

**REVIEW BY FORT BEND COUNTY
COMMISSIONERS COURT**

**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: 2017-16356

Applicant: Verizon/Eagle Eye Permitting & Design, LLC

Job Location Site: Hagerson Road, Missouri City, TX 77459

Bond No. **Date of Bond:** 8/27/1981 **Amount:** \$150,000.00

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.

On this 7th day of November, 2017, Upon Motion of Commissioner Meyers, seconded by Commissioner Morales, 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

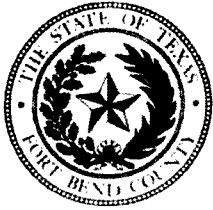
Presented to Commissioners Court and approved.

By: Charles O. Ay
for County Engineer

Date Recorded 11-14-2017 Comm. Court No. 12Q

By: N/A
Drainage District Engineer/Manager

Clerk of Commissioners Court
By: Annita Willis
Deputy



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

**Fort Bend County
Engineering Department**
301 Jackson Suite 401
Richmond, Texas 77469
281.633.7500
Permits@fortbendcountytexas.gov

- ☒ Right of Way Permit
☐ Commercial Driveway Permit

Permit No: 2017-16356

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: \$150,000.00
- ☐ 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.

Charles O. Al

Permit Administrator

10/27/2017

Date

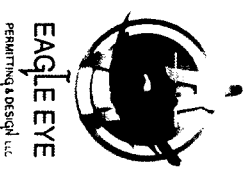
MCI metro
ACCESS TRANSMISSION SERVICES CORPORATION

OUTSIDE PLANT CONSTRUCTION
FIBER OPTIC CABLE ROUTE

MCI ONE-FIBER
MISSOURI CITY/SIENNA VILLAGE LATERAL
MISSOURI CITY, TX

SITE NFID: 1706ANAY.013

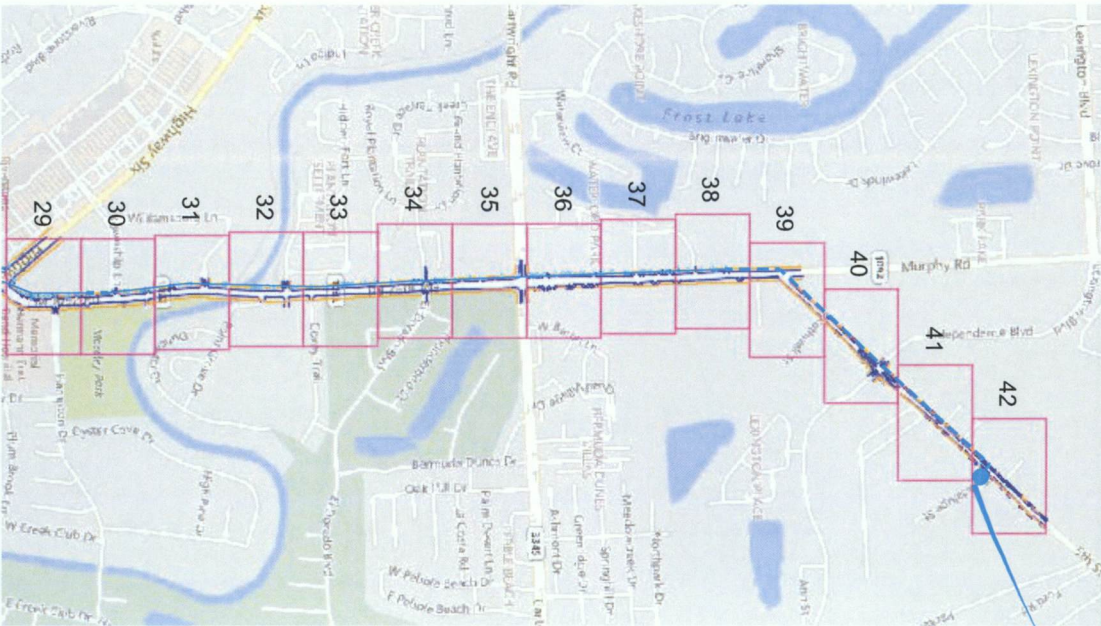
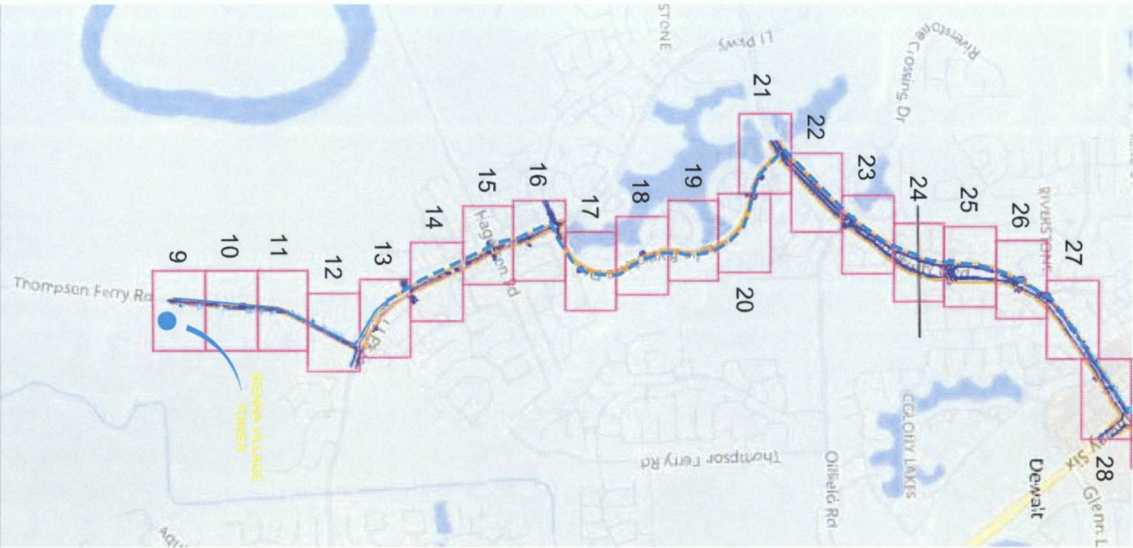
PROJECT STATUS: CONSTRUCTION



LOCATION MAP MISSOURI CITY, TX FORT BEND COUNTY



verizonbusiness
PROJECT: MISSOURI CITY, TX
SIENNA VILLAGE/MISSOURI CITY LATERAL
FILE: T10004V013



MAP LINE LEGEND

- PROPOSED BURIED CABLE
- PROPOSED AERIAL CABLE

MCImetro
ACCESS TRANSMISSION SERVICES
CORPORATION

OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
SIENNA VILLAGE/MISSOURI CITY LATERAL
MISSOURI CITY, TX

DATE: 08-26-2017

ENGINEER: EGLE EYE

DRAWN BY: ROBERT SANTOS

REVISIONS

NO. DATE DESCRIPTION BY

1 08/29/17 1ST REVISION SP

HORIZONTAL: 1"= N/A

VERTICAL: 1"= N/A

MP TO MP

SHEET 02 OF 42

FILE: SIENNA VILLAGE.DWG

GENERAL NOTES / CLARIFICATION NOTES

GENERAL NOTES

1. VERIZON BUSINESS COMPRISES THE FOLLOWING OPERATING ENTITIES:
 - MCI COMMUNICATIONS SERVICES, INC.
 - MCI METRO ACCESS TRANSMISSION SERVICES CORPORATION
 - 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. 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.
4. 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.
5. ANY AND ALL IMPROVEMENTS, SUCH AS ASPHALT OR CONCRETE PAVEMENT, CURBS, GUTTERS, WALKS, DRAINAGE DITCHES, EMBANKMENTS, SHRUBS, GRASS SOD, ETC., IF DAMAGED SHALL BE RESTORED TO ORIGINAL CONDITION.
6. 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.
7. SHORING OF BORE PITS AND TRENCHES IN ACCORDANCE WITH OSHA REGULATIONS IS MANDATORY.
8. 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.
9. ALL 4" ID CONDUIT WILL BE SCHEDULE 40 (E.G.: PVC OR GSPBSP), OR AS SPECIFIED.
10. UNDERGROUND CONDUIT WILL BE PLACED AT 48" MINIMUM COVER UNLESS OTHERWISE SPECIFIED ON THE CONSTRUCTION DRAWINGS.
- 11.

CLARIFICATION NOTES

1.	STATION
2.	LOCATION
3.	CLARIFICATION NO. AND MINIMUM COVER
4.	QUANTITY LINEAR FOOTAGE/SQUARE FOOTAGE, SIZE OF MANHOLE/HANDHOLE SIZE OF PULL-SPICE 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: HARRIS COUNTY - 48 HOUR NOTICE

1. CONTRACTOR SHALL NOTIFY HARRIS COUNTY (48 HOURS) PRIOR TO COMMENCING CONSTRUCTION.
2. CONTRACTOR(S) ARE TO CONTACT HARRIS COUNTY PUBLIC REVIEW DEPARTMENT BY PHONE OR EMAIL.
- public.review@hcgd.org

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 AND RELOCATE/SUBSTITUTE
	218	EXPOSE AND REMOVE CONDUIT (ABANDONED)
	219	CONCRETE ENCASE
	220	REMOVE CONCRETE ENCASMENT
	221	REMOVE CONCRETE CAP
	222	PLACE HANDHOLE
	240	REMOVE EXISTING HANDHOLE
	244	RELOCATE HANDHOLE
	245	REPLACE/SUBSTITUTE HANDHOLE
	246	EXCAVATE SPICE PIT
	247	PLACE MANHOLE
	250	REMOVE EXISTING MANHOLE
	252	RELOCATE PRECAST MANHOLE
	255	REPLACE/SUBSTITUTE PRECAST MANHOLE
	256	CONSTRUCT WALL
	180	REMOVE AND RESTORE ASPHALT
	270	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-SPICE 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	REMOVE AND DISPOSE OF CABLE
	517	RELOCATE AERIAL CABLE
	518	RELOCATE 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 FLOW
	630	DIRECTIONAL BORE
700	710	PLACE BURIED CABLE MARKERS AND SIGNSWAYCOM
	711	WATER CROSSING SIGNS
	713	PLACE ISOLATION/PROTECTION SYSTEM AT EXISTING
	712	HANDHOLES/MANHOLES
	714	REMOVE BURIED CABLE MARKER POST/HARDWARE
		REMOVE CONCRETE BURIED CABLE MARKER POST



PROJECT:

MISSOURI CITY, TX

SIENNA VILLAGE/MISSOURI CITY LATERAL

WFO: 1706449V.013

McMetro
ACCESS TRANSMISSION SERVICES
CORPORATION

OUTSIDE PLANT CONSTRUCTION

TITLE: FIBER OPTIC ROUTE
SIENNA VILLAGE/MISSOURI CITY LATERAL
MISSOURI CITY, TX

DATE: 06-25-2017

ENGINEER: EAGLE EYE

DRAWN BY: ROBERT SANTOS

REVISIONS

Rev. Date Description Rev

1 1/23/17 151 REVISION 8/1

SCALE
HORIZONTAL: 1"= N/A
VERTICAL: 1"= N/A
MP TO MP
SHEET 04 OF 42
FILE: SIENNA VILLAGE.DWG

MCI OUTSIDE PLANT FOCUS

FIBER OPTIC CABLE UNCOVERING SYSTEM

1. THE TITLE OF THIS PROGRAM, **F.O.C.U.S.**, AN ACRONYM FOR "FIBER OPTIC CABLE UNCOVERING SYSTEM," WAS SELECTED TO REMIND EVERYONE INVOLVED WITH WORKING NEAR MCIS ACTIVE FIBER OPTIC SYSTEMS TO FOCUS ON PROTECTING THE FACILITIES. IF, DURING THE COURSE OF THE PROJECT, YOU NOTICE ANY ACTIVITY WHICH MAY JEOPARDIZE THE MCI OSP FACILITIES, IT IS YOUR DUTY TO STOP THE WORK AND RE-F.O.C.U.S.
2. **F.O.C.U.S.** RULES MUST BE FOLLOWED ON ALL MCI PROJECTS INVOLVING WORK ON OR NEAR MCI OSP FACILITIES. SAFETY IS MCIS NUMBER ONE PRIORITY. EVERYONE MUST REFRAIN FROM UNSAFE AND IMPROPER PRACTICES.
3. REVIEW OF **F.O.C.U.S.** IS MANDATORY AT EVERY PRE-BID, PRE-CONSTRUCTION SITE MEETING AND DAILY TAILGATE MEETING. **F.O.C.U.S.** DISCUSSION MUST INCLUDE SITE-SPECIFIC HISTORY, UNIQUE PROBLEMS, FACILITY CONFIGURATIONS THAT MAY BE ENCOUNTERED, AND PAST ERRORS. *THOSE WHO DO NOT LEARN FROM HISTORY ARE DOOMED TO REPEAT IT.* DO NOT LET THIS HAPPEN TO YOU.
4. ANY WORK NEAR OR REQUIRING HANDLING OF MCI OUTSIDE PLANT FACILITIES CAN ONLY BE PERFORMED WITH AN MCI EMPLOYEE OR CONTRACT REPRESENTATIVE PRESENT – **THIS MEANS OUT OF HIS OR HER VEHICLE AND DIRECTLY MONITORING THE WORK.** THE REPRESENTATIVE MUST HAVE A PROPERLY OPERATING CABLE LOCATOR CHECKED FOR ACCURACY EVERY DAY PRIOR TO COMMENCEMENT OF WORK (COMPARISON OF LINE AND DEPTH READINGS TO ACTUAL LINE AND DEPTH OF THE CABLE).
5. LOCATE AND POT HOLE REQUIREMENTS:
 - PRIOR TO ANY EXCAVATION, THE MCI EMPLOYEE OR CONTRACT REPRESENTATIVE MUST VERIFY THE INITIAL LOCATE MARKS COMPLETED BY MCI OPERATIONS. **DO NOT TRUST LOCATE RESULTS COMPLETED BY OTHERS.** THE MCI OR CONTRACT REPRESENTATIVE MUST LOCATE THE CABLE RUNNING LINE BY MAKING AT LEAST ONE PASS IN EACH DIRECTION. LOCATE RESULTS MUST THEN BE COMPARED WITH PREVIOUS MARKS AND THE AS-BUILTS.
 - IF THE PROPOSED WORK INVOLVES DIGGING OR EXCAVATING WITHIN 3 FEET OF THE CABLE, THE CABLE ROUTE WILL BE MARKED CONTINUALLY WITH ORANGE PAINT AND SUPPLEMENTED BY MARKER FLAGS PLACED EVERY 10 FT. THE EXCAVATION CONTRACTOR MUST POT HOLE **ALL POT HOLES MUST BE COMPLETED BY HAND DIGGING OR VACUUM EXCAVATION.** A MINIMUM OF EVERY 15 FT., THEN EXPOSE THE ENTIRE LENGTH OF THE CABLE BY HAND DIGGING OR VACUUM EXCAVATION.
 - IF THE PROPOSED WORK INVOLVES DIGGING OR EXCAVATING WITHIN 5 FEET (BUT NOT CLOSER THAN 3 FEET) OF THE CABLE, THE CABLE ROUTE WILL BE MARKED CONTINUALLY WITH ORANGE PAINT AND SUPPLEMENTED BY MARKER FLAGS PLACED EVERY 10 FT. THE EXCAVATION CONTRACTOR MUST POT HOLE THE CABLE A MINIMUM OF EVERY 15 FT.
 - IF THE PROPOSED WORK INVOLVES DIGGING OR EXCAVATING WITHIN 5 FEET (BUT NOT CLOSER THAN 3 FEET) OF THE CABLE, THE CABLE ROUTE WILL BE MARKED CONTINUALLY WITH ORANGE PAINT AND SUPPLEMENTED BY MARKER FLAGS PLACED EVERY 10 FT. THE EXCAVATION CONTRACTOR MUST POT HOLE THE CABLE A MINIMUM OF EVERY 15 FT.
 - THE CABLE WILL ALSO BE POT HOLED AT ANY CHANGE IN THE RUNNING LINE OF MORE THAN 1 FT. IN ANY DIRECTION. ANYTIME THE ACCURACY OF THE ELECTRONIC LOCATE IS QUESTIONED, OR THE MARKED RUNNING LINE DOES NOT MATCH THE AS-BUILTS.
6. EXPOSING REQUIREMENTS:
 - NO MECHANICAL EXCAVATION WITHIN 3 FT. OF OSP FACILITIES WILL BE ALLOWED UNLESS THE FACILITIES HAVE FIRST BEEN PROPERLY LOCATED, POT HOLED, POSITIVELY IDENTIFIED, CONTINUOUSLY EXPOSED BY HAND DIGGING OR VACUUM EXCAVATION, AND THE FACILITIES ARE CLEARLY VISIBLE.
 - IN ADDITION, MECHANICAL EXCAVATION WITHIN 3 FT. OF OSP FACILITIES REQUIRES ON-SITE PRIOR APPROVAL FROM MCIS EMPLOYEE OR CONTRACT REPRESENTATIVE.
7. PLEASE REFER TO THE LATEST EDITION OF THE MCI OSP HANDBOOK FOR ADDITIONAL DETAILS. KNOW IT AND FOLLOW IT.

MCI OUTSIDE PLANT CONSTRUCTION GENERAL REQUIREMENTS

- ALL FEDERAL, STATE AND LOCAL SAFETY REGULATIONS MUST BE FOLLOWED WITHOUT EXCEPTION.
- PERSONAL PROTECTIVE EQUIPMENT APPROPRIATE FOR THE SPECIFIC WORK SITE SHALL BE USED AT ALL TIMES. AT A MINIMUM, HARD HAT, SAFETY SHOES/STEEL-TOED BOOTS, AND FLORESCENT ORANGE OR GREEN WORK VEST ARE REQUIRED UPON ENTERING ANY MCI WORK SITE.
- USE OF INTOXICANTS, DRUGS, INHALANTS OR ANY OTHER SUBSTANCES THAT MAY IMPAIR ALERTNESS ARE STRICTLY PROHIBITED.
- CONTRACTORS ARE NOT ALLOWED TO CUT ANY CABLE. CABLES SCHEDULED FOR REMOVAL WILL BE CUT BY MCI OPERATIONS PERSONNEL, AND ONLY AFTER VERIFICATION THAT ALL TRAFFIC HAS BEEN OFF-LOADED.
- EXTREME CAUTION MUST BE USED AT ALL TIMES WHEN WORKING ON OR NEAR ACTIVE CABLES. AN MCI EMPLOYEE OR CONTRACT REPRESENTATIVE MUST APPROVE AND BE PRESENT PRIOR TO AND DURING ALL CABLE HANDLING ACTIVITIES.
- TOOLS AND EQUIPMENT SPECIFICALLY DESIGNED FOR THE JOB AT HAND ARE REQUIRED. USE THE PROPER TOOL FOR THE JOB.
- CONDUIT WORK INVOLVING ACTIVE CABLES REQUIRES SPECIALIZED TOOLS SPECIFICALLY DESIGNED TO ACCESS DUCTS WITH ACTIVE CABLES.
- PROTECTING MCI FACILITIES IS EXTREMELY IMPORTANT; HOWEVER, SAFETY REGARDING YOURSELF AND OTHERS IS THE MOST IMPORTANT PART OF ANY PROJECT.

			
PROJECT			
MISSOURI CITY, TX			
SIENNA VILLAGE/MISSOURI CITY LATERAL			
REQ. 1706/ANV 013			
DATE: 08-25-2017			
ENGINEER: EAGLE EYE			
DRAWN BY: ROBERT SANTOS			
REVISIONS			
NO.	DATE	DESCRIPTION	BY
1	8/25/17	1ST REVISION	RS
SCALE			
HORIZONTAL: 1"= N/A			
VERTICAL: 1"= N/A			
MP TO MP			
SHEET 4A OF 42			
FILE: SIENNA VILLAGE.DWG			

MCImetro ACCESS TRANSMISSION SERVICES CORPORATION	
OUTSIDE PLANT CONSTRUCTION	
TITLE: FIBER OPTIC ROUTE	
SIENNA VILLAGE/MISSOURI CITY LATERAL	
MISSOURI CITY, TX	

CLARIFICATION SUMMARY SHEET

PROJECT SPECIFIC

PROJECT CLARIFICATION SUMMARY

DESCRIPTION	QUANTITY	UNIT
PLACE (30"x60"x30") HANDHOLE	42	EA
PLACE 1-2" HDPE (SDR 11) CONDUIT	26,741	LF
PLACE 2-2" HDPE (SDR 11) CONDUIT	3,293	LF
PULL 1-96F CABLE (INCLUDES 830' IN COILS)	7,042	LF
PULL 1-432F CABLE (INCLUDES 1760' IN COILS)	14,313	LF
PULL 1-864F CABLE (INCLUDES 1930' IN COILS)	14,350	LF
PULL 1-288F CABLE (INCLUDES 630' IN COILS)	3,970	LF
ATTACH (25') 2" U-GUARD RISER	4	EA
(PLACE) DOWN GUY & ANCHOR LEAD	7	EA
PLACE 1-6M AERIAL STRAND (INCLUDES ALL HARDWARE, LOOP EQUIPMENT, & 175' IN GUYS)	4,307	LF
LASH 1-96F CABLE (INCLUDES 200' IN SLACK LOOPS & RISERS)	4,027	LF
LASH 1-864F CABLE (INCLUDES 0' IN SLACK LOOPS & RISERS)	380	LF
PLACE (BURIED CABLE) MARKER	73	EA



PROJECT: MISSOURI CITY, TX
SIENNA VILLAGE/MISSOURI CITY LATERAL
REF: 170644V.010

MCImetro
ACCESS TRANSMISSION SERVICES CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
SIENNA VILLAGE/MISSOURI CITY LATERAL
MISSOURI CITY, TX

DATE: 08-25-2017

ENGINEER: EAGLE EYE

DRAWN BY: ROBERT SANTOS

REVISIONS

NO.	DATE	DESCRIPTION	BY
1	8/25/17	1ST REVISION	

SCALE

HORIZONTAL: 1"= N/A

VERTICAL: 1"= N/A

MP TO MP

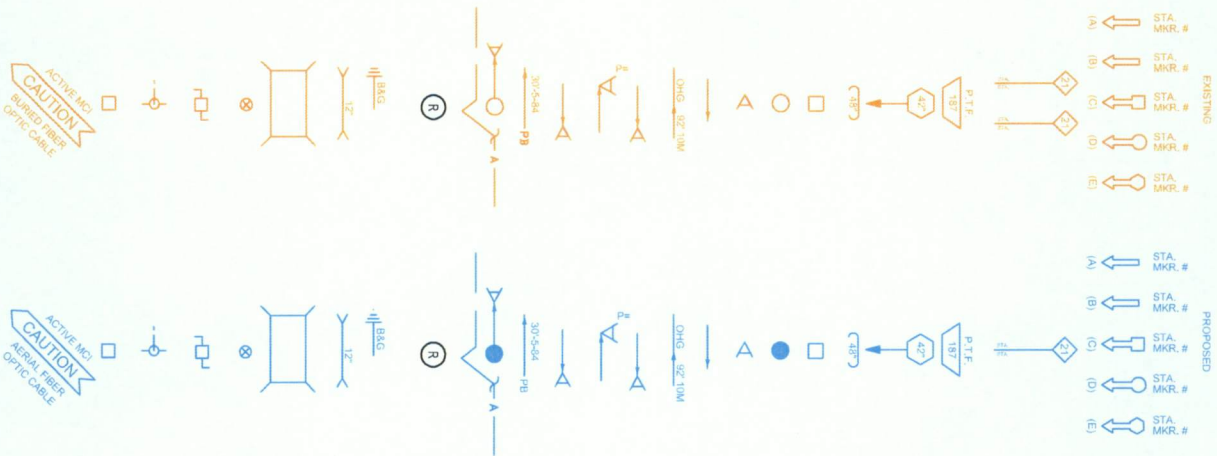
SHEET 48 OF 42

FILE: SIENNA VILLAGE.DWG

SYMBOLS KEY

	EXISTING	PROPOSED
DIRECT BURIED CABLE		
AERIAL CABLE		
SUBMARINE CABLE		
FOGWIRE CABLE		
DIRECT BURIED HOPE		
PVC OR SPLIT PVC CONDUIT		
BSP/GSP OR SPLIT BSP/GSP CONDUIT		
STEEL CASING		
REMOVE AND RESTORE ASPHALT OR CONCRETE (WIDTH AS INDICATED)		
REMOVE AND RESTORE ASPHALT OR CONCRETE (WIDTH AS INDICATED)		
JACK AND BORE		
DIRECTIONAL BORE (A PLACE CONDUIT)		
FUTURE CABLE		
REMOVE CABLE		
TO BE REMOVED OR ABANDONED (SHOWN FOR HDPE)		
AERIAL UTILITY (ELECTRIC)		
UNDERGROUND UTILITY (TELEPHONE)		
MAIN TRACKS		
AUXILIARY 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 TUB-STYLE MARKER(B)	STANDARD TUB-STYLE 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	

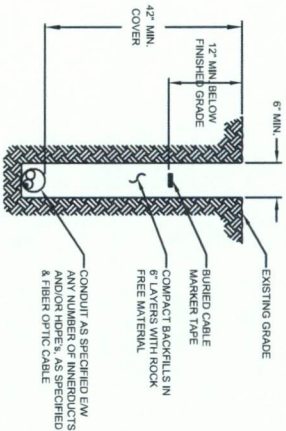


verizonbusiness PROJECT: MISSOURI CITY, TX SIENNA VILLAGE/MISSOURI CITY LATERAL INFO: 1700444.013		MCImetro ACCESS TRANSMISSION SERVICES CORPORATION OUTSIDE PLANT CONSTRUCTION TITLE: FIBER OPTIC ROUTE SIENNA VILLAGE/MISSOURI CITY LATERAL MISSOURI CITY, TX
DATE: 08-25-2017	ENGINEER: EAGLE EYE	DRAWN BY: ROBERT SANTOS
REVISIONS NO. DATE DESCRIPTION BY 1 8/25/17 1ST REVISION 30		
SCALE HORIZONTAL: 1" = 100' VERTICAL: 1" = 10' SHEET 05 OF 42 FILE: SIENNA VILLAGE.DWG		

CONSTRUCTION DETAILS

TYPICAL DETAIL "A"

TRENCH & PLACE CONDUIT



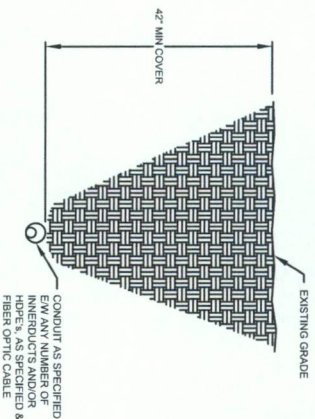
TYPICAL DETAIL "B"

CROSS SECTION OF PROPOSED HOPE



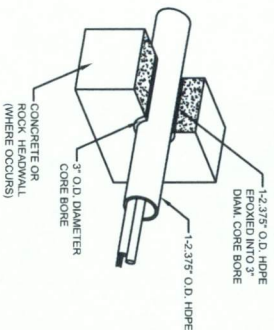
TYPICAL DETAIL "C"

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.



PROJECT:

MISSOURI CITY, TX
SIENNA VILLAGE/MISSOURI CITY LATERAL
FILE: TIRMANV.013

McImetro
ACCESS TRANSMISSION SERVICES
CORPORATION

OUTSIDE PLANT CONSTRUCTION

TITLE: FIBER OPTIC ROUTE
SIENNA VILLAGE/MISSOURI CITY LATERAL
MISSOURI CITY, TX

DATE: 08-25-2017

ENGINEER: EAGLE EYE

DRAWN BY: ROBERT SANTOS

REVISIONS

NO.	DATE	DESCRIPTION	BY
1	8/25/17	1ST REVISION	

EXCEPT AS MAY BE OTHERWISE PROVIDED BY THE PROJECT SPECIFICATIONS, THE CONTRACTOR SHALL RETAIN THE RESPONSIBILITY OF NOTING AND CORRECTING ANY DISCREPANCIES OR OMISSIONS IN THE PROJECT SPECIFICATIONS AND SHALL NOT BE RELIED UPON FOR ANY OTHER PURPOSES WITHOUT WRITTEN PERMISSION.

SCALE

HORIZONTAL: 1" = 50'

VERTICAL: 1" = 10'

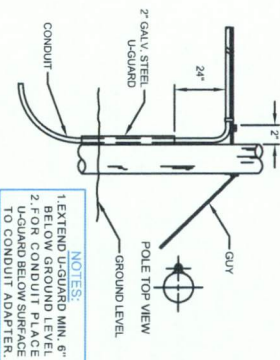
MP TO MP

SHEET 08 OF 42

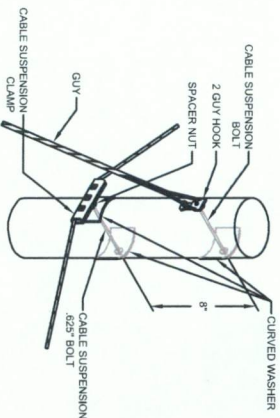
FILE: SIENNA VILLAGE.DWG

GENERAL AERIAL CONSTRUCTION DETAILS

TYPICAL DETAIL "A"
POLE ARRANGEMENT FOR
AERIAL TO BURIED



TYPICAL DETAIL "D"
SUSPENSION STRAND - PULL TOWARD
POLE - LESS THAN 5 FEET

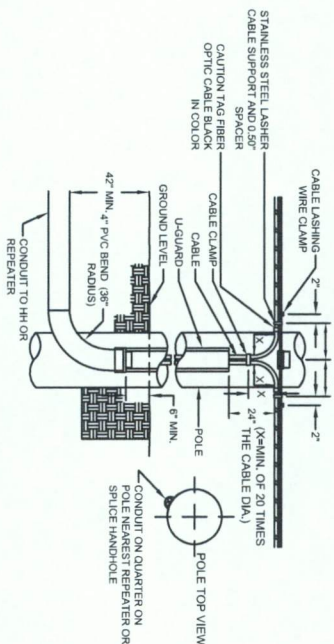


TYPICAL DETAIL "G"
JOINING 045 LASHING WIRE

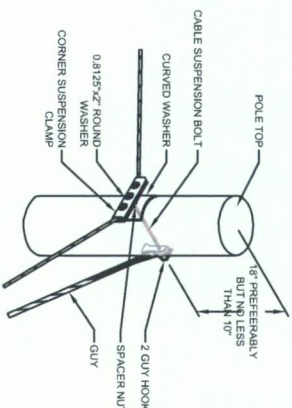


REMOVE ANY SLACK IN THE LASHING WIRE BY MAINTAINING A PULL ON THE WIRE AND TAPPING THE STRAND SHARPLY. THEN FORM THE WIRE OVER THE STUD AND TIGHTEN THE NUT. CUT THE FREE END OF THE LASHING WIRE OFF 0.75\"/>

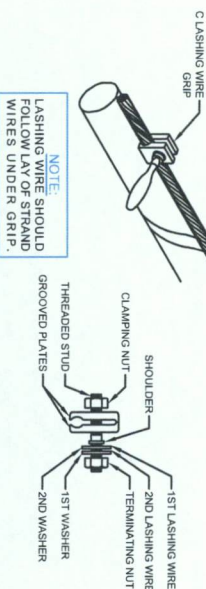
TYPICAL DETAIL "B"
POLE ARRANGEMENT FOR REPEATER
OR HANDHOLE LOCATION



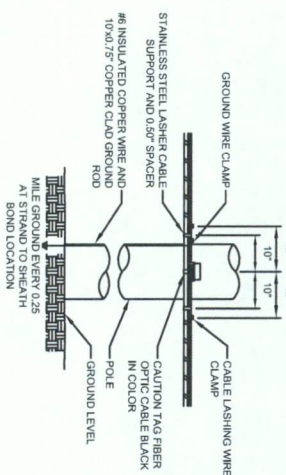
TYPICAL DETAIL "E"
SUSPENSION STRAND - PULL AWAY
FROM POLE - 5 FEET OR MORE



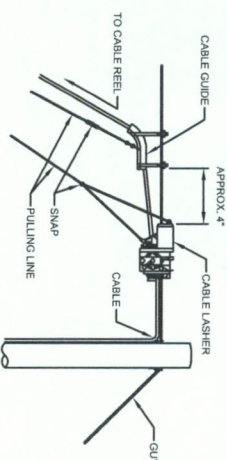
TYPICAL DETAIL "H"
LASHING WIRE GRIP AND CLAMP



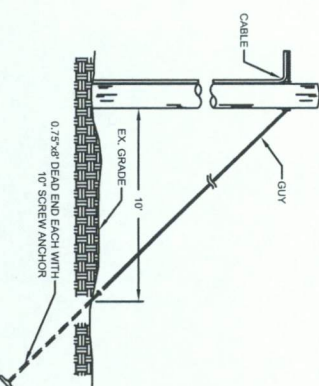
TYPICAL DETAIL "C"
TYPICAL CABLE & HARDWARE
INSTALLATION



TYPICAL DETAIL "F"
TYPICAL ARRANGEMENT OF
CABLE LASHER AND CABLE GUIDE



TYPICAL DETAIL "I"
ANCHOR & DOWN GUY



verizonbusiness PROJECT: MISSOURI CITY, TX SIENNA VILLAGE/MISSOURI CITY LATERAL WFO: 1706MAY/213		MCImetro ACCESS TRANSMISSION SERVICES CORPORATION OUTSIDE PLANT CONSTRUCTION TITLE: FIBER OPTIC ROUTE SIENNA VILLAGE/MISSOURI CITY LATERAL MISSOURI CITY, TX	
DATE: 06-25-2017 ENGINEER: EAGLE EYE DRAWN BY: ROBERT SANTOS REVISIONS NO. DATE DESCRIPTION BY 1 02/28/17 1ST REVISION 80		SCALE HORIZONTAL: 1" = 10' VERTICAL: 1" = 10' SHEET 6A OF 42 FILE: SIENNA VILLAGE.DWG	

AERIAL IN-LINE SLACK STORAGE DETAILS

TYPICAL DETAIL "A"
RESERVE CABLE LENGTH
STRAND STORAGE APPLICATION



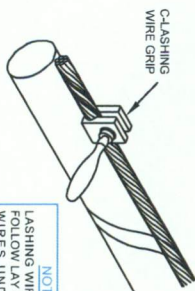
TYPICAL DETAIL "B"
IN-LINE SPLICE APPLICATION



TYPICAL DETAIL "C"
BUTT SPLICE APPLICATION

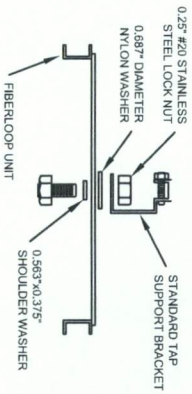


TYPICAL DETAIL "D"
LASHING WIRE GRIP AND CLAMP LASHING
WIRE GRIP INSTALLED ON STRAND

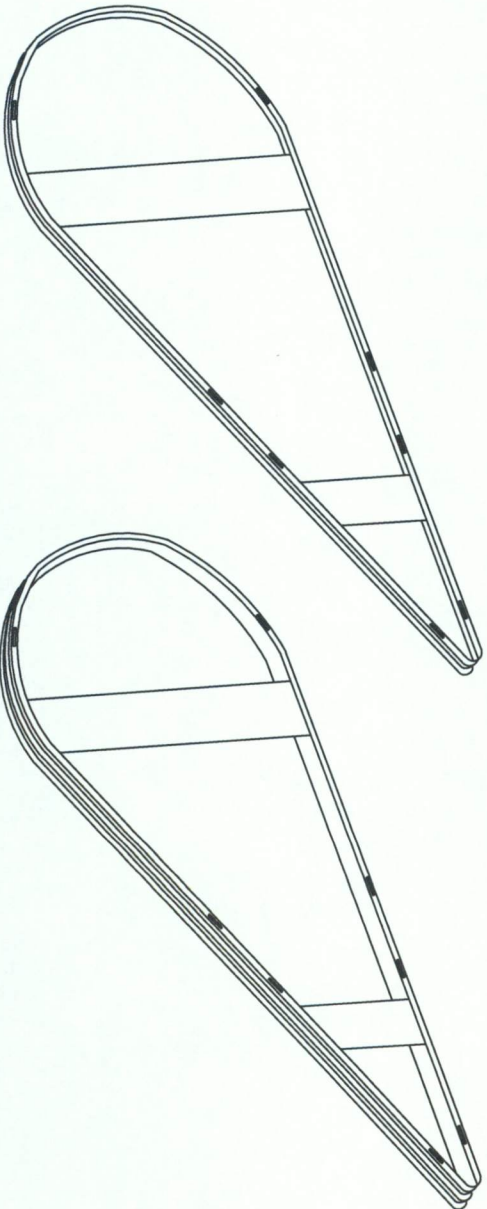


NOTE:
LASHING WIRE SHOULD
FOLLOW LAY OF STRAND
WIRES UNDER GRIP.

TYPICAL DETAIL "E"
HARDWARE KIT



TYPICAL DETAIL "F"
SINGLE & DOUBLE FIBER LOOPS



PROJECT:

MISSOURI CITY, TX
SIENNA VILLAGE/MISSOURI CITY LATERAL
NEO, TYPICAL 013

McMetro
ACCESS TRANSMISSION SERVICES
CORPORATION

OUTSIDE PLANT CONSTRUCTION

TITLE: FIBER OPTIC ROUTE
SIENNA VILLAGE/MISSOURI CITY LATERAL
MISSOURI CITY, TX

DATE: 08-25-2017

ENGINEER: EAGLE EYE

DRAWN BY: ROBERT SANTOS

REVISIONS

NO.	DATE	DESCRIPTION	BY
1	8/25/17	1ST REVISION	

EXCEPT AS MAY BE OTHERWISE PROVIDED BY
SPECIFICATIONS, ALL MATERIALS AND WORKMANSHIP
SHALL REMAIN THE PROPERTY OF MC METRO
ACCESS TRANSMISSION SERVICES CORPORATION
UNTIL THE PROJECT IS COMPLETED AND SHALL NOT BE
REUSED OR REPAIRED WITHOUT THE WRITTEN PERMISSION
OF MC METRO ACCESS TRANSMISSION SERVICES CORPORATION.

SCALE

HORIZONTAL: 1" = 10'

VERTICAL: 1" = 10'

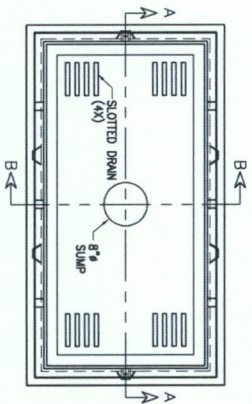
MP TO MP

SHEET 68 OF 42

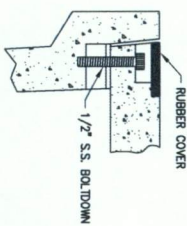
FILE: SIENNA VILLAGE.DWG

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

DETAIL "A"
LOCKING DEVICE
CROSS SECTION

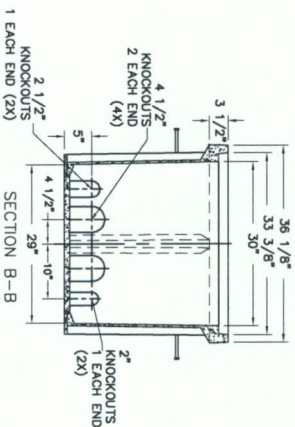
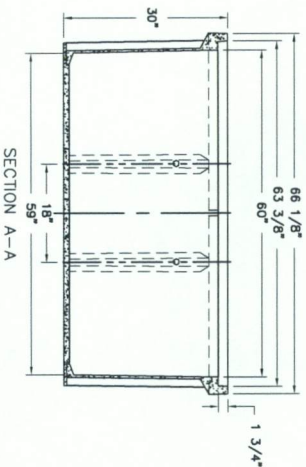
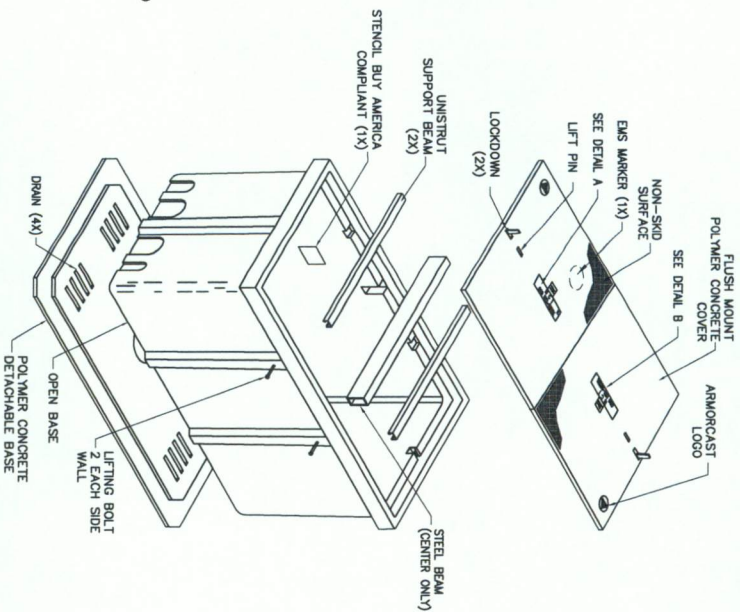


DETAIL "B"
FLUSH MOUNT
COVER DETAIL



FLUSH MOUNT COVER DETAIL

DETAIL "C"
EXPLODED ISOMETRIC DETAIL



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: MISSOURI CITY, TX
SIENNA VILLAGE/MISSOURI CITY LATERAL
NED: 1706000/013

DATE: 08-25-2017
ENGINEER: EAGLE EYE
DRAWN BY: ROBERT SANTOS

REVISIONS
1 08/25/17 1ST REVISION

MCImetro
ACCESS TRANSMISSION SERVICES
CORPORATION

OUTSIDE PLANT CONSTRUCTION

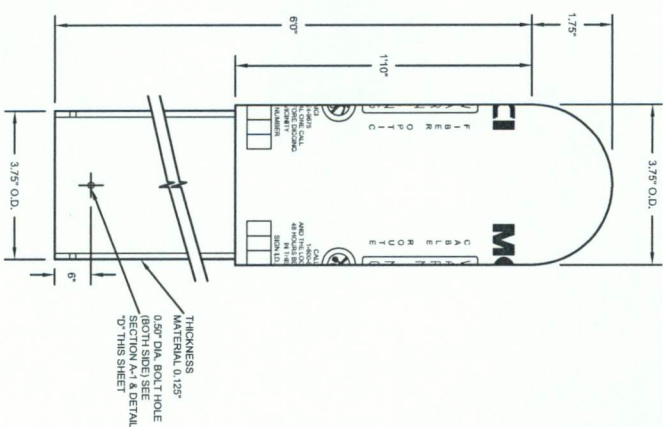
TITLE: FIBER OPTIC ROUTE
SIENNA VILLAGE/MISSOURI CITY LATERAL
MISSOURI CITY, TX

EXCEPT AS MAY BE OTHERWISE PROVIDED BY THE PROJECT SPECIFICATIONS, THE DESIGN AND CONSTRUCTION OF THIS PROJECT SHALL BE THE RESPONSIBILITY OF THE DESIGNER. THE DESIGNER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES AND STRUCTURES. THE DESIGNER SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES AND STRUCTURES. THE DESIGNER SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES AND STRUCTURES.

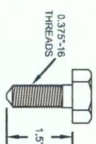
SCALE
HORIZONTAL: 1"= 60'
VERTICAL: 1"= 12'
SHEET 07 OF 42
MP TO MP
FILE: SIENNA VILLAGE.DWG

DETAIL "C"

SIDE VIEW



DETAIL "D"





PROJECT:

MISSOURI CITY, TX

SIENNA VILLAGE/MISSOURI CITY LATERAL

WFO: 1706AWK.013

McImetro
ACCESS TRANSMISSION SERVICES
CORPORATION

OUTSIDE PLANT CONSTRUCTION

TITLE: FIBER OPTIC ROUTE
 SIENNA VILLAGE/MISSOURI CITY LATERAL
 MISSOURI CITY, TX

DATE: 08-25-2017

ENGINEER: EAGLE EYE

DRAWN BY: ROBERT SANTO

REVISIONS

No	DATE	DESCRIPTION	BY
1	8/25/17	1ST REVISION	

SCALE

HORIZONTAL: 1" = NA

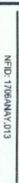
VERTICAL: 1" = NA

SHEET 7A OF 42

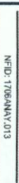
FILE: SIENNA VILLAGE.DWG

PROJECT:

MISSOURI CITY, TX



NFID: 1706ANAY.013



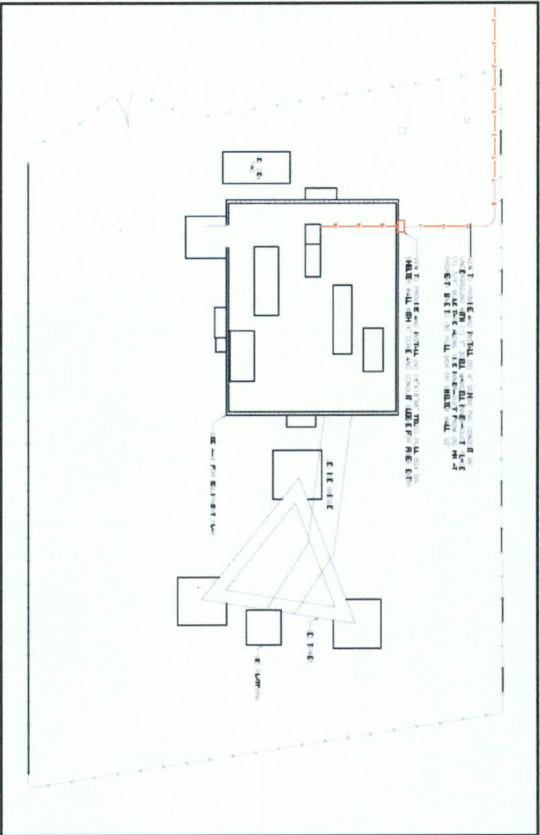
FOUR LANE (W/ TURN LANE) - CURBED ROAD - WITH MEDIAN



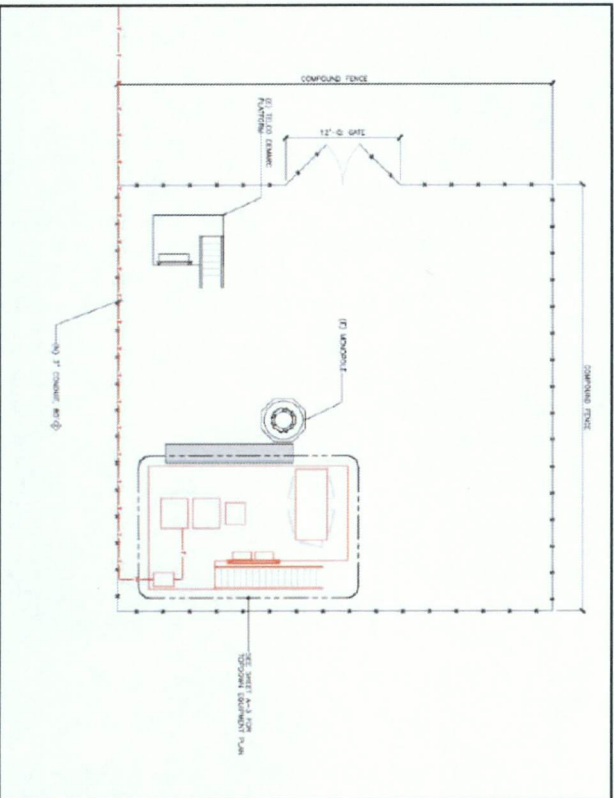
4 LANE - SPLIT CURBED ROAD

[illegible]

MISSOURI CITY CELL SITE CELL SITES DETAILS



SIENNA VILLAGE CELL TOWER



PROJECT:

MISSOURI CITY, TX

SIENNA VILLAGE/MISSOURI CITY LATERAL

INFR: T1000A.V.013

MCImetro
ACCESS TRANSMISSION SERVICES
CORPORATION

OUTSIDE PLANT CONSTRUCTION

TITLE: FIBER OPTIC ROUTE
SIENNA VILLAGE/MISSOURI CITY LATERAL
MISSOURI CITY, TX

DATE: 08-25-2017

ENGINEER: EAGLE EYE

DRAWN BY: ROBERT SANTOS

REVISIONS

NO.	DATE	DESCRIPTION	BY
1	8/25/17	1ST REVISION	

SCALE

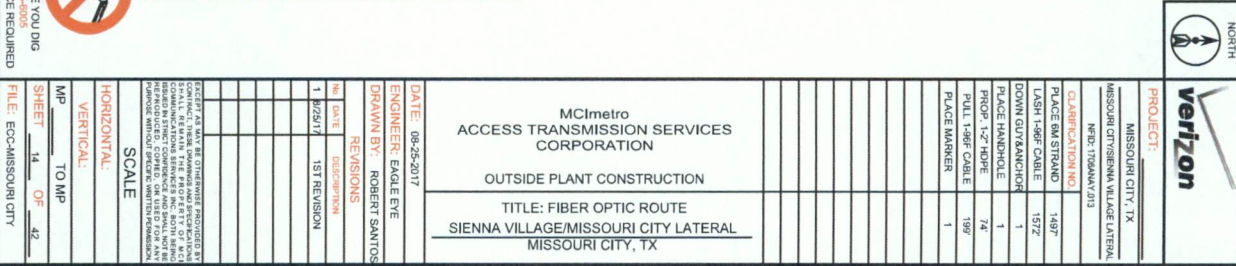
HORIZONTAL: 1"= NA

VERTICAL: 1"= NA

MP TO MP

SHEET 088 OF 42

FILE: SIENNA VILLAGE.DWG

MISSOURI CITY, TX
FORT BEND COUNTY

MISSOURI CITY, TX
FORT BEND COUNTY

SEE SHEET 16 TO MATCH SURVEY STA. 81+62



PROJECT:

MISSOURI CITY, TX
MISSOURI CITY/SENA VILLAGE LATERAL
NEB-176644V-013
CLASSIFICATION NO.
PLACE HMDHOLE 1
PROP. 1-2" HDPE 1603
PULL 1-48F CABLE 1703
PLACE MARKER 2

MCImetro
ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
SIENNA VILLAGE/MISSOURI CITY LATERAL
MISSOURI CITY, TX

DATE: 09-25-2017
ENGINEER: EAGLE EYE
DRAWN BY: ROBERT SANTOS

REVISIONS
1 02/21/17 1ST REVISION

SCALE
HORIZONTAL:
VERTICAL:
MP TO MP
SHEET 15 OF 42
FILE: ECC-MISSOURI CITY



UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE RECORDS AND FIELD OBSERVATIONS BUT ARE NOT NECESSARILY EXACT. IT IS THE CONTRACTOR'S 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 BY A REGISTERED PROFESSIONAL LAND SURVEYOR TO ACCURATELY VERIFY RIGHT OF WAY AND PROPERTY LINES PRIOR TO CONSTRUCTION.

