

#### **REVIEW BY FORT BEND COUNTY COMMISSIONERS COURT**

## **Fort Bend County**

Engineering Department 301 Jackson Suite 401 Richmond, Texas 77469 281.633.7500 Permits@fortbendcountytx.gov

***2	Right of Way	Permit	
	X Commercial D	Priveway Permit	
	Permit No: 2018-21	214	
Appli			
Job L	ocation Site: 918-A Talisman Drive, Rosharon,	, TX 77583	
Bond	No. Date of Bond:	Amount:	\$5,000.00
Laying Roads Commof the	bove applicant came to make use of certain Fort Beg, Construction, Maintenance, and Repair of Burieds, Streets, Highways, and Drainage Ditches in Fort Benissioners Court of Fort Bend County, Texas," as pase Minutes of the Commissioners Court of Fort Bend sistant with Chapter 181, Vernon's Texas Statutes a	Cables, Conduits, and end County, Texas, Unseed by the Commissio County, Texas, to the	Pole Lines, In, Under, Across or Along der the Jurisdiction of the oners Court of Fort Bend County, Texas,
Notes 1. 2.	Evidence of review by the Commissioners Court m grounds for job shutdown. Written notices are required:  a. 48 hours in advance of construction is b. When construction is completed and Administrator thru MyGovernmentO	start up, and I ready for final inspec Online.org portal.	tion, submit notification to Permit
Comr notice	nis <u>26th</u> day of <u>June, 2018</u> , Upon Motion of Commiss missioner <u>Puttroon</u> , duly put an e of said above purpose is hereby acknowledged by said notice be placed on record according to the reg	d carried, it is ORDERE the Commissioners Co	D, ADJUDGED AND DECREED that said
Signa By:	County Engineer		issioners Court and approved.  -2018 Comm. Court No. 13 C
Ву:	N/A  Drainage District Engineer/Manager	Clerk of Commission  By:  Deputy	ers Court Willis



## PERMIT APPLICATION REVIEW FORM FOR CABLE, CONDUIT, AND POLE LINE ACTIVITY IN FORT BEND COUNTY

#### Fort Bend County Engineering Department 301 Jackson Suite 401

Richmond, Texas 77469 281.633.7500 Permits@fortbendcountytx.gov

<del></del>	ht of Way Permit nmercial Driveway	Permit
Permit No	2018-21214	
The following "Notice of Proposed Cable, Condattachments have been reviewed and the notice of Fort Bend County, Texas.	luit, and/or Pole Lir ce conforms to app	ne activity in Fort Bend County" and accompanying ropriate regulations set by Commissioner's Court
(1) COMPLETE APPLICATION FORM:		
x a. Name of road, street, and/o	r drainage ditch aff	ected.
b. Vicinity map showing course	of directions	
x c. Plans and specifications		
(2) BOND:		
County Attorney, approval whe applicable.	n	
Perpetual bond currently posted.	Bond No:	Amount:
Performance bond submitted.	Bond No:	Amount:
X Cashier's Check	Check No:	Amount: \$5,000.00
(3) DRAINAGE DISTRICT APPROVAL (WHE	EN APPLICABLE):	
Drainage District Approval	_	Date
We have reviewed this project and agree it r	neets minimum re	quirements.
Parmit Administrator		6/18/2018
Permit Administrator		Date

USAA 10750 San A

USAA Federal Savings Bank 10750 McDermott Fwy San Antonio, TX 78288-0544 Teller Check
JPMorgan Chase Bank N.A.
Dallas, TX

FACE OF DOCUMENT HAS A MULTICOLOREDEBACKGROUND THE BACK CONTAINS AN ARTIFICIAL WATERMARK. HOLD AT ANGLE TO VIEW

88-88/1113

Date 06/15/2018

Pay

\*\*\*\*FIVE THOUSAND AND XX/100 DOLLAR \*\*\*\*

\$\*\*5,000.00

To The Order Of

FORT BEND COUNTY

Void if over \$\*\*5000.00

Preparer:

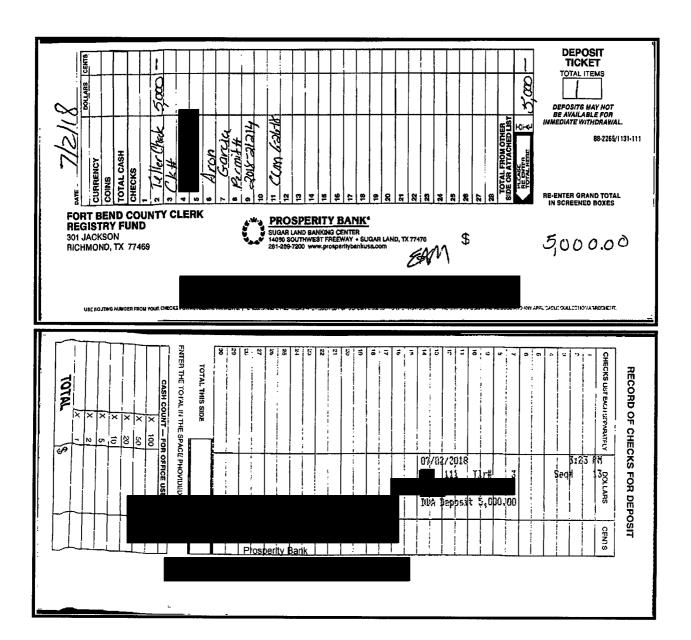
RE: ARON GARCIA

Memo: NA

Void After 180 Days from Issue Date

Drawer: USAA Federal Savings Bank

Authorized Signature





#### **PRINT**

#### **Order Confirmation**

#### Fort Bend County, Office of County Clerk

301 Jackson Street Richmond, TX 77469 U.S.A.

Memo:

#### **TXCLASS**

Order Date:	7/5/2018		Order Number:	
Participant Name:	Fort Bend	County, Office of Cour	nty Clerk	
Account Name:	CCM20 AronGarcia	a/TAMC		
Account Number:	TXCLASS		Authorized	Linda Willis
Transaction Type:	Contributio	on		
Transaction Amount:	\$5,000.00			
Bank Name:	PROSPERI	TY BANK		
Bank Account No:				
Payment Type:	ACH	,		ontribution, these funds
ABA:		will not be availa. day.	ble for withdrawal un	til the following business
Payment Instructions:		<b>,</b>		

Email: clientservices@texasclass.com Tel: (800) 707-6242 Fax: (855) 848-9910 www.texasclass.com

### **DEPOSIT**

**PERMIT #** 2018-21214

STYLE: Aron Garcia/TAMC

NAME PUT INTO TEXAS CLASS AS: CCM2018-21214
AronGarcia/TAMC

**TEXAS CLASS ACCOUNT NUMBER** 

DEPOSIT AMOUNT: \$5,000.00

DATE RECEIVED: 6/26/2018

DATE TRANSFERRED TO TEXAS CLASS: 7/5/2018

# F--Mobile® verticalbridge

T-MOBILE: A3C0203B

VERTICAL BRIDGE: TX-5460 - GOLDFARB REVOCABLE TRUST

918 TALISMAN ROAD #A [E911]

ROSHARON, TX 77583

100'-0" MONOPOLE TOWER

RAW LAND CONSTRUCTION DRAWINGS

#### VICINITY MAP **ENLARGED VICINITY MAP** Hilshire Village 1-10-TOL Cloverleaf Landing Park Galans Jacinto City Galena Park Village West Univers Talisman Dr Brookside Village Hastings TRUE TRUE NORTH-NORTH

#### DRIVING DIRECTIONS

FROM 4660 NORTH SAM HOUSTON PKWY E , HOUSTON, TX 77032 , GET ON HWY 59 S/I-69 FROM TEXAS 8 BELTWAY FRONTAGE RD AND 4TH ST/EASTEX FREEWAY SERVICE RD , HEAD EAST ON TEXAS 8 BELTWAY FRONTAGE RD E , SLIGHT RIGHT ONTO 4TH ST/EASTEX FREEWAY SERVICE RD , USE THE LEFT LANE TO TAKE THE S INTERSTATE 69/S 59 RAMP , FOLLOW HWY 59 S/I-69 , I-610 E AND STATE HWY 288 S/TX-288 S TO MANVEL. TAKE THE TX-6 EXIT FROM STATE HWY 288 S/TX-288 S , MERGE ONTO HWY 59 S/I-69 , USE THE RIGHT 2 LANES TO TAKE THE INTERSTATE 610 E EXIT , MERGE ONTO I-610 E , USE THE RIGHT 2 LANES TO MERGE ONTO STATE HWY 288 S/TX-288 S , TAKE THE TX-6 EXIT TOWARD ALVIN SUGARLAND , KEEP RIGHT AT THE FORK, FOLLOW SIGNS FOR ARCOLA/SUGARLAND AND MERGE ONTO HWY 6 N/TX-6 N/ALVIN SUGARLAND RD , FOLLOW HWY 6 N/TX-6 N TO TALISMAN DR IN FORT BEND COUNTY , MERGE ONTO HWY 6 N/TX-6 N/ALVIN SUGARLAND RD , TURN RIGHT ONTO TALISMAN DR ,918 TALISMAN DR , ROSHARON, TX 77583

#### DO NOT SCALE DRAWINGS

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

FORT BEND COUNTY ENGINEER

ENGINEER: Richard W. Stolleis, P.C.

ATE: 5/30/18

THESE SIGNATURES ARE VOID IF CONSTRUCTION HAS NOT COMMENCED IN (1) YEAR FROM DATE OF APPROVAL.

ROVED: <u>Ulsav</u>

DATE:

5-30-1

DRAWING INDEX

SHEET NO.	DESCRIPTION	REV
T-1	TITLE SHEET	0
S.1	SURVEY	0
C-1 & C-1A	OVERALL SITE PLAN	0
C-2	ENLARGED SITE PLAN	0
C-3	DIMENSION PLAN	0
C-4	EQUIPMENT PLAN & PLATFORM DETAILS	0
C-5	ELEVATION & ANTENNA PLAN	0
C-6	RFDS OMITTED	0
C-7	RFDS PLUMBING DIAGRAM OMITTED	0
C-8	COLOR CODING CONVENTION OMITTED	0
C-9	EQUIPMENT DETAILS OMITTE	0
C-10	EQUIPMENT DETAILS	0
C-11	SITE DETAILS	0
C-12	SITE DETAILS	0
C-13	DELTA SSC CABINET & MODULES OMITTED	0
C-13A & B	DELTA SSC CABINET (CONTINUOUS) OMITTED	0
C-14	PLATFORM SPECIFICATIONS OMITTE	0
C-15	SUPPORT RAIL SPECIFICATIONS OMITTE	ED o
EC-1	EROSION & GRADING CONTROL PLAN	0
EC-2	DRAINAGE CONTROL PLAN	0
EC-3	EROSION, GRADING, & DRAINAGE CONTROL PLAN NOTES & DETAILS	0
E-1	UTILITY ROUTING PLAN	0
E-2	ELECTRICAL DETAILS	0
E-3	ELECTRICAL DETAILS OMITTED	0
G-1	GROUNDING PLAN	0
G-2	GROUNDING PLANS	0
G-3	GROUNDING DETAILS OMITTED	0
GN-1	GENERAL NOTES	0
GN-2	GENERAL NOTES	0
T1.0	COVER SHEET (10'x8') STEEL PLATFORM WINDLESP	0
S1.0	PLATFORM FRAMING PLAN & SECTIONS	0
S1.1	PLATFORM DETAILS OMITTED	0
S2.0	CANOPY FRAMING PLAN	0
S2.1	CANOPY FRAMING DETAILS OMITTED	0
S3.0	DRAWING NOTES	0
S3.1	STRUCTURAL CONCRETE & STEEL NOTES	0

# T - Mobile Greenway Plaza HOUSTON, TX 77046



750 PARK OF COMMERCE DRIVE BOCA RATON, FL 33487



CONSULTING GROUP, INC.
9221 Lyndon B Johnson Fwy
Suite 204, Dallas, TX 75243
Phone: 972–231–8893
Fax: 866–364–8375
www.ollprocgi.com
Registration No. 8242

ACGI NO: 17-7142, 18-2191
DRAWN BY: RM

CHECKED BY:

REVISIONS

REV	DATE	DESCRIPTION	BY
			F
2	05/17/18	REV. FOR DRAINAGE DISTRICT	RM
1	04/17/18	REV. FOR ZONING SUBMITTAL	RM
0	03/05/18	FINAL CD	RM
C	02/15/18	REV. FOR T-MOBILE REDLINES	RM
В		REV. FOR T-MOBILE REDLINES	HR
Α	11/22/17	PRELIMINARY CD	RM



NOT VALID WITHOUT P.E. STAMP & SIGNATURE

SITE INFORMATION
T-MOBILE SITE #:
A3C0203B

VERTICAL BRIDGE SITE #: TX-5460

918 TALISMAN ROAD #A[E911] ROSHARON, TX 77583 FORT BEND COUNTY

SHEET TITLE:

TITLE SHEET

SHEET NUMBER:

T-1

## 855-372-1980 CONTACT INFORMATION

SCOPE OF WORK

THESE PLANS HAVE BEEN DEVELOPED FOR THE PLACEMENT OF THE THE THE FORMUNICATION AND PUBLIC UTILITY FACILITY. CONSISTING

OF A 100' MONOPOLE TOWER SPACE FOR CARRIER FOLIPMENT AND

UTILITY RACK WITHIN A FENCED COMPOUND (NO WATER OR SEWER

REQUIRED), IN ACCORDANCE WITH THE SCOPE OF WORK IN THE PLANS. THESE PLANS ARE FOR CONSTRUCTION DRAWINGS UNLESS ACCOMPANIED BY A PASSING STRUCTURAL STABILITY ANALYSIS

PREPARED BY LICENSED STRUCTURAL ENGINEER, STRUCTURAL ANALYSIS MUST INCLUDED BOTH TOWER AND MOUNT.

SITE INFORMATION

750 PARK OF COMMERCE DRIVE

918 TALISMAN ROAD #A [E911] ROSHARON, TX 77583

29° 30' 10.28" (29.502856°) N

-95' 26' 55.15" (-95.448653') W

BOCA RATON, FL 33487

FORT BEND COUNTY

CITY OF ROSHARON

0170-00-000-1700-907

CENTERPOINT ENERGY 800-427-7142

UNMANNED

COMMERCIAL

PROPERTY OWNER:

TOWER OWNER:

SITE ADDRESS:

ATITUDE (NAD 83):

LONGITUDE (NAD 83):

GROUND ELEVATION: OCCUPANCY TYPE:

ZONING JURISDICTION:

ZONING CODE:

PARCEL NUMBER:

POWER PROVIDER:

COUNTY:

JERROLD HASKELL GOLDFARB REVOCABLE TRUST 903180 HOLMES RUN RD FALLS CHURCH, VA 22042–4308

APPLICANT:

VERTICAL BRIDGE HOLDINGS, LLC

750 PARK OF COMMERCE DRIVE BOCA RATON, FL 33487

ALLPRO CONSULTING GROUP, INC.

ENGINEER:

9221 LYNDON B. JOHNSON FREEWAY SUITE 204 DALLAS, TX 75243 CONTACT: JOJI GEORGE, P.E OFFICE: 972–231–8893 FAX: 866–364–8375

#### APPLICABLE CODES

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALL IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES

- INTERNATIONAL BUILDING CODE (2006 IBC)
   TIA-EIA-222-G OR LATEST EDITION
- 2. IIA-EIA-222-G OR LATEST EDITION 3. NFPA 780 - LIGHTNING PROTECTION CODE 4. 2017 NATIONAL ELECTRICAL CODE OR LATEST EDITION
- ANY OTHER NATIONAL OR LOCAL APPLICABLE CODES MOST RECENT EDITIONS
- 6. TX BUILDING CODE 7. LOCAL BUILDING CODE
- 8. CITY/COUNTY ORDINANCES.



VERTICAL BRIDGE SITE #:
VERTICAL BRIDGE SITE NAME:
T-MOBILE SITE #:
SITE ADDRESS:

TX-5460

**GOLDFARB REVOCABLE TRUST** 

A3C0203B

918 TALISMAN ROAD #A [E911]

**ROSHARON, TX 77583** 

APPROVAL SIGNA	ATURE BLOC	CK		
THE FOLLOWING PARTIES HAVE REVIEWED THESE DOCUMENTS.  ALL DOCUMENTS ARE SUBJECT TO REVISION BY THE LOCAL ZO AND MAY IMPOSE CHANGES OR MCDIFICATIONS.	NING BUILDING DEPARTMENTS			
	APPROVED REJECTED		APPROVED REJECTED	
VERTICAL BRIDGE PROJECT MANAGER	APPROVED REJECTED	T-MOBILE PROJECT MANAGER	APPROVED REJECTED	DATE
VERTICAL BRIDGE RF ENGINEER	APPROVED REJECTED	T-MOBILE RF ENGINEER	APPROVED REJECTED	DATE
VERTICAL BRIDGE SITE ACQUISITION	AFPROVED REJECTED	T-MOBILE SITE ACQUISITION	APPROVED REJECTED	DATE
VERTICAL BRIDGE QUALITY ASSURANCE		T-MOBILE QUALTY ASSURANCE		DATE

PARENT TRACT DESCRIPTION PER DEED RECORDED UNDER C.F. 2015093188 O.P.R. F.B.C.T.

7.46.59 acres of land, in the Nanuel Escalera League, Abstract No. 170, Fort Bend County, Texas, being that portion of Lot 2 of Fetterly's Subdivision, according to the plat thereof recorded in Volume 42, Page 83, Deed Records of Fort Bend County, Texas Iying North of the North Right—of—way line of State Highway 6, also being the same tract described as being 9.74 acres, as recorded in Volume 952. Page 211 of the Deed Records of Fort Bend County, Texas, soid 7.46.39 acre tract being described by metes and bounds as follows:

THENCE North 50° 00° 00° East, along the North line of sold Lot 2, some being the East line of sold Rosedole Addition, a distance of 797.48 feet (called 796.76 feet) to a 3/4 inch iron pipe found for the Northeast comer of sold and the Southeast Corner of sold Rosedole Addition;

THENCE South 14° 56° 10° West along the East line of sold Lot 2, some being the East Line of sold Manuel Escolero League and the West line of the A.B. Langerman Survey, Abstract 456, a distance of 571.30 feet to a 3/4 inch iron pipe found for the Southeast Corner of sold Lot 2;

THENCE South 90' 00' 00', along the South line of sold Lot 2, some being the North line of Lot 4 of sold Fetterly's Subdivision, a distance of 145.92 feet to a 1/2 inch iron rod set on the Northeast Right-of-way line of State Highway 6 (100.00 feet

THENCE North 57' 41' 57' West, along said Right-of-way line, a distance of 633.51 feet to an iron rod with cap Found for Cut-Bock Corner of that; triangular tract taken soid State Highway 6 Right-of-way as recorded in File Number (96)35373, Official Records of Fort Bend County, Texas;

Right-of-way line of Linda Street (60.00 feet wide);

THENCE North 15° 05° 00° East, along said East Right-of-way line, a distance of 180.75 feet to the POINT OF BEGINNING and containing a computed 7.4639 acres of land.

1.0000 core of land in the Manuel Escalera League, Abstract No. 170, Fort Bend County, Texas, out of a 7.4639 core tract, originally called a 9.74 core tract, recorded un Valume 952, Page 211 of the Deed Records of Fort Bend County, Texas, sold 1.0000 core tract being described by metes and bounds as follows:

BEGNNING at a 3/4 Inch Iron pipe found on the East Right-of-way line of Lindo
Street (60.00 feet wide) for the Northwest Corner of soid 7.4639 core tract, some
being the Northwest corner of Lot 2 of the Fetterly's Subdivision, according to the plat
thereof recorded in Volume 42, Page 83, Dead Records of Fort Bend County, and the
Southwest corner of Rosediae Addition, according to the plat thereof recorded in
Volume 393, Page 86 of the Map Records of Fort Bend County, Texas, and Side No.
99999A:

THENCE North 90° 00° 00° East, along the North line of sold Lot 2, some being the South line of sold Rosedale Addition, a distance of 177.58 feet to a 1/2 inch iron rod set for corner;

THENCE South 15' 05' 00' West a distance of 305.63 feet to a 1/2 Inch iron rod set for corner on the Northeast right-of-way line of State Highway 6 (100 feet wide);

THENCE North 57' 41' 57' West, along sold right-of-way line a distance of 152.68 feet to an iron rod with cop found for cut back comer of that triangular tract taken for sold State Highway 6 right-of-way as recorded in File Number (96) 35373 Deed Records of Fort Bend County, Texas;

THENCE North 22' 20' 56' West (called North 24' 34' 52' West) along said Cut Back Corner, a distance of 42.16 feet to a 1/2 inch iron rod set for corner of the East right-of-way line of Linda Street (60.00 feet wide);

#### ACCESS & UTILITY EASEMENT (A.U.E.) DESCRIPTION (AS SURVEYED):

Being 0.04 acres (1,684 square feet) tract of land situated in the Manuel Escalero Survey, A-170 of Fort Bend, County, being a portion of a called 6.4639 acre tract of land as described in an instrument to Jerroid Hosskell Goldforb, recorded under Cerk's File Number (C.F.) 2015093188 of the Official Public Records of Real Property Fort Bend County, Teans (O.P.R.P.F.B.C.T.), said 0.04 acre tract of land being more particularly described by metes and bounds as follows:

COMMENCING at a 1/2 inch iron pipe found for the Northeast corner of sold 6.4639 acre tract, same being the Southeast corner of Linda Drive (60° right-of-way) as shown on the plat of ROSEDALE ADDITION, a subdivision per plat recorded under Volume 393, Page 84 of the Map Records of Fort Bend County, Texas;

THENCE, over and across said 6.4639 acre, tract the following five (5) courses and distances:

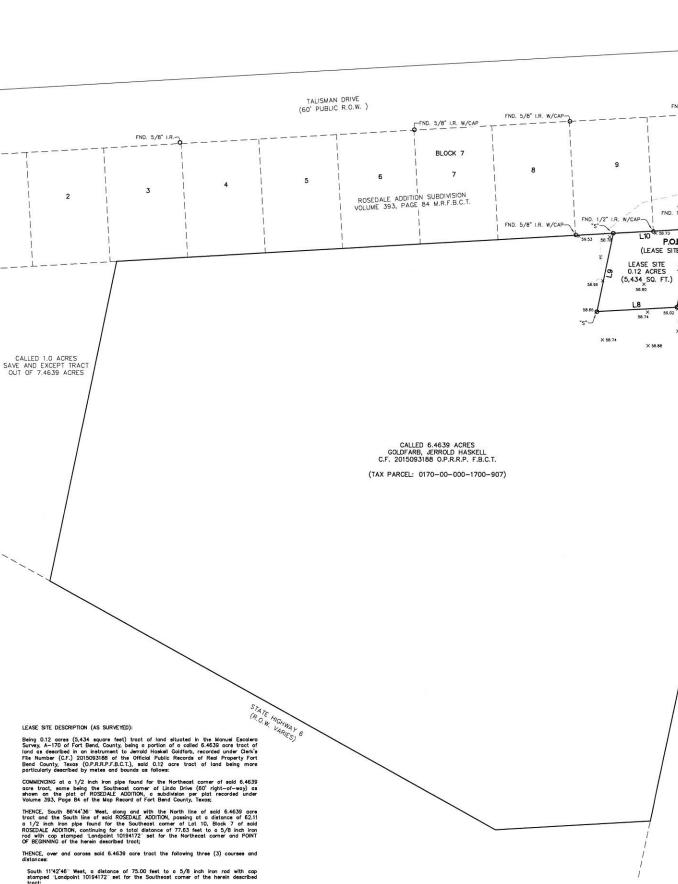
South 11'42'25" West, a distance of 47.85 feet to a point for the Southeast corner of the herein described tract;

South 86'44'36" West, a distance of 57.07 feet to a point for the Southwest corner of the herein described tract, lying on the East line of a lease site;

North 86'44'36" East, a distance of 36.36 feet to a point for an interior corner of the herein described tract;

North 11'42'25" East, a distance of 27.15 feet to a point for the Northwest corner of the herein described tract;

THENCE North 86'44'36" East, along and with the North line of said 6.4639 acre tract and the South line of said ROSEDALE ADDITION, a distance of 20.70 feet to the POINT OF BEGINNING and containing a computed 0.04 acres (1,684 square feet) of land



South 86'44'36" West, a distance of 75.00 feet to a 5/8 inch iron rod with cap stamped "Landpoint 10194172" set for the Southwest corner of the herein described

North 11'42'46' East, a distance of 75.00 feet to a 5/8 inch iron rod with cap stamped 'Landpoint 10194172' set for the Northwest corner of the herein described tract;

THENCE North 86'44'36" East, along and with the North line of said 6.4639 acre tract and the South line of said ROSEDALE ADDITION, a distance of 75.00 feet to the POINT OF BEGINNING and containing a computed 0.12 acres (5,434 square feet) of land.

L11 S 86"44"36" W 20.57 L12 S 86\*44'36" W 77.63

CALLED 89.243 ACRES CHARLESTON C.M.I. LTD. C.F. 2010055798 O.P.R.P. F.B.C.T.

LINE TABLE

BEARING LENGTH

5 11°42'25" W 47.85

S 86"44'36" W 57.07

.3 N 11°42'46" E 20.70 L4 N 86"44"36" E 36.36

L5 N 11\*42'25" E 27.15

L6 N 86\*44'36" E 20.70

L7 S 11\*42'46" W 75,00

L8 S 86\*44"36" W 75.00

L9 N 11\*42'46" E 75.00 L10 N 86\*44"36" E 75.00

PROPERTY MARKER

(Mb 5/30/18

59.89

119 -1

(ALL TRACTS)

ACCESS AND UTILITY EASEMENT -0.04 ACRES

POR (A.U.E.)

(1,684 SQ. FT.)

SITE BENCHMARK

FND. 1/2" I.P. 59/29

DERO

© 62.11' FND. 1/2" I.P.

P.O.B

SITE BENCHMARK

800-NAIL ELEV .: 59.18 (GEOID 12) SET 800-NAIL LOCATED SOUTH 89'46'35" EAST, A DISTANCE OF 46.94 FEET, FROM THE SOUTHEAST CORNER OF LEASE SITE.

ELEVATIONS AS MEASURED WITH TRIMBLE R6 USING AREA VRS NETWORK.

VICINITY MAP GRAPHIC SCALE

DISTEY

® TISITE

DISNEY WE PINE - DALE
OMANOR

I hereby certify to: Vertical Bridge REIT, LLC, a Delaware limited liability company, its subsidiaries, and their respective successors and/or assigns; Toronto Dominion (Faxa) LLC, as Administrative Agent, for itself and on behalf of the lenders parties from time to time to that certain Second Amended and Restated Loon Agreement dated June 17, 2016 with Vertical Bridge Holdoc, LLC, as borrower, and Vertical Bridge Holdoc, LLC, as sorted, as may be amended, restated, modified or renewed, their successors and casigns as their interests may oppear; and Fidelity National Title Insurance Company

Joy Dean Conine Registered Professional Land Surveyor Texas Registration No. 4345 Date: November 16, 2017 Date: Jenuary 29, 2018 (Added Parent tract description)

( IN FEET ) 1 inch = 40 f

SURVEY OF

A LEASE SITE 0.12 ACRES (5,434 SQ. FT.) AND ACCESS & UTILITY EASEMENT 0.04 ACRES (1,684 SQ. FT.)

MANUEL ESCALERA SURVEY, A-170 FORT BEND COUNTY, TEXAS

This site is situated in Zone "X" in Fort Bend County, Texas according to FEMA map number 48157C0315t, dated April 02, 2014. Warning: This stotement does not imply that the property and/or the structures thereon will be free from flooding or flood damage. This determination has been made by scaling the property on the referenced map and is not the result of an elevation survey. This flood statement shall not create liability on the part of the surveyor.

PROJECT INFORMATION
SITE NAME
SITE NUMBER
OWNERS NAME
SITE ADDRESS GOLDFARB US-TX-5480 JERROLD HASKELL GOLDFARB 918 TALISMAN ROAD JA ROSHARON, TX 77583 NAD 83 LATITUDE LONGITUDE NOTES

1. Elevations based on GEOID12 using area VRS network.

1. Elevations based on EC012 using orea VRS network.

2. Bearings based on Texas State Plane Coordinate System, South Central Zone, North American Datum 1983 (NADS).

3. This survey was prepared with the benefit of a title commitment from Parkinsky Systems (National Title Insurance Company, effective date: January 7, 2018, DATE: 11/16/2017.

 This survey was prepared with the benefit of a title commitment from Fidelity National Title insurance Company, effective date: January 7, 2018, issued: January 19, 2018, Commitment No. 26522104. There are no Schedule "B" Items that offect the Lease Area or Access and Utility Easement per title commitment from Fidelity National Title Insurance Company, effective date: January 7, 2018, issued: January 19, 2018, Commitment No. 26522104.

5. There were no visible encroachments affecting the Lease Area or any of the easements, at the time the survey was completed.

| The control | The control

6. The Lease Area and all easements lie entirely within the parent parcel.

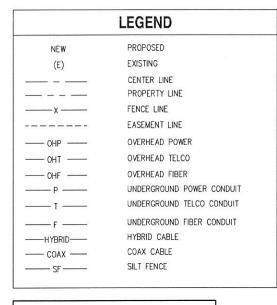
8. This survey was prepared for Vertical Bridge Development, LLC.

**S.1** SHEET 1 OF

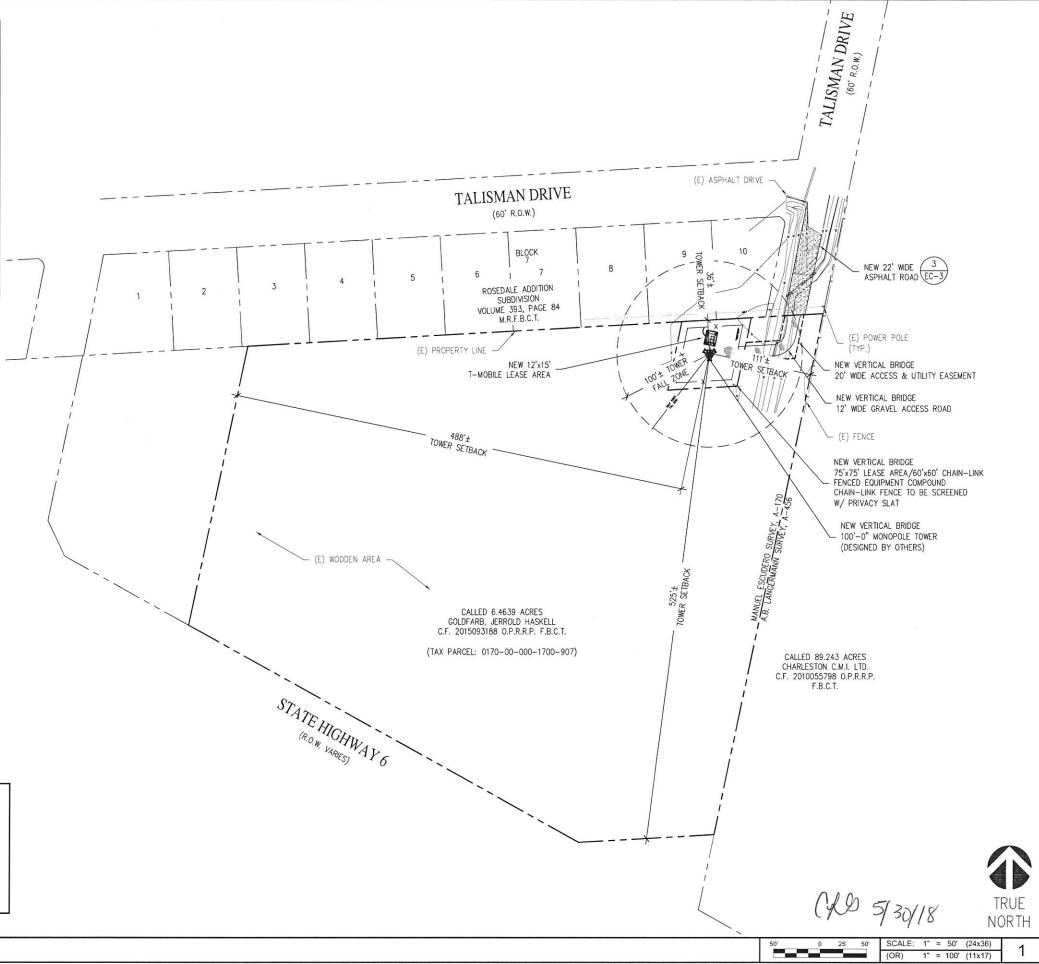
FOWN AND COUNTRY SURVEYORS A LANDPOINT COMPANY
2219 SAWDUST ROAD, STE. 2003
THE WOODLANDS, TY 77380
(281)465-6730
WWW.landpoint.net
TBPLS REG. NO. 10194472







NOTE:
INFORMATION CONTAINED WITHIN DRAWINGS IS BASED
ON PROVIDED INFORMATION AND A DESIGN WALK BY
ALLPRO CONSULTING GROUP, INC, DATED 09/28/17,
AND TOPOGRAPHIC SURVEY BY LANDPOINT
COMPANY DATED 11/16/17.





2 GREENWAY PLAZA HOUSTON, TX 77046



750 PARK OF COMMERCE DRIVE BOCA RATON, FL 33487



CONSULTING GROUP, INC.
9221 Lyndon B Johnson Fwy
Suite 204, Dallas, TX 75243
Phone: 972–231–8893
Fax: 866–364–8375
www.allprocgi.com
Registration No. 8242

ACGI NO: 17-7142, 18-2191

DRAWN BY:

CHECKED BY: JG

	REVISIONS					
REV	DATE	DESCRIPTION	BY			
2	05/17/18	REV. FOR DRAINAGE DISTRICT	RM			
		REV. FOR ZONING SUBMITTAL	RM			
0	03/05/18	FINAL CD	RM			
C	02/15/18	REV. FOR T-MOBILE REDLINES	RM			
В		REV. FOR T-MOBILE REDLINES	HR			
Α	11/22/17	PRELIMINARY CD	RM			



NOT VALID WITHOUT P.E. STAMP & SIGNATURE

SITE INFORMATION
T-MOBILE SITE #:
A3C0203B

VERTICAL BRIDGE SITE #: TX-5460

918 TALISMAN ROAD #A[E911] ROSHARON, TX 77583 FORT BEND COUNTY

SHEET TITLE:

OVERALL SITE PLAN

SHEET NUMBER:

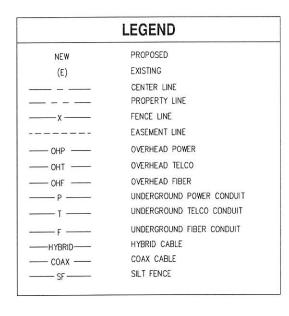
C-1

OVERALL SITE PLAN

DATE:

FORT BEND COUNTY ENGINEER

Development Coordinator



NEW BURIED OR OVERHEAD UTILITIES MUST BE CONTAINED WITHIN A DEDICATED UTILITY EASEMENT. ALL EXISTING AND NEW UTILITY EASEMENTS MUST BE VERIFIED PRIOR TO CONSTRUCTION. NO DIGGING OR TRENCHING SHALL BE ALLOWED WITHOUT PRIOR VERIFICATION OF EXISTING BURIED UTILITIES. IT IS THE CONTRACTOR'S RESPONSIBILITY

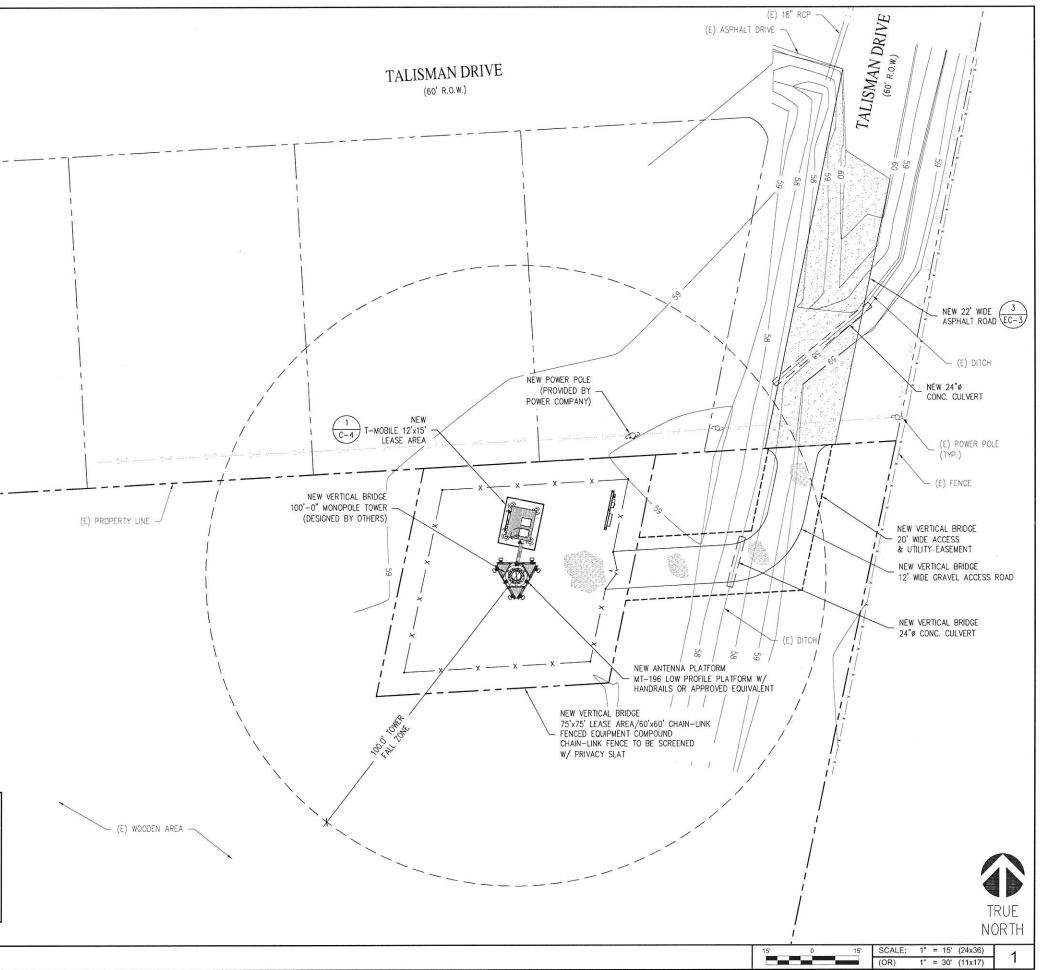
TO VERIFY THE LOCATION OF ALL UTILITIES (WHETHER SHOWN OR NOT) AND PROTECT SAID UTILITIES FROM ANY DAMAGE CAUSED BY CONTRACTOR'S ACTIVITIES.

INFORMATION CONTAINED WITHIN DRAWINGS IS BASED ON PROVIDED INFORMATION AND A DESIGN WALK BY ALLPRO CONSULTING GROUP, INC, DATED 09/28/17, AND TOPOGRAPHIC SURVEY BY LANDPOINT COMPANY DATED 11/16/17.

NOTE: VERTICAL BRIDGE WILL UTILIZE EXISTING ASPHALT DRIVEWAY, WITHIN THE RIGHT-OF-WAY. THEN CONTINUE WITH NEW 12' WIDE GRAVEL ROAD TO THE TELECOMMUNICATION SITE.

FORT BEND COUNTY ENGINEER APPROVED: Development Coordinator DATE:

**OVERALL SITE PLAN (CONTINUOUS)** 







750 PARK OF COMMERCE DRIVE BOCA RATON, FL 33487



CONSULTING GROUP, INC. 9221 Lyndon B Johnson Fwy Suite 204, Dallas, TX 75243 Phone: 972-231-8893 Fax: 866-364-8375 www.allprocgi.com Registration No. 8242

17-7142, 18-2191 ACGI NO: DRAWN BY:

CHECKED BY: JG

REV	DATE	DESCRIPTION	BY
			F
2	05/17/18	REV. FOR DRAINAGE DISTRICT	RM
1	04/17/18	REV. FOR ZONING SUBMITTAL	RM
0	03/05/18	FINAL CD	RM
С	02/15/18	REV. FOR T-MOBILE REDLINES	RM
В	01/29/18	REV. FOR T-MOBILE REDLINES	HR
Α	11/22/17	PRELIMINARY CD	RM



NOT VALID WITHOUT P.E. STAMP & SIGNATURE

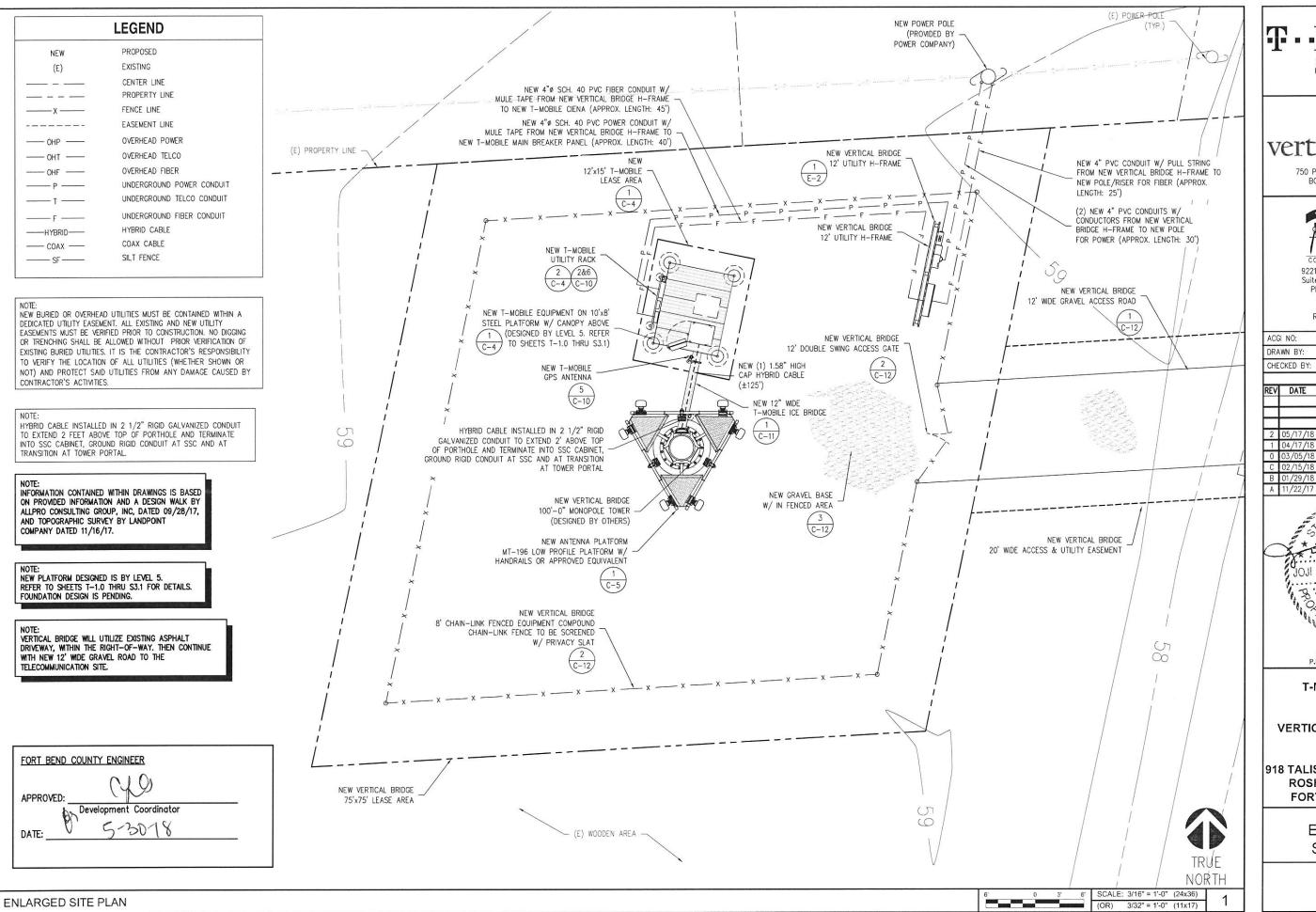
SITE INFORMATION T-MOBILE SITE #: A3C0203B

**VERTICAL BRIDGE SITE #:** TX-5460

918 TALISMAN ROAD #A[E911] ROSHARON, TX 77583 FORT BEND COUNTY

SHEET TITLE:

**OVERALL SITE PLAN** (CONTINUOUS)





HOUSTON, TX 77046

750 PARK OF COMMERCE DRIVE BOCA RATON, FL 33487



CONSULTING GROUP INC. 9221 Lyndon B Johnson Fwy Suite 204, Dallas, TX 75243 Phone: 972-231-8893 Fax: 866-364-8375 www.allprocgi.com Registration No. 8242

17-7142, 18-2191 ACGI NO: DRAWN BY: RM

REVISIONS DATE DESCRIPTION

REV. FOR DRAINAGE DISTRICT 1 04/17/18 REV FOR ZONING SUBMITTAL FINAL CD REV. FOR T-MOBILE REDLINES RM /29 /18 REV FOR T-MORILE REDLINES A 11/22/17 PRELIMINARY CD



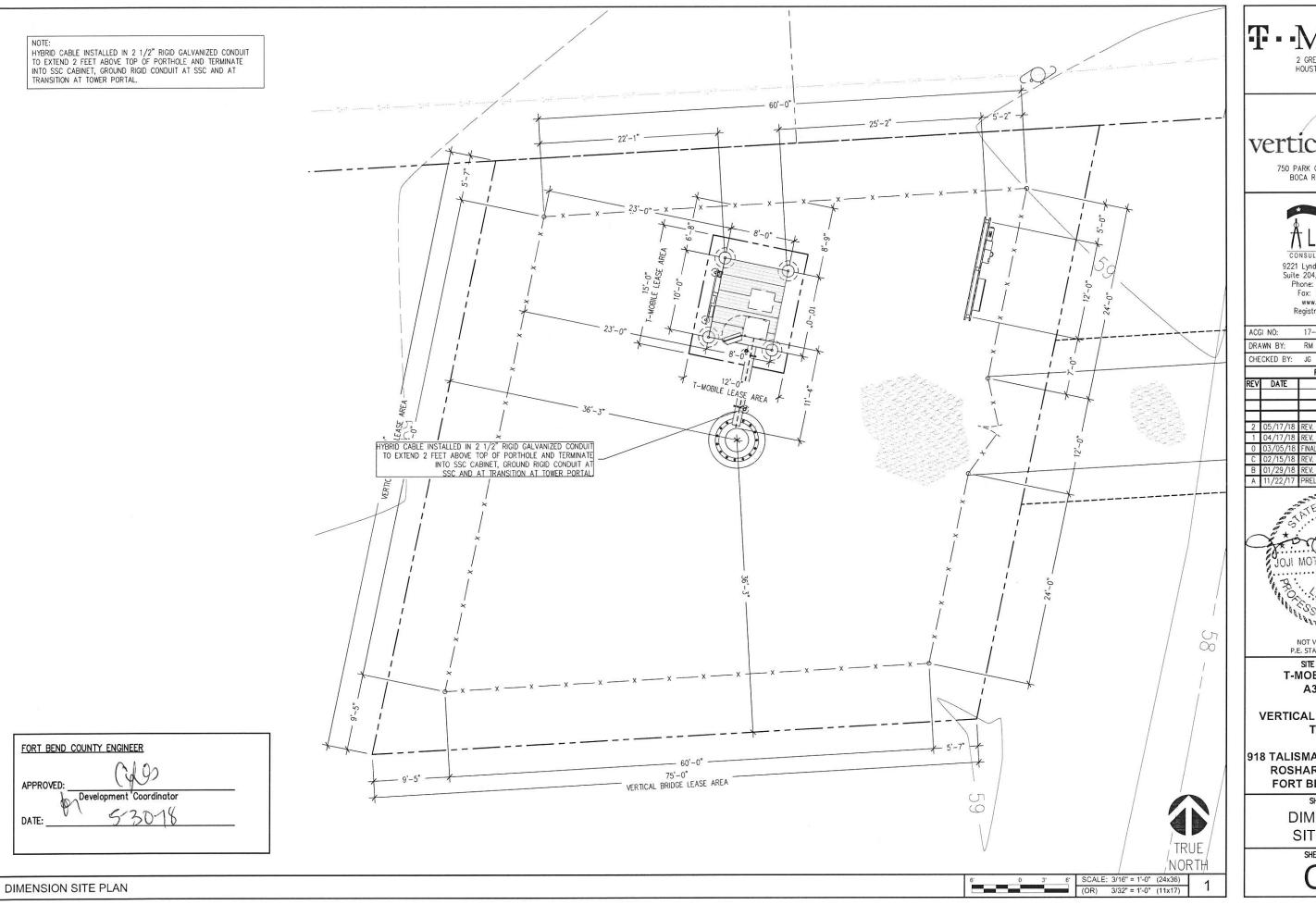
NOT VALID WITHOUT P.E. STAMP & SIGNATURE

SITE INFORMATION T-MOBILE SITE #: A3C0203B

**VERTICAL BRIDGE SITE #:** TX-5460

918 TALISMAN ROAD #A[E911] ROSHARON, TX 77583 FORT BEND COUNTY

> SHEET TITLE: **ENLARGED** SITE PLAN





2 GREENWAY PLAZA HOUSTON, TX 77046



750 PARK OF COMMERCE DRIVE BOCA RATON, FL 33487



CONSULTING GROUP, INC. 9221 Lyndon B Johnson Fwy Suite 204, Dallas, TX 75243 Phone: 972–231–8893 Fax: 866–364–8375 www.allprocgi.com Registration No. 8242

17-7142, 18-2191 ACGI NO: DRAWN BY:

		REVISIONS	
REV	DATE	DESCRIPTION	BY
_			$\vdash$
2	05/17/18	REV. FOR DRAINAGE DISTRICT	RM
1		REV. FOR ZONING SUBMITTAL	RM
0	03/05/18	FINAL CD	RM
C	02/15/18	REV. FOR T-MOBILE REDLINES	RM
В	01/29/18	REV. FOR T-MOBILE REDLINES	HR
Α	11/22/17	PRELIMINARY CD	RM



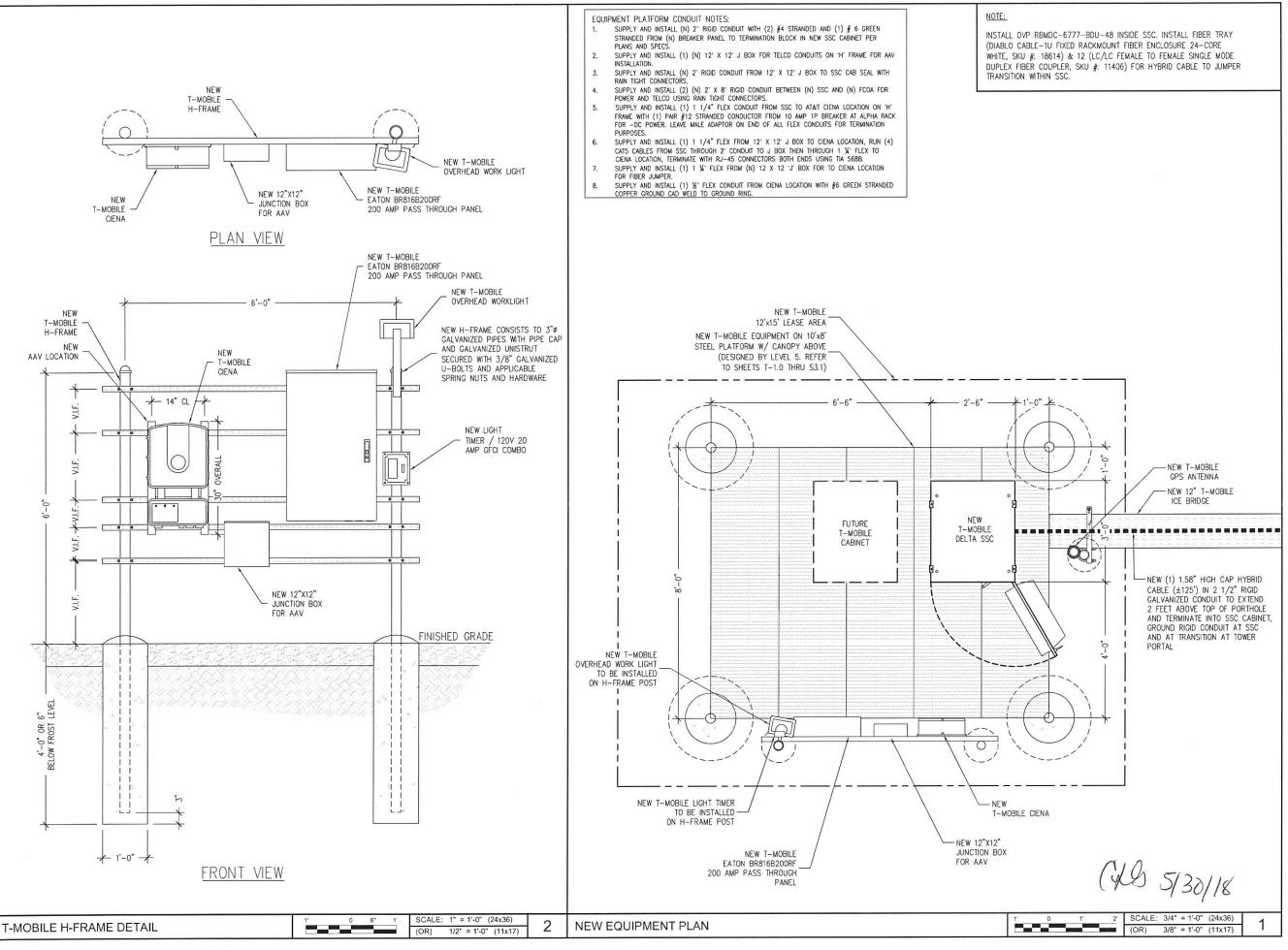
NOT VALID WITHOUT P.E. STAMP & SIGNATURE

SITE INFORMATION T-MOBILE SITE #: A3C0203B

**VERTICAL BRIDGE SITE #:** TX-5460

918 TALISMAN ROAD #A[E911] ROSHARON, TX 77583 FORT BEND COUNTY

> SHEET TITLE: **DIMENSION** SITE PLAN



T-Mobile\*

verticalbridge

750 PARK OF COMMERCE DRIVE BOCA RATON, FL 33487



CONSULTING GROUP, INC.
9221 Lyndon B Johnson Fwy
Suite 204, Dallas, TX 75243
Phone: 972–231–8893
Fax: 866–364–8375
www.allprocgi.com
Registration No. 8242

ACGI NO: 17-7142, 18-2191

DRAWN BY: RM

CHECKED BY: JG

	REVISIONS						
REV	DATE	DESCRIPTION					
			⊢				
2	05/17/18	REV. FOR DRAINAGE DISTRICT	RM				
1	04/17/18	REV. FOR ZONING SUBMITTAL	RM				
0	03/05/18	FINAL CD	RM				
C	02/15/18	REV. FOR T-MOBILE REDLINES	RM				
В	01/29/18	REV. FOR T-MOBILE REDLINES	HR				
Α	11/22/17	PRELIMINARY CD	RM				



NOT VALID WITHOUT P.E. STAMP & SIGNATURE

SITE INFORMATION
T-MOBILE SITE #:
A3C0203B

VERTICAL BRIDGE SITE #: TX-5460

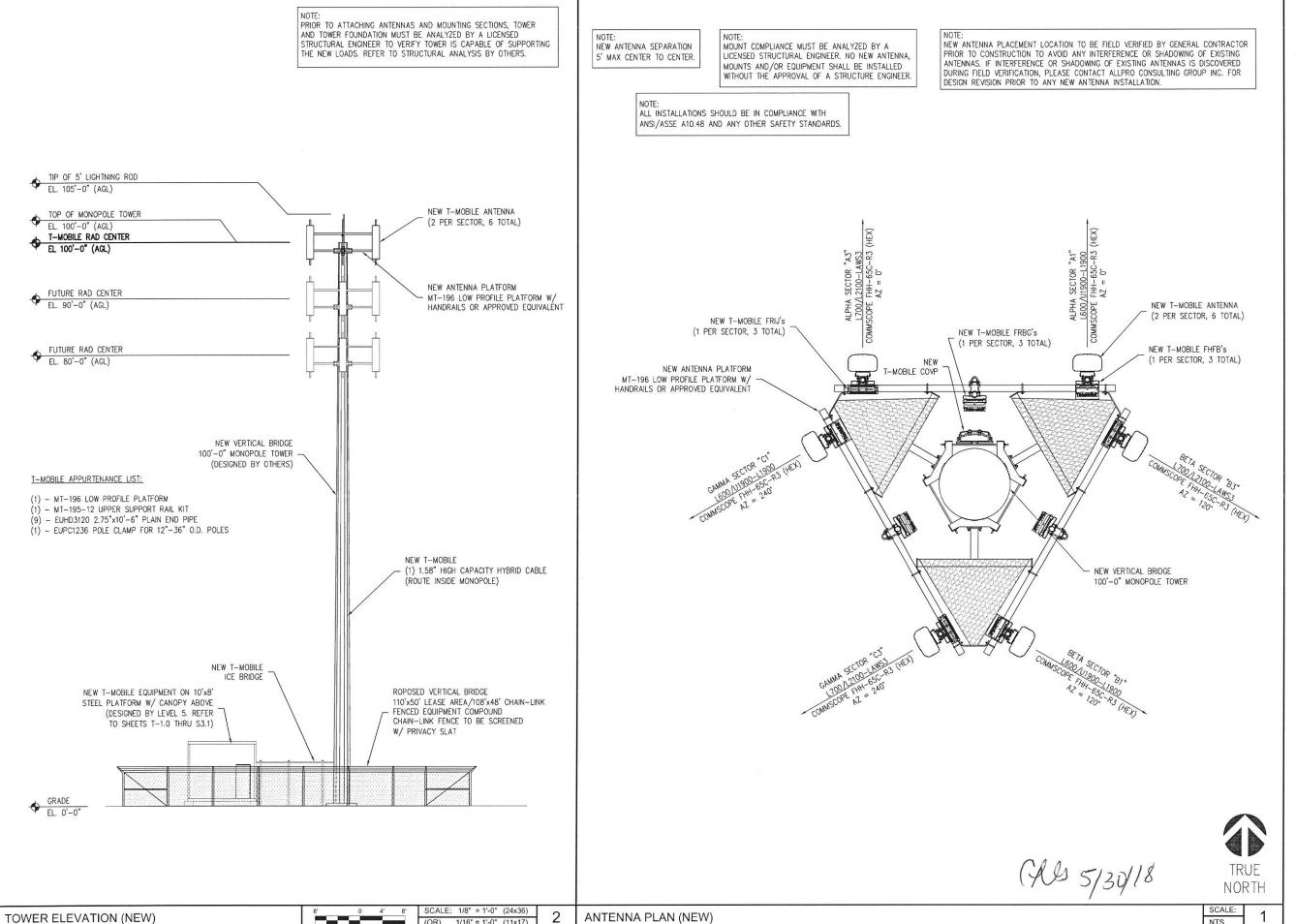
918 TALISMAN ROAD #A[E911] ROSHARON, TX 77583 FORT BEND COUNTY

SHEET TITLE:

**EQUIPMENT PLAN** 

SHEET NUMBER:

C-4



2 GREENWAY PLAZA HOUSTON, TX 77046



750 PARK OF COMMERCE DRIVE BOCA RATON, FL 33487



9221 Lyndon B Johnson Fwy Suite 204, Dallas, TX 75243 Phone: 972-231-8893 Fax: 866-364-8375 www.allprocgi.com Registration No. 8242

ACGI NO: 17-7142, 18-2191 DRAWN BY:

CHECKED BY:

REV	DATE	DESCRIPTION	BY
2	05/17/18	REV. FOR DRAINAGE DISTRICT	RM
1		REV. FOR ZONING SUBMITTAL	RM
0	03/05/18		RM
C	02/15/18	REV. FOR T-MOBILE REDLINES	RM
В	01/29/18	REV. FOR T-MOBILE REDLINES	HR
Α	11/22/17	PRELIMINARY CD	RM



NOT VALID WITHOUT P.E. STAMP & SIGNATURE

SITE INFORMATION T-MOBILE SITE #: A3C0203B

**VERTICAL BRIDGE SITE #:** TX-5460

918 TALISMAN ROAD #A[E911] ROSHARON, TX 77583 FORT BEND COUNTY

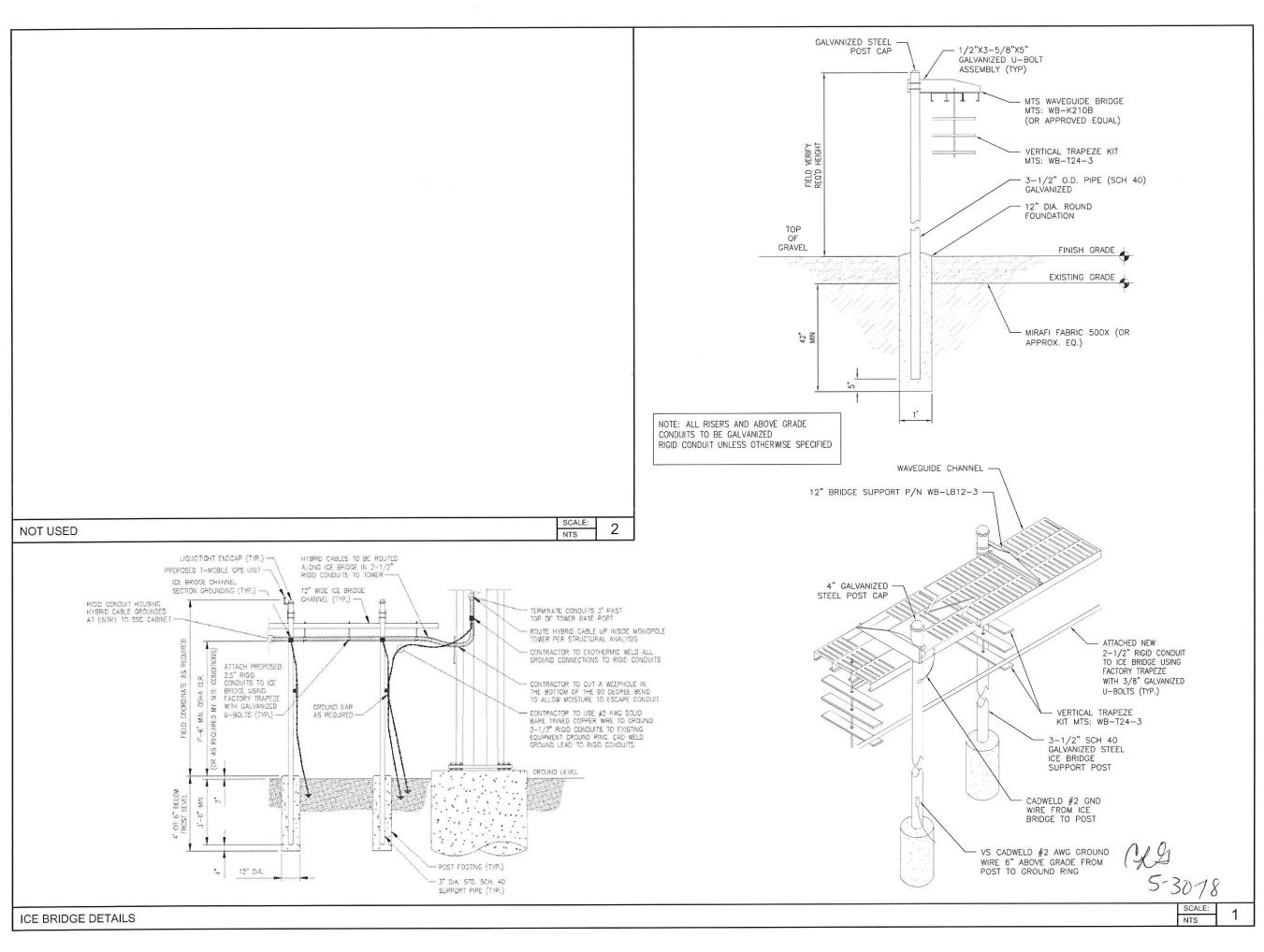
SHEET TITLE:

ANTENNA PLAN & ELEVATION

SHEET NUMBER:

ANTENNA PLAN (NEW)

(OR) 1/16" = 1'-0" (11x17)





2 GREENWAY PLAZA HOUSTON, TX 77046



750 PARK OF COMMERCE DRIVE BOCA RATON, FL 33487



9221 Lyndon B Johnson Fwy Suite 204, Dallas, TX 75243 Phone: 972-231-8893 Fax: 866-364-8375 www.allprocgi.com Registration No. 8242

17-7142, 18-2191 ACGI NO: DRAWN BY: RM

CHECKED BY: JG

REV	DATE	DESCRIPTION	BY
		5200 m 1100	
2	05/17/18	REV. FOR DRAINAGE DISTRICT	RM
1		REV. FOR ZONING SUBMITTAL	RM
0	03/05/18	FINAL CD	RM
С	02/15/18	REV. FOR T-MOBILE REDLINES	RM
В	01/29/18	REV. FOR T-MOBILE REDLINES	HR
Α	11/22/17	PRELIMINARY CD	RM



NOT VALID WITHOUT P.E. STAMP & SIGNATURE

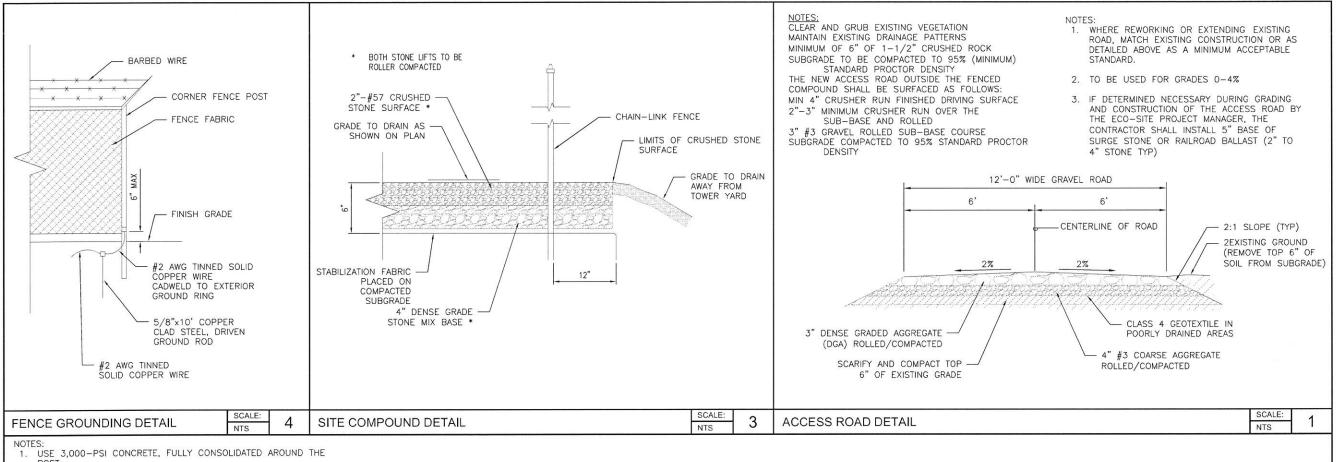
SITE INFORMATION T-MOBILE SITE #: A3C0203B

**VERTICAL BRIDGE SITE #:** TX-5460

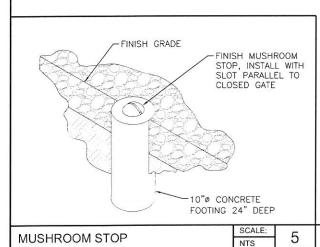
918 TALISMAN ROAD #A[E911] ROSHARON, TX 77583 FORT BEND COUNTY

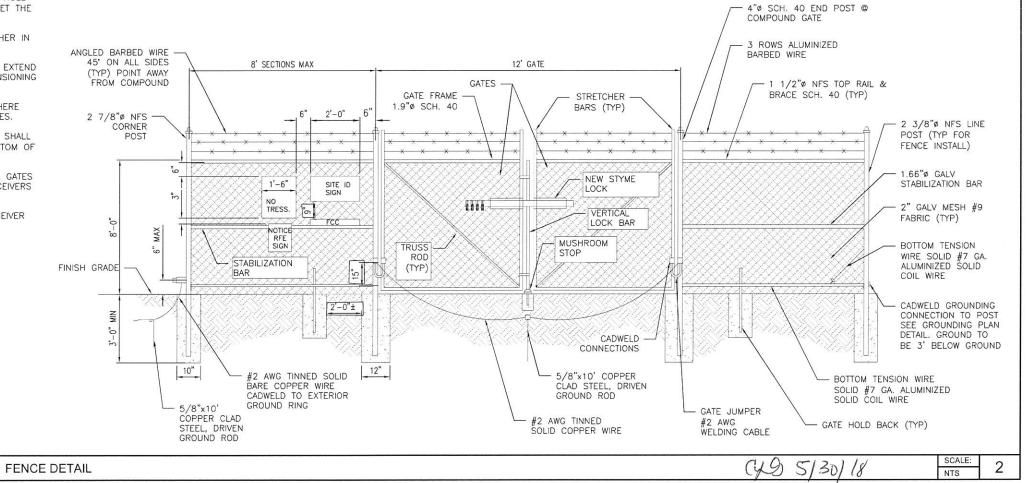
SHEET TITLE:

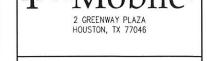
SITE **DETAILS** 



- 2. WHERE THE POST IS SET IN ROCK OR CONCRETE, CORE A HOLE 12" DEEP AND 1" LARGER IN DIAMETER THAN THE POST. SET THE POST AND GROUT IN PLACES USING NON-SHRINK GROUT.
- 3. ALL POSTS MUST BE PLUMB AND ALIGNED WITH ONE ANOTHER IN BOTH HORIZONTAL AND VERTICAL PLANES.
- 4. CORNERS AND GATEPOSTS FOR CHAIN-LINK FENCES SHALL EXTEND ABOVE THE TOP STRAND OF BARBED WIRE TO PROVIDE TENSIONING FOR THE BARBED WIRE.
- 5. PROVIDE MIDRAILS AND BRACING AT ALL CORNERS POST WHERE THE FENCE CHANGES DIRECTION BY MORE THAN 30 DEGREES.
- 6. THE GRADE OF THE SITE AND INSTALLATION OF THE FENCE SHALL PROVIDE FOR NO MORE THAN A 1" GAP BETWEEN THE BOTTOM OF THE FENCE MATERIAL AND FINISH GRADE.
- CONTRACTOR SHALL PROVIDE HOLD OPEN DEVICES FOR ALL GATES AT THE SPECIFIED OPEN POSITIONS, DRIVEN PIPE TYPE RECEIVERS ARE NOT AUTHORIZED.
- 8. CONTRACTOR SHALL ALSO PROVIDE A MUSHROOM TYPE RECEIVER AT THE CLOSE POSITION.









BOCA RATON, FL 33487



CONSULTING GROUP, INC. 9221 Lyndon B Johnson Fwy Suite 204, Dallas, TX 75243 Phone: 972-231-8893 Fax: 866-364-8375 www.allprocgi.com Registration No. 8242

DEVI DATE	DECODIDATION	I DV
	REVISIONS	
CHECKED BY:	JG	
DRAWN BY:	RM	
ACGI NO:	17-7142, 18-2191	

REV	DATE	DESCRIPTION	BY
2	05/17/18	REV. FOR DRAINAGE DISTRICT	RM
1	04/17/18	REV. FOR ZONING SUBMITTAL	RM
0	03/05/18	FINAL CD	RM
С	02/15/18	REV. FOR T-MOBILE REDLINES	RM
В	01/29/18	REV. FOR T-MOBILE REDLINES	HR
Α	11/22/17	PRELIMINARY CD	RM



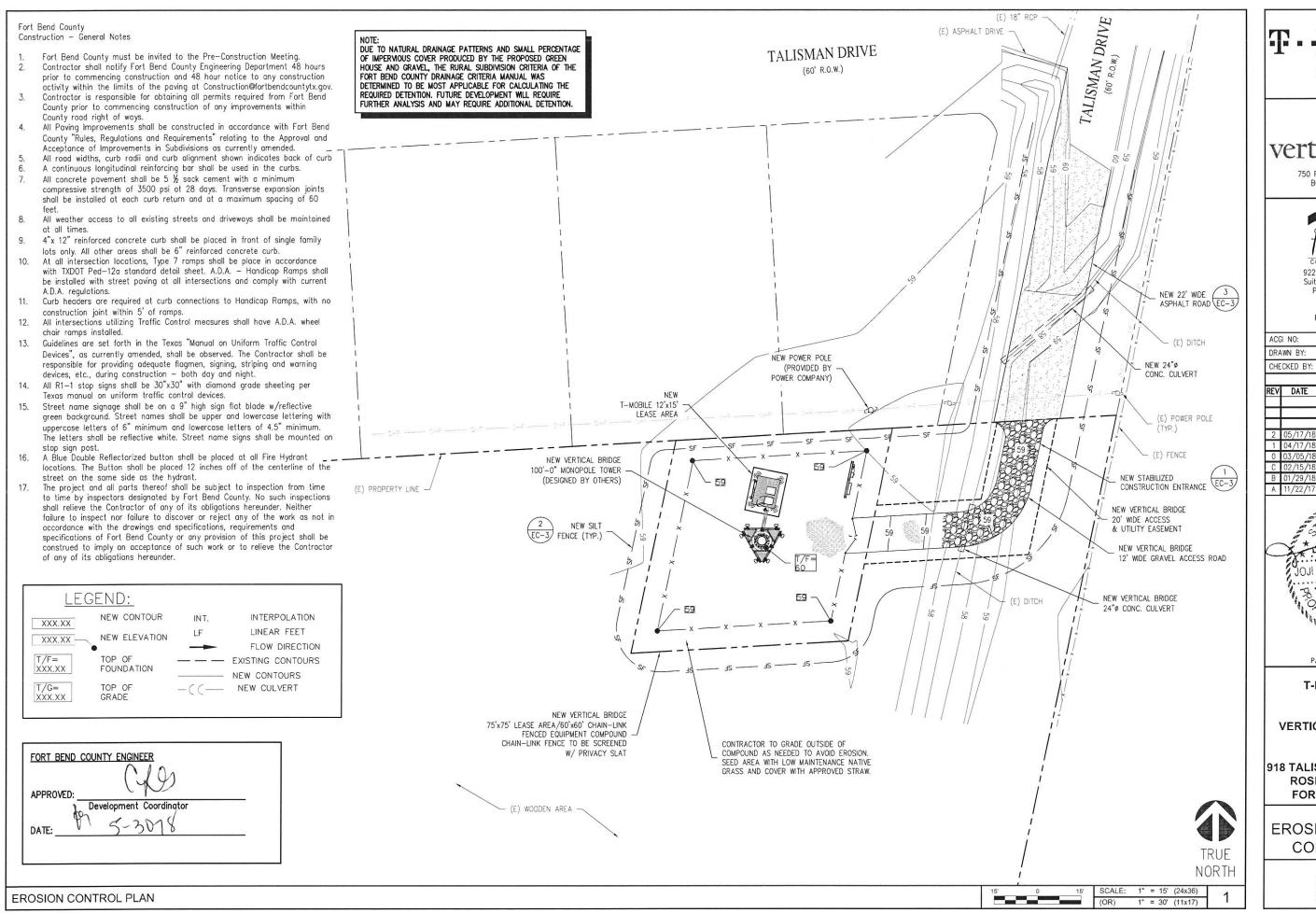
SITE INFORMATION T-MOBILE SITE #: A3C0203B

**VERTICAL BRIDGE SITE #:** TX-5460

918 TALISMAN ROAD #A[E911] **ROSHARON, TX 77583** FORT BEND COUNTY

SHEET TITLE:

SITE DETAILS



T. Mobile.

verticalbridge

750 PARK OF COMMERCE DRIVE BOCA RATON, FL 33487



CONSULTING GROUP, INC. 9221 Lyndon B Johnson Fwy Suite 204, Dallas, TX 75243 Phone: 972–231–8893 Fax: 866–364–8375 www.allprocgi.com Registration No. 8242

ACGI NO: 17-7142, 18-2191 DRAWN BY: RM

CKED BY: JG

REVISIONS		
DATE	DESCRIPTION	BY
05/17/18	REV FOR DRAINAGE DISTRICT	RM
		RM
03/05/18	FINAL CD	RM
02/15/18	REV. FOR T-MOBILE REDLINES	RM
01/29/18	REV. FOR T-MOBILE REDLINES	HR
11/22/17	PRELIMINARY CD	RM
	05/17/18 04/17/18 03/05/18 02/15/18 01/29/18	



NOT VALID WITHOUT P.E. STAMP & SIGNATURE

SITE INFORMATION
T-MOBILE SITE #:
A3C0203B

VERTICAL BRIDGE SITE #: TX-5460

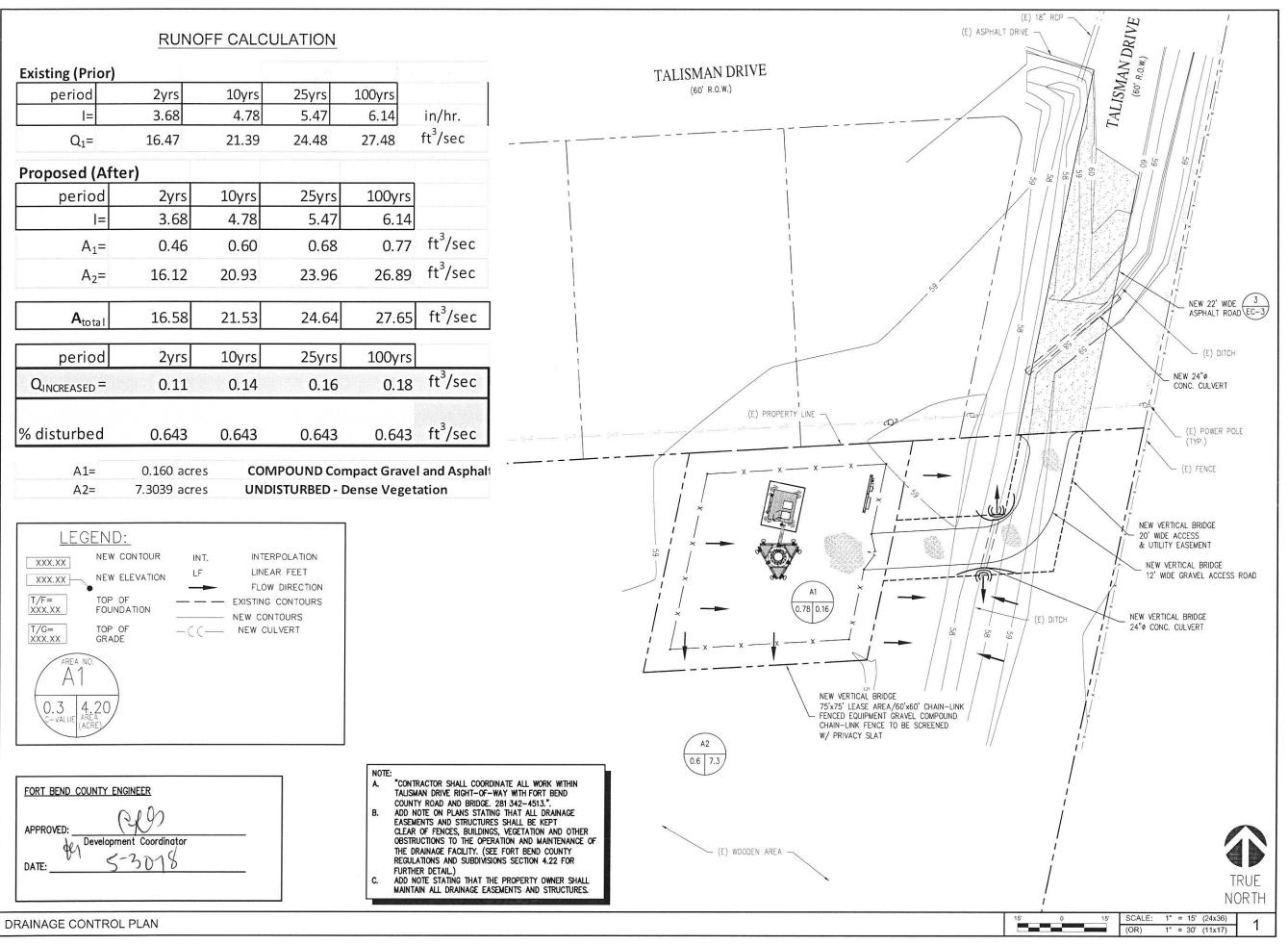
918 TALISMAN ROAD #A[E911] ROSHARON, TX 77583 FORT BEND COUNTY

SHEET TITLE:

EROSION & GRADING CONTROL PLAN

SHEET NUMBER

EC-1







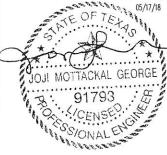
750 PARK OF COMMERCE DRIVE BOCA RATON, FL 33487



CONSULTING GROUP, INC.
9221 Lyndon B Johnson Fwy
Suite 204, Dallas, TX 75243
Phone: 972-231-8893
Fax: 866-364-8375
www.cllprocgi.com
Registration No. 8242

ACGI NO:	17-7142, 18-2191
DRAWN BY:	RM
CHECKED BY:	JG

REV	DATE	DESCRIPTION	BY
			E
2		REV. FOR DRAINAGE DISTRICT	RM
1		REV. FOR ZONING SUBMITTAL	RM
0	03/05/18	FINAL CD	RM
C	02/15/18	REV. FOR T-MOBILE REDLINES	RM
В	01/29/18	REV. FOR T-MOBILE REDLINES	HR
Α	11/22/17	PRELIMINARY CD	RM



NOT VALID WITHOUT P.E. STAMP & SIGNATURE

SITE INFORMATION
T-MOBILE SITE #:
A3C0203B

VERTICAL BRIDGE SITE #: TX-5460

918 TALISMAN ROAD #A[E911] ROSHARON, TX 77583 FORT BEND COUNTY

SHEET TITLE:

DRAINAGE CONTROL PLAN

SHEET NUMBER:

EC-2

#### GRADING & EXCAVATING NOTES

- 1. ALL EXCAVATIONS ON WHICH CONCRETE IS TO BE PLACED SHALL BE SUBSTANTIALLY HORIZONTAL ON UNDISTURBED AND UNFROZEN SCIL AND BE FREE FROM LOOSE MATERIAL AND EXCESS GROUNDWATER. DEWATERING FOR EXCESS GROUNDWATER SHALL BE PROVIDED IF REQUIRED.
- CONCRETE FOUNDATIONS SHALL NOT BE PLACED ON ORGANIC MATERIAL. IF SOUND SOIL IS NOT REACHED AT THE DESIGNATED EXCAVATION DEPTH, THE UNSATISFACTORY SOIL SHALL BE EXCAVATED TO ITS FULL DEPTH AND EITHER BE REPLACED WITH MECHANICALLY COMPACTED GRANULAR MATERIAL OR THE EXCAVATION BE FILLED WITH CONCRETE OF THE SAME QUALITY SPECIFIED FOR THE FOUNDATION
- 3. ANY EXCAVATION OVER THE REQUIRED DEPTH SHALL BE FILLED WITH EITHER MECHANICALLY COMPACTED GRANULAR MATERIAL OR CONCRETE OF THE SAME QUALITY SPECIFIED FOR THE FOUNDATION. CRUSHED STONE MAY BE USED TO STABILIZE THE BOTTOM OF THE EXCAVATION. STONE, IF USED, SHALL NOT BE USED AS COMPILING CONCRETE THICKNESS.
- AFTER COMPLETION OF THE FOUNDATION AND OTHER CONSTRUCTION BELOW GRADE, AND BEFORE BACKFILLING, ALL EXCAVATIONS SHALL BE CLEAN OF UNSUITABLE MATERIAL SUCH AS VEGETATION, TRASH, DEBRIS, AND SO FORTH.
- 5. USE APPROVED MATERIALS CONSISTING OF EARTH, LOAM, SANDY CLAY, SAND -BE FREE FROM CLODS OR STONES OVER 2-1/2" MAXIMUM DIMENSIONS -BE PLACED IN 6" LAYERS AND COMPACTED TO 95% STANDARD PROCTOR EXCEPT IN GRASSED/LANDSCAPED AREAS, WHERE 90% STANDARD PROCTOR
- 6. REMOVE ALL VEGETATION, TOPSOIL, DEBRIS, WET AND UNSATISFACTORY SCIL MATERIALS, OBSTRUCTIONS, AND DELETERIOUS MATERIALS FROM GROUND SURFACE PRIOR TO PLACING FILLS. PLOW, STRIP, OR BREAK UP SLOPED SURFACES STEEPER THAN THAN 1 VERTICAL TO 4 HORIZONTAL SO FILL MATERIAL WILL BOND WITH EXISTING SURFACE. WHEN SUBGRADE OR EXISTING GROUND SURFACE TO RECEIVE FILL HAS A DENSITY LESS THAN THAT REQUIRED FOR FILL, BREAK UP GROUND SURFACE TO DEPTH REQUIRED, PULVERIZE, MO STURE-CONDITION OR AERATE SOIL AND RECOMPACT TO REQUIRED
- 7. PROTECT EXISTING GRAVEL SURFACING AND SUBGRADE IN AREAS WHERE EQUIPMENT LOADS WILL OPERATE. USE PLANKING OR OTHER SUITABLE MATERIALS DESIGNED TO SPREAD EQUIPMENT LOADS. REPAIR DAMAGE TO EXISTING GRAVEL SURFACING OR SUBGRADE WHERE SUCH DAMAGE IS DUE TO THE CONTRACTOR'S OPERATIONS. DAMAGED GRAVEL SURFACING SHALL BE RESTORED TO MATCH THE ADJACENT UNDAMAGED GRAVEL SURFACING AND
- REPLACE EXISTING GRAVEL SURFACING ON AREAS FROM WHICH GRAVEL SURFACING IS REMOVED DURING CONSTRUCTION OPERATIONS, GRAVEL SURFACING SHALL BE REPLACED TO MATCH EXISTING ADJACENT GRAVEL SURFACING AND SHALL BE OF THE SAME THICKNESS, SURFACES OF GRAVEL SURFACING SHALL BE FREE FROM CORRUGATIONS AND WAVES. EXISTING GRAVEL SURFACING MAY BE EXCAVATED SEPARATELY AND REUSED IF INJURIOUS AMOUNTS OF EARTH, ORGANIC MATTER, OR OTHER DELETERIOUS MATERIALS ARE REMOVED PRIOR TO REUSE. FURNISH ALL ADDITIONAL GRAVEL RESURFACING MATERIAL AS REQUIRED. BEFORE GRAVEL SURFACING IS REPLACED, SUBGRADE SHALL BE GRADED TO CONFORM TO REQUIRED SUBGRADE ELEVATIONS, AND LOOSE OR DISTURBED MATERIALS SHALL BE THOROUGHLY COMPACTED, DEPRESSIONS IN THE SUBGRADE SHALL BE FILLED AND COMPACTED WITH APPROVED SELECTED MATERIAL. GRAVEL SURFACING MATERIAL MAY BE USED FOR FILLING DEPRESSIONS IN THE SUBGRADE, SUBJECT TO ENGINEER'S APPROVAL
- DAMAGE TO EXISTING STRUCTURES AND UTILITIES RESULTING FROM CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED/REPLACED TO OWNER'S SATISFACTION AT CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL COORDINATE THE CONSTRUCTION SCHEDULE WITH PROPERTY OWNER SO A TO AVOID INTERRUPTIONS TO PROPERTY OWNER'S OPERATIONS.
- 11. ENSURE POSITIVE DRAINAGE DURING AND AFTER COMPLETION OF CONSTRUCTION.
- ALL CUT AND FILL SLOPES SHALL BE MAXIMUM 2 HORIZONTAL TO 1 VERTICAL
- CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING SITE VEHICLE TRAFFIC AS TO NOT ALLOW VEHICLES LEAVING THE SITE TO TRACK MUD ONTO PUBLIC STREETS. THE CONTRACTOR IS RESPONSIBLE FOR CLEANING PUBLIC STREETS DUE TO MUDDY VEHICLES LEAVING

#### CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

- 1. WOVEN WIRE FENCE TO BE FASTENED SECURELY POSTS: STEEL EITHER T OR U TO FENCE POSTS WITH WIRE TIES OR STAPLES. TYPE.
- 2. FILTER CLOTH TO BE FASTENED SECURELY TO FENCE: WOVEN WIRE, 14 GA. WOVEN WIRE FENCE WITH TIES SPACED 6" MAX. MESH OPEN EVERY 24" AT TOP AND MID SECTION.
- 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOIDED
- 4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
- 5. ALL SILT FENCE MATERIALS MUST BE LISTED ON THE CURRENT STATES. D.O.T. QUALIFIED PRODUCTS LIST.

- FILTER CLOTH: FILTER X, MIRAFI 100X' STABILINKA T140N OR

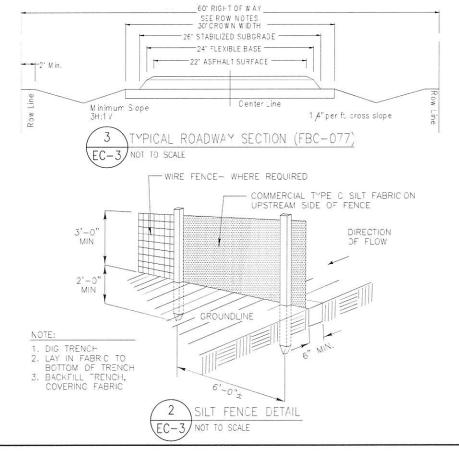
6" MAX. MESH OPENING.

PREFABRICATED UNIT: GEOFAB, ENVIROFENCE CR APPROVED

APPROVED EQUAL

#### GENERAL EROSION & SEDIMENT CONTROL NOTES

- THE SOIL EROSION AND SEDIMENT CONTROL MEASURES AND DETAILS AS SHOWN HEREIN AND STIPULATED WITHIN STATE STANDARDS SHALL BE FOLLOWED AND INSTALLED IN A MANNER SO AS TO MINIMIZE SEDIMENT LEAVING THE SITE.
- PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DENARCATED WITH STAKES, RIBBONS, OR CTHER APPROPRIATE MEANS.
- EROSION CONTROL DEVICES SHALL BE INSTALLED BEFORE GROUND DISTURBANCE OCCURS. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM SHOWN ON THE AFPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
- THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
- CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED. CLEAN OUT ALL SEDIMENT PONDS WHEN REQUIRED BY THE ENGINEER OR THE LOCAL JURISDICTION INSPECTOR. CONTRACTOR SHALL INSPECT ERCSION CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.
- THE CONTRACTOR SHALL REMOVE ACCUMULATED SILT WHEN THE SILT IS WITHIN 12" OF THE TOP OF THE SILT FENCE.
- FALURE TO INSTALL, CPERATE OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB SITE UNTIL SUCH MEASURES ARE
- SILT BARRIERS TO BE PLACED AT DOWNSTREAM TOE OF ALL CUT AND FILL SLOPES.
- ALL CUT AND FILL SLOPES MUST BE SURFACED ROUGHENED AND VEGETATED WITHIN SEVEN (7) DAYS OF THEIR CONSTRUCTION.
- CONTRACTOR SHALL REMOVE ALL EROSION & SEDIMENT CONTROL MEASURES AFTER COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER.
- THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND-DISTURBING ACTIVITIES



FINAL STABILIZATION OF ALL DISTURBED AREAS, UNLESS OTHERWISE NOTED, SHALL BE LOAMED AND SECDED. LOAM SHALL BE PLACED AT A MINIMUM COMPACTED DEPTH OF 4". RECOMMENDED SEEDING DATES FOR PERMANENT VEGETATION SHALL BE BETWEEN JUNE 15 THROUGH AUGUST 1 AND SEPTEMBER 15 THROUGH OCTOBER 15. TEMPORARY VEGETATIVE MEASURES SHALL CONSIST OF AN ANNUAL OR PERENNIAL RYE GRASS WITH RECOMMENDED SEEDING DATES BEING FROM JUNE 1 THROUGH AUGUST 15 AND SEPTEMBER 30 THROUGH NOVEMBER 30.

#### EVALUATE PROPOSED COVER MATERIAL

BEFORE SPREADING COVER MATERIAL OVER THE DESIGNATED AREA, OBTAIN A REPRESENTATIVE SOIL SAMPLE AND SUBMIT TO A REPUTABLE SOIL TESTING LABORATORY FOR CHEMICAL AND PHYSICAL ANALYSIS. THE PRELIMINARY TEST IS NECESSARY TO DETERMINE THE REQUIRED INORGANIC AND/OR ORGANIC AMENDMENTS THAT ARE NEEDED TO ASSIST IN ESTABLISHING THE SEED MIXTURE IN AN ENVIRONMENTALLY AND ECONOMICALLY SOUND MANNER. THE RESULTS WILL GIVE THE COVER MATERIAL CHARACTERISTICS SUCH AS pH AND FERTILIZATION NEEDS THESE RESULTS SHALL BE KEPT ON-SITE B THE CONTRACTOR AND AVAILABLE FOR REVIEW BY THE COUNTY

#### SEED BED PREPARATION

PROPOSED COVER MATERIAL SHOULD BE SPREAD EVENLY OVER THE SITE AREA IN A MINIMUM 4" LIFT VIA BULLDOZER/BUCKET LOADER. USING THE INFORMATION FROM THE SOIL ANALYSIS, CAREFULLY CALCULATE THE QUANTITIES OF LIMESTONE AND PRE-PLANT FERTILIZER NEEDED PRIOR TO APPLYING, PRE-PLANT AMENDMENTS CAN BE APPLIED WITH A BROADCAST AND/OR DROP SEEDER AND INCORPORATED WITH AN OFFSET DISK, YORK RAKE, AND/OR HAND RAKE. AFTER INCORPORATION THE PRE-PLANT SOIL AMENDMENTS, THE SEED BED SHOULD BE SMOOTH AND FIRM PRIOR TO SEEDING. THE FOLLOWING SEED MIXTURES SHALL BE USED AS NOTED:

#### SEED MIXTURE

SPECIES/VARIETY LBS/ACRE

CREEPING RED FESCUE KENTUCKY BLUEGRASS PERENNIAL RYEGRASS

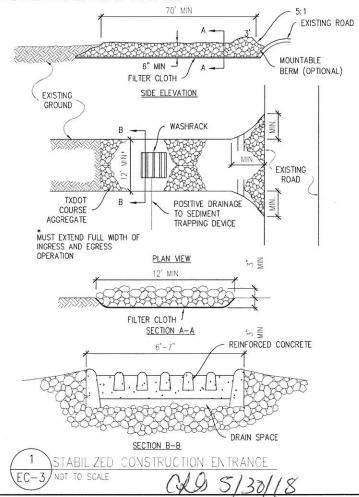
SEED TME AND METHOD

20

THE PREFERRED TIME FOR SEEDING THE COOL SEASON MIXTURE IS LATE SUMMER. SOIL AND AIR TEMPERATURES ARE IDEAL FOR SEED GERMINATION AND SEEDING GROWTH. WEED COMPETITION IS REDUCED BECAUSE SEEDS OF MANY WEED SPECIES GERMINATE EARLIER IN THE GROWING SEASON. ADDITIONALLY, HERBICIDE USE IS GREATLY REDUCED. HOWEVER, SEEDING MAY BE DONE AT ANY OF THE ABOVE NOTED TIMES.

#### MULCHING

NEWLY SEEDED AREAS SHOULD BE MULCHED TO INSURE ADEQUATE MOISTURE FOR SUCCESSFUL TURF ESTABLISHMENT AND TO PROTECT AGAINST SURFACE MOVEMENT OF SEDIMENT-BOUND AGROCHEMICALS AND SOIL EROSION. IF MULCHING PROCEDURES ARE NOT SPECIFIED ON PLANS, APPLY GOOD QUALITY STRAW OR HAY AT A RATE OF 2 BALES/1000 SQ. FT. OTHER COMMERCIALLY AVAILABLE MULCHES CAN BE USED.



HOUSTON, TX 77046





9221 Lyndon B Johnson Fwy Suite 204, Dallas, TX 75243 Phone: 972-231-8893 Fox: 866-364-8375 www.allprocai.com Registration No. 8242

17-7142, 18-2191 ACGI NO:

RM DRAWN BY:

CHECKED BY

	REVISIONS		
REV	DATE	DESCRIPTION	ВҮ
2	05/17/18	REV. FOR DRAINAGE DISTRICT	RM
1	THE RESERVE THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED I	REV. FOR ZONING SUBMITTAL	RM
0	03/05/18	FINAL CD	RM
С	02/15/18	REV. FOR T-MOBILE REDLINES	RM
В	01/29/18	REV. FOR T-MOBILE REDLINES	HR
Α	11/22/17	PRELIMINARY CD	RM



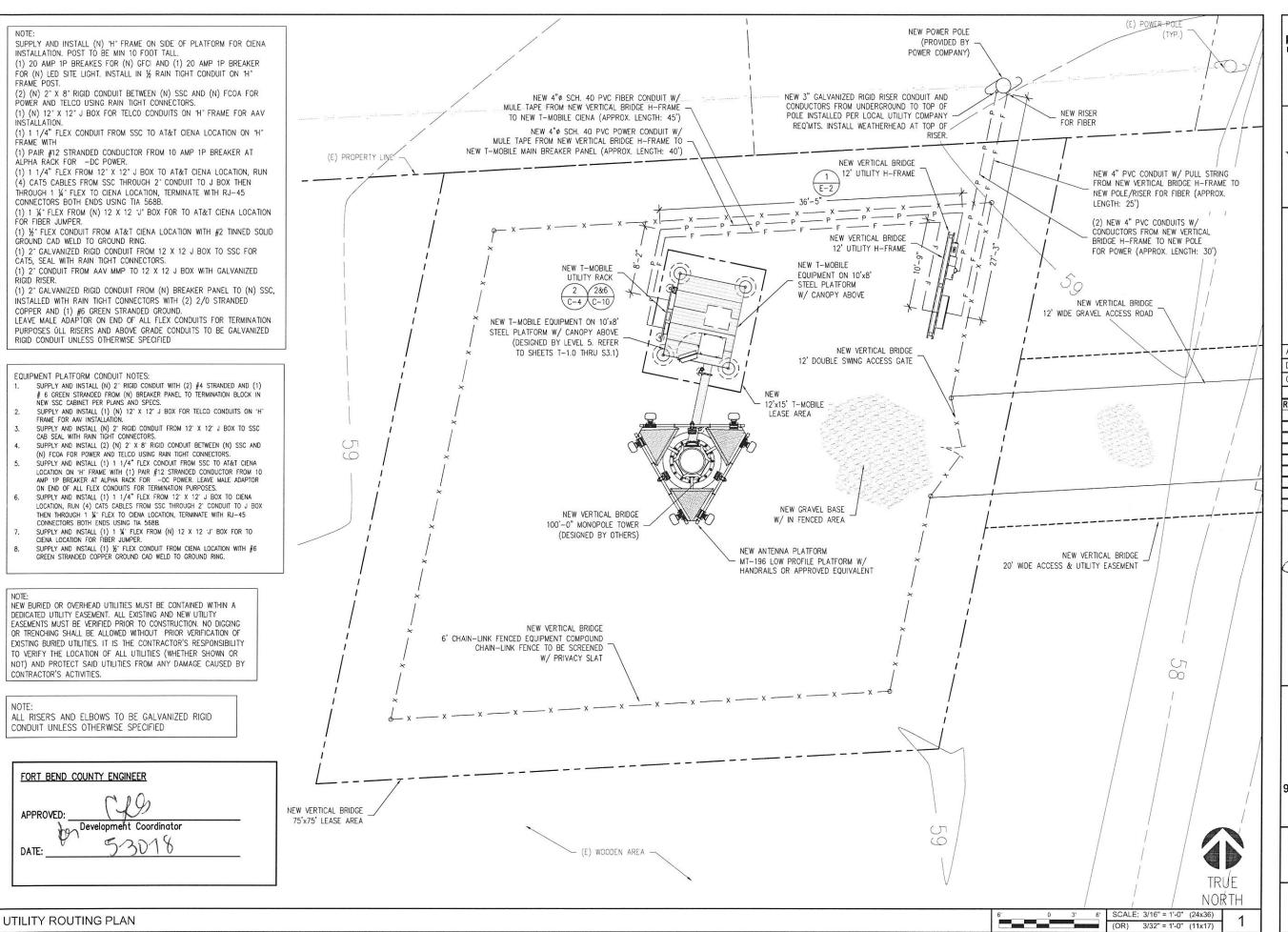
NOT VALID WITHOUT P.E. STAMP & SIGNATURE

SITE INFORMATION T-MOBILE SITE #: A3C0203B

**VERTICAL BRIDGE SITE #:** TX-5460

918 TALISMAN ROAD #A[E911] ROSHARON, TX 77583 FORT BEND COUNTY

SHEET TITLE: EROSION, GRADING, & DRAINAGE CONTROL PLAN NOTES & DETAILS



T-Mobile®

HOUSTON, TX 77046



750 PARK OF COMMERCE DRIVE BOCA RATON, FL 33487



consulting group, INC.
9221 Lyndon B Johnson Fwy
Suite 204, Dallas, TX 75243
Phone: 972–231–8893
Fax: 866–364–8375
www.allpracgi.com
Registration No. 8242

ACGI NO: 17-7142, 18-2191 DRAWN BY: RM

CHECKED BY: J



NOT VALID WITHOUT P.E. STAMP & SIGNATURE

SITE INFORMATION
T-MOBILE SITE #:
A3C0203B

VERTICAL BRIDGE SITE #: TX-5460

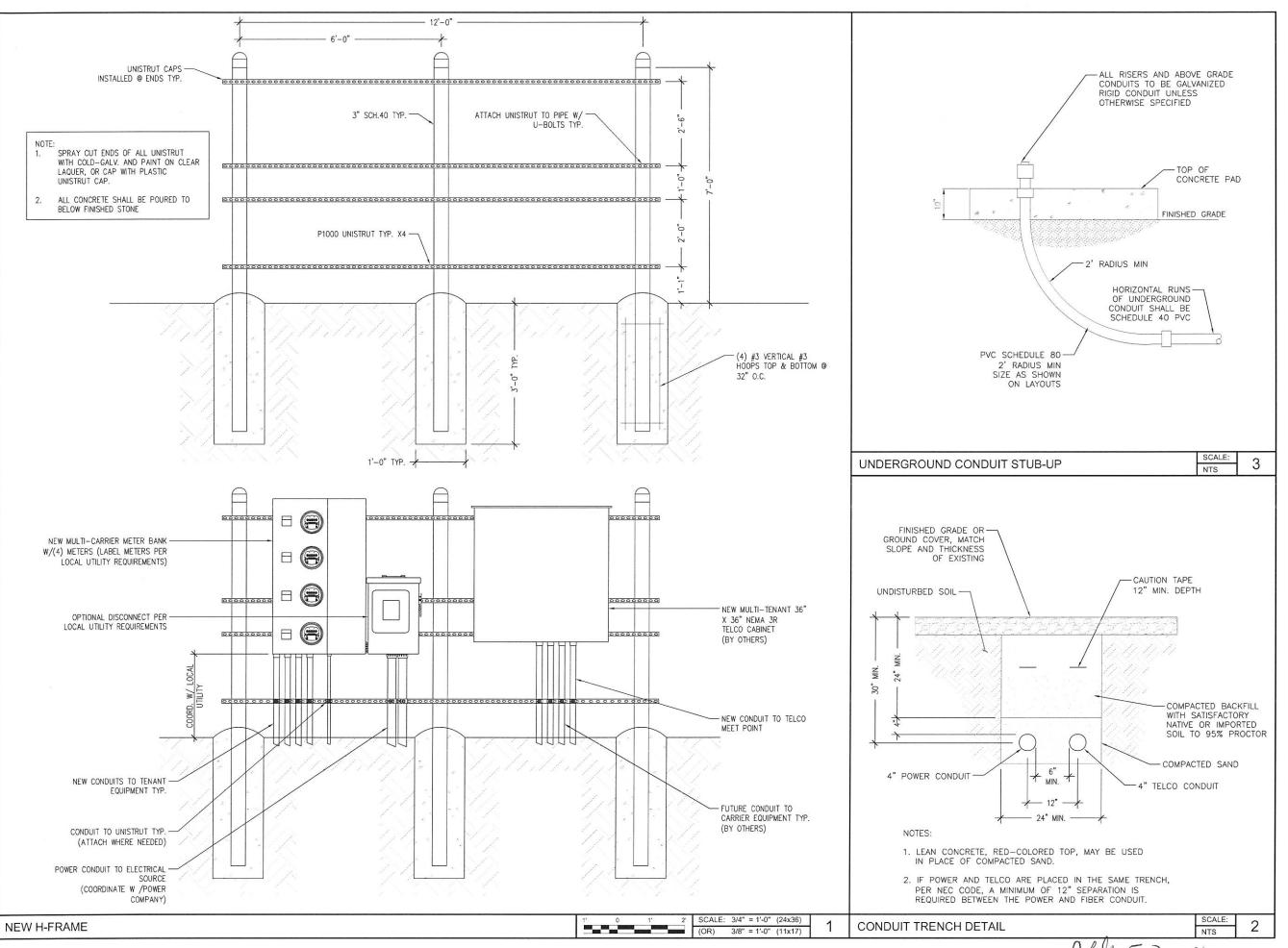
918 TALISMAN ROAD #A[E911] ROSHARON, TX 77583 FORT BEND COUNTY

SHEET TITLE:

UTILITY ROUTING PLAN

SHEET NUMBER:

E-1



HOUSTON, TX 77046



750 PARK OF COMMERCE DRIVE BOCA RATON, FL 33487



CONSULTING GROUP, INC. 9221 Lyndon B Johnson Fwy Suite 204, Dallas, TX 75243 Phone: 972-231-8893 Fax: 866-364-8375 www.allprocgi.com Registration No. 8242

ACGI NO: 17-7142, 18-2191 DRAWN BY: RM

CHECKED BY: REVISIONS DESCRIPTION

17/18 REV. FOR DRAINAGE DISTRICT /05/18 FINAL CD 2/15/18 REV. FOR T-MOBILE REDLINES B 01/29/18 REV. FOR T-MOBILE REDLINES A 11/22/17 PRELIMINARY CD



NOT VALID WITHOUT P.E. STAMP & SIGNATURE

SITE INFORMATION T-MOBILE SITE #: A3C0203B

**VERTICAL BRIDGE SITE #:** TX-5460

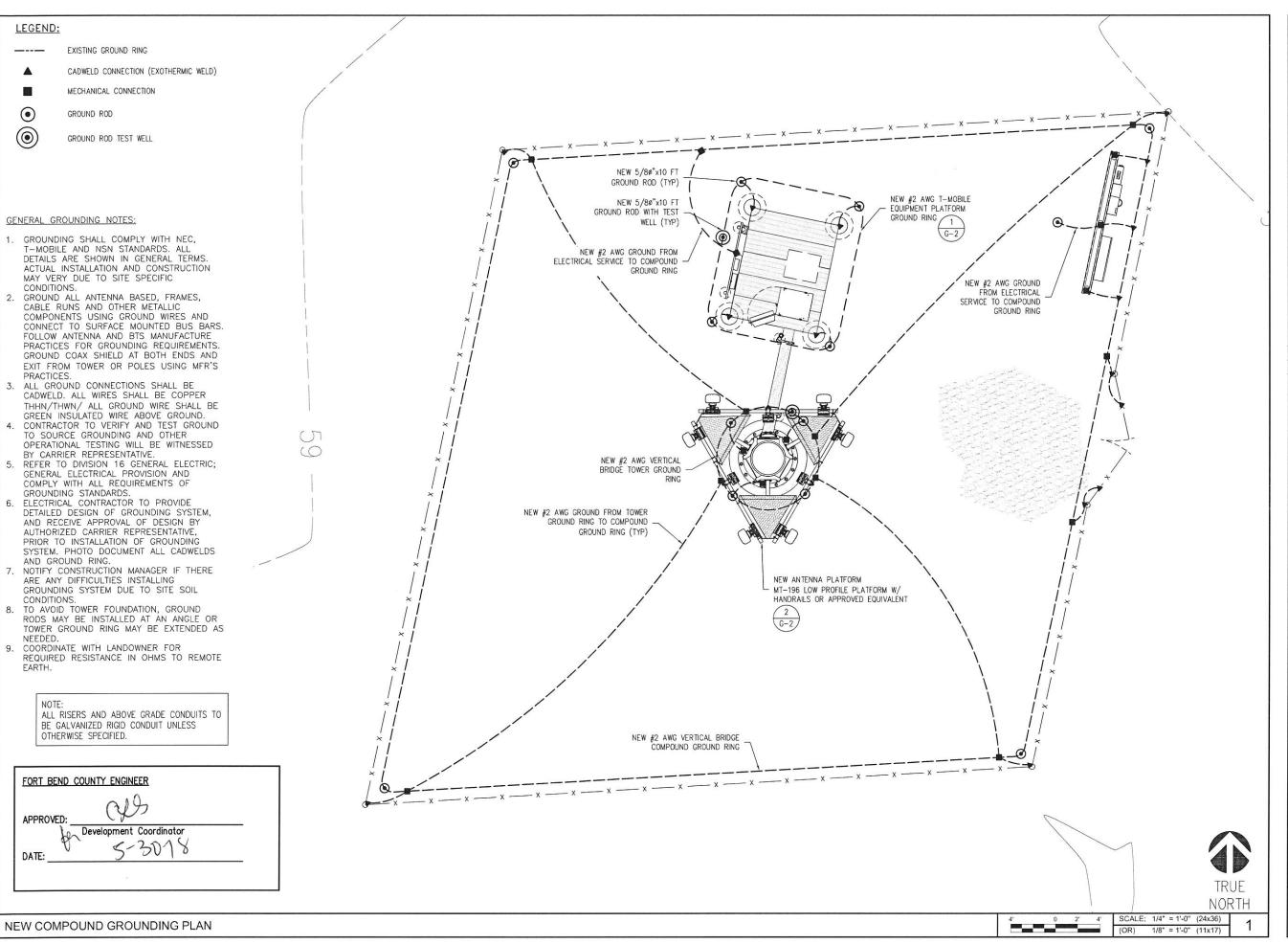
918 TALISMAN ROAD #A[E911] ROSHARON, TX 77583 FORT BEND COUNTY

SHEET TITLE:

**ELECTRICAL DETAILS** 

SHEET NUMBER:

Che 5-3018



T·Mobile\*

HOUSTON, TX 77046



750 PARK OF COMMERCE DRIVE BOCA RATON, FL 33487



CONSULTING GROUP, INC.
9221 Lyndon B Johnson Fwy
Suite 204, Dallas, TX 75243
Phone: 972–231–8893
Fax: 866–364–8375
www.ollprocgi.com
Registration No. 8242

ACGI NO: 17-7142, 18-2191

DRAWN BY: RM

CHECKED BY: JG

		REVISIONS	
REV DATE		V DATE DESCRIPTION	
2	05/17/18	REV. FOR DRAINAGE DISTRICT	RM
1	04/17/18	REV. FOR ZONING SUBMITTAL	RM
0	03/05/18	FINAL CD	RM
С	02/15/18	REV. FOR T-MOBILE REDLINES	RM
В		REV. FOR T-MOBILE REDLINES	HR
Α	11/22/17	PRELIMINARY CD	RM



NOT VALID WITHOUT P.E. STAMP & SIGNATURE

SITE INFORMATION
T-MOBILE SITE #:
A3C0203B

VERTICAL BRIDGE SITE #: TX-5460

918 TALISMAN ROAD #A[E911] ROSHARON, TX 77583 FORT BEND COUNTY

SHEET TITLE:

GROUNDING PLAN

SHEET NUMBER:

G-1

#### LEGEND:

EXISTING GROUND RING

▲ CADWELD CONNECTION (EXOTHERMIC WELD)

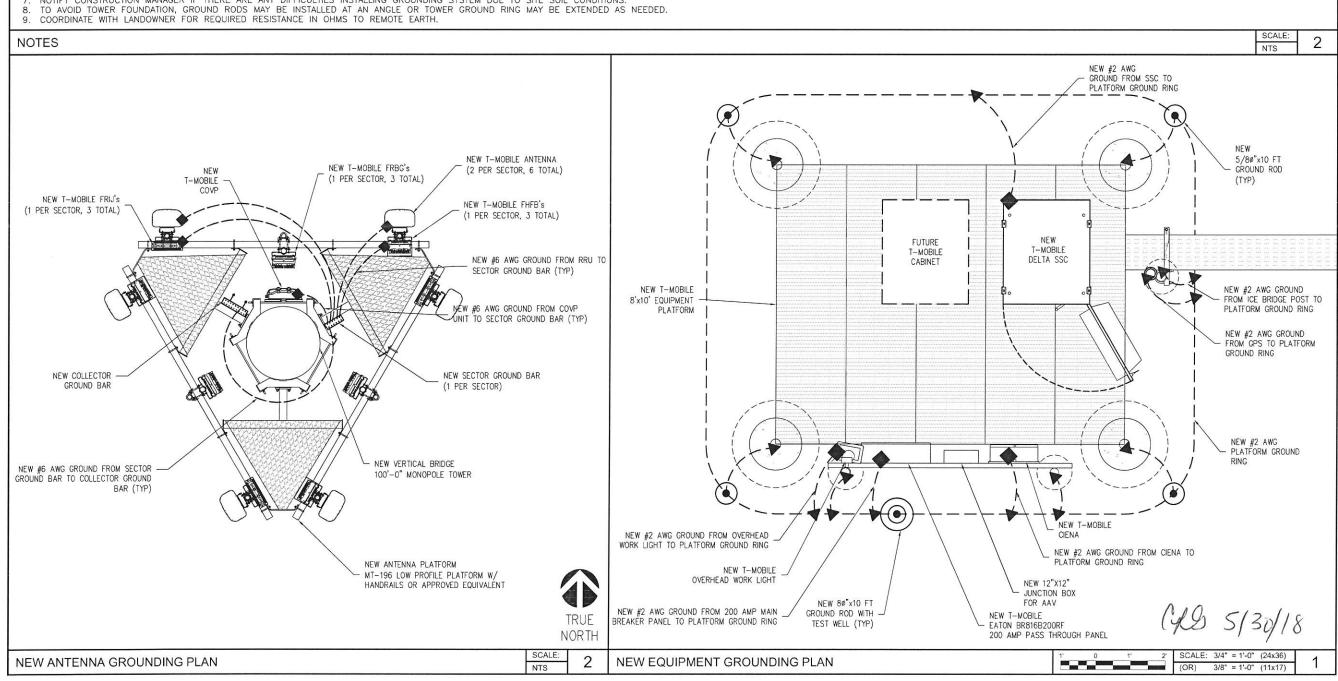
MECHANICAL CONNECTION

GROUND ROD

GROUND ROD TEST WELL

#### GENERAL GROUNDING NOTES:

- GROUNDING SHALL COMPLY WITH NEC, T-MOBILE AND NSN STANDARDS. ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL INSTALLATION
  AND CONSTRUCTION MAY VERY DUE TO SITE SPECIFIC CONDITIONS.
- GROUND ALL ANTENNA BASED, FRAMES, CABLE RUNS AND OTHER METALLIC COMPONENTS USING GROUND WIRES AND CONNECT TO SURFACE
  MOUNTED BUS BARS. FOLLOW ANTENNA AND BTS MANUFACTURE PRACTICES FOR GROUNDING REQUIREMENTS. GROUND COAX SHIELD AT BOTH
  ENDS AND EXIT FROM TOWER OR POLES USING MFR'S PRACTICES.
- 3. ALL GROUND CONNECTIONS SHALL BE CADWELD. ALL WIRES SHALL BE COPPER THHN/THWN/ ALL GROUND WIRE SHALL BE GREEN INSULATED WIRE ABOVE GROUND.
- 4. CONTRACTOR TO VERIFY AND TEST GROUND TO SOURCE GROUNDING AND OTHER OPERATIONAL TESTING WILL BE WITNESSED BY CARRIER REPRESENTATIVE.
- 5. REFER TO DIVISION 16 GENERAL ELECTRIC; GENERAL ELECTRICAL PROVISION AND COMPLY WITH ALL REQUIREMENTS OF GROUNDING STANDARDS.
  6. ELECTRICAL CONTRACTOR TO PROVIDE DETAILED DESIGN OF GROUNDING SYSTEM, AND RECEIVE APPROVAL OF DESIGN BY AUTHORIZED CARRIER
- REPRESENTATIVE, PRIOR TO INSTALLATION OF GROUNDING SYSTEM. PHOTO DOCUMENT ALL CADWELDS AND GROUND RING.
  NOTIFY CONSTRUCTION MANAGER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SITE SOIL CONDITIONS.



T - Mobile

2 GREENWAY PLAZA
HOUSTON, TX 77046



750 PARK OF COMMERCE DRIVE BOCA RATON, FL 33487



CONSULTING GROUP, INC.
9221 Lyndon B Johnson Fwy
Suite 204, Dallas, TX 75243
Phone: 972–231–8893
Fax: 866–364–8375
www.ollprocgi.com
Registration No. 8242

ACGI NO: 17-7142, 18-2191

DRAWN BY: RM

CHECKED BY: JG

REVISIONS

REV	DATE	DESCRIPTION	ВҮ
2	05/17/18	REV. FOR DRAINAGE DISTRICT	RM
1		REV. FOR ZONING SUBMITTAL	RM
0	03/05/18	FINAL CD	RM
С	02/15/18	REV. FOR T-MOBILE REDLINES	RM
В		REV. FOR T-MOBILE REDLINES	HR
Α	11/22/17	PRELIMINARY CD	RM



NOT VALID WITHOUT P.E. STAMP & SIGNATURE

SITE INFORMATION
T-MOBILE SITE #:
A3C0203B

VERTICAL BRIDGE SITE #: TX-5460

918 TALISMAN ROAD #A[E911] ROSHARON, TX 77583 FORT BEND COUNTY

SHEET TITLE:

GROUNDING PLANS

SHEET NUMBER:

G-2

GENERAL NOTES

1. THE CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE ALL ITEMS DEFINED IN THE CONTRACT DOCUMENTS. THE CONTRACT DOCUMENTS INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING: THE CONTRACT, SPECIFICATIONS AND CONSTRUCTION DRAWNGS

2. ALL EQUIPMENT SUPPLIED BY THE OWNER SHALL BE PICKED UP BY THE CONTRACTOR AT THE APPROPRIATE WAREHOUSE.

THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL WORK.

4. THE CONTRACTOR SHALL PROVIDE ON-SITE SUPERVISION AT ALL TIMES WHILE THE WORK IS BEING PERFORMED AND SHALL DIRECT ALL WORK USING HIS BEST SKILL AND ATTENTION, HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES AND SEQUENCES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.

5. THE CONTRACTOR SHALL VISIT THE JOB SITE TO REVIEW THE SCOPE OF WORK AND EXISTING JOB SITE CONDITIONS INCLUDING. BUT NOT LIMITED TO, MECHANICAL ELECTRICAL SERVICE AND OVERALL COORDINATION. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO SUBMITTING HIS BID. ANY DISCREPANCIES, CONFLICTS OR OMISSIONS, ETC., SHALL BE REPORTED TO THE T-MOBILE CONSTRUCTION SUPERVISOR REFORE PROCEEDING WITH THE WORK 6. THE CONTRACTOR SHALL PROTECT ALL AREAS FROM DAMAGE WHICH MAY OCCUR DURING CONSTRUCTION. ANY DAMAGE TO NEW AND EXISTING CONSTRUCTION. STRUCTURE, LANDSCAPING OR EQUIPMENT SHALL BE IMMEDIATELY REPAIRED OR REPLACED TO THE SATISFACTION OF THE TENANT, BUILDING OWNER OR OWNER'S REPRESENTATIVE AT THE EXPENSE OF THE CONTRACTOR.

7. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES, WHETHER SHOWN HEREON OR NOT, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSES FOR REPAIR OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGED IN CONJUNCTION WITH THE EXECUTION OF WORK.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE SECURITY OF THE SITE WHILE THE JOB IS IN PROGRESS AND UNTIL THE JOB IS COMPLETED. 9. THE CONTRACTOR SHALL PROVIDE TEMPORARY WATER, POWER AND TOILET FACILITIES AS REQUIRED BY THE CITY OR GOVERNING AGENCY.

10. THE CONTRACTOR AND ALL SUBORDINATE CONTRACTORS SHALL COMPLY WITH

ALL LOCAL AND STATE REGULATIONS.

THE CONTRACTOR SHALL OBTAIN AND PAY FOR PERMITS, LICENSES AND INSPECTIONS NECESSARY FOR PERFORMANCE OF THE WORK AND INCLUDE THOSE IN THE COST OF THE WORK TO T-MOBILE. 12. FIGURED DIMENSIONS HAVE PRECEDENCE OVER DRAWING SCALE, AND DETAIL DRAWINGS HAVE PRECEDENCE OVER SMALL DRAWINGS, CHECK ACCURACY OF ALL DIMENSIONS IN THE FIELD, UNLESS SPECIFICALLY NOTED. DO NOT FABRICATE ANY MATERIALS OFF SITE, NOR DO ANY CONSTRUCTION UNTIL THE ACCURACY OF DRAWING DIMENSIONS HAVE BEEN VERIFIED AGAINST ACTUAL FIELD DIMENSIONS.

13. THE CONTRACTOR SHALL NOTIFY THE T-MOBILE CONSTRUCTION SUPERVISOR OF ANY CONFLICTS OR DISCREPANCIES IN THE CONTRACT DOCUMENTS OR FIELD CONDITIONS PRIOR TO EXECUTING THE WORK IN QUESTION.

THE CONTRACTOR SHALL NOTIFY THE T-MOBILE CONSTRUCTION SUPERVISOR IF DETAILS ARE CONSIDERED UNSOUND, UNSAFE, NOT WATERPROOF, OR NOT WITHIN CUSTOMARY TRADE PRACTICE, IF WORK IS PERFORMED, IT WILL BE ASSUMED THAT THERE IS NO OBJECTION TO THE DETAIL. DETAILS ARE INTENDED TO SHOW THE END RESULT OF THE DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB CONDITIONS, AND SHALL BE INCLUDED AS PART OF THE WORK.

15 EXISTING FLEVATIONS AND LOCATIONS TO BE JOINED SHALL BE VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION, IF THEY DIFFER FROM THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE T-MOBILE CONSTRUCTION SUPERVISOR SO THAT MODIFICATIONS CAN BE MADE BEFORE PROCEEDING WITH THE

16. ALL SYMBOLS AND ABBREVIATIONS USED ON THE DRAWINGS ARE CONSIDERED CONSTRUCTION STANDARDS. IF THE CONTRACTOR HAS QUESTIONS REGARDING THEIR EXACT MEANING, THE T-MOBILE CONSTRUCTION SUPERVISOR SHALL BE NOTIFIED FOR CLARIFICATION REFORE PROCEEDING WITH THE WORK

17 THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BLOCKING, BACKING FRAMING, HANGERS OR OTHER SUPPORT FOR ALL OTHER ITEMS REQUIRING THE

18 CITY APPROVED PLANS SHALL BE KEPT IN A PLAN BOX AND SHALL NOT BE USED BY WORKMEN, ALL CONSTRUCTION SETS SHALL REFLECT SAME INFORMATION. AT ALL TIMES THESE ARE TO BE UNDER THE CARE OF THE JOB SUPERINTENDENT. 19. DESIGN DRAWINGS ARE DIAGRAMMATIC ONLY AND SHALL BE FOLLOWED AS CLOSELY AS ACTUAL CONSTRUCTION CONDITIONS WILL PERMIT, ANY ERROR. OMISSION, OR DESIGN DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE T -MOBILE CONSTRUCTION SUPERVISOR FOR CLARIFICATION OR CORRECTION BEFORE CONSTRUCTION

20. AS—BUILTS REQUIREMENTS: DO NOT USE RECORD DOCUMENTS FOR CONSTRUCTION PURPOSES. PROTECT RECORD DOCUMENTS FROM DETERIORATION AND LOSS IN A SECURE, FIRE-RESISTANT LOCATION. PROVIDE ACCESS TO RECORD DOCUMENTS FOR THE T-MOBILE CONSTRUCTION SUPERVISOR'S REFERENCE DURING NORMAL WORKING HOURS. MAINTAIN A CLEAN, UNDAMAGED SET OF BLUE OR BLACK LINE PRINTS OF CONTRACT DRAWINGS AND SHOP DRAWINGS. MARK THE SET TO SHOW THE ACTUAL INSTALLATION WHERE THE INSTALLATION VARIES SUBSTANTIALLY FROM THE WORK AS ORIGINALLY SHOWN. MARK WHICH DRAWINGS IS MOST CAPABLE OF SHOWING CONDITIONS FULLY AND ACCURATELY. WHERE SHOP DRAWINGS ARE USED, RECORD A CROSS-REFERENCE AT THE CORRESPONDING LOCATION ON THE CONTRACT DRAWINGS GIVE PARTICULAR ATTENTION TO CONCEALED FLEMENTS THAT WOULD BE DIFFICULT TO MEASURE AND RECORD AT A LATER DATE. MARK RECORD SETS WITH RED ERASABLE PENCIL. USE OTHER COLORS TO DISTINGUISH BETWEEN VARIATIONS IN SEPARATE CATEGORIES OF THE WORK. MARK NEW INFORMATION THAT IS IMPORTANT TO THE OWNER BUT WAS NOT SHOWN ON THE CONTRACT DRAWINGS, DETAILS OR SHOP DRAWINGS, NOTE RELATED CHANGE ORDER NUMBERS WHERE APPLICABLE. NOTE RELATED RECORD DRAWING INFORMATION AND PRODUCT DATA. UPON COMPLETION OF THE WORK, SUBMIT ONE (1) COMPLETE SET OF RECORD DOCUMENTS TO THE T-MOBILE CONSTRUCTION SUPERVISOR FOR THE OWNER'S RECORDS.

PART 1: GENERAL

1.1 SCOPE: CLEARING, GRUBBING, STRIPPING, EROSION CONTROL, SURVEY, LAYOUT, SUB GRADE PREPARATION, FINISH GRADING AND SECURITY FENCE, AS REQUIRED BY CONSTRUCTION DRAWINGS AND DETAIL DRAWINGS.

1.2 REFERENCES A. DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS FOR THE STATE IN WHICH THE PROJECT IS LOCATED.

B. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS)

C. OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION) D. AASHTO (AMERICAN ASSOCIATION OF STATE HIGHWAY TRANSPORTATION OFFICIALS) 1.3 INSPECTION AND TESTING

A. FIELD TESTING OF EARTHWORK, AGGREGATE BASE COURSE, COMPACTION, AND CONCRETE TESTING SHALL BE PERFORMED BY THE CONTRACTOR'S INDEPENDENT TESTING LAR

B. ALL WORK SHALL BE INSPECTED AND RELEASED BY THE T-MOBILE CONSTRUCTION SUPERVISOR WHO SHALL CARRY OUT THE GENERAL INSPECTION OF THE WORK WITH SPECIFIC CONCERN TO PROPER PERFORMANCE OF THE WORK AS SPECIFIED AND/OR CALLED FOR ON THE DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REQUEST TIMELY INSPECTIONS PRIOR TO PROCEEDING WITH FURTHER WORK THAT WOULD MAKE PARTS OF THE WORK INACCESSIBLE OR DIFFICULT TO INSPECT.

1.4 SITE MAINTENANCE AND PROTECTION

A. PROVIDE ALL NECESSARY JOB SITE MAINTENANCE FROM COMMENCEMENT OF THE WORK UNTIL COMPLETION OF THE CONTRACT.

B. CONTACT THE ONE-CALL UTILITY LOCATION SERVICE PRIOR TO ANY EXCAVATING ACTIVITIES TO HAVE LOCATIONS OF UNDERGROUND UTILITIES VERIFIED. C. AVOID DAMAGE TO THE SITE INCLUDING EXISTING FACILITIES, STRUCTURES, TREES AND SHRUBS DESIGNATED TO REMAIN, TAKE PROTECTIVE MEASURES TO PREVENT EXISTING FACSIMILES THAT ARE NOT DESIGNATED FOR REMOVAL FROM BEING

DAMAGED BY THE WORK. D. KEEP SITE FREE OF ALL PONDING WATER.

E. PROVIDE EROSION CONTROL MEASURES IN ACCORDANCE WITH THE DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS FOR THE STATE IN WHICH THE PROJECT IS LOCATED.

F. PROVIDE AND MAINTAIN ALL TEMPORARY FENCING, BARRICADES, WARNING SIGNALS AND SIMILAR DEVICES NECESSARY TO PROTECT LIFE AND PROPERTY DURING THE ENTIRE PERIOD OF CONSTRUCTION. REMOVE ALL SUCH DEVICES UPON COMPLETION OF THE WORK. PART II: PRODUCTS

2.1 SUITABLE BACK FILL: EXCAVATED INORGANIC MATERIAL, COHESIVE AND NON-COHESIVE MATERIALS INCLUDING GRAVEL SAND INORGANIC LEAN CLAY GRAVEL SILT, GRAVEL CLAY, SAND CLAY, SAND SILT OR SILT CLAY MATERIAL FREE FROM FROZEN LUMPS, REFUSE, STONES OR ROCKS LARGER THAN 3-INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT MAY MAKE THE INORGANIC MATERIAL UNSUITABLE FOR BACKFILL OR FILL MATERIAL AS DETERMINED BY THE T-MOBILE CONSTRUCTION SUPERVISOR AND GEOTECHNICAL ENGINEER.

2.2 UNSUITABLE MATERIALS: TOP SOIL, HIGH AND MODERATELY PLASTIC SILTS AND CLAY, MATERIAL CONTAINING REFUSE, FROZEN LUMPS, DEMOLISHED BITUMINOUS MATERIAL, VEGETATIVE MATTER, WOOD, STONES IN EXCESS OF 3-INCHES IN ANY DIMENSION AND DEBRIS AS DETERMINED BY THE CONSTRUCTION SUPERVISOR AND T -MOBILE GEOTECHNICAL ENGINEER. TYPICALLY, THESE WILL BE SOILS CLASSIFIED AS

PT, MH, CH, OH, ML OR OL. 2.3 GEOTEXTILE FARRIC: MIRAFI 500X OR APPROVED FOLIVALENT 2.4 PLASTIC MARKING TAPE: SHALL BE ACID- AND ALKALI-RESISTANT POLYETHYLENE FILM, SPECIFICALLY MANUFACTURED FOR MARKING AND LOCATING UNDERGROUND UTILITIES, 6-INCHES WIDE WITH A MINIMUM THICKNESS OF 0.004-INCH. TAPE SHALL HAVE MINIMUM STRENGTH OF 1500 PSI IN BOTH DIRECTIONS AND MANUFACTURED WITH INTEGRAL WIRES FOIL BACKING OR OTHER MEANS TO ENABLE DETECTION BY A METAL DETECTOR WHEN BURIED UP TO 3 FEET DEEP. THE METALLIC CORE OF THE TAPE SHALL BE ENCASED IN A PROTECTIVE JACKET OR PROVIDED WITH OTHER MEANS TO PROTECT IT FROM CORROSION. TAPE COLOR SHALL BE RED FOR ELECTRIC UTILITIES AND ORANGE FOR

TELECOMMUNICATION UTILITIES. 2.5 SECURITY FENCE

A. PROVIDE AND INSTALL THE GALVANIZED FENCE WITH ASSOCIATED POSTS, RAILS, BRACES FABRIC TERMINAL POST GATES DROP BAR AND BARBED WIRE LISE APPLICABLE PROVISIONS OF ASTM FOR MATERIALS.

B. FABRIC SHALL BE HEAVY GALVANIZED CHAIN LINK FENCE, CONFORMING TO ASTM A392 2-INCH MESH 9 GAUGE WIRE (0.148 INCHES IN DIAMETER) WITH THE TOP AND BOTTOM SELVAGES TWISTED AND BARBED. C. POSTS

LINE POST FOR FABRIC UP TO 8 FEET HIGH SHALL BE 2-3/8 INCH O.D. 2. END CORNER, PULL POST AND GATE POST SHALL BE 2-7/8 INCH O.D. ALL POSTS SHALL BE SCHEDULE 40 GALVANIZED STEEL PIPE IN ACCORDANCE WITH ASTM.I A 12D, A570 AND A525. FOR FENCE OVER 8 FEET HIGH, SIZE POST ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

D. TOP RAILS SHALL CONFORM TO 1-1/4 INCH (1.66 INCH O.D.), SCHEDULE 40 GALVANIZED STEEL PIPE IN ACCORDANCE WITH ASTM4 A12D.

E. TENSION WIRE SHALL BE 7 GAUGE U.S. STEEL WIRE GALVANIZED IN ACCORDANCE WITH ASTM A116 COATING CLASS III

F. BRACE BANDS, TENSION BANDS AND TENSION BARS SHALL BE FABRICATED OF 1/8 INCH BY 7/B INCH GALVANIZED STEEL WITH GALVANIZED STEEL CARRIAGE BOLTS AND NUTS IN ACCORDANCE WITH ASTM4 A123, TENSION BARS SHALL BE 1/4 INCH BY 3/4 INCH GALVANIZED STEEL BAR IN ACCORDANCE WITH ASTM A153. FABRIC TIES SHALL BE CLASS I GALVANIZED STEEL WIRE NO LESS THAN 9

GALIGE H. POST TOPS SHALL BE PRESSED STEEL OR MALLEABLE IRON AND SHALL BE GALVANIZED PER ASTM A15J. I. BARBED WIRE SHALL CONSIST OF DOUBLE STRANDED 12 1/2 GAUGE WIRE ASTM A121, CLASS 3 WITH 4-POINT BARBS SPACED 5 INCHES APART. THE TOP 1 FOOT OF THE FENCE SHALL CONSIST OF 3 STRANDS OF BARBED WIRE ATTACHED TO 45 DEGREE ANGLE, HEAVY-PRESSED ARMS CAPABLE OF WITHSTANDING WITHOUT FAILURE 250 POUNDS DOWNWARD PULL AT THE OUTERMOST END OF THE ARM

J. GATE MATERIALS, SUCH AS FABRIC, BOLTS, NUTS, TENSION BARS AND BARBED WIRE SHALL BE CONSISTENT WITH FENCE MATERIALS.

PART III: EXECUTION 3.1 GENERAL

A. BEFORE STARTING GENERAL SITE PREPARATION ACTIVITIES, INSTALL EROSION AND SEDIMENT CONTROL MEASURES. THE WORK AREA SHALL BE CONSTRUCTED AND MAINTAINED IN SUCH CONDITION THAT IN THE EVENT OF RAIN THE SITE WILL BE WELL DRAINED AT ALL TIMES

B. PERFORM ALL SURVEY, LAYOUT, STAKING AND MARKING TO ESTABLISH AND MAINTAIN ALL LINES, GRADES, ELEVATIONS AND BENCHMARKS NEEDED FOR EXECUTION OF THE WORK

C. CLEAR AND GRUB THE AREA WITHIN THE LIMITS OF THE SITE AND ONLY THE IMMEDIATE SURROUNDINGS NECESSARY TO COMPLETE THE WORK, REMOVE TREES. BRUSH, STUMPS, RUBBISH AND OTHER DEBRIS AND VEGETATION RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE SITE AREA TO BE CLEARED AND GRUBBED.

1. REMOVE THE FOLLOWING MATERIALS TO A DEPTH OF NO LESS THAN 12-INCHES BELOW THE ORIGINAL GROUND SURFACE: ROOTS, STUMPS AND OTHER DEBRIS, BRUSH AND REFUSE EMBEDDED IN OR PROTRUDING THROUGH THE GROUND SURFACE, RAKE, DISK OR PLOW THE AREA TO A DEPTH OF NO LESS THAN 6-INCHES, AND REMOVE UP TO A DEPTH OF 12-INCHES AII ROOTS AND OTHER DEBRIS THEREBY EXPOSED.

2. REMOVE TOPSOIL MATERIALS COMPLETELY FROM THE SURFACE UNTIL THE SOIL NO LONGER MEETS THE DEFINITION OF TOPSOIL, AVOID MIXING TOPSOIL WITH SUBSOIL OR OTHER EXCAVATED MATERIALS. TOPSOIL SHALL BE STOCKPILED SEPARATELY FOR REUSE, AS DIRECTED BY THE CONSTRUCTION SUPERVISOR. 3. EXCEPT WHERE EXCAVATION TO GREATER DEPTH IS INDICATED, FILL DEPRESSIONS RESULTING FROM CLEARING, GRUBBING AND DEMOLITION COMPLETELY WITH SUITABLE

D. REMOVE FROM THE SITE AND DISPOSE IN AN AUTHORIZED LANDFILL AII DEBRIS RESULTING FROM CLEARING AND GRUBBING OPERATIONS. BURNING IS NOT

F PRIOR TO EXCAVATING THOROLIGHLY EXAMINE THE AREA TO BE EXCAVATED AND/OR TRENCHED TO VERIEY THE LOCATIONS OF FEATURES INDICATED ON THE DRAWINGS, AND ASCERTAIN THE EXISTENCE AND LOCATION OF ANY STRUCTURE, UNDERGROUND STRUCTURE, CULVERT, STREAM CROSSING OR OTHER ITEM NOT SHOWN THAT MIGHT AFFECT OR INTERFERE WITH THE NEW CONSTRUCTION, NOTIFY THE T-MORILE CONSTRUCTION SUPERVISOR OF ANY OBSTRUCTIONS THAT WILL PREVENT ACCOMPLISHMENT OF THE WORK AS INDICATED ON THE DRAWINGS. SEPARATE AND STOCKPILE AII EXCAVATED MATERIALS SUITABLE FOR BACK FILL. ALL EXCESS EXCAVATED AND UNSUITABLE MATERIALS SHALL BE DISPOSED OF IN AN AREA DESIGNATED BY THE T-MOBILE CONSTRUCTION SUPERVISOR. (UNSUITABLE MATERIAL MAY BE REQUIRED TO BE REMOVED FROM THE SITE.) 3.2 STRUCTURAL EXCAVATION

A FOUNDATION EXCAVATIONS SHALL BE CUT TO FIRM MATERIAL HAVING A SAFE BEARING VALUE OF 3000 PSF AND SHALL BE FREE OF ALL LOOSE AND WET MATERIALS. IF THE BOTTOM OF THE EXCAVATION IS NOT FIRM AND STABLE, OVER-EXCAVATE AN ADDITIONAL 12 INCHES, COMPACT SUB-GRADE AND FILL WITH 12 INCHES OF SELECT STRUCTURAL FILL

B. AFTER EXCAVATION, THE EXPOSED SOILS SHALL BE INSPECTED AND TESTED AND ANY UNSUITABLE DEPOSITS REMOVED AS DIRECTED TO REACH SUITABLE BEARING SOIL ALL OVER-EXCAVATED AREAS SHALL. BE BACK FILLED WITH SELECT STRUCTURAL FILL OR WITH LEAN CONCRETE FILL TO THE ELEVATION OF THE BOTTOM OF FOOTING OR FOUNDATION AS INDICATED ON THE DRAWINGS. PRIOR TO PLACEMENT OF CONC. FOUNDATIONS, THE SURFACE ON WHICH THE CONCRETE IS TO BE PLACED SHALL. BE COMPACTED TO A MINIMUM OF 95%% OF THE MODIFIED PROCTOR DENSITY BY THE MODIFIED PROCTOR TEST, ASTM4 D1557 D. NO FOUNDATIONS OR STRUCTURES SHALL BE CONSTRUCTED UNTIL THE BASE MATERIALS HAVE BEEN INSPECTED BY THE T-MOBILE CONSTRUCTION SUPERVISOR. 3.3 STRUCTURAL FILL: AII COMPACTED FILL SHALL BE PLACED IN LAYERS NOT EXCEEDING A LOOSE THICKNESS AND COMPACTED TO A MINIMUM DENSITY OF 95%% OF THE MODIFIED PROCTOR DENSITY OBTAINED IN ACCORDANCE WITH ASTM4

3.4 BACK FILL AS SOON AS PRACTICAL AFTER COMPLETING CONSTRUCTION OF THE RELATED STRUCTURE, INCLUDING EXPIRATION OF THE SPECIFIED MINIMUM CURING PERIOD FOR CAST-IN-PLACE CONCRETE, BACKFILL THE EXCAVATION WITH APPROVED MATERIAL TO RESTORE THE REQUIRED FINISH GRADE. 1. PRIOR TO PLACING BACKFILL AROUND STRUCTURES, ALL FORMS SHALL HAVE

BEEN REMOVED AND THE EXCAVATION CLEANED OF ALL TRASH, DEBRIS AND UNSUITABLE MATERIALS.

2. BACK FILL BY PLACING AND COMPACTING SUITABLE BACKFILL MATERIAL OR SELECT GRANULAR BACKFILL MATERIAL, WHEN REQUIRED, IN UNIFORM HORIZONTAL LAYERS OF NO GREATER THAN 8-INCH LOOSE THICKNESS WHERE HAND-OPERATED COMPACTORS ARE USED. THE FILL MATERIALS SHALL BE PLACED IN LIFTS NOT TO EXCEED FOUR INCHES IN LOOSE DEPTH.

. WHENEVER THE DENSITY TESTS INDICATE THAT THE CONTRACTOR HAS NOT OBTAINED THE SPECIFIED DENSITY THE SUCCEEDING LAYER SHALL NOT BE PLACED UNTIL THE SPECIFICATION REQUIREMENTS ARE MET UNLESS OTHERWISE AUTHORIZED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL TAKE WHATEVER APPROPRIATE ACTION IS NECESSARY, SUCH AS DISKING AND DRYING, ADDING WATER OR INCREASING THE COMPACTIVE FEFORT, B. THOROUGHLY COMPACT FACH LAYER OF BACKFILL TO A MINIMUM OF 90%% OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE MODIFIED PROCTOR TEST C. DO NOT PLACE UNTIL THE CONCRETE HAS CURED FOR AT LEAST 7 DAYS OR COMPRESSIVE STRENGTH TESTS INDICATE THAT THE CONCRETE HAS ACHIEVED MORE THAN BOX OF ITS SPECIFIED 28 DAY COMPRESSIVE STRENGTH.

3.5 TRENCH EXCAVATION A. UTILITY TRENCHES SHALL BE EXCAVATED TO THE LINES AND GRADES SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE T-MOBILE CONSTRUCTION SUPERVISOR. PROVIDE SHORING, SHEETING AND BRACING AS REQUIRED TO PREVENT CAVING OR SLOUGHING OF THE TRENCH WAILS.

B. THE TRENCH WIDTH EXTENDS A MINIMUM OF 6 INCHES BEYOND EACH OUTSIDE EDGE OF THE CONDUIT OR OUTERMOST CONDUIT, WHICHEVER IS APPLICABLE. C. WHEN SOFT, YIELDING OR OTHERWISE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED AT THE REQUIRED TRENCH BOTTOM FLEVATION OVER-EXCAVATE THE TRENCH TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE REQUIRED ELEVATION AND BACKFILL WITH GRANULAR BEDDING MATERIAL. 3.6 TRENCH BACK FILL

A PROVIDE GRANULAR BEDDING MATERIAL IN ACCORDANCE WITH THE SPECIFICATIONS, DRAWINGS AND THE UTILITY REQUIREMENTS.

B. NOTIFY THE T-MOBILE CONSTRUCTION SUPERVISOR 24 HOURS IN ADVANCE OF

C. CONDUCT UTILITY CHECK TESTS BEFORE BACK FILLING BACK FILL AND COMPACT TRENCH REFORE ACCEPTANCE TESTING

D. PLACE GRANULAR TRENCH BACKFILL UNIFORMLY ON BOTH SIDES OF THE CONDUITS IN 6-INCH UNCOMPACTED LIFTS UNTIL 12 INCHES OVER THE CONDUITS. SOLIDLY RAM AND TAMP BACKFILL INTO SPACES AROUND THE CONDUITS. F PROTECT CONDUIT FROM LATERAL MOVEMENT DAMAGE FROM IMPACT OR UNBALANCED LOADING

ABOVE THE CONDUIT EMBEDMENT ZONE, PLACE AND COMPACT SATISFACTORY BACKFILL MATERIAL IN 9-INCH MAXIMUM LOOSE THICKNESS LIFTS TO RESTORE THE REQUIRED FINISHED SURFACE GRADE.

G. COMPACT FINAL TRENCH BACKFILL TO A DENSITY EQUAL TO OR GREATER THAN THAT OF THE EXISTING UNDISTURBED MATERIAL IMMEDIATELY ADJACENT TO THE TRENCH BUT NO LESS THAN A MINIMUM OF 95%% OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE MODIFIED PROCTOR TEST, ASTM D1557 3.7 AGGREGATE ACCESS ROAD AND SITE

. CLEAR, GRUB, STRIP AND EXCAVATE FOR THE ACCESS ROAD AND TOWER COMPOUND TO THE LINES AND GRADES INDICATED ON THE DRAWINGS. SCARIFY TO A DEPTH OF 6 INCHES AND PROOF-ROLL ALL HOLES, RUTS, SOFT PLACES AND

OTHER DEFECTS SHALL BE CORRECTED. B. THE ENTIRE SUB GRADE SHALL BE COMPACTED TO NOT LESS THAN 95: 2: OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE MODIFIED PROCTOR TEST, ASTM D

C. AFTER PREPARATION OF THE SUB GRADE IS COMPLETED, THE GEOTEXTILE FABRIC SHALL BE INSTALLED TO THE LIMITS INDICATED ON THE DRAWINGS BY ROLLING THE FABRIC OUT LONGITUDINALLY ALONG THE ROADWAY OR SITE. THE FABRIC SHALL NOT BE DRAGGED ACROSS THE SUB GRADE PLACE THE ENTIRE ROLL IN A SINGLE OPERATION, ROLLING THE MATERIAL AS SMOOTHLY AS POSSIBLE. OVERLAPS PARALLEL TO THE ROADWAY AND SITE WILL BE PERMITTED AT THE CENTERLINE AND AT LOCATIONS BEYOND THE ROADWAY OR SITE SURFACE WIDTH (I.E., WITHIN THE SHOULDER WIDTH) ONLY. NO LONGITUDINAL OVERLAPS SHALL BE LOCATED BETWEEN THE CENTERLINE AND THE SHOULDER. PARALLEL OVERLAPS SHALL BE A MINIMUM OF 3 FEET WIDE.

2 TRANSVERSE (PERPENDICULAR TO THE ROADWAY) OVERLAPS AT THE END OF A ROLL SHALL OVERLAP IN THE DIRECTION OF THE AGGREGATE PLACEMENT (PREVIOUS ROLL ON TOP) AND SHALL HAVE A MINIMUM LENGTH OF 3 FEET.

3. ALL OVERLAPS SHALL. BE PINNED WITH STAPLES OR NAILS BETWEEN 10 AND 12 INCHES LONG TO INSURE STABLE POSITIONING DURING PLACEMENT OF AGGREGATE. PIN LONGITUDINAL SEAMS AT 25-FOOT CENTERS AND TRANSVERSE SEAMS EVERY 5 FEET ON CENTER.

D. THE AGGREGATE SUB BASE, BASE AND SURFACE COURSES SHALL BE CONSTRUCTED IN LAYERS NOT MORE THAN 4 INCHES (COMPACTED) THICKNESS. AGGREGATE TO BE PLACED ON GEOTEXTILE FABRIC SHALL BE END-DUMPED ON THE FABRIC FROM THE FREE END OF THE FABRIC OR OVER PREVIOUSLY PLACED AGGREGATE. AT NO TIME SHALL EQUIPMENT, EITHER DUMPING THE AGGREGATE OR GRADING THE AGGREGATE, BE PERMITTED ON THE ROADWAY OR COMPOUND WITH LESS THAN 8 INCHES OF MATERIAL COVERING THE FABRIC.

E. THE AGGREGATE SUB BASE AND BASE SHALL BE IMMEDIATELY COMPACTED TO NOT LESS THAN 95%% OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE MODIFIED PROCTOR TEST, ASTM4 D 1557

3.8 FINISH GRADING

PERFORM ALL FINISHED GRADING TO PROVIDE SMOOTH, EVEN SURFACE AND SUBSURFACE DRAINAGE OF THE ENTIRE AREA WITHIN THE LIMITS OF CONSTRUCTION. GRADING SHALL BE COMPATIBLE WITH ALL SURROUNDING TOPOGRAPHY AND STRUCTURES.

B. UTILIZE SATISFACTORY FILL MATERIALS RESULTING FROM THE EXCAVATION WORK IN THE CONSTRUCTION OF FILLS, EMBANKMENTS AND FOR THE REPLACEMENT OF REMOVED LINSUITABLE MATERIALS

C. REPAIR ALL ACCESS ROADS AND SURROUNDING AREAS USED DURING THE COURSE OF THIS WORK TO THEIR ORIGINAL CONDITION.

3.9 SECURITY FENCE

A. THE BOTTOM OF THE FENCE SHALL BE 2 INCHES BELOW THE TOP OF THE COMPOUND GRAVEL IF THE SITE CROSSES FEATURES SUCH AS DRAINAGE DITCHES. ETC., THE FENCE SHALL SPAN THE DEPRESSION. CLOSE THE SPACE BELOW THE BOTTOM OF THE FENCE WITH EXTRA FENCE FABRIC OR BARBED WIRE AS DIRECTED BY THE T-MOBILE CONSTRUCTION SUPERVISOR PRIOR TO PLACING COMPONENTS SUCH AS FABRIC, RAILS, TENSION WIRE AND GATES, ENSURE THAT THE CONCRETE POST FOUNDATION HAS REACHED AT LEAST 75%% OF ITS DESIGN STRENGTH OR HAS CURED A MINIMUM OF 7 DAYS AFTER SETTING THE POST. B. FURNISH GATES WITH NECESSARY FITTINGS AND HARDWARE, HINGES SHALL

ALLOW SWING GATES TO SWING 180 DEGREES, PLUNGER BARS SHALL HAVE TOP. BOTTOM AND MIDDLE LOCKING POINTS WITH THE MIDDLE POINT ARRANGED FOR PADLOCKING. GATES SHALL HAVE KEEPERS ON EACH LEAF THAT ENGAGE AUTOMATICALLY WHEN THE GATE IS SWUNG OPEN, REPAIR GAI VANIZED COATING DAMAGED IN THE FIELD WITH METHODS AND TECHNIQUES AS RECOMMENDED BY THE



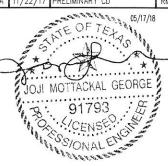


9221 Lyndon B Johnson Fwy Suite 204, Dallas, TX 75243 Phone: 972-231-8893 Fax: 866-364-8375 www.allprocai.com Registration No. 8242

ACGI NO: 17-7142, 18-2191 DRAWN BY: RM

CHECKED BY: REVISIONS DATE

DESCRIPTION 2 05/17/18 REV. FOR DRAINAGE DISTRICT RM 1 04/17/18 REV. FOR ZONING SUBMITTAL 0 03/05/18 FINAL CD C 02/15/18 REV. FOR T-MOBILE REDLINES B 01/29/18 REV. FOR T-MOBILE REDLINES A 11/22/17 PRELIMINARY CD



NOT VALID WITHOUT P.E. STAMP & SIGNATURE

SITE INFORMATION T-MOBILE SITE #: A3C0203B

**VERTICAL BRIDGE SITE #:** TX-5460

918 TALISMAN ROAD #A[E911] **ROSHARON, TX 77583** FORT BEND COUNTY

SHEET TITLE:

**GENERAL NOTES** 

PROJECT SPECIFICATION 16000 (ELECTRICAL)

PART 1: GENERAL

- 1.1 SCOPE' THIS SPECIFICATION DESCRIBES THE MINIMUM REQUIREMENT FOR INSTALLATION OF ALL ELECTRICAL SYSTEMS
- 1.2 REFERENCES: THE PUBLICATIONS LISTED BELOW FORM PART OF THIS SPECIFICATION, EACH PUBLICATION SHALL BE THE LATEST REVISION AND ADDENDUM IN EFFECT ON THE DATE THIS SPECIFICATION IS ISSUED FOR CONSTRUCTION, UNLESS NOTED OTHERWISE. EXCEPT AS MODIFIED BY THE REQUIREMENTS SPECIFIED HEREIN, OR THE DETAILS OF THE DRAWINGS, WORK INCLUDED IN THIS SPECIFICATION SHALL CONFORM TO THE APPLICABLE PROVISIONS OF THESE PUBLICATIONS.
- A. ANSI (AMERICAN NATIONAL STANDARDS INSTITUTE)
- B. NESC (NATIONAL ELECTRICAL SAFETY CODE), LATEST EDITION
- C. NEC (NATIONAL ELECTRICAL CODE), LATEST EDITION
- D. NFPA 70 (NATIONAL FIRE PROTECTION ASSOCIATION)
- E. OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION), INCLUDING ALL APPLICABLE AMENDMENTS F. U.L. (UNDERWRITERS LABORATORIES)
- 1.3 SYSTEM DESCRIPTION
- A. DESIGN REQUIREMENTS: THE CONTRACTOR SHALL INSTALL UNDERGROUND ELECTRICAL AND TELEPHONE CONDUITS AND CABLE AS SPECIFIED HEREIN AND AS SHOWN ON THE DRAWINGS.
- B. PERFORMANCE REQUIREMENTS: WHEN FINISHED, WORK SHALL BE IN A COMPLETE AND UNDAMAGED STATE, AS REQUIRED IN THE CONTRACT DOCUMENTS.
- PART II: PRODUCTS
- 2.1 GENERAL
- A. ITEMS SHALL BE NEW AND SHALL BE INSTALLED ONLY IF IN FIRST-CLASS CONDITION.
- B. SUBSTITUTIONS FOR MATERIAL WILL BE PERMITTED ONLY BY WRITTEN APPROVAL OF THE T-MOBILE CONSTRUCTION SUPERVISOR.
- 2.2 MATERIALS: THE CONTRACTOR SHALL PROVIDE ALL MATERIAL EXCEPT AS SPECIFIED IN THE CONTRACT DOCUMENTS. ALL MATERIAL SHALL BE APPROVED AND LISTED BY OR BEAR THE U.L. LABEL, AND WILL COMPLY WITH ANSI, IEEE AND NEMA STANDARDS WHERE APPLICABLE. A. CONDUITS:
- 1. ALL UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC, SIZED AS SHOWN ON THE CONSTRUCTION DRAWNGS.
- 2. ALL EXTERIOR ABOVEGROUND CONDUIT SHALL BE PER LOCAL CODE REQUIREMENTS.
- 3 ALL INTERIOR CONDUIT SHALL BE EMT WITH COMPRESSION-TYPE FITTINGS.
- 4. LIQUID—TIGHT FLEXIBLE METALLIC CONDUIT SHALL BE USED FOR OUTDOOR LOCATIONS WHERE FLEXIBLE CONNECTION IS REQUIRED
- B. CABLES CONDUCTORS FOR GENERAL WIRING SHALL BE NEC STANDARD ANNEALED COPPER WIRE WITH NEC 600 VOLT INSULATION.
- 1. #B AND LARGER-STRANDED TYPE, THHN OR THWN
- #10 AND SMALLER-SOLID TYPE THHN OR THWN
- CONDUCTORS IN CONDUIT IN OR ADJACENT TO HIGH HEAT SOURCE SHALL BE TYPE XHHW
- 4. CONDUCTORS IN CONDUITS ABOVE ROOF, ON TOP OF ROOF OR INSIDE BUILT-UP ROOFING MATERIAL SHALL BE TYPE XHHW
- C. CONVENIENCE OUTLET, UNLESS NOTED OTHERWISE, SURFACE-MOUNTED OUTLETS FOR EXTERIOR LOCATIONS SHALL BE FERALOY, CAD/ZINC ELECTROPLATED WITH THREADED HUBS OR CONDUIT ENTRANCES DRILLED AND TAPPED, ALL COVERS SHALL BE SELF-CLOSING AND GASKETED. SURFACE MOUNTED OUTLETS FOR INTERIOR LOCATIONS SHALL BE GALVANIZED, PRESSED STEEL WITH COVER PLATE, SIERRA PLASTIC STYLE, IVORY COLOR. D COAXIAL CARLE SUPPORTS
- 1. ALL WAVE GUIDE SUPPORTS SHALL BE MANUFACTURED TO MEET ALL COAX MINIMUM BENDING REQUIREMENTS WAVE GUIDES, AND B1587 FOR 6 WAVE GUIDES. SUPPORTS SHALL BE PROVIDED 3'-0" ON CENTERS.
- 3.1 PREPARATION
- A. BEFORE LAYING OUT WORK, EXERCISE PROPER PRECAUTION TO VERIFY EACH MEASUREMENT.
- B. USE EXTREME CAUTION BEFORE EXCAVATING IN EXISTING AREAS TO LOCATE EXISTING UNDERGROUND SERVICES.
- A. A VISUAL CHECK OF ELECTRICAL AND TELEPHONE CABLES, CONDUITS AND OTHER ITEMS SHALL BE MADE BY A T-MOBILE CONSTRUCTION SUPERVISOR BEFORE THESE ITEMS ARE PERMANENTLY INSTALLED. B. THE CONTRACTOR SHALL NOTIFY THE T-MOBILE CONSTRUCTION SUPERVISOR 24 HOURS PRIOR TO TRENCH
- BACK FILL 3.3 INSTALLATION
- A TRENCHING BACK FILLING BEDDING AND COMPACTING SHALL COMPLY WITH SITE WORK SPECIFICATIONS. B. DIG TRENCHES TO THE REQUIRED DEPTH AS SHOWN ON THE DRAWINGS WITHOUT POCKETS OR DIPS. REMOVE LARGE STONES FROM THE BOTTOM OF THE TRENCH AND FIRMLY TAMP LOOSE FILL IN THE BOTTOM BEFORE
- C. INSTALL UNDERGROUND CONDUIT WITH A MINIMUM 3-INCH TO 100-FOOT SLOPE OR TO A SLOPE SHOWN ON THE DRAWINGS.
- D. UNLESS SHOWN OTHERWISE ON THE DRAWINGS, TERMINATE AND CAP ALL STUB-UPS 12 INCHES ABOVE FINISHED GRADE ELEVATION.
- F WHEREVER CONDUITS CROSS UNDER ROADWAYS, USE GALVANIZED RIGID STEEL CONDUITS IN ALL CASES. EXTENDING 5 FEET BEYOND THE EDGE OF THE ROAD BED. MINIMUM DEPTH FOR CONDUIT SHALL BE 4 FEET
- F. MARK UNDERGROUND CONDUITS WITH A 6-INCH WIDE RED POLYETHYLENE TAPE BURIED 6 INCHES UNDER THE SURFACE DIRECTLY OVER THE CONDUITS. MARK THE TAPE THUS: CAUTION-BURIED ELECTRICAL CABLE. G. FOR SEALING CONDUITS, USE ONLY NON-THERMOPLASTIC COMPOUNDS SUCH AS J.M. DUXSEAL, OR AN APPROVED SUBSTITUTE. THE COMPOUND SHALL HAVE NO EFFECT ON RUBBER OR RUBBER-LIKE INSULATIONS, LEAD, ALUMINUM OR FERROUS ALLOYS; IT SHALL BE INSOLUBLE IN WATER AND WITHSTAND MAXIMUM TEMPERATURE RANGES OF THE LOCALITY.
- H. COAXIAL REFER TO NOKIA ANTENNA AND COAXIAL CABLE INSULATION PROCEDURES.
- I. ANTENNA REFER TO NOKIA ANTENNA AND COAXIAL CABLE INSULATION PROCEDURES.
- J. LNA/MHA REFER TO NOKIA ANTENNA AND COAXIAL CABLE INSULATION PROCEDURES. END OF ELECTRICAL **SPECIFICATIONS**
- PROJECT SPECIFICATION 16670 (GROUNDING)
- 1.1 SCOPE
- A. THIS SPECIFICATION PRESCRIBES THE REQUIREMENTS FOR FURNISHING, INSTALLATION AND TESTING OF THE GROUNDING CABLE, CONNECTORS AND ASSOCIATED COMPONENTS AS INDICATED ON THE DRAWINGS. 8. APPLICATIONS OF ELECTRICAL GROUNDING AND BONDING WORK SPECIFIED IN THIS SPECIFICATION INCLUDE THE FOLLOWING:
- 1 FENCE AND GATE POSTS
- 2. ELECTRICAL POWER SYSTEMS 3. GROUNDING ELECTRODES
- . GROUND BUS BAR
- SERVICE EQUIPMENT
- 6 ENCLOSURES
- 7. MONOPOLE/LATTICE TOWER
- B. ICF BRIDGE

- 1.2 REFERENCES: THE PUBLICATIONS LISTED BELOW FORM PART OF THIS SPECIFICATION. EACH PUBLICATION SHALL BE THE LATEST REVISION AND ADDENDUM IN EFFECT ON THE DATE THIS SPECIFICATION IS ISSUED FOR CONSTRUCTION, UNLESS NOTED OTHERWISE. EXCEPT AS MODIFIED BY THE REQUIREMENTS SPECIFIED HEREIN, OR THE DETAILS OF THE DRAWINGS, WORK INCLUDED IN THIS SPECIFICATION SHALL CONFORM TO THE APPLICABLE PROVISIONS OF THESE PUBLICATIONS.
- A. ANSI (AMERICAN NATIONAL STANDARDS INSTITUTE)
- B. IEEE (INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS)
- C. NEC (NATIONAL ELECTRICAL CODE), LATEST EDITION
- D. NEMA (NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION)
- E. NESC (NATIONAL ELECTRICAL SAFETY CODE), LATEST EDITION . OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION)
- G III (UNDERWRITERS LABORATORIES)
- H. APPLICABLE LOCAL CODES AND ORDINANCES
- PART II' PRODUCTS
- 2.1 MATERIALS' EXCEPT AS OTHERWISE INDICATED, PROVIDE ELECTRICAL GROUNDING AND BONDING SYSTEMS INDICATED; WITH ASSEMBLY OF MATERIAL, INCLUDING, BUT NOT LIMITED TO, GROUNDING ELECTRODES, BONDING JUMPER AND ADDITIONAL ACCESSORIES NEEDED FOR A COMPLETE INSTALLATION. WHERE MORE THAN ONE TYPE COMPONENT PRODUCT MEETS INDICATED REQUIREMENTS, SELECTION IS INSTALLER'S OPTION. WHERE MATERIALS OR COMPONENTS ARE NOT INDICATED, PROVIDE PRODUCTS WHICH COMPLY WITH NEC, U.L. AND IEEE REQUIREMENTS AND WITH ESTABLISHED INDUSTRY STANDARDS FOR THOSE APPLICATIONS INDICATED. A GROUNDING
- THE EQUIPMENT SHALL BE GROUNDED AS FOLLOWS, AS SHOWN ON THE DRAWINGS AND IN COMPLIANCE WITH NEC ARTICLE 250 AND STATE AND LOCAL CODES.
- 2. GROUND RODS AND QUANTITY SHOWN ON THE DRAWINGS ARE DIAGRAMMATIC. THE CONTRACTOR SHALL PERFORM A GROUND-RESISTANCE-TO-EARTH TEST. SHOULD THE INSTALLATION HAVE A RESISTANCE OF 5 OHMS OR MORE, CONTRACTOR SHALL INSTALL MORE GROUND RODS AS NECESSARY SO THAT THE OVERALL GROUND-TO-EARTH RESISTANCE IS LESS THAN 5 OHMS.
- 3. INSTALL FLECTRICAL GROUNDING AND BONDING SYSTEMS AS INDICATED. IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, NEC'S "STANDARD OF INSTALLATION," AND IN ACCORDANCE WITH RECOGNIZED INDUSTRY PRACTICES TO ENSURE THAT PRODUCTS COMPLY WITH REQUIREMENTS.
- . COORDINATE WITH OTHER ELECTRICAL WORK AS NECESSARY TO INTERFACE INSTALLATION OF ELECTRICAL GROUNDING AND BONDING SYSTEMS.
- 5 INSTALL GROUND CONDUCTORS A MINIMUM OF 36 INCHES BELOW FINISHED GRADE WHICH ENCIRCLES THE TOWER AND EQUIPMENT AND ARE CONNECTED TO EACH DRIVEN GROUND ROD. GROUND TRENCH SHALL BE AT LEAST 24 INCHES AWAY FROM FOUNDATIONS.
- . TIGHTEN GROUNDING AND BONDING CONNECTORS, INCLUDING SCREWS AND BOLTS, IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED TORQUE TIGHTENING VALUE FOR CONNECTORS AND BOLTS. WHERE MANUFACTURER'S TORQUING REQUIREMENTS ARE NOT INDICATED, TIGHTEN CONNECTIONS TO COMPLY WITH TIGHTENING TORQUE VALUE SPECIFIED IN U.L. 486A TO ASSURE PERMANENT AND EFFECTIVE GROUNDING. 7. APPLY CORROSION-RESISTANT FINISH (NO-OX) TO FIELD-CONNECTIONS. AT COPPER GROUND BARS AND PLACES WHERE FACTORY APPLIED PROTECTIVE COATING HAVE BEEN DESTROYED, WHICH ARE SUBJECTED TO CORROSIVE AND FOR OXIDATION PROCESS.
- 8. ON EXISTING LATTICE TOWERS, WATER TOWERS AND ROOF TOPS WHEN A NEW GROUNDING SYSTEM IS INSTALLED, THE CONTRACTOR SHALL TIE THE NEW GROUND SYSTEM TO THE EXISTING WATER TOWER, LATTICE TOWER STRUCTURAL STEEL OR BUILDING STRUCTURAL STEEL AS THE CASE MAY BE AT LEAST AT ONE LOCATION SO THAT THEY ARE AT THE SAME POTENTIAL
- B. GROUND RODS
- GROUND RODS SHALL BE 5/8" DIAMETER 8'-0" LONG, COPPER CLAD DRIVEN ROD(S).
- . GROUND ROD(S) SHALL BE LOCATED AT THE PERIMETER OF EQUIPMENT AS TO CREATE A GROUND RING AS SHOWN ON THE DRAWINGS.
- 3. GROUND ROD(S) SHALL BE SPACED AT A MINIMUM SPACING OF 8'-0" AND A MAXIMUM SPACING OF 10'-0". 4. GROUND RODS SHELL BE BURIED BELOW THE FROSTLINE. AT NO TIME SHALL THIS DEPTH BE LESS THAN 18" BELOW FINISHED GRADE.
- 5. GROUND RODS WHICH CANNOT BE DRIVEN STRAIGHT DOWN THE ENTIRE (10) FEET, SHALL BE DRIVEN AT AN ANGLE NOT GRATER THAN 45 DEGREES (NEC 250-83 AND 250-84).
- 6. GROUND ROD LOCATIONS SHALL BE NOTED ON THE AS-BUILT DRAWING COMPLETE WITH DIMENSIONS.
- PROVIDE GROUND TEST WELLS AS SHOWN ON THE CONSTRUCTION DRAWINGS.
- C GROUND CONDUCTOR
- 1. ALL DIRECT BURIED GROUND CONDUCTORS SHALL BE TINNED SOLID (#2 AWG) WIRE. BURIED GROUND CONDUCTOR SHALL BE INSTALLED AT MINIMUM DEPTH OF 36" BELOW GRADE.
- 2. ALL SUB GRADE GROUND CONNECTIONS SHALL BE MADE THROUGH THE USE OF EXOTHERMIC WFI D PROCESS. CONNECTIONS SHALL INCLUDE ALL CABLE TO CABLE SPLICES, TEES AND ALL GROUND ROD CONNECTIONS. MOLD, WELD KITS, ETC., SHALL BE MANUFACTURED BY CADWELD AND SHALL BE INSTALLED AS PER THE MANUFACTURER'S INSTRUCTIONS.
- 3. GROUND CONDUCTORS SHALL BE ROUTED IN THE SHORTEST AND STRAIGHTEST DISTANCES POSSIBLE TO MINIMIZE TRANSIENT VOLTAGE RISES. CONDUCTORS SHALL BE INSTALLED AS FOLLOWS'
- A. ALL GROUND CONDUCTORS SHALL FOLLOW A CONTINUOUS DOWNWARD PATTERN TO THE GROUND SOURCE. (NEVER RUN GROUND CONDUCTOR IN AN UPWARD DIRECTION.)
- CONDUCTORS SHALL BE INSTALLED WITH A MINIMUM OF 12 INCH MINIMUM BENDING RADIUS WHEN THE MINIMUM BENDING RADIUS CANNOT BE ACHIEVED, GROUND CABLES SHALL BE ROUTED AT 90 DEGREE BENDS WITH THE USE OF EXOTHERMIC CONNECTIONS AT 90 DEGREES. THE INTENT IS TO ELIMINATE THE CABLE BEND RADIUS AND REPLACE THE RADIUS WITH AN EXOTHERMIC CONNECTION.
- PART III: FXECUTION 3.1 PREPARATION
- . ALL SURFACES TO WHICH GROUND CONNECTIONS WILL BE MADE SHALL BE FREE OF PAINT, GALVANIZING DIRECT CORROSION ETC .. B. ALL METAL SURFACES EXPOSED ON GROUNDING SHALL BE EITHER COLD GALVANIZE, OR PAINTED TO MATCH ORIGINAL SURFACE.
- EXAMINE AREAS AND CONDITIONS UNDER WHICH ELECTRICAL GROUNDING AND BONDING CONNECTIONS ARE TO BE MADE AND NOTIFY T-MOBILE CONSTRUCTION SUPERVISOR IN WRITING OF CONDITIONS DETRIMENTAL TO PROPER COMPLETION OF WORK DO NOT PROCEED WITH WORK LINTIL LINSATISFACTORY CONDITIONS HAVE B. THE CONTRACTOR SHALL NOTIFY THE T-MOBILE CONSTRUCTION SUPERVISOR 24 HOURS PRIOR TO TRENCH BACK FILL ALL WORK DONE BELOW FINISHED GRADE SHALL BE INSPECTED BY THE AERIAL CONSTRUCTION SUPERVISOR DURING THAT PERIOD OR THE CONTRACTOR SHALL PROCEED. 3.3 GROUND TESTING
- A. THE CONTRACTOR SHALL TEST THE GROUND ELECTRODE ROD RESISTANCE IN ACCORDANCE WITH THE METHODS OF MEASUREMENT SHOWN IN THE FALL OF POTENTIAL METHOD.
- TEST INSTRUMENTS SHALL OPERATE AT A FREQUENCY OTHER THAN 60 HERTZ AND SHALL CONTAIN STRAY CURRENT AND DC FILTERS. FAULT CURRENT PROTECTION AND HAVE SENSITIVITY TO OPERATE A LOW SIGNAL STRENGTH.
- C. PRIOR TO TESTING, THE CONTRACTOR SHALL DE-ENERGIZE ALL POWER SOURCES, DISCONNECT THE ELECTRODE CONDUCTOR FROM THE GROUND ROD, WEAR HIGH VOLTAGE RUBBER SAFETY GLOVES AND WILL NOT HANDLE TEST INSTRUMENTS IF AT ALL POSSIBLE.

- D. GROUND TESTS ARE TO BE PERFORMED BY QUALIFIED PERSONS FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE EQUIPMENT AND THE HAZARDS INVOLVED.
- . AN INDEPENDENT, APPROVED OUTSIDE FIRM SHALL PERFORM THE GROUND TEST AS OUTLINED. ALL TEST RESULTS SHALL BE FORWARDED TO THE T-MOBILE CONSTRUCTION SUPERVISOR FOR APPROVAL. END OF GROUNDING SPECIFICATIONS CLOSE OUT DOCUMENTATION CLOSEOUT BOOK CONTAINING THE FOLLOWING' . AS BUILT DESIGN DRAWINGS
- 2. SWEEP TEST RESULTS
- 3. RESISTIVELY TEST
- 4 PHOTO DOCUMENTATION OF
- UNDERGROUND CONDUITS AND GROUND RING
- ANTENNA, COAXV, JUMPER ATTACHMENTS AND GROUND KIT ATTACHMENTS
- ANTENNA DOWN TILT MEASUREMENT USING AN INCLINOMETER ON THE BACK PLANE OF THE ANTENNA
- GROUND BAR ATTACHMENTS
- 5. SIGNED OFF PERMIT CARDS
- 6. CERTIFICATE OF OCCUPANCY
- 7. RETURN OF KEYS AND/OR ACCESS AUTHORIZATION
- B. ORIGINAL BUILDING PERMIT
- PART IV" GROUNDING SPECIFICATIONS
- 4.1 ALL GROUNDING SYSTEM CONDUCTORS AND CONNECTIONS BELOW GRADE SHALL BE THERMAL WELDS AT GROUND RODS AND AT A MINIMUM OF 30" BELOW GRADE.
- 4.2 ALL INSTALLATIONS SHALL BE FIELD VERIFIED.

CONSTRUCTION AT THE CONTRACTORS EXPENSE.

- 4.3 ALL GROUND WIRE SHALL BE #2 AWG BARE COPPER TINNED UNLESS NOTED OTHERWISE.
- 4.4 ALL GROUND WIRES SHALL PROVIDE A STRAIGHT DOWNWARD PATH TO GROUND WITH GRADUAL BEND AS REQUIRED. GROUND WIRES SHALL NOT BE LOOPED OR SHARPLY BENT.
- 4.5 THE CONTRACTOR SHALL COORDINATE INSTALLATION OF GROUND RODS AND GROUND RING WITH FOUNDATION AND UNDERGROUND CONDUIT
- 4.6 EACH EQUIPMENT CABINET SHALL BE CONNECTED WITH (2) #2 AWG INSULATED SOLID TINNED COPPER WIRE TO GROUND BAR. EQUIPMENT CABINETS SHALL EACH HAVE (2) CONNECTIONS.
- 4.7 ANTENNA GROUND KITS SHALL BE FURNISHED BY T-MOBILE AND INSTALLED BY ELECTRICAL CONTRACTOR. 4.8 KOPR-SHIELD ANTI-OXIDATION COMPOUND SHALL BE USED ON ALL GROUNDING CONNECTIONS.
- 4.9 ALL EXOTHERMIC CONNECTS SHALL BE INSTALLED UTILIZING THE PROPER CONNECTION/MOLD AND MATERIALS FOR THE PARTICULAR APPLICATION.
- 4.10 ALL BOLTED GROUNDING CONNECTIONS SHALL BE INSTALLED WITH A LOCK WASHER UNDER THE NUT. HARDWARE FOR BOLTED CONNECTIONS SHALL BE A MINIMUM OF 3/8" DIAMETER AND SHALL BE STAINLESS
- 4.11 GROUNDING WIRE SHALL NOT BE INSTALLED OR ROUTED THROUGH HOLES IN ANY METAL OBJECTS OR SUPPORTS TO PRECLUDE ESTABLISHING A "CHOKE" POINT.
- 4.12 PLASTIC CLIPS OR METAL CLIPS WHICH DO NOT COMPLETELY SURROUND THE GROUNDING CONDUCTORS SHALL BE USED TO FASTEN AND SUPPORT GROUNDING CONDUCTORS. FERROUS METAL CLIPS WHICH COMPLETELY SURROUND THE GROUNDING CONDUCTOR SHALL NOT BE USED.
- 4.13 STANDARD BUS BARS (CIGRE AND MIGR) SHALL BE FURNISHED AND INSTALLED. THEY SHALL NOT BE FABRICATED OR MODIFIED IN THE FIELD. 4.14 THE GROUNDING CONNECTION TO THE POWER AND TELCO SECTIONS OF THE PPC CABINET SHALL BE MADE
- BY CONNECTING A CONDUCTOR FROM THE GROUND RING TO THE FACTORY FURNISHED BUS BAR IN EACH COMPARTMENT
- 4.15 THE CONTRACTOR SHALL SUPPLY T-MOBILE WITH RESULTS FROM PRE-CONSTRUCTION (CO-LO ONLY) AND POST-CONSTRUCTION OHM TESTING (GROUND) RESULTS.
- 4.16 THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A "FALL OF POTENTIAL" TEST ON THE NEW SUPPLEMENTAL GROUND FIELD PRIOR TO FINAL CONNECTION OF THE GROUNDING SYSTEM TO EQUIPMENT. THE TEST SHALL BE PERFORMED BY A QUALIFIED AND CERTIFIED TESTING AGENT, PROVIDE INDEPENDENT TEST RESULTS TO THE PROJECT MANAGER FOR REVIEW. THE GROUND SYSTEM RESISTANCE TO EARTH GROUND SHALL NOT EXCEED FIVE (5) OHMS. IF THE GROUND TEST EXCEEDS THE MAXIMUM OF 5 OHMS, THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ADDITIONAL GROUND CONNECTIONS AS REQUIRED TO MEET THE 5 OHMS MIMIXAM
- 4.17 IF COAX ON ICE BRIDGE IS MORE THAT 6' FROM THE GROUND BAR AT THE BASE OF THE TOWER, A SECOND GROUND BAR WILL BE NEEDED AT THE END OF THE ICE BRIDGE RUN TO GROUND THE COAX GROUND KIT AND THE IN-LINE SURGE ARRESTORS 4.18 CONTRACTOR SHALL REPAIR/PLACE EXISTING GROUNDING SYSTEM COMPONENTS DAMAGED DURING

HOUSTON, TX 77046





9221 Lyndon B Johnson Fwy Suite 204, Dallas, TX 75243 Phone: 972-231-8893 Fax: 866-364-8375 www.allprocgi.com Registration No. 8242

ACGI NO: 17-7142, 18-2191 DRAWN BY: RM

CHECKED BY: REVISIONS DATE DESCRIPTION /17/18 REV. FOR DRAINAGE DISTRICT 1 04/17/18 REV FOR ZONING SURMITTAL /05/18 FINAL CD REV. FOR T-MOBILE REDLINES RM B 01/29/18 REV FOR T-MOBILE REDLINES | HR 11/22/17 PRELIMINARY CD



NOT VALID WITHOUT P.E. STAMP & SIGNATURE SITE INFORMATION T-MOBILE SITE #:

A3C0203B

**VERTICAL BRIDGE SITE #:** TX-5460

918 TALISMAN ROAD #A[E911] ROSHARON, TX 77583 FORT BEND COUNTY

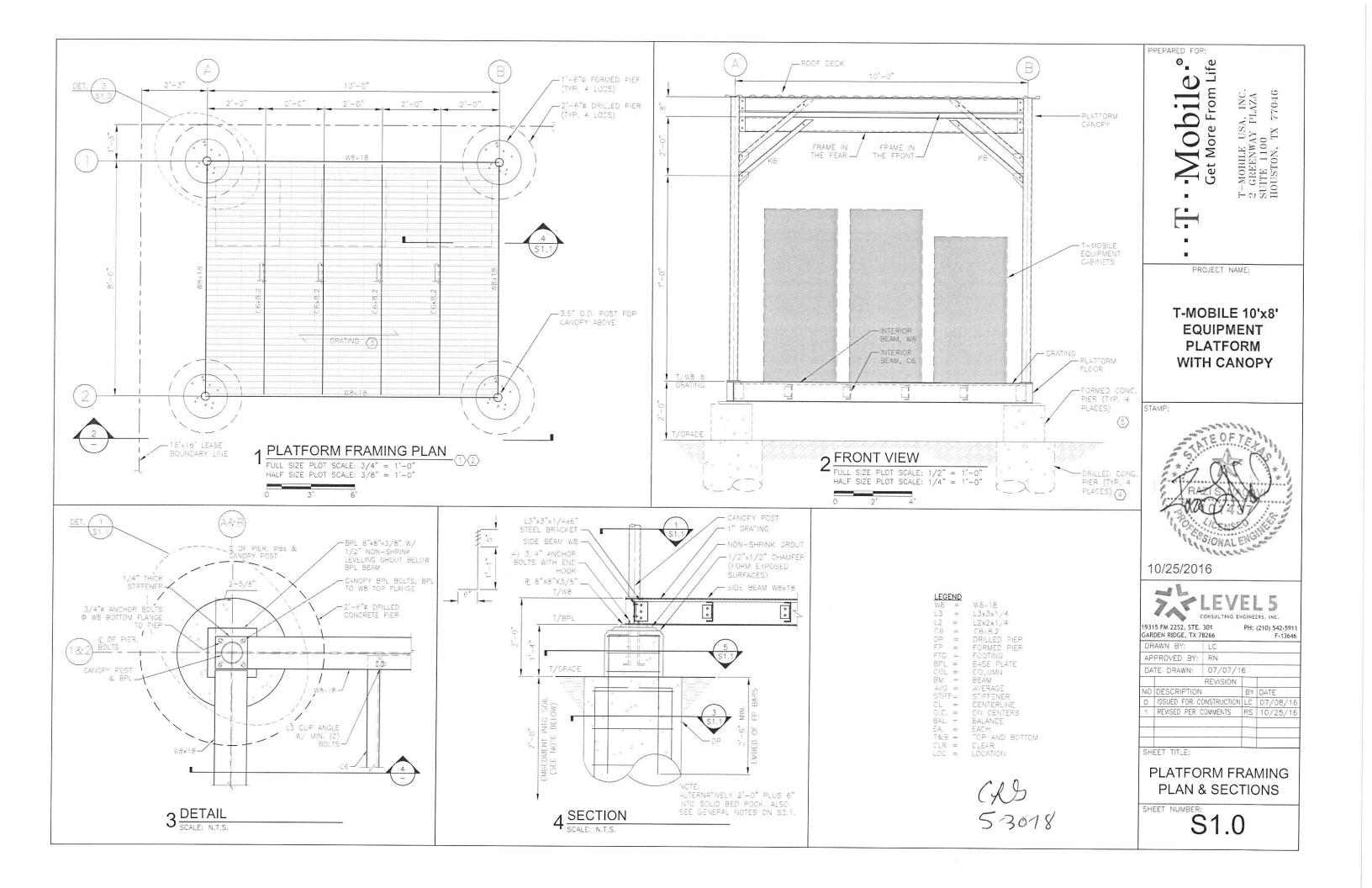
SHEET TITLE:

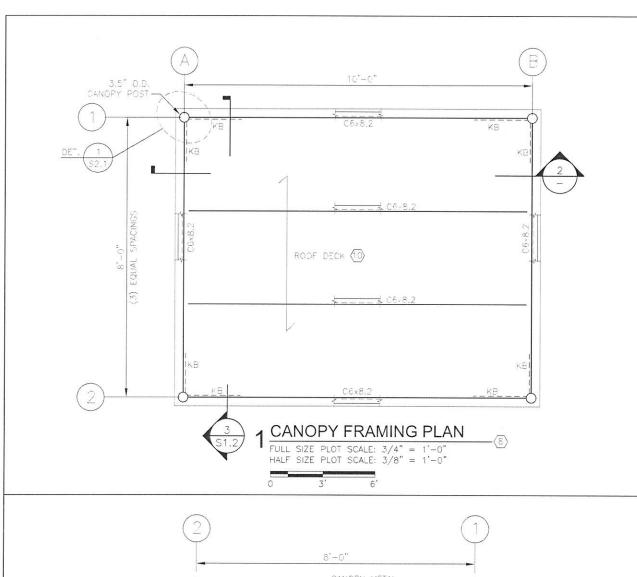
**GENERAL** NOTES

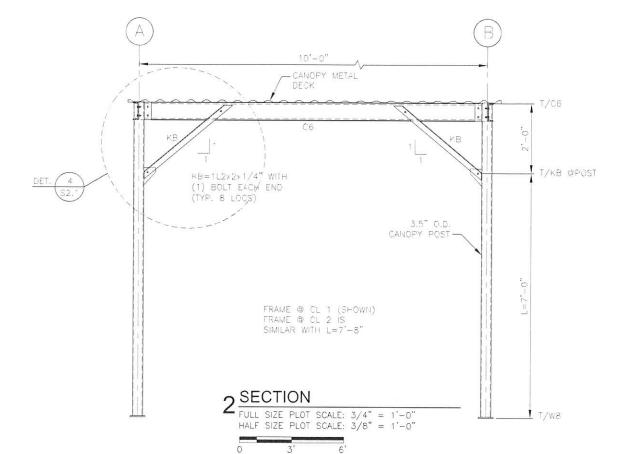
SHEET NUMBER:

**GENERAL NOTES** 

( S-3018







PREPARED FOR: STAMP:

T-MOBILE 10'x8' **EQUIPMENT PLATFORM** WITH CANOPY

PROJECT NAME:

-Mobile of Get More From Life

T-MOBILE USA, INC. 2 GREENWAY PLAZA SUITE 1100 HOUSTON, TX 77046

**©** 

10/25/2016



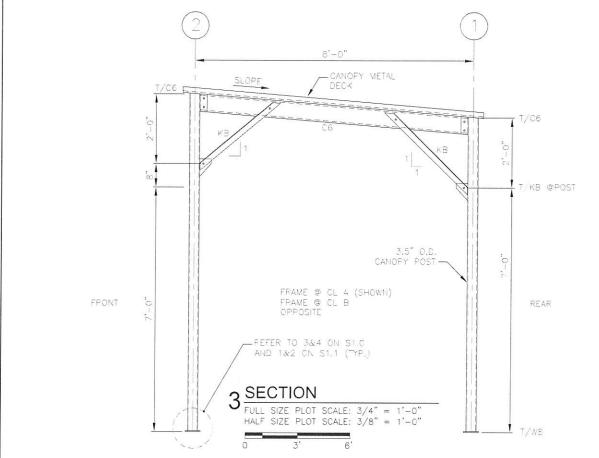
19315 FM 2252, STE. 301 PH: (210) 542-5911 GARDEN RIDGE, TX 78266 DRAWN BY: APPROVED BY: RN DATE DRAWN: 07/07/16 NO DESCRIPTION D ISSUED FOR CONSTRUCTION LC 07/08/18 1 REVISED PER COMMENTS RS 10/25/18

> PLAN & SECTIONS

**CANOPY FRAMING** 

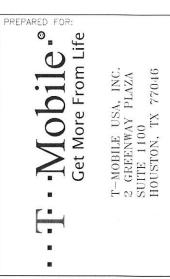
SHEET NUMBER S2.0

CHS 5-3078



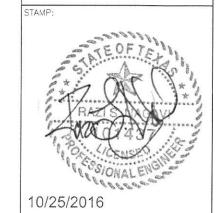
#### PLATFORM FRAMING DRAWING NOTES

- 1. PROVIDE W8X18 BEAMS ON CENTERLINES A&B CONTINUOUS OVER THE BEAM BASE PLATE. PROVIDE W8X18 BEAMS ON CENTERLINES 1 AND 2 FRAMED INTO THE LATTER. CONNECT W8 TO W8 BEAM WITH MINIMUM (1) L3"X3"X1/4"X0"-6" AND (3) 5/8" BOLTS. THE CLIP ANGLE MAY BE WELDED TO ONE W8 AND BOLTED TO THE OTHER.
- 2. PROVIDE INTERIOR (C6) BEAMS 1" LOWER THAN PERIMETER BEAMS TO ELIMINATE COPING. CONNECT C6 TO W8 BEAM WEB WITH MINIMUM (1) L3"X3"X1/4"X0'-6" AND (2) 5/8" BOLTS. THE CLIP ANGLE MAY BE WELDED TO W8 AND BOLTED TO C6. ALTERNATIVELY, CONTRACTOR MAY USE C8X11.5 IN LIEU OF C6 CHANNEL BEAMS WITH GRATING PLACED ON TOP OF ALL BEAMS.
- 3. THE PLATFORM FLOOR WILL BE COVERED WITH STANDARD SERRATED STEEL GRATING WITH 1"X3/16" BEARING BARS AT 19/16" OC AND CROSS BARS AT 4" OC BY MCNICHOLS OR APPROVED EQUIVALENT WITH BANDED ENDS AND EDGES. MAIN BEARING BARS OF THE GRATING SHALL RUN PERPENDICULAR TO INTERIOR CHANNEL BEAMS AND WILL BE FLUSH WITH THE TOP ELEVATION OF THE W8 BEAMS. PROVIDE CONTINUOUS BARS WELDED TO END W8 BEAMS ALONG CENTERLINES A & B TO SUPPORT GRATING ENDS. IF C8 INTERIOR BEAMS ARE UTILIZED, GRATING WILL BEAR ON THE PERIMETER BEAMS AS WELL AS INTERIOR BEAMS. GRATING SHALL BE POSITIVELY ATTACHED TO THE PLATFORM STEEL AS PER MANUFACTURER RECOMMENDATIONS TO ACT AS A DIAPHRAGM.
- 4. DRILLED PIERS AS FOUNDATIONS OF THE PLATFORM AND CANOPY SHALL EXTEND INTO FIRM CLAYEY SOILS DESIGNATED AS "CL" AND ACHIEVE INDICATED MINIMUM ALLOWABLE END BEARING AND SIDE FRICTION STRESSES. IF FILL IS ENCOUNTERED, THE INDICATED MINIMUM DEPTH SHALL START FROM THE BOTTOM OF THE FILL MATERIAL. THE EMBEDMENT DEPTH SHALL BE INCREASED UNTIL SAID ALLOWABLES ARE OBTAINED. PROVIDE CASING DURING THE DRILLING AND POURING PROCESS AS SOFT SOILS OR FILL MATERIAL ARE ENCOUNTERED TO PROTECT DRILLED HOLE WALL.
- FORMED PIER SHALL USE ROUND SONO—TUBE OR APPROVED EQUIVALENT CENTERED ON THE DRILLED PIER, PROVIDE SMOOTH TOP SURFACE AND CHAMFERED EXPOSED EDGES. THE ELEVATION TOP OF THE FORMED PIER TO ALLOW FOR '%" +/- THICK NON—SHRINK ADJUSTMENT GROUT.
- 6. HANDRAIL IS NOT REQUIRED PER OSHA FOR PLATFORMS WITH OVERALL HEIGHT OF 30" OR LESS ABOVE GRADE. HOWEVER, IF REQUIRED BY T-MOBILE CONSTRUCTION MANAGER, PROVIDE LADDER AND / OR HANDRAIL SYSTEM AS PER THE MOST STRINGIEST REQUIREMENT OF THE OSHA OR GOVERNING BUILDING CODE.
- 7. IF REQUIRED BY T-MOBILE CONSTRUCTION MANAGER, PROVIDE H-FRAME CONSISTING OF (3) 3.5" ODX6'-O" SCHEDULE 40 PIPE POSTS POSITIVELY ATTACHED TO THE PLATFORM PERIMETER BEAMS. COORDINATE POST LOCATIONS WITH PM AND PLATFORM BEAM LOCATIONS. PROVIDE UNI-STRUTS ATTACHED TO POSTS TO COMPLY WITH T-MOBILE LAYOUT.
- 8. PROVIDE A CANOPY AS SHOWN. CANOPY POSTS SHALL BE CENTERED ON TOP OF THE PLATFORM W8 BEAMS AND PIERS. PROVIDE 1" PER FOOT SLOPE FOR THE CANOPY FRAME AND METAL DECK. FRONT ELEVATION WILL BE HIGHER AND SURFACE WATERS WILL DRAIN TO THE REAR OF THE CANOPY, PROVIDE KNEE BRACING ACCORDING TO THE INDICATED DETAILS FOR THE LATERAL STABILITY OF THE CANOPY FRAME. PROVIDE TEMPORARY LATERAL SUPPORT PRIOR TO AND DURING THE INSTALLATION OF KNEE BRACES. THE TEMPORARY SUPPORT WILL MAINTAINED UNTIL ALL BRACES ARE INSTALLED AND FUNCTIONAL.
- NOTCH THE CANOPY POST AT THE TOP, FABRICATE CRUCIFORM, INSERT INTO THE NOTCH IN THE POST, AND WELD. PROVIDE 1" WELD ON TOP AND BOTTOM OF THE CRUCIFORM PLATES INSIDE POST. PROVIDE FULL WELDING OF THE PLATES AROUND NOTCH IN OUTSIDE OF THE POST.
- 10. THE METAL DECK SHALL BE VULCRAFT C.6X24 GAUGE OR APPROVED EQUIVALENT. FOLLOW STEEL DECK INSTITUTE (SDI) AND MANUFACTURER RECOMMENDATIONS FOR HANDLING, SIDE/ OVERLAP LENGTH, AND INSTALLATION OF METAL DECK SHEETS. THE METAL DECK MUST BE POSITIVELY ATTACHED TO THE SUPPORTING INTERIOR AND EXTERIOR BEAMS IN ACCORDANCE WITH THE DECK MANUFACTURER RECOMMENDATIONS. AS MINIMUM USE CONNECTIONS AT EACH BEAM LOCATION AND AT 12" OC AT SHEET ENDS. CONNECTIONS MAY BE 5/8" DIAMETER PUDDLE WELDS WITH THICK WASHERS OR #10 SCREWS WITH THICK WASHERS.
- 11. PROVIDE STRUCTURAL STEEL AND REINFORCED CONCRETE WORK SHOP DRAWINGS FOR ENGINEER'S REVIEW PRIOR TO FABRICATIONS OR CONSTRUCTION, FABRICATION SHALL BE IN ACCORDANCE WITH THE APPROVED SHOP DRAWINGS.
- 12. ALL STRUCTURAL STEEL MEMBERS SHALL BE HOT-DIPPED GALVANIZED. ABRADED AND OR WELDED AREAS SHALL BE CLEANED THOROUGHLY AND COVERED WITH ZINC RICH COLD GALVANIZING MATERIAL. COLD GALVANIZING MATERIAL AND THICKNESS TO BE SUBMITTED FOR APPROVAL.



PROJECT NAME:

T-MOBILE 10'x8'
EQUIPMENT
PLATFORM
WITH CANOPY





SHEET TITLE:

DRAWING NOTES

SHEET NUMBER

(AD 5-30-18

S3.0

#### STRUCTURAL CONCRETE AND STEEL GENERAL NOTES

#### CODES AND SPECIFICATIONS

INTERNATIONAL BUILDING CODE, CURRENT EDITION AS ADOPTED BY THE LOCAL BUILDING CODE

ACI 318 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, LATEST EDITION.

ACI 301— LATEST EDITION, SPECIFICATION FOR STRUCTURAL CONCRETE FOR BUILDINGS.

AISC MANUAL OF THE STEEL CONSTRUCTION, LATEST EDITION.

#### CONCRETE AND FOUNDATIONS

- A. THE FOUNDATIONS HAVE BEEN DESIGNED FOR GRAVELY CLAYS, INORGANIC CLAYS WITH LOW MEDIUM PLASTICITY, SANDY CLAYS, AND SILTY CLAYS DESIGNATED AS "CL" IN ACCORDANCE WITH UNIFIED SOIL CLASSIFICATION WITH ASSUMED MINIMUM NET END BEARING STRESS OF 1000 PSF ALONG WITH A SKIN FRICTION OF 250 PSF IN UNDISTURBED SOILS. ASSUMED SOIL PARAMETERS TO BE FIELD VERIFIED BY ACCEPTABLE METHODS.
- B. FOOTINGS ARE TO BE POURED WITHOUT SIDE FORM AGAINST NEAT CUT EXCAVATION, EXCEPT IF NOTED OTHERWISE.
- C. SET COLUMN DOWELS AND ANCHOR BOLTS WITH TEMPLATE, PRIOR TO CONCRETING.
- D. IF EXISTING UTILITIES ARE UNCOVERED DURING EXCAVATION, STOP WORK AND NOTIFY OWNER'S REPRESENTATIVE.
- F. BACKFILL WITH MATERIAL APPROVED BY THE GEOTECHNICAL ENGINEER. IN GENERAL, THE FILL MATERIAL SHALL BE PLACED IN UNIFORM LIFTS NO THICKER THAN 6 INCHES FOR COHESIVE, PLASTIC SOILS AND 10 INCHES FOR GRANULAR MATERIAL. COMPACT TO 100% OF STANDARD PROCTOR DENSITY PER ASTM D698.

#### CONCRETE

- A. ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF ACI SPECIFICATION 301— LATEST EDITION UNLESS HEREIN MODIFIED. CONCRETE WORK SHALL FURTHER FOLLOW ACI RECOMMENDED PRACTICES CONTAINED IN THE ACI FIELD REFERENCE MANUAL [PUBLICATION SP—15 (73)]. A COPY OF THE FIELD REFERENCE MANUAL SHALL BE KEPT ON THE JOB SITE AT ALL TIMES.
- B. ALL STRUCTURAL REINFORCED CONCRETE HAS BEEN DESIGNED IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318).
- C. PROVIDE A STEEL TROWEL FINISH FOR ALL INTERIOR CONCRETE FLATWORK.
  PROVIDE A NONSLIP SOFT—BROOM FINISH FOR ALL EXTERIOR EXPOSED CONCRETE FLATWORK. PROVIDE A NONSLIP ROUGH—BROOM FINISH FOR RAMPS.
- D. FINISH SURFACES TO THE FOLLOWING TOLERANCES, MEASURED WITHIN 24 HOURS ACCORDING TO ASTM E 1155/E 1155M:
  SPECIFIED OVERALL VALUES OF FLATNESS, F(F) [25]; AND LEVELNESS, F(L) [20]; WITH MINIMUM LOCAL VALUES OF FLATNESS, F(F) [17]; AND LEVELNESS, F(L) [15].
- E. PROVIDE WET COVERING OR CURING COMPOUND CURING FOR ALL CONCRETE. CURING COMPOUND TO BE COMPATIBLE WITH FLOOR COVERING, SEALERS, ETC.
- F. PLACE NO OPENINGS, SLEEVES, INSERTS, ETC., IN CONCRETE WORK UNLESS CRITERIA INDICATED ON STRUCTURAL DRAWINGS IS MET.
- G. ALL EXISTING CONDITIONS AND DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO FABRICATION OF REINFORCEMENT.
- H. CONCRETE STRENGTHS (AT 28 DAYS):

DRILLED PIER AND FOOTING CONCRETE: 3000 PSI

#### REINFORCING STEEL

- A. ALL BARS, STIRRUPS AND TIES (ASTM A 615 OR A 616) 60 KSI YIELD
- B. PROVIDE COMPRESSION SPLICES FOR ALL SPLICES UNLESS OTHERWISE NOTED. CONTINUOUS REINFORCEMENT SPLICES SHALL BE STAGGERED UNLESS NOTED OTHERWISE.
- C. CLEARANCES BETWEEN REINFORCING BARS AND CONCRETE SURFACES ACI MINIMUM UNLESS OTHERWISE NOTED.
- D. NO REINFORCEMENT SHALL BE WELDED OR BENT IN THE FIELD UNLESS SPECIFICALLY SHOWN OR NOTED ON THE SHOP DRAWINGS. TACK WELDING OF REINFORCEMENT GRIDS SHALL CONFIRM TO ASTM A 184.
- E. ALL REINFORCEMENT SHALL BE HELD SECURELY IN PLACE PRIOR TO CONCRETE PLACEMENT.
- F. PROVIDE SHOP DRAWINGS FOR THE REINFORCEMENT FOR REVIEW PRIOR TO FABRICATION AND CONCRETE POUR.

#### COORDINATION

- A. FIELD VERIFY EXISTING DIMENSIONS AND ELEVATIONS THAT AFFECT FABRICATION LENGTHS
  OF MEMBERS PRIOR TO SUBMITTAL OF SHOP DRAWINGS OR FABRICATION.

  A. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES,
  CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONTRACTOR WILL BE SOLELY AND CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONTRACTOR WILL BE SOLELY AND CONTRACTOR WILL BE SOLED WITH THE PROPERTY WILL BE SOLELY AND CONTRACTOR WILL BE SOLE
- B. REFER TO MECHANICAL, PLUMBING, ELECTRICAL, AND ARCHITECTURAL DRAWINGS FOR ADDITIONAL EMBEDDED ITEMS, SLEEVES, FLOOR PITCHES, FILLS AND DEPRESSIONS.

#### CONSTRUCTION

- A. PROVIDE CONCRETE WITH MAXIMUM WATER—CEMENT (W/C) RATIO AS FOLLOWS: DRILLED PIERS AND FOOTINGS: 0.60
- B. MAXIMUM SLUMP AT POINT OF PLACEMENT IS 4"+/- 1 INCH, UNLESS OTHERWISE INDICATED IN THE SPECIFICATIONS. MAXIMUM SLUMP AT DRILLED PIERS IS 6", WITH A TOLERANCE OF 1 INCH.

#### STRUCTURAL STEEL NOTES

#### STRUCTURAL STEEL

- A. ALL STRUCTURAL STEEL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, LATEST EDITION; AND THE AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES, LATEST EDITION.
- B. MATERIAL: ASTM A 36 STRUCTURAL STEEL SHAPES, RODS, AND PLATES.

  ASTM A 500 (GRADE B, FY = 46 KSI) STRUCTURAL TUBING.

  ASTM A 53 (TYPE E OR S GRADE B, FY = 35 KSI) STRUCTURAL PIPE.

  ASTM A 325 HIGH-STRENGTH ALL FIELD BOLTS. SIZE TO BE 5/8" DIAMETER UNO.

  ASTM A 307 ALL TEMPORARY ERECTION BOLTS. ALL ANCHOR BOLTS.
- C. CONNECTIONS: ALL CONNECTIONS SHALL BE AISC TYPE 2 CONNECTIONS UNLESS NOTED. DESIGN ALL CONNECTIONS NOT SHOWN ON PROJECT DRAWINGS. UNLESS SPECIFIC REACTIONS, MOMENTS, SHEARS AND AXIAL FORCES ARE INDICATED, PROVIDE CONNECTIONS FOR THE REACTION DUE TO THE MAXIMUM UNIFORM LOAD WHICH THE MEMBER CAN SUPPORT AT ITS SPAN SHOWN IN THE ALLOWABLE UNIFORM LOAD TABLES, PART 2 OF THE AISC STEEL CONSTRUCTION MANUAL, FOR THE SPECIFIED BEAM YIELD STRENGTH. MINIMUM NUMBER OF BOLT ROWS SHALL BE EQUAL TO THE BEAM DEPTH IN INCHES DIVIDED BY 4.0.
- D. ALL WELDING SHALL BE IN ACCORDANCE WITH "THE STRUCTURAL WELDING CODE", AWS D1.1, USING E70 ELECTRODES UNLESS NOTED OTHERWISE. ALL WELDERS, SHOP AND FIELD, SHALL BE AWS CERTIFIED.
- E. PROVIDE NON-SHRINK, NONMETALLIC GROUT AT ALL BASE PLATES, MINIMUM COMPRESSIVE STRENGTH IS 4000 PSI.
- F. GALVANIZING: ALL GALVANIZED STEEL, IF INDICATED ON THE DRAWINGS, SHALL BE CLEANED OF FOREIGN MATERIAL AS REQUIRED TO OBTAIN A UNIFORM (IN QUALITY) GALVANIZED FINISH. REFERENCE ASTM A123, A385 AND A386.
- G. POWER TOOL CLEAN ALL WELDS AND ADJACENT AREAS TO REMOVE FLUX AND SPLATTER PRIOR TO GALVANIZING OR TOUCH UP. AFTER INSTALLATION, ABRADED AREAS AND FIELD WELDS SHALL RECEIVE A SPOT COAT OF ZINC-RICH COLD GALVANIZING COMPOUND PER MANUFACTURER'S INSTRUCTIONS. (I.E. COLD GALVANIZING NO. 740 BY DEVOU SUPPLY CO.)
- H. SHOP DRAWINGS CONTAINING COMPLETE DETAILS SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION.
- I. ALL EXISTING CONDITIONS AND DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO FABRICATION OF STRUCTURAL STEEL.
- J. PROVIDE STRUCTURAL STEEL SHOP DRAWINGS FOR ENGINEER'S REVIEW PRIOR TO FABRICATION. FABRICATION SHALL BE ACCORDING TO THE APPROVED SHOP DRAWINGS.

#### COORDINATION

A. FIELD VERIFY EXISTING DIMENSIONS AND ELEVATIONS THAT AFFECT FABRICATION LENGTHS OF MEMBERS PRIOR TO SUBMITTAL OF SHOP DRAWINGS OR FABRICATION.

#### CONSTRUCTION

A. BRACE ENTIRE STRUCTURE AS REQUIRED TO MAINTAIN STABILITY UNTIL COMPLETE AND FUNCTIONING AS THE DESIGNED UNIT.

#### SAFETY

A. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF JOB SITE, INCLUDING COMPLIANCE WITH ALL REGULATORY AGENCIES AND SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

#### DESIGN LOADS (PSF)

Α.	GROUND SNOW LOAD (PG)	25
	EXPOSURE FACTOR (CE)	0.7
	SNOW LOAD IMPORTANCE FACTOR (I)	1.0
	LIVE LOAD	20
	CABINET LOADING	100 PSF

B. WIND:

TELECOMMUNICATIONS FACITITY W/ RISK CATEGORY II
SURVIVAL 3 SECOND WIND SPEED 139 MPH
EQUIVALENT 3 SECOND WIND SPEED 110 MPH
IMPORTANCE FACTOR 1
WIND EXPOSURE C

C. SEISMIC:

SHORT PERIOD ACCELERATION COEFFICIENT	1.4
1 SECOND PERIOD ACCELERATION COEFFICIENT	2.05
SITE CLASSIFICATION	AVG OF C & E
SHORT PERIOD ACCEL,	.0.11
1 SECOND PERIOD ACCEL,	0.10
IMPORTANCE FACTOR	1
R FACTOR FOR BRACED FRAME	3

D. PLATFORM TOTAL LIVE LOAD INCLUDING MAINTENANCE PERSONNEL:
E. CANOPY LIVE LOAD

4600 LBS 20 PSF

#### RISK CATEGORY NOTE:

THIS TELECOMMUNICATION PROJECT WITH RISK CATEGORY II DOES NOT PROVIDE SERVICE TO STRUCTURES/FACILITIES DESIGNATED IN HIGHER RISK CATEGORIES AND DOES NOT INVOLVE EMERGENCY RESPONSE EQUIPMENT ESSENTIAL TO EMERGENCY RESPONDERS TO COMPLETE THEIR TASK.

PREPARED FOR:

-Mobile .° Get More From Life

T-MOBILE USA, INC.
2 GREENWAY PLAZA
SUITE 1100
HOUSTON, TX 77046

PROJECT NAME:

T-MOBILE 10'x8'
EQUIPMENT
PLATFORM
WITH CANOPY

RAZIS SIONAL ENGINEER

10/25/2016



9315 FM 2252, STE. 301 PH: GARDEN RIDGE, TX 78266 DRAWN BY: LC

F-13646

DRAWN BY: LC

APPROVED BY: RN

DATE DRAWN: 07/07/16

REVISION

NO DESCRIPTION BY DATE

O ISSUED FOR CONSTRUCTION LC 07/08/16

1 REVISED PER COMMENTS RS 10/25/16

SHEET TITLE:

STRUCTURAL CONCRETE AND STEEL NOTES

SHEET NUMBER

S3.1

Cds 5-3018