



**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@fortbendcountytexas.gov

- ☒ Right of Way Permit
☐ Commercial Driveway Permit

Permit No: 2018-23570

The following "Notice of Proposed Cable, Conduit, and/or Pole Line activity in Fort Bend County" and accompanying attachments have been reviewed and the notice conforms to appropriate regulations set by Commissioner's Court of Fort Bend County, Texas.

(1) COMPLETE APPLICATION FORM:

- ☒ a. Name of road, street, and/or drainage ditch affected.
☒ b. Vicinity map showing course of directions
☒ c. Plans and specifications

(2) BOND:

- ☐ County Attorney, approval when applicable.
- ☒ Perpetual bond currently posted. Bond No: [REDACTED] Amount: \$50,000.00
- ☐ Performance bond submitted. Bond No: _____ Amount: _____
- ☐ Cashier's Check Check No: _____ Amount: _____

(3) DRAINAGE DISTRICT APPROVAL (WHEN APPLICABLE):

Drainage District Approval

Date

We have reviewed this project and agree it meets minimum requirements.



Permit Administrator

10/29/2018

Date

MCImetro
ACCESS TRANSMISSION SERVICES CORPORATION

OUTSIDE PLANT CONSTRUCTION
FIBER OPTIC CABLE ROUTE

ECC FIBER BUILD: 1706ANBE.004
PECAN GROVE TO HOUGHTON
RICHMOND, TX. 77407

CROSSING FM-1093 AT THE INTERSECTION OF FM-1093
HOUGHTON RD.

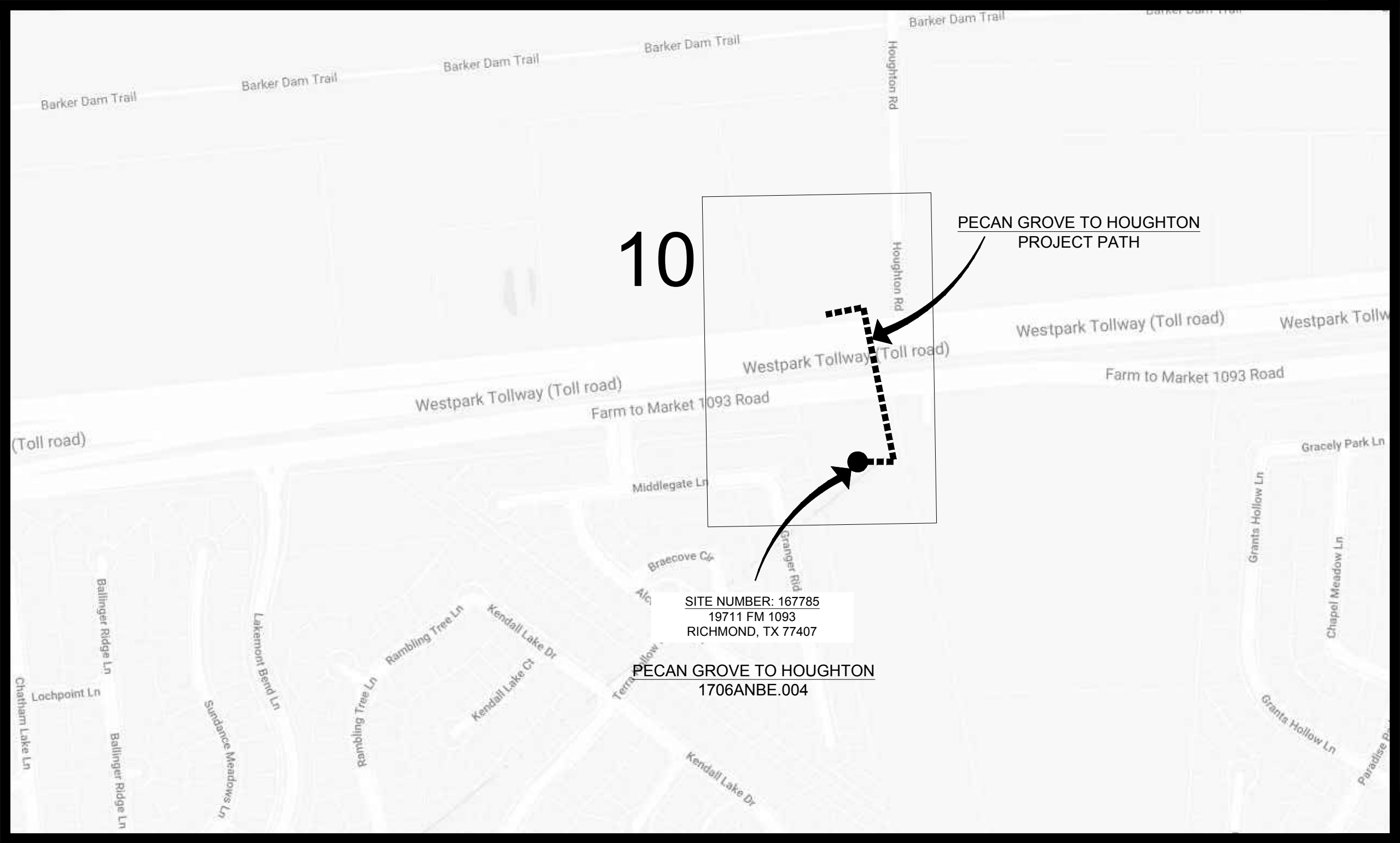
SITE CODE: HODATX
PROJECT STATUS: CONSTRUCTION

DATE: 09/05/18

NOTE:
CONTRACTOR YOU ARE TO CALL THE TxDOT INSPECTOR
NOTED ON THE APPROVED PERMIT 48 HOURS PRIOR TO
THE START OF CONSTRUCTION.

NOTE:
CONTRACTOR IS REQUIRED TO CONTACT TxDOT DISTRICT TRAFFIC SIGNAL SHOP
AT 817-370-3661 FOR LINE LOCATES IF BURIED PORTION OF THIS WORK
IS NEAR TxDOT TRAFFIC SIGNALS

LOCATION MAP
RICHMOND, TX
FORT BEND COUNTY



SITE NUMBER: 167785
19711 FM 1093
RICHMOND, TX 77407

PECAN GROVE TO HOUGHTON
1706ANBE.004

PECAN GROVE TO HOUGHTON
PROJECT PATH

MAP LINE LEGEND

- PROPOSED BURIED CABLE
- PROPOSED AERIAL CABLE

PROJECT: 1706ANBE.004
RICHMOND, TX
PECAN GROVE TO HOUGHTON



McImetro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PECAN GROVE TO HOUGHTON
RICHMOND, TX

DATE: 09/05/18
ENGINEER: L. STALCUP
DRAWN BY: T.P.G. (KIB)

REVISIONS			
No.	DATE	DESCRIPTION	BY
1.	-	-	-

EXCEPT AS MAY BE OTHERWISE PROVIDED BY CONTRACT, THESE DRAWINGS AND SPECIFICATIONS SHALL REMAIN THE PROPERTY OF MCI COMMUNICATIONS SERVICES INC. BOTH BEING ISSUED IN STRICT CONFIDENCE AND SHALL NOT BE REPRODUCED, COPIED, OR USED FOR ANY PURPOSE WITHOUT SPECIFIC WRITTEN PERMISSION.

SCALE
HORIZONTAL: 1"= 50'
VERTICAL: 1"= N/A
MP _____ TO MP _____
SHEET 2 OF 11
FILE: 1706ANBE.005 02 A

CONTACT SHEET

MCI

PROJECT ENGINEER:

PROJECT MANAGER:

PROJECT COORDINATOR:

OUTSIDE PLANT CONSTRUCTION:

CONSTRUCTION CONTRACTOR:	ERVIN CABLE CONSTRUCTION	844-322-2524
CONSTRUCTION MANAGER:	AURELIO MALLAMANCE	270-349-0337

AGENT:

MANAGER:

COORDINATOR:

MANAGER:

PROGRAM MANAGER:

LIGHTWAVE ENGINEER:

CIVIL ENGINEER:

TERMINAL CONST. REP.:

SPLICING MANAGER:

TSO MANAGER:

ENGINEERING CONTRACTOR

RAILROADS

UNION PACIFIC RAILROAD	DANIEL PETERS	402-544-8620
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UTILITIES

MCI UTILITY LOCATE	1-800-624-9675
TEXAS ONE CALL SYSTEM (UTILITY LOCATES)	1-800-545-6005

NON MEMBERS:

CITY GOVERNMENT

RICHMOND PUBLIC WORKS DEPARTMENT
600 MORTON STREET , RICHMOND TEXAS
PUBLIC WORKS - 281-342-0559
CITY ENGINEER – KELLY KALUZA

COUNTY GOVERNMENT

STATE GOVERNMENT

FEDERAL GOVERNMENT

N/A

OTHER

N/A

PROJECT: 1706ANBE.004

RICHMOND, TX
PECAN GROVE TO HOUGHTON



MCI metro ACCESS TRANSMISSION SERVICES CORPORATION	OUTSIDE PLANT CONSTRUCTION TITLE: FIBER OPTIC ROUTE PEACANGROVE TO HOUGHTON RICHMOND, TX
--	---

DATE: 09/05/18

ENGINEER: L. STALCUP

DRAWN BY: T.P.G. (KIB)

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MP _____ TO MP _____

SHEET 3 OF 11

FILE: 1706ANBE.005 03 A

GENERAL NOTES / CLARIFICATION NOTES

GENERAL NOTES

1.

VERIZON BUSINESS COMPRISES THE FOLLOWING OPERATING ENTITIES:

- MCI COMMUNICATIONS SERVICES, INC.
- MCI METRO COMMUNICATIONS SERVICES, INC.
- MCI METRO ACCESS TRANSMISSION SERVICES OF VIRGINIA, INC.
- MCI METRO ACCESS TRANSMISSION SERVICES OF MASSACHUSETTS, INC.
- METROPOLITAN FIBER SYSTEMS OF NEW YORK, INC.
2.

ALL WORK TO BE PERFORMED IN STRICT ACCORDANCE WITH THE APPLICABLE CODES OR REQUIREMENTS OF ANY REGULATING GOVERNMENTAL AGENCY, VERIZON BUSINESS AND THE RIGHT-OF-WAY GRANTOR.
3.

LOCATIONS OF SOME OF THE PHYSICAL FEATURES WERE OBTAINED FROM DATED RAILROAD EVALUATION MAPS OR OTHER DRAWINGS AND MAY NOT BE AS SHOWN OR DEPICTED ON THESE DRAWINGS.
4.

UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE RECORDS AND FIELD OBSERVATIONS BUT ARE NOT NECESSARILY EXACT. THEREFORE, UTILITY LOCATIONS WILL BE VERIFIED AT LEAST 100 FEET IN ADVANCE OF TRENCHING OR PLOWING, SO THAT CHANGES IN CABLE PLACEMENT CAN BE MADE IN THE EVENT OF CONFLICT.
5.

ALL KNOWN BURIED OBSTRUCTIONS ARE SHOWN ON THE CONSTRUCTION DRAWINGS. ANY AND ALL OTHERS ENCOUNTERED ARE ALSO THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE, PROTECT AND REPAIR IF DAMAGED.
6.

ANY AND ALL IMPROVEMENTS, SUCH AS ASPHALT OR CONCRETE PAVEMENT, CURBS, GUTTERS, WALKS, DRAINAGE DITCHES, EMBANKMENTS, SHRUBS, TREES, GRASS SOD, ETC., IF DAMAGED, SHALL BE RESTORED TO ORIGINAL CONDITION.
7.

EQUIPMENT TYPES SPECIFIED HEREIN (IE: "BACKHOE", SWAMP PLOW" ETC.) ARE SUGGESTIONS ONLY AND ARE NOT INTENDED AS REQUIREMENTS. CONTRACTOR WILL BE NOTIFIED AS TO EXPECTATIONS.
8.

SHORING OF BORE PITS AND TRENCHES IN ACCORDANCE WITH OSHA REGULATIONS IS MANDATORY.
9.

BURIED CABLE MARKERS WILL BE PLACED AT ALL UNDERGROUND UTILITY LOCATIONS AND ALL OTHER LOCATIONS IN ACCORDANCE WITH THE CONSTRUCTION DRAWINGS AND THE OUTSIDE PLANT HANDBOOK.
10.

ALL 4" ID CONDUIT WILL BE SCHEDULE 40 (EG.: PVC OR GSP/BSP), OR AS SPECIFIED.
11.

UNDERGROUND CONDUIT WILL BE PLACED AT 48" MINIMUM COVER UNLESS OTHERWISE SPECIFIED ON THE CONSTRUCTION DRAWINGS.

CLARIFICATION NOTES

1.

2.

3.

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1.

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3.

4.

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7.

1. STATION

2. LOCATION

3. CLARIFICATION NO. AND MINIMUM COVER

4. QUANTITY LINEAR FOOTAGE/SQUARE FOOTAGE, SIZE OF MANHOLE/HANDHOLE SIZE OF PULL/SPLICE BOX, DIMENSION OF WALL, HEIGHT/CLASS/TYPE OF POLE

5. TYPICAL DRAWING NO. AND TYPICAL DETAIL DRAWING NUMBER

6. PLANT ACCOUNTING CODE

7. SPECIFIED CONDUIT, HANDHOLE/MANHOLE NO., SPECIFIED PURPOSE AND MATERIAL, BRIDGE NO. AND RAILROAD STATION, MATERIAL, POLE NO.

ADDENDUM NOTES

CLARIFICATION NOTES (CONTINUED)

- 100

110

JACK AND DRY BORE CONDUIT(S)
- 200

210

212

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PLACE CONDUIT

PLACE HIGH DENSITY POLYETHYLENE (HDPE)

ROCK ADDER

SLURRY BACKFILL ADDER

EXPOSE CONDUIT

EXPOSE CONDUIT AND RELOCATE

EXPOSE CONDUIT AND REPLACE/SUBSTITUTE

EXPOSE AND REMOVE CONDUIT

EXPOSE AND REMOVE CONDUIT (ABANDONED)

CONCRETE ENCASE

REMOVE CONCRETE ENCASEMENT

REMOVE CONCRETE CAP

PLACE HANDHOLE

REMOVE EXISTING HANDHOLE

RELOCATE HANHOLE

REPLACE/SUBSTITUTE HANDHOLE

EXCAVATE SPLICE PIT

PLACE MANHOLE

REMOVE EXISTING MANHOLE

RELOCATE PRECAST MANHOLE

REPLACE/SUBSTITUTE PRECAST MANHOLE

CONSTRUCT WALL

REMOVE AND RESTORE ASPHALT

REMOVE AND RESTORE CONCRETE

REMOVE AND RESTORE SIDEWALK

REMOVE AND RESTORE CURBING

300

310

315

320

330

ATTACH CONDUIT TO WALL OR STRUCTURE

DETACH CONDUIT FROM WALL OR STRUCTURE

CORE BORE

ATTACH PULL/SPLICE BOX TO WALL OR STRUCTURE

400

410

411

415

420

PULL CABLE

PULL THROUGH DUCT (INNERDUCT)

REMOVE CABLE FROM CONDUIT

REPOSITION ACTIVE CABLE SLACK

500

510

515

516

517

520

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518

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535

DIRECT BURY CABLE

EXPOSE DIRECT BURIED CABLE

EXPOSE DIRECT BURIED CABLE AND RELOCATE

REMOVE AND DISPOSE OF CABLE

PLACE AERIAL CABLE

RELOCATE AERIAL CABLE

DELASH AERIAL CABLE

RELASH AERIAL CABLE

REMOVE AERIAL CABLE

PLACE POLE/PUSH BRACE

REMOVE POLE/PUSH BRACE

600

610

620

630

JETTING CONDUIT

EMBEDMENT PLOW

DIRECTIONAL BORE

700

710

711

713

712

714

PLACE BURIED CABLE MARKERS AND SIGNS/MWCOM

WATER CROSSING SIGNS

PLACE ISOLATOR/PROTECTION SYSTEM AT EXISTING HANDHOLES/MANHOLE

REMOVE BURIED CABLE MARKER POST/HARDWARE

REMOVE CONCRETE BURIED CABLE MARKER POST

PROJECT: 1706ANBE.004

RICHMOND, TX

PECAN GROVE TO HOUGHTON



MCI metro
ACCESS TRANSMISSION SERVICES
CORPORATION

OUTSIDE PLANT CONSTRUCTION

TITLE: FIBER OPTIC ROUTE

PEACANGROVE TO HOUGHTON

RICHMOND, TX

DATE: 09/05/18

ENGINEER: L. STALCUP

DRAWN BY: T.P.G. (KIB)

REVISIONS

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SCALE

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VERTICAL: 1"= N/A

MP TO MP

SHEET 4 OF 11

FILE: 1706ANBE.005 04 A

SYMBOLS KEY

DIRECT BURIED CABLE

AERIAL CABLE

SUBMARINE CABLE

FOGWIRE CABLE

DIRECT BURIED HDPE

PVC OR SPLIT PVC CONDUIT

BSP/GSP OR SPLIT BSP/GSP CONDUIT

STEEL CASING

REMOVE AND RESTORE ASPHALT OR CONCRETE
(WIDTH AS INDICATED)

CORE BORE

JACK AND BORE

DIRECTIONAL BORE (& PLACE CONDUIT)

FUTURE CABLE

REMOVE CABLE

TO BE REMOVED OR ABANDONED
(SHOWN FOR HDPE)

AERIAL UTILITY (ELECTRIC)

UNDERGROUND UTILITY (TELEPHONE)

MAIN TRACKS

AUXILLARY TRACKS

CENTERLINE

RIGHT-OF-WAY

EDGE OF ROADWAY (GENERIC)

EDGE OF PAVEMENT

BACK OF CURB

DITCH LINE

TAX, CITY, COUNTY, OR STATE BOUNDARY LINE

PROPERTY LINE

FENCE LINE

GUARDRAIL

TOP OF SLOPE

TOE OF SLOPE

EXISTING

PROPOSED

STEEL MARKER AND SIGN-(A)
ALUMINUM "HUB"-STYLE MARKER-(B)
FLAT MARKER-(C)
TUBULAR MARKER-(D)
TUBULAR MARKER, & ISOLATOR PROTECTOR-(E)

MILE POST MARKER
NOTE:
DASHED = NOT FOUND IN FIELD

PERMIT TRACKING FORM IDENTIFIER

ROCK PROBE (DEPTH AS INDICATED)

UTILITY COVER DEPTH

HANDHOLE, MANHOLE OR PULLBOX

POLE

ANCHOR ONLY

GUY ONLY

OVERHEAD GUY (ARROW IN DIRECTION OF PULL)

ANCHOR AND GUY

SIDEWALK ANCHOR AND GUY

FOREIGN ANCHOR AND GUY

PUSH BRACE (EXISTING POLE)

ACCOUNT CODE CHANGE (BURIED TO AERIAL)

RISER ATTACHMENT LOCATION

BOND AND GROUND

CULVERT (SIZE AS INDICATED)

BRIDGE

WATER METER

GAS VALVE

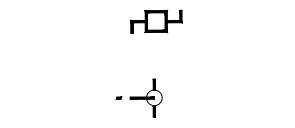
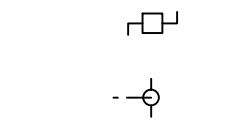
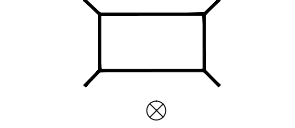
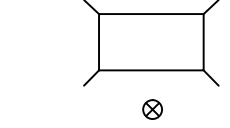
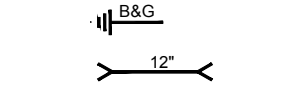
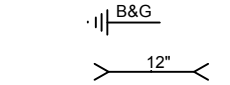
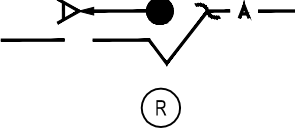
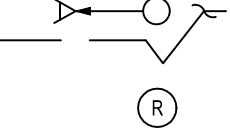
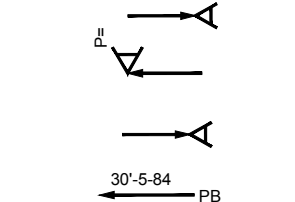
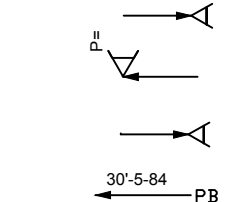
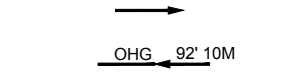
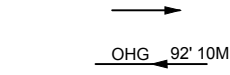
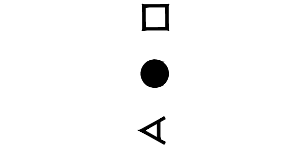
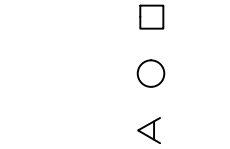
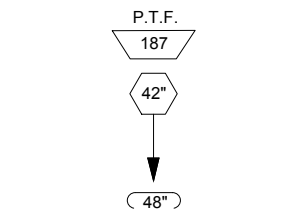
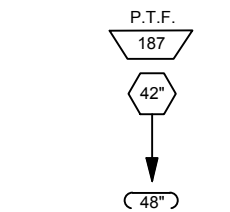
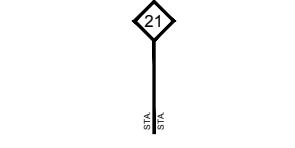
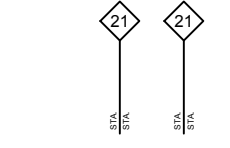
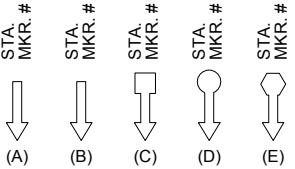
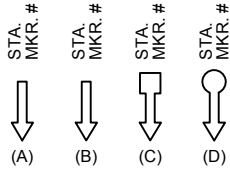
FIRE HYDRANT

RAILROAD SIGNAL CONTROL BOX

CAUTION NOTE

EXISTING

PROPOSED



PROJECT: 1706ANBE.004

RICHMOND, TX

PECAN GROVE TO HOUGHTON



McImetro
ACCESS TRANSMISSION SERVICES
CORPORATION

OUTSIDE PLANT CONSTRUCTION

TITLE: FIBER OPTIC ROUTE
PECANGROVE TO HOUGHTON

RICHMOND, TX

DATE: 09/05/18

ENGINEER: L. STALCUP

DRAWN BY: T.P.G. (KIB)

REVISIONS

No.	DATE	DESCRIPTION	BY
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SCALE

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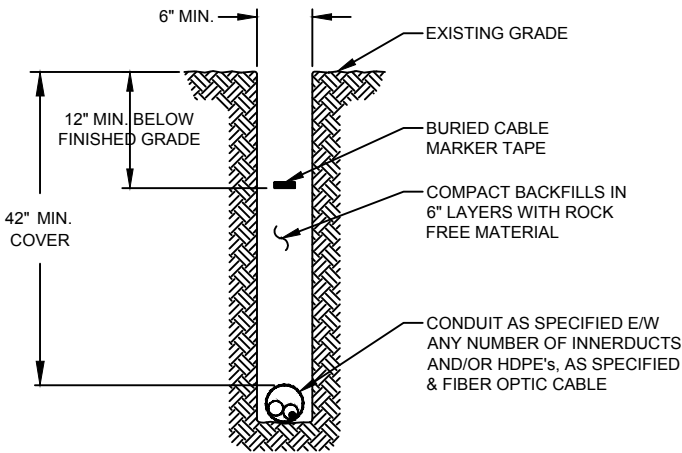
SHEET 6 OF 11

FILE: 1706ANBE.005 06 A

CONSTRUCTION DETAILS

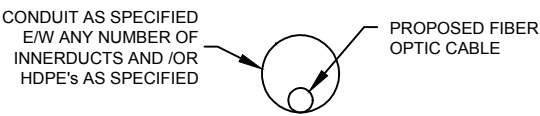
TYPICAL DETAIL "A"

TRENCH & PLACE CONDUIT



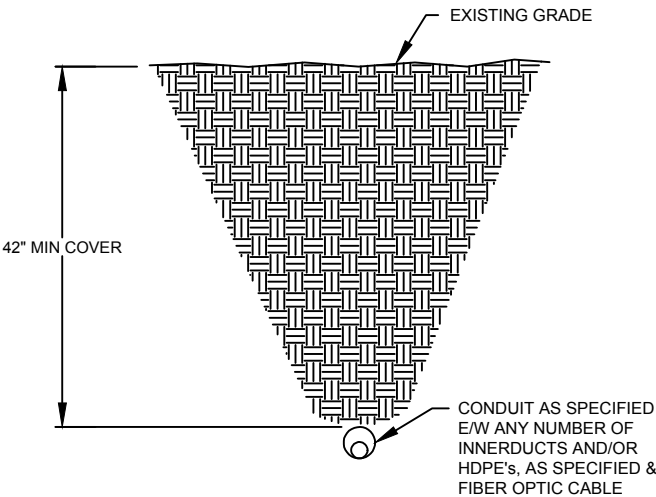
TYPICAL DETAIL "B"

CROSS SECTION OF PROPOSED HDPE



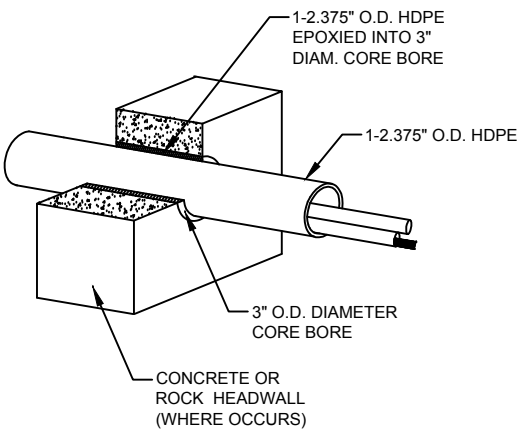
TYPICAL DETAIL "C"

DIRECTIONAL BORE CROSS SECTION FOR CONDUIT



TYPICAL DETAIL "D"

3" CORE BORE



NOTE:

EPOXY GROUT IS USED AT BOTH ENDS OF CORE BORE TO SEAL GAP BETWEEN 2.375" CONDUIT AND PVC SLEEVE.

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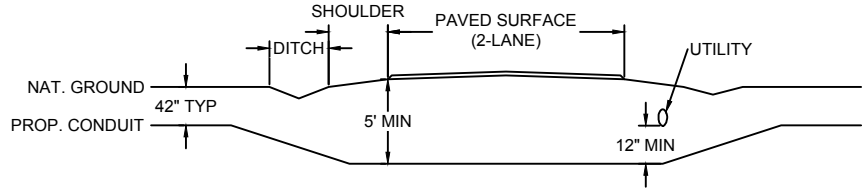
SHEET 7 OF 11

FILE: 1706ANBE.005 07 A

TYPICAL CROSSING PROFILE DETAILS: UNDERGROUND

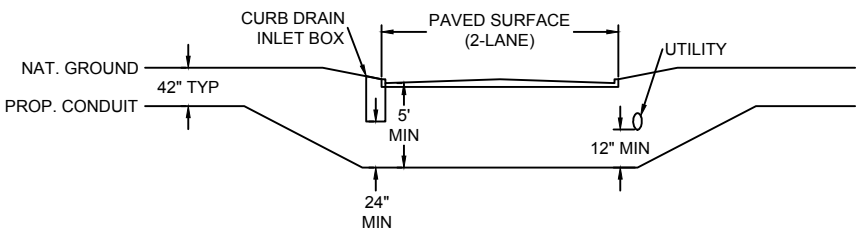
TYPICAL DETAIL "A"

TWO LANE - ASPHALT ROAD - NO CURB



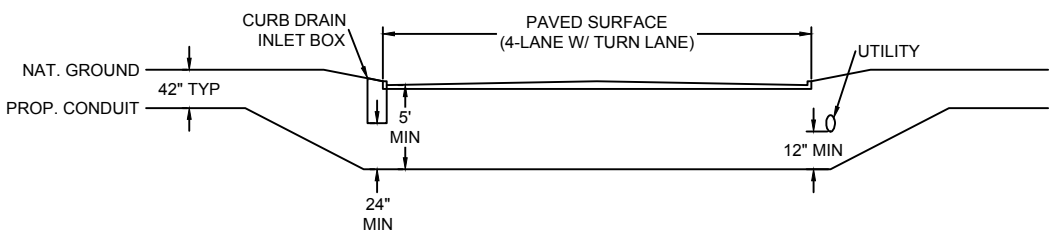
TYPICAL DETAIL "B"

TWO LANE - CURBED ROAD



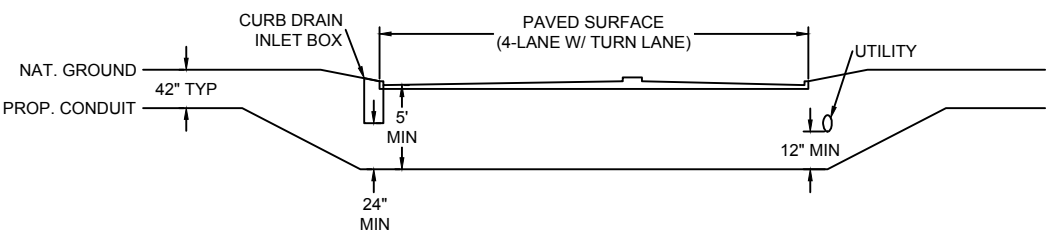
TYPICAL DETAIL "C"

FOUR LANE (W/ TURN LANE) - CURBED ROAD - NO MEDIAN



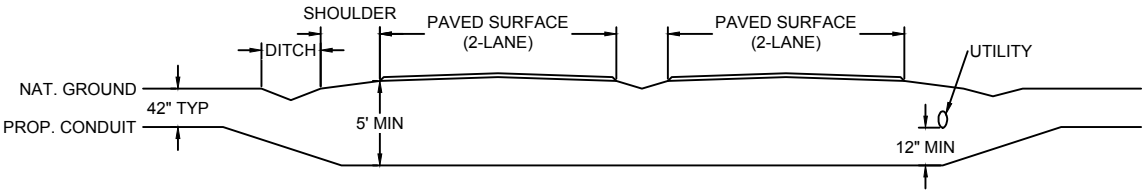
TYPICAL DETAIL "D"

FOUR LANE (W/ TURN LANE) - CURBED ROAD - WITH MEDIAN



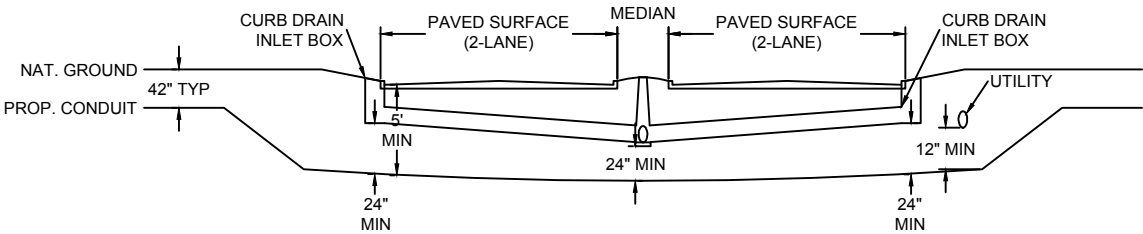
TYPICAL DETAIL "E"

4 LANE - SPLIT ASPHALT ROAD - NO CURB



TYPICAL DETAIL "F"

4 LANE - SPLIT CURBED ROAD



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RICHMOND, TX

PECAN GROVE TO HOUGHTON



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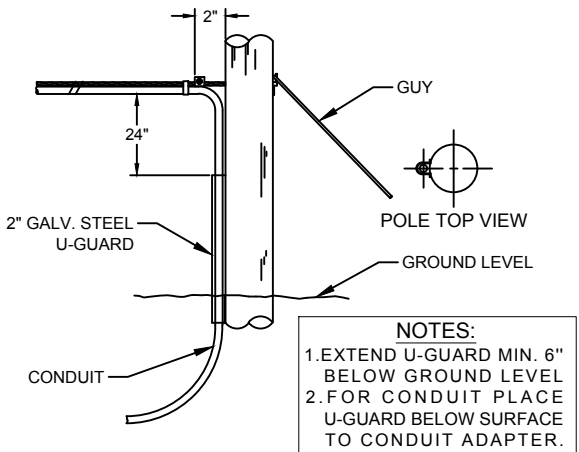
SHEET 7A OF 11

FILE: 1706ANBE.005 07AA

GENERAL AERIAL CONSTRUCTION DETAILS

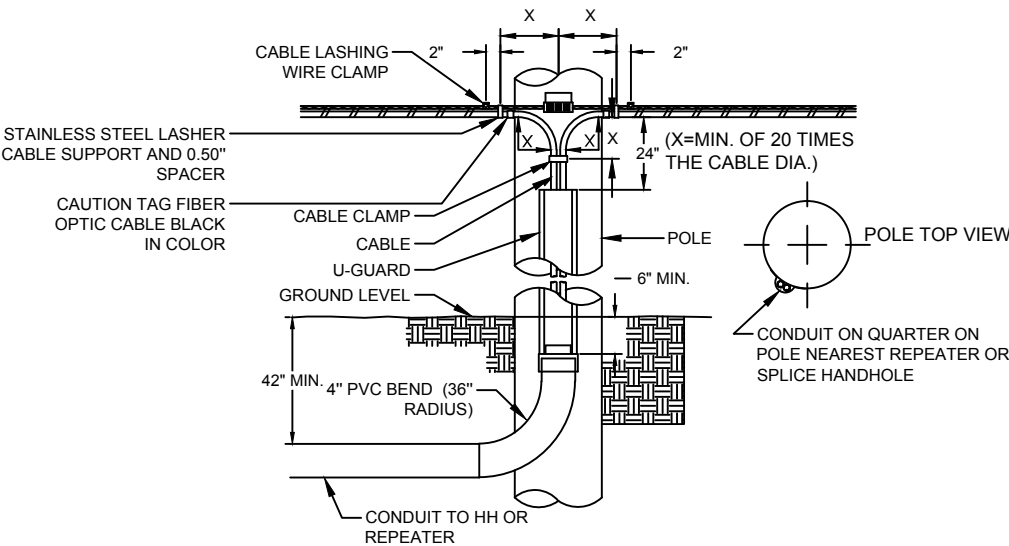
TYPICAL DETAIL "A"

POLE ARRANGEMENT FOR
AERIAL TO BURIED



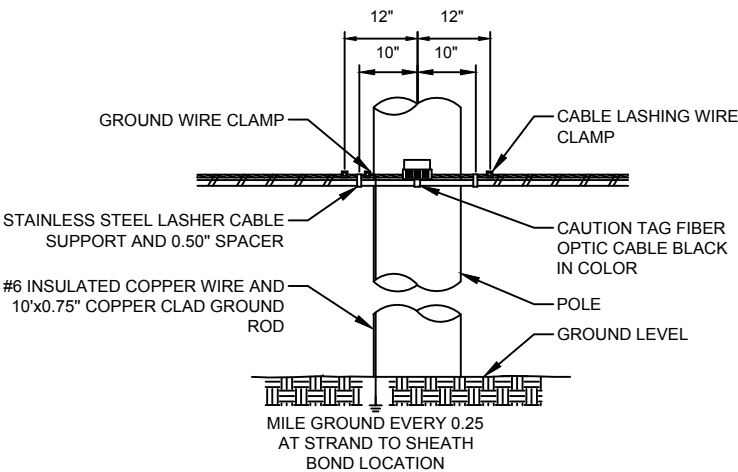
TYPICAL DETAIL "B"

POLE ARRANGEMENT FOR REPEATER
OR HANDHOLE LOCATION



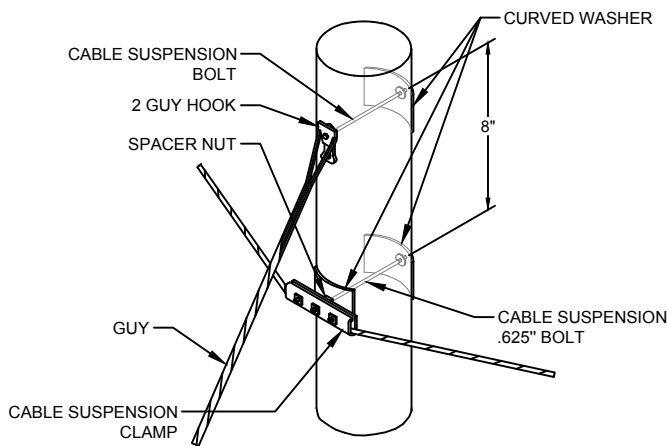
TYPICAL DETAIL "C"

TYPICAL CABLE & HARDWARE
INSTALLATION



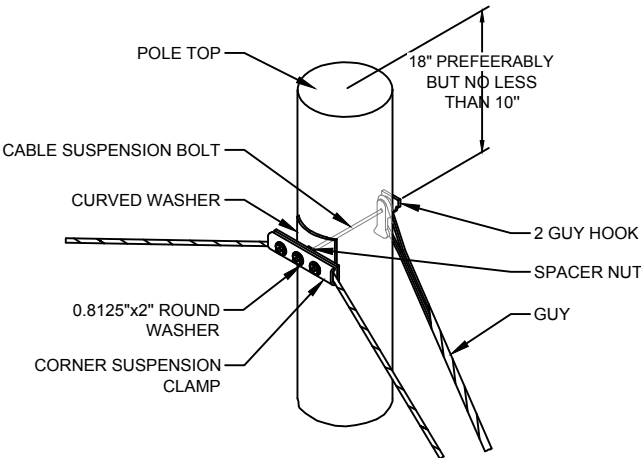
TYPICAL DETAIL "D"

SUSPENSION STRAND - PULL TOWARD
POLE - LESS THAN 5 FEET



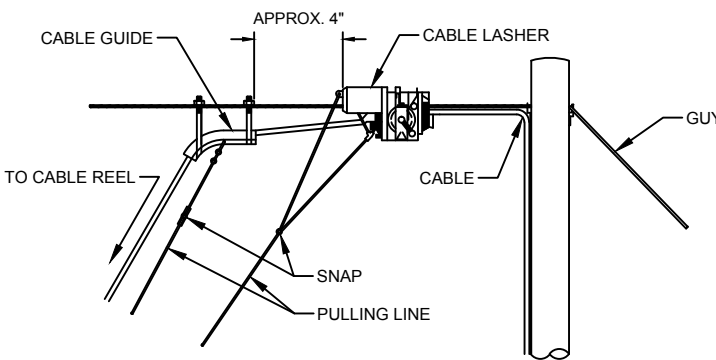
TYPICAL DETAIL "E"

SUSPENSION STRAND - PULL AWAY
FROM POLE - 5 FEET OR MORE



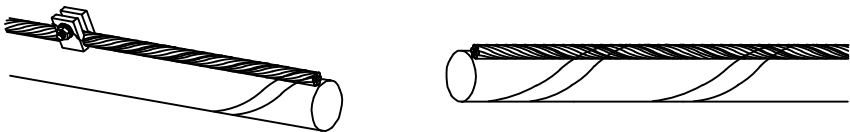
TYPICAL DETAIL "F"

TYPICAL ARRANGEMENT OF
CABLE LASHER AND CABLE GUIDE



TYPICAL DETAIL "G"

JOINING 045 LASHING WIRE



FORMING WIRE OVER
STUD OF CLAMP

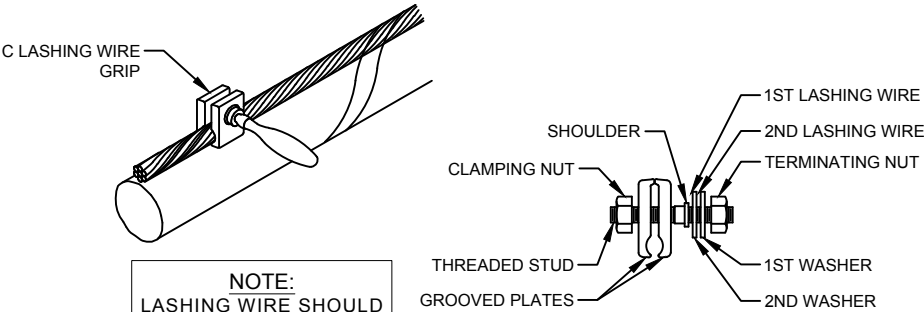
REMOVE ANY SLACK IN THE LASHING WIRE BY MAINTAINING A PULL ON THE WIRE AND TAPPING THE STRAND SHARPLY. THEN FORM THE WIRE OVER THE STUD AND TIGHTEN THE NUT. CUT THE FREE END OF THE LASHING WIRE OFF 0.75" BEYOND THE END OF THE CLAMP.

FORMING LASHING WIRE
AROUND STRAND

FORM THE LASHING WIRE AROUND THE STRAND AND PLACE IT BELOW THE STUD AND BETWEEN THE SECOND WASHER AND STUD SHOULDER.

TYPICAL DETAIL "H"

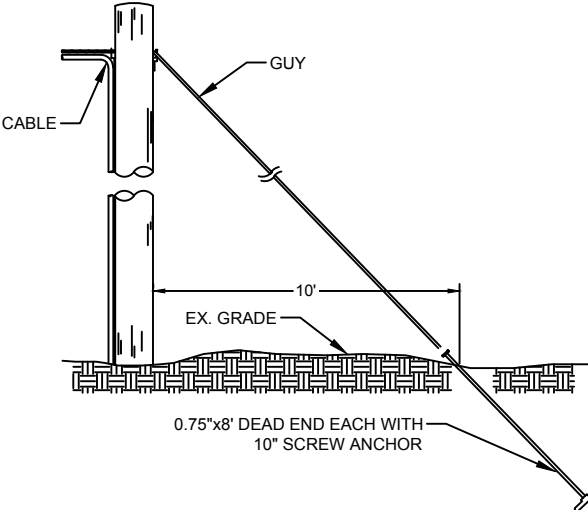
LASHING WIRE GRIP AND CLAMP



NOTE:
LASHING WIRE SHOULD FOLLOW LAY OF STRAND WIRES UNDER GRIP.

TYPICAL DETAIL "I"

ANCHOR & DOWN GUY



PROJECT: 1706ANBE.004

RICHMOND, TX

PECAN GROVE TO HOUGHTON



McImetro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PEACANGROVE TO HOUGHTON
RICHMOND, TX

DATE: 09/05/18

ENGINEER: L. STALCUP

DRAWN BY: T.P.G. (KIB)

REVISIONS			
No.	DATE	DESCRIPTION	BY
1.	-	-	-

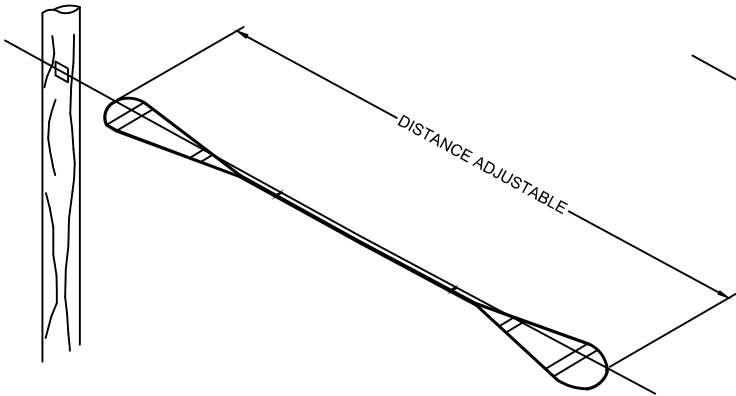
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SCALE
HORIZONTAL: 1"= 50'
VERTICAL: 1"= N/A
MP _____ TO MP _____
SHEET 7B OF 11
FILE: 1706ANBE.005 07BA

AERIAL IN-LINE SLACK STORAGE DETAILS

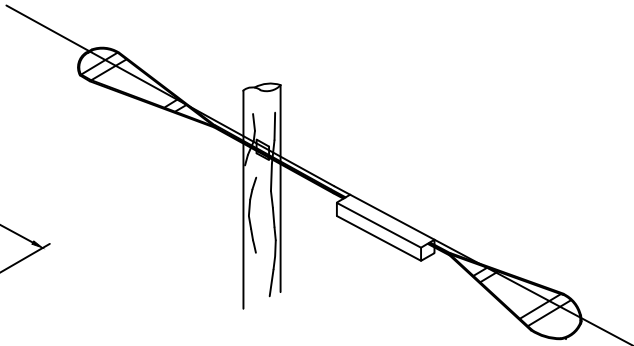
TYPICAL DETAIL "A"

RESERVE CABLE LENGTH
STRAND STORAGE APPLICATION



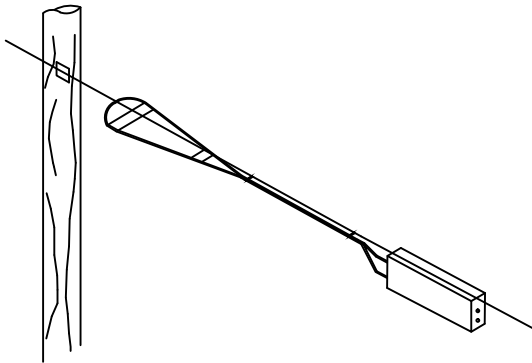
TYPICAL DETAIL "B"

IN-LINE SPLICE APPLICATION



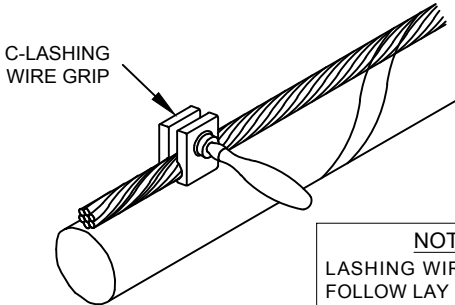
TYPICAL DETAIL "C"

BUTT SPLICE APPLICATION



TYPICAL DETAIL "D"

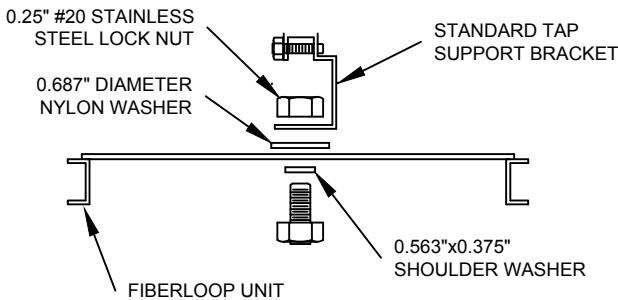
LASHING WIRE GRIP AND CLAMP C-LASHING
WIRE GRIP INSTALLED ON STRAND



NOTE:
LASHING WIRE SHOULD
FOLLOW LAY OF STRAND
WIRES UNDER GRIP.

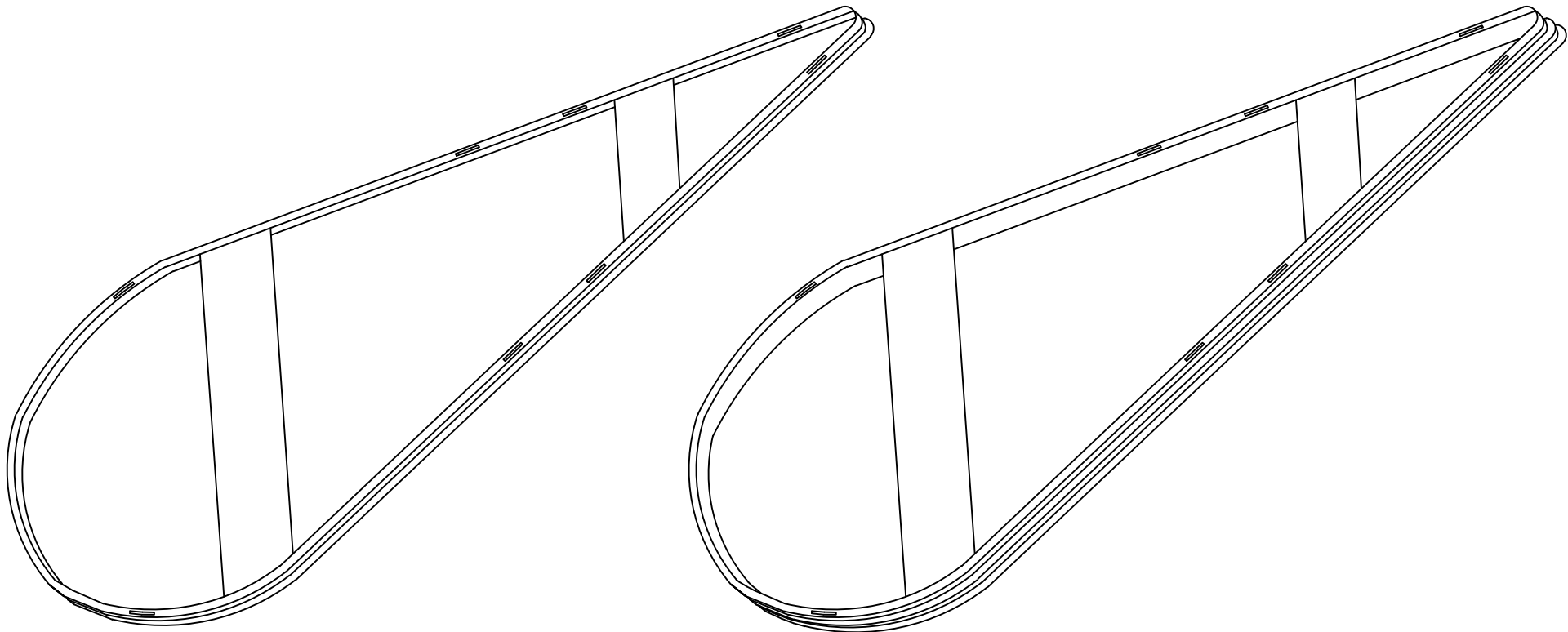
TYPICAL DETAIL "E"

HARDWARE KIT



TYPICAL DETAIL "F"

SINGLE & DOUBLE FIBER LOOPS



PROJECT: 1706ANBE.004

RICHMOND, TX
PECAN GROVE TO HOUGHTON



McImetro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PEACANGROVE TO HOUGHTON
RICHMOND, TX

DATE: 09/05/18

ENGINEER: L. STALCUP

DRAWN BY: T.P.G. (KIB)

REVISIONS			
No.	DATE	DESCRIPTION	BY
1.	-	-	-

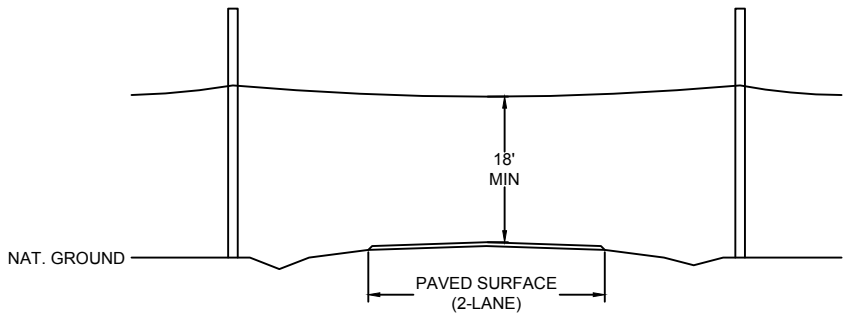
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PURPOSE WITHOUT SPECIFIC WRITTEN PERMISSION.

SCALE
HORIZONTAL: 1"= 50'
VERTICAL: 1"= N/A
MP _____ TO MP _____
SHEET 7C OF 11
FILE: 1706ANBE.005 07CA

TYPICAL CROSSING PROFILE DETAILS: AERIAL

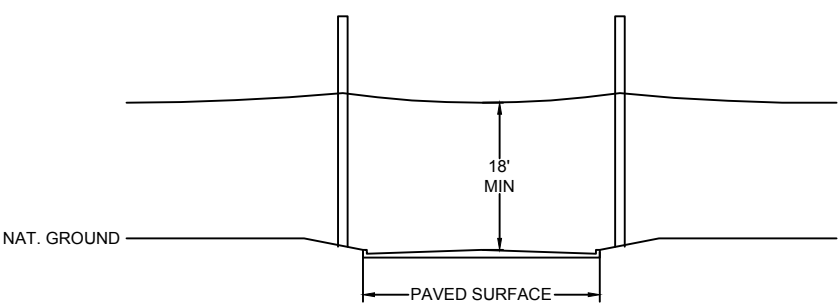
TYPICAL DETAIL "A"

TWO LANE - ASPHALT ROAD - NO CURB



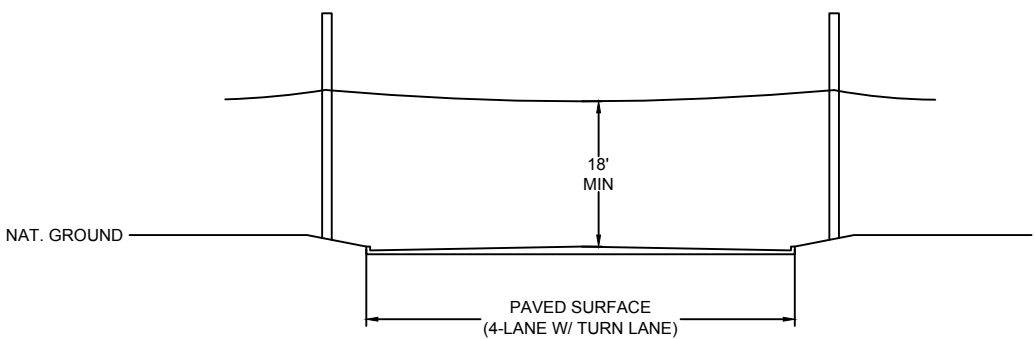
TYPICAL DETAIL "B"

TWO LANE - CURBED ROAD



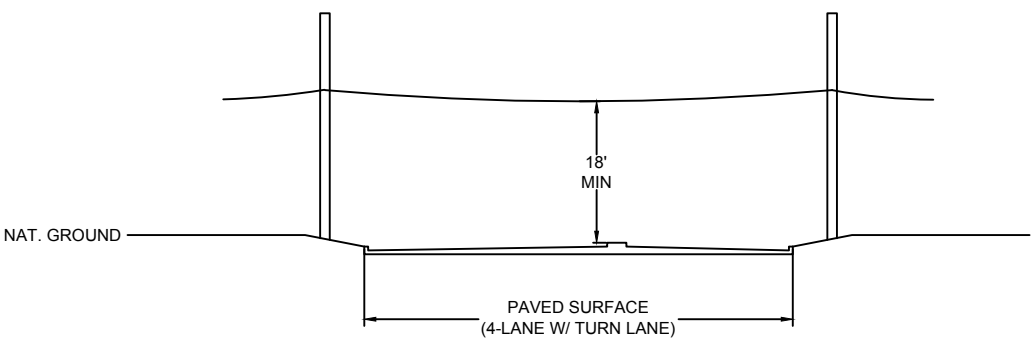
TYPICAL DETAIL "C"

FOUR LANE (W/ TURN LANE) - CURBED ROAD - NO MEDIAN



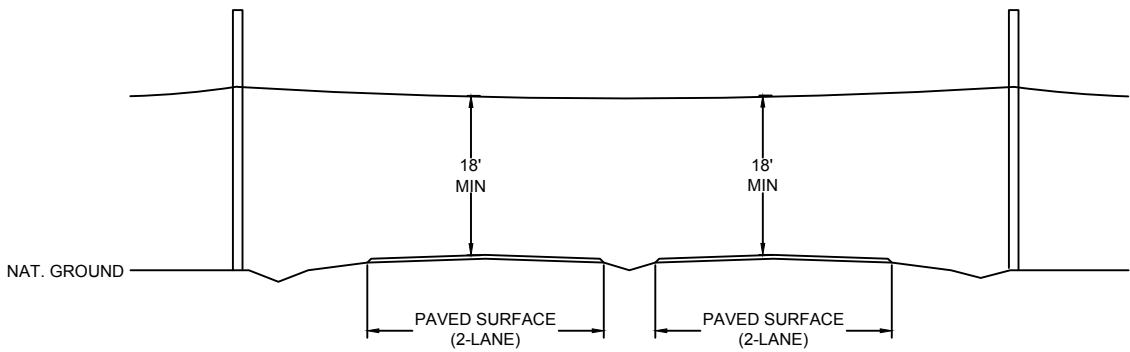
TYPICAL DETAIL "D"

FOUR LANE (W/ TURN LANE) - CURBED ROAD - WITH MEDIAN



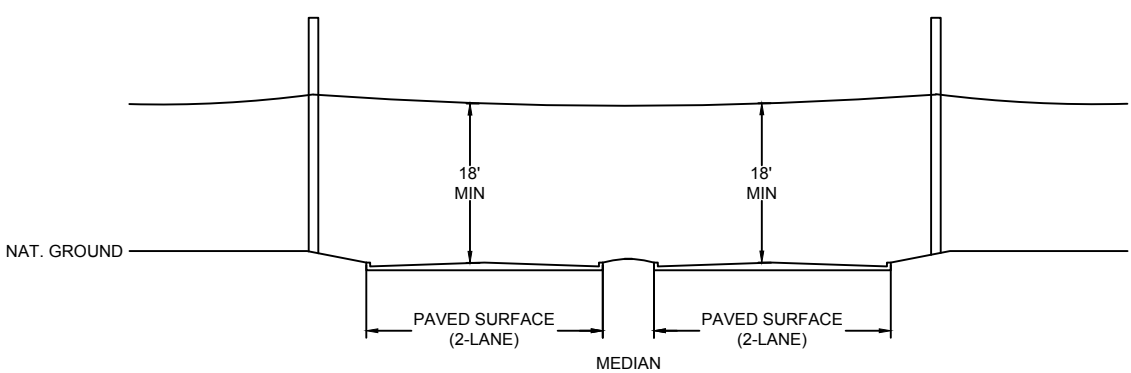
TYPICAL DETAIL "E"

4 LANE - SPLIT ASPHALT ROAD - NO CURB



TYPICAL DETAIL "F"

4 LANE - SPLIT CURBED ROAD



PROJECT: 1706ANBE.004

RICHMOND, TX
PECAN GROVE TO HOUGHTON



McImetro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PECAN GROVE TO HOUGHTON
RICHMOND, TX

DATE: 09/05/18

ENGINEER: L. STALCUP

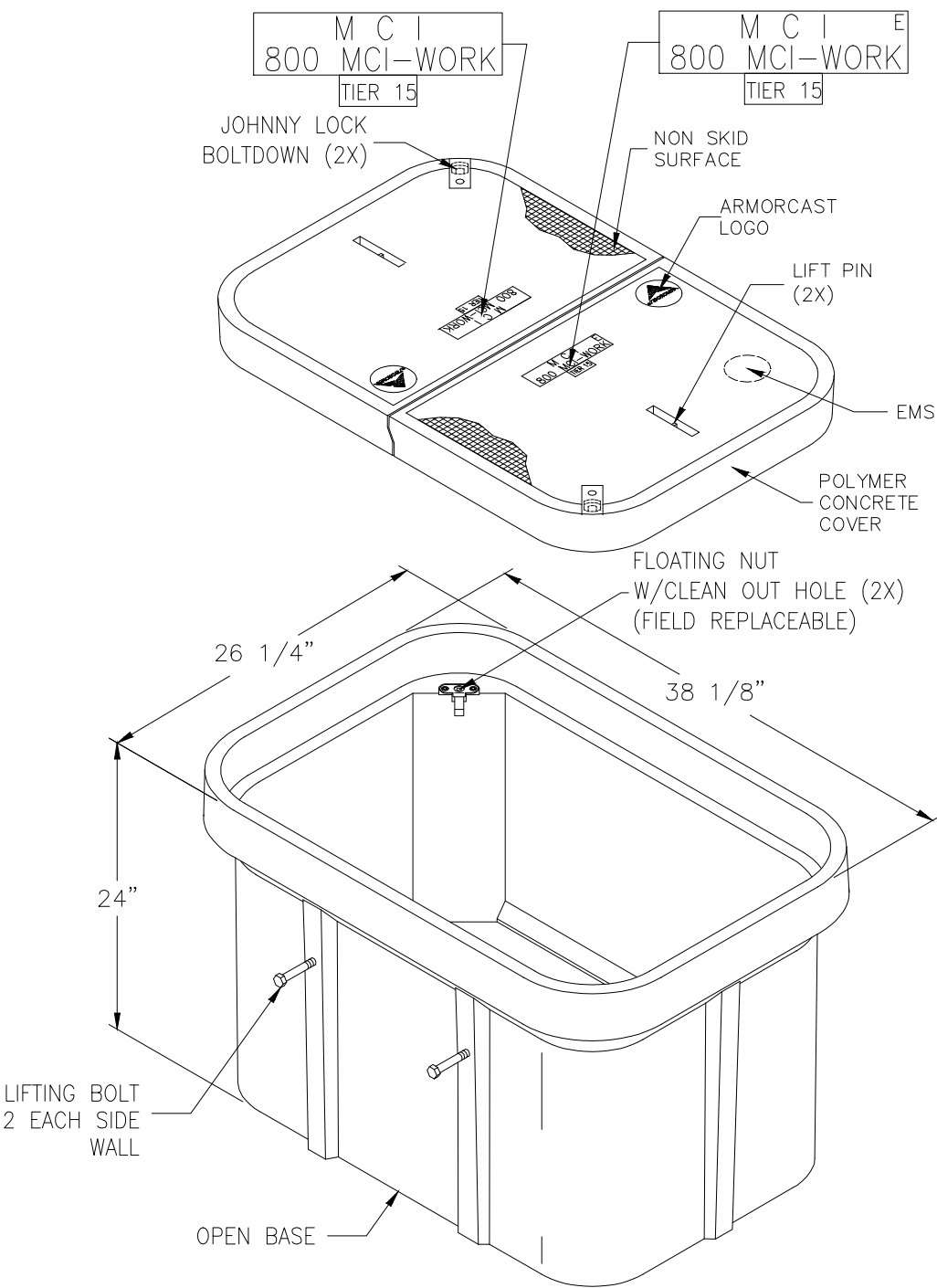
DRAWN BY: T.P.G. (KIB)

REVISIONS			
No.	DATE	DESCRIPTION	BY
1.	-	-	-


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SCALE
HORIZONTAL: 1"= 50'
VERTICAL: 1"= N/A
MP _____ TO MP _____
SHEET 7D OF 11
FILE: 1706ANBE.005 07DA

24" x 36" x 24" POLYMER CONCRETE BOX ASSEMBLY



NOTE:
BOX AND COVER ASSEMBLY MEET
ANSI/SCTE 77 TIER 15 LOADING

FILE # A6-1974TAPMC14		13230 Satcoy Street, North Hollywood, CA 91605 (818) 982-3600				PART DESCRIPTION 24" X 36" X 24" POLYMER CONCRETE BOX ASSEMBLY			
		ARMORCAST® PRODUCTS COMPANY				CUSTOMER VERIZON			
		THE INFORMATION IN THIS DRAWING IS CONFIDENTIAL. THE DRAWING IS NOT TO BE REPRODUCED OR ITS CONTENTS DIVULGED IN ANY WAY WHATSOEVER EXCEPT WITH THE PRIOR WRITTEN APPROVAL OF ARMORCAST PRODUCTS COMPANY. IT IS THE PROPERTY OF AND MUST BE RETURNED TO ARMORCAST PRODUCTS COMPANY, 13230 SATICOY STREET, NORTH HOLLYWOOD, CALIFORNIA 91605.				DRAWN	DATE	SCALE	MAX. LOAD
						OA	10/17	NONE	TIER 15
						APPROV.	10/17	MATERIAL POLYMER CONCRETE	DRAWING NUMBER A6001974TAPMC14

PROJECT: 1706ANBE.004

RICHMOND, TX
PECAN GROVE TO HOUGHTON



MCI metro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PEACANGROVE TO HOUGHTON
RICHMOND, TX

DATE: 09/05/18
ENGINEER: L. STALCUP
DRAWN BY: T.P.G. (KIB)

REVISIONS			
No.	DATE	DESCRIPTION	BY
1.	-	-	-

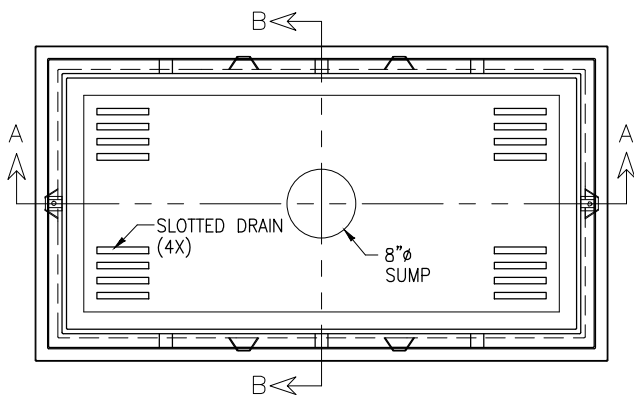
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SCALE
HORIZONTAL: 1"= 50'
VERTICAL: 1"= N/A
MP _____ TO MP _____
SHEET 8 OF 11
FILE: 1706ANBE.005 08 A

30" x 60" x 30" 30K STANDARD HANDHOLE DETAILS

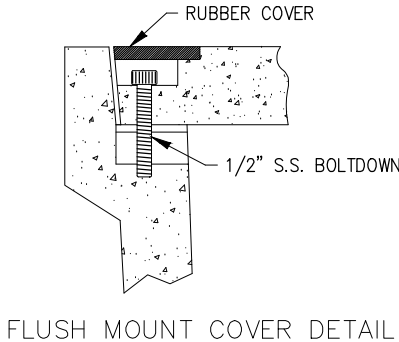
DETAIL "A"

LOCKING DEVICE
CROSS SECTION



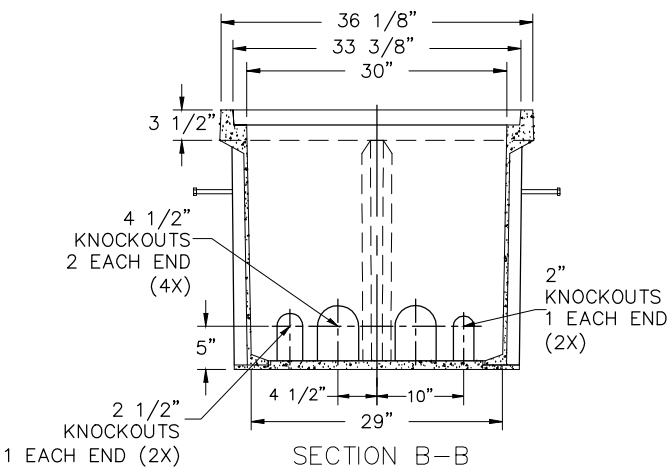
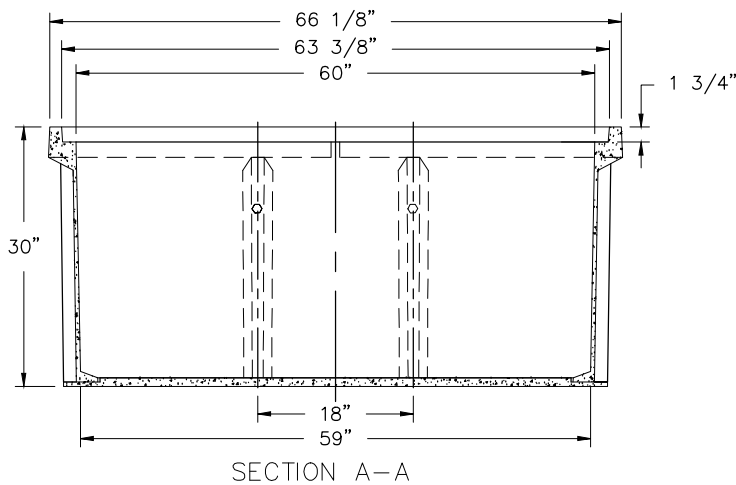
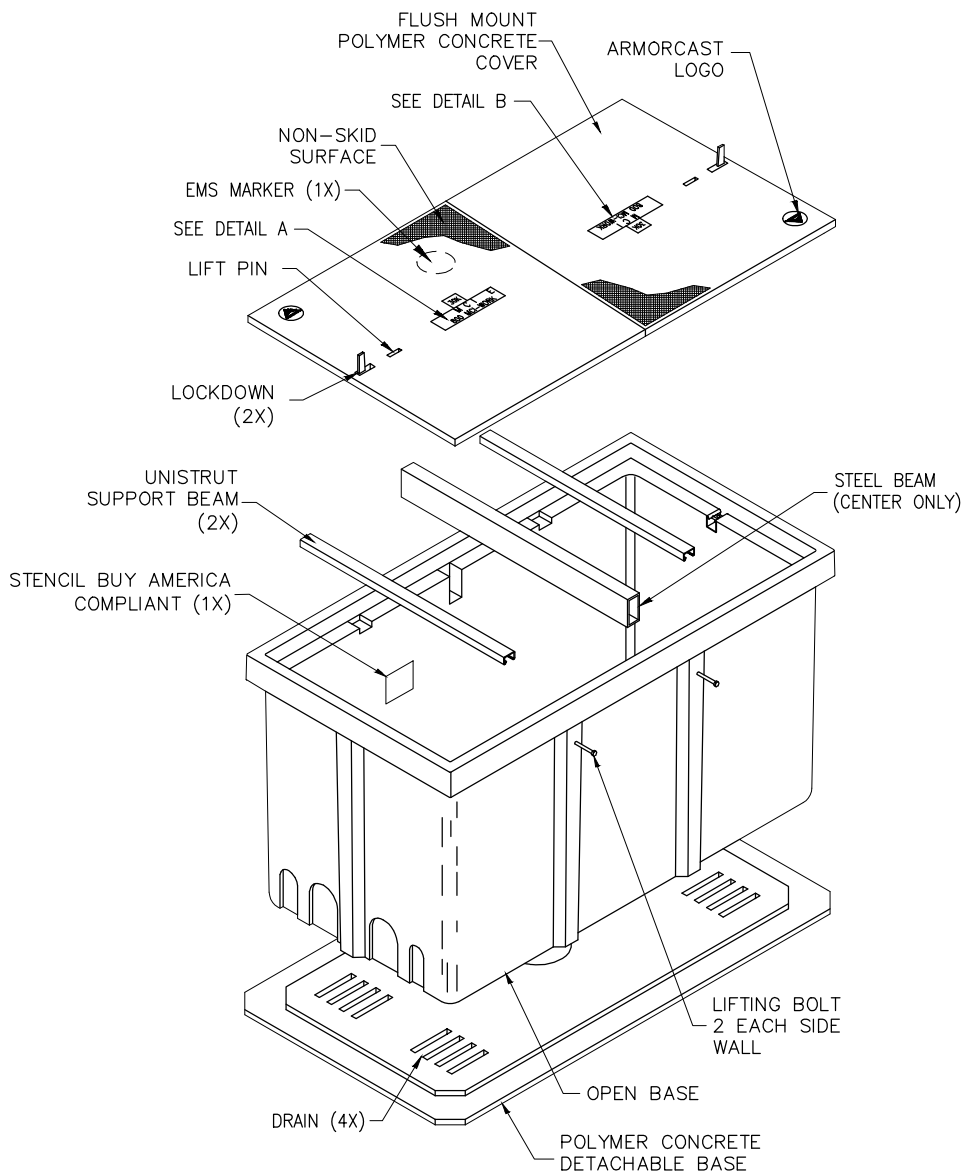
DETAIL "B"

FLUSH MOUNT
COVER DETAIL



DETAIL "C"

EXPLODED ISOMETRIC DETAIL



30K
M C I E
800 MCI-WORK
DETAIL A

30K
M C I
800 MCI-WORK
DETAIL B

- SEALED PLASTIC BAG PLACED INSIDE VAULT TO CONTAIN
- | ITEM | QTY | |
|------|-----|--|
| 1 | (1) | JOHNNY LOCK KEY |
| 2 | (2) | S.S. JOHNNY BOLTS W/FLAT WASHER. |
| 3 | | SHRINK WRAP COVERS TO FRAME FOR PACKAGING. |

30K STANDARD HANDHOLE
30"x60"x30" POLYMER CONCRETE FLUSH MOUNT ASSEMBLY
MEETS SCTE/ANSI 77-TIER 22 LOADING CRITERIA
ADDITIONAL REQUIREMENTS:
DESIGNED LOAD: 30,000 LBS
MINIMUM FAILURE LOAD: 45,000 LBS

PROJECT: 1706ANBE.004
RICHMOND, TX
PECAN GROVE TO HOUGHTON



MCI metro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PEACANGROVE TO HOUGHTON
RICHMOND, TX

DATE: 09/05/18
ENGINEER: L. STALCUP
DRAWN BY: T.P.G. (KIB)

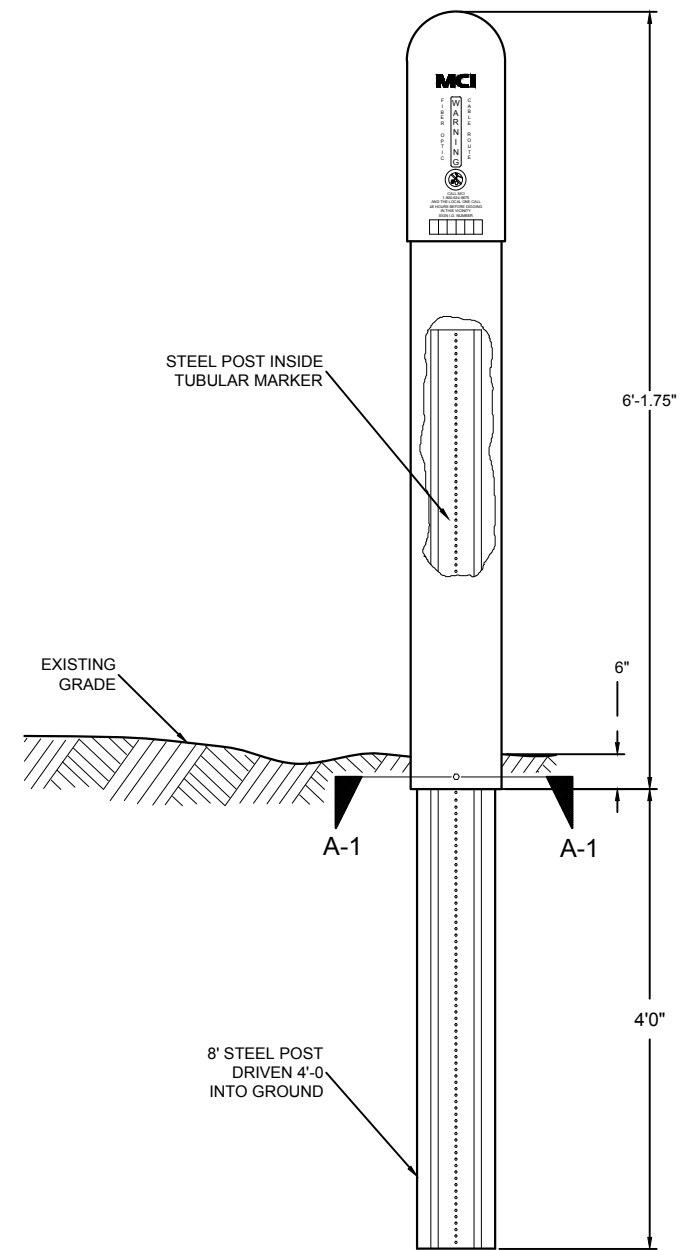
REVISIONS			
No.	DATE	DESCRIPTION	BY
1.	-	-	-

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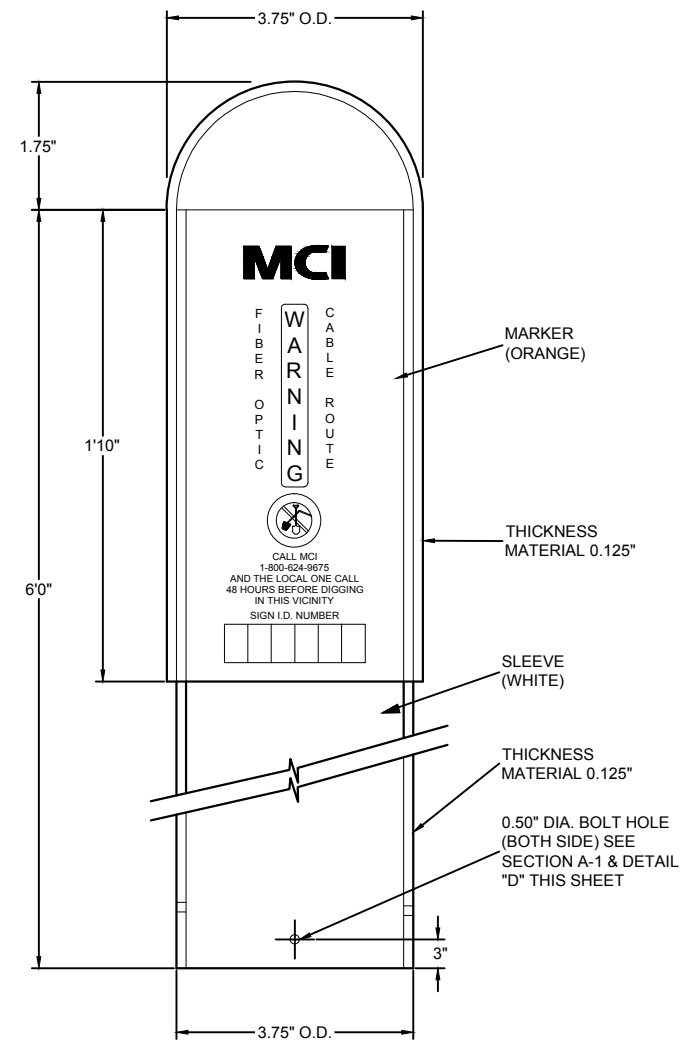
SCALE
HORIZONTAL: 1"= 50'
VERTICAL: 1"= N/A
MP _____ TO MP _____
SHEET 8A OF 11
FILE: 1706ANBE.005 08AA

TUBULAR MARKER DETAILS

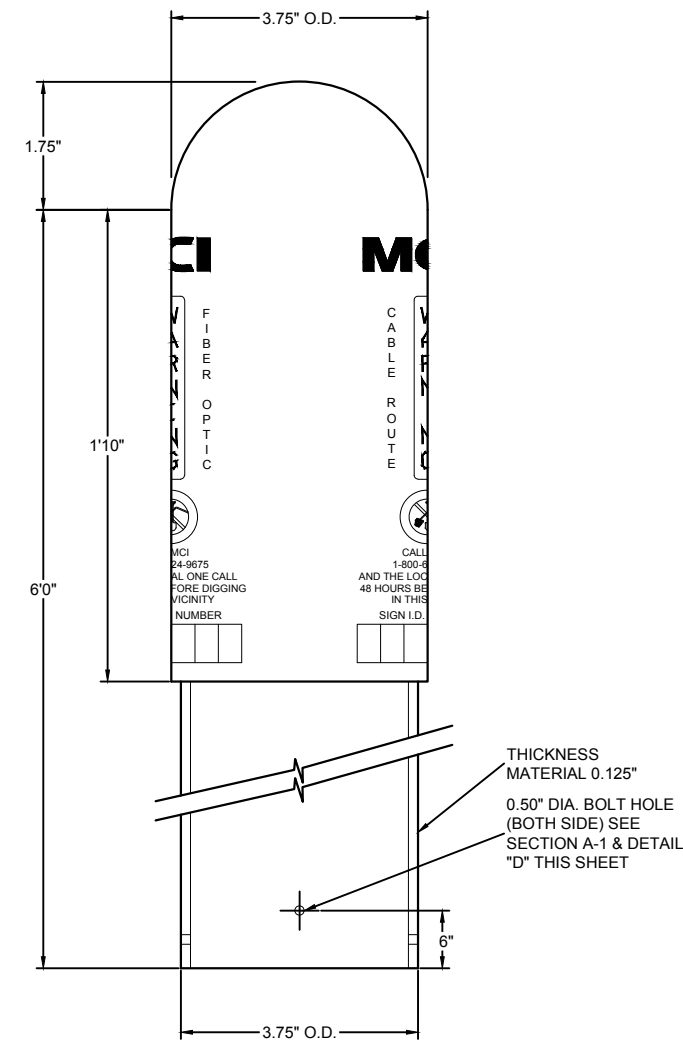
DETAIL "A"
INSTALLATION VIEW



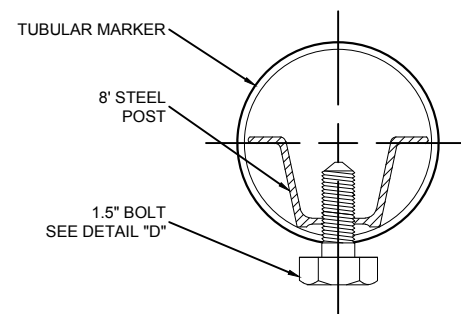
DETAIL "B"
FRONT VIEW



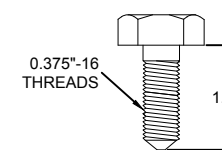
DETAIL "C"
SIDE VIEW



SECTION A-1
TUBULAR MARKER



DETAIL "D"
1.5\" BOLT



PROJECT: 1706ANBE.004
RICHMOND, TX
PECAN GROVE TO HOUGHTON



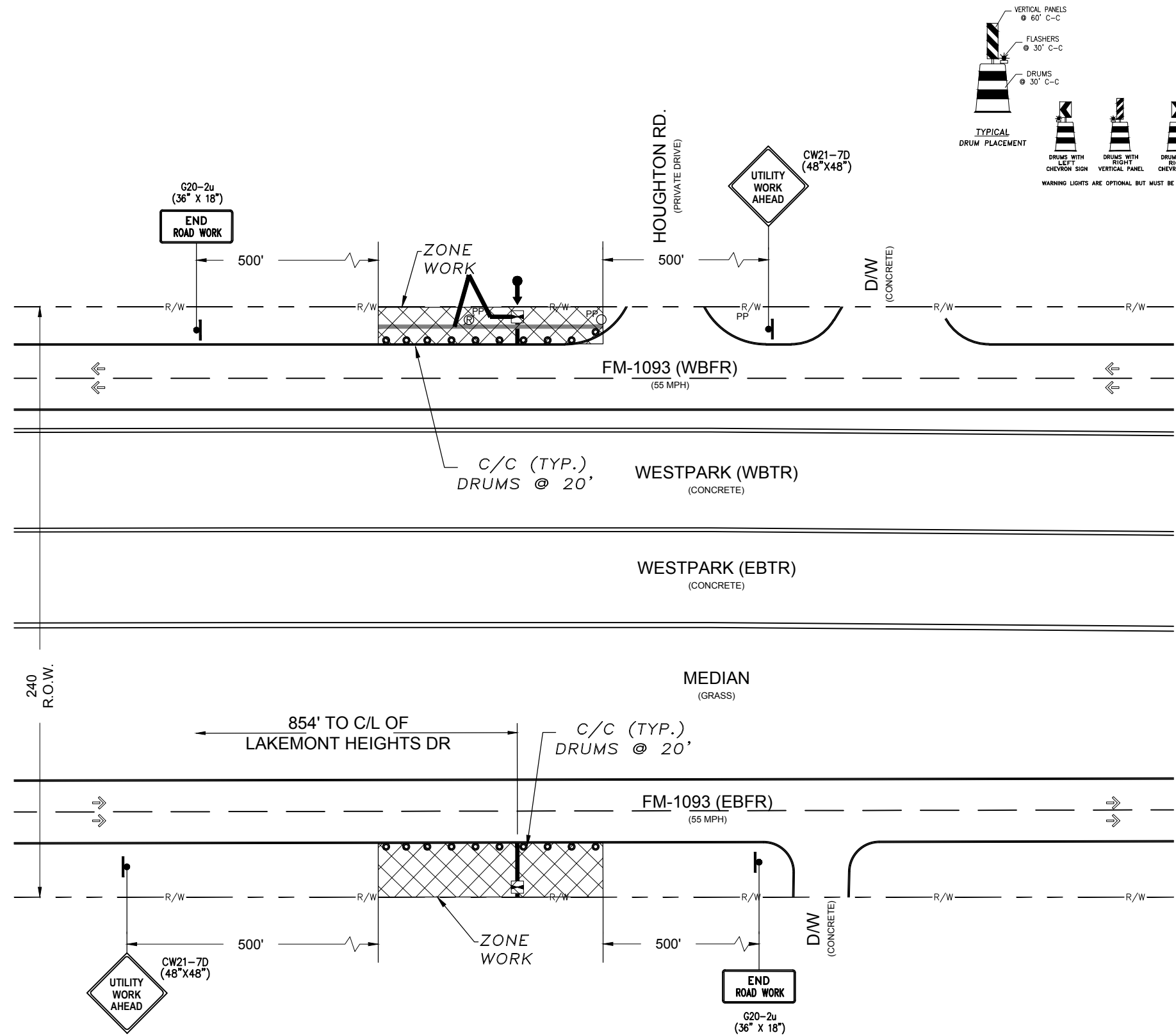
MCI metro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PECANGROVE TO HOUGHTON
RICHMOND, TX

DATE: 09/05/18
ENGINEER: L. STALCUP
DRAWN BY: T.P.G. (KIB)

REVISIONS			
No.	DATE	DESCRIPTION	BY
1.	-	-	-

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SCALE
HORIZONTAL: 1"= 50'
VERTICAL: 1"= N/A
MP _____ TO MP _____
SHEET 9 OF 11
FILE: 1706ANBE.005 09 A



LEGEND

- WORK ZONE
- PLASTIC DRUM
- TRAFFIC CONSTRUCTION SIGNS
- TYPE III BARRICADE
- LAW OFFICER
- FLAGGER
- FLASHING ARROW PANEL
- DIRECTION OF TRAFFIC FLOW

PROJECT: 1706ANBE.004

RICHMOND, TX

PECAN GROVE TO HOUGHTON

THE PERMIT GETTERS

McImetro
ACCESS TRANSMISSION SERVICES
CORPORATION

OUTSIDE PLANT CONSTRUCTION

TITLE: FIBER OPTIC ROUTE
PEACANGROVE TO HOUGHTON
RICHMOND, TX

DATE: 09/05/18

ENGINEER: L. STALCUP

DRAWN BY: T.P.G. (KIB)

REVISIONS

No.	DATE	DESCRIPTION	BY
1.	-	-	-

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SCALE

HORIZONTAL: 1"= 50'

VERTICAL: 1"= N/A

MP _____ TO MP _____

SHEET 9A OF 11

FILE: 1706ANBE.005 09AA

NOTE:
ALL DRIVEWAYS TO REMAIN OPEN AT ALL TIMES.

NOTE:
SUBJECT TO NO PAVEMENT EXCAVATION.
CONTRACTOR RESPONSIBLE TO KEEP SIDEWALK AREAS OPEN AT ALL TIMES DURING CONSTRUCTION.

RICHMOND, TX
FORT BEND COUNTY

CAUTION !!!!
CONTRACTOR TO LOCATE &
VERIFY ALL EXISTING UTILITIES
PRIOR TO CONSTRUCTION

CAUTION!!!
EXIST. BURIED FIBER, TELEPHONE, CATV, GAS, ELECTRIC, WATER,
SANITARY SEWER & STORM SEWER FACILITIES IN CONSTRUCTION AREA
AND HAVE NOT BEEN FIELD LOCATED, CONTRACTOR TO VERIFY EXACT
LOCATION AND DEPTH PRIOR TO ANY DIGGING AND/OR BORING.



PROJECT: 1706ANBE.004

RICHMOND, TX
PECAN GROVE TO HOUGHTON

CLARIFICATION NO.	QUANTITY
PLACE (24"x36"x24") HH	2
PLACE (17"x30"x36") HH	-
PROP. 1-2" HDPE	323'
PULL 1-144F (A) CABLE	713'
PULL 1-144F (DE) CABLE	-
PLACE 6M STRAND	-
LASH 1-144F CABLE	-
DOWN GUY & ANCHOR	-
RISER: 2" U GUARD	1
PLACE MARKER	2



McMetro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PEACANGROVE TO HOUGHTON
RICHMOND, TX

DATE: 09/05/18

ENGINEER: L. STALCUP

DRAWN BY: T.P.G. (KIB)

REVISIONS			
No.	DATE	DESCRIPTION	BY
1.	-	-	-

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SCALE

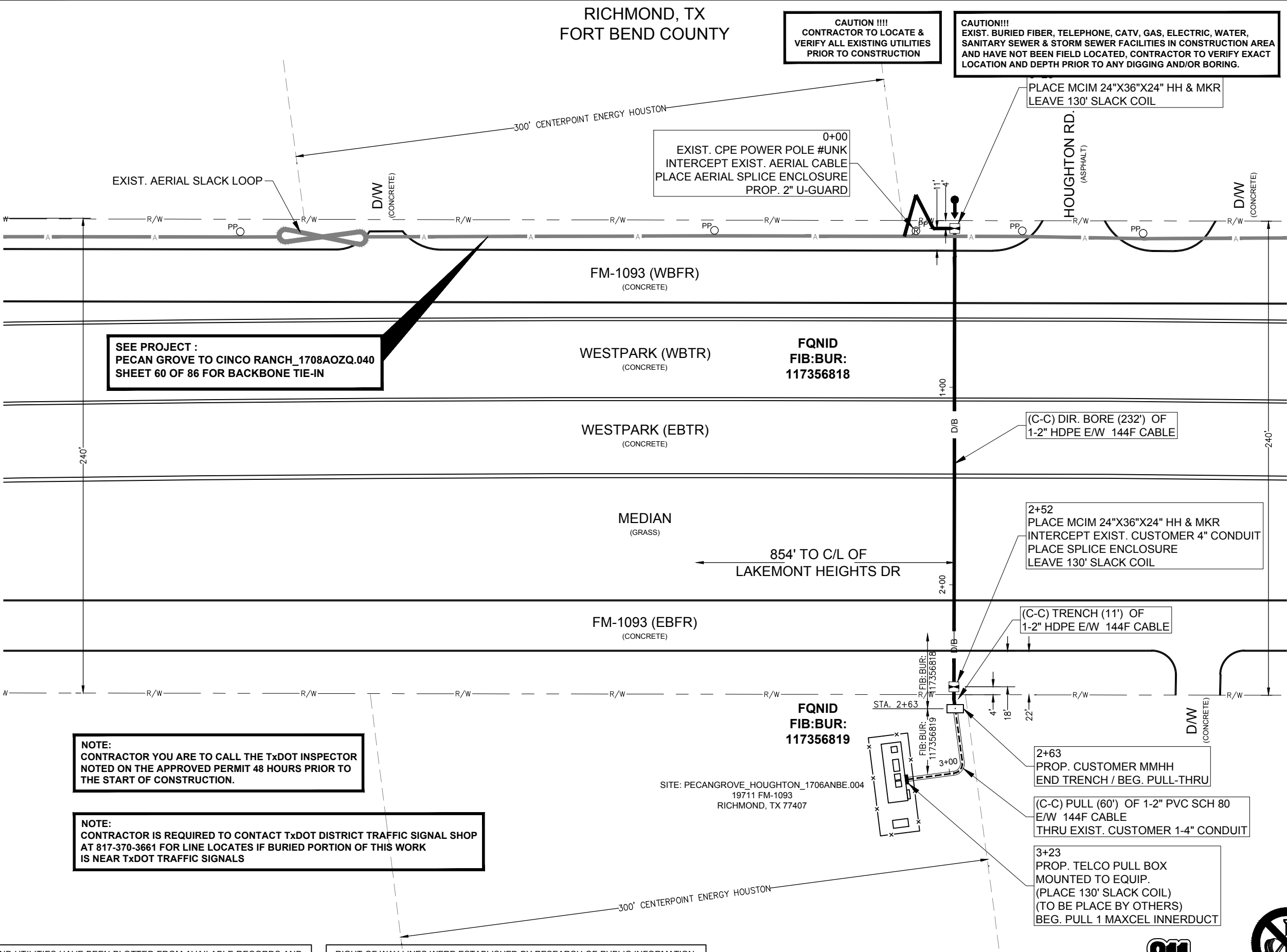
HORIZONTAL: 1"= 50'

VERTICAL: 1"= N/A

MP _____ TO MP _____

SHEET 10 OF 11

FILE: 1706ANBE.005 010



SEE PROJECT :
PECAN GROVE TO CINCO RANCH_1708AOZQ.040
SHEET 60 OF 86 FOR BACKBONE TIE-IN

NOTE:
CONTRACTOR YOU ARE TO CALL THE TxDOT INSPECTOR
NOTED ON THE APPROVED PERMIT 48 HOURS PRIOR TO
THE START OF CONSTRUCTION.

NOTE:
CONTRACTOR IS REQUIRED TO CONTACT TxDOT DISTRICT TRAFFIC SIGNAL SHOP
AT 817-370-3661 FOR LINE LOCATES IF BURIED PORTION OF THIS WORK
IS NEAR TxDOT TRAFFIC SIGNALS

FQPID
FIB: BUR:
117356819

SITE: PECANGROVE_HOUGHTON_1706ANBE.004
19711 FM-1093
RICHMOND, TX 77407

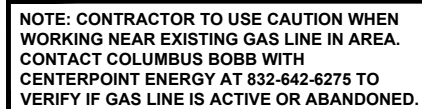
NOTE:
THE CONTRACTOR SHALL FIELD VERIFY AND LOCATE
ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION."



CALL BEFORE YOU DIG
1-800-545-6005
48 HOURS NOTICE REQUIRED

SCALE
HOR: 1" = 50'
VER: 1" = 10'

**NOTE:
CONTRACTOR IS REQUIRED TO CONTACT TxDOT DISTRICT TRAFFIC SIGNAL SHOP
AT 817-370-3661 FOR LINE LOCATES IF BURIED PORTION OF THIS WORK
IS NEAR TxDOT TRAFFIC SIGNALS**



FILE: 1706ANBE.005 010A

RICHMOND, TX
FORT BEND COUNTY

CAUTION !!!!
CONTRACTOR TO LOCATE &
VERIFY ALL EXISTING UTILITIES
PRIOR TO CONSTRUCTION

CAUTION!!!
EXIST. BURIED FIBER, TELEPHONE, CATV, GAS, ELECTRIC, WATER,
SANITARY SEWER & STORM SEWER FACILITIES IN CONSTRUCTION AREA
AND HAVE NOT BEEN FIELD LOCATED, CONTRACTOR TO VERIFY EXACT
LOCATION AND DEPTH PRIOR TO ANY DIGGING AND/OR BORING.

NORTH



2+52
PLACE MCIM 24"X36"X24" HH & MKR
INTERCEPT EXIST. 4" CONDUIT
PLACE SPLICE ENCLOSURE
LEAVE 130' SLACK COIL

(C-C) TRENCH (11') OF
1-2" HDPE E/W 144F CABLE

FM-1093 (EBFR)
(CONCRETE)

R/W

STA. 2+63

FIB: BUR:
117356818

3+00

FIB: BUR:
117356819

2+63
PROP. CUSTOMER MMHH
END TRENCH / BEG. PULL-THRU

(C-C) PULL (60') OF 1-2" PVC SCH 80
E/W 144F CABLE
THRU EXIST. CUSTOMER 1-4" CONDUIT

3+23
PROP. TELCO PULL BOX
MOUNTED TO EQUIP.
(PLACE 130' SLACK COIL)
(TO BE PLACE BY OTHERS)
BEG. PULL 1 MAXCEL INNERDUCT

D/W
(CONCRETE)

SITE: PECANGROVE_HOUGHTON_1706ANBE.004
19711 FM-1093
RICHMOND, TX 77407

UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE RECORDS AND
FIELD OBSERVATIONS BUT ARE NOT NECESSARILY EXACT. IT IS THE CONTRACTORS
RESPONSIBILITY TO FIELD LOCATE ALL UNDERGROUND OBSTRUCTIONS AND
UTILITIES PRIOR TO CONSTRUCTION. COMPLETE REPAIR OF ANY AND ALL
DAMAGES INCURRED SHALL BE AT THE EXPENSE OF THE CONTRACTOR.

RIGHT OF WAY LINES WERE ESTABLISHED BY RESEARCH OF PUBLIC INFORMATION.
NO BOUNDARY SURVEY OR PROPERTY LINE SURVEY WAS ESTABLISHED. RIGHT OF
WAY BOUNDARY MUST BE FIELD VERIFIED BY A REGISTERED PROFESSIONAL LAND
SURVEYOR TO ACCURATELY VERIFY RIGHT OF WAY AND PROPERTY LINES PRIOR
TO CONSTRUCTION.

NOTE:
THE CONTRACTOR SHALL FIELD VERIFY AND LOCATE
ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION."



Know what's below.
Call before you dig.



CALL BEFORE YOU DIG
1-800-545-6005
48 HOURS NOTICE REQUIRED

PROJECT: 1706ANBE.004

RICHMOND, TX
PECAN GROVE TO HOUGHTON

CLARIFICATION NO.	QUANTITY
PLACE (24"X36"X24") HH	-
PLACE (17"X30"X36") HH	2
PROP. 1-2" HDPE	714'
PULL 1-144F (A) CABLE	864'
PULL 1-144F (DE) CABLE	-
PLACE 6M STRAND	-
LASH 1-144F CABLE	-
DOWN GUY & ANCHOR	-
RISER: 2" U GUARD	-
PLACE MARKER	2



McImetro
ACCESS TRANSMISSION SERVICES
CORPORATION

OUTSIDE PLANT CONSTRUCTION

TITLE: FIBER OPTIC ROUTE
PECANGROVE TO HOUGHTON
RICHMOND, TX

DATE: 09/05/18

ENGINEER: L. STALCUP

DRAWN BY: T.P.G. (KIB)

REVISIONS			
No.	DATE	DESCRIPTION	BY
1.	-	-	-

EXCEPT AS MAY BE OTHERWISE PROVIDED BY
CONTRACT, THESE DRAWINGS AND SPECIFICATIONS
SHALL REMAIN THE PROPERTY OF MCI
COMMUNICATIONS SERVICES INC. BOTH BEING
ISSUED IN STRICT CONFIDENCE AND SHALL NOT BE
REPRODUCED, COPIED, OR USED FOR ANY
PURPOSE WITHOUT SPECIFIC WRITTEN PERMISSION.

SCALE

HORIZONTAL: 1"= 50'

VERTICAL: 1"= N/A

MP _____ TO MP _____

SHEET 10.1 OF 11

FILE: 1706ANBE.005 010.1

Velasquez, Courtney

From: Velasquez, Courtney
Sent: Tuesday, October 16, 2018 4:05 PM
To: 'jeff.buehler@verizon.com'; 'marcus.armijo@verizon.com'
Cc: Peterson, Jillian; Eglinton, Sean; Ramirez, Jose; 'Gary Gehbauer'
Subject: Permit 2018-23570 - FM 1093 and West Park Tollway

Please see the comments below from FBTRA in reference to the Permit 2018-23570.

" No objections from me, however they should be made aware of an existing MCI and FBCTRA fiber optic line running parallel with the Westpark Tollway between the eastbound mainlanes and eastbound frontage road."

Also I see that you are crossing FM 1093 for that you will need the TxDOT Permit uploaded to this application. You can email that to me and I will upload it for you and we can process this application.

Thank you,

Courtney Velasquez
Clerk III
Fort Bend County Engineering
301 Jackson St., Suite 401 | Richmond, TX 77469
Email: Courtney.Velasquez@fortbendcountytexas.gov
Phone: 281-633-7516