

Legal Department

American Electric Power 1 Riverside Plaza Columbus, OH 43215-2373 AEP.com

January 5, 2024

Ms. Tanowa Troupe, Secretary Ohio Power Siting Board 180 East Broad Street Columbus, Ohio 43215-3793

Hector Garcia Senior Counsel – Regulatory Services (614) 716-3410 (P) hgarcia1@aep.com

RE: Proof of Compliance with Condition Case No. 23-0028-EL-BLN Green Chapel Station Project

Dear Ms. Troupe:

In satisfaction of Condition (2) of the Staff Report for this Project, AEP Ohio Transmission Company, Inc., submits this notice and attachment to inform you that the Ohio Environmental Protection Agency National Pollutant Discharge Elimination System-Construction Site Stormwater General Permit has been approved for the above-referenced Project. Also included are the Temporary Construction Entrance Permits.

If you have any questions regarding this information, please do not hesitate to contact me.

Respectfully submitted,

/s/ Hector Garcia

Hector Garcia (0084517), Counsel of Record Counsel for AEP Ohio Transmission Company, Inc.

cc: John Jones, Counsel OPSB Staff Jon Pawley, OPSB Staff



Mike DeWine, Governor Jon Husted, Lt. Governor Anne M. Vogel, Director

November 28, 2023

Ohio Transmission Company, AEP Jennifer Walker 8500 Smith Mill Road New Albany OH 43054

Re: Approval Under Ohio EPA National Pollutant Discharge Elimination System (NPDES) - Construction Site Stormwater General Permit - OHC000006

Dear Applicant,

Your NPDES Notice of Intent (NOI) application is approved for the following facility/site. Please use your Ohio EPA Facility Permit Number in all future correspondence.

Facility Name: Green Chapel Extension 138kV t line

Facility Location: Green Chapel Road and Clover Valley Road

City:New AlbanyCounty:LickingTownship:Jersey

Ohio EPA Facility Permit Number: 4GC09644*AG
Permit Effective Date: November 28, 2023
Permit Expiration Date: April 22, 2028

Please read and review the permit carefully. The permit contains requirements and prohibitions with which you must comply. A copy of the general permit may be viewed or downloaded from here. Coverage under this permit will remain in effect until a renewal of the permit is issued by the Ohio EPA.

If more than one operator (defined in the permit) will be engaged at the site, each operator shall seek coverage under the general permit. Additional operator(s) shall submit a Co-Permittee NOI to be covered under this permit. There is no fee associated with the Co-Permittee NOI form.

Please be aware that this letter only authorizes discharges in accordance with the above referenced General Permit. The placement to fill into regulated waters of the state may require a 401 Water Quality Certification and/or Isolated Wetlands Permit from Ohio EPA. Failure to obtain the required permits in advance is a violation of Ohio Revised Code 6111 and potentially subjects you to enforcement and civil penalties.

If you need assistance or have questions, please call (614) 644-2001 and ask for Construction Site Stormwater General Permit support or visit our website at epa.ohio.gov.

Sincerely,

Anne M. Vogel Director

Ame M Vagel



Division of Surface Water - Notice of Intent (NOI) For Coverage Under Ohio Environmental Protection Agency General NPDES Permit

(Read accompanying instructions carefully before completing this form.)

Submission of this NOI constitutes notice that the party identified in Section I of this form intends to be authorized to discharge into state surface waters under Ohio EPA's NPDES general permit program. Becoming a permittee obligates a discharger to comply with the terms and conditions of the permit. Complete all required information as indicated by the instructions. Do not use correction fluid on this form. Forms transmitted by fax will not be accepted. A check for the proper amount must accompany this form and he made payable to "Transpurer. State of Ohio." (See the fee table in Attachment C of the NOI instructions for the appropriate processing fee.)

form and be made payable to "Treasurer, State of Ohio." (See the fee table in Attachment C of the NOI instructions for the appropriate processing fee.)									
I. Applicant Info	ormation/Mailing	Address							
Company (App	licant) Name: Oh	nio Transmiss	sion Company,	AEP					
Mailing (Applic	ant) Address: 85	00 Smith Mil	l Road						
City: New Albany	1		S	State : OH		Zip (Code: 43054		
Country: USA									
Contact Persor	1: Jennifer Walker		F	Phone: (61	14) 477-5410	Fax:			
Contact E-mail	Address: jlwalker	2@aep.com							
II. Facility/Site I	Location Informa	ation							
Facility/Site Na	me: Green Chapel	Extension 1	38kV t line						
Facility Addres	s: Green Chapel R	oad and Clo	ver Valley Road	d					
City: New Albany	1		State: OH				Zip Code:	43054	
County: Licking	I					Townsh	i p: Jersey		
Facility Contac	t Person: Drew G	lover	Phone: (614) 286-4667	,		Fax:		
Facility Contac	t E-mail Address	s: dcglover@	aep.com						
Latitude: 40.1250	05		Longitude: -8	32.741132				p Attachment Gree ocation map.pdf	en Chapel
Receiving Strean	n or MS4: City of No	ew Albany M	S4, Licking Co	unty MS4,	Duncan Run ar	nd unname	d trib, Blackl	ick Creek and unna	amed trib
III. General Per	mit Information								
General Permit	Number: OHC0000	006			Coverage Ty	Coverage Type: New			
Type of Activity	: Construction Site	Stormwater (General Permit		SIC Code(s):				
Existing NPDES	Facility Permit Nu	ımber: 4GC	09644*AG		ODNR Coal Mining Application Number:				
If Household Se	wage Treatment S	ystem, is sy	stem for:		New Home Construction: Replacement of fai system:		failed existing		
Outfall	Design Flow (MGD):	Associated	Permit Efflue	nt Table:	Receiving Wa	iter :		Latitude	Longitude
Ave These Days	ita Basuirada	DTI. NO			Individual 40	Motor C	Suality Carti	iootion: NO	
Are These Perm Individual NPDE	-	PTI: NO	/etland: PEND	INIC					
-					U.S. Army C				2004
	ct Start Date(if app urbance (Acres): 2		cember 06, 20		Estimated Completion Date(if applicable): August 30, 2024 MS4 Drainage Area (Sq. Miles):				
SWP3 Attachme	· · · · · · · · ·	0			W34 Diamay	je Alea (S	q. willes).		
IV. Payment Inf	. ,								
Check #:	<u>Ormanon</u>					For	Ohio EPA Us	e Only	
Check Amount:				Check ID(Check ID(OFA): ORG #:				
			Rev ID:				: <u> </u>		
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.									
Applicant Name: Jennifer Walker Title: Environmental Manager									
Signature:									
Electronically submitted by 78793785 Electronically submitted on 11/27/2023)23				
ADDITIONAL IN	NFORMATION								
ADDITIONAL INFORMATION Please add any additional comments or attachments below.									

EDA 4404 (Dov. 4/40) Application ID: 0704000

Amy J Toohey

From: Joshua Albright <jalbright@newalbanyohio.org>

Sent: Monday, December 4, 2023 8:50 AM **To:** Amy J Toohey; Jay Herskowitz

Subject: [EXTERNAL] RE: AEP Green Chapel Extension 138Kv transmission line SWPPP

This Message Is From an EXTERNAL Sender

This is an **EXTERNAL** email. **STOP. THINK** before you click links or open attachments. If suspicious, please click the 'Report to Incidents' button. No button, forward to incidents@aep.com.

Looks good, Thanks,

Joshua Albright Development Engineer



phone 614.245.8756

From: Amy J Toohey <ajtoohey@aep.com>
Sent: Wednesday, November 29, 2023 2:20 PM

To: Jay Herskowitz < jherskowitz@epferris.com>; Joshua Albright < jalbright@newalbanyohio.org>

Subject: FW: AEP Green Chapel Extension 138Kv transmission line SWPPP

Greetings:

Please find attached the OEPA NOI approval. Please let me know that you received the SWPPP document.

Please let me know if you would like to attend the preconstruction conference; the first phase will be tree clearing.

Thank you Amy

From: Amy J Toohey

Sent: Monday, November 27, 2023 1:36 PM

To: Joshua Albright < <u>jalbright@newalbanyohio.org</u>>; Jay Herskowitz < <u>jherskowitz@epferris.com</u>>

Cc: Brandon S McKinney < bsmckinney@aep.com >

Subject: AEP Green Chapel Extension 138Kv transmission line SWPPP

Greetings:

The subject project is the construction of a new transmission line connection from Green Chapel station to the connection point with the existing transmission line at Conesville Corridor line. The project is located in Jersey Township, Licking County. There are 9 acres of disturbance associated with this linear project located in Licking County limits, and the remaining 11 acres are located in the City of New Albany limits. There is an isolated permit pending at

OEPA for three isolated wetland impacts. Tree clearing will not occur in the isolated wetlands-Wetland M, N and R1-until the Isolated wetland permit is obtained; anticipated approval (delayed due to Corps JD review) April 2023.

The Army Corps of Engineer's permit is a non-notifying NWP#57; no coordination is required with the Army Corps of Engineers. I have submitted my NOI with OEPA this morning and will be sending you the NOI approval once received.

Tree clearing is going to begin as soon as possible as permits are received as there is no option to do tree clearing after March 31, 2024. As this is a linear project and with no post construction bmps and it is my understanding that there is now work located in the city of New Albany r/w. Temporary construction entrances are noted on the SWPPP. AEP R/W's vendor, OR Colan will be securing any temporary construction entrance permits from the City.

I will be sending a box link to transmit the SWPPP to you. I will send the NOI to you when it is received; it is estimated to be received by the end of the week.

If you would like to attached the construction kick off meeting please let me know. We will be having one for the start of forestry clearing next week.

Please let me know if you have any questions or comments.

Thank you Amy

AMY J TOOHEY | ENVIRONMENTAL SPEC CONSULT AJTOOHEY@AEP.COM | | C:614.565.1480 8600 SMITHS MILL ROAD, NEW ALBANY, OH 43054

Amy J Toohey

From:	Jarvis, Joe <joejarvis@lickingswcd.com></joejarvis@lickingswcd.com>
Sent:	Monday, December 4, 2023 12:45 PM
	Amy J Toohey
Subject:	Re: [EXTERNAL] Re: AEP Green Chapel Extension 138Kv transmission line SWPPP
This Message Is From an	EXTERNAL Sender
This is an EXTERNAL email. STOF Incidents ' button. No button, forward	P. THINK before you click links or open attachments. If suspicious, please click the 'Report to rd to incidents@aep.com.
Amy,	
Sorry for the delay, you didn't mis	s my email and just hadn't responded.
After looking it over, I do not have	any comments for this plan set.
Is there a timeframe for when you transmission line?	need me to have any comments to you for the Conesville Corridor-Bermuda
Thanks,	
Joe Jarvis District Urban Technician (740)-670-5336 (office) (740)-438-5791 (cell)	
×	
On Mon, Dec 4, 2023 at 9:42 AM A	Amy J Toohey < <u>ajtoohey@aep.com</u> > wrote:
Good Morning!	
I wanted to check in to see if you email is moody at best.	had a chance Friday to check out the SWPPP. I apologize if I missed the email as my
Thank you	
Amy	

From: Jarvis, Joe < joejarvis@lickingswcd.com> Sent: Wednesday, November 29, 2023 1:47 PM To: Amy J Toohey <a i toohey@aep.com> Subject: [EXTERNAL] Re: AEP Green Chapel Extension 138Kv transmission line SWPPP Hi Amy, I will try and look this over and have any comments and or concers to you by Friday. Thanks, Joe Jarvis District Urban Technician (740)-670-5336 (office) (740)-438-5791 (cell) On Mon, Nov 27, 2023 at 9:10 AM Amy J Toohey <a in the square of the squ Greetings:

The subject project is the construction of a new transmission line connection from Green Chapel station to the connection point with the existing transmission line at Conesville Corridor line. The project is located in Jersey Township, Licking County. There are 9 acres of disturbance associated with this linear project located in Licking County and the remaining 11 acres are located in the City of New Albany limits. There is an isolated permit pending at OEPA for three isolated wetland impacts. Tree clearing will not occur in the isolated wetlands-Wetland M, N and R1-until the Isolated wetland permit is obtained; anticipated approval (delayed due to Corps JD review) April 2023.

The Army Corps of Engineer's permit is a non-notifying NWP#57; no coordination is required with the Army Corps of Engineers.

I have submitted my NOI with OEPA this morning and will be sending you the NOI approval once received.

Tree clearing is going to begin as soon as possible as permits are received as there is no option to do tree clearing after March 31, 2023. As this is a linear project and an application is not required I wanted to make you aware of the isolated wetland permit delay, and the need to clear trees in the rest of the non isolated wetland areas as soon as possible, to help in your review of the project.

This project should be moved ahead of Conesville Corridor-Bermuda transmission line that was previously submitted if there is a way to order the review of projects. I will be sending a box link to transmit the SWPPP to you.

Please let me know if you have any questions or comments.

Thank you

Amy



GREEN CHAPEL EXTENSION 138kV TRANSMISSION LINE PROJECT

LICKING COUNTY, OH

LAT/LONG: 40.097132/ -82.749111

WORK ORDER # T10465864002

STORM WATER POLLUTION PREVENTION PLAN (SWP3)



Prepared for:

AEP Ohio Transmission Company, Inc. 8500 Smith's Mill Road New Albany, OH 43054

Prepared by:

AECOM 525 Vine Street, Suite 1800 Cincinnati, OH 45202

Site Contact: Drew Glover Phone: 614-286-4667 E-mail: dcglover@aep.com

REVISION 2 OCTOBER 2023

Project Start Date: NOVEMBER 2023
Project End Date: AUGUST 2024

GREEN CHAPEL EXTENSION 138kV TRANSMISSION LINE PROJECT

CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Name: Jennifer Walker	
-----------------------	--

Title: Environmental Manager

Signature: Jennifer Walker

Date: 11-16-2023

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- **APPENDIX 1 –** Project Location Map, Soil Erosion and Sediment Control Plan, USDA Soils and Watershed (HUC-12) Map
- APPENDIX 2 ODNR Rainwater and Land Development Manual Details
- APPENDIX 3 SWP3 Inspection Form and SWP3 Amendments, Grading, and Stabilization Log
- APPENDIX 4 Duty to Inform Contractors and Subcontractors Signature Form

I. Site Description

A. <u>Description of Construction Activity</u>

AEP Ohio Transmission Company, Inc. (AEP) is proposing installation of 2.7-miles of 138kV transmission line between the future proposed Green Chapel Station and the proposed tie-in at the existing Jug-Kirk 138/345kV circuit as part of the Green Chapel Extension 138kV Transmission Line Project in Licking County, Ohio. The 41-acre Project is located in Jersey township in Licking County, Ohio. Construction of the Project will involve the installation of 17 steel single-pole and 6 steel double-pole transmission line structures as well as 35 wooden, single-pole distribution line structures. In addition, one structure associated with the Jug-Kirk 138/345 kV transmission line will be rebuilt in place in order to accommodate installation of the Green Chapel 138kV transmission line. Proposed temporary work areas will be required to connect the new transmission line to the Jug-Krik 138kV/345 kV transmission line. Approximately 4.1-miles of temporary access roads are proposed to facilitate construction activities. The total Project area is estimated at 41-acres and the anticipated disturbance area is 20-acres

B. Disturbed Area

Total Area of the Site - 41 acres

Total Disturbed Area - 20 acres

Table 1: Disturbed Area

County	Township/Village/City	Disturbance Acreage
Licking	Jersey Township	9
Licking	New Albany	11

C. Impervious Area

The proposed Project will result in 23 new transmission structures and 35 new distribution poles. However, the structures are not located in a concentrated location and are dispersed throughout the Project area. As a result, the single point of new impervious area at each pole location is well below 2 acres, and no receiving streams will be impacted by the impervious area created by the structure installations. Therefore, no post-construction best management practices (BMPs) are warranted for this project.

D. Storm Water Calculations

The transmission line will require the installation of minor concrete foundations for the proposed steel structures. There are a total of 17 steel single-pole structures proposed which will require concrete foundation with an approximate diameter of 5'9". In addition, there are a total of 6 steel double-pole structures proposed which will require concrete foundation with an approximate diameter of 9'3". The total disturbance from these steel poles is estimated to be 1,248 square feet or 0.03 acres. The pre-construction runoff coefficient is estimated to be 0.2, whereas the post-construct runoff coefficient at each concrete foundation will be 0.95. However, given these impacts are spread throughout the estimated 41-acres of Project area, the actual increase in the runoff coefficient is estimated to be 0.0005. This assumes the remaining 40.97-acres pre- and post- construction coefficient remain relatively the same. For these reasons, the post-construction runoff will effectively be consistent with the preconstruction conditions.

E. Existing Soil Data

The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey was used to determine soil types within the Project area. A copy of the web-based soil map is included in Appendix 1. Soils in the Project area are shown in Table 2.

Table 2: Soil Types

Map Unit Symbol	Map Unit Description	Drainage Class	Hydric Soil?
BeA	Bennington silt loam, 0 to 6 percent slopes	Somewhat poorly drained	No
Beb	Bennington silt loam, 2 to 6 percent slopes	Somewhat poorly drained	No
Cen1B1	Centerbug silt loam, 2 to 6 percent slopes	Moderately well drained	No
Pe	Pewamo silty clay loam, low carbonate till, 0 to 2 percent slopes	Very poorly drained	Yes ¹

¹ Contains hydric inclusions.

F. Prior Land Uses

The Project corridor is located within the greenfield, 138 kV transmission line right-of-way (ROW) which consists of a mixture of agricultural row-crop, streams/wetlands, woodlands, urban areas, and pasture/hay field areas.

G. On-site Streams and Receiving Streams and Surface Waters

1. On-Site Waterbodies

Table 3: Delineated Streams

Stream ID	Stream Name	Flow Regime	Ohio EPA 401 Permitting Eligibility	Stream Stability
S-SRC-001	UNT to Duncan Run	Ephemeral	Eligible	Stable
S-SRC-002	Duncan Run	Perennial	Eligible	Eroding
EMHT- Stream 1	Blacklick Creek	Perennial	Possibly Eligible	Eroding
EMHT- Stream 1 - EXT 1	Blacklick Creek	Perennial	Possibly Eligible	Eroding

Table 4: Delineated Wetlands and Ponds

Wetland ID	Wetland ID	Wetland ID
EMHT Wetland R1	PFO	2
EMHT Wetland R2	PFO	2

EMHT Wetland M	PFO	2
EMHT Wetland N	PFO	2
EMHT Wetland U	PFO/PEM	2
EMHT Wetland V	PFO/PEM	2
Pond-MRK-001	-	-
Pond-MRK-002	-	-

2. Receiving Waters

The Project is located in multiple watersheds: Duncan Run Watershed (HUC-12: 050600011307), Blacklick Creek Watershed (HUC-12: 050600011503), and Raccoon Creek Watershed (HUC-12: 050400060301). These watersheds ultimately drain to the Scioto River. The receiving streams may include Duncan Run, Blacklick Creek, and Raccoon Creek.

H. Implementation Schedule

A construction log will be kept at the Project site to record major dates of grading and stabilization. The general order of construction is provided in Table 5 below and will begin in November 2023 and is estimated to end in August 2024.

Table 5: Implementation Schedule

Table 5: Implementation Schedule				
Task	Date			
Identify environmental avoidance areas in the field [i.e. wetlands,	August - November			
50' stream buffers, other environmental commitments]	2022			
Mobilize construction equipment	November 2023			
Forestry clearing/grubbing to begin	November 2023			
Install [erosion control/BMPs] filter sock, timber matting, and	November 2023			
temporary construction entrances, as needed				
Excavate foundations for new poles, install new poles	November 2022			
Install temporary seed and mulch, as needed, during Project	November 2023 –			
activities	August 2024			
Grade pole locations to pre-existing conditions				
Install permanent seed and mulch	August 2024			
Remove matting and temporary BMPs	August 2024			
Repair/restore all remaining disturbed areas	August 2024			
Seed and mulch all remaining disturbed areas	August 2024			
Construction demobilization	August 2024			
Inspection with AEP and SWP3 contractor	August 2024			

I. Subdivided Development Drawing

Not applicable.

J. <u>Dedicated Asphalt and Concrete Plant Discharges</u>

Not applicable.

K. Log of Grading and Stabilization Activities

A log for documenting grading and stabilization activities and amendments to the SWP3 is included in Appendix 3.

L. Site Map

A vicinity of the Project area is included in Appendix 2, along with the Soil Erosion Sediment and Sediment Control Plan and details. The Soil Erosion and Sediment Control Plan shows the Project boundaries and contours, the limits of construction, and the locations of the erosion and sediment control features.

M. Permit Requirements

The permit requirements can be reviewed in the Ohio EPA General Permit No. OHC000006 which can be found at https://epa.ohio.gov/static/Portals/35/permits/OHC000006.pdf.

II. Storm Water Pollution Prevention Plan

The SWP3 was developed to meet the objectives in Part II. Non-numeric Effluent Limitations and Part III. Storm Water Pollution Prevention Plan (SWP3) of Ohio EPA General Permit No. OHC000006.

A. SWP3 Availability

This Plan, a copy of the Notice of Intent (NOI), and the Ohio EPA authorization shall be made available on-site immediately upon request of the director or an authorized representative and MS4 operators or authorized representative during working hours. Per Ohio EPA, an electronic copy is an acceptable format for on-site availability and review.

B. Amendments

The SWP3 is a living document that will be updated as needed. The SWP3 shall be amended whenever there is a change in design, construction, operation or maintenance, or if the SWP3 proves to be ineffective in controlling pollutants in storm water discharges associated with construction activity. A log for documenting amendments is included in Appendix 3.

AEP Environmental Services shall be notified prior to any significant modifications to the SWP3, such as changes to the access roads, disturbance acreage, culvert installations, etc., to ensure the Project remains in compliance with Ohio EPA General Permit No. OHC000006.

C. <u>Duty to Inform Contractors</u>

All contractors and subcontractors who will be involved in implementation of the SWP3 shall review and understand the conditions and responsibilities of the SWP3 and document their acknowledgement by signing the form included in Appendix 4.

D. Controls

<u>Timing:</u> Temporary erosion and sediment control measures shall be installed prior to earth-disturbing activity. Temporary control measures will not be removed until final site stabilization, in the form of permanent gravel cover or perennial vegetative cover with a density of at least 70%, is achieved.

The locations of the control methods are shown on the Soil Erosion and Sediment Control Plans in Appendix 2. Maintenance and inspections requirements for these controls can be found in Section II.D.6 of this SWP3. The control measures for this Project include the following:

1. Preservation Methods

Existing natural conditions shall be preserved as much as feasible. Such practices may include: preserving existing vegetation, vegetative buffer strips, and existing soil profile and topsoil; minimizing soil compaction; minimizing disturbance of steep slopes; phasing of construction operations to minimize the amount of disturbed land at any one time; and protective clearing or grubbing practices. For all construction activity adjacent to surface waters of the state, a 50-foot undisturbed natural buffer will be maintained as measured from the ordinary high water mark (OHWM).

2. Erosion, Sediment, and Runoff Controls

a. Stabilization and Seeding

Disturbed areas will be stabilized as specified in tables 6 and 7 below per the Soil Erosion and Sediment Control Plan and BMP detail sheets in Appendix 2. Mulch shall be applied to all exposed soil that has been seeded in an effort to facilitate seed germination and development.

Table 6: Permanent Stabilization

Area Requiring Permanent Stabilization	Time Frame to Apply Erosion Controls
Any areas that will lie dormant for one	Within seven calendar days of the most
year or more.	recent disturbance.
Any areas within 50 feet of a surface	Within two calendar days of reaching
water of the state and at final grade.	final grade.
Other areas at final grade.	Within seven calendar days of reaching
Other areas at illiar grade.	final grade within that area.

Table 7: Temporary Stabilization

Area Requiring Temporary Stabilization	Time Frame to Apply Erosion Controls
Any disturbed areas within 50 feet of a	Within two calendar days of the most
surface water of the state and not at final	recent disturbance if the area will remain
grade.	idle for more than 14 calendar days.
	Within seven calendar days of the most
Any disturbed areas that will be dormant	recent disturbance within the area.
for more than 14 calendar days but less	For residential subdivisions, disturbed
than one year, and not within 50 feet of a	areas must be stabilized at least seven
surface water of the state.	days prior to transfer of permit coverage
	for the individual lot(s).
Disturbed areas that will be idle over winter.	Prior to the onset of winter weather.

b. Sediment Barriers and Diversions

Filter sock will be installed to encompass the entire site at all appropriate locations to filter sediment from site runoff. Orange barrier fencing will be used as needed and to protect wetland areas and 50-foot natural stream buffers. After Project completion, the posts, fencing, and ties shall be removed from the Project site and transported to an appropriate off-site disposal facility.

c. Wetland and Stream Crossings

Stream and wetland crossings shall be avoided where possible by accessing pole locations from either side of the surface waters. Temporary wetland crossings for this Project are limited to Wetlands as shown on the Plans in Appendix 2 and shall consist of geotextile fabric and prefabricated wood matting lined with filter sock and orange barrier fence. Timber mat or span bridge stream crossings are limited to streams shown on the Plans in Appendix 2 and shall not be placed below the OHWM. Timber matting/span bridges shall span the stream(s) from bank to bank. No fording of the stream is permitted.

After construction is completed, the wood mats and geotextile fabric shall be removed and the area seeded with a wetland seed mix (see enclosed seed mix in Appendix 2).

d. Temporary Construction Entrances

Construction entrances consisting of a stabilized pad of aggregate will be installed where construction vehicles leave active construction areas and enter public roadways to reduce the amount of sediment tracked offsite. Temporary construction entrance locations and details are provided in Appendix 2.

3. Surface Water Protection

No direct discharge to surface waters is proposed for this Project. Surface waters will be protected through the erosion and sediment controls outlined in the sections above.

4. Other Controls

a. Non-sediment Pollutant Controls

Waste disposal containers shall be provided for proper collection of all waste material including sanitary garbage, petroleum products and any materials to be used onsite (excluding inert waste/materials such as construction debris that would not be expected to contribute pollution to storm water). Containers shall be covered and not leaking. No construction waste materials shall be buried on-site. All waste materials shall be disposed of in the manner specified by local or state regulations or by the manufacturer. No solid or liquid wastes will be discharged in storm water runoff.

b. Off-site Traffic and Dust Control

Any paved roads adjacent to the site entrance shall be swept to remove any excess mud, dirt, or rock tracked from the site, as necessary. Dump trucks hauling materials to or from the site shall be covered with a tarpaulin. Dust control shall be observed both on and off the site for the duration of the Project. Dust and sedimentation will be minimized by limiting earth-moving activities, site traffic, and soil and vegetation disturbances throughout the site. Chemical stabilizers and adhesives will not be used unless written permission is received from AEP Environmental Representative. Dust control details can be found in Appendix 2.

c. Concrete Washouts

Concrete washouts will be located in upland areas outside of wetlands or flood zones. Under no circumstances will concrete trucks wash out into a drainage channel, storm sewer or surface water.

d. Wash Water

Water from vehicle washing, wheel washing, and other wash waters will be treated appropriately prior to discharge to minimize pollutants. Spills and leaks will be prevented and responded to as necessary.

e. Compliance with Other Requirements

This SWP3 is consistent with state and/or local waste disposal, sanitary sewer or septic system regulations including provisions prohibiting waste disposal by open burning. Spill response, disposal of suspect contaminated soils and clean-up activities are initiated by calling the AEP Regional Environmental Coordinator (REC).

f. Trench and Groundwater Control and Dewatering

Trench dewatering and groundwater control is not likely since this is an overhead line and any necessary trenching will be relatively shallow and short in duration. Dewatering may be needed if surface or subsurface water creates conditions where pole or foundation placement is being prevented or hindered and removing the water has the potential to contribute sediment to surface waters. If dewatering is needed, water shall be pumped directly into a dewatering device such as a tube or bag that has been sized according to the flow rate of the dewatering pump and the predominant sediment size (woven for sand, non-woven for silt and clay). Upon construction completion, accumulated sediment shall be removed from the dewatering device and

either placed in an upland part of the site where it shall then be seeded and mulched or shall be removed to an appropriate off-site disposal facility.

g. Contaminated Sediment

Contaminated soils are not expected to be encountered on this Project. However, if they should exist within the limits of construction, they will be disposed of properly per direction of the AEP Regional Environmental Coordinator (REC).

5. Post-Construction Storm Water Management Requirements

As mentioned in section I.D, the runoff coefficient increases are negligible (approximately 0.0005). Therefore, it is assumed that there will be no change from pre- to post-construction conditions and post-construction storm water management is not required per Part III.G.2.e of Ohio EPA General Permit No. OHC000006.

6. Maintenance and Inspections Requirements

*All temporary and permanent control practices shall be maintained and repaired as needed to ensure continued performance of their intended function. All erosion and sediment control measures shall be inspected:

- · Once every seven calendar days; and,
- After any storm event greater than one-half inch of rain per 24-hour period by the end of the next calendar day, excluding weekends and holidays unless work is scheduled.

An inspection report shall be made after each inspection. The SWP3 Inspection Form is included in Appendix 3.

*The Contractor shall select at least two qualified individuals responsible for inspections, maintenance, and repair activities, and filling out the SWP3 Inspection Form and SWP3 Amendments, Grading, and Stabilization Log in Appendix 3. Personnel selected for these responsibilities shall be knowledgeable and experienced in all inspection and maintenance practices necessary for keeping the erosion and sediment controls in good working order.

*If an inspection reveals that a control is in need of repair or maintenance, with the exception of a sediment settling pond, it shall be repaired or maintained within three calendar days of the inspection. Sediment ponds will be repaired or maintained within 10 calendar days of the inspection. If an inspection reveals that a control fails to perform its intended function and that another, more appropriate control is required, the SWP3 shall be amended and the new control shall be installed within 10 calendar days of the inspection. If an inspection reveals a control has been installed inappropriately or incorrectly, the control will be replaced or modified for site conditions.

*When controls are modified, the erosion control drawings associated with the SWP3 will be updated to reflect the modifications, and the changes will be reflected using the SWP3 Amendments, Grading, and Stabilization Log in Appendix 3.

- Filter sock shall be inspected for depth of sediment, tears, and to ensure the anchor
 posts are firmly in the ground. Filter sock shall also be inspected to ensure they are
 maintained in the appropriate positions per the plans in Appendix 2. Built up sediment
 shall be removed from the filter sock when it has reached <u>one-third</u> the height of the
 sock.
- Orange barrier fence shall be inspected to ensure the fence is erect and functioning as intended per the plans in Appendix 2.

- Temporary and permanent seeding shall be inspected for bare spots, washouts, and healthy growth. If seed does not germinate in an area on which it was placed, the area will either be re-seeded or an alternate erosion control method will be employed.
- Locations where vehicles and equipment enter or exit the site shall be inspected for evidence of off-site tracking of sediment. Sediment being tracked onto off-site roadways shall be cleaned up promptly.
- Excess concrete should be removed when the washout system reaches 50 percent of the design capacity. Use of the system should be discontinued until appropriate measures can be initiated to clean out the structure. Prefabricated systems should also utilize this criterion unless the manufacturer has alternative specifications.

*The permittee shall maintain the SWP3 Inspection Forms for three years following the submittal of a notice of termination (NOT) form. The Inspection Forms shall be signed in accordance with Part V.G of Ohio EPA General Permit OHC000006.

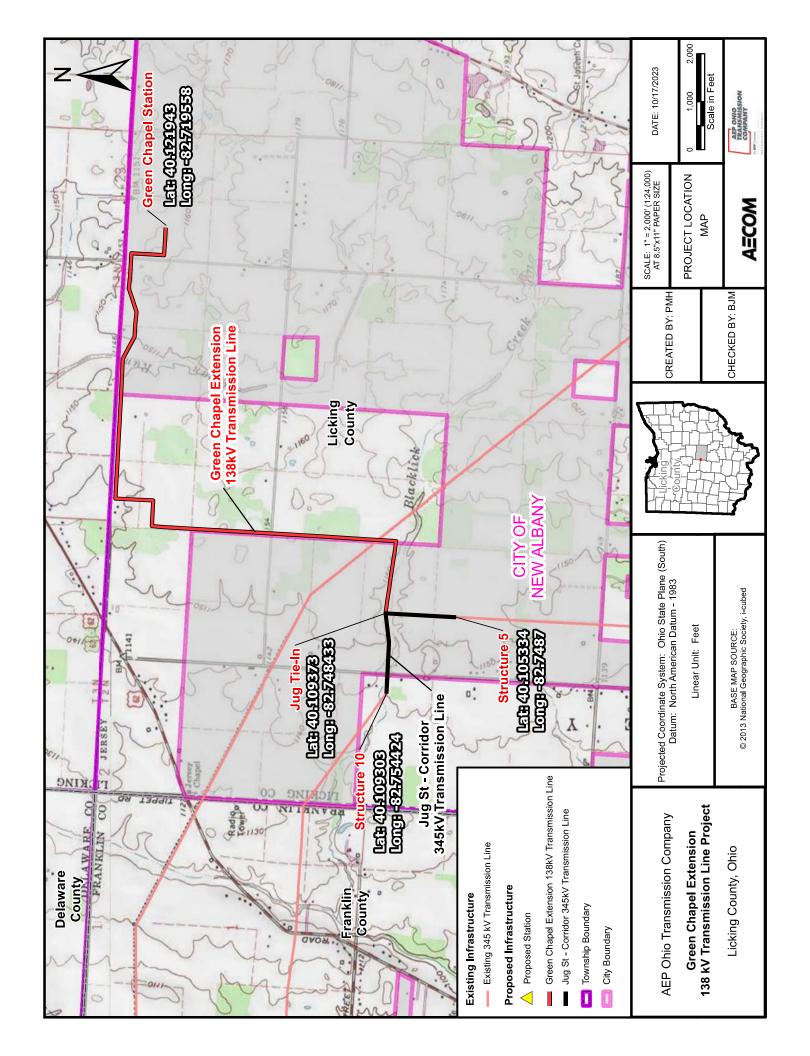
III. Approved State or Local Plans

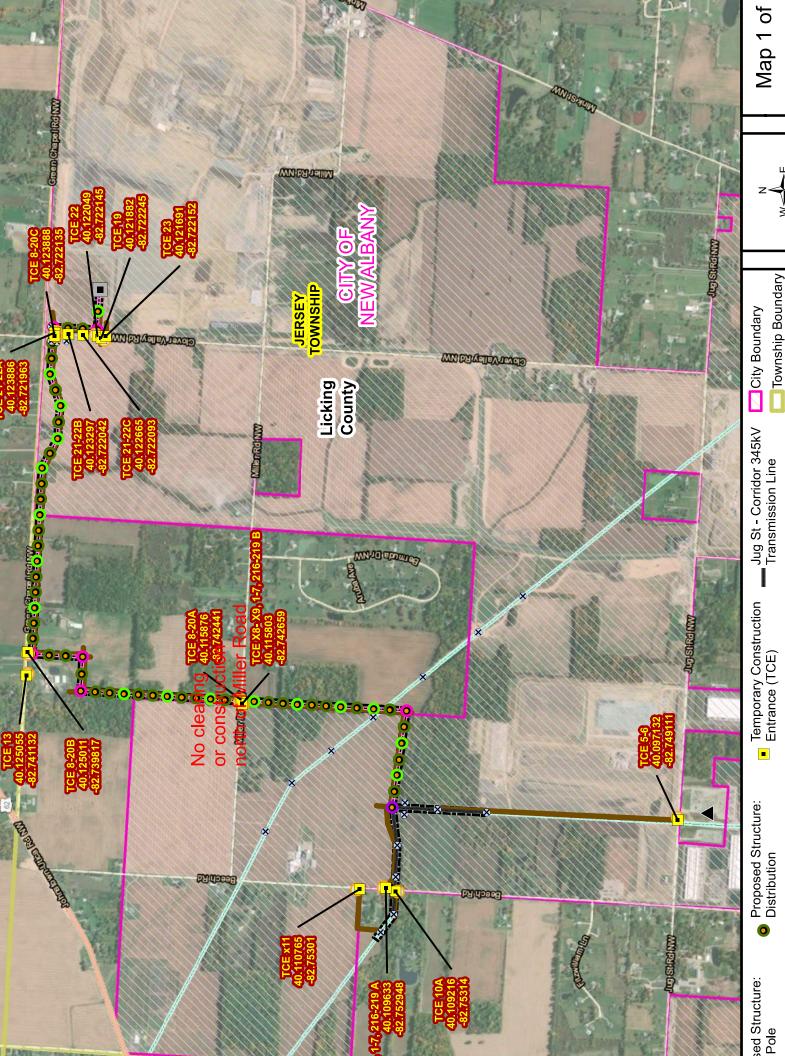
The erosion and sediment control plans were prepared in accordance with Ohio EPA Permit No. OHC000006.

IV. Exceptions

There are no exceptions to the erosion and sediment control practices contained in the Ohio EPA General Permit No. OHC000006.

APPENDIX 1 Project Location Map, Soil Erosion and Sediment Control Plan, USDA Soils Map and Watershed (HUC-12) Map





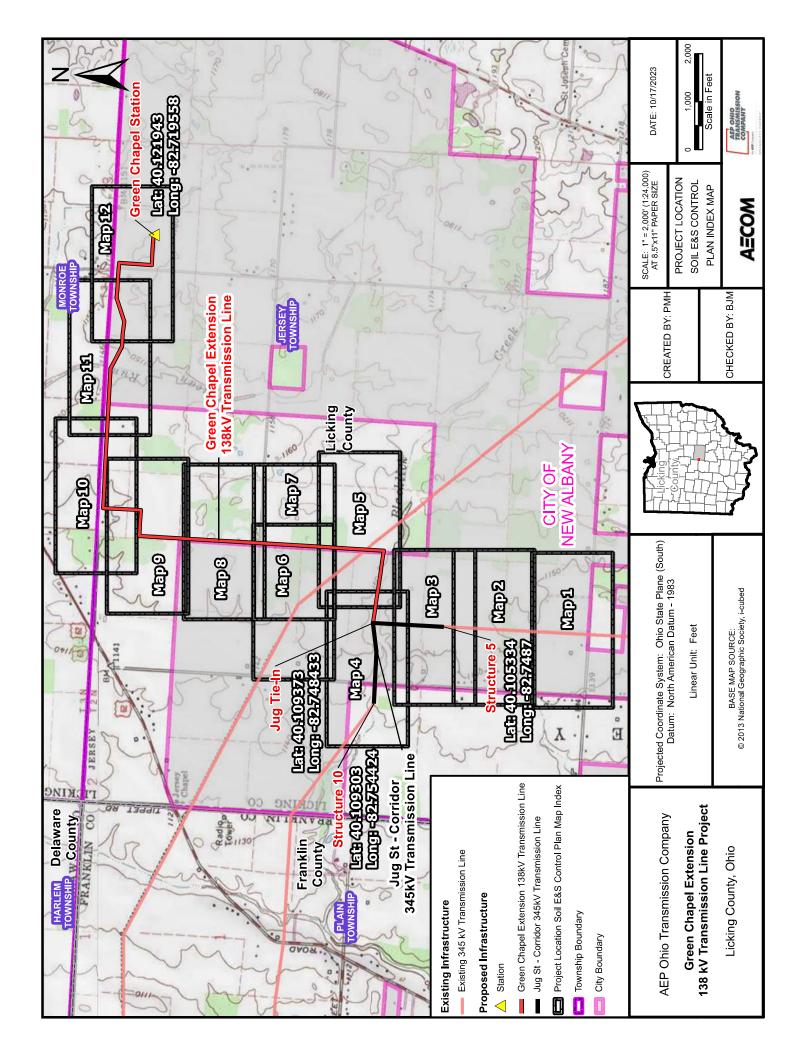
The State of Ohio:

Existing Structure

Existing Transmission

Concrete Washout

sed Structure:



GENERAL NOTES FOR SOIL EROSION & SEDIMENT CONTROL PLANS:

- 1) No new laydown, marshalling yard, equipment storage area, timber storage area or any other ground disturbance is permitted unless shown on this plan.
- 2) Provide any access road modification or additions to the Project Engineer or Project Manager, if not shown on this plan.
- 3) Work completed within 100-feet of cemeteries or burials should be considered sensitive. Contact the responsible AEP Regional Environmental Specialist (Amy Toohey 614-565-1480 or Drew Glover 614-286-4667) before proceeding with any work.
- 4) Discovery during construction of any human or unidentified artifacts or other unknown objects that are unearthed or otherwise discovered requires construction to cease and immediate notification to the responsible AEP Regional Environmental Specialist (Amy Toohey 614-565-1480 or Drew Glover 614-286-4667).
- 5) Any modifications or additions must be added to this plan, field checked, and permits updated as needed prior to construction.
- 6) Equipment access to wetlands is not allowed unless on a permitted access road crossing with timber mats. Parking equipment on timber mats overnight within a wetland is strictly forbidden.
- 7) For rebuilds and retirement projects that include the removal of wood poles treated with creosote, all such poles must be physically removed from the right of way and properly disposed of in accordance with all applicable laws and regulations unless the poles will be given to the landowner for reuse. Cut or otherwise removed creosote treated poles contain hazardous constituents and may not be left in place or disposed of with other clean wood waste.
- 8) The conditions and restrictions shown on these plans are a part of the approved permits and must be strictly followed.
- 9) Do not place silt fence or orange barrier fence within sensitive areas (e.g. Wetland or Stream).
- 10) If feasible, provide and maintain a 50-foot undisturbed natural buffer around streams/wetlands.
- 11) If an Orange Barrier Fence (OBF) is being installed to avoid disturbance to a stream/wetland, then a sign shall be installed that states, "STOP, Wetland Area, DO NOT DISTURB or cross with equipment."
- 12) The stockpiling of soil, mulch, aggregate, or other similar materials shall be completely surrounded by silt fence and, if needed, temporarily seeded. Any stockpiled material that is not used during the project shall be removed from the site, unless otherwise directed by AEP.
- 13) The size of the filter sock or silt fence cannot be changed without the approval from AEP Regional Environmental Specialist (Amy Toohey 614-565-1480 or Drew Glover 614-286-4667)
- 14) The contractor is responsible for any existing culverts that are damaged and for determining whether an existing culvert crossing will support the weight of their construction equipment. The contractor may mat such crossings to prevent damage. Replacement shall not be implemented without prior approval from the TCR and AEP's environmental team.
- 15) Standard depth of cover. 6" of #2 stone and 3-4" of #304 or as requested by TCR.
- 16) Silt fence/filter sock is not intended to be installed across access roads or work pads, but such that ends are adjacent to road or edge of pad to protect the surrounding environmental features during construction. After pads and roads have been removed, fence/sock should be installed across disturbed areas during site restoration until stabilization is achieved.
- 17) A pre-construction conference with Licking County Soil and Water Conservation District is required prior to construction (contact: Joe Jarvis, (740) 670-5330).

CITY OF NEW ALBANY STANDARD NOTES

Revised February 21, 2023

1 GENERAL

1.1 Standards

1.1.1 The City of Columbus and Ohio Department of Transportation Construction and Material Specifications, current editions, together with the City of New Albany specifications including all supplements thereto (hereafter referred to as Standard Specifications), shall govern all construction items of these plans unless otherwise noted. If conflict between specifications is found, the more strict specification will apply as decided by the City Engineer. CMSC item numbers listed refer to the City of Columbus Construction and Material Specifications.

1.2 Plan Modifications

1.2.1 Any modifications to the work as shown on these drawings must have prior written approval by the City Engineer, City of New Albany. Inspectors have no authority to approve revisions in the field.

1.3 Preconstruction Conference

- 1.3.1 A pre-construction conference involving a representative of the City of New Albany, the Owner, the Principal Contractor, and all available Sub-Contractors will be held prior to the start of construction.
- 1.3.2 All easements shall be recorded and submitted to the City Engineer prior to the pre-construction conference.
- 1.3.3 During the conference the Contractor shall submit his construction schedule, proposed schedule for controlling siltation and erosion, and for temporary and permanent seeding for the project.

1.4 Working Hours

- 1.4.1 City Ordinance 521.12 restricts the hours of work to 7:30 am to 7:00 pm.
- 1.4.2 Work will not be permitted on Sundays unless otherwise approved by the City Manager.

1.5 Inspection

- 1.5.1 Inspection on this project will be provided by the representatives of the City of New Albany.
- 1.5.2 The Owner shall deposit with the City of New Albany the total estimated costs for construction inspection prior to any construction operations.

1.5.3 The Contractor shall notify the City Engineer at least 48 hours prior to construction.

1.6 Work Within Public Right of Ways

- 1.6.1 All trenches within public right-of-way shall be backfilled according to the approved construction drawings or securely plated during non-working hours. Trenches outside these areas shall be backfilled or shall be protected by approved temporary fencing or barricades during non-working hours. Clean up shall follow closely behind the trenching operation. Trenches within City right of way shall be backfilled per item 911, City of Columbus Construction and Material specification. Item 912 (Type 1 Only) compacted granular backfill shall be used within the 45 degree influence plane of paved surfaces.
- 1.6.2 The contractor shall be responsible for the condition of trenches within the right-of-way and public easements for a period of 2 (two) years from the final acceptance of the work, and shall make any necessary repairs at no cost to the City of New Albany. The Developer/Contractor shall provide a letter to the City indicating any settlement of the trenches will be repaired at their expense for a period of 5 (five) years from the date of acceptance of the subdivision or site (whichever applicable).
- 1.6.3 Non-rubber tired vehicles shall not be moved on public streets. The City Engineer may grant exceptions where short distances and special circumstances are involved. Granting exceptions must be in writing, and any damages must be repaired to the satisfaction of the City of New Albany.
- 1.6.4 No materials, including pipe, shall be stored within the public right-of-way or within one hundred (100) feet of any intersecting street or driveway. During non-working hours, storage of equipment shall comply with these same requirements. Compliance with these requirements along with additional provisions of the contract specifications shall not relieve the contractor of their legal responsibility to maintain job safety.
- 1.6.5 Any deteriorated pavement due to construction operations shall be saw cut and removed and replaced as per City of Columbus Standard Drawing 2130 Dr.A. The location of the saw cut shall be determined by the City Engineer in the field.
- 1.6.6 When a new roadway is to adjoin an existing roadway any existing underdrain is to be maintained, or replaced if not functional. A relief joint shall be constructed at the intersection of the existing and new road.
- 1.6.7 Ingress and egress shall be maintained at all times to public and private property. Access to all adjoining properties shall be maintained at all times.
- 1.6.8 Access to the site shall be provided through the construction access drive (only) as shown on the erosion control plan.

- 1.6.9 When mail boxes, road or street name signs and supports interfere with construction, the contractor shall remove and erect them in temporary locations during construction in a manner satisfactory to the City Engineer and U.S. Postal Service. After completion of the construction and before final acceptance of the project the contractor shall erect the mailboxes, road or street name signs and supports in a permanent location in accordance with the plans unless otherwise directed by the City Engineer. Removal, temporary erection and permanent erection of mailboxes shall be in accordance with U.S. Postal regulations. This work shall be performed at no cost to the City or the property owners.
- 1.6.10 Trenches along roadways shall be protected in accordance with the ODOT "Drop offs in Work Zones" policy copies of which are available from the Ohio Department of Transportation, Bureau of Traffic, 1980 E. Broad Street, Columbus, Ohio 43215.

1.7 Equipment on Public Roads

1.7.1 Non-rubber tired vehicles shall not be moved on public streets. The City Engineer may grant exceptions where short distances and special circumstances are involved. Granting exceptions must be in writing, and any damages must be repaired to the satisfaction of the City of New Albany.

1.8 Traffic Maintenance

- 1.8.1 All traffic control devices shall be furnished, erected, maintained and removed by the Contractor in accordance with the Ohio Manual of Uniform Traffic Control Devices for Construction and Maintenance Operations (current edition), copies of which are available from the Ohio Department of Transportation, Bureau of Traffic, 1980 West Broad Street, Columbus, Ohio 43215.
- 1.8.2 All traffic lanes shall be fully open to traffic on all public roadways. Any lane closings must be coordinated with the City Engineer at least 48 hours prior to the lane closure.
- 1.8.3 Steady-burning Type "C" lights shall be required on all barricades, drums, and similar devices in use at night.
- 1.8.4 Manual control of traffic by anyone other than a police officer is not permitted.
- 1.8.5 The maintenance of traffic should follow Typical Application (TA)-6 "Shoulder Work with Minor Encroachment" from the Ohio Manual of Uniform Traffic Control Devices (OMUTCD) current edition and ODOT SCD MT-101.90 for drop off requirements.
- 1.8.6 The minimum lane width of 10 feet must be maintained if the work zone encroaches in to the traveled lane. If this requirement cannot be met, the lane must be closed and flaggers employed following Typical Application (TA)-10 "Lane Closure on a Two-Lane Road Using Flaggers" from the Ohio Manual of Uniform Traffic Control Devices (OMUTCO) current edition.

- 1.8.7 This operation may be performed at any time, except during peak hours (7am 9am and 4pm-6pm).
- 1.8.8 If in the opinion of the City Engineer, the Contractor fails to comply with these requirements and the provisions of the approved maintenance of traffic plan, the City Engineer shall suspend work until all requirements are met. Any costs or delays incurred as a result of the failure shall be the full responsibility of the Contractor.
- 1.8.9 The following devices must meet NCHRP 350 or MASH-08 before the devices are installed on the project: drums, cones, vertical panels and the panel support, portable sign supports, temporary impact attenuators, temporary concrete barrier, and barricades.
- 1.8.10 Payment for all traffic maintenance items shall be included within the price bid for the project improvements.
- 1.8.11 All permanent traffic controls not in conflict with the temporary controls shall be maintained throughout this project by the Contractor. Permanent traffic controls may be temporarily relocated, as approved by the Engineer. The Contractor shall assume all liability for missing, damaged and improperly placed signs.
- 1.8.12 The Contractor shall be responsible for the reinstallation and/or replacement of all permanent traffic control devices damaged or removed during the construction. Permanent traffic control no longer in conflict with temporary traffic control shall be replaced immediately.

1.9 Existing Traffic Sign Maintenance

1.9.1 Special care shall be taken to maintain existing signs. If necessary, the contractor shall relocate these signs out of the way of construction, but in conformance with OMUTCD. Any damaged signs shall be replaced at the expense of the contractor.

1.10 Local Access

1.10.1 Ingress and egress shall be maintained to all residential and commercial properties. Driveway closure may be necessary to enable work on or in front of a drive. The contractor will be responsible for notifying owners, residents, or business operators in writing at least 48 hours but not more than 72 hours prior to closure. The engineer shall be given a list of the persons that were given notices with the date of notice included. Closure is permitted only during work hours and access must be returned at the end of each working day. Properties with multiple drives may have one drive closed at a time, while work is performed in the area of the closed drive. Individual drive closures shall be kept to the minimum time needed for construction activities. Every effort must be made to accommodate the owner's need for access.

1.11 Dust Control

1.11.1 The contractor shall be responsible for providing Dust Control measures in accordance with COCCMS Item 616. Dust control operations shall be performed on a periodic basis and/or as directed by the City Engineer to alleviate or prevent a dust nuisance originating within the project limits. Calcium chloride on areas to be seeded and mulched will not be permitted. The cost for all dust control measures shall be included in the price bid for the project improvements.

1.12 Maintain Drainage

1.12.1 The flow in all sewers, drains, field tiles and watercourses encountered shall be maintained by the Contractor. Whenever such watercourses and drains are disturbed or destroyed during the prosecution of the work, they shall be restored by the Contractor to a condition satisfactory to the City Engineer.

1.13 Replacement of Drain Tile and Storm Sewer

1.13.1 All drain tile and storm sewers damaged, disturbed, or removed as a result of the Contractor's operations shall be replaced with the same quality pipe or better, maintaining the same gradient as existing. The drain tile and/or storm sewer shall be connected to the curb sub-drain, storm sewer system or provided with an outlet into the roadway ditch as applicable. Replaced drain tile/storm sewer shall be laid on bedding compacted to 98% maximum density.

1.14 Dewatering

1.14.1 Contractors installing any well, well point, pit, or other device(s) used for the purpose of removing ground water from an aquifer shall complete and file a Well Log and Drilling Report with the Ohio Department of Natural Resources within 30 days of the well completion in accordance with the Ohio Revised Code Section 1521.16 and 1524.05. In addition, any such facility shall be completed in accordance with Section 1521.15 of the Ohio Revised code. For copies of the necessary well log, drilling report, or registration forms, contact:

Ohio Department of Natural Resources Division of Water Fountain Square Columbus, Ohio 43224-1387 (614) 265-6717

- 1.14.2 The contractor shall be responsible to the ODNR for registry, maintenance and abandonment of any withdrawal device used in the construction of this project.
- 1.14.3 Any well, well point, pit, or device installed for the purpose of lowering the ground water to facilitate construction of this project shall be properly abandoned in accordance with the provisions of Section 3745.9.10 of the Ohio Administrative Code or in accordance with the provisions of this plan.
- 1.14.4 The outlet for the well shall be directed into a suitable erosion control device as approved by the City Engineer.

1.14.5 If during construction of the sewer, the water wells belonging to nearby residences are dewatered, the contractor shall provide potable water to the residents. Bottled water will be provided in 4 hours and a 500 gallon water tank hooked up to the existing plumbing system will be provided within 48 hours should well service become dewatered. If the well is unable to be re-commissioned after construction, a tap to a water line shall be provided if available or another well dug, at no extra cost to the residents.

1.15 Blasting

1.15.1 If the contractor intends to use blasting during excavation, the blasting shall be in accordance with the City of a New Albany Ordinance 1505.

1.16 Street Lighting

- 1.16.1 Contractor Requirements
 - (a) The contractor must register with the City of New Albany and show evidence of liability insurance and a copy of their State of Ohio license.
 - (b) Obtain required permits through the New Albany Service Department and Community Development Department.

1.16.2 Street Light Submittals

- (a) A site development plan must be submitted by Ohio Registered Engineer to the City of New Albany Service Department for preliminary review. The plans need to show the following information:
 - (1) Property lines.
 - (2) Utility and drainage easements.
 - (3) Storm drains and catch basins.
 - (4) Street light layout.
- (b) Submit three (3) copies of the standard construction drawings to Community Development for review to receive approval. Permit must be issued prior to beginning work.
- (c) Information on the construction drawings are to include:
 - (1) Location of light poles, disconnect switch, and power source.
 - (2) Voltage drop calculations, loads, wire size, and over-current protection.
 - (3) Photo cell location shown near or at disconnects.
 - (4) Foundation and rebar placement details for pole bases.

1.16.3 Inspection Requirements

- (a) The Contractor must schedule inspections through the Community Development.
- (b) The following inspections from the Community Development Department are required:

Rough inspections

- (1) Conduit Depth. (100% of conduit must be inspected before burial)
- (2) Ground rod and rebar connections
- (3) Rebar reinforcement of light pole foundation

Final inspection

- (1) Final connections at disconnect and light poles.
- (2) Demonstrate 25 OHMS or less to the ground or add a second ground rod.
- (3) Light pole finish (scratches, dents or paint defects) shall be repaired if damaged.
- (4) Final inspection demonstrating the operation of all lights

1.16.4 Installation Requirements

- (a) This work shall consist of furnishing and installing electrical materials and equipment complete and ready for service, in reasonably close conformity with locations, dimensions, and grades shown on the plans or as ordered by the City Engineer. This work shall also include necessary excavation and backfill, and disposal of discarded materials, and restoration of disturbed areas.
- (b) Foundations shall have a sleeve for the grounding electrode conductor. The connection to the ground rod shall be by exothermic welding or listed pressure connector. The ground rod shall be driven 8 feet into undisturbed earth next to the pole base.
- (c) Trenches adjacent to the pavement shall be excavated in a manner that will prevent the curb from moving or separating from the road base. Minimum distance from the curb to the ditch shall be 2 feet.
- (d) Where conduit crosses the street, a pull-box shall be installed on both sides of the street and at directional changes more than 45 degrees. No conduit runs to exceed 200' between junction points.
- (e) Conduit shall be schedule 40 PVC and shall be at a depth of at least 24".
- (f) Where, in the opinion of the Engineer, an excavation for a foundation has revealed an unstable condition at the bottom of the excavation, the foundation shall be deepened or enlarged in size as directed by the Engineer. Payment for additional quantities of excavation and foundation concrete required by the Engineer for this purpose shall be made by the Contractor. If a cave-in should occur during the excavation, the Contractor may continue excavation with use of a casing, sleeves, or other methods, with the approval of the Engineer.
- (g) Anchor bolts for light poles shall be installed in the foundations in accordance with approved shop drawings and anchor bolt setting templates. The tops of foundations shall be finished smooth and level. Anchor bolt settings for light poles shall provide that light poles predominantly illuminating a mainline roadway shall be positioned with the arm of the pole perpendicular to the longitudinal centerline of the roadway at that location. After forms have been removed, excavated spaces around the foundations shall be backfilled with suitable materials placed and tamped in thin layers as directed by the Engineer.
- (h) When pull boxes are installed in paved areas, an adequate area shall be removed by saw cutting on the sides, or by removal back to an expansion joint. The cover surface shall be adjusted to be slightly above the surrounding pavement.

1.16.5 General Requirements

(a) Street lighting illumination and installation shall meet the New Albany Standards.

Luminaire supports shall be a Holophane brand Hallbrook Series, with a 15' pole plus goose arm(s).

- Reference for single head pole is Model HLBK ALN 15 1A QSM CMC AGB.
- Double Head pole (twin Goosenecks) shall be Model HLBK ALN 15 2A QSM CMC ABG.
- Clam Shell Pole Base shall be Model GWBA512RP99P335.
- Pole and Base shall be factory painted New Albany Green (Paint Reference PMS 5535).

Luminaires shall be:

- Holophane Brand Glaswerks LED Hallbrook Model GSLF3 P40 40K MVOLT ASY QSM CMC.
- Color Temperature 3000K.
- Photocontrol receptacle reference PR3.
- 120-277V.
- Luminaire housing shall be factory painted New Albany Green (Paint Reference PMS 5535).
 - (1) This work shall consist of furnishing and installing electrical materials and equipment complete and ready for service, in conformity with the locations, dimensions, and grades shown on the plans or as ordered by the Engineer. This work shall also include necessary excavation and backfill, and disposal of discarded materials, and restoration of disturbed facilities and surfaces.
 - (2) Each system shall conform as to voltage, amperage, frequency and type as specified by design. The Contractor shall furnish and install all incidentals necessary to provide a complete and practical working unit or system. All installations shall be in accordance with the National Electrical Code and shall also conform to local laws and codes governing such work. The Contractor shall obtain and pay for all permits required. In order to provide the necessary requirements for the proposed lighting system, the Contractor shall cooperate with the agency which will furnish electrical service also hereinafter referred to as the supplying agency.
 - (3) Light poles conforming to approved shop drawings shall be set in the ground, erected up on the completed concrete foundations or other specified type of mounting. Light poles shall be plumbed. After erection, each light pole shall be adequately grounded and shall have hand hole covers or transformer base doors fastened in place. After erection, painted poles shall be inspected for defects in the painted surfaces. Minor scratches shall be given two coats of matching paint. The second coats

- shall not be applied until after the first coat has adequately dried. Poles having major scratches or defects in the painted surfaces will not be accepted.
- (4) The contractor shall furnish all of the materials in accordance with the listed specifications. The equipment list and receipts shall be delivered to the Service Department. A copy of the receipt shall be provided to the City Engineer.
- (5) The contractor shall provide the required number of poles complete with light fixture, bulb, wiring, and pedestal to the City. The equipment shall be delivered to the Service Department and a copy of the receipt shall be provided to the City Engineer.
- (6) Street fixtures shall be controlled to operate at the same time when in close proximity or on the same street in the areas they serve. Some areas may require a single photocell for each light, while others may be joined to one photocell. In no case shall there be more than 6 lights on a photocell. The photo controller shall be placed near the disconnect box.

1.16.6 Material Specifications

- (a) Disconnect box for a 120 rated current circuit shall be mounted to a 4x6 treated lumber pole containing a circuit breaker and have a lockable door. The box needs to be a minimum of 24 inches above final grade. Disconnect box for a 480 volt circuit shall be stainless steel in material and mounted to a concrete footer. The box shall be a minimum of 30 inches tall, 18 inches wide, and 15 inches deep. The concrete footer shall exceed 4 inches in all directions beyond base of disconnect box. The access door on disconnect shall be a minimum of 16 inches wide by 23 inches tall. The door shall have a latching handle that can be locked by padlock, and hinged on one side.
- (b) Wiring for a 120 volt circuit to the pole and/or disconnect shall be 6 gauge in size, copper conductor, and have a USE jacketing or equivalent thickness. Wiring for a 480 volt circuit to the pole and/or disconnect shall be 4 gauge in size, copper conductor, and have a USE jacketing or equivalent thickness. Wiring going up all poles to the load shall be 10 gauge stranded copper wire. The hot lead shall have a black jacket, neutral lead shall have a white jacket, and the ground lead shall have a green jacket.
- (c) Each electrical circuit shall have a fuse in the pole base. The fuse holder must be capable of accepting #6 awg on line side and 10 gauge on load side. 480 volt circuits must be capable of passing power to another pole on the line side of the holder
- (d) Pull boxes in residential areas shall be 18 inches long, 12 inches wide and 18 inches deep in size or equivalent. All 480 volt circuit pull boxes shall be traffic rated. The 480 volt boxes shall be 25 inches long, 16 inches wide, and 18 inches deep in size or equivalent. All pull boxes must have the word "electrical" embossed on the cover of the box. Plates attached to the cover will not be accepted. All pull boxes must be a minimum of curb height or final grade.

1.17 Permits

- 1.17.1 The Contractor shall be responsible to obtain all necessary permits unless otherwise noted.
- 1.17.2 A tap permit for domestic and commercial waterline services must be obtained from the City of Columbus and the City of New Albany prior to making the tap into the public waterline.
- 1.17.3 No service connection permits shall be issued or connections made to any existing service taps until waterlines have been disinfected (chlorinated).
- 1.17.4 Excavation and Driveway Permit(s) for work within the public right-of-way limits shall be obtained from the City as warranted.
- 1.17.5 No building permits will be issued until all punch list items are completed to the satisfaction of the City of New Albany. Domestic waterline taps for potable use and fire supply and sanitary sewer connection permits must be coordinated with the City of Columbus and the City of New Albany and all associated fees must be paid prior to making the tap. Water service will not be provided until all lines have been chlorinated.

1.18 Construction Layout

- 1.18.1 General Field layout control will be provided by the Owner. Provisions for all other construction staking required to accomplish the utility improvements shall be performed by a State of Ohio Licensed Professional Surveyor in accordance with Contract Documents.
- 1.18.2 All construction layout stakes (placed at intervals not to exceed 50') are to be set on the opposite side of the trench from where the excavated soil is placed. Stakes are to be preserved by the Contractor. If the above is not followed, work shall be suspended until the Contractor has requested re-staking, stakes have been replaced, and revised cut sheets have been approved.
- 1.18.3 Construction shall not be initiated until cut sheets have been submitted to the City Engineer's office in digital format.

1.19 Clearing and Grubbing

1.19.1 Any additional clearing and grubbing beyond that performed as part of the Mass Excavation shall be included as part of this plan. Costs associated with tree, brush or stump removal shall be included with the unit prices for the improvements. Trees planned to be removed shall be shown on the plans. City approval shall be obtained prior to removing trees.

1.19.2 Silt Fence or Snow Fence shall be used, if deemed necessary, to preserve the maximum amount of existing trees and vegetation.

1.20 Aggregate Base and Backfill Material

1.20.1 Aggregate base and backfill material shall be free of recycled concrete, reclaimed asphalt pavement, brick, wood or any other deleterious material that would prevent proper compaction from being achieved.

1.21 Prohibited Construction Activities

- 1.21.1 The contractor shall not use construction proceedings, activities or operations that may unnecessarily impact the natural environment or the public health and safety. Prohibited construction proceedings, activities or operations include, but are not limited to:
 - (a) Disposing of excess or unsuitable excavated material in wetlands or floodplains, even with the permission of the property owner.
 - (b) Indiscriminate, arbitrary, or capricious operation of equipment in any stream corridors, any wetlands, any surface waters, or outside the easement limits.
 - (c) Pumping of sediment-laden water from trenches or other excavations into any surface waters, any stream corridors, any wetlands or storm drains.
 - (d) Discharging pollutants such as chemicals, fuel, lubricants, bituminous materials, raw sewage, and other harmful waste into or alongside of rivers, streams, impoundments or into natural or man-made channels leading thereto.
 - (e) Permanent or unspecified alteration of flow line of a stream.
 - (f) Damaging vegetation outside of the construction area.
 - (g) Disposal of trees, brush and other debris in any stream corridors, an wetlands, and surface water, or at unspecified locations.
 - (h) Open burning of project debris without a permit.
 - (i) Storing construction equipment and vehicles and/or stock piling construction materials on property, public or private, not previously specified by the City Engineer for said purpose.

2 SANITARY SEWER

2.1 Clean Water Connections Prohibited

2.1.1 Roof drains, foundation drains, and other clean water connections to the sanitary sewer system are prohibited on this project.

2.2 Risers

2.2.1 Service risers, Item 914, shall be installed where depth from the wye fitting to the existing or proposed surface elevation exceeds 10 feet. Top of riser shall be no more than 9 feet +/- below existing or proposed surface elevation, whichever is higher.

2.3 Sanitary Services

2.3.1 All sanitary services shall be a minimum of 2.08% grade (1/4" per foot).

- 2.3.2 All sanitary sewer lines installed on this project shall be in accordance with CMSC Item 901 & ASTM D-2321, or approved equal. Minimum requirements for sanitary sewer on the project shall be PVC sewer pipe ASTM D-3034 or High Density HDPP ASTM F-2736 & F-2764. All joints shall be gasketed integral bell & spigot in accordance with ASTM D-3212.
- 2.3.3 All sanitary sewer including service lines shall be subject to and pass infiltration or ex-filtration tests according to CMSC Item 901.20 and must be approved for use by the City Engineer before any service connections are tapped into sewers. Refer to Item 901.20 (3) for sanitary manhole testing requirements. All public sanitary sewer lids shall be stamped NEW ALBANY OHIO SANITARY SEWER. Private sewers shall be stamped SANITARY SEWER.
- 2.3.4 Existing manhole shall be core cut to accept proposed sanitary sewer. All manholes shall be tested in accordance with CMSC Item 901.20.
- 2.3.5 All precast products shall be inspected at the location of manufacture (refer to Note Block 4).
- 2.3.6 Provide cut sheets in digital format to the City's inspection agency.

2.4 Deflection Testing

2.4.1 All sewer lines installed on this project using P.V.C., HDPE or HDPP pipe will be deflection tested by pulling an approved Mandrel equal in diameter to 95% of the pipe diameter through the pipe after pipe is backfilled and a sufficient amount of time is allowed for weight transfer of the backfill to the pipe and bedding, as required under CMSC item 901.21. Testing shall be performed no sooner than 30 days after installation and backfilling.

2.5 Trench Dams

2.5.1 Cut off trench dams, in accordance with item 901.11, shall be constructed between each pair of manholes.

2.6 Temporary Bulkheads

2.6.1 Temporary bulkheads shall be placed where indicated on the plans, and shall remain in place until removal is directed by the City Engineer.

2.7 Wye Poles

2.7.1 Wye poles shall be placed at the end of sanitary service laterals and at the end of stub mainlines ending 5 feet or more from a manhole. The wye pole shall be placed from the pipe to at least three feet above the proposed grade. A 2 foot long minimum section of rebar shall be placed vertically alongside the wye pole 6 inches below the proposed grade. The rebar shall not be fastened in any way to the wye pole.

2.8 Manhole Coring

- 2.8.1 The contractor shall furnish all material, equipment, and labor to make connections to existing manholes. The sewer pipe to manhole connections for all sanitary sewers shall be flexible and watertight. All holes shall be neatly cored. The sewer pipe barrel at the springline shall not extend more than 1-inch beyond the inside face of the manhole. Any metal that is used shall be Type 300 Series Stainless Steel. The connection may be any of the following:
 - 1. Rubber Sleeve with Stainless Steel Banding.
 - a. Kor-N-Seal as manufactured by National Pollution Control Systems, Inc.
 - b. Lock Joint Flexible Manhole Sleeve as manufactured by Interpace Corporation.
 - c. Or equal as approved by the City Engineer.
 - 2. Rubber Gasket Compression.
 - a. Press Wedge II as manufactured by Press-Seal Gasket Corporation.
 - b. Dura Seal III as manufactured by Dura Tech, Inc.
 - c. Link-Seal as manufactured by Thunderline Corporation.
 - d. Or equal as approved by the City Engineer.

2.9 Sewer Inspection

2.9.1 See note block 4.14 for inspection requirements.

3 STREETS

3.1 Concrete Base Construction

- 3.1.1 In addition to the requirements set forth in the City of Columbus Specifications, the following shall apply:
 - a) No water shall be added to the concrete while in the mixers unless specifically authorized by the City Engineer or his representative.
 - b) Subgrade shall be at proper moisture content prior to base construction. Water shall be added to the subbase if necessary.
 - c) Concrete exceeding a 4" slump or being on the truck for 60 minutes or more will be rejected from the project.

3.2 Street Pre-Construction Conference

3.2.1 Prior to street construction a pre-construction conference shall be held at the City Hall with the owner and superintendent/foremen of the base, curb and asphalt sub-contractors. The pre-construction conference shall be scheduled by the contractor for 48 hours prior to the pouring of the curb. The purpose of the meeting is to ensure a 6" curb height is provided upon the completion of the street system.

3.3 Transverse & Longitudinal Joints

3.3.1 Transverse contraction and longitudinal joints shall be constructed as per 305.01 paragraph (C) & (D). (Including 26' pavement)

- 3.3.2 No transverse joints shall be permitted adjacent to a new pavement surface which is more than 24 hours old, weather permitting, except for joints which have existed over weekends and holidays. The surface course shall be continuous to the existing pavement surface.
- 3.3.3 The contractor shall provide a written procedure on how he/she intends to construct the final two courses of asphalt prior to construction for approval by the City Engineer. The procedure should include specifics for construction of intersections.

3.4 Curb Height

3.4.1 When constructing the pavement (concrete base to asphalt courses) the contractor shall ensure that a 6" height curb is available upon completion of street construction. The City may require this curb to be removed and reconstructed if this height deviates more or less than ½" of the 6" required height. All costs associated with the above shall be borne by the contractor.

3.5 Crack Sealing

3.5.1 The contractor, thirty (30) days prior to project acceptance by City Council or as directed by the City Engineer and weather permitting shall crack seal all pavement cracks as directed by the City Engineer. The crack seal shall be in accordance with Item 423. If acceptance occurs in winter months, crack seal may be delayed until weather permits.

3.6 Pavement Relief Joints

3.6.1 Asphalt shall not be placed in the pavement relief joints until permanent or temporary street signs are erected.

3.7 Curb Stamps

3.7.1 During installation, curb shall be stamped with the following symbols at the noted utilities:

"X" – Utility Crossing

"T" - Sump Pump Junction Box

"W" - Water Service

"WV" - Water Valve

"S" - Sanitary Sewer Crossing

3.8 Detectable Warnings

3.8.1 Type A detectable warning shall be installed as per COC Std. Dwg. 2319. Material shall be pre-cast manufactured 4"x8"x2.25" red clay brick.

4 STORM SEWER

4.1 Storm Sewer Pipe and Structures

4.1 Pipe specification for the plan improvements may be in accordance with the following (Except as designated within the profiles.)

- A) Reinforced concrete pipe ASTM C-76 (CMSC 706.02). Concrete classification shall be in conformance with the following unless otherwise referenced by the profiles.
 - 12" -15" diameter Class IV
 - 18" 24" diameter Class III
 - 27" and larger diameter Class II, or
- B) High Density Polypropylene, HDPP 12" 60" Polypropylene Double Wall ASTM F 2736 12" thru 30" and ASTM F- 2881 36" thru 60" with integral bell & spigot meeting the watertight requirements of ASTM D 3212 (CMSC 720.13 & ODOT 707.65), or
- C) Smooth-lined corrugated polyethylene pipe (CMSC Item 720.12) (Hancor Hi-Q, ADS N-12, or equal). Except any sewers within Public R/W or as directed by the City Engineer, or
- D) P.V.C. sewer pipe ASTM D3034 with joints as per ASTM D3212. PVC sewer pipe placement shall be limited to sewers through 10" diameter.
- **4.2** The Contractor shall provide written certification to the Engineer reflecting the pipe material to be used along with the current City consignment list identifying the approved pipe material specification.
- **4.3** All bedding shall be in accordance with Standard Drawing AA-S151 for rigid pipe sewer and in accordance with Standard Drawing AA-S149 for flexible pipe sewer.
- **4.4** The cost of compacted backfill shall be included in unit price bid for Item 901. Concrete encasement will be required (CCMS 901.12) where 30" of cover is not maintained. Cost to be included in unit price bid for Item 901.
- **4.5** All public manhole castings shall be stamped NEW ALBANY OHIO STORM. Temporary casting tops may be used until such are made available. Private manhole lids shall be stamped Storm Sewer.
- **4.6** All pre-cast concrete products shall be inspected at the location of manufacture. Approved pre-cast concrete products must be stamped or have such identification noting that inspection has been performed by the City of Columbus. Pre-cast concrete products without proof of inspection shall not be approved for installation.
- **4.7** The contractor shall submit a copy of the plans and a list of proposed pre-cast concrete product manufactures to the City of Columbus Construction Inspection Division before commencing construction. Send the information to the following address:

Construction Inspection Division City of Columbus 1800 East 17th Avenue Columbus, Ohio 43219

- **4.8** Openings shall be provided in the drainage structures to accommodate underdrain outlets.
- **4.9** All storm structures with a depth greater than four feet shall have steps (AA-S119) installed at 16" intervals maximum.
- **4.10** All standard catch basins and curb inlets within paved areas are to have bicycle safe grates.
- **4.11** When a new roadway is to adjoin an existing roadway any existing underdrain is to be maintained, or replaced if not functional. A relief joint shall be constructed at the intersection of the existing and new road.
- **4.12** All existing inverts along with the proposed top of casting elevations shall be verified by the Contractor prior to construction of the sewer.
- **4.13** Within proposed roadway sections that include straight 18" concrete curb, all frames and grates for curb and gutter inlets shall be per East Jordan 7505 Series or approved equal.

4.14 Sewer Inspection

- 4.14.1 The Contractor shall ensure there is a surveyor's level and rod on the project for use in performing grade checks whenever sewer line structures or pipe are being installed. The Contractor shall make this equipment available for the use of and assist the City Inspector in performing grade checks when requested by the inspector. The Inspector will make all reasonable attempts to confine requests for assistance in performing grade checks to times convenient to the Contractor.
- 4.14.2 These checks will be performed to ensure the following:
 - 1. Proper placement of each structure.
 - 2. Proper installation of initial runs of pipe from a structure.
 - 3. Grade, after an overnight or longer shutdown.
 - 4. Grade, at any other time the inspector has reason to question grade of installation.
- 4.14.3 Grade checks performed by the City Inspector in no way relieve the Contractor for the ultimate responsibility to ensure construction to the plan grade.
- 4.14.4 At the request of the City Engineer, the contractor shall remove 36" storm sewer castings for inspection during construction and for final inspection.

4.14.5 Deflection Testing

All sewer lines installed on this project using P.V.C., HDPP, or H.D.P.E. pipe will be deflection tested by pulling an approved Mandrel equal in diameter to 95% of the pipe

diameter through the pipe after pipe is backfilled and a sufficient amount of time is allowed for weight transfer of the backfill to the pipe and bedding, as required under CMSC Item 901.21. Testing shall be performed no sooner than 30 days after installation and backfilling.

4.14.6 Adjustments of manholes that would result in a chimney section greater than 24" high shall require adding another barrel section. Adjustments of manholes shall include the use of HDPE or concrete grade rings in addition to the requirements of CMS Section 604. Grade rings are not acceptable if the top of casting change in elevation exceeds nine inches. Use of brick to adjust the heights of castings is unacceptable. Payment shall be included within Item 604-Manhole Reconstructed to Grade, As Per Plan where depths of adjustments are greater than 9" and Item 604-Manhole Adjusted to Grade where depths of adjustments are less than 9".

5 WATER LINE

- **5.1** All water line and fire hydrant construction, material and specification shall be in accordance with "City of Columbus Construction and Material Specifications", 2018 edition and all revisions, including supplements and City of New Albany requirements including Chapter 939 of the City Code. Water main materials and installations shall be in accordance with the current rules, regulations and standard drawings of the City of Columbus, Division of Water with the exception of utilization of C900 PVC pipe. Use of C900 PVC pipe will not be permitted in New Albany unless otherwise approved by the City Engineer.
- **5.2** For any emergencies involving the water distribution system, please contact the Division of Water Distribution Maintenance Office at 614-645-7788.
- 5.3 Each fire hydrant shall be acceptable to the City of New Albany with two (2) 2-1/2" side nozzles and one (1) 5" integrated Storz fitting in place of pumper nozzle (no add-on fittings) in accordance with New Albany Fire specifications. Hydrants shall be in accordance with the CCMS. All public hydrants and nozzles shall receive 2 coats of New Albany Red (Federal Color Book 595, Color 11105). Private fire hydrants shall be painted red with white caps and bonnets. An additional fire hydrant for future maintenance purposes shall be delivered to the Public Service Department Building located at 7800 Bevelhymer Road, New Albany, OH 43054 (Residential Subdivision Projects Only). Prior to final acceptance, fire hydrants shall be inspected and accepted by the Plain Township Fire Chief and the Public Service Department Building located at 7800 Bevelhymer Road, New Albany, OH 43054. These inspections will be scheduled by contacting the New Albany Building Department at (614) 939-2254. All brass fittings associated with water work, including repairs to the existing system, shall conform to the revised allowable lead extraction limit per the updated NSF/ANSI 61 Standard. The Division of Water's Approved Materials List has been updated to reflect this requirement.
- **5.4** No water service construction before or after the water meter shall begin until permits are issued by the City of Columbus Division of Water. It shall be unlawful for

any person to perform any work on City of Columbus water line systems without first securing license to engage in such work, as indicated in Columbus City Code Section 1103.02 and 1103.06. This work includes any attachments, additions to or alterations in any city service pipe or appurtenances (including water service lines and taps). This requirement may be met by utilization of a subcontractor who holds a City of Columbus Water Contractor License or a Combined Water/Sewer Contractor License to perform this work. Utilization of a subcontractor must meet the licensing requirements of City of Columbus Building Code, in particular Section 4114.119 and 4114.529.

- **5.5** Water service taps 2" and smaller shall be Type K, soft temper copper tubing conforming with the requirements of 805.03 of the CMSC. The Contractor shall obtain the proper hydrant permit(s), and pay any applicable fees, for any approved hydrant usage deemed necessary for work under this improvement. Permits must be obtained from the New Albany Building Department prior to contacting the Division of Water Permit Office (645-7330). The Contractor shall adhere to all rules & regulations governing said permit and must have the original permit on site anytime in which the hydrant is in use. Cost to be included in the various bid items.
- **5.6** All water mains shall be disinfected in accordance with Section 801.15 of the City of Columbus Construction and Material Specifications. Special attention is directed to applicable sections of AWWA C-651. When water mains are ready for disinfection, the Contractor shall submit the survey coordinates to the Design Engineer for preparation of digital as-built drawings. The Design Engineer shall then submit three (3) SETS OF THE RED LINED "As-Built" plans (with survey coordinates) to the City Engineer. The City of New Albany Shall submit a letter stating that the waterlines have been pressure tested and need to be disinfected to the City of Columbus, Division of Water. The Contractor shall be responsible for all costs associated with the disinfection of all water mains constructed under this plan. All water mains shall be cleaned and flushed, and any water main 12-inch and larger must be properly pigged, in accordance with section 801.13 of the City of Columbus, Construction, and Material Specifications. Only one connection to an existing water line is permitted before disinfection of a new water line has been completed. All other connections must be made after the line has been disinfected.

The contractor and representatives from the City of New Albany shall meet with COC/DOW staff prior to installing blow-offs and taps to obtain pre-approval.

- 5.6.1.1 Any section of water main that is longer than 20 feet in length shall be chlorinated. Hand swabbing methods will only be permitted for sections less than or equal to 20 feet in length. Use unscented household bleach for hand swabbing of pipe and fittings. Please note that cut-in tees, sleeves, and any other required fittings or piping shall be taken into account and are included in the total length of the section (cut to cut).
- 5.6.1.2 Contractor shall adhere to the requirements of the Ohio Administrative Code Chapter 3745-83.02 Water Disruption of Service Rule. Excavate pits sufficiently below

the area to be connected in order to maintain water levels below the water main. If water from the pit enters the existing main, contact the Division of Water immediately. Ensure that sufficiently sized pumps are utilized to remove water from the trench and back-up pumps are kept on site for redundancy.

- **5.7** All water mains shall be pressure tested in accordance with section 801.14 of the City of Columbus Construction and Material Specifications, with the following exception: 150 psi of pressure shall be maintained for at least two hours in any tested section. The City may not approve any test lasting less than two hours regardless of the amount of leakage.
- **5.8** Where indicated on the plans, the existing water main shall be abandoned; and any existing water services off this main shall be transferred to the new water main. Prior to abandonment of the existing water main, the proposed water main shall be pigged (if required), tested, chlorinated and put in service and then the existing water services shall be transferred. The Contractor shall maintain water services to all properties during construction of the new water main and shall notify all customers affected by the transfer of services. To ensure that all existing services are transferred to the new main, no water main shall be abandoned until the new water main has been put in service; all affected water services have been transferred; and the existing water main to be abandoned has been shut down for 24 hours. All visible valve boxes, fire hydrants, and service boxes on the water main to be abandoned, which will no longer be in service, shall be removed. All water mains to be abandoned shall be made water tight. The required surface restoration shall be paid for under the appropriate bid item(s).
- 5.9 Water service boxes shall be placed 1' from the edge of the proposed or existing sidewalk between the sidewalk and the curb, or 2 feet inside the right-of-way or easement line when no sidewalk is present or proposed. Refer to Standard Drawing L-9901 for additional information.
- **5.9** Maintain eighteen (18) inches vertical and ten (10) feet horizontal separation between any sanitary or storm sewer piping and all proposed water mains.
- **5.10** When Controlled Density Fill (Item 613, Type 3 Only within Public R/W) is to be used as backfill, the Contractor shall provide Size No. 57 Crushed Carbonate Stone (CCS) 1 foot below to 1 foot above the existing water line.
- **5.11** All water lines installed within a 45 degree influence plain of pavement shall be backfilled with Item 912 (Type 1 Only) compacted granular backfill.

5.12 Survey Coordinates

5.12.1 Survey Coordinates shall include all material, equipment, and labor necessary to obtain horizontal and vertical (Northing, Easting, and Elevation) survey coordinates for the water main improvements. The survey coordinates shall be obtained for the completed water main construction and shall include all valves, tees, crosses, bends, deflections, plugs, reducers, tapping sleeves, blow offs, chlorination taps, fire hydrants, air releases, curb stops, casing pipe termini, and other fittings. Additional survey

coordinates are required on the water main every 200' where no fitting or other water main structure is being installed within that length of the improvement.

- 5.12.2 All survey coordinates shall be referenced to the applicable County Engineer's Monuments, and shall be based on the North American Datum of 1983 (NAD 83) with the NSRS2007 adjustment, with further reference made to the Ohio State Plane South Coordinate System, South Zone, with elevations based on NAVD 88 datum. All coordinates (Northing, Easting, Elevation) shall be referenced to the nearest hundredth (NXXXXXX,XX,EXXXXXXXX, Elev. XXX.XX). All survey coordinates shall be accurate to within 1.0 foot horizontal and a tenth of a foot (0.10) or less vertical.
- 5.12.3 The coordinates shall be documented to the Municipality Engineer or designated Representative in digital spreadsheet form and shall include the applicable Item, Station, Northing, Easting, and elevation. Coordinates shall be submitted to the Municipality Engineer or designated Representative on a bi-weekly basis. Coordinates shall also be submitted to the Division of Power and Water as part of the request for chlorination (See Note Block 5.6).
- 5.12.4 Lump sum payment is full compensation for all work involved in obtaining and documenting the survey coordinates as described in this specification.
- **5.13** The Contractor must receive pre-approval from the Division of Water and City Engineer 48 hours in advance if elimination of bends is proposed and joint deflection is utilized instead.

5.14 Special Notes (If Applicable)

- 5.14.1 All water line valve boxes, service boxes, test stations, pitometer tap structures, meter pit covers, and other surface utility structures within the disturbed area shall be adjusted to grade. Any of these structures located within pavement, driveways, or other traveled areas, whether existing or proposed, shall be equipped with a traffic rated, heavy duty valve box and/or cover in accordance with the Standard Drawings. Existing water service boxes to remain that are encountered within the project limits shall be cleaned out, centered over the curb stop, and adjusted to the proposed grade.
- 5.14.2 Where new conduit is proposed to cross an existing or proposed water main or water service, a minimum of 12-inch of vertical clearance shall be maintained between the conduit and the water main or service. A minimum of 3-feet of horizontal clearance (out to out) is required at locations where the conduit is parallel to the water main and at locations of water line thrust blocks.
- 5.14.3 A minimum of 3 feet horizontal clearance (out to out) shall be maintained between all existing water mains and foundations for poles, pull boxes, push button pedestals, and any other miscellaneous electrical structure.

- 5.14.4 A minimum of 4 feet of cover is required prior to pressure testing any water main. A sufficient amount of backfill shall be installed to provide the adequate restraint in areas where required.
- 5.14.5 Proposed water mains shall be located a minimum distance of twenty (20) feet away from any structure, overhang or footer.
- 5.14.6 No two (2) adjacent fire hydrants shall be taken out of service concurrently.
- 5.14.7 Relocated fire hydrants shall be put back in service as soon as possible.
- 5.14.8 The Contractor shall coordinate his work such that no water customer will have their service disrupted more than two (2) times throughout the duration of this project.
- 5.14.9 Fire hydrant relocations shall conform to applicable sections of Item 809 of the Columbus Construction and Material Specifications. Work shall consist of removing the existing hydrant, installing new 6" pipe and fitting as required to locate the fire hydrant 2 feet from back of proposed curb or 8 feet off edge of pavement, resetting hydrant and blocking as required. All 6" pipe shall be installed at 4'0)' minimum cover. Hydrant extensions shall be provided per Item 810, as required. Relocated fire hydrants shall be adjusted to proper grade and faced in proper direction. When a hydrant is relocated fifteen (15) feet or more from the "Typical Hydrant Setting" valve location (see L-6409 & L-6637), an additional valve shall be installed, and restrained, within two (2) feet of the relocated hydrant. Payment is to be included under Item 809, Fire Hydrant Relocated.

6 OWNERS NOTES IF APPLICABLE

7 EROSION CONTROL

7.1 Control of erosion and sedimentation shall be in accordance with the City of New Albany Codified Ordinance chapter 1183.

7.2 Temporary Soil Erosion and Sediment Control

- 7.2.1 Erosion and sediment control measures are required as a part of this project. The erosion and sediment control plan reflects a schematic diagram of the intended measures for compliance with the required standards. General practice and/or site field conditions may warrant variation in the placement or use of the specific controls. Any variations shall be approved by the City Engineer.
- 7.2.2 The contractor in compliance with the NPDES General Permit for Storm Water Discharge associated with construction activity and in accordance with the City of New

Albany's Ordinance 1183, will be responsible for providing adequate erosion and sediment control measures along with proper maintenance and inspection. An erosion control maintenance log shall be kept on site in compliance with OEPA regulations. The log shall be available for public inspection.

7.3 Seeding

7.3.1 "Temporary seeding" No area for which grading has been completed shall be left unseeded or un-mulched for longer than 14 days. If permanent seed is not applied at this time, temporary seeding shall be done at the following rates:

March 1 to August 15

 Seed:
 Oats
 2 lbs./1,000 sq. ft.

 Fertilizer:
 (12:12:12)
 12-½ lbs./1,000 sq. ft.

Mulch: (Straw or Hay) 2 tons/acre

August 15 to November 1

 Seed:
 Annual Rye
 2 lbs./1,000 sq. ft.

 Fertilizer:
 (12:12:12)
 12-½ lbs./1,000 sq. ft.

Mulch: (Straw or Hay) 2 tons/acre

November 1 to March 1

Mulch (ONLY): (Straw or Hay) 2 tons/acre

- 7.3.2 "Permanent seeding" shall be done between March 15 and September 15. If seeding is done between September 15 and March 15, it shall be classified as "Temporary Seeding". Permanent seed shall be 40% Kentucky Bluegrass, 40% Creeping Red Fescue, 20% Annual Ryegrass.
- 7.3.3 Permanent seeding shall consist of fertilizing, watering and seeding rates indicated under Item 659. Seeding shall be applied within two (2) days after final grading or following seed bed preparation.

Rates of application of Item 659:

Seed: 2 lbs./1,000 sq. ft. Fertilizer: (12:12:12) 25 lbs./1,000 sq. ft.

Mulch: (Straw or Hay) 2 tons/acre

7.4 Stabilization of Denuded Areas

- 7.4.1 Denuded areas shall have soil stabilization applied within seven days if they are to remain dormant for more than fourteen days.
- 7.4.2 Sheet flow runoff from denuded areas shall be filtered or diverted to a setting facility.

- 7.4.3 Sediment Barriers such as sediment fence or diversions to settling facilities shall protect adjacent properties and water resources from sediment transported by sheet flow.
- 7.4.4 Prior to Construction Operations in a particular area, all sedimentation and erosion control features shall be in place. Field adjustments with respect to locations and dimensions may be made by the Engineer.
- 7.4.5 The Contractor shall place inlet protection for the erosion control immediately after construction of the catch basins or inlets, which are not tributary to a sediment basin or dam.
- 7.4.6 It may become necessary to remove portions of the barrier during construction to facilitate the grading operations in certain areas. However, the barrier shall be in place in the evening or during any inclement weather.

7.5 Maintenance

- 7.5.1 It is the Contractor's responsibility to maintain the sediment control features used on this project. The site shall be inspected periodically and within 24 hours of a significant rainfall. Records of these inspections shall be kept and made available to jurisdictional agencies if requested. Any sediment or debris which has reduced the efficiency of a structure shall be removed immediately. Should a structure or feature become damaged, the Contractor shall repair or replace at no additional cost to the Owner.
- 7.5.2 All Erosion & Sediment Control practices are subject to Field Modification at the direction of the City Engineer and/or Ohio EPA.

8 RIGHT OF WAY PERMITS

8.1 The contractor shall have all necessary permits before beginning construction. A permit is required to bury in public right-of-way. Permits may be required from more than one governing agency. The contractor shall notify the appropriate governing agency at least forty-eight hours in advance of commencement of work. On state right-of-way, call Ohio Department of Transportation, division of Highways Permit Expediter forty-eight hours in advance.

9 PAVEMENT REPLACEMENT

9.1 If any street or road within the City is damaged as a result of construction traffic related to Construction as determined by the City Engineer, all requested repairs shall be made by the Contractor. Existing pavement surfaces shall be video taped prior to

the pre-construction meeting by the Contractor and a copy of the tape is to be furnished to the City Engineer.

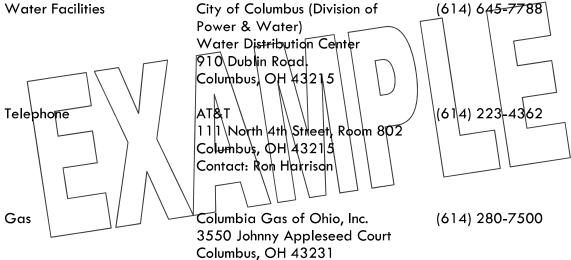
10 EXISTING UTILITIES

- 10.1 The identity and location of the existing underground utility facilities know to be located in the construction area have been shown on the plans as accurately as provided by the Owner of the underground utility. The City of New Albany and/or Engineer assumes no responsibility to the accuracy or the depths of the underground facilities shown on the plans.
- 10.2 Investigation, location, support, protection and restoration of all existing utilities and appurtenances shall be the responsibility of the Contractor. This work includes maintenance of adequate depth on all existing utility facilities. The Contractor is responsible to identify and coordinate field stakeout of all locations of possible grade conflicts with existing utilities prior to construction.
- 10.3 The Contractor is responsible for coordinating the relocation and/or protection of any utilities as required by the plan with the owner of the affected utility. Private utility manholes within the limits of the work shall be adjusted to grade by the respective utility. The cost of this work shall be included in the price bid for the project improvements.
- 10.4 Utility poles within the influence of the earthwork operations shall be reinforced by the utility company prior to these construction activities. Notification of the utility company prior to construction shall be the responsibility of the Contractor.
- 10.5 Abandonment (Capping, Etc.) of existing utility facilities (Ameritech, Columbia Gas, American Electric Power) shall be performed by the respective utility company. Upon completion of same, the Contractor shall be responsible to remove any or all the necessary utility as required to complete the plan improvements. The cost of all removal along with the proper disposal thereof should be included in the price bid for the project improvement.
- 10.6 The Contractor shall cause notice to be given to the Ohio Utilities Protection Service (Telephone 800-362-2764, toll–free) and to the owners of the underground utilities who are not members of a registered underground protection service in accordance with Section 153.64 of the Revised Code. The above mentioned notice shall be given at least 48 hours prior to start of construction. The following utilities and Owners are located within the work limits of this project:

<u>UTILITY</u>	OWNER	TELEPHONE
Electric/FOC	AEP 850 Tech Center Drive Gahanna, Oll 43280	(614) 277-2177/ (614) 634-1007-Mike Fraley
Sanitary Sewer, &	City of New Albany	614) 855-0076

Storm Sewer, Water Serv & Fiber Optic Cable 7800 (FOC) New

Service Department 7800 Bevelhymer Road New Albany, OH 43054



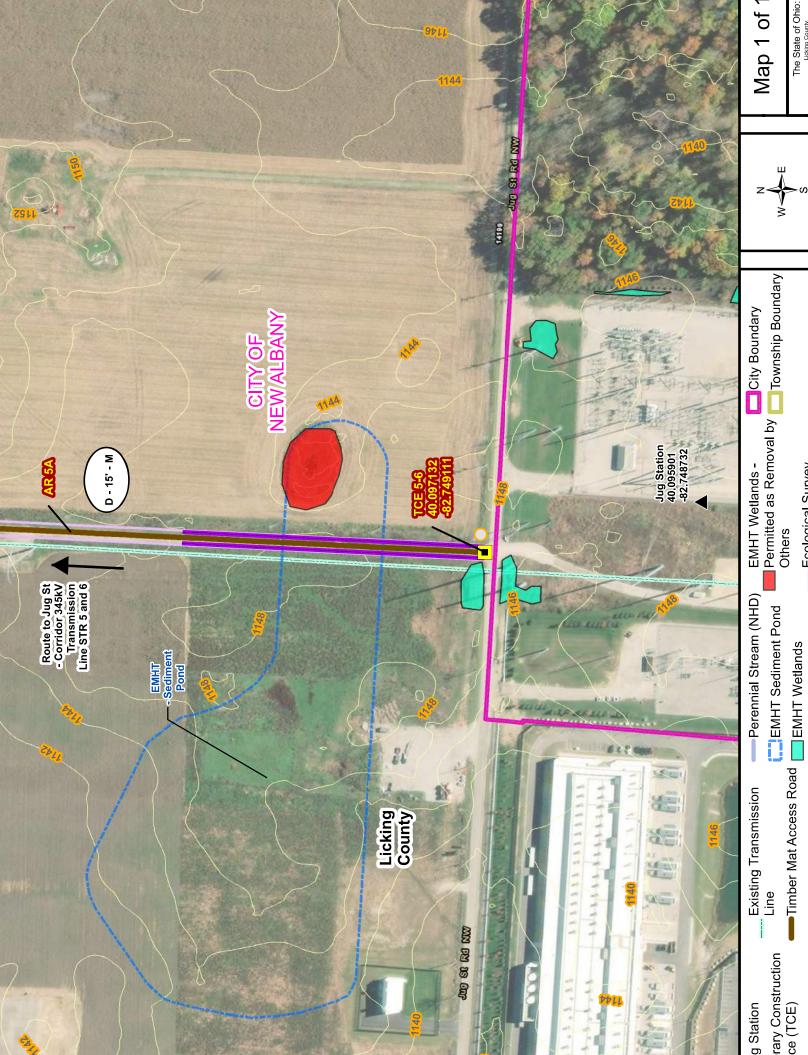
11 TREES

11.1 All branches or growth from trees that are to be saved and which are interfering with the grading operation may be removed by the use of pruning tools. All pruning tools used and methods employed shall meet with the approval of the City Arborist. The branches shall be removed with a good clean cut made flush with the parent trunk or if having a good healthy lateral branch, the cut shall be a good clean slanting cut close to and beyond the healthy branch. All pruning cuts shall be painted with an accepted pruning preservative. All branches removed shall be at the direction of the City Arborist (614) 855-0076. The cost of all work and expenses connected with the removal of trees and/or branches shall be included in the price bid for clearing and grubbing. No extra payment shall be made therefore.

12 Benchmarks and Survey Monuments

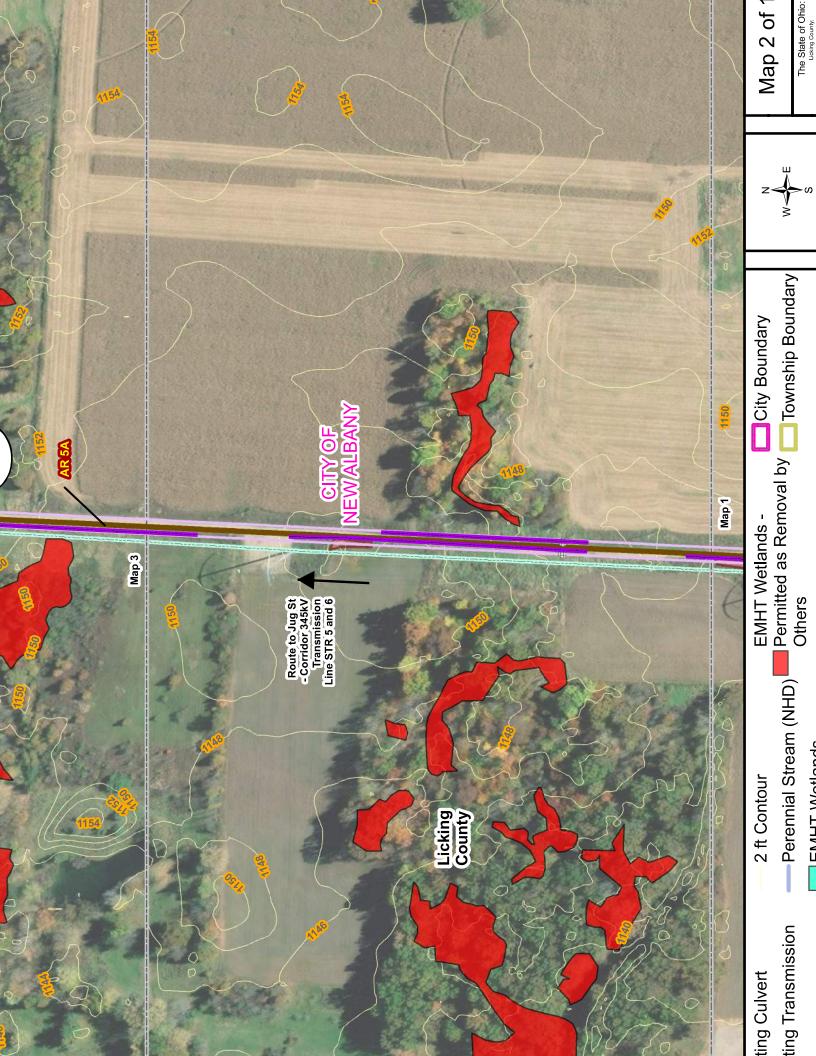
- 12.1 Do not disturb any Franklin County or Licking County certified benchmarks (vertical and/or horizontal) located within the working limits of the project. The Contractor shall contact either the Franklin County Survey Department (614) 462-3026 or Licking County Survey Department (740) 670- 5280, prior to construction, to coordinate the proper procedures for resetting, relocation, or replacement of any Franklin County Certified Benchmark or Survey Monument.
- 12.2 The Contractor shall reference all iron pins and monuments before excavating at or near said iron pins or monuments. The contractor shall not disturb existing right-of-way or property corner markers that are required to remain after construction. If any pins or monuments are disturbed, destroyed, or damaged by the Contractor that have not been designated to be removed in these plans, they shall be accurately replaced by a Registered Surveyor at the completion of the project or at the direction of the City

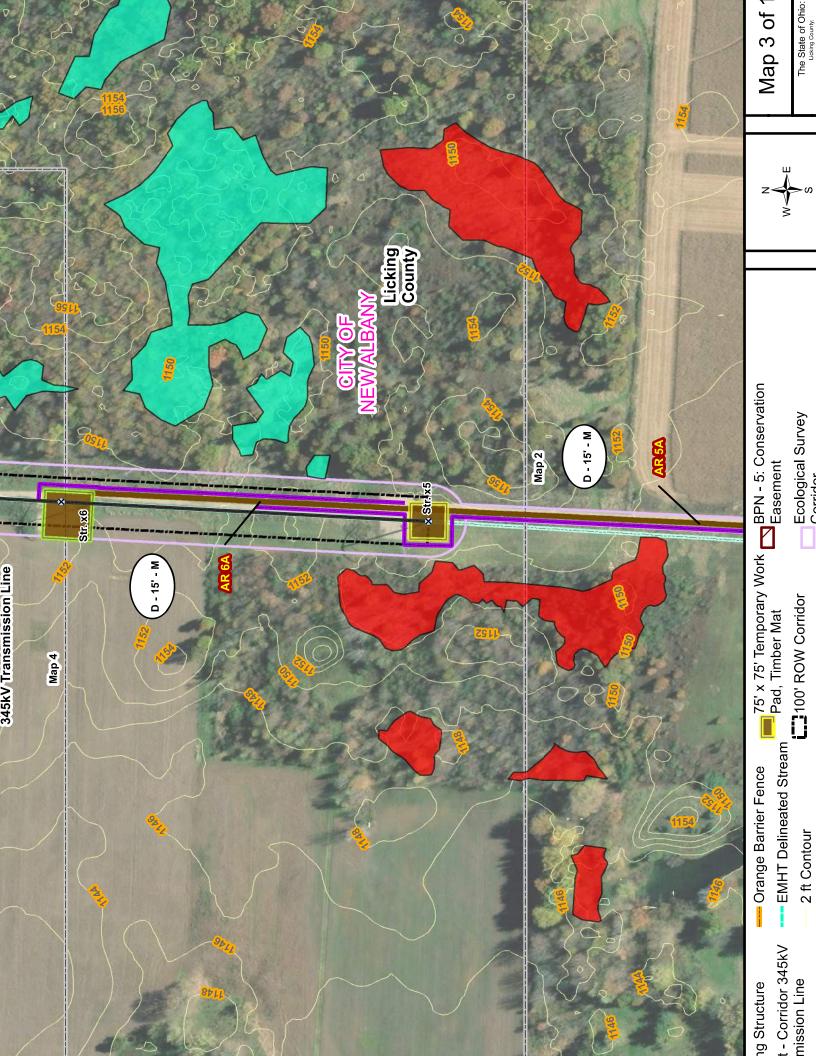
Engineer and at the contractor's expense as per the City of Columbus Construction and Materials Specifications, Section 107.12. If replacement of pins or monuments is required, the Engineer, Developer, or Contractor shall provide an exhibit during the final punch list inspection verifying that monuments have been placed at all property corners.

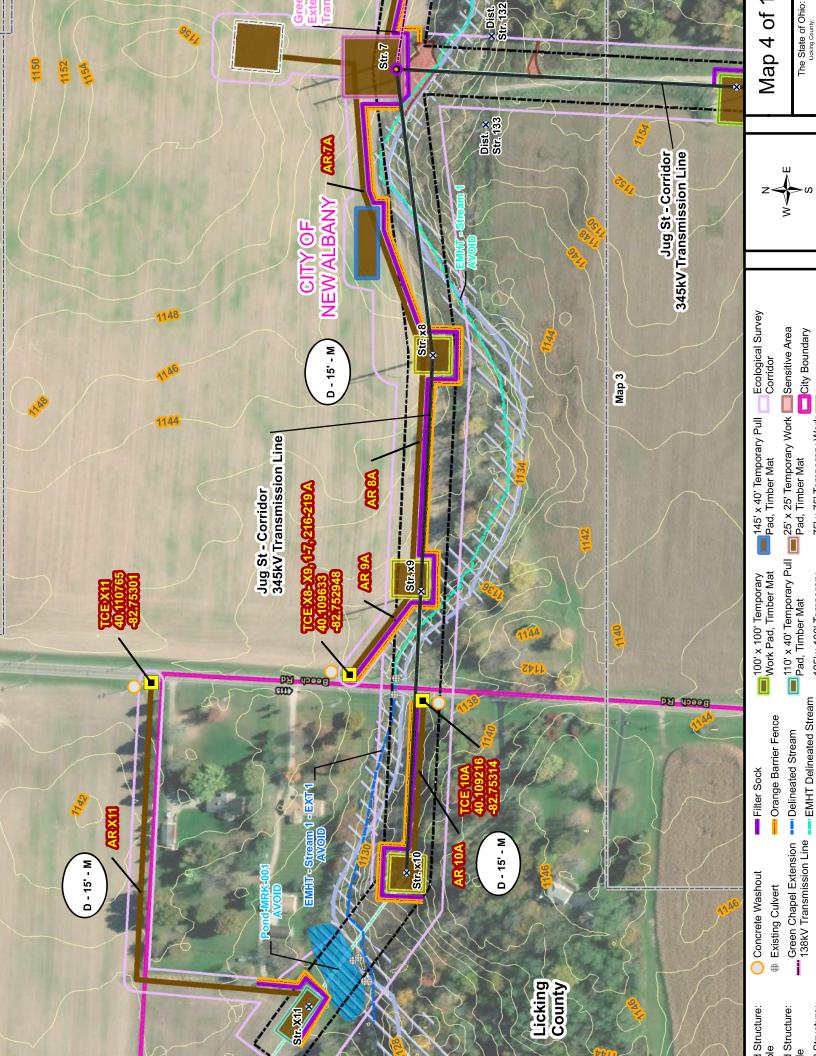


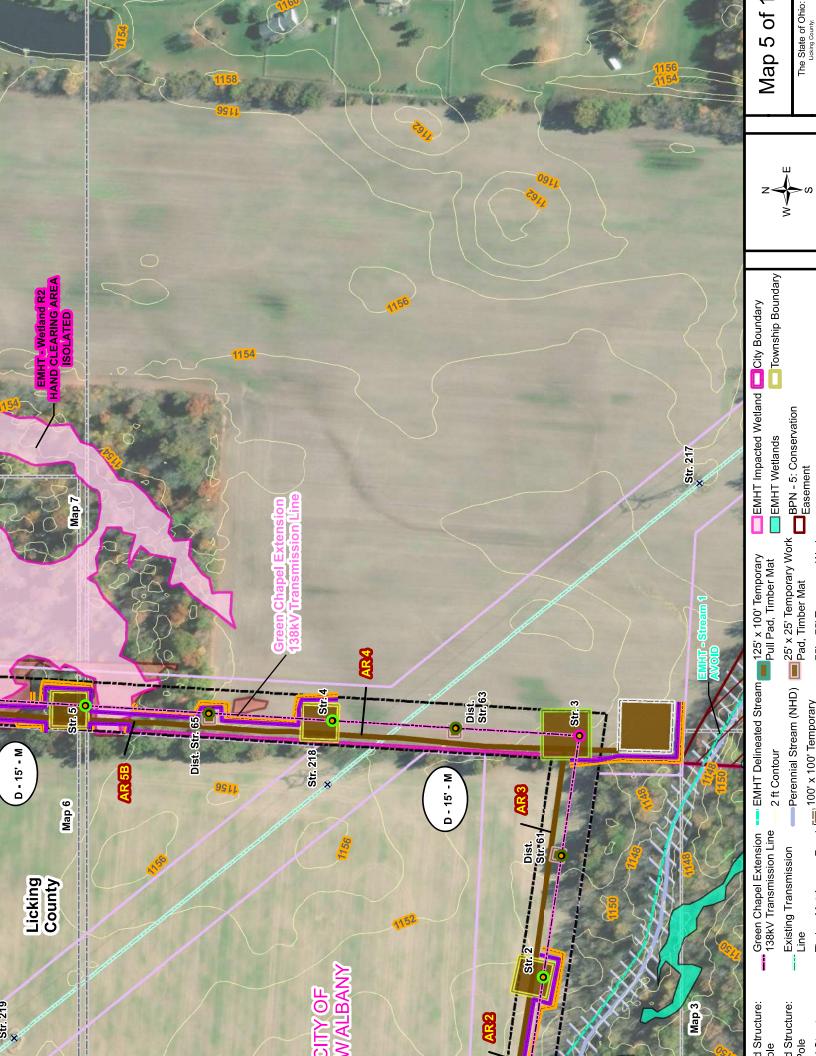
The State of Ohio:

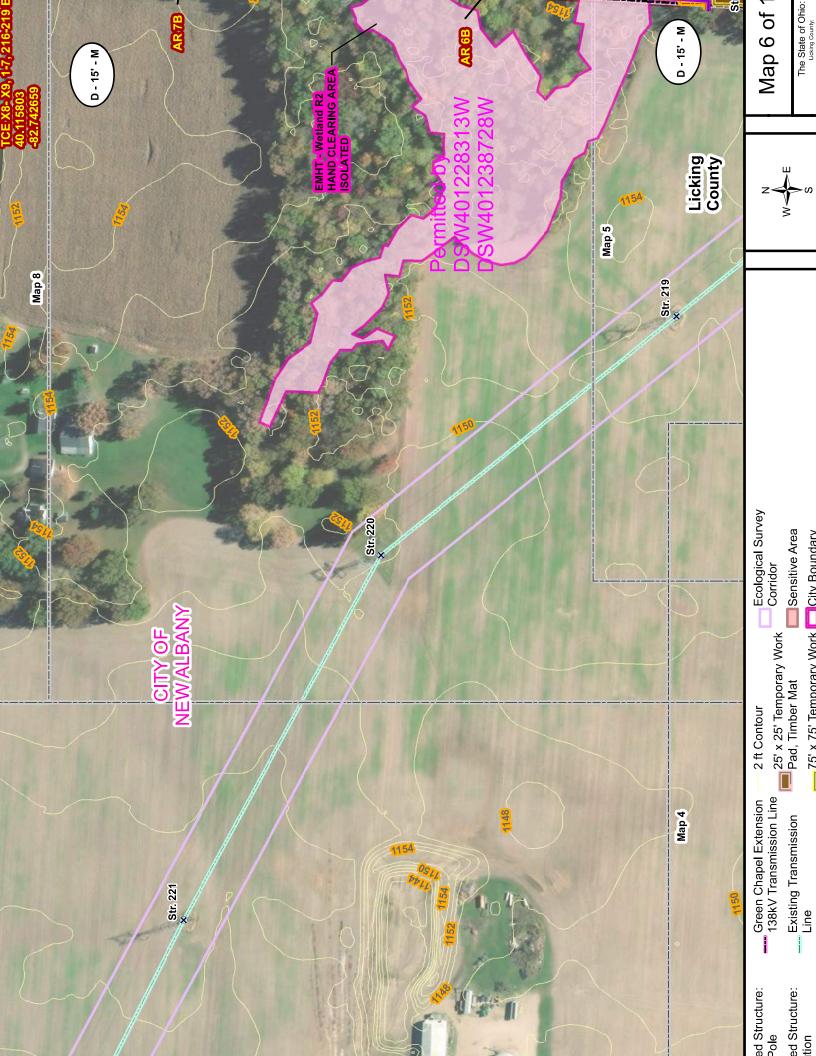
Foological Survey

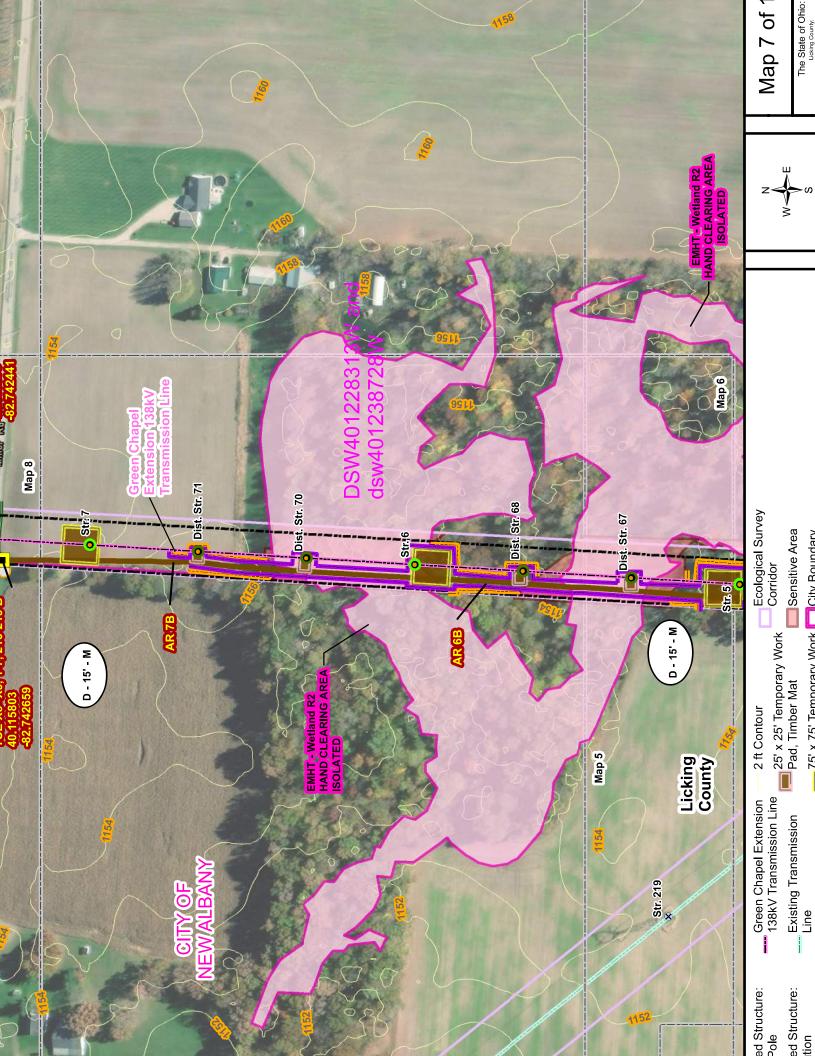








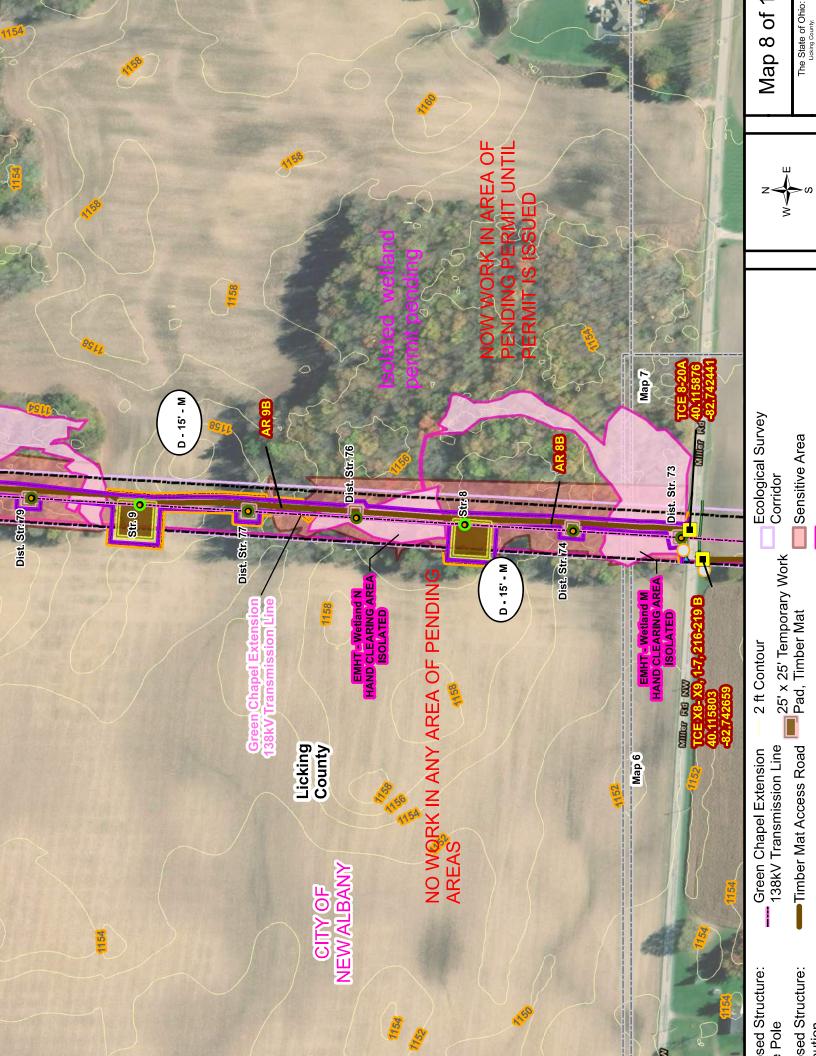


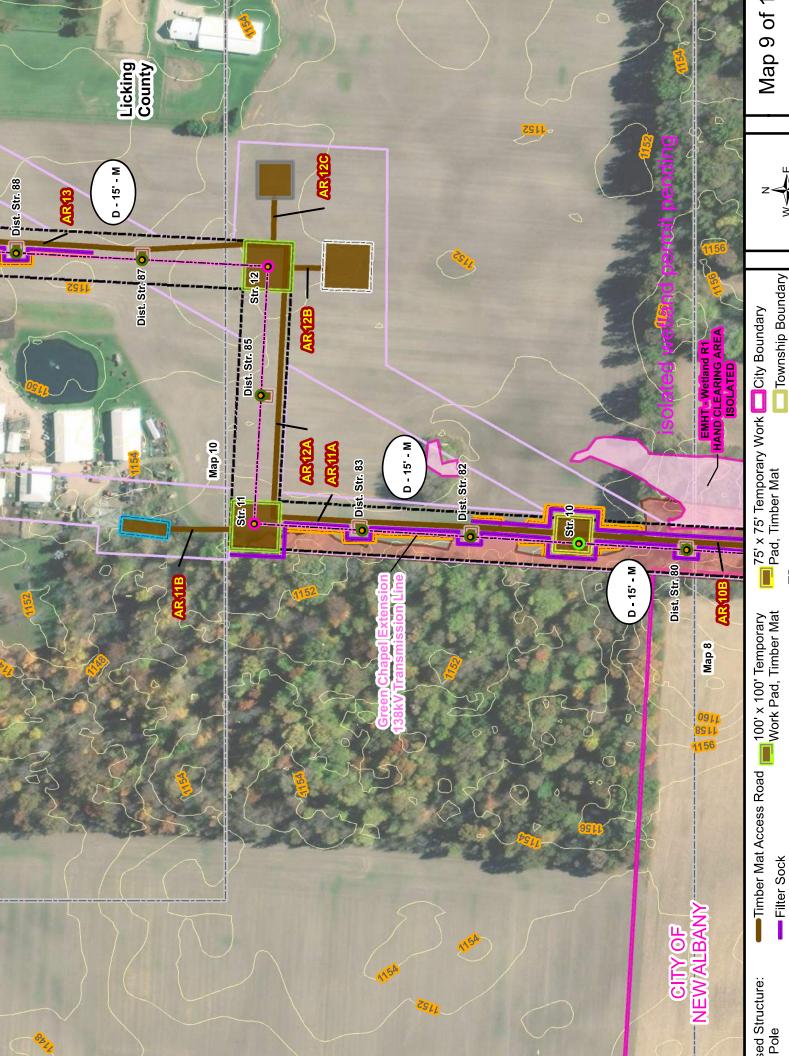


ed Structure: Ition

75' x 75' Temporary Work

Sensitive Area



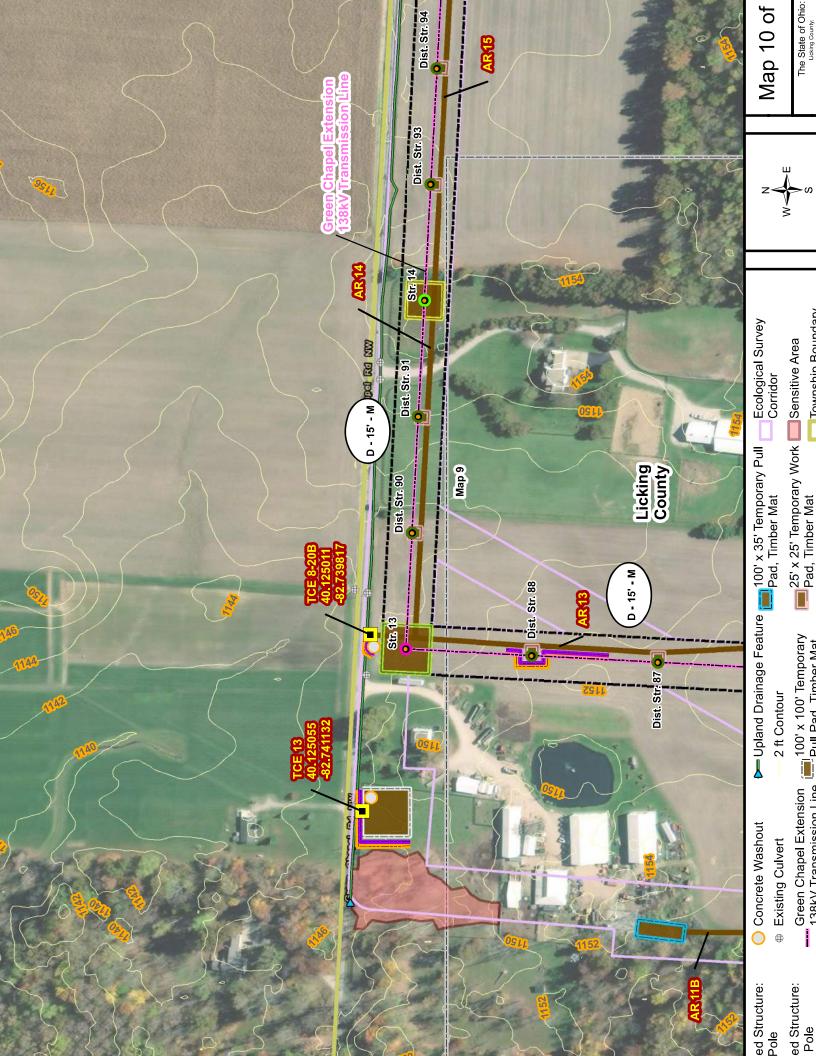


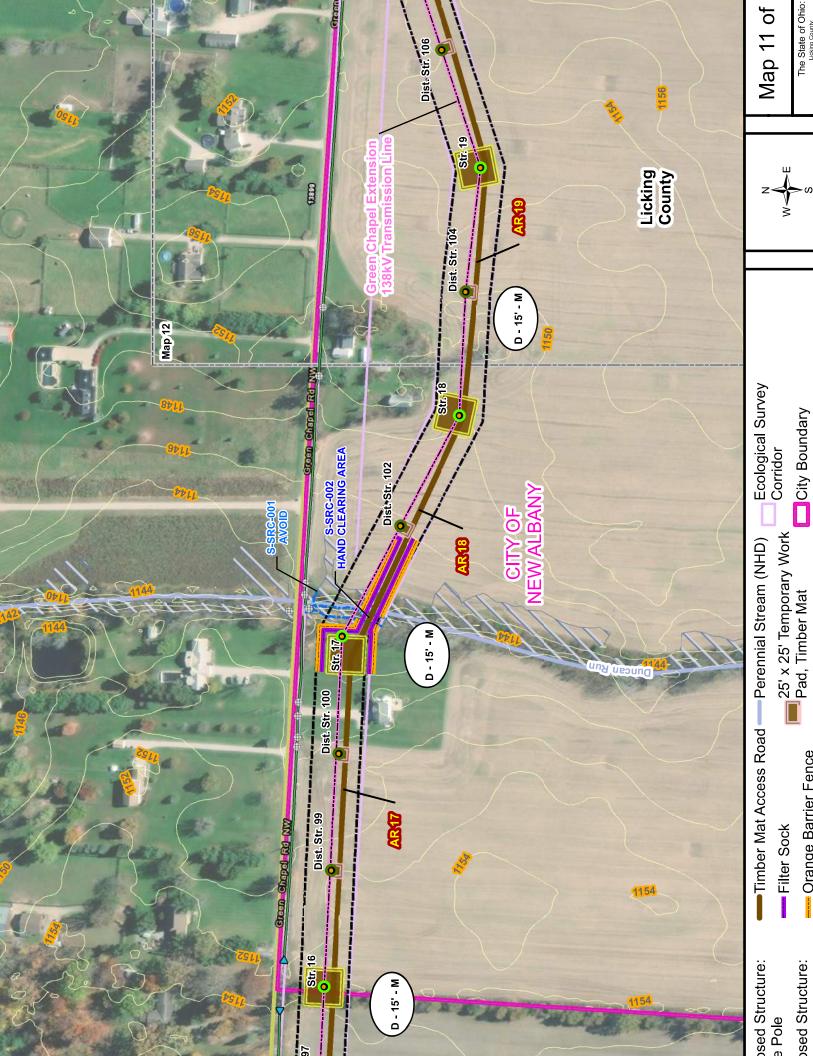
sed Structure:

--- Orange Barrier Fence

100' x 35' Temporary Pull 11110' ROW Corridor Pad. Timber Mat

The State of Ohio:



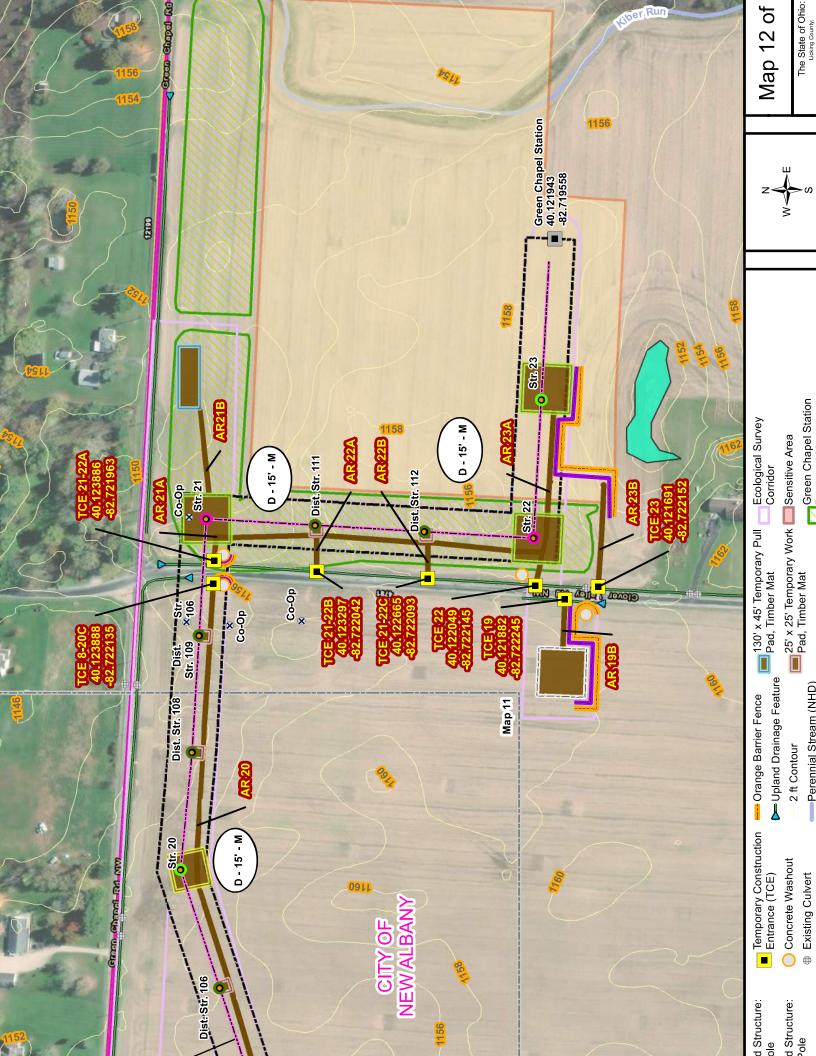


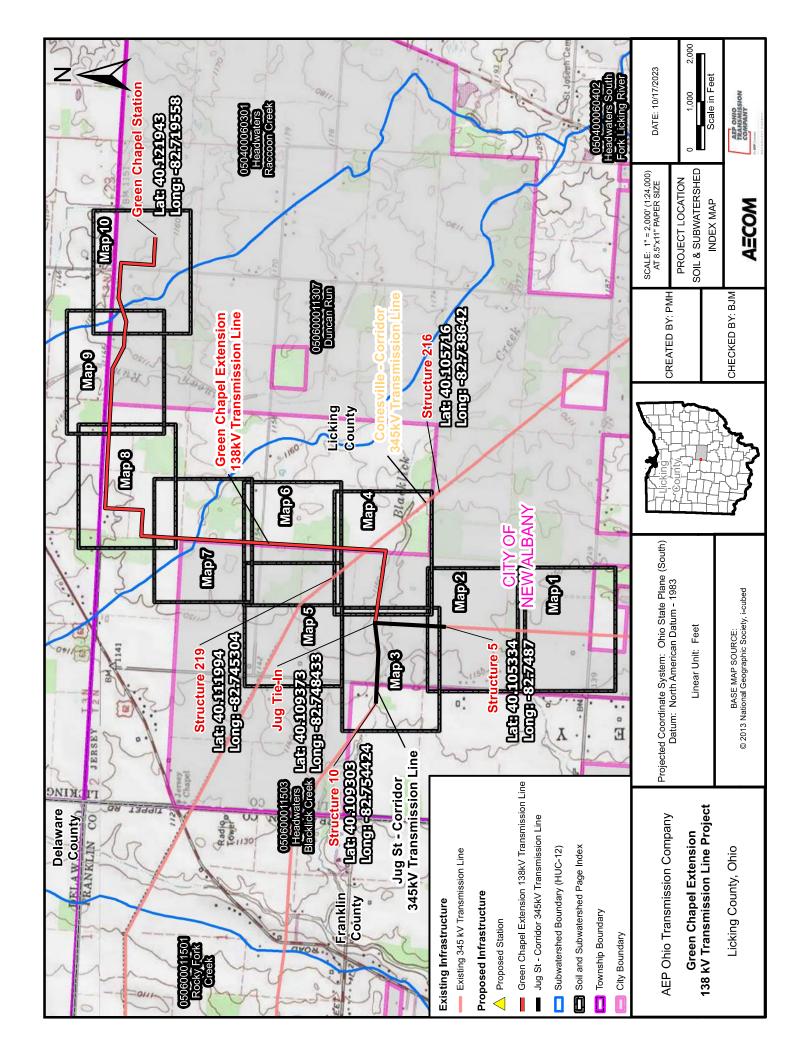
sed Structure:

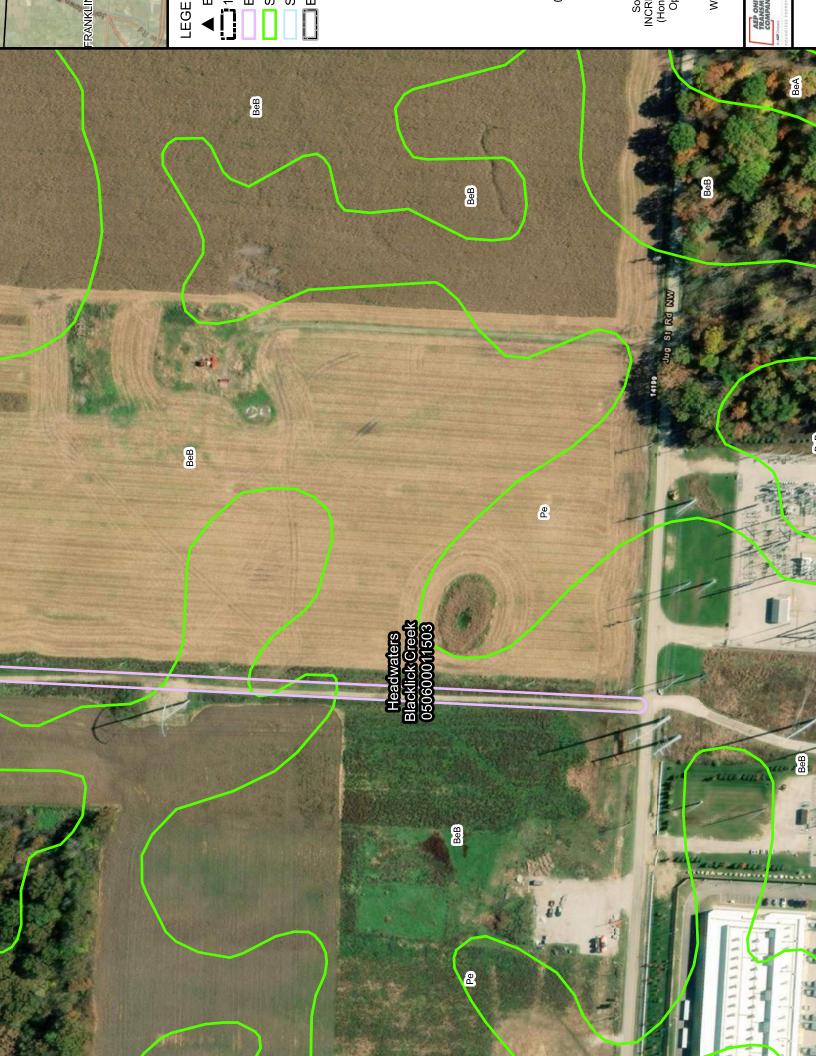
--- Orange Barrier Fence

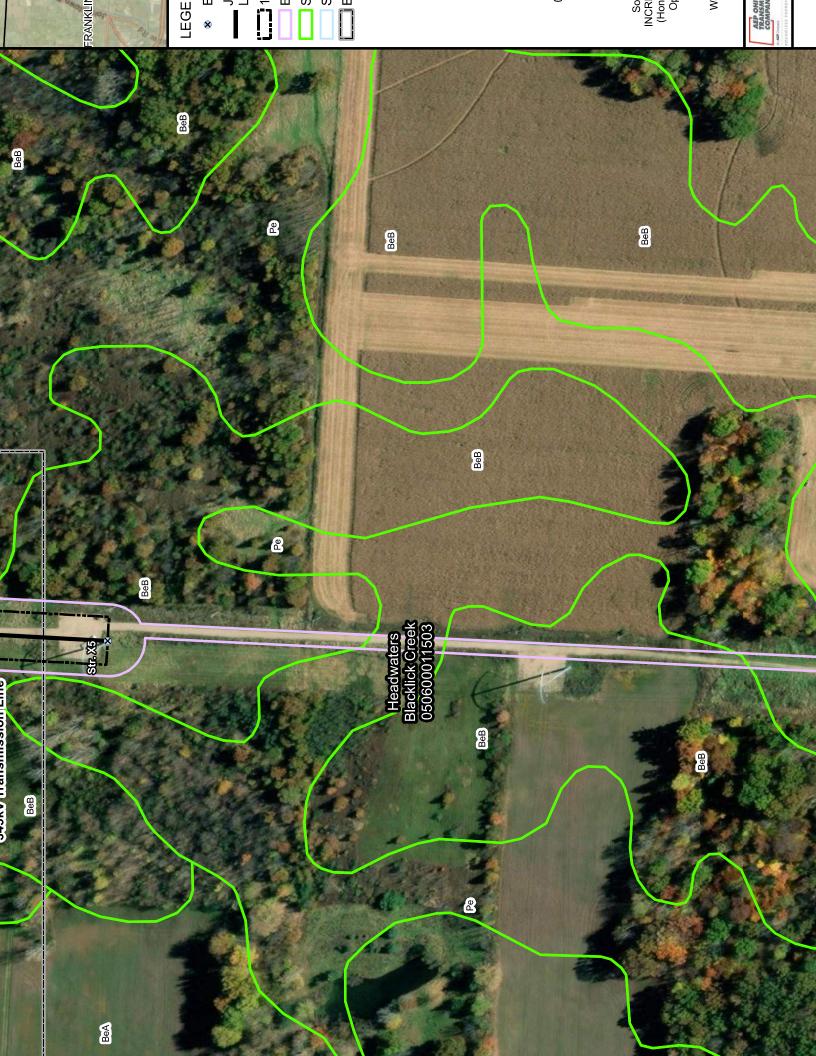
City Boundary

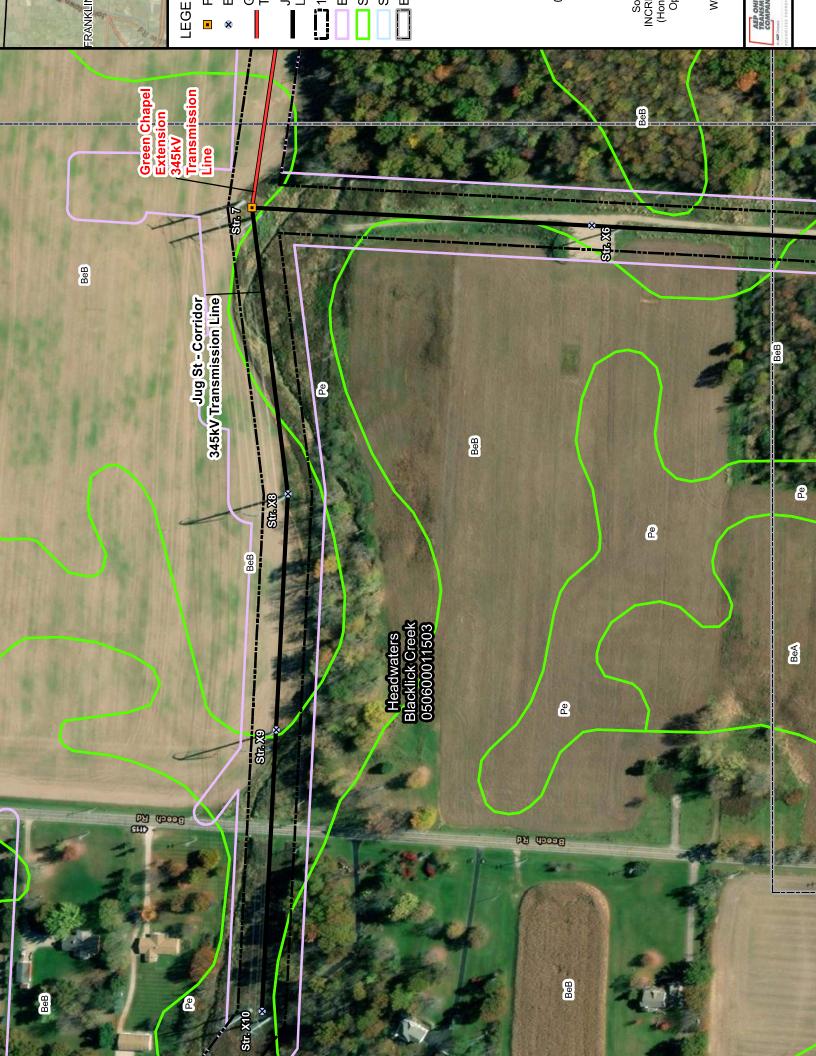
The State of Ohio:





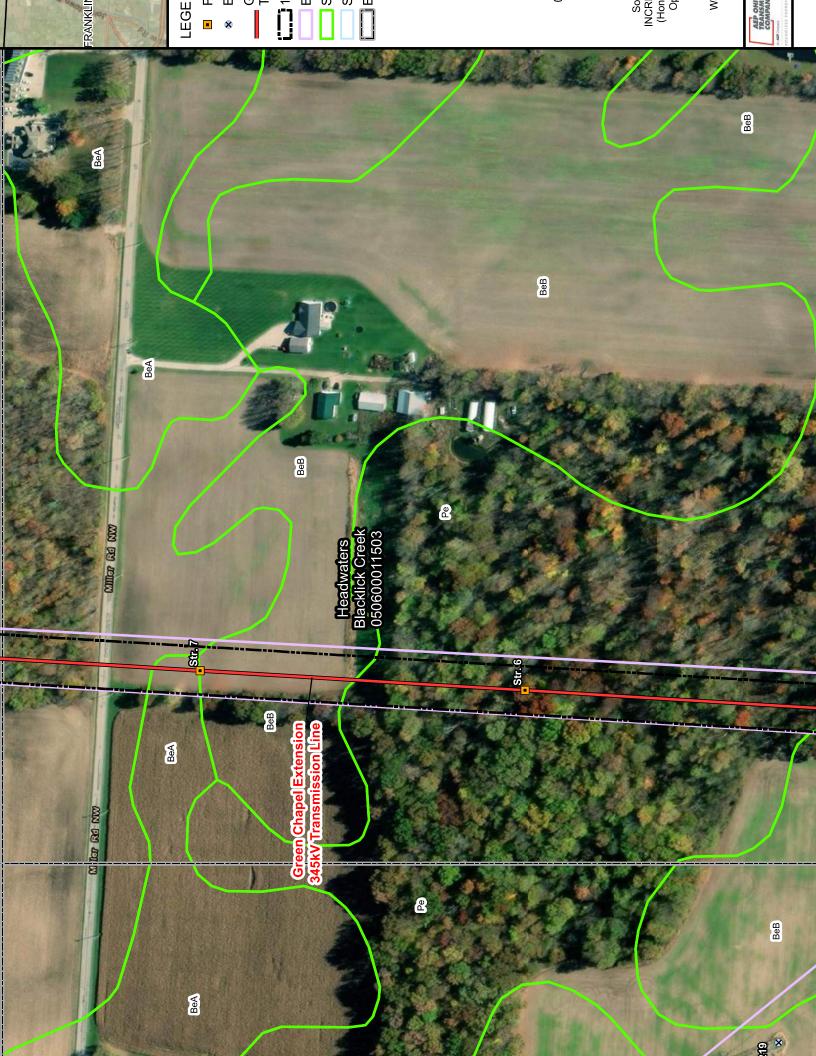




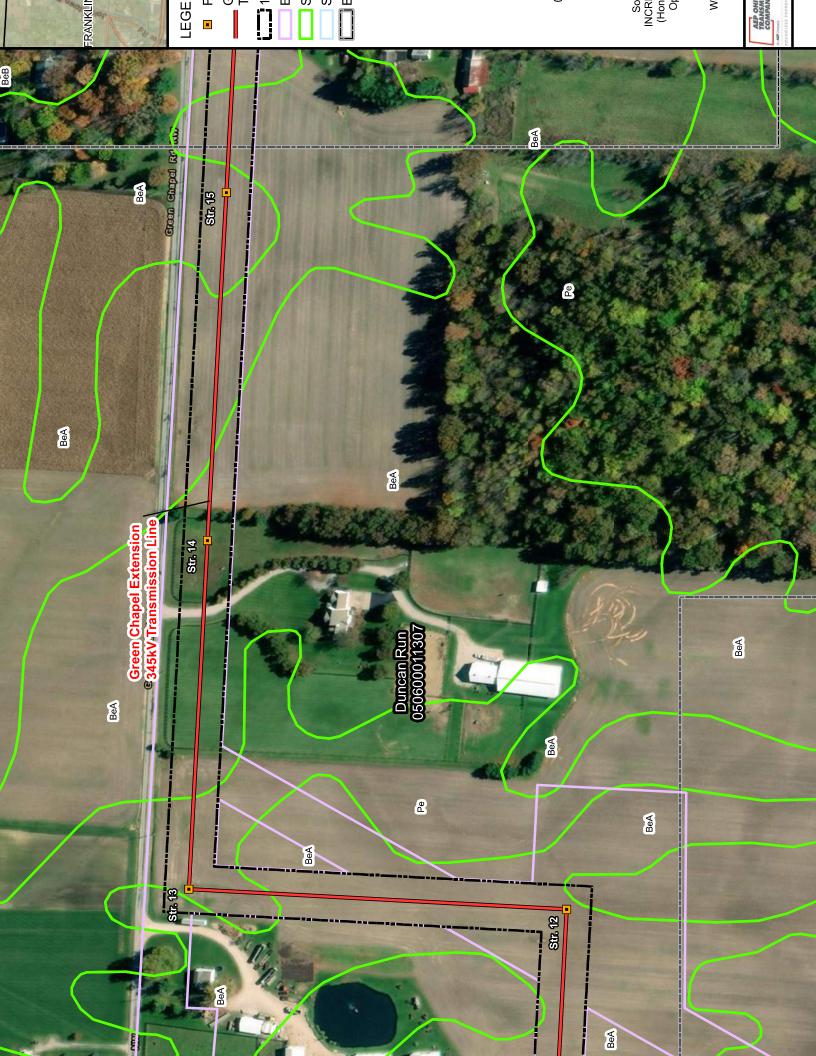


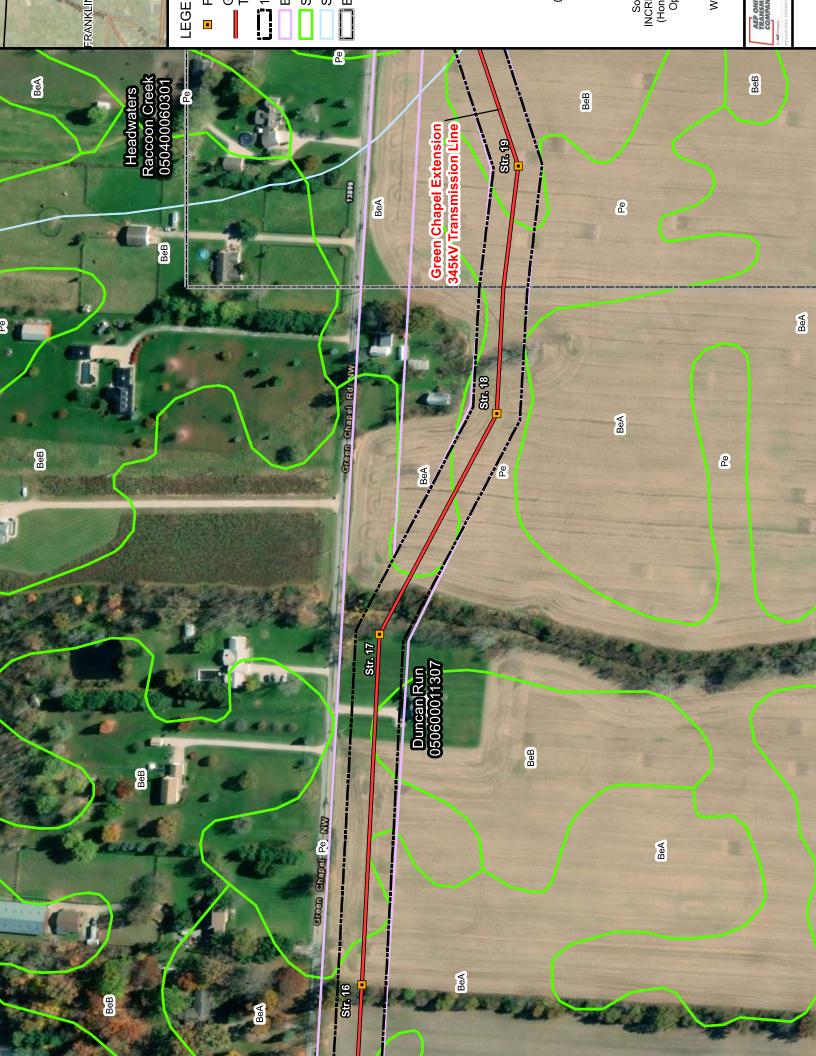


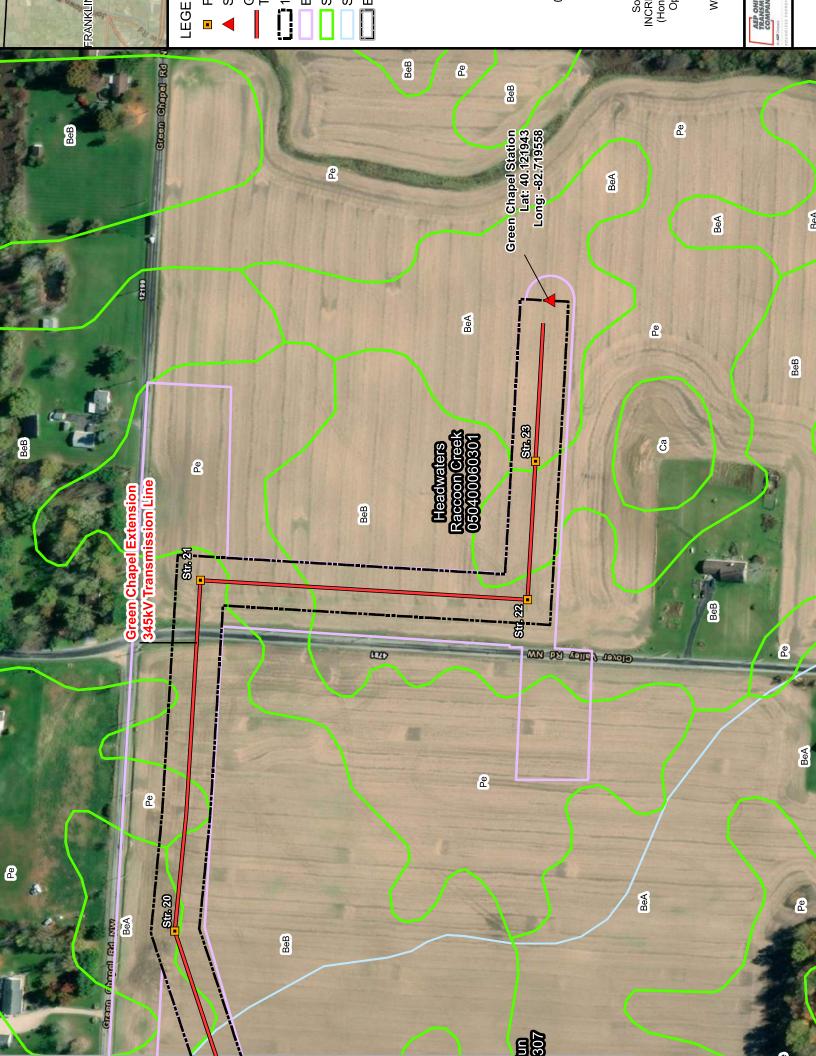












APPENDIX 2

ODNR Rainwater and Land Development Manual Details

BMP Detail Sheets

- Concrete Washout Detail provided by AEP
- De-Watering Measures ODNR detail 5.7
- Temporary Wetland and Stream Crossings Provided by AEP
- Filter Sock ODNR detail 6.6
- Construction entrance ODNR detail 7.5
- Dust Control ODNR detail 7.5
- Mulching ODNR detail 7.9
- Temporary Seeding provided by AEP
- Permanent Seeding ODNR detail 7.10
- Permanent Seed Mixes provided by AEP
- Additional Construction Site Pollution Controls ODNR detail 8.1

Green Chapel Extension 138kV Transmission Line Project SWPPP BMP Details Table

				I			
Approximate Cover/ Quantity	15 count	237,900 sf 26,434 sy	79,775 sf 8,864 sy	12 count Needed per CW 400 sf 1-2 signs 100 lf 100 lf ss needed as needed	21,639 lf 36,065 sy	19,865 lf	10,465 If 1 per 20 If (more as needed) 2 per If (more as needed) 1 sign per wetland/waterbody
Material Types	No. 2 Stone (6" thick) No. 304 Stone (4" thick) Geotextile	Timber mats Geotextile	Timber mats Geotextile	10 mm polyethylene sheeting Signage Orange Barrier Fence Filter Sock Sandbags Staples	Timber mats (assuming 15' wide) Geotextile	Greater than 8" in diameter	Orange Construction Fence T-posts Zip ties Signage
Timing	Pre-Construction	Pre-Construction	Pre-Construction	Pre-Construction	Pre-Construction	Pre-Construction	to provide Pre-Construction r.
Location*	Located where proposed access roads meet existing roadways.	As shown on the Soil Erosion and Sediment Control Plan	As shown on the Soil Erosion and Sediment Control Plan	Located where proposed access roads meet existing roadways. Not to be placed within 50-feet of Streams, Wetlands, or Other identified Waterways	As shown on the Soil Erosion and Sediment Control Plan.	Located around proposed access roads and work pads to filter sediment from site runoff.	To be placed near surface waters such as wetlands, ponds, and streams to provide a 50-foot natural buffer.
BMP	Temporary Construction Entrance (TCE)	Temporary Work Pads Timber Matting	Temporary Pull Pads Timber Matting	Concrete Washout (CW)	Access Roads Timber Matting (TM)	Filter Sock (FS)	Orange Barrier Fence (OBF)

*BMP locations shown on Soil Erosion and Sediment Control Plan included in Appendix 2.

Concrete Washout



Concrete washout areas are designated locations within a construction site that are either a prefabricated unit or a designed measure that is constructed to contain concrete washout. Concrete washout systems are typically used to contain washout water when chutes and hoppers are rinsed following delivery.

Purpose

Concrete washout systems are implemented to reduce the discharge of pollutants that are associated with concrete washout waste through consolidation of solids and retention of liquids. Uncured concrete and associated liquids are highly alkaline which may leach into the soil and contaminate ground water or discharge to a waterbody or wetland which can elevate the pH and be harmful to aquatic life. Performing concrete washout in designated areas and into specifically designed systems reduces the impact concrete washout will have on the environment.

Specifications

Site Management

- Complete construction/installation of the system and have washout locations operational prior to concrete delivery.
- Do not wash out concrete trucks or equipment into storm drains, wetlands, streams, rivers, creeks, ditches, or streets.
- Never wash out into a storm sewer drainage system. These systems are typically connected to a natural conveyance system.
- Where necessary, provide stable ingress and egress (see **Temporary Construction Ingress/Egress Pad** on page 17).
- It is recommended that washout systems be restricted to washing concrete from mixer and pump trucks and not used to dispose of excess concrete or

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residual loads due to potential to exceed the design capacity of the washout system. Small amounts of excess or residual concrete (not washout water) may be disposed of in areas that will not result in flow to an area that is to be protected.

- Install systems at strategic locations that are convenient and in close proximity to work areas and in sufficient number to accommodate the demand for disposal.
- Install signage identifying the location of concrete washout systems.

Location

- Locate concrete washout systems at least 50 feet from any creeks, wetlands, ditches, karst features, or storm drains/manmade conveyance systems.
- To the extent practical, locate concrete washout systems in relatively flat areas that have established vegetative cover and do not receive runoff from adjacent land areas.
- Locate in areas that provide easy access for concrete trucks and other construction equipment.
- Locate away from other construction traffic to reduce the potential for damage to the system.

General Design Considerations

- The structure or system shall be designed to contain the anticipated washout water associated with construction activities.
- The system shall be designed, to the extent practical, to eliminate runoff from entering the washout system.
- Runoff from a rainstorm or snowmelt should not carry wastes away from the washout location.
- Washout will not impact future land uses (i.e., open spaces, landscaped areas, home sites, parks).
- Washout systems/containment measures may also be utilized on smaller individual building sites. The design and size of the system can be adjusted to accommodate the expected capacity.

Prefabricated Washout Systems/Containers

• Self-contained sturdy containment systems that are delivered to a site and located at strategic locations for concrete disposal.

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- These systems are manufactured to resist damage from construction equipment and protect against leaks or spills.
- Manufacturer or supplier provides the containers. The project site manager maintains the system or the supplier provides complete service that includes maintenance and disposal.
- Units are often available with or without ramps. Units with ramps lend themselves to accommodate pump trucks.
- Maintain according to the manufacturer's recommendations.

Designed and Installed Units

These units are designed and installed on site. They tend to be less reliable than prefabricated systems and are often prone to failure. Concrete washout systems can be constructed above or below grade. It is not uncommon to have a system that is partly below grade with an additional containment structure above grade.

- Washout systems shall utilize a pit or bermed area designed and maintained at a capacity to contain all liquid and concrete waste generated by washout operations.
- The volume of the system must also be designed to contain runoff that drains to the system and rainfall that enters the system for a two-year frequency, 24-hour storm event.

Below Grade System

- ♦ A washout system installed below grade should be a minimum of ten feet wide by ten feet long, but sized to contain all liquid and waste that is expected to be generated between scheduled cleanout periods. The size of the pit may be limited by the size of polyethylene available. The polyethylene lining should be of adequate size to extend over the entire excavation.
- ◆ Include a minimum 12-inch freeboard to reasonably ensure that the structure will not overtop during a rain event.
- Line the pit with ten millimeter polyethylene lining to control seepage.
- ◆ The bottom of excavated pit should be above the seasonal high water table.

Above Grade System

◆ A system designed and built above grade should be a minimum of ten feet wide by ten feet long, but sized to contain all liquid and waste that is expected to be generated between scheduled cleanout periods. The size of the containment system may be limited by the size of

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- polyethylene available. The polyethylene lining should be of adequate size to extend over the berm or containment system.
- The system design may utilize an earthen berm, straw bales, sandbags, or other acceptable barriers that will maintain its shape and integrity and support the polyethylene lining.
- Include a minimum four-inch freeboard as part of the design.

Washout Procedures

- Do not leave excess mud in the chutes or hopper after the pour. Every effort should be made to empty the chutes and hopper at the pour. The less material left in the chutes and hopper, the quicker and easier the cleanout. Small amounts of excess concrete (not washout water) may be disposed of in areas that will not result in flow to an area that is to be protected.
- At the washout location, scrape as much material from the chutes as possible before washing them. Use non-water cleaning methods to minimize the chance for waste to flow off site.
- Remove as much mud as possible when washing out.
- Stop washing out in an area if you observe water running off the designated area or if the containment system is leaking or overflowing and ineffective.
- Do not back flush equipment at the project site. Back flushing should be restricted to the plant as it generates large volumes of waste that more than likely will exceed the capacity of most washout systems. If an emergency arises, back flush should only be performed with the permission of an on-site manager for the project.
- Do not use additives with wash water. Do not use solvents or acids that may be used at the target plant.

Materials

- Minimum of ten millimeter polyethylene sheeting that is free of holes, tears, and other defects. The sheeting selected should be of an appropriate size to fit the washout system without seams or overlap of the lining (designed and installed systems).
- Signage.
- Orange safety fencing or equivalent.
- Straw bales, sandbags (bags should be ultraviolet-stabilized geotextile fabric), soil material, or other appropriate materials that can be used to construct a containment system (above grade systems).

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- Metal pins or staples at a minimum of six inches in length, sandbags, or alternative fastener to secure polyethylene lining to the containment system.
- Non-collapsing and non-water holding cover for use during rain events (optional).

Installation

Prefabricated Washout Systems/Containers

• Install and locate according to the manufacturer's recommendations.

Designed and Installed Systems

- Utilize and follow the design in the storm water pollution prevention plan to install the system.
- Dependent upon the type of system, either excavate the pit or install the containment system.
- A base shall be constructed and prepared that is free of rocks and other debris that may cause tears or punctures in the polyethylene lining.
- Install the polyethylene lining. For excavated systems, the lining should extend over the entire excavation. The lining for bermed systems should be installed over the pooling area with enough material to extend the lining over the berm or containment system. The lining should be secured with pins, staples, or other fasteners.
- Place flags, safety fencing, or equivalent to provide a barrier to construction equipment and other traffic.
- Place a non-collapsing, non-water holding cover over the washout facility prior to a predicted rainfall event to prevent accumulation of water and possible overflow of the system (optional).
- Install signage that identifies concrete washout areas.
- Post signs directing contractors and suppliers to designated locations.
- Where necessary, provide stable ingress and egress (see Temporary Construction Ingress/Egress Pad on page 17) or alternative approach pad for concrete washout systems.

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Maintenance

- Inspect daily and after each storm event.
- Inspect the integrity of the overall structure including, where applicable, the containment system.
- Inspect the system for leaks, spills, and tracking of soil by equipment.
- Inspect the polyethylene lining for failure, including tears and punctures.
- Once concrete wastes harden, remove and dispose of the material.
- Excess concrete should be removed when the washout system reaches 50 percent of the design capacity. Use of the system should be discontinued until appropriate measures can be initiated to clean the structure. Prefabricated systems should also utilize this criterion, unless the manufacturer has alternate specifications.
- Upon removal of the solids, inspect the structure. Repair the structure as needed or construct a new system.
- Dispose of all concrete in a legal manner. Reuse the material on site, recycle, or haul the material to an approved construction/demolition landfill site.
 Recycling of material is encouraged. The waste material can be used for multiple applications including but not limited to roadbeds and building.
 The availability for recycling should be checked locally.
- The plastic liner should be replaced after every cleaning; the removal of material will usually damage the lining.
- The concrete washout system should be repaired or enlarged as necessary to maintain capacity for concrete waste.
- Concrete washout systems are designed to promote evaporation. However, if the liquids do not evaporate and the system is near capacity it may be necessary to vacuum or remove the liquids and dispose of them in an acceptable method. Disposal may be allowed at the local sanitary sewer authority provided their National Pollutant Discharge Elimination System permits allow for acceptance of this material. Another option would be to utilize a secondary containment system or basin for further dewatering.
- Prefabricated units are often pumped and the company supplying the unit provides this service.
- Inspect construction activities on a regular basis to ensure suppliers, contractors, and others are utilizing designated washout areas. If concrete waste is being disposed of improperly, identify the violators and take appropriate action.

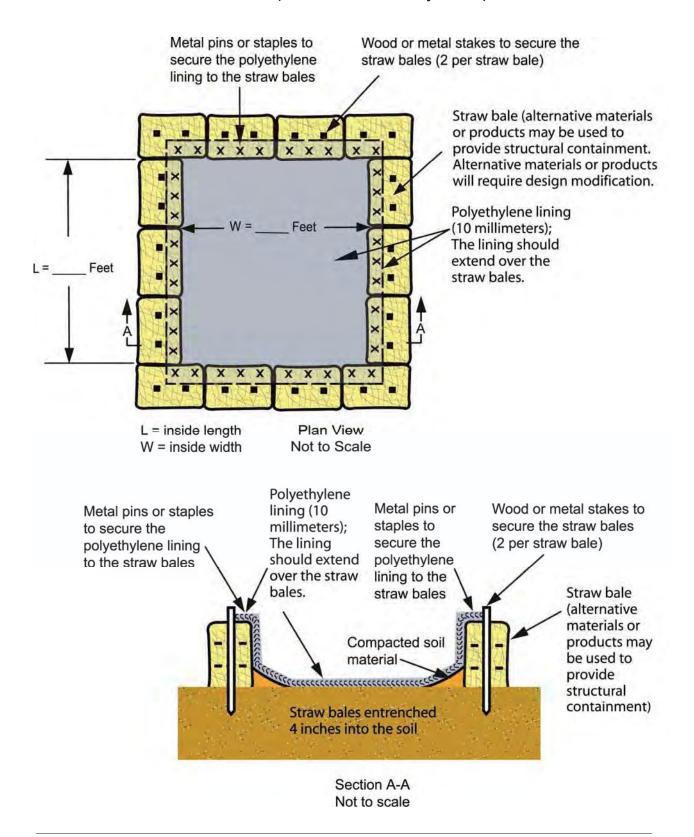
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CONCRETE WASHOUT

- When concrete washout systems are no longer required, the concrete washout systems shall be closed. Dispose of all hardened concrete and other materials used to construct the system.
- Holes, depressions and other land disturbances associated with the system should be backfilled, graded, and stabilized.

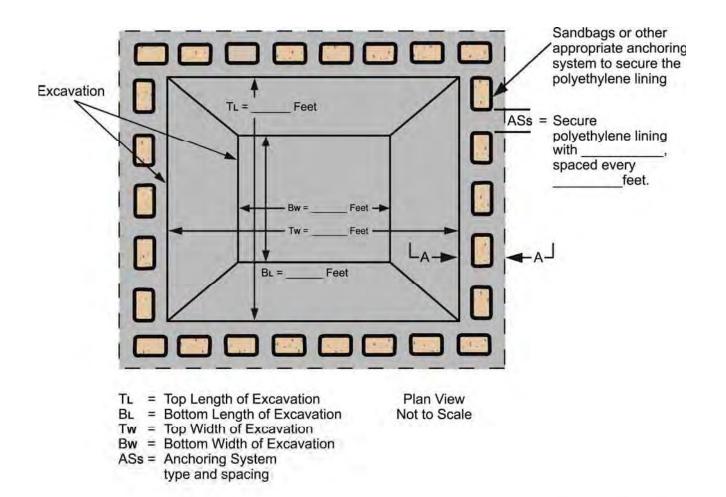
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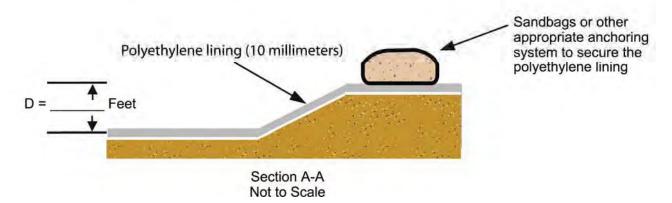
Concrete Washout (Above Grade System) Worksheet



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Concrete Washout (Below Grade System) Worksheet





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Specifications for

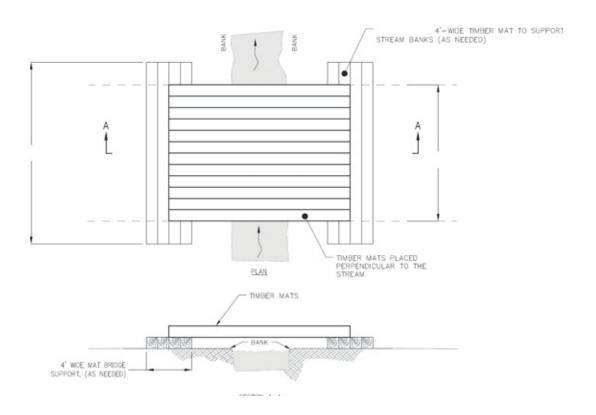
De-Watering

- 1. A de-watering plan shall be developed prior to the commencement of any pumping activities.
- The de-watering plan shall include all pumps and related equipment necessary for the dewatering activities and designate areas for placement of practices. Outlets for practices shall be protected from scour either by riprap protection, fabric liner, or other acceptable method of outlet protection.
- Water that is not discharged into a settling/treatment basin but directly into waters of the state shall be monitored hourly. Discharged water shall be within +/- 5° F of the receiving waters.
- 4. Settling basins shall not be greater than four (4) feet in depth. The basin shall be constructed for sediment storage as outlined in Chapter 6, SEDIMENT BASIN OR SEDIMENT TRAP. The inlet and outlet for the basin shall be located at the furthest points of the storage. A floating outlet shall be used to ensure that settled solids do not re-suspend during the discharge process. The settling basin shall be cleaned out when the storage has been reduced by 50% of its original capacity.
- 5. All necessary National, State and Local permits shall be secured prior to discharging into waters of the state

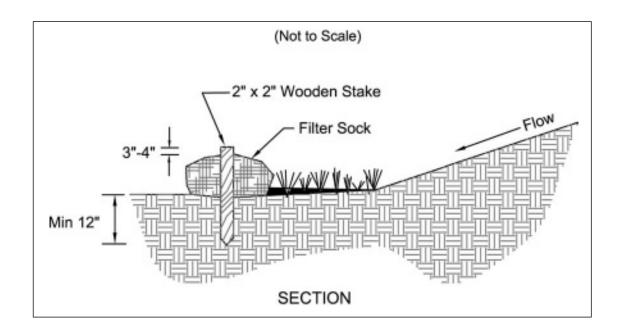
Temporary Wetland and Stream Crossings

Temporary wetland and stream crossings will be installed in the ROW across unavoidable wetlands and streams to provide temporary construction access with minimal impact. The crossings shall consist of pre-fabricated wood matting. For stream crossings, a 4' wide timber mat should be used to parallel to the stream support the mat placed perpendicular to the stream as shown in the drawing below. Geotextile fabric should be used under the matting in wetland areas. After construction is completed, the wood mats and any geotextile fabric shall be removed and if placement or removal of the mats has resulted in disturbance to the vegetation, the area shall be seeded with wetland mix as specified in the Permanent Seeding Section.

Stream Detail



Filter Sock



- Materials Compost used for filter socks shall be weed, pathogen and insect free and free of any refuse, contaminants or other materials toxic to plant growth. They shall be derived from a well-decomposed source of organic matter and consist of a particles ranging from 3/8" to 2".
- 2. Filter Socks shall be 3 or 5 mil continuous, tubular, HDPE 3/8" knitted mesh netting material, filled with compost passing the above specifications for compost products.

INSTALLATION:

- Filter socks will be placed on a level line across slopes, generally parallel to the base of the slope or other affected area. On slopes approaching 2:1, additional socks shall be provided at the top and as needed midslope.
- Filter socks intended to be left as a permanent filter or part of the natural landscape, shall be seeded at the time of installation for establishment of permanent vegetation.

5. Filter Socks are not to be used in concentrated flow situations or in runoff channels.

MAINTENANCE:

- Routinely inspect filter socks after each significant rain, maintaining filter socks in a functional condition at all times.
- Remove sediments collected at the base of the filter socks when they reach 1/3 of the exposed height of the practice.
- 8. Where the filter sock deteriorates or fails, it will be repaired or replaced with a more effective alternative.
- Removal Filter socks will be dispersed on site when no longer required in such as way as to facilitate and not obstruct seedings.

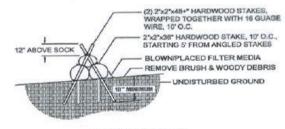
Table 6.6.1 Maximum Slope Length Above Filter Sock and Recommended Diameter

Slope	Ratio (H:V)	8"	12"	18"	24"
0% - 2%	10% - 20%	125	250	300	350
10% - 20%	50:1 - 10:1	100	125	200	250
2% - 10%	10:1 - 5:1	75	100	150	200
20% - 33%	5:1 - 2:1		50	75	100
>50%	>2:1		25	50	75

Stacked Filter Sock



Filtrexx

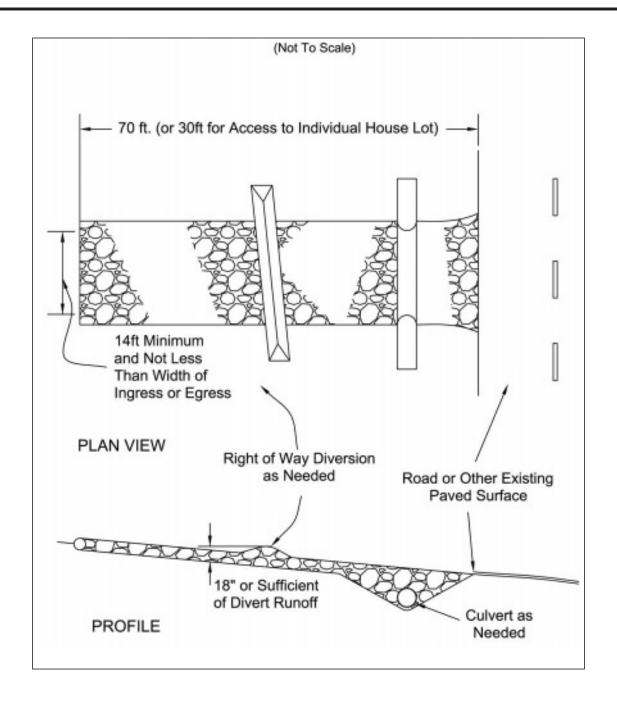


Adapted from Filtrexx

STAKING DETAIL

Specifications for

Construction Entrance



Specifications

for

Construction Entrance

- 1. Stone Size—ODOT # 2 (1.5-2.5 inch) stone shall be used, or recycled concrete equivalent.
- Length—The Construction entrance shall be as long as required to stabilize high traffic areas but not less than 70 ft. (exception: apply 30 ft. minimum to single residence lots).
- Thickness -The stone layer shall be at least 6 inches thick for light duty entrances or at least 10 inches for heavy duty use.
- Width -The entrance shall be at least 14 feet wide, but not less than the full width at points where ingress or egress occurs.
- 5. Geotextile -A geotextile shall be laid over the entire area prior to placing stone. It shall be composed of strong rot-proof polymeric fibers and meet the following specifications:

Figure 7.4.1

Geotextile Specification for Construction Entrance		
Minimum Tensile Strength	200 lbs.	
Minimum Puncture Strength	80 psi.	
Minimum Tear Strength	50 lbs.	
Minimum Burst Strength	320 psi.	
Minimum Elongation	20%	
Equivalent Opening Size	EOS < 0.6 mm.	
Permittivity	1×10-3 cm/sec.	

- 6. Timing—The construction entrance shall be installed as soon as is practicable before major grading activities.
- Culvert -A pipe or culvert shall be constructed under the entrance if needed to prevent surface water from flowing across the entrance or to prevent runoff from being directed out onto paved surfaces.
- Water Bar -A water bar shall be constructed as part of the construction entrance if needed to prevent surface runoff from flowing the length of the construction entrance and out onto paved surfaces.
- Maintenance -Top dressing of additional stone shall be applied as conditions demand. Mud spilled, dropped, washed or tracked onto public roads, or any surface where runoff is not checked by sediment controls, shall be removed immediately. Removal shall be accomplished by scraping or sweeping.
- Construction entrances shall not be relied upon to remove mud from vehicles and prevent off-site tracking. Vehicles that enter and leave the construction-site shall be restricted from muddy areas.
- 11. Removal—the entrance shall remain in place until the disturbed area is stabilized or replaced with a permanent roadway or entrance.

Specifications

for

Dust Control

- Vegetative Cover and/mulch Apply temporary or permanent seeding and mulch to areas that will remain idle for over 21 days. Saving existing trees and large shrubs will also reduce soil and air movement across disturbed areas. See Temporary Seeding; Permanent Seeding; Mulching Practices; and Tree and Natural Area Protection practices.
- Watering Spray site with water until the surface is wet before and during grading and repeat as needed, especially on haul roads and other heavy traffic routes. Watering shall be done at a rate that prevents dust but does not cause soil erosion. Wetting agents shall be utilized according to manufacturers instructions.
- 3. Spray-On Adhesives Apply adhesive according to the following table or manufacturers' instructions.

Table 7.5.1 Adhesives for Dust Control

Adhesive	Water Dilution (Adhesive: Water)	Nozzle Type	Application Rate Gal./Ac.
Latex Emulsion	12.5:1	Fine	235
Resin in Water Acrylic Emulsion (No-traffic)	4:1	Fine	300
Acrylic Emulsion (No-traffic)	7:1	Coarse	450
Acrylic Emulsion (Traffic)	3.5:1	Coarse	350

- 4. Stone Graded roadways and other suitable areas will be stabilized using crushed stone or coarse gravel as soon as practicable after reaching an interim or final grade. Crushed stone or coarse gravel can be used as a permanent cover to provide control of soil emissions.
- Barriers Existing windbreak vegetation shall be marked and preserved. Snow fencing or other suitable barrier may be placed perpendicular to prevailing air currents at intervals of about 15 times the barrier height to control air currents and blowing soil.
- 6. Calcium Chloride This chemical may be applied by mechanical spreader as loose, dry granules or flakes at a rate that keeps the surface moist but not so high as to cause water pollution or plant damage. Application rates should be strictly in accordance with suppliers' specified rates.
- Operation and Maintenance When Temporary Dust Control measures are used; repetitive treatment should be applied as needed to accomplish control.

Street Cleaning - Paved areas that have accumulated sediment from construction should be cleaned daily, or as needed, utilizing a street sweeper or bucket -type endloader or scraper.

Specifications for

Mulching

- Mulch and other appropriate vegetative practices shall be applied to disturbed areas within 7 days of grading if the area is to remain dormant (undisturbed) for more than 21 days or on areas and portions of the site which can be brought to final grade.
- 2. Mulch shall consist of one of the following:
- Straw Straw shall be unrotted small grain straw applied at the rate of 2 tons/ac. or 90 lb./1,000 sq. ft. (two to three bales). The straw mulch shall be spread uniformly by hand or mechanically so the soil surface is covered. For uniform distribution of hand-spread mulch, divide area into approximately 1,000 sq.ft. sections and place two 45-lb. bales of straw in each section.
- Hydroseeders Wood cellulose fiber should be used at 2,000 lb./ac. or 46 lb./1,000 sq. ft.
- Other Acceptable mulches include mulch mattings and rolled erosion control products applied according to manufacturer's recommendations or wood mulch/chips applied at 10-20 tons/ac.

- 3. Mulch Anchoring Mulch shall be anchored immediately to minimize loss by wind or runoff. The following are acceptable methods for anchoring mulch.
- Mechanical Use a disk, crimper, or similar type tool set straight to punch or anchor the mulch material into the soil. Straw mechanically anchored shall not be finely chopped but be left generally longer than 6 inches.
- Mulch Nettings Use according to the manufacturer's recommendations, following all placement and anchoring requirements. Use in areas of water concentration and steep slopes to hold mulch in place.
- Synthetic Binders For straw mulch, synthetic binders such as Acrylic DLR (Agri-Tac), DCA-70, Petroset, Terra Tack or equal may be used at rates recommended by the manufacturer. All applications of Sythetic Binders must be conducted in such a manner where there is no contact with waters of the state.
- Wood Cellulose Fiber Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 750 lb./acre. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 lb./100 gal. of wood cellulose fiber.

Specifications for

Temporary Seeding

Table 7.8.1 Temporary Seeding Species Selection

Lbs/Ac.	Botanical Name	Common Name
32	Avena sativa	Seed Oats
10	Lolium multiflorum	Annual Ryegrass

- Structural erosion and sediment control practices such as diversions and sediment traps shall be installed and stabilized with temporary seeding prior to grading the rest of the construction site.
- Temporary seed shall be applied between construction operations on soil that will not be graded or reworked for 21 days or greater. These idle areas shall be seeded within 7 days after grading.
- The seedbed should be pulverized and loose to ensure the success of establishing vegetation. Temporary seeding should not be postponed if ideal seedbed preparation is not possible.
- 4. Soil Amendments—Temporary vegetation seeding rates shall establish adequate stands of vegetation, which may require the use of soil amendments. Base rates for lime and fertilizer shall be used.
- 5. Seeding Method—Seed shall be applied uniformly with a cyclone spreader, drill, cultipacker seeder, or hydroseeder. When feasible, seed that has been broadcast shall be covered by raking or dragging and then lightly tamped into place using a roller or cultipacker. If hydroseeding is used, the seed and fertilizer will be mixed on-site and the seeding shall be done immediately and without interruption.

Specifications

for

Permanent Seeding

Site Preparation

- Subsoiler, plow, or other implement shall be used to reduce soil compaction and allow maximum infiltration. (Maximizing infiltration will help control both runoff rate and water quality.) Subsoiling should be done when the soil moisture is low enough to allow the soil to crack or fracture. Subsoiling shall not be done on slip-prone areas where soil preparation should be limited to what is necessary for establishing vegetation.
- 2. The site shall be graded as needed to permit the use of conventional equipment for seedbed preparation and seeding.
- 3. Topsoil shall be applied where needed to establish vegetation.

Seedbed Preparation

- Lime—Agricultural ground limestone shall be applied to acid soil as recommended by a soil test. In lieu of a soil test, lime shall be applied at the rate of 100 pounds per 1,000-sq. ft. or 2 tons per acre.
- Fertilizer—Fertilizer shall be applied as recommended by a soil test. In place of a soil test, fertilizer shall be applied at a rate of 25 pounds per 1,000-sq. ft. or 1000 pounds per acre of a 10-10-10 or 12-12-12 analyses.
- The lime and fertilizer shall be worked into the soil with a disk harrow, spring-tooth harrow, or other suitable field implement to a depth of 3 inches. On sloping land, the soil shall be worked on the contour.

Seeding Dates and Soil Conditions

Seeding should be done March 1 to May 31 or August 1 to September 30. If seeding occurs outside of the above-specified dates, additional mulch and irrigation may be required to ensure a minimum of 80% germination. Tillage for seedbed preparation should be done when the soil is dry enough to crumble and not form ribbons when compressed by hand. For winter seeding, see the following section on dormant seeding.

Dormant Seedings

- Seedings should not be made from October 1 through November 20. During this period, the seeds are likely to germinate but probably will not be able to survive the winter.
- 2. The following methods may be used for "Dormant Seeding":

- From October 1 through November 20, prepare the seedbed, add the required amounts of lime and fertilizer, then mulch and anchor. After November 20, and before March 15, broadcast the selected seed mixture. Increase the seeding rates by 50% for this type of seeding.
- From November 20 through March 15, when soil conditions permit, prepare the seedbed, lime and fertilize, apply the selected seed mixture, mulch and anchor. Increase the seeding rates by 50% for this type of seeding.
- Apply seed uniformly with a cyclone seeder, drill, cultipacker seeder, or hydro-seeder (slurry may include seed and fertilizer) on a firm, moist seedbed.
- Where feasible, except when a cultipacker type seeder is used, the seedbed should be firmed following seeding operations with a cultipacker, roller, or light drag. On sloping land, seeding operations should be on the contour where feasible.

Mulching

- Mulch material shall be applied immediately after seeding. Dormant seeding shall be mulched. 100% of the ground surface shall be covered with an approved material.
- 2. Materials
- Straw—If straw is used it shall be unrotted small-grain straw applied at the rate of 2 tons per acre or 90 pounds (two to three bales) per 1,000-sq. ft. The mulch shall be spread uniformly by hand or mechanically applied so the soil surface is covered. For uniform distribution of hand-spread mulch, divide area into approximately 1,000-sq.-ft. sections and spread two 45-lb. bales of straw in each section.
- Hydroseeders—If wood cellulose fiber is used, it shall be applied at 2,000 lb./ac. or 46 lb./1,000 sq. ft.
- Other—Other acceptable mulches include rolled erosion control mattings or blankets applied according to manufacturer's recommendations or wood chips applied at 6 tons per acre.

3. Straw and Mulch Anchoring Methods

Straw mulch shall be anchored immediately to minimize loss by wind or water.

- Mechanical—A disk, crimper, or similar type tool shall be set straight to punch or anchor the mulch material into the soil. Straw mechanically anchored shall not be finely chopped but, generally, be left longer than 6 inches.
- Mulch Netting—Netting shall be used according to the manufacturer's recommendations. Netting may be necessary to hold mulch in place in areas of concentrated runoff and on critical slopes.
- Asphalt Emulsion—Asphalt shall be applied as recommended by the manufacture or at the rate of 160 gallons per acre.

- Synthetic Binders—Synthetic binders such as Acrylic DLR (Agri-Tac), DCA-70, Petroset, Terra Tack or equivalent may be used at rates specified by the manufacturer.
- Wood Cellulose Fiber—Wood cellulose fiber shall be applied at a net dry weight of 750 pounds per acre. The wood cellulose fiber shall be mixed with water with the mixture containing a maximum of 50 pounds cellulose per 100 gallons of water.

Irrigation

Permanent seeding shall include irrigation to establish vegetation during dry weather or on adverse site conditions, which require adequate moisture for seed germination and plant growth.

Irrigation rates shall be monitored to prevent erosion and damage to seeded areas from excessive runoff.

PERMANENT SEED MIXES

Slope Stability & Natural Corridors Seed Mix

Temporary Matrix	×	
oz/ac	Grasses	
512	Avena sativa	Seed Oats
160	Lolium multiflorum	Annual Ryegrass
Permanent Matrix	×	
oz/acre	Grasses	
16	Andropogon gerardii	Big Bluestem
16	Bouteloua curtipendula	Side-Oats Grama
48	Elymus canadensis	Canada Wild Rye
48	Elymus virginicus	Virginia Wild Rye
32	Schizachyrium scoparium	Little Bluestem
16	Sorghastrum nutans	Indian Grass
oz/acre	Forbs	
1	Monarda fistulosa	Bergamot
2	Coreopsis lanceolata	Lanceleaf coreopis
4	Rudbecka hirta	Black-eyed Susan
2	Solidago nemoralis	Grey Goldenrod
2	Solidago speciosa	Showy Goldenrod

Lawn Mix - Sun to partial shade

Grasses	
Lolium multiflorum	Annual Ryegrass
Poa pratensis	Kentucky Bluegrass
Lolium perenne	Perennial Ryegrass

Lawn Mix -Shade

lbs/acre	Grasses	
20	Lolium multiflorum	Annual Ryegrass
100	Poa pratensis	Kentucky Bluegrass
100	Festuca rubra	Creeping Red Fescue

Swale and Retention Area Seed Mix

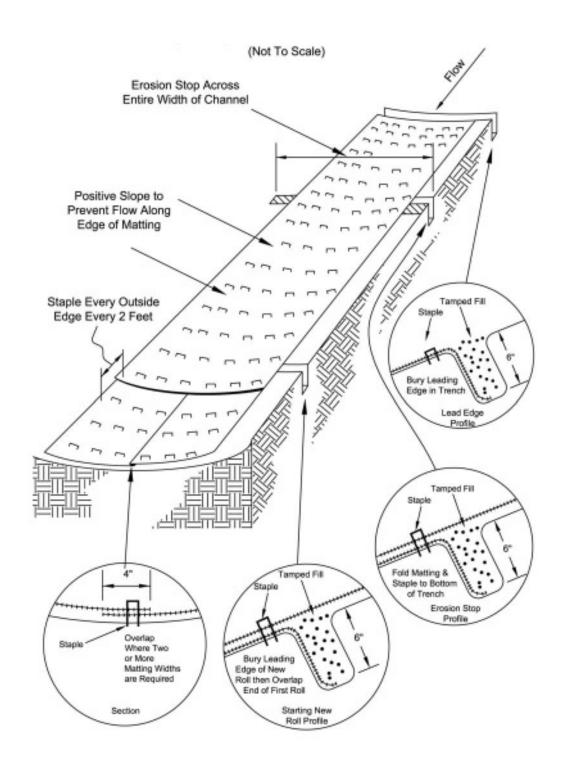
Temporary Matrix	rix	
oz/ac	Grasses	
512	Avena sativa	Seed Oats
160	Lolium multiflorum	Annual Ryegrass
Permanent Matrix	rix	
oz/acre	Grasses	
8	Carex frankii	Frank's Sedge
2	Eleocharis obtusa	BluntSpike Rush
8	Carex vulpinoidea	Fox Sedge
32	Panicum virgatum	Switchgrass
2	Scirpus acutus	Hard Stem Rush
oz/acre	Forbs	
2	Asclepias incarnata	Swamp milkweed
2	Aster novae-angliae	New England Aster
2	Eupatorium perfoliatum	Boneset
1	Helenium autumnale	Autumn Sneezeweed
2	2 Monarda fistulosa	Bergamot
2	Ratibida pinnata	Yellow Coneflower
2	2 Rudbeckia subtomentosa	Sweet Black-Eyed Susan

Farm Lane Area Seed Mix

Temporary Matrix	rix	
oz/ac	Grasses	
512	Avena sativa	Seed Oats
160	Lolium multiflorum	Annual Ryegrass
Permanent Matrix	rix	
oz/acre		
64	Trifolium pratense	Red Clover
32	Trifolium repens	White Clover

Specifications for

Temporary Rolled Erosion Control Product



Specifications

for

Temporary Rolled Erosion Control Product

- Channel/Slope Soil Preparation Grade and compact area of installation, preparing seedbed by loosening 2"-3" of topsoil above final grade. Incorporate amendments such as lime and fertilizer into soil. Remove all rocks, clods, vegetation or other debris so that installed RECP will have direct contact with the soil surface.
- Channel/Slope Seeding Apply seed to soil surface prior to installation. All check slots, anchor trenches, and other disturbed areas must be reseeded. Refer to the Permanent Seeding specification for seeding recommendations.

Slope Installation

- 3. Excavate top and bottom trenches (12"x6"). Intermittent erosion check slots (6"x6") may be required based on slope length. Excavate top anchor trench 2' x 3' over crest of the slope.
- If intermittent erosion check slots are required, install RECP in 6"x6" slot at a maximum of 30' centers or the mid point of the slope. RECP should be stapled into trench on 12" centers.
- 5. Install RECP in top anchor trench, anchor on 12" spacings, backfill and compact soil.
- Unroll RECP down slope with adjacent rolls overlapped a minimum of 3". Anchor the seam every 18". Lay the RECP loose to maintain direct soil contact, do not pull taught.
- Overlap roll ends a minimum of 12" with upslope RECP on top for a shingle effect. Begin all new rolls in an erosion check slot if required, double anchor across roll every 12".
- Install RECP in bottom anchor trench (12"x6"), anchor every 12". Place all other staples throughout slope at 1 to 2.5 per square yard dependant on slope. Refer to manufacturer's anchor guide.

Channel Installation

- 9. Excavate initial anchor trench (12"x6") across the lower end of the project area.
- 10. Excavate intermittent check slots (6"x6") across the channel at 30' intervals along the channel.
- 11. Excavate longitudinal channel anchor slots (4"x4") along both sides of the channel to bury the edges. Whenever possible extend the RECP 2'-3' above the crest of channel side slopes.
- 12. Install RECP in initial anchor trench (downstream) anchor every 12", backfill and compact soil.
- 13. Roll out RECP beginning in the center of the channel toward the intermittent check slot. Do not pull taught. Unroll adjacent rolls upstream with a 3" minimum overlap (anchor every 18") and up each channel side slope.
- 14. At top of channel side slopes install RECP in the longitudinal anchor slots, anchor every 18".
- 15. Install RECP in intermittent check slots. Lay into trench and secure with anchors every 12", backfill with soil and compact.
- 16. Overlap roll ends a minimum of 12" with upstream RECP on top for a shingling effect. Begin all new rolls in an intermittent check slot, double anchored every 12".
- 17. Install upstream end in a terminal anchor trench (12"x6"); anchor every 12", backfill and compact.
- 18. Complete anchoring throughout channel at 2.5 per square yard using suitable ground anchoring devices (U shaped wire staples, metal geotextile pins, plastic stakes, and triangular wooden stakes). Anchors should be of sufficient length to resist pullout. Longer anchors may be required in loose sandy or gravelly soils.

NOTE:

1. CONTRACTOR TO USE SC-250 EROSION CONTROL MATTING, OR OWNER APPROVED EQUAL.

8.1 Additional Construction Site Pollution Controls



Description

Although sediment is the primary pollutant of concern resulting from construction activity, other pollutants need to be considered as well. These include petrochemicals: fuel, oil, and asphalt; and construction chemicals and materials: paints, solvents, fertilizer, soil additives, concrete wash water, etc. Also included are solid wastes and construction debris. Keeping these substances from polluting runoff can be accomplished to a large extent through good housekeeping and following the manufacturer's recommendations for their use and disposal.

Condition Where Practice Applies

Wastes generated by construction activities (i.e. construction materials such as paints, solvents, fuels, concrete, wood, etc.) must be disposed of in accordance with ORC 3734 and ORC 3714. Hazardous and toxic substances are used on virtually all construction-sites. Good management of these substances is always needed.

Planning Considerations

Good erosion and sediment control will prevent some pollutants in addition to sediment from leaving the site; however, pollutants carried in solution or as surface films on runoff water will be carried through most erosion and sediment control practices. These pollutants become nearly impossible to control once carried offsite in runoff. Adding to the problem is the fact that construction wastes, many containing toxic chemicals, are routinely buried onsite, dumped on the ground, poured down a storm drain, or disposed of with construction debris. So while typical erosion and sediment-control practices are important for controlling other pollutants, additional preventative measures are needed.

Reducing pollutants other than sediments depends heavily on construction personnel and how they carry out their operations. To help facilitate this, plans should contain standard notes clearly stating requirements to contractors. It also may be appropriate to include requirements for specific provisions for hazardous materials storage, handling and disposal.

Requirements

1. Educate Construction Personnel, including subcontractors who may use or handle hazardous or toxic materials, making them aware of the following general guidelines:

	Disposal and Handling of Hazardous and Other Construction Waste
DO:	 Prevent spills Use products up Follow label directions for disposal Remove lids from empty bottles and cans when disposing in trash Recycle wastes whenever possible
DON'T	 Don't pour into waterways, storm drains or onto the ground Don't pour down the sink, floor drain or septic tanks Don't bury chemicals or containers Don't burn chemicals or containers Don't mix chemicals together

- **2.** Waste disposal containers shall be provided for the proper collection of all waste material including construction debris, sanitary garbage, petroleum products and any hazardous materials to be used on-site. Containers shall be covered and not leaking. All waste material shall be disposed of at facilities approved for that material. Construction Demolition and Debris (CD&D) waste must be disposed of in accordance with ORC 3714 at an approved Ohio EPA CD&D landfill.
- **3.** No construction related waste materials are to be buried on-site. By exception, clean fill (bricks, hardened concrete, soil) may be utilized in a way that does not encroach upon natural wetlands, streams or their floodplains. Filling of stream side areas is Fill may not result in the contamination of waters of the state. unless prohibited by local ordinance or zoning.
- **4. Construction and Demolition Debris (CD&D) Disposal.** CD&D waste must be disposed of in accordance with ORC 3714 at an approved Ohio EPA CD&D landfill. CD&D waste is defined as all materials attached to a structure, which is being demolished (for materials containing asbestos see Item 12).
- **5. Handling Construction Chemicals.** Mixing, pumping, transferring or other handling of construction chemicals such as fertilizer, lime, asphalt, concrete drying compounds, and all other potentially hazardous materials shall be performed in an area away from any watercourse, ditch or storm drain.

- 6. Equipment Fueling and Maintenance, oil changing, etc., shall be performed away from watercourses, ditches or storm drains, in an area designated for that purpose. The designated area shall be equipped for recycling oil and catching spills. Secondary containment shall be provided for all fuel oil storage tanks. These areas must be inspected every seven days and within 24 hrs. of a 0.5 inch or greater rain event to ensure there are no exposed materials which would contaminate storm water. Site operators must be aware that Spill Prevention Control and Countermeasures (SPCC) requirements may apply. An SPCC plan is required for sites with one single aboveground tank of 660 gallons or more, accumulative aboveground storage of 1330 gallons or more, or 42,000 gallons of underground storage. Soils that have become contaminated must be disposed of accordance with Item 8 "Contaminated Soils".
- 7.Concrete Wash Water/Wash Outs. Concrete wash water shall not be allowed to flow to streams, ditches, storm drains, or any other water conveyance. A sump or pit with no potential for discharge shall be constructed if needed to contain concrete wash water. Field tile or other subsurface drainage structures within 10 ft. of the sump shall be cut and plugged. For small projects, truck chutes may be rinsed on the lot away from any water conveyances.
- 8. Contaminated Soils. If substances such as oil, diesel fuel, hydraulic fluid, antifreeze, etc. are spilled, leaked, or released onto the soil, the soil should be dug up and disposed of at licensed sanitary landfill or other approved petroleum contaminated soil remediation facility (not a construction/demolition debris landfill). Please be aware that storm water run off associated with contaminated soils are not authorized under Ohio EPA's General Storm Water Permit associated with Construction Activities. In the event there are large extensive areas of contaminated soils additional measures above and beyond the conditions of Ohio EPA's General Construction Storm Water Permit will be required. Depending on the extent of contamination, additional treatment and/or collection and disposal may be required. All storm water discharges associated with the contaminated soils must be authorized under an alternate NPDES (National Pollutant Discharge Elimination System) Permit.
- **9.Spill Reporting Requirements:** Spills on pavement shall be absorbed with sawdust, kitty litter or other absorbant material and disposed of with the trash at a licensed sanitary landfill. Hazardous or industrial wastes such as most solvents, gasoline, oil-based paints, and cement curing compounds require special handling. Spills shall be reported to Ohio EPA (1-800-282-9378). Spills of 25 gallons or more of petroleum products shall be reported to Ohio EPA (1-800-282-9378), the local fire department, and the Local Emergency Planning Committee within 30 min. of the discovery of the release. All spills, which result in contact with waters of the state, must be reported to OHIO EPA's Hotline.
- **10. Open Burning**. No materials may be burned which contain rubber, grease, asphalt, or petroleum products such as tires, cars, autoparts, plastics or plastic coated wire. (See OAC 3745-19) Open burning is not allowed in restricted areas. Restricted areas are defined as: 1) within corporation limits; 2) within 1000 feet outside a municipal corporation having a population of 1000 to 10,000; and 3) a one mile zone outside of a

- corporation of 10, 000 or more. Outside a restricted area, no open burning can take place within a 1000 feet of an inhabited building located off the property where the fire is set. Open burning is permissible in a restricted area for the following activities: heating tar, welding and acetylene torches, smudge pots and similar occupational needs, and heating for warmth or outdoor barbeques. Outside of restricted areas, open burning is permissible for landscape wastes (plant material), land-clearing wastes (plant material, with prior written permission from Ohio EPA), and agricultural wastes (material generated by crop, horticultural, or livestock production practices. This includes fence posts and scrap lumber, but not buildings).
- 11. Dust Control/Suppressants. Dust control is required to prevent nuisance conditions. Dust controls must be used in accordance with the manufacturer's specifications and not be applied in a manner, which would result in a discharge to waters of the state. Isolation distances from bridges, catch basins, and other drainageways must be observed. Application (excluding water) may not occur when precipitation is imminent as noted in the short term forecast. Used oil may not be applied for dust control.
- 12. Other Air Permitting Requirements: All contractors and sub contractors must be made aware that certain activities associated with construction will require air permits. Activities including but not limited to mobile concrete batch plants, mobile asphalt plants, concrete crushers, large generators, etc., will require specific Ohio EPA Air Permits for installation and operation. These activities must seek authorization from the corresponding district of Ohio EPA. Notification for Restoration and Demolition must be submitted to Ohio EPA for all commercial sites to determine if asbestos corrective actions are required.
- 13. Process Waste Water/Leachate Management. All contractors shall be made aware that Ohio EPA's Construction General Permit only allows the discharge of storm water. Other waste streams/discharges including but not limited to vehicle and/or equipment washing, leachate associated with on-site waste disposal, concrete wash outs, etc are a process wastewater. They are not authorized for discharge under the General Storm Water Permit associated with Construction Activities. All process wastewaters must be collected and properly disposed at an approved disposal facility. In the event there are leachate outbreaks associated with onsite disposal, measures must be taken to isolate this discharge for collection and proper disposal. Investigative measures and corrective actions must be implemented to identify and eliminate the source of all leachate outbreaks.
- 14. Permit To Install (PTI) Requirements: All contractors and sub contractors must be made aware that a PTI must be submitted and approved by Ohio EPA prior to the construction of all centralized sanitary systems, including sewer extensions, and sewerage systems (except those serving one, two, and three family dwellings) and potable water lines. The issuance of an Ohio EPA Construction General Storm Water Permit does not authorize the installation of any sewerage system where Ohio EPA has not approved a PTI.

Additional Construction Site Pollution Controls

- 1. Construction personnel, including subcontractors who may use or handle hazardous or toxic materials, shall be made aware of the following general guidelines regarding disposal and handling of hazardous and construction wastes:
 - · Prevent spills
 - · Use products up
 - · Follow label directions for disposal
 - Remove lids from empty bottles and cans when disposing in trash
 - Recycle wastes whenever possible
 - Don't pour into waterways, storm drains or onto the ground
 - Don't pour down the sink, floor drain or septic tanks
 - Don't bury chemicals or containers
 - Don't burn chemicals or containers
 - Don't mix chemicals together
- 2. Containers shall be provided for the proper collection of all waste material including construction debris, trash, petroleum products and any hazardous materials used on-site. Containers shall be covered and not leaking. All waste material shall be disposed of at facilities approved for that material. Construction Demolition and Debris (CD&D) waste must be disposed of at an Ohio EPA approved CD&D landfill.
- 3. No construction related waste materials are to be buried on-site. By exception, clean fill (bricks, hardened concrete, soil) may be utilized in a way which does not encroach upon natural wetlands, streams or floodplains or result in the contamination of waters of the state.
- 4. Handling Construction Chemicals. Mixing, pumping, transferring or other handling of construction chemicals such as fertilizer, lime, asphalt, concrete drying compounds, and all other potentially hazardous materials shall be performed in an area away from any watercourse, ditch or storm drain.
- 5. Equipment Fueling and Maintenance, oil changing, etc., shall be performed away from watercourses, ditches or storm drains, in an area designated for that purpose. The designated area shall be equipped for recycling oil and catching spills. Secondary containment shall be provided for all fuel oil storage tanks. These areas must be inspected every seven days and within 24 hrs. of a 0.5 inch or greater rain event to ensure there are no exposed materials which would contaminate storm water. Site operators must be aware that Spill Prevention Control and Countermeasures (SPCC) requirements may apply. An SPCC plan is required for sites with one single above ground tank of 660

- gallons or more, accumulative above ground storage of 1330 gallons or more, or 42,000 gallons of underground storage. Contaminated soils must be disposed of in accordance with Item 8.
- **6.** Concrete Wash Water shall not be allowed to flow to streams, ditches, storm drains, or any other water conveyance. A sump or pit with no potential for discharge shall be constructed if needed to contain concrete wash water. Field tile or other subsurface drainage structures within 10 ft. of the sump shall be cut and plugged. For small projects, truck chutes may be rinsed away from any water conveyances.
- 7. Spill Reporting Requirements: Spills on pavement shall be absorbed with sawdust or kitty litter and disposed of with the trash at a licensed sanitary landfill. Hazardous or industrial wastes such as most solvents, gasoline, oil-based paints, and cement curing compounds require special handling. Spills shall be reported to Ohio EPA (1-800-282-9378). Spills of 25 gallons or more of petroleum products shall be reported to Ohio EPA, the local fire department, and the Local Emergency Planning Committee within 30 min. of the discovery of the release. All spills which contact waters of the state must be reported to Ohio EPA.
- **8.** Contaminated Soils. If substances such as oil, diesel fuel, hydraulic fluid, antifreeze, etc. are spilled, leaked, or released onto the soil, the soil should be dug up and disposed of at licensed sanitary landfill or other approved petroleum contaminated soil remediation facility. (not a construction/demolition debris landfill). Note that storm water run off associated with contaminated soils are not be authorized under Ohio EPA's General Storm Water Permit associated with Construction Activities.
- 9. Open Burning. No materials containing rubber, grease, asphalt, or petroleum products, such as tires, autoparts, plastics or plastic coated wire may be burned (OAC 3745-19). Open burning is not allowed in restricted areas, which are defined as: 1) within corporation limits; 2) within 1000 feet outside a municipal corporation having a population of 1000 to 10,000; and 3) a one mile zone outside of a corporation of 10, 000 or more. Outside of restricted areas, no open burning is allowed within a 1000 feet of an inhabited building on another property. Open burning is permissible in a restricted area for: heating tar, welding, smudge pots and similar occupational needs, and heating for warmth or outdoor barbeques. Outside of restricted areas, open burning is permissible for landscape or land-clearing wastes (plant material, with prior written permission from Ohio EPA), and agricultural wastes, excluding buildings.
- **10. Dust Control or dust suppressants** shall be used to prevent nuisance conditions, in accordance with the manufacturer's specifications and in a manner, which prevent a discharge to waters of the state. Sufficient distance must be provided between applications and nearby bridges, catch basins, and other waterways. Application (excluding water) may not occur when rain is imminent as noted in the short term forecast. Used oil may not be applied for dust control.
- 11. Other Air Permitting Requirements: Certain activities associated with construction will require air permits including but not limited to: mobile concrete batch plants, mobile asphalt plants, concrete crushers, large generators, etc. These activities will require specific Ohio EPA Air Permits for installation and operation. Operators must seek authorization from the corresponding district of Ohio EPA. For demolition of all

- commercial sites, a Notification for Restoration and Demolition must be submitted to Ohio EPA to determine if asbestos corrective actions are required.
- **12.** Process Waste Water/Leachate Management. Ohio EPA's Construction General Permit only allows the discharge of storm water and does not include other waste streams/discharges such as vehicle and/or equipment washing, on-site septic leachate concrete wash outs, which are considered process wastewaters. All process wastewaters must be collected and properly disposed at an approved disposal facility. In the event, leachate or septage is discharged; it must be isolated for collection and proper disposal and corrective actions taken to eliminate the source of waste water.
- 13. A Permit To Install (PTI) is required prior to the construction of all centralized sanitary systems, including sewer extensions, and sewerage systems (except those serving one, two, and three family dwellings) and potable water lines. Plans must be submitted and approved by Ohio EPA. Issuance of an Ohio EPA Construction General Storm Water Permit does not authorize the installation of any sewerage system where Ohio EPA has not approved a PTI.

APPENDIX 3

SWP3 Inspection Forms and SWP3 Amendments, Grading, and Stabilization Log

AEP OHIO TRANSMISSION COMPANY, INC. GREEN CHAPEL EXTENSION 138kV TRANSMISSION LINE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWP3) INSPECTION FORM

Date:	Inspector's	Name/Title:				
Inspector's Compa	ny:					
Inspector Qualified	in accordance with	Part VII.BB of Permit: 🗆 Yes	s 🗆 No (Docum	nent Qualifications in Appe	endix 3 of SWP3)	
Inspection Type:	\square Weekly (once	every seven calendar days)				
	☐ Storm Event (0.5 inch or greater) Date:	Am	ount: Dura	ation:	
Rain Event(s) Sinc	e Last Inspection:					
Date:	Amount:	Duration:	Date:	Amount:	Duration:	
Date:	Amount:	Duration:	Date:	Amount:	Duration:	
Did any discharges	occur during these	events? No Yes, Loc	ation:			
Current Weather:	Current Weather: ☐ Clear ☐ Cloudy ☐ Fog ☐ Rain ☐ Snow ☐ Sleet ☐ High Winds ☐ Other: Temp:					
Current Discharges	s: 🗆 No 🗆 Yes, L	ocation:				
Evidence of Sedim	ent/Pollutants Leavi	ng the Site? \square No \square Yes,	Location:			
Has Seeding Take	n Place? □ No □	Yes, Location/Seed tag phot	o included:			
Erosion and Sedin	ment Control Featu	res / BMPs Inspected:				
☐ Silt Fence / Filt	ter Sock (Mark whi	ch one applies)				
Location(s) (Structo	ure # (STR#)):					
Properly anchored	/installed: ☐ Yes	□ No Repairs N	Needed: 🗆 Yes	s 🗆 No		
Sediment Removal	Required (Sedimer	t one-half height for fence & o	ne-third height fo	or sock): \square Yes \square No		
Action Required/Ta	aken/Location(s):					
☐ Orange Barrier	r Fence					
_		STR#):				
	′installed: ☐ Yes		Needed: 🗆 Yes			
-		·				
□ Construction E	- - - - - -					
		oad and nearest STR#):				
		Evidence of mud tracked on i				
			•			
•	,	waste containers, fuel area	•			
•		and shown on the SWP3:				
			•	lls or releases: ☐ Yes ☐		
Action Required/Ta	aken/Location(s):					

☐ Concrete Washouts
Location(s) (Access Road / STR#):
Properly installed and located at least 50 feet from wetlands/streams/ditches/storm drains: ☐ Yes ☐ No
Replacement needed (concrete reaches 50 percent of the system): \square Yes \square No
Action Required/Taken/Location(s):
Comments / Additional Control Measures Recommended:
If BMP modifications are made, you must update the SWP3 drawings and document changes on the SWP3 amendment log.
Inspector's Signature: Date:

AEP OHIO TRANSMISSION COMPANY, INC. GREEN CHAPEL EXTENSION 138kV TRANSMISSION LINE PROJECT

STORM WATER POLLUTION PREVENTION PLAN AMENDMENTS, GRADING, AND STABILIZATION LOG

Date:	Inspector's Name/Title:	
Location and Description of	of Grading and Stabilization Activities	
Amendments to SWP3:		
Date:	Inspector's Name/Title:	
	of Grading and Stabilization Activities	
Amendments to SWP3:		
Date:	Inspector's Name/Title:	
	of Grading and Stabilization Activities	
Amendments to SWP3:		

AEP OHIO TRANSMISSION COMPANY, INC. GREEN CHAPEL EXTENSION 138kV TRANSMISSION LINE PROJECT

SUMMARY SWP3 INSPECTION RECORDS – FOR TCRs

I have completed a review of the SVVP3 inspections completed on the project for the period of to
The following major observations were made relating to the implementation of the SWP3 and review of the inspection log.
Inspector Qualifications:
\Box The inspections were performed by "qualified inspection personnel" knowledgeable in the principles of erosion and sediment control and skilled in assessing the effectiveness of control measures.
☐ The inspections were NOT performed by "qualified inspection personnel" knowledgeable in the principles of erosion and sediment control and skilled in assessing the effectiveness of control measures.
☐ Corrective Measures were taken on to provide "qualified inspection personnel" at the site.
Permit Compliance Observations:
\square The project was in compliance with the SWP3 and permit during the review period.
☐ The project was NOT in compliance with the SWP3 and permit during the review period as noted below:
☐ Non-compliance issues included:

☐ Corrective Measures were taken on to correct the above non-compliance issues.
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.
Name:
Title:
Signature:
Date:

APPENDIX 4

Duty to Inform Contractors and Subcontractors Signature Form

AEP OHIO TRANSMISSION COMPANY, INC. GREEN CHAPEL EXTENSION 138kV TRANSMISSION LINE PROJECT

DUTY TO INFORM CONTRACTORS AND SUBCONTRACTORS SIGNATURE FORM

By signing below, I acknowledge that I have been informed of the terms and conditions of the Ohio Environmental Protection Agency's General NPDES Permit for Storm Water Associated with Construction Activity, and have reviewed and understand the conditions and responsibilities of the Storm Water Pollution Prevention Plan for the AEP Ohio Transmission Company, Inc. Green Chapel Extension 138kV Transmission Line Project. I understand that Inspectors shall meet the qualifications outlined in Part VII.BB. of Ohio EPA Permit No.: OHC000006.

Printed Name	Company	Signature	Date



402.03-311 December 12, 2023

Charles Jankowski c/o AEP

> Re: AEP R/W Permit – Miller Road – 151.0-23

Dear Mr. Jankowski:

Please find attached a conditionally approved permit subject to the following conditions:

1. It is understood that it is the permittee's responsibility to record all easements required to complete the work and to ensure that facilities are installed in easements or public right-of-way.

2. Contact Brian Walkenspaw at (614) 855-0076 to arrange a field meeting prior to performing the work.

- 3. Provide Construction Entrance Ahead signage in accordance with the OMUTCD.
- Restore all surface features in accordance with the General Notes (see Exhibit A).
- 5. Remove sediment that may become discharged on public streets immediately using a vacuum street sweeper with a brush.

Please contact us if you require additional information.

Very truly yours,

Matt Ferris, P. E., P.S. Consulting City Engineer

that Ferris og/b

MEF/JH





Company Name: AEP Ohio Transmission Company, Inc

RECEIVED DEC 0 4 2023

Date Submitted: 12/01/23

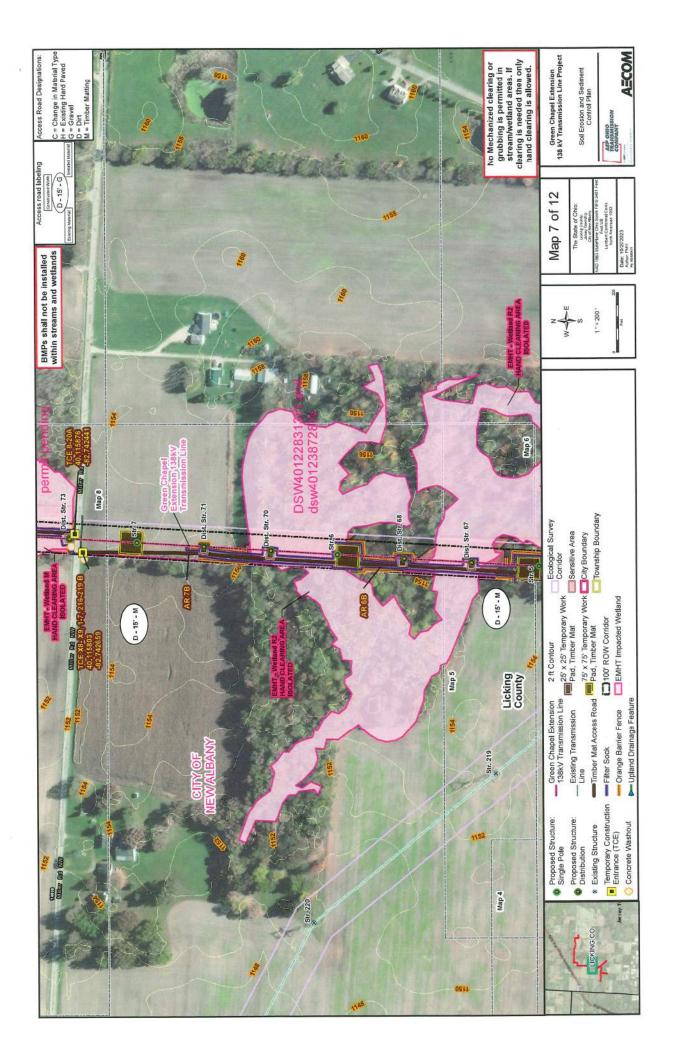
Right-of-Way Work Permit Application (Chapter 1178.03 (a))

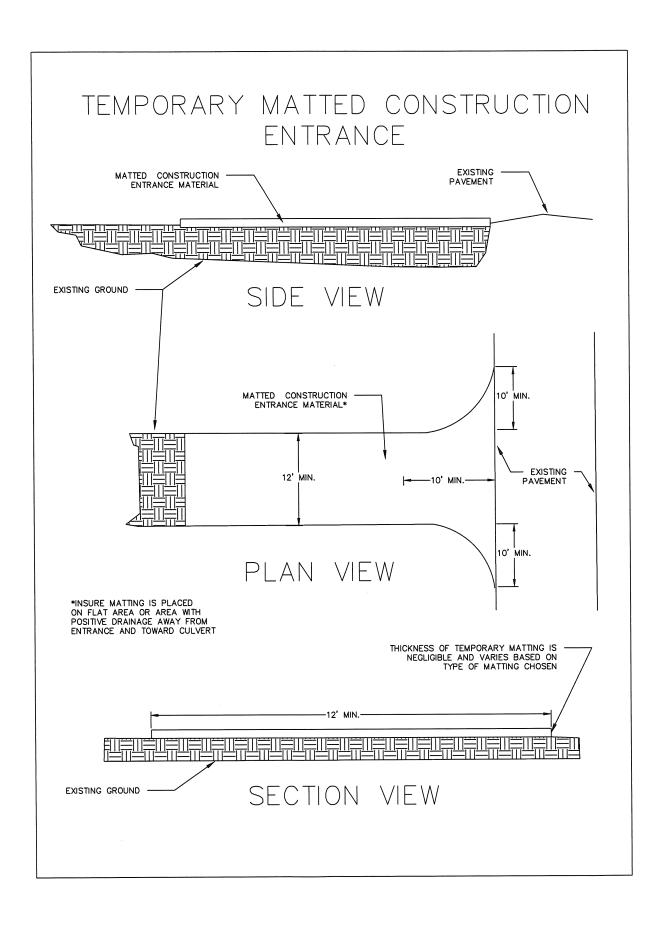
Application #: 151.0 -23

40.115803, -82.7	42659	
GCE TCE01		
In the location	on, alignment, and elevation as shown on th	attached plans (3 sets required). Attach separate sheet if
Who	o should receive approved permit and	or engineer review comments? (<u>Must Complete</u>)
Name: Charles Jankowski		Address: 255 Taylor Station Rd Ste 100 Columbus OH 43213
Phone Number: 614.323.4103		Fax Number:
	sheets included: 4	Email: CJankowski@orcolan.com (Preferred method)
specifications applicant sha the work to l	s of New Albany as set forth in codified all notify all affected, or potentially affected,	or better condition in compliance with rules, regulations, an ordinance 1178 and New Albany's Right-of-Way policy. The permittees and franchisees, and adjoining property owners as to hall comply with special conditions, if any, as listed below (attack)
specification: applicant sha the work to l	s of New Albany as set forth in codified all notify all affected, or potentially affected, be completed. Furthermore, the applicant s	ordinance 1178 and New Albany's Right-of-Way policy. The permittees and franchisees, and adjoining property owners as
specifications applicant sha the work to l	s of New Albany as set forth in codified all notify all affected, or potentially affected, be completed. Furthermore, the applicant set if required).	ordinance 1178 and New Albany's Right-of-Way policy. The permittees and franchisees, and adjoining property owners as t
specification: applicant sha the work to l separate she	s of New Albany as set forth in codified all notify all affected, or potentially affected, be completed. Furthermore, the applicant set if required).	ordinance 1178 and New Albany's Right-of-Way policy. The permittees and franchisees, and adjoining property owners as to hall comply with special conditions, if any, as listed below (attack) ubmitted with the following documents: • Estimate of time to complete work
specification: applicant sha the work to l separate she Desc Requ	This Work Application must be cription of Right-Of-Way affected.	ubmitted with the following documents: Estimate of time to complete work Description of facility to be installed
especifications supplicant sha the work to lesseparate she Desc Request	This Work Application must be cription of Right-Of-Way affected. uired street closure/blockage. ement verifying notification of affected.	ubmitted with the following documents: Estimate of time to complete work Description of facility to be installed Application fee of \$75.00 (if not part of Engineerin
Desc Requ State Noti	This Work Application must be cription of Right-Of-Way affected. circument verifying notification of affected sies. fication of any adversely affected consumer	ubmitted with the following documents: Estimate of time to complete work Description of facility to be installed Application fee of \$75.00 (if not part of Engineerin Development Package) or Resubmittal fee of \$50.00.
Desc Request Noti	This Work Application must be cription of Right-Of-Way affected. Emert verifying notification of affected ies. fication of any adversely affected consumer PUCO Rules & Regulations.	ubmitted with the following documents: Estimate of time to complete work Description of facility to be installed Application fee of \$75.00 (if not part of Engineerin Development Package) or Resubmittal fee of \$50.00. Performance Bond (cash, money order, or certified
Desc Requ State Noti per Proj	This Work Application must be cription of Right-Of-Way affected. circument verifying notification of affected sies. fication of any adversely affected consumer	ubmitted with the following documents: Estimate of time to complete work Description of facility to be installed Application fee of \$75.00 (if not part of Engineerin Development Package) or Resubmittal fee of \$50.00.

Contractor Information:

Name:	Zach Lacey / New River Electrical	Phone Number: 614-769-5496			
Email:	ZLacey@nrec.com	Emergency 24 Hour Number:			
Address:	6005 Westerville Rd, Westerville, OH				
radii coo.	(Street) (C	City)	(State and Zip)		
	Sub-Contrac	ctor Information:			
Name:		Phone Number:			
Email:		Emergency 24 Hour Number:			
Address:					
	(Street) (6	City)	(State and Zip)		
If durin	UTILITIES PROTECTION SERVICE AT 1-800-362-2764, AND THE NEW ALBANY DEPARTMENT OF PUBLIC SERVICE AT 614-855-0076. If during construction any fiber/inner duct is damaged the contractor shall notify Ohio Utilities Protection Service (OUPS) by dialing 811.				
	Permit Approved	Permit Denied			
	This permit expires on the "end" constructi	on date listed on page one unless o	otherwise noted.		
No.	et Juni Do 12	Approval Date	12-23		







402.03-312 December 12, 2023

Charles Jankowski c/o AEP

> Re: AEP R/W Permit – Miller Road – 152.0-23

Dear Mr. Jankowski:

Please find attached a conditionally approved permit subject to the following conditions:

- 1. It is understood that it is the permittee's responsibility to record all easements required to complete the work and to ensure that facilities are installed in easements or public right-of-way.
- 2. Contact Brian Walkenspaw at (614) 855-0076 to arrange a field meeting prior to performing the work.
- 3. Provide Construction Entrance Ahead signage in accordance with the OMUTCD.
- 4. Restore all surface features in accordance with the General Notes (see Exhibit A).
- 5. Remove sediment that may become discharged on public streets immediately using a vacuum street sweeper with a brush.

Please contact us if you require additional information.

Very truly yours,

Matt Ferris, P. E., P.S. Consulting City Engineer

not term !

MEF/JH





402.03-312 Application #: 152.0 -23 RECEIVED DEC 0 4 2023

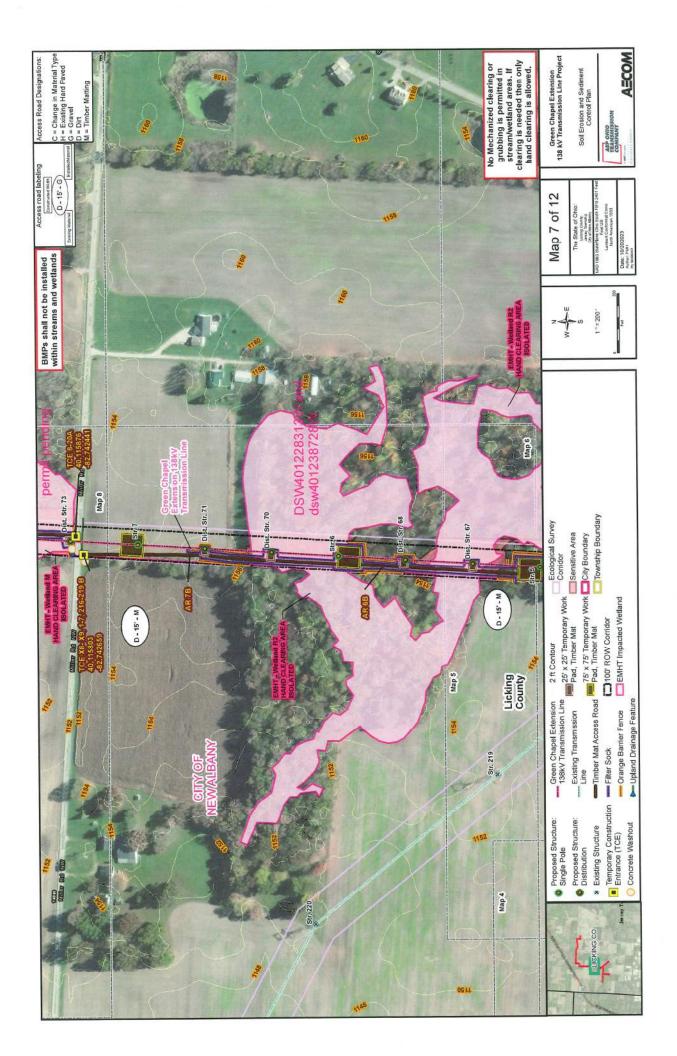
Right-of-Way Work Permit Application (Chapter 1178.03 (a))

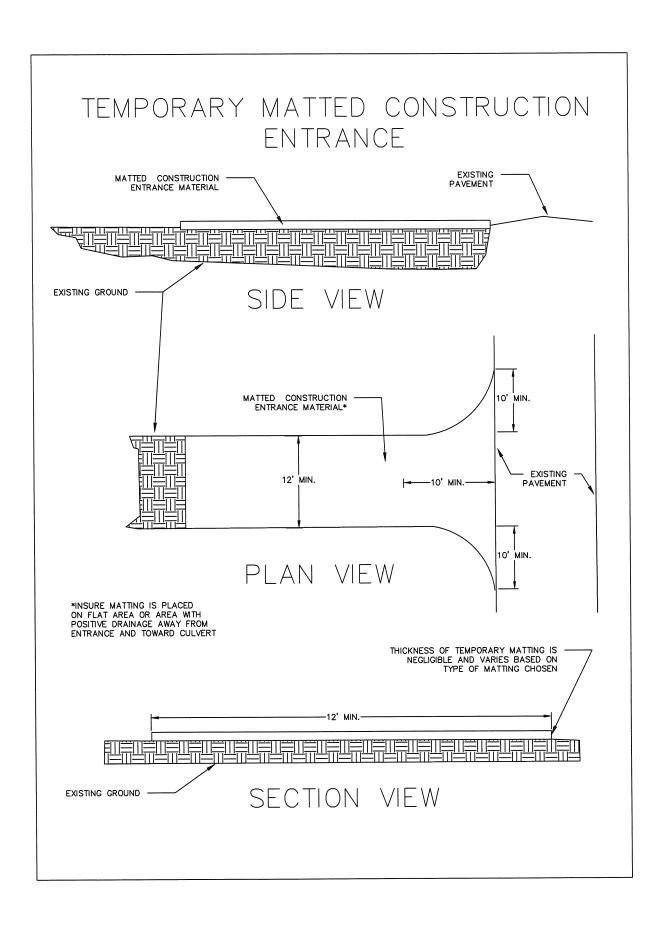
Construction Dates Start: 12/11/2023	
	End: 12/11/24
The above named company hereby requests a Right-Of-V Construct & maintain a temporary timber matted construction entrance to suppo	Vay Permit to do the following work: It an electrical transmission line project on the north side of Miller Rd NW.
40.115876, -82.742441	
GCE TCE02	
In the location, alignment, and elevation as shown on the needed.	attached plans (3 sets required). Attach separate sheet if
Who should receive approved permit and/o	r engineer review comments? (<u>Must Complete</u>)
Name: Charles Jankowski A	ddress: 255 Taylor Station Rd Ste 100 Columbus OH 43213
	ax Number:
	mail: CJankowski@orcolan.com (Preferred method)
Number of sheets included:	man.
the work to be completed. Furthermore, the applicant so	all comply with special conditions, it any, as hered below (attack
the work to be completed. Furthermore, the applicant sha separate sheet if required).	
separate sheet if required).	bmitted with the following documents:
This Work Application must be su Description of Right-Of-Way affected.	bmitted with the following documents: • Estimate of time to complete work
This Work Application must be su Description of Right-Of-Way affected. Required street closure/blockage.	bmitted with the following documents: • Estimate of time to complete work • Description of facility to be installed
This Work Application must be su Description of Right-Of-Way affected. Required street closure/blockage. Statement verifying notification of affected	 bmitted with the following documents: Estimate of time to complete work Description of facility to be installed Application fee of \$75.00 (if not part of Engineering
This Work Application must be su Description of Right-Of-Way affected. Required street closure/blockage. Statement verifying notification of affected parties.	 bmitted with the following documents: Estimate of time to complete work Description of facility to be installed Application fee of \$75.00 (if not part of Engineering Development Package) or Resubmittal fee of
This Work Application must be su Description of Right-Of-Way affected. Required street closure/blockage. Statement verifying notification of affected parties. Notification of any adversely affected consumer	 bmitted with the following documents: Estimate of time to complete work Description of facility to be installed Application fee of \$75.00 (if not part of Engineering Development Package) or Resubmittal fee of \$50.00.
This Work Application must be su Description of Right-Of-Way affected. Required street closure/blockage. Statement verifying notification of affected parties. Notification of any adversely affected consumer per PUCO Rules & Regulations.	 bmitted with the following documents: Estimate of time to complete work Description of facility to be installed Application fee of \$75.00 (if not part of Engineering Development Package) or Resubmittal fee of
This Work Application must be su Description of Right-Of-Way affected. Required street closure/blockage. Statement verifying notification of affected parties. Notification of any adversely affected consumer	 Estimate of time to complete work Description of facility to be installed Application fee of \$75.00 (if not part of Engineering Development Package) or Resubmittal fee of \$50.00. Performance Bond (cash, money order, or certified

Contractor Information:

Name:	Zach Lacey / New River Electrical	Phone Number: 614-769-5496	
Email:	ZLacey@nrec.com	Emergency 24 Hour Number:	
Address:	6005 Westerville Rd, Westerville, OH	43081	
	(Street)	City)	(State and Zip)
	Sub-Contrac	tor Information:	
Name:		Phone Number:	
Email:		Emergency 24 Hour Number:	
Address:			100
	(Street)	City)	(State and Zip)
If duri	ng construction any fiber/inner duct is	IC SERVICE AT 614-855-007 damaged the contractor shall (OUPS) by dialing 811.	
	Permit Approved	Permit Denied	
	This permit expires on the "end" constructi	on date listed on page one unless ot	herwise noted.
Ne	at Firm / 200 /c	Approval Date	12-23
Service Di	irector OR	Approvar Buto	

Authorized New Albany Representative







402.03-313 December 12, 2023

Charles Jankowski c/o AEP

> Re: AEP R/W Permit – Green Chapel Rd. – 153.0-23

Dear Mr. Jankowski:

Please find attached a conditionally approved permit subject to the following conditions:

 It is understood that it is the permittee's responsibility to record all easements required to complete the work and to ensure that facilities are installed in easements or public right-of-way.

2. Contact Brian Walkenspaw at (614) 855-0076 to arrange a field meeting prior

to performing the work.

3. Provide Construction Entrance Ahead signage in accordance with the OMUTCD.

4. Restore all surface features in accordance with the General Notes (see Exhibit A).

5. Remove sediment that may become discharged on public streets immediately using a vacuum street sweeper with a brush.

Please contact us if you require additional information.

Very truly yours,

Matt Ferris, P. E., P.S. Consulting City Engineer

MEF/JH





RECEIVED DEC 0 4 2023

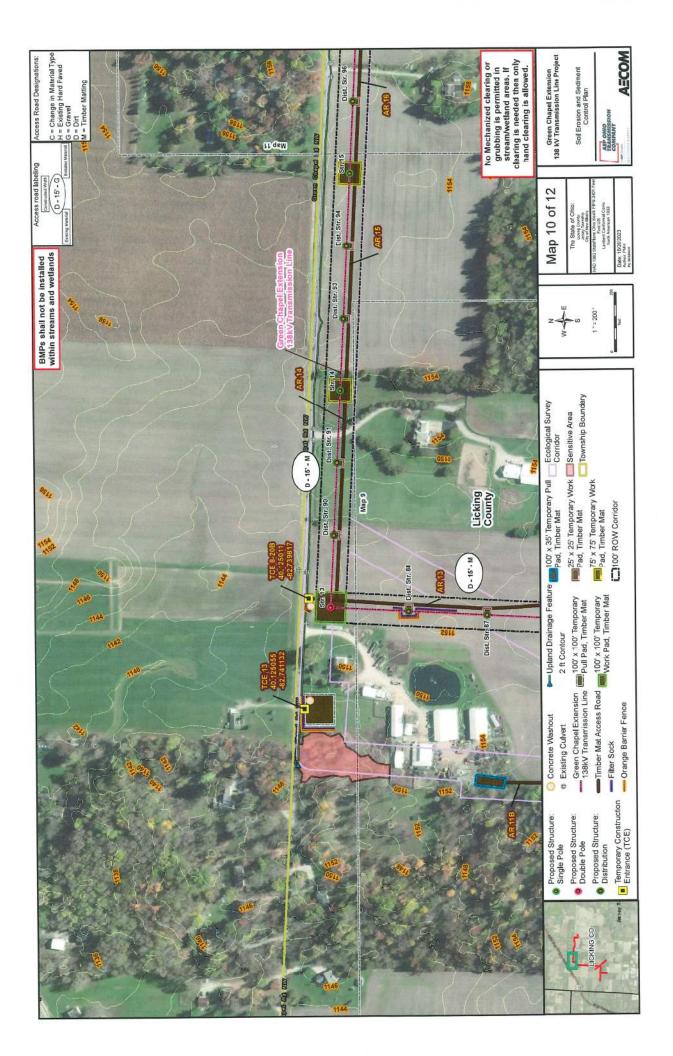
Application #: 153.0-23

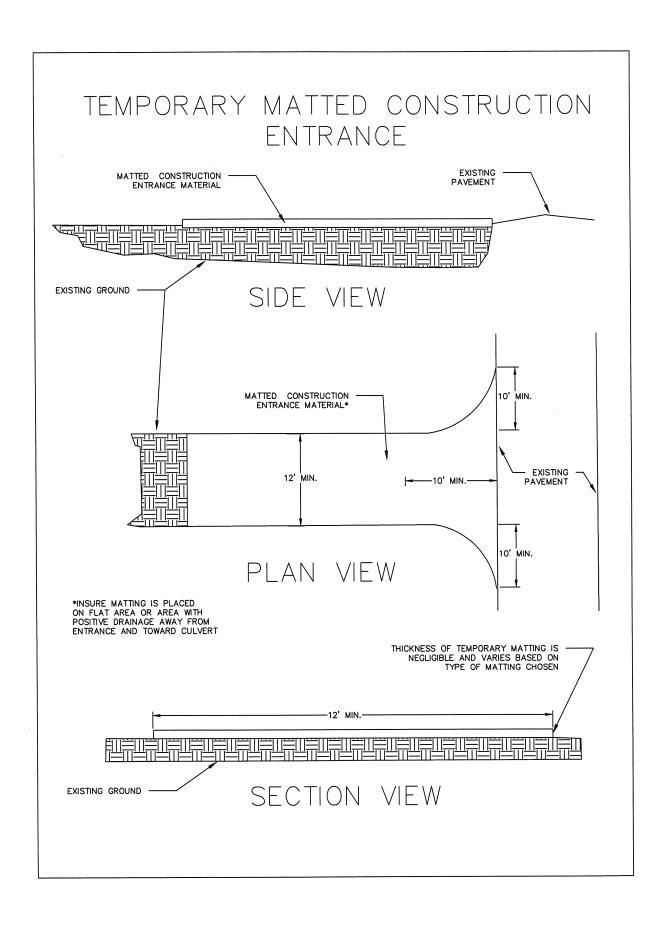
Right-of-Way Work Permit Application (Chapter 1178.03 (a))

Company Name: AEP Ohio Transmission Company, Inc	Date Submitted: 12/01/23			
Construction Dates Start: 12/11/2023	End: 12/11/24			
The above named company hereby requests a Right-Of-Way Permit to do the following work: Construct & maintain a temporary timber matted construction entrance to support an electrical transmission line project on the south side of Green Chapel Rd. 40.125055, -82.741132				
GCE TCE03				
In the location, alignment, and elevation as shown on the needed.	attached plans (3 sets required). Attach separate sheet if			
Name: Charles Jankowski Phone Number: 614.323.4103	Address: 255 Taylor Station Rd Sta 100 Columbus OH 43213 Fax Number:			
The above applicant agrees to restore all areas to like or better condition in compliance with rules, regulations, and specifications of New Albany as set forth in codified ordinance 1178 and New Albany's Right-of-Way policy. The applicant shall notify all affected, or potentially affected, permittees and franchisees, and adjoining property owners as to the work to be completed. Furthermore, the applicant shall comply with special conditions, if any, as listed below (attach separate sheet if required).				
This Work Application must be submitted with the following documents: Description of Right-Of-Way affected. Required street closure/blockage. Statement verifying notification of affected Estimate of time to complete work Description of facility to be installed Application fee of \$75.00 (if not part of Engineering)				
parties. Notification of any adversely affected consumer per PUCO Rules & Regulations. Project time table. 3 Sets of 11x17 To-Scale Plans and 2 CDs containing CAD files	Development Package) or Resubmittal fee of \$50.00. Performance Bond (cash, money order, or certified check). Proof of general liability, automobile and worker's compensation insurance.			

Contractor Information:

Name:	Zach Lacey / New River Electrical	Phone Number: 614-769-5496			
Email:	ZLacey@nrec.com	Emergency 24 Hour Number:			
Address:	6005 Westerville Rd , Westerville , OH				
Audi C55;			(State and Zip)		
	Sub-Contrac	ctor Information:			
Name:		Phone Number:			
Email:	And the second s	Emergency 24 Hour Number:			
Address:		0'.)	(State and Zip)		
	(Street)	City)	(State and Zip)		
	48 HOURS PRIOR TO EXCAVATION, ALL PERMITEES SHALL NOTIFY THE OHIO UTILITIES PROTECTION SERVICE AT 1-800-362-2764, AND THE NEW ALBANY DEPARTMENT OF PUBLIC SERVICE AT 614-855-0076. If during construction any fiber/inner duct is damaged the contractor shall notify Ohio Utilities Protection Service (OUPS) by dialing 811.				
	Permit Approved Permit Denied				
	This permit expires on the "end" constructi	on date listed on page one unless othe	erwise noted.		
Service Dir Authorized	rector OR I New Albany Representative	Approval Date	2-23		







402.03-314 December 12, 2023

Charles Jankowski c/o AEP

Re: AEP R/W Permit -

Green Chapel Rd. - 154.0-23

Dear Mr. Jankowski:

Please find attached a conditionally approved permit subject to the following conditions:

1. It is understood that it is the permittee's responsibility to record all easements required to complete the work and to ensure that facilities are installed in easements or public right-of-way.

2. Contact Brian Walkenspaw at (614) 855-0076 to arrange a field meeting prior

to performing the work.

3. Provide Construction Entrance Ahead signage in accordance with the OMUTCD.

- 4. Restore all surface features in accordance with the General Notes (see Exhibit A).
- 5. Remove sediment that may become discharged on public streets immediately using a vacuum street sweeper with a brush.

Please contact us if you require additional information.

Very truly yours,

Matt Ferris, P. E., P.S.

Consulting City Engineer

MEF/JH





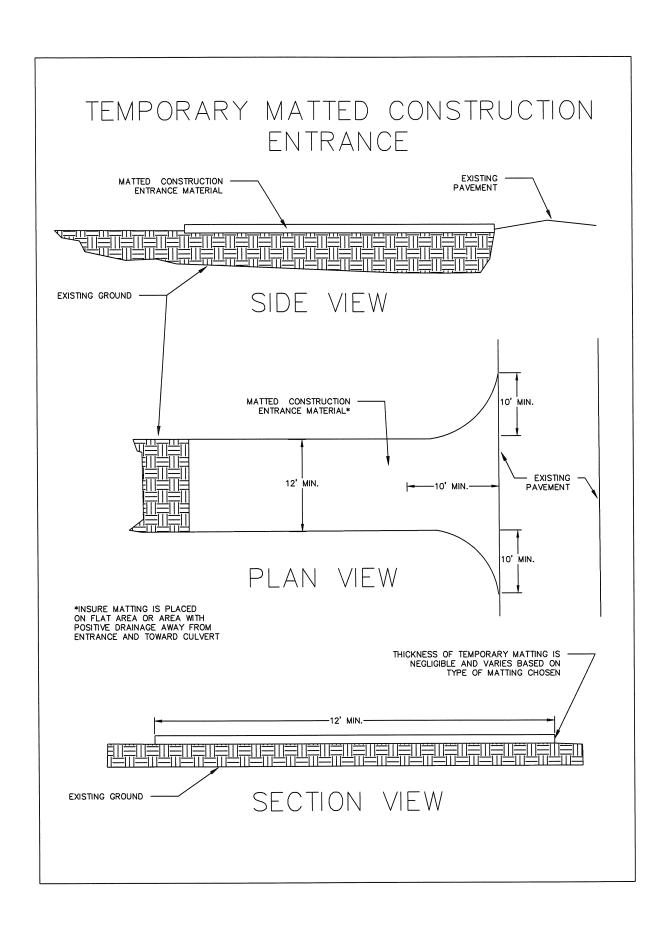
RECEIVED DEC 0 4 2023

Work Perm (Chapte Company Name: AEP Ohio Transmission Company, Inc	Application #: 154.0.23 t-of-Way nit Application Pate Submitted: 12/01/23 End: 12/11/24			
Construction Dates Start: 12/11/2023 End: 12/11/24 The above named company hereby requests a Right-Of-Way Permit to do the following work: Construct & maintain a temporary timber matted construction entrance to support an electrical transmission line project on the south side of Green Chapel Rd. 40.125011, -82.739817 GCE TCE04 In the location, alignment, and elevation as shown on the attached plans (3 sets required). Attach separate sheet if needed.				
Who should receive approved permit and/or engineer review comments? (Must Complete) Name: Charles Jankowski Phone Number: 614.323.4103 Fax Number:				
	 Estimate of time to complete work Description of facility to be installed Application fee of \$75.00 (if not part of Engineering Development Package) or Resubmittal fee of \$50.00. Performance Bond (cash, money order, or certified check). Proof of general liability, automobile and worker's compensation insurance. 			

Contractor Information:

Name:	Zach Lacey / New River Electrical	Phone Number: 614-769-549	6			
Email:	ZLacey@nrec.com	Emergency 24 Hour Number:				
Address:	6005 Westerville Rd, Westerville, 0					
	(Street)	(City)	(State and Zip)			
	Sub-Cont	ractor Information:				
Name:		Phone Number:				
Email:	Emergency 24 Hour Number:					
Address:						
	(Street)	(City)	(State and Zip)			
If during construction any fiber/inner duct is damaged the contractor shall notify Ohio Utilities Protection Service (OUPS) by dialing 811.						
	Permit Approved	Permit Denied				
This permit expires on the "end" construction date listed on page one unless otherwise noted.						
Mox Service Di Authorize	rector OR d New Albany Representative	Approval Date	123 e			







402.03-315 December 12, 2023

Charles Jankowski c/o AEP

Re: AEP R/W Permit -

Clover Valley Rd. - 155.0-23

Dear Mr. Jankowski:

Please find attached a conditionally approved permit subject to the following conditions:

 It is understood that it is the permittee's responsibility to record all easements required to complete the work and to ensure that facilities are installed in easements or public right-of-way.

2. Contact Brian Walkenspaw at (614) 855-0076 to arrange a field meeting prior

to performing the work.

Provide Construction Entrance Ahead signage in accordance with the OMUTCD.

- Restore all surface features in accordance with the General Notes (see Exhibit A).
- 5. Remove sediment that may become discharged on public streets immediately using a vacuum street sweeper with a brush.

Please contact us if you require additional information.

Very truly yours,

Matt Ferris, P. E., P.S.

Consulting City Engineer

matterin 19

MEF/JH

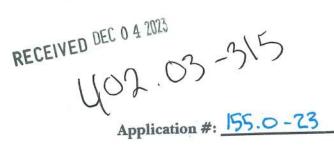


Project time table.

containing CAD files

3 Sets of 11x17 To-Scale Plans and 2 CDs





Right-of-Way **Work Permit Application**

(Chapter 1178.03 (a))

Company Name: AEP Ohio Transmission Company, Inc	Date Submitted: 12	2/01/23
AND CORP. A STATE OF THE STATE	End: 12	
Construction Dates Start: 12/11/2023		
The above named company hereby requests a Right-Of-Way Construct & maintain a temporary timber matted construction entrance to support ar	Permit to do the following won electrical transmission line project on the v	ork: west side of Clover Valley Rd.
40.123888, -82.722135		
GCE TCE05		or cover
In the location, alignment, and elevation as shown on the atta needed.		
Who should receive approved permit and/or e	engineer review comments?	(Must Complete)
Charles Jankowski Address: 255 Taylor Station Rd Ste 100 Columbus OH 43213		
Fax	Number:	
	ail: CJankowski@orcolan.com (Preferre	ed method)
Number of sheets included: 4 Em		d -
The above applicant agrees to restore all areas to like or specifications of New Albany as set forth in codified ordi applicant shall notify all affected, or potentially affected, per the work to be completed. Furthermore, the applicant shall separate sheet if required).	mittees and franchisees, and ad comply with special conditions,	joining property owners as to, if any, as listed below (attach
This Work Application must be sub-		
 Description of Right-Of-Way affected. 	 Estimate of time to con Description of facility t 	nplete work to be installed
 Required street closure/blockage. 	 Description of facility of Application fee of \$75. 	.00 (if not part of Engineering
 Statement verifying notification of affected parties. 	Development Package) or Resubmittal fee of
 Notification of any adversely affected consumer per PUCO Rules & Regulations. 	\$50.00. • Performance Bond (ca	ash, money order, or certified

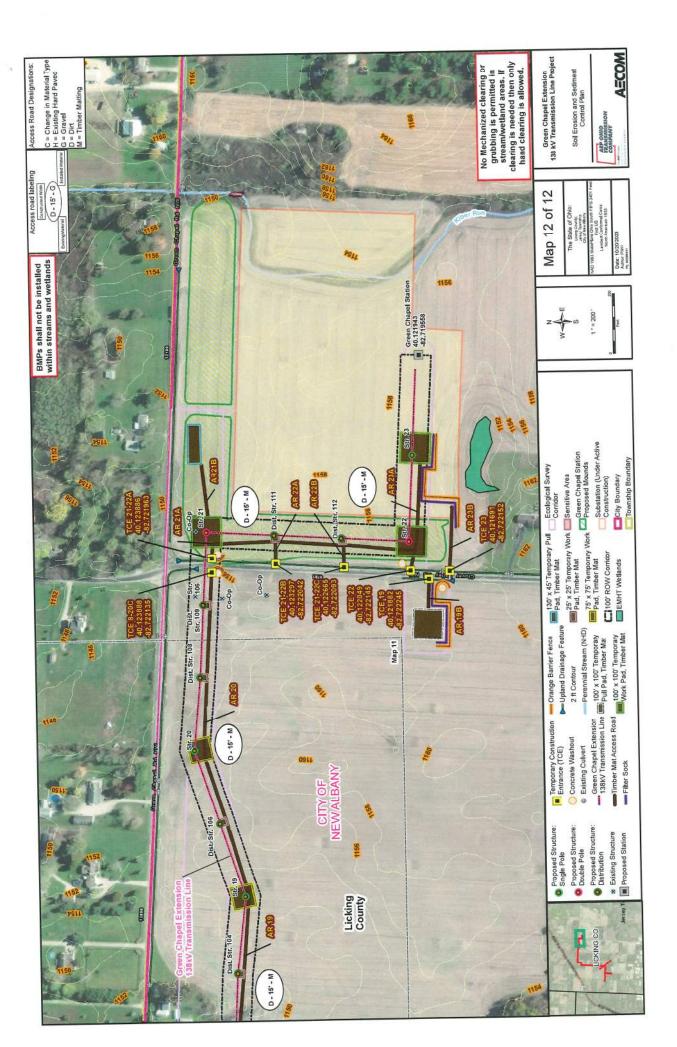
Proof of general liability, automobile and worker's

compensation insurance.

Contractor Information:

Contractor information:							
Name: Email:	Zach Lacey / New River Electrical ZLacey@nrec.com	Phone Number: 614-769-5496 Emergency 24 Hour Number:					
Address	6005 Westerville Rd, Westerville, Ol	H 43081					
12441	(Street)	(City)	(State and Zip)				
Sub-Contractor Information:							
Name:		Phone Number:					
Email:							
Address:	(Street)	(City)	(State and Zip)				
48 HOURS PRIOR TO EXCAVATION, ALL PERMITEES SHALL NOTIFY THE OHIO UTILITIES PROTECTION SERVICE AT 1-800-362-2764, AND THE NEW ALBANY DEPARTMENT OF PUBLIC SERVICE AT 614-855-0076. If during construction any fiber/inner duct is damaged the contractor shall notify Ohio Utilities Protection Service (OUPS) by dialing 811.							
Permit Approved Permit Denied							
This permit expires on the "end" construction date listed on page one unless otherwise noted.							

Service Director OR Authorized New Albany Representative Approval Date



TEMPORARY MATTED CONSTRUCTION ENTRANCE EXISTING PAVEMENT MATTED CONSTRUCTION ENTRANCE MATERIAL SIDE VIEW EXISTING GROUND 10' MIN. MATTED CONSTRUCTION ENTRANCE MATERIAL* - EXISTING PAVEMENT -10' MIN. 12' MIN. 10' MIN. PLAN VIEW *INSURE MATTING IS PLACED ON FLAT AREA OR AREA WITH POSITIVE DRAINAGE AWAY FROM ENTRANCE AND TOWARD CULVERT THICKNESS OF TEMPORARY MATTING IS NEGLIGIBLE AND VARIES BASED ON TYPE OF MATTING CHOSEN -12' MIN.-SECTION VIEW EXISTING GROUND



402.03-316 December 12, 2023

Charles Jankowski c/o AEP

> Re: AEP R/W Permit – Clover Valley Rd. – 156.0-23

Dear Mr. Jankowski:

Please find attached a conditionally approved permit subject to the following conditions:

 It is understood that it is the permittee's responsibility to record all easements required to complete the work and to ensure that facilities are installed in easements or public right-of-way.

2. Contact Brian Walkenspaw at (614) 855-0076 to arrange a field meeting prior

to performing the work.

3. Provide Construction Entrance Ahead signage in accordance with the OMUTCD.

4. Restore all surface features in accordance with the General Notes (see Exhibit A).

5. Remove sediment that may become discharged on public streets immediately using a vacuum street sweeper with a brush.

Please contact us if you require additional information.

Very truly yours,

Matt Ferris, P. E., P.S. Consulting City Engineer

Next form Dold

MEF/JH





RECEIVED DEC 0 4 2023

Application #: 156.0-23

Right-of-Way Work Permit Application

(Chapter 1178.03 (a))

Company Name: AEP Ohio Transmission Company, Inc	Date Submitted:	12/01/23	
Construction Dates Start: 12/11/2023	End:	12/11/24	
The above named company hereby requests a Right Construct & maintain a temporary timber matted construction entrance t	t-Of-Way Permit to do the following to support an electrical transmission line project on the	work: ne west side of Clover Valley Rd.	
40.121882, -82.722245			
GCE TCE10	41		
In the location, alignment, and elevation as shown oneeded. Who should receive approved permit a			
Name: Charles Jankowski	Address: 255 Taylor Station Rd Ste 100	Columbus OH 43213	
Phone Number: 614.323.4103	Fax Number:		
Number of sheets included: 4	Email: CJankowski@orcolan.com (Pref	erred method)	
The above applicant agrees to restore all areas to	like or better condition in complian	nce with rules, regulations, and ny's Right-of-Way policy. The	

The above applicant agrees to restore all areas to like or better condition in compliance with rules, regulations, and specifications of New Albany as set forth in codified ordinance 1178 and New Albany's Right-of-Way policy. The applicant shall notify all affected, or potentially affected, permittees and franchisees, and adjoining property owners as to the work to be completed. Furthermore, the applicant shall comply with special conditions, if any, as listed below (attach separate sheet if required).

This Work Application must be submitted with the following documents:

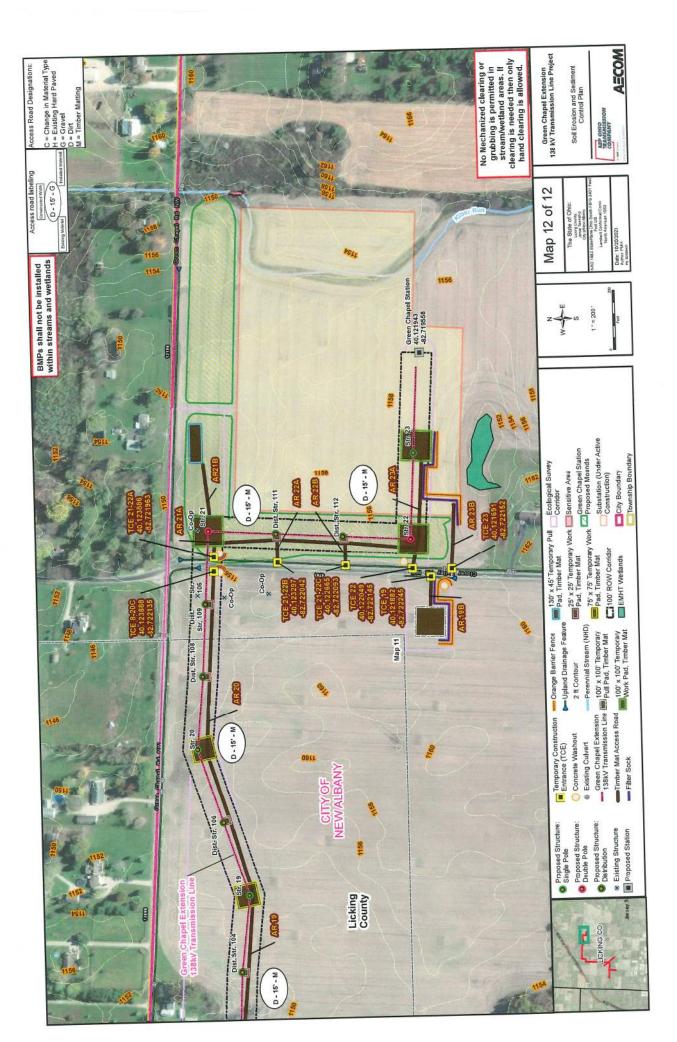
- Description of Right-Of-Way affected.
- Required street closure/blockage.
- Statement verifying notification of affected parties.
- Notification of any adversely affected consumer per PUCO Rules & Regulations.
- Project time table.
- 3 Sets of 11x17 To-Scale Plans and 2 CDs containing CAD files

- Estimate of time to complete work
- Description of facility to be installed
- Application fee of \$75.00 (if not part of Engineering Development Package) or Resubmittal fee of \$50.00.
- Performance Bond (cash, money order, or certified check).
- Proof of general liability, automobile and worker's compensation insurance.

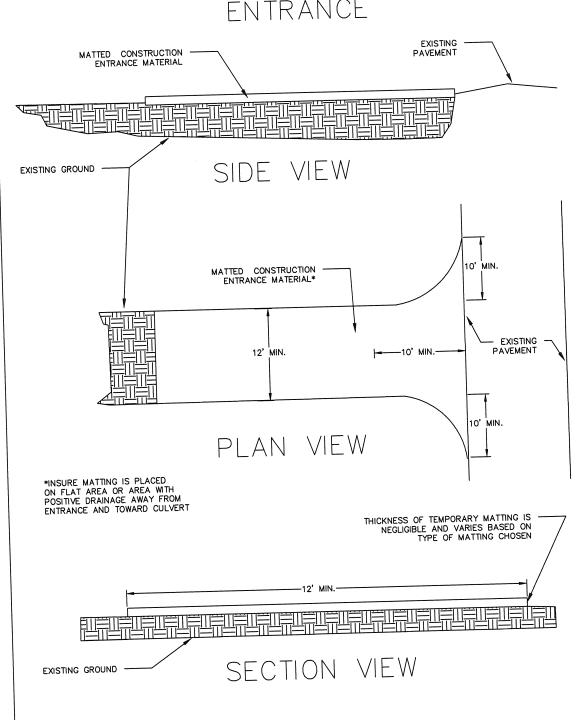
Contractor Information: Phone Number: 614-769-5496 Zach Lacey / New River Electrical Name: Emergency 24 Hour Number: ZLacey@nrec.com Email: 6005 Westerville Rd, Westerville, OH 43081 Address: (State and Zip) (City) **Sub-Contractor Information:** Phone Number: Name: Emergency 24 Hour Number: Email: Address: (State and Zip) (Street) 48 HOURS PRIOR TO EXCAVATION, ALL PERMITEES SHALL NOTIFY THE OHIO UTILITIES PROTECTION SERVICE AT 1-800-362-2764, AND THE NEW ALBANY DEPARTMENT OF PUBLIC SERVICE AT 614-855-0076. If during construction any fiber/inner duct is damaged the contractor shall notify Ohio Utilities Protection Service (OUPS) by dialing 811. Permit Denied Permit Approved This permit expires on the "end" construction date listed on page one unless otherwise noted.

Service Director OR
Authorized New Albany Representative

12-12-23 Approval Date



TEMPORARY MATTED CONSTRUCTION ENTRANCE



This foregoing document was electronically filed with the Public Utilities Commission of Ohio Docketing Information System on

1/5/2024 4:30:02 PM

in

Case No(s). 23-0028-EL-BLN

Summary: Correspondence Proof of Compliance with Condition electronically filed by Hector Garcia-Santana on behalf of AEP Ohio Transmission Company, Inc..