January 31, 2017

VIA EMAIL AND OVERNIGHT DELIVERY

Ms. Melanie A. Bachman
Acting Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

RE: T-Mobile Northeast LLC - CT11328F
Tower Share Application
50 Maple Street, Branford, CT 06405
LAT: 41.274244
LNG: -72.813656

Dear Ms. Bachman:

This letter and attachments are submitted on behalf of T-Mobile Northeast LLC ("T-Mobile"). T-Mobile plans to install additional antennas and related equipment on the brick chimney located at 50 Maple Street in Branford, CT.

T-Mobile previously received approvals from the Town of Branford to install antennas and associated equipment on the existing brick chimney. However, the Siting Council indicated that brick chimney meets the regulatory definition of a "tower" as the chimney is no longer in use and there are cellular antennas affixed thereto. Accordingly, please accept this letter as notification pursuant to Regulations of Connecticut State Agencies 16-50aa, of T-Mobile's intent to share a telecommunications facility pursuant to R.C.S.A. 16-50j-88.

In accordance with R.C.S.A., a copy of this letter is being sent to First Selectman James Cosgrove, Town Planner Harry Smith, and the property owner, Marine Systems, LLC. Also, please see the attached letter from Marine Systems, LLC authorizing the proposed shared use of the facility attached as **Exhibit A.**

T-Mobile currently maintains three (3) antennas at the 96' level of the existing 99.7' brick chimney. T-Mobile will install three (3) new 700 MHz antennas and three (3) new 2100 MHz antennas respectively at the 96' level. Additionally, T-Mobile will install one (1) hybrid cable inside an existing vertical cable tray. Included are plans prepared by Atlantis Design Group, Inc., dated September 27, 2016, depicting the planned changes and attached as **Exhibit B**. Also included is a structural analysis prepared by International Chimney Corporation dated August 8, 2016 confirming that the existing brick chimney is structurally capable of supporting T-Mobile's equipment subject to the repairs stipulated in Section III - Recommendations. The structural analysis is attached as **Exhibit C**.

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. 16-50j-89.

1. The proposed equipment will not result in an increase in the height of the existing structure. The top of the brick chimney is approximately 99.7' AGL; T-Mobile's proposed antennas will be located at a centerline height of 96' and will not extend above the top of the brick chimney.

2. The proposed modifications will not require the extension of the site boundary as depicted on the attached site plan. T-Mobile has an equipment platform at the base of the brick chimney.

3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria. The incremental effect of the proposed changes will be negligible.

4. The operation of the proposed antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard. As indicated in the attached power density calculations, T-Mobile's operations at the site will result in a power density of 5.61%; the combined site operations will result in a total power density of 5.61% as evidenced by the power density calculations attached as **Exhibit D**.

5. The proposed equipment will not cause a change or alteration in the physical or environmental characteristics of the site.

Connecticut General Statutes 16-50aa indicates that the Council must approve the shared use of a telecommunications facility provided it finds the shared use is technically, legally, environmentally and economically feasible and meets the public safety concerns. As demonstrated in this letter, T-Mobile respectfully submits that the shared use of this facility satisfies these criteria:

A. Technical Feasibility. The existing brick chimney has been deemed to be structural capable of supporting T-Mobile's proposed loading. The structural analysis is included as **Exhibit C**.
B. Legal Feasibility. As referenced above, C.G.S. 16-50aa has been authorized to issue orders approving the shared use of an existing tower such as this brick chimney in Branford. Under the authority granted to the Council, an order of the Council approving the requested shared use would permit T-Mobile to obtain a building permit for the proposed installation. Further, a letter of authorization from the chimney owner, Marine Systems, LLC, is included as **Exhibit A** authorizing T-Mobile to file this application for shared use.
C. Environmental Feasibility. The proposed shared use of this facility would have a minimal environmental effect. The installation of T-Mobile's additional

antennas at 96' AGL on the existing 99.7' brick chimney would have an insignificant visual impact on the area around the chimney. T-Mobile's ground equipment is installed on an equipment platform at the base of the brick chimney. Therefore, T-Mobile's shared use would not cause any significant alteration in the physical or environmental characteristics of the existing site. Additionally, as evidenced by **Exhibit D**, the proposed antennas will not increase radio frequency emissions to a level at or above the Federal Communications Commission safety standard.

D. Economic Feasibility. T-Mobile has entered into an agreement with the owner of this facility under mutually agreeable terms.

E. Public Safety Concerns. As discussed above, the brick chimney is structurally capable of supporting T-Mobile's proposed loading subject to the repairs stipulated in Section III – Recommendations of the structural analysis. T-Mobile is not aware of any public safety concerns relative to the proposed sharing of the existing brick chimney. T-Mobile's intent to provide new and improved wireless service through the shared use of this facility is expected to enhance the safety and welfare of residents and individuals traveling through the Town of Branford.

Respectfully submitted,

By: _____

Eric Dahl, Agent for T-Mobile
edahl@comcast.net
860-227-1975

Attachments

cc: James B. Cosgrove, First Selectman,Town of Branford
Harry Smith, Town Planner, Town of Branford
Marine Systems, LLC – as property owner

EXHIBIT A

BYM BERDON YOUNG & MARGOLIS, PC
Attorneys and Counselors at Law

Pasquale Young Ext: 101
pat.young@bymlaw.com
Stuart A. Margolis Ext: 102
stuart.margolis@bymlaw.com
Peter A. Berdon Ext: 114
peter.berdon@bymlaw.com
Russell J. Bonin Ext: 112
russ.bonin@bymlaw.com
OF COUNSEL
Daniel C. Burns Ext: 117
dan.burns@bymlaw.com
David D. Berdon (1925-1998)

October 21, 2016

Via e-Mail: jford@verticaldevelopmentllc.com

T-Mobile Northeast LLC
ATTN: Jamie Ford, Project Manager
35 Griffin Road South
Bloomfield, CT 06002

RE: 50 Maple Street, Branford, CT

Dear Jamie:

I am enclosing the Authorization Letter for Permit Application from Marine Systems, Inc. relative to the above noted project. Please be advised that the sign off of the authorization letter is being provided to you for the purposes of advancing the town permit process only.

Thank you for providing the Structural Analysis Report. Although you did not state in your e-mails, the consent to move forward with your proposed work is subject to the completion of the work recommended in the structural report furnished by you to my client. Further, I would note that the recommendations note that there was a prior report from January of 2016 making similar recommendations, which work was not undertaken by your client. The obligation to do the work identified within the structural report is required under the terms and conditions of the lease whether or not you move forward with the installation of the replacement antennas. Please advise as to when we might expect that work to be completed.

Prior to engaging in any work, your client will need to fully comply with the construction requirements under the lease including, but not limited to, identifying specifically the work to be undertaken, the contractors who undertake said work and furnishing appropriate certificates of insurance.

This letter shall in no way be deemed a waiver of any requirement set forth in the Lease. Thank you in advance for your cooperation in this matter.

Very truly yours,

Peter A. Berdon

PAB/lb
Enclosure
cc: Client

Authorization Letter For Permit Application

Date 10/17/2015

Property Owner MARINE SYSTEMS, INC.

Address P.O. BOX 447, BRANFORD, CT 06405

Address of Proposed Work 50 MAPLE ST.

Branford, CT 06405

To whom it may concern,

Per Public Act 91-95 this letter authorizes ERIC DAHL, AGENT FOR T-MOBILE to obtain and sign a permit application from the Building Official on my behalf for the proposed address of work stated above. The description of the job or proposed works is as follows; ADD SIX (6) NEW ANTENNAS & ASSOCIATED RADIO EQUIPMENT

Start Date__________

Contractor D & A CONST. MGMT.

License Number 0901925

Marine Systems, Inc

X

Signature of OWNER Applicant by Peter G. Baldon, Its Agent

EXHIBIT B

T-MOBILE NORTHEAST LLC

SITE #: CT11328F

SITE NAME: MARINE SYS. SMOKE STACK

SITE ADDRESS:
50 MAPLE STREET
BRANDFORD, CT, 06405
WIRELESS BROADBAND FACILITY
CONSTRUCTION DRAWINGS
(702CU CONFIGURATION)

VICINITY MAP

DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

CALL BEFORE YOU DIG:
WWW.CBYD.COM
CALL 800 922 4455, OR 811
CALL THREE WORKING DAYS PRIOR TO DIGGING
SAFETY PRECAUTIONS SHALL BE IMPLEMENTED BY CONTRACTOR(S) AT ALL TIMES WORK IS IN ACCORDANCE WITH CURRENT OSHA STANDARDS.

COLOR CODE FOR UTILITY LOCATIONS

ELECTRIC	– RED	SEWER	– GREEN
GAS/OIL	– YELLOW	SURVEY	– PINK
TEL/CATV	– ORANGE	PROPOSED EXCAVATION	– WHITE
WATER	– BLUE	RECLAIMED WATER	– PURPLE

GENERAL NOTES

1. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES.
2. THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONSTRUCT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
3. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE T-MOBILE REPRESENTATIVE OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF THE CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCREPANCIES, THE CONTRACTOR SHALL PRICE THE WORK COSTLY OR EXPENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.
4. THE SCOPE OF WORK SHALL INCLUDE FURNISHING OF ALL MATERIALS, EQUIPMENT, LABOR AND ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.
5. THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK TO FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
6. THE CONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.
7. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
8. THE CONTRACTOR SHALL PROVIDE A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE UPDATED WITH THE LATEST REVISIONS AND ADDENDUM OR CLARIFICATIONS AVAILABLE FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
9. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER CONTRACT.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY PERMITS AND INSPECTIONS WHICH ARE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY, OR LOCAL GOVERNMENT AUTHORITY.
11. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC., DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
12. THE CONTRACTOR SHALL KEEP THE GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON PROPERTY. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
13. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS, AS WELL AS THE LATEST EDITIONS OF ANY PERTINENT STATE SAFETY REGULATIONS.
14. THE CONTRACTOR SHALL NOTIFY THE T-MOBILE REPRESENTATIVE WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT UNTIL CONFLICT IS RESOLVED BY THE T-MOBILE REPRESENTATIVE.
15. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC., ON THE JOB.
16. THE CONTRACTOR SHALL RETURN ALL DISTURBED AREAS TO THEIR ORIGINAL CONDITION AT THE COMPLETION OF WORK.
17. REFER TO STRUCTURAL ANALYSIS DOCUMENT ENTITLED, "STRUCTURAL ANALYSIS CT-SSBO-C" PREPARED BY INTERNATIONAL CHIMNEY CORPORATION, "T-MOBILE SITE ID CT11328F", DATED AUGUST 30, 2016.

SITE INFORMATION

SITE NUMBER:	CT11328F
SITE NAME:	MARINE SYS. SMOKE STACK
SITE ADDRESS:	50 MAPLE STREET BRANDFORD, CT, 06405
LAT./LONG.:	N 41.274244 / W -72.813656
JURISDICTION:	TOWN OF BRANDFORD, CT
PROPERTY OWNER:	MARINE SYSTEMS, LLC.

PROJECT SUB-CONTRACTORS

APPLICANT:	T-MOBILE NORTHEAST, LLC. 35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002 (860) 692-7100
PROJECT MANAGER	JAMIE FORD PROJECT MANAGER JFORD@VERTICALDEVELOPMENT.LLC.COM (774) 249-5373
A&E:	ATLANTIS DESIGN GROUP INC. 3210 MAIN CAMPUS DRIVE LEXINGTON, MA 02421 (617)-862-3611

CODE COMPLIANCE

CONNECTICUT STATE BUILDING CODE

2005 CONNECTICUT BUILDING CODE WITH 2013 AMENDMENT
2011 NATIONAL ELECTRICAL CODE

CONSTRUCTION TYPE: 2B USE GROUP: N/A

SHEET INDEX

SHEET	DESCRIPTION
T-1	TITLE SHEET
N-1	GENERAL AND ELECTRICAL NOTES
A-1	ROOF PLAN AND EQUIPMENT PLAN
A-2	ELEVATION
A-3	DETAILS
E-1	GROUNDING DIAGRAMPOWER ONE LINE DIAGRAM
E-2	GROUNDING DETAILS

T-Mobile
T-MOBILE NORTHEAST, LLC
35 GRIFFIN ROAD SOUTH
BLOOMFIELD, CT 06002
OFFICE: (860) 692-7100
FAX: (860) 692-7019

ATLANTIS DESIGN GROUP, INC.
3210 MAIN CAMPUS DRIVE
LEXINGTON, MA 02421
Phone (617) 862-3611
Fax Number: (781) 762-0347

SUBMITTALS

DATE	DESCRIPTION	REVISION
06/30/16	ISSUED FOR REVIEW	A
08/30/16	FINAL CD	B

DEPT	DATE	APP'D	REVISION
RFE			
RF ENG.			
HOUSING			
OPS			
CONSTR.			
SITE ACQ.			

DRAWN BY: PG
CHECKED BY: KM

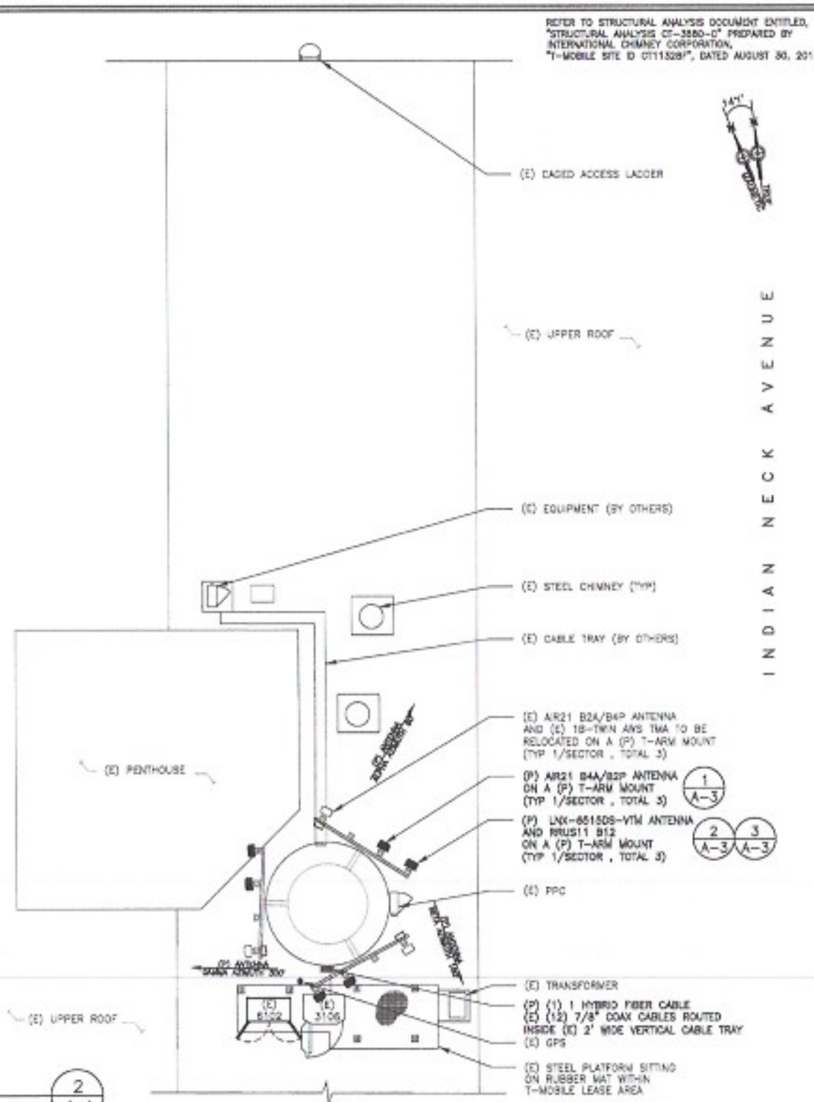
STATE OF CONNECTICUT
HOSSEIN YAHEDI
NO. ARI.1168
LICENSED ARCHITECT
PROFESSIONAL SEAL

SITE NAME
CT11328F
SITE NAME
MARINE SYS. SMOKE STACK
SITE ADDRESS
50 MAPLE STREET
BRANDFORD, CT, 06405

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

1 A-1 **KEY PLAN**
SCALE: NTS


REFER TO STRUCTURAL ANALYSIS DOCUMENT ENTITLED, "STRUCTURAL ANALYSIS CT-3880-C" PREPARED BY INTERNATIONAL CHIMNEY CORPORATION, "T-MOBILE SITE ID CT11328F", DATED AUGUST 30, 2016.
(E) CAGED ACCESS LADDER
(E) UPPER ROOF
INDIAN NECK AVENUE
(E) EQUIPMENT (BY OTHERS)
(E) STEEL CHIMNEY (TYP)
(E) CABLE TRAY (BY OTHERS)
(E) PENTHOUSE
(E) AIR21 B2A/B4P ANTENNA AND (E) 18-TWIN AWS TMA TO BE RELOCATED ON A (P) T-ARM MOUNT (TYP 1/SECTOR , TOTAL 3)
(P) AIR21 B4A/B2P ANTENNA ON A (P) T-ARM MOUNT (TYP 1/SECTOR , TOTAL 3)
1 A-3
(P) LNX-6515DS-VTM ANTENNA AND RRUS11 B12 ON A (P) T-ARM MOUNT (TYP 1/SECTOR , TOTAL 3)
2 A-3
3 A-3
(E) PPC
(E) TRANSFORMER
(P) (1) 1 HYBRID FIBER CABLE
(E) (12) 7/8" COAX CABLES ROUTED INSIDE (E) 2' WIDE VERTICAL CABLE TRAY
(E) GPS
(E) STEEL PLATFORM SITTING ON RUBBER MAT WITHIN T-MOBILE LEASE AREA
(E) 6102
(E) 3106
(E) UPPER ROOF

SITE PLAN 2 A-1
SCALE: N.T.S

GENERAL SITE NOTES

1. SITE INFORMATION WAS OBTAINED FROM A FIELD INVESTIGATION PERFORMED BY ATLANTIS DESIGN GROUP, INC. CONTRACTOR TO FIELD VERIFY DIMENSIONS AS NECESSARY BEFORE CONSTRUCTION.
2. THE PROPOSED DEVELOPMENT DOES NOT INCLUDE SIGNS OF ADVERTISING.
3. THE PROPOSED DEVELOPMENT IS UNMANNED AND THEREFORE DOES NOT REQUIRE A MEANS OF WATER SUPPLY OR SEWAGE DISPOSAL.
4. NO LANDSCAPING WORK IS PROPOSED IN CONJUNCTION WITH THIS DEVELOPMENT OTHER THAN THAT WHICH IS SHOWN.
5. THE PROPOSED DEVELOPMENT DOES NOT INCLUDE OUTDOOR STORAGE OR ANY SOLID WASTE RECEPTACLES.
6. UTILITIES SHOWN ON PLAN ARE TAKEN FROM OWNERS RECORDS AND FIELD LOCATION OF VISIBLE SURFACE FEATURES. THE EXISTENCE, EXTENT AND EXACT HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES HAS NOT BEEN VERIFIED. ANY CONTRACTOR PERFORMING WORK ON THIS SITE MUST CONTACT CALL-BEFORE-YOU-DIG THREE WORKING DAYS PRIOR TO COMMENCING WORK.
7. ALL OBSOLETE OR UNUSED FACILITIES SHALL BE REMOVED WITHIN 12 MONTHS OF CESSATION OF OPERATIONS.

SITE LEGEND

- SITE PROPERTY LINE
- STREET OR ROAD
- CHAIN LINK FENCE
- OPAQUE WOODEN FENCE
- BOARD ON BOARD FENCE
- DECIDUOUS TREES/SHRUBS
- EVERGREEN TREES/SHRUBS
- TREE LINE
- UTILITY POLE
- (E) EXISTING
- (N) NEW
- (P) PROPOSED
- (F) FUTURE
- PROP. LTE ANTENNA
- PROP. UMTS/GSM ANTENNA
- EX. GSM ANTENNA
- EX. UMTS ANTENNA

T · · Mobile ·

T-MOBILE NORTHEAST, LLC

ATLANTIS DESIGN GROUP, INC.

SUBMITTALS

DRAWN BY: FG
CHECKED BY: KV

STATE OF CONNECTICUT — HOSSEIN VAHEDI — NO. ARI. 11162 — LICENSED ARCHITECT

PROFESSIONAL SEAL

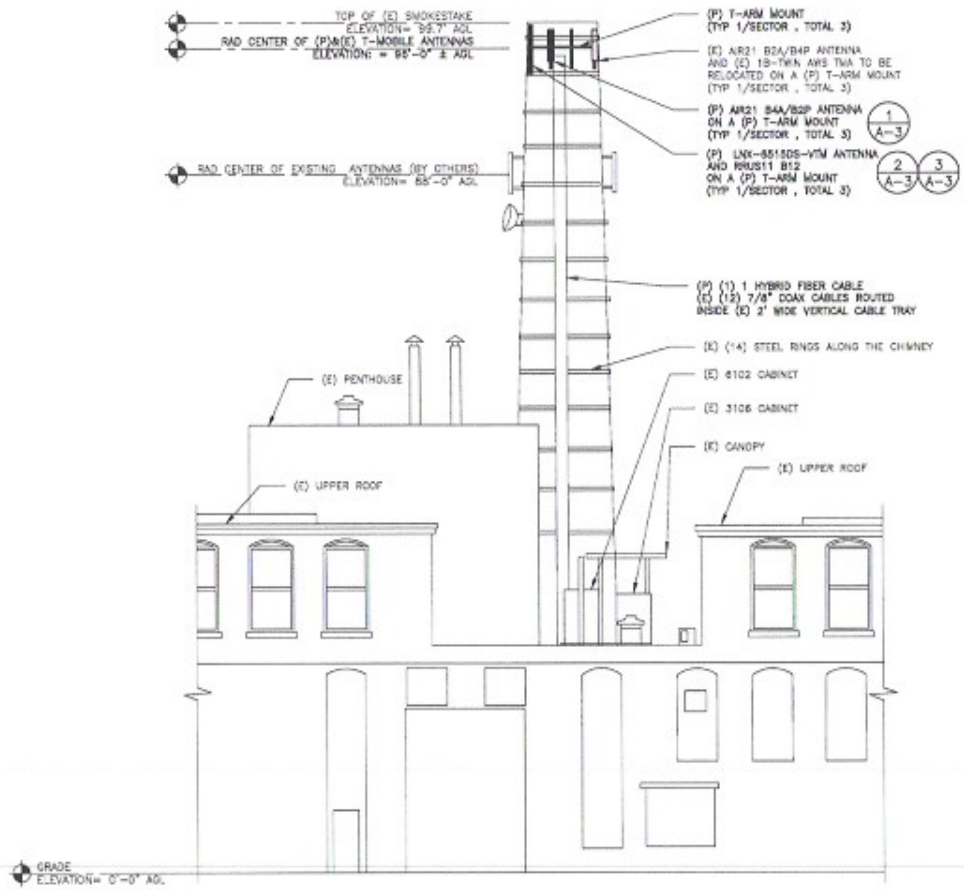
SITE NAME
CT11328F

SITE NAME
MARINE SYS. SMOKE STACK

SITE ADDRESS
50 MAPLE STREET
BRANFORD, CT, 06405

SHEET TITLE
ROOF PLAN AND EQUIPMENT PLAN

SHEET NUMBER
A-1


TOP OF (E) SMOKESTAKE
ELEVATION= 99.7' AGL
RAD CENTER OF (P)&(E) T-MOBILE ANTENNAS
ELEVATION: = 95'-0" ± AGL
RAD CENTER OF EXISTING ANTENNAS (BY OTHERS)
ELEVATION= 88'-0" AGL
(P) T-ARM MOUNT
(TYP 1/SECTOR , TOTAL 3)
(E) AIR21 B2A/B4P ANTENNA
AND (E) 19-TWIN AWS TMA TO BE
RELOCATED ON A (P) T-ARM MOUNT
(TYP 1/SECTOR , TOTAL 3)
(P) AIR21 B4A/B2P ANTENNA
ON A (P) T-ARM MOUNT
(TYP 1/SECTOR , TOTAL 3)
1 A-3
(P) LNX-6515DS-VTM ANTENNA
AND RRUS11 B12
ON A (P) T-ARM MOUNT
(TYP 1/SECTOR , TOTAL 3)
2 A-3
3 A-3
(P) (1) 1 HYBRID FIBER CABLE
(E) (12) 7/8" COAX CABLES ROUTED
INSIDE (E) 2' WIDE VERTICAL CABLE TRAY
(E) (14) STEEL RINGS ALONG THE CHIMNEY
(E) PENTHOUSE
(E) 6102 CABINET
(E) 3106 CABINET
(E) CANOPY
(E) UPPER ROOF
(E) UPPER ROOF
GRADE
ELEVATION= 0'-0" AGL

ELEVATION
SCALE: N.T.S
1 A-2

T-Mobile

T-MOBILE NORTHEAST, LLC

ATLANTIS DESIGN GROUP, INC.

SUBMITTALS

DRAWN BY: FG
CHECKED BY: KM

PROFESSIONAL SEAL

STATE OF CONNECTICUT · HOSSEIN VAHEDI · NO. ARI. 11162 · LICENSED ARCHITECT

THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF T-MOBILE. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED.

SITE NAME
CT11326F

SITE NAME
MARINE SYS. SMOKE STACK

SITE ADDRESS
60 MAPLE STREET
BRANDFORD, CT, 06405

SHEET TITLE
ELEVATION

SHEET NUMBER
A-2

EXHIBIT C

Chimney Design Calculations by International Chimney Corporation
55 South Long Street, Williamsville, NY 14221

Project: CT-43880-C STRUCTURAL ANALYSIS

Site: 50 Maple Street | Branford, CT 06405

Chimney Description: 99.70' Red Common Brick Chimney with Pedestal

Summary: The following is a structural analysis on a 99.7' common brick chimney. With the addition of the proposed antennas and RRUS at the 96' elevation, it was found that the chimney shell is not overstressed. The chimney meets the requirements of ASCE 7-02 which is currently adopted in the state of Connecticut. This analysis assumes all recommended repairs have been completed.

Customer: Mark Robert
T-Mobile Northeast, LLC.
35 Griffin Road, South
Bloomfield, CT 06002

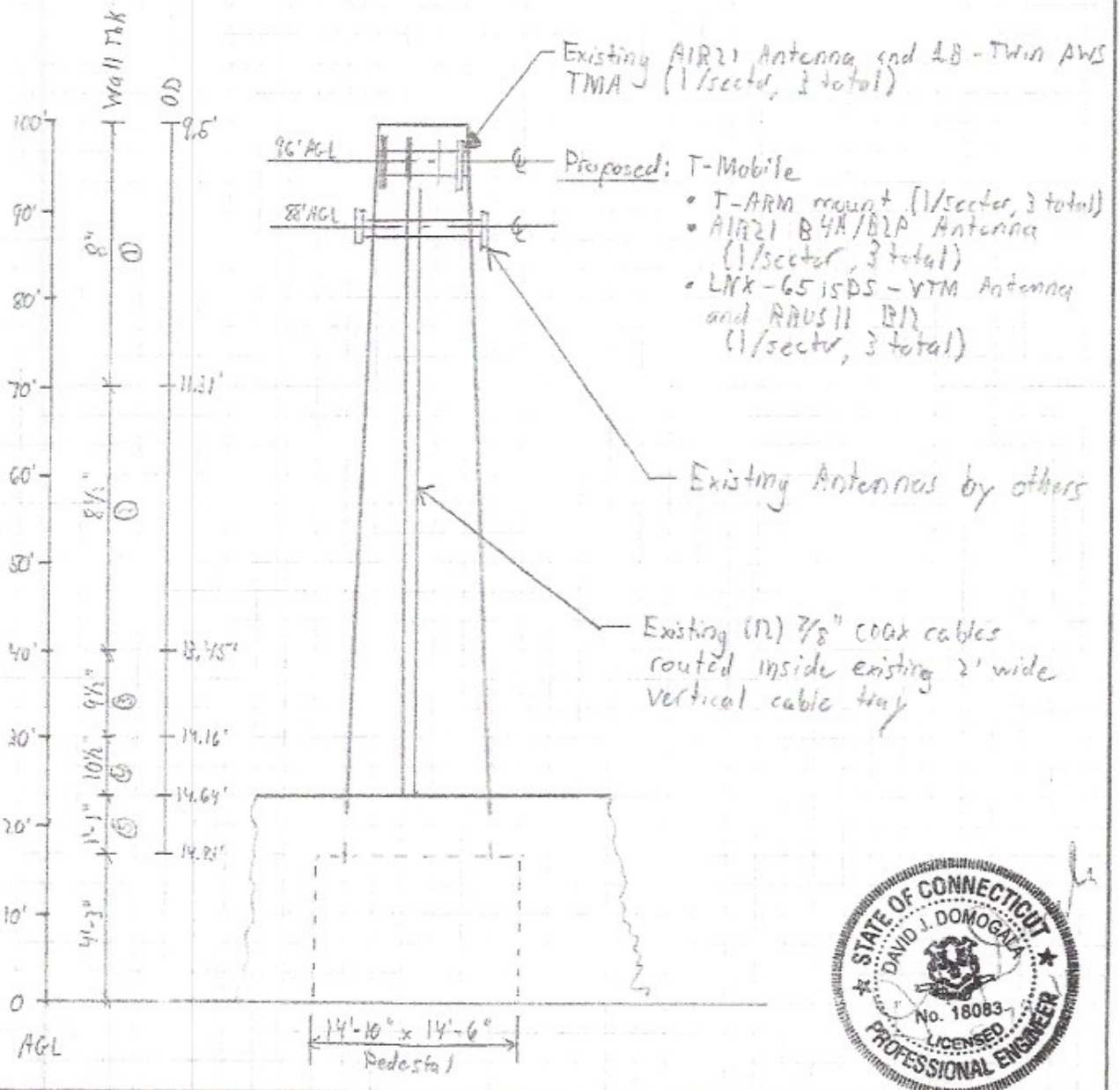
Finish cover page ..... 10 total

By: JWL
Date: 8/8/2016

INTERNATIONAL CHIMNEY CORPORATION
Engineers & Contractors Since 1927

ICC Job: CT-43880-C

Site: 50 Maple St
Branford, CT 06405



STATE OF CONNECTICUT
DAVID J. DOMOGALA
No. 18083
LICENSED PROFESSIONAL ENGINEER

HEADQUARTERS: 55 South Long Street, Williamsville, NY 14221
MIDWEST GENERAL OFFICE: 20622 South Amherst Court, Joliet, IL 60433
BRANCH OFFICES: Cleveland, Gulf Coast, Mid-Atlantic, New England, New Jersey, Pittsburgh

800-828-1446
Fax 716-634-3983
www.internationalchimney.com

(2)

Wind Loads: Using ASCE 7-10

Risk Category III, Exposure C, V = 137 mph

$q_z = 0.00256\, K_z\, K_{zt}\, K_d\, V^2$

$p = q_z\, G\, C_f$ ← changes

$q = 0.00256 \times \underset{K_{zt}}{1.0} \times \underset{K_d}{0.95} \times \underset{G}{0.85} \times \underset{V^2}{137^2} = 38.80$ psf

Use $0.6q = 0.6 \times 38.8 = 23.3$ psf

Section	ΔH (ft)	K_z	C_f	F_{des} (psf)
①	99.7-70	1.23	1.08	30.95
②	70-40	1.11	0.81	20.95
③	40-30	1.01	0.80	18.83
④	30-23.333	0.95	0.80	17.71
⑤	23.333-17	—	0	0

* ignore pedestal in analysis

STATE OF CONNECTICUT
DAVID J. DOMOGALA
No. 18083
LICENSED
PROFESSIONAL ENGINEER

Input Stack Profile Data:

Starting from top of stack and working downward, enter data for each stack section to be analyzed:

TopOD := (in)	BtmOD := (in)	WallThk := (in)	SectHgt := (in)
114	135.72	8	355
135.72	161.40	8.5	360
161.40	169.92	9.5	120
169.92	175.68	10.5	80
175.68	178	13	76
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

STATE OF CONNECTICUT ★ DAVID J. DOMOGALA No. 18083 LICENSED PROFESSIONAL ENGINEER ★

5-19-11

-

14

Input Wind Load and Unit Weight Data:

Starting from top of stack and working downward, enter data for each stack section to be analyzed:

$$\text{DesignWindLoad} := \begin{pmatrix} 30.95 \\ 20.95 \\ 18.83 \\ 17.71 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{pmatrix} \frac{lb}{ft^2} \quad \text{WindCoefficient} := \begin{pmatrix} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{pmatrix} \quad \text{UnitWeight} := \begin{pmatrix} 127 \\ 125 \\ 125 \\ 125 \\ 125 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{pmatrix} \frac{lb}{ft^3}$$

Calculate Stress:

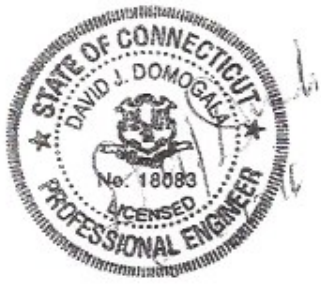
Fa = Axial load at bottom of each stack section. This includes all dead load above the bottom of the stack section, including the stack section itself plus all other stack sections above it.

$$Fa := \left| \begin{array}{l} \text{for } r \in 1..N \\ \quad Fa_r \leftarrow \dfrac{DeadLoad_r}{Area_r} \\ Fa \end{array} \right.$$

Fb = Bending stress due to wind at bottom of each stack section. This includes all wind load on the stack section itself plus the wind load on all stack sections above it.

$$Fb := \left| \begin{array}{l} \text{for } r \in 1..N \\ \quad Fb_r \leftarrow \dfrac{TotalSectionMoment_r}{SectionMod_r} \\ Fb \end{array} \right.$$

$$Fa = \begin{pmatrix} 23.872 \\ 42.623 \\ 44.798 \\ 45.05 \\ 41.885 \end{pmatrix} \frac{lb}{in^2} \qquad Fb = \begin{pmatrix} 17.464 \\ 43.971 \\ 48.122 \\ 49.031 \\ 46.503 \end{pmatrix} \frac{lb}{in^2}$$



The following is a spreadsheet that calculates the allowable stresses on the chimney using Code ACI 530-05/ASCE 5-05/TMS 402-05

Input =
Pass =
Fail =

Height of Chimney (h in feet)	99.7

f'_m (psi)	1500

Section	Wall Thk (in)	OD (ft)	ID (ft)	r (ft)	h/r	F_a (psi)	F_{bc} (psi)	f_a (psi)	f_{bc} (psi)	$(f_a/F_a)+(f_{bc}/F_{bc})$	f_{bt} (psi)	F_{bt} (psi)	f_{bt}/F_{bt}
1	8	11.31	9.98	3.77	26.44	361.62	499.5	23.872	17.464	0.100977	-6.408	40	-0.160
2	8.5	13.45	12.03	4.51	22.10	365.66	499.5	42.623	43.971	0.204595	1.348	40	0.034
3	9.5	14.16	12.58	4.73	21.06	366.52	499.5	44.798	48.122	0.218567	3.324	40	0.083
4	10.5	14.64	12.89	4.88	20.45	367.00	499.5	45.05	49.031	0.220911	3.981	40	0.100
5	13	14.83	12.66	4.88	20.45	367.00	499.5	41.885	46.503	0.207228	4.618	40	0.115

For h/r < 99: $F_a = (1/4)f'_m[1 - (h/140r)^2]$

For h/r < 99: $F_a = (1/4)f'_m(70r/h)^2]$

$F_{bc} = (1/3)f'_m$

USING 0.6DEAD + 0.6WIND (ASCE 7-10)

Section	Wall Thk (in)	OD (ft)	ID (ft)	r (ft)	h/r	F_a (psi)	F_{bc} (psi)	$0.6f_a$ (psi)	f_{bc} (psi)	$(0.6f_a/F_a)+(f_{bc}/F_{bc})$	f_{bt} (psi)	F_{bt} (psi)	f_{bt}/F_{bt}
1	8	11.31	9.98	3.77	26.44	361.62	499.5	14.3232	17.464	0.074571	3.141	40	0.079
2	8.5	13.45	12.03	4.51	22.10	365.66	499.5	25.5738	43.971	0.157969	18.397	40	0.460
3	9.5	14.16	12.58	4.73	21.06	366.52	499.5	26.8788	48.122	0.169676	21.243	40	0.531
4	10.5	14.64	12.89	4.88	20.45	367.00	499.5	27.03	49.031	0.171811	22.001	40	0.550
5	13	14.83	12.66	4.88	20.45	367.00	499.5	25.131	46.503	0.161576	21.372	40	0.534

(7)

Applied Technology Council

WINDSPEED BY LOCATION

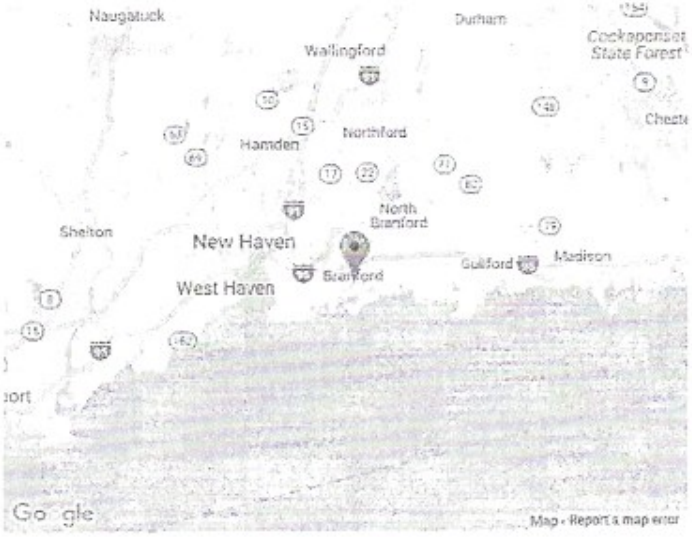
Search Results

Query Date: Mon Aug 08 2016
Latitude: 41.2739
Longitude: -72.8138

ASCE 7-10 Windspeeds (3-sec peak gust in mph*):

Risk Category I: 116
Risk Category II: 127
Risk Category III-IV: 137
MRI 10-Year:** 77
MRI 25-Year:** 88
MRI 50-Year:** 95
MRI 100-Year:** 103

ASCE 7-05 Windspeed:
112 (3-sec peak gust in mph)
ASCE 7-93 Windspeed:
83 (fastest mile in mph)



*Miles per hour
**Mean Recurrence Interval

Users should consult with local building officials to determine if there are community-specific wind speed requirements that govern.

Print your results

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Our File # CT-43880-C August 30, 2016

INTERNATIONAL CHIMNEY CORPORATION
ENGINEERS & CONTRACTORS SINCE 1927

T-MOBILE NORTHEAST, LLC
35 GRIFFIN ROAD, SOUTH
BLOOMFIELD, CT 06002

CHIMNEY RE ANALYSIS REPORT
99.70' RED COMMON BRICK CHIMNEY WITH PEDESTAL
50 MAPLE STREET
BRANFORD, CT 06405
VERIZON WIRELESS SITE NAME:
BRANFORD 5 CT

SECTION III - RECOMMENDATIONS

The damaged NE lower corner of the pedestal needs to be cleaned up and new material put in place.

All stress cracks must be cut out, cleaned, moistened, and pointed with an appropriate mortar for this type of chimney. All loose and missing brick should be replaced, where possible, or patched with a strong mortar. This includes sealing up the existing breeching opening with brick or block. Prior to

The masonry repairs in the pedestal should be followed by the fabrication and installation of a steel corset.
The radial section of the chimney should also have a steel corset installed to stabilize the column after the masonry repairs have been completed.

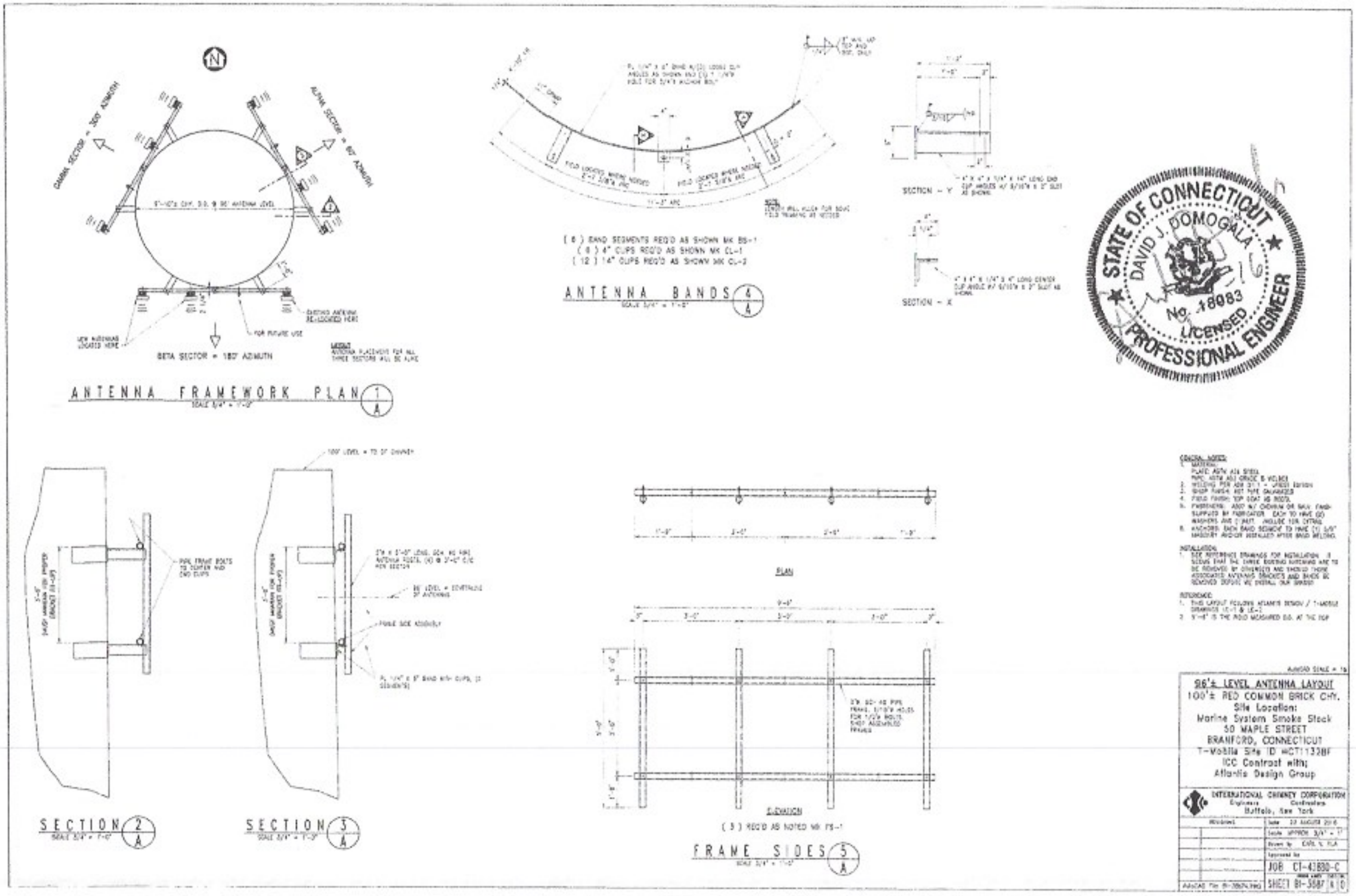
To validate the structural analysis all masonry repairs and steel corset and framework required must be completed.

A new LPS should be installed. The cast iron caps should be removed and the top sealed with a vented cover.

The interior base of the liner should have all debris removed.

The above was taken from a previous report whick was completed in January of this year. None of the work has been completed.

(9)


GAMMA SECTOR = 300° AZIMUTH
ALPHA SECTOR = 60° AZIMUTH
BETA SECTOR = 180° AZIMUTH
NEW ANTENNAS LOCATED HERE
EXISTING ANTENNA RE-LOCATED HERE
FOR FUTURE USE
ANTENNA FRAMEWORK PLAN 1/A
SCALE 3/4" = 1'-0"
(6) BAND SEGMENTS REQ'D AS SHOWN MK BS-1
(6) 4" CLIPS REQ'D AS SHOWN MK CL-1
(12) 14" CLIPS REQ'D AS SHOWN MK CL-2
ANTENNA BANDS 4/A
SCALE 3/4" = 1'-0"
SECTION – Y
SECTION – X
100' LEVEL = TO OF CHIMNEY
PIPE FRAME BOLTS TO CLIPS AND END CLIPS
FRAME SIDE ASSEMBLY
SECTION 2/A
SCALE 3/4" = 1'-0"
SECTION 3/A
SCALE 3/4" = 1'-0"
PLAN
ELEVATION
(3) REQ'D AS NOTED MK FS-1
FRAME SIDES 5/A
SCALE 3/4" = 1'-0"
STATE OF CONNECTICUT
DAVID J. DOMOGALA
No. 18083
LICENSED
PROFESSIONAL ENGINEER
96'± LEVEL ANTENNA LAYOUT
100'± RED COMMON BRICK CHY.
Site Location:
Marine System Smoke Stack
50 MAPLE STREET
BRANFORD, CONNECTICUT
T-Mobile Site ID #CT11328F
ICC Contract with;
Atlantis Design Group
INTERNATIONAL CHIMNEY CORPORATION
Engineers Contractors
Buffalo, New York
Date 23 AUGUST 2016
JOB CT-43830-C
SHEET BI-3587 A 0

10

EXHIBIT D

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RADIO FREQUENCY EMISSIONS ANALYSIS REPORT
EVALUATION OF HUMAN EXPOSURE POTENTIAL TO NON-IONIZING EMISSIONS

T-Mobile Existing Facility

Site ID: CT11328F

Marine Sys. Smoke Stack
50 Maple Street
Branford, CT 06405

January 22, 2017

EBI Project Number: 6217000259

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general public allowable limit:	5.61 %

21 B Street · Burlington, MA 01803 Tel: (781) 273.2500 Fax: (781) 273.3311

EBI Consulting
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January 22, 2017

T-Mobile USA
Attn: Jason Overbey, RF Manager
35 Griffin Road South
Bloomfield, CT 06002

Emissions Analysis for Site: **CT11328F – Marine Sys. Smoke Stack**

EBI Consulting was directed to analyze the proposed T-Mobile facility located at **50 Maple Street, Branford, CT**, for the purpose of determining whether the emissions from the Proposed T-Mobile Antenna Installation located on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter (μW/cm2). The number of $\mu W/cm^2$ calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

General population/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu W/cm^2$). The general population exposure limit for the 700 MHz Band is approximately 467 $\mu W/cm^2$, and the general population exposure limit for the 1900 MHz (PCS) and 2100 MHz (AWS) bands is 1000 $\mu W/cm^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the proposed T-Mobile Wireless antenna facility located at **50 Maple Street, Branford, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since T-Mobile is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was focused at the base of the tower. For this report the sample point is the top of a 6-foot person standing at the base of the tower.

For all calculations, all equipment was calculated using the following assumptions:

1) 2 GSM channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.

2) 2 UMTS channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.

3) 2 UMTS channels (AWS Band – 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.

4) 2 LTE channels (AWS Band – 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 60 Watts per Channel

5) 1 LTE channel (700 MHz Band) was considered for each sector of the proposed installation. This channel has a transmit power of 30 Watts.

6) Since the 2100 MHz UMTS radios are ground mounted there are additional cabling losses accounted for. For each ground mounted 2100 MHz UMTS RF path an additional 2.08 dB of loss was factored in to the calculations for these paths. This is based on manufacturers Specifications for 120 feet of 7/8" coax cable on each path.

7) All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.

8) For the following calculations the sample point was the top of a 6-foot person standing at the base of the tower. The maximum gain of the antenna per the antenna manufactures supplied specifications minus 10 dB was used in this direction. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

9) The antennas used in this modeling are the **Ericsson AIR21 B4A/B2P** & **Ericsson AIR21 B2A/B4P** for 1900 MHz (PCS) and 2100 MHz (AWS) channels and the **Commscope LNX-6515DS-A1M** for 700 MHz channels. This is based on feedback from the carrier with regards to anticipated antenna selection. The **Ericsson AIR21 B4A/B2P** has a maximum gain of **15.9 dBd** at its main lobe at 2100 MHz. The **Ericsson AIR21 B2A/B4P** has a maximum gain of **15.9 dBd** at its main lobe at 1900 MHz and 2100 MHz. The **Commscope LNX-6515DS-A1M** has a maximum gain of **14.6 dBd** at its main lobe. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

10) The antenna mounting height centerline of the proposed antennas is **96 feet** above ground level (AGL).

11) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.

12) All calculations were done with respect to uncontrolled / general public threshold limits.

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T-Mobile Site Inventory and Power Data

Sector:	A	Sector:	B	Sector:	C
Antenna #:	1	Antenna #:	1	Antenna #:	1
Make / Model:	Ericsson AIR21 B4A/B2P	Make / Model:	Ericsson AIR21 B4A/B2P	Make / Model:	Ericsson AIR21 B4A/B2P
Gain:	15.9 dBd	Gain:	15.9 dBd	Gain:	15.9 dBd
Height (AGL):	96	Height (AGL):	96	Height (AGL):	96
Frequency Bands	2100 MHz (AWS)	Frequency Bands	2100 MHz (AWS)	Frequency Bands	2100 MHz (AWS)
Channel Count	2	Channel Count	2	Channel Count	2
Total TX Power(W):	120	Total TX Power(W):	120	Total TX Power(W):	120
ERP (W):	4,668.54	ERP (W):	4,668.54	ERP (W):	4,668.54
Antenna A1 MPE%	2.07	Antenna B1 MPE%	2.07	Antenna C1 MPE%	2.07
Antenna #:	2	Antenna #:	2	Antenna #:	2
Make / Model:	Ericsson AIR21 B2A/B4P	Make / Model:	Ericsson AIR21 B2A/B4P	Make / Model:	Ericsson AIR21 B2A/B4P
Gain:	15.9 dBd	Gain:	15.9 dBd	Gain:	15.9 dBd
Height (AGL):	96	Height (AGL):	96	Height (AGL):	96
Frequency Bands	1900 MHz(PCS) / 2100 MHz (AWS)	Frequency Bands	1900 MHz(PCS) / 2100 MHz (AWS)	Frequency Bands	1900 MHz(PCS) / 2100 MHz (AWS)
Channel Count	6	Channel Count	6	Channel Count	6
Total TX Power(W):	180	Total TX Power(W):	180	Total TX Power(W):	180
ERP (W):	6,114.48	ERP (W):	6,114.48	ERP (W):	6,114.48
Antenna A2 MPE%	2.71	Antenna B2 MPE%	2.71	Antenna C2 MPE%	2.71
Antenna #:	3	Antenna #:	3	Antenna #:	3
Make / Model:	Commscope LNX-6515DS-A1M	Make / Model:	Commscope LNX-6515DS-A1M	Make / Model:	Commscope LNX-6515DS-A1M
Gain:	14.6 dBd	Gain:	14.6 dBd	Gain:	14.6 dBd
Height (AGL):	96	Height (AGL):	96	Height (AGL):	96
Frequency Bands	700 MHz	Frequency Bands	700 MHz	Frequency Bands	700 MHz
Channel Count	1	Channel Count	1	Channel Count	1
Total TX Power(W):	30	Total TX Power(W):	30	Total TX Power(W):	30
ERP (W):	865.21	ERP (W):	865.21	ERP (W):	865.21
Antenna A3 MPE%	0.82	Antenna B3 MPE%	0.82	Antenna C3 MPE%	0.82

Site Composite MPE%	
Carrier	**MPE%**
T-Mobile (Per Sector Max)	**5.61 %**
No Additional Carriers Listed In The CSC Active MPE Database	NA
Site Total MPE %:	**5.61 %**

T-Mobile Sector A Total:	5.61 %
T-Mobile Sector B Total:	5.61 %
T-Mobile Sector C Total:	5.61 %
Site Total:	5.61 %

T-Mobile _per sector	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ($\mu W/cm^2$)	Frequency (MHz)	Allowable MPE ($\mu W/cm^2$)	Calculated % MPE
T-Mobile AWS - 2100 MHz LTE	2	2,334.27	96	20.72	AWS - 2100 MHz	1000	2.07%
T-Mobile AWS - 2100 MHz UMTS	2	722.97	96	6.42	AWS - 2100 MHz	1000	0.64%
T-Mobile PCS - 1950 MHz UMTS	2	1,167.14	96	10.36	PCS - 1950 MHz	1000	1.04%
T-Mobile PCS - 1950 MHz GSM	2	1,167.14	96	10.36	PCS - 1950 MHz	1000	1.04%
T-Mobile 700 MHz LTE	1	865.21	96	3.84	700 MHz	467	0.82%
						Total*:	**5.61%**

*Totals may vary by 0.01% due to summing of remainders

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Summary

All calculations performed for this analysis yielded results that were **within** the allowable limits for general public exposure to RF Emissions.

The anticipated maximum composite contributions from the T-Mobile facility as well as the site composite emissions value with regards to compliance with FCC's allowable limits for general public exposure to RF Emissions are shown here:

T-Mobile Sector	Power Density Value (%)
Sector A:	5.61 %
Sector B:	5.61 %
Sector C:	5.61 %
T-Mobile Per Sector Maximum:	5.61 %
Site Total:	5.61 %
Site Compliance Status:	**COMPLIANT**

The anticipated composite MPE value for this site assuming all carriers present is **5.61%** of the allowable FCC established general public limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

FCC guidelines state that if a site is found to be out of compliance (over allowable thresholds), that carriers over a 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite values calculated were well within the allowable 100% threshold standard per the federal government.