

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

*****	X Right of Way Commercial (Drivewa	y Permit	
	Permit No: 2018-20	0467		
Appl	icant: AT&T Texas/Cobb Fendley & Associates	<u>-</u>		
Job	Location Site: Brazos River, Sugarland, TX 774	179		
Bond	Date of Bond: 11/28	8/2017	_Amount: _	\$50,000.00
Layin Road Comi of the	above applicant came to make use of certain Fort Being, Construction, Maintenance, and Repair of Buried Is, Streets, Highways, and Drainage Ditches in Fort Bendssioners Court of Fort Bend County, Texas," as pase Minutes of the Commissioners Court of Fort Bend Issistant with Chapter 181, Vernon's Texas Statutes a	d Cables, Bend Cou Issed by I County	Conduits, and the Commiss of Texas, to the Commiss of Texas, the Commiss of T	d Pole Lines, In, Under, Across or Along Inder the Jurisdiction of the ioners Court of Fort Bend County, Texas,
Note 1. 2.	s: Evidence of review by the Commissioners Court magnounds for job shutdown. Written notices are required: a. 48 hours in advance of construction b. When construction is completed and Administrator thru MyGovernmentCountries one (1) year from date of permiters.	start up d ready Online.o	o, and for final inspe rg portal.	ection, submit notification to Permit
Com	nis <u>12th</u> day of <u>June</u> , <u>2018</u> , Upon Motion of Commis missioner <u>Morello</u> , duly put ar re of said above purpose is hereby acknowledged by said notice be placed on record according to the reg	nd carrie y the Co	ed, it is ORDEI mmissioners	RED, ADJUDGED AND DECREED that said Court of Fort Bend County, Texas, and
Signa	ature /	Prese	nted to Com	missioners Court and approved.
Ву:	County Engineer	Date	Recorded <u>6</u>	12-201 Comm. Court No. 9H
Ву:	N/A	Clerk By:	of Commission	oners Court
	Drainage District Engineer/Manager	\mathcal{I}	Deputy	



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	nt of Way Permit		
Con	nmercial Driveway	Permit	
Permit No	: 2018-20467		
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/or	drainage ditch affe	ected.	
X b. Vicinity map showing course	of directions		
x c. Plans and specifications			
(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	N APPLICABLE):	Date	
We have reviewed this project and agree it n	neets minimum re	quirements.	
La Elita		6/4/2018	
Permit Administrator		Date	

HIGH PROFILE FACILITIES

SELF INFLICTED CABLE DAMAGE AVOIDANCE

1. THE CONTRACTOR MUST NOTIFY THE ATT CONTRACT COORDINATOR 48 HOURS PRIOR TO STARTING WORK AROUND HIGH PROFILE FACILITIES. HIGH PROFILE IS DEFINED AS ANY FIBER CABLE, AND ANY CABLE OF 900 PAIRS OR GREATER.

- 2. ALL PRE-WORK BY THE CONTRACTOR SHOULD BE PERFORMED BEFORE THE BUILD AUTHORIZATION MEETING (IE. LOCATES, POTHOLES, CABLE EXPOSURE, ETC)
- 3. THE BUILD AUTHORIZATION MEETING SHOULD BE HELD ONSITE IF POSSIBLE OR VIA TELEPHONE IF THE ONSITE MEETING IS NOT FEASIBLE. THIS MEETING IS REQUIRED BETWEEN THE CONTRACTOR AND THE AT&T CONTRACT COORDINATOR.
- 4. IF THERE IS ANY DOUBT ABOUT EXISTING CABLE FACILITY LOCATIONS, SOLICIT ASSISTANCE FROM AT&T PERSONNEL.
- 5. THE CONTRACTOR MUST VERIFY THE LOCATION OF THE HIGH PROFILE FACILITIES AT THE BEGINNING, AT EACH ROAD CROSSING, AND AT EACH SIGNIFICANT OBSTACLE IN THE CABLE PATH THAT MAY HAVE ALTERED THE DRIGINAL PLACEMENT AND MINIMUM OF EVERY 300' WHEN EXCAVATING IS GREATER THAN 5' FROM THE HIGH PROFILE FACILITY. ATTENTION SHOULD BE GIVEN TO THE ONSTACLES IN THE TRENCH PATH AND THE MINIMUM LOCATE VERIFICATION WILL BE EVERY 1,000'.
- 6. NO BORE SHOULD BE PERFORMED WITHIN 10' VERTICALLY OR HORIZONTALLY OF THE EXISTING HIGH PROFILE CABLE FACILITIES WITHOUT PRIOR CONSULTATION WITH ATT ENGINEEERING/CONSTRUCTION PERSONNEL
- 7. EXISTING HIGH PROFILE COPPER/FIBER CABLES SHOULD BE EXPOSED ON BOTH SIDES OF THOROUGHFARE PRIOR TO COMMENCING BORE.
- 8. THE CONTRACTOR MUST NOT MECHCANICALLY EXCAVATE WITH IN 2' OF EITHER SIDE OF A HIGH PROFILE FACILITY.

CONTRACTORS

LLY RECOGNICIALE ROR ANY AND ALL DALAGES WHICH ALIGH LY REPORTED FOR ANY AND ALL ENDAGES WALLE HUME LOADED BY HE CONTRACTOR FAILURE TO EMETLY LOCATE AND PRESENT ANY AND ALL CITITIES IS HOUSE PRIOR TO ENGINETING FACILITY LOCATES WILL BE PREPORTED BY USIC IN THE HOLISTON DISTRICTS TRACTORS WILL NO LONGER PERFORM LOCATES IN THESE AREAS



EN ESPANOL:

AUTO CABLE CAUSADOS la evitación de daños 1. EL CONTRATISTA DEBE NOTIFICAR AL COORDINADOR DE CONTRATO ATT 48 HORAS ANTES DE EMPEZAR A TRABAJAR ALREDEDOR DE PERFIL ALTO PERFIL FACILITIES. HIGH se define como cualquier cable de fibra, y el cable de 900 pares o más.

- 2. Todos PRE-obra por el contratista DEBE REALIZAR ANTES DE LA REUNIÓN DE AUTORIZACIÓN BUILD (IE, localiza, baches, EXPOSICIÓN DEL CABLE, ETC)
- 3, LA REUNIÓN DE AUTORIZACIÓN DE OBRA QUE SE LLEVARÁ A CABO EN EL SITIO SI ES POSIBLE O VIA TELEFONO SI LA REUNIÓN EN EL SITIO NO ES FACTIBLE. ESTA REUNIÓN SE REQUIERE ENTRE EL CONTRATISTA Y EL COORDINADOR DEL CONTRATO AT & T.
- 4. SI TIENE ALGUNA DUDA ACERCA DE LAS INSTALACIONES EXISTENTES ubicación de los cables, solicitar la ayuda de AT & T PERSONAL.
- 5. EL CONTRATISTA deberá verificar la ubicación de las instalaciones de alto perfil en el principio, en cada carretera CRUCE, y en cada obstáculo importante en la trayectoria del cable que pueden haber alterado la ubicación original y mínimas de cada 300 'al excavar es mayor que 5' DE EL PERFIL FACILITY, ATTENTION Se debe dar alta A LOS ONSTACLES EN EL CAMINO DE ZANJA Y LA VERIFICACIÓN MINIMA LOCATE será cada 1.000 '.
- 6. PASO NO se deben realizar dentro de 10 'vertical u horizontal de las instalaciones existentes de perfil alto, CABLE, sin consulta previa con ATT ENGINEEERING / CONSTRUCCIÓN DE PERSONAL.
- 7. EXISTENTES DE ALTO PERFIL cobre / fibra CABLES DEBEN SER EXPUESTOS EN AMBOS LADOS DE VIA PASO ANTES DE COMENZAR.
- 8. EL CONTRATISTA NO DEBE MECHCANICALLY excavar con IN 2' DE CADA LADO DE UN CENTRO DE ALTO PERFIL.

CIRCUITS 6203

FORWARDED REQUIRED



TO

OPERATING RANGE OF JOB STEPS

TASK

MFRC 8450

TRANSMISSION ZONE CZ 0 TAPER CODE

CAUTION HIGH VOLTAGE KV 28, 80 AERIAL Y BURIED Y

HIGHWAY PERMIT NO.

Utility CO CENT - CENTER POINT REP NAME

REP TEL NO. (713) 207-2222 POLE CONTACTS (+)0 (-)0

Utility CO REP NAME REP TEL NO.

POLE CONTACTS (+)0

Utility CO REP NAME REP TEL NO. POLE CONTACTS (+)

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PROJECT NO A00FV4D

TOT.PRINTS 27 NPA/NNX:

PRINT NO.1 PRT:

EXCH. RICH-ROSE TAX DIST.

GFO LOC FNGR. MB

DRAWNES

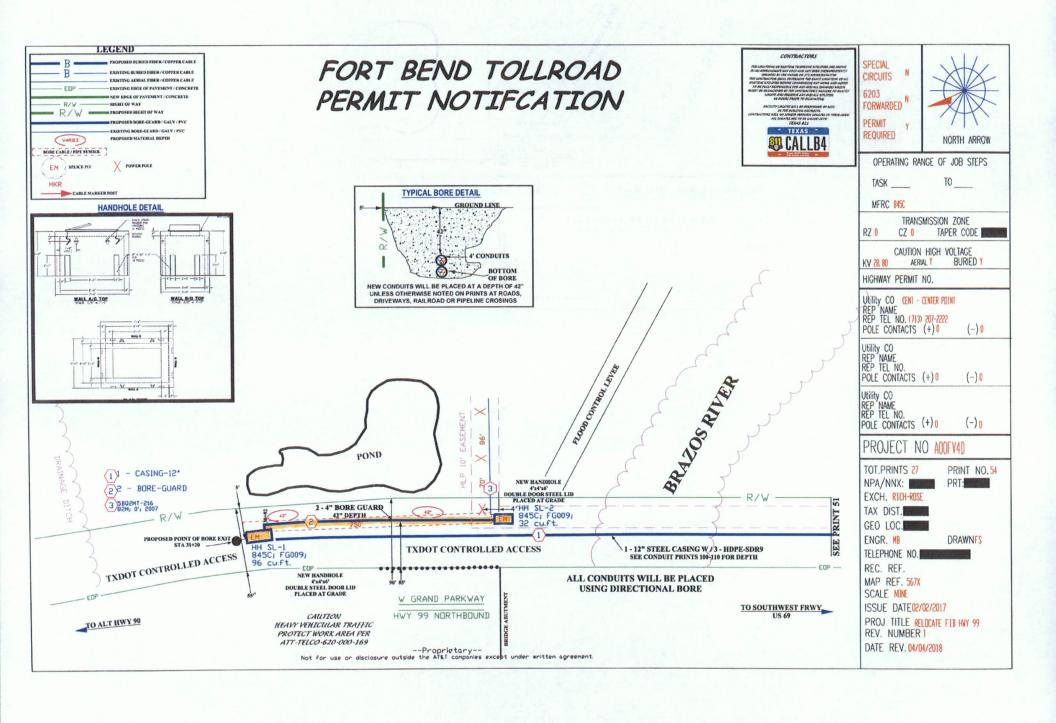
TELEPHONE NO. REC. REF.

MAP REF. 567X

SCALE NONE ISSUE DATE 02/02/2017

PROJ TITLE RELOCATE FIB HWY 99 REV. NUMBER I

DATE REV. 04/02/2018



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@fb.ctra.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 totl 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 6 am to 9 am, and 4 pm to 7 pm. 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."

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MAP REF. 567X SCALE NON SCALE NON ISSUE DATER/02/2017 PROJ TITLE RELOCATE REV. NUMBER? DATE REV.	NPA/NNX: EXCH. RICH-ROSE TAX DIST. GEO LOC. ENGR. MB TELEPHONE NO. REC. REF.	PROJECT NO	CONTACTS	Utility CO REP NAME REP TEL NO. POLE CONTACTS	POLE CONTACTS	KY 28.80 AERW HIGHWAY PERMIT N	RZ 0 CZ 0	MFRC 8450	OPERATING RANGE	SPECIAL CIRCUITS N 6203 FORWARDED N PERMIT Y REQUIRED
EZZO17 CCATE FIB HAY 99	PRI	PRINT NO.55	(+)0 (-)0	+)0 (-)0	CATER POINT (+)0 (-)0	HIGH VOLTAGE MLY BURNED Y NO.		to the control of the	IO	NORTH ARROW

- 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

Page 2 of 4

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.

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H. RICH-RICK DIST. COMMING LOC.	TOT.PRINTS 27 PRINT NO NPA/NNX: PRT	NIACIS (+)	Utility CO REP NAME REP TEL NO. POLE CONTACTS (+)0 (-)0	USIGN CO COM - COMER POINT REP NAME REP IEL NO. (719 201-2222 POLE CONTACTS (+) 0 (-) 0	SHWAY PERMIT NO.	RZ 0 CZ 0 TAPER CODE A CAUTION HIGH VOLTAGE KV 28.80 AERW Y BURKED Y	MFRC 845C TRANSMISSION ZONE	TASK	NORTH
8 8	NO. 57			0				3	

- 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.

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.
- 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.

Page 4 of 4

C. REF. ALE NOW SUE DATI ROJ TITLI V. NUMI V. NUMI	TAX DIST. CENTRAL GEO LOC. CENGR. MB	PRINTS /NNX:	PROJECT N	Utility CO REP NAME REP TEL NO. POLE CONTACTS (Utility CO REP NAME REP TEL NO. POLE CONTACTS	Utility CO (2011 - (REP NAME REP TEL NO. (713) POLE CONTACTS	HIGHWAY PERMIT	CAUTION H	TRANSI RZ 0 CZ 0	MFRC 8450	TASK	OPERATING RAP	SPECIAL N CIRCUITS N 6203 FORWARDED N PERMIT Y REQUIRED
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GENERAL CONSTRUCTION NOTES

- 1.1f existing buried coble is exposed during trenching operations, coordinate temporary support and protection of buried coble while placing coble in the same trench as conduit.

 2.Coordinate temporary support and protection of underground conduit with construction and maintenance forces.

- 2.Coordinate temporally support one protection of underground concur win construction and maintenance forces, support and/or find errocking of cobles in proposed rebuilt monholes with the construction and maintenance.

 4.Soop existing cobles in existing manchale(s) of the beginning and and of each work day. If on oir leak is detected, notify AT&T lesso personnel immediately.

 5.The Contractor is responsible for attending meetings and the coordination of all work with customers and governmental antities.

 7.C° PVC ductor is responsible for attending meetings and the coordination of all work with customers and governmental antities.

 7.C° PVC ductor or to be mondered in accordance with BSP 622—240—201.

 8.The location of existing underground utilities, if shown, ore in an approximate way only and have not been independently verified by the owner or its representative. The contractor should determine the exact location of at existing utilities before commencing work, and agrees to be fully responsible for any and all domages which might be accordanced by the contractor's fabrue or sandly BBDO-545-6005, or tone Star Notification System at 713-223-4557 or 1-800-659-8344 48 hours prior to construction.

 9.The Information shown on this drawing concerning type and location of underground utilities in drawing concerning type and location of underground utilities in drawing concerning type and location of underground utilities in the drawing concerning type and location of underground utilities in the contraction of the property of the construction of the contraction of the
- 9. The information shown on this drawing concerning type and location of underground utilities is not guaranteed to be occurate or all inclusive. The contractor is responsible for making his own determinations so to type and foociation of underground utilities or may be necessary to avoid acronge thereto. The contractor shall verify location of underground spletines, conduits and structures by contacting owners of underground utilities or by secreotion in ordance of

- demoge thereto. The controctor shall verify lecotion of underground pipelines, conduits and structures by contacting owners of underground utilities or by accordion in divotice of 10. Controctor shall notify tess Excovation Safety System (TESS). 48 hours prior to working in or 10. Contractor shall notify tess Excovation Safety System (TESS). 48 hours prior to working in or 10. Contractor must comply with OSHA Specifications and shoring requirements.

 12. The 12 on terraching bookshilling, accordington and shoring requirements.

 12. The 12 on terraching bookshilling, accordington and shoring requirements.

 12. The construction Contractor shall also be soldy responsible for the means, methods, sequence, procedures, techniques or scheduling algorithms of the work of construction in accordance with a procedure, techniques or scheduling algorithms of the work of construction in accordance with a procedure, techniques or scheduling algorithms of the work of construction in accordance with a construction of the construction in accordance with a construction of the construction in accordance with a construction of the construction in accordance with a construction of the construction in a construction of the sound of the construction of the sound of the construction of the

- 19. Contractor to take necessary precoutions to protect root systems of shrubs, plants and trees along the area of excavation.

- 19 Contractor to text necessor preceptions to protect roat systems of shrubs, plonts and trees along the ore of according to error of according to error of according to error of according to the protect and the second of the protect and the second of sock services and the second of sock services are considered to the second of sock services and the second of sock services are services and the second of second of the services and the services are services and the second of second of
- CAUTION: CATV Buried cable in construction area. Contractor to be responsible for any damage whatsoever.

 CAUTION: Existing underground street light cable in construction area. Verify exact location &
- depth prior to any digging and/or boring. CAUTION: Existing AT&T Texas/SWBT facilities in construction area. Verify exact location & depth
- LAUTIEK: Easting Ant I resoly should incline in construction and any should be deprived to any digital and for boring.

 CAUTION: Easting CenterPoint Energy Electric facilities in construction area, contact CenterPoint Energy Electric 48 Hours prior to any digiting and/for boring.

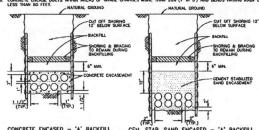
 CAUTION: Existing CenterPoint Energy Gas facilities in constriction area, contact CenterPoint Energy Gas 48 hours prior to any digiting and/for boring.
- CAUTION: UNDERGROUND GAS FACILITIES
- CAUTON: UNDERCORUND CAS FACILITIES
 Locations of CenterPoint Energy main lines (to include CenterPoint Energy, introstate Pipeline, LLC, where applicable) are shown in an approximate location only. Service lines are usually not shown. Our signature on these plans and vy indicates that our feelilities are shown in approximate location. It does not imply that a conflict analysis has been made. The contractor shall contact the Utility Coordinating Committee at (1713)223-4567 or (1-600)-569-344 or 811 a minimum of 48 hours prior to construction to how main and service lines feld faculted.

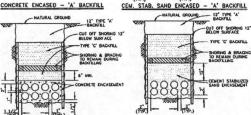
 "Mem CenterPoint Energy Gas pipeline markings are not visible call (713)945-8036 or (713) 955-8037 (7100 a.m. to 4:30 p.m.) for stated of a visible call (713)945-8036 or (713) 185-9037 (7100 a.m. to 4:30 p.m.) for stated of a facilities for procedures. The execution within spike cocomplished said in the discrete location of CenterPoint Energy Gas in the execution of the contractor of the c

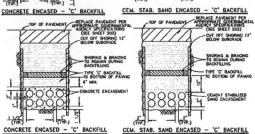
- The contractor is fully responsible for any damages caused by his failure to exactly locate and preserve these underground facilities.

AT&T Texas/SWBT GENERAL BACKFILL & ENCASEMENT SPECIFICATIONS

- TYPE 'C' BACKFILL ~ CEMENT STABILIZED SAND (2 SACKS PER TON OR MEET CURRENT LOCAL GOVERNMENTAL ENTITY
 SPECIFICATIONS WITH TESTING, RESILTS MUST BE PROVIDED TO ATACT TEXAS REPRESENTATIVE).
- 2. TYPE 'A' BACKFILL ORIGINAL MATERIAL, FREE OF DELETERIOUS MATERIAL, COMPACTED 90-95% PROCTOR IN 6" LIFTS. 3. CONDUIT FORMATIONS, REGARDLESS OF NUMBER OF DUCTS, SHALL MAINTAIN THE SAME MRIMUM CLEARANCES BETWEEN DUCT AND TRENCH WALL, AS SHOWN IN TYPICAL FORMATIONS HEREON.
- 4. FORMATIONS OVER FOUR DUCTS HIGH REQUIRE 2" SEPARATION AFTER EVERY FOURTH TIER OF DUCTS.
- 5. ALL DUCTS TO BE ENCASED WITH CEMENT STABILIZED SAND LINESS OTHERWISE SPECIFIED OR REQUIRED
- 6. CONCRETE ENCASE DUCTS WITHIN AREAS OF GRADE CHANGES MORE THAN 20% (1' IN 5') AND BENDS HAVING RADII OF







UNDER PAVEMENT

CONCRETE REQUIREMENTS										
TYPE OF STRUCTURE	COMPRESSIVE STRENGTH (PSI)	MAX. SIZE OF ACCREGATE (IN.)	SLUMP (IN.)	TYPE OF CEMENT (SEE NOTE)						
Manholes and other form work: Hand Compaction Machine Vibration	4000 4000	3/4	6 3	· I or III						
Conduit Encasement	2500	1/4 to 3/8	9) or III						
Conduit Bose and Top Protection (for multiple duct or unencosed single bore)	2500	3/4	3	i or ti						
Pavement Base, Sidewalks, Drives	2500	3/4 to 1-1/2	3	1 or III						

UNDER PAVEMENT

NOTE: Type of cement used will depend on shether normal or short cure period is required. For construction requirements and for concrete placement & procedures, use Bell System Practice 622-020-901.

AT&T Texas/SWBT LEGEND ----RAILROAD TRACKS

DITCH EXIST. AT&T Texos/SWBT CONDUCT PROPOSED AT&T Texas/SWET CONDU SANITARY SEWER WATER 1 10 1 10 - - - -CENTERPOINT ENERGY ELECTRIC WESTERN UNION CONDUCT TELE. & ELEC. OR ELEC. POLE

TELEPHONE POLE EXIST. BURIED TELEPHONE CABLE EXIST. PEDESTAL/CABLE ENCLOSURE FUTURE PAVEMENT

CHT-OF-WAY LINE OR CENTER LINE OF CONDUIT EXIST. AT&T Texas/SWBT CONDUIT PROPOSED ATACT Texas/SWBT CONDUIT WATER

STORM SEWER SANITARY SEWER CENTERPOINT ENERGY ELECTRIC CENTERPOINT ENERGY CAS

CENTER LINE OF STREET PROPERTY LINE OR R.O.W BACK OF CURB CONCRETE SIDEWALKS

CONCRETE PAVEMENT

ASPHALT PAVENENT

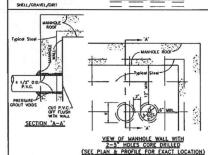
PROFILE Can tit been CARL LT DATE *** rm ra-E or ROMbecervious and

HIN WALL THICKNESSES

OF STEEL CASING

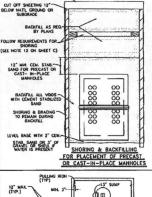
0.188 0.219 0.250 0.281 0.312 0.344 0.375 0.406 0.438 0.469

UNDER 14 14 TO 16

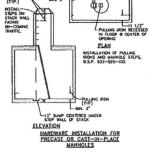


-FILL CASING WITH NAXIMUM

TYPICAL STEEL



NATL GND. OR



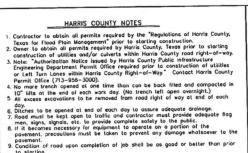
SIZE (PL) THOUESS (IX.) 07-12-2004

AT&T Texas/SWBT

ws

GENERAL DETAILS 1 A & SPECIFICATIONS SCALE N.T.S. WILLIAM F. FENDLEY PREPARED BY SOF DATE ASS1 | CONAT D BY | CONAT D BY

CobbRendley JOB NO. 1605-063-01-51C F.B. 2857



HARRIS COUNTY SPECIFICATIONS

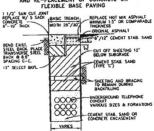
BASIC SECTION FOR TRENCH

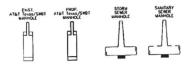
SUPPORT AND RIGHT-OF-WAY RESTORATION BASIC TRENCH
WDTH 28"/30" NATURAL GROUND
12" TYPE 'A" BKIL
CUT OFF SHEETING 12"
BELOW NATI. GROUND CEMENT STAB. SAND (TYPE 'C')
OR ORIGINAL MATERIAL (TYPE 'A')
BACKFILL COMPACTED
(SEE SPECIFICATIONS ON PLANS) SHEETING AND BRACING TO UNDERGROUND TELEPHONE
CONDUIT
VARIOUS SIZES & FORWATIONS

BASIC SECTION FOR TRENCH SUPPORT AND RE-PLACEMENT OF CONCRETE OR FLEXIBLE BASE PAYING

VARIES

CEMENT STAB. SAND OR CONCRETE ENCASEMENT





TEXAS DEPARTMENT OF TRANSPORTATION Specifications for Placing Utility Lines Within the Right-of-Way of State-Maintained Highways

NIGHT - OIT - MOY OI STOTE - MOINTOINED RIGHWOYS

All excovations within the right-ofway and not under surfacing shall be
backfilled by tamping in 6-inch horizontal layers and/or as directed. All
surplus material shall be removed
from the right-of-way and the excovation finished flush with the surroundiago adjust ground.

vation finished flush with the surroun-ding natural ground.

2. Where sadding is disturbed by excova-tion or backfilling operations, such areas shall be replaced by seeding. Slopes 4:1 or steeper, shall be re-placed by block sadding. This work would be a precordance with TXDOT shall be in accordance with TXDOT specifications.

3. Highway crossings under surfaced

roads and surfaced crossroads within the right-of-way shall be placed by boring. Boring shall extend from crown line to crown line. All lines shall be enclosed in satisfactory

casing. 4.Use of water and other fluids in connection with boring operations will be permitted only in sufficient quantity to lubricate boring bit and provide a smooth flow of cuttings. Jetting will

6. Operations on the highways shall be performed in such a manner that operating equipment and excavated material are kept off the povement at all times.

7. Barricades and warning signs, and flogmen when necessary, shall be pro-vided by the contractor or owner. One-half the traveled portion of the roodway must be open to traffic at

8. Work performed on railroad right-of-5. work performed on railroad right-of-way is subject to the concurrence of the railroad company. Work performed within waterways, such os rivers, creeks, bayous, and drainage ditches is subject to the rules & requirements of that appropriate governmental opency.

agency.

9. All manhole covers shall be installed flush with ground level. The roof of communications manholes shall be at least five feet below ground level within state right-of-way.

ABBREVIATIONS

Asph. B-B	Asphalt Book to Book	HR.	Head Room	Sto.	Station
BLATE	Backill Saseline Benchmark	M.H. N.F.L.F.	Left Manhole Not Found in Field	Stm.	Storm Sewer
Clare C. of H.	Cement Centerine City of Houston	PVC Pvmt	Offset Polyvinyt Chloride Povement	Tele. T.B.M.	Egsement Telephone Temporory
Conc.	Concrete Conduit	P.L or R	Property Line	TADOT	Bench Mark Texas Department of Transportation
CMP.	Construction Corrugated Metal Pipe Cubic Feet	PROP. Rel. R.C.B.	Proposed Reference Reinforced Concrete Box	IV.	Typical Utility Eosement
Earnt Dec.	Eosement Bectric or Bectronic	R.C.P. RT. R.O.W.	Reinforced Concrete Pipe Right Right-of-Way	Vol.	Volume Water Line
Elev. Exist.	Devation Existing Field Book	San.	Sonitory Sever Ecsement	W.L.E.	Woter Line Easement Water Mater
F.B. FH. F/C	fire Hydront frame and Cover	S.A.I. Shl S.W.	Service Area Interface Sheet Sidewalk	WV.	Water Valve Western Union
HCF.CD	Future Harris County Flood Control District	Stob.	Stobilized		

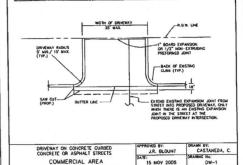
WHEN A COMMERCIAL DRIVEWAY, OR CURB & GUTTER IS CONSTRUCTED, RECONSTRUCTED, REPAIRED OR REGRADED ON COUNTY RIGHT OF WAY USE THE FOLLOWING:

A - USE FOR ALL PROPOSED DRIVES ON CURBED TYPE STREETS:

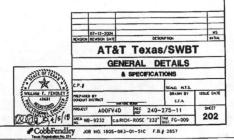


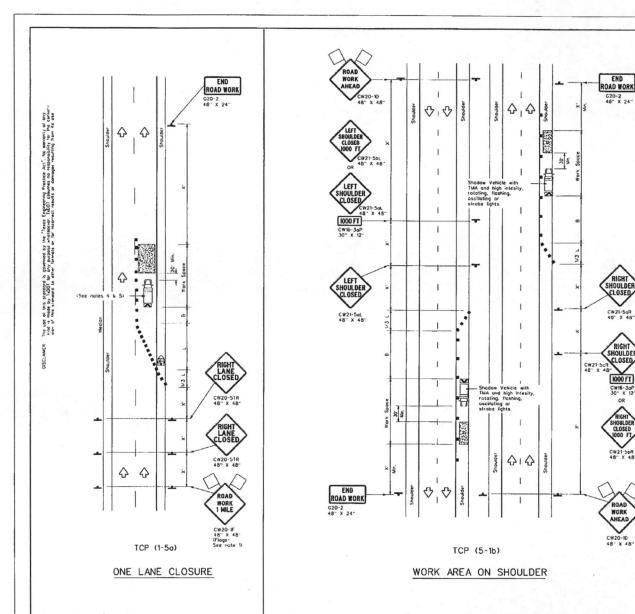
"FOR USE WITH CONCRETE OR ASPHALT CURBED TYPE STREETS"

B - USE FOR ALL PROPOSED EXISTING CURB REMOVAL:



HARRIS COUNTY ENGINEERING DEPARTMENT &\StuRE\Std Dage and Specifications\Drewings\HCDRart-1.eag 07/24/2001 09:07:57 AM CDT





	LEG	END	
CTT CO	Type 3 Barricade		Chonnetizing Devices
	Heavy Work Vehicle	20	Truck Mounted Attenuator (TMA)
	Trailer Mounted Floshing Arrow Board	M	Portable Changeable Message Sign (PCMS)
-	Sign	4	Traffic Flow
a	Flag	O.D	Flagger

Posted Speed	Formula	70	Minimu Desiros sper Len	le	Spac Chan	a Maximum ring of nelizing vices	Minimum Sign Spacing	Suggested Longitudinal Buffer Space
•	100	10° Offset	II* Offset	12' Offset	On a Toper	On a Tangent	Distance	9
30	2	150'	165'	180'	30'	60'	120'	90.
35	L- WS2	2051	225	245	35'	70'	160	120
40	00	265'	295	320	40'	80.	240'	155
45		450	495	540	45'	90'	320'	195'
50		500	550	600	50.	100	400'	240'
55	L-WS	550	605	660	55'	110	500	295
60		600'	660	720	60.	120	600	350'
65	1	650	715	780'	65'	130'	700'	4101
70	1	700'	770	840	70'	140	800	475
75		750'	825	900	75	150	900'	540

- Conventional Roads Only
- xx Toper lengths have been rounded off.
 L-Length of Toper(FT) W-Width of Offset(FT) S-Posted Speed(MPH)

		TYPICAL US	SAGE	
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
		1		

GENERAL NOTES

- GENERAL NOTES

 1. Flags statucal to signs where show, are REQUINED.

 2. All traffic control devices districted are REQUINED, second those devoted with the tripingle symbol may be envitted when stated escenter in the plans, or for reutine maintenance work, when approved by the Engineer.

 3. Chamesking detrices used to close tones may be supplementated with the Chevron Majornach Sign placed on every other chamesking device. Chevrons may be ottouched to plastic drums as per BE Standards.

 5. Phodour Verkleic with TIMA on High intensity relating, Blashing, ascelleding or strade splits. A Shadour Verkleic with 10 Mar All Shadour be used originar is can be positioned 30 to 800 feet in advance of the original of the control of order exposure without observately officially the performance or work conditions require the treffic control for remain. July 19 3 Borricootes or other charactering devices may be substituted for the Shadour Verkleic and TIMA.

 5. Additional Shadour Chevices with TIMA may be positioned in each closed layer, on the shadour or of the pervale surface, next to mose shown in order to protect a wider work space.

PLEASE NOTE:

ONE LANE CLOSURE TRAFFIC OPERTAION MAY NOT BE IN EFFECT BETWEEN THE HOURS OF 6:00-9:00AM AND 4:00-7:00PM, MONDAYS TO FRIDAY.

AT&T Texas/SWBT TRAFFIC CONTROL PLAN CFA/CC 205 16-9232 C.O. RICH-ROSE "232" IAK FG-009

JOB NO. 1605-063-01-510