## **BOARD OF SUPERVISORS**

### **MADISON COUNTY, MISSISSIPPI**

Department of Engineering Tim Bryan, P.E., PTOE, County Engineer 3137 South Liberty Street, Canton, MS 39046 Office (601) 855-5582 FAX (601) 859-5857

#### **MEMORANDUM**

October 6, 2025

To: Casey Brannon, Supervisor, District I Trey Baxter, Supervisor, District II Gerald Steen, Supervisor, District III Karl Banks, Supervisor, District IV Paul Griffin, Supervisor, District V

From: Tim Bryan, P.E., PTOE County Engineer

Re: Telepak Networks/D.B.A. Cspire Utility Permit County Road Name, Old Jackson Road

The Engineering Department recommends approval for Cspire to do a directional bore as drawings reflect to serve EUTAW Construction.

Revised: 2/14/2019



# PERMIT APPLICATION FOR THE CONSTRUCTION OR ADJUSTMENT OF A UTILITY WITHIN COUNTY ROAD RIGHT-OF-WAY

<u> Utility Information:</u>	Utility Name: Tele	pak dba C Spire i	-iber			
Address:1018 Highlar	nd Colony Pkwy Ste	400	City/State/Zip: Ridgeland, MS 39157			
Contact Person: Jon H		Contact's P	Phone: <u>769-79</u>	8-7284		
Project Information:	County Road Name			<del></del>		<del></del>
Beginning Location: 32	.577111, -90.088972 Old	(If located within more th Jackson Rd Endin		of-way, use Appendio 32.577111, -90.0		
Length of Project: 202	2' Se	ection: 33	Township:	9N	Range:	2E
Description of Work: _	Directional bore as dr	awings reflect to se	erve EUTAW	CONSTRUC	TION	
Check Box if Append	ix 1 is to be included as	a part of this Applic	ation			

Whereas the above stated Utility makes application to the **Madison County Board of Supervisors** for a Construction Permit. Attached hereto are drawings and plans for the construction of the above facilities located within Madison County owned public rights-of-way. Once stamped by the Madison County Engineering Department, these plans shall not be changed or altered without written approval of the County Engineer, or his representative. A copy of the approved permit and plans shall be on-site at all times during construction.

The Applicant Utility 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* (hereinafter referred to as the "Policy"), as adopted on November 1, 2005, by the **Madison County Board of Supervisors**, and which is hereby made a part of this Application Agreement.

If facilities are to be located within the Rights-of-Way of the County-Federal or State Aid System, Applicant Utility also agrees to comply with applicable provisions of *S.O.P. No. SA II-2-8, Accommodation of Utilities on Rights-of-Way,* issued by the State Aid Engineer and dated July 1, 2005.

The Applicant Utility 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. If this Utility is 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 Utility 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. If work impacts traffic in any way, the appropriate traffic control shall be installed per the *Manual of Uniform Traffic Control Devices*, Latest Edition.

The Applicant Utility understands that the County Engineer, or his representative, may issue a Stop Work Order at any time if it is deemed that site conditions are not suitable for construction or if any of the requirements of this permit are not being met.

Many County Roads have variable Rights-of-Way and/or no Right-of-Way at all and are maintained under a Prescriptive Easement. It is the sole responsibility of the Applicant Utility to verify the existence and limits of public rights-of-way. If none exists, it is the

responsibility of the Applicant Utility to acquire an easement for their Facilities from the applicable property owner(s). Madison County in no way verifies the limits of Right-of-Way as shown on the permit application.

The Applicant Utility shall be responsible for all future maintenance and repair of the facilities installed under this permit. The Applicant Utility shall make future adjustments to, 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 Madison 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 Utility understands that any damages caused by routine maintenance and construction by County forces shall be borne by the Applicant Utility.

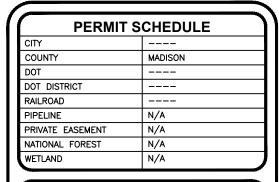
The Applicant Utility further agrees to indemnify and hold Madison County harmless for any and all claims, accidents, damages, liabilities and expenses occasioned wholly, or in part, by any act or omission of applicant, its agents or employees. In case County shall, without fault on its own part, be 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.

All underground facilities shall be installed at a depth equal to or greater than 48" below the lowest adjacent grade.

All pipes carrying liquid shall be encased under County maintained roads.

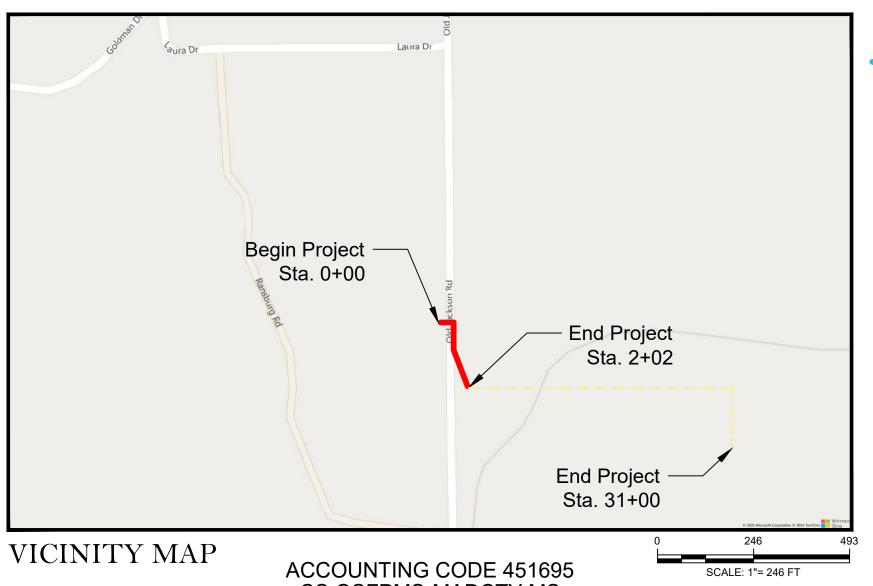
WITNE	ESS the signature of the Applicant this the 1st da	y of October	_, 20 <u>25</u>
	Ву:	Jon Huddleston (Applicant Signature)	
	Title:	OSP Permit Specialist	
Note:	Applicant must be an employee of the Utility named in this application a Contractor, Subcontractor, Agent, or Consulting Engineer as the Apperformed under this application.		•
plans s	ny authorized representative, have reviewed this applications submitted by the Applicant meet the requirements of A Popht-of-Way of all Public County Roads.	licy for The Accommodation of Utility Fo	
the mg	,	APPROVED	
	Ву	By Tim Bryan at 1:35 pm, O	ct 15, 2025
AGREE	By:	By Tim Bryan at 1:35 pm, O	ct 15, 2025
AGREE	ED TO AND APPROVED BY:	Tim Bryan, P.E.	ct 15, 2025
AGREE		Tim Bryan, P.E. County Engineer	ct 15, 2025
	ED TO AND APPROVED BY:	Tim Bryan, P.E. County Engineer  Date:	

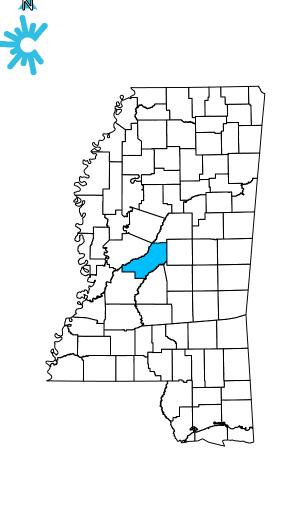




AS-BUILT SCHEDULE				
AS-BUILTS	SCHEDULE			
FIELD ENGINEER				
PROJECT MANAGER				
CONSTRUCTION				
SUB CONTRACTOR				
INSPECTOR				
START CONSTRUCTION				
END CONSTRUCTION				
INSTALL FIBER				
FINAL CLEANUP				

General Notes





CS.OSFPMS-MADCTY.MS

PREPARED BY

SBI-EUTAW CONSTRUCTION CANTON-12049525 936 OLD JACKSON ROAD, CANTON, MS 39046

OSP Subproject 76488-001 9/30/25





## **CONSTRUCTION NOTES:**

- 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.**

MS 800-227-6477 AL 800-292-8525 TN 800-351-1111 FL 800-432-4770

- 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 36" MINIMUM COVER UNLESS CROSSING STATE AND OR COUNTY ROADS AND ALL CREEK BEDS UNLESS SPECIFIED OTHERWISE ON THE CONSTRUCTION DRAWINGS.

48" MINIMUM DEPTH MAY BE REQUIRED.

- 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.
- OPERATIONS PERSONNEL TO BE CONTACTED BY THE **CONTRACTOR 48 HOURS PRIOR TO CONSTRUCTION.**
- 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 COMPLY WITH THE REQUIREMENTS OF THE JURISDICTION HAVING AUTHORITY.
- 12. CONSTRUCTION CONTRACTOR SHALL PLACE MARKER POLES AT REQUIRED LOCATIONS 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 REVENUE.
- 2. ALL WORK TO BE PERFORMED IN STRICT ACCORDANCE WITH THE APPLICABLE CODES OR REQUIREMENTS OF ANY REGULATING GOVERNMENTAL AGENCY, CSPIRE, OR THE RIGHT-OF-WAY GRANTOR.
- 4. UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE RECORDS, FIELD OBSERVATIONS, OR SURVEY LOCATES BUT ARE NOT NECESSARILY EXACT. THEREFORE, UTILITY LOCATIONS WILL BE VERIFIED PRIOR TO CONSTRUCTION, SO THAT ADJUSTMENTS IN CABLE PLACEMENT CAN BE MADE PRIOR TO POTENTIAL 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, GRASS, SOD, ETC., IF DAMAGED, SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.

### TRAFFIC CONTROL NOTES:

ALL WORK SHALL COMPLY WITH THE UNIFORM TRAFFIC CONTROL MANUAL. (11TH EDITION OF MUTCD, JAN '24) OR NEWER **VERSIONS OF THIS MANUAL.** 

### **CLARIFICATION NOTES:**

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

**SYMBOL** 

/ BM53F

✓ BM53F(A)

- **MATERIAL AMOUNT DEPTH IF BURIED**
- SIZE OF FIBER
- D. SIZE OF HDPE
- SIZE OF STRAND
- CABLE ID

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

General Notes



Prepared For		

Project Details		

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S	heet	2	of	21			

NOMENCLATURE DEFINITION

> 1. BM2-8: PLACEMENT OF EIGHT FOOT GROUND ROD OUTSIDE OF HAND HOLE SIX INCHES BELOW GROUND LEVEL WITH PLACEMENT OF GROUND

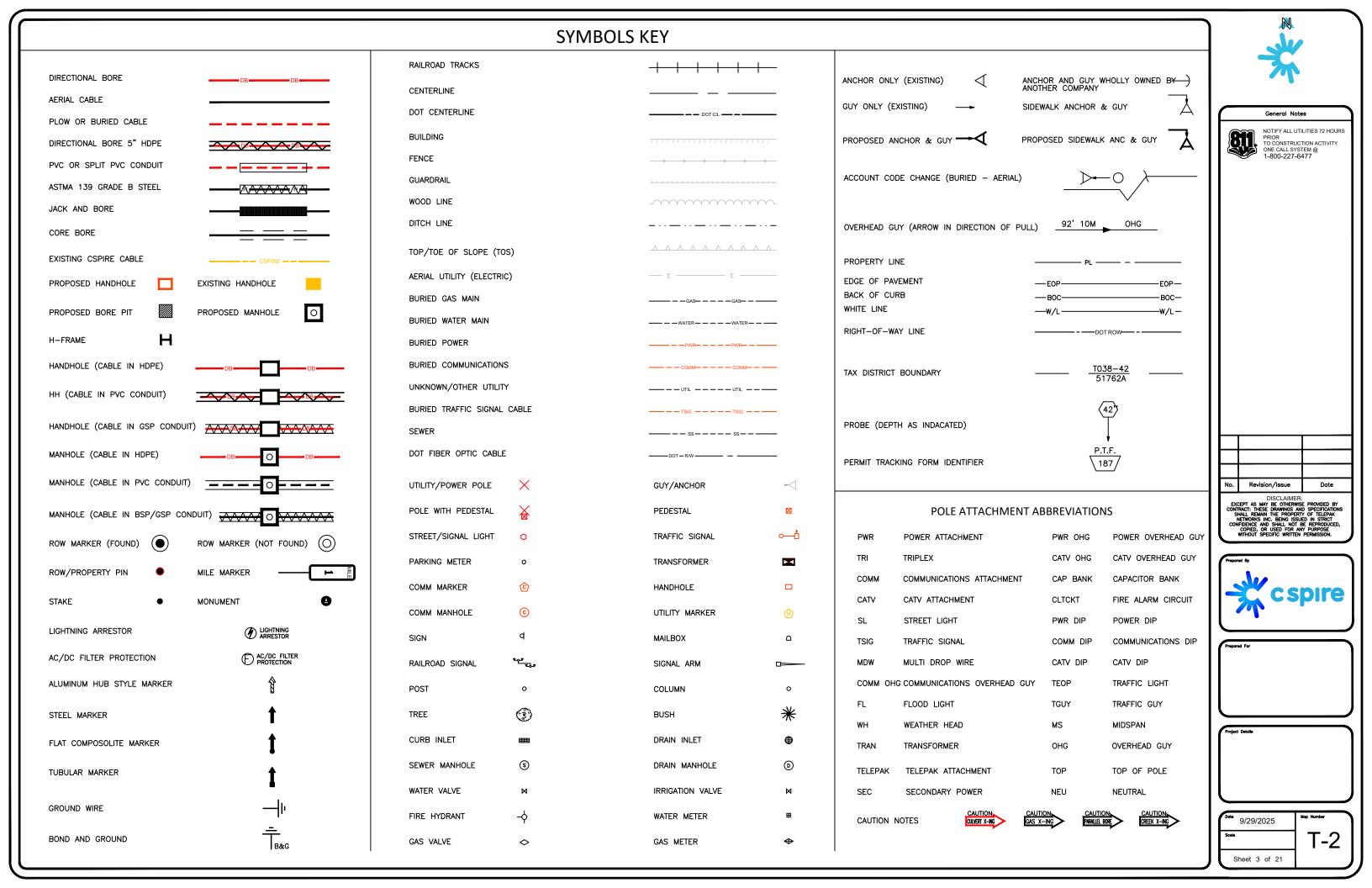
WIRE WITH CONNECTOR.

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

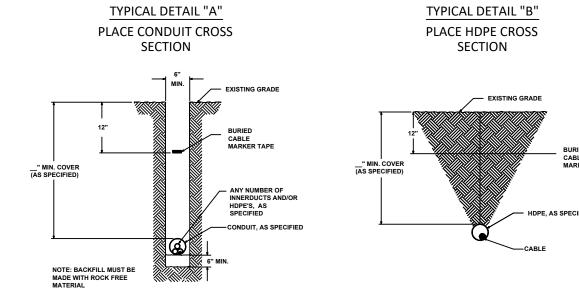
AS INDICATED BY DRAWINGS.

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

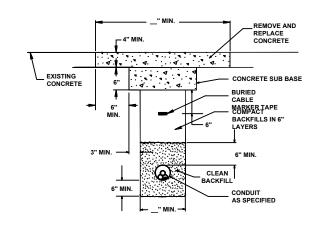
IN POST FOR LOCATION OF FACILITIES AS INDICATED ON DRAWINGS.



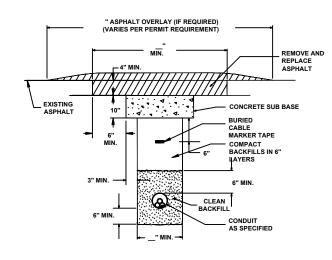
## PLACEMENT-TYPICALS



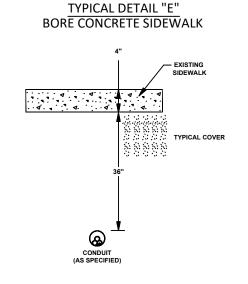
# TYPICAL DETAIL "C" CONCRETE / PAVEMENT OPEN CUT CROSS SECTION



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



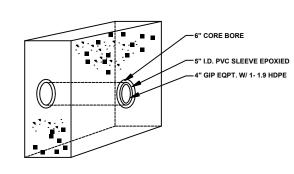
# **OPEN CUT-TYPICALS**



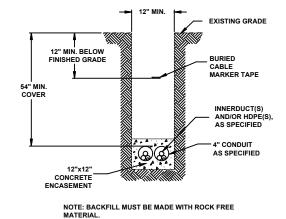
TYPICAL DETAIL "F"

CORE BORE

(CONCRETE / BRICK WALL)



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



### TYPICAL DETAIL "H"

PLACE (2) 1.25" HDPE IN CONDUIT

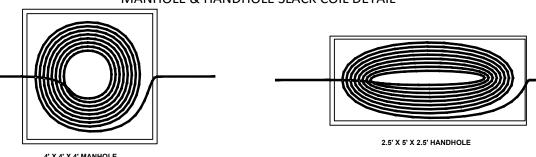


TYPICAL DETAIL "I"

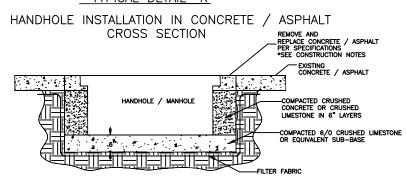
PLACE CABLE IN HDPE



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

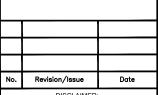


### TYPICAL DETAIL "K"









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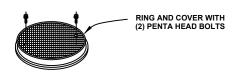






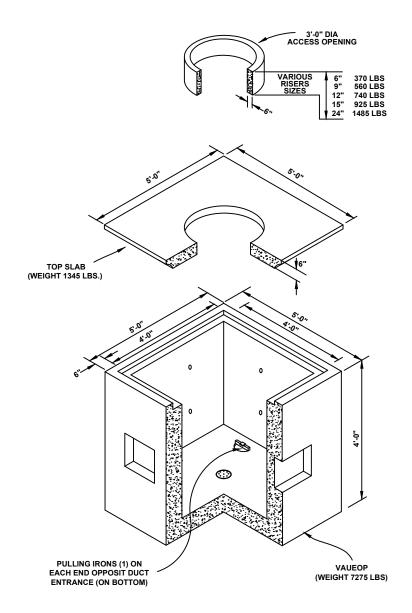
Date	9/29/2025	Map Number
Scale		T-3
	Sheet 4 of 21	

# 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** 



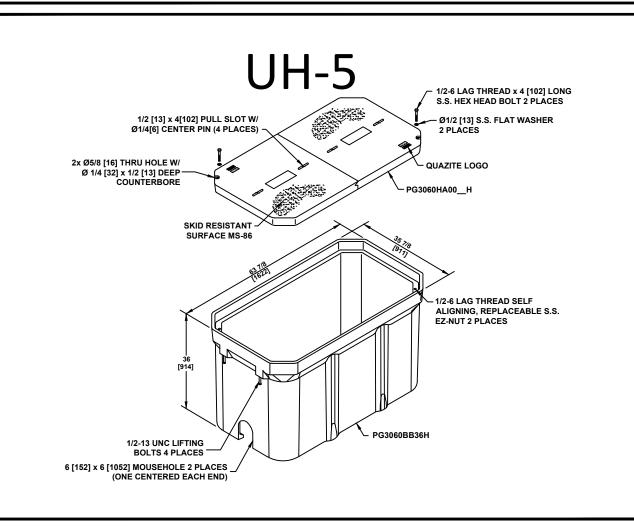




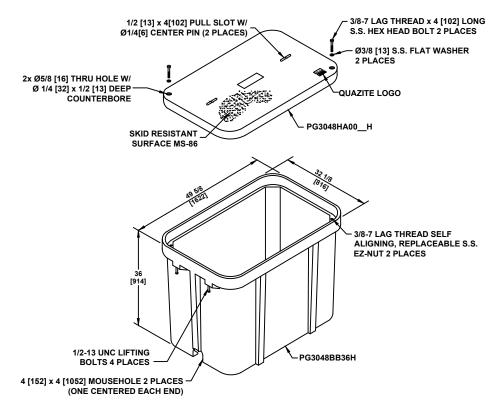
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9/29/2025	Map Number
Scale	T-4
Sheet 5 of 21	J



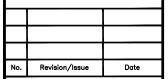
# UH-4







General Notes



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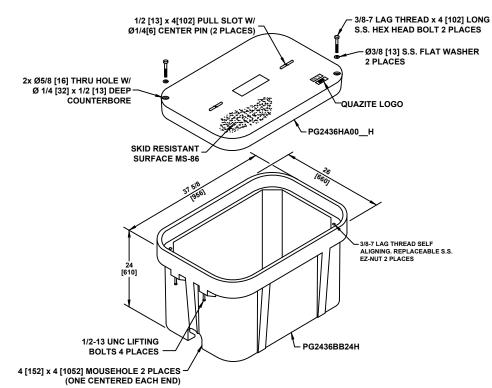




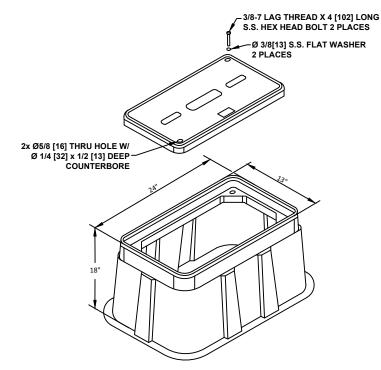


Date	9/29/2025	Map Number
Scale		T-5
S	heet 6 of 21	

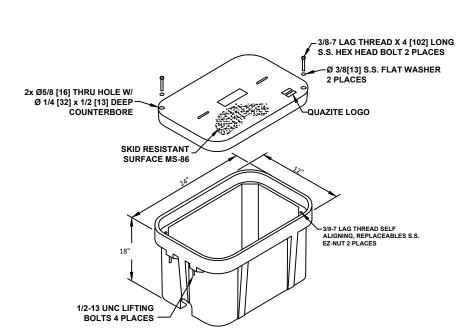
# UH-3



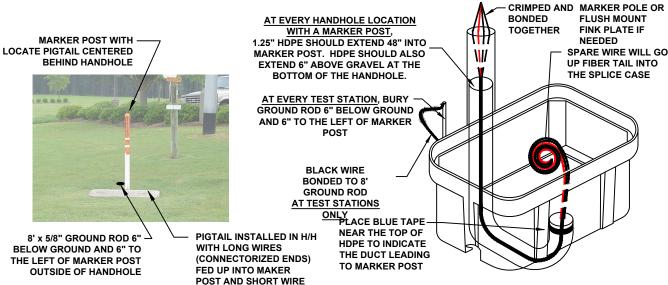
# UH-2.5



# UH-2



## TYPICAL HAND HOLE INSTALLATION



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)

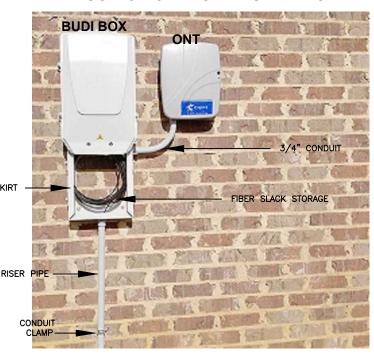
DESCRIPTION	PART NO.	WEIGHT	DESIGN/TEST LOAD#
UH-5 30x60x36	PG3060Z501	933# 423KG.	15'000 LBS
UH-4 30x48x36	PG3048Z579	563# 255KG.	15'000 LBS
UH-3 24x36x24	PG2436Z905	284# 129KG.	15'000 LBS

TO GROUND ROD

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 BUDI BOX, SKIRT & ONT COMBO **OUTDOOR INSTALLATION** PROCEDURES AT BUILDING ENTRIES



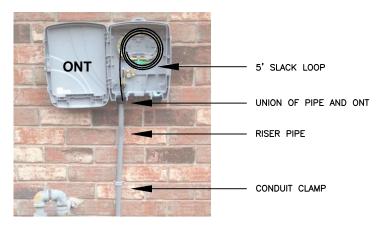
- BUDI BOX & ONT INSTALLATION LOCATION WILL BE SHOWN ON THE CONSTRUCTION DRAWINGS. PLEASE DO NOT USE PICTURES AS A HEIGHT INDICATOR FOR THE INSTALLATION
- MOUNT 3' RISER PIPE TO THE WALL USING SHOWN CONDUIT STRAPS.
- . JOIN RISER PIPE TO SKIRT AT SHOWN LOCATION & MOUNT BUDI BOX & SKIRT TO WALL
- USING A 3/4" SWEEPING 90. CONNECT SKIRT TO ONT AND MOUNT ONT TO WALL PLACE FIBER FROM DUCT INTO RISER PIPE AND INTO SKIRT LEAVING A 5' SLACK LOOP

### **BUDI BOX, SKIRT & ONT COMBO OUTDOOR INSTALLATION COMPLETED INSTALL**



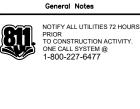


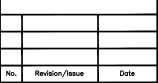
# TYPICAL ONT OUTDOOR INSTALLATION PROCEDURES AT BUILDING ENTRIES



- 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.









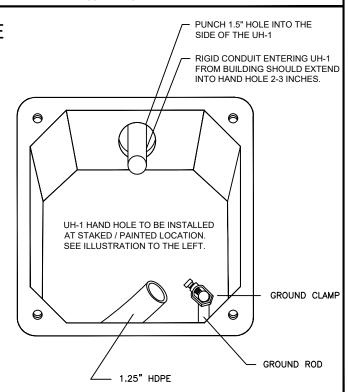
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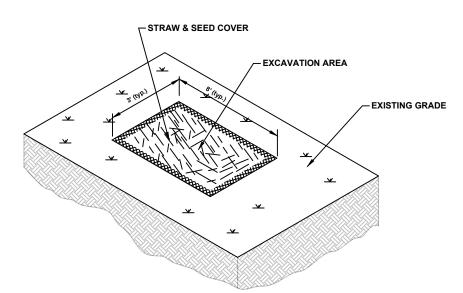
Date 9/29/2025	Map Number
Scale	T-6
Sheet 7 of 21	

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



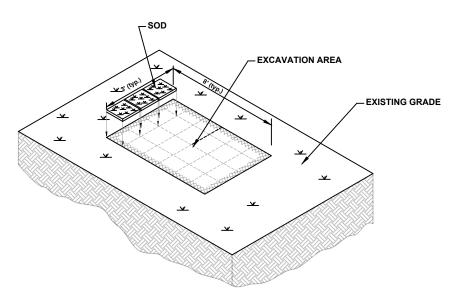
UH-1 / UH-2 INSTALLATION LOCATION WILL BE MARKED BY A STAKE AND/OR PAINT. CSPIRE/ OSP WILL INSTALL CONDUIT 8" UNDERGROUND TO DESIRABLE UH-1 LOCATION.





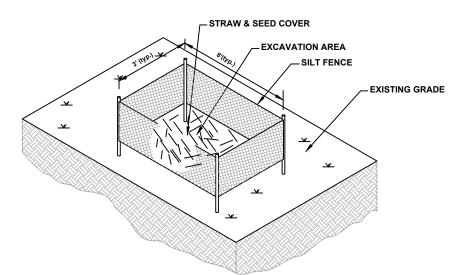
# TYPICAL EROSION DETAIL #1 NOTE TO CONSTRUCTION:

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



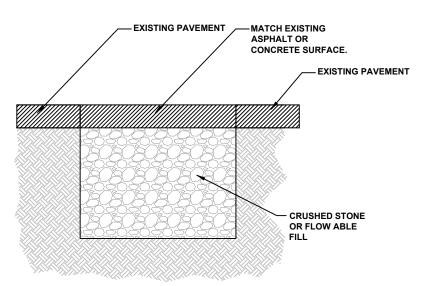
TYPICAL EROSION DETAIL #3
NOTE TO CONSTRUCTION:

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.





No.	Revision/Issue	Date

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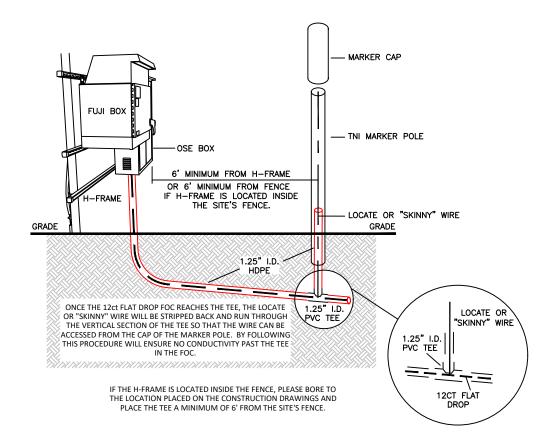


Prepared For		

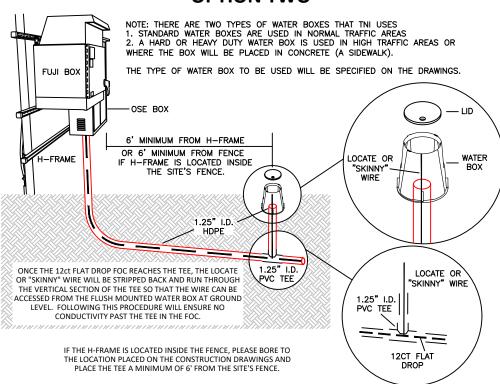
Project Details		

1	9/29/2025	Map Number
	Scale	T-7
	Shoot 9 of 21	

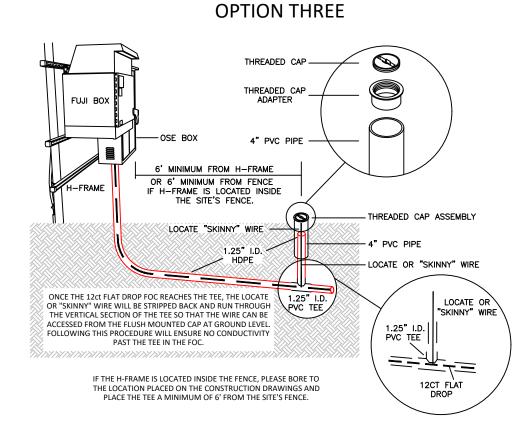
# **DIELECTRIC TEST STATION** (DTS) TYPICALS



## FLUSH MOUNTED WATER BOX INSTALLATION **OPTION TWO**

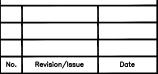


# THREADED PVC FLUSH MOUNTED ACCESS CAP









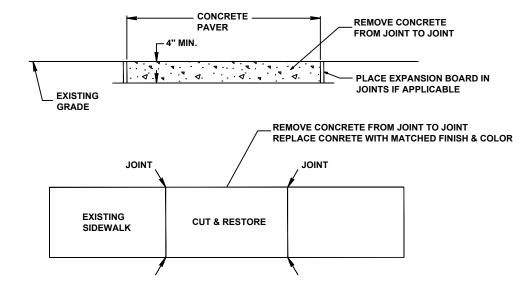


9/29/2025 Sheet 9 of 21

# SIDEWALK CUT & RESTORE TYPICAL DETAIL

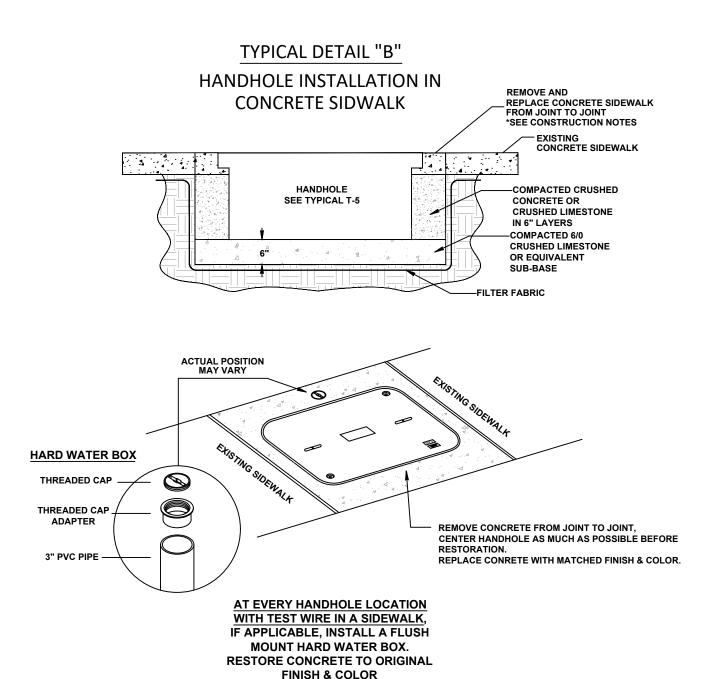
SIDEWALK MUST BE ADA COMPLIANT WHERE APPLICABLE

# TYPICAL DETAIL "A" CONCRETE CUT & RESTORE REPLACEMENT



## **CONSTRUCTION NOTES:**

- 1. PROVIDE BARRIERS AND TRAFFIC CONTROL PER MUTCD REV.3 OR NEWER.
- 2. 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.







No. Revision/Issue Date

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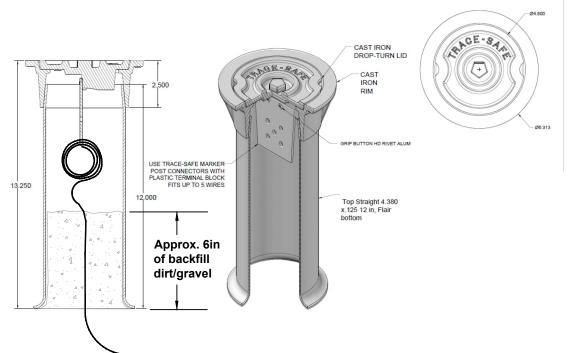
| Number | Sheet 10 of 21 | Number | T-9

# **TRACE-SAFE Termination Test Station**









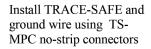




12in Tail for testing

### **Grounding Trace-Safe inside test station**







Pigtail jumper wire between TRACE-SAFE and ground wire stud

Disconnect pigtail from TRACE-SAFE stud to isolate the line you would like to locate. Replace the pigtail when job is completed.

- 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

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

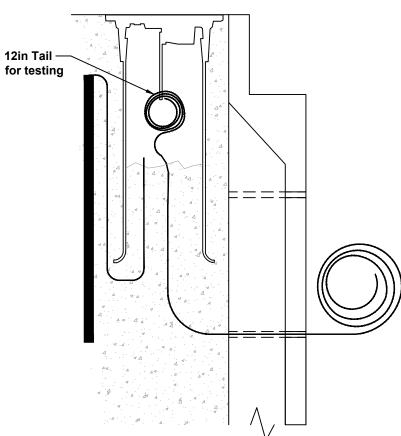
HANDHOLES ARE TO BE INSTALLED A MINIMUM OF THREE FEET FROM ANY UTILITY OR POWER POLE.

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

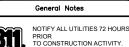
DESCRIPTION	PART NO.	WEIGHT	DESIGN/TEST LOAD#
UH-5 30x60x36	PG3060Z501	933# 423KG.	15'000 LBS
UH-4 30x48x36	PG3048Z579	563# 255KG.	15'000 LBS
UH-3 24x36x24	PG2436Z905	284# 129KG.	15'000 LBS

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

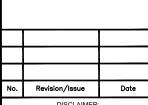
## SIDE PROFILE







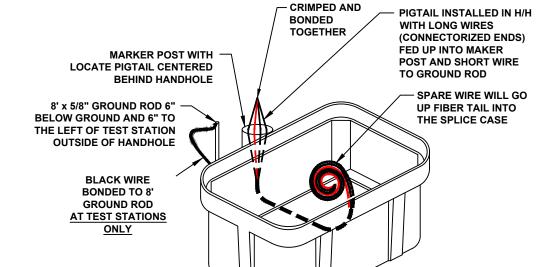
ONE CALL SYSTEM @ 1-800-227-6477





Sheet 11 of 21

9/29/2025



# **TRACE-SAFE Termination Test Station**





# **ASBUILT INSTALLATION**

3IN ¾ IN CARRIAGE BOLT \_ WITH NYLON NUT

**4IN MINRLAC CONDUIT-**HANGER





















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

No.	Revision/Issue	Date



9/29/2025

# STANDARDS FOR ALL DESIGN METHODS

The duct entering any vault must enter at a 45-degree angle and be 4-6 inches above the dirt/gravel at the bottom of vault. When a UH-2 ( $11" \times 18" \times 18"$ ) up to a UH-3 ( $24" \times 36" \times 24"$ ) is needed, a 1-inch bed of gravel (#57 stone) must be placed. Where a UH-4 vault ( $30" \times 48" \times 36"$ ) or UH-5 vault ( $30" \times 60" \times 36"$ ) is needed, it is required that a 4-inch bed of gravel (#57 stone) must be placed.

When using micro ducts, be sure to have a call out on the construction prints of what color duct to be used and what will remain underground (express) throughout the project. When using 18/14 2-way micro duct, the fiber will go in the blue duct and the orange duct will be used for drops.

Standard deployments using Quad: Blue - Distribution / Orange - Spare Distribution / Green - Metro\_Backbone / Brown - Spare Metro\_Backbone

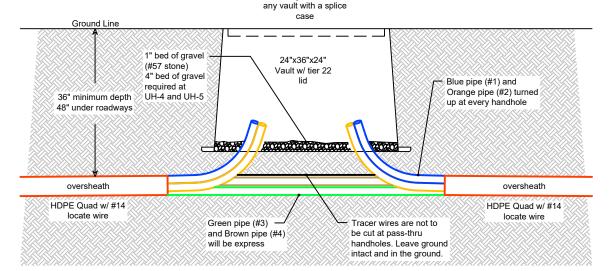
Long haul projects with little to no distribution: Blue - Distribution / Orange - Metro\_Backbone / Green - Spare Metro\_Backbone / Brown - Spare Metro\_Backbone (See typical below for details)

Tracer wires are not to be cut at pass-through handholes. Leave ground intact and in the ground. If it is broken, then it needs to be bonded. See typical drawings for connections of tracer wires for each duct type.

BLUE duct = 1 ORANGE duct = 2 GREEN duct = 3 BROWN duct = 4

(Any additional pipe placed in the project well equal higher numbers)

#### 3-way Hybrid **Standard Deployment Ex:** 18/14 2-way (1) 1.25" SDR11 18/14 4-way Spare micro duct Distribution (2) 18/14 mm micro duct Distribution Oversheath Oversheath Micro Duct x2 Micro Duct x2 20 AWG Insulated 20 AWG Copper Wire Insulated Copper Wire Spare Metro Metro Standard Backbone Backbone Conduit x1 Example **UH-3 Pass Thru** Install a ground rod at



#### **NOTES:**

When deploying 144ct fiber, if Tyco D case is used, a UH-4 needs to be placed. If Tyco B case, a UH-3 needs to be placed.

Ground rods need to be shown at splice locations, PON cabinets and end of laterals.

All duct sizes and materials used should be called out on all documents associated with the project.

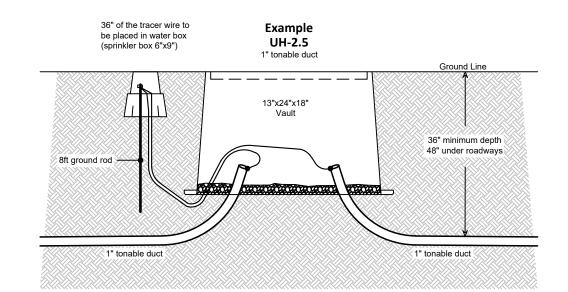
When pulling through any existing duct, it should be noted on the construction drawing.

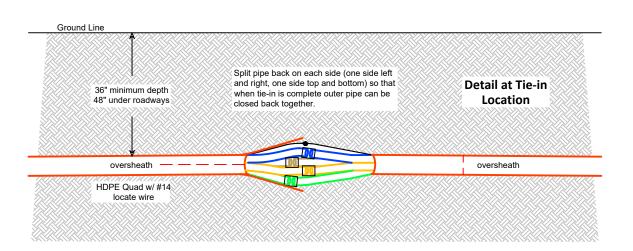
All pipe installation should be at a minimum depth of 36" along the roadway and a minimum depth of 48" under the roadway.

For every handhole or pedestal that will house a splice, a minimum of 60' storage loop is required. For every handhole or pedestal that will not house a splice and it just for storage purposes, a minimum of 100' storage loop is required.

Two (2) drops can be placed in 1" pipe. Only one (1) drop per 18/14 micro duct.

For 1" tonable duct, 36" of the tracer wire will need to be placed in a water box (sprinkler box - 6" x 9") at splice locations, laterals, and the beginning and ending of fiber ends.









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# **MICRO DISTRIBUTED TAP**





<u>Description</u>: Micro Distributed Tap deployment is a 12ct fiber placed in a 1" HDPE pipe or 18/14 micro duct (2-Way (Dual Duct) or 4-Way (Quad Duct)) with a CSC100, Charles Yellowjacket or FOSC enclosure spliced and installed in a pedestal.

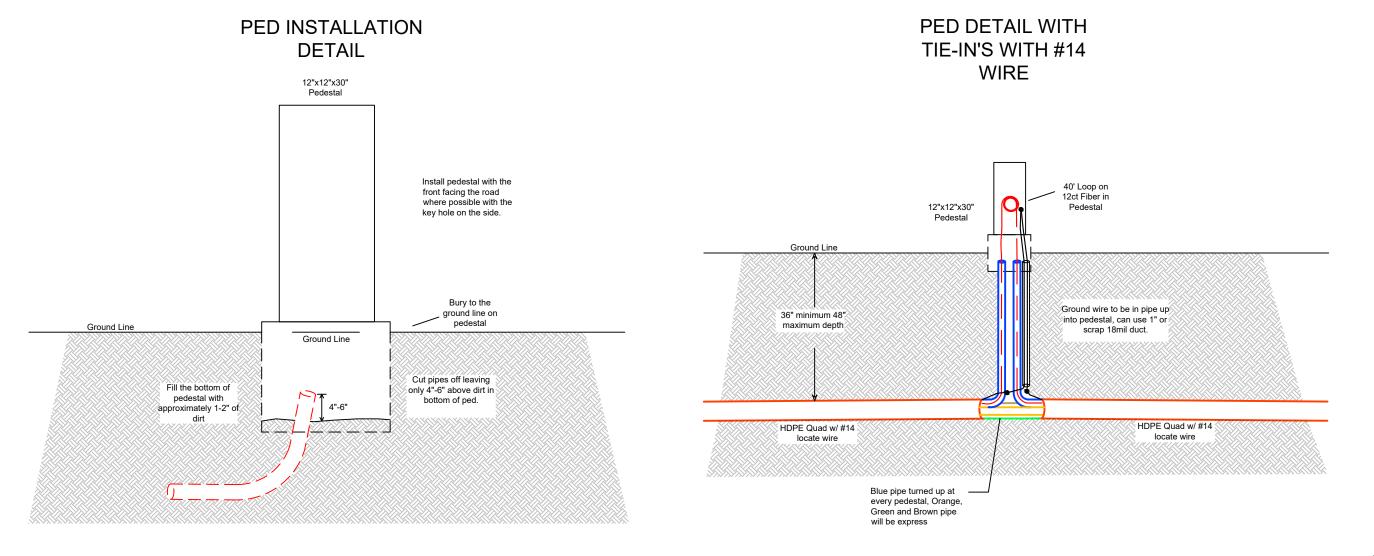
<u>Standards</u>: The pedestal is to be positioned with the front facing the road so the keyhole is located on the side and shall be buried up to the ground line indicated on the pedestal.

The duct that is entering the pedestal shall be 4 to 6 inches above the dirt inside of the pedestal. The ducts that are assigned to be expressed through the project will only be turned up at necessary intersections or where splice cases are required. When using micro duct, if a spare duct is turned up inside of the pedestal, it must be capped off using the micro duct end caps. We need to have clear instructions of what is happening at each pedestal.

Any time a FOSC enclosure is used, it will require a UH-3 (24" x 36" x 24").

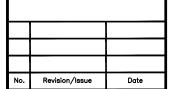
A dummy tap will be needed at locations where the fiber is cut, including tails.

Tie-ins are to be done following the typical example and must be done correctly to ensure that the tracer wire is connected back together for locating.



General Notes

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



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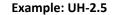
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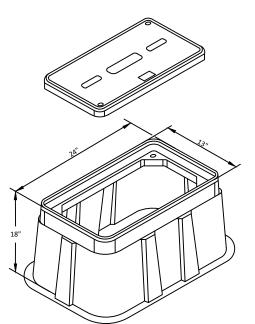
Project Details

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# MICRO CENTRALIZED SPLIT





<u>Description</u>: Micro-Centralized Split deployment is a microfiber placed in a 1" HDPE pipe or 18/14 micro duct (2-Way (Dual Duct) or 4-Way (Quad Duct)) with a Mini OTE installed in UH-2.5 (13" x 24" x 18" equivalent) sized vault.

**Standards**: Microfiber installed in the 1" non-toneable HDPE duct must have a tracer wire and the microfiber installed in the 18/14 micro duct can be with or without tracer wire.

The Mini OTE will handle up to a 144ct microfiber spliced through and will allow an additional fiber (tail) to be spliced as needed. However, there is only room to make 12 splices inside of this enclosure. If more splices are required, then the vault size will need to be a UH-3 (24" x 36" x 24") minimum and will require the appropriately sized splice case.

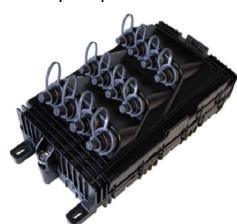
When a Mini OTE is needed with a splice case in the same vault, it will require a 100' loop to be left inside of vault to splice the Mini OTE to the splice case.

All fiber needs to be utilized in splice trays from the cabinet.

With 18/14 micro duct 4-Way (Quad Duct) deployment, the Blue Duct (Duct 1) and Orange Duct (Duct 2) will be turned up in the UH-2.5 vaults (13" x 24" x 18") with the Green (Duct 3) and Brown (Duct 4) expressed unless otherwise noted. With 18/14 micro duct 2-Way (Dual Duct) deployment, the Blue Duct (Duct 1) and Orange Duct (Duct 2) will be turned up in the UH-2.5 vaults (13" x 24" x 18") and only the Orange Duct (Duct 2) turned up at every flowerpot (9.5" x 12" vault) unless otherwise noted. If a spare duct is turned up inside of the vault, it must be capped off using the micro duct end caps. The ducts that are assigned to be expressed through the project will only be turned up at necessary intersections or where splice cases are required. We need to have clear instructions of what is happening at each vault.

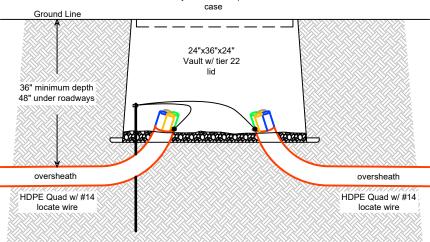
Tie-ins are to be done following the typical example and must be done correctly to ensure that the tracer wire is connected back together for locating.

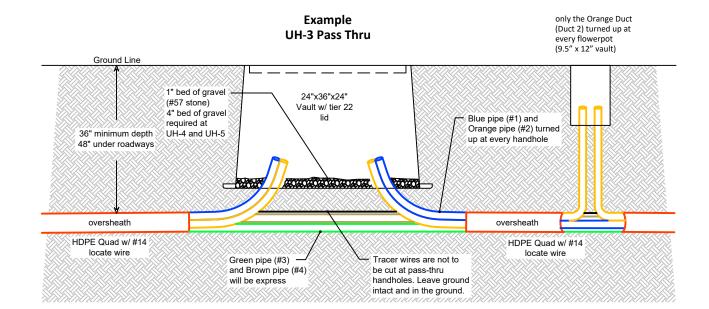
#### **Example: 12 port Mini-OTE 300**



#### Example UH-3 Splice

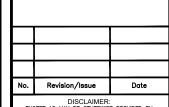
Install a ground rod at any vault with a splice case











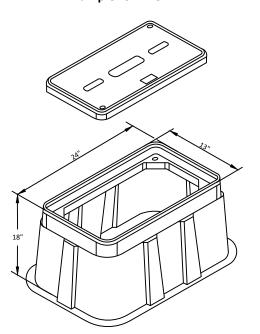
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Project Details

Date 9/29/2025	Map Number
Scale	T-14
Sheet 15 of 21	

# **FULLY BELOW GRADE**

Example: UH-2.5



**Description**: Fully Below Grade deployment is a 12ct fiber placed in a 1" HDPE pipe or 18/14 micro duct (2-Way (Dual Duct) or 4-Way (Quad Duct)) with a CSC100, FOSC, or Mini OTE w/splitter installed in a UH-2.5 (13" x 24" x 18" equivalent) sized vault.

Standards: With 18/14 micro duct 4-Way (Quad Duct) deployment, the Blue Duct (Duct 1) and Orange Duct (Duct 2) will be turned up in the UH-2.5 vaults (13" x 24" x 18") with the Green (Duct 3) and Brown (Duct 4) expressed unless otherwise noted. With 18/14 micro duct 2-Way (Dual Duct) deployment, the Blue Duct (Duct 1) and Orange Duct (Duct 2) will be turned up in the UH-2.5 vaults (13" x 24" x 18") and only the Orange Duct (Duct 2) turned up at every flowerpot (9.5" x 12" vault) unless otherwise noted. When 18/14 micro duct is used, the only time that all ducts will be turned up is when the drawing calls for a slack loop or a splice case. If a spare duct is turned up inside of the vault, it must be capped off using the micro duct end caps. The ducts that are assigned to be expressed through the project will only be turned up at necessary intersections or where splice cases are required. We need to have clear instructions of what is happening at each vault.

Any time a FOSC enclosure is used, it will require a UH-3 (24" x 36" x 24").

A dummy tap will be needed at locations where the fiber is cut, including tails.

Tie-ins are to be done following the typical example and must be done correctly to ensure that the tracer wire is connected back together for locating.

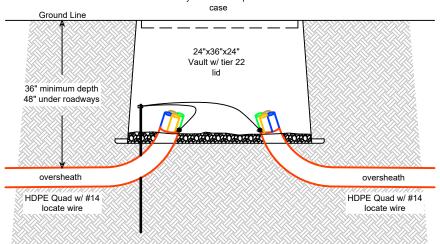
**Example: CSC100 Compact Fiber Closure** 



#### only the Orange Duct Example (Duct 2) turned up at **UH-3 Pass Thru** every flowerpot (9.5" x 12" vault) Ground Line 1" bed of gravel 24"x36"x24" (#57 stone) Vault w/ tier 22 4" bed of gravel Blue pipe (#1) and required at Orange pipe (#2) turned 36" minimum depth UH-4 and UH-5 up at every handhole 48" under roadways oversheath oversheath HDPE Quad w/#14 HDPE Quad w/ #14 locate wire Green pipe (#3) Tracer wires are not to and Brown pipe (#4) be cut at pass-thru handholes. Leave ground will be express



Install a ground rod at any vault with a splice case





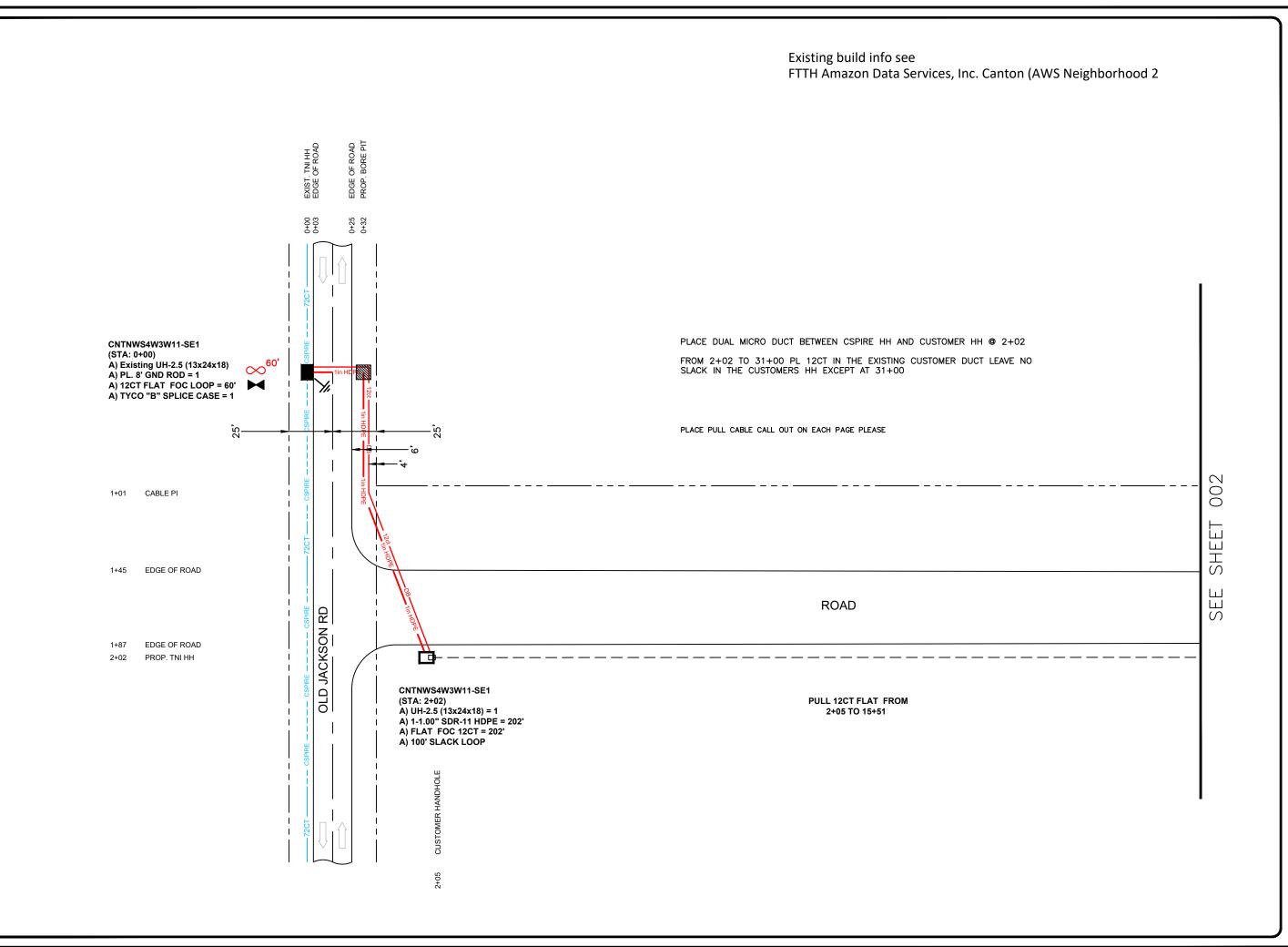


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Date 9/29/2025	Map Number
Scale	T-15

Sheet 16 of 21









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Sheet 17 of 21