

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

200		Way Permi		
	Permit No: 201	8-21686		
Appl	icant: Crown Castle NG Central LLC			
Job I	Location Site: 17500 W. Grand Parkway S.,	Sugar lan	d, TX 77479	
Bond	d No. Date of Bond:	5/12/2014	_Amount: _	\$50,000.00
Layin Road Comi Texas	above applicant came to make use of certain Foing, Construction, Maintenance, and Repair of Bulls, Streets, Highways, and Drainage Ditches in Fomissioners Court of Fort Bend County, Texas," as, of the Minutes of the Commissioners Court of Insistant with Chapter 181, Vernon's Texas Status	iried Cables ort Bend Co s passed by f Fort Bend	s, Conduits, and ounty, Texas, Ur of the Commission County, Texas,	Pole Lines, In, Under, Across or Along oder the Jurisdiction of the oners Court of Fort Bend County,
Note 1. 2.	Evidence of review by the Commissioners Cougrounds for job shutdown. Written notices are required: a. 48 hours in advance of constructions.	tion start u d and ready entOnline.c	p, and for final inspec org portal.	ction, submit notification to Permit
Com	his <u>3rd</u> day of <u>July, 2018</u> , Upon Motion of Comm missioner <u>Lestagl</u> , duly pu te of said above purpose is hereby acknowledge said notice be placed on record according to the	ut and carri d by the Co	ed, it is ORDERI ommissioners C	
Signa	ature /	Pres	ented to Comm	issioners Court and approved.
Ву:	County Engineer	Date	Recorded <u>7-0</u>	5-2018 Comm. Court No. 20A
Ву:	N/A	Cleri By:	of Commission	ners Court Willis
	Drainage District Engineer/Manager		Députy	



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

X Rigi	ht of Way Permit					
Con	nmercial Driveway	Permit				
Permit No	o: 2018-21686					
The following "Notice of Proposed Cable, Condattachments have been reviewed and the notic of Fort Bend County, Texas.						
(1) COMPLETE APPLICATION FORM:						
X a. Name of road, street, and/o	a. Name of road, street, and/or drainage ditch affected.					
X b. Vicinity map showing course	of directions					
X c. Plans and specifications		<u> </u>				
(2) BOND:						
County Attorney, approval whe applicable.	n					
X Perpetual bond currently posted.	Bond No:	Amount: \$50,000.00				
Performance bond submitted.	Bond No:	Amount:				
Cashier's Check	Check No:	Amount:				
(3) DRAINAGE DISTRICT APPROVAL (WHE	EN APPLICABLE):					
Drainage District Approval	_	Date				
We have reviewed this project and agree it r	neets minimum req	uirements.				
han Eghten		6/25/2018				
Permit Administrator		Date				

From: To: Gary Gehbauer Velasquez, Courtney

Cc:

Garza, Sandy

Subject:

RE: Fibernet Direct - HDPE Innerduct and Fiber under W. Grand Pkwy S along north ROW I-69 (in Sugar Land)

Date:

Friday, June 22, 2018 2:39:57 PM

Good afternoon Courtney,

Yes, I did speak to them. They did incorporate what I was looking for. This should be good to go from the toll road authority.

Have a good weekend.

Gary Gehbauer, PE BGE 10777 Westheimer, Suite 400 Houston, Texas 77042 (281)558-8700 voice (281)558-9706 fax ggehbauer@bgeinc.com

From: Velasquez, Courtney [mailto:Courtney.Velasquez@fortbendcountytx.gov]

Sent: Friday, June 22, 2018 2:36 PM

To: Gary Gehbauer < GGehbauer @bgeinc.com>

Cc: Garza, Sandy <Sandy.Garza@fortbendcountytx.gov>

Subject: FW: Fibernet Direct - HDPE Innerduct and Fiber under W. Grand Pkwy S along north ROW I-

69 (in Sugar Land)

Hi Gary,

Please see the information highlighted below. I have attached their site plan. If you would please confirm that they have complied with everything you have requested so that I can process this permit.

Thank you,

Courtney Velasquez Clerk III Fort Bend County Engineering

301 Jackson St., Suite 401 | Richmond, TX 77469

Email: Courtney.Velasquez@fortbendcountytx.gov

Phone: 281-633-7516

From: Garza, Sandy

Sent: Friday, June 22, 2018 11:04 AM

To: Randy Watkins

Subject: RE: Fibernet Direct - HDPE Innerduct and Fiber under W. Grand Pkwy S along north ROW I-69

(in Sugar Land)

Thank you!

From: Randy Watkins [mailto:FCS.Randy@outlook.com]

Sent: Friday, June 22, 2018 10:54 AM **To:** Garza, Sandy; Larry Anderson

Cc: Permits

Subject: RE: Fibernet Direct - HDPE Innerduct and Fiber under W. Grand Pkwy S along north ROW I-69

(in Sugar Land)

Sandy Garza,

I submitted the revised permit for the proposed fiber crossing at W. Grand Parkway S. and Southwest Freeway on the Fort Bend County permit site.

The application number is APP-23947 and the address is 17500 W. Grand Pkwy. S.

Larry and I spoke to Gary Gehbauer yesterday and reviewed his comments. After looking at the permit again ,he said the proposed was at 90 degrees. We have added his other requested notes.

If you have any questions, please give me a call.

Thank you,

Randy Watkins FiberComm Services, LLC 713-376-6012

From: Garza, Sandy < Sandy. Garza@fortbendcountytx.gov>

Sent: Wednesday, June 20, 2018 2:57 PM

To: Randy Watkins < FCS.Randy@outlook.com >; Larry Anderson < FC_S@live.com >

Cc: Permits < Permits@fortbendcountytx.gov>

Subject: FW: Fibernet Direct - HDPE Innerduct and Fiber under W. Grand Pkwy S along north ROW I-

69 (in Sugar Land)

Randy or Larry,

Please see below for comments from the FBTRA. After all comments have been addressed, you can upload the final drawings into our online permit application. This will be routed back to Gary or Phil with the FBTRA for final comments/no objection before proceeding with processing the permit and sending to Commissioners Court for approval.

Additional information regarding the permit process and the "customer portal" can be found here: https://www.fortbendcountytx.gov/government/departments/county-services/engineering/permits/working-in-right-of-wavs-drainage-ditches).

Please also continue to work with City of Sugar Land to acquire any necessary permits through their

office.

Thank you,
Sandy Garza
Development Assistant
Fort Bend County Engineering
301 Jackson Street, 4th Floor
Richmond, TX 77469
281-633-7518 (direct line)
Casandra.Garza@fortbendcountytx.gov
Website: www.fortbendcountytx.gov

From: Gary Gehbauer [mailto:GGehbauer@bgeinc.com]

Sent: Wednesday, June 20, 2018 12:08 PM

To: Garza, Sandy

Cc: Phil Martin (philmartin@mikestoneassociates.com); John Fletcher

(<u>JohnFletcher@mikestoneassociates.com</u>)

Subject: RE: Fibernet Direct - HDPE Innerduct and Fiber under W. Grand Pkwy S along north ROW I-69

(in Sugar Land)

Sandy,

I don't believe I have seen this before. Comments below.

- The crossing or the Grand Parkway must be at a 90 degree angle; not skewed as shown in the drawing.
- Depth note on page 6 of 7: Due to future bridge and/or retaining wall construction, the line must be at least 10 feet below the frontage road elevation.
- The line may have to be relocated if future construction conflicts with this location
- Need locations of bore pits and/or equipment crew locations within Grand Parkway right of way.
- Include FBTRA permit requirements (attached).

Thanks,

Gary

Gary Gehbauer, PE BGE 10777 Westheimer, Suite 400 Houston, Texas 77042 (281)558-8700 voice (281)558-9706 fax gqehbauer@bgeinc.com

From: Garza, Sandy [mailto:Sandy.Garza@fortbendcountvtx.gov]

Sent: Wednesday, June 20, 2018 11:12 AM **To:** Gary Gehbauer < <u>GGehbauer@bgeinc.com</u>>

Subject: FW: Fibernet Direct - HDPE Innerduct and Fiber under W. Grand Pkwy S along north ROW I-

69 (in Sugar Land)

Gary,

Any comments on this attached plan set? I don't know if they have submitted for permit yet; I had trouble finding it in our system if they did.

Thank you,
Sandy Garza
Development Assistant
Fort Bend County Engineering
301 Jackson Street, 4th Floor
Richmond, TX 77469
281-633-7518 (direct line)
Casandra.Garza@fortbendcountytx.gov
Website: www.fortbendcountytx.gov

From: Randy Watkins [mailto:FCS.Randy@outlook.com]

Sent: Wednesday, June 20, 2018 9:29 AM

To: Garza, Sandy **Cc:** Larry Anderson

Subject: RE: Fibernet Direct - HDPE Innerduct and Fiber under W. Grand Pkwy S along north ROW I-69

(in Sugar Land)

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Sandy Garza,

Per your request, I have attached a PDF file for the SH 99 (W. Grand Pkwy. S.) permit.

If you have any questions, please give me a call.

Thank you,

Randy Watkins FiberComm Services, LLC 713-376-6012

From: Larry Anderson < FC_S@live.com> **Sent:** Tuesday, June 19, 2018 5:06 PM

To: Randy Watkins < FCS.Randy@outlook.com>

Subject: FW: Fibernet Direct - HDPE Innerduct and Fiber under W. Grand Pkwy S along north ROW I-

69 (in Sugar Land)

From: Garza, Sandy <<u>Sandy.Garza@fortbendcountytx.gov</u>>

Sent: Tuesday, June 19, 2018 4:27 PM

To: FC_S@live.com

Subject: Fibernet Direct - HDPE Innerduct and Fiber under W. Grand Pkwy S along north ROW I-69

(in Sugar Land)

Mr. Anderson.

Fort Bend County has received two projects for ROW permits from your office. The one referenced above is wholly within the City of Sugar Land, but since it is along the Toll Road, it will still need a FBC ROW permit. I typically send these over to the FBTRA for review, but I'm having trouble scanning the document due to the multiple folds. Can you please send over a digital copy so I can forward over for review?

The project number at the top was HO 01006A-Span 336 – SH 99.

Thank you,
Sandy Garza
Development Assistant
Fort Bend County Engineering
301 Jackson Street, 4th Floor
Richmond, TX 77469
281-633-7518 (direct line)
Casandra.Garza@fortbendcountytx.gov
Website: www.fortbendcountytx.gov

Report This Message as Spam to FBCIT

Report This Message as Phishing to FBCIT

Attach the message to the E-Mail

Right-Click the Spam/Phish message (not the text) copy and paste into the body of the new message. Should show as an envelope under attachments.

Report This Message as Spam to FBCIT

Report This Message as Phishing to FBCIT

Attach the message to the E-Mail

Right-Click the Spam/Phish message (not the text) copy and paste into the body of the new message. Should show as an envelope under attachments.

Fort Bend County Notice of Construction in Right-of-Way

HO 01006A-Span 336 - SH 99

PROPOSED BORED HDPE INNERDUCT AND FIBER TO BE PLACED UNDER W. GRAND PARKWAY S. (SH 99) ALONG THE NORTH R.O.W. **OF SOUTHWEST FREEWAY (I-69)**

MAP AREA LOCATION:

A - LOC: HO 01006A /

167787-FLANAGAN

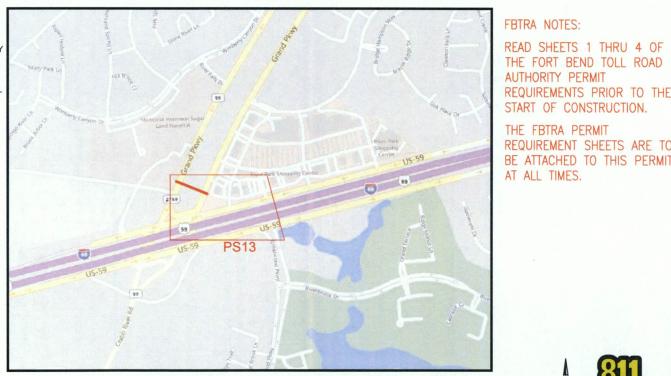
A - ADDRESS: 14000 1/5 UNIVERSITY

BLVD. Z LOC:

HO 01006A /

108867-GREATWOOD

1720 CRAB RIVER RD. Z - ADDRESS:



SITE LOCATION

KEY MAP: 607 G

PERMITS REQUIRED /CONTACTS

PERMIT ADMINISTER FORT BEND COUNTY ENGINEERING 281-633-7503

DRAWING LIST

FBTRA NOTES:

AUTHORITY PERMIT

THE FBTRA PERMIT

AT ALL TIMES.

READ SHEETS 1 THRU 4 OF

THE FORT BEND TOLL ROAD

REQUIREMENT SHEETS ARE TO BE ATTACHED TO THIS PERMIT

Know what's below.

Call before you dig.

FT. BEND COUNTY PERMIT FORM

FIT. BEND COUNTY PERMIT FORM FBTRA PERMIT REQUIREMENT SHEET 1 FBTRA PERMIT REQUIREMENT SHEET 3

FBTRA PERMIT REQUIREMENT SHEET 4 COVER SHEET

GENERAL NOTES LEGEND PROJECT SHEET 13

PROJECT SHEET 13A (AERIAL IMAGE)
PROFILE SHEET 1
TXDOT R.O.W. SHEET 1

TRAFFIC CONTROL SHEET TRAFFIC CONTROL SHEET 2

TRAFFIC CONTROL SHEET 3
TRAFFIC CONTROL SHEET 4

DESIGN CONTRACTOR:

JV#:			
M: Ron	nie Shorthose	346-206-5092	
OWG: Fort	Bend County	- HO 01006A-Spi	an 336 -
DRAWING	DATE	ENG DESIG	N
DRIGINAL	06/22/18	FCS	
Rev#1	N/A	N/A	
AS-BUILT	N/A	N/A	
0		WNIFIBER	PAGE:
V.	CAST	LE	OF:

PROPRIETARY INFORMATION OF CROW

GENERAL NOTES

GENERAL NOTES:

- 1. CONTRACTOR MUST OBTAIN LOCATES PRIOR TO DISTURBING THE GROUND.
- 2. THE CONTRACTOR SHALL CONTACT A MEMBER OF TEXAS ONE CALL SYSTEM A MIN. OF 48 HOURS BEFORE DIGGING, YOU ONLY NEED TO CONTACT ONE CENTER. THAT CENTER WILL RELAY THE INFORMATION TO THE OTHER TWO CENTERS.
- TEXAS ONE CALL 713-223-4567 OR 1-800-245-4545
- TESS (TEXAS EXCAVATION SAFETY SYSTEM) 811
- LONE STAR NOTIFICATION SYSTEM 800-669-8344 OR 713-223-4567
- REMINDER: ANY UNDERGROUND FACILITY OWNERS WHO ARE NOT MEMBERS OF TEXAS ONE CALL, TESS OR LONESTAR
- 3. NOTIFICATION CENTERS IN THE STATE OF TEXAS, MUST BE CONTACTED DIRECTLY BY THE ORIGINATOR OF THE LOCATION REQUEST.
- 4. CONTRACTOR MUST HAVE A COPY OF THE APPROVED PERMIT FROM THE APPROPRIATE AGENCY ON THE JOBSITE AT ALL TIMES.
- 5. THE CONTRACTOR SHALL VERIFY THE ROAD R.O.W. AND EASEMENTS PROIR TO COMMENCING WORK. NO FACILITIES SHOULD BE PLACED ON PRIVATE PROPERTY UNLESS OTHERWISE SPECIFIED.
- 6. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UNDERGROUND FACILITIES BEFORE COMMENCING WORK AND AGREE TO BE FULLY RESPONSIBLE FOR ALL DAMAGES CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UNDERGROUND FACILITIES.
- 7. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES TO EXISTING WATER, WASTEWATER AND STORM DRAINAGE LINES. DAMAGES SHALL BE REPAIRED IN ACCORDANCE WITH THE MUNICIPALITY AGENCY (STATE, COUNTY, OR CITY), DEPARTMENT OF PUBLIC WORKS AND ENGINEERING'S STANDARD CONSTRUCTION SPECIFICATIONS FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE, AND STREET PAVING REFERENCED ABOVE, AT NO ADDITIONAL COST.
- 8. MOST CITIES AND MUD'S ARE NOT PART OF A ONE CALL SYSTEM. IT IS THE RESPONSIBILITY OF THE CONSTRUCTION CONTRACTOR TO NOTIFY THESE AGENCIES PRIOR TO CONSTRUCTION.
- 9. ALL CABLE WILL BE PLACED AT STANDARD MINIMUM DEPTH. (CROWN CASTLE FIBER STANDARD IS 48" DEEP UNLESS OTHERWISE DIRECTED BY A CROWN CASTLE FIBER REPRESENTATIVE OR SPECIFIED ON THE DRAWING.)
- 10. NO MORE TRENCH OPENED AT ONE TIME THAN CAN BE BACKFILLED AND COMPACTED IN 10" LIFTS AT THE END OF EACH DAY, (NO TRENCH LEFT OPENED OVERNIGHT)
- 11. ALL EXCESS EXCAVATION TO BE REMOVED FROM THE ROAD RIGHT-OF-WAY AT THE END OF EACH DAY.
- 12. ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND ANY DRAINAGE DITCH OR STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO EXISTING CONDITIONS OR BETTER.
- 13. ROAD MUST BE KEPT OPEN TO TRAFFIC AND CONTRACTOR MUST PROVIDE ADEQUATE FLAGMEN, SIGNALS, ETC., TO PROVIDE COMPLETE SAFETY TO THE PUBLIC. IF IT BECOMES NECESSARY FOR EQUIPMENT TO OPERATE ON A PORTION OF THE PAVEMENT, PRECAUTIONS MUST BE TAKEN TO PREVENT ANY DAMAGE WHATSOEVER TO THE PAVEMENT.
- 14. CONDITION OF ROAD UPON COMPLETION OF JOB SHALL BE AS GOOD OR BETTER THAN PRIOR TO STARTING
- 15. CONTRACTOR SHALL COMPLY WITH LATEST EDITION OF OSHA REGULATIONS AND THE STATE OF TEXAS LAWS CONCERNING EXCAVATION.
- 16. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT ROOT SYSTEMS OF SHRUBS, PLANTS, AND TREES ALONG THE AREA OF EXCAVATION.
- 17. NO CONSTRUCTION ON PRIVATE PROPERTY WILL COMMENCE UNTIL RIGHT OF ENTRY OR EASEMENT IS GRANTED.
- 18. CONTRACTOR SHALL NOT EXCEED THE PURCHASE ORDER VALUE WITHOUT AUTHORIZATION IN WRITING FROM THE APPROPRIATE CROWN CASTLE FIBER REPRESENTATIVE ANY LANDSCAPING WILL BE REPLACED TO EQUAL OR BETTER THAN THAT WHICH EXISTED PRIOR TO WORK.
- 19. PROJECT SITE WILL BE PROPERLY SECURED PRIOR TO THE END OF EACH DAY.
- 20. ALL WORK IS TO BE IN ACCORDANCE WITH THE STANDARDS OF ALL AUTHORITIES HAVING JURISDICTION IN THE WORK ZONE.
- 21. CONTRACTORS ARE ADVISED TO CONTACT CROWN CASTLE FIBER FOR ANY ADDITIONAL INFORMATION OR CLARIFICATION CONCERNING SCOPE OF WORK OR THE REQUIREMENTS NECESSARY FOR PROJECT COMPLETION.
- 22. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, QUANTITIES AND EXISTING CONDITIONS PRIOR TO CONSTRUCTION. IF A SIGNIFICANT CHANGE TO THE RUNNING LINE IS NEEDED, PLEASE CONTACT YOUR CROWN CASTLE FIBER REPRESENTATIVE BEFORE PROCEEDING.
- 23. BEFORE CONSTRUCTION BEGINS, CONTRACTOR SHALL TAKE APPROPRIATE PRECAUTIONS TO AVOID ANY POTENTIAL OBSTRUCTIONS PRIOR TO PROCEEDING WITH WORK.
- 24. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT ROOT SYSTEMS OF SHRUBS, PLANTS, AND TREES ALONG THE AREA OF EXCAVATION.
- 25. CONTRACTOR WILL COMPLETE ALL WORK PER "CROWN CASTLE FIBER" CONSTRUCTION SPECIFICATIONS.
- 26. CONTRACTOR SHALL MAINTAIN A SET OF REDLINE DRAWINGS RECORDING AS-BUILT CONDITIONS DURING CONSTRUCTION. THESE REDLINE MARKED UP DRAWINGS WILL BE SUBMITTED TO THE DESIGN CONSULTANT WHO WILL MAKE THE CHANGES ON THE AS-BUILT RECORD DRAWINGS.
- 27. RIGHT-OF-WAY WILL BE RESTORED TO EQUAL OR BETTER CONDITION WHEN CONSTRUCTION IS COMPLETE.

ADDIX.	DESCRIPTION		
B.O.	BUILDING OWNED		
B.O.C.	BUILDING OWNED CONDUIT		
EOC	EDGE OF CURB		
EMT	ELECTIC METALLIC TUBING		
EOP	EDGE OF PAVEMENT		
FDP	FIBER DISTRIBUTION PANEL		
FF	FINISHED FLOOR		
FMC	FLEXIBLE METALLIC CONDUIT		
GRC	GALVANIZED RIGID CONDUIT		
HDPE	HIGH DENSITY POLYETHYLENE		
НН	HANDHOLE		
JB	JUNCTION BOX		
MH	MANHOLE		
PB	PULLBOX		
PL	PROPERTY LINE		
PVC	POLYVINYL CHLORIDE		
ROW	RIGHT OF WAY		
SP	SPLICE PANEL		
STA.	STATION		

DESCRIPTION

ARRR

FBTRA NOTES:

READ SHEETS 1 THRU 4 OF THE FORT BEND TOLL ROAD AUTHORITY PERMIT REQUIREMENTS PRIOR TO THE START OF CONSTRUCTION.

SIDEWALK

THE FBTRA PERMIT
REQUIREMENT SHEETS ARE TO
BE ATTACHED TO THIS PERMIT
AT ALL TIMES.

APWA STANDARD

COLOR CODE FOR TEMPORARY MARKING OF UNDERGROUND FACILITIES:

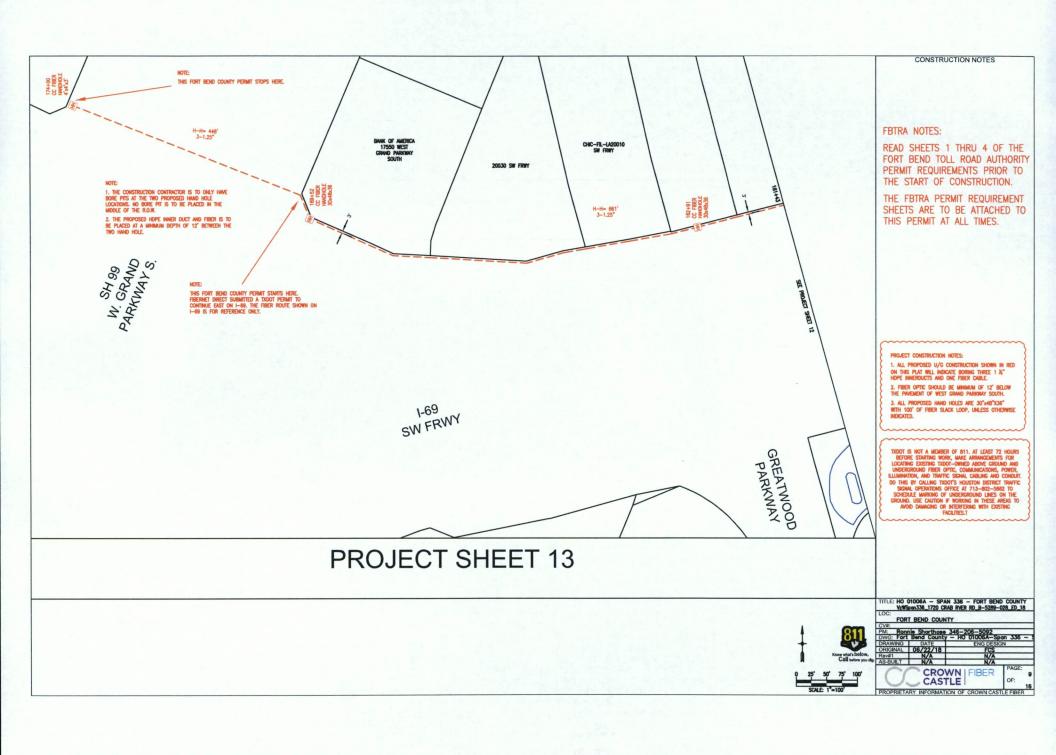
RED = ELECTRIC POWERLINES, CABLES, CONDUIT, AND LIGHTING CABLES
YELLOW = GAS, OIL, STEAM, PETROLEUM, OR GASEOUS MATERIAL
ORANGE = COMMUNICATION, ALARM, OR SIGNAL LINES, CABLES, OR CONDUIT
BLUE = POTABLE WATER
GREEN = SEWER AND DRAIN LINES
PURPLE = RECLAIMED WATER, IRRIGATION, AND SLURRY
PINK = TEMPORARY SURVEY MARKINGS

WHITE = PROPOSED EXCAVATION



TITLE: HO (01006A - SPAN pan336_1720 CRAE	336 - FORT BENI	D COUNTY 028 ED_18	
LOC:	T BEND COUNTY			
CV#:				
		46-206-5092		
DWG: Fort	Bend County -	- HO 01006A-Sp	an 336 - 3	
DRAWING DATE ENG DESIGN			SN NS	
ORIGINAL 08/22/18		FCS		
Rev#1	N/A	N/A		
AS-BUILT N/A		N/A		
PROPRIETA	CROW	N FIBER	PAGE: 7 OF: 16	





CONSTRUCTION NOTES



FBTRA NOTES:

READ SHEETS 1 THRU 4 OF THE FORT BEND TOLL ROAD AUTHORITY PERMIT REQUIREMENTS PRIOR TO THE START OF CONSTRUCTION.

THE FBTRA PERMIT REQUIREMENT SHEETS ARE TO BE ATTACHED TO THIS PERMIT AT ALL TIMES.

1. ALL PROPOSED U/G CONSTRUCTION SHOWN IN RED ON THIS PLAT WILL INDICATE BORING THREE 1 χ^{*} HDPE INNERDUCTS AND ONE FIBER CABLE.

3. ALL PROPOSED HAND HOLES ARE 30"x48"X36" WITH 100' OF FIBER SLACK LOOP, UNLESS OTHER

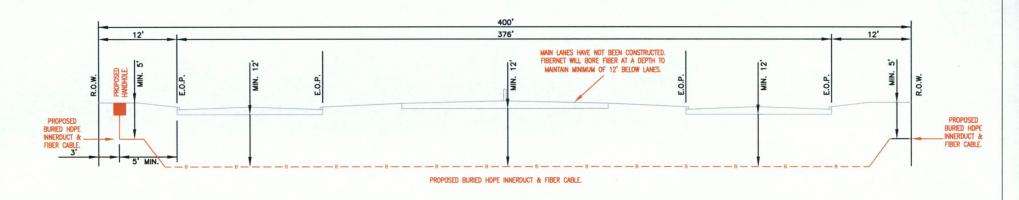
ITLE: HO 01006A - SPAN 336 - FORT BEND COUNTY

EXISTING PARCELS & RIGHT OF WAY ARE BASED ON F.B.C.A.D. GIS MAP. AERIAL IMAGES ARE FROM BING MAPS. THE AERIAL IMAGE WITH THE DESIGN IS FOR REFERENCE ONLY. THE CONTRACTOR SHALL VERIFY THE ROAD RIGHT OF WAY AND EASEMENTS PRIOR TO COMMENCING WORK.

PROJECT SHEET 13A - AERIAL IMAGE FOR REFERENCE ONLY



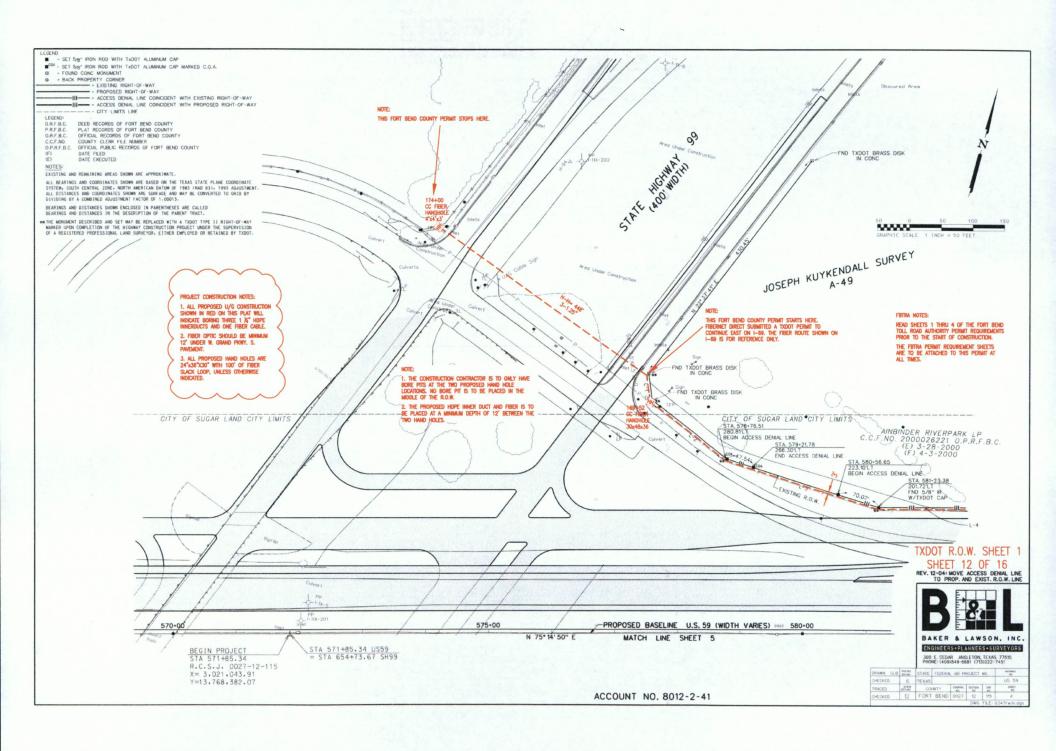
CROWN CASTLE



SH 99 (W. GRAND PKWY.S.) AT SOUTHWEST FREEWAY (I-69) LOOKING NORTHEAST



PROFILE SHEET 1



PERMIT REQUIREMENTS (May 2018)

FORT BEND GRAND PARKWAY TOLL ROAD AUTHORITY AND FORT BEND COUNTY TOLL ROAD AUTHORITY (collectively known as FBTRA)

- A preconstruction meeting with Authority's staff will be required before commencing work.
 Contact Phil Martin with FBTRA at (713) 574-5261 office; (832) 907-5726 cell), or philmartin@fbctra.com to schedule the meeting.
- All work within the right-of-way shall be performed in accordance with TxDOT standards and specifications as to the installation and materials used. All materials and mix designs to be placed in TxDOT right-of-way must be obtained from TxDOT approved sources and be of approved TxDOT or FBTRA mix designs.
- At least five (5) working days prior to any excavation, permittee shall request the location of all
 underground utilities within the work area by calling 811, and contacting local municipalities, utility
 districts, school districts, or any other utility owners. Do not perform underground work on the
 project until FBTRA owned facilities have been located and marked. Use caution when working in
 these areas to avoid damaging or interfering with existing facilities. Permittee shall be responsible
 for relocating and/or adjusting any utilities within the work area.
- Any work with in the toll road right of way requires a traffic control plan (TCP); even if lanes are
 not affected. Utility borings that don't require equipment or personnel within the right of way do
 not require TCP.
- This permit is subject to a separate traffic control plan being approved by the Authority's Engineer. All work must follow the TxDOT Traffic Control Plan Standards, Latest Revision, or if approved, Typical Applications shown in the Texas Manual on Uniform Traffic Control Devices, Latest Revision, Chapter 6-H. The advanced warning signage shown on standards BC (1)-14 thru BC (12)-14 will be required. It is mutually agreed and understood that the implementation and maintenance of the traffic control plan shall be the responsibility of the Permittee. Contractor is required to supply all sub-contractors with a copy of this permit and approved traffic control plan. The person in charge for permittee/contractor on the job site shall have a copy of the permit and approved Traffic Control Plan (TCP) at all times.
- No lane closures permitted during peak hours without authorization from the Authority. Peak hours are weekdays from 5am to 9am, and 3pm to 7pm. No lane closures on holidays or holiday weekends.
- Designate in writing, a Contractor's Responsible Person (CRP) and an alternate to be the representative of the Contractor who is responsible for taking or directing corrective measures regarding the traffic control. The CRP or alternate must be accessible by phone 24 hr. per day and able to respond when notified. The CRP and alternate must comply with the requirements of TxDOT Specification, Section 7.2.6.5., "Training."
- Flaggers must be courteous and able to effectively communicate with the public. When directing
 traffic, flaggers must dress appropriately, wear high-visibility safety apparel, use flags, signs, stopslow paddles, and other hand-signaling devices, and follow the flagging procedures in the
 TMUTCD. Comply with the requirements of TxDOT Specification Section 7.2.6.5., "Training."

- Workers involved with traffic control, including the maintenance of the traffic control, must comply with the requirements of TxDOT Specification, Section 7.2.6.5., "Training."
- Provide a copy of the certification of completion to the Engineer, except in the case of Contractordeveloped Training. Ensure the certification of completion includes the following:
 - name of provider and course title,
 - name of participant,
 - date of completion, and
 - date of expiration.

For Contractor developed-Training, maintain a log of attendees. Make the log available upon request. Ensure the log is legible and includes the following:

- print name and signature of participant,
- name and title of trainer, and
- date of training.
- The Permittee shall coordinate the sequence of construction and traffic control plan with any adjacent construction or maintenance projects. No overnight lane closures will be permitted, unless otherwise approved by the Authority's Engineer.
- Work performed within the waterways, such as rivers, creeks, bayous, and drainage ditches, is subject to the concurrence of appropriate regulatory agencies.
- The Permittee certifies that its drainage system meets all storm water quality criteria of the County and/or City where the permit is located.
- All excavations within the right-of-way shall be backfilled according to the TxDOT Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges (SPECS), Item 400, as currently amended. All surplus material shall be removed from the right-of-way, and the excavation finished flush with surrounding natural ground.
- In no event will an edge drop-off be permitted during the hours of darkness. If the Contractor is
 unable to complete a section before the end of the work day, base material capable of vehicle
 support shall be pulled back to the existing edge on a 4:1 or flatter slope, to provide for driver and
 pedestrian safety.
- The Contractor shall not create a dirt nuisance or safety hazard in any roadway. The pavement shall be cleaned daily.
- All exposed dirt surfaces shall be fully block sodded, unless otherwise approved by the Authority's Engineer. A slope of 4:1, or flatter, shall be required on the ditch front slope. Sod/grass shall be watered until roots have established into soil.
- No valves, meter boxes, cleanouts, ground boxes, handholes, manhole covers, etc. will be
 allowed in the pavement. These appurtenances shall be relocated elsewhere within the right-ofway, unless otherwise approved by the Authority's Engineer.
- The Texas Universal Triangular Slip Base Sign Supports shall be required for all signage within the right-of-way. Proposed signs, or those which require relocation, shall be done in accordance with the following TxDOT standards: SMD (GEN)-08, SMD (SLIP-1)-08, SMD (SLIP-2)-08, and SMD (SLIP-3)-08.
- All work zone pavement markings shall meet the requirements of TxDOT Specification, Item 662.
 All permanent pavement markings shall meet the requirements of TxDOT Specification, Item 666, and be placed in accordance with the following standards: PM (1)-12, PM (2)-12, PM (3)-12, and

PM (4)-12. All raised pavement markers shall meet the requirements of TxDOT Specification, Item 672.

- Existing pavement markings shall be removed according to the requirements of TxDOT
 Specification, Item 677, or to the satisfaction of the Authority's Engineer. All pavement surfaces
 shall be cleaned and prepared in accordance with TxDOT Specification, Item 678.
- The Contractor shall employ at his/her expense, an approved commercial testing laboratory to perform testing on materials (such as concrete, base, lime, and asphalt). Sample and test concrete in accordance with TxDOT Specifications. Certified reports of all test results shall be submitted to the Authority's Engineer. Make at least one set of test specimens for each element cast each day. Cure these specimens under the same conditions as the portion of the structure involved for all stages of construction. Ensure safe handling, curing, and storage of all test specimens.
- Should the existing roadway pavement or other feature be damaged, the permittee shall make repairs as specified by the Authority's Engineer.
- Inlet depressions in concrete pavement must be removed to prevent ponding in the pavement.
- All storm sewer and culvert pipes used shall be Reinforced Concrete Pipe (RCP).
- Culvert crossings within the 30-foot clear zone (parallel culverts) shall be required to have minimum 6:1 sloping ends known as Safety End Treatments (SETs). The culvert shall have sufficient length to allow the 6:1 slope to be achieved from the top edge of pavement to the flowline at the bottom end of the SET. Culverts that exceed 50' in length shall have a junction box for clean out as specified by the Authority's Engineer.
- Culverts larger than single 33-inch diameter, double 30-inch diameter, or three or more 12-inch diameter shall require safety pipe runners.
- Riprap or stabilizing material shall be provided and installed by grantee at time of construction as directed by Area Engineer.
- Full-depth saw cut shall be made to facilitate removal of the concrete within the limits of the required full-depth cuts. Concrete adjacent to the patch shall not be spalled or fractured by the removal procedure.
- Work areas that have been disturbed must be returned to the original condition and may be required to place grass sod and continual watering until roots are established.
- Placement or removal of beautification on right of way shall be under the direction of the Authority, at the permittees expense. This includes but not limited to landscape, bushes, trees, etc.
- The Grantee certifies that its storm water runoff to the right of way (Authority's/County/State) shall
 not be contaminated by any industrial processes or significant pollutants, and the
 Authority/County/State shall not be held liable for any pollutants entering the right of way through
 storm water connections.
- Grantee shall meet all Americans with Disabilities Act (ADA) and Texas Department of Licensing Regulation (TDLR) requirements for items including but not limited to sidewalks and wheelchair ramps.

- Grantee shall obtain overall environmental clearance with all appropriate regulatory agencies prior to beginning construction. Approval of this request by the Authority/County does not relieve the Grantee or its agents of this obligation.
- Work performed on railroad right-of-way or easements controlled by others is subject to the
 concurrence of the owner of said properties. Approval of this request by the Authority/County does
 not relieve the Grantee of this obligation.
- The complete permit package including TCP shall be on the project site at all times and available for review by Authority/County representatives.
- Upon completion of work, submit CADD/Microstation files and pdf of Record Drawings to Phil Martin with FBTRA.
- The Permittee shall indemnify and save harmless the Authority, County and State from any and all damages or losses that may develop due to this project.
- All TxDOT standards are available online for free download:

Statewide http://www.dot.state.tx.us/business/standardplanfiles.htm
http://www.dot.state.tx.us/business/standardplanfiles.htm

Additional requirements for utilities:

- Contact Phil Martin with FBTRA at (713) 574-5261 office; (832) 907-5726 cell), or philmartin@fbctra.com, at least 48 hours prior to starting work within toll road right of way.
- Access to SH 99/Grand Parkway or Fort Bend Parkway must be coordinated with FBTRA prior to work
- All work must meet TxDOT/State of Texas utility accommodation requirements
- Markers must be placed at the right of way line for all underground utilities. Markers must indicate
 owners name and contact information.
- Utility owner must provide owner's responsible person's name and contact information (not contractor's contact information). Owner's responsible person must be available 24 hours/day – 7 days/week for emergency contact.
- Bore pits within the right of way must be protected during non-work hours.
- Borings must be cased from right of way line to right of way line, unless other approval is received from the Authority

The Authority will assist as follows:

- 1. Provide inspection of construction.
- 2. This permit issued subject to a traffic control plan, which will be prepared, signed/sealed by permittees agent, will approved by the Authority's Engineer. No work within the right of way shall begin until this approval has been granted.

Notes for Figure 6H-1—Typical Application 1 Work Beyond the Shoulder

Guidance:

1. If the work space is in the median of a divided highway, an advance warning sign should also be placed on the left side of the directional roadway.

Option:

- 2. The ROAD WORK AHEAD sign may be replaced with other appropriate signs such as the SHOULDER WORK sign. The SHOULDER WORK sign may be used for work adjacent to the shoulder.
- 3. The ROAD WORK AHEAD sign may be omitted where the work space is behind a barrier, more than 24 inches behind the curb, or 15 feet or more from the edge of any roadway.
- 4. For short-term, short duration or mobile operation, all signs and channelizing devices may be eliminated if a vehicle with activated high-intensity rotating, flashing, oscillating, or strobe lights is used.
- 5. Vehicle hazard warning signals may be used to supplement high-intensity rotating, flashing, oscillating, or strobe lights.

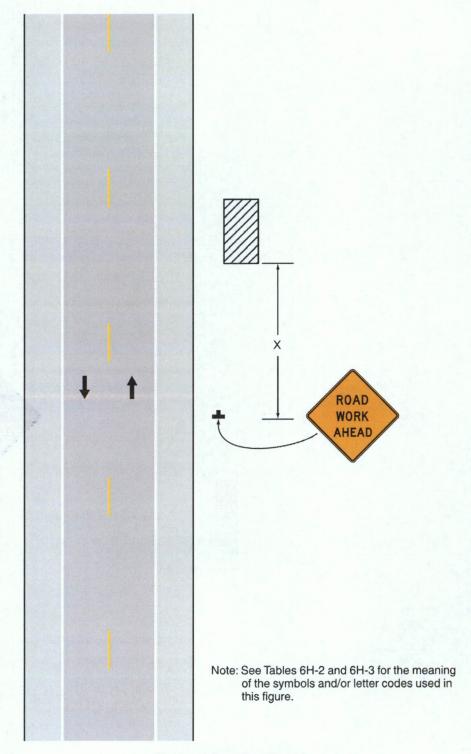
Standard:

6. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.

Sect. 6H.01 December 2011

2011 Edition - Revision 2 Page 661

Figure 6H-1. Work Beyond the Shoulder (TA-1)



Typical Application 1

December 2011 Sect. 6H.01

2011 Edition - Revision 2

Notes for Figure 6H-3—Typical Application 3 Work on the Shoulders

Guidance:

1. A SHOULDER WORK sign should be placed on the left side of the roadway for a divided or one-way street only if the left shoulder is affected.

Option:

- 2. The Workers symbol signs may be used instead of SHOULDER WORK signs.
- 3. The SHOULDER WORK AHEAD sign on an intersecting roadway may be omitted where drivers emerging from that roadway will encounter another advance warning sign prior to this activity area.
- 4. For short duration operations of 60 minutes or less, all signs and channelizing devices may be eliminated if a vehicle with activated high-intensity rotating, flashing, oscillating, or strobe lights is used.
- 5. Vehicle hazard warning signals may be used to supplement high-intensity rotating, flashing, oscillating, or strobe lights.

Standard:

- 6. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.
- 7. When paved shoulders having a width of 8 feet or more are closed, at least one advance warning sign shall be used. In addition, channelizing devices shall be used to close the shoulder in advance to delineate the beginning of the work space and direct vehicular traffic to remain within the traveled way.

Sect. 6H.01 December 2011



Figure 6H-3. Work on the Shoulders (TA-3)

