

## 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@fortbendcountytx.gov

X	Right of Way Permit			
	Commercial Driveway Permi			
Perr	nit No: 2018-19918			

The following "Notice of Proposed Cable, Conduit, and/or Pole Line activity in Fort Bend County" and accompanying

attachments have been reviewed and the not of Fort Bend County, Texas.		,				
(1) COMPLETE APPLICATION FORM:						
	a. Name of road, street, and/or drainage ditch affected.					
X b. Vicinity map showing cours	e of directions					
X c. Plans and specifications						
(2) BOND:						
County Attorney, approval wh applicable.	en					
X Perpetual bond currently posted.	Bond No:	Amount: \$50,000.00				
Performance bond submitted	Bond No:	Amount:				
Cashier's Check	Check No:	Amount:				
(3) DRAINAGE DISTRICT APPROVAL (WED)  Drainage District Approval	IEN APPLICABLE):	Date				
Rick Stargle PE, PTOE		4/23/2018				
remii Auministrator		Date				



## REVIEW BY FORT BEND COUNTY COMMISSIONERS COURT

# Fort Bend County Engineering Department 301 Jackson Suite 401

301 Jackson Suite 401 Richmond, Texas 77469 281.633.7500 Permits@fortbendcountytx.gov

Χ	Right of Way Permit
	<b>Commercial Driveway Permit</b>
Perr	nit No: 2018-19918

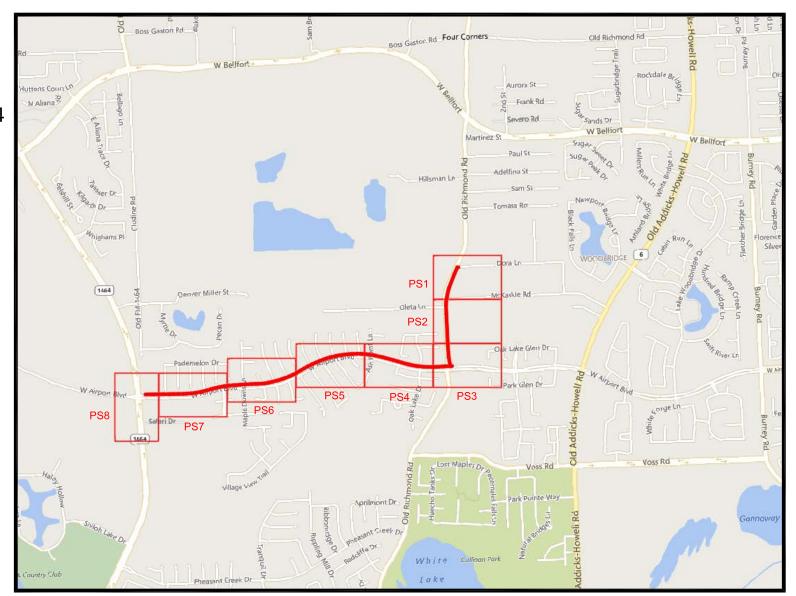
		Permit No: 2	2018-19918			
Appl	licant: Crown	Castle NG Central LLC				
Job	Location Site:	15550 W. Airport Blvd, Sug	gar Land, TX	77498		
Bond	d No.	Date of Bond:	5/12/2014	_Amount:	\$50,000.00	
Layin Road Comi Texa:	ng, Construction, ls, Streets, Highv missioners Court s, of the Minute	came to make use of certain Maintenance, and Repair of ways, and Drainage Ditches in t of Fort Bend County, Texas, s of the Commissioners Court apter 181, Vernon's Texas Sta	Buried Cables Fort Bend Co as passed by of Fort Bend	s, Conduits, and ounty, Texas, Un the Commissic County, Texas,	Pole Lines, In, Under, Acro der the Jurisdiction of the oners Court of Fort Bend C	oss or Along ounty,
Note 1. 2.	Evidence of regrounds for jo Written notice a. 4 b. 1	view by the Commissioners C b shutdown. es are required: 18 hours in advance of constr When construction is complet Administrator thru MyGovern vires one (1) year from date o	uction start u ted and ready mentOnline.c	p, and for final inspec org portal.	tion, submit notification to	
abov	e purpose is her	on Motion of Commissioner _ , duly put and carried eby acknowledged by the Co according to the regulation of	d, it is ORDER mmissioners (	ED, ADJUDGED	, seconded by Commis AND DECREED that said no and County, Texas, and tha	otice of said
Signa	ature		Pres	ented to Comm	issioners Court and appro	ved.
Ву:	Rid J County Engineer	staigle, PE, PTO	E Date	Recorded	Comm. Court No	
	N/A		Clerk	of Commission	ners Court	
Ву:			Ву:			
	Drainage Distri	ct Engineer/Manager		Deputy		

# **Fort Bend County Notice of Construction in Right-of-Way**

Cluster 47A - Old Richmond Rd. and W. Airport Blvd.

PROPOSED BORED HDPE INNERDUCT AND FIBER TO BE PLACED ALONG THE EAST R.O.W. OF OLD RICHMOND RD. AND THE NORTH R.O.W. OF W. AIRPORT BLVD.

MAP AREA LOCATION: CLUSTER 47 - PHASE 2 OLD RICHMOND RD., W. AIRPORT BLVD. & FM 1464



KEY MAP: 567 B & C



## PERMITS REQUIRED /CONTACTS

FORT BEND COUNTY

CARMEN ESCOBAR CEM PERMIT ADMINISTER FORT BEND COUNTY ENGINEERING

WRITTEN NOTICES ARE REQUIRED:

1. 48 HOURS IN ADVANCE OF START OF CONSTRUCTION.

2. WHEN CONSTRUCTION IS COMPLETE AND READY FOR FINAL INSPECTION, MAIL TO.

PERMIT ADMINISTOR/FORT BEND COUNTY ENGINEERING P.O. BOX 1449, ROSENBERG, TX 77471

### DRAWING LIST

- 1. COVER SHEET
- GENERAL NOTES
- LEGEND
- 4 PROJECT SHEET
- 5. PROJECT SHEET 2

- 8 PROJECT SHEET 5
- 9. PROJECT SHEET 6
- 11. PROJECT SHEET 8
- 12. PROFILE SHEET 1

- 15. PROFILE SHEET 4
- 16. PROFILE SHEET 5

### **DESIGN CONTRACTOR:**

Design Co: FiberComm Services, LLC Designer: Larry Anderson

### **CONTRACTOR NOTE**

TITLE: CLUSTER 47A — FORT BEND COUNTY PERMIT   PHASE 2						
	SE 2					
LOC:						
	<u>T BEND COUN</u>					
PMO# / TGT	BUILDING ID: I	N/A				
		346-206-5092				
DWG: Fort Bend - Cluster 47A.dwg						
DRAWING DATE ENGIDESIGN						
ORIGINAL	03/16/18	FCS				
Rev#1	N/A	N/A				
AS-BUILT	N/A	N/A				
	CROWN   FIRER PAGE:					

## **GENERAL NOTES**

## **GENERAL NOTES:**

- 1. CONTRACTOR MUST OBTAIN LOCATES PRIOR TO DISTURBING THE GROUND.
- 2. THE CONTRACTOR SHALL CONTACT A MEMBER OF TEXAS ONE CALL SYSTEM A MIN. OF 48 HOURS BEFORE DIGGING. YOU ONLY NEED TO CONTACT ONE CENTER. THAT CENTER WILL RELAY THE INFORMATION TO THE OTHER TWO CENTERS.
- TEXAS ONE CALL 713-223-4567 OR 1-800-245-4545
- TESS (TEXAS EXCAVATION SAFETY SYSTEM) 811
- LONE STAR NOTIFICATION SYSTEM 800-669-8344 OR 713-223-4567
- REMINDER: ANY UNDERGROUND FACILITY OWNERS WHO ARE NOT MEMBERS OF TEXAS ONE CALL, TESS OR LONESTAR
- 3. NOTIFICATION CENTERS IN THE STATE OF TEXAS, MUST BE CONTACTED DIRECTLY BY THE ORIGINATOR OF THE LOCATION REQUEST.
- 4. CONTRACTOR MUST HAVE A COPY OF THE APPROVED PERMIT FROM THE APPROPRIATE AGENCY ON THE JOBSITE AT ALL TIMES.
- 5. THE CONTRACTOR SHALL VERIFY THE ROAD R.O.W. AND EASEMENTS PROIR TO COMMENCING WORK. NO FACILITIES SHOULD BE PLACED ON PRIVATE PROPERTY UNLESS OTHERWISE SPECIFIED.
- 6. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UNDERGROUND FACILITIES BEFORE COMMENCING WORK AND AGREE TO BE FULLY RESPONSIBLE FOR ALL DAMAGES CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UNDERGROUND FACILITIES.
- 7. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES TO EXISTING WATER, WASTEWATER AND STORM DRAINAGE LINES. DAMAGES SHALL BE REPAIRED IN ACCORDANCE WITH THE MUNICIPALITY AGENCY (STATE, COUNTY, OR CITY), DEPARTMENT OF PUBLIC WORKS AND ENGINEERING'S STANDARD CONSTRUCTION SPECIFICATIONS FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE, AND STREET PAVING AND STREET PAVING AND STRUCTION DETAILS FOR WASTEWATER COLLECTION S SYSTEMS, WATER LINES, STORM DRAINAGE, AND STREET PAVING REFERENCED ABOVE, AT NO ADDITIONAL COST.
- 8. ALL CABLE WILL BE PLACED AT STANDARD MINIMUM DEPTH. (CROWN CASTLE FIBER STANDARD IS 48" DEEP UNLESS OTHERWISE DIRECTED BY A CROWN CASTLE FIBER REPRESENTATIVE OR SPECIFIED ON THE DRAWING.)
- 9. NO MORE TRENCH OPENED AT ONE TIME THAN CAN BE BACKFILLED AND COMPACTED IN 10" LIFTS AT THE END OF EACH DAY. ( NO TRENCH LEFT OPENED OVERNIGHT )
- 10. ALL EXCESS EXCAVATION TO BE REMOVED FROM THE ROAD RIGHT-OF-WAY AT THE END OF EACH DAY.
- 11. ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND ANY DRAINAGE DITCH OR STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO EXISTING CONDITIONS OR BETTER.
- 12. ROAD MUST BE KEPT OPEN TO TRAFFIC AND CONTRACTOR MUST PROVIDE ADEQUATE FLAGMEN, SIGNALS, ETC., TO PROVIDE COMPLETE SAFETY TO THE PUBLIC. IF IT BECOMES NECESSARY FOR EQUIPMENT TO OPERATE ON A PORTION OF THE PAVEMENT. PRECAUTIONS MUST BE TAKEN TO PREVENT ANY DAMAGE WHATSOEVER TO THE PAVEMENT.
- 13. CONDITION OF ROAD UPON COMPLETION OF JOB SHALL BE AS GOOD OR BETTER THAN PRIOR TO STARTING
- 14. CONTRACTOR SHALL COMPLY WITH LATEST EDITION OF OSHA REGULATIONS AND THE STATE OF TEXAS LAWS CONCERNING EXCAVATION.
- 15. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT ROOT SYSTEMS OF SHRUBS, PLANTS, AND TREES ALONG THE AREA OF EXCAVATION.
- 16. NO CONSTRUCTION ON PRIVATE PROPERTY WILL COMMENCE UNTIL RIGHT OF ENTRY OR EASEMENT IS GRANTED.
- 17. CONTRACTOR SHALL NOT EXCEED THE PURCHASE ORDER VALUE WITHOUT AUTHORIZATION IN WRITING FROM THE APPROPRIATE CROWN CASTLE FIBER REPRESENTATIVE ANY LANDSCAPING WILL BE REPLACED TO EQUAL OR BETTER THAN THAT WHICH EXISTED PRIOR TO WORK.
- 18. PROJECT SITE WILL BE PROPERLY SECURED PRIOR TO THE END OF EACH DAY.
- 19. ALL WORK IS TO BE IN ACCORDANCE WITH THE STANDARDS OF ALL AUTHORITIES HAVING JURISDICTION IN THE WORK ZONE.
- 20. CONTRACTORS ARE ADVISED TO CONTACT CROWN CASTLE FIBER FOR ANY ADDITIONAL INFORMATION OR CLARIFICATION CONCERNING SCOPE OF WORK OR THE REQUIREMENTS NECESSARY FOR PROJECT COMPLETION.
- 21. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, QUANTITIES AND EXISTING CONDITIONS PRIOR TO CONSTRUCTION. IF A SIGNIFICANT CHANGE TO THE RUNNING LINE IS NEEDED, PLEASE CONTACT YOUR CROWN CASTLE FIBER REPRESENTATIVE BEFORE PROCEEDING.
- 22. BEFORE CONSTRUCTION BEGINS. CONTRACTOR SHALL TAKE APPROPRIATE PRECAUTIONS TO AVOID ANY POTENTIAL OBSTRUCTIONS PRIOR TO PROCEEDING WITH WORK.
- 23. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT ROOT SYSTEMS OF SHRUBS, PLANTS, AND TREES ALONG THE AREA OF EXCAVATION.
- 24. CONTRACTOR WILL COMPLETE ALL WORK PER "CROWN CASTLE FIBER" CONSTRUCTION SPECIFICATIONS.
- 25. CONTRACTOR SHALL MAINTAIN A SET OF REDLINE DRAWINGS RECORDING AS-BUILT CONDITIONS DURING CONSTRUCTION. THESE REDLINE MARKED UP DRAWINGS WILL BE SUBMITTED TO THE DESIGN CONSULTANT WHO WILL MAKE THE CHANGES ON THE AS-BUILT RECORD DRAWINGS.
- 26. RIGHT-OF-WAY WILL BE RESTORED TO EQUAL OR BETTER CONDITION WHEN CONSTRUCTION IS COMPLETE.

### ABBR. DESCRIPTION

**BUILDING OWNED** B.O. B.O.C. BUILDING OWNED CONDUIT EOC **EDGE OF CURB** EMT **ELECTIC METALLIC TUBING** EOP EDGE OF PAVEMENT FDP FIBER DISTRIBUTION PANEL FF FINISHED FLOOR **FMC** FLEXIBLE METALLIC CONDUIT GRC GALVANIZED RIGID CONDUIT **HDPF** HIGH DENSITY POLYETHYLENE HANDHOLE НН JUNCTION BOX JB MH MANHOLE РΒ PULLBOX ы PROPERTY LINE PVC POLYVINYL CHLORIDE ROW **RIGHT OF WAY** SP SPLICE PANEL STA. STATION

SIDEWALK

S/W

## APWA STANDARD

COLOR CODE FOR TEMPORARY MARKING OF UNDERGROUND FACILITIES:

RED = ELECTRIC POWERLINES, CABLES, CONDUIT, AND LIGHTING CABLES
YELLOW = GAS, OIL, STEAM, PETROLEUM, OR GASEOUS MATERIAL
ORANGE = COMMUNICATION, ALARM, OR SIGNAL LINES, CABLES, OR CONDUIT
BLUE = POTABLE WATER
GREEN = SEWER AND DRAIN LINES
PURPLE = RECLAIMED WATER, IRRIGATION, AND SLURRY
PINK = TEMPORARY SURVEY MARKINGS
WHITE = PROPOSED EXCAVATION





#### POLE ATTACHMENT **BOND EXISTING** 0+00 POLE ATTACHMENT POLE NO. 1 ATTACHMENT 00'-00" OWNER POLENO JOINT USE POLE PROPOSED 0+00 JOINT USE POLE Ø OWNER P-P= FTG STRAND FTG. EXISTING W/ TRANFORMER **POLENO** 0+00 × OWNER POWER POLE P-P= FTG STRAND FTG. PROPOSED **POLENO** 0+00 POWER POLE W/ OWNER 0+00 OWNER MANHOLE TRANSFORMER MANHOLE МН **POLENO EXISTING** SIZE OWNER STEEL POLE MANHOLE **POLENO** PROPOSED 0+00 CONCRETE POLE O OWNER 0+00 POI FNO HANDHOLE НН **EXISTING** 0+00 HANDHOLE OWNER POLENO TELCO POLE SIZE HANDHOLE PROPOSED 0+00 **PROPOSED** OWNER POLENO SIZE TELCO POLE 0+00 **PULLBOX** PB OWNER SIZE **EXISTING EXISTING RISER** ® FIG PULLBOX CC FIBER SIZE **PROPOSED** PROPOSED RISER H-H= FTG **EXISTING DOWN** CONDUIT / INNER-DUCT 3-1.25" **GUY & ANCHOR** FTG. EXISTING H-H= FTG 3-1.25" CONDUIT / INNER-DUCT PROPOSED DOWN L/H 1/2" SCREW **GUY & ANCHOR** FTG. PROPOSED 0+00 **EXISTING DOWN** OWNER OS-5' COTT GUY MARKER - EXISTING **PROPOSED** L/H DOWN GUY MARKER - PROPOSED 1/2" COTT EXISTING S/W A **GUY & ANCHOR** PROPOSED S/W L/H 1/2" SCREW FDP LOCATION **GUY & ANCHOR** FDP - EXISTING EXISTING S/W 7 GUY EDP LOCATION FDP - PROPOSED PROPOSED S/W GUY L/H 1/2" FF-FF= FTG ISP DUCT FTG. EXISTING 1-1.25" FTG >>> EXISTING EXTENDED MESSENGER FF-FF= FTG 1-1.25" ISP DUCT FTG, PROPOSED FTG >>> PROPOSED EXTENDED MESSENGER 0+00 OWNER SIZE **PULLBOX** PB FTG **OVERHEAD GUY EXISTING EXISTING PULLBOX** CC FIBER SIZE **OVERHEAD GUY** PROPOSED **PROPOSED**

## **LEGEND**

## SIZE CABLE SIZE EXISTING

## SIZE

CABLE SIZE PROPOSED

## FTG

SLACK LOOP AERIAL EXISTING



SLACK LOOP AERIAL PROPOSED



SLACK LOOP UG EXISTING

SLACK UG PROPOSED

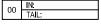


SPLICE CASE EXISTING

SPLICE CASE PROPOSED



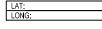
FIBER SIZE IN-OUT SEQUENTIAL



FIBER SIZE IN-TAIL SEQUENTIAL



FIBER SIZE TAIL-OUT SEQUENTIAL

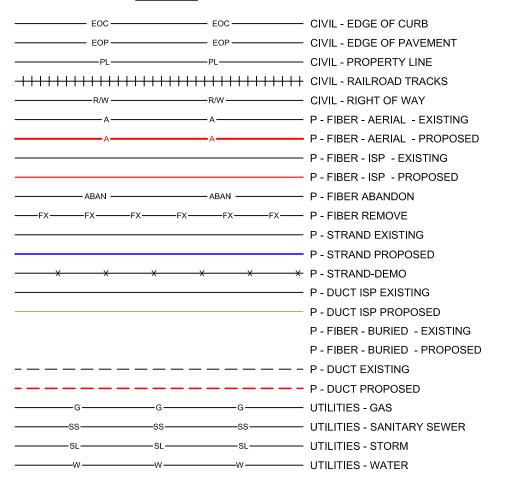


LATITUDE & LONGITUDE

- (1) CONDUIT OWNER: CC FIBER CONDUIT LENGTH: LENGTH CONDUIT QUANITY: QUANITY CONDUIT SIZE: SIZE CONDUIT TYPE: TYPE NOTE:
- (1) CONDUIT OWNER: CC FIBER CONDUIT LENGTH: LENGTH CONDUIT QUANITY: QUANITY CONDUIT SIZE: SIZE CONDUIT TYPE: TYPE INNER-DUCT QUANITY: QUAN INNER-DUCT SIZE: SIZE INNER-DUCT TYPE: TYPE
- CONDUIT TYPE: TYPE
  INNER-DUCT QUANITY: QUANITY
  INNER-DUCT SIZE: SIZE
  INNER-DUCT TYPE: TYPE
  NOTE:
- (1) INNER-DUCT OWNER: CC FIBER INNERDUCT LENGTH: LENGTH INNER-DUCT QUANITY: QUANITY INNER-DUCT SIZE: SIZE INNER-DUCT TYPE: TYPE NOTE:
- STRAND SIZE: SIZE
  STRAND LENGTH: LENGTH
  NOTE:
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  CABLE OWNER: CC FIBER
  CABLE LENGTH: FTG
  NOTES:

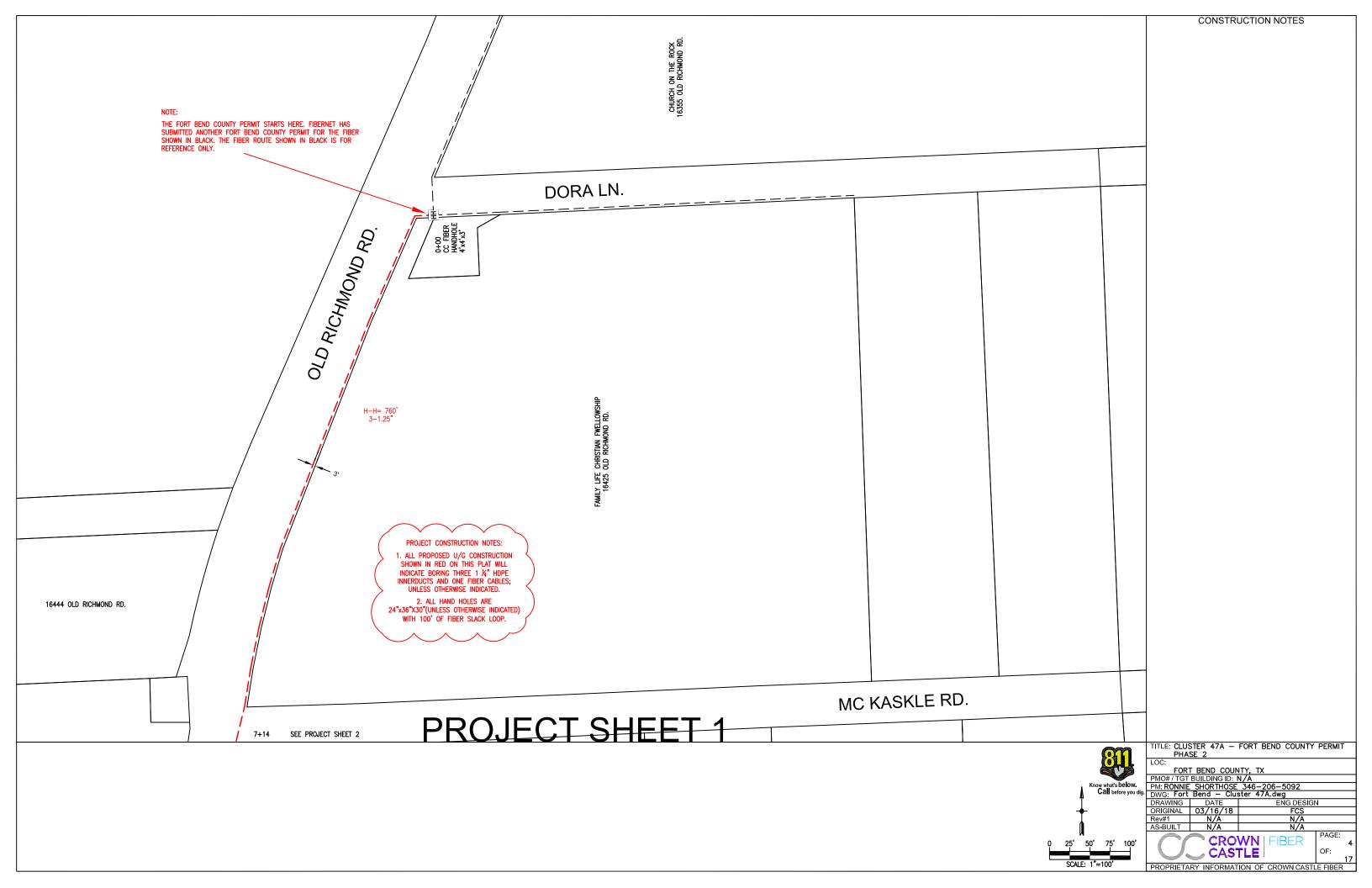
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- (1) CONDUIT OWNER: CC FIBER CONDUIT LENGTH: LENGTH CONDUIT QUANITY; QUANITY CONDUIT SIZE: SIZE CONDUIT TYPE: TYPE INNER-DUCT QUANITY; QUANITY INNER-DUCT TYPE: TYPE NOTE:
- (1) INNER-DUCT OWNER: CC FIBER INNERDUCT LENGTH: LENGTH INNER-DUCT QUANITY: QUANITY INNER-DUCT SIZE: SIZE INNER-DUCT TYPE: TYPE NOTE:
- STRAND SIZE: SIZE
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  NOTE:
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  CABLE OWNER: CC FIBER
  CABLE LENGTH: FTG
  NOTES:

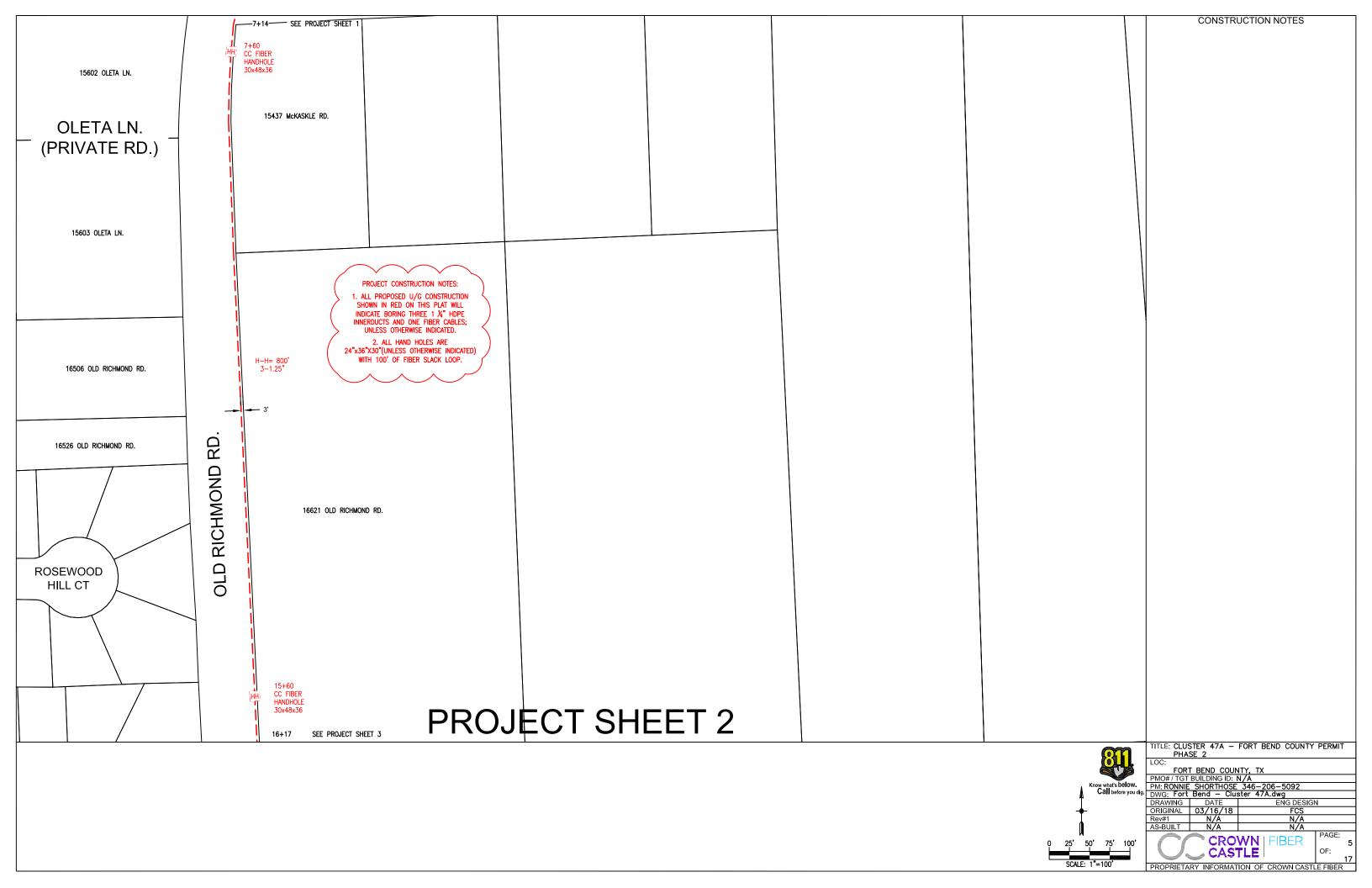
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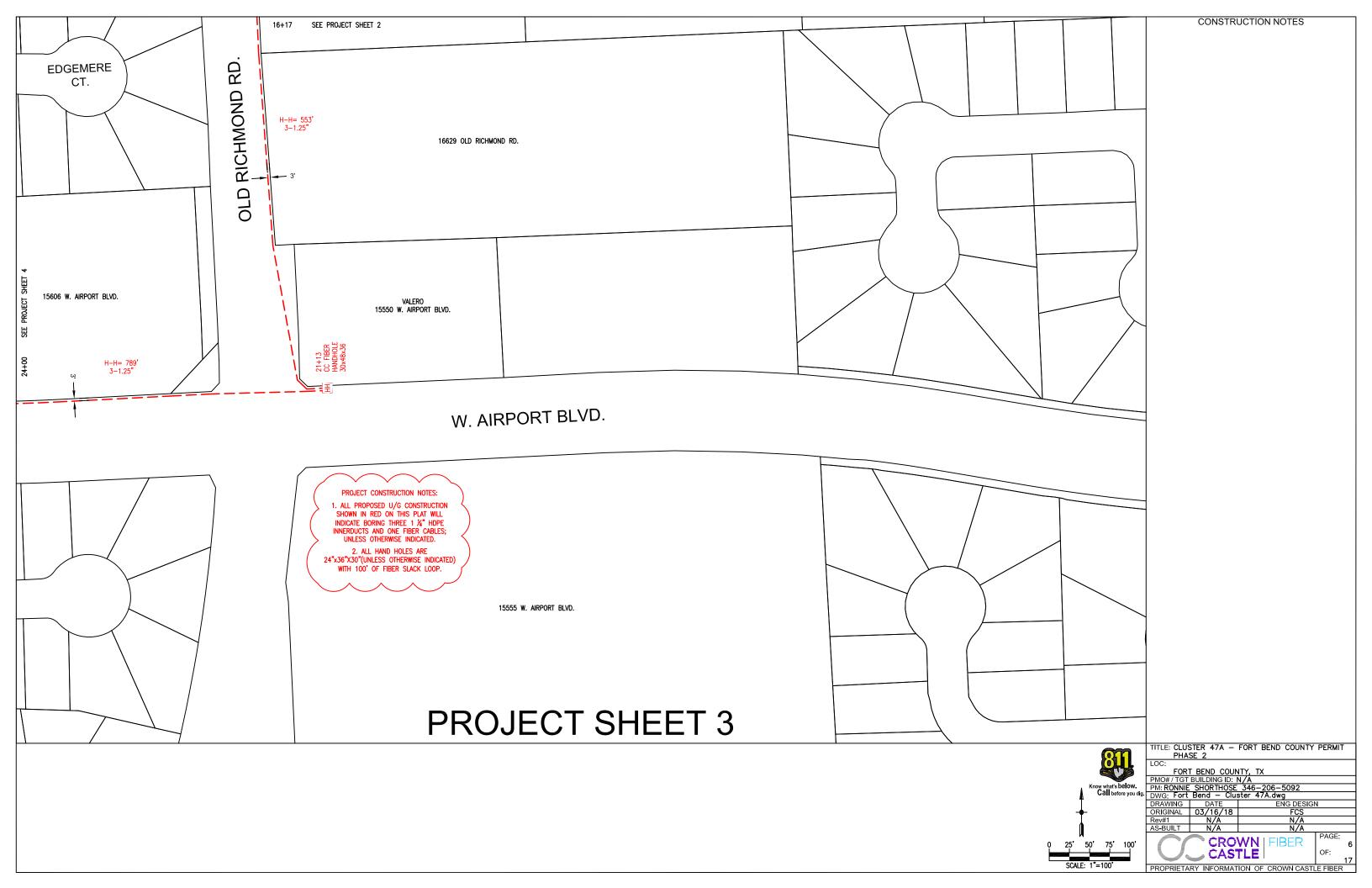


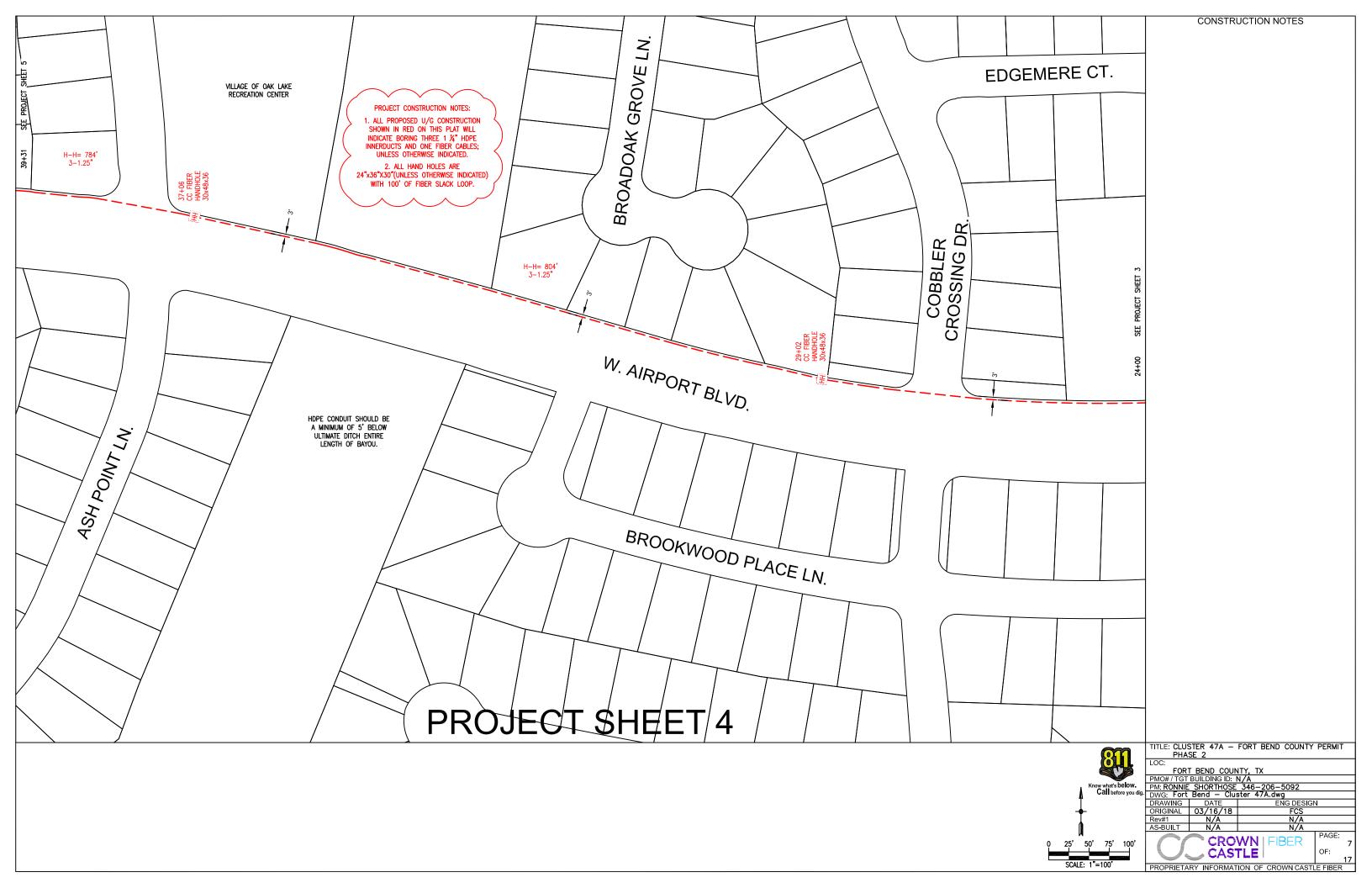


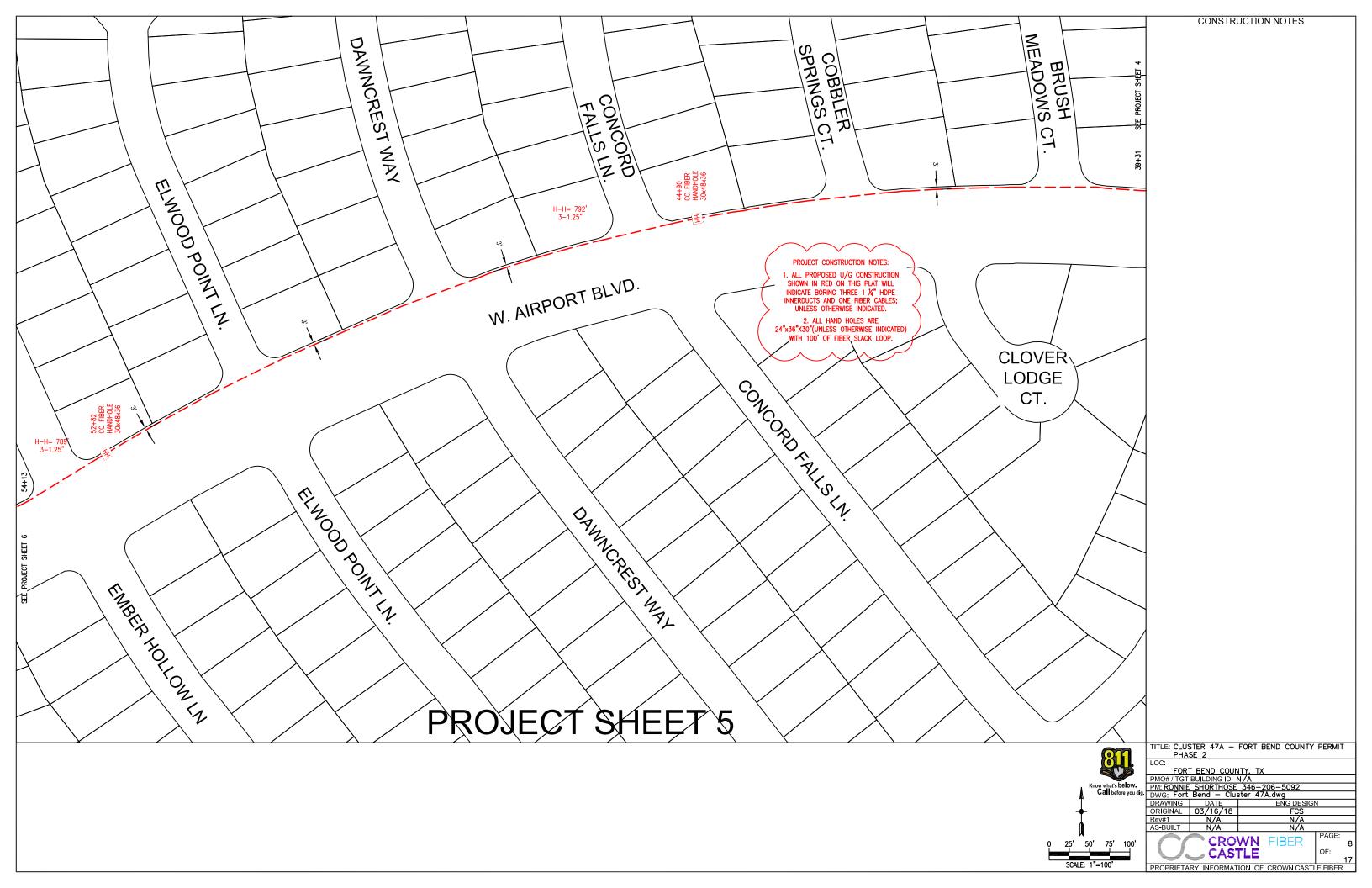
			5551117
	SIER 4/A – SE 2	FORT BEND COUNTY	PERMIT
LOC:	<u> </u>		
FOR:	T BEND COUN	NTY, TX	
PMO# / TGT	BUILDING ID: [	N/Ã	
		346-206-5092	
DWG: Fort	Bend - Clus	ster 47A.dwg	
DRAWING	DATE	ENG DESIGI	1
ORIGINAL	03/16/18	FCS	
Rev#1	N/A	N/A	
AS-BUILT	N/A	N/A	
	CRO	WN I FIBER	PAGE:
CASTLE OF: 1			
PROPRIETARY INFORMATION OF CROWN CASTLE FIBER			

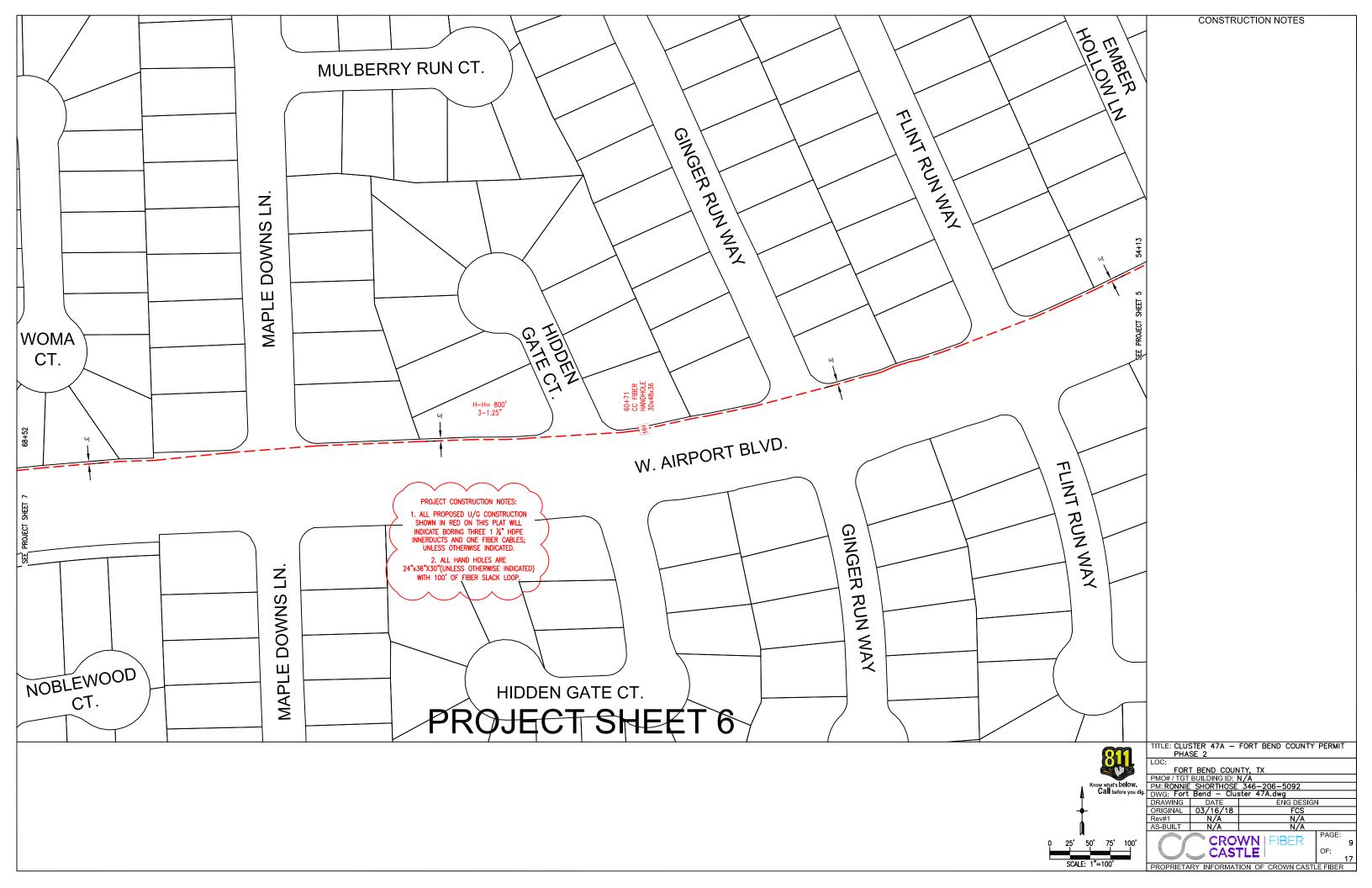


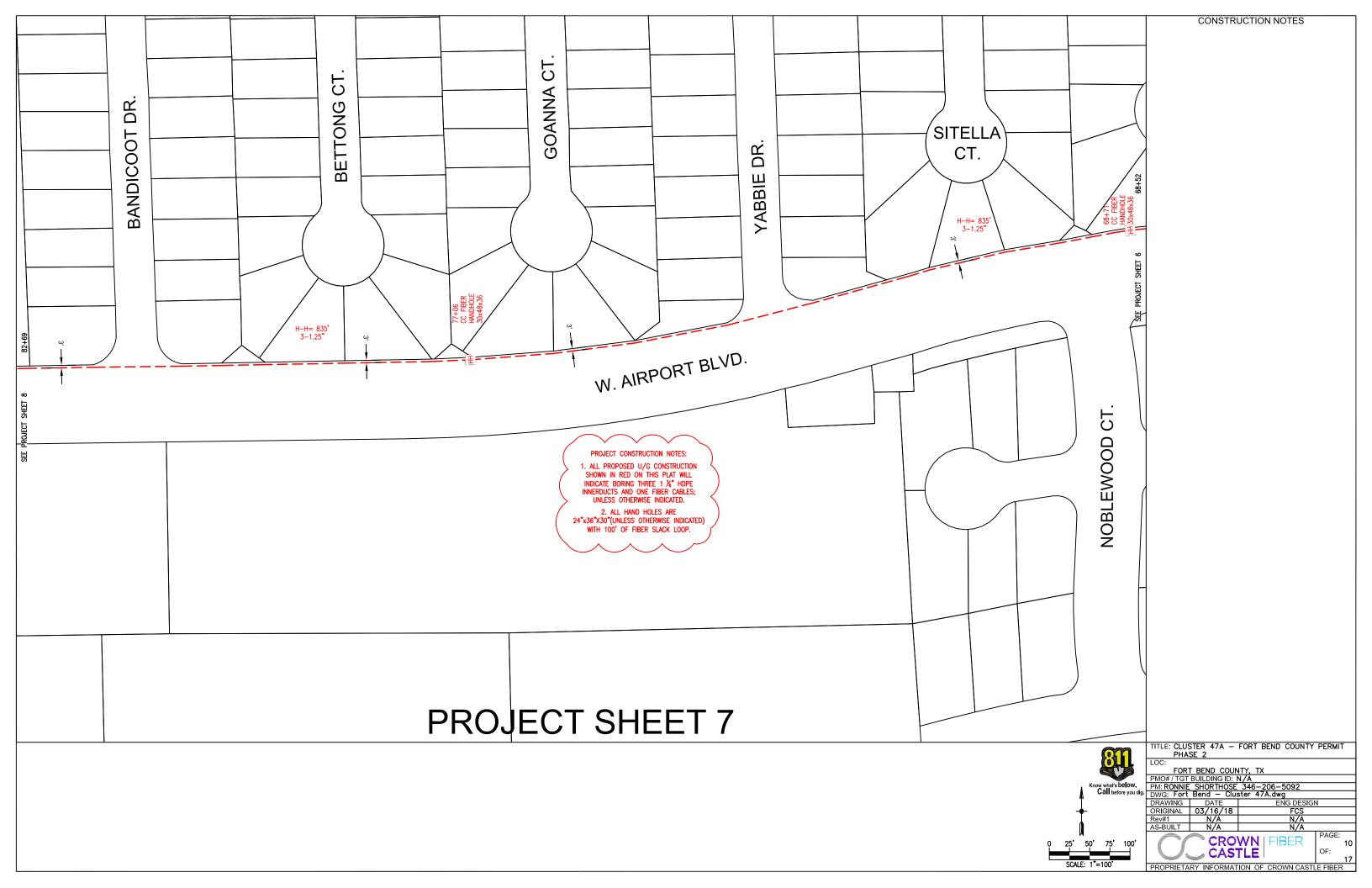


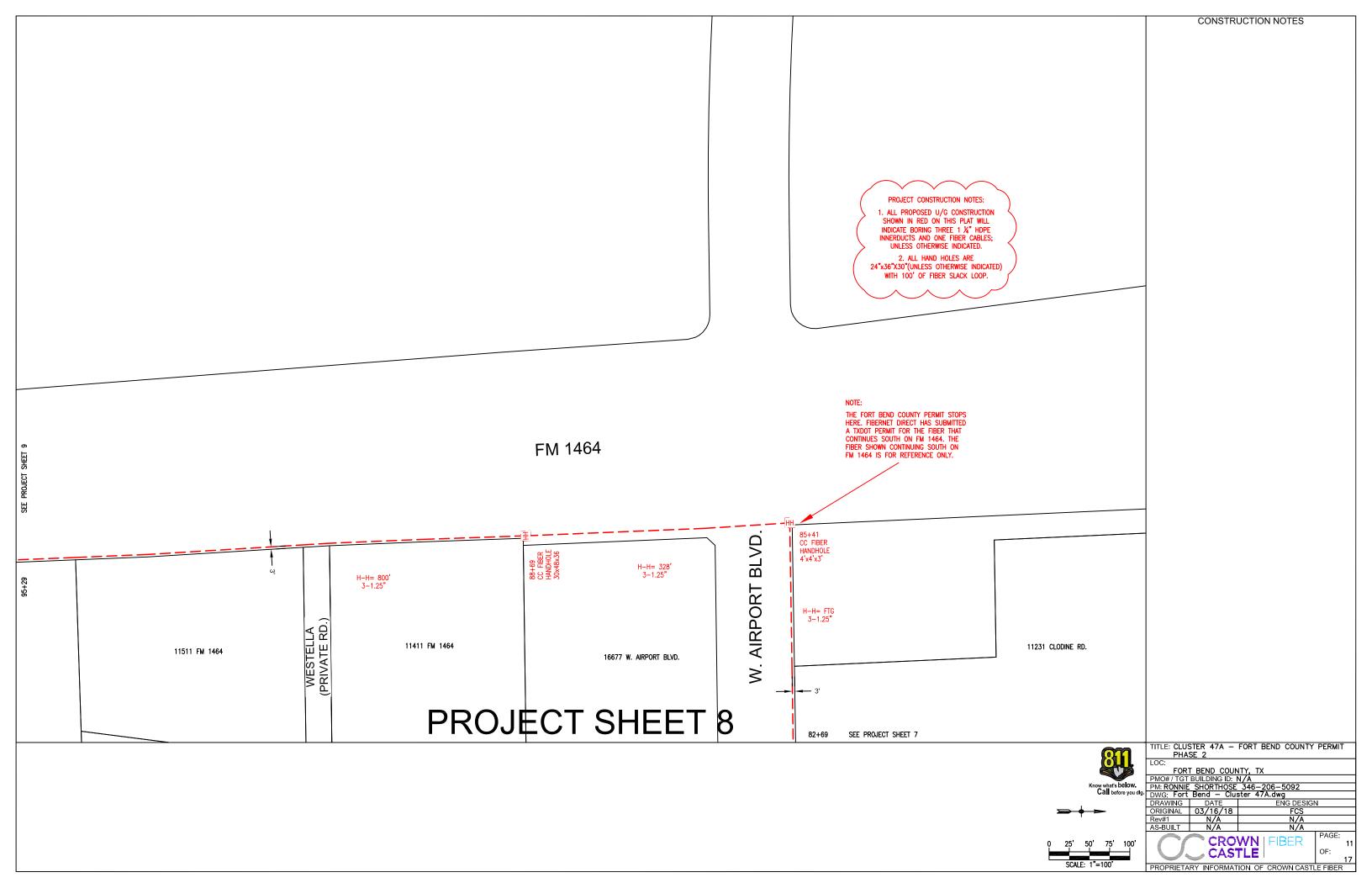


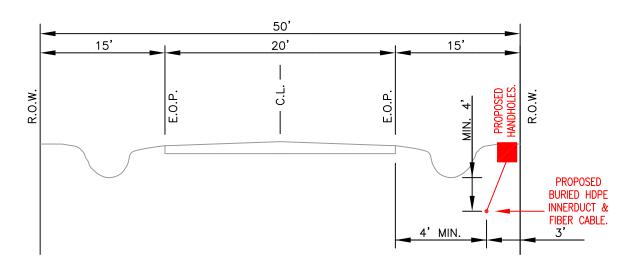




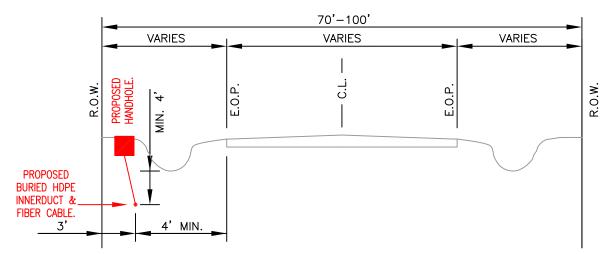




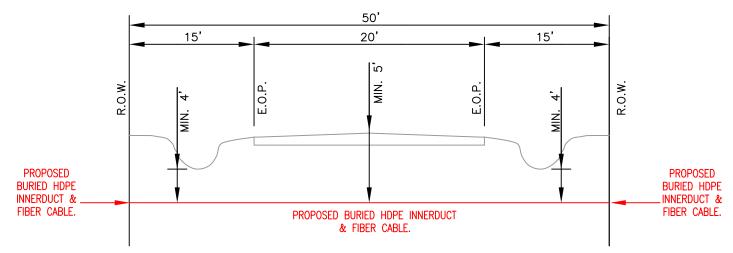




DORA LN. AT OLD RICHMOND RD. LOOKING EAST

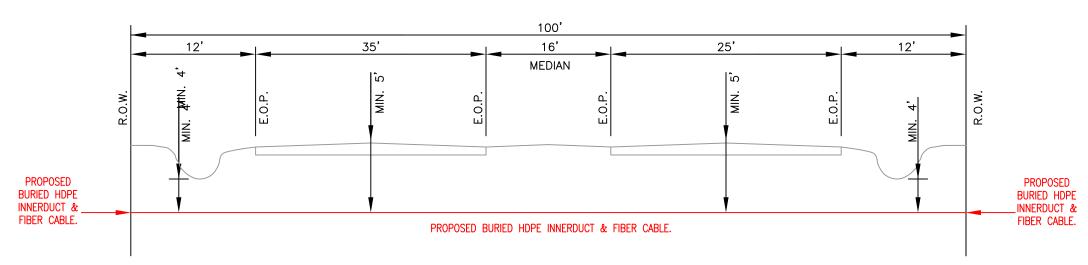


OLD RICHMOND RD. FROM DORA LN. TO W. AIRPORT BLVD. LOOKING SOUTH

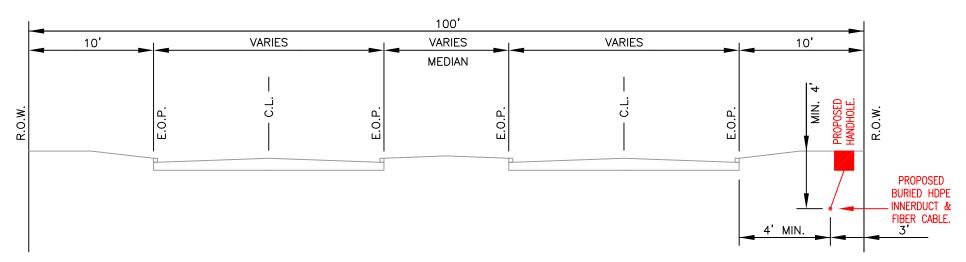


McKASKIE RD. @ OLD RICHMOND RD. LOOKING EAST

		FORT BEND COUNTY	PERMI'	T
PHA:	SE 2			
LOC:				
FOR:	T BEND COUN	ITY, TX		
PMO# / TGT	BUILDING ID: I	N/A		
		346-206-5092		
DWG: Fort	Bend - Clus	ster 47A.dwg		
DRAWING	DATE	ENG DESIGN	1	
ORIGINAL	03/16/18	FCS		
Rev#1	N/A	N/A		
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)	<b>9 4</b> / (3			17
PROPRIETA	RY INFORMAT	ION OF CROWN CASTL	E FIBER	₹

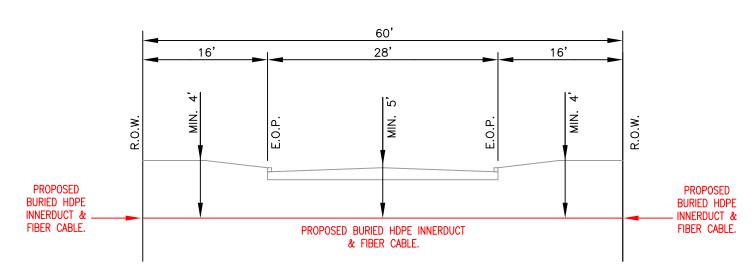


OLD RICHMOND RD. © W. AIRPORT BLVD. LOOKING NORTH

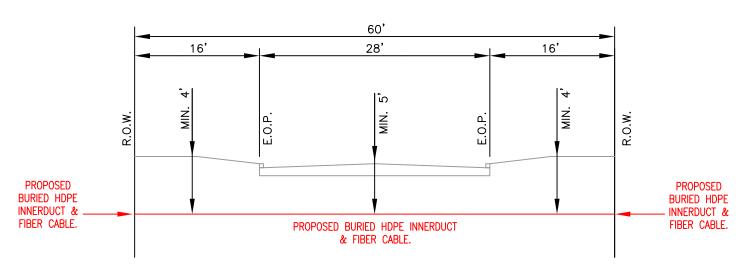


W. AIRPORT BLVD. FROM OLD RICHMOND RD. TO FM 1464 LOOKING WEST

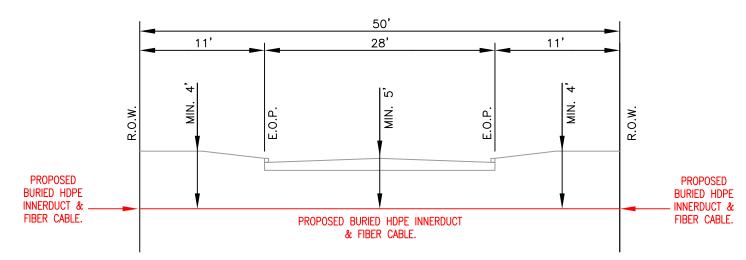




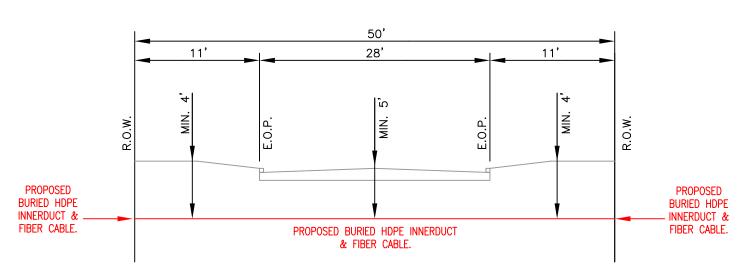
COBBLER CROSSING DR. © W. AIRPORT BLVD. LOOKING NORTH



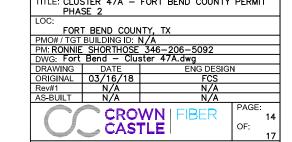
ASH POINT LN. © W. AIRPORT BLVD. LOOKING NORTH

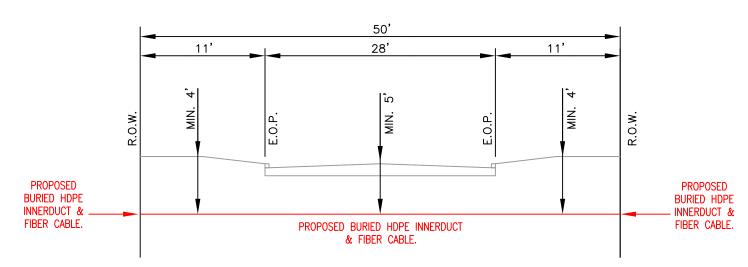


BRUSH MEADOW CT. © W. AIRPORT BLVD. LOOKING NORTH

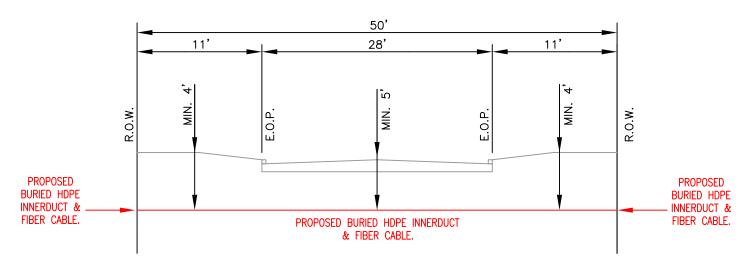


COBBER SPRINGS CT. @ W. AIRPORT BLVD. LOOKING NORTH

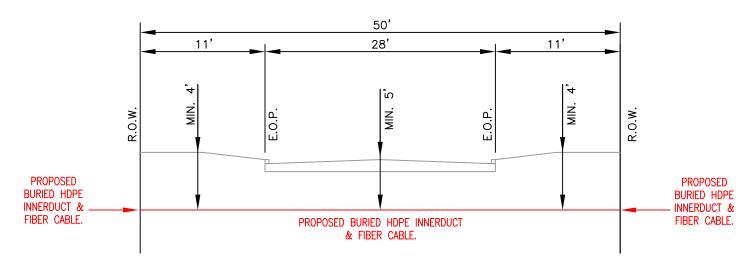




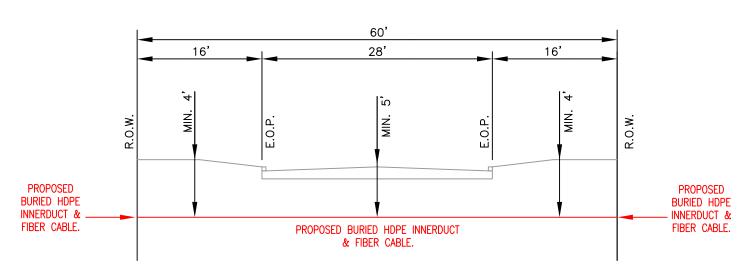
CONCORD FALLS LN. @ W. AIRPORT BLVD. LOOKING NORTH



DAWNCREST WAY @ W. AIRPORT BLVD. LOOKING NORTH



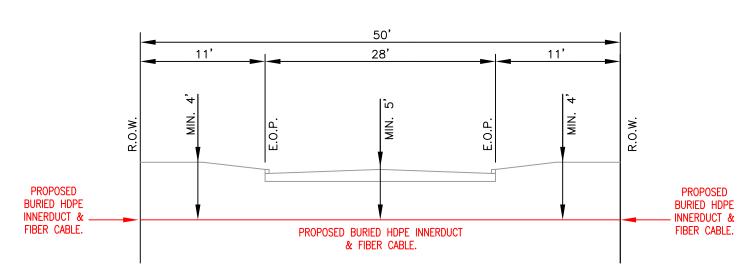
ELWOOD POINT LN. © W. AIRPORT BLVD. LOOKING NORTH



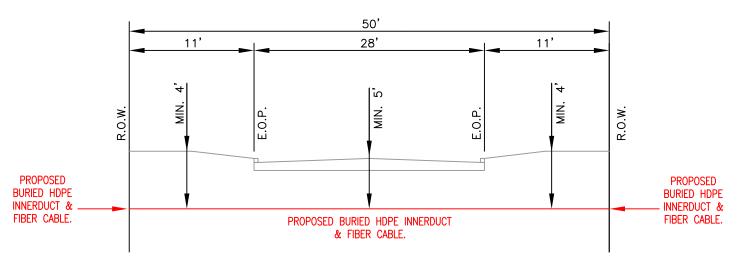
EMBER HOLLOW LN. © W. AIRPORT BLVD. LOOKING NORTH



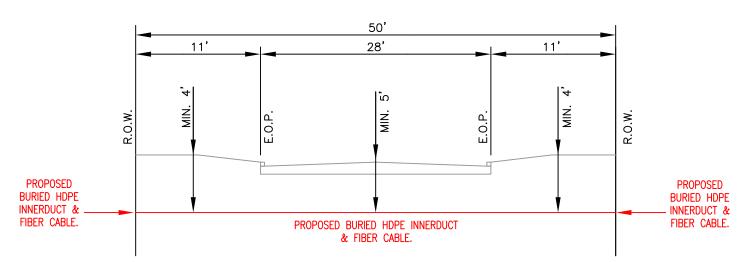
TITLE: CLUSTER 47A - FORT BEND COUNTY PERMI



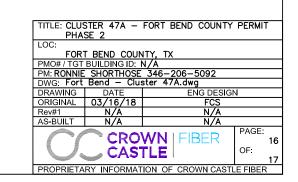
FLINT RUN WAY @ W. AIRPORT BLVD. LOOKING NORTH

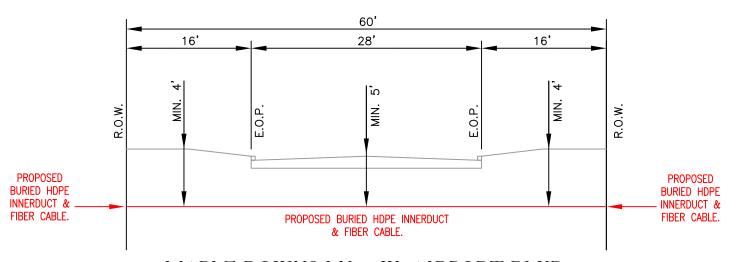


GINGER RUN WAY © W. AIRPORT BLVD. LOOKING NORTH



HIDDEN GATE CT. © W. AIRPORT BLVD. LOOKING NORTH



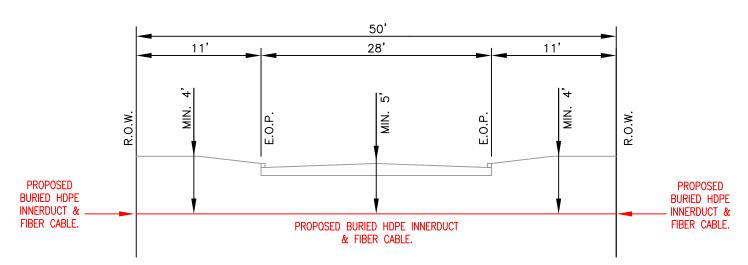


PROPOSED BURIED HDPE INNERDUCT & FIBER CABLE.

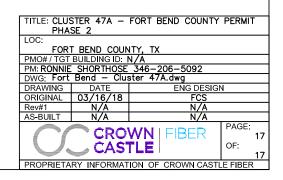
PROPOSED BURIED HDPE INNERDUCT & FIBER CABLE.

MAPLE DOWNS LN. © W. AIRPORT BLVD. LOOKING NORTH

YABBIE DR. © W. AIRPORT BLVD. LOOKING NORTH



BANDICOOT DR. © W. AIRPORT BLVD. LOOKING NORTH



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## Notes for Figure 6H-1—Typical Application 1 Work Beyond the Shoulder

### Guidance:

1. If the work space is in the median of a divided highway, an advance warning sign should also be placed on the left side of the directional roadway.

### Option:

- 2. The ROAD WORK AHEAD sign may be replaced with other appropriate signs such as the SHOULDER WORK sign. The SHOULDER WORK sign may be used for work adjacent to the shoulder.
- 3. The ROAD WORK AHEAD sign may be omitted where the work space is behind a barrier, more than 24 inches behind the curb, or 15 feet or more from the edge of any roadway.
- 4. For short-term, short duration or mobile operation, all signs and channelizing devices may be eliminated if a vehicle with activated high-intensity rotating, flashing, oscillating, or strobe lights is used.
- 5. Vehicle hazard warning signals may be used to supplement high-intensity rotating, flashing, oscillating, or strobe lights.

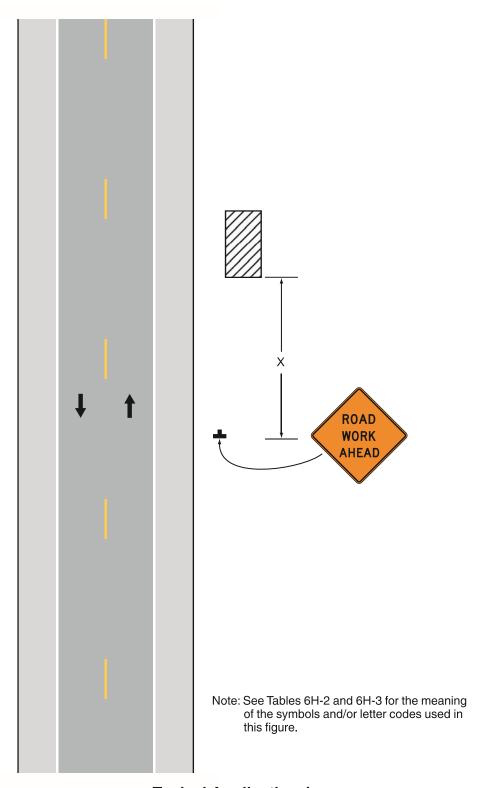
## **Standard:**

6. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.

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Figure 6H-1. Work Beyond the Shoulder (TA-1)



**Typical Application 1** 

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## Notes for Figure 6H-3—Typical Application 3 Work on the Shoulders

### Guidance:

1. A SHOULDER WORK sign should be placed on the left side of the roadway for a divided or one-way street only if the left shoulder is affected.

### Option:

- 2. The Workers symbol signs may be used instead of SHOULDER WORK signs.
- 3. The SHOULDER WORK AHEAD sign on an intersecting roadway may be omitted where drivers emerging from that roadway will encounter another advance warning sign prior to this activity area.
- 4. For short duration operations of 60 minutes or less, all signs and channelizing devices may be eliminated if a vehicle with activated high-intensity rotating, flashing, oscillating, or strobe lights is used.
- 5. Vehicle hazard warning signals may be used to supplement high-intensity rotating, flashing, oscillating, or strobe lights.

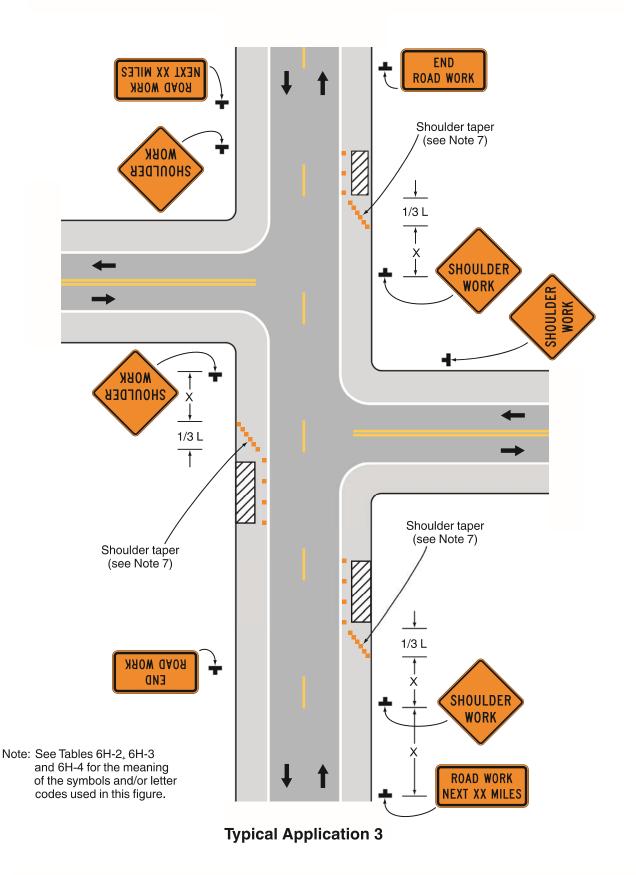
### Standard:

- 6. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.
- 7. When paved shoulders having a width of 8 feet or more are closed, at least one advance warning sign shall be used. In addition, channelizing devices shall be used to close the shoulder in advance to delineate the beginning of the work space and direct vehicular traffic to remain within the traveled way.

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Figure 6H-3. Work on the Shoulders (TA-3)



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