CITY OF BILOXI
AGENDA ITEM
FACT SHEET

Item No.: 5T

Council Meeting Date: August 18, 2020

ITEM TITLE: RESOLUTION

INTRODUCED BY: Mayor Andrew "FoFo" Gilich

CONTACT PERSON: E. Michael Leonard, CAO

Peter Abide, City Attorney

SUMMARY EXPLANATION:

Resolution authorizing Consent to partial removal of wireless telecommunications equipment by T-Mobile South, LLC on the Margaret Sherry Tower Site (2145 Popps Ferry Road), pursuant to the Water Tower Option and Lease Agreement, dated November 16, 1999

Resolution ✓ **Ordinance**____ **Public Hearing**____ **Routine Agenda**____

Exhibits for Review

Contract____ **Minutes**____ **Plans/Maps**____ **Deed**____ **Lease**____

Other (Specify): Exhibit A: Consent Letter

Submittal Authorization: **Council President**____ **Mayor** ✓

STAFF RECOMMENDATION: **Staff recommends approval**

COUNCIL ACTION: **Motion By:**____ **Second By:**____

Vote:	Councilmember	Yes	No	Other	Councilmember	Yes	No	Other
	Lawrence				Tisdale			
	Gines				Glavan			
	Newman				Barrett			
	Deming							

ACTION TAKEN:

081820ocon

Resolution No.

RESOLUTION AUTHORIZING CONSENT TO PARTIAL REMOVAL OF WIRELESS TELECOMMUNICATIONS EQUIPMENT BY T-MOBILE SOUTH, LLC ON THE MARGARET SHERRY TOWER SITE (2145 POPPS FERRY ROAD), PURSUANT TO THE WATER TOWER OPTION AND LEASE AGREEMENT, DATED NOVEMBER 16, 1999

WHEREAS, by Resolution No. 668-99, the governing authorities of the City of Biloxi (the "City") approved entry into that certain Water Tower Option and Lease Agreement (the "Agreement"), dated November 16, 1999, with Digiph PCS, Inc. for the lease of space located on top of the City's water tower at 2145 Popps Ferry Road for the purposes of installing and maintaining wireless telecommunication equipment in exchange for compensation in the amount of $18,000.00 per year, with a twelve percent (12%) increase every five (5) years;

WHEREAS, by Resolution No. 799-00, the City's governing authorities approved entry into a Consent and Estoppel Agreement, recognizing the transfer of the Agreement to Eliska Wireless Ventures I, Inc. as a result of Digiph PCS, Inc.'s assignment of interest;

WHEREAS, by Resolution No. 256-09, the City's governing authorities approved an Amendment to the Agreement, dated July 8, 2010, with Powertel/Memphis, Inc. d/b/a T-Mobile ("PowerTel"), as successor in interest to Digiph PCS, Inc. and Eliska Wireless Ventures I, Inc., and providing for the installation of additional equipment in exchange for additional compensation of $6,480.00 per year, subject to all terms and conditions of the Agreement, including the twelve percent (12%) increase every five (5) years;

WHEREAS, by Resolution No. 265-14, the City's governing authorities consented to PowerTel's installation of additional equipment, with no increase to the annual rent;

WHEREAS, by Resolution No. 560-19, the City's governing authorities consented to PowerTel's installation of additional equipment, with no increase to the annual rent;

WHEREAS, by Resolution No. 819-19, the City consented to the assignment of all of PowerTel's rights and obligations under the Lease to T-Mobile South, LLC ("T-Mobile");

WHEREAS, pursuant to the Agreement, T-Mobile has the right, subject to the approval of the City, to make reasonable alterations to its equipment on the leased premises and has requested the City's consent to the installation of new equipment at this time;

WHEREAS, T-Mobile, by and through its property manager, CMI Acquisitions, has requested certain the City's consent to the removal of certain equipment and the installation of new equipment as part of a technology upgrade, as further explained in the Consent Letter, attached hereto as Exhibit "A";

WHEREAS, the new equipment proposed by T-Mobile will not occupy additional space on the water tower and will not significantly increase the total weight of T-Mobile's equipment located on the water tower;

WHEREAS, the City's consent to T-Mobile's plan, as described in Exhibit "A" attached hereto, will not relieve any other City water tower lessee of its separate

obligations under a separate tower agreement with the City and the City's consent shall not waive any rights or remedies the City currently has against any such lessee, and will not relieve any other such lessee of any outstanding obligations under separate agreements; and

WHEREAS, it is the recommendation of Peter C. Abide, City Attorney, that the City consent to T-Mobile's plan regarding the placement and removal of equipment on the City's water tower located at 2145 Popps Ferry Road, as described in Exhibit "A" attached hereto.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF BILOXI, MISSISSIPPI, AS FOLLOWS:

SECTION ONE: The findings, conclusions, and statements of fact contained in the foregoing preamble are hereby adopted, ratified and incorporated herein.

SECTION TWO: The Mayor is hereby authorized to execute, on behalf of the City of Biloxi, the letter, attached hereto as Exhibit "A," indicating the City's consent to T-Mobile South, LLC's installation of new equipment on the City's water tower located at 2145 Popps Ferry Road.

SECTION THREE: This resolution shall take effect and be in force from and after adoption.

EXHIBIT
A

July 09, 2020

City of Biloxi
Attn: Billy Ray Allen
Director Public Works
P. O. Box 429
Biloxi, MS 39533

Re: T- Mobile Site #: 9MT0043A
Site Address: 2145 CT Popps Ferry Rd, Biloxi, MS
Acknowledgement and Consent Letter to Modification of Antenna Facilities

Dear Mr. Allen,

T-Mobile South LLC, as successor in interest to Powertel/Memphis, Inc., d/b/a T-Mobile ("T-Mobile"), as successor in interest to DIGPH PCS, Inc., d/b/a T-Mobile, ("T-Mobile"), and the City of Biloxi, entered into a(n) Water Tank Option and Lease Agreement (the "Lease) with an effective date of November 16, 1999, together with any subsequent amendments, for a site located at 2499 Popps Ferry Rd, Biloxi, MS, upon which T-Mobile operates wireless antenna facilities.

Pursuant to the Lease, T-Mobile has the right, subject to the approval of the City, to make reasonable alterations to its equipment on the leased premises.

T-Mobile has requested CMI Acquisitions inform you that T-Mobile needs to modify the antenna facilities by installing new equipment as part of a technology upgrade. All of the new equipment will be installed on the water tower and within the ground lease area, as shown on the attached construction drawings.

To confirm your approval of the proposed modifications to the antenna facilities, please have the appropriate party sign, date, and initial two copies of this letter and return one for our records.

If you have any questions, please contact Marthalie Porter at 121 Village Blvd., Madison, MS 39110, or by telephone at 662-889-2339, or email at mporter@cmiacquisitions.com. Thank you for your cooperation and attention to this matter.

Landlord Initials _____

Thank you,

Marthalie Porter

Marthalie Porter
121 Village Blvd.
Madison, MS 39110
Mobile: 662-889-2339
Fax: 601-605-9218
mporter@cmiacquisitions.com

Acknowledged, Accepted and Agreed:

Landlord: _____

By: _____

Name: _____

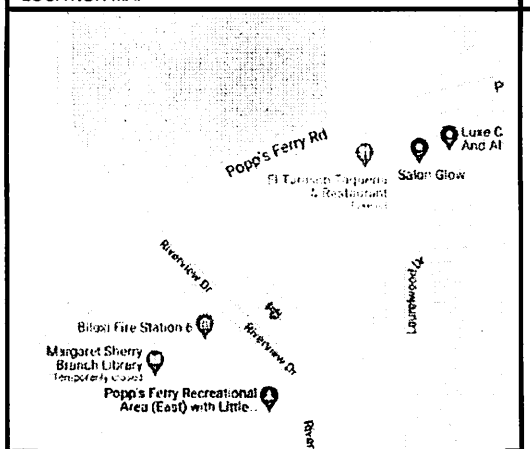
Title: _____

Date: _____

GENERAL NOTES

1. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTORS SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.
2. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
3. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
4. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
5. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR.
6. THE SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
7. THE SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
8. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWING MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
9. ALL SAFETY PRECAUTIONS MUCH BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE ADVISED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.

LOCATION MAP



DIRECTIONS

DIRECTIONS FROM BILOXI, MS: TAKE ESTERS BLVD TO CAILLAVET ST, HEAD WEST ON HOWARD AVE & TURN RIGHT ON MAIN ST; TURN LEFT ON ESTERS BLVD. TAKE I-110 N/MS-15N, BRODIE RD, JAM LN AND POPPS FERRY RD TO RIVERVIEW DR. TURN RIGHT ON CAILLAVET ST. TURN LEFT ON DIVISION ST. TURN RIGHT ON BOWN ST. MERGE ONTO I-110/NMS-15N TAKE EXIST 2 TO D'LBERVILLE TURN LEFT ON POPPS FERRY RD. TURN LEFT ON RIVERVIEW.

T··Mobile·

ANCHOR

T-MOBILE SITE NUMBER

9MT0043A

177' WATER TANK

T-MOBILE SITE NAME

POPPS FERRY RD WT

SITE ADDRESS
2145 CT POPPS FERRY ROAD
BILOXI, MS 39532

SITE SUMMARY

SITE TYPE:	EXISTING SITE OVERLAY
TECHNOLOGY TYPE:	ANCHOR
SITE ADDRESS:	2145 CT POPPS FERRY ROAD BILOXI, MS 39532
SITE LATITUDE:	N 30.43655991° (N 30° 26' 11.40")
SITE LONGITUDE:	W -88.98561600° (W 88° 57' 56.20")
GROUND ELEVATION	24.3' AMSL
JURISDICTION:	NOT PROVIDED
POWER COMPANY:	COAST ELECTRIC
TELEPHONE COMPANY:	AT&T
TOWER OWNER/MANAGER:	CMI ACQUISITIONS
WIRELESS CARRIER:	T-MOBILE 3757 HALLS MILL ROAD MOBILE, AL 36693 CONTACT: TERESA SHEMPERT PHONE: (251) 665-3408
ENGINEER:	SMW ENGINEERING 158 BUSINESS CENTER DRIVE BIRMINGHAM, AL 35244 CONTACT: V.G. DUVALL, PE PHONE: (281) 650-9731

APPROVALS

DEPARTMENT	NAME/SIGNATURE	DATE
DEVELOPMENT MANAGER		
PROPERTY/TOWER OWNER		
SITE ACQUISITION MANAGER		
CONSTRUCTION MANAGER		
RF ENGINEER		
OPERATIONS MANAGER		

SHEET INDEX

BUILDING CODES

ALL CONSTRUCTION SHALL COMPLY WITH THE LATEST EDITION OF THE (AS ADOPTED BY LOCAL JURISDICTION):

- INDUSTRIAL CODE (ANSI)
- OCCUPATIONAL SAFETY AND HEALTH STANDARDS (OSHA)
- NATIONAL ELECTRICAL CODE
- INTERNATIONAL BUILDING CODE
- UNIFORM MECHANICAL CODE
- INTERNATIONAL ENERGY CONSERVATION CODE

HANDICAP REQUIREMENTS

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAP ACCESS IS NOT REQUIRED.

PLUMBING REQUIREMENTS

FACILITY HAS NO SANITARY OR POTABLE WATER

ONE CALL

MISSISSIPPI ONE-CALL
STATE WIDE CALL: 811
CALL BEFORE YOU DIG

T··Mobile·

CMI ACQUISITIONS

SMW ENGINEERING GROUP, INC.
TOGETHER PLANNING A BETTER TOMORROW

CA#: MS E-0265

JEREMY D. SHARIT
LICENSED PROFESSIONAL ENGINEER
19180
STATE OF MISSISSIPPI

07/13/2020

SITE INFORMATION
9MT0043A
2145 CT POPPS FERRY ROAD
BILOXI, MS 39532

#	DATE	DESCRIPTION
0	06/12/20	ISSUED FOR CLIENT REV.
1	07/13/20	ISSUED FOR CONSTRUCTION

T-MOBILE SITE ID	SMW SITE ID
9MT0043A	9MT0043A

SHEET NAME
TITLE SHEET

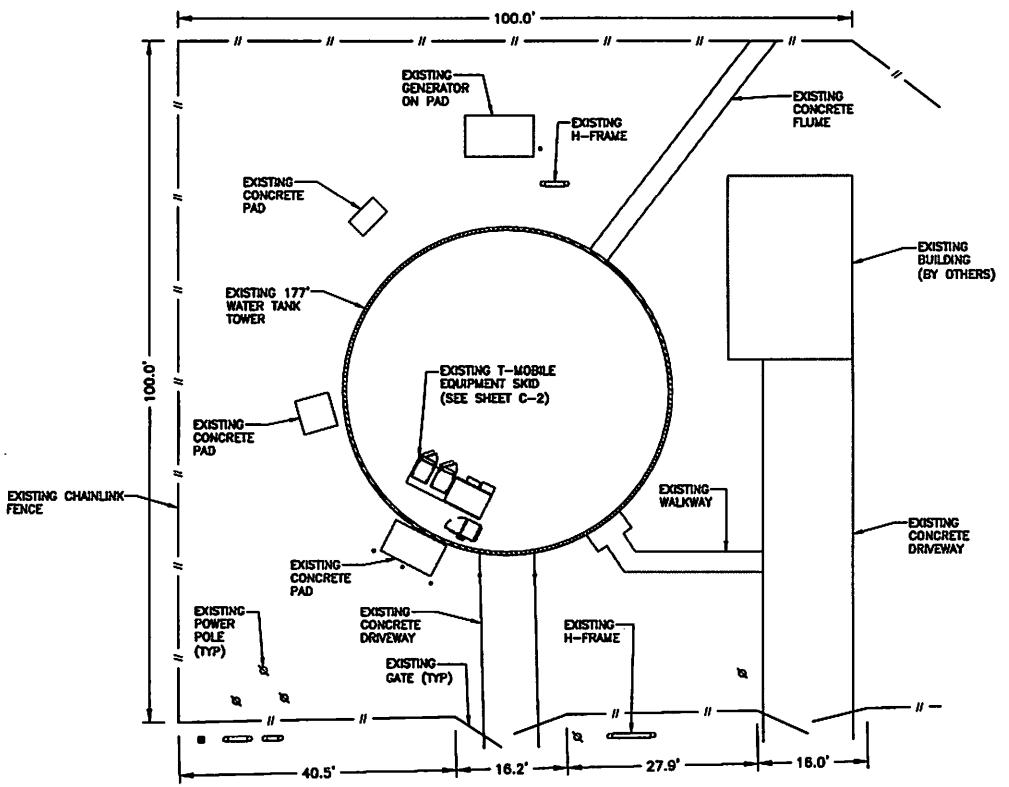
SMW #	SHEET NUMBER
12-0770.3	T-1

DESIGNER	GJS
CHECKED BY	VGD
DRAWN BY	JDS

SITE NOTES:

1. DIGGING AND/OR TRENCHING INSIDE COMPOUND, MUST BE DONE BY HAND.
2. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO FIELD VERIFY THE EXACT LOCATIONS OF EXISTING UTILITIES WHICH MAY CONFLICT WITH PROPOSED IMPROVEMENTS.
3. LOCATION OF UNDERGROUND UTILITIES WAS NOT PERFORMED.
4. THE ADEQUACY OF EXISTING SITE UTILITIES TO ACCOMMODATE NEW CO-LOCATION LOAD(S) WAS NOT VERIFIED.
5. ALL EXISTING VEGETATION AND IMPROVEMENTS SHOWN ARE TO REMAIN UNLESS OTHERWISE SHOWN IN THESE DRAWINGS.

REFERENCE SHEET C-2 FOR DETAILED EQUIPMENT LAYOUT



1 OVERALL PROPOSED SITE PLAN

SCALE: 1" = 5'

5' 0 2.5 5'

T-Mobile

CMI ACQUISITIONS

SMW ENGINEERING GROUP, INC.

TOGETHER PLANNING A BETTER TOMORROW

CA#: MS E-0265

JEREMY D. SHARP LICENSED PROFESSIONAL ENGINEER 19180 STATE OF MISSISSIPPI

07/13/2020

SITE INFORMATION

9MT0043A

2145 CT POPPS FERRY ROAD

BILOXI, MS 39532

#	DATE	DESCRIPTION
0	06/18/20	ISSUED FOR CLIENT REV.
1	07/13/20	ISSUED FOR CONSTRUCTION

T-MOBILE SITE ID	SBA SITE ID
9MT0043A	9MT0043A

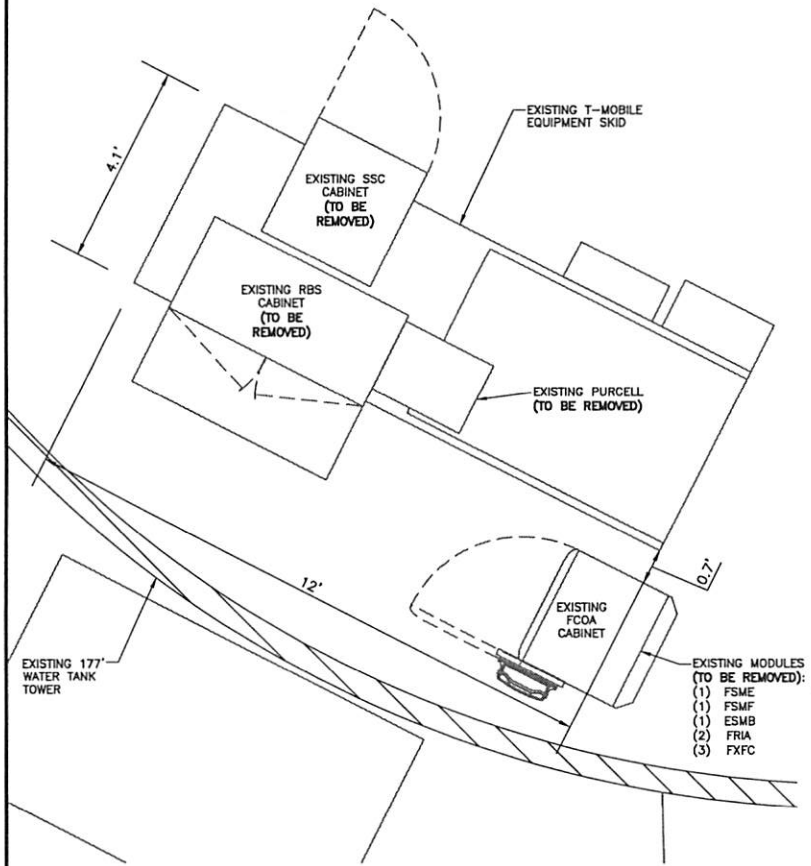
SHEET NAME

OVERALL SITE PLAN

SMW #	SHEET NUMBER
12-0770.3	C-1

DESIGNED:	CJS
CHECKED BY:	ACS
ENGINEER:	JDS

SITE LAYOUT NOTE:
EXISTING SITE AND EQUIPMENT LAYOUT OBTAINED FROM PREVIOUS CDs BY JDS, DATED 07/11/2019. SMW ENGINEERING HAS NOT VISITED THIS SITE TO VERIFY MEASUREMENTS OR ANY EXISTING EQUIPMENT.

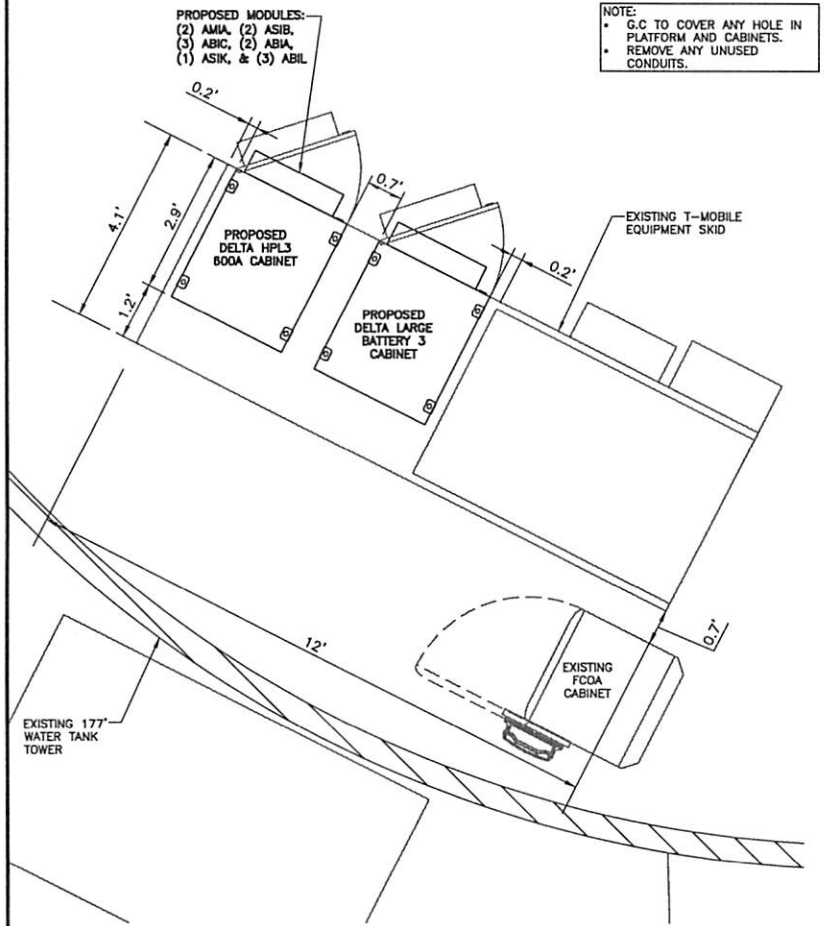


1 EXISTING EQUIPMENT LAYOUT
SCALE: 1" = 10'
10' 0' 5' 10'

NOTE:
GC TO FIELD VERIFY NEW CABINET PLACEMENT WITH T-MOBILE CM PRIOR TO INSTALL

PROPOSED EQUIPMENT NOTE:
FOR EQUIPMENT SPECIFICATION REFERENCE SHEETS C-3.2/C-3.4.

NOTE:
- G.C TO COVER ANY HOLE IN PLATFORM AND CABINETS.
- REMOVE ANY UNUSED CONDUITS.



2 PROPOSED EQUIPMENT LAYOUT
SCALE: 1" = 10'
10' 0' 5' 10'

T-Mobile

CMI ACQUISITIONS

SMW ENGINEERING GROUP, INC.
TOGETHER PLANNING A BETTER TOMORROW

CA#: MS E-0265

JEREMY D. SHARIT
LICENSED PROFESSIONAL ENGINEER
19160
STATE OF MISSISSIPPI
07/13/2020

SITE INFORMATION:
9MT0043A
2145 CT POPPS FERRY ROAD
BILOXI, MS 39532

#	DATE	DESCRIPTION
0	06/18/20	ISSUED FOR CLIENT REV.
1	07/13/20	ISSUED FOR CONSTRUCTION

T-MOBILE SITE ID:	SBA SITE ID:
9MT0043A	9MT0043A

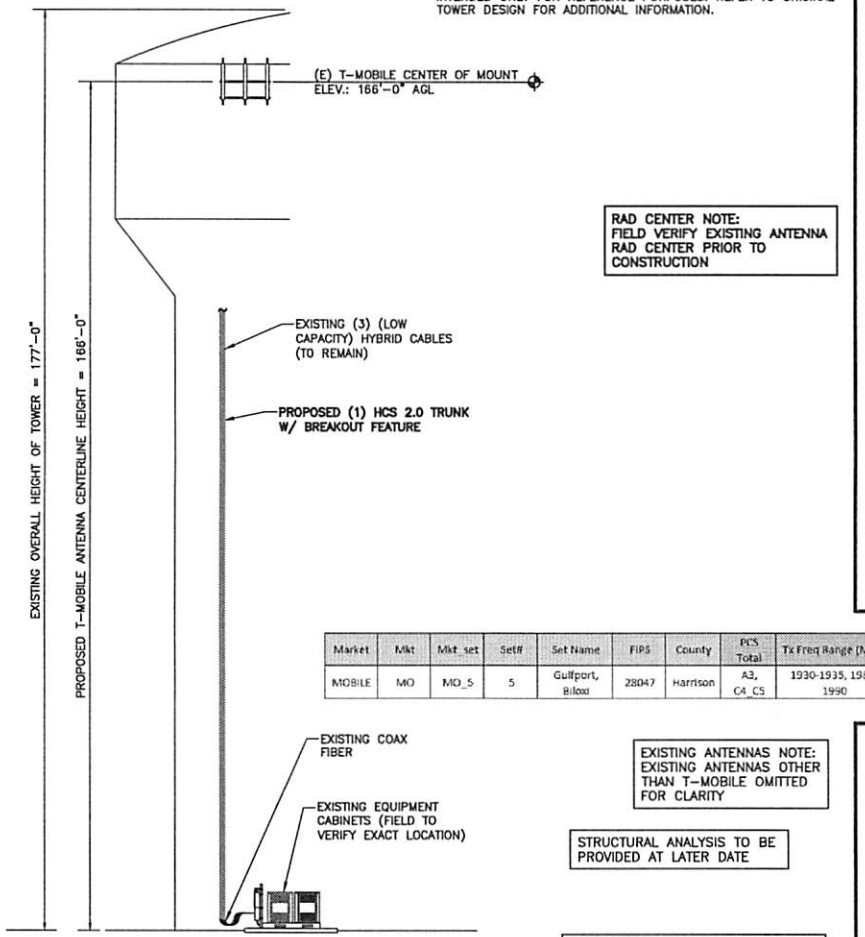
SHEET NAME:
EQUIPMENT PLAN

SMW #:	SHEET NUMBER:
12-0770.3	C-2

DESIGNER:	CJS
CHECKED BY:	JCS
ENGINEER:	JDS

ANTENNA NOTES:
1. THE PRE-APPLICATION & LEASE DIRECTION OF THE ANTENNA SHALL BE ADJUSTED TO MEET SYSTEM REQUIREMENTS.
2. CONTRACTOR SHALL VERIFY HEIGHT OF ANTENNA WITH T-MOBILE PCS PM.
3. CONTRACTOR SHALL VERIFY HEIGHT AND DIRECTION OF MICROWAVE DISHES WITH T-MOBILE PROJECT MANAGER (WHEN APPLICABLE).
4. ALL ANTENNA AZIMUTHS TO BE FROM MAGNETIC NORTH.
5. CONTRACTOR TO USE EXISTING ANTENNA TOP HAT.

STRUCTURAL NOTES:
1. SMW HAS NOT PERFORMED A STRUCTURAL ANALYSIS OF THE EXISTING TOWER OR ANTENNA MOUNT. REFER TO STRUCTURAL ANALYSIS OR STRUCTURAL LETTER BY OTHERS FOR ADDITIONAL INFORMATION.
2. IF THE TOWER STRUCTURAL ANALYSIS SHOWS THE NEED FOR TOWER REINFORCEMENT REFER TO TOWER REINFORCEMENT DESIGN PRIOR TO THE INSTALLATION OF ANY PROPOSED EQUIPMENT.
3. REFER TO TOWER STRUCTURAL ANALYSIS FOR PROPOSED CABLE ROUTING AND ATTACHMENT DETAILS.
4. TOWER ELEVATION SHOWN IS NOT DRAWN TO SCALE AND IS INTENDED ONLY FOR REFERENCE PURPOSES. REFER TO ORIGINAL TOWER DESIGN FOR ADDITIONAL INFORMATION.



1 TOWER ELEVATION
SCALE: N.T.S.

RAD CENTER NOTE:
FIELD VERIFY EXISTING ANTENNA RAD CENTER PRIOR TO CONSTRUCTION

EXISTING ANTENNAS NOTE:
EXISTING ANTENNAS OTHER THAN T-MOBILE OMITTED FOR CLARITY

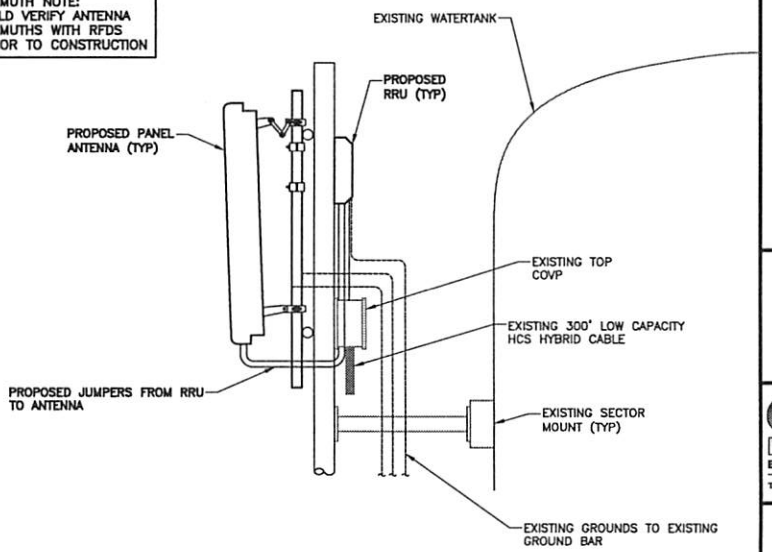
STRUCTURAL ANALYSIS TO BE PROVIDED AT LATER DATE

NO MAPPING OR ANALYSIS HAS BEEN PERFORMED ON SECTOR MOUNTS. SMW HAS NOT ANALYZED THE PROPOSED MOUNT WITH THE NEW LOADING AND THE STRUCTURAL INTEGRITY OF THE MOUNT IS UNDETERMINED.

CONTRACTOR TO FIELD DETERMINE BEST AND SAFEST LOCATION FOR GROUND BAR INSTALLATION – FOLLOWING T-MOBILE STANDARDS.

AZIMUTH NOTE:
FIELD VERIFY ANTENNA AZIMUTHS WITH RFDS PRIOR TO CONSTRUCTION

NO MAPPING OR ANALYSIS HAS BEEN PERFORMED ON SECTOR MOUNTS, AND STRUCTURAL INTEGRITY OF MOUNTS UNDER NEW LOADING IS UNDETERMINED



2 MOUNTING DETAIL
SCALE: N.T.S.

Market	Mkt	Mkt_set	Set#	Set Name	FIPS	County	PCS Total	Tx Freq Range (MHz)	Rx Freq Range (MHz)	AWS Total	Tx Freq Range (MHz)	Rx Freq Range (MHz)	AWS-3 Total	Tx Freq Range (MHz)	Rx Freq Range (MHz)
MOBILE	MO	MO_5	5	Gulfport, Biloxi	28047	Harrison	A3, C4_C5	1930-1935, 1980-1990	1850-1855, 1900-1910	D_E	2135-2145	1735-1745	G	2155-2160	1755-1760

3 MOUNTING DETAIL (NOT USED)
SCALE: N.T.S.

T-Mobile

CMI ACQUISITIONS

SMW ENGINEERING GROUP, INC.
TOGETHER PLANNING A BETTER TOMORROW

CA#: MS E-0265

JEREMY D. SHARIT
LICENSED PROFESSIONAL ENGINEER
19160
STATE OF MISSISSIPPI
07/13/2020

SITE INFORMATION
9MT0043A
2145 CT POPPS FERRY ROAD
BILOXI, MS 39532

#	DATE	DESCRIPTION
0	06/18/20	ISSUED FOR CLIENT REV.
1	07/13/20	ISSUED FOR CONSTRUCTION

T-MOBILE SITE ID: 9MT0043A
SBA SITE ID: 9MT0043A

SHEET NAME:
TOWER ELEVATION & DETAILS

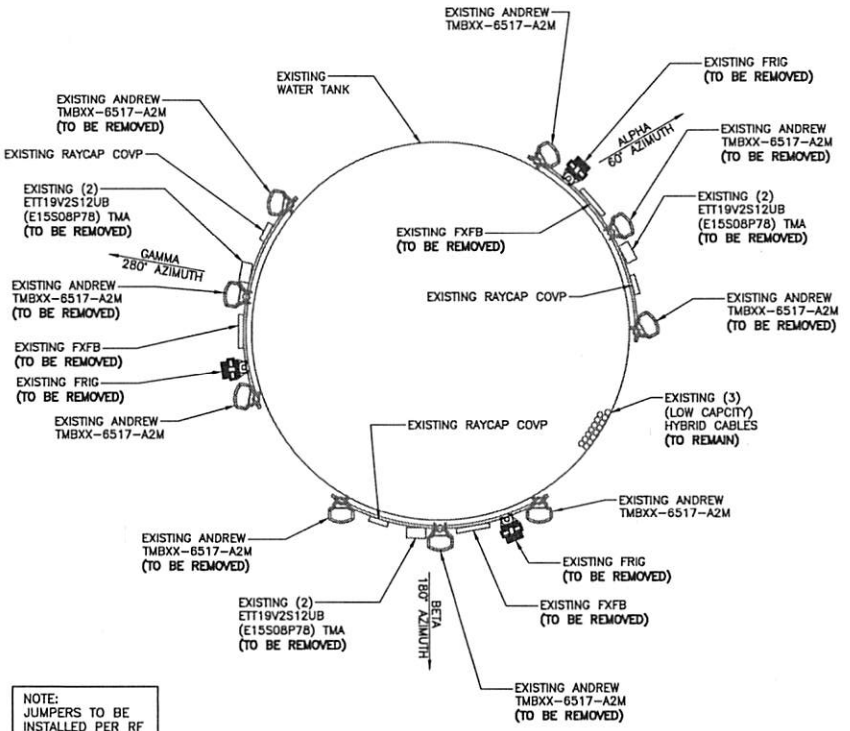
SMW #: 12-0770.3
DESIGNER: CJS
CHECKED BY: JCS
ENGINEER: JDS

SHEET NUMBER: C-3

ANTENNA NOTE:
PRIOR TO CONSTRUCTION CONTRACTOR TO VERIFY ANTENNA POSITION, TILT, AND AZIMUTH PER LATEST RFDS

RAD CENTER NOTE:
FIELD VERIFY EXISTING ANTENNA RAD CENTER PRIOR TO CONSTRUCTION

AZIMUTH NOTE:
FIELD VERIFY ANTENNA AZIMUTHS WITH RFDS PRIOR TO CONSTRUCTION

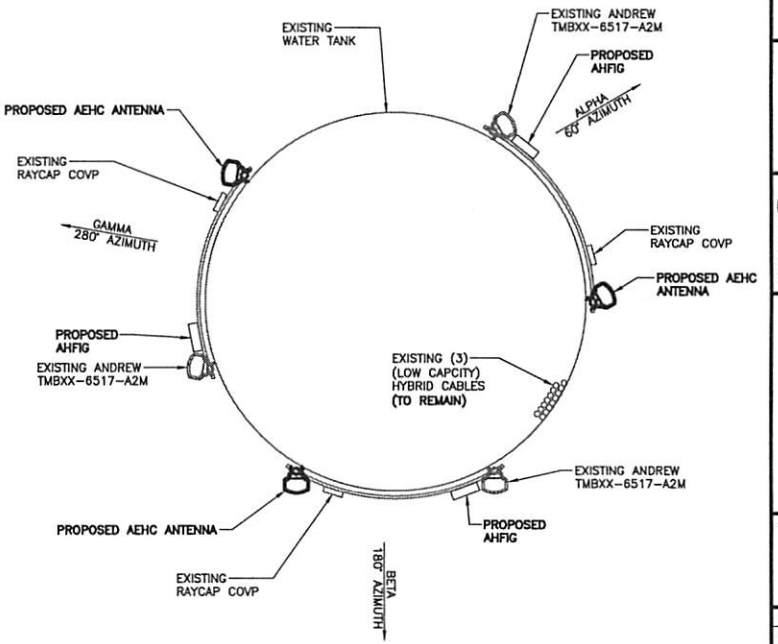


NOTE:
JUMPERS TO BE INSTALLED PER RF PLUMBING DIAGRAM

1 EXISTING ANTENNA ORIENTATION PLAN
SCALE: N.T.S.

NO MAPPING OR ANALYSIS HAS BEEN PERFORMED ON SECTOR MOUNTS. SMW HAS NOT ANALYZED THE PROPOSED MOUNT WITH THE NEW LOADING AND THE STRUCTURAL INTEGRITY OF THE MOUNT IS UNDETERMINED.

STRUCTURAL ANALYSIS TO BE PROVIDED AT LATER DATE



Market	MKT	MKT_NO	SWN	Set Name	FIPS	County	PCS Total	Tx Freq Range (MHz)	Rx Freq Range (MHz)	AWS Total	Tx Freq Range (MHz)	Rx Freq Range (MHz)	AWS-3 Total	Tx Freq Range (MHz)	Rx Freq Range (MHz)
MOBILE	MO	MO_5	5	Gulfport, Biloxi	28047	Harrison	A5, C4_C5	1930-1995, 1960-1980	1850-1915, 1900-1920	D_E	2135-2145	1735-1745	G	2155-2180	1755-1760

2 PROPOSED ANTENNA ORIENTATION PLAN
SCALE: N.T.S.

T-Mobile

CMI ACQUISITIONS

SMW ENGINEERING GROUP, INC.
TOGETHER PLANNING A BETTER TOMORROW

CA#: MS E-0265

JEREMY D. SHARIT
LICENSED PROFESSIONAL ENGINEER
19160
STATE OF MISSISSIPPI

07/13/2020

SITE INFORMATION

9MT0043A
2145 CT POPPS FERRY ROAD
BILOXI, MS 39532

#	DATE	DESCRIPTION
0	06/18/20	ISSUED FOR CLIENT REV.
1	07/13/20	ISSUED FOR CONSTRUCTION

T-MOBILE SITE ID: 9MT0043A
SBA SITE ID: 9MT0043A

SHEET NAME:
ANTENNA PLAN

SMW#: 12-0770.3
SHEET NUMBER: C-3.1

DESIGNER:	CJS
CHECKED BY:	JCS
ENGINEER:	JDS

DELTA

Smarter. Greener. Together.

Specifications

Model	HP-Large 3 Power Cabinet
1. General	
Construction	Aluminum enclosure
Dimensions (W x H x D)	30 x 72 x 35 in.(76 | 829 x 889mm). Depth with Door: 41 in. (1067mm)
Weight	~551 lbs (~270kg) (without customer equipment or batteries)
Internal rack dimension	Total Equipment space, 30RU: Horizontal rack: 19" x 27RU Vertical rack: 19" x 3RU Power System space: 23" x 12RU
Mounting options	Pad-mount, plinth option
Finish	Polyester Powder Paint (Tan)
Safety	UL Listed , IEC / EN 60950
2. Environment	
Operating temperature	-40°C to +50°C (-40°F to +122°F) with solar load. IP55
Protection class	designed to GR-487
Acoustics	5°C delta T: 70 dBA @6000W, 65dBA @5000W test load
Humidity (relative)	95%, non-condensing (Max.)
3. Thermal management	
Cooling Equipment:	Direct Air Cooling 6000W, 5°C delta T (5) centrifugal redundant fans. (3) Merv-13 or optional CORE filters front door (3) Merv-13 filters rear hatch
Heating Equipment:	Forced air heating (2) 1000W AC heaters
4. Equipment	
Cable Entry	Knock-out plate on each upper side wall Additional knockouts each side (1) 3" conduit hole with plug
Door latch	3 point latching, 5/16 nut driver tool, pad-locking capability
Primary ground	10 double-hole ¼"-20 threaded holes on 5/8" center ground bar
Lifting Ears	4 Lifting Tabs
Standard equipment	AC Load Center: 240V 4 wire feed / (1) 200A + (1-100A 208V single feed / (1) 200A AC Surge Protection for each breaker feed GFCI Receptacle 120V (6 form-C) Alarm Termination block (1) Thermal Probe 600A/ 54V (336kW) redundant Power System with DIN rail distribution: 12 rectifier positions (qty 3x55A DPR3000 rectifiers included) 52 poles for load (qty 1x150A, 3x10A load circuit breakers included) 16 poles for battery (qty 2x200A battery circuit breakers included) (2) SB350 generator connector LVD over-ride switch (2) SB175 Battery connections (2) SB350 Battery connections Front Door: (6) DC powered centrifugal fans with (3) MERV-13 filters, (3CORE option) Clogged Filter alarm pressure switch Door intrusion alarm (2) 1000W AC powered heaters LED interior cabinet light Rear Hatch: Exhaust vent with (3) MERV-13 filters
5. Ordering Information	
Cabinet	ESOA600-HCU01 — HP-Large 3 600A Power +Equipment Cabinet
Rectifier	ESR-48/60A D-A — 48V / 56A 3000W, 98.4%, CAN communication
Controller (Spare)	TPS1020028AU17 — Orion TOUCH Controller
Plinth, 6"	3799331881690-S — Plinth for V1/V2, HPL2, HPL3, LB2 cabinets only

Delta Group Website:
www.deltaww.com

Product Website:
www.deltapowersolutions.com

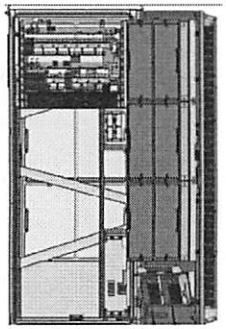
United States of America & Canada:
Delta Electronics U.S. Inc.
2925 E. Plano Parkway
Plano, TX (Texas) 75074

Sales and Support:
Sales: DEUSTPS.Sales@deltaww.com
Orders: DEUSTPS.Orders@deltaww.com

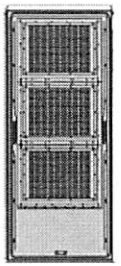
Field Support:
1-877-DELTA-08 option 3
(877-335-8208 option 3)
DEUSTPS.Support@deltaww.com

Installation Services:
DEUSTPS.Services@deltaww.com

RMA:
DEUSTPS.RMA@deltaww.com



Front Door Open



Rear Hatch View

*All specifications are subject to change without prior notice.

① DELTA HPLA 3 POWER CABINET
SCALE: N.T.S.

DETAILS BY OTHER NOTE:
DETAILS SHOWN ON THIS PAGE WERE PROVIDED BY OTHERS AND ARE NOT CARRIED UNDER THE SIGNATURE AND SEAL OF SMW AND/OR IT'S ENGINEERS.

DELTA

Smarter. Greener. Together.

Specifications

Model	Large 3 Battery (LB3) Cabinet	
1. General		
Construction	Aluminum enclosure	
Dimensions (W x H x D)	30 x 72 x 35 in. (762 x 1829 x 889mm). Depth with door: 41 in. (1041mm)	
Weight	~540lbs (245kg) (without batteries)	
Internal rack dimension	4 battery trays to support up to 210Ah batteries	
Mounting options	Pad-mount, plinth option	
Finish	Polyester Powder Paint (Tan)	
Safety	UL Listed, IEC / EN 60950	
2. Environment		
Operating temperature	-40C to +50C (-40F to +122F) with solar load.	
Protection class	IP55 designed to GR-487	
Acoustics	65 dBA	
Humidity (relative)	95%, non-condensing (Max.)	
3. Thermal management		
Cooling	Direct Air Cooling (4) Axial Fans. Filters: F6 front and rear	
Heating	Forced air heating (2) 1000W AC heaters	
4. Equipment		
Cable Entry	Knock-out plate on each upper side wall Additional knockouts each side	
Door latch	3 point latching, 5/16 Nut driver tool, pad-locking capability	
Lifting Ears	4 eye bolts	
Standard equipment	AC Load Center with AC Surge protection and GFCI outlet Left or Right side AC entry options (2) 1000W AC powered heater DC Load Center 100A bulk feed bus bar (4) 20050A DIN rail battery breakers (4) 2-hole lug landings (2) Anderson SB350 input connectors to daisy chain 2nd battery cabinet 2AWG battery cables from breakers to trays Configurable trays for (4) strings of up to 210Ah batteries Door intrusion switch LED interior cabinet light Fan Control Board, factory wired alarms via RJ45 output (fan & breaker alarms) Cabinet Connection kit (2) 4/0 cables with SB350 disconnects to connect to power cabinet	
5. Ordering Information		
Cabinet	ESOF015-ECV04	Large Battery 3 Cabinet
Plinth, 6"	3799331881690-S	Plinth for V1/V2, HPL2, LB2 cabinets only

*All specifications are subject to change without prior notice.

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www.deltaww.com

Product Website:
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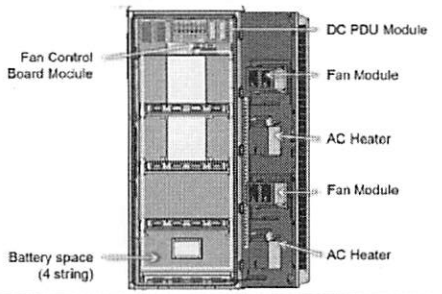
United States of America & Canada:
Delta Electronics U.S. Inc.
2925 E. Plano Parkway
Plano, TX (Texas) 75074

Sales and Support:
Sales: DEUSTPS.Sales@deltaww.com
Orders: DEUSTPS.Orders@deltaww.com

Field Support:
1-877-DELTA-08 option 3
(877-335-8208 option 3)
DEUSTPS.Support@deltaww.com

Installation Services:
DEUSTPS.Services@deltaww.com

RMA:
DEUSTPS.RMA@deltaww.com



② DELTA HPLA 3 BATTERY CABINET
SCALE: N.T.S.

T-Mobile

CMI ACQUISITIONS

SMW ENGINEERING GROUP, INC.
TOGETHER PLANNING A BETTER TOMORROW

CA#: MS E-0265

JEREMY D. SHARIT
LICENSED PROFESSIONAL ENGINEER
19160
STATE OF MISSISSIPPI

07/13/2020

SITE INFORMATION:

9MT0043A
2145 CT POPPS FERRY ROAD
BILOXI, MS 39532

#	DATE	DESCRIPTION
0	06/18/20	ISSUED FOR CLIENT REV.
1	07/13/20	ISSUED FOR CONSTRUCTION

T-MOBILE SITE ID:	SBA SITE ID:
9MT0043A	9MT0043A

SHEET NAME:

EQUIPMENT DETAILS

SMW #	SHEET NUMBER:
12-0770.3	C-3.2
DESIGNER: CJS	
CHECKED BY: JCS	
ENGINEER: JDS	

RAN Template:	A&L Template:
50092EZ_SR	50092EZ_SR

9MT0043A_Anchor_4

Standard

Section 1 - Site Information

Site ID: 9MT0043A
Status: Final
Version: 4
Project Type: Anchor
Approved: 5/2/2020 11:10:10 PM
Approved By: Srinivas.Kotareddy3@T-Mobile.com
Last Modified: 5/2/2020 11:10:10 PM
Last Modified By: Srinivas.Kotareddy3@T-Mobile.com

Site Name: Popps Ferry Rd WT
Site Class: Watertank
Site Type: Structure Non Building
Plan Year: 2020
Market: MOBILE AL
Vendor: Nobis
Landlord: City of Biloxi

Latitude: 30.43655991
Longitude: -88.98561800
Address: 2459 Popps Ferry Road
City, State: Biloxi, MS
Region: SOUTH

RAN Template: 50092EZ_DR		AL Template: 50092EZ_SR		
Sector Count: 3	Antenna Count: 0	Coax Line Count: 0	TMA Count: 0	RRU Count: 3

Proposed RAN Equipment

Template: 50092EZ_SR

Enclosure	1	2	3	4
Enclosure Type	Generic 600A Site Support Cabinet	Tower Top Mount (Nokia)	Ancillary Equipment (Nokia)	Generic Battery Cabinet for 600A SSC
Baseband	ASIB (L2100, L1900); ASIK (N2500); ASIB (L2500); FSMF (U1900, G1900)			
Baseband Submodule	ASIA (x 3) (L2100, L1900); ASIL (x 3) (N2500); ASIC (x 3) (L2500)			
Baseband Subrack	AMIA (x 2)			
Hybrid Cable System			NSN Low Cap HCS 3008 (x 3); 300' HCS 2.0 Trunk - 12#4AWG 24 SM FIBER PR (Tower)	
Junction Box		Large COVP (Nokia) (x 3)	Nokia HCS 2.0 Tower Junction Box; Large COVP (Nokia)	
Power subsystem	Rectifier Shelf "Select size"; Breakers "Select size"			Batteries "Select size"
Radio		AHFIG (x 3) (U1900, L2100, L1900, G1900)		
Transport System	CSR DCRe			

RAN Scope of Work:

50092EZ_SR
04/30/2020
New Anchor POR - 50092EZ_SR
-N2.5/L2.5 will use AEHC radio (3)
-L2100, L1900, G1900, U1900 will do RF share in AHFIG(3).
-1-ASIB and 3-ASIC for L2500
-1-ASIK and 3-ASIL for N2500
-1-ASIB and 2-ASIA for L1900, L2100
-G1900 and U1900 will use FSMF(1).
-AMIA(2), ASIB(1) & ASIK(1) will use for core and transport functionality
-A&L section updated with new antenna information
-Add new HCS2.0 trunk for AEHC radios(1).
-Follow the port maps for cable connections.
-Fiber jumpers length must be verified at the time of construction

Reuse coax for LMU.
Keep U2100 as is.
In Regions list to use FXFC, FSMF.

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CA#: MS E-0265

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19180
STATE OF MISSISSIPPI

07/13/2020

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2145 CT POPPS FERRY ROAD
BILOXI, MS 39532

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T-MOBILE SITE ID	SBA SITE ID
9MT0043A	9MT0043A

SHEET NAME
RFDS

SMW #	SHEET NUMBER
12-0770.3	RF-1

DESIGNER:	CVS
CHECKED BY:	VCS
ENGINEER:	JDS

RAN Template: 50092EZ_SR	A&L Template: 50092EZ_SR

9MT0043A_Anchor_4
Standard

Sector 1 (Proposed) view from front (Note: the images show view from behind)			
Coverage Type	A - Outdoor Macro		
Antenna	1		2
Antenna Model	Andrew - TMBXX-6517-A2M (Quad)		AEHC (Active Antenna - Massive MIMO)
Azimuth	60		60
M. Tilt	0		0
Height	166		166
Ports	P1	P2	P3
Active Tech.	U1900 L2100 L1900 G1900	U1900 L2100 L1900 G1900	L2500 N2500
Dark Tech.			
Restricted Tech.			
Decomm. Tech.			
E. Tilt	2	2	2
Cables			
TMAs			
Diplexers / Combiners			
Radio			
Sector Equipment			

Unconnected Equipment:

Scope of Work:

RAN Template: 50092EZ_SR	A&L Template: 50092EZ_SR

9MT0043A_Anchor_4
Standard

Sector 2 (Proposed) view from front (Note: the images show view from behind)			
Coverage Type	A - Outdoor Macro		
Antenna	1		2
Antenna Model	Andrew - TMBXX-6517-A2M (Quad)		AEHC (Active Antenna - Massive MIMO)
Azimuth	180		180
M. Tilt	0		0
Height	166		166
Ports	P1	P2	P3
Active Tech.	U1900 L2100 L1900 G1900	U1900 L2100 L1900 G1900	L2500 N2500
Dark Tech.			
Restricted Tech.			
Decomm. Tech.			
E. Tilt	2	2	2
Cables			
TMAs			
Diplexers / Combiners			
Radio			
Sector Equipment			

Unconnected Equipment:

Scope of Work:

RAN Template: 50092EZ_SR	A&L Template: 50092EZ_SR

9MT0043A_Anchor_4
Standard

Sector 3 (Proposed) view from front (Note: the images show view from behind)			
Coverage Type	A - Outdoor Macro		
Antenna	1		2
Antenna Model	Andrew - TMBXX-6517-A2M (Quad)		AEHC (Active Antenna - Massive MIMO)
Azimuth	280		280
M. Tilt	0		0
Height	166		166
Ports	P1	P2	P3
Active Tech.	U1900 L2100 L1900 G1900	U1900 L2100 L1900 G1900	L2500 N2500
Dark Tech.			
Restricted Tech.			
Decomm. Tech.			
E. Tilt	2	2	2
Cables			
TMAs			
Diplexers / Combiners			
Radio			
Sector Equipment			

Unconnected Equipment:

Scope of Work:

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SMW ENGINEERING GROUP, INC.
TOGETHER PLANNING A BETTER TOMORROW

CA#: MS E-0265

JEREMY D. SHARIT
LICENSED PROFESSIONAL ENGINEER
19160
STATE OF MISSISSIPPI

07/13/2020

SITE INFORMATION

9MT0043A
2145 CT POPPS FERRY ROAD
BILOXI, MS 39532

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T-MOBILE SITE ID:	SBA SITE ID:
9MT0043A	9MT0043A

SHEET NAME:

RFDS

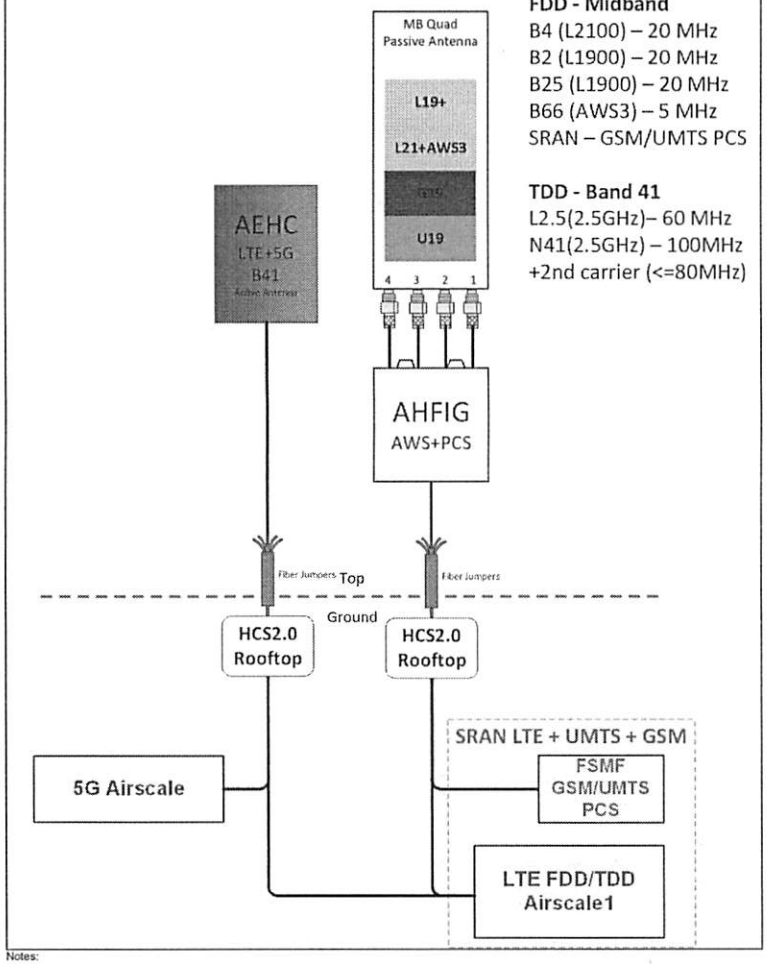
SMW #:	SHEET NUMBER:
12-0770.3	RF-2
DESIGNER: CJS	
CHECKED BY: JCS	
ENGINEER: JDS	

50092EZ_SR.jpg

Configuration 50092EZ_SR

* For 5G and LTE Airscale BB dimensioning refer to Fiber Port matrices.

(Alpha, Beta & Gamma)



FDD - Midband
B4 (L2100) – 20 MHz
B2 (L1900) – 20 MHz
B25 (L1900) – 20 MHz
B66 (AWS3) – 5 MHz
SRAN – GSM/UMTS PCS

TDD - Band 41
L2.5(2.5GHz)– 60 MHz
N41(2.5GHz) – 100MHz
+2nd carrier (<=80MHz)

Notes:

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JEREMY D. SHARIT
LICENSED PROFESSIONAL
ENGINEER
19160
STATE OF MISSISSIPPI
07/13/2020

SITE INFORMATION:
9MT0043A
2145 CT POPPS FERRY ROAD
BILOXI, MS 39532

#	DATE	DESCRIPTION
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1	07/13/20	ISSUED FOR CONSTRUCTION

T-MOBILE SITE ID:	SBA SITE ID:
9MT0043A	9MT0043A

SHEET NAME:
RFDS

SMW #: 12-0770.3
DESIGNER: CJS
CHECKED BY: JCS
ENGINEER: JDS

SHEET NUMBER:
RF-3

1. ALL WORK IS TO COMPLY WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE (NEC) AND ANY LOCAL ORDINANCES, CODES, AND ALL OTHER ADMINISTRATIVE AUTHORITIES HAVING JURISDICTION. THE CONTRACTOR SHALL FURNISH AND PAY FOR ALL PERMITS AND RELATED FEES.

2. ALL EQUIPMENT AND MATERIAL FURNISHED AND INSTALLED UNDER THIS CONTRACT SHALL BE UNDERWRITERS LABORATORIES (U.L.) LISTED, NEW, FREE FROM DEFECTS, AND SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE BY OWNER OR HIS REPRESENTATIVE. SHOULD ANY TROUBLE DEVELOP DURING THIS PERIOD DUE TO FAULTY WORKMANSHIP, MATERIAL, OR EQUIPMENT, THE CONTRACTOR SHALL FURNISH ALL NECESSARY MATERIALS AND LABOR TO CORRECT THE TROUBLE WITHOUT COST TO THE OWNER.

3. ALL WORK SHALL BE EXECUTED IN A WORKMAN LIKE MANNER AND SHALL PRESENT A NEAT MECHANICAL APPEARANCE WHEN COMPLETED. CONTRACTOR SHOULD AVOID DAMAGE TO EXISTING UTILITIES WHEREVER POSSIBLE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING RELATED TO ELECTRICAL WORK, AND SHALL RESTORE ALL EXISTING LANDSCAPING, SPRINKLER SYSTEMS, CONDUITS, WIRING, PIPING, ETC. DAMAGED BY THE ELECTRICAL WORK TO MATCH EXISTING CONDITIONS.

4. ELECTRICAL WORK SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO COMPLETE ELECTRICAL POWER AND LIGHTING SYSTEMS, TELEPHONE AND COMMUNICATION SYSTEMS, PANELBOARDS, CONDUIT, CONTROL WIRING, GROUNDING, ETC. AS INDICATED ON ELECTRICAL DRAWINGS AND/OR AS REQUIRED BY GOVERNING CODES.

5. PRIOR TO INSTALLING ANY ELECTRICAL WORK, THE CONTRACTOR SHALL VISIT THE JOB SITE AND VERIFY EXISTING SITE LOCATIONS AND CONDITIONS AND UTILITY SERVICE REQUIREMENTS OF THE JOB, AND BY REFERENCE TO ENGINEERING AND EQUIPMENT SUPPLIERS' DRAWINGS. SHOULD THERE BE ANY QUESTION OR PROBLEM CONCERNING THE NECESSARY PROVISIONS TO BE MADE. PROPER DIRECTIONS SHALL BE OBTAINED BEFORE PROCEEDING WITH ANY WORK.

6. PROVIDE POWER AND TELEPHONE TO SERVICE POINTS PER UTILITY COMPANY REQUIREMENTS. CONTRACTOR SHALL CONTACT UTILITY SERVICE PLANNERS AND OBTAIN ALL SERVICE REQUIREMENTS AND INCLUDE COSTS FOR SUCH IN THEIR BID.

7. SERVICE EQUIPMENT SHALL HAVE A SHORT CIRCUIT WITHSTAND RATING EXCEEDING THE MAXIMUM AVAILABLE FAULT CURRENT AT THE SUPPLY TERMINAL ON THE UTILITY TRANSFORMER SECONDARY, THE INSULATION SHALL BE FREE FROM ANY SHORT CIRCUITS AND GROUNDS. CONTRACTOR TO OBTAIN THE AVAILABLE SHORT CIRCUIT CURRENT FROM THE ELECTRICAL SERVICE PROVIDER.

8. ALL WIRES SHALL BE STRANDED COPPER WITH THHN/THWN AND 600 VOLTS INSULATION. ALL GROUND CONDUCTORS TO BE PROPERLY SIZED COPPER. (STRANDED OR SOLID)

9. IN THE EVENT OF ANY CONFLICT OR INCONSISTENCY BETWEEN ITEMS SHOWN ON THE PLANS AND/OR SPECIFICATIONS, THE NOTE, SPECIFICATION OR CODE WHICH PRESCRIBES AND ESTABLISHES THE HIGHEST STANDARD OF PERFORMANCE SHALL PREVAIL.

10. SERVICE CONDUITS SHALL HAVE NO MORE THAN (4) -50° BENDS IN ANY SINGLE RUN. THE CONTRACTOR SHALL PROVIDE PULL BOXES AS NEEDED WHERE CONDUIT REQUIREMENTS EXCEED THESE CONDITIONS. PULL WIRES AND CAPS SHALL BE PROVIDED AT ALL SPARE CONDUITS FOR FUTURE USE.

11. ALL ELECTRICAL EQUIPMENT SHALL BE ANCHORED TO WITHSTAND LOCAL WIND SPEED REQUIREMENTS AND DESIGNED FOR OUTDOOR EXPOSURE.

12. ALL COAX, POWER AND TELEPHONE SYSTEM CONDUITS SHALL HAVE A MINIMUM 24" SCH. 80 PVC RADIUS SWEEPS TO EQUIPMENT, PULLBOXES, GUY, ETC., UNLESS OTHERWISE NOTED, OR AS REQUIRED BY UTILITY COMPANIES.

13. FUSE TYPE SHALL BE BUSSMAN RKI LOW PEAK FUSE (LPN-RK-140).

14. UPON COMPLETION OF THE JOB, THE CONTRACTOR SHALL FURNISH AS-BUILT DRAWINGS TO THE OWNER.

15. GENERAL GROUNDING CRITERIA
    1ST STEP: GROUND TO EXISTING BUILDING STRUCTURAL STEEL AND TO THE EXISTING COLD WATER METAL PIPE LINE. (WHERE APPLICABLE) THEN TEST GROUNDING RESISTANCE FOR 5 OHMS OR LESS OVERALL GROUND RESISTANCE. WHERE THE EFFECTIVE RESISTANCE DOES NOT MEET THIS CRITERIA, PROVIDE SUPPLEMENTAL GROUNDING AND RE-TEST UNTIL GROUND RESISTANCE FALLS BELOW THIS LEVEL.

16. SUPPLEMENTAL GROUND MAY CONSIST OF ONE OR MORE OF THE FOLLOWING: COUNTERPOISE, USER GROUND, GROUND ROD AND/OR GROUND WELL IN EXTREMELY ADVERSE SOIL CONDITIONS. WHERE THE EXISTING BUILDING STEEL DOES NOT PROVIDE AN EFFECTIVE GROUND RESISTANCE, THEN THE CONTRACTOR SHALL PROVIDE A SEPARATE GROUND CONDUCTOR FROM ROOF MOUNTED BTS EQUIPMENT LOCATIONS EITHER DOWN THROUGH THE INSIDE OF THE BUILDING OR DOWN THE OUTSIDE OF THE BUILDING, DEPENDING UPON OWNER PREFERENCE. WHERE THE GROUND CONDUCTOR FROM THE ROOF MOUNTED EQUIPMENT IS ROUTED IN CONDUIT, THE CONDUIT SHALL BE EFFECTIVELY GROUNDED TO THE GROUND CONDUCTOR AT BOTH ENDS OF THE CONDUIT. (GUY INSTALLATIONS):

    FOR INSTALLATIONS WHERE WOODEN STRUCTURES, TOWERS, CONCRETE SILOS ETC. ARE ENCOUNTERED A PARATE DOWNLEAD SHALL BE PROVIDED FROM THE 3 ANTENNAS SEPARATED BY A MINIMUM OF 12 INCHES FROM THE COAXIAL CABLES. THE GROUND CONDUCTOR SHALL BE SECURELY FASTENED TO THE EXTERIOR OF OUTSIDE STRUCTURES WITH NONMETALLIC GROUND STRAPS EVERY 10 FEET. AGAIN, AS FOR TENANT IMPROVEMENT PROJECTS, TEST THE GROUND RESISTANCE FOR GUY INSTALLATIONS AND PROCEED PER THE ABOVE STEPS.

17. CONTRACTOR TO COLOR PHASE CONDUCTORS BLACK (B PHASE), RED (A PHASE), WHITE (NEUTRAL), AND GREEN (GROUND).

18. CONTRACTOR TO PROVIDE GUTTER TAP.

19. THERE SHALL BE A MINIMUM CLEARANCE OF 48" BETWEEN FRONT OF ELECTRICAL EQUIPMENT AND ANY WALL OR OBSTRUCTION.

1 ELECTRICAL NOTES
SCALE: N.T.S.

T-Mobile

CMI ACQUISITIONS

SMW ENGINEERING GROUP, INC.
TOGETHER PLANNING A BETTER TOMORROW

CA#: MS E-0265

JEREMY D. SHARP
LICENSED PROFESSIONAL ENGINEER
19180
STATE OF MISSISSIPPI

07/13/2020

SITE INFORMATION
9MT0043A
2145 CT POPPS FERRY ROAD
BILOXI, MS 39532

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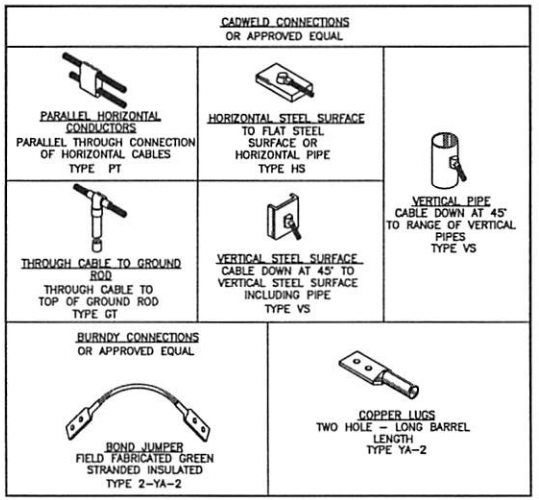
1	07/13/20	ISSUED FOR CONSTRUCTION

T-MOBILE SITE ID	SMW SITE ID
9MT0043A	9MT0043A

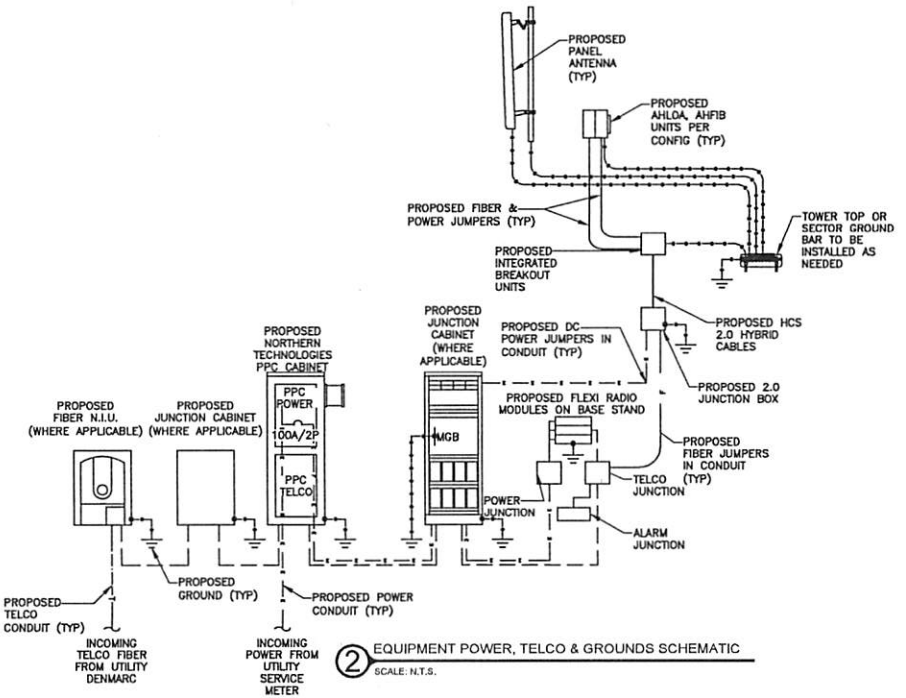
SHEET NAME
ELECTRICAL NOTES

SMW #: 12-0770.3
DESIGNER: CJS
CHECKED BY: JCS
ENGINEER: JCS

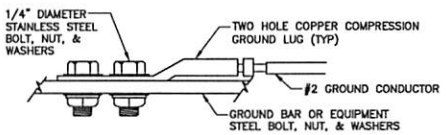
SHEET NUMBER
E-1



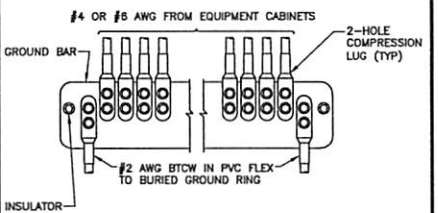
1 GROUNDING CONNECTION DETAILS
SCALE: N.T.S.



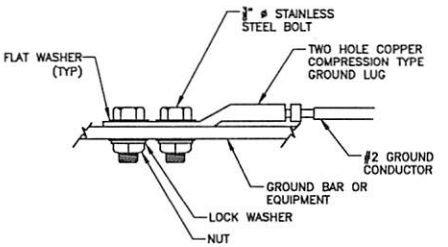
2 EQUIPMENT POWER, TELCO & GROUNDS SCHEMATIC
SCALE: N.T.S.



3 TWO HOLE LUG CONNECTION DETAIL
SCALE: N.T.S.



4 GROUND BAR DETAIL
SCALE: N.T.S.



5 MECHANICAL GROUND CONNECTION
SCALE: N.T.S.

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19160
STATE OF MISSISSIPPI

07/13/2020

SITE INFORMATION

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2145 CT POPPS FERRY ROAD
BILOXI, MS 39532

#	DATE	DESCRIPTION
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1	07/13/20	ISSUED FOR CONSTRUCTION

T-MOBILE SITE ID:	SBA SITE ID:
9MT0043A	9MT0043A

SHEET NAME:
GROUNDING DETAILS

SMW #:	SHEET NUMBER:
12-0770.3	G-1

DESIGNER:	CJS
CHECKED BY:	JCS
ENGINEER:	JDS

Date: **June 18, 2020**

Teresa Shempert
T-Mobile
3757 Halls Mill Road
Mobile, AL 36693

SMW Engineering Group, Inc.
158 Business Center Dr.
Birmingham AL. 35244
(205) 252-6985

Subject: **Structural Opinion Letter**

Carrier Designation: ***T-Mobile* Co-Locate**
Carrier Site Name: Popps Ferry Rd WT
Carrier Site Number: 9MT0043A

Engineering Firm Designation: **SMW Engineering Group, Inc. Project Number:** 12-0770.3

Site Data: **2145 CT Popps Ferry Road, Biloxi, MS 39532 (Harrison County)**
Latitude *30.43655991°*, Longitude *-88.96561600°*
177' Water Tower

Dear Teresa Shempert,

SMW Engineering Group, Inc. is pleased to submit this **"Structural Letter"** to determine the structural integrity of the above-mentioned water tower supported telecommunications site.

The purpose of the assessment is to determine acceptability of the water tower to sufficiently support the telecommunications equipment presented in this report. Based on our professional opinion we have determined the suitability for the structure, under the following load case, to be:

Proposed Equipment Configuration **Sufficient Capacity**

This assessment has been performed in accordance with the AWWA D-100, the 2018 International Building Code, and the TIA-222-H Standard using a design wind speed of 160 mph 3-second gust wind speed with no ice accumulation and 30 mph 3-second gust wind with 0.5" ice.

All equipment proposed in this report shall be installed in accordance with the drawings for the determined available structural capacity to be effective.

We at *SMW Engineering Group, Inc.* appreciate the opportunity of providing our continuing professional services to you. If you have any questions or need further assistance on this or any other projects please give us a call.

Respectfully submitted,

JEREMY D. SHARIT
LICENSED PROFESSIONAL
ENGINEER
19160
STATE OF MISSISSIPPI

Jeremy D. Sharit
2020.06.18
08:57:44 -05'00'

Jeremy Sharit, PE
Project Engineer
MS CA# E-0265

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1) INTRODUCTION

The proposed telecommunications equipment will be located on the existing water tower. Currently, there are existing telecommunications antennas and equipment on the tower. See below table for the proposed loading.

2) ASSESSMENT CRITERIA

Building Code:	2018 International Building Code
TIA-222 Revision:	TIA-222-H
Risk Category:	II
Ultimate Wind Speed:	160 mph
Exposure Category:	C
Topographic Factor:	I
Ice Thickness:	0.5 in
Wind Speed with ice:	30 mph

Table 1 - Proposed Equipment Configuration

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
150.0 (T-Mobile)	150.0 (T-Mobile)	3	Nokia	AEHC	1	HCS 2.0 trunk
		3	Nokia	AHFIG		

Table 2 - Other Considered Equipment

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
150.0 (T-Mobile)	150.0 (T-Mobile)	3	Andrew	TMBXX-6517-A2M	3 12	Low Cap HCS Coax Cable
		3	Nokia	COVP		
		3	-	Sector Mounts		

3) ASSESSMENT PROCEDURE

Table 3 - Documents Provided

Document	Remarks	Reference	Source
Construction Drawings	SMW Engineering Group, Inc.	-	SMW
RFDS (Antenna Design)	T-Mobile	Dated 05/02/2020	T-Mobile

3.1) Assumptions

1) The structure was built in accordance with the designer's specifications.
2) The structure has been maintained and is free of damage.
3) The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2.

This assessment may be affected if any assumptions are not valid or have been made in error. SMW Engineering Group, Inc. should be notified to determine the effect on the structural integrity of the structure.

4) ASSESSMENT RESULTS

It is our assessment that the water tower **will support** the existing and proposed loads. This is based on past performance, and that the proposed final equipment configuration will be less wind area and weight than what is currently installed on the tower. This letter is based on the proposed equipment to be installed as shown in the associated construction drawings.