



**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

- Right of Way Permit**
- Commercial Driveway Permit**

Permit No: 2018-23705

Applicant: MCI Metro Access Transmission Services, Corp./Verizon

Job Location Site: 2756 FM 723 , ROSENBERG, TX 77471

Bond No. XXXXXXXXXX **Date of Bond:** 5/1/2017 **Amount:** \$50,000.00

The above applicant came to make use of certain Fort Bend County property subject to, "The Order Regulating the Laying, Construction, Maintenance, and Repair of Buried Cables, Conduits, and Pole Lines, In, Under, Across or Along Roads, Streets, Highways, and Drainage Ditches in Fort Bend County, Texas, Under the Jurisdiction of the Commissioners Court of Fort Bend County, Texas," as passed by the Commissioners Court of Fort Bend County, Texas, of the Minutes of the Commissioners Court of Fort Bend County, Texas, to the extent that such order is not inconsistent with Chapter 181, Vernon's Texas Statutes and Codes Annotated.

Notes:

1. Evidence of review by the Commissioners Court must be kept on the job site and failure to do so constitutes grounds for job shutdown.
2. Written notices are required:
 - a. 48 hours in advance of construction start up, and
 - b. When construction is completed and ready for final inspection, submit notification to Permit Administrator thru MyGovernmentOnline.org portal.
3. This permit expires one (1) year from date of permit if construction has not commenced.
4. This permit applies to work performed within right-of-ways owned and maintained by Fort Bend County only, and it is the responsibility of the applicant to acquire all other necessary permits.

On this 6th day of November, 2018, Upon Motion of Commissioner _____, seconded by Commissioner _____, duly put and carried, it is ORDERED, ADJUDGED AND DECREED that said notice of said above purpose is hereby acknowledged by the Commissioners Court of Fort Bend County, Texas, and that said notice be placed on record according to the regulation order thereof.

Signature

By: 
County Engineer

Presented to Commissioners Court and approved.

Date Recorded _____ Comm. Court No. _____

Clerk of Commissioners Court

By: N/A
Drainage District Engineer/Manager

By: _____
Deputy

MCImetro
ACCESS TRANSMISSION SERVICES CORPORATION

OUTSIDE PLANT CONSTRUCTION
FIBER OPTIC CABLE ROUTE

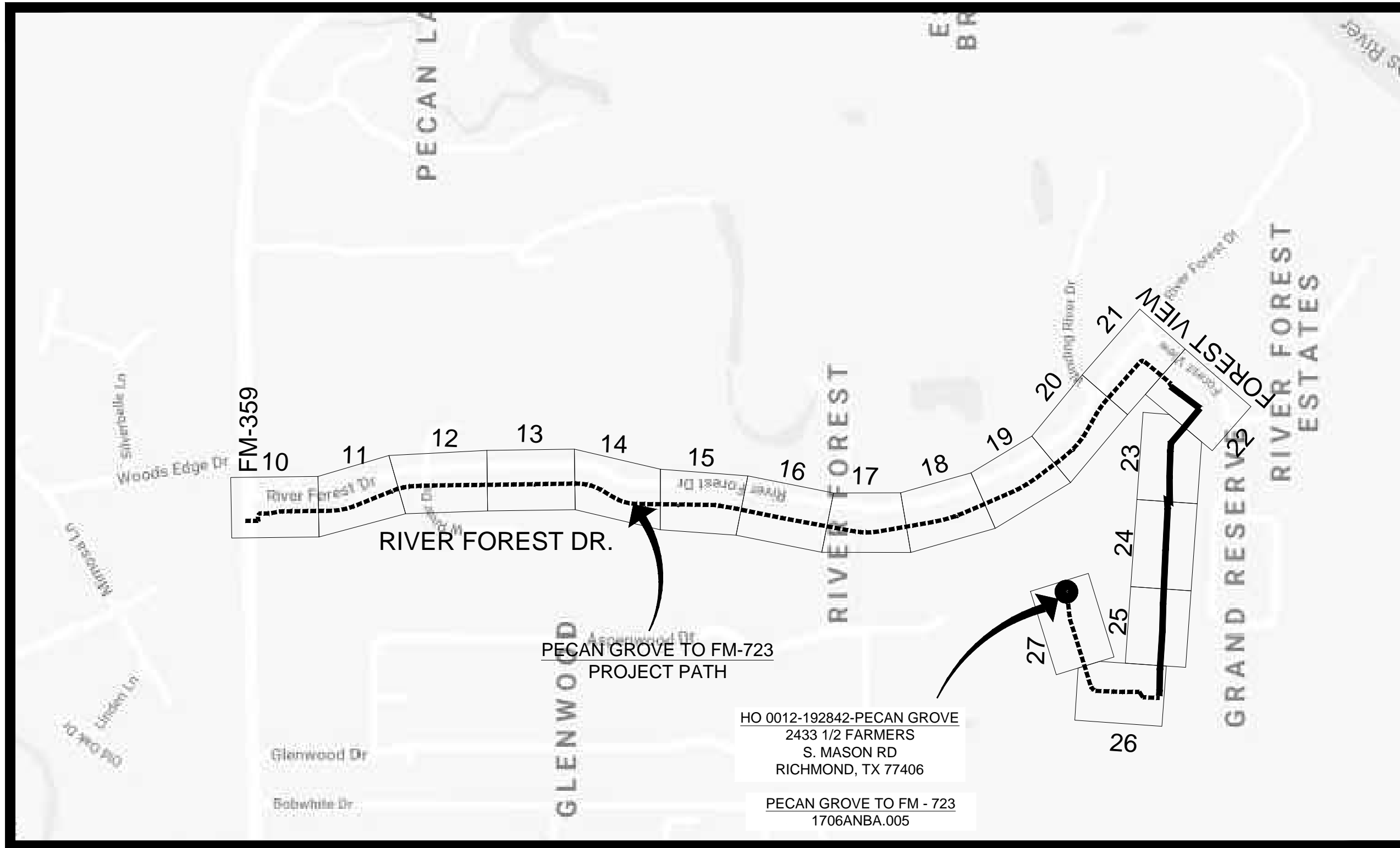
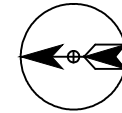
ECC FIBER BUILD: 1706ANBA.005
PECAN GROVE TO FM-723
RICHMOND, TX

SITE CODE: HODATX

PROJECT STATUS: CONSTRUCTION

DATE: 09/21/18

LOCATION MAP
 RICHMOND, TX
 FORT BEND COUNTY



PECAN GROVE TO FM-723
 PROJECT PATH

HO 0012-192842-PECAN GROVE
 2433 1/2 FARMERS
 S. MASON RD
 RICHMOND, TX 77406

PECAN GROVE TO FM - 723
 1706ANBA.005

MAP LINE LEGEND

- PROPOSED BURIED CABLE
- PROPOSED AERIAL CABLE

PROJECT: 1706ANBA.005
 RICHMOND, TX
 PECAN GROVE TO FM - 723



MCImetro
 ACCESS TRANSMISSION SERVICES
 CORPORATION

OUTSIDE PLANT CONSTRUCTION

TITLE: FIBER OPTIC ROUTE
 PECAN GROVE TO FM - 723
 RICHMOND, TX

DATE: 09/21/18
 ENGINEER: ECC
 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 27

FILE: 1706ANBA.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

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

TEXAS DEPARTMENT OF TRANSPORTATION
7600 WASHINGTON AVE.
HOUSTON TX, 77076
HOUSTON DISTRICT - PERMITS
PERMIT COORDINATOR:
TRICIA COLLETTE

OFFICE: (713) 802-5568
E-MAIL: TRICIA.COLLETTE@TXDOT.GOV

FEDERAL GOVERNMENT

N/A

OTHER

N/A

PROJECT: 1706ANBA.005

RICHMOND, TX

PEACAN GROVE TO FM - 723



MCI metro
ACCESS TRANSMISSION SERVICES
CORPORATION

OUTSIDE PLANT CONSTRUCTION

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PEACAN GROVE TO FM - 723
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SCALE

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VERTICAL: 1"= N/A

MP _____ TO MP _____

SHEET 3 OF 27

FILE: 1706ANBA.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.
4.
5.
6.
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	PLACE CONDUIT
	212	PLACE HIGH DENSITY POLYETHYLENE (HDPE)
	213	ROCK ADDER
	214	SLURRY BACKFILL ADDER
	215	EXPOSE CONDUIT
	216	EXPOSE CONDUIT AND RELOCATE
	217	EXPOSE CONDUIT AND REPLACE/SUBSTITUTE
	218	EXPOSE AND REMOVE CONDUIT
	219	EXPOSE AND REMOVE CONDUIT (ABANDONED)
	220	CONCRETE ENCASE
	221	REMOVE CONCRETE ENCASMENT
	222	REMOVE CONCRETE CAP
	240	PLACE HANDHOLE
	244	REMOVE EXISTING HANDHOLE
	245	RELOCATE HANHOLE
	246	REPLACE/SUBSTITUTE HANDHOLE
	247	EXCAVATE SPLICE PIT
	250	PLACE MANHOLE
	252	REMOVE EXISTING MANHOLE
	255	RELOCATE PRECAST MANHOLE
	256	REPLACE/SUBSTITUTE PRECAST MANHOLE
	180	CONSTRUCT WALL
	270	REMOVE AND RESTORE ASPHALT
	280	REMOVE AND RESTORE CONCRETE
	281	REMOVE AND RESTORE SIDEWALK
	282	REMOVE AND RESTORE CURBING
300	310	ATTACH CONDUIT TO WALL OR STRUCTURE
	315	DETACH CONDUIT FROM WALL OR STRUCTURE
	320	CORE BORE
	330	ATTACH PULL/SPLICE BOX TO WALL OR STRUCTURE
400	410	PULL CABLE
	411	PULL THROUGH DUCT (INNERDUCT)
	415	REMOVE CABLE FROM CONDUIT
	420	REPOSITION ACTIVE CABLE SLACK
500	510	DIRECT BURY CABLE
	515	EXPOSE DIRECT BURIED CABLE
	516	EXPOSE DIRECT BURIED CABLE AND RELOCATE
	517	REMOVE AND DISPOSE OF CABLE
	520	PLACE AERIAL CABLE
	525	RELOCATE AERIAL CABLE
	518	DELASH AERIAL CABLE
	527	RELASH AERIAL CABLE
	528	REMOVE AERIAL CABLE
	530	PLACE POLE/PUSH BRACE
	535	REMOVE POLE/PUSH BRACE
600	610	JETTING CONDUIT
	620	EMBEDMENT PLOW
	630	DIRECTIONAL BORE
700	710	PLACE BURIED CABLE MARKERS AND SIGNS/MWCOM WATER CROSSING SIGNS
	711	PLACE ISOLATOR/PROTECTION SYSTEM AT EXISTING HANDHOLES/MANHOLES
	713	HANDHOLES/MANHOLES
	712	REMOVE BURIED CABLE MARKER POST/HARDWARE
	714	REMOVE CONCRETE BURIED CABLE MARKER POST

PROJECT: 1706ANBA.005
 RICHMOND, TX
 PEACAN GROVE TO FM - 723



MCI metro
 ACCESS TRANSMISSION SERVICES
 CORPORATION

OUTSIDE PLANT CONSTRUCTION

TITLE: FIBER OPTIC ROUTE
 PEACAN GROVE TO FM - 723
 RICHMOND, TX

DATE: 09/21/18
 ENGINEER: ECC
 DRAWN BY: T.P.G. (KIB)

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SCALE

HORIZONTAL: 1" = 50'
 VERTICAL: 1" = N/A

MP _____ TO MP _____

SHEET 4 OF 27

FILE: 1706ANBA.005 04 A

SYMBOLS KEY

	EXISTING	PROPOSED
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		

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

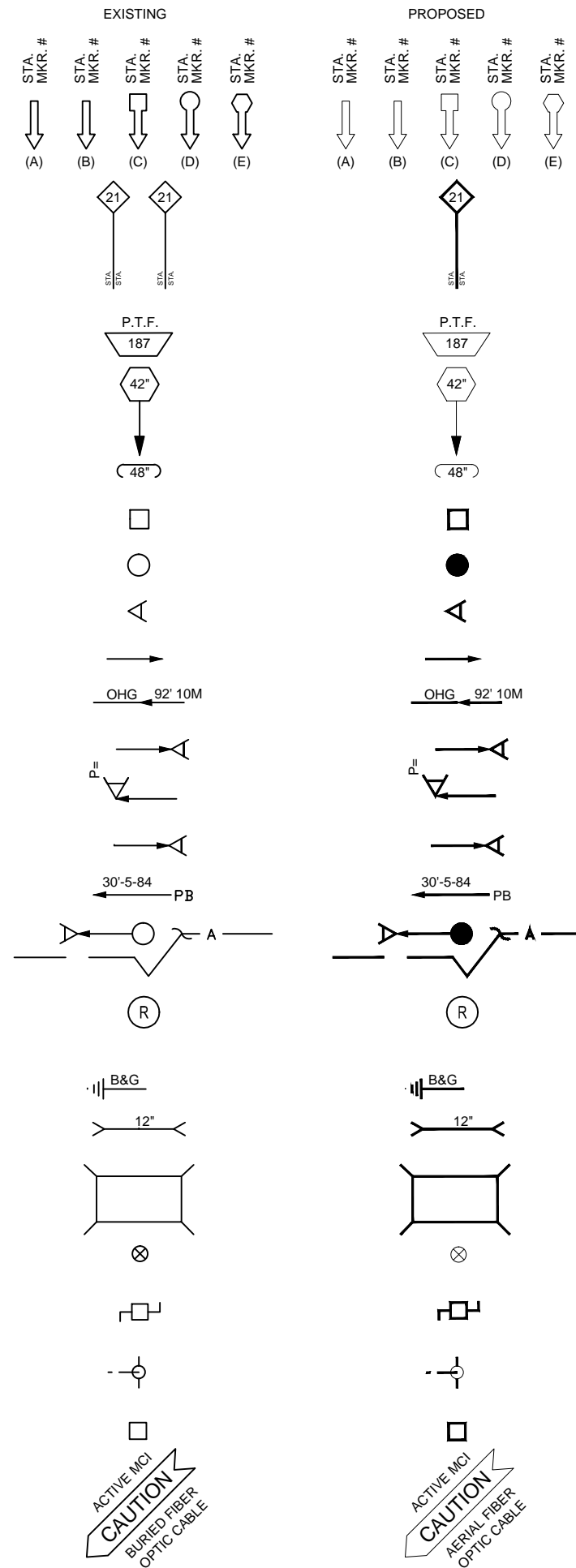
WATER METER

GAS VALVE

FIRE HYDRANT

RAILROAD SIGNAL CONTROL BOX

CAUTION NOTE



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 RICHMOND, TX
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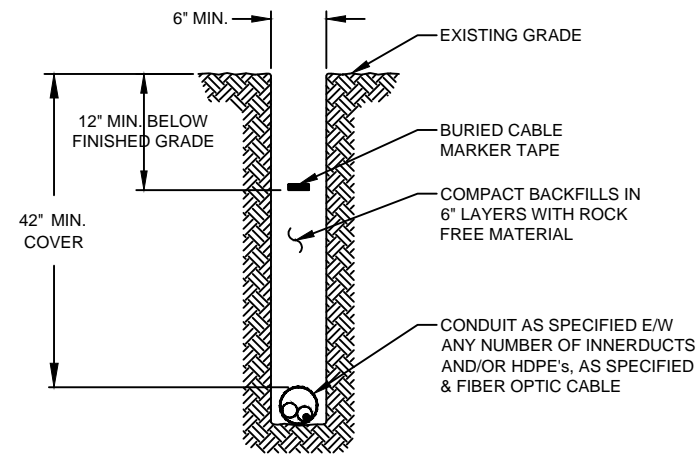
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SCALE
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 MP _____ TO MP _____
 SHEET 6 OF 27
 FILE: 1706ANBA.005 06 A

CONSTRUCTION DETAILS

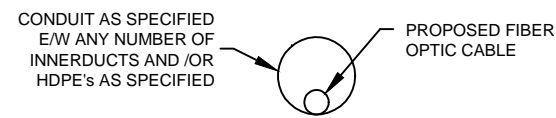
TYPICAL DETAIL "A"

TRENCH & PLACE CONDUIT



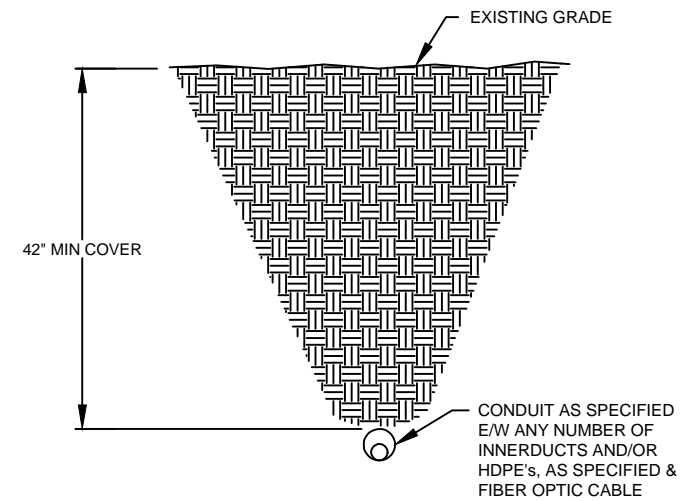
TYPICAL DETAIL "B"

CROSS SECTION OF PROPOSED HDPE



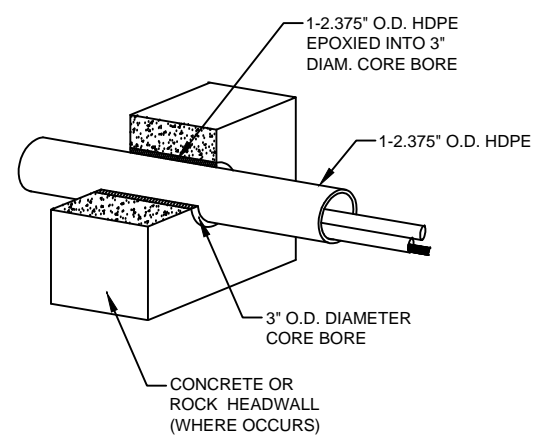
TYPICAL DETAIL "C"

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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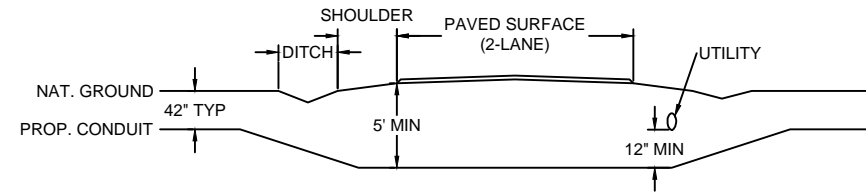
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 MP _____ TO MP _____
 SHEET 7 OF 27
 FILE: 1706ANBA.005 07 A

TYPICAL CROSSING PROFILE DETAILS: UNDERGROUND

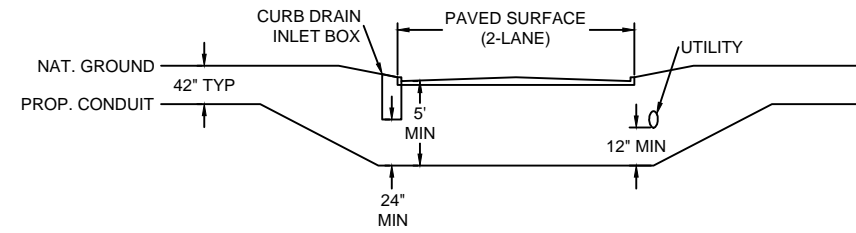
TYPICAL DETAIL "A"

TWO LANE - ASPHALT ROAD - NO CURB



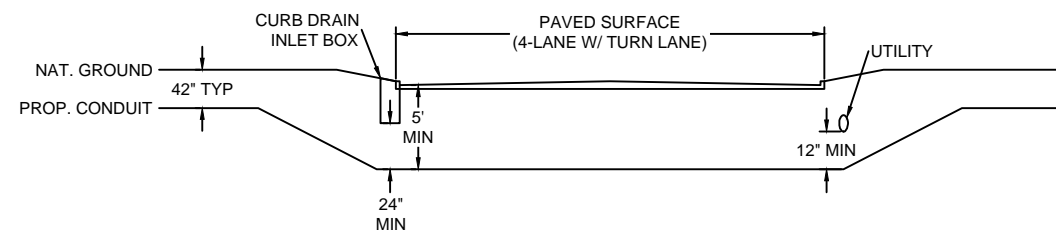
TYPICAL DETAIL "B"

TWO LANE - CURBED ROAD



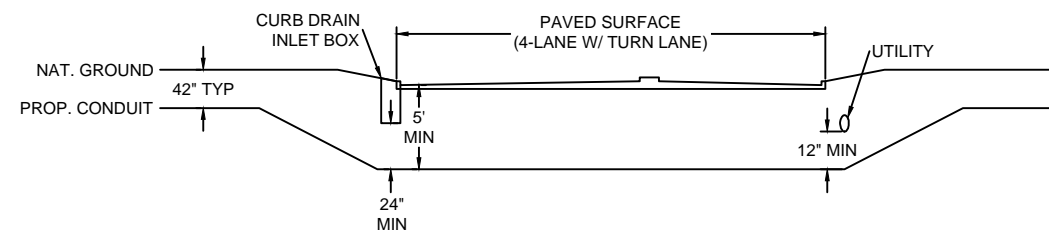
TYPICAL DETAIL "C"

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



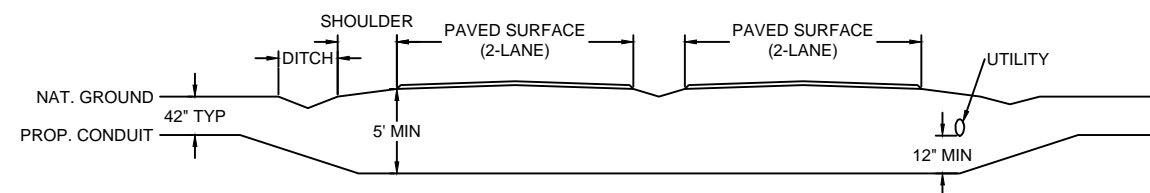
TYPICAL DETAIL "D"

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



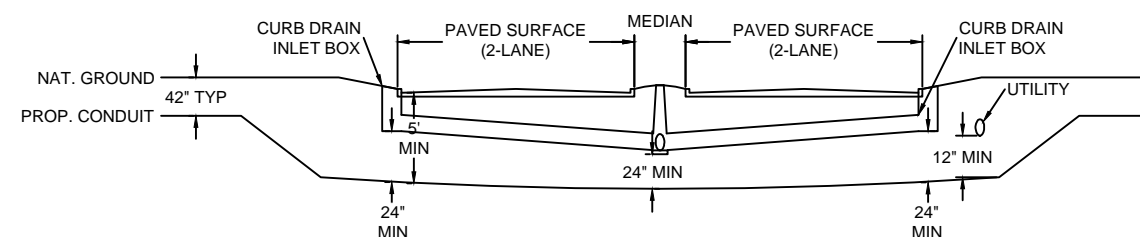
TYPICAL DETAIL "E"

4 LANE - SPLIT ASPHALT ROAD - NO CURB



TYPICAL DETAIL "F"

4 LANE - SPLIT CURBED ROAD



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RICHMOND, TX

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MP _____ TO MP _____

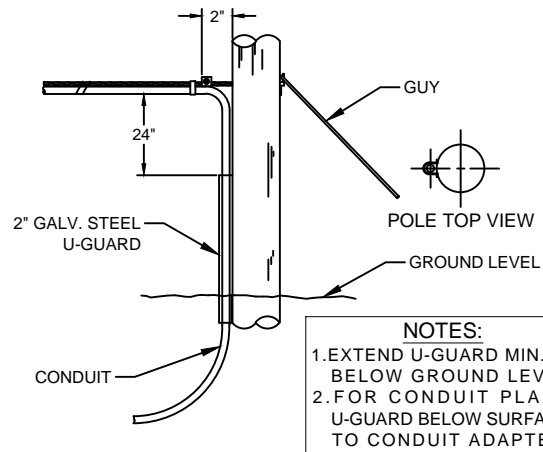
SHEET 7A OF 27

FILE: 1706ANBA.005 07AA

GENERAL AERIAL CONSTRUCTION DETAILS

TYPICAL DETAIL "A"

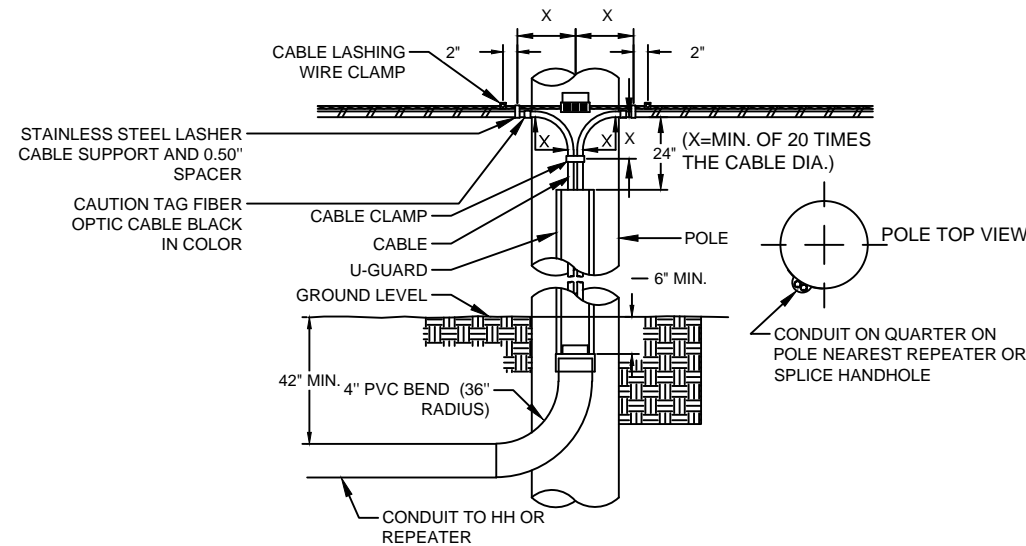
POLE ARRANGEMENT FOR AERIAL TO BURIED



NOTES:
 1. EXTEND U-GUARD MIN. 6" BELOW GROUND LEVEL
 2. FOR CONDUIT PLACE U-GUARD BELOW SURFACE TO CONDUIT ADAPTER.

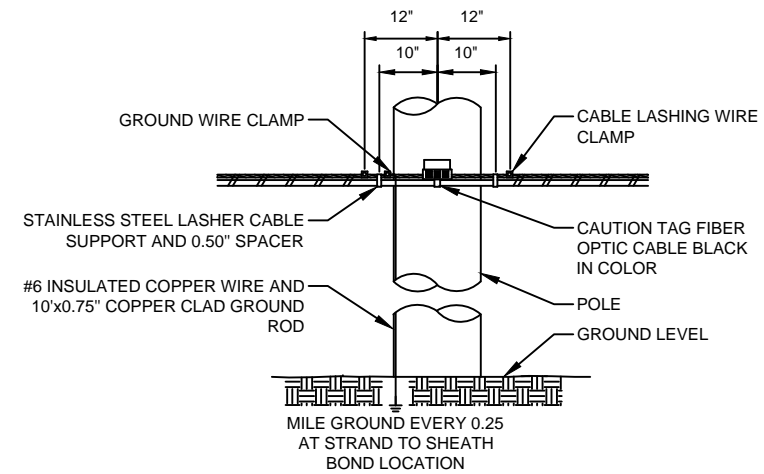
TYPICAL DETAIL "B"

POLE ARRANGEMENT FOR REPEATER OR HANDHOLE LOCATION



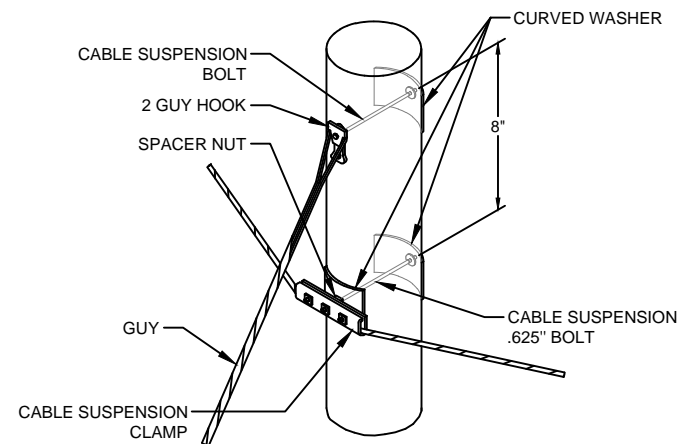
TYPICAL DETAIL "C"

TYPICAL CABLE & HARDWARE INSTALLATION



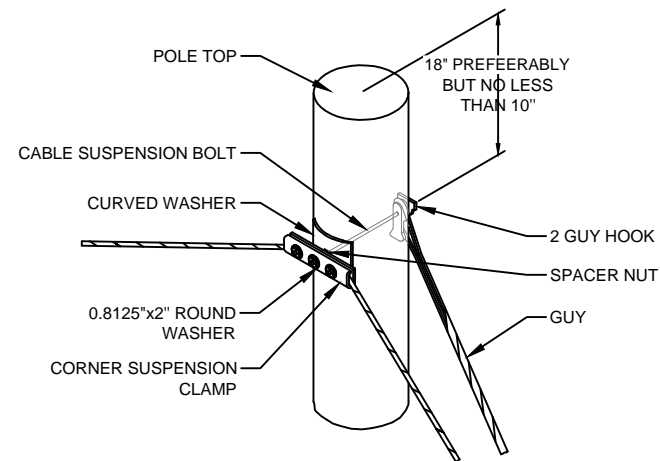
TYPICAL DETAIL "D"

SUSPENSION STRAND - PULL TOWARD POLE - LESS THAN 5 FEET



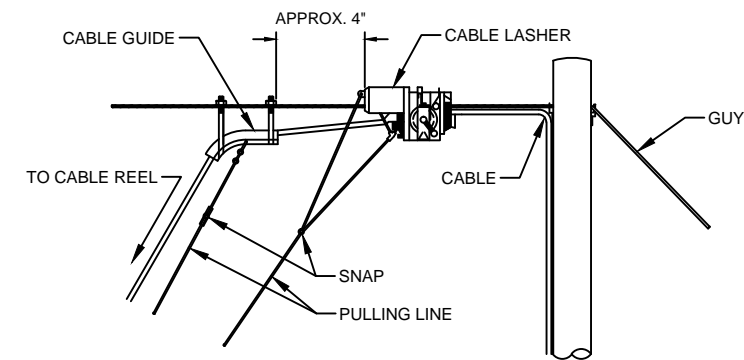
TYPICAL DETAIL "E"

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



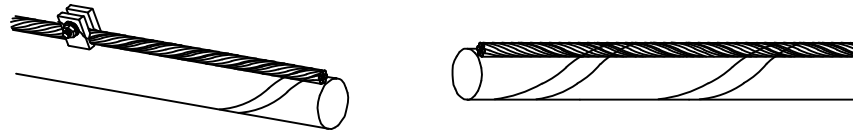
TYPICAL DETAIL "F"

TYPICAL ARRANGEMENT OF CABLE LASHER AND CABLE GUIDE



TYPICAL DETAIL "G"

JOINING 045 LASHING WIRE



FORMING WIRE OVER STUD OF CLAMP

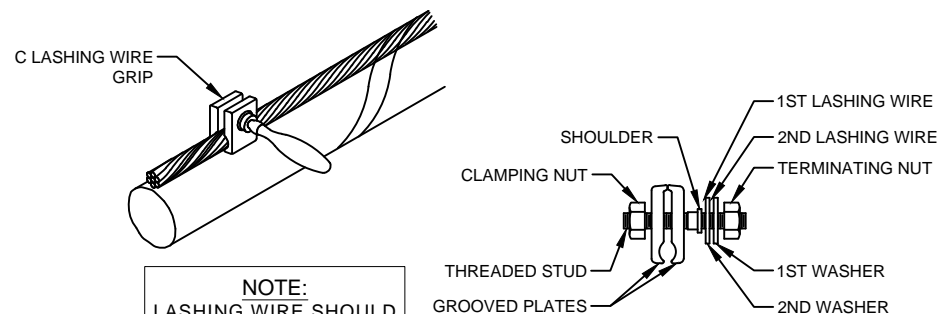
REMOVE ANY SLACK IN THE LASHING WIRE BY MAINTAINING A PULL ON THE WIRE AND TAPPING THE STRAND SHARPLY. THEN FORM THE WIRE OVER THE STUD AND TIGHTEN THE NUT. CUT THE FREE END OF THE LASHING WIRE OFF 0.75" BEYOND THE END OF THE CLAMP.

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"

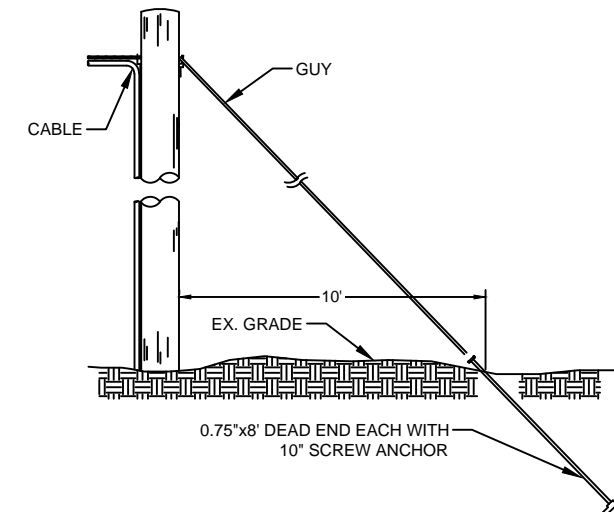
LASHING WIRE GRIP AND CLAMP



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

TYPICAL DETAIL "I"

ANCHOR & DOWN GUY



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

REVISIONS			
No.	DATE	DESCRIPTION	BY
1.	-	-	-

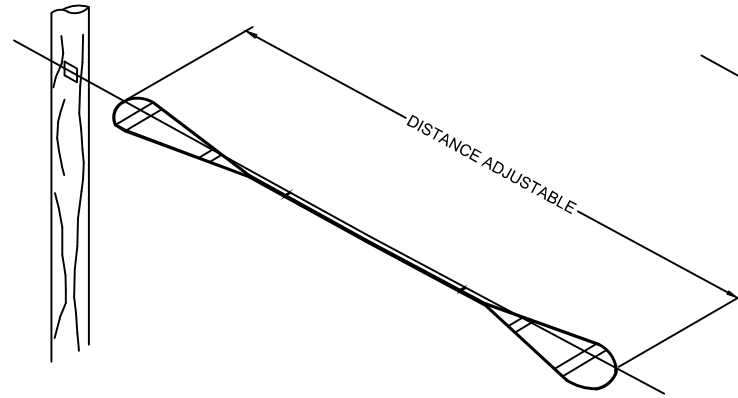
EXCEPT AS MAY BE OTHERWISE PROVIDED BY CONTRACT, THESE DRAWINGS AND SPECIFICATIONS SHALL REMAIN THE PROPERTY OF MCI COMMUNICATIONS SERVICES INC. BOTH BEING ISSUED IN STRICT CONFIDENCE AND SHALL NOT BE REPRODUCED, COPIED, OR USED FOR ANY PURPOSE WITHOUT SPECIFIC WRITTEN PERMISSION.

SCALE
 HORIZONTAL: 1" = 50'
 VERTICAL: 1" = N/A
 MP _____ TO MP _____
 SHEET 7B OF 27
 FILE: 1706ANBA.005 07BA

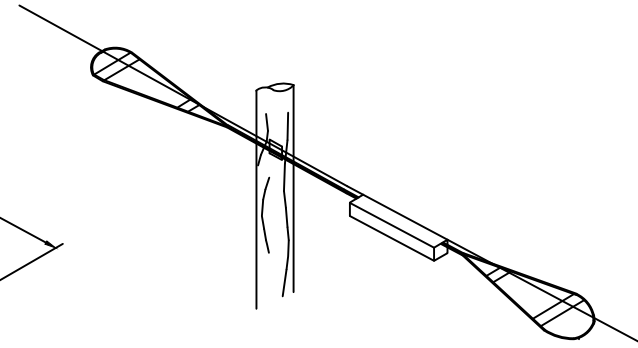
AERIAL IN-LINE SLACK STORAGE DETAILS

PROJECT: 1706ANBA.005
 RICHMOND, TX
 PEACAN GROVE TO FM - 723

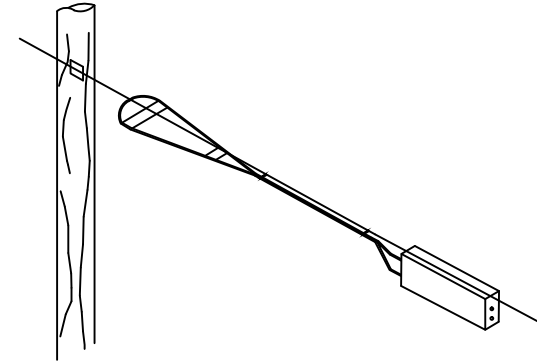
TYPICAL DETAIL "A"
 RESERVE CABLE LENGTH
 STRAND STORAGE APPLICATION



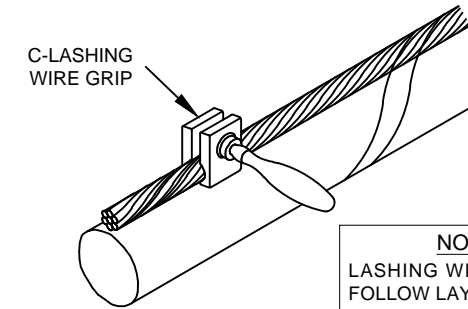
TYPICAL DETAIL "B"
 IN-LINE SPLICE APPLICATION



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.



MCI metro
 ACCESS TRANSMISSION SERVICES
 CORPORATION
 OUTSIDE PLANT CONSTRUCTION
 TITLE: FIBER OPTIC ROUTE
 PEACAN GROVE TO FM - 723
 RICHMOND, TX

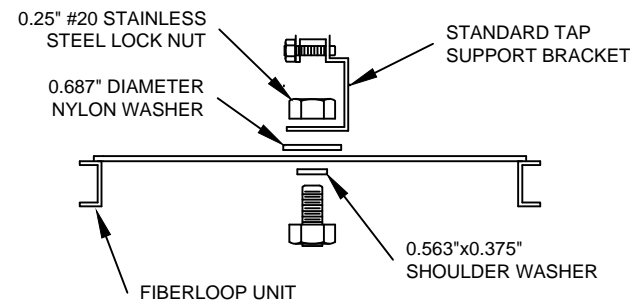
DATE: 09/21/18
 ENGINEER: ECC
 DRAWN BY: T.P.G. (KIB)

REVISIONS			
No.	DATE	DESCRIPTION	BY
1.	-	-	-

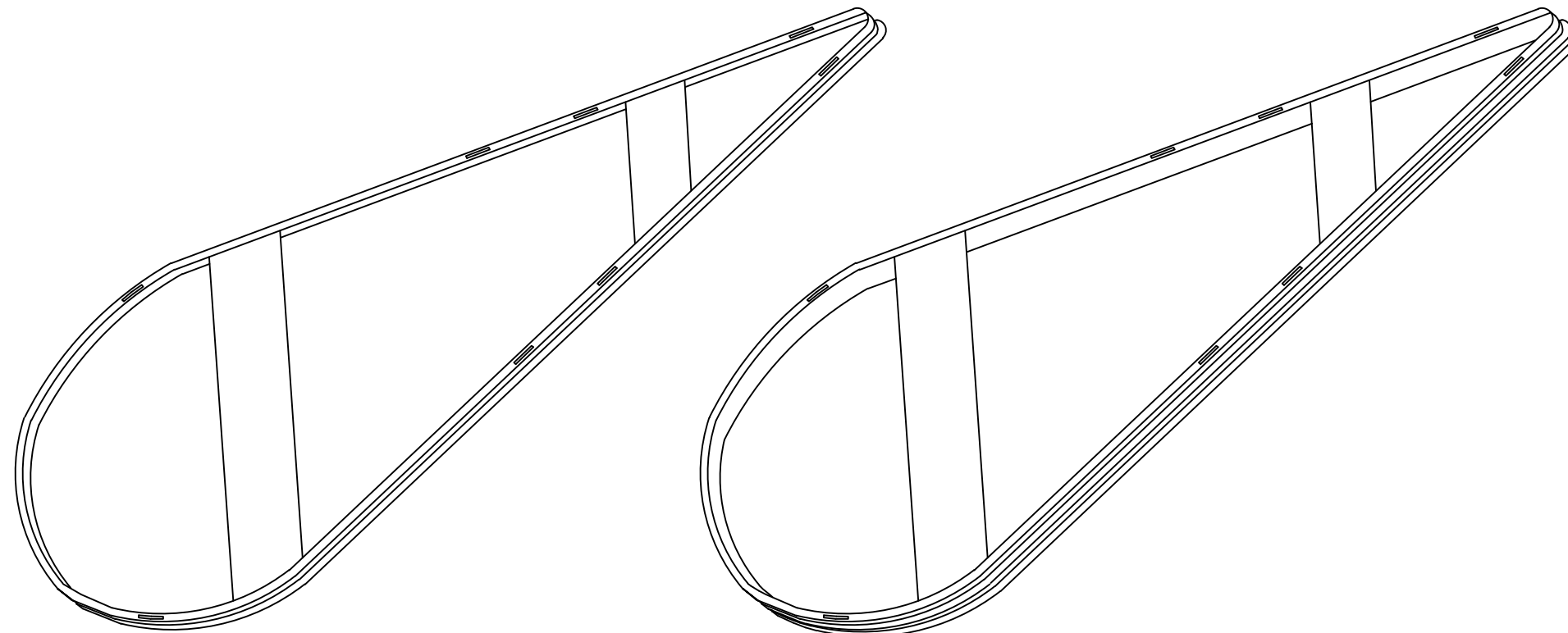
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 VERTICAL: 1" = N/A
 MP _____ TO MP _____
 SHEET 7C OF 27
 FILE: 1706ANBA.005 07CA

TYPICAL DETAIL "E"
 HARDWARE KIT



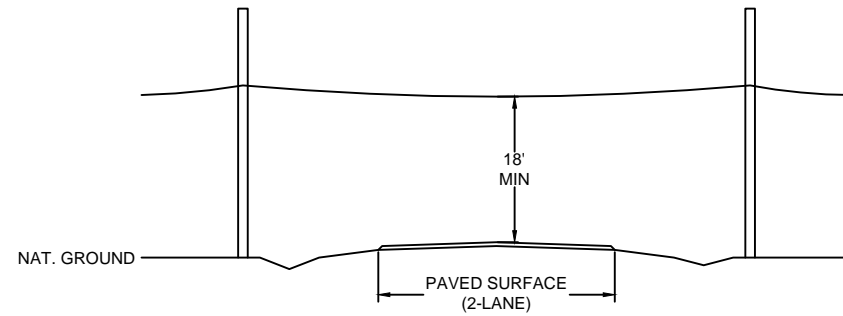
TYPICAL DETAIL "F"
 SINGLE & DOUBLE FIBER LOOPS



TYPICAL CROSSING PROFILE DETAILS: AERIAL

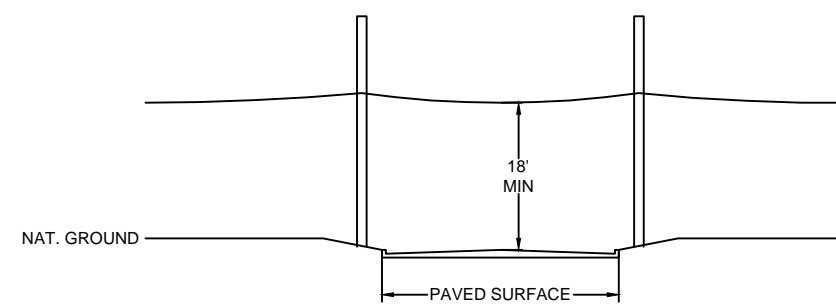
TYPICAL DETAIL "A"

TWO LANE - ASPHALT ROAD - NO CURB



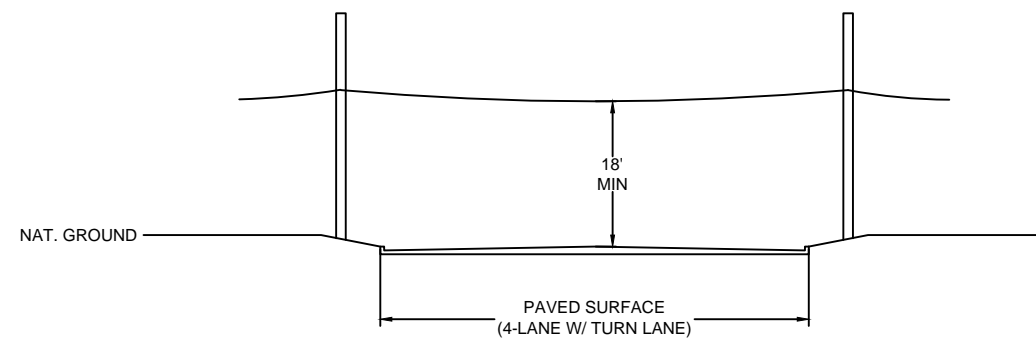
TYPICAL DETAIL "B"

TWO LANE - CURBED ROAD



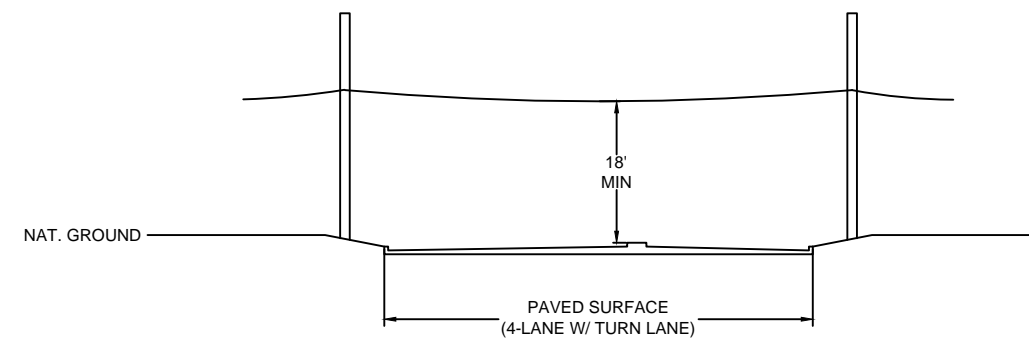
TYPICAL DETAIL "C"

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



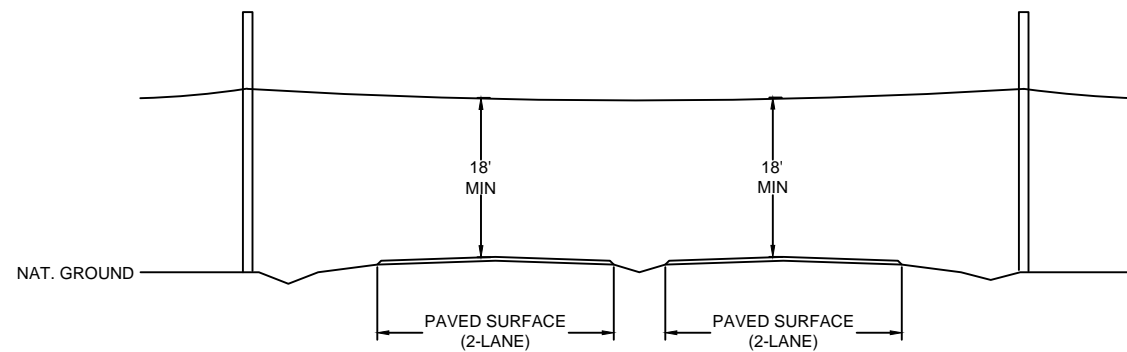
TYPICAL DETAIL "D"

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



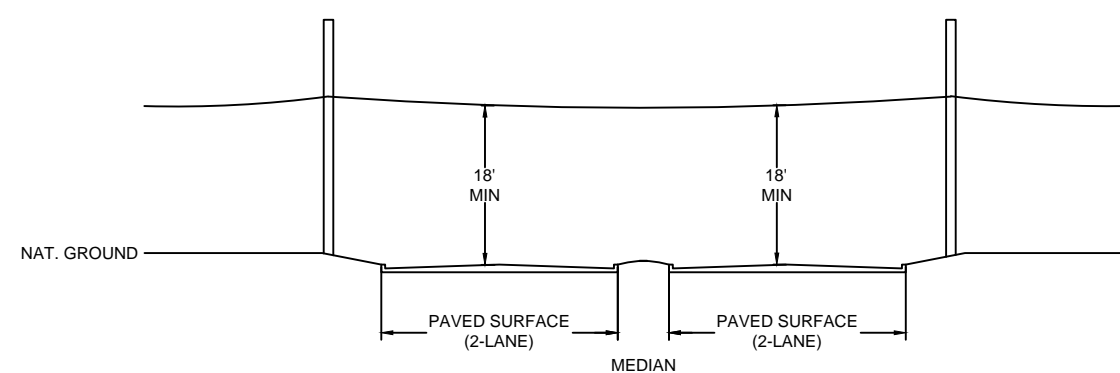
TYPICAL DETAIL "E"

4 LANE - SPLIT ASPHALT ROAD - NO CURB



TYPICAL DETAIL "F"

4 LANE - SPLIT CURBED ROAD



PROJECT: 1706ANBA.005

RICHMOND, TX

PEACAN GROVE TO FM - 723



MCImetro
ACCESS TRANSMISSION SERVICES
CORPORATION

OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PEACAN GROVE TO FM - 723
RICHMOND, TX

DATE: 09/21/18

ENGINEER: ECC

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

REVISIONS

No.	DATE	DESCRIPTION	BY
1.	-	-	-

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SCALE

HORIZONTAL: 1" = 50'

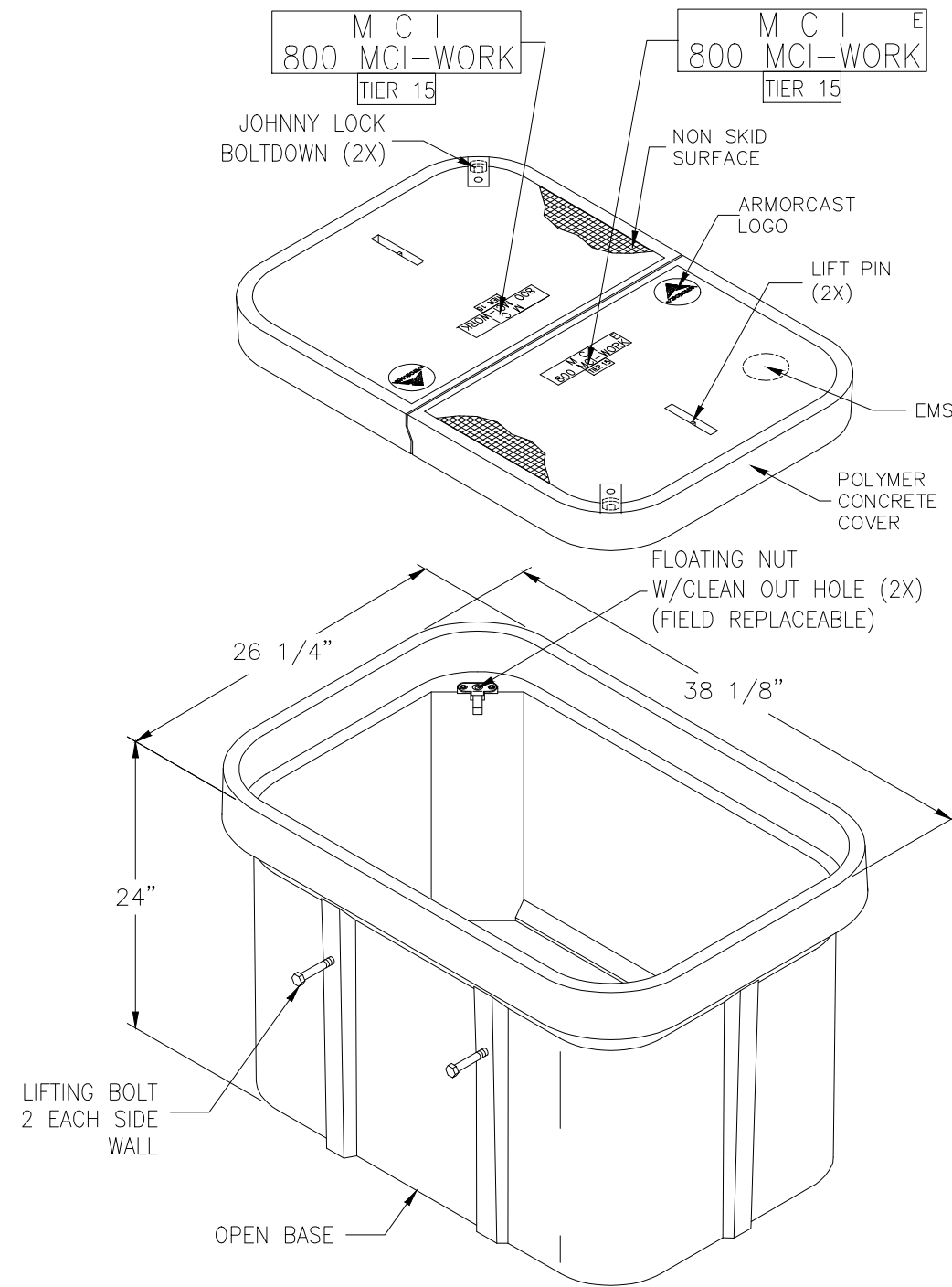
VERTICAL: 1" = N/A

MP _____ TO MP _____


SHEET 7D OF 27

FILE: 1706ANBA.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	 ARMORCAST® PRODUCTS COMPANY 13230 Saticoy Street, North Hollywood, CA 91605 (818) 982-3600	PART DESCRIPTION 24" X 36" X 24" POLYMER CONCRETE BOX ASSEMBLY				
		CUSTOMER VERIZON				
		DRAWN OA	DATE 10/17	SCALE NONE	MAX. LOAD TIER 15	
		APPROV. WS	DATE 10/17	MATERIAL POLYMER CONCRETE	DRAWING NUMBER A6001974TAPMC14	
<small>*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.*</small>						

PROJECT: 1706ANBA.005
RICHMOND, TX
PEACAN GROVE TO FM - 723



MCImetro
 ACCESS TRANSMISSION SERVICES
 CORPORATION
 OUTSIDE PLANT CONSTRUCTION
 TITLE: FIBER OPTIC ROUTE
 PEACAN GROVE TO FM - 723
 RICHMOND, TX

DATE: 09/21/18
ENGINEER: ECC
DRAWN BY: T.P.G. (KIB)

REVISIONS			
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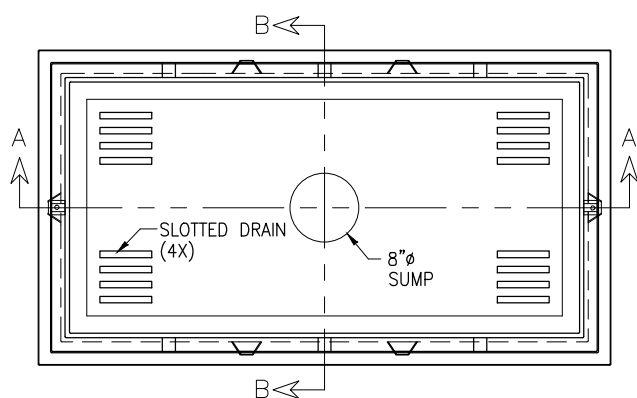
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VERTICAL: 1" = N/A
MP _____ TO MP _____
SHEET 8 OF 27
FILE: 1706ANBA.005 08 A

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

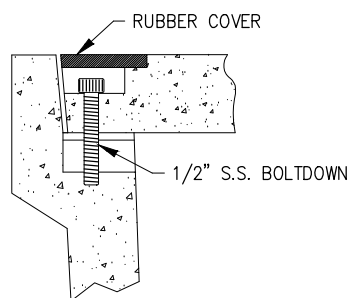
DETAIL "A"

LOCKING DEVICE
CROSS SECTION



DETAIL "B"

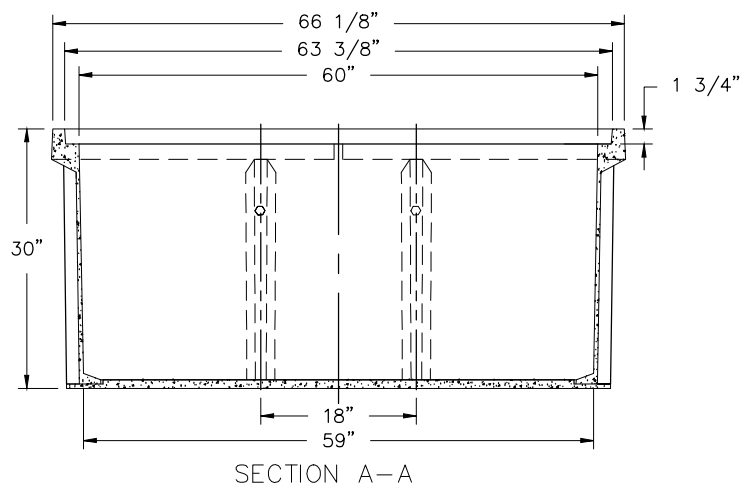
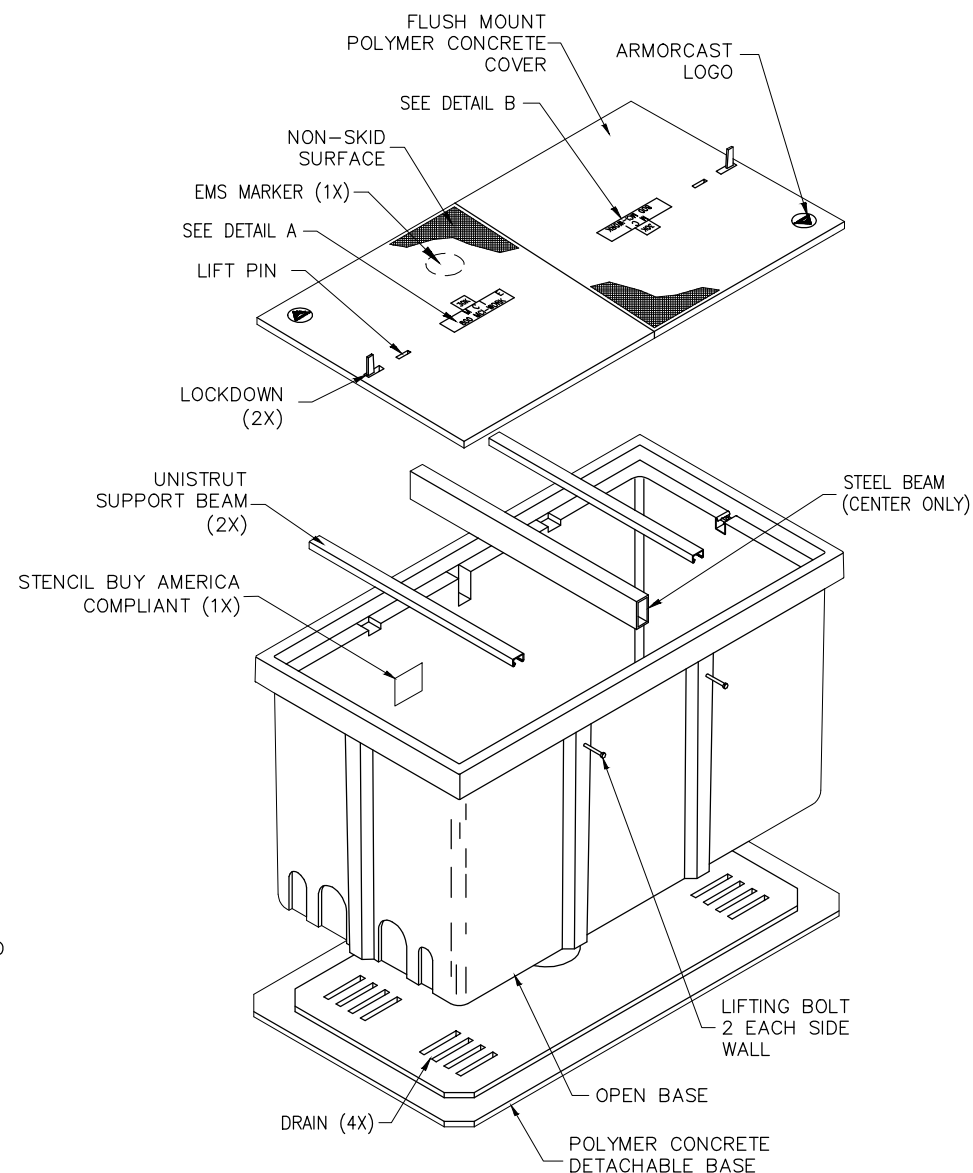
FLUSH MOUNT
COVER DETAIL



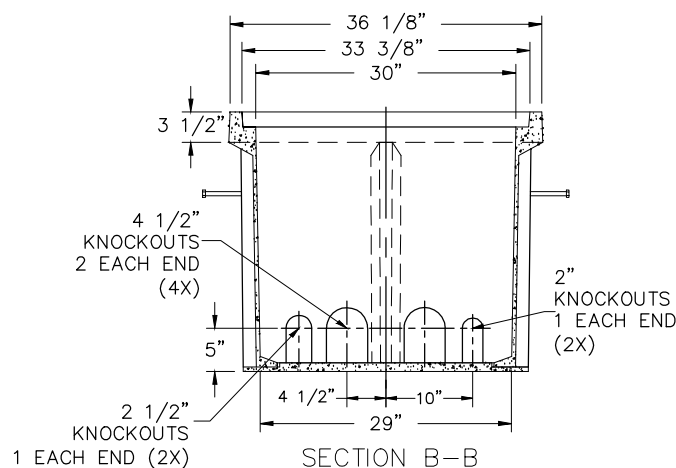
FLUSH MOUNT COVER DETAIL

DETAIL "C"

EXPLODED ISOMETRIC DETAIL



SECTION A-A



SECTION B-B

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

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

SEALED PLASTIC BAG PLACED INSIDE VAULT TO CONTAIN

ITEM	QTY	DESCRIPTION
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: 1706ANBA.005
 RICHMOND, TX
 PEACAN GROVE TO FM - 723



MCI metro
 ACCESS TRANSMISSION SERVICES
 CORPORATION
 OUTSIDE PLANT CONSTRUCTION
 TITLE: FIBER OPTIC ROUTE
 PEACAN GROVE TO FM - 723
 RICHMOND, TX

DATE: 09/21/18
 ENGINEER: ECC
 DRAWN BY: T.P.G. (KIB)

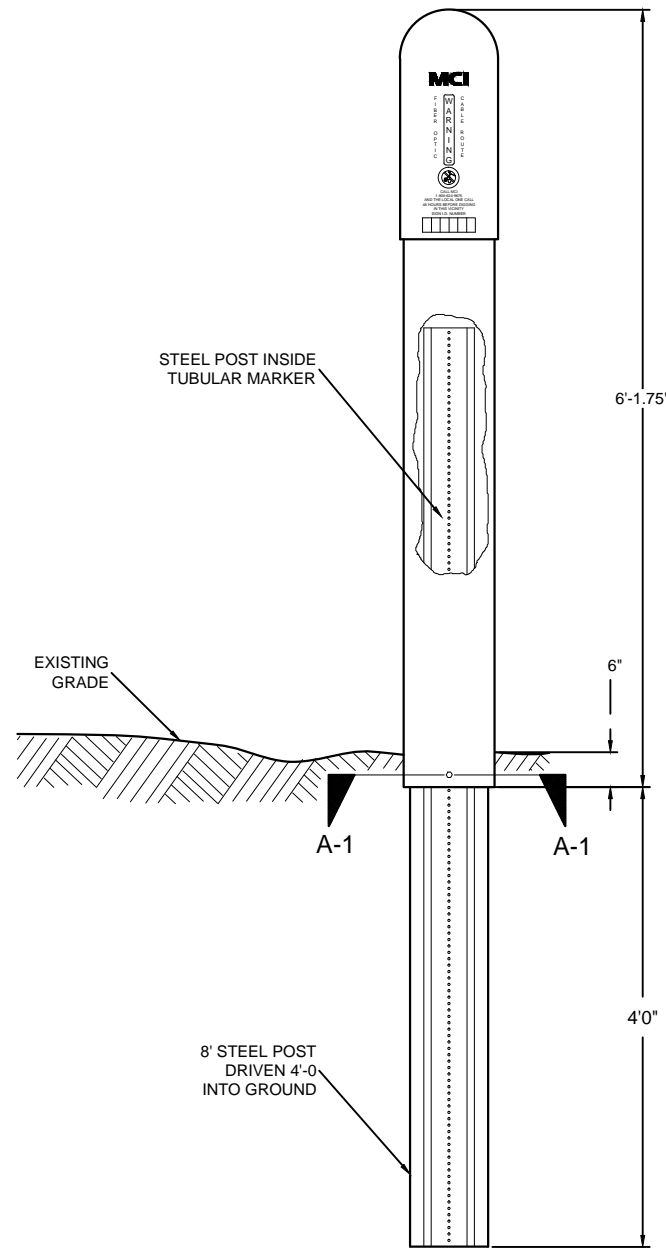
REVISIONS			
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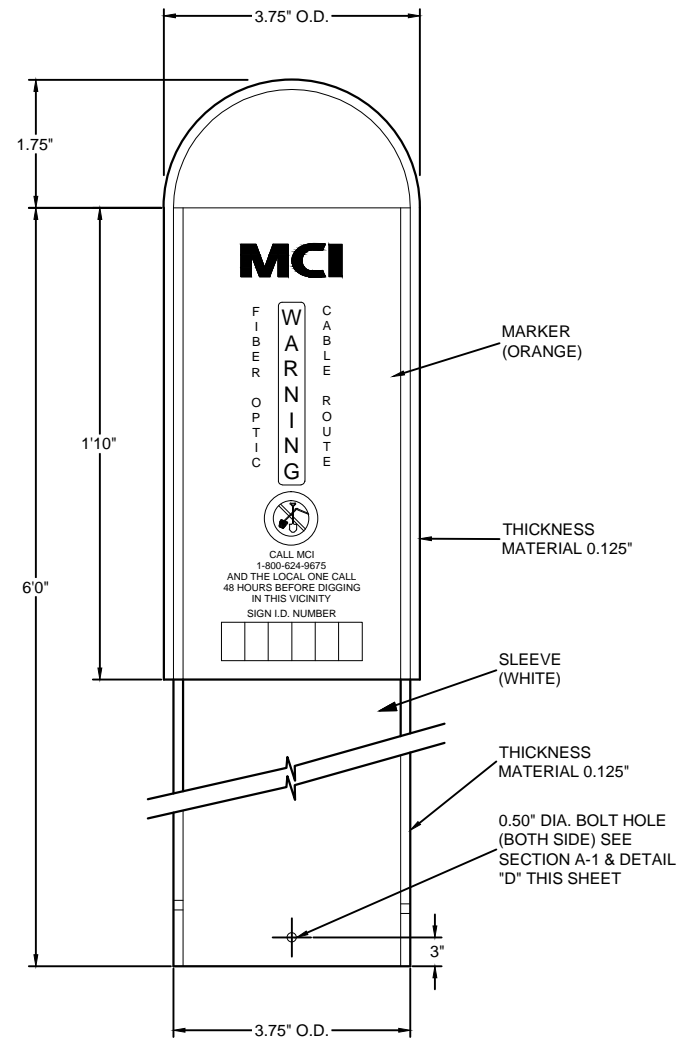
SCALE
 HORIZONTAL: 1"= 50'
 VERTICAL: 1"= N/A
 MP _____ TO MP _____
 SHEET 8A OF 27
 FILE: 1706ANBA.005 08AA

TUBULAR MARKER DETAILS

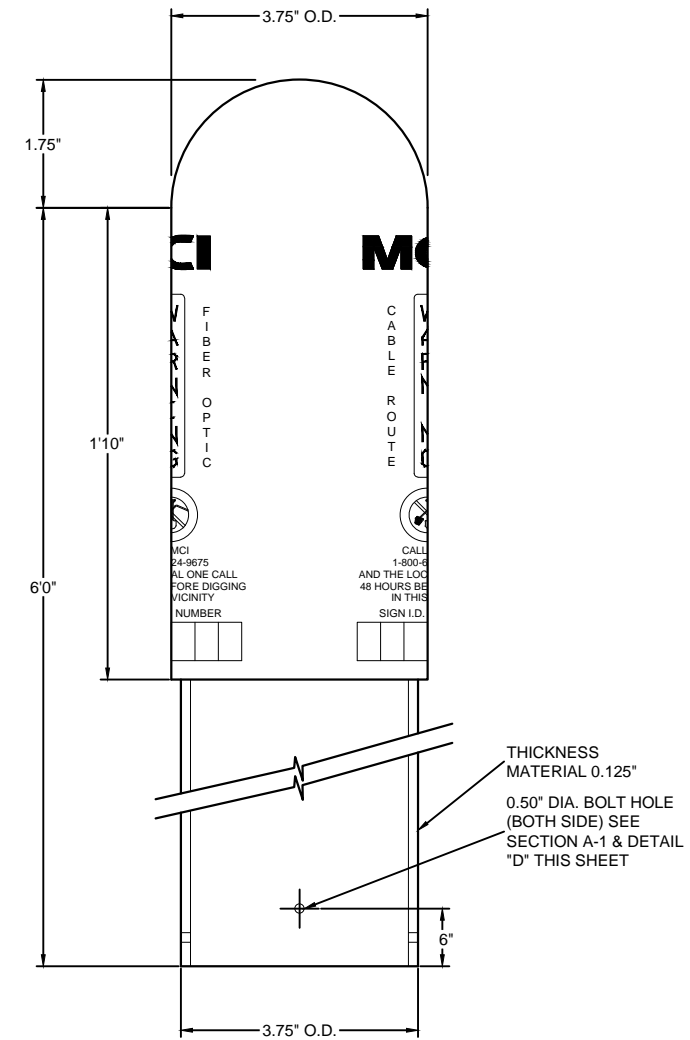
DETAIL "A"
INSTALLATION VIEW



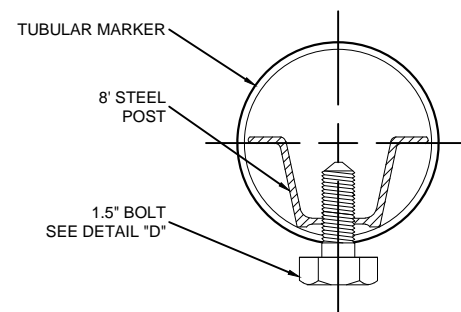
DETAIL "B"
FRONT VIEW



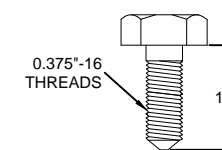
DETAIL "C"
SIDE VIEW



SECTION A-1
TUBULAR MARKER



DETAIL "D"
1.5" BOLT



PROJECT: 1706ANBA.005
RICHMOND, TX
PEACAN GROVE TO FM - 723



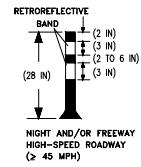
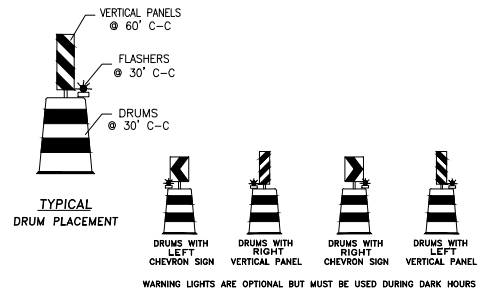
MCI metro
ACCESS TRANSMISSION SERVICES CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PEACAN GROVE TO FM - 723
RICHMOND, TX

DATE: 09/21/18
ENGINEER: ECC
DRAWN BY: T.P.G. (KIB)

REVISIONS			
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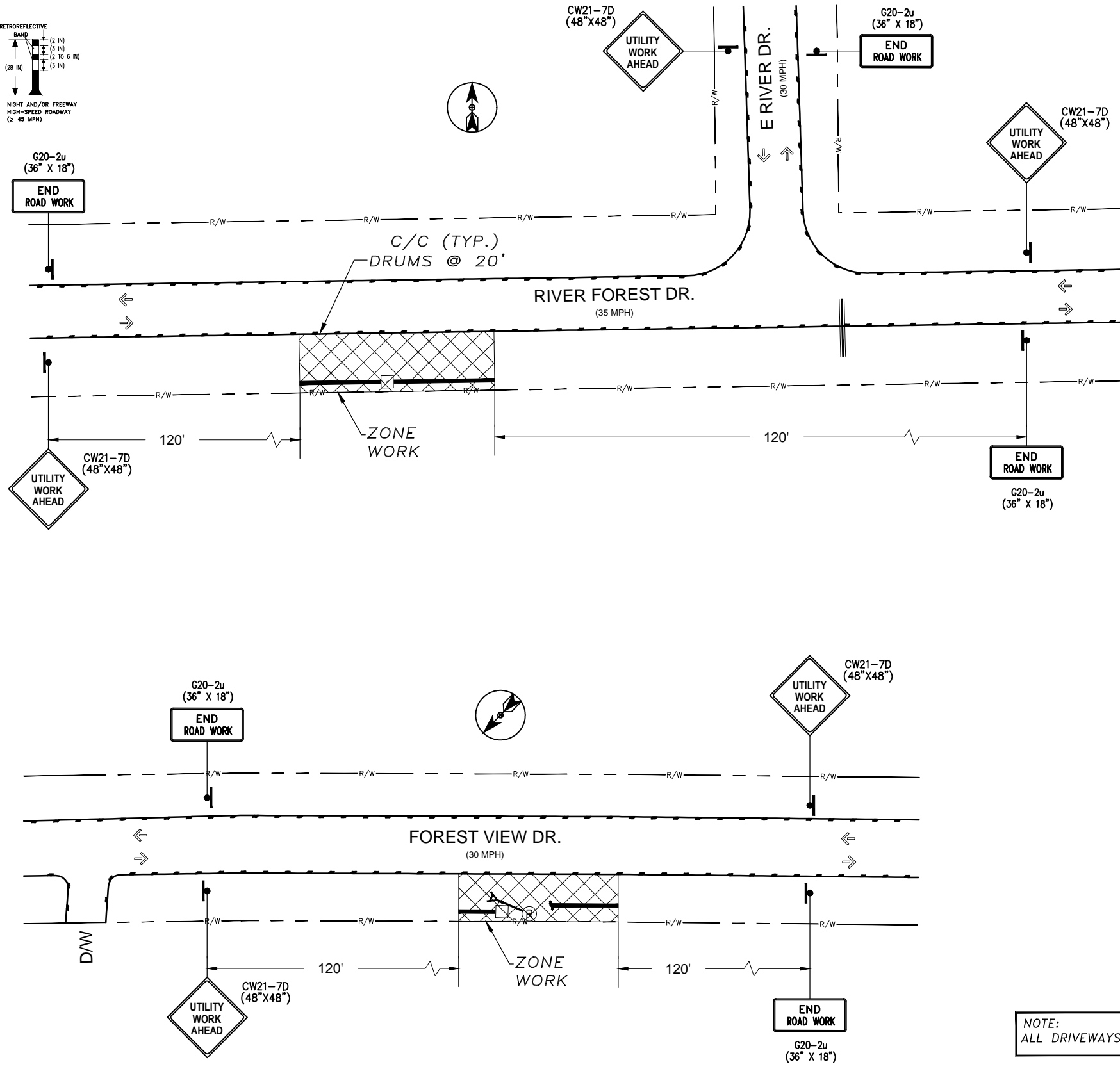
SCALE
HORIZONTAL: 1" = 50'
VERTICAL: 1" = N/A
MP _____ TO MP _____
SHEET 9 OF 27
FILE: 1706ANBA.005 09 A



LEGEND

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

PROJECT: 1706ANBA.005
 RICHMOND, TX
 PEACAN GROVE TO FM - 723



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.



MCImetro
 ACCESS TRANSMISSION SERVICES CORPORATION
 OUTSIDE PLANT CONSTRUCTION
 TITLE: FIBER OPTIC ROUTE
 PEACAN GROVE TO FM - 723
 RICHMOND, TX

DATE: 09/21/18
 ENGINEER: ECC
 DRAWN BY: T.P.G. (KIB)

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SCALE
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 VERTICAL: 1" = N/A
 MP _____ TO MP _____
 SHEET 9A OF 27
 FILE: 1706ANBA.005 09AA

NOTE:
CONTRACTOR TO MAINTAIN 60" MIN. DEPTH CROSSING
OF ROADWAYS, DRIVEWAYS, AND CULVERTS.

NOTE:
MAINTAIN 4' MINIMUM
SEPARATION FROM EOP/BOC.

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.

NOTE:
PROP. 4'X4' BORE PITS
AT EACH HH LOCATION



PROJECT: 1706ANBA.005
RICHMOND, TX
PEACAN GROVE TO FM - 723

CLARIFICATION NO.	QUANTITY
PLACE (24"X36"X24") HH	1
PLACE (17"X30"X36") HH	-
PROP. 1-2" HDPE	596'
PULL 1-144F (A) CABLE	746'
PULL 1-144F (DE) CABLE	-
PLACE 6M STRAND	-
LASH 1-144F CABLE	-
DOWN GUY & ANCHOR	-
RISER: 2" U GUARD	-
PLACE MARKER	1



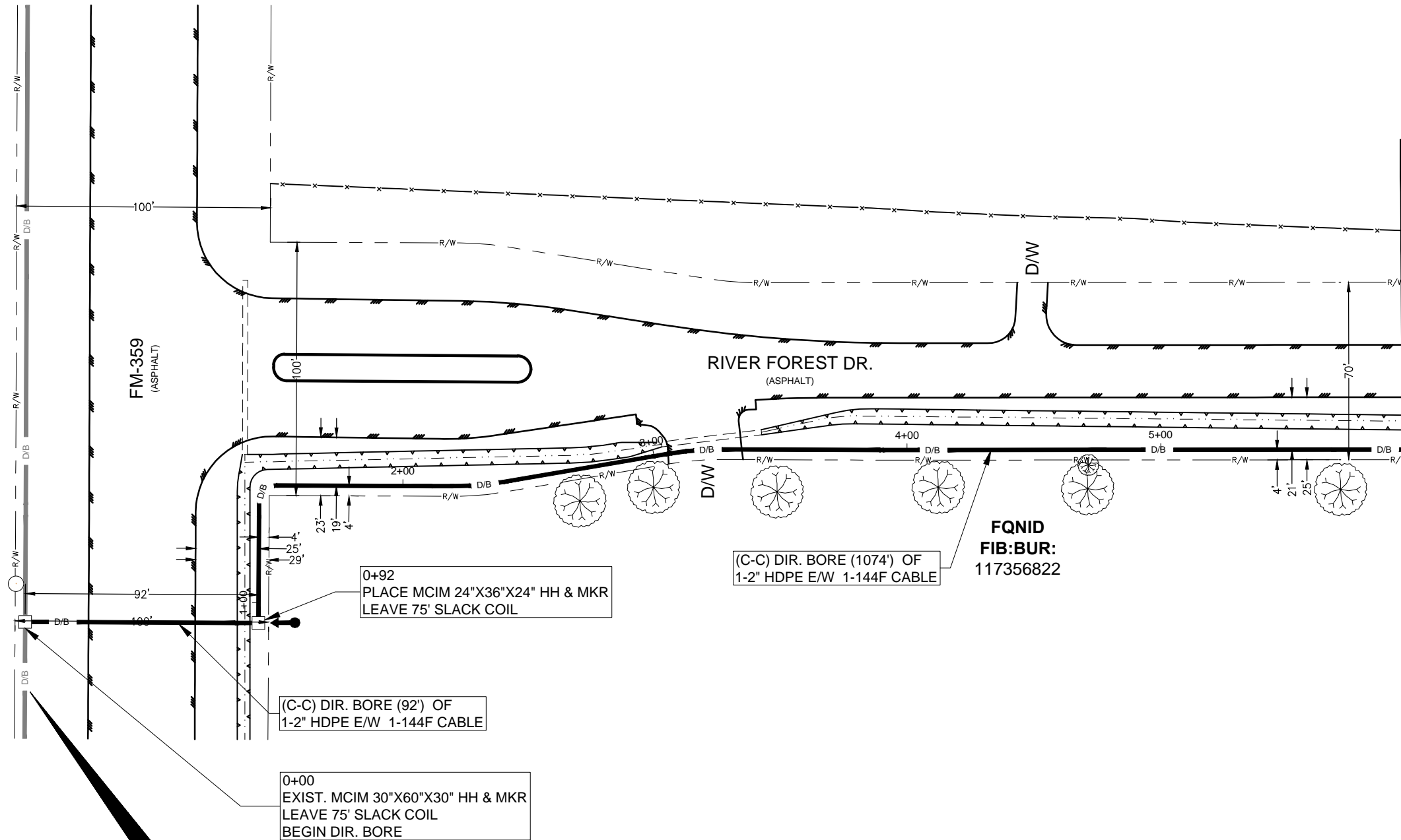
MCI/metro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PEACAN GROVE TO FM - 723
RICHMOND, TX

DATE: 09/21/18
ENGINEER: ECC
DRAWN BY: T.P.G. (KIB)

REVISIONS			
No.	DATE	DESCRIPTION	BY
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SCALE
HORIZONTAL: 1" = 50'
VERTICAL: 1" = N/A
MP _____ TO MP _____
SHEET 10 OF 27
FILE: 1706ANBA.005 010



SEE SHEET 11 TO MATCH SURVEY STA. 5+96

SEE PROJECT :
PECANGROVE_OVEREASY_1706ANBE0005
SHEET 38 OF 129 FOR BACKBONE TIE-IN

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.

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

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.

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

NOTE:
CONTRACTOR TO MAINTAIN 60" MIN. DEPTH CROSSING
OF ROADWAYS, DRIVEWAYS, AND CULVERTS.

NOTE:
MAINTAIN 4' MINIMUM
SEPARATION FROM EOP/BOC.

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.

NOTE:
PROP. 4'X4' BORE PITS
AT EACH HH LOCATION



PROJECT: 1706ANBA.005
RICHMOND, TX
PEACAN GROVE TO FM - 723

CLARIFICATION NO.	QUANTITY
PLACE (24"X36"X24") HH	1
PLACE (17"X30"X36") HH	-
PROP. 1-2" HDPE	623'
PULL 1-144F (A) CABLE	698'
PULL 1-144F (DE) CABLE	-
PLACE 6M STRAND	-
LASH 1-144F CABLE	-
DOWN GUY & ANCHOR	-
RISER: 2" U GUARD	-
PLACE MARKER	1



MCI metro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PEACAN GROVE TO FM - 723
RICHMOND, TX

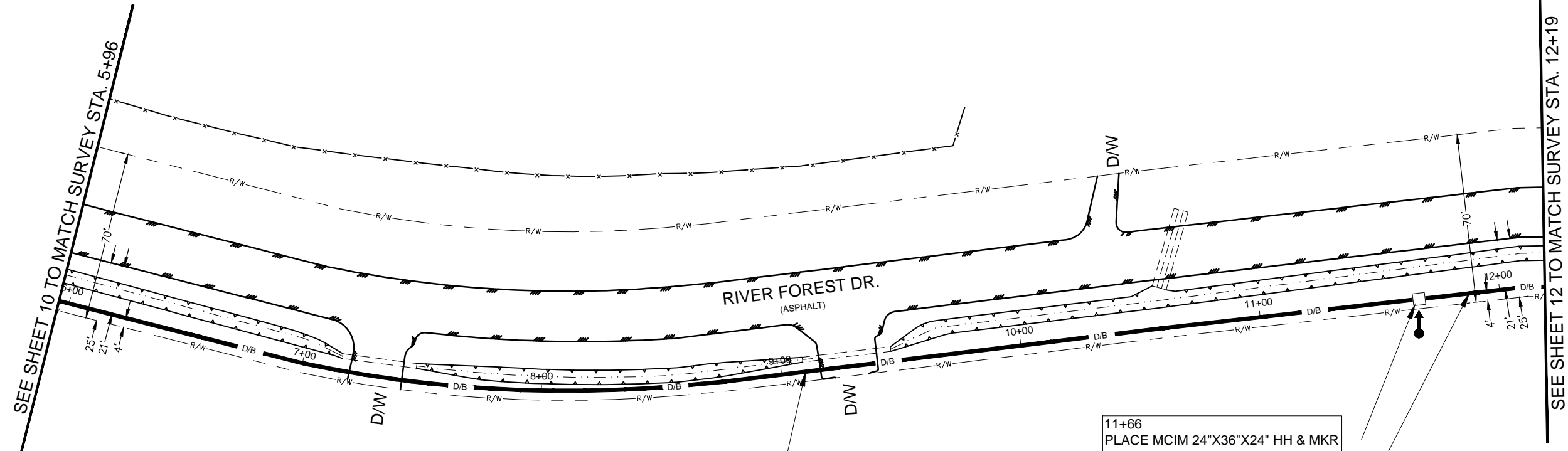
DATE: 09/21/18
ENGINEER: ECC
DRAWN BY: T.P.G. (KIB)

REVISIONS

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SCALE
HORIZONTAL: 1" = 50'
VERTICAL: 1" = N/A
MP _____ TO MP _____
SHEET 11 OF 27
FILE: 1706ANBA.005 011



FQID
FIB: BUR:
117356822

(C-C) DIR. BORE (1074') OF
1-2" HDPE E/W 1-144F CABLE

11+66
PLACE MCIM 24"X36"X24" HH & MKR
LEAVE 75' SLACK COIL

(C-C) DIR. BORE (1067') OF
1-2" HDPE E/W 1-144F CABLE

UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE RECORDS AND
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NOTE:
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WAY BOUNDARY MUST BE FIELD VERIFIED BY A REGISTERED PROFESSIONAL LAND
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48 HOURS NOTICE REQUIRED

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NOTE:
MAINTAIN 4' MINIMUM
SEPARATION FROM EOP/BOC.

RICHMOND, TX
FORT BEND COUNTY

CAUTION !!!!
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AND HAVE NOT BEEN FIELD LOCATED, CONTRACTOR TO VERIFY EXACT
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NOTE:
PROP. 4'X4' BORE PITS
AT EACH HH LOCATION

NORTH



PROJECT: 1706ANBA.005
RICHMOND, TX
PEACAN GROVE TO FM - 723

CLARIFICATION NO.	QUANTITY
PLACE (24"X36"X24") HH	-
PLACE (17"X30"X36") HH	-
PROP. 1-2" HDPE	663'
PULL 1-144F (A) CABLE	663'
PULL 1-144F (DE) CABLE	-
PLACE 6M STRAND	-
LASH 1-144F CABLE	-
DOWN GUY & ANCHOR	-
RISER: 2" U GUARD	-
PLACE MARKER	-



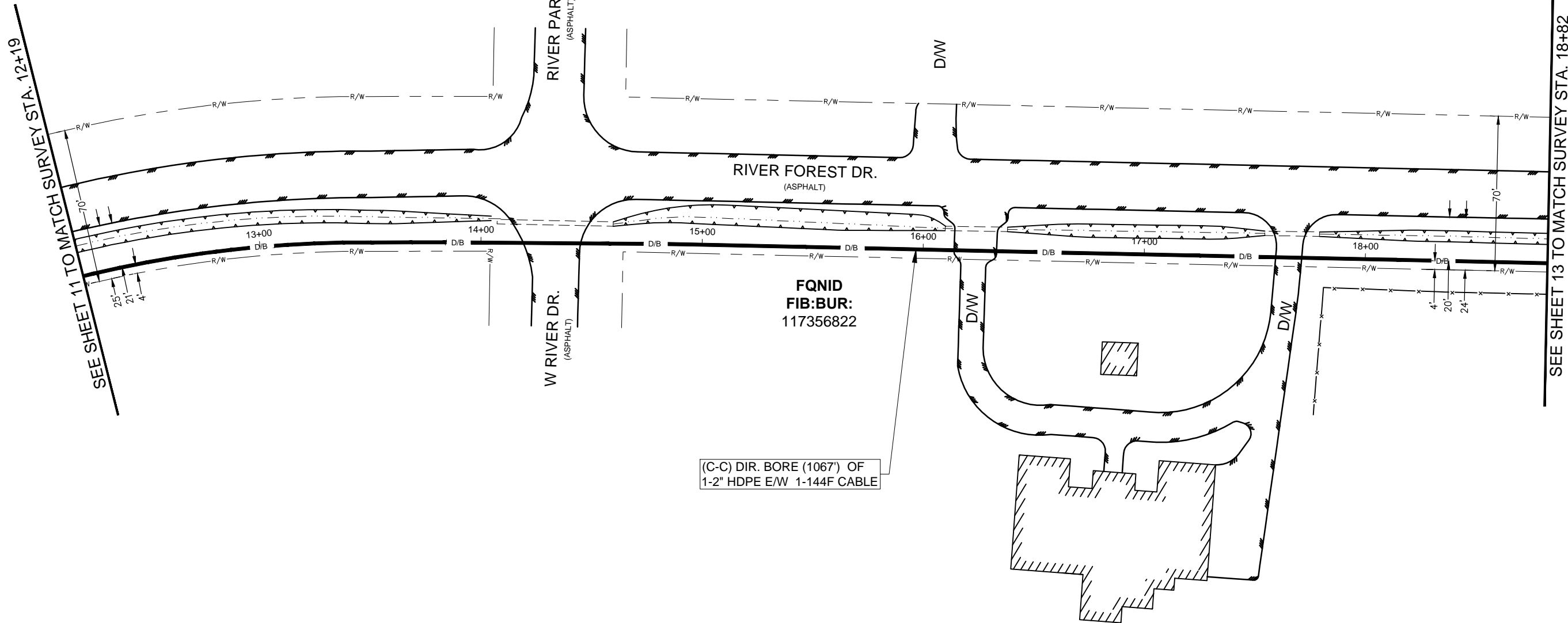
MCImetro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PEACAN GROVE TO FM - 723
RICHMOND, TX

DATE: 09/21/18
ENGINEER: ECC
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 12 OF 27
FILE: 1706ANBA.005 012



UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE RECORDS AND
FIELD OBSERVATIONS BUT ARE NOT NECESSARILY EXACT. IT IS THE CONTRACTORS
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NOTE:
THE CONTRACTOR SHALL FIELD VERIFY AND LOCATE
ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION."

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.

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

NOTE:
CONTRACTOR TO MAINTAIN 60" MIN. DEPTH CROSSING
OF ROADWAYS, DRIVEWAYS, AND CULVERTS.

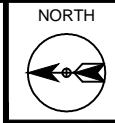
NOTE:
MAINTAIN 4' MINIMUM
SEPARATION FROM EOP/BOC.

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,
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LOCATION AND DEPTH PRIOR TO ANY DIGGING AND/OR BORING.

NOTE:
PROP. 4'X4' BORE PITS
AT EACH HH LOCATION



PROJECT: 1706ANBA.005

RICHMOND, TX
PEACAN GROVE TO FM - 723

CLARIFICATION NO.	QUANTITY
PLACE (24"X36"X24") HH	1
PLACE (17"X30"X36") HH	-
PROP. 1-2" HDPE	652'
PULL 1-144F (A) CABLE	727'
PULL 1-144F (DE) CABLE	-
PLACE 6M STRAND	-
LASH 1-144F CABLE	-
DOWN GUY & ANCHOR	-
RISER: 2" U GUARD	-
PLACE MARKER	1



MCImetro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PEACAN GROVE TO FM - 723
RICHMOND, TX

DATE: 09/21/18

ENGINEER: ECC

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

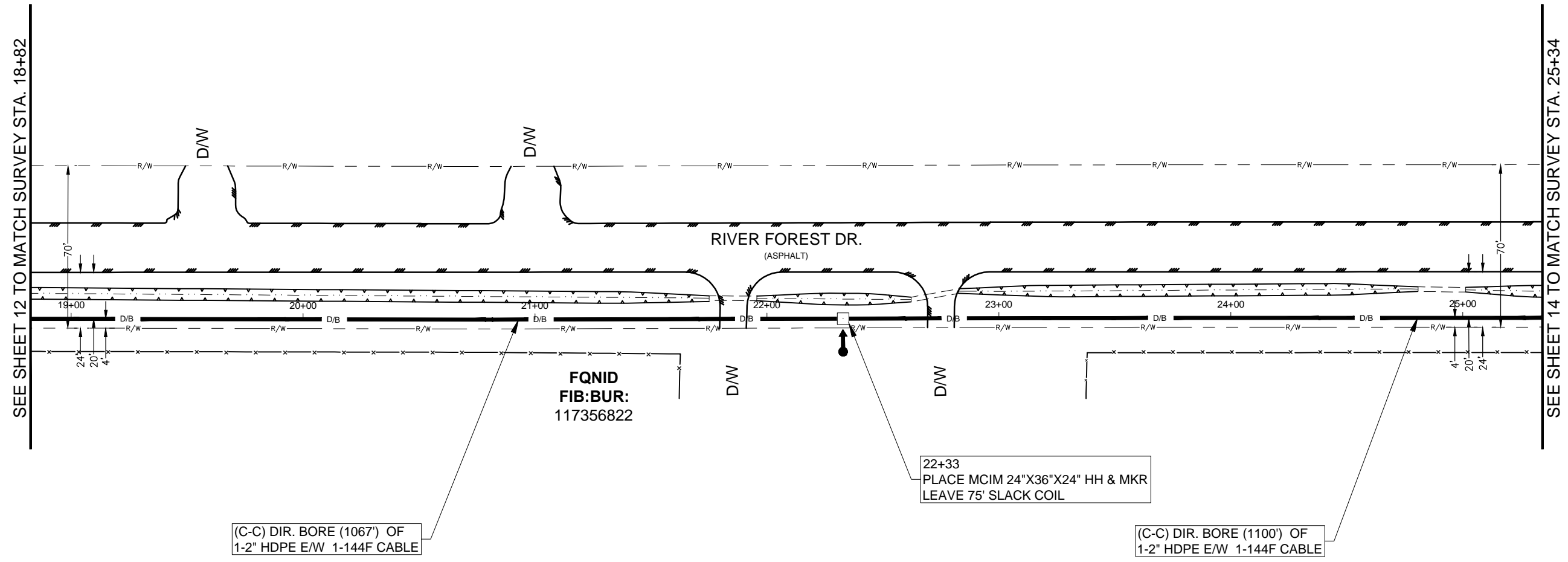
REVISIONS			
No.	DATE	DESCRIPTION	BY
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SCALE
HORIZONTAL: 1" = 50'
VERTICAL: 1" = N/A
MP _____ TO MP _____
SHEET 13 OF 27
FILE: 1706ANBA.005 013

SEE SHEET 12 TO MATCH SURVEY STA. 18+82

SEE SHEET 14 TO MATCH SURVEY STA. 25+34



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NOTE:
MAINTAIN 4' MINIMUM
SEPARATION FROM EOP/BOC.

RICHMOND, TX
FORT BEND COUNTY

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NOTE:
PROP. 4'X4' BORE PITS
AT EACH HH LOCATION



PROJECT: 1706ANBA.005
RICHMOND, TX
PEACAN GROVE TO FM - 723

CLARIFICATION NO.	QUANTITY
PLACE (24"X36"X24") HH	-
PLACE (17"X30"X36") HH	-
PROP. 1-2" HDPE	669'
PULL 1-144F (A) CABLE	669'
PULL 1-144F (DE) CABLE	-
PLACE 6M STRAND	-
LASH 1-144F CABLE	-
DOWN GUY & ANCHOR	-
RISER: 2" U GUARD	-
PLACE MARKER	-



MCI/metro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PEACAN GROVE TO FM - 723
RICHMOND, TX

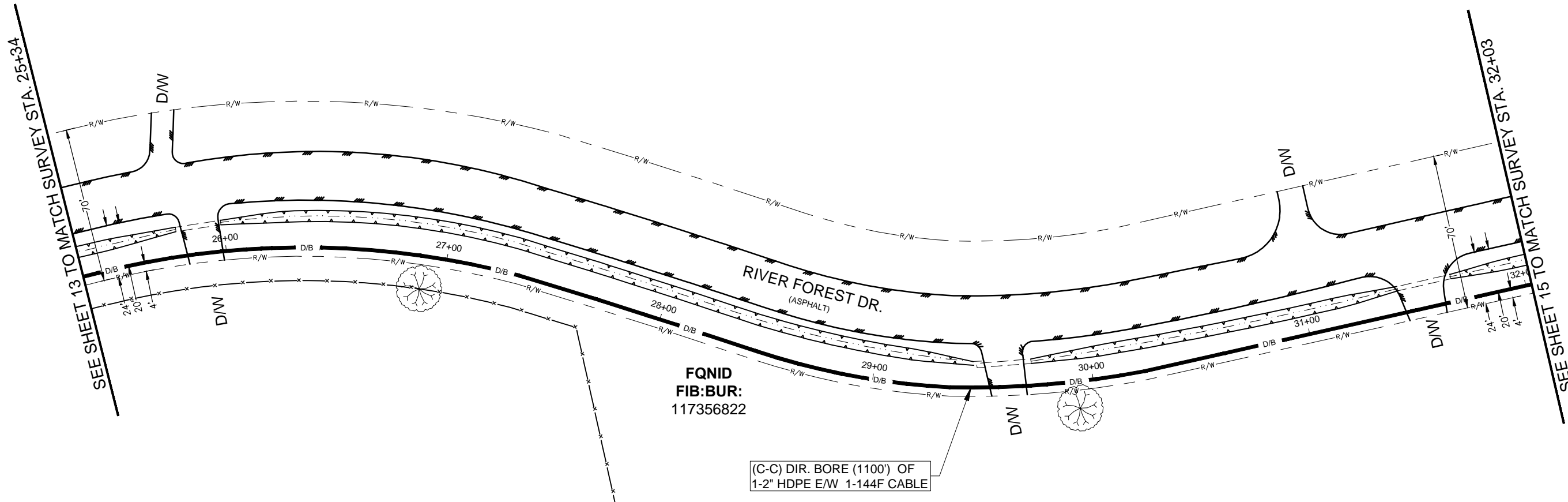
DATE: 09/21/18
ENGINEER: ECC
DRAWN BY: T.P.G. (KIB)

REVISIONS			
No.	DATE	DESCRIPTION	BY
1.	-	-	-

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SCALE

HORIZONTAL: 1" = 50'
VERTICAL: 1" = N/A
MP _____ TO MP _____
SHEET 14 OF 27
FILE: 1706ANBA.005 014



FQID
FIB: BUR:
117356822

(C-C) DIR. BORE (1100') OF
1-2" HDPE E/W 1-144F CABLE

UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE RECORDS AND
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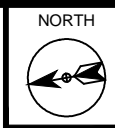
NOTE:
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SEPARATION FROM EOP/BOC.

RICHMOND, TX
FORT BEND COUNTY

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NOTE:
PROP. 4'X4' BORE PITS
AT EACH HH LOCATION



PROJECT: 1706ANBA.005
RICHMOND, TX
PEACAN GROVE TO FM - 723

CLARIFICATION NO.	QUANTITY
PLACE (24"X36"X24") HH	1
PLACE (17"X30"X36") HH	-
PROP. 1-2" HDPE	605'
PULL 1-144F (A) CABLE	680'
PULL 1-144F (DE) CABLE	-
PLACE 6M STRAND	-
LASH 1-144F CABLE	-
DOWN GUY & ANCHOR	-
RISER: 2" U GUARD	-
PLACE MARKER	1



MCI/metro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PEACAN GROVE TO FM - 723
RICHMOND, TX

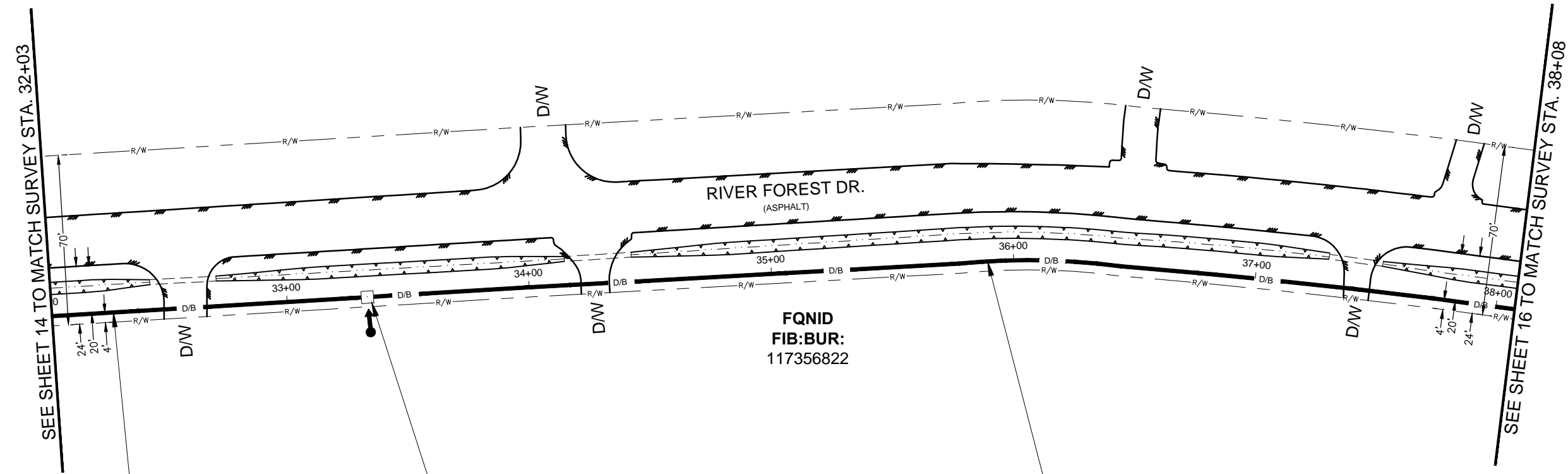
DATE: 09/21/18
ENGINEER: ECC
DRAWN BY: T.P.G. (KIB)

REVISIONS

No.	DATE	DESCRIPTION	BY
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SCALE
HORIZONTAL: 1" = 50'
VERTICAL: 1" = N/A
MP _____ TO MP _____
SHEET 15 OF 27
FILE: 1706ANBA.005 015



(C-C) DIR. BORE (1100') OF
1-2" HDPE E/W 1-144F CABLE

33+33
PLACE MCIM 24"X36"X24" HH & MKR
LEAVE 75' SLACK COIL

(C-C) DIR. BORE (1000') OF
1-2" HDPE E/W 1-144F CABLE

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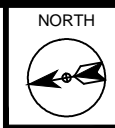
NOTE:
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SEPARATION FROM EOP/BOC.

RICHMOND, TX
FORT BEND COUNTY

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NOTE:
PROP. 4'X4' BORE PITS
AT EACH HH LOCATION



PROJECT: 1706ANBA.005
RICHMOND, TX
PEACAN GROVE TO FM - 723

CLARIFICATION NO.	QUANTITY
PLACE (24"X36"X24") HH	1
PLACE (17"X30"X36") HH	-
PROP. 1-2" HDPE	650'
PULL 1-144F (A) CABLE	725
PULL 1-144F (DE) CABLE	-
PLACE 6M STRAND	-
LASH 1-144F CABLE	-
DOWN GUY & ANCHOR	-
RISER: 2" U GUARD	-
PLACE MARKER	1



MCImetro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PEACAN GROVE TO FM - 723
RICHMOND, TX

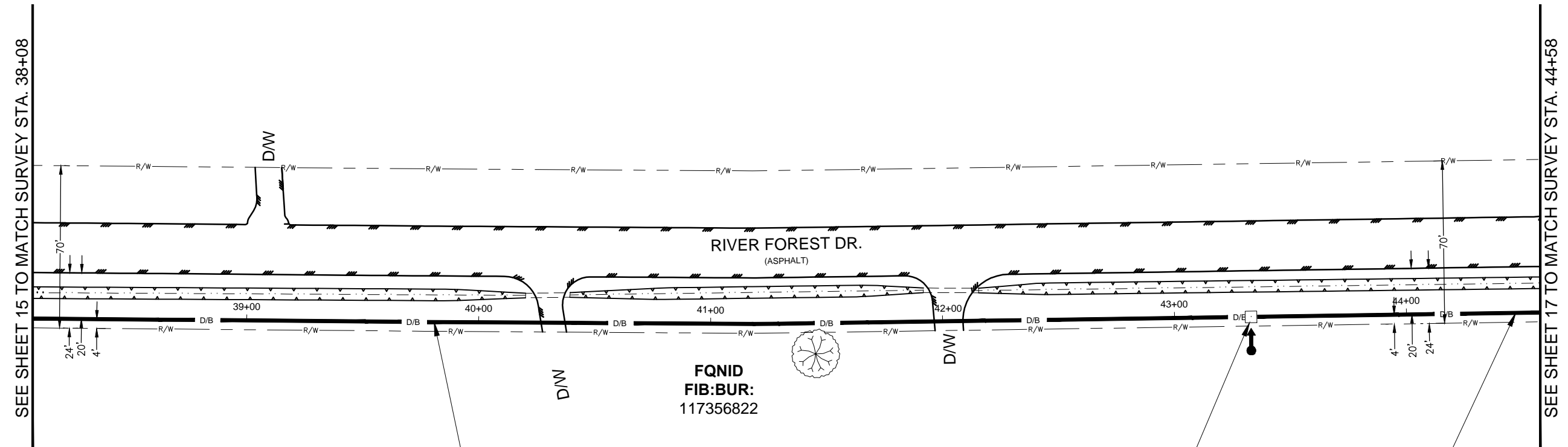
DATE: 09/21/18
ENGINEER: ECC
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REVISIONS

No.	DATE	DESCRIPTION	BY
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SCALE
HORIZONTAL: 1" = 50'
VERTICAL: 1" = N/A
MP _____ TO MP _____
SHEET 16 OF 27
FILE: 1706ANBA.005 016



(C-C) DIR. BORE (1000') OF
1-2" HDPE E/W 1-144F CABLE

43+33
PLACE MCIM 24"X36"X24" HH & MKR
LEAVE 75' SLACK COIL

(C-C) DIR. BORE (1110') OF
1-2" HDPE E/W 1-144F CABLE

FQID
FIB: BUR:
117356822

UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE RECORDS AND
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CALL BEFORE YOU DIG
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48 HOURS NOTICE REQUIRED

RICHMOND, TX
FORT BEND COUNTY

NOTE:
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NOTE:
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SEPARATION FROM EOP/BOC.

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NOTE:
PROP. 4'X4' BORE PITS
AT EACH HH LOCATION



PROJECT: 1706ANBA.005
RICHMOND, TX
PEACAN GROVE TO FM - 723

CLARIFICATION NO.	QUANTITY
PLACE (24"X36"X24") HH	-
PLACE (17"X30"X36") HH	-
PROP. 1-2" HDPE	598'
PULL 1-144F (A) CABLE	598'
PULL 1-144F (DE) CABLE	-
PLACE 6M STRAND	-
LASH 1-144F CABLE	-
DOWN GUY & ANCHOR	-
RISER: 2" U GUARD	-
PLACE MARKER	-



MCImetro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PEACAN GROVE TO FM - 723
RICHMOND, TX

DATE: 09/21/18
ENGINEER: ECC
DRAWN BY: T.P.G. (KIB)

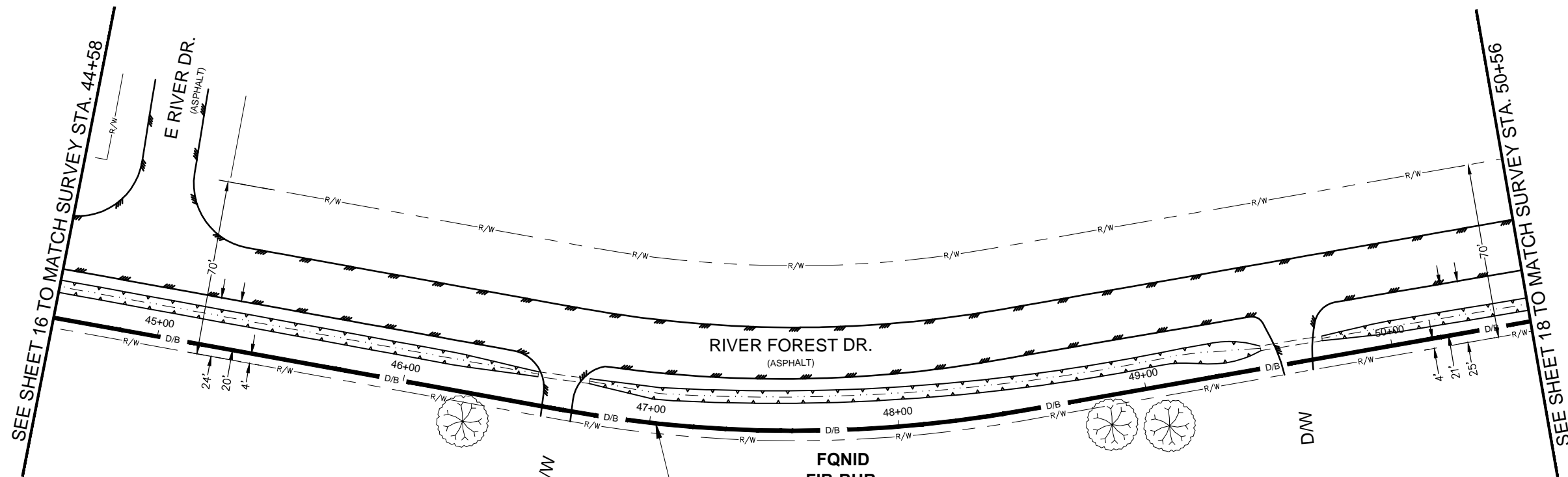
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No.	DATE	DESCRIPTION	BY
1.	-	-	-

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SCALE

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VERTICAL: 1" = N/A
MP _____ TO MP _____
SHEET 17 OF 27
FILE: 1706ANBA.005 017



(C-C) DIR. BORE (1110') OF
1-2" HDPE E/W 1-144F CABLE

FQID
FIB: BUR:
117356822

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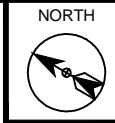
NOTE:
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RICHMOND, TX
FORT BEND COUNTY

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NOTE:
PROP. 4'X4' BORE PITS
AT EACH HH LOCATION



PROJECT: 1706ANBA.005
RICHMOND, TX
PEACAN GROVE TO FM - 723

CLARIFICATION NO.	QUANTITY
PLACE (24"X36"X24") HH	1
PLACE (17"X30"X36") HH	-
PROP. 1-2" HDPE	609'
PULL 1-144F (A) CABLE	684
PULL 1-144F (DE) CABLE	-
PLACE 6M STRAND	-
LASH 1-144F CABLE	-
DOWN GUY & ANCHOR	-
RISER: 2" U GUARD	-
PLACE MARKER	1



MCI/metro
ACCESS TRANSMISSION SERVICES
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OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PEACAN GROVE TO FM - 723
RICHMOND, TX

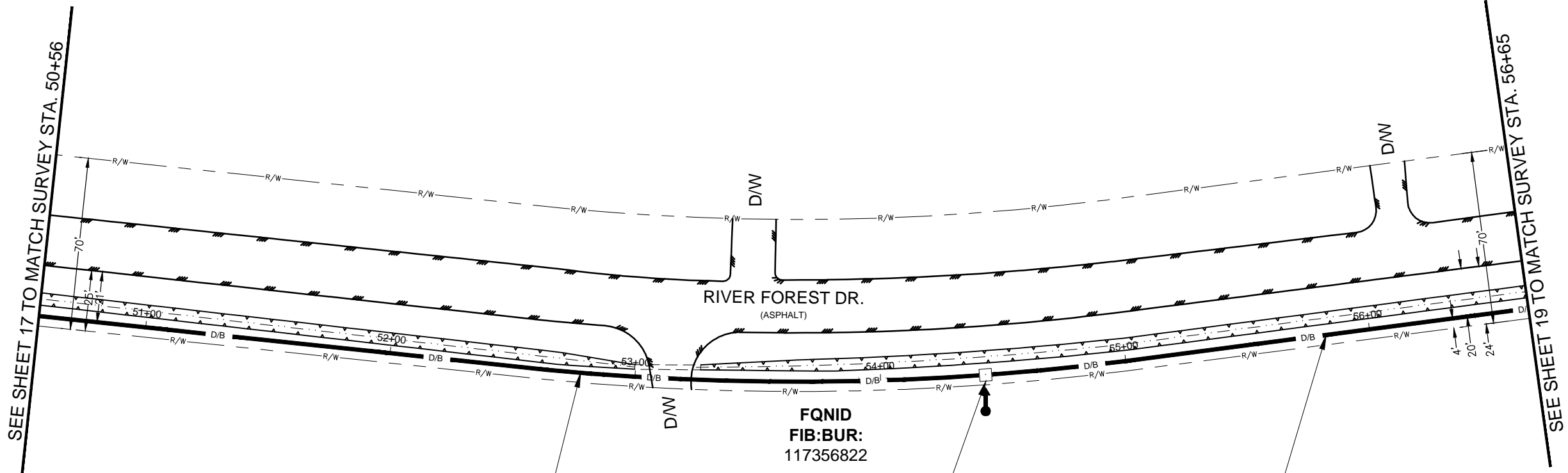
DATE: 09/21/18
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VERTICAL: 1" = N/A
MP _____ TO MP _____
SHEET 18 OF 27
FILE: 1706ANBA.005 018



(C-C) DIR. BORE (1110') OF
1-2" HDPE E/W 1-144F CABLE

54+43
PLACE MCIM 24"X36"X24" HH & MKR
LEAVE 75' SLACK COIL

(C-C) DIR. BORE (1000') OF
1-2" HDPE E/W 1-144F CABLE

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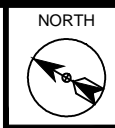
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FORT BEND COUNTY

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NOTE:
PROP. 4'X4' BORE PITS
AT EACH HH LOCATION



PROJECT: 1706ANBA.005
RICHMOND, TX
PEACAN GROVE TO FM - 723

CLARIFICATION NO.	QUANTITY
PLACE (24"X36"X24") HH	-
PLACE (17"X30"X36") HH	-
PROP. 1-2" HDPE	607'
PULL 1-144F (A) CABLE	607'
PULL 1-144F (DE) CABLE	-
PLACE 6M STRAND	-
LASH 1-144F CABLE	-
DOWN GUY & ANCHOR	-
RISER: 2" U GUARD	-
PLACE MARKER	-



MCImetro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PEACAN GROVE TO FM - 723
RICHMOND, TX

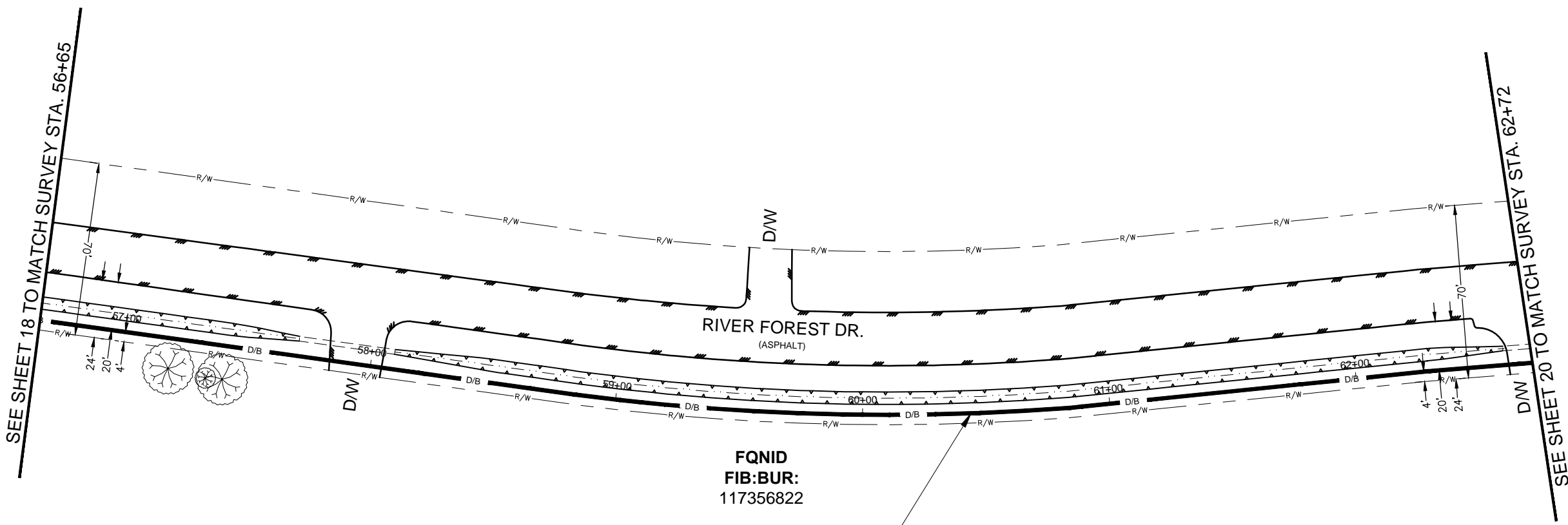
DATE: 09/21/18
ENGINEER: ECC
DRAWN BY: T.P.G. (KIB)

REVISIONS

No.	DATE	DESCRIPTION	BY
1.	-	-	-

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SCALE
HORIZONTAL: 1" = 50'
VERTICAL: 1" = N/A
MP _____ TO MP _____
SHEET 19 OF 27
FILE: 1706ANBA.005 019



FQID
FIB: BUR:
117356822

(C-C) DIR. BORE (1000') OF
1-2" HDPE E/W 1-144F CABLE

UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE RECORDS AND
FIELD OBSERVATIONS BUT ARE NOT NECESSARILY EXACT. IT IS THE CONTRACTORS
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NOTE:
THE CONTRACTOR SHALL FIELD VERIFY AND LOCATE
ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION."

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.

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

NOTE:
CONTRACTOR TO MAINTAIN 60" MIN. DEPTH CROSSING
OF ROADWAYS, DRIVEWAYS, AND CULVERTS.

NOTE:
MAINTAIN 4' MINIMUM
SEPARATION FROM EOP/BOC.

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.

NOTE:
PROP. 4'X4' BORE PITS
AT EACH HH LOCATION

NORTH



PROJECT: 1706ANBA.005
RICHMOND, TX
PEACAN GROVE TO FM - 723

CLARIFICATION NO.	QUANTITY
PLACE (24"X36"X24") HH	1
PLACE (17"X30"X36") HH	-
PROP. 1-2" HDPE	639'
PULL 1-144F (A) CABLE	714
PULL 1-144F (DE) CABLE	-
PLACE 6M STRAND	-
LASH 1-144F CABLE	-
DOWN GUY & ANCHOR	-
RISER: 2" U GUARD	-
PLACE MARKER	1



MCImetro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PEACAN GROVE TO FM - 723
RICHMOND, TX

DATE: 09/21/18

ENGINEER: ECC

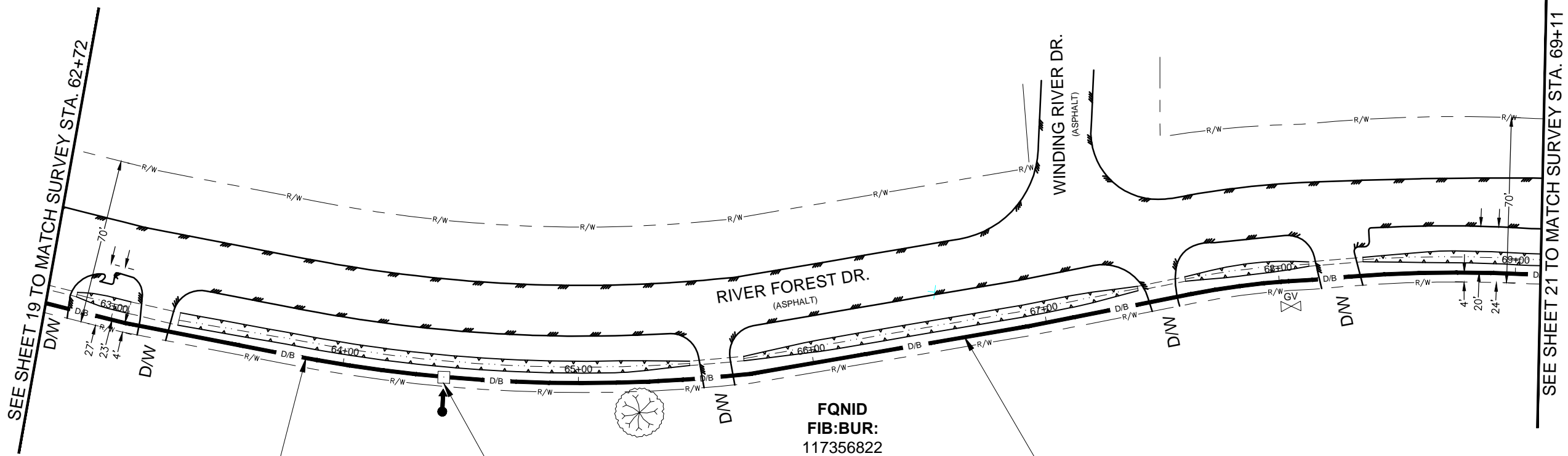
DRAWN BY: T.P.G. (KIB)

REVISIONS

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SCALE
HORIZONTAL: 1" = 50'
VERTICAL: 1" = N/A
MP _____ TO MP _____
SHEET 20 OF 27
FILE: 1706ANBA.005 020



(C-C) DIR. BORE (1000') OF
1-2" HDPE E/W 1-144F CABLE

64+43
PLACE MCIM 24"X36"X24" HH & MKR
LEAVE 75' SLACK COIL

(C-C) DIR. BORE (857') OF
1-2" HDPE E/W 1-144F CABLE

FQID
FIB: BUR:
117356822

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Know what's below.
Call before you dig.
CALL BEFORE YOU DIG
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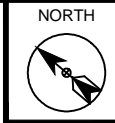
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RICHMOND, TX
FORT BEND COUNTY

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NOTE:
PROP. 4'X4' BORE PITS
AT EACH HH LOCATION



PROJECT: 1706ANBA.005
RICHMOND, TX
PEACAN GROVE TO FM - 723

CLARIFICATION NO.	QUANTITY
PLACE (24"X36"X24") HH	1
PLACE (17"X30"X36") HH	-
PROP. 1-2" HDPE	558'
PULL 1-144F (A) CABLE	633
PULL 1-144F (DE) CABLE	-
PLACE 6M STRAND	-
LASH 1-144F CABLE	-
DOWN GUY & ANCHOR	-
RISER: 2" U GUARD	-
PLACE MARKER	1



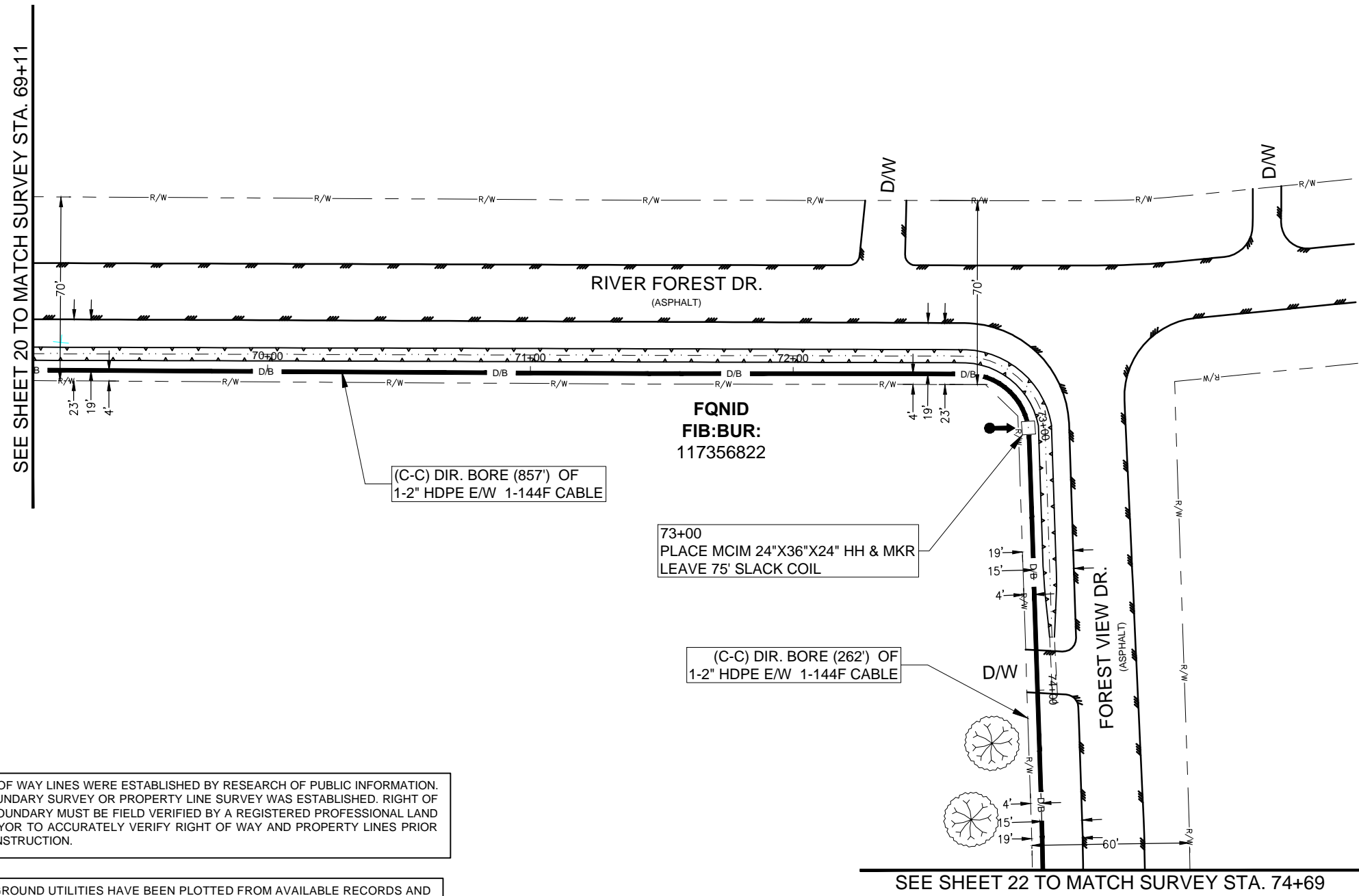
MCImetro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PEACAN GROVE TO FM - 723
RICHMOND, TX

DATE: 09/21/18
ENGINEER: ECC
DRAWN BY: T.P.G. (KIB)

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SCALE
HORIZONTAL: 1" = 50'
VERTICAL: 1" = N/A
MP _____ TO MP _____
SHEET 21 OF 27
FILE: 1706ANBA.005 021



SEE SHEET 20 TO MATCH SURVEY STA. 69+11

SEE SHEET 22 TO MATCH SURVEY STA. 74+69

RIGHT OF WAY LINES WERE ESTABLISHED BY RESEARCH OF PUBLIC INFORMATION.
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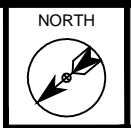
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RICHMOND, TX
FORT BEND COUNTY

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NOTE:
PROP. 4'X4' BORE PITS
AT EACH HH LOCATION



PROJECT: 1706ANBA.005
RICHMOND, TX
PEACAN GROVE TO FM - 723

CLARIFICATION NO.	QUANTITY
PLACE (24"X36"X24") HH	1
PLACE (17"X30"X36") HH	-
PROP. 1-2" HDPE	115'
PULL 1-144F (A) CABLE	190'
PULL 1-144F (DE) CABLE	-
PLACE 6M STRAND	454'
LASH 1-144F CABLE	554'
DOWN GUY & ANCHOR	3
RISER: 2" U GUARD	1
PLACE MARKER	1



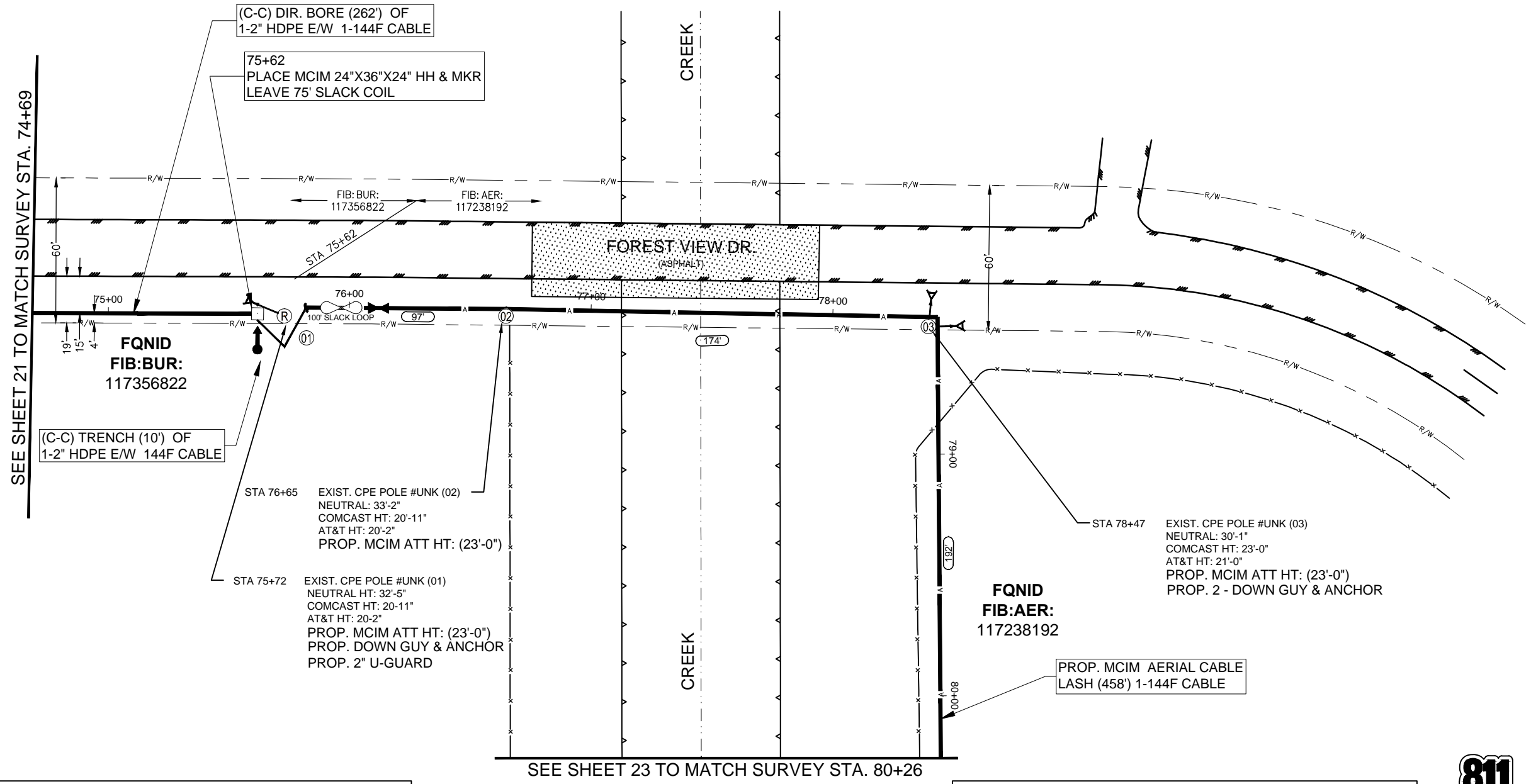
MCImetro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PEACAN GROVE TO FM - 723
RICHMOND, TX

DATE: 09/21/18
ENGINEER: ECC
DRAWN BY: T.P.G. (KIB)

REVISIONS			
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SCALE
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VERTICAL: 1" = N/A
MP _____ TO MP _____
SHEET 22 OF 27
FILE: 1706ANBA.005 022



SEE SHEET 21 TO MATCH SURVEY STA. 74+69

SEE SHEET 23 TO MATCH SURVEY STA. 80+26

UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE RECORDS AND
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NOTE:
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RICHMOND, TX
FORT BEND COUNTY

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NOTE:
PROP. 4'X4' BORE PITS
AT EACH HH LOCATION



PROJECT: 1706ANBA.005
RICHMOND, TX
PEACAN GROVE TO FM - 723

CLARIFICATION NO.	QUANTITY
PLACE (24"X36"X24") HH	-
PLACE (17"X30"X36") HH	-
PROP. 1-2" HDPE	-
PULL 1-144F (A) CABLE	-
PULL 1-144F (DE) CABLE	-
PLACE 6M STRAND	615'
LASH 1-144F CABLE	715
DOWN GUY & ANCHOR	6
RISER: 2" U GUARD	-
PLACE MARKER	-



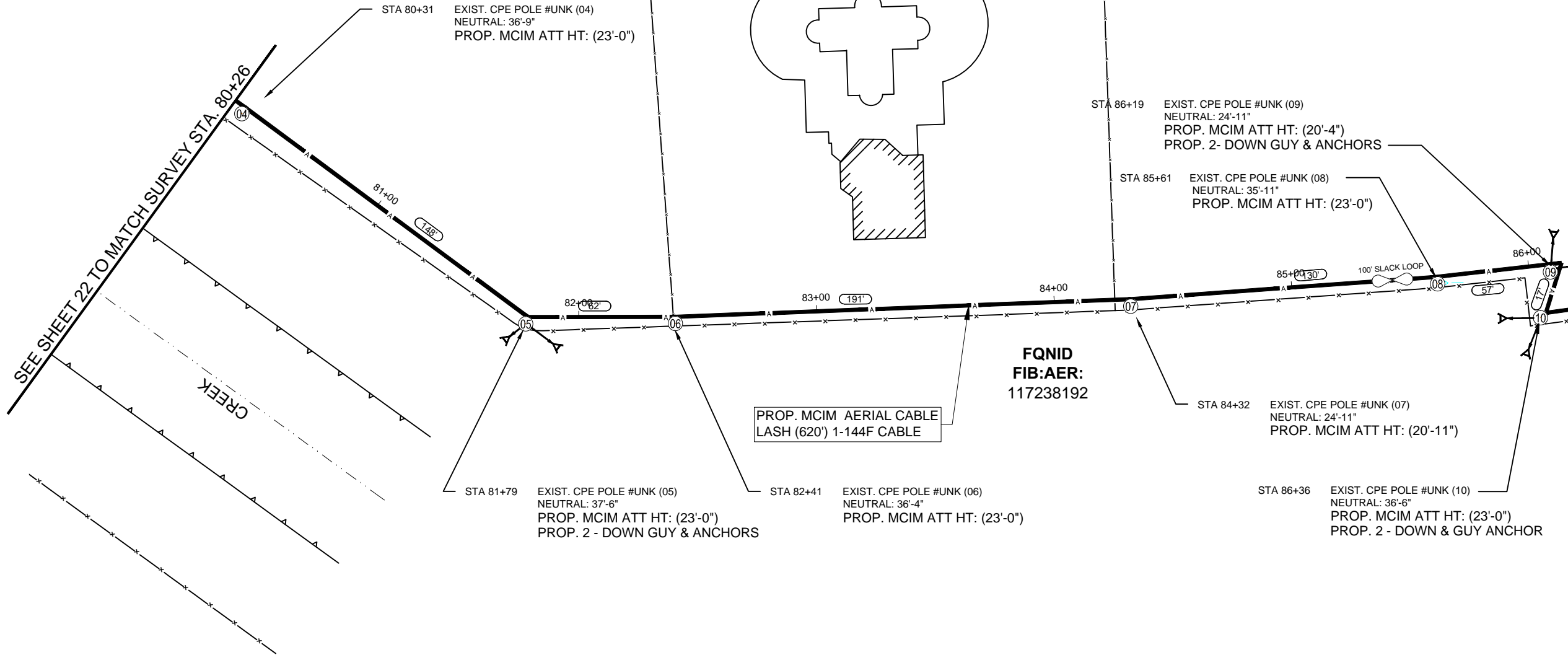
MCImetro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PEACAN GROVE TO FM - 723
RICHMOND, TX

DATE: 09/21/18
ENGINEER: ECC
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 23 OF 27
FILE: 1706ANBA.005 023



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RICHMOND, TX
FORT BEND COUNTY

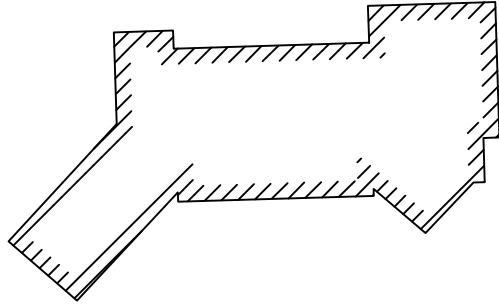
NOTE:
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NOTE:
PROP. 4'X4' BORE PITS
AT EACH HH LOCATION



PROJECT: 1706ANBA.005
RICHMOND, TX
PEACAN GROVE TO FM - 723

CLARIFICATION NO.	QUANTITY
PLACE (24"X36"X24") HH	-
PLACE (17"X30"X36") HH	-
PROP. 1-2" HDPE	-
PULL 1-144F (A) CABLE	-
PULL 1-144F (DE) CABLE	-
PLACE 6M STRAND	651'
LASH 1-144F CABLE	651'
DOWN GUY & ANCHOR	-
RISER: 2" U GUARD	-
PLACE MARKER	-



MCI metro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PEACAN GROVE TO FM - 723
RICHMOND, TX

DATE: 09/21/18
ENGINEER: ECC
DRAWN BY: T.P.G. (KIB)

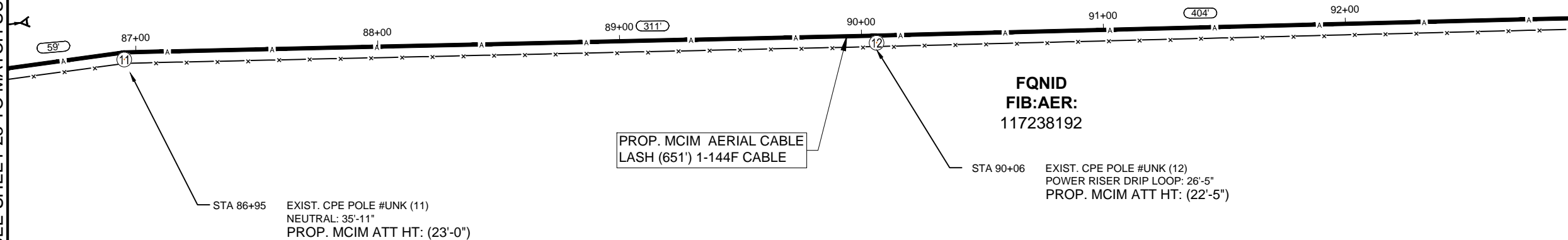
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SCALE
HORIZONTAL: 1" = 50'
VERTICAL: 1" = N/A
MP _____ TO MP _____
SHEET 24 OF 27
FILE: 1706ANBA.005 024

SEE SHEET 23 TO MATCH SURVEY STA. 86+46

SEE SHEET 25 TO MATCH SURVEY STA. 92+97



STA 86+95 EXIST. CPE POLE #UNK (11)
NEUTRAL: 35'-11"
PROP. MCIM ATT HT: (23'-0")

PROP. MCIM AERIAL CABLE
LASH (651') 1-144F CABLE

FQID
FIB:AER:
117238192

STA 90+06 EXIST. CPE POLE #UNK (12)
POWER RISER DRIP LOOP: 26'-5"
PROP. MCIM ATT HT: (22'-5")

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RICHMOND, TX
FORT BEND COUNTY

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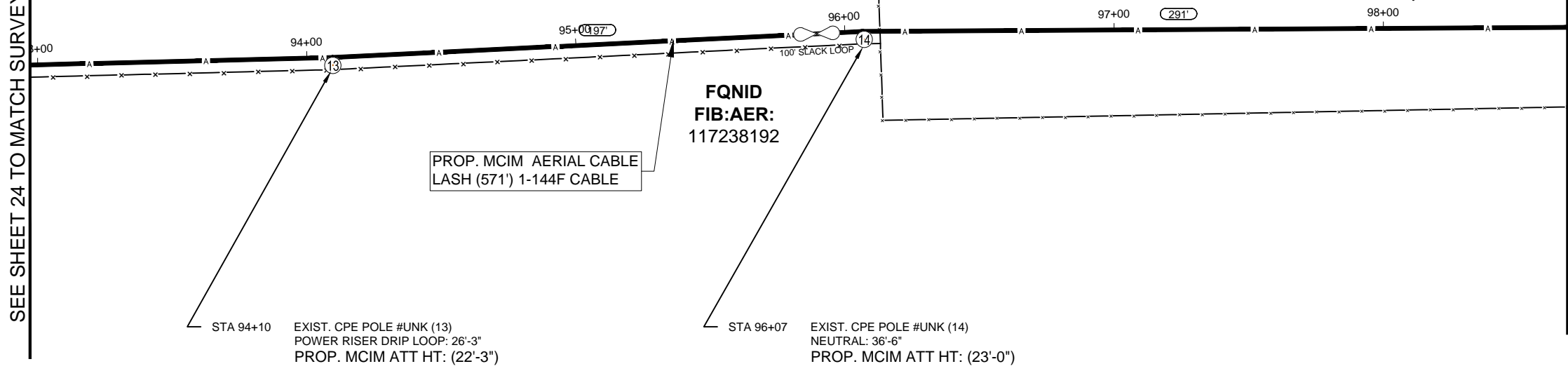


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NOTE:
PROP. 4'X4' BORE PITS
AT EACH HH LOCATION

SEE SHEET 24 TO MATCH SURVEY STA. 92+97

SEE SHEET 26 TO MATCH SURVEY STA. 98+68



FQCID
FIB:AER:
117238192

PROP. MCIM AERIAL CABLE
LASH (571') 1-144F CABLE

STA 94+10 EXIST. CPE POLE #UNK (13)
POWER RISER DRIP LOOP: 26'-3"
PROP. MCIM ATT HT: (22'-3")

STA 96+07 EXIST. CPE POLE #UNK (14)
NEUTRAL: 36'-6"
PROP. MCIM ATT HT: (23'-0")

PROJECT: 1706ANBA.005
RICHMOND, TX
PEACAN GROVE TO FM - 723

CLARIFICATION NO.	QUANTITY
PLACE (24"X36"X24") HH	-
PLACE (17"X30"X36") HH	-
PROP. 1-2" HDPE	-
PULL 1-144F (A) CABLE	-
PULL 1-144F (DE) CABLE	-
PLACE 6M STRAND	571'
LASH 1-144F CABLE	671'
DOWN GUY & ANCHOR	-
RISER: 2" U GUARD	-
PLACE MARKER	-



MCI metro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PEACAN GROVE TO FM - 723
RICHMOND, TX

DATE: 09/21/18
ENGINEER: ECC
DRAWN BY: T.P.G. (KIB)

REVISIONS

No.	DATE	DESCRIPTION	BY
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SCALE
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VERTICAL: 1" = N/A
MP _____ TO MP _____
SHEET 25 OF 27
FILE: 1706ANBA.005 025

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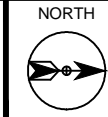
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FORT BEND COUNTY

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PROJECT: 1706ANBA.005
RICHMOND, TX
PEACAN GROVE TO FM - 723

CLARIFICATION NO.	QUANTITY
PLACE (24"X36"X24") HH	1
PLACE (17"X30"X36") HH	-
PROP. 1-2" HDPE	-
PULL 1-144F (A) CABLE	790'
PULL 1-144F (DE) CABLE	-
PLACE 6M STRAND	232'
LASH 1-144F CABLE	332'
DOWN GUY & ANCHOR	1
RISER: 2" U GUARD	1
PLACE MARKER	1



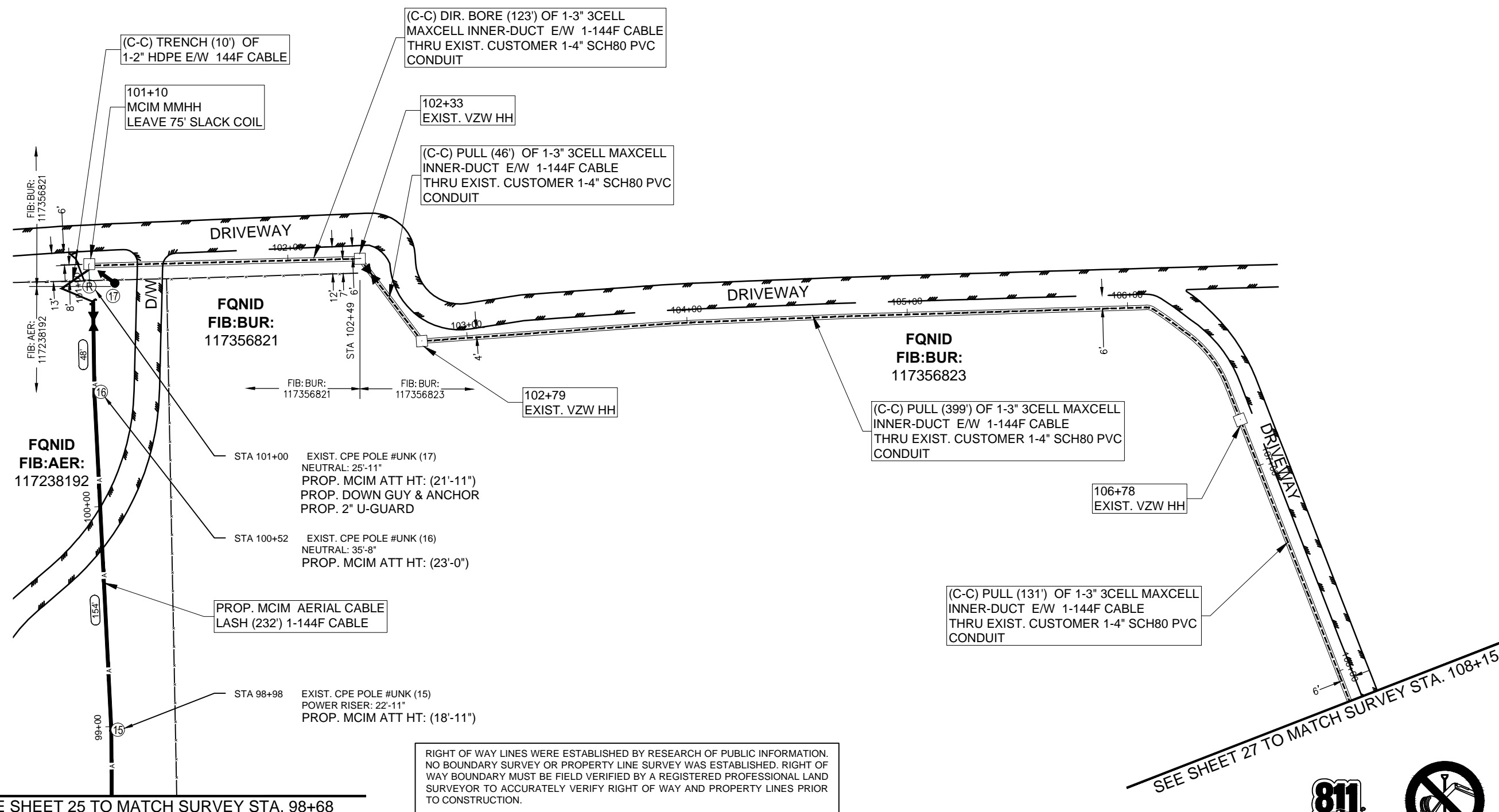
McImetro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
PEACAN GROVE TO FM - 723
RICHMOND, TX

DATE: 09/21/18
ENGINEER: ECC
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 26 OF 27
FILE: 1706ANBA.005 026



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."

SEE SHEET 25 TO MATCH SURVEY STA. 98+68

SEE SHEET 27 TO MATCH SURVEY STA. 108+15

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

RICHMOND, TX
FORT BEND COUNTY

NOTE:
CONTRACTOR TO MAINTAIN 60" MIN. DEPTH CROSSING
OF ROADWAYS, DRIVEWAYS, AND CULVERTS.

NOTE:
MAINTAIN 4' MINIMUM
SEPARATION FROM EOP/BOC.

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.

NOTE:
PROP. 4'X4' BORE PITS
AT EACH HH LOCATION



PROJECT: 1706ANBA.005
RICHMOND, TX
PEACAN GROVE TO FM - 723

CLARIFICATION NO.	QUANTITY
PLACE (24"X36"X24") HH	-
PLACE (17"X30"X36") HH	-
PROP. 1-2" HDPE	-
PULL 1-144F (A) CABLE	628'
PULL 1-144F (DE) CABLE	-
PLACE 6M STRAND	-
LASH 1-144F CABLE	-
DOWN GUY & ANCHOR	-
RISER: 2" U GUARD	-
PLACE MARKER	-



MCI metro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
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DATE: 09/21/18
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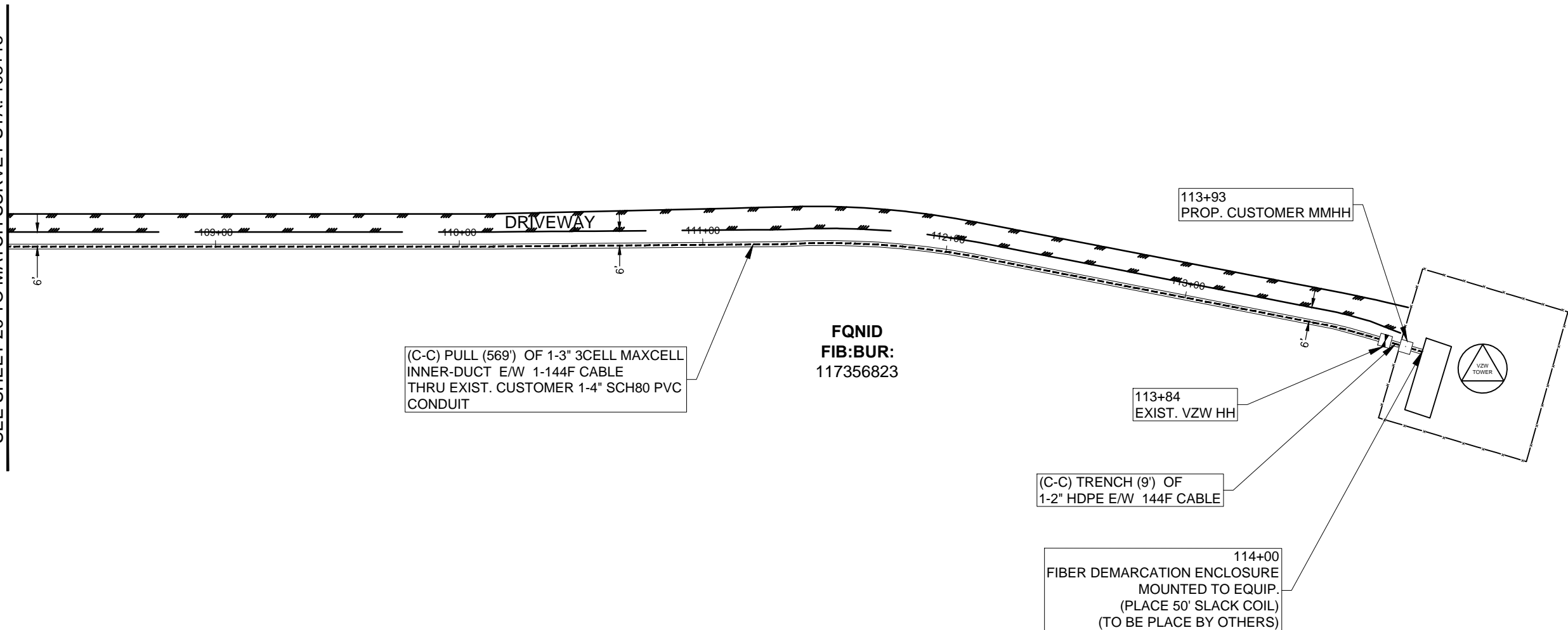
REVISIONS

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 27 OF 27
FILE: 1706ANBA.005 027

SEE SHEET 26 TO MATCH SURVEY STA. 108+15



(C-C) PULL (569') OF 1-3" 3CELL MAXCELL
INNER-DUCT E/W 1-144F CABLE
THRU EXIST. CUSTOMER 1-4" SCH80 PVC
CONDUIT

FQPID
FIB: BUR:
117356823

(C-C) TRENCH (9') OF
1-2" HDPE E/W 144F CABLE

114+00
FIBER DEMARCATION ENCLOSURE
MOUNTED TO EQUIP.
(PLACE 50' SLACK COIL)
(TO BE PLACE BY OTHERS)

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.

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

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
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