.25		
T12 100'-80'	90'	1.332	21	0.5000	54.583	A	0.000	23.559	9.167	38.91	0.000	0.000
						B	0.000	18.121		50.59		
						C	0.000	24.874		36.85		
T13 80'-60'	70'	1.24	19	0.5000	54.583	A	0.000	23.559	9.167	38.91	0.000	0.000
						B	0.000	18.121		50.59		
						C	0.000	24.874		36.85		
T14 60'-40'	50'	1.126	18	0.5000	54.583	A	0.000	23.281	9.167	39.37	0.000	0.000
						B	0.000	17.798		51.50		
						C	0.000	24.608		37.25		
T15 40'-20'	30'	1	16	0.5000	54.583	A	0.000	23.281	9.167	39.37	0.000	0.000
						B	0.000	17.798		51.50		
						C	0.000	24.608		37.25		
T16 20'-16'-8-1/32"	18'-3-31/32"	1	16	0.5000	9.097	A	0.000	3.791	1.528	40.30	0.000	0.000
						B	0.000	2.863		53.37		
						C	0.000	4.016		38.04		
T17 16'-8-1/32"-1'-3-31/32"	15'	1	16	0.5000	9.097	A	0.000	3.856	1.528	39.62	0.000	0.000
						B	0.000	2.938		52.00		
						C	0.000	4.078		37.46		
T18 13'-3-31/32"-10'	11'-8-1/32"	1	16	0.5000	9.097	A	0.000	3.856	1.528	39.62	0.000	0.000
						B	0.000	2.938		52.00		
						C	0.000	4.078		37.46		
T19 10'-6'-8-1/32"	8'-3-31/32"	1	16	0.5000	9.097	A	0.000	2.938	1.528	52.00	0.000	0.000
						B	0.000	2.938		52.00		
						C	0.000	2.938		52.00		
T20 6'-8-1/32"-5'	5'-9-31/32"	1	16	0.5000	4.549	A	0.000	1.878	0.764	40.67	0.000	0.000
						B	0.000	1.878		40.67		
						C	0.000	1.878		40.67		
T21 5'-0'	2'-6"	1	16	0.5000	7.431	A	4.458	2.409	2.385	34.73	0.000	0.000
						B	4.458	2.409		34.73		
						C	4.458	2.409		34.73		

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STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

DEPARTMENT ORDER
IN THE MATTER OF

SAGA COMMUNICATIONS, DBA
PORTLAND RADIO GROUP
Portland, Cumberland County
RADIO TOWER
L-21939-A-N (approval)

) NATURAL RESOURCES PROTECTION
) COASTAL WETLAND
) WATER QUALITY CERTIFICATION
) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 38 M.R.S.A. Sections 480-A et seq. and Section 401 of the Federal Water Pollution Control Act, the Department of Environmental Protection has considered the application of SAGA COMMUNICATIONS, DBA PORTLAND RADIO GROUP, with the supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. PROJECT DESCRIPTION:

A. Summary: The applicant proposes to replace a 528-foot high guyed radio tower and three anchors in and adjacent to a tidal marsh and mudflat off Presumpscot Street in Portland. The new tower and anchors will be located adjacent to the old tower and anchors. The site is the location of a radio tower that collapsed after an anchor failed in December 2003. The tower replacement is necessary to restore the broadcasting capability of a local FM radio station. The project includes the construction of two new double anchors in upland locations approximately 30 feet from the upland/wetland edge and one new anchor in a tidal mudflat. Each anchor will be capped with a 225 square foot concrete cap. The concrete cap for anchor #3 located in the mudflat will be elevated on support piles approximately 8 feet above the substrate to minimize the impact on the mudflat. The applicant also proposes to restore approximately 900 square of mudflat by removing the rock rubble fill at the original site of anchor #3. To access the mudflat to drive piles and construct the concrete pile cap for anchor #3, the applicant proposes to construct a 10-foot wide rock filled upland access road and a 20-foot wide temporary access road across the vegetated salt marsh using wooden crane mats. No equipment will operate in the mudflat, and construction will be limited to periods when the tidal flat is exposed during low tide. In addition, the applicant also proposes to stabilize a 100-foot long section of eroded slope by installing rock riprap adjacent to the site of the proposed tower. The proposed project is shown on a set of plans the first of which is entitled "Existing Conditions Survey, Sunshine Broadcasting WMGX Tower," prepared by Sebago Technics, with a last revision date of May 28, 2004. The applicant proposes to complete the project during a three week period in early fall 2004.

B. Current Use of the Site: The applicant leases the 13.6 acre site that is located adjacent to a coastal wetland in an industrial zone on Presumpscot Street between I-295



DEP INFORMATION SHEET

Appealing a Commissioner's Licensing Decision

Dated: May 2004

Contact: (207) 287-2811

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's (DEP) Commissioner: (1) in an administrative process before the Board of Environmental Protection (Board); or (2) in a judicial process before Maine's Superior Court. This INFORMATION SHEET, in conjunction with consulting statutory and regulatory provisions referred to herein, can help aggrieved persons with understanding their rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

DEP's *General Laws*, 38 M.R.S.A. § 341-D(4), and its *Rules Concerning the Processing of Applications and Other Administrative Matters* (Chapter 2), 06-096 CMR 2.24 (April 1, 2003).

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written notice of appeal within 30 calendar days of the date on which the Commissioner's decision was filed with the Board. Appeals filed after 30 calendar days will be rejected.

HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, c/o Department of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017; faxes are acceptable for purposes of meeting the deadline when followed by receipt of mailed original documents within five (5) working days. Receipt on a particular day must be by 5:00 PM at DEP's offices in Augusta; materials received after 5:00 PM are not considered received until the following day. The person appealing a licensing decision must also send the DEP's Commissioner and the applicant a copy of the documents. All the information listed in the next section must be submitted at the time the appeal is filed. Only the extraordinary circumstances described at the end of that section will justify evidence not in the DEP's record at the time of decision being added to the record for consideration by the Board as part of an appeal.

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

The materials constituting an appeal must contain the following information at the time submitted:

1. *Aggrieved Status*. Standing to maintain an appeal requires the appellant to show they are particularly injured by the Commissioner's decision.
2. *The findings, conclusions or conditions objected to or believed to be in error*. Specific references and facts regarding the appellant's issues with the decision must be provided in the notice of appeal.
3. *The basis of the objections or challenge*. If possible, specific regulations, statutes or other facts should be referenced. This may include citing omissions of relevant requirements, and errors believed to have been made in interpretations, conclusions, and relevant requirements.
4. *The remedy sought*. This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.

5. *All the matters to be contested.* The Board will limit its consideration to those arguments specifically raised in the written notice of appeal.
6. *Request for hearing.* The Board will hear presentations on appeals at its regularly scheduled meetings, unless a public hearing is requested and granted. A request for public hearing on an appeal must be filed as part of the notice of appeal.
7. *New or additional evidence to be offered.* The Board may allow new or additional evidence as part of an appeal only when the person seeking to add information to the record can show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process or show that the evidence itself is newly discovered and could not have been presented earlier in the process. Specific requirements for additional evidence are found in Chapter 2, Section 24(B)(5).

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

1. *Be familiar with all relevant material in the DEP record.* A license file is public information made easily accessible by DEP. Upon request, the DEP will make the material available during normal working hours, provide space to review the file, and provide opportunity for photocopying materials. There is a charge for copies or copying services.
2. *Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal.* DEP staff will provide this information on request and answer questions regarding applicable requirements.
3. *The filing of an appeal does not operate as a stay to any decision.* An applicant proceeding with a project pending the outcome of an appeal runs the risk of the decision being reversed or modified as a result of the appeal.

WHAT TO EXPECT ONCE YOU FILE A TIMELY APPEAL WITH THE BOARD

The Board will formally acknowledge initiation of the appeals procedure, including the name of the DEP project manager assigned to the specific appeal, within 15 days of receiving a timely filing. The notice of appeal, all materials accepted by the Board Chair as additional evidence, and any materials submitted in response to the appeal will be sent to Board members along with a briefing and recommendation from DEP staff. Parties filing appeals and interested persons are notified in advance of the final date set for Board consideration of an appeal or request for public hearing. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision. The Board will notify parties to an appeal and interested persons of its decision.

II. APPEALS TO MAINE SUPERIOR COURT

Maine law allows aggrieved persons to appeal final Commissioner licensing decisions to Maine's Superior Court, see 38 M.R.S.A. § 346(1); 06-096 CMR 2.26; 5 M.R.S.A. § 11001; & MRCivP 80C. Parties to the licensing decision must file a petition for review within 30 days after receipt of notice of the Commissioner's written decision. A petition for review by any other person aggrieved must be filed within 40-days from the date the written decision is rendered. The laws cited in this paragraph and other legal procedures govern the contents and processing of a Superior Court appeal.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, contact the DEP's Director of Procedures and Enforcement at (207) 287-2811.

Note: The DEP provides this INFORMATION SHEET for general guidance only; it is not intended for use as a legal reference. Maine law governs an appellant's rights.

and the St. Lawrence Railroad tracks. Development adjacent to the project site includes a lumberyard, warehouse complex, and cement storage facility.

2. WATER QUALITY AND EROSION CONTROL CONSIDERATIONS:

The Department does not anticipate that the proposed project will violate any state water quality law, including those governing the classification of the State's waters. The applicant proposes to install and maintain adequate erosion control measures to protect water quality until the project site is stabilized.

3. HABITAT CONSIDERATIONS:

The Department of Marine Resources (DMR) reviewed the proposed project. In comments dated July 12, 2004, DMR stated that the project site is a low energy consolidated shore. The upper and mid intertidal area are vegetated with *Spartina patens* (salt hay grass) and *Spartina alterniflora* (smooth cordgrass) respectively. The lower intertidal is mud. DMR recommends that the salt marsh be monitored after the crane mat access road is removed to insure that the substrate and vegetation recovers during the growing season following construction. DMR also recommends that the existing pile of rock rubble is removed and the mudflat restored at the existing location of anchor #3. The applicant has agreed to these two requirements.

The Maine Department of Inland Fisheries and Wildlife (MDIFW) reviewed the proposed project and stated that the coastal wetland is part of a large wetland complex associated with the Presumpscot River. This complex is designated as Coastal Wading Bird and Waterfowl Habitat and qualifies as Significant Wildlife Habitat, but the project site is outside the critical habitat areas of open water and emergent vegetation used by nesting and feeding waterfowl. To minimize the impact to waterfowl, MDIFW recommends no work in the coastal wetland during the waterfowl-breeding season from July to September, if possible.

4. WETLANDS AND WATERBODIES PROTECTION RULES:

The Department's Wetlands and Waterbodies Protection Rules, Chapter 310, require that the applicant meet the following standards:

- a. Avoidance. No activity may be permitted if there is a practicable alternative to the project that would be less damaging to the environment. The applicant submitted an alternatives analysis for the project prepared by Sebago Technics and dated May 27, 2004 that demonstrated that, based on Federal Communications Commission licensing requirements, zoning standards in the City of Portland, and the design and engineering specifications for the new radio tower, the tower and its anchors must be located adjacent to the original tower and anchors.

b. Minimal Alteration. The alteration to the coastal wetland will be limited to seven piles driven into the substrate and the temporary impacts to the salt marsh from the installation of approximately 5,360 square feet of crane mats during the construction of anchor #3. This anchor will be a pile supported concrete pile cap elevated 8 feet above the substrate to minimize the impact to the tidal mudflat. To further minimize impacts to salt marsh vegetation, the Department recommends that the applicant construct anchor #3 after October 1, when *Spartina* is dormant.

c. Compensation. Although the applicant demonstrated that the proper use of crane mats at the construction site for anchor #3 should result in no permanent loss of wetland functions and values, the Department finds that the applicant must photograph the access area prior to installing the mats, immediately after removing the mats, and prior to June 15 in the year following construction. The Department will assess the recovery of the salt marsh vegetation in the year following construction and may require restoration or enhancement of the access area if salt marsh vegetation is not the same density as that in the adjacent undisturbed areas.

The Department finds that the applicant has avoided and minimized wetland impacts to the greatest extent practicable, and that the proposed project represents the least environmentally damaging alternative that meets the overall purpose of the project.

5. EXISTING SCENIC AND AESTHETIC USES:

The applicant evaluated the impact of the proposed project on existing scenic and aesthetic uses in the vicinity of the proposed project by submitting photographs of the existing conditions at the project site and by completing a visual evaluation and field survey checklist. The proposed radio tower and supporting guy wires and anchors will be located in the same area as the former tower and be the same height. The new tower will have the same visual impact as the old tower and will be located within a highly developed industrial zone in Portland adjacent to an interstate highway. Based on information in the application and a site visit, the Department finds that the proposed project will not unreasonably interfere with existing scenic and aesthetic uses.

6. OTHER CONSIDERATIONS:

The Department did not identify any other issues involving existing navigational uses, soil erosion, the natural transfer of soil, natural flow of water, or flooding.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S.A. Sections 480-A et seq. and Section 401 of the Federal Water Pollution Control Act:

- A. The proposed activity will not unreasonably interfere with existing scenic, aesthetic, recreational, or navigational uses.

- B. The proposed activity will not cause unreasonable erosion of soil or sediment.
- C. The proposed activity will not unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.
- D. The proposed activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic habitat, travel corridor, freshwater, estuarine, or marine fisheries or other aquatic life provided that the applicant photographs the access area prior to installing the mats, immediately after removing the mats, and prior to June 15 in the year following construction and restores or enhances the access area, if necessary.
- E. The proposed activity will not unreasonably interfere with the natural flow of any surface or subsurface waters.
- F. The proposed activity will not violate any state water quality law including those governing the classifications of the State's waters.
- G. The proposed activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties.
- H. The proposed activity is not on or adjacent to a sand dune.
- I. The proposed activity is not on an outstanding river segment as noted in Title 38 M.R.S.A. Section 480-P.

THEREFORE, the Department APPROVES the above noted application of SAGA COMMUNICATIONS, DBA PORTLAND RADIO GROUP to construct a radio tower with anchors and install riprap, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations:

1. Standard Conditions of Approval, a copy attached.
2. The applicant shall take all necessary measures to ensure that its activities or those of its agents do not result in measurable erosion of soil on the site during the construction of the project covered by this approval.
3. The applicant shall photograph the access area prior to installing the mats, immediately after removing the mats, and prior to June 15 in the year following construction. The photographs shall be submitted to the Bureau of Land and Water Quality one week after installing and removing the mats and by June 22.

- 4. The applicant shall enhance or restore salt marsh vegetation in the access area if the plant density is not the same as that in adjacent undisturbed areas.

THIS APPROVAL DOES NOT CONSTITUTE OR SUBSTITUTE FOR ANY OTHER REQUIRED STATE, FEDERAL OR LOCAL APPROVALS NOR DOES IT VERIFY COMPLIANCE WITH ANY APPLICABLE SHORELAND ZONING ORDINANCES.

DONE AND DATED AT AUGUSTA, MAINE, THIS 14TH DAY OF SEPTEMBER, 2004.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

By: 
DAWN R. GALLAGHER, COMMISSIONER

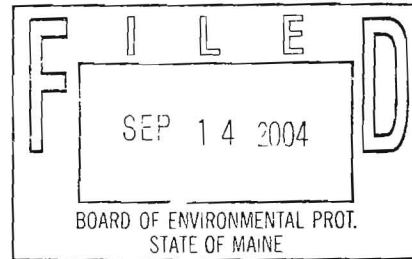
PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application May 28, 2004

Date of application acceptance June 14, 2004

Date filed with Board of Environmental Protection

DBB/ATS52615/L21939AN



NATURAL RESOURCE PROTECTION ACT (NRPA)
STANDARD CONDITIONS

THE FOLLOWING STANDARD CONDITIONS SHALL APPLY TO ALL PERMITS GRANTED UNDER THE NATURAL RESOURCE PROTECTION ACT, TITLE 38, M.R.S.A. SECTION 480-A ET.SEQ. UNLESS OTHERWISE SPECIFICALLY STATED IN THE PERMIT.

- A. **Approval of Variations From Plans.** The granting of this permit is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation.
- B. **Compliance With All Applicable Laws.** The applicant shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.
- C. **Erosion Control.** The applicant shall take all necessary measures to ensure that his activities or those of his agents do not result in measurable erosion of soils on the site during the construction and operation of the project covered by this Approval.
- D. **Compliance With Conditions.** Should the project be found, at any time, not to be in compliance with any of the Conditions of this Approval, or should the applicant construct or operate this development in any way other than specified in the Application or Supporting Documents, as modified by the Conditions of this Approval, then the terms of this Approval shall be considered to have been violated.
- E. **Initiation of Activity Within Two Years.** If construction or operation of the activity is not begun within two years, this permit shall lapse and the applicant shall reapply to the Board for a new permit. The applicant may not begin construction or operation of the activity until a new permit is granted. Reapplications for permits shall state the reasons why the applicant will be able to begin the activity within two years from the granting of a new permit, if so granted. Reapplications for permits may include information submitted in the initial application by reference.
- F. **Reexamination After Five Years.** If the approved activity is not completed within five years from the date of the granting of a permit, the Board may reexamine its permit approval and impose additional terms or conditions to respond to significant changes in circumstances which may have occurred during the five-year period.
- G. **No Construction Equipment Below High Water.** No construction equipment used in the undertaking of an approved activity is allowed below the mean high water line unless otherwise specified by this permit.
- H. **Permit Included In Contract Bids.** A copy of this permit must be included in or attached to all contract bid specifications for the approved activity.
- I. **Permit Shown To Contractor.** Work done by a contractor pursuant to this permit shall not begin before the contractor has been shown by the applicant a copy of this permit.

Revised (4/92)

DEP LW0428