



155 East Broad Street
20th Floor
Columbus, Ohio, 43215

o: 614-222-1330
f: 614-222-1337

June 25, 2020

Ms. Tanowa M. Troupe
Ohio Power Siting Board
PUCO Docketing Division
180 East Broad Street, 11th Floor
Columbus, OH 43215-3716

Re: Case No. 16-253-GA-BTX
Reading Permit for Multiple Bores

Dear Ms. Troupe:

Duke Energy Ohio, Inc., is filing, herewith, a permit, issued by the City of Reading, for a bore in various locations.

Please contact me if you have any questions.

Sincerely,

Emily A. Olive, CP
Paralegal

CITY OF READING
BUILDING DEPARTMENT

EXCAVATION/FILL PERMIT

DATE ISSUED ~~3/24/2020~~ 6/25/2020 PERMIT # _____
LOCATION various locations noted on Excavation Summary VOID AFTER _____
OWNER Duke Energy Ohio EXCAVATION X FILL _____ OTHER _____
CONTRACTOR TBD ADDRESS TBD
ENGINEER Burns & McDonnell ADDRESS 530 W. Spring St. Columbus, OH 43215
QUANTITY various quantities noted on Excavation Summary CUBIC YARDS FEE _____
BORROW/DISPOSAL SITE: TBD

This permit is issued in accordance with terms and conditions of the City of Reading Ordinance No. 82-57. The owner is required/ not required to engage a professional engineer or architect/ a geotechnical engineer, for field observation and testing and for submission of a summary report to this office upon completion of operations. This permit must be on the job and in the hands of the person actually engaged in doing the work.

The Excavating or Filling must be performed in compliance with all existing Ordinances and Regulations of the City of Reading.

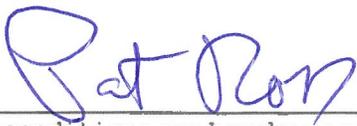
In consideration of the issuance of this permit the applicant and owner agree to indemnify and hold the City of Reading harmless from any and all expense, damage, loss or liability for injury to persons or property, public or private, due either directly or indirectly to the permission and authority herein given.

Drainage of buildings and paved areas shall be in accordance with the OHIO BASIC BUILDING CODE.

The owner shall notify this office twelve (12) hours prior to start of work and when work is completed. All work shall be subjected to final inspection upon completion.

ATTACHMENTS:

- a. Soil boring logs, analysis, and report with recommendations
- b. Declaration of contract for Geotechnical Engineering Serv.
- c. Authorization from adjoining property owners.
- d. M.S.D. Bond
- e. Public works bond

Permit issued by 
The above terms and conditions are hereby accepted:

Requested work hours are from 7am-7pm for all work

Excavation Summary

Road/Street	Start Lat	Start Long	End Lat	End Long	Length of Cut (ft)	Approximate Excavation Dirt (cu. Yds)
West Street	39°14'02.25"N	84°26'14.48"W	39°13'59.10"N	84°26'17.23"W	400	197
West Street	39°13'55.77"N	84°26'18.29"W	39°13'45.77"N	84°26'24.34"W	1130	557
W. Pleasant St.	39°13'45.77"N	84°26'24.34"W	39°13'43.94"N	84°26'20.22"W	360	178
Market St.	39°13'43.94"N	84°26'20.22"W	39°13'40.77"N	84°26'22.08"W	345	170
Columbia St.	39°13'40.77"N	84°26'22.08"W	39°13'40.37"N	84°26'22.35"W	40	20
Market St.	39°13'40.37"N	84°26'22.35"W	39°13'37.02"N	84°26'23.87"W	360	178
Mechanic St.	39°13'37.02"N	84°26'23.87"W	39°13'35.45"N	84°26'19.71"W	340	168
Reading Rd. (US-42)						
NOTE: this open cut crossing permit was submitted to ODOT						
Mechanic St.	39°13'35.45"N	84°26'19.71"W	39°13'35.29"N	84°26'19.32"W	75	37
Mechanic St.	39°13'35.29"N	84°26'19.32"W	39°13'34.31"N	84°26'16.65"W	225	111
Indiana & Ohio Railroad-Mechanic St.						
NOTE: this bored crossing was submitted to SORTA & Indiana & Ohio Railway						
Mechanic St.	39°13'34.31"N	84°26'16.65"W	39°13'34.03"N	84°26'16.09"W	N/A-bored	N/A-bored
Mechanic St.	39°13'34.03"N	84°26'16.09"W	39°13'32.86"N	84°26'13.18"W	260	128
3rd St.	39°13'32.70"N	84°26'13.22"W	39°13'25.87"N	84°26'17.32"W	756	373
Vine St.	39°13'25.87"N	84°26'17.32"W	39°13'25.47"N	84°26'17.64"W	55	27
3rd St.	39°13'25.47"N	84°26'17.64"W	39°13'19.35"N	84°26'21.30"W	700	345
Benson St.	39°13'19.35"N	84°26'21.30"W	39°13'18.91"N	84°26'21.60"W	40	20
3rd St.	39°13'18.91"N	84°26'21.60"W	39°13'12.22"N	84°26'25.89"W	760	375
along Vorhees St.	39°13'12.22"N	84°26'25.89"W	39°13'13.11"N	84°26'28.40"W	215	106
East Galbraith Rd.						
NOTE: this is a bored crossing so no road excavation will take place						
	39°12'41.83N	84°26'47.05"W	39°12'40.41"N	84°26'43.62"W	N/A-bored	N/A-bored

Excavations for open cut efforts will be managed at minimum 4' depth and 4'-7' in width.

Excavation/Fill Permit Conditions

1. Streets shall be paved curb to curb upon completion of installation. This will be inspected by City of Reading Public Works to ensure proper road construction specifications.
2. Traffic control will maintained by contractor.
3. Construction Hours permitted will be 7AM-7PM
4. Contractor will make every attempt to accommodate residents/businesses during construction.
5. All holes will be properly plated and covered in a safe manner
6. This permit is subject to the City of Reading's appeal of the Central Corridor Pipeline.

REF. DWG. NO.	OWNERSHIP	
	ACREAGE	
	EASEMENTS	
	REF. DWG. NO.	

STATIONING



FOR PERMITTING PURPOSES ONLY



MATERIAL
CONST. METHOD
CLASS / MAOP

PROPRIETARY & CONFIDENTIAL ALL RIGHTS RESERVED * DO NOT SCALE THIS DRAWING * USE DIMENSIONS ONLY
PIEDMONT'S NATURAL GAS FACILITY DRAWINGS ARE CONSIDERED CONFIDENTIAL (OM-1095) * DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE * TO INSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO. MANAGEMENT (RIM) POLICY 1001

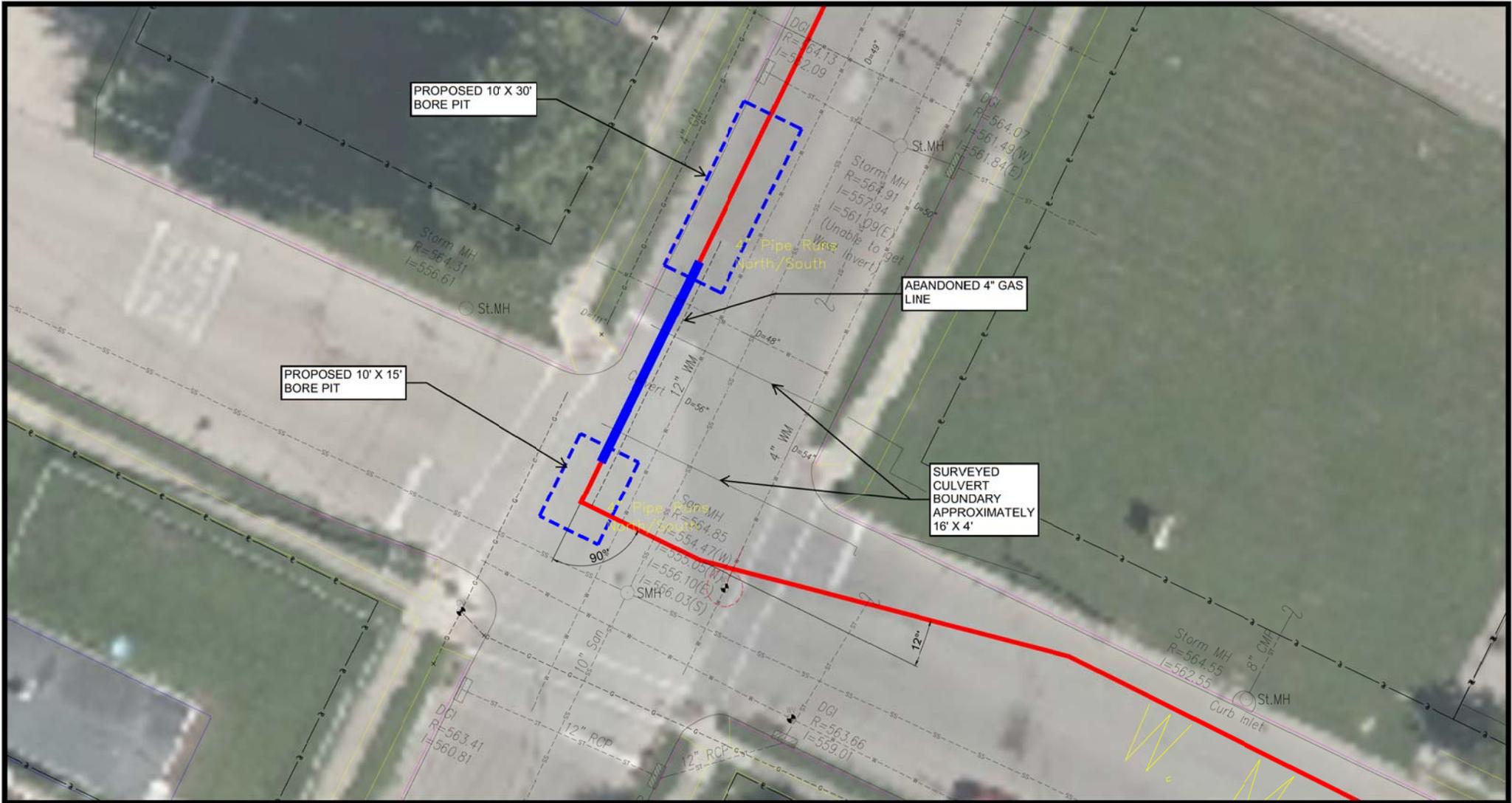
NO. DATE		REVISION(S) DESCRIPTION	BY	CHK	APPR	DESCRIPTION	DATE	INITIALS	APPROVALS
P1	03/09/2020	ISSUED FOR PERMITTING	AKT	CNS	AMP	AREA CODE	-	-	REGIONAL ENGINEER
						ACCOUNT NUMBER	Q3680	-	
						PROJECT NUMBER	1880115	-	MANAGER TECH REC & STD
						DRAWING BY	AKT	-	
						STATION ID	C350	-	PRINCIPAL ENGINEER
						CHECKER INITIALS	CNS	-	

C350 PIPELINE
PIPELINE ALIGNMENT SHEETS
HAMILTON COUNTY, OH
HAMILTON COUNTY, OH

COPYRIGHT 2019

REF. DWG(S)	
SHEET(S) 1 OF X	DWG SCALE AS NOTED
DWG DATE 01/13/2020	SUPERSEDED
DRAWING NUMBER	REVISION
PNG -C-350-SK01054	P1
© HAMILTON COUNTY © 2020	

PROFESSIONAL ENGINEER/STONS



SCALE

0 7 14

1IN = 7FT

GRID NORTH

LEGEND	
	PROPOSED C350 PIPELINE
	PROPOSED JACK & BORE
	PROPOSED BORE PIT
	EDGE OF ROAD
	SIDEWALK
	EDGE OF BUILDING
	EDGE OF CURB

BURNS & MCDONNELL

DUKE ENERGY

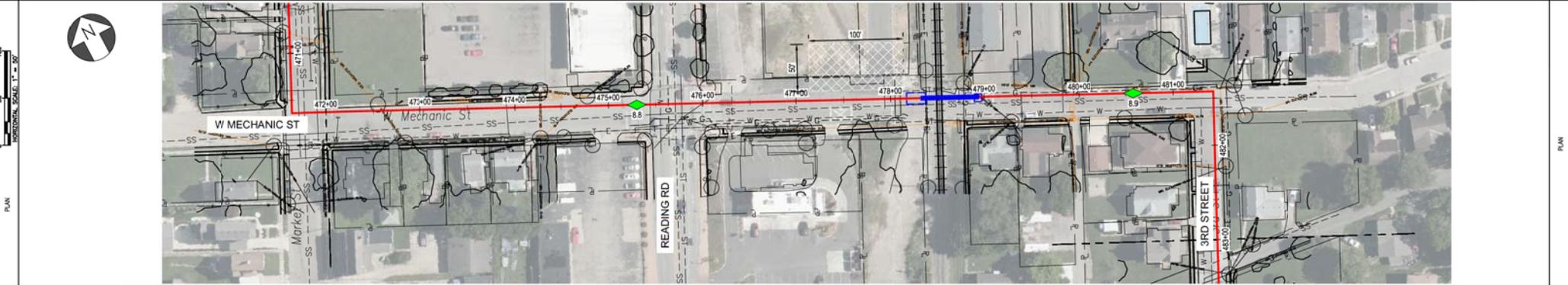
C350 PIPELINE

MARKET ST & MECHANIC ST
ROUTE ADJUSTMENT

ISSUED FOR PERMIT

REF. DWG. NO.	OWNERSHIP	
	ACREAGE	
	EASEMENTS	
	REF. DWG. NO.	PNG-C-350-SK01089

STATIONING	
------------	--



PIPE DATA (SLOPE STATIONING)	STA.	WELD #	COMP.	UNIT	WOF
	STA.	WELD #	COMP.	UNIT	WOF

FOR PERMITTING PURPOSES ONLY

PROFILE	
MATERIAL	
CONST. METHOD	
CLASS / MAP	

PROPRIETARY & CONFIDENTIAL ALL RIGHTS RESERVED * DO NOT SCALE THIS DRAWING * USE DIMENSIONS ONLY

PIEDMONT'S NATURAL GAS FACILITY DRAWINGS ARE CONSIDERED CONFIDENTIAL (OM-1095) * DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE * TO INSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO. MANAGEMENT (RIM) POLICY 1001

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD
P1	03/09/2020	ISSUED FOR PERMITTING	AKT	CNS	AMP

DESCRIPTION	APPROVALS	REGIONAL ENGINEER
AREA CODE	DATE	INITIALS
ACCOUNT NUMBER Q3680	DATE	INITIALS
PROJECT NUMBER 1880115	DATE	INITIALS
DRAWING BY AKT	DATE	INITIALS
STATION ID C350	DATE	INITIALS
CHECKER INITIALS CNS	DATE	INITIALS

C350 PIPELINE PIPELINE ALIGNMENT SHEETS HAMILTON COUNTY, OH

HAMILTON COUNTY, OH

REF. DWG(S)	SHEET(S) 1 OF X	DWG SCALE AS NOTED
	DWG DATE 01/13/2020	SUPERSEDED
	DRAWING NUMBER	REVISION
	PNG -C-350-SK01056	P1

© HAMILTON COUNTY C350

PROFESSIONAL ENGINEER/ARCHITECTS

RIFIC/OWNER	OWNERSHIP	
	ACREAGE	
	EASEMENTS	
REF. DWG. NO.		

STATIONING	
------------	--



PIPE DATA (SLOPE STATIONING)	
STA. 100' / 100'	STA. 100' / 100'

FOR PERMITTING PURPOSES ONLY

PROFILE	
VERTICAL SCALE 1" = 40'	HORIZONTAL SCALE 1" = 100'
MATERIAL	
CONSTR. METHOD	
CLASS / MAP	

PROPRIETARY & CONFIDENTIAL ALL RIGHTS RESERVED * DO NOT SCALE THIS DRAWING * USE DIMENSIONS ONLY
 PIEDMONT'S NATURAL GAS FACILITY DRAWINGS ARE CONSIDERED CONFIDENTIAL (OM-1095) * DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE * TO INSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO. MANAGEMENT (RIM) POLICY 1001

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
P1	03/09/2020	ISSUED FOR PERMITTING	AKT	CNS	AMP	AREA CODE	-	-	REGIONAL ENGINEER
						ACCOUNT NUMBER	Q3680	-	REGIONAL ENGINEER
						PROJECT NUMBER	1880115	-	MANAGER TECH REC & STD
						DRAWING BY	AKT	-	MANAGER TECH REC & STD
						STATION ID	C350	-	PRINCIPAL ENGINEER
						CHECKER INITIALS	CNS	-	PRINCIPAL ENGINEER

C350 PIPELINE
PIPELINE ALIGNMENT SHEETS
HAMILTON COUNTY, OH
 HAMILTON COUNTY, OH

REF. DWG(S)	
SHEET(S) 1 OF X	DWG SCALE AS NOTED
DWG DATE 01/13/2020	SUPERSEDED
DRAWING NUMBER	REVISION
PNG -C-350-SK01058	P1
© HAMILTON COUNTY C350	

PROFESSIONAL ENGINEER/ARCHITECTS

RIBB/CORNER	OWNERSHIP	
	ACREAGE	
	EASEMENTS	
REF. DWG. NO.		

STATIONING	
------------	--



PIPE DATA (SLOPE STATIONING)	STA.	WELL #	COMP.	UNIT	WOP
	STA.	WELL #	COMP.	UNIT	WOP

Additional water line survey captured in exhibit on next sheet

FOR PERMITTING PURPOSES ONLY

PROFILE	VERTICAL SCALE 1" = 40' HORIZONTAL SCALE 1" = 100' 200' 100' 0'
MATERIAL	
CONSTR. METHOD	
CLASS / MAP	

PROPRIETARY & CONFIDENTIAL ALL RIGHTS RESERVED * DO NOT SCALE THIS DRAWING * USE DIMENSIONS ONLY
 PIEDMONT'S NATURAL GAS FACILITY DRAWINGS ARE CONSIDERED CONFIDENTIAL (OM-1095) * DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE * TO INSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO. MANAGEMENT (RIM) POLICY 1001

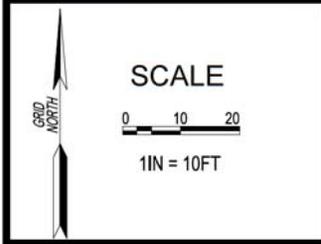
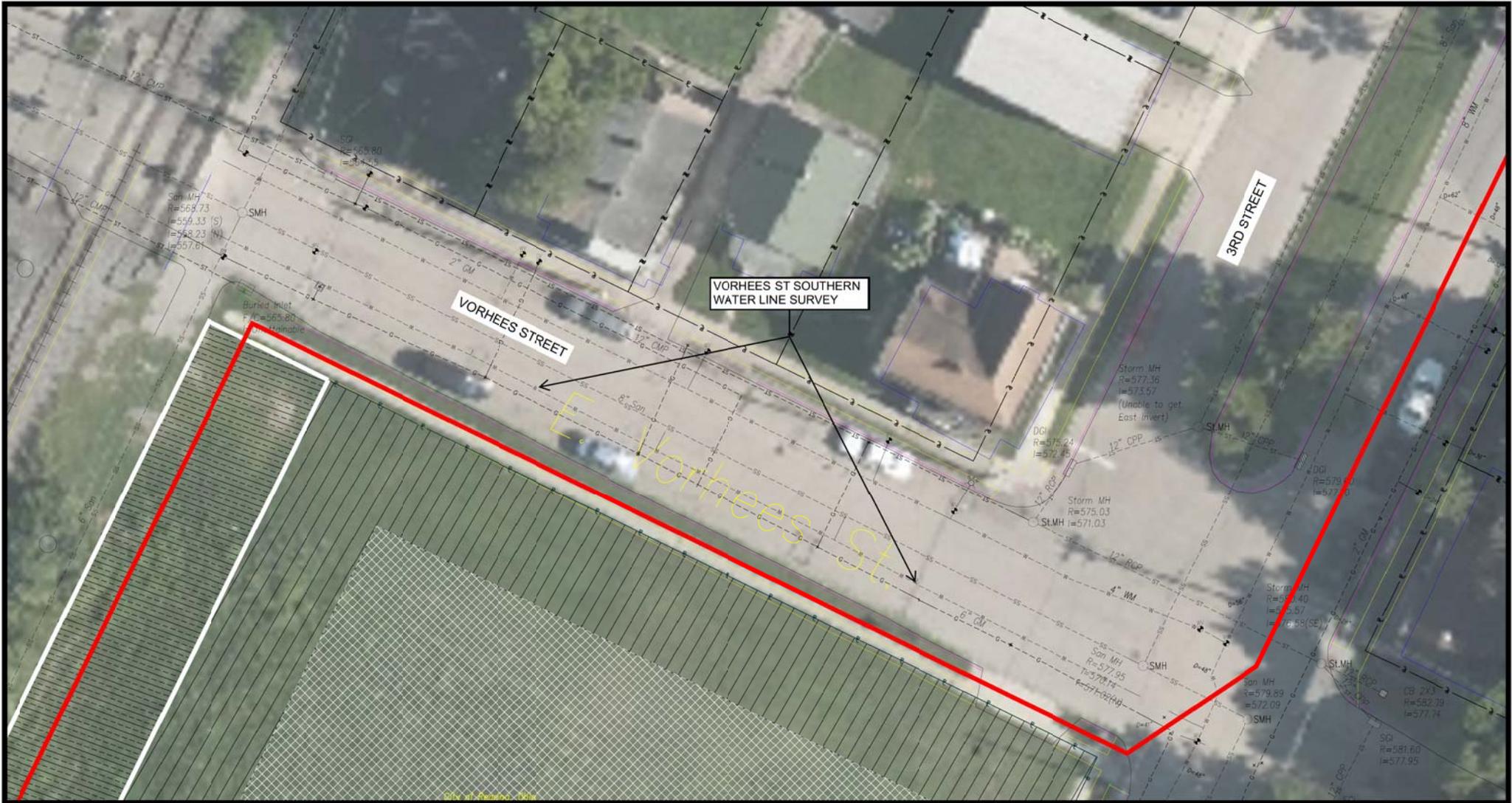
NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
			AKT	CNS	AMP				
P1	03/09/2020	ISSUED FOR PERMITTING				AREA CODE	-	-	REGIONAL ENGINEER
						ACCOUNT NUMBER	Q3680	-	
						PROJECT NUMBER	1880115	-	MGR. TECH REC & STD
						DRAWING BY	AKT	-	
						STATION ID	C350	-	PRINCIPAL ENGINEER
						CHECKER INITIALS	CNS	-	

C350 PIPELINE
PIPELINE ALIGNMENT SHEETS
HAMILTON COUNTY, OH
 HAMILTON COUNTY, OH

REF. DWG(S)
 SHEET(S) 1 OF X DWG SCALE AS NOTED
 DWG DATE 01/13/2020 SUPERSEDED
 DRAWING NUMBER REVISION
PNG -C-350-SK01059 P1
C/HAMILTON COUNTY/C350

PROFESSIONAL ENGINEER/STS

COPYRIGHT 2019



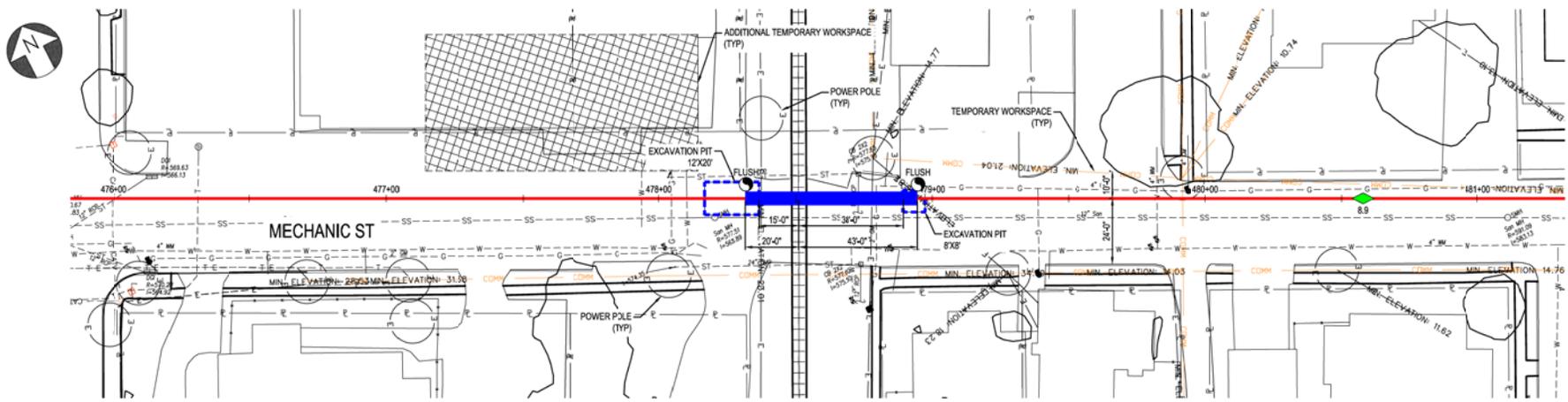
LEGEND	
	PROPOSED C350 PIPELINE
	PROPOSED JACK & BORE
	EDGE OF CURB
	EDGE OF ROAD
	SIDEWALK
	EDGE OF BUILDING
	PROPOSED PERMANENT EASEMENT
	PROPOSED TEMPORARY WORKSPACE
	PROPOSED BORE PIT

**BURNS
MCDONNELL**

**DUKE
ENERGY**

C350 PIPELINE
VORHEES STREET WATER LINE
ADDITION
ISSUED FOR PERMIT

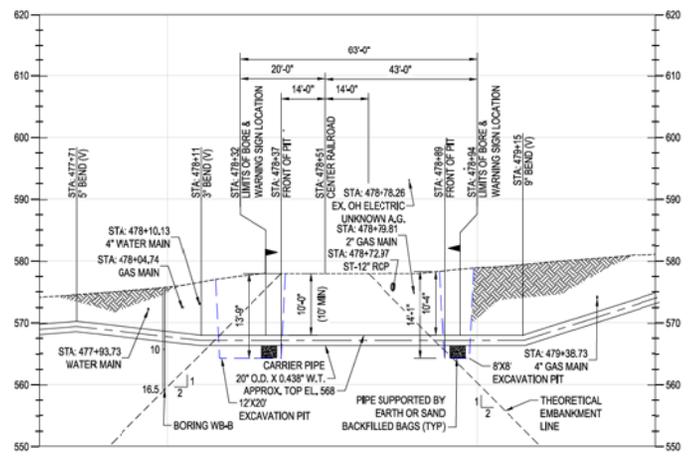
PLAN



NOTES:
 1. PER I.O.R.Y. GENERAL SPECIFICATIONS FOR SUB-GRADE AND ABOVE GRADE UTILITY CROSSINGS OF RAILROAD'S RIGHT-OF-WAY: BORE PITS WILL BE PROTECTED WITH ADEQUATE SHEETING, BULKHEADS, AND SIDEWALLS TO PROTECT THE RAILROAD'S ROADBED.



PROFILE



FOR PERMITTING PURPOSES ONLY

MATERIAL CLASS (MCP)

PROPRIETARY & CONFIDENTIAL ALL RIGHTS RESERVED * DO NOT SCALE THIS DRAWING * USE DIMENSIONS ONLY

DUKE ENERGY DRAWINGS ARE CONSIDERED CONFIDENTIAL (DM-1095) * DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE * TO INSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO. MANAGEMENT (RIM) POLICY 1001

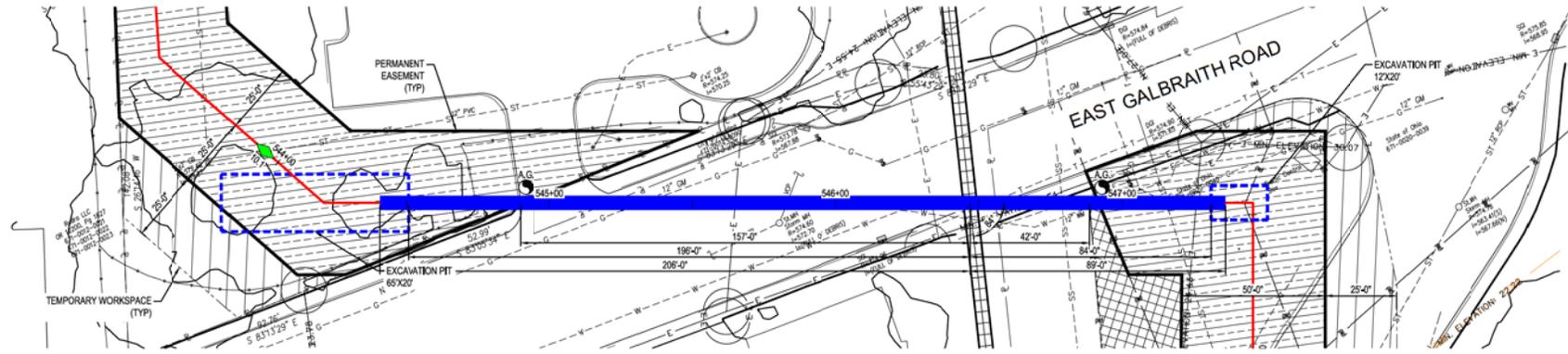
NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APP'D	DESCRIPTION	DATE	INITIALS	APPROVALS
P1	03/09/2020	ISSUED FOR PERMITTING	AKT	CNS	AMP	AREA CODE	XXXX/20XX	XXX	REGIONAL ENGINEER
						ACCOUNT NUMBER	1880115	XXX	MGR TECH REC & STD
						DRAWING BY	AKT	XXX	PRINCIPAL ENGINEER
						STATION ID	C350	XXX	
						CHECKER INITIALS	CNS	XXX	



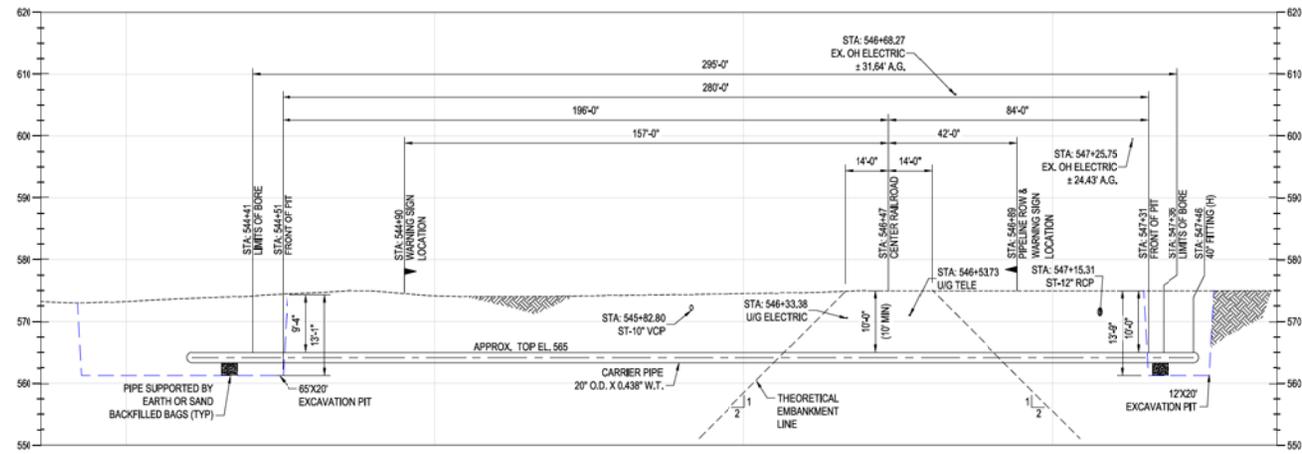
C350 PROJECT
BORE CROSSING DETAIL 12
HAMILTON COUNTY, OHIO
 HAMILTON COUNTY, OH

REF. DWG(S)	SHEET(S) X OF X	DWG SCALE	AS NOTED
DWG DATE	09-05-2018	SUPERSEDED	
DRAWING NUMBER	PNG C-350-SK01089		REVISION P1
HAMILTON COUNTY/C350			

PROFESSIONAL ENGINEER STAMP



NOTES:
 1. PER I.O.R.Y. GENERAL SPECIFICATIONS FOR SUB-GRADE AND ABOVE GRADE UTILITY CROSSINGS OF RAILROAD'S RIGHT-OF-WAY. BORE PITS WILL BE PROTECTED WITH ADEQUATE SHEETING, BULKHEADS, AND SIDEWALLS TO PROTECT THE RAILROAD'S ROADBED.



FOR PERMITTING PURPOSES ONLY

DUKE ENERGY DRAWINGS ARE CONSIDERED CONFIDENTIAL (OM-1095) * DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE * TO INSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO. MANAGEMENT (RIM) POLICY 1001

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD
P1	03/09/2020	ISSUED FOR PERMITTING	AKT	CNS	AMP

DESCRIPTION	DATE	INITIALS
AREA CODE	-	
PROJECT NUMBER	1880115	
DRAWING BY	AKT	
STATION ID	C350	
CHECKER INITIALS	CNS	

APPROVALS	REGIONAL ENGINEER
DATE: XXXX/20XX INITIALS: XXX	
DATE: XXXX/20XX INITIALS: XXX	
DATE: XXXX/20XX INITIALS: XXX	



C350 PROJECT
BORE CROSSING DETAIL 14
HAMILTON COUNTY, OHIO
 HAMILTON COUNTY, OH

REF. DWG(S)	SHEET(S) X OF X	DWG SCALE	AS NOTED
DWG DATE: 09-05-2018	SUPERSEDED		
DRAWING NUMBER	REVISION		
PNG C-350-SK01091	P1		
HAMILTON COUNTY/C350			

PROFESSIONAL ENGINEER STAMP



NOTE:
 1. PROPOSED PIPELINE ACCESS ROUTES SHOULD REMAIN OPEN FOR LOCAL TRAFFIC AS MUCH AS PRACTICABLE. CONTRACTOR SHALL NOT UNNECESSARILY STORE MATERIALS OR EQUIPMENT ON ACCESS ROUTES OR OTHERWISE BLOCK TYPICAL TRAFFIC FLOW.

FOR PERMITTING PURPOSES ONLY

PROPRIETARY & CONFIDENTIAL ALL RIGHTS RESERVED * DO NOT SCALE THIS DRAWING * USE DIMENSIONS ONLY

DUKE ENERGY DRAWINGS ARE CONSIDERED CONFIDENTIAL (DM-1095) * DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE * TO INSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO. MANAGEMENT (RIM) POLICY 1001

NO.	DATE	REVISION/DESCRIPTION	BY	CHK	APPD	DESCRIPTION	APPROVALS
P1	03/09/2020	ISSUED FOR PERMITTING	AKT	CNS	AMP	AREA CODE ACCOUNT NUMBER Q3680 PROJECT NUMBER 1880115 DRAWING BY AKT STATION ID C350 CHECKER INITIALS CNS	DATE XXXX/20XX DATE XXXX/20XX DATE XXXX/20XX DATE XXXX/20XX
							REGIONAL ENGINEER MGR TECH REC & STD PRINCIPAL ENGINEER



C350 PROJECT
ACCESS ROUTE AND LAYDOWN PLAN - 02
HAMILTON COUNTY, OHIO
 HAMILTON COUNTY, OHIO

SHEET(S) 1 OF X	DWG SCALE 1"=50'	
DWG DATE 02/10/2020	SUPERSEDED	
DRAWING NUMBER		REVISION
PNG -C-350-SK01002		P1
CHAMILTON COUNTY/C350		

PROFESSIONAL ENGINEER STAMP



NOTE:
 1. PROPOSED PIPELINE ACCESS ROUTES SHOULD REMAIN OPEN FOR LOCAL TRAFFIC AS MUCH AS PRACTICABLE. CONTRACTOR SHALL NOT UNNECESSARILY STORE MATERIALS OR EQUIPMENT ON ACCESS ROUTES OR OTHERWISE BLOCK TYPICAL TRAFFIC FLOW.

FOR PERMITTING PURPOSES ONLY

DUKE ENERGY DRAWINGS ARE CONSIDERED CONFIDENTIAL (DM-1095) * DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE * TO INSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO. MANAGEMENT (RIM) POLICY 1001

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APP'D	DESCRIPTION	DATE	INITIALS	APPROVALS
P1	03/09/2020	ISSUED FOR PERMITTING	AKT	CNS	AMP	AREA CODE	-	XXXX/20XX	XXX
						ACCOUNT NUMBER	Q3680	XXXX/20XX	XXX
						PROJECT NUMBER	1880115	XXXX/20XX	XXX
						DRAWING BY	AKT	XXXX/20XX	XXX
						STATION ID	C350	XXXX/20XX	XXX
						CHECKER INITIALS	CNS	XXXX/20XX	XXX

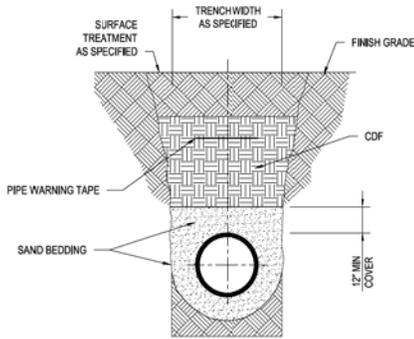


C350 PROJECT
ACCESS ROUTE AND LAYDOWN PLAN - 03
HAMILTON COUNTY, OHIO
 HAMILTON COUNTY, OHIO

SHEET(S)	1 OF X	DWG SCALE	1"=80'
DWG DATE	02/10/2020	SUPERSEDED	-
DRAWING NUMBER	PNG -C-350-SK01003 P1		
REVISION	P1		

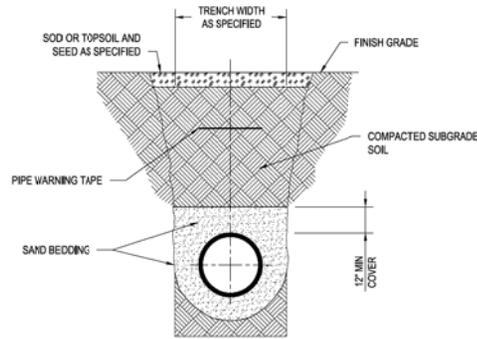
PROFESSIONAL ENGINEER STAMP

RESTORATION AFTER INSTALLATION WILL BE EXECUTED PER GUIDELINES FROM CITY JURISDICTION.



NOTES:

- PIPE BEDDING SHALL BE CLEAN, GRADED SAND COMPACTED TO PROVIDE EVEN SUPPORT FOR PIPE. APPROVED MATERIALS INCLUDE M10 "STONE DUST" OR SIMILAR. BEDDING MATERIAL SHALL FULLY ENCASE PIPE. CONTROLLED DENSITY FILL (CDF) SHALL BE INSTALLED IN SUCH A MANNER THAT MINIMIZES VOIDS AND DOES NOT DISTURB BEDDING OR PIPE.
- PIPE WARNING TAPE SHALL BE INSTALLED APPROXIMATELY 24"-36" ABOVE PIPELINE, OR AS OTHERWISE RECOMMENDED BY MANUFACTURER. MATERIALS SHALL BE SIGNALTAPE® OR APPROVED EQUIVALENT AND SHALL BE NON-TRACEABLE VARIETY.

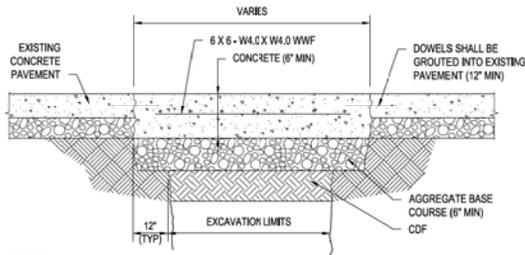


NOTES:

- PIPE BEDDING SHALL BE CLEAN, GRADED SAND COMPACTED TO PROVIDE EVEN SUPPORT FOR PIPE. APPROVED MATERIALS INCLUDE M10 "STONE DUST" OR SIMILAR. BEDDING MATERIAL SHALL FULLY ENCASE PIPE.
- PIPE WARNING TAPE SHALL BE INSTALLED APPROXIMATELY 24"-36" ABOVE PIPELINE, OR AS OTHERWISE RECOMMENDED BY MANUFACTURER. MATERIALS SHALL BE SIGNALTAPE® OR APPROVED EQUIVALENT AND SHALL BE NON-TRACEABLE VARIETY.

UTILITY TRENCH

SCALE: N.T.S.

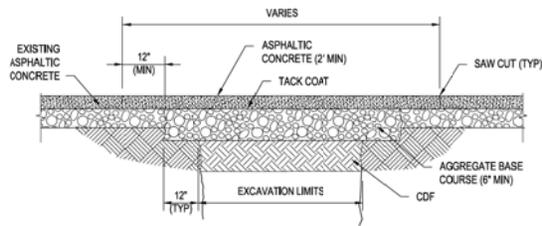


NOTES:

- THICKNESS OF ALL REPLACEMENT COURSES SHALL BE EQUAL TO EXISTING BUT SHALL NOT BE LESS THAN INDICATED.
- CONCRETE PAVEMENT SHALL BE SAWCUT AND REMOVED TO NEAREST JOINT TO PREVENT PARTIAL PANEL REMOVAL. WIDTH OF PAVEMENT REMOVAL SHALL BE MINIMUM 2' EITHER SIDE OF UTILITY CENTERLINE AND UP TO NEXT PANEL LIMIT.
- SAWCUTS THAT EXTEND OUTSIDE THE AREA OF REMOVAL AND REPLACEMENT SHALL BE FILLED WITH AN EPOXY-BASED GROUT APPROVED BY THE ENGINEER.
- FULL DEPTH SAWCUTS SHALL BE MADE AROUND THE PERIMETER OF THE AREA TO BE PATCHED. THE CUT SHALL BE MADE AT A RIGHT ANGLE TO THE PAVEMENT EDGE AND TO THE CENTERLINE OF THE PAVEMENT.
- LONGITUDINAL FULL DEPTH SAW CUTS SHALL BE AT EXISTING LONGITUDINAL JOINTS.
- ADDITIONAL SAWCUTS MAY BE REQUIRED WITH THE AREA OF THE PATCH TO FACILITATE REMOVAL OF THE CONCRETE OR TO ALLEVIATE BINDING OF THE FULL DEPTH SAW CUT AT THE PATCH EDGE.

CONCRETE PAVEMENT REMOVAL AND REPLACEMENT FOR UTILITY TRENCH

SCALE: N.T.S.

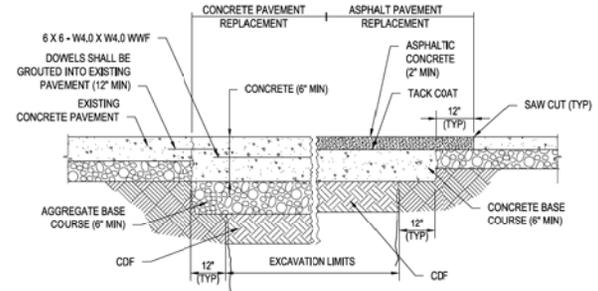


NOTES:

- THICKNESS OF ALL REPLACEMENT COURSES SHALL BE EQUAL TO EXISTING BUT SHALL NOT BE LESS THAN INDICATED.
- BASE COURSE SHALL BE PORTLAND CEMENT TO MATCH EXISTING CONCRETE BASE, AND SHALL BE ASPHALTIC CONCRETE BASE TO REPLACE ALL OTHER BASE MATERIALS.
- SAWCUTS THAT EXTEND OUTSIDE THE AREA OF REMOVAL AND REPLACEMENT SHALL BE FILLED WITH AN EPOXY-BASED GROUT APPROVED BY THE ENGINEER.

ASPHALT PAVEMENT REMOVAL AND REPLACEMENT FOR UTILITY TRENCH

SCALE: N.T.S.



NOTES:

- WIDTH OF PAVEMENT REMOVAL SHALL BE MINIMUM 2' EITHER SIDE OF UTILITY CENTERLINE AND TO THE NEXT PAVEMENT PANEL OR JOINT LIMIT WHENEVER FEASIBLE.
- THICKNESS OF ALL REPLACEMENT COURSES SHALL BE EQUAL TO EXISTING BUT SHALL NOT BE LESS THAN INDICATED.
- BASE COURSE SHALL BE PORTLAND CEMENT CONCRETE TO REPLACE EXISTING CONCRETE BASE, AND SHALL BE ASPHALTIC CONCRETE BASE TO REPLACE ALL OTHER BASE MATERIALS.
- FULL DEPTH SAWCUTS SHALL BE MADE AROUND THE PERIMETER OF THE AREA TO BE PATCHED AND SHALL BE MADE AT EXISTING JOINTS AND PERPENDICULAR TO THE PAVEMENT EDGE AND CENTERLINE WHENEVER FEASIBLE. SAWCUTS THAT EXTEND OUTSIDE THE AREA OF REMOVAL AND REPLACEMENT SHALL BE FILLED WITH AN EPOXY-BASED GROUT APPROVED BY THE ENGINEER.
- EXISTING CONCRETE PAVEMENT SHALL BE SAWCUT AND REMOVED TO NEAREST JOINT TO PREVENT PARTIAL PANEL REMOVAL.
- CONCRETE REPLACEMENT PANELS SHALL BE SIZED TO MATCH THE EXISTING CONCRETE PANEL SIZES WHENEVER FEASIBLE AND SHALL HAVE A MAXIMUM LENGTH/WIDTH RATIO OF 1.25.
- SAWCUTS THAT EXTEND OUTSIDE THE AREA OF REMOVAL AND REPLACEMENT SHALL BE FILLED WITH AN EPOXY-BASED GROUT APPROVED BY THE ENGINEER.

PAVEMENT REMOVAL AND REPLACEMENT FOR UTILITY TRENCH

SCALE: N.T.S.

FOR PERMITTING PURPOSES ONLY

DUKE ENERGY DRAWINGS ARE CONSIDERED CONFIDENTIAL (DM-1095) * DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE * TO INSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO. MANAGEMENT (RIM) POLICY 1001

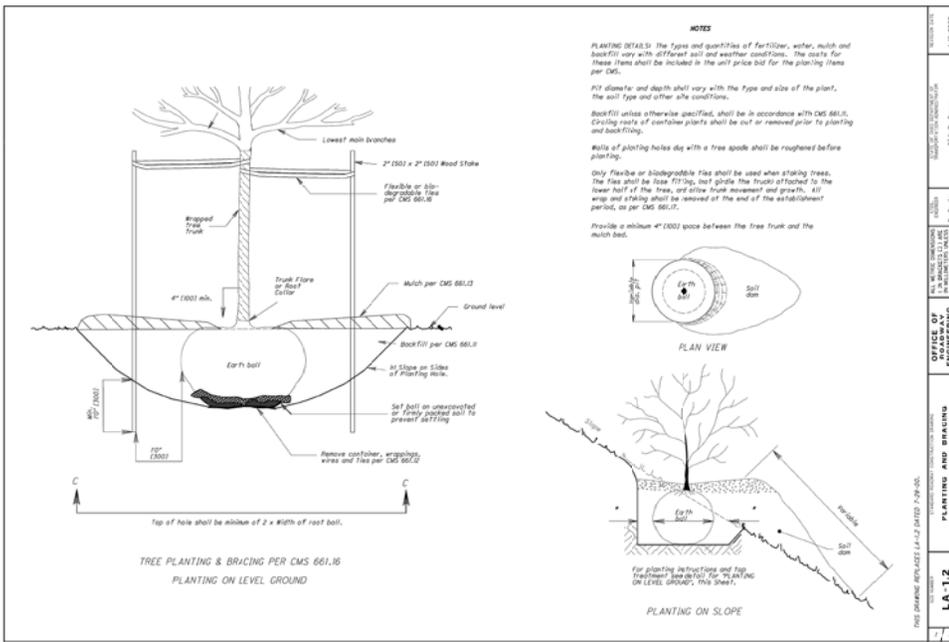
NO.	DATE	REVISIONS DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
P1	03/09/2020	ISSUED FOR PERMITTING	AKT	CNS	AMP	AREA CODE	DATE	INITIALS	REGIONAL ENGINEER
						ACCOUNT NUMBER	DATE	INITIALS	MGR TECH REC & STD
						PROJECT NUMBER	DATE	INITIALS	PRINCIPAL ENGINEER
						DRAWING BY	DATE	INITIALS	
						STATION ID	DATE	INITIALS	
						CHECKER INITIALS	DATE	INITIALS	



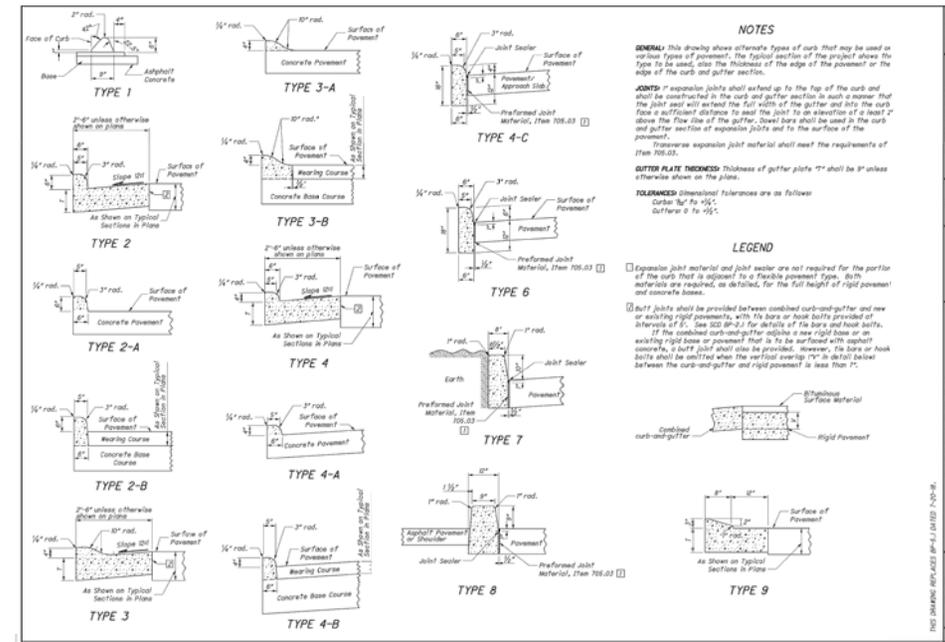
C350 PROJECT
RESTORATION DETAILS 1
HAMILTON COUNTY, OHIO
HAMILTON COUNTY, OHIO

SHEET(S) 1 OF X	DWG SCALE NONE
DWG DATE 02/04/2020	SUPERSEDED
DRAWING NUMBER PNG C-350-SK01110	REVISION P1
CHA HAMILTON COUNTY/C350	

PROFESSIONAL ENGINEER STAMP



DATE: 02/04/2020
 DRAWN BY: [Redacted]
 CHECKED BY: [Redacted]
 DESIGNED BY: [Redacted]
 APPROVED BY: [Redacted]
 TITLE: PLANTING AND BRACING
 SHEET NO: LA-1.2
 PROJECT NO: C350



DATE: 02/04/2020
 DRAWN BY: [Redacted]
 CHECKED BY: [Redacted]
 DESIGNED BY: [Redacted]
 APPROVED BY: [Redacted]
 TITLE: CONCRETE CURB AND GUTTER
 SHEET NO: BP-5.1
 PROJECT NO: C350

FOR PERMITTING PURPOSES ONLY

DUKE ENERGY DRAWINGS ARE CONSIDERED CONFIDENTIAL (OM-1095) * DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE * TO INSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO. MANAGEMENT (RIM) POLICY 1001

NO.	DATE	REVISIONS DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
P1	03/09/2020	ISSUED FOR PERMITTING	AKT	CNS	AMP	AREA CODE	03/09/2020	XXX	REGIONAL ENGINEER
						ACCOUNT NUMBER	03/09/2020	XXX	MGR TECH REC & STD
						PROJECT NUMBER	03/09/2020	XXX	PRINCIPAL ENGINEER
						DRAWING BY	03/09/2020	XXX	
						STATION ID	03/09/2020	XXX	
						CHECKER INITIALS	03/09/2020	XXX	



C350 PROJECT
RESTORATION DETAILS 2
HAMILTON COUNTY, OHIO

SHEET(S) 1 OF X	DWG SCALE NONE
DWG DATE 02/04/2020	SUPERSEDED
DRAWING NUMBER PNG C-350-SK01111	REVISION P1
C:HAMILTON COUNTY/C350	

PROFESSIONAL ENGINEER STAMP