#### **BOARD OF SUPERVISORS**

MADISON COUNTY, MISSISSIPPI

Department of Engineering
Dan Gaillet, P.E., County Engineer

3137 South Liberty Street, Canton, MS 39046 Office (601) 790-2525 FAX (601) 859-3430

#### **MEMORANDUM**

January 16, 2019

To: Sheila Jones, Supervisor, District I

Trey Baxter, Supervisor, District II Gerald Steen, Supervisor, District III David Bishop, Supervisor, District IV Paul Griffin, Supervisor, District V

From: Dan Gaillet, P.E.

County Engineer

Re: CSpire Utility Permit

Gluckstadt Road

The Engineering Department recommends approval of permit application for CSpire to install 2,305 feet of fiber along Gluckstadt Road and Dees Drive.

# MADISON COUNTY, MISSISSIPPI PERMIT APPLICATION FOR USE AND OCCUPANCY FOR THE CONSTRUCTION OR ADJUSTMENT OF A UTILITY WITHIN COUNTY ROAD RIGHT-OF-WAY

BY STEVE CASE
PHONE 602.590.3120 ADDRESS 1018 WHEHLAND COLONY PKWY, CLOSEWHD
herein called APPLICANT, proposes to construct on DEES DR
said facility to be installed between roads <u>Gucrestrop lo</u> and and within the road right-of-way, and hereby makes application to the County for construction permit. Attaches hereto are drawings or plans for the construction, which will not be changed or altered without approval of the
County Engineer, or his representative. Beginning in Section, Township, Range
Whereas, the Legislature of Mississippi has heretofore granted to the applicant the right to locate facilities upon, across, under, over and along public highways and streets within the State of Mississippi has heretofore granted to the applicant the right to locate facilities upon, across, under, over and along public highways and streets within the State of Mississippi

Applicant agrees to comply with applicable provisions of S.O.P. No. SAD II-2-8, Policy for the Accommodation of Utility Facilities within the Rights-of-Way of County Federal Aid and State Aid Highways (hereinafter referred to as the "Policy"), promulgated by the State Aid Engineer and dated January 1, 1983, and which is hereby made a part of this application Agreement, and agrees to perform the construction according to the applicable industry code and according to the plans and specifications for the Project.

The Applicant shall comply with all policies, procedures and construction practices as outlined in "A Policy for The Accommodation of Utility Facilities within the Right-of-Way of all Public County Roads", as adopted on May 1, 1992, by the Madison County Board of Supervisors.

The Applicant is 100% liable for verifying the location of County right-of-way and for locating permitted utilities within its limits. The Applicant is responsible for verifying the location of all storm drainage structures before boring.

The Applicant shall be responsible for the future maintenance and repair of the facilities. The Applicant shall make future adjustments in, or relocate, the facilities located within road or highway right-of-way when required for road or highway widening or other road or highway construction at no cost to the county. The Applicant Utility shall relocate said utilities within sixty (60) days of notification by County by registered mail, return receipt requested, unless otherwise designated by the County Engineer. Further, any maintenance, repair, or construction shall be done in such a manner as to occasion no unreasonable interference with the normal flow and safety to traffic and at the expense of the utility company. When reasonable care has been taken to locate said utility facilities within the right-of-way, the applicant understands that any damages caused by routine maintenance and construction by county forces shall be borne by the applicant Utility.

## A general description of the size, type, nature, and extent of the Utility work to be done is as follows: BORE FIBER OPTIC CHBIE IN BACK SFT OF COUNTY ROW WIN DEPTH 48"

The Applicant is responsible for insuring that all utilities in the aforementioned description of work be laid at a minimum depth of 48".

The applicant understands and agrees that, except as herein granted, no right, title, claim, or easement to said road right-of-way is granted by the issuance of this permit and if this Utility Facility as listed in the general provisions of the Policy, it will be adjusted to comply with same without cost to the County, unless the variance from the Policy has been approved by the granting of the Permit pursuant to this Application.

The Applicant further understands that the Utility's engineering, plant, or other personnel will be responsible for the staking and construction supervision of the work set out above and as shown on the attached plans.

The applicant further agrees to indemnify and hold county harmless for any and all claims, accidents, damages, liabilities and expenses occasioned wholly, or in part, by any act or omission of applicant, its agents or employees. In case County shall, without fault on its own part, be made a party to any litigation commenced by or against applicant, then applicant shall protect and hold County harmless, and shall pay all costs, expenses and reasonable attorney's fees incurred or paid by County in connection with said litigation.

Madison County agrees to the following stipulations:

- (1) To cooperate with the Utility Company in every way to avoid conflicts in the location, construction, and maintenance of the County Highway and Utility Facility.
- (2) To pursue any and all legal means to see the Policy Standards, except to the extent of any variance shown on the plans filed herewith and approved, are complied with in the facility installation.
- (3) If the County Engineer or his authorized representative approved the drawing, sketches, and plans submitted by the Applicant, he shall so indicate by signing and dating the Permit Approval at the end of this application, and the Applicant may proceed with the installation; if the drawings, sketches, and plans are not approved, he shall promptly notify the Applicant, and advise it of the reason or reasons. He will also act as the duly appointed representative of the Board of Supervisors and will give his approval to the completed work as being in compliance with the location and standards shown in the Policy and in the Agreement for the installations.
- (4) That all joint highway construction and utility adjustment or relocation operations will comply with the requirements of Section S-105.06 and Section S-107-18, Mississippi Standard Specifications for State Aid Road and Bridge Construction, 1989 edition (or current edition).
- (5) Should any term of provision of this Applicant Agreement conflict with the law of the State of Mississippi, the Mississippi Constitution, or the United States Constitution, or impair or deny to the Applicant or the County any right protected thereby, it shall be deemed amended to conform to said law or Constitution.

WITNESS the signature of the Applicant this the 14 day of Another, 2019.
By: Steer Con —  (Applicant Signature)  Title: Configures & Permits
Dan Gaillet, P.E. Madison County Engineer  **Approved by Neel-Schaffer  (6) uckstadt widening)
AGREED TO AND APPROVED BY:
Madison County Board President  Date:
ENTERED INTO THE MINUTES OF THE BOARD OF SUPERVISORS OF MADISON COUNTY,

MISSISSIPPI ON THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, \_\_\_\_.



### ASBUILT INFORMATION

FIELD ENGINEER:

NAME:

PROJECT MANAGER:

NAME:

CONSTRUCTION:

NAME:

SUB CONTRACTOR:

NAME:

**INSPECTOR:** 

NAME:

PHONE#:

CONSTRUCTION COMMENCED:

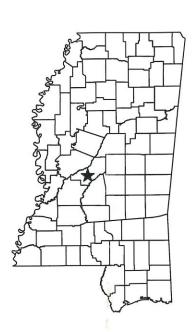
DATE:

CONSTRUCTION COMPLETED: FIBER INSTALLED:

DATE:

FINAL CLEANUP:

DATE:



SBI-Bicycle Revolution Madison NVSBI.OSP.38557 CSF.OSFPMS-MADCTY.MS

&

SBI-Netlink Cabling Systems-Madison NVSBI.OSP.38700 CSF.OSFPMS-MADCTY.MS

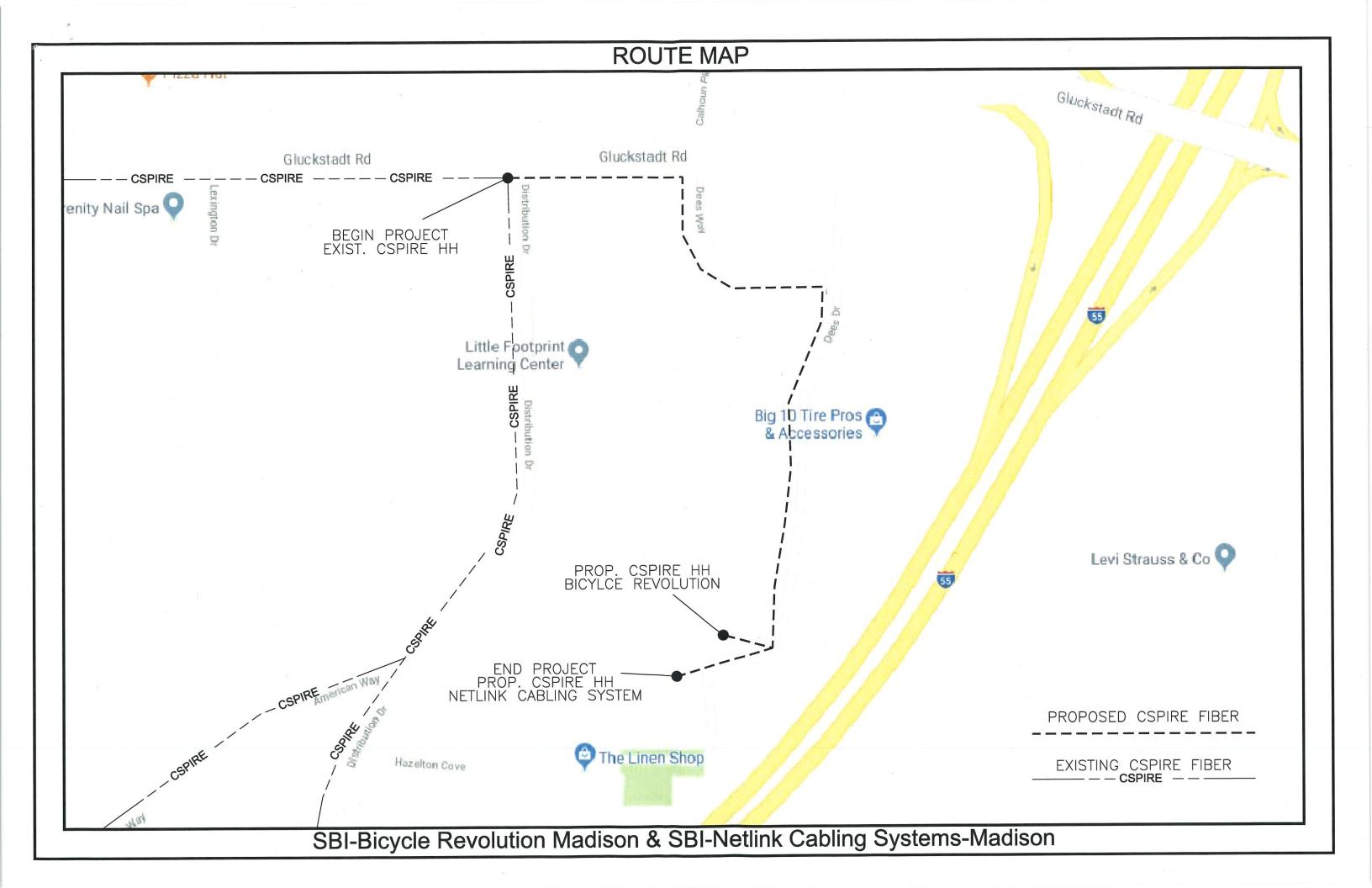
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< PERMITS >>

COUNTY: MADISON

PREPARED BY





#### **CONSTRUCTION NOTES:**

- 1. ALL CONDUIT WILL BE 4" ID SCHEDULE 40 (ie. PVC OR BSP/GSP, MANUFACTURED SPLIT PVC OR SPLIT BSP/GSP), UNLESS SPECIFIED OTHERWISE.
- 2. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES 48 HOURS PRIOR TO CONSTRUCTION ACTIVITY. CALL ONE CALL SYSTEM @ 1-800-227-6477.
- 3. ALL UNDERGROUND OBSTRUCTIONS, WHEN LOCATED, WILL REQUIRE THE PLACEMENT OF A BURIED CABLE MARKER AND THE PLACEMENT OF 4" MANUFACTURED SPLIT PVC, BSP/GSP OVER OR UNDER EACH OBSTRUCTION.
- 4. SHORING MAY BE REQUIRED AND SHALL COMPLY TO O.S.H.A. STANDARDS.
- 5. ALL BURIED CONDUIT/CABLE WILL BE PLACED AT 60" MINIMUM COVER CROSSING ALL STATE AND OR COUNTY ROADS AND ALL CREEK BEDS UNLESS SPECIFIED OTHERWISE ON THE CONSTRUCTION DRAWINGS.
- 6. MECHANICAL PROTECTION SHALL BE REQUIRED ANYTIME A 36" MINIMUM COVER IS UNOBTAINABLE UNLESS SPECIFIED OTHERWISE ON THE CONSTRUCTION DRAWINGS.
- 7. ALL 90 DEGREE BENDS IN CONDUIT CONSTRUCTION WILL BE A MINIMUM 38.2" RADIUS UNLESS SPECIFIED OTHERWISE. ALL SPLIT CONDUIT BENDS AND SOLID PVC BENDS SHALL REQUIRE CONCRETE ENCASEMENT, UNLESS SPECIFIED **OTHERWISE**
- 8. OPERATIONS PERSONNEL TO BE CONTACTED BY THE CONTRACTOR 48 HOURS PRIOR TO CONSTRUCTION.
- 9. ALL STATIONING IS BASED ON AS-BUILT INFORMATION, THEREFORE SOME VARIANCE SHOULD BE ANTICIPATED. ADJUST AS NEEDED.
- 10. RAILROAD COMMUNICATION AND SIGNAL CABLES TO BE LOCATED PRIOR TO CONSTRUCTION ACTIVITY. RAILROAD TO BE GIVEN 48 HOURS NOTICE PRIOR TO CONSTRUCTION
- 11. ALL BURIED CONDUIT/CABLE WILL BE PLACED AT 24" MINIMUM BELOW THE LOWEST POINT OF EXISTING CITY UTILITY BEING CROSSED.
- 12. ALL BURIED CONDUIT/CABLE WILL BE PLACED AT 48" MINIMUM BELOW ALL CITY & OR SURFACE STREET(S) WHERE NO UTILITY IS CROSSED.
- 13. CONSTRUCTION CONTRACTOR SHALL PLACE MARKER POLES AT ALL H.H. LOCATIONS & AT EVERY MAJOR P.I. CONTRACTOR WILL PLACE MARKER POLES DURING THE CONSTRUCTION PHASE.

#### **GENERAL NOTES:**

- 1. ALL WORK TO BE DONE WITH EXTREME CAUTION, FIBER OPTIC CABLE CARRYING TRAFFIC AND LOSS OF SERVICE WILL RESULT IN LOSS OF
- 2. ALL WORK TO BE PERFORMED IN STRICT ACCORDANCE WITH THE APPLICABLE CODES OR REQUIREMENTS OF ANY REGULATING GOVERNMENTAL AGENCY, TELEPAK, OR 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 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 EVENT OF CONFLICTS.
- 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 OR BETTER 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 EXCEPTIONS.

#### TRAFFIC CONTROL NOTES:

ALL WORK SHALL COMPLY WITH THE UNIFORM TRAFFIC CONTROL MANUAL. (1998 EDITION OF MUTCD, REVISION 3) OR NEWER VERSIONS OF THIS MANUAL.

#### **CLARIFICATION NOTES:**

NOTE: CALLOUTS WILL BE PLACED ON EACH DRAWING INDICATING FOLLOWING:

MATERIAL AMOUNT

**DEPTH IF BURIED** SIZE OF FIBER

D. SIZE OF HDPE

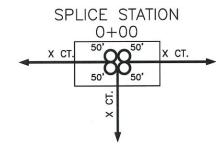
SIZE OF STRAND E.

CABLE ID

DIRECTIONAL BORE 0 48" MINIMUM DEPTH ( 0 ) 1.25"HDPE PULL CABLE 0 (0) 0 CT. F.O.C.

**STATION** E/W (1)144 CT F.O.C. PLACE 0 'SLACK

0+00PLACE UH-4 HANDHOLE PLACE 0 'SLACK COIL OF 0 CT F.O.C.



#### **DEFINITION** NOMENCLATURE

PLACEMENT OF EIGHT FOOT GROUND ROD OUTSIDE OF HAND HOLE 1. BM2-8:

SIX INCHES BELOW GROUND LEVEL WITH PLACEMENT OF GROUND

WIRE WITHE CONNECTOR.

PLACEMENT OF PLASTIC MARKER POLE, MINIMUM OF 30" IN GROUND 2. BM53F:

AS INDICATED BY DRAWINGS.

PLACEMENT OF LOCATE MARKER POST AND PLACEMENT OF WIRE INSIDE 3. BM53F(A): OF POST FROM GROUND ROD AND SPLICE CLOSURE TO BE TERMINATED

IN POST FOR LOCATION OF FACILITIES AS INDICATED ON DRAWINGS.

RESTORATION OF ASPHALT PER SQ. FT. AS REQUIRED BY COMPANY REP. 4. BM72:

RESTORATION OF CONCRETE PER SQ. FT. AS REQUIRED BY COMPANY REP. 5. BM73:

6. UO-144: PLACEMENT OF 144 COUNT FIBER INTO INNER-DUCT, LEAVING SLACK IN HAND HOLES AS INDICATED ON DRAWINGS. PRICE PER PLACEMENT IS ON

'PER FOOT' BASIS

PLACEMENT OF 24 COUNT FIBER INTO INNER-DUCT, LEAVING SLACK IN 7. UO-24: HAND HOLES AS INDICATED ON DRAWINGS. PRICE FOR PLACEMENT IS ON

A 'PER FOOT' BASIS.

#### SYMBOL



BM53F

/ BM53F(A)

NONE NONE

NONE

NONE

NOTIFY ALL UTILITIES 72 HOURS PRIOR TO CONSTRUCTION ACTIVITY. ONE CALL SYSTEM @ 1-800-227-6477



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PROJECT CITY -	
FULL FILENAME	
T-01	l.dwg
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REV.	DESCRIPTION	INITIALS	DATE

**REVISIONS** 

	MATERIAL	LIST
ITEM	DESCRIPTION	QUANTITY
1	TOTAL CABLE FT.	0'
2	DIR-BORE CABLE	0'
3	PULL CABLE	0'
4	BURIED SLACK	0'
5	1.25" HDPE	0'
6	5" HDPE CASING	0'
7	HANDHOLES	0
8	MANHOLES	0
9	SPLICE CLOSURE	0
10	H-POSTS	0
11	GROUND RODS	0
12	AERIAL CABLE	0'
13	RISERS	0



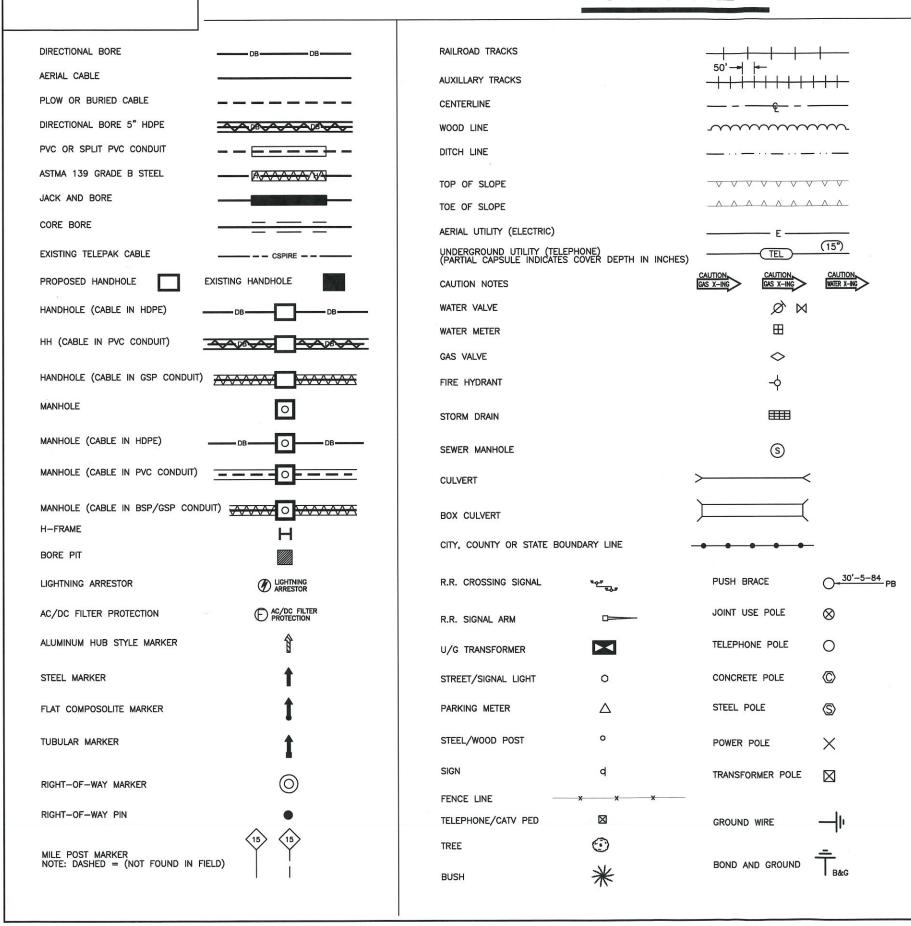


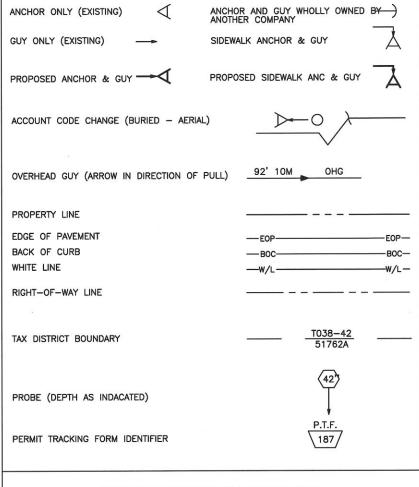
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#### **SYMBOLS KEY**





#### **POLE ATTACHMENT ABBREVIATIONS**

PWR	POWER ATTACHMENT	PWR OHG	POWER OVERHEAD GUY
TRI	TRIPLEX	CATV OHG	CATV OVERHEAD GUY
СОММ	COMMUNICATIONS ATTACHMENT	CAP BANK	CAPACITOR BANK
CATV	CATV ATTACHMENT	CLTCKT	FIRE ALARM CIRCUIT
SL	STREET LIGHT	PWR DIP	POWER DIP
TSIG	TRAFFIC SIGNAL	COMM DIP	COMMUNICATIONS DIP
MDW	MULTI DROP WIRE	CATV DIP	CATV DIP
сомм он	COMMUNICATIONS OVERHEAD GUY	TEOP	TRAFFIC LIGHT
FL	FLOOD LIGHT	TGUY	TRAFFIC GUY
WH	WEATHER HEAD	MS	MIDSPAN
TRAN	TRANSFORMER	OHG	OVERHEAD GUY
TELEPAK	TELEPAK ATTACHMENT	TOP	TOP OF POLE
SEC	SECONDARY POWER	NEU	NEUTRAL





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MATERIAL	LIS	Τ
DESCRIPTION	Ql	JANTITY
TOTAL CABLE FT.		
DIR-BORE CABLE		
PULL CABLE		
BURIED SLACK		
1.25" HDPE		
5" HDPE CASING	0,	
HANDHOLES	0	
MANHOLES	0	
SPLICE CLOSURE	0	
H-POSTS	0	
GROUND RODS	0	
AERIAL CABLE	0,	
RISERS	0	
PREPARED	BY	
	DESCRIPTION TOTAL CABLE FT. DIR—BORE CABLE PULL CABLE BURIED SLACK 1.25" HDPE 5" HDPE CASING HANDHOLES MANHOLES SPLICE CLOSURE H—POSTS GROUND RODS AERIAL CABLE RISERS	TOTAL CABLE FT. 0' DIR—BORE CABLE 0' PULL CABLE 0' BURIED SLACK 0' 1.25" HDPE 0' 5" HDPE CASING 0' HANDHOLES 0 MANHOLES 0 SPLICE CLOSURE 0 F-POSTS 0 GROUND RODS 0 AERIAL CABLE 0' RISERS 0



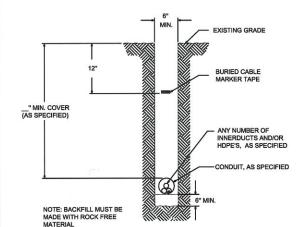
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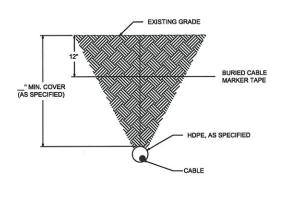
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### **PLACEMENT-TYPICALS**

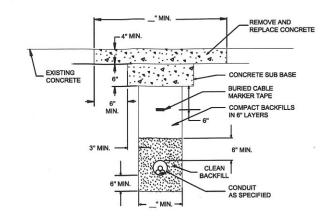
## TYPICAL DETAIL "A" PLACE CONDUIT CROSS SECTION



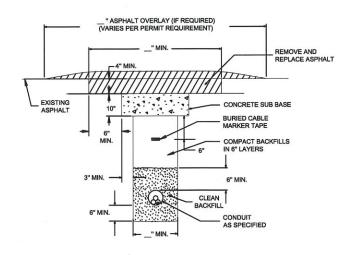
## TYPICAL DETAIL "B" PLACE HDPE CROSS SECTION



## TYPICAL DETAIL "C" CONCRETE / PAVEMENT OPEN CUT CROSS SECTION

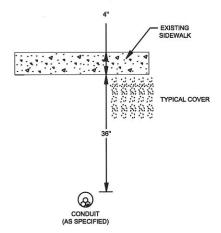


## TYPICAL DETAIL "D" ASPHALT/PAVEMENT OPEN CUT CROSS SECTION



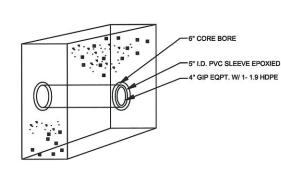
### **OPEN CUT-TYPICALS**

### TYPICAL DETAIL "E" BORE CONCRETE SIDEWALK

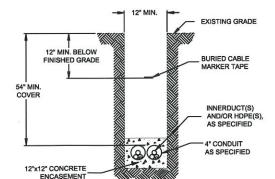


TYPICAL DETAIL "F"

CORE BORE
(CONCRETE / BRICK WALL)



### TYPICAL DETAIL "G" 12"x12" CONCRETE ENCASEMENT



NOTE: BACKFILL MUST BE MADE WITH ROCK FREE MATERIAL.

#### **TYPICAL DETAIL "H"**

PLACE (2) 1.25" HDPE IN CONDUIT

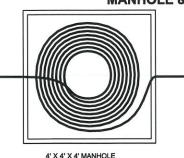


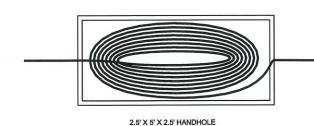
#### TYPICAL DETAIL "I"

PLACE CABLE IN HDPE

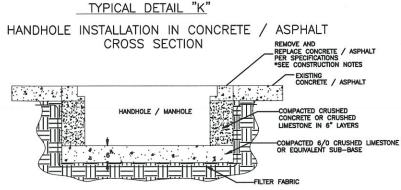


## TYPICAL DETAIL "J" MANHOLE & HANDHOLE SLACK COIL DETAIL





#### T. (D. (a.) (b. (b.) (b.) (b.) (b.)



NOTIFY ALL UTILITIES 72 HOURS PRIOR TO CONSTRUCTION ACTIVITY.
ONE CALL SYSTEM @ 1-800-227-6477



FILE NAME T-03

PROJECT CITY -

FULL FILENAME

T-03.dwg

DATE DESCRIPTION

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**REVISIONS** 

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MATÉRIAL LIST

ITEM	DESCRIPTION	QUANTITY
1	TOTAL CABLE FT.	0'
2	DIR-BORE CABLE	0'
3	PULL CABLE	0'
4	BURIED SLACK	0'
5	1.25" HDPE	0'
6	5" HDPE CASING	0'
7	HANDHOLES	0
8	MANHOLES	0
9	SPLICE CLOSURE	0
10	H-POSTS	0
11	GROUND RODS	0
12	AERIAL CABLE	0'
13	RISERS	0

PREPARED BY



PREPARED FOR

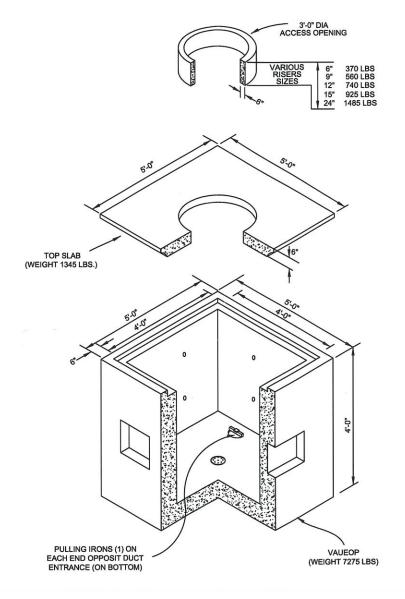


## **CAPITOL CONCRETE PRODUCTS, INC**



FIBER OPTIC/LIGHTGUIDE SPLICE VAUEOP 4'-0"X4'-0"X4'-0"

GRADE 60 REINFORCEMENT 4500 PSI CONCRETE REINFORCEMENT FOR AASHTO M-20 LOADING





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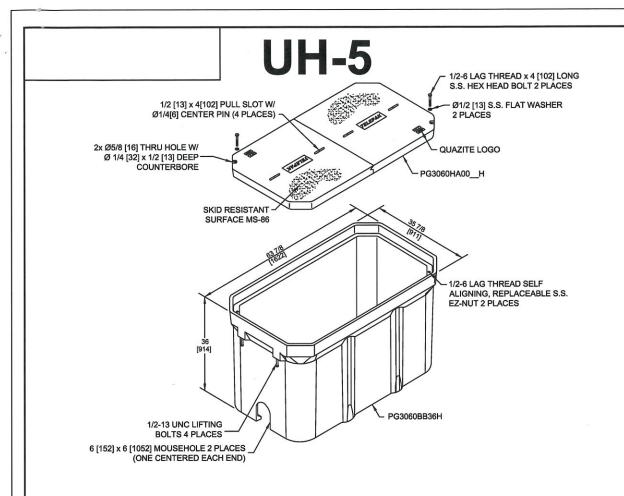
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10	H-POSTS	0
11	GROUND RODS	0
12	AERIAL CABLE	0'
13	RISERS	0

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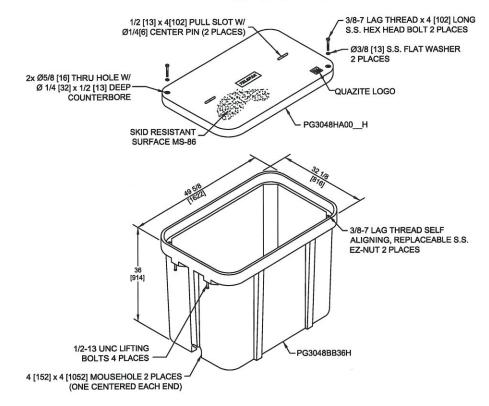


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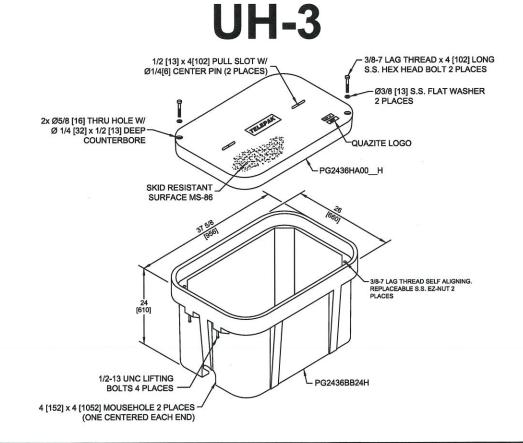


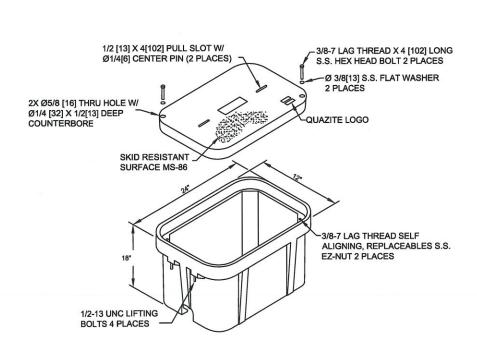


## **UH-4**



## **UH-2**





NOTIFY ALL UTILITIES 72 HOURS PRIOR TO CONSTRUCTION ACTIVITY. ONE CALL SYSTEM @ 1-800-227-6477



FILE NAME T-05

PROJECT CITY -

FULL FILENAME T-05.dwg

DATE DESCRIPTION CONSTRUCTION

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REVISIONS

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	DESCRIPTION	DESCRIPTION INITIALS

MATERIAL LIST

ITEM	DESCRIPTION	QUANTITY
1	TOTAL CABLE FT.	0'
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7	HANDHOLES	0
8	MANHOLES	0
9	SPLICE CLOSURE	0
10	H-POSTS	0
11	GROUND RODS	0
12	AERIAL CABLE	0'
13	RISERS	0

PREPARED BY



PREPARED FOR



EXCEPT AS MAY BE OTHERWISE PROVIDED BY CONTRACT: THESE DRAWINGS AND SPECIFICATIONS SHALL REMAIN THE PROPERTY OF CSPIRE FIBER. BEING ISSUED IN STRICT CONFIDENCE AND SHALL NOT BE REPRODUCED, COPIED, OR USED FOR ANY PURPOSE WITHOUT SPECIFIC WITH SPECIFIC WITHOUT SPECIFIC WITH SPECI

#### TYPICAL HAND HOLE INSTALLATION CRIMPED AND MARKER POLE OR FLUSH MOUNT FINK AT EVERY HANDHOLE LOCATION WITH A MARKER POST, BONDED **TOGETHER** PLATE IF NEEDED MARKER POST WITH 1.25" HDPE SHOULD EXTEND 48" INTO LOCATE PIGTAIL CENTERED SPARE WIRE WILL GO MARKER POST. HDPE SHOULD ALSO **BEHIND HANDHOLE UP FIBER TAIL INTO** EXTEND 6" ABOVE GRAVEL AT THE THE SPLICE CASE BOTTOM OF THE HANDHOLE. AT EVERY TEST STATION, BURY GROUND ROD 6" BELOW GROUND AND 6" TO THE LEFT OF MARKER POST BLACK WIRE BONDED TO 8' GROUND ROD AT TEST STATIONS PLACE BLUE TAPE NEAR THE TOP OF PIGTAIL INSTALLED IN H/H 8' x 5/8" GROUND ROD 6" -HDPE TO INDICATE WITH LONG WIRES BELOW GROUND AND 6" TO THE DUCT LEADING (CONNECTORIZED ENDS) THE LEFT OF MARKER POST

FED UP INTO MAKER POST

AND SHORT WIRE TO **GROUND ROD** 

TO MARKER POST

PIGTAILS ARE TO BE INSTALLED AT TEST STATION (T.S.) ONLY.

HANDHOLES ARE TO BE INSTALLED A MINIMUM OF THREE FEET FROM ANY UTILITY OR POWER POLE.

#### **BOXES** (Nestable)

OUTSIDE OF HANDHOLE

DESCRIPTION	PART NO.	WEIGHT	DESIGN/TEST LOAD#
UH-5 30x60x36	PG3060Z501	933# 423KG.	15'000 LBS
UH-4 30x48x36	PG3048Z579	563# 255KG.	15'000 LBS
UH-3 24x36x24	PG2436Z905	284# 129KG.	15'000 LBS

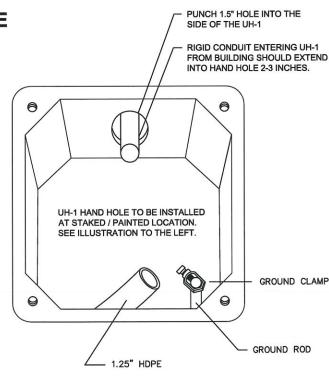
DIMENSIONS ARE IN INCHES OR MILLIMETERS IN BRACKETS UNLESS OTHERWISE NOTED.

- 1. THIS ASSEMBLY IS RATED FOR A STATIC DESIGN LOAD
- OF 15,000 LBS. [66,720 N] OVER A 10 [254] X 10 [254] AREA AND MUST PASS A MIN. STATIC TEST LOAD OF 22,500 LBS.
- 2. ALL ENCLOSURES, BOXES AND COVERS, ARE REQUIRED TO CONFORM TO ALL TEST PROVISIONS OF ANSI/SCTE 77 2007 "SPECIFICATION FOR UNDERGROUND ENCLOSURE INTEGRITY" AS MANUFACTURED BY QUAZITE OR **EQUIVALENT WITH TELEPAK NETWORK'S ENGINEER'S** SIGNED APPROVAL. THE COVERS MUST BE RATED FOR TIER 15 APPLICATIONS AND BOXES RATED FOR TIER 22 APPLICATIONS AND IN NO ASSEMBLY CAN THE COVER DESIGN LOAD EXCEED THE DESIGN LOAD OF THE BOX. ALL COMPONENTS IN AN ASSEMBLY (BOX & COVER) ARE MANUFACTURED USING MATCHED SURFACE TOOLING, ALL COVERS ARE REQUIRED TO HAVE A MINIMUM COEFFICIENT OF FRICTION OF 0.50 IN ACCORDANCE WITH ASTM C 1028 AND HAVE TIER 15 AND "TELEPAK NETWORKS 800-342-3716" EMBOSSED ON THE TOP SURFACE. ALL COVER BOLTS TO BE SELF-CLEANING AUGER BOLT ASSEMBLIES.

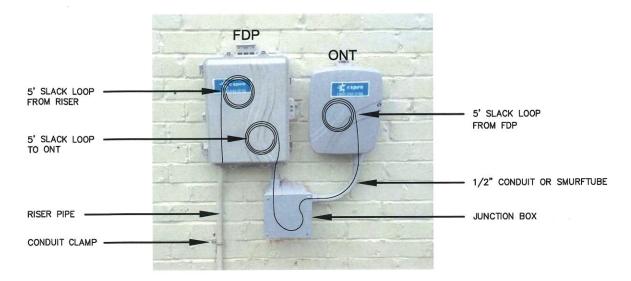
### TYPICAL UH-1 / UH-2 HAND HOLE **INSTALLATION PROCEDURES** AT BUILDING ENTRIES



UH-1 / UH-2 INSTALLATION LOCATION WILL BE MARKED BY A STAKE AND/OR PAINT. CSPIRE/ OSP WILL INSTALL CONDUIT 8" UNDERGROUND TO DESIRABLE UH-1 LOCATION.

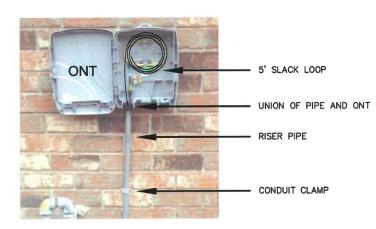


### TYPICAL FDP & ONT OUTDOOR INSTALLATION PROCEDURES AT BUILDING ENTRIES



- 1. PLEASE MOUNT ONT 48" OFF THE GROUND UNLESS OTHERWISE STATED ON THE DRAWINGS.
- 2. ONT & FDP INSTALLATION LOCATION WILL BE SHOWN ON THE CONSTRUCTION DRAWINGS. PLEASE DO NOT USE PICTURES AS A HEIGHT INDICATOR FOR THE INSTALLATION. MOUNT ONT AS CLOSE TO THE POWER METER AS POSSIBLE
- 3. DUCT PLACED BY DIRECTIONAL BORING SHOULD MEET RISER PIPE UNDERGROUND NEAR THE BASE OF THE WALL. A 4" GAP BETWEEN THE DUCT AND THE RISER PIPE IS ACCEPTABLE.
- 4. MOUNT 4' RISER PIPE TO THE WALL USING SHOWN CONDUIT CLAMPS.
- 5. JOIN RISER PIPE TO FDP AT SHOWN LOCATION & MOUNT FDP TO THE WALL.
- 6. USING ½" CONDUIT, CONNECT J-BOX TO FDP AND MOUNT J-BOX TO WALL.
- 7. USING A 1/2" SWEEPING 90, CONNECT J-BOX TO ONT AND MOUNT ONT TO WALL
- 8. PLACE FIBER FROM DUCT INTO RISER PIPE AND INTO FDP LEAVING A 5' SLACK LOOP.
- 9. WITH A SEPARATE 12CT FIBER, LEAVE A 5' SLACK LOOP IN THE FDP. PASS THRU THE JBOX AND INTO THE ONT.
- 10. LEAVE 5' OF SLACK INSIDE OF THE ONT. ALL SLACK SHOULD BE LOOSELY STORED AND NOT LOOPED TIGHTLY.

### TYPICAL ONT OUTDOOR INSTALLATION PROCEDURES AT BUILDING ENTRIES



- 1. PLEASE MOUNT ONT 48" OFF THE GROUND UNLESS OTHERWISE STATED ON THE DRAWINGS.
- 2. ONT & FDP INSTALLATION LOCATION WILL BE SHOWN ON THE CONSTRUCTION DRAWINGS. PLEASE DO NOT USE PICTURES AS A HEIGHT INDICATOR FOR THE INSTALLATION. MOUNT ONT AS CLOSE TO THE POWER METER AS POSSIBLE
- 3. DUCT PLACED BY DIRECTIONAL BORING SHOULD MEET THE RISER PIPE UNDERGROUND NEAR THE BASE OF THE WALL. A 4" GAP BETWEEN THE DUCT AND THE RISER PIPE IS ACCEPTABLE.
- 4. MOUNT 4' RISER PIPE TO THE WALL USING SHOWN CONDUIT CLAMPS.
- 5. JOIN RISER PIPE TO ONT AT SHOWN LOCATION & MOUNT ONT TO THE WALL.
- 6. PLACE FIBER FROM DUCT INTO RISER PIPE AND INTO ONT.
- 7. LEAVE 5' OF SLACK INSIDE OF THE ONT. SLACK SHOULD BE LOOSELY STORED AND NOT LOOPED TIGHTLY.

NOTIFY ALL UTILITIES 72 HOURS PRIOR TO CONSTRUCTION ACTIVITY. ONE CALL SYSTEM @ 1-800-227-6477



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	MATERIAL	LIS	Τ
ITEM	DESCRIPTION	QU	IANTITY
1	TOTAL CABLE F		
2	DIR-BORE CABL	E 0'	
3	PULL CABLE	0'	
4	BURIED SLACK	0'	
5	1.25" HDPE	0'	
6	5" HDPE CASIN	G 0'	
7	HANDHOLES	0	
8	MANHOLES	0	
9	SPLICE CLOSUR	E 0	
10	H-POSTS	0	
11	GROUND RODS	0	
12	AERIAL CABLE	0'	
13	RISERS	0	
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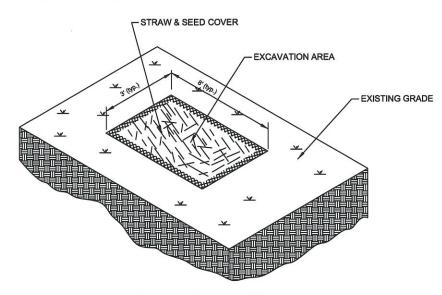


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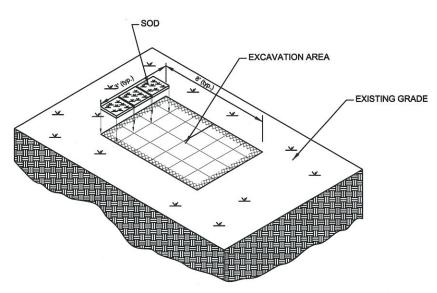


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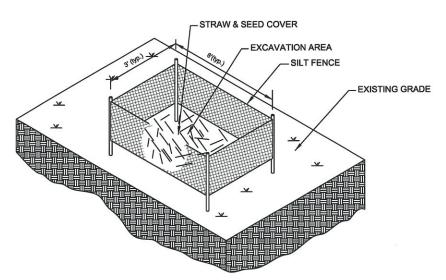
### TYPICAL EROSION DETAIL #1 NOTE TO CONSTRUCTION:

WHERE APPLICABLE RE-COMPACT SOIL AROUND HANDHOLES AND BOREPITS USE HAY AND SEED COVER FOR EROSION CONTROL.



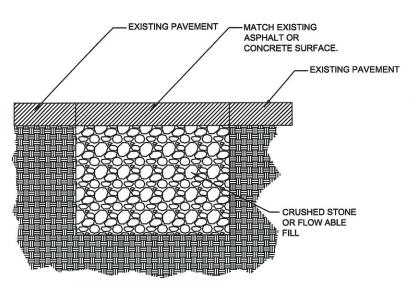
### TYPICAL EROSION DETAIL #3 NOTE TO CONSTRUCTION:

FOR EROSION CONTROL IN WELL MANICURED AREAS RE-COMPACT SOIL AROUND HANDHOLES AND BOREPITS. RE-SOD TO MATCH EXISTING GROUND COVER.



### TYPICAL EROSION DETAIL #2 NOTE TO CONSTRUCTION:

FOR HIGHER DEGREE OF SLOPE RE- COMPACT SOIL AROUND HANDHOLES AND BOREPITS. USE HAY,SEED AND SILT FENCES FOR EROSION CONTROL.



#### TYPICAL PAVEMENT REPAIR

### DETAIL #4 NOTE TO CONSTRUCTION:

RE-COMPACT EFFECTED AREAS WITH CRUSHED STONE OR FLOW ABLE FILL. MATCH EXISTING PAVEMENT SURFACE.



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#### **REVISIONS**

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#### MATERIAL LIST

	MATERIAL	LIST
ITEM	DESCRIPTION	QUANTITY
1	TOTAL CABLE FT.	0'
2	DIR-BORE CABLE	0'
3	PULL CABLE	0'
4	BURIED SLACK	0'
5	1.25" HDPE	0'
6	5" HDPE CASING	0'
7	HANDHOLES	0
8	MANHOLES	0
9	SPLICE CLOSURE	0
10	H-POSTS	0
11	GROUND RODS	0
12	AERIAL CABLE	0'
13	RISERS	0

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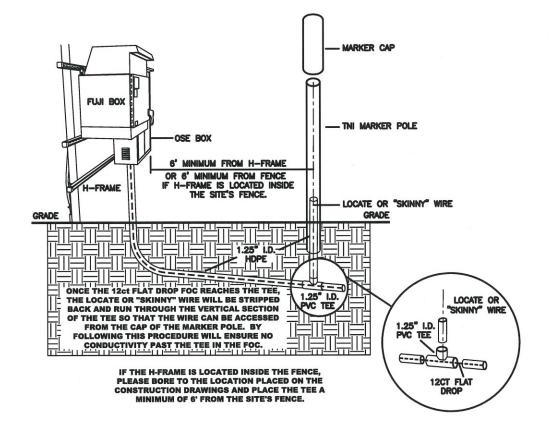


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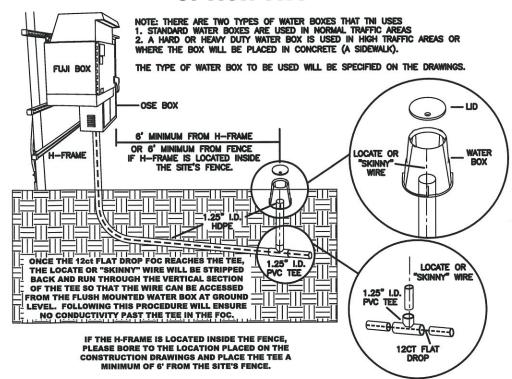
EXCEPT AS MAY BE OTHERWISE PROVIDED BY CONTRACT: THESE DRAWINGS AND SPECIFICATIONS SHALL REMAIN THE PROPERTY OF CSPIRE FIBER. BISUED IN STRICT CONFIDENCE AND SHALL NOT BE REPRODUCED, COPIED, OR USED FOR ANY PURPOSE WITHOUT SPECIFIC WRITTEN PERMISSION.

NOTIFY ALL UTILITIES 72 HOURS PRIOR TO CONSTRUCTION ACTIVITY.
ONE CALL SYSTEM @ 1-800-227-6477

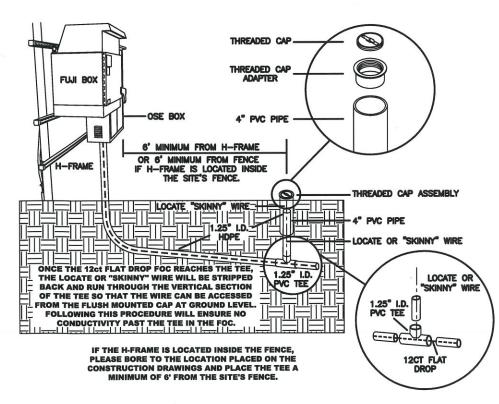
## DIELECTRIC TEST STATION (DTS) TYPICALS



## FLUSH MOUNTED WATER BOX INSTALLATION OPTION TWO



## THREADED PVC FLUSH MOUNTED ACCESS CAP OPTION THREE



NOTIFY ALL UTILITIES 72 HOURS PRIOR TO CONSTRUCTION ACTIVITY. ONE CALL SYSTEM @ 1-800-227-6477



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	MATERIAL	LIST
ITEM	QUANTITY	
1	TOTAL CABLE FT.	0'
2	DIR-BORE CABLE	0'
3	PULL CABLE	0'
4	BURIED SLACK	0'
5	1.25" HDPE	0'
6	5" HDPE CASING	0'
7	HANDHOLES	0
8	MANHOLES	0
9	SPLICE CLOSURE	0
10	H-POSTS	0
11	GROUND RODS	0
12	AERIAL CABLE	0'
13	RISERS	0
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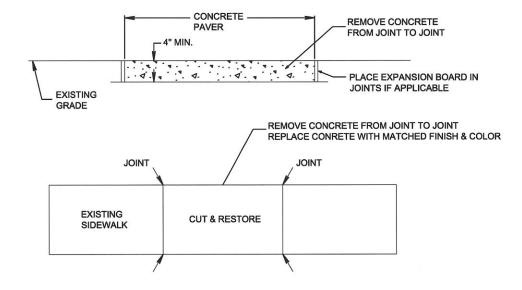


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## SIDEWALK CUT & RESTORE TYPICAL DETAIL

SIDEWALK MUST BE ADA COMPLIANT WHERE APPLICABLE

# TYPICAL DETAIL "A" CONCRETE CUT & RESTORE REPLACEMENT



#### **CONSTRUCTION NOTES:**

- PROVIDE BARRIERS AND TRAFFIC CONTROL PER MUTCD REV.3 OR NEWER.
   CUT & RESTORE AREAS SHALL BE RETURNED TO ORIGINAL, OR BETTER CONDITION.
- 3. SIDEWALKS THAT HAVE EXPANSION BOARD IN USE IN ADJACENT AREAS SHALL BE RESTORED WITH EXPANSION BOARD.
- 4. EXPOSED AGGREGATE FINISHED SIDEWALKS SHALL BE RESTORED WITH SAME FINISH.
- 5. ENSURE FINISH IS SLIP RESISTANT.
- 6. BRICK SIDEWALKS SHALL BE RESTORED TO THE SAME FINISH.
- 7. ENSURE FLUSH MOUNT TEST STATIONS DO NOT PRESENT A TRIP HAZARD.
- 8. COVER CONCRETE FOR A MINIMUM OF 12 HOURS PRIOR TO REMOVING PEDESTRIAN BARRIERS.
- 9. RESTORATION AREA MUST BE RESTORED TO AN OPERATIONAL SIDEWALK PRIOR TO CLOSING ANY CONSTRUCTION PERMITS.

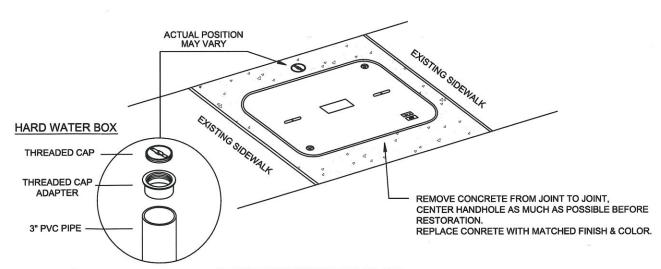


COMPACTED 6/0

SUB-BASE

-FILTER FABRIC

CRUSHED LIMESTONE OR EQUIVALENT



AT EVERY HANDHOLE LOCATION
WITH TEST WIRE IN A SIDEWALK,
IF APPLICABLE, INSTALL A FLUSH
MOUNT HARD WATER BOX.
RESTORE CONCRETE TO ORIGINAL
FINISH & COLOR



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		MATERIAL	LIST
П	EM	DESCRIPTION	QUANTITY
	1	TOTAL CABLE FT.	0'
	2	DIR-BORE CABLE	0'
	3	PULL CABLE	0'
	4	BURIED SLACK	0'
;	5	1.25" HDPE	0'
	5	5" HDPE CASING	0'
	7	HANDHOLES	0
	В	MANHOLES	0
	9	SPLICE CLOSURE	0
1	0	H-POSTS	0
1	1	GROUND RODS	0
1	2	AERIAL CABLE	0'
1	3	RISERS	0
1	4		

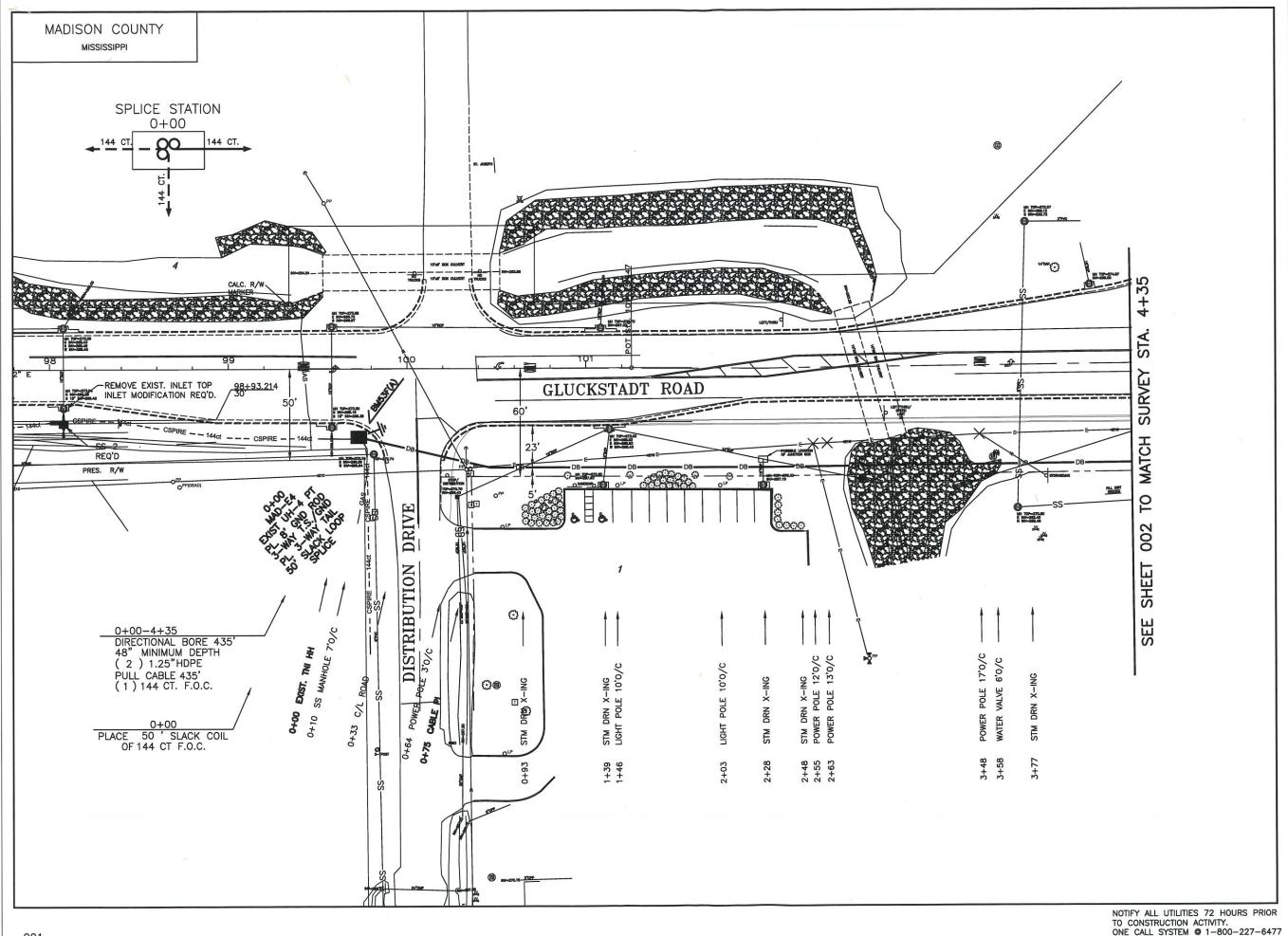
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PROJECT CITY - MADISON COUNTY

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DATE 12-31-18 DESCRIPTION CONSTRUCTION

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SCALE PAGE 1"=50' 001

#### **REVISIONS**

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#### MATERIAL LIST

ITEM	DESCRIPTION	QUANTITY
1	TOTAL CABLE FT.	485'
2	DIR-BORE CABLE	435'
3	PULL CABLE	0'
4	BURIED SLACK	50'
5	1.25" HDPE	870'
6	5" HDPE CASING	0'
7	HANDHOLES	0
8	MANHOLES	0
9	SPLICE CLOSURE	1
10	H-POSTS	0
11	GROUND RODS	0
12	AERIAL CABLE	0'
13	RISERS	0
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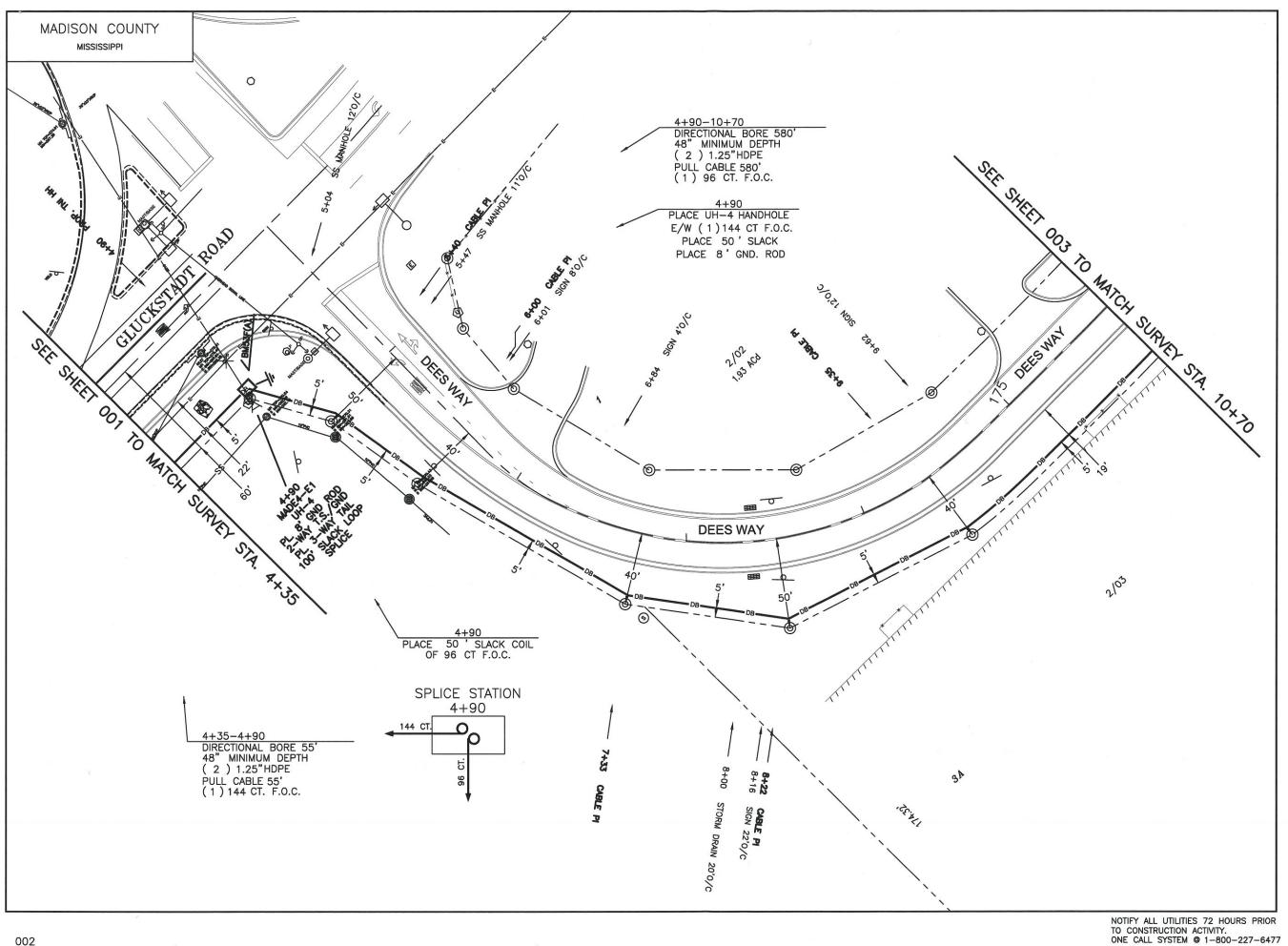
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FILE NAME BCR-002

PROJECT CITY - MADISON COUNTY

FULL FILENAME

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#### **REVISIONS**

DESCRIPTION	INITIALS	DATE
	DESCRIPTION	DESCRIPTION INITIALS

#### MATERIAL LIST

ITEM	DESCRIPTION	QUANTITY
1	TOTAL CABLE FT.	735'
2	DIR-BORE CABLE	635'
3	PULL CABLE	0'
4	BURIED SLACK	100'
5	1.25" HDPE	1270'
6	5" HDPE CASING	0'
7	HANDHOLES	1
8	MANHOLES	0
9	SPLICE CLOSURE	1
10	H-POSTS	0
11	GROUND RODS	1
12	AERIAL CABLE	0,
13	RISERS	0
14		

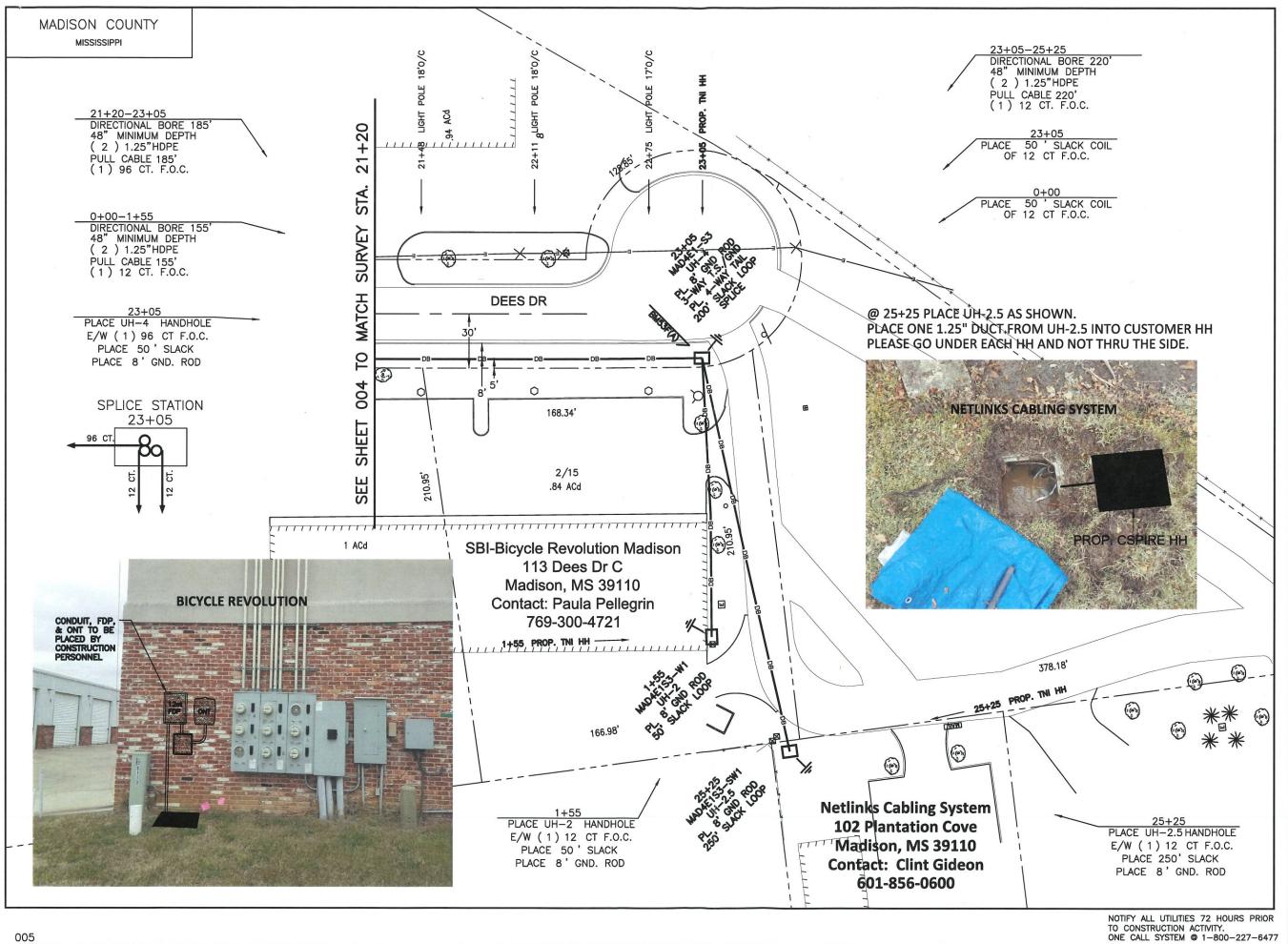
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PROJECT CITY - MADISON COUNTY

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#### MATERIAL LIST

ITEM	DESCRIPTION	QUANTITY
1	TOTAL CABLE FT.	1010'
2	DIR-BORE CABLE	560'
3	PULL CABLE	0'
4	BURIED SLACK	450'
5	1.25" HDPE	1120'
6	5" HDPE CASING	0'
7	HANDHOLES	3
8	MANHOLES	0
9	SPLICE CLOSURE	1
10	H-POSTS	0
11	GROUND RODS	3
12	AERIAL CABLE	0'
13	RISERS	0

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