

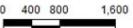
DRI # 677 Verizon Tower Height Extension

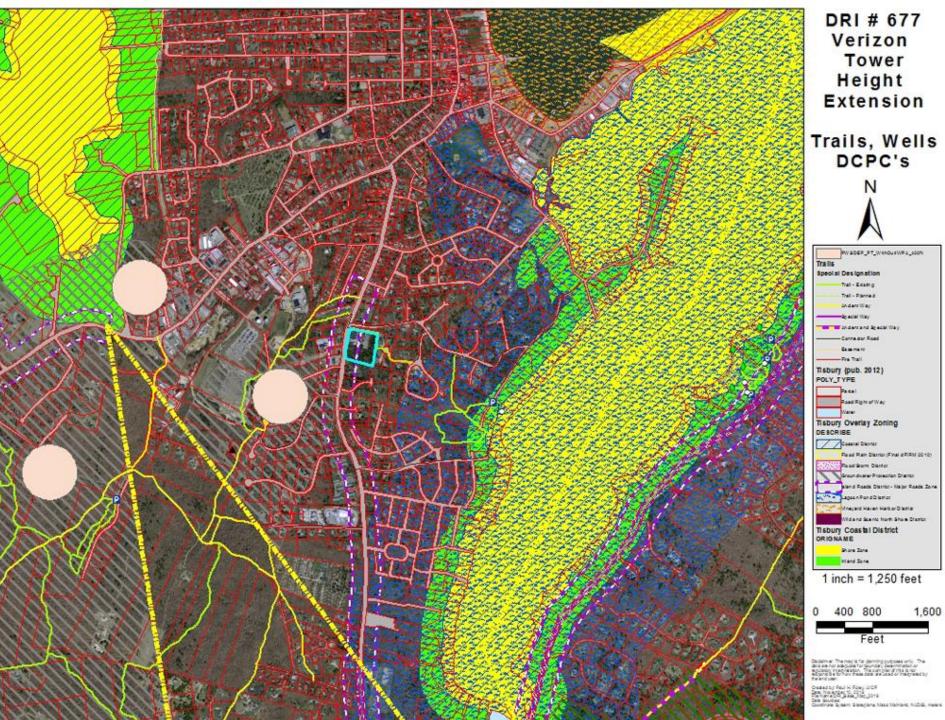
Basemap





1 inch = 1,250 feet

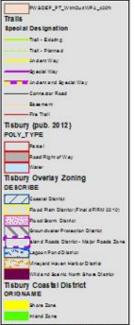




DRI # 677 Verizon Tower Height Extension

Trails, Wells DCPC's





1 inch = 1,250 feet

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DRI # 677 Verizon Tower Height Extension

Applicant: Verizon New England Inc; Geoghan Coogan Esq. (Agent).

Project Location: 228 Edgartown Road, Tisbury, Map 14-A Lot 3 (4.12 acres)

Proposal: To increase the height of the Verizon Tower used to transmit landline calls and Internet access via narrow width microwave between Vineyard Haven and Falmouth (also handles Nantucket) from 77 feet above the ground level to 130 feet ± above ground.

Zoning: R-20 Residential

Local Permits: Special Permit from ZBA; Building Permit

DRI # 677 Verizon Tower Height Extension

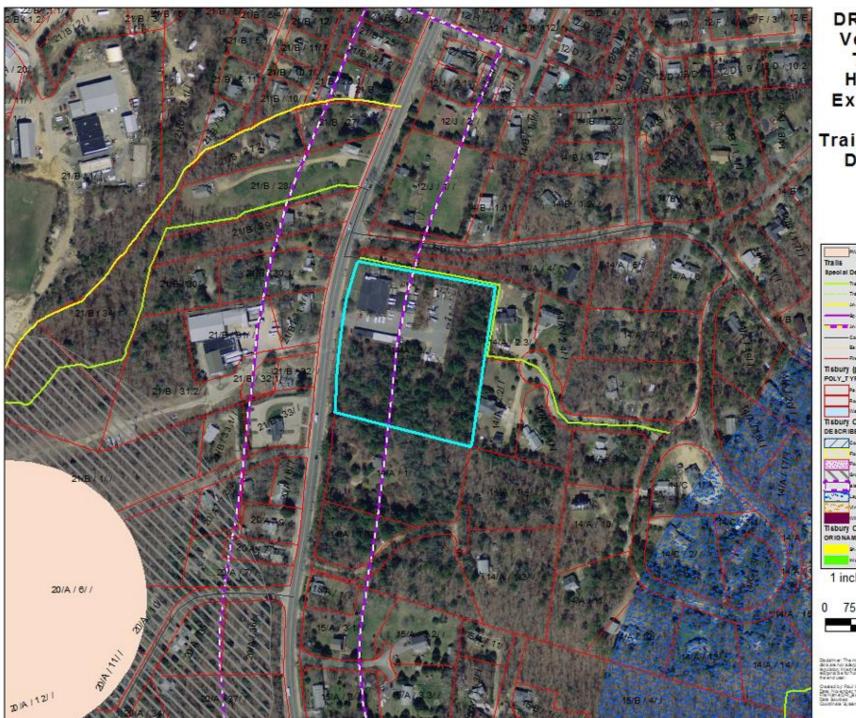
Project Summary:

- To increase the height of the Verizon Tower used to transmit landline calls and Internet access via narrow width microwave between Vineyard Haven and Falmouth (also handles Nantucket) from 77 feet above the ground level to 130 feet ± above ground.
- The additional height will be constructed above the existing tower.
- The calls transmitted include police, fire department, EMS, E911 calls.
- One new piece of equipment, an 8' dish, will be installed on the tower at elevation 125'.
- The following existing equipment on the tower will be relocated to a different height:
 - A 6' diameter dish at elevation 55' above ground will be re-installed at elevation 95';
 - A 6' diameter dish at elevation 6S' above ground will be re-Installed at elevation 102';
 - An 8' diameter dish at elevation 75' above ground will be re-installed at elevation of 128'.
- Applicant says that a number of trees In the Vineyard Haven area are approaching the height at which they will obstruct this transmission. Some of these trees are on private property and others are on public property and have been classified by the Town Tree Warden as shade trees which would require a public hearing to determine if they can be trimmed or removed.
- Verizon anticipates that these trees and others will grow and cause service interruptions
- Verizon's stated goal is to get as close to 100% annual two-way reliability as possible.

Planning Issues

- Visibility: Existing and proposed photo simulations indicate that the higher tower will be more visible along Edgartown-Vineyard Haven Road.
- **DCPC**: The existing tower is within the Island Roads DCPC. If the tower were moved further back on the property outside of the DCPC the taller tower would be less visible while driving along Edgartown Vineyard Haven Road.

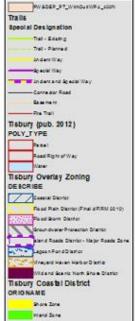
NOTE: The applicant is proposing to extend the height of an existing tower not build a new taller tower.



DRI # 677 Verizon Tower Height Extension

Trails, Wells DCPC's



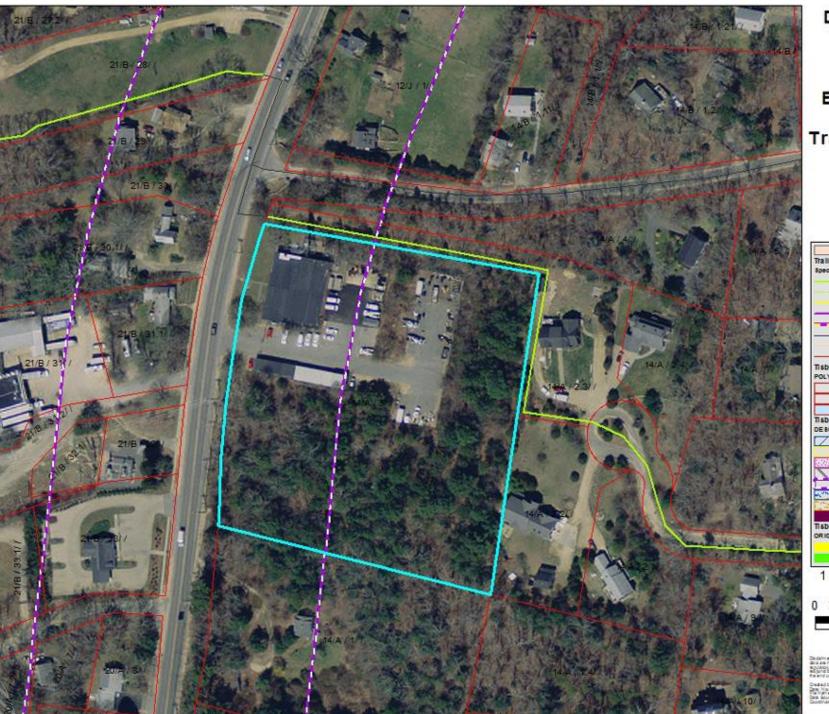


1 inch = 250 feet

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DRI # 677 Verizon Tower Height Extension

Trails, Wells DCPC's





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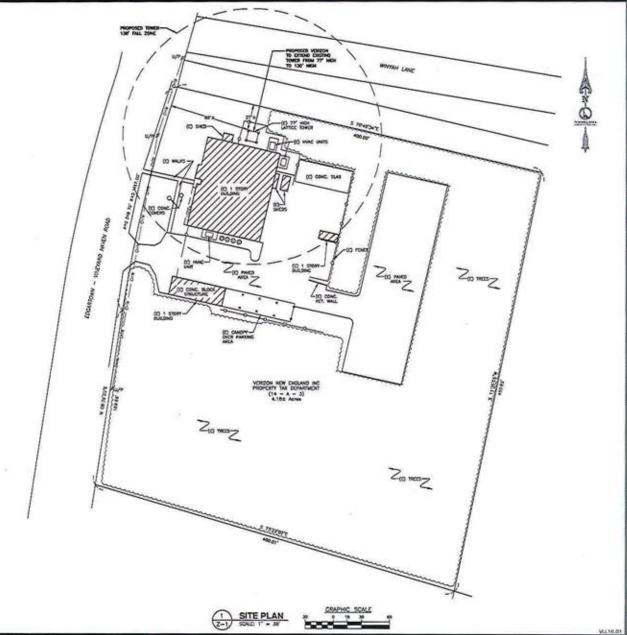
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9. ARISOCTON TOWN OF TISBURY WA 10. TAX WAY MP 14, DUDON A, LOT 3

11. 20NING 12.0000 NOTOHOKO: 800K 24Z - PAGE 569

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79 HIGH STREET WAREHAM, MASSACHUSETTS 0257

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TURNING MILL CONSULTANTS, INC. DENTLOPERS, ENGINEERS AND CONSTRUCTION MANAGERS NO TOTAL STATE OF THE STATE OF

SITE ADDRESS:

228 EDGARTOWN ROAD TISBURY, MA 02568

SUBMITTALS

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8 63/13/17 REV. Dt. TWR. C/Li A 11/14/16 ISSUED FOR REVIEW

PROFESSIONAL STAMP

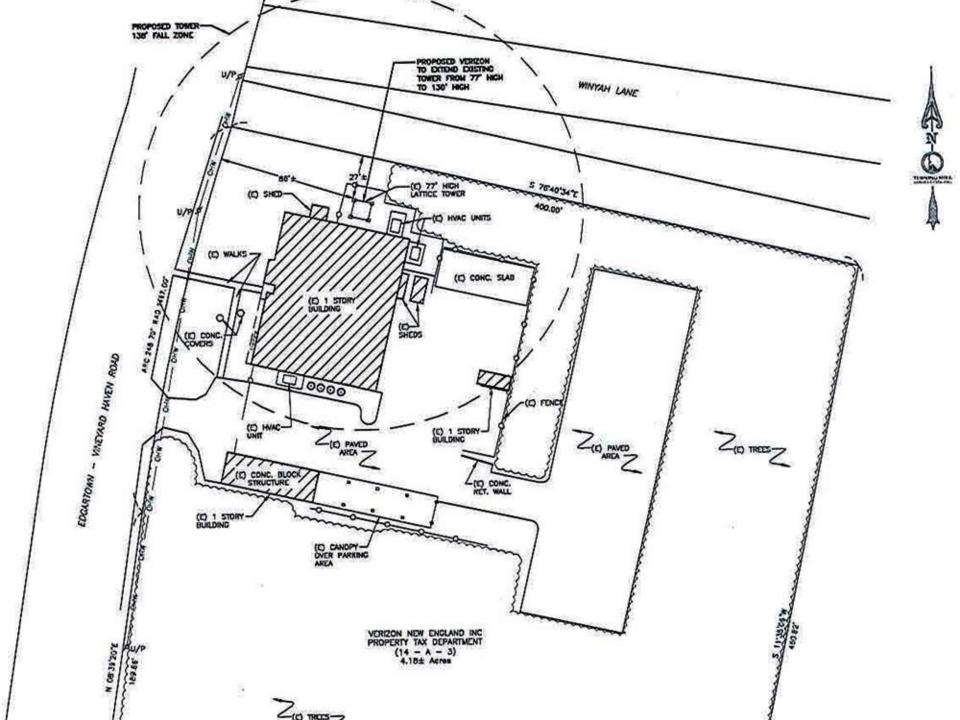
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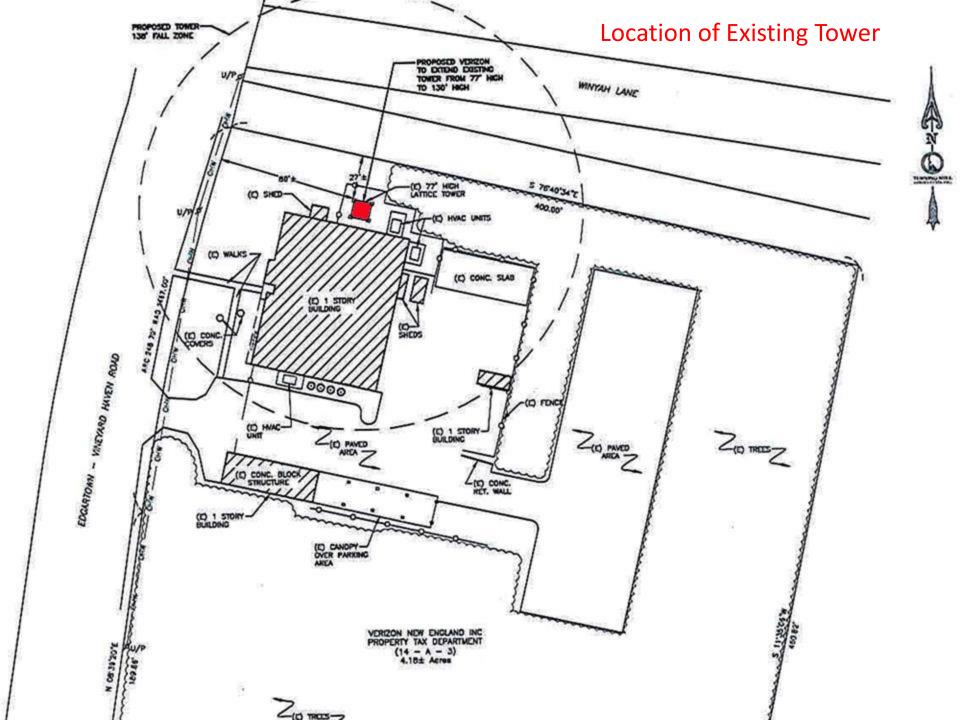
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SITE PLAN

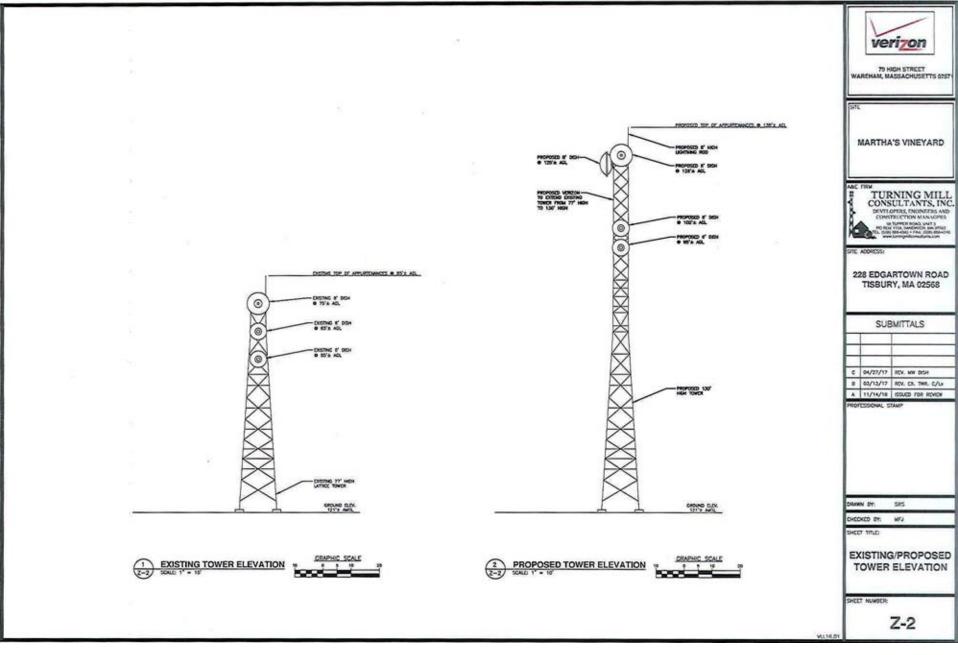
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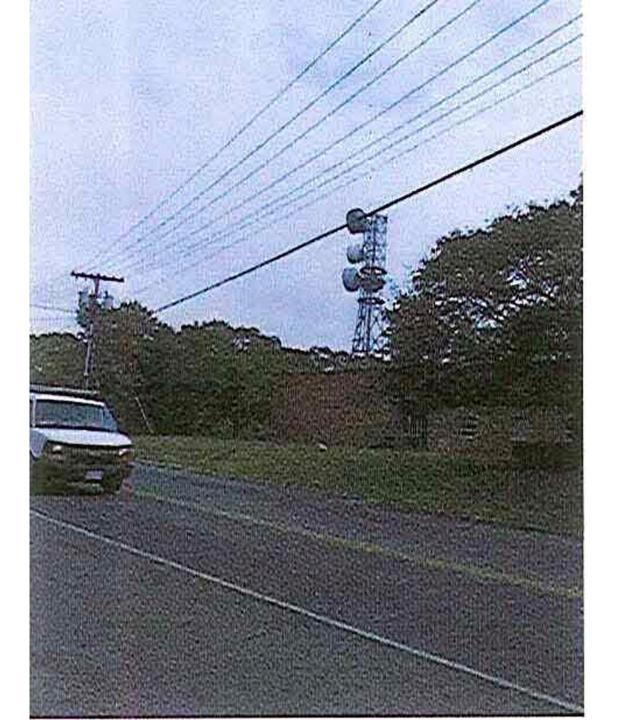
Z-1





Existing versus Proposed Tower Height





PROJECT SUMMARY

APPLICANT/LESSEE:

VERIZON

CONTRACTORS:

CONSTRUCTION: TBD.

CONSULTANTS:

STRUCTURAL COMPONENTS, LLC

1-866-386-7622

FOR ENGINEERING QUESTIONS CONTACT: WESLEY CULVER
FOR CONSTRUCTION AND FIELD SERVICES QUESTIONS CONTACT: RYAN HUBERT
FOR MATERIAL QUOTES AND FABRICATION QUESTIONS CONTACT: SCOTT STEKR

TOWER OWNER:

TURNING MILL CONSULTANTS, INC. 68 TUPPER ROAD, UNIT 3 PO BOX 1159 SANDWICH, MA 02563 CONTACT: MICHAEL JOYCE 508-888-4383

SHEET INDEX

ARCHITECTURAL:

T-1 TITLE SHEET
GN-1 GENERAL CONSTRUCTION NOTES
GN-2 SPECIAL INSPECTIONS

STRUCTURAL:

BOM-1 BILL OF MATERIALS BOM-2 BILL OF MATERIALS (CONT'D) S-1 SPECIFICATIONS

DETAILS:

D-1 CONSTRUCTION SEQUENCE
D-2 REINFORCEMENT DETAILS
D-3 REINFORCEMENT DETAILS (CONTD)

D-4 REINFORCEMENT DETAILS (CONTD)

D-5 REINFORCEMENT DETAILS (CONT'D)

D-6 REINFORCEMENT DETAILS (CONT'D)

D-7 REINFORCEMENT DETAILS (CONTD)

D-8 REINFORCEMENT DETAILS (CONT'D)

D-9 REINFORCEMENT DETAILS (CONT'D)

D-10 TOWER EXTENSION DETAILS

D-11 TOWER EXTENSION DETAILS (CONT'D)

D-12 REINFORCEMENT DETAILS (CONT'D)

D-13 REINFORCEMENT OBSTRUCTIONS

D-14 REINFORCEMENT OBSTRUCTIONS (CONT'D)

D-15 ANGLE-X SAFETY CLIMB DETAILS

D-16 TOWER EXTENSION SAFETY CLIMB DETAILS

PRELIMINARY DRAWINGS FOR VINEYARD HAVEN, MA





SITE NAME:

VINEYARD HAVEN

SITE NUMBER:

ASR - 1006321

SITE ADDRESS:

228 EDGARTOWN ROAD VINEYARD HAVEN, MA 02568

We're making this commitment!

VICINITY MAP



DRIVING DIRECTIONS

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MOTE: A VERIZON REPRESENTATIVE IS REQUIRED TO BE ON SITE FOR ACCESS.

APPROVALS					
DISCIPLINE	SIGNATURE	DATE			
PRE CONSTRUCTION INSPECTION					
ZONING/ PERMITTING					
CONSTRUCTION (AS-BUILT)					
LESSEE					
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	_	_			

CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN

ACCORDANCE WITH THE CURRENT EDITIONS OF ALL GOVERNING CODES. AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES, NOTHING IN THESE PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

PROJECT SUMMARY

APPLICANT/LESSEE:

VERIZON

CONTRACTORS:

CONSTRUCTION: TBD.

CONSULTANTS:

STRUCTURAL COMPONENTS, LLC

1-865-365-7602
FOR DERINKENS QUESTIONS CONTACT HELLY QUARK
FOR DESCRIPTION OF DISCONNECTS QUESTIONS CONTACT RYAN HARBITT
FOR MATERIAL QUOTES AND FARRICATION QUESTIONS CONTACT SYOTI STIKE

TOWER OWNER:

TURNING MILL CONSULTANTS, INC. 68 TUPPER ROAD, UNIT 3 PO BOX 1159 SANDWICH, MA 02563 CONTACT: MICHAEL JOYCE

SHEET INDEX

ARCHITECTURAL:

T-1 TITLE SHEET GN-1 GENERAL CONSTRUCTION NOTES GN-2 SPECIAL INSPECTIONS

STRUCTURAL:

BOM-1 BILL OF MATERIALS BOM-2 BILL OF MATERIALS (CONTO) SPECIFICATIONS

DETAILS:

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REINFORCEMENT OBSTRUCTIONS (CONTO) ANGLE-X SAFETY CLIMB DETAILS

D-16 TOWER EXTENSION SAFETY CLIMB DETAILS

SITE INFORMATION

LATITUDE: 41.4450°N LONGITUDE: 70,6084°W

JURISDICTION

DUKES COUNTY, MA

TURNING MILL CONSULTANTS, INC.



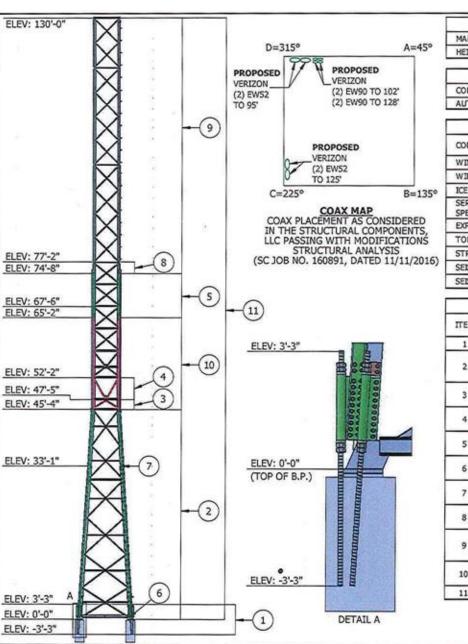
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228 EDGARTOWN ROAD VINEYARD HAVEN, MA 02500

S.S.T. REINFORCEMENT

TITLE SHEET



	TOWER SPECIFICATIONS
MANUFACTURER	UNKNOWN
HEIGHT / TOWER TYPE	77'-2" TOWER EXTENDED TO 130'-0" / (4) LEG S.S.T.

C	URRENT STRUCTURAL ANALYSIS
COMPANY	STRUCTURAL COMPONENTS, LLC
AUTHOR / FILE # / DATE	WESLEY CULVER, P.E. / 160891 / 11-11-2016

	DESIGN SPECIFICATIONS	
CODE	TIA-222-G (IBC 2009) DUKES COUNTY, MA MA AMENDMENTS TO IBC	
WIND SPEED (BARE)	120 MPH 3-SECOND GUST	
WIND SPEED (ICED)	40 MPH 3-SECOND GUST	
ICE THICKNESS	3/4" RADIAL	
SERVICEABILITY BASIC WIND SPEED	60 MPH 3-SECOND GUST	
EXPOSURE CATEGORY	С	
TOPOGRAPHIC CATEGORY	1	
STRUCTURE CLASS	п	
SEISMIC SITE CLASS	D, S ₅ =0.179, S ₁ = 0.051	
SEISMIC DESIGN CATEGORY	В	

ITEM	DESCRIPTION	ELEVA	DILLC NO		
HEM	DESCRIPTION	BOTTOM	TOP	DWG. NO.	
1	INSTALL ANGLE-X ANCHOR RODS.	-3" - 3"	3' - 3"	D-2 & D-3	
2	INSTALL 5x5x1/2" ANGLE-X REINFORCEMENT.	0' - 0"	45' - 4"	D-1, D-2, D-4, D-5, D-13, & D-14	
3	SWAP OUT THE EXISTING DIAGONALS WITH NEW 2x2x3/8" DIAGONALS.	45' - 4"	47" - 5"	D-1 & D-6	
4	SWAP OUT THE EXISTING DIAGONALS WITH NEW 2-1/2x2-1/2x5/16" DIAGONALS.	47" - 5"	52' - 2"	D-1 & D-6	
5	INSTALL 5x5x1/2" ANGLE-X REINFORCEMENT.	65' - 2"	74" - 8"	D-1, D-7, D-13 & D-14	
6	REPLACE THE LEG SPLICE BOLTS AT THE BASE WITH NEW 5/8" A490 BOLTS.	0' - 0"	0" - 0"	D-1 & D-8	
7	REPLACE THE LEG SPLICE BOLTS AT 33' - 1" WITH NEW 5/8" A325 BOLTS.	33' - 1"	33' - 1"	D-1 & D-8	
8	FIELD CUT THE LEGS AT THE TOP OF THE TOWER.	74' - 8"	77' - 2"	D-1 & D-9	
9	INSTALL THE TOWER EXTENSION.	74" - 8"	130' - 0"	D-1, D-10, D-11, D-13, & D-14	
10	INSTALL 5x5x1/2" ANGLE-X REINFORCEMENT.	45' - 4"	65" - 2"	D-1, D-12, D-13, & D-14	
11	INSTALL THE SAFETY CLIMB SYSTEM.	0, - 0,	130' - 0"	D-15 & D-16	

SEE STRUCTURAL COMPONENTS, LLC PASSING WITH MODIFICATIONS STRUCTURAL ANALYSIS (SC JOB NO. 160891, DATED 11/11/2016) FOR TOWER LOADING DETAILS AND ANALYSIS ASSUMPTIONS.







The information contained in this set of documents is proprietary by nature, any use or disclosure other than that service relates to the claim named is strictly prohibited.

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REINFORCEMENT	VINEYARD		00568
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SPECIFICATIONS

S-1





CONSTRUCTION SEQUENCE

- AFTER THE TOWER EXTENSION HAS BEEN INSTALLED THE DISHES THAT WERE REMOVED WILL BE INSTALLED ON THE EXTENSION AT THEIR PROPOSED ELEVATIONS.
- ONCE ALL OF THE REINFORCEMENT HAS BEEN INSTALLED ON THE TOWER THE TWO DISHES THAT WERE REMOVED FROM THE RING MOUNTS MAY BE MOUNTED ON THE TOWER EXTENSION AT THEIR PROPOSED ELEVATIONS.
- THE TWO UPPER DISHES WILL HAVE TO BE TEMPORARILY REMOVED SO THE ANGLE-X REINFORCEMENT MAY BE INSTALLED.

- 4. ONCE ALL THE TOWER REINFORCEMENT (EXCEPT FOR THE ANGLE-X REINFORCEMENT FROM 45'-4" TO 65'-2") AND THE TOWER EXTENSION HAS BEEN INSTALLED THESE TWO DISHES AND RING MOUNTS ARE TO BE REMOVED SO THE ANGLE-X MAY BE INSTALLED FROM 45'-4" TO 65'-2".
- THE TWO DISHES ON THE RING MOUNTS WILL BE LEFT AS IS AND REMAIN ACTIVE UNTIL AFTER THE TOWER EXTENSION HAS BEEN INSTALLED.

NOTES:

- 1. FOLLOW THE ORDER INSTALLATION ON THE S-1 SHEET.
- ALL DISH RELOCATIONS ARE TO BE PERFORMED IN UNDER 6 WEEKS. IF ANY HURRICANES OR OTHER EXTREME WIND EVENTS ARE FORECASTED DISHES WILL NEED TO BE MOVED BACK TO THEIR ORIGINAL LOCATIONS.
- 3. FINAL DISH MOUNT DETAILS TO BE DETERMINED AT A LATER DATE.





11611 E 51ST AVE DENVER, CO 80239 (866) 386 - 7622 JOB #: 160891

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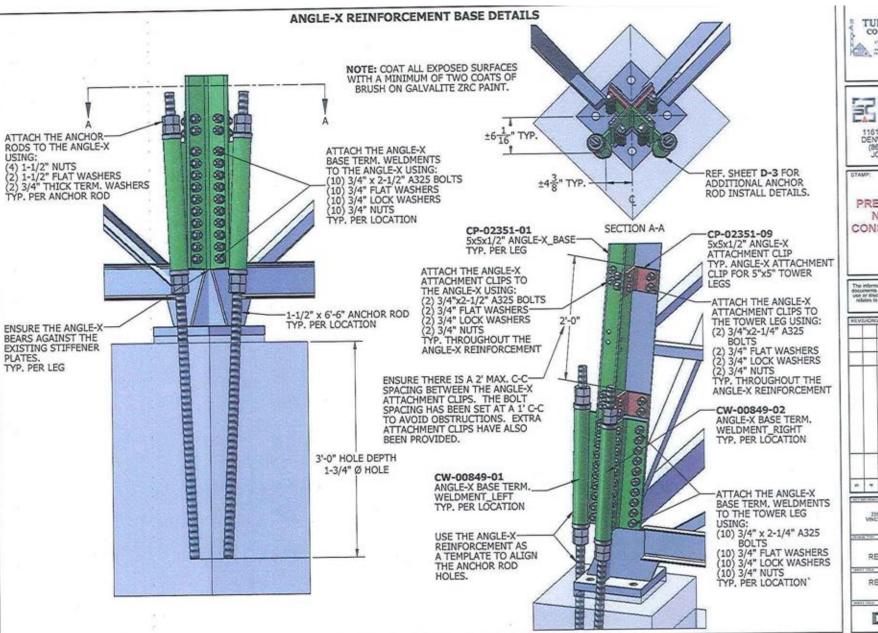
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228 EDGARTOWN ROAD VINCYARD HAVEN, MA 02566
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S.S.T. REINFORCEMENT

CONSTRUCTION SEQUENCE

D-1







11611 E 51ST AVE DENVER, CO 80239 (868) 386 - 7622 JOB #: 150891

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228 EDGARTOWN ROAD VINEYARD HAVEN, WA 00503

S.S.T. REINFORCEMENT

REINFORCEMENT DETAILS

ANGLE-X REINFORCEMENT BASE DETAILS (CONT'D) 00000000000 000000 00000 93.5° 0 0 93.5° 90.0° 90.0° 86.5° 86.5° 3'-0" THE PERSON NAMED IN

NOTE: THE ANGLE-X ANCHOR RODS FOLLOW THE TAPER OF THE TOWER LEG IN ONE DIRECTION. DO A MOCK FIT UP OF THE ANGLE-X TO CHECK THE ANCHOR ROD ALIGNMENT AND LOCATION.

ANCHOR ROD INSTALL NOTES:

- ANCHOR ROD HOLES MAY BE DRILLED OR CORED. IF CORED, AN APPROVED ROUGHENING METHOD MUST BE USED.
- HOLES SHALL BE FREE OF DEBRIS AND MOISTURE; CLEAN HOLES WITH A VACUUM IF NECESSARY.
- USE HIT-RE 500 V3 TO BOND THE ANCHOR RODS TO THE FOUNDATION.
- REFER TO THE MANUFACTURES INSTRUCTIONS FOR ALLOWABLE INSTALLATION TEMPERATURE RANGE.
- FOLLOW ALL MANUFACTURES PREPARATION AND INSTALLATION INSTRUCTIONS.
- AFTER DRILLING / CORING IS FINISHED COMPLETE TAPE DROPS WITH PHOTOS FOR EACH HOLE. INSTALL ANCHOR ROD INTO HOLE TO ENSURE THERE ARE NO OBSTRUCTIONS, REMOVE, INSTALL EPOXY AND REINSTALL ANCHOR ROD.
- APPROXIMATE EPOXY NEEDED = 1/4 GAL. PER ANCHOR ROD, 2 GAL. TOTAL





DENVER, CO 80239 (886) 385 - 7622 JOB #: 160891

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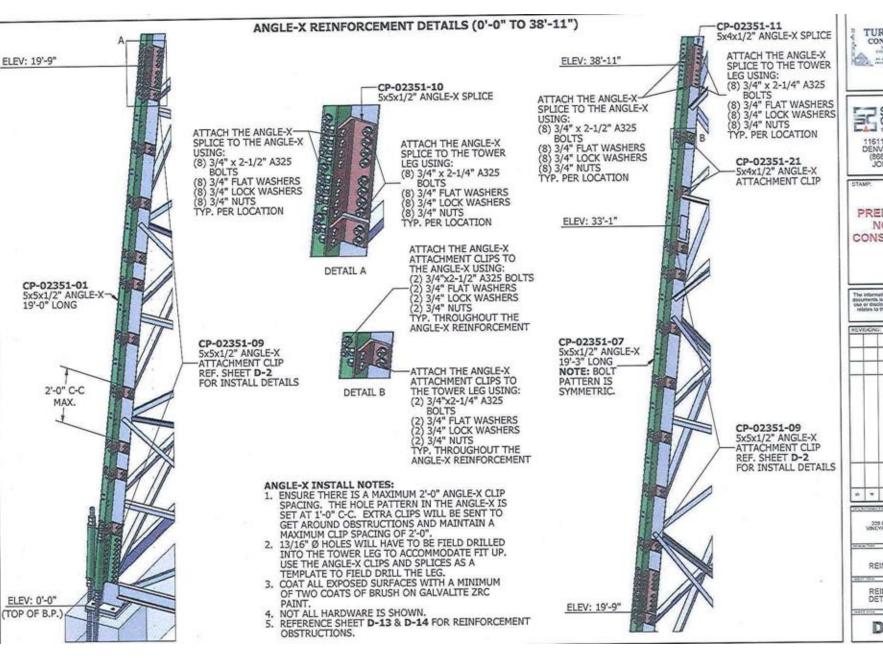
VINEYARD HAVEN, MA 025

S.S.T. REINFORCEMENT

REINFORCEMENT

REINFORCEMENT DETAILS (CONT'D)

D-3





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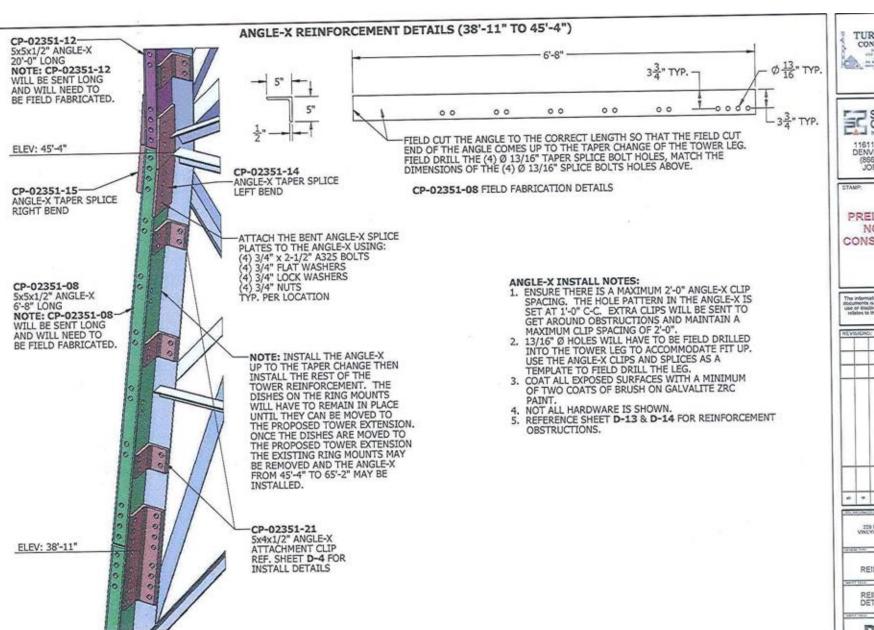


228 EDGARTOWN ROAD VINEYARD HAVEN, MA 02568

S.S.T. REINFORCEMENT

REINFORCEMENT DETAILS (CONT'D)

D-4



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CONSULTANTS, INC
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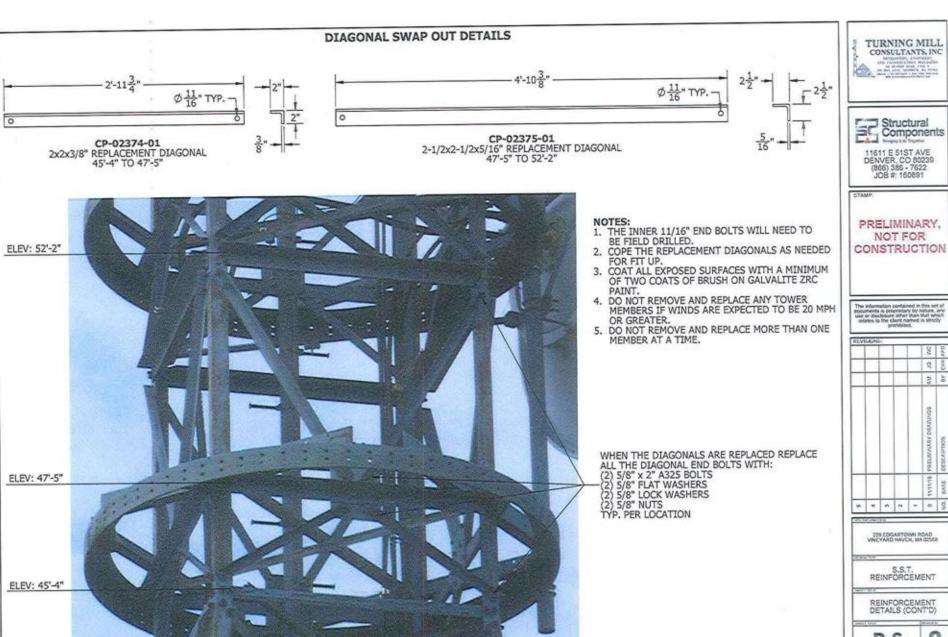
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REINFORCEMENT DETAILS (CONT'D)

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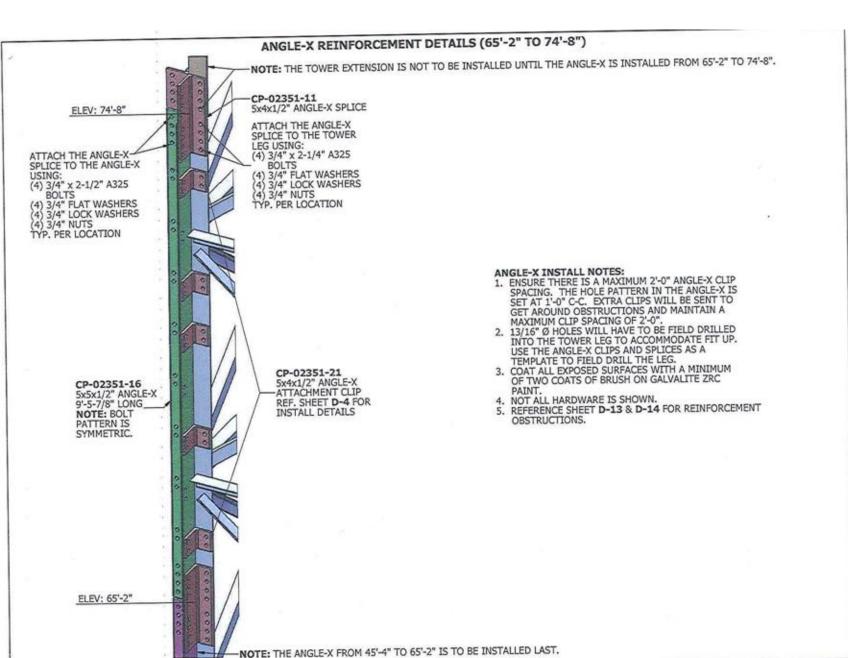
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S.S.T. REINFORCEMENT

REINFORCEMENT DETAILS (CONT'D)





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CONSULTANTS, INC
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228 EDGARTOWN ROAD VINEYARD HAVEN, MA 02558

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S.S.T. REINFORCEMENT

REINFORCEMENT DETAILS (CONT'D)

D-7

LEG SPLICE BOLT REPLACEMENT DETAILS



THE EXISTING 5/8" BOLTS AT THE BASE SPLICE ARE TO BE REPLACED WITH NEW 5/8" A490 BOLTS. REPLACE THE EXISTING BASE LEG SPLICE BOLTS WITH:

(1) 5/8" x 2-1/4" A490 BOLT

(1) 5/8" FLAT WASHER (1) 5/8" LOCK WASHER (1) 5/8" NUT

TYP. PER LOCATION



SPLICE BOLT REPLACEMENT NOTES:

DO NOT REPLACE ANY TOWER SPLICE BOLTS IF WINDS ARE EXPECTED TO BE 20 MPH OR GREATER.
 ONLY REMOVE AND REPLACE ONE SPLICE BOLT AT A

TIME.



THE EXISTING 5/8" BOLTS AT THE 33'-1" TOWER SPLICE ARE TO BE REPLACED WITH NEW 5/8" A325 BOLTS. REPLACE THE EXISTING BASE LEG SPLICE BOLTS WITH:

(1) 5/8" x 2-1/4" A325 BOLT (1) 5/8" FLAT WASHER

(1) 5/8" LOCK WASHER

(1) 5/8" NUT

TYP. PER LOCATION







11611 E 51ST AVE DENVER, CO 80239 (856) 386 - 7622 JOB #: 160891

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S.S.T. REINFORCEMENT

REINFORCEMENT DETAILS (CONT'D)



TOP OF TOWER FIELD CUT DETAILS



FIELD CUT THE TOWER LEGS AT THE APPROXIMATE MID PANEL.

1. ENSURE THE TOWER LEGS ARE CUT PERPENDICULAR TO THE HEEL EDGE OF THE ANGLE.
2. CUT THE SAME AMOUNT OF ANGLE OFF EACH LEG. THE TOP OF THE TOWER SHOULD BE LEVEL AFTER THE FIELD CUTS.
3. FLOAT THE TOP DISH UNTIL IT CAN BE RE-BOLTED TO THE TOWER EXTENSION.
4. THE UPPER END CONNECTION OF THE DIAGONALS WILL BE BOLTED TO THE PROPOSED TOWER EXTENSION. REMOVE THE UPPER DIAGONAL END BOLTS AND LEAVE THE DIAGONAL STITCH BOLTS IN PLACE.





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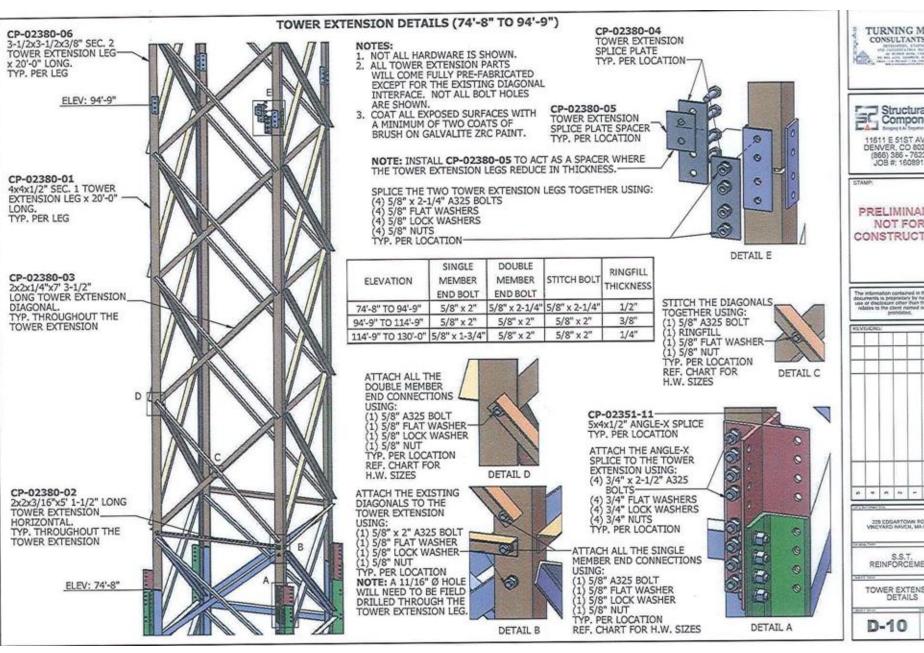
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S.S.T. REINFORCEMENT

REINFORCEMENT DETAILS (CONT'D)







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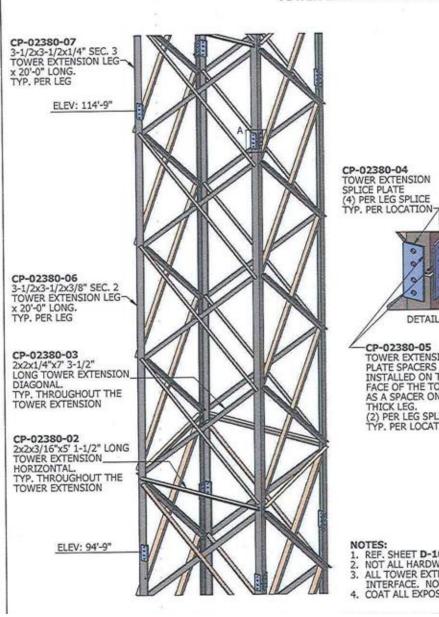


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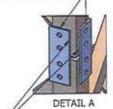
REINFORCEMENT

TOWER EXTENSION DETAILS

TOWER EXTENSION DETAILS (94'-9" TO 130'-0")

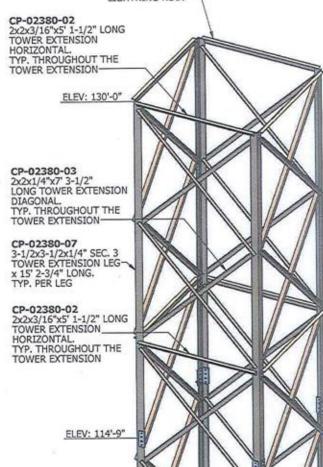


CP-02380-04



CP-02380-05 TOWER EXTENSION SPLICE PLATE SPACERS ARE TO BE INSTALLED ON THE INSIDE FACE OF THE TOWER TO ACT AS A SPACER ON THE 1/4" THICK LEG. (2) PER LEG SPLICE TYP. PER LOCATION

NOTE: FIELD DRILL A 11/16" Ø HOLE IN THE HORIZONTAL LEG OF A TOP HORIZONTAL AND RE-INSTALL THE EXISTING 5/8" Ø x 4' LIGHTNING ROD .-



REF. SHEET D-10 FOR TOWER EXTENSION HARDWARE INSTALL DETAILS.

2. NOT ALL HARDWARE IS SHOWN.

3. ALL TOWER EXTENSION PARTS WILL COME FULLY PRE-FABRICATED EXCEPT FOR THE EXISTING DIAGONAL INTERFACE. NOT ALL BOLT HOLES ARE SHOWN.

4. COAT ALL EXPOSED SURFACES WITH A MINIMUM OF TWO COATS OF BRUSH ON GALVALITE ZRC PAINT.

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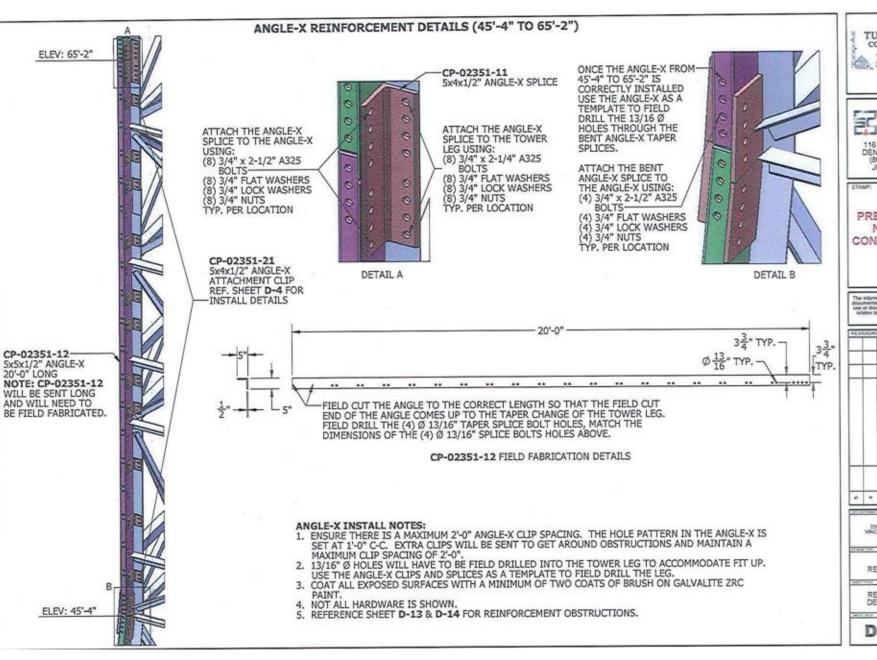
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TOWER EXTENSION DETAILS (CONT'D)



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S.S.T. REINFORCEMENT

REINFORCEMENT DETAILS (CONTD)

THE SITE IS ONLY ACCESSIBLE BY FERRY. FREIGHT VEHICLES WILL HAVE TO TRAVEL VIA FERRY TO DELIVER MATERIAL.



OVERHEAD POWERLINES ALONG THE ROADWAY WILL LIMIT CRANE AND HOISTING ACCESS.



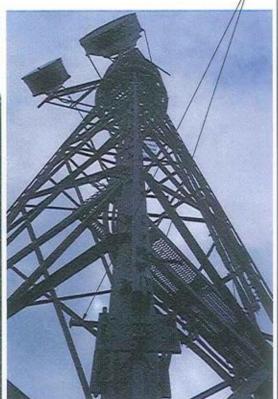
REINFORCEMENT OBSTRUCTIONS

THE EXISTING SOLID ROD LEG REINFORCEMENT FROM 0' TO 44' ON ALL (4) TOWER LEGS WILL NEED TO BE REMOVED PRIOR TO INSTALLING THE PROPOSED ANGLE-X REINFORCEMENT. THE EXISTING SOLID ROD REINFORCEMENT IS ATTACHED TO THE TOWER LEGS WITH 5/8" BOLTS.



NOTE: NEW STEP PEGS AND SAFETY CLIMB WILL BE INSTALLED. REF. SHEET D-17 & D-18 FOR SAFETY CLIMB INSTALL DETAILS.

THE EXISTING SAFETY CLIMB AND STEP PEGS FROM 0' TO 33' ON LEG D WILL NEED TO BE REMOVED PRIOR TO INSTALLING THE ANGLE-X REINFORCEMENT.—7







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S.S.T. REINFORCEMENT

REINFORCEMENT OBSTRUCTIONS

D-13

REINFORCEMENT OBSTRUCTIONS (CONT'D)



EXISTING SAFETY CLIMB TOP TERMINATION AT 33'TO BE REMOVED PRIOR TO ANGLE-X INSTALLATION.



EXISTING SAFETY CLIMB BASE TERMINATION—
TO BE REMOVED PRIOR TO ANGLE-X INSTALLATION.

BOLT ON STEP PEGS FROM 0' TO 33' TO BE REMOVED PRIOR TO ANGLE-X INSTALLATION.

BOLT ON SOLID ROD REINFORCEMENT FROM 0' TO 44' TO BE REMOVED PRIOR TO ANGLE-X INSTALLATION.



THE (3) DISHES AND MOUNTS FROM 55' TO 65' ARE TO REMAIN ACTIVE DURING CONSTRUCTION.

THE ANGLE-X FROM 45'-4" TO 65'-2" IS TO BE INSTALLED LAST SO THESE DISHES CAN REMAIN ACTIVE. ONCE ALL OF THE REINFORCEMENTS AND TOWER EXTENSION HAVE BEEN INSTALLED RE-LOCATE THESE (3) DISHES AND MOUNTS TO THE TOWER EXTENSION. AFTER THESE DISHES AND MOUNTS HAVE BEEN RE-LOCATED TO THE TOWER EXTENSION THE ANGLE-X FROM 45'-4" TO 65'-2" IS TO BE INSTALLED.





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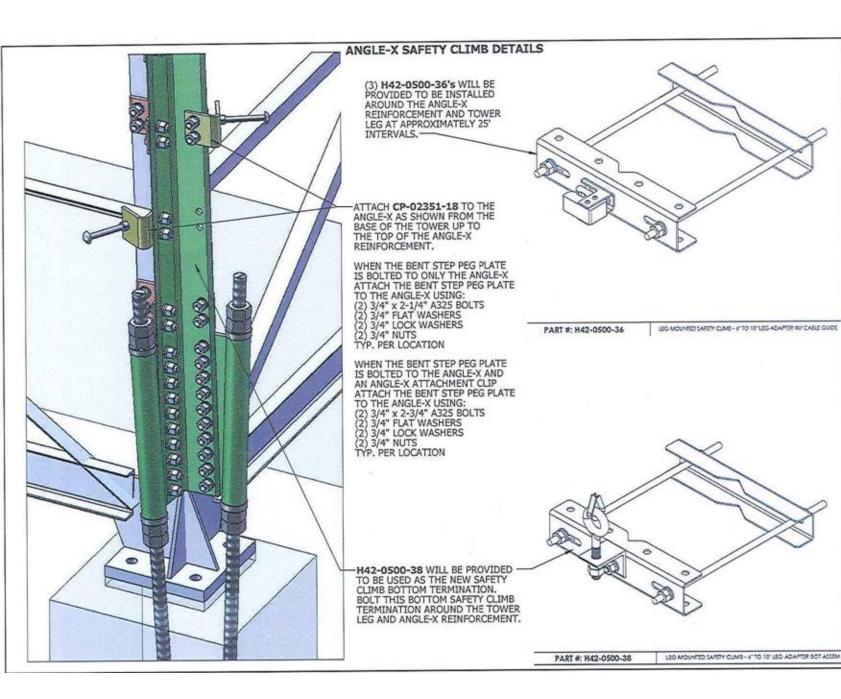
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S.S.T. REINFORCEMENT

REINFORCEMENT OBSTRUCTIONS (CONT'D)

D-14



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REINFORCEMENT

ANGLE-X SAFETY CLIMB DETAILS

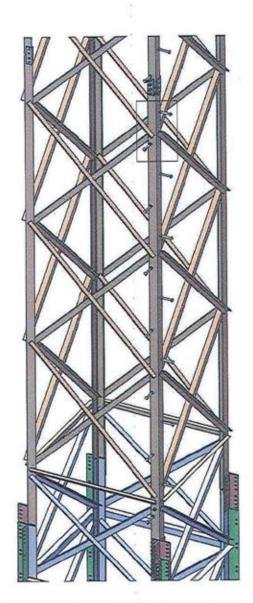
TOWER EXTENSION SAFETY CLIMB DETAILS

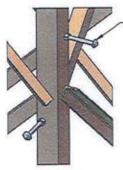
(2) H42-0500-35's WILL BE PROVIDED TO BE INSTALLED

LEG AT APPROXIMATELY 25'
-INTERVALS.

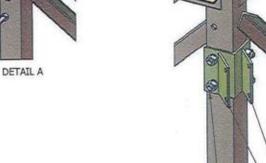
PART #: H42-0500-35

AROUND THE TOWER EXTENSION





INSTALL THE PROVIDED 5/8" STEP BOLTS UP THE TOWER EXTENSION.

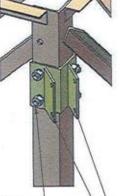


BOLT CA-00531-01-THROUGH THE ANGLE LEG USING: (4) 5/8" x 1-3/4" A325 BOLTS (4) 5/8" FLAT WASHERS

(4) 5/8" LOCK WASHERS (4) 1/2" NUTS

NOTE: INSTALL THE FLAT WASHERS BETWEEN THE TO ANGLES TO ACT AS A RINGFILL.

NOTE: THE SAFETY CLIMB TOP TERMINATION-WILL BOLT TO THESE PLATES. FOLLOW THE MANUFACTURES INSTALLATION INSTRUCTIONS.



228 EDGARTOWN ROAD VINEYARD HAVEN, MA 02568

S.S.T. REINFORCEMENT

TOWER EXTENSION SAFETY CLIMB DETAILS

D-16

NOTE: NOT ALL HARDWARE IS SHOWN.

LEG MOUNTED SAFETY CURVE - 5" TO 6" LEG ADAPTER W/ CASLE QUICE



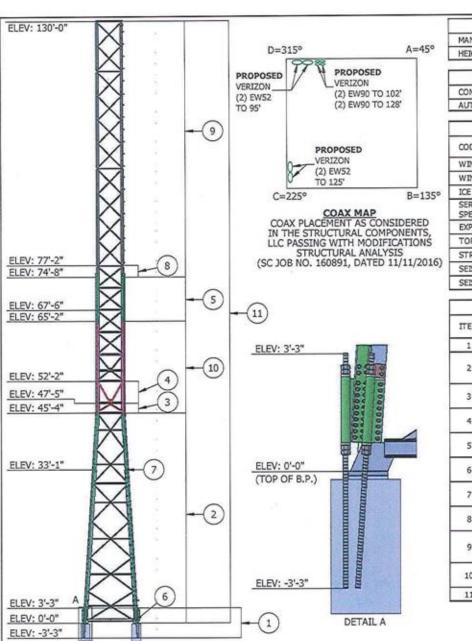


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	TOWER SPECIFICATIONS
MANUFACTURER	UNKNOWN
HEIGHT / TOWER TYPE	77'-2" TOWER EXTENDED TO 130'-0" / (4) LEG S.S.T.

CURRENT STRUCTURAL ANALYSIS				
COMPANY	STRUCTURAL COMPONENTS, LLC			
AUTHOR / FILE # / DATE	WESLEY CULVER, P.E. / 160891 / 11-11-2016			

	DESIGN SPECIFICATIONS	
CODE	TIA-222-G (IBC 2009) DUKES COUNTY, MA MA AMENDMENTS TO IBC	
WIND SPEED (BARE)	120 MPH 3-SECOND GUST	
WIND SPEED (ICED)	40 MPH 3-SECOND GUST	
ICE THICKNESS	3/4" RADIAL	
SERVICEABILITY BASIC WIND SPEED	60 MPH 3-SECOND GUST	
EXPOSURE CATEGORY	С	
TOPOGRAPHIC CATEGORY	1	
STRUCTURE CLASS	п	
SEISMIC SITE CLASS	D, S ₅ =0.179, S ₁ = 0.051	
SEISMIC DESIGN CATEGORY	В	

-	DCCCOMPTION .	ELEVA	TION	DWG, NO.	
ITEM	DESCRIPTION	BOTTOM	TOP	DWG. NO.	
1	INSTALL ANGLE-X ANCHOR RODS.	-3" - 3"	3' - 3"	D-2 & D-3	
2	INSTALL 5x5x1/2" ANGLE-X REINFORCEMENT.	0" - 0"	45' - 4"	D-1, D-2, D-4, D-5, D-13, & D-14	
3	SWAP OUT THE EXISTING DIAGONALS WITH NEW 2x2x3/8" DIAGONALS.	45' - 4"	47' - 5"	D-1 & D-6	
4	SWAP OUT THE EXISTING DIAGONALS WITH NEW 2-1/2x2-1/2x5/16" DIAGONALS.	47' - 5"	52' - 2"	D-1 & D-6	
5	INSTALL 5x5x1/2* ANGLE-X REINFORCEMENT.	65' - 2"	74' - 8"	D-1, D-7, D-13 & D-14	
6	REPLACE THE LEG SPLICE BOLTS AT THE BASE WITH NEW 5/8" A490 BOLTS.	0' - 0"	0, - 0,	D-1 & D-8	
7	REPLACE THE LEG SPLICE BOLTS AT 33' - 1" WITH NEW 5/8" A325 BOLTS.	33' - 1"	33' - 1"	D-1 & D-8	
8	FIELD CUT THE LEGS AT THE TOP OF THE TOWER.	74' - 8"	77" - 2"	D-1 & D-9	
9	INSTALL THE TOWER EXTENSION.	74' - 8"	130" - 0"	D-1, D-10, D-11, D-13, & D-14	
10	INSTALL 5x5x1/2" ANGLE-X REINFORCEMENT.	45' - 4"	65' - 2"	D-1, D-12, D-13, & D-14	
11	INSTALL THE SAFETY CLIMB SYSTEM.	0'-0"	130' - 0"	D-15 & D-16	

SEE STRUCTURAL COMPONENTS, LLC PASSING WITH MODIFICATIONS STRUCTURAL ANALYSIS (SC JOB NO. 160891, DATED 11/11/2016) FOR TOWER LOADING DETAILS AND ANALYSIS ASSUMPTIONS.





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S.S.T. REINFORCEMENT

SPECIFICATIONS

S-1

