2474 McKinley Avenue Columbus, Ohio 43204

PID: 010-146234, 010-146253, 010-200913, 010-146278, 010-104705, 010-107406, 010-200912

WestBend Development

Type II & III Variance Request Package





E. P. Ferris and Associates Inc.

Attn. Chad Buckley

(614) 299-2999

cbuckley@epferris.com

January 13th, 2023

Rob S. Prestas P.E., Administrator, DOSD

City of Columbus

Attn: Greg Fedner, P.E., Private Development Section Manager

Stormwater and Regulatory Management Section

111 N. Front Street Columbus, Ohio 43215

Re: WestBend Development -

Type III and Type II Variance

Requests

Project Name: WestBend Development

Property Address: 2474 McKinley Avenue, Columbus, Ohio 43204

PID: 010-146234, 010-146253, 010-200913, 010-146278

Site Disturbance: 43 Ac. Total Site Area: 55 Ac.

Primary Contact: E.P. Ferris & Associates, Inc.

Attn: Chad Buckley, P.E.

(614) 299-2999

cbuckley@epferris.com

Dear Mr. Fedner,

On behalf of Westbend QOZB, LLC, E.P. Ferris and Associates, Inc. (EPF) is seeking approval of a Type III, Section 1.3 and a Type II, Section 3.2 variance from the City of Columbus (COC) Stormwater Drainage Manual (SWDM). This variance is being requested for the purpose of completing site improvements related to a new mixed-use development throughout a former landfill / dumping site currently used as a junkyard located east of the intersection of McKinley Avenue and Fisher Road, south and west of Larrison Lake and west of the Scioto River. The proposed site will support a variety of multi-family and commercial uses as well as future park land centered around the existing Larrison Lake, providing recreational opportunities for the community and surrounding area.

The development is located on a former quarry turned to a landfill / dumping site and will require remediation through the Ohio Environmental Protection Agency's (OEPA) Voluntary Action Plan (VAP). This plan is currently under review by the OEPA. To adequately maximize the developable area of the site and fully remediate the existing landfill / dumping site and provide preferred development plans, an encroachment into the Stream Corridor Protection Zone (SCPZ) of the

WestBend Development - City of Columbus

Type II & III Stormwater Drainage Manual Variance Requests

Scioto River is required. This conflicts with Section 1.3 of the COC SWDM. The areas in question are outlined in the attached exhibits (Appendix F) as prepared by EPF. All encroachments outlined in this Type III variance request will be adequately mitigated within this project site with new protected and dedicated SCPZ areas. Additionally, Westbend QOZB, LLC plans to dedicate appropriate area to the SCPZ of the Scioto River at a ratio greater than 1:1.

A Type II variance is also being requested for stormwater quantity controls as required by SWDM Section 3.2. Following the project's VAP with the OEPA to clean up former landfill / dumping site sections throughout the project site, deep dynamic compaction will be performed, and a clean clay cap will be installed across areas of existing trash within the project site. Thus, providing stormwater management quantity controls within the project footprint would introduce substantial hardship by breaching the installed environmental controls and potentially creating storage within contaminated soils. Additional hardship associated with providing stormwater management quantity in these areas would include necessary excavation through shallow limestone. Within the project site, the majority of the subsurface conditions are made up of either trash or unharvested limestone. The additional excavation and hauling of unsuitable soils and waste materials required to fully meet the City of Columbus SWDM's water quantity requirements would introduce substantial cost and scheduling hardships to the development of this site.

Our team respectfully requests approval of these variances for this project's preferred alternatives. These will not only benefit the overall development of the area, but also ensure the proper remediate of the existing landfill / dumping site. Please find enclosed our technical request in support of the variances briefly mentioned above.

Sincerely,

E. P. FERRIS & ASSOCIATES, INC.

Choo Balans

Chad Buckley, PE Project Manager

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- **Appendix H Geotechnical Report and Boring Logs**
- **Appendix I SCPZ Delineation Determination**

<u>Introduction</u>

On behalf of Westbend QOZB, LLC, EPF is seeking approval of Type III and Type II variances from the COC SWDM Sections 1.3 and 3.2.

This variance is being sought to relieve the unique constructability hardship associated with redeveloping the existing landfill / dumping site. Approval of this variance will also ensure the proper remediation of the project site following the Ohio Environmental Protection Agency's (OEPA) Voluntary Action Plan (VAP). This plan is currently under review by the OEPA.

<u>Type III, SWDM Section 1.3 WestBend Development Variance</u> – Section 1.3.2 of the COC SWDM states that the SCPZ shall be kept in as natural state as possible so that it can perform its inherent ecological and hydraulic functions. As part of this policy, various activities are prohibited such as filling and construction that results in direct impacts to an existing stream. However, it is necessary to impact the SCPZ for the Scioto River in order to complete the OEPA's VAP and to properly remediate the existing solid waste conditions to allow for developable and recreational uses on the site.

In order to develop the project site's intended mixed-use and recreational areas and clean up an environmental nuisance, an OEPA Rule 13 authorization agreement is being acquired due to existing solid waste areas that result from a former landfill. To follow the plan outlined in this permit and the project's VAP, all areas within the project site's Rule 13 boundary are to be capped to obtain a minimum clay cover of four (4) feet, including those found within the Scioto River's SCPZ. This variance will allow necessary capping and grading to improve these former landfill areas in addition to adjacent areas either with deeper trash or without contaminated materials for future development. Capping of the solid waste in the SCPZ will improve the riparian area along the river and reduce the potential of pollution from the landfill entering the river. It will ultimately promote environmental safety and will accept the development plan's incorporation of newly dedicated SCPZ sections along the Scioto River. The current junkyard operations extend into the delineated SCPZ in a similar fashion as the landfill areas and will also be included with the improvements to the riparian areas. This project is committed to providing a preservation type easement along the Scioto River corridor and providing more mitigated SCPZ area than the minimum required 1:1 ratio.

<u>Type II, SWDM Section 3.2 Variance</u> – Section 3.2 of the SWDM states that stormwater quantity control facilities shall be designed to control runoff from small, moderate, and large storm events before it is discharged offsite. However, with this site's unique conditions, a hardship exemption from this requirement is respectfully being requested. As previously described the project site is within the boundaries of an abandoned landfill / dumping site. The development will provide necessary controls to meet post-construction water quality requirements prior to routing runoff to the Scioto River, but quantity storage will not be provided to avoid additional environmental hardship to the proposed development, surrounding area and destruction of the VAP required four (4) foot earthen cap.

If stormwater detention were provided per the manual, nearly three hundred thousand (300,000) cubic feet of storage could be required across the project site, compared to the one hundred thousand (100,000) cubic feet of storage that is required for water quality. This much additional storage would introduce significant interruptions to the development's OEPA's VAP across the former landfill sections. Surface or underground storage systems could compromise the design integrity of the VAP, which was designed to not only create a four (4) foot point of contact barrier from human activity but is also meant to keep surface water from infiltrating into the trash layer. The introduction of water to the trash layer will create an unwanted environmental/biologic condition resulting in negative byproducts and impacts. To accommodate the additional storage required by water quantity, the detention system will need to be significantly larger which will cause the need for trash to be exported from the project site. Exporting of trash creates additional environmental impacts as the trash must be relocated to another active landfill and is a significant economic impact due to the cost of transporting the trash.

Project and Site Information

The proposed project site is located in an industrial area east of the intersection of McKinley Road and Fisher Road in the west central portion of the COC. The project site consists of approximately 55 acres of land (including approximately 12.3 acres being Larrison Lake) previously used as an active quarry, then a landfill / dumping site and later a junkyard. The Franklin County Parcel Identification numbers for this site are 010-146234, 010-146253, 010-200913, and 010-146278. The Scioto River borders the project site to the east, Larrison Lake borders the northwestern portion and McKinley Avenue borders the western half. There is also an approximate 5.21 acre tract southwest of the intersection of McKinley Avenue and Fisher Road, bordered by both roads and a railroad track to the west. The approximate latitude/longitude coordinates at the center of the site are 39.975467, -83.066291.

The majority of the project site consists of flat ground that is currently used as an automobile junkyard, and consists of portions of asphalt pavement, gravel drives, vegetation, and tree cover. The northwestern portion of the project site consists of steep grades and tree cover that leads down to the edge of Larrison Lake. Along the southeastern portion of the project site, there is also tree cover and steep grades that make up the western bank of the Scioto River.

Investigation of the site's current conditions revealed that approximately 28.2 acres of the site contain solid waste. See Appendix H for the sites Geotechnical Report and Boring Logs. This area is located in the center of the project site, making up most of the developable area. However, a significant portion of the OEPA Rule 13 area overlaps with the existing SCPZ area for the Scioto River. The encroachment area in question for this variance request is located both within the OEPA Rule 13 area and the existing SCPZ. This encroachment will allow these areas to be properly mitigated following the OEPA's VAP. Exhibit showing the SCPZ adjustment areas can be found in Appendix F.

The existing site generally flows from west to east, with the northern portion directed into Larrison Lake and the southern portion directed into the Scioto River. The site currently does not have any stormwater control practices in place. Approval of this variance will allow the project site to be fully developed and mitigated, with all required stormwater control practices for post-construction water quality put in place per the COC SWDM.

Upon reviewing the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) Panel 39049C0302K, the project site has been determined to include both Zone X and Zone AE. The western majority of the project site is located in Flood Zone X, and the eastern edges along Larrison Lake and the Scioto River are located in Flood Zone AE. The Designation Zone AE is described as the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be conveyed without substantial increases in flood heights. There will be areas of the 100-year floodplain that are filled during the development of this site, however these areas will be mitigated with compensatory cut into the 100 year floodplain at a different location on the project site per the requirements of the SWDM. This compensatory cut and fill is detailed within the Mass Excavation plan for Phase 1, see Appendix G.

Section 1 - Reason Variances are Requested

Type III, SWDM Section 1.3 WestBend Development Variance:

The project site's existing conditions present an additional unusual design challenge that requires the development and design teams to obtain a variance from Section 1.3 of the SWDM and encroach upon the Scioto River's SCPZ on the eastern side of the project site. Despite this section's restrictions from certain construction activities within a stream's SCPZ, this project site resides on a formerly active landfill / dumping area with areas of existing solid waste under less than two (2) feet of cover that currently overlap the Scioto's SCPZ. Due to this overlap and in accordance with an active VAP, the project's preferred plan incorporates capping this area and grading its surrounding sections in preparation for future development.

Filling within waste areas overlapping the Scioto SCPZ will not only adequately prepare the project site, but it will also help eliminate the local environment's direct exposure to waste and reduce potential contamination of surface and ground water. By granting this Type III variance, the project will be able to significantly improve conditions within the Scioto River's SCPZ and will mitigate these necessary encroachments by dedicating new SCPZ directly adjacent to these areas on-site at a ratio greater than 1:1.

If full compliance with the SWDM was required, this project would not be permitted to complete the clean clay capping plan per its VAP along the eastern side of this project site currently within the Scioto River's SCPZ. Additionally, if these landfill sections within the existing Scioto SCPZ

were not capped, then development along the entire eastern side of the project site would not be possible due to OEPA Solid Waste Regulations and the potential negative health impacts. These conditions would certainly deprive the development of the reasonable use of this land and the original intent to improve the site's poor environmental conditions.

For these various reasons, the WestBend Development is requesting this Type III Variance from SWDM Section 1.3 to encroach upon the Scioto River SCPZ. As previously explained, these encroachments will be mitigated at a ratio greater than what is required and the variance will grant the project's reasonable use of this land to adequately complete the VAP and maximize its developable/recreational potential.

Type II, SWDM Section 3.2 Variance:

As required by the COC SWDM Section 3.2, stormwater quantity control facilities shall be designed for new development to control runoff from various storm events before being discharged offsite. For multiple reasons, a variance is being requested from this policy, specifically to be exempt from stormwater quantity controls due to various restrictive site conditions that create unusual design challenges.

Following the project's VAP, this project intends to clean up the former landfill sections throughout the project site within a designated Rule 13 boundary. This is being completed in an operation that involves deep dynamic compaction and the installation of a clean clay cap across areas of existing trash. The active plan will not only adequately prepare this site for development, but also help eliminate the local environment's direct exposure to waste and reduce potential contamination of surface or ground waters.

Due to the former landfill sections previously described, stormwater quantity controls within these areas would risk contamination and would induce hardship to the project by breeching the installed environmental controls as required by its VAP. Keeping rainwater from seeping into the existing trash once the clay cap is in place is essential to preventing formation of potentially hazardous waste gases. The proposed WestBend Development will provide water quality control via vegetated swales, pervious pavers and storage chambers ultimately out letting into the Scioto River.

By granting this variance request, this project would be exempt from stormwater quantity controls. Despite the various hardship conditions this project faces, this exemption would allow for the preferred development plan and would ensure the proper execution of the VAP.

Section 2 – Site Development Alternatives

Type III, SWDM Section 1.3 WestBend Development Variance

No Impact/Degradation Development Alternative Fully Complying with SWDM:

An alternative development plan for this project that fully complies with the SWDM would involve avoiding any encroachments to the Scioto River SCPZ. This would significantly reduce all mixed-use development proposed across the subject parcels in the project and would effectively diminish the remediation of the project site in the most critical areas, directly adjacent to the Scioto River and Larrison Lake.

Restricting encroachment into the Scioto River and Larrison Lake SCPZ would not allow capping of shallow landfill areas currently spread across the eastern edge of the project site, which would significantly limit any potential development due to OEPA Solid Waste Regulations. These regulations require strict waste management to protect public and environmental health and the isolation of contaminated materials to prevent their exposure when development is proposed. These conditions are why the project is following a VAP through the OEPA to provide four (4) foot capping of solid waste areas prior to development. Failing to properly cap all areas of solid waste would breach this plan, effectively preventing the team from developing the project site as previously stated (See Appendix E).

Additionally, a lack of development across the project's eastern parcels would eliminate the opportunity to provide unique recreational opportunities at the areas around existing Larrison Lake, which is planned to public use park space as a part of the project.

This alternative would certainly introduce planning, programming, and constructability hardships to the redevelopment of this project site. It would also prevent efforts to contain contaminated materials within the Scioto River SCPZ to avoid their potential spread into the surrounding environment. Absence of landfill capping in this plan would allow rain and snowmelt to continue seeping through contaminants to the groundwater, runoff to carry contaminated material offsite or into the Scioto River, waste gas to be released, and surrounding residents/wildlife to potentially come into contact with hazardous material.

Minimal Impact/Degradation Development Alternative Plan:

The minimal impact plan alternative for this project involves no impact to the SCPZ and only developing the western portion of the site, southwest of the intersection of McKinley Avenue and Fisher Road (See Appendix E). This plan would allow the capping and remediation of the western portion of the site per the OEPA's VAP and minimal development in that area. The majority of the project site, east of McKinley Avenue would remain undeveloped.

In this plan, the development of the site would no longer be economically viable, as the developable area would be reduced significantly. With the eastern portion of the site remaining undeveloped there would be no improvements to the banks of the Scioto River and Larrison Lake, which would result in no improvement to the water quality runoff. Additionally, there would no longer be any recreational opportunities around the banks of the Scioto River or surrounding Larrison Lake.

Preferred Development Plan:

The preferred plan for this project involves encroaching upon the Scioto River SCPZ. These preferred encroachments will allow our team to complete the OEPA's VAP by capping existing shallow landfill areas within the Scioto River's SCPZ and to complete grading adjacent to these areas in preparation for future mixed-use development. The overall preferred development site plan is shown in Appendix E.

As previously stated, former landfill sections within the Scioto River SCPZ are being capped not only for the preferred development of the eastern side, but to contain contaminated materials along the Scioto River's banks that can harm the environment.

Encroachments to the Scioto River SCPZ in the preferred plan will amount to 1.071 acres of SCPZ encroachment, with only 0.119 acres permanently removed from the SCPZ. Total SCPZ dedication to mitigate these encroachments will occur on the eastern edge of the project site directly adjacent to the Scioto River at a ratio of 1.13:1 and will result in 0.134 acres of new SCPZ to be protected from future development.

There is a significant portion of the SCPZ along the eastern edge of the project site that is currently junkyard and within the Rule 13 area. These areas will be remediated and improved with the rest of the site, ensuring all the Rule 13 area on site is remediated per the VAP. As shown in Appendix F, 0.952 acres of this area will not be developed and will remain a part of the SCPZ, improving its function for the Scioto River.

Type II, SWDM Section 3.2 Variance

No Impact/Degradation Development Alternative Fully Complying with SWDM:

The no impact options for this project related to providing stormwater quantity will significantly reduce the effectiveness of the site remediation per the OEPA's VAP. Unfortunately, providing for stormwater quantity controls at the volumes required by the SWDM would require water quantity storage to extend deep, interfering with the proposed function of the four (4) foot clay cap. In addition to the impacts on the VAP, fully meeting the requirements in the SWDM would require an additional two hundred thousand (200,000) cubic feet of storage on site, for a grand total of three hundred thousand (300,000). This additional storage requirement would introduce

significant financial hardships on the project, which would threaten to make the project not economically viable. Removing unsuitable soils and trash from the site is much more expensive than traditional cut, at around \$2.22 per cubic foot of trash and unsuitable soil removed. Storage generally costs around \$20 per cubic foot installed. This option would cost the development an additional \$4,754,960, being \$4,000,000 in additional storage (200,000 cf X \$20/cf) and \$754,960 in trash and unsuitable soil removal (200,000 cf + 140,072 cf excess excavation X \$2.22/cf). With these additional costs, the development may not be economically viable.

Minimal Impact/Degradation Development Alternative Plan:

The minimal impact development plan for this site involves meeting the SWDM requirements to the critical storm (25 year) reduction to the 1 year pre-developed stormwater flows, but keeping the 50 and 100 year storms at their predeveloped flows, not reducing them to the 10 year storm flow. Proceeding with these calculations, that would require the site to provide an additional fifty thousand (80,000) cubic feet of storage. This option would greatly reduce the costs involved in the installation of the stormwater detention systems and would minimize the impact on the site remediation per the VAP. This option would cost the development an additional \$1,964,176, being \$1,600,000 in additional storage (80,000 cf X \$20/cf) and \$364,176 in trash and unsuitable soil removal (80,000 cf + 84,043 cf excess excavation X \$2.22/cf). With this reduction, the site development stands a greater chance of being economically viable.

Preferred Development Plan:

The preferred development plan resulting from a stormwater quantity control variance would reflect the site plans provided in Appendix E. Undetained stormwater runoff will be discharged through quality controls, then directly to the Scioto River or Larrison Lake. Without the need for extensive underground detention, areas of existing trash would be completely capped per the VAP, improving the quality of the water discharging into the Scioto River. The existing site has locations of surface trash and is currently undetained. The preferred development plan would allow the project site to improve the quality of the runoff into the Scioto River.

<u>Section 3 – Demonstration of Adequate Mitigation</u>

Impact to SCPZ:

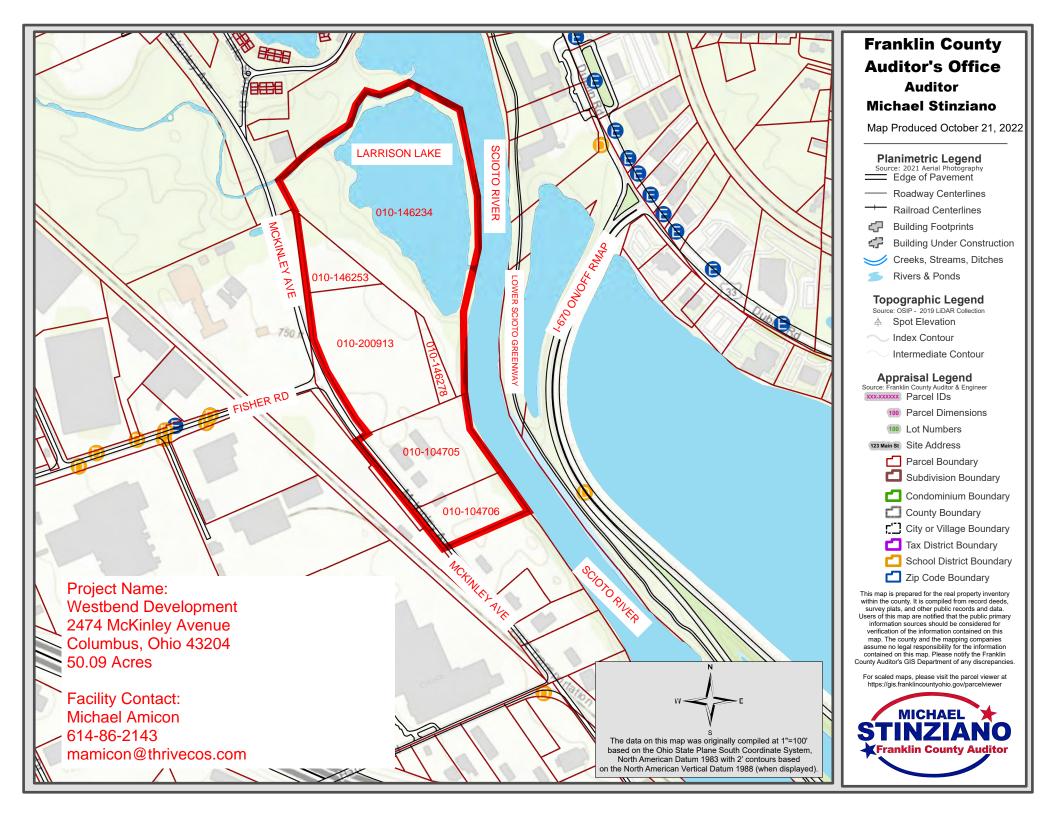
As previously discussed, this project's preferred alternative directly impacts the Scioto River delineated SCPZ by proposing landfill capping along the eastern edge of the project site. Landfill capping within the SCPZ is necessary to adhere to an active VAP with the OEPA and to adequately improve this project's environment for future development. This disturbance will be accomplished while providing proper mitigation in accordance with the COC SWDM.

Based on conceptual plans, approximately 1.071 acres of the Scioto River delineated SCPZ along the eastern side of the project site will be impacted for necessary landfill capping and development grading, with 0.119 acres permanently removed from the SCPZ. This encroachment will be mitigated at a ratio of approximately 1.13:1 in the location as depicted in Appendix F, by dedicating 0.134 acres of new SCPZ. This area dedicated to new SCPZ will remain onsite and directly west of the Scioto River on the site's eastern side. There will be approximately 0.952 acres of SCPZ that is encroached upon for remediation purposes then will be returned to the SCPZ. It is the intent when dedicating this new SCPZ to provide areas that will perform the same function as the disturbed SCPZ but in a more environmentally preferable location.

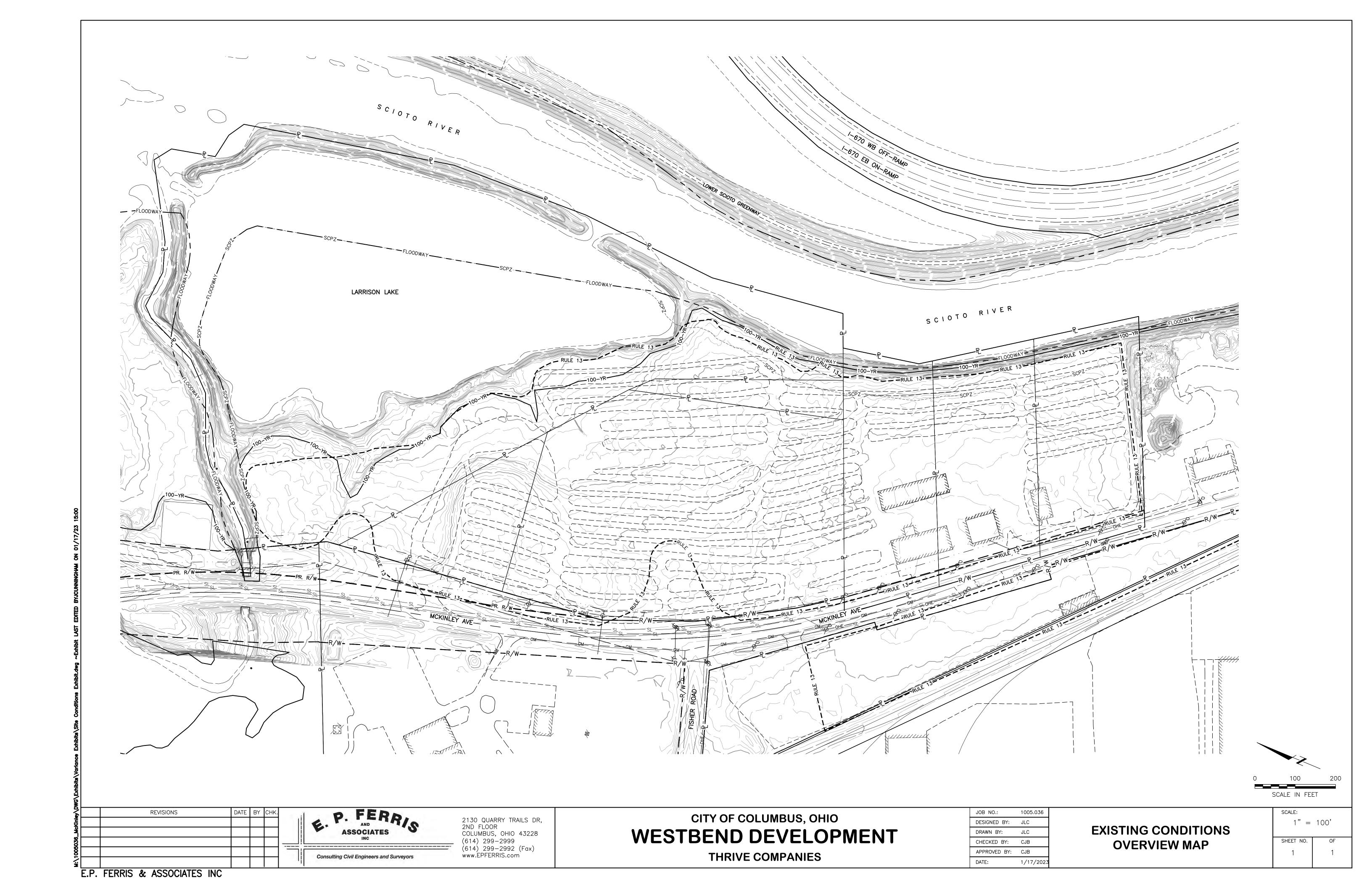
<u>Section 4 – Executive Summary</u>

Unique conditions of the WestBend Development present various unusual design and constructability challenges to be considered. However, by granting the Type III and Type II SWDM variances sought by this request, the COC will allow improvements to be completed through this project's preferred alternative plan. This plan will allow the proper remediation of the site per the OEPA's VAP and improve the corridors of the Scioto River SCPZ by enhancing the environmental conditions and setting aside more SCPZ acreage than the SWDM currently requires. Repurposing this brownfield site into an active mixed-use development with recreational opportunities is only possible with the approval of the requested variances. The unusual design challenges that this site possesses warrants the request of the above-mentioned variances from the SWDM.

APPENDIX A SITE LOCATION MAP



APPENDIX B EXISTING CONDITIONS OVERVIEW MAP





0 100 200 SCALE IN FEET

REVISIONS

DATE BY CHK.

P.FER

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CITY OF COLUMBUS, OHIO

WESTBEND DEVELOPMENT
THRIVE COMPANIES

| JOB NO.: | 1005.036 |
|--------------|-----------|
| DESIGNED BY: | JLC |
| DRAWN BY: | JLC |
| CHECKED BY: | CJB |
| APPROVED BY: | CJB |
| DATE: | 1/17/2023 |

EXISTING CONDITIONS OVERVIEW MAP

| SCALE: 1" = | 100' |
|----------------|------|
| SHEET NO. | OF |
| 1 | 1 |

APPENDIX C

ALTA SURVEY

RECORDED DEED

Paine-McKinley Properties II. LLC Who acquired said interest in Instrument 201011170154929, filed November 17, 2010 in the Franklin County records. (As to Parcels I-II) Paine-McKinley Avenue, LLC Who acquired said interest in Instrument 201011170154930, filed November 17, 2010 in the Franklin County records. (As to Parcels III—VI) Paine-McKinley Avenue, LLC Who acquired said interest in Instrument 200212300334742, filed December 30, 2002 in the

Franklin County records. (As to Parcel VII) FLOOD ZONE: Said described property is located within an area having a Zone Designation "X" and "AE" by the Secretary of Housing and Urban

Development, on Flood Insurance Rate Map No. 39049C0302K with a date of identification of June 17, 2008, for Community Number 390181, in Franklin County, State of Ohio, which is the current Flood Insurance Rate Map for the community in which said property is situated.

1. This property has direct access to McKinley Ave. 2. There is no observed evidence of current earthmoving, work, building construction or building additions. 3. There is no observed evidence of recent street or sidewalk construction or repairs.

water service, electric service, gas service, sanitary sewer, telephone service, and storm water drainage. 5. Due to heavy brush and over grown vegetation not all the improvements on the subject property have been shown.

4. By field observation only, the property appears to have access to

SURVEYOR NOTE:

This survey has been completed using the provided documentation in Title Commitment Number 346808 issued by Stewart Title Company effective date January 25, 2019.

The property described hereon is the same as the property described in Stewart Title Company Commitment Number 346808 with an effective date of Jaunuay 25, 2019 and that all easements, covenants and restrictions referenced in said title commitment or apparent from a physical inspection of the site or otherwise known to me have been plotted hereon or otherwise noted as to their effect on the subject property.

The legal description provided in Commitment No. 346808 for Parcel III does not mathematically close.

RESPONSE TO SCHEDULE B - SECTION II

(Stewart Title Company Commitment Number 346808 Effective Date January 25, 2019 @ 6:00am 10. Easement granted to the City of Columbus, Ohio, as more fully set forth in the document recorded as Deed Book 2443 Page 520. (As to Parcels

Shown on Survey.

Shown on Survey.

Not on Property

Easement for pole line.

Shown on Survey.

Shown on Survey.

Shown on Survey.

Not on Property.

Shown on Survey

No survey items to plot.

No survey items to plot.

Shown on Survey.

Shown on Survey.

Shown on Survey

No survey items to plot.

Easement for pole line along McKinley Ave.

Easement for pole line along McKinley Ave. Affects subject property. Exact location unknown. Width of easement not specified.

Easement for pole line along McKinley Ave.

Affects subject property. Exact location unknown.

Easement for anchor placement along McKinley Ave.

Affects subject property. Exact location unknown.

Affects subject property. Exact location unknown. Exhibit "A" not provided.

Affects subject property. Exact location unknown.

Affects subject property. Exact location unknown.

Affects subject property. Easements do not mathematically close. Exact location unknown.

11. Easement contained in the Deed of record in Deed Book 466 Page 128. (As to Parcels III, IV and VII) 12. Easement granted to The Columbus, Railway, Power & Light Company, as more fully set forth in the document recorded as Deed Book 968 Page 236. (As to Parcel V)

13. Easement granted to The Óhio Bell Telephone Company, as more fully

to Parcel V) 14. Easement granted to The Columbus Railway, Power & Light Company, as more fully set forth in the document recorded as Deed Book 1033 Page 422. (As to Parcels III-IV) 15. Easement granted to The Ohio Bell Telephone Company, as more fully

set forth in the document recorded as Deed Book 1033 Page 227. (As

set forth in the document recorded as Deed Book 1033 Page 232. (As 16. Easement granted to The Columbus Railway, Power & Light Company, as more fully set forth in the document recorded as Deed Book 1048 Page

17. Easement granted to Columbus and Southern Ohio Electric Company, as more fully set forth in the document recorded as Deed Book 1356 Page 533. (As to Parcels III-IV) 18. Easement granted to the City of Columbus, Ohio, as more fully set forth

in the document recorded as Deed Book 1809 Page 451. (As to Parcels

19. Right of Entry Easement, as more fully set forth in the document recorded as Deed Book 2544 Page 368. (As to Parcels III-IV) 20. Right of Entry Easement, as more fully set forth in the document recorded as Deed Book 2544 Page 371. (As to Parcels III-IV) 21. Easement as more fully set forth in the document recorded as Deed Book 2879 Page 394. (As to Parcels III-IV)

22. Easement granted to Columbus and Southern Ohio Electric Company, as more fully set forth in the document recorded as Deed Book 2564 Page 80. (As to Parcels VI-VII) 23. Easement granted to The Ohio Bell Telephone Company, as more fully

set forth in the document recorded as Deed Book 3126 Page 149. (As 24. Easement granted to the City of Columbus, Ohio, as more fully set forth in the document recorded as Deed Book 3251 Page 630. (As to Parcels

25. Agreement between Adjoining Owners Fixing Common Line by and between Joseph B. Ridolfo and Lula Ridolfo and Robert Lyman Dye and Eva Delie Dye Butts, Trustees of record in Miscellaneous Record 143

Page 244. (As to Parcels III-V) 26. Agreement between Adjoining Owners Fixing Common Line by and between Joseph B. Ridolfo and Lula Ridolfo and the City of Columbus, Ohio of record in Miscellaneous Record 143 Page 247. (As to Parcels

27. Lease by and between Ace Outdoor Advertising, as Lessee and Buckeye Auto Parts of Columbus, Inc., as Lessor of record in Instrument 200010230214444; as assigned to Infinity Outdoor, Inc. of record in Instrument 200010230214446. (As to Parcel VII) 28. Lease by and between Ace Outdoor Advertising, as Lessee and Buckeye

Auto Parts of Columbus, Inc., as Lessor of record in Instrument 200010230214442; as assigned to Infinity Outdoor, Inc. of record in Instrument 200010230214445. (As to Parcel V) 29. Easement as more fully set forth in the document recorded as Deed

Book 645 Page 371. (As to Parcel V) 30. Easement granted to the City of Columbus, as more fully set forth in the document recorded as Deed Book 941 Page 78. (As to Parcels

31. Terms, provisions, options, rights of first refusal, covenants, conditions, restrictions, easements, charges, assessments and liens provided in the Covenants, Conditions and Restrictions of record in Instrument 200308280272775; Acknowledgment and Waiver of Reciprocal Right of First Refusal for Limited Purpose of record in Instrument 201008260109709. (As to Parcels III-VI) **EXISTING UTILITIES:**

All existing utilities have been shown as field

located by O.U.P.S. (Ref No A917202090). EXISTING ON—SITE PARKING: Regular parking spaces 8 Handicap parking spaces 0

Total Spaces Available **APPARENT ENCROACHMENTS:**

(1) Appears existing fence encroaches. Ownership unknown.

 $\langle 2 \rangle$ Existing sanitary sewer appears to encroach outside of existing easement.

(3) Existing waterline appears to encroach easement not provided.

(4) Existing Billboard appears to encroach. Easement not provided,

ZONING Not provided.

Legend

Ex. Utility Pole

Ex. Light Pole

Ex. Storm Sewer

Ex. Sanitary Sewer

Ex. Manhole (MH)

Ex. Parking Count

Pony Spike Set

Ex. Street Sign

Yard Drain (YD)

Ex. Gas Line

Ex. Water Line

Ex. Fiber Optic

Property Line

Right-of-Way

Ex. Fence

Ex. Mailbox

Iron Pin Found (IPF)

Iron Pin Set (IP Set) or

Ex. Underground Telephone

Deed bearing and distance

Point of Commencement

Point of Beginning

ASSOCIATES

Measured bearing and distance

MAG Nail Set w/ Brass Survey marker

Ex. Overhead Electric

Ex. Underground Electric

Ex. Catch Basin (CB)

Gas Marker Post T Electrical Transformer Air Conditioning Unit Sac Ex. Telephone Pedestal (Ex. Valve. WV- Water, GV- Gas Property Line

PLR/W Right-of-Way QEx. Fire Hydrant Ex. Electric/Telephone Pole w/ Light Ex. Drop Pole / Traffic Signal Pole * Ex. Ground Light

— stm- — — SAN- — --- OHE - ---— UGE - —

()**(6)** 0

MB

— UGT - —

— -G— —

——X——

PL

R/W

20.25' (D)

S87°51'30"E (D)

20.33'(M)

POC

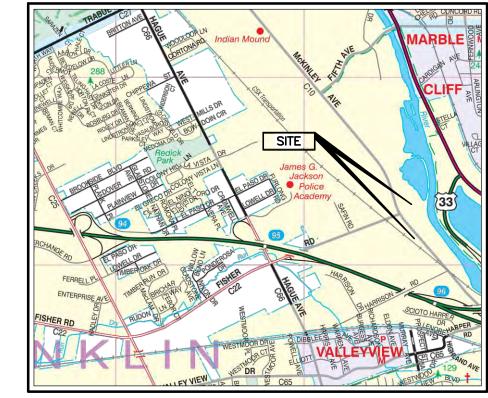
POB

S88°05'11"E(M)

ALTA / NSPS LAND TITLE SURVEY 2474 McKinley Ave

Part of that 9.46 acre tract of land conveyed to Harry A. Coleman, Robert J. and Bette L. Huston and Harry Barr, by deed of record as shown in Deed Book 3329, page 501, also being a portion of an original 32.5+ acre tract of land deeded to the City of Columbus by Louis Golden through Deed Volume 941, Page 78

City of Columbus Franklin County, Ohio



Location Map

PROPERTY DESCRIPTION PARCEL I: (010-104705)

Situated in the State of Ohio, County of Franklin, City of Columbus, and being a part of that 9.46 acre tract of land conveyed to Harry A. Coleman, Robert J. and Bette L. Huston and Harry Barr, by deed of record as shown in Deed Book 3329, page 501, in the office of the Recorder of Franklin County, Ohio, and being more particularly described as follows: Being the Northern one-third (1/3) of the above 9.46 acre tract and being bounded as follows:

Beginning at the Northwesterly corner of said 9.46 acre tract, thence N. 67° 56' 11" E. a distance of 659.52 feet to a point in the Northeasterly corner of said 9.46 acre tract; thence S. 10° E. with the Easterly line of said 9.46 acre tract a distance of 191.56 feet to a point; thence continuing with the Easterly line of said 9.46 acre tract, S 34° E. a distance of 34.56 feet to a point; thence S. 66° 30' W. parallel to the Southerly line of said 9.46 acre tract, a distance of 559.66 feet to a point in the Westerly line of said 9.46 acre tract; thence N. 38° W. with the Westerly line of said 9.46 acre tract, a distance of 244.56 feet to the place of

beginning and containing 3.19 acres of land, more or less. Situated in the County of Franklin, in the State of Ohio and in the City of Columbus, and bounded and Being a part of the 9.46 acre tract of land conveyed to Harry A. Coleman, Robert J. Huston and Bette L. Huston and Harry Barr by deed of record in Deed Book 3329, Page 501, the Recorder's Office, Franklin

County, Ohio and being particularly described as follows: Being the middle one—third (1/3) of the above 9.46 acre tract and being bounded as follows: Beginning for reference at the southwesterly corner of said 9.46 acre tract, thence N 38° W a distance of 270.01 feet to the true place of beginning; Thence continuing N 38° W a distance of 260.77 feet to a point;

Thence N. 66° 30' E crossing said 9.46 acres, a distance of 559.66 feet to a point in the easterly line of Thence S 34° E with the easterly line of said 9.46 acre tract a distance of 256.76 feet to a point; Thence S. 66° 30' W parallel to the southerly line of the 9.46 acre tract a distance of 541.16 feet to the place of beginning containing 3.19 acres of land, more or less.

PARCEL II: (010-104706-00) Situated in the County of Franklin, in the State of Ohio, and in the City of Columbus, and bounded and described as follows: Being a part of that 9.46 acre tract of land conveyed to Harry A. Coleman, Robert J. and Bette A. Huston and Harry Barr, by deed of record as shown in Deed Book 3329, Page 501, in the office of the Recorder of Franklin County, Ohio, and being more particularly described as follows:

Being the southerly one-third (1/3) of the above 9.46 acre tract and being bounded as follows: Beginning at the Southwesterly Corner of the said 9.46 acre tract, thence N. 38° W a distance of 270.01 feet to a point: thence N. 66° 30' E. crossing the said 9.46 acre tract, a distance of 541.16 feet to a point in the Easterly line of said 9.46 acre tract; thence S. 34° E with the Easterly line of said 9.46 acre tract, a distance of 265.86 feet to the

Southeasterly corner of said 9.46 acre tract; thence S. 66° 30' W, with the Southerly line of said 9.46 acre tract a distance of 522 feet to the place of PARCEL III: (010-146234-00) Situated in the County of Franklin, in the City of Columbus and in the State of Ohio, and bounded and described as follows:

Beginning at a stone in the center of the stone quarry pike where the north line of the original survey intersects the same; thence S. 49 deg. E. 49.20 poles to a corner of the Macon Trabue heirs' 8.40 acre tract held in common for stone quarry purposes, thence S. 6 1/2 deg. E. 28 poles to a large boulder; thence N. 66 deg. E. 16 poles to the west bank of the Scioto River; thence up the river with its meanders thereof N. 1 3/4 deg. W. 21.21 poles, N. 9 1/2 deg. E. 21.21 poles, thence N. 3 1/2 deg. E. 21.27 poles, thence N. 6 deg. W. 32.12 poles to the mouth of a large run; thence up the run and with the meanders thereof N. 60 deg. W. 6 poles, thence N. 47 deg. W. 9.72 poles, thence S. 74 1/2 deg. W. 7.36 poles, thence S. 45 deg. W. 9.46 poles, thence S. 78 1/2 deg. W. 10.84 poles, thence S. 2 1/2 deg. W. 9.72 poles, thence S. 52 1/2 deg. W. 9.06 poles, thence S. 64 3/4 deg. W. 7.20 poles, thence S. 42 1/2 deg. W. 13.32 poles to a stone in the center of the Trabue Free Pike, thence with the center of said Free Pike, S. 33 1/2 deg. E. 10.24 poles to the place of beginning. Said premises being Lots 7 and 8 of John P. Trabue's Heirs Subdivision as same is shown in Plat Book 5, Page 265, Recorder's Office, Franklin

PARCEL IV: (010-146278-00) Situated in the County of Franklin, in the City of Columbus and in the State of Ohio, and bounded and

described as follows: Beginning at a point on the line between the 21.64 acre tract owned by John Dye, as described in Deed Book 200, Page 414, and the above mentioned 31 acre tract, more or less, owned by the City of Columbus, said point beginning being 811.8 feet southeasterly, measured along said line from the intersection of said line with the center line of McKinley Avenue (Stone Quarry Road); thence with the continuation of said line and a bearing of S. 49 deg. E. a distance of 69.2 feet to a point; thence S. 13 deg. 45' E. a distance of 384.00 feet to a point; thence S. 66 deg. W. a distance of 99.8 feet to a point; thence N. 6 deg. 30' W. a distance of 462.00 feet, more or less, to the place of beginning, and containing 0.68 of an acre.

PARCEL V: (010-146253-00) Situated in the County of Franklin, State of Ohio, and City of Columbus, and bounded and described as

Commencing at a found spike at the intersection of the centerline of Fisher Road with the centerline (old location) of McKinley Avenue; thence North 8 degrees 39 minutes West along the centerline (old location) of said McKinley Avenue, the centerline, (old location) of said McKinley Avenue, is shown on Sheets 2 and 3 of Right of Way Plan of McKinley Avenue, County Road 10, 1962, in the office of the County Engineer of Franklin County, Ohio, a distance of 507.58 feet to a found spike; thence North 81 degrees 21 minutes East along a line perpendicular to the centerline (old location) of said McKinley Avenue, a distance of 25.0 feet to a found iron pin in the easterly right of way line of said McKinley Avenue (old location) and the true point of beginning of this description; thence North 8 degrees 39 minutes West along the Easterly right of way line of said McKinley Avenue (old location) and along a line 25 feet (measured at right angles) easterly of and parallel to the centerline (old location) of said McKinley Avenue a distance of 433.59 feet to a point; thence South 52 degrees 05 minutes East, a distance of 597.1 feet to a found iron pin; thence South 81 degrees 21 minutes West, a distance of 410.5 feet to the place of beginning, containing 2.043 acres. PARCEL VI: (010-200913-00)

Being situated in the State of Ohio, County of Franklin, City of Columbus and being a portion of an original 32.5+ acre tract of land deeded to the City of Columbus by Louis Golden through Deed Volume 941, Page 78 as shown of record in the Franklin County Recorder's Office, said portion being herein designated as Parcel "A" and also being a part of Survey 530 in the Virginia Military District, being

Beginning for reference at a railroad spike (found) N 8° 33′ 21″ W (by this survey) along the old centerline of McKinley Avenue a distance of 507.92 feet from the intersection of Fisher Road and McKinley Avenue

(formerly known as the Stone Quarry Road), thence, N 81° 26' 39" E with a line being at a right angle to the aforementioned McKinley Avenue a distance of 25.00 feet to a 1" diameter pipe (found), said pipe being the southwest corner of a 2.043 acre tract of land as recorded in Deed Volume 2966, Page 268 in the Franklin County Recorder's Office, said pipe also being the true place of beginning of the herein described Parcel "A",

thence, N 81° 26' 39" E a distance of 410.50 feet to a point, said point being the southeast corner of the above mentioned 2.043 acre tract of land. thence, S 51° 59' 20" E along the westerly line of a certain 21.64 acre tract of land being recorded in O.R. 03696E14 in the Franklin County Recorder's Office a distance of 227.59 feet to a point, thence, S 16° 29' 00" E along the westerly line of the above mentioned 21.64 acre tract, a distance of 539.97 feet to a point in the north line of a certain 3.19 acre tract of land being of record in Deed Volume thence, S 65° 31' 00" W along the north line of the above mentioned 3.19 acre tract a distance of 439.30 feet to a 3/4" re-bar (found) said re-bar being in the easterly right of way, 40.00 feet from and at a right angle to the old centerline of McKinley Avenue,

thence, N. 36° 50' 03" W along the easterly right of way of McKinley Avenue a distance of 120.87 feet to a 3/4" re-bar (found), thence, N. 31° 59' 55" W a distance of 252.08 feet to an angle point in the easterly right of way of McKinley Avenue N. 65° 18' 30" E a distance of 90.00 feet from the intersection of Fisher Road and

thence, N. 23° 50' 00" W a distance of 233.23 feet to a 1/2" re-bar (found), said re-bar being in the easterly right of way, 25.00 feet from and at a right angle to, the older centerline of McKinley Avenue. thence, N. 8° 33' 21" W along the easterly right of way of McKinley Avenue a distance of 257.92 feet to the true place of beginning, containing 9.246 acres of land, more or less. The basis of bearings for this description are based upon a certain plan prepared by the Franklin County Engineer's Office (establishing, altering, widening and relocating McKinley Avenue Section "C" Part, County Road No. 10, Franklin Township, Franklin County, Ohio), being on file in Road Record Book 19, Page 194 and 195, and right of way portion of said plan also being on file in the City Engineer's Office Map Section (being known as ROW-38) and the bearing shown as S 40° 44' E on McKinley Avenue was This description was prepared by Donald E. Tobias, Registered Surveyor #5977 (State of Ohio) for the

City of Columbus based upon a survey conducted in 1984 by the City of Columbus. PARCEL VII: (010-200912-00) Being situate in the State of Ohio, County of Franklin, City of Columbus and being a portion of an original 32.5+/- acre tract of land deeded to the City of Columbus by Louis Golden through Deed Volume 941, Page 78 as shown of record in the Franklin County Recorder's Office, said portion being herein designated as Parcel "B" and also being a part of Survey 530 in the Virginia Military District, being bounded and described as follows:

Beginning for reference at a railroad spike (found) N 8° 33′ 21″ W (by this survey) along the old centerline of McKinley Avenue a distance of 507.92 feet from the intersection of Fisher Road and McKinley Avenue (formerly known as the Stone Quarry Road), thence. S 8° 33′ 21″ E a distance of 507.92 feet to the above mentioned road intersection, thence, S 69° 58' 30" W along the centerline of Fisher Road a distance of 29.53 feet to a point,

thence, S 20° 01' 30" E a distance of 35.00 feet to a point, said point being the most northeasterly corner and the true place of beginning of the herein described parcel "A", thence, S 40° 44' 00" E with line parallel to and 40.00 feet from the old centerline of McKinley Avenue, a distance of 527.70 feet to a point,

thence, S 49° 16' 00" W a distance of 20.00 feet to a point, thence, S 40° 44' 00" E a distance of 450.00 feet to a point, thence, N 49' 16" 00" E a distance of 35.00 feet to a point,

thence S 40° 44' 00" E along the original west line of McKinley Avenue, said west line being formerly described in the above mentioned description of the original 32.5+/- acre tract a distance of 748.49 feet to a point in the easterly right of way of the present Conrail Railroad (formerly known as the Toledo and Ohio Central Railway), said point being at a right angle from the centerline of the mainline tract a distance of 33.0 feet, said point being the most southerly corner of the herein described tract of land, thence, N 49° 46' 47" W along the easterly line of the above mentioned Conrail Railroad right of way a distance of 1853.77 feet to a point, said point being 35.00 feet south of and at a right angle to the centerline of Fisher Road, said point being the most northwesterly corner of the herein described tract of land,thence, N 69° 58′ 30" E along the southerly right of way of Fisher Road a distance of 295.57 feet to the true place of beginning, containing 5.214 acres, more or less. The basis of bearings for this description are based upon a certain plan prepared by the Franklin County Engineer's Office (establishing, altering, widening and relocating McKinley Avenue Section "C" Part, County Road No. 10, Franklin Township, Franklin County, Ohio), being on file in Road Record Book 19, Pages 194 and 195, and right of way portion of said plan also being on file in the City Engineer's Office Map Section (being known as ROW-38) and the bearing shown as S 40° 44' E on McKinley Avenue was

This description was prepared by Donald E. Tobias, Registered Surveyor #5977 (State of Ohio) for the City of Columbus based upon a survey conducted in 1984 by the City of Columbus.

> We hereby certify that the foregoing Boundary Survey was prepared from actual field measurements in accordance with Chapter 4733-37 Ohio Administrative Code. All iron pins set are 5/8" rebar, 30" in length with yellow plastic cap and all Mag Nails set are with brass survey marker with "EP FERRIS SURVEYOR 8230" inscribed

CERTIFICATION

To Riverbend Commercial Title Services LP., SB Columbus LLC., JHI Realty, LLC, an Indiana limited liability company, First American Title Insurance Company that: The undersigned certifies that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTÁ and NSPS, and includes Items 1,2,3,4,7(a),7(b)(1),8,9,11,13,14, and 16 of Table A thereof. Pursuant to the Accuracy Standards as adopted by ALTA and NSPS and in effect on the date of this certification, undersigned further certifies that in my professional opinion, as a land surveyor registered in the State of Ohio, the Relative Positional Accuracy of this survey does not exceed that which is specified therein.



PRELIMINARY Matthew Lee Sloat, P.E., P.S. Registered Surveyor No. 8342

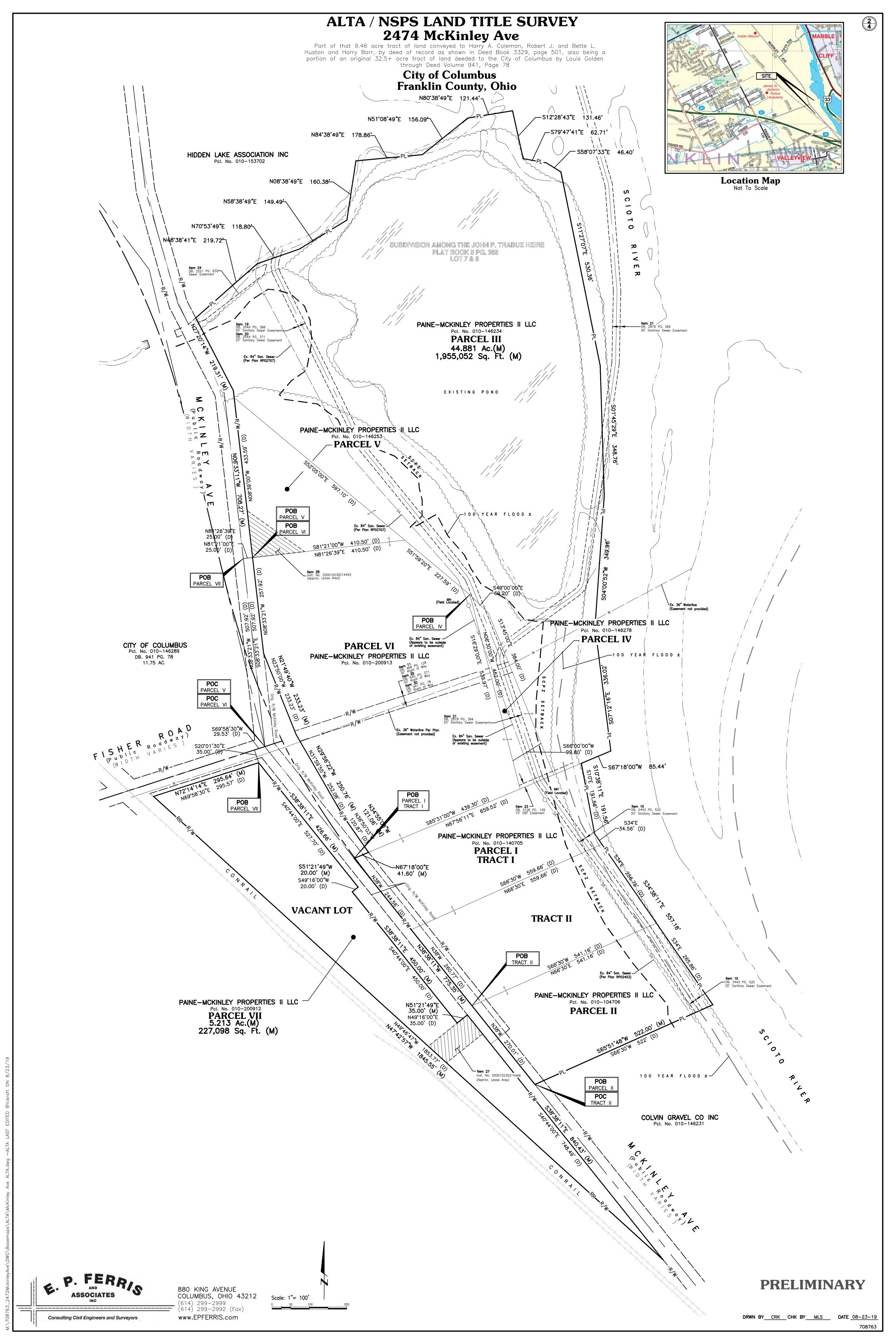
Consulting Civil Engineers and Surveyors

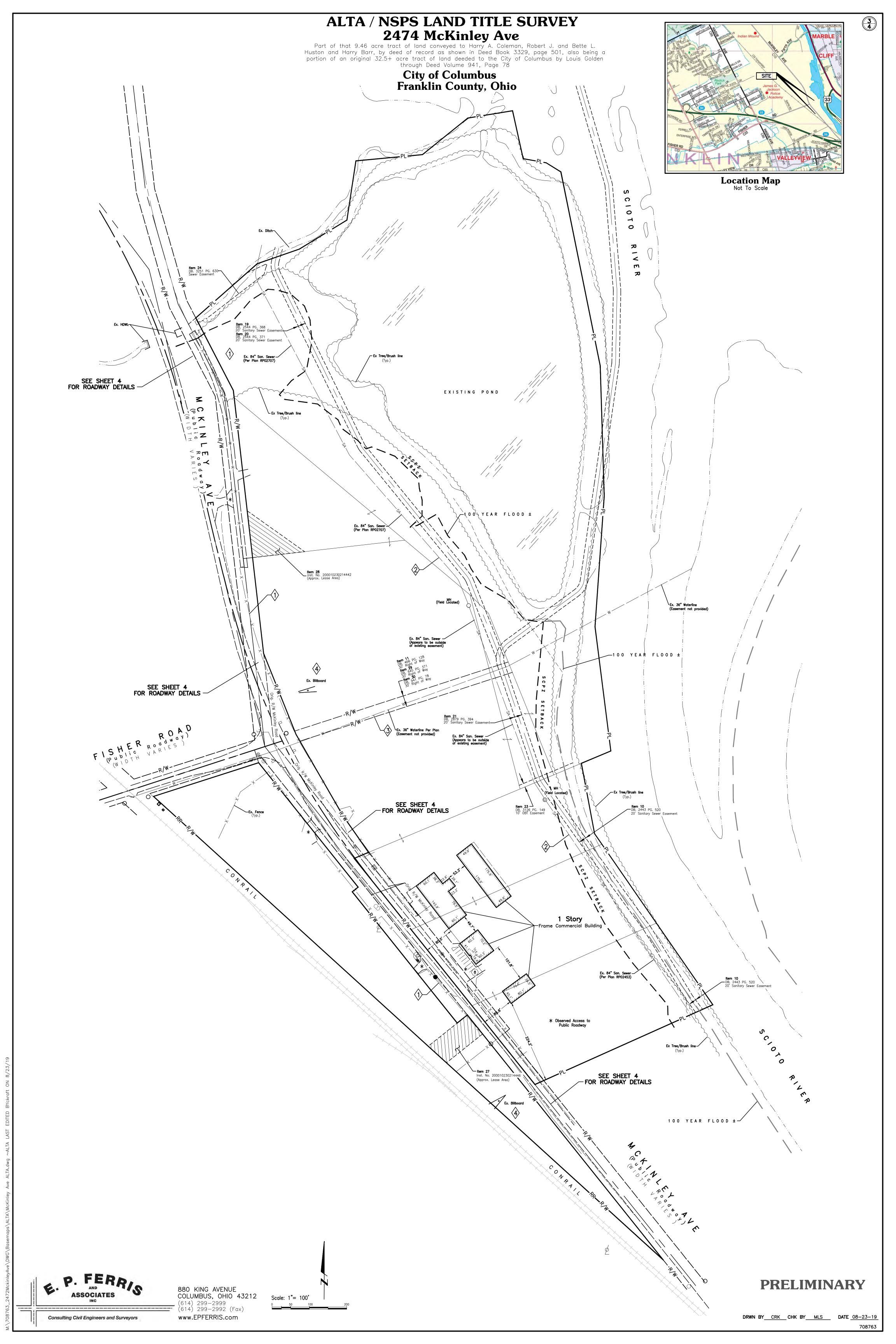
(614) 299-2992 (Fax) www.EPFERRIS.com

880 KING AVENUE

(614) 299-2999

COLUMBUS, OHIO 43212





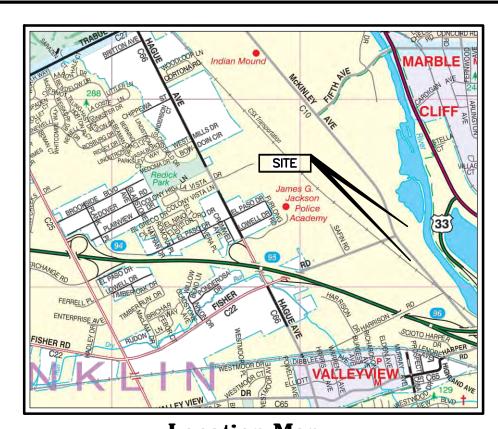
ALTA / NSPS LAND TITLE SURVEY

2474 McKinley Ave

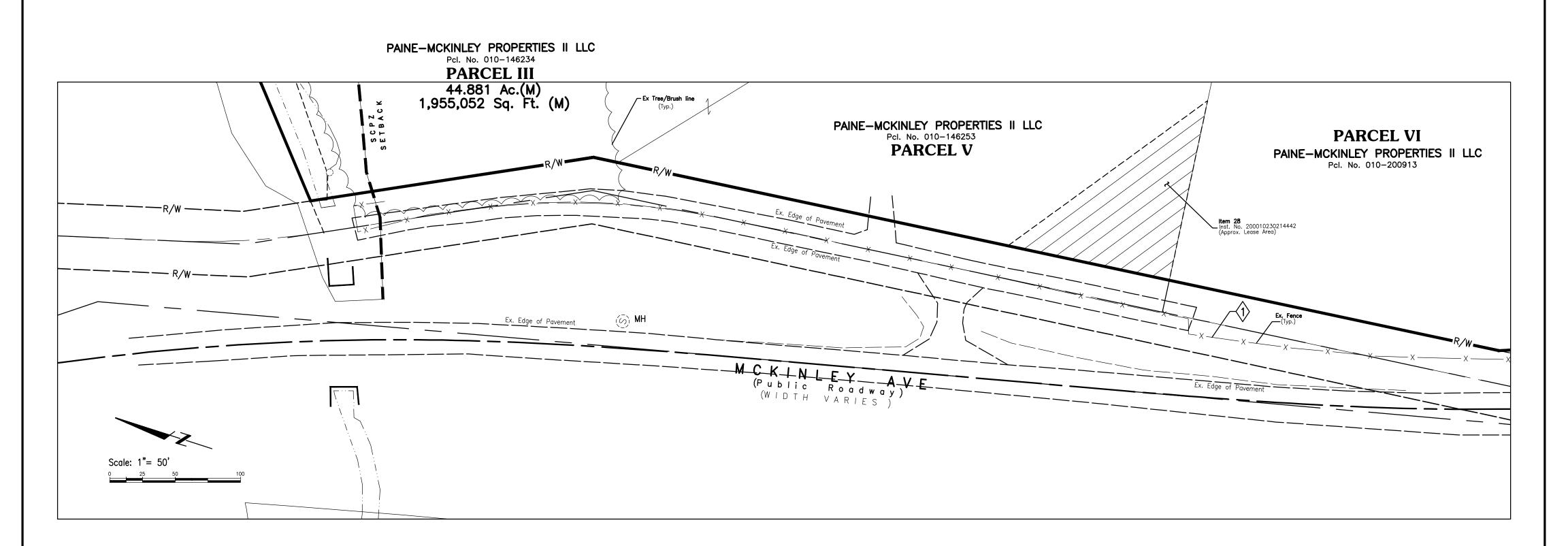
Part of that 9.46 acre tract of land conveyed to Harry A. Coleman, Robert J. and Bette L.

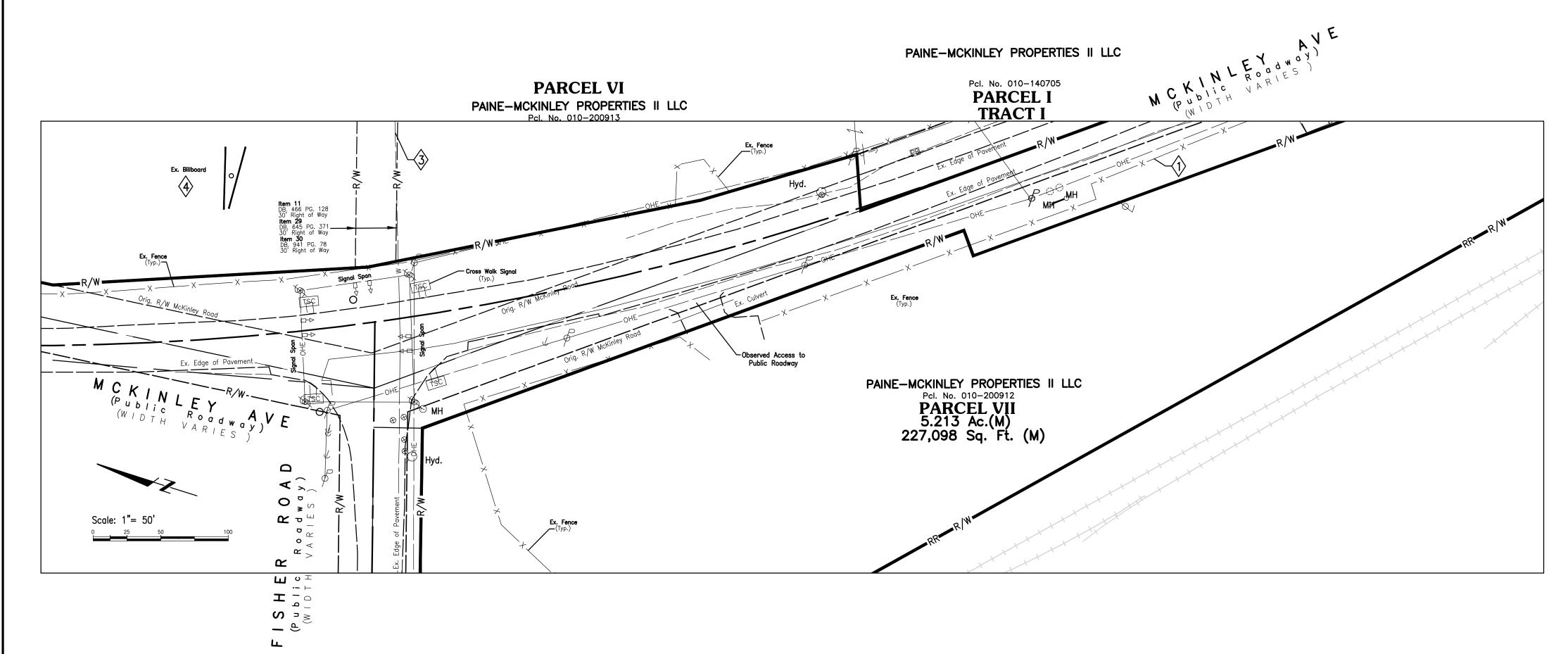
Huston and Harry Barr, by deed of record as shown in Deed Book 3329, page 501, also being a portion of an original 32.5+ acre tract of land deeded to the City of Columbus by Louis Golden through Deed Volume 941, Page 78

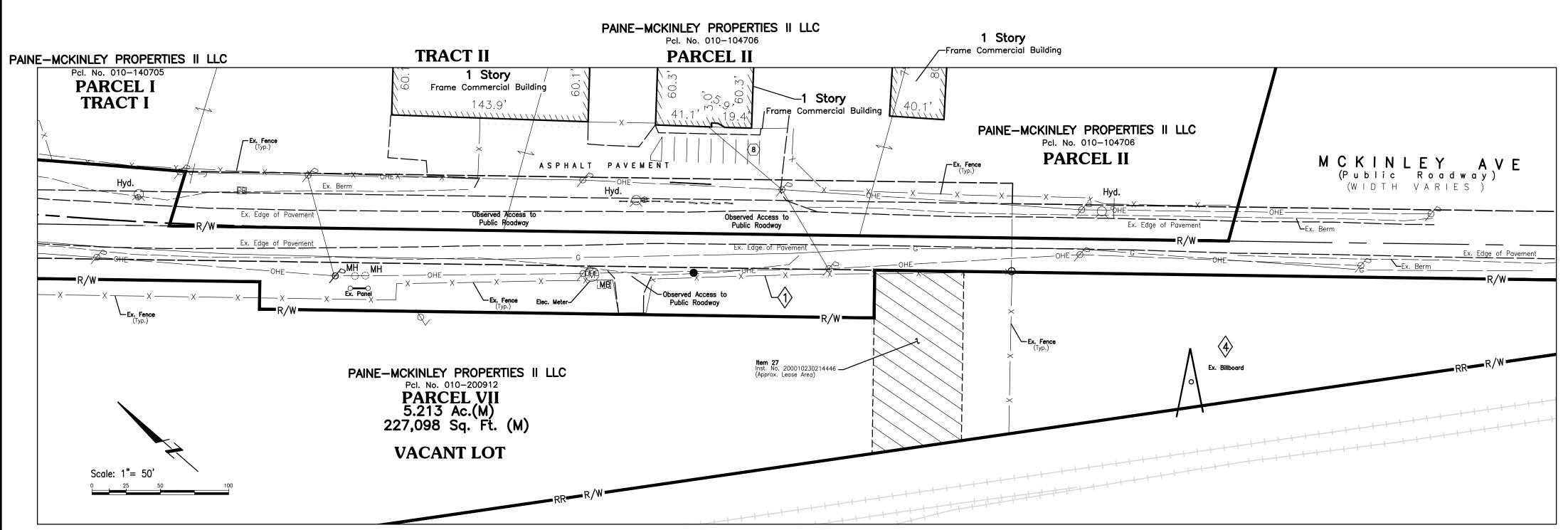
City of Columbus Franklin County, Ohio



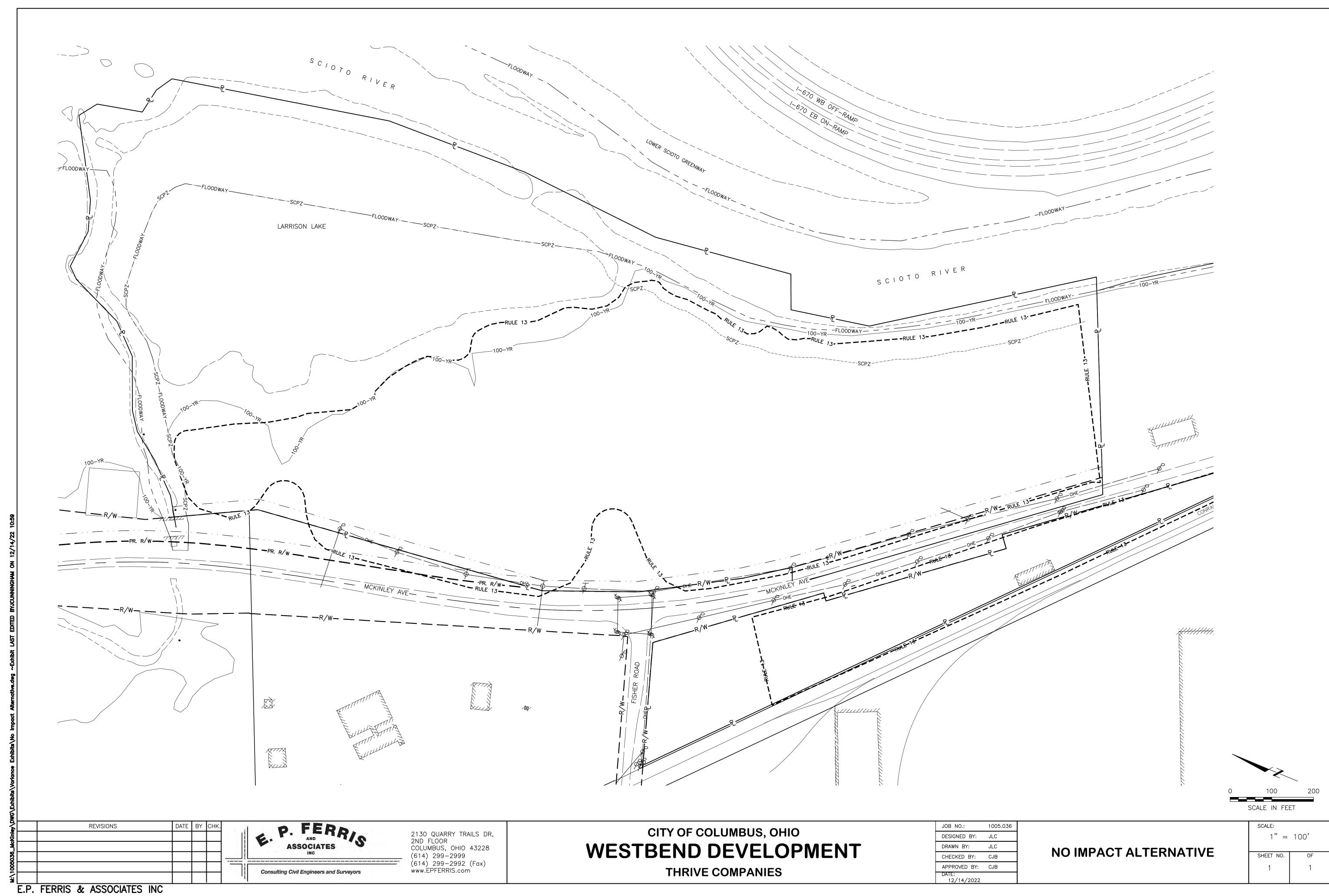
Location Map
Not To Scale

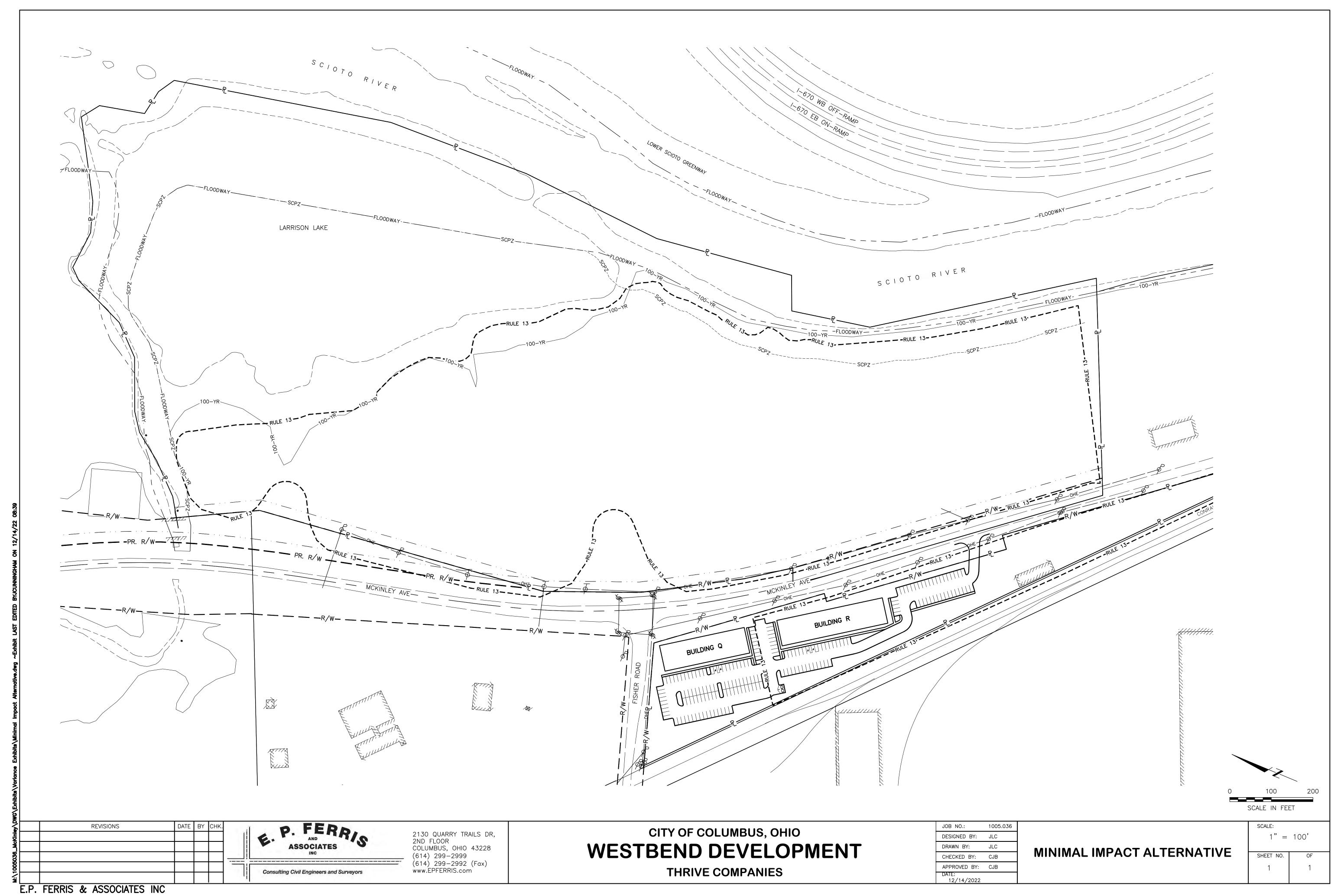


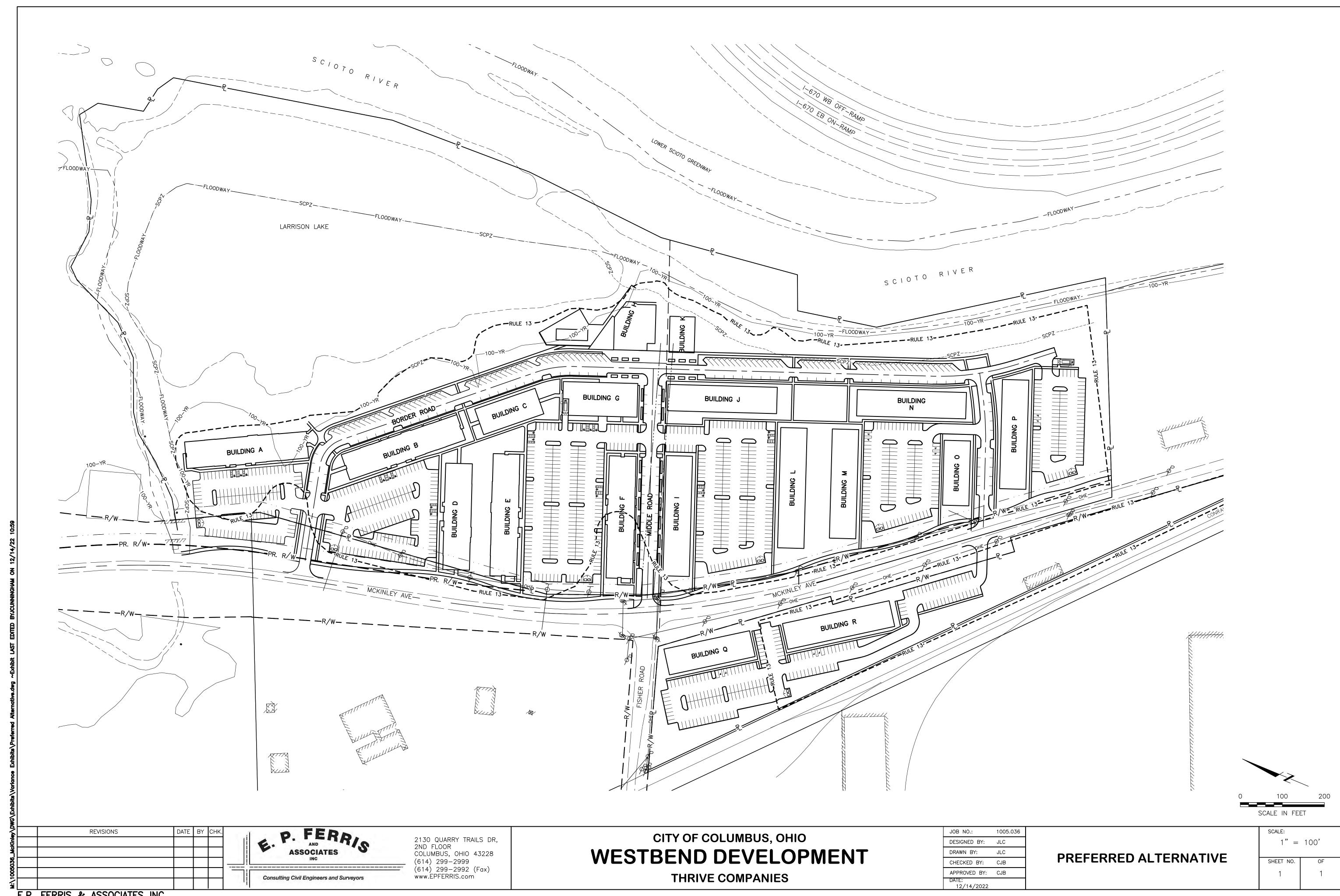




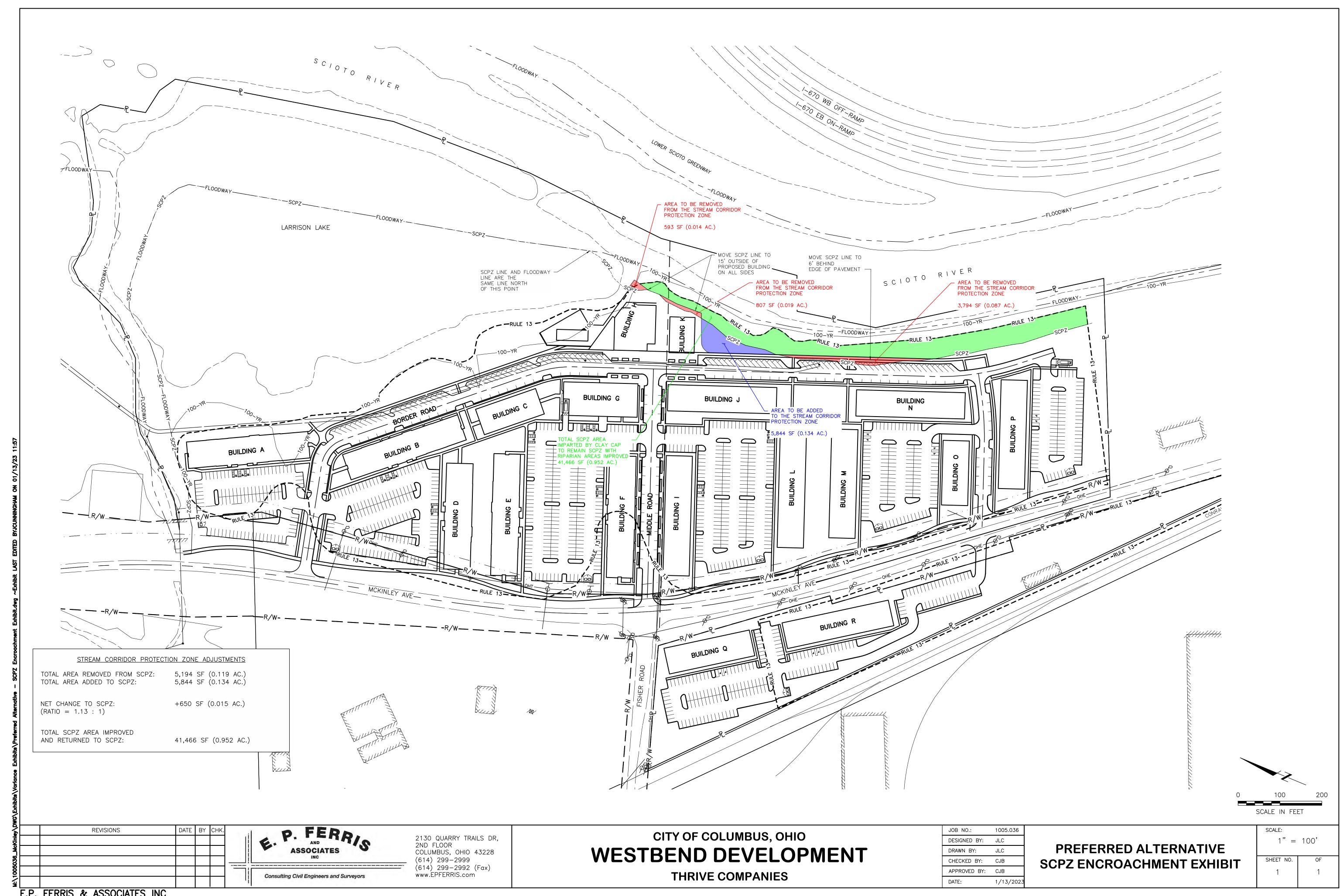
APPENDIX E WESTBEND DEVELOPMENT ALTERNATIVES







APPENDIX F PREFERRED ALTERNATIVE SCPZ ENCROACHMENT EXHIBIT



APPENDIX G WESTBEND DEVELOPMENT PHASE 1 MASS EXCAVATION PLAN

ZONING INFORMATION:

WESTBEND QOZB, LLC 842 N 4TH STREET SUITE #200 COLUMBUS, OHIO 43215 CONTACT: MICHAEL AMICON PH: (614) 286-2143 EMAIL: mamicon@thrivecos.com

EXISTING ZONING: M, MANUFACTURING, Z6 PROPOSED REZONING: Z22-XXXX PROPOSED VARIANCE: CV22-XXX PARCEL ID NUMBERS: 010-146234, 010-1 010-200913, 010-146278, 010-10470 010-104706, 010-200912

CIVIL ENGINEER INFORMATION:

| O | | | | ***** | • |
|----------|----------|---------|----------|--------|-------|
| | E.P. FE | ERRIS & | & ASSOC | SIATES | |
| 2130 | QUARRY | TRAILS | DRIVE, | 2ND | FLOOR |
| | COLUI | MBUS, | OHIO 43 | 228 | |
| | CONTA | CT: CH | AD BUC | KLEY | |
| | | | 299-29 | | |
| | FAX: | (614) | 299-29 | 92 | |
| 1 | EMAIL: d | buckle | y@epferr | is.con | n |
| | | | • | | |
| | | | | | |

| SUMMARY OF POST-CONSTRUCTION STORMWATER CONTROL FACITILITES | | | | | | | | | | | |
|---|-------------------------------|---------------------|---|-----------------------------|--|--|--|--|--|--|--|
| CONTROL/OUTLET STRUCTURE NO. (PER PLAN) | PLAN VIEW & DETAIL PAGE | CONTROL FUNCTION | DRAINAGE AREA TO CONTROL FACILITIES | FACILITY TYPE | GREEN INFRASTRUCTURE (SQUARE FEET) | | | | | | |
| BASIN A / MH #2 | 6 | WATER QUALITY | 2.26 ACRES | TEMPORARY SEDIMENT BASIN | N/A | | | | | | |
| BASIN B / MH #4 | 6 | WATER QUALITY | 6.94 ACRES | TEMPORARY SEDIMENT BASIN | N/A | | | | | | |
| BASIN C / MH #6 | 6 | WATER QUALITY | 2.44 ACRES | TEMPORARY SEDIMENT BASIN | N/A | | | | | | |

NOTE: SEE SHEET 3 FOR POST CONSTRUCTION SCP INSPECTION AND MAINTENANCE SCHEDULE

| | 100-YR DETENTION TABLE | | | | | | | | | | |
|---------|--|--|---------------------------------------|--|------------------------------------|--|--|--|--|--|--|
| ID | 100 YEAR PONDING STORAGE REQUIRED (CF) | 100 YEAR PONDING STORAGE PROVIDED (CF) | 100 YEAR PONDING ELEVATION (FT) | MAX PONDING / SPILLOVER ELEVATION (FEET) | MAXIMUM PONDING VOLUMES (CF) | | | | | | |
| BASIN A | N/A | 8,229* | 740.50 | 740.50 | 8,229* | | | | | | |
| BASIN B | N/A | 19,428* | 739.50 | 739.50 | 19,428* | | | | | | |
| BASIN C | N/A | 8,779* | 740.50 | 740.50 | 8,779* | | | | | | |

* 100-YEAR PONDING NOT REQUIRED AS THESE BASINS ARE ALL TEMPORARY SEDIMENT BASINS TO BE UTILIZED DURING EARTH MOVING ACTIVITIES.

SCP STRUCTURE NOTICE
THE TEMPORARY SEDIMENT SETTLING PONDS BASIN A, B, & C ARE STORMWATER QUALITY SCPS AND ARE AN INTEGRAL PART OF THE PRIVATE STORM SEWER SYSTEM DEPICTED IN THESE DRAWINGS. RESPONSIBILITY AND ASSURANCE OF PERIODIC MAINTENANCE AND THE CONTINUOUS FUNCTIONALITY OF THESE STORMWATER QUALITY DEVICES SHALL BE PER SECTION 4.1.2 OF THE CITY OF COLUMBUS STORMWATER DRAINAGE MANUAL. (SEE SHEET 3 FOR POST CONSTRUCTION SCP INSPECTION AND MAINTENANCE SCHEDULE).

THE PROJECT IS COMPLIANT WITH OHIO EPA GENERAL CONSTRUCTION STORM WATER PERMIT NO. OHCOOO05, ISSUED FEBRUARY 17TH, 2022.

FLOODPLAIN NOTE:
COMPENSATORY FLOODPLAIN CUT AND FILL WILL TAKE PLACE ON THIS SITE. SEE SHEET 8 FOR INFORMATION ON COMPENSATORY FLOODPLAIN CUT AND FILL. CUT: FILL: 1,128.93 C.Y. 1,078.58 C.Y.

50.35 C.Y. CUT

| SEWER. | DESIGN & CONSTRUCTION | |
|---------|--------------------------|-----------------|
| AA-S102 | | 2230 (04/30/18) |
| AA-S119 | | |
| AA-S149 | | |
| AA-S150 | | |
| AA-S168 | | |
| AA-S169 | | |
| | | |

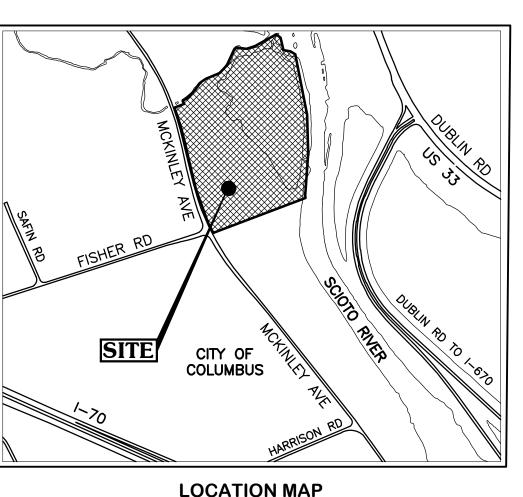
STANDARD CONSTRUCTION DRAWINGS

THE STANDARD CONSTRUCTION DRAWINGS LISTED ABOVE SHALL BE CONSIDERED A PART OF THESE PLANS.

| 67–005 | |
|-----------------------|------------|
| 146253, 705, | |
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| EN UCTURE FEET) | FLOODWAY (|
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| UM NG | P |
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| 28* | ``` |
| 9* | (RP270) |
| | 102) |
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THE SITE IS GENERALLY 732.90 FEET.

SCIOTO RIVER -FLOODWAY-LARRISON LAKE 1 (RP2707) © BORDER ROAD - PHASE LIMITS 0012 3 WESTBEND PHASE MCKINLEY AVE. -MCKINLEY AVE. **FUTURE >** PHASE PRELIMINARY SITE COMPLIANCE PLAN: XXXXX-XXXXX WATER SERVICE PLAN: WSP-XXXX NOTE: SITE IS LOCATED IN FEMA FIRM MAP PANEL 39049C0302K **INDEX MAP** (EFFECTIVE 06/17/2008). THE SITE INCLUDES BOTH FLOOD FINAL SITE COMPLIANCE PLAN: XXXXX—XXXXX
R/W IMPROVEMENTS PLAN: XXXX—E SCALE: 1" = 100' ZONES AE AND X. THE BASE FLOOD ELEVATION THROUGHOUT CC STORM PLAN: CC-XXXXX CC SANITARY PLAN: CC-XXXXX



LOCATION MAP

NOT TO SCALE

PROJECT DESCRIPTION

MASS EXCAVATION PLAN REQUIRED FOR REMEDIATION OF EXISTING RULE 13 LANDFILL PER OHIO ENVIRONMENTAL PROTECTION AGENCY VOLUNTARY ACTION PLAN (VAP)

SITE DATA TABLE

| DESCRIPTION | QUANTITY | UNIT |
|---------------------------------|----------|------|
| TOTAL SITE AREA (PRIVATE) | 13.27 | AC. |
| TOTAL DISTURBED AREA (ON-SITE) | 13.27 | AC. |
| DISTURBED IMPERVIOUS AREA | 3.84 | AC. |
| TOTAL DISTURBED AREA (R/W) | 0.00 | AC. |
| TOTAL DISTURBED AREA (OFF-SITE) | 0.00 | AC. |
| TOTAL DISTURBED AREA | 13.27 | AC. |
| PRE-DEVELOPED IMPERVIOUS AREA | 3.84 | AC. |
| POST-DEVELOPED IMPERVIOUS AREA | 0.00 | AC. |

| | PARCEL INFORMATION | | | | | | | | | | |
|-----|---------------------------|----------------------|------------|-------------------|---------------------------------|--------------------|--|--|--|--|--|
| NO. | OWNER | ADDRESS | PARCEL ID. | ACREAGE (DEED) | ZONING | HEIGHT DISTRICT | | | | | |
| 1 | PAINE-MCKINLEY AVENUE LLC | MCKINLEY AVE | 010-146234 | 23.72 | M, MANUFACTURING (Z67-005) | H-35 | | | | | |
| 2 | PAINE-MCKINLEY AVENUE LLC | 2610 MCKINLEY AVE | 010-146253 | 2.10 | M, MANUFACTURING (Z67-005) | H-35 | | | | | |
| 3 | PAINE-MCKINLEY AVENUE LLC | MCKINLEY AVE | 010-200913 | 9.25 | M, MANUFACTURING (Z67-005) | H-35 | | | | | |
| 4 | PAINE-MCKINLEY AVENUE LLC | MCKINLEY AVE | 010-146278 | 0.78 | M, MANUFACTURING (Z67-005) | H-35 | | | | | |
| 5 | HIDDEN LAKE ASSOCIATION | MCKINLEY AVE | 010-153702 | 17.07 | M, MANUFACTURING (ANNEX1424) | H-35 | | | | | |
| 6 | CITY OF COLUMBUS | MCKINLEY AVE | 010-153709 | 64.61 | M, MANUFACTURING (ANNEX5599) | H-35 | | | | | |
| 7 | CITY OF COLUMBUS | 2609 MCKINLEY AVE | 010-146289 | 15.14 | M, MANUFACTURING (Z67-005) | H-35 | | | | | |
| 8 | PAINE-MCKINLEY AVENUE LLC | MCKINLEY AVE | 010-200912 | 5.18 | M, MANUFACTURING (Z67-005) | H-35 | | | | | |

SHEET INDEX



800-362-2764 or 8-1-1 www.oups.org

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CC-19850

| EASEMENT REFERENCE | | | REVISIONS | | | PLAN PREPARED BY: | ARED BY: APPROVALS: SIGNATURES BELOW SIGNIFY ONLY CONCURRENCE WITH THE GENERAL PURPOSE AND GENERAL LOCATION OF THE PROJECT. ALL TECHNICAL | | CAL DDIVATE STODA SEWED IADDO | | | | | | |
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| CITY NO. | со | DUNTY RE | CORDER | GRANTOR | NO. | | DESCRIPTION | APPROVAL/DATE | mentalian TEOF O | | DETAILS REMAIN THE RESPONSIBILITY OF THE ENGINEER PREPARING THE PLANS. APPROVED FOR STORM SEWERS ONLY. | | PRIVATE STORM SEWER IMPROVEMENTS FOR WESTBEND DEVELOPMENT PHASE 1 | | |
| OITI NO. | vo | DL. | PAGE | GNANTON | | | | | THE CHAD THE | | | 2474 MCKINLEY | | DIVISION U | JOE ONE! |
| | | | | | | | | | J. *** BUCKLEY **** E-74383 *** BUCKLEY ** BUCKLEY *** BUCKLEY *** BUCKLEY *** BUCKLEY *** BUCKLEY ** BUCKLEY *** BUCKLEY *** BUCKLEY *** BUCKLEY *** BUCKLEY ** BUCKLEY *** BUCKLEY *** BUCKLEY *** BUCKLEY *** BUCKLEY ** BUCKLEY *** BUCKLEY *** BUCKLEY *** BUCKLEY *** BUCKLEY ** BUCKLEY *** BUCKLEY *** BUCKLEY ** BUCK | | | | T | _ | |
| - | | | | | | | | | 1 E-74383 """ | CITY ENGINEER/ADMINISTRATOR, DIVISION OF DESIGN AND O | CONSTRUCTION DATE | DIVISION USE ONLY | OWNER | | |
| | | | | | | | | | This COSTERED CONTROLL CONTROL CONTROLL CONTROL CO | | | | CONTRACTOR | | |
| | | | | | | | | | In Management of the Control of the | ADMINISTRATOR, DIVISION OF POWER | DATE | | INSPECTOR | SCALE: 1" = 100' | SHEET: 1/8 |
| | | | | | | | | | · · · ининиште | | | | AGREEMENT COMPLETED | SCALE. = 100 | 3/1221. 1/0 |
| | | | | | | | | | | ADMINISTRATOR, DIVISION OF SEWERAGE & DRAINAGE | DATE | | RPD CKD CLD CON. DR. | CONTRACT DRAWING NO. | RECORD PLAN NO. |

100

SCALE IN FEET

200

DATE ADMINISTRATOR, DIVISION OF WATER REGISTERED ENGINEER PROJECT NO.: 1005.036 E.P. FERRIS & ASSOCIATES INC

GENERAL NOTES

SPECIFICATIONS

THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS (CMSC), 2018 EDITION, REVISION (07/01/2022), INCLUDING ALL REVISIONS AND SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS THAT ARE A PART OF THIS PLAN UNLESS NOTED OTHERWISE.

THE CONTRACTOR SHALL NOTIFY THE FOLLOWING DIVISIONS AT LEAST 24-HOURS IN ADVANCE OF ANTICIPATED START OF CONSTRUCTION:

DIVISION OF SEWERAGE AND DRAINAGE (614) 645-7102

DIVISION OF DESIGN AND CONSTRUCTION, CONSTRUCTION SECTION (614) 645-0433

INSPECTION FOR THIS PROJECT SHALL BE PROVIDED BY REPRESENTATIVES OF THE CITY OF COLUMBUS.

THE DEVELOPER SHALL DEPOSIT WITH THE CITY OF COLUMBUS THE TOTAL ESTIMATED COST OF CONSTRUCTION

<u>UTILITY OWNERSHIF</u>

THE IDENTITY AND LOCATION OF EXISTING UNDERGROUND UTILITIES LOCATED IN AND AROUND THE CONSTRUCTION AREA HAVE BEEN SHOWN AND LABELED ON THE PLANS BY USING INFORMATION PROVIDED BY THE RESPECTIVE UTILITY OWNERS. THE CITY OF COLUMBUS OR THE CONSULTING ENGINEER WILL NOT ASSUME RESPONSIBILITY FOR THE ACCURACY OF LOCATION OR DEPTH OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE PLAN.

THE CONTRACTOR IS RESPONSIBLE FOR THE INVESTIGATION, LOCATION, SUPPORT, PROTECTION, AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES WHETHER SHOWN ON THESE PLANS OR NOT. THE CONTRACTOR SHALL EXPOSE ALL UTILITIES OR STRUCTURES PRIOR TO CONSTRUCTION TO VERIFY THE VERTICAL AND HORIZONTAL EFFECT ON THE PROPOSED CONSTRUCTION. THE CONTRACTOR SHALL CALL, TOLL FREE, THE OHIO UTILITIES PROTECTION SERVICE (1-800-362-2764) 48 HOURS PRIOR TO CONSTRUCTION AND SHALL NOTIFY ALL UTILITY COMPANIES AT LEAST 48 HOURS PRIOR TO WORK IN THE VICINITY OF THEIR UNDERGROUND LINES.

SUPPORT AND PROTECTION OF ALL UTILITIES AND APPURTENANCES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. COSTS FOR REPAIR AND RESTORATION OF EXISTING UTILITIES DAMAGE BY THE CONTRACTOR SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CITY OF COLUMBUS UTILITIES WILL ONLY LOCATE AND MARK MAIN LINE FACILITIES. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL SERVICE LATERALS AND LINES. COSTS ASSOCIATED WITH THE ABOVE WORK AND RESPONSIBILITIES SHALL BE INCLUDED IN THE PRICE BID OF VARIOUS ITEMS.

PRIOR TO EXCAVATION, THE CONTRACTOR SHALL GIVE A 48-HOUR NOTICE TO THE OHIO UTILITIES PROTECTION SERVICE (OUPS) BY CALLING (800) 362-2764. A 48-HOUR NOTICE SHALL BE GIVEN TO THE OWNERS OF THE UNDERGRÒUND UTILITIES SHOWN ON THE PLANS WHO ARE NOT MEMBERS OF A REGISTERED UNDERGROUND

WHERE PLANS PROVIDE FOR A PROPOSED SEWER TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES, BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED SEWER. THESE LOCATIONS ARE NOTED THUS: EXPOSE THE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CMSC ITEM 901.

CITY OF COLUMBUS CONTACTS CITY OF COLUMBUS DEPARTMENT OF PUBLIC SERVICE TRAFFIC MANAGEMENT 1820 EAST 17TH AVENUE

OFFICE: (614) 645-7393 CITY OF COLUMBUS DEPARTMENT OF TECHNOLOGY

COLUMBUS, OHIO 43219

1355 MCKINLEY AVENUE BUILDING C COLUMBUS, OHIO 43222

CONTRACTOR LINE: (614) 645-7756

CITY OF COLUMBUS SUPPORT SERVICES DIVISION - COMMUNICATIONS

4211 GROVES ROAD COLUMBUS, OHIO 43232

TELEPHONE: (614) 724-7047 RADIO ROOM: (614) 724-4006

CONSTRUCTION OF THIS PROJECT MAY NOT BEGIN UNTIL THE EASEMENTS INDICATED HAVE BEEN RECORDED BY

THE DEVELOPER/OWNER SHALL, PRIOR TO ANY CONSTRUCTION OPERATION, DEPOSIT WITH THE CITY THE TOTAL ESTIMATED COSTS FOR INSPECTION AND WHERE REQUIRED A REPAVING GUARANTEE.

ANY MODIFICATION TO THE WORK AS SHOWN ON THESE DRAWINGS MUST HAVE PRIOR WRITTEN APPROVAL BY THE ADMINISTRATOR, DIVISION OF SEWERAGE AND DRAINAGE.

ALL PLASTIC SEWER LINES SHALL BE DEFLECTION TESTED AFTER INSTALLATION IN CONFORMANCE WITH THE REQUIREMENTS OF ITEM 901 OF THE CITY OF COLUMBUS, CONSTRUCTION AND MATERIAL SPECIFICATIONS, CURRENT VERSION (2018).

<u>CERTIFICATION OF PIPE AND STRUCTURES</u> ALL CONCRETE PIPE, STORM AND SANITARY SEWER STRUCTURES WILL BE STAMPED OR HAVE SUCH IDENTIFICATION NOTING THAT SAID PIPE. STORM AND SANITARY STRUCTURES HAVE BEEN INSPECTED BY THE CITY OF COLUMBUS AND MEETS THEIR SPECIFICATIONS. PIPE AND STRUCTURES WITHOUT PROPER IDENTIFICATION WILL NOT BE

PERMITTED FOR INSTALLATION.

EROSION AND SEDIMENT CONTROL MEASURES ARE REQUIRED AS PART OF THIS PROJECT. EROSION AND SEDIMENT CONTROL MEASURES SPECIFIC TO THIS SITE MAY BE FOUND ON SHEET NUMBERS 3-5 OF THIS PLAN. LAND-DISTURBING ACTIVITIES MUST COMPLY WITH ALL PROVISIONS OF THE DIVISION OF SEWERAGE AND DRAINAGE EROSION AND SEDIMENT CONTROL REGULATION. ALL LAND-DISTURBING ACTIVITIES SHALL BE SUBJECT TO INSPECTION AND SITE INVESTIGATION BY THE CITY OF COLUMBUS AND/OR THE OHIO EPA.

IT IS THE RESPONSIBILITY OF THE SITE OWNER TO NOTIFY THE CITY OF COLUMBUS TWO WORKING DAYS PRIOR TO COMMENCEMENT OF INITIAL SITE LAND DISTURBANCE ON ANY SITE OF ONE OR MORE ACRES. THIS INCLUDES SITE CLEARING, GRUBBING AND ANY EARTH MOVING, PRIMARY EROSION AND SEDIMENT CONTROL PRACTICES ARE MANDATED BY REGULATION TO BE IN PLACE FROM THE BEGINNING OF THE CONSTRUCTION ACTIVITY. PLEASE CONTACT THE STORMWATER AND REGULATORY MANAGEMENT SECTION AT (614) 645-6311. DETAILS OF THIS REQUIREMENT MAY BE FOUND IN THE REGULATION FOR CONTROL OF STORMWATER POLLUTION FROM LAND DISTURBANCE. FAILURE TO COMPLY MAY RESULT IN ENFORCEMENT ACTION.

GRADE CHECKS

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 USE 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.

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.

GRADE CHECKS PERFORMED BY THE CITY INSPECTOR IN NO WAY RELIEVE THE CONTRACTOR OF THE ULTIMATE RESPONSIBILITY TO ENSURE CONSTRUCTION TO THE PLAN GRADE.

PONDING / DETENTION AREAS

THE PONDING OR DETENTION AREAS SHOWN ON THE PLANS ARE A PART OF THE STORM SEWER FACILITIES. THE DEVELOPER/OWNER WILL ASSUME THE RESPONSIBILITY TO MAINTAIN THE PONDING OR DETENTION AREAS SO AS NOT TO REDUCE THE WATER STORAGE AREAS. IF THE OWNER DOES NOT MAINTAIN THE PONDING AND DETENTION AREAS, THE PLAN WILL BECOME VOID AND THE CITY WILL PLUG THE SEWER AT THE OUTLET.

AS A CONDITION OF FINAL ACCEPTANCE. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR PROVIDING ASBUIL SURVEYS TO VERIFY THE FINAL GRADES AND ELEVATIONS OF STORMWATER CONTROL FACILITIES. AT THE COMPLETION OF CONSTRUCTION, THE OWNER/DEVELOPER SHALL FIELD SURVEY THE STORMWATER DETENTION FACILITY TO VERIFY THAT THE FACILITIES ARE CONSTRUCTED ACCORDING TO APPROVED PLANS. SHOULD A DISCREPANCY BETWEEN THE PLANS AND CONSTRUCTED GRADES EXIST, THE DESIGN STORAGE OF THE DETENTION FACILITY SHALL BE RESTORED BY THE OWNER/DEVELOPER AS DIRECTED BY THE CITY OF COLUMBUS.

IMMEDIATELY AFTER PLACEMENT OF ANY CONDUITS, THE CONTRACTOR SHALL CONSTRUCT THE END TREATMENTS REQUIRED BY THE PLANS AT BOTH OUTLET AND INLET ENDS. THIS SHALL INCLUDE HEADWALLS, CONCRETE, RIP RAP, ROCK CHANNEL PROTECTION, SODDING, POURING BOTTOMS, MUDDING LIFT HOLES, ETC.

THE CONTRACTOR IS TO OBTAIN ALL NECESSARY PERMITS. AN ORIGINAL PERMIT, WITH RED SIGNATURES, SHALL BE KEPT ONSITE AT ALL TIMES.

WHEN OCCUPYING OR EXCAVATING WITHIN PUBLIC RIGHT-OF-WAY LIMITS. THE CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT FROM THE DEPARTMENT OF PUBLIC SERVICE - PERMIT OFFICE BETWEEN THE HOURS OF 7:30 AM AND 4:00 PM MONDAY THROUGH FRIDAY. PHONE: (614) 645-7497; FAX: (614) 645-1876; EMAIL: COLSPERMITS@COLUMBUS.GOV.

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 MAY BE OBTAINED THROUGH THE DIVISION OF WATER PERMIT OFFICE (614-645-7330). THE CONTRACTOR SHALL ADHERE TO ALL RULES & REGULATIONS GOVERNING SAID PERMIT AND MUST HAVE THE ORIGINAL PERMIT ON SITE ANY TIME IN WHICH THE HYDRANT IS IN USE. PERMITS MAY BE OBTAINED BY ACCESSING HTTP: //PORTAL.COLUMBUS.GOV/PERMITS/. COST TO BE INCLUDED IN THE VARIOUS BID ITEMS.

THE CONTRACTOR IS TO OBTAIN ALL NECESSARY PERMITS. AN ORIGINAL PERMIT, WITH RED SIGNATURES, SHALL BE KEPT ONSITE AT ALL TIMES.

WHEN OCCUPYING OR EXCAVATING WITHIN PUBLIC RIGHT-OF-WAY LIMITS, THE CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT FROM THE DEPARTMENT OF PUBLIC SERVICE - PERMIT OFFICE BETWEEN THE HOURS OF 7:30 AM AND 4:00 PM MONDAY THROUGH FRIDAY. PHONE: (614) 645-7497; FAX: (614) 645-1876; EMAIL: COLSPERMITS@COLUMBUS.GOV.

CONTRACTOR TO PROVIDE AGGREGATE SIEVE ANALYSIS FROM THE SUPPLIER TO COLUMBUS INSPECTOR FOR REVIEW. AGGREGATE PROVIDED MUST MEET CITY OF COLUMBUS SPECIFICATION ITEM 703.

MISCELLANEOUS NOTES

CONTRACTOR IS RESPONSIBLE FOR REVIEWING GEOTECHNICAL REPORT SPECIFIC TO THE PROJECT SITE AND FOLLOWING THE SITE PREPARATION RECOMMENDATIONS, INCLUDING THE REMOVAL AND MITIGATION OF UNSUITABLE MATERIAL. IF A GEOTECHNICAL REPORT WAS NOT PREPARED FOR THE PROJECT SITE, CONTRACTOR SHALL TAKE ALL RISKS ASSOCIATED WITH SUBSURFACE FINDINGS.

UTILITIES SHOWN IN THIS PLAN SET ARE AS TAKEN FROM OUPS MARKINGS, EXISTING RECORD MAPS AND OTHER INFORMATION MADE AVAILABLE. THE CONTRACTOR SHALL BE RESPONSIBLE TO INCLUDE IN THE BASE BID

ALLOWANCES TO DETERMINE EXISTING UTILITY LOCATIONS AND EXACT ROUTING

SEWER CAPOFF PERMIT IS REQUIRED PRIOR TO ISSUANCE OF DEMOLITION PERMIT. OBTAIN A CAPOFF PERMIT FROM SEWER PERMIT OFFICE, 111 N. FRONT STREET, 1ST FLOOR, (614) 645-7490.

PRIOR TO DEMOLITION PERMIT, A PERMIT FOR SANITARY LATERALS TO BE CAPPED OFF MUST BE OBTAINED FROM 111 N. FRONT STREET, 1ST FLOOR, (614) 645-7490.

CONNECTIONS TO SANITARY CANNOT BE MADE UNTIL PERMIT IS OBTAINED FROM SEWER PERMIT OFFICE AT 111 N. FRONT STREET, 1ST FLOOR, (614) 645-7490.

PROPOSED PUBLIC SIDEWALK TO BE INSTALLED PER CITY OF COLUMBUS STD. DRAWING 2300.

FOR THE DIVISION OF POWER

THE DIVISION OF POWER (DOP) MAY HAVE OVERHEAD AND UNDERGROUND PRIMARY, SECONDARY, AND STREET LIGHTING AT THIS WORK LOCATION. THE CONTRACTOR IS HEREBY REQUIRED TO CONTACT OPUS AT 811 OR 1-800-362-2764 FORTY-EIGHT HOURS PRIOR TO CONDUCTING ANY ACTIVITY WITHIN THE CONSTRUCTION AREA.

ANY REQUIRED RELOCATION, SUPPORT, PROTECTION, OR ANY OTHER ACTIVITY CONCERNED WITH THE CITY'S ELECTRICAL FACILITIES IN THE CONSTRUCTION AREA IS TO BE PRERFORMMED BY THE CONTRACTOR UNDER THE DIRECTION OF DOP PERSONNEL AND AT THE EXPENSE OF THE PROJECT. DOP SHALL MAKE ALL FINAL CONNECTIONS TO DOP'S EXISTING ELECTRICAL SYSTEM AT THE EXPENSE OF THE PROJECT. THE CONTRACTOR SHALL USE MATERIAL AND MAKE REPAIRS TO A CITY OF COLUMBUS STREET LIGHTING SYSTEM BY FLLOWING DOP'S "MATERIAL AND INSTALLATION SPECIFICATIONS" (MIS) AND THE CITY OF COLUMBUS "CONSTRUCTION AND MATERIAL SPECIFICATIONS" (CMSC). ANY NEW OR RE-INSTALLED UNDERGROUND STREETLIGHT SYSTEM SHALL REQUIRE TESTING AS REFERRED TO IN SECTION 1000.08 OF THE CMSC MANUAL. THE CONTRACTOR SHALL CONFORM TO DOP'S EXISTING STREET LIGHT LOCKOUT/TAGOUT (LOTO) PROCEDURE, MIS-1, COPIES OF WHICH ARE AVAILABLE

IF ANY ELECTRIC FACILITY BELONGING TO DOP IS DAMAGED IN ANY MANNER BY THE CONTRACTOR, ITS AGENTS, SERVANTS, OR EMPLOYEES, AND REQUIRES EMERGENCY REPAIRS, THE DOP DISPATCH OFFICE SHOULD BE CONTACTED IMMEDIATELY AT (614) 645-7627. DOP SHALL MAKE ALL NECESSARY REPAIRS, AND THE EXPENSE OF SUCH REPAIRS AND OTHER RELATED COSTS SHALL BE PAID BY THE CONTRACTOR TO THE DIVISION OF POWER, CITY OF COLUMBUS, OHIO.

PAVEMENT CUTTING, SAWING, AND EXCAVATION OPERATIONS NOTE
ALL PUBLIC AGENCIES AND PRIVATE CONTRACTORS PERFORMING PAVEMENT—CUTTING OPERATIONS ON CITY OF

COLUMBUS STREETS AND ROADWAYS SHALL PROTECT THE ENVIRONMENT FROM DISCHARGES CREATED BY THEIR PAVEMENT CUTTING OPERATIONS. NOTE THAT COLUMBUS CITY CODE 1145 PROHIBITS NON-STORMWATER DISCHARGE INTO THE CITY OF COLUMBUS SEWER SYSTEM, CURB INLETS AND ANY PART OF ITS MS4 (MUNICIPAL SEPARATE STORM SEWER SYSTEM).

THE REQUIREMENT INCLUDES BUT IS NOT LIMITED TO WET OR DRY SAW-CUTTING, JACK HAMMERING, EXCAVATION EQUIPMENT USE, ETC. THE PUBLIC AGENCY AND/OR PRIVATE CONTRACTOR WORK CREWS SHALL RECOVER AND DISPOSE OF DETRITUS, POLLUTED WATERS, OR OTHER SUCH DISCHARGES RESULTING FROM THEIR PAVEMENT CUTTING OPERATIONS AND PROTECT ALL STORM SEWER INLETS FROM RECEIVING ANY DISCHARGES FROM THE CONSTRUCTION OPERATIONS. THE AGENCY OR CONTRACTOR RESPONSIBLE FOR EACH PAVEMENT CUTTING ACTIVITY SHALL BE SOLELY LIABLE FOR NOTICE OF VIOLATIONS (NOV/S) AND FINES ISSUED BY CITY OF COLUMBUS AND/OR STATE OF OHIO AUTHORITIES.

EQUIPMENT, MATERIALS AND METHODS SHALL BE PROVIDED BY THE RESPONSIBLE PUBLIC AGENCY AND/OR PRIVATE CONTRACTOR TO WORK CREWS PERFORMING THE PAVEMENT CUTTING ACTIVITY AND MADE AVAILABLE TO

WORK CREWS FOR USE IN CLEANING UP DISCHARGES RESULTING FROM SUCH CUTTING ACTIVITIES AND PREVENTING RUNOFF. ALL WORK CREWS SHALL BE TRAINED TO EXERCISE AND EMPLOY EQUIPMENT, MATERIALS, AND ENVIRONMENTAL PROTECTIVE MEASURES TO PREVENT POLLUTED DISCHARGES FROM ENTERING THE CITY OF COLUMBUS STORM SEWER SYSTEM AND WATERS OF THE STATE OF OHIO.

THE PUBLIC AGENCY AND/OR PRIVATE CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING THAT THE INLET PROTECTION IS ADEQUATE. THE MOST STRINGENT PROJECT PLANS, NOTES AND/OR DRAWINGS INCLUDING STORMWATER POLLUTION PREVENTION PLAN (SWP3) OR SPILL PREVENTION/REMEDIATION PLAN SHALL APPLY TO ALL PAVEMENT CUTTING, SAWING OR EXCAVATION OPERATIONS.

PUBLIC TREE PRESERVATION NOTE

ALL PUBLIC TREES AND THE GROUND BELOW THEIR RESPECTIVE DRIP LINES, WHETHER SHOWN OR NOT SHOWN ON THE PLANS, ARE TO BE PRESERVED UNLESS APPROVAL TO REMOVE OR PRUNE IS GIVEN IN WRITING BY COLUMBUS RECREATION & PARKS (CRPD)/CITY FORESTER OR IF THE PUBLIC TREE REMOVAL HAS BEEN DESIGNATED ON THE APPROVED FINAL SITE COMPLIANCE PLAN. TREES APPROVED FOR REMOVAL BY EITHER OF THE CRPD/CITY FORESTER SHALL BE PAID FOR UNDER CMSC ITEM 201. CLEARING AND GRUBBING, UNLESS OTHERWISE PROVIDED FOR BY UNIT PRICE BID UNDER ITEM 201. THE CONTRACTOR SHALL PROTECT TREES NEAR OR ADJACENT TO THE WORK AREA TO AVOID DAMAGE TO ALL TREES THAT ARE TO REMAIN. ALL TREES REMOVED SHALL INCLUDE STUMP REMOVAL TO EIGHTEEN (18) INCHES BELOW GRADE. ALL CLEARING AND GRUBBING DONE ON CRPD PROPERTY, RIGHT-OF-WAY, OR ANY CITY OF COLUMBUS PROPERTY SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. HEAVY EQUIPMENT WILL NOT BE ALLOWED TO COMPACT THE SOIL OVER THE ROOT ZONE OF EXISTING PUBLIC TREES. RESTRICTED EQUIPMENT ACCESS ROUTES SHALL BE COORDINATED WITH CRPD INSPECTOR, KEITH MAY, AT (614) 645-3014 OR KAMAY@COLUMBUS.GOV BEFORE WORK BEGINS. TEMPORARY PAVING MATERIALS, SUCH AS PLYWOOD, LUMBER OR RUBBER MATTING, SPREAD OVER THE ROOT ZONE OF PUBLIC TREES MAY BE REQUIRED TO PREVENT COMPACTION. IF A PUBLIC TREE NEEDS TO BE REMOVED, THE CONTRACTOR SHALL PROVIDE A TREE MITIGATION PLAN TO THE CITY FORESTRY SECTION [(614) 724-1276] AND REFER TO THE CRPD TREE MITIGATION PLAN GUIDANCE, ANSI A300 AND/OR CITY OF COLUMBUS EXECUTIVE ORDER 2015-01 FOR TREE REPLACEMENT STANDARDS.

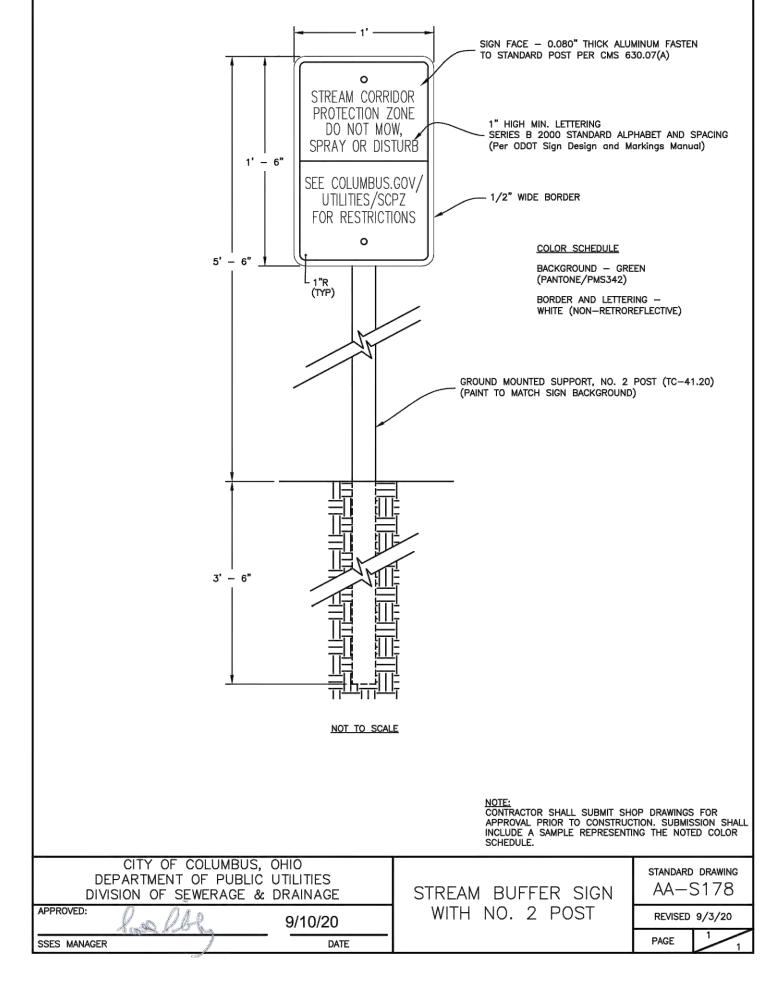
PUBLIC TREE PROTECTION NOTE

A TREE PROTECTION PLAN WITH A DRAWING OF ANY WORK LOCATED WITHIN THE DRIP LINE OF A PUBLIC TREE SHALL BE INCLUDED IN THE APPROVED FINAL SITE COMPLIANCE PLAN (FSCP). REFER TO CRPD STANDARD DRAWING FOR TREE PROTECTION. CONSTRUCTION MATERIALS, EXCAVATION DEBRIS, FUEL, EQUIPMENT OR VEHICLES ARE NOT TO BE STOCKPILED, STORED, DUMPED, OR PARKED WITHIN THE DRIPLINE OF PUBLIC TREES. ALL TREES MUST BE PROTECTED AGAINST INJURY OR DAMAGE TO BRANCHES. TRUNKS, OR ROOTS FROM CONSTRUCTION AND EXCAVATION, AS DESCRIBED IN THE "BEST MANAGEMENT PRACTICES - MANAGING TREES DURING CONSTRUCTION" A COMPANION PUBLICATION TO ANSI A300 PART 5. IF THERE IS A QUESTION WHETHER A TREE OR NOT NEEDS TO BE PROTECTED, THE CONTRACTOR MUST CONTACT THE CITY FORESTRY SECTION AT (614) 724-1276. FAILURE TO CONTACT THE CITY FORESTRY REPRESENTATIVE IN ADVANCE OF CONSTRUCTION WILL RESULT IN THE CONTRACTOR REIMBURSING CITY FORESTRY FOR THE COST OF ANY AND ALL DAMAGE AS DETERMINED BY THE CURRENT ANSI A300/CITY OF COLUMBUS EXECUTIVE ORDER 2015-01 FOR TREE PROTECTION AND REPLACEMENT.

| | , , | | ESTIMATE OF QUANTITIES | | |
|------|----------|------|---|--|--|
| ITEM | QUANTITY | UNIT | DESCRIPTION | | |
| | | | IMPROVEMENTS OUTSIDE R/W | | |
| 203 | 40,000 | C.Y. | EXCAVATION | | |
| 203 | 40,000 | C.Y. | EMBANKMENT | | |
| 207 | 1 | EA | CONCRETE WASHOUT AREA | | |
| 207 | 64,227 | S.Y. | TEMPORARY SEEDING AND MULCHING | | |
| 207 | 3,471 | L.F. | SILT FENCE | | |
| 207 | 1 | EA | STABILIZED CONSTRUCTION ENTRANCE | | |
| 207 | 3 | EA | SEDIMENT BASIN | | |
| 601 | 12 | C.Y. | ROCK CHANNEL PROTECTION, TYPE C WITH FILTER FABRIC | | |
| 604 | 3 | EA | PRECAST PIPE ENDWALL (AA-S169) | | |
| 616 | 15 | MGAL | WATER | | |
| 616 | 15 | TONS | CALCIUM CHLORIDE | | |
| 671 | 4,594 | S.Y. | EROSION CONTROL MAT, TYPE C | | |
| 901 | 197 | LF | TEMPORARY 12 INCH STORM PIPE, WITH TYPE 1 BEDDING | | |
| SPEC | 3 | EA | TEMPORARY OUTLET RISER STRUCTURE W/ FAIRCLOTH SKIMMER | | |
| SPEC | 3 | EA | STREAM CORRIDOR PROTECTION ZONE SIGN, COMPLETE | | |
| | | | | | |

THE QUANTITIES HAVE BEEN ESTABLISHED AS A MEANS FOR THE ENGINEER TO TO ESTIMATE A PRELIMINARY COST AND FOR THE CITY OF COLUMBUS TO ESTABLISH INSPECTION FEES. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DETERMINING THE REQUIRED BID QUANTITIES NECESSARY FOR THE COMPLETION OF THE PLAN IMPROVEMENTS.

THE SPECIFIC PRODUCTS SPECIFIED IN THESE DOCUMENTS CAN BE SUBSTITUTED WITH AN EQUIVALENT ALTERNATIVE PRODUCT IF APPROVED BY THE ENGINEER OF RECORD AND THE CITY OF COLUMBUS. IT IS THE CONTRACTORS RESPONSIBILITY TO PAY ALL FEES ASSOCIATED WITH REVISIONS TO THE PLANS. ENGINEERING DRAWING OR CALCULATION CHANGES, AND JURISDICTIONAL REVIEW (LOCAL, STATE, AND/OR FEDERAL) IF THE PLANS HAVE BEEN SIGNED BY THE CITY OF COLUMBUS OR ARE SUBSTANTIALLY COMPLETE/REVIEWED.



| EASEMENT REFERENCE | | | FERENCE | REVISIONS | | | PLAN PREPARED BY: | |
|--------------------|--------|----------|---------|-----------|-------------|---------------|-------------------|---------------|
| , NO. | COUNTY | RECORDER | GRANTOR | NO. | DESCRIPTION | APPROVAL/DATE | | |
| NO. | VOL. | PAGE | GRANTOR | | | | | |
| | | | |] | | | | |
| | | | | | | | - | GENERAL NOTES |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

PROJECT TITLE: PRIVATE STORM SEWER IMPROVEMENTS FOR WESTBEND DEVELOPMENT PHASE 2474 MCKINLEY AVE

CITY OF COLUMBUS DEPARTMENT OF PUBLIC UTILITIES DIVISION OF SEWERAGE AND DRAINAGE DIVISION USE ONLY

PROJECT NO.: 1005.036

| DIVISION USE ONLY | OWNER | | | | | |
|-------------------|-----------|-------|-----------|----------|----------------------|-----------------|
| | CONTR | ACTOR | | | | |
| | INSPEC | TOR | | | SCALE: NONE | SHEET: 2/8 |
| | AGREEMENT | | COMPLETED | | SOMEE. HOHE | 2, 3 |
| | RPD | CKD | CLD | CON. DR. | CONTRACT DRAWING NO. | RECORD PLAN NO. |
| | | | | | CC-19850 | |
| | | | | | | |

E.P. FERRIS & ASSOCIATES INC

EROSION AND SEDIMENT CONTROL MEASURES ARE REQUIRED AS PART OF THIS PROJECT. EROSION AND SEDIMENT CONTROL MEASURES SPECIFIC TO THIS SITE MAY BE FOUND ON SHEET NO(S). 2-X OF THIS PLAN. LAND-DISTURBING ACTIVITIES MUST COMPLY WITH ALL PROVISIONS OF THE DIVISION OF SEWERAGE AND DRAINAGE EROSION AND SEDIMENT CONTROL REGULATION. ALL LAND-DISTURBING ACTIVITIES SHALL BE SUBJECT TO INSPECTION AND SITE INVESTIGATION BY THE CITY OF COLUMBUS AND/OR THE OHIO EPA.

ALL EROSION SEDIMENTATION CONTROL PRACTICES ARE SUBJECT TO FIELD MODIFICATIONS AT THE DISCRETION OF THE CITY OF COLUMBUS, PROJECT ENGINEER AND/OR THE OHIO EPA.

IT IS THE RESPONSIBILITY OF THE SITE OWNER TO NOTIFY THE CITY OF COLUMBUS TWO WORKING DAYS PRIOR TO COMMENCEMENT OF INITIAL SITE LAND DISTURBANCE ON ANY SITE OF ONE OR MORE ACRES. THIS INCLUDES SITE CLEARING, GRUBBING, AND ANY EARTH MOVING. PRIMARY EROSION AND SEDIMENT CONTROL PRACTICES ARE MANDATED BY REGULATION TO BE IN PLACE FROM THE BEGINNING OF THE CONSTRUCTION ACTIVITY. PLEASE CONTACT THE STORMWATER AND REGULATORY MANAGEMENT SECTION AT (614) 645-6311. DETAILS OF THIS REQUIREMENT MAY BE FOUND IN THE REGULATION FOR CONTROL OF STORMWATER POLLUTION FROM LAND DISTURBANCE. FAILURE TO COMPLY MAY RESULT IN ENFORCEMENT ACTION.

THE NPDES PERMIT HOLDER SHALL PROVIDE QUALIFIED PERSONNEL TO CONDUCT SITE INSPECTIONS ENSURING PROPER FUNCTIONALITY OF THE EROSION AND SEDIMENTATION CONTROLS. ALL EROSION AND SEDIMENTATION CONTROLS ARE TO BE INSPECTED ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF A 1/2" STORM EVENT OR GREATER THAT OCCURS OVER A 24 HOUR PERIOD. RECORDS OF THE SITE INSPECTIONS SHALL BE KEPT BY THE CONTRACTOR AND MADE AVAILABLE TO JURISDICTIONAL AGENCIES IF REQUIRED.

THIS PLAN MUST BE POSTED ON SITE. A COPY OF THE SWPPP PLAN AND THE APPROVED EPA STORMWATER PERMIT (WITH THE SITE-SPECIFIC NOI NUMBER) SHALL BE KEPT ON SITE AT ALL TIMES.

EROSION/SEDIMENT/DUST CONTROL CONSTRUCTION PRACTICES UTILIZE EROSION AND SEDIMENT CONTROL PRACTICES PER THE SOIL CONSERVATION SERVICE STANDARDS AND SPECIFICATIONS AND THE ODNR RAINWATER AND LAND DEVELOPMENT MANUAL. EROSION CONTROL DEVICES ARE TO BE MAINTAINED IN EFFECTIVE WORKING CONDITION DURING CONSTRUCTION AND UNTIL THE CONSTRUCTION AREA HAS BEEN PERMANENTLY STABILIZED. THE CONTRACTOR SHALL CONSULT WITH SOIL CONSERVATION SERVICE AND THE ENGINEER CONCERNING PROPER EROSION AND SEDIMENT PRACTICES.

STOCKPILED TOPSOIL AND EXCAVATED MATERIAL IS TO BE PROTECTED THROUGH THE USE OF TEMPORARY SEEDING, OR COVERED WITH ANCHORED STRAW

FINAL GRADING WILL BE CONSISTENT WITH PRE-CONSTRUCTION TOPOGRAPHY TO MAINTAIN DRAINAGE AND AESTHETICS.

REMOVE ONLY THOSE TREES, SHRUBS, AND GRASSES THAT MUST BE REMOVED TO PERMIT ACTUAL CONSTRUCTION: PROTECT THE REMAINING TO PRESERVE THEIR AESTHETIC AND EROSION CONTROL VALUE.

BACKFILL TRENCHES IMMEDIATELY AFTER COMPACTION. SEED AND MULCH TRENCHES WITHIN TWO WEEKS AFTER TRENCHES ARE OPENED.

SILT FROM CONSTRUCTION OPERATIONS SHALL NOT BE PERMITTED TO ENTER THE STORM DRAIN SYSTEM, WATERWAYS (NATURAL OR MAN-MADE), OR ADJACENT PRIVATE PROPERTY. CONSTRUCTION OCCURRING NEAR STORM DRAIN. INLETS OR WATERWAYS (NATURAL OR MAN-MADE) SHALL REQUIRE EROSION CONTROL MEASURES, SUCH AS SILT FENCE AND STRAW BALE BARRIERS, TO PREVENT SILT FROM ENTERING THE STORM DRAIN, WATERWAYS (NATURAL OR MAN-MADE) OR ADJACENT PRIVATE PROPERTY.

ALL EROSION/SEDIMENT/DUST CONTROL PRACTICES SHALL BE PERFORMED AS RECOMMENDED BY THE SOIL CONSERVATION SERVICE PUBLICATION "ODNR'S RAINWATER AND LAND DEVELOPMENT MANUAL".

STABILIZATION OF DENUDED AREAS

DENUDED AREAS SHALL HAVE SOIL STABILIZATION APPLIED WITHIN SEVEN DAYS OF DISTURBANCE IF THEY ARE TO REMAIN SUBSTANTIALLY UNWORKED FOR MORE THAN 14 DAYS. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. SOIL STABILIZATION SHALL ALSO BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS WHICH MAY NOT BE AT FINAL GRADE, BUT WHICH WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN

STORM WATER RUNOFF FROM DENUDED AREAS SHALL PASS THROUGH A SEDIMENT BASIN OR OTHER SUITABLE SEDIMENT TRAPPING FACILITY. THESE CONTROLS SHALL BE SELECTED AND LOCATED AS DIRECTED BY THE ENGINEER.

CONSTRUCTION ACCESS ROUTES

MEASURES SHALL BE TAKEN TO PREVENT SOIL TRANSPORT ONTO SURFACES WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS, OR ONTO PUBLIC ROADS. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT OFF-SITE TRACKING OF SEDIMENTS BY VEHICLES, EQUIPMENT, AND WORKERS IS

NO SOIL, ROCK, DEBRIS OR ANY OTHER MATERIAL SHALL BE DUMPED OR PLACED INTO A WATER RESOURCE OR INTO SUCH PROXIMITY THAT IT MAY READILY SLOUGH, SLIP, OR ERODE INTO A WATER RESOURCE UNLESS SUCH DUMPING OR PLACING IS AUTHORIZED BY THE ENGINEER. UNSTABLE SOILS PRONE TO SLIPPING OR LAND SLIDING SHALL NOT BE GRADED, EXCAVATED, FILLED OR HAVE LOADS IMPOSED UPON THEM UNLESS THE WORK IS DONE IN ACCORDANCE WITH A QUALIFIED PROFESSIONAL ENGINEER'S RECOMMENDATIONS TO CORRECT, ELIMINATE OR ADEQUATELY ADDRESS THE PROBLEMS.

<u>ESTABLISHMENT OF PERMANENT VEGETATION</u>

PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL GROUND COVER IS ACHIEVED WHICH, IN THE OPINION OF THE ENGINEER, IS MATURE ENOUGH TO CONTROL SOIL EROSION SATISFACTORILY AND TO SURVIVE ADVERSE WEATHER CONDITIONS.

SEEDING AND MULCHING:

TEMPORARY SEEDING SHALL CONSIST OF ANNUAL RYE-GRASS AS PER ITEM 207. SEED AND MULCHING SHALL BE APPLIED IN ACCORDANCE WITH ITEM 659. 1. PERMANENT SEEDING AND MULCHING SHALL BE TREATED IN ACCORDANCE

WITH ITEM 659.

<u> TIMING OF SEDIMENT-TRAPPING PRACTICES</u> SEDIMENT CONTROL PRACTICES SHALL BE FUNCTIONAL THROUGHOUT EARTH-DISTURBING ACTIVITY. SETTLING FACILITIES, PERIMETER CONTROLS AND OTHER PRACTICES INTENDED TO TRAP SEDIMENT SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING OR CONSTRUCTION AND WITHIN SEVEN DAYS FROM THE START OF GRUBBING. THEY SHALL CONTINUE TO FUNCTION UNTIL THE UPSLOPE DEVELOPMENT AREA IS RE-STABILIZED. THESE CONTROLS SHALL BE SELECTED AND LOCATED AS DIRECTED BY THE ENGINEER.

NOTE: LOCATIONS SHOWN FOR SEDIMENT FILTERING BARRIERS ARE SUGGESTED LOCATIONS; THE FINAL AND MOST APPROPRIATE LOCATION FOR THESE DEVICES SHALL BE APPROVED BY THE ENGINEER, BASED ON SITE CONDITIONS AND OBSERVED TOPOGRAPHY. PROPER IMPLEMENTATION, INSTALLATION, MAINTENANCE, AND REPAIR OF SEDIMENT FILTERING BARRIERS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

OUTFLOWS FROM DEWATERING OPERATIONS ALL WATER PRODUCED FROM CLEANING AND DEWATERING OPERATIONS, WHETHER SPECIFICALLY FROM TRENCH DEWATERING OPERATIONS OR FROM MORE EXTENSIVE DEWATERING OPERATIONS, SHALL BE DISCHARGED IN SUCH A MANNER AS TO ELIMINATE EROSION FROM SUCH A DISCHARGE BY DIVERTING THE WATER THROUGH ONE OR MORE FILTER FENCES. PRIOR TO PUMPING, THE ENGINEER SHALL APPROVE THE INSTALLATION OF THE FILTER FENCE.

ADDITIONAL_CONTROLS THE CONTRACTOR SHALL ENSURE THAT NO SEDIMENTS ARE TRACKED OFF-SITE BY CONSTRUCTION EQUIPMENT, VEHICLES, AND WORKERS. THE CONTRACTOR SHALL ALSO ENSURE THAT NO OTHER SOLID (OTHER THAN SEDIMENT) OR LIQUID WASTE IS DISCHARGED INTO ANY STORM WATER FLOW.

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 PROCEDURES, ACTIVITIES, OR OPERATIONS INCLUDE BUT ARE NOT LIMITED TO:

DISPOSING OF EXCESS OR UNSUITABLE EXCAVATED MATERIAL IN WETLANDS OR FLOOD PLAINS, EVEN WITH THE PERMISSION OF THE PROPERTY OWNER.

INDISCRIMINATE, ARBITRARY, OR CAPRICIOUS OPERATION OF EQUIPMENT IN ANY STREAM CORRIDORS, ANY WETLANDS, ANY SURFACE WATERS, OR OUTSIDE THE EASEMENT LIMITS.

3. PUMPING OF SEDIMENT-LADEN WATER FROM TRENCHES OR OTHER EXCAVATIONS INTO ANY SURFACE WATERS, ANY STREAM CORRIDORS, ANY WETLANDS, OR STORM DRAINS.

4. DISCHARGING POLLUTANTS SUCH AS CHEMICALS, FUELS, 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.

5. PERMANENT OR UNSPECIFIED ALTERATION OF THE FLOW LINE OF A STREAM.

DISPOSAL OF TREES, BRUSH AND OTHER DEBRIS IN ANY STREAM

CORRIDORS, ANY WETLANDS, ANY SURFACE WATERS, OR AT UNSPECIFIED

6. DAMAGING VEGETATION OUTSIDE OF THE CONSTRUCTION AREA.

8. OPEN BURNING OF PROJECT DEBRIS WITHOUT A PERMIT.

9. STORING CONSTRUCTION EQUIPMENT AND VEHICLES AND/OR STOCKPILING CONSTRUCTION MATERIALS ON PROPERTY, PUBLIC OR PRIVATE, NOT PREVIOUSLY SPECIFIED BY THE ENGINEER FOR SAID PURPOSES.

MAINTENANCE AND INSPECTION

ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE DESIGNED AND CONSTRUCTED TO MINIMIZE MAINTENANCE REQUIREMENTS. THEY SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. MAINTENANCE AND INSPECTION OF ALL EROSION/SEDIMENT CONTROL DEVICES REQUIRED BY THE ENGINEER SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. INSPECTION SHALL BE PERFORMED AS PRESCRIBED IN THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (N.P.D.E.S.) GENERAL PERMIT. INSPECTIONS SHALL BE PERFORMED BY THE CONTRACTOR, IN THE PRESENCE OF THE ENGINEER ONCE EVERY 7 CALENDAR DAYS AND/OR WITHIN 24 HOURS AFTER ANY RAIN EVENT OF GREATER THAN 0.5 INCHES IN A 24 HOUR PERIOD. THESE INSPECTIONS SHALL IDENTIFY AREAS CONTRIBUTING TO STORM WATER DISCHARGES ASSOCIATED WITH THE PROJECT: EVALUATE THE ADEQUACY, IMPLEMENTATION, AND MAINTENANCE OF EXISTING AND PROPOSED EROSION/ SEDIMENTATION MEASURES; AND DETERMINE WHETHER ADDITIONAL MEASURÉS ARE REQUIRED.

ACCEPTABLE INSPECTION REPORTS SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER, IF REQUESTED, WITHIN 48 HOURS OF INSPECTION COMPLETION. THE REPORT SHALL CONTAIN THE RESULTS OF THE INSPECTION, NAME(S) AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE STORM WATER POLLUTION PLAN, A CERTIFICATION THAT THE FACILITY IS IN COMPLIANCE WITH THE PLAN, AND IDENTIFICATION OF ANY INCIDENTS OF NON-COMPLIANCE.

POLLUTION PREVENTION PLAN AVAILABILITY AND UPDATES AVAILABILITY OF THE POLLUTION PREVENTION PLAN ON-SITE. THE OWNER SHALL ALSO BE SOLELY RESPONSIBLE TO PERFORM ALL UPDATES AND AMENDMENTS TO THE POLLUTION PREVENTION PLAN.

STREET CLEANING, AS NEEDED, IS REQUIRED THROUGH THE DURATION OF THIS CONSTRUCTION PROJECT. THIS INCLUDES SWEEPING, POWER CLEANING AND MANUAL (IF NECESSARY) REMOVAL OF DIRT OR MUD IN THE STREET GUTTERS.

THIS PLAN MUST BE POSTED ON-SITE. A COPY OF THE SWPPP AND THE APPROVED EPA STORMWATER PERMIT (WITH THE SITE-SPECIFIC NOI NUMBER) SHALL BE KEPT ON-SITE AT ALL TIMES.

ALL EROSION AND SEDIMENT CONTROL PRACTICES ARE SUBJECT TO FIELD MODIFICATION AT THE DISCRETION OF THE CITY OF COLUMBUS AND/OR THE

DIRECT DISCHARGE OF SEDIMENT LADEN WATER TO THE CITY'S SEWER SYSTEM OR A RECEIVING STREAM IS A VIOLATION OF OHIO EPA AND CITY OF COLUMBUS REGULATIONS. THE CONTRACTOR WILL BE HELD LIABLE FOR THE VIOLATION AND SUBSEQUENT FINES.

THE USE OF STRAW WATTLES HAS PROVEN TO BE A VERSATILE AND EFFECTIVE ESC BMP, ESPECIALLY IN RESIDENTIAL SETTINGS. STRAW WATTLES MAY BE SUBSTITUTED FOR SILT FENCE.

STRAW WATTLES OR COMPOST ROLLS HAVE TO BE A MINIMUM OF 12 INCHES IN DIAMETER NOW (OEPA). THE USE OF COMPOST FILTER SOCKS AND COMPOST BLANKETS ARE GAINING WIDER ACCEPTANCE NATIONWIDE. THEY ARE NOW APPROVED FOR USE ON ALL

COLUMBUS SWPPP PLANS AND CONSTRUCTION SITES. ANY EXISTING STORM INLETS IMPACTED BY THE NEW CONSTRUCTION ACTIVITY

WILL NEED THE APPROPRIATE INLET PROTECTION FOR SEDIMENT CONTROL. THE EXACT LOCATION OF THE CONCRETE WASHOUT(S) MAY BE FIELD LOCATED BY THE ON-SITE PROJECT ENGINEER/CONTACT.

THE USE OF PORTABLE CONCRETE WASHOUT UNITS IS APPROVED (AND ENCOURAGED) FOR ALL CONSTRUCTION AREAS IN THE CITY OF COLUMBUS.

PLAN PREPARED BY:

EROSION AND SEDIMENTATION CONTROL NARRATIVE

OEPA NOTICE OF INTENT PERMIT NUMBER: 4GC08870*AG

PLAN DESIGNER: E.P. FERRIS & ASSOCIATES 2130 QUARRY TRAILS DRIVE, 2ND FLOOR

COLUMBUS, OH 43212 PHONE: 614-299-2999 FAX: 614-299-2992 EMAIL: cbuckley@epferris.com

OWNER/DEVELOPER: 842 NORTH FOURTH STREET, SUITE #200

COLUMBUS, OH 43215 CONTACT: MICHAEL AMICON PH: 614-286-2143

THE EXISTING SITE CONSISTS OF A FORMER JUNK YARD BORDERED ON THE WEST BY MCKINLEY AVENUE. THE EAST BY THE PROJECT DESCRIPTION: SCIOTO RIVER, AND THE NORTH BY LARRISON LAKE. CONSTRUCTION ACTIVITIES WILL INCLUDE THE CONSTRUCTION OF MULTI-FAMILY BUILDINGS, ROADWAYS, AND DRIVEWAYS. THE OVERALL DISTURBED AREA CONSISTS OF APPROXIMATELY 13.27 AC.

THE SITE GENERALLY DRAINS TO THE WEST AND NORTH TO LARRISON LAKE AND ULTIMATELY THE SCIOTO RIVER, WHICH IS SITE DRAINS TO: THE NEAREST WATER COURSE.

EXISTING SITE CONDITIONS: THE SITE SLOPES GENERALLY FROM THE SOUTH TO THE NORTH AND THE WEST TO THE EAST, TOWARDS LARRISON LAKE AND THE

THE EXISTING ADJACENT DEVELOPMENTS HAVE BEEN TAKEN INTO ACCOUNT FOR THE STORM SYSTEM AND FLOOD ROUTING ADJACENT AREAS: FOLLOWING EXISTING DRAINAGE PATH.

SCIOTO RIVER CRITICAL AREAS:

EROSION CONTROL MEASURES: EROSION AND SITE RUN-OFF WILL BE CONTROLLED THROUGH THE USE OF FILTER FABRIC FENCE PLACED AT LOW LYING AREAS AROUND THE SITE AS WELL AS EROSION CONTROL MATTING ON SLOPES 4:1 OR GREATER.

SEDIMENT CONTROL MEASURES: SEDIMENT WILL BE CONTROLLED THROUGH THE USE OF TEMPORARY SEDIMENT BASINS LOCATED THROUGHOUT THE SITE.

PERMANENT STABILIZATION: ALL DISTURBED AREAS ARE TO BE SEEDED. SEE SHEET 2 FOR SEEDING NOTES.

MAINTENANCE: ALL EROSION CONTROL DEVICES WILL BE INSPECTED BY THE CONSTRUCTION SUPERINTENDENT DAILY AND AFTER SIGNIFICANT RAINFALLS. ANY DAMAGED DEVICES WILL BE REPAIRED AND/OR REPLACED IMMEDIATELY OR AS NECESSARY.

CONSTRUCTION SEQUENCE: 1. INSTALL ROCK CONSTRUCTION ENTRANCE.

INSTALL PERIMETER EROSION & SEDIMENT CONTROLS.

CONSTRUCT AND INSTALL TEMPORARY SEDIMENT BASINS A, B, AND C. INSTALL OUTLET CONTROL

STRUCTURES, OUTLETS, EROSION CONTROL MATING, AND SKIMMERS.
CLEAR & GRUB AS NECESSARY FOR THE INSTALLATION OF EROSION & SEDIMENT CONTROL DEVICES. 5. BEGIN MASS EXCAVATION ACTIVITIES.

6. PERMANENTLY STABILIZE/SEED & MULCH OR SOD DISTURBED AREAS PER SPECIFICATION. 7. NOTICE OF INTENT (NOI) TO STAY OPEN THROUGH FINAL CONSTRUCTION.

SITE CONTACT: WESTBEND QOZB, LLC 842 NORTH FOURTH STREET, SUITE #200

COLUMBUS, OH 43215 CONTACT: MICHAEL AMICON PH: 614-286-2143 EMAIL: mamicon@thrivecos.com

TEMPORARY SEDIMENT BASIN INSPECTION & MAINTENANCE SCHEDULE

| INSPECTION ITEM | MAINTENANCE PROCEDURES | FREQUENCY OF INSPECTION |
|-----------------------------|--|--|
| TEMPORARY SEDIMENT BASIN | ESTABLISH VEGETATIVE COVER AND FERTILIZE AS NECESSARY TO MAINTAIN A VIGOROUS COVER IN AND AROUND THE SEDIMENT BASIN. | WEEKLY AND AFTER EACH RUNOFF EVENT |
| | 2. REMOVE UNDESIRABLE VEGETATION PERIODICALLY TO PREVENT GROWTH OF TREES AND SHRUBS ON THE EMBANKMENT AND SPILLWAY AREAS. | |
| | 3. PROMPTLY REPAIR ERODED AREAS. REESTABLISH VEGETATIVE COVER IMMEDIATELY WHERE SCOUR EROSION HAS REMOVED ESTABLISHED SEEDING. | |
| | 4. PROMPTLY REMOVE ANY BURROWING RODENTS THAT MAY INVADE AREAS OF THE EMBANKMENT. | |
| | 5. REMOVE TRASH AND DEBRIS THAT MAY BLOCK SPILLWAYS AND ACCUMULATE IN THE POND. | |
| | 6. REMOVE SEDIMENT FROM BASIN WHEN IT FILLS THE DESIGN DEPTH OF THE SEDIMENT STORAGE ZONE. THIS ELEVATION SHALL BE MARKED ON A CLEANOUT STAKE NEAR THE CENTER OF THE BASIN. | |
| | 7. CHECK SPILLWAY OUTLETS AND POINTS OF INFIOW TO ENSURE DRAINAGE IS NOT CAUSING EROSION AND THAT OUTLETS ARE NOT CLOGGED. REPLACE DISPLACED RIPRAP IMMEDIATELY. | |
| | 8. AFTER THE ENTIRE CONSTRUCTION PROJECT IS COMPLETED, TEMPORARY SEDIMENT BASINS SHOULD BE DEWATERED AND REGRADED TO CONFORM TO THE CONTOURS OF THE AREA. ALL TEMPORARY STRUCTURES SHOULD BE REMOVED AND THE AREA SEEDED, MULCHED AND STABILIZED AS NECESSARY. | |

THIS PLAN MUST BE POSTED ON-SITE. A COPY OF THE SWPPP PLAN AND THE APPROVED EPA STORMWATER PERMIT (WITH THE SITE-SPECIFIC NOI NUMBER) SHALL BE KEPT ON-SITE AT ALL

PERMANENT STABILIZATION

| AREA REQUIRING PERMANENT STABILIZATION | TIME FRAME TO APPLY EROSION CONTROLS |
|---|--|
| ANY AREAS THAT WILL LIE DORMANT FOR ONE YEAR OR MORE | WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE |
| ANY AREAS WITHIN 50 FEET OF A SURFACE WATER OF THE STATE AND AT FINAL GRADE | WITHIN TWO DAYS OF REACHING FINAL GRADE |
| ANY OTHER AREAS AT FINAL GRADE | WITHIN SEVEN DAYS OF REACHING FINAL GRADE WITHIN THAT AREA |

TEMPORARY STABILIZATION

| AREA REQUIRING TEMPORARY STABILIZATION | TIME FRAME TO APPLY EROSION CONTROLS |
|--|---|
| ANY DISTURBED AREAS WITHIN 50 FEET OF A SURFACE WATER OF THE STATE AND NOT AT FINAL GRADE | WITHIN TWO DAYS OF THE MOST RECENT DISTURBANCE IF THE AREA WILL REMAIN IDLE FOR MORE THAN 14 DAYS |
| FOR ALL CONSTRUCTION ACTIVITIES, ANY DISTURBED AREA THAT WILL BE DORMANT FOR MORE THAN 14 DAYS BUT LESS THAN ONE YEAR, AND NOT WITHIN 50 FEET OF A SURFACE WATER OF THE STATE. | WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE WITHIN THE AREA FOR RESIDENTIAL SUBDIVISIONS, DISTURBED AREAS MUST BE STABILIZED AT LEAST SEVEN 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 |

WHERE VEGETATIVE STABILIZATION TECHNIQUES MAY CAUSE STRUCTURAL INSTABILITY OR ARE OTHERWISE UNOBTAINABLE, ALTERNATIVE STABILIZATION TECHNIQUES MUST BE EMPLOYED.

EASEMENT REFERENCE **REVISIONS** APPROVAL/DATE COUNTY RECORDER DESCRIPTION GRANTOR PAGE

SWPPP NOTES

PRIVATE STORM SEWER IMPROVEMENTS FOR WESTBEND DEVELOPMENT PHASE 2474 MCKINLEY AVE

CITY OF COLUMBUS DEPARTMENT OF PUBLIC UTILITIES DIVISION OF SEWERAGE AND DRAINAGE DIVISION USE ONLY

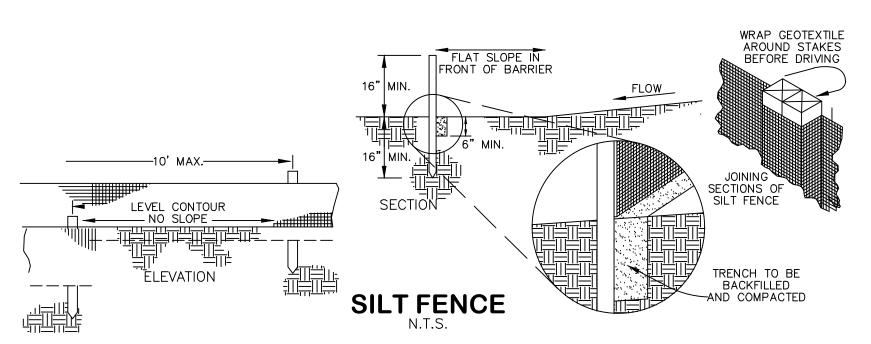
DIVISION USE ONLY OWNER CONTRACTOR **INSPECTOR** SHEET: 3/8 SCALE: NONE AGREEMENT COMPLETED CONTRACT DRAWING NO. RECORD PLAN NO. RPD | CKD | CLD | CON. DR. CC-19850

E.P. FERRIS & ASSOCIATES INC

PROJECT NO.: 1005.036

STABILIZED CONSTRUCTION ENTRANCE

- 1. STONE SIZE USE 2" STONE OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT. 2. LENGTH - A MINIMUM OF 100', BUT MAY BE LONGER AS DETERMINED BY THE CITY OF COLUMBUS.
- 3. THICKNESS NOT LESS THAN SIX (6) INCHES.
- 4. WIDTH TWENTY (20) FEET MINIMUM BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. MAY BE WIDER AS DETERMINED BY THE CITY OF COLUMBUS. 5. FLARES OR RADII SHALL BE INSTALLED AT THE ENTRANCE IF THE PUBLIC ROADWAY SPEEDS AND/OR
- TRAFFIC CONDITIONS WARRANT IT, OR IF DIRECTED BY C.O.C. PERSONNEL. 6. FILTER FABRIC — WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE.
- 7. SURFACE WATER ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1
- 8. CULVERT PIPE 12" MINIMUM PIPE IS REQUIRED IF A STORM DITCH OR SWALE EXISTS AT THE PROPOSED ENTRANCE.THE CULVERT PIPE INVERTS SHALL MATCH THE EXISTING DITCH AT BOTH SIDES OF
- 9. MAINTENANCE THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PROTECT THE PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED
- 10. WASHING WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE INTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE
- 11. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN. 12. MAINTENANCE OF TRAFFIC SIGNAGE SHALL BE A 48" x 48" CONSTRUCTION ENTRANCE AHEAD, 200' (ADEQUATE SIGHT DISTANCE SHALL BE CONSIDERED) BEFORE THE ENTRANCE ON BOTH SIDES OF THE ROAD OR AS APPROVED BY THE C.O.C. TEMPORARY TRAFFIC CONTROL COORDINATOR. YOU SHALL CALL THE TTCC @ (614) 645-6269 OR 645-5845 BEFORE STARTING THE ENTRANCE WORK.



- SILT FENCE SHALL BE CONSTRUCTED BEFORE UPPSLOPE LAND DISTURBANCE
- 2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS THAT MAY CARRY CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
- 3. ENDS OF THE SILT FENCES SHALL BE BROUGHT UPSLOPE SLIGHTLY SO THAT WATER PONDED BY THE SILT FENCE WILL BE PREVENTED FROM FLOWING AROUND THE ENDS.
- 4. SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
- 5. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FEET (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE SILT FENCE.
- 6. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
- 7. THE SILT FENCE SHALL BE PLACED IN AN EXCAVATED OR SLICED TRENCH CUT A MINIMUM OF 6 INCHES DEEP. THE TRENCH SHALL BE MADE WITH A TRENCHER, CABLE LAYING MACHINE, SLICING MACHINE, OR OTHER SUITABLE DEVICE THAT WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.
- 8. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE. A MINIMUM OF 8 INCHES OF GEOTEXTILE MUST BE PLACED BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6-INCH DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED ON BOTH SIDES OF THE FABRIC.
- 9. SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST WITH A MINIMUM 6-INCH OVERLAP PRIOR TO DRIVING INTO THE GROUND, SEE DETAIL.
- 10. MAINTENANCE: SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER THE FABRIC, FLOWS AROUND THE FENCE ENDS, OR IN ANY OTHER WAY ALLOWS A CONCENTRATED FLOW DISCHARGE, ONE OF THE FOLLOWING OPTIONS SHALL BE PERFORMED:

- 10.1. THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED, ACCUMULATED SEDIMENT SHALL BE REMOVED, OR 10.3. OTHER PRACTICES SHALL BE INSTALLED.
- SEDIMENT DEPOSITS SHALL BE ROUTINELY REMOVED WHEN THE DEPOSIT REACHES APPROXIMATELY ONE-HALF OF THE HEIGHT OF THE SILT FENCE.
- SILT FENCES SHALL BE INSPECTED AFTER EACH RAINFALL AND AT LEAST DAILY DURING A PROLONGED RAINFALL. THE LOCATION OF EXISTING SILT FENCE SHALL BE REVIEWED DAILY TO ENSURE ITS PROPER LOCATION AND EFFECTIVENESS. IF DAMAGED, THE SILT FENCE SHALL BE REPAIRED OR REPLACED IMMEDIATELY.
- CRITERIA FOR SILT FENCE MATERIALS:
- FENCE POST: THE LENGTH SHALL BE A MINIMUM OF 32 INCHES. WOOD POSTS SHALL BE 2-BY-2-INCH NOMINAL DIMENSIONED HARDWOOD OF SOUND QUALITY. POSTS SHALL BE FREE OF KNOTS, SPLITS, AND OTHER VISIBLE IMPERFECTIONS THAT WOULD WEAKEN THE POSTS. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FEET. POSTS SHALL BE DRIVEN A MINIMUM OF 16 INCHES INTO THE GROUND WHERE POSSIBLE. IF NOT POSSIBLE, THE POSTS SHALL BE ADEQUATELY SECURED TO PREVENT OVERTURNING OF THE FENCE DUE TO SEDIMENT/WATER LOADING.
- 2. SILT FENCE FABRIC: SEE CHART BELOW.
- NOTES: THE USE OF STRAW WATTLES HAS PROVEN TO BE A VERSATILE AND EFFECTIVE ESC BMP, ESPECIALLY IN RESIDENTIAL SETTINGS. STRAW WATTLES MAY BE SUBSTITUTED FOR SILT FENCE. THE USE OF COMPOST FILLER SOCKS AND COMPOST BLANKETS ARE GAINING WIDER ACCEPTANCE NATIONWIDE. THEY ARE NOW APPROVED FOR USE ON CITY OF POWELL PLANS AND CONSTRUCTION SITES.
 - STRAW WATTLES OR COMPOST ROLLS HAVE A MINIMUM DIAMETER OF 12"

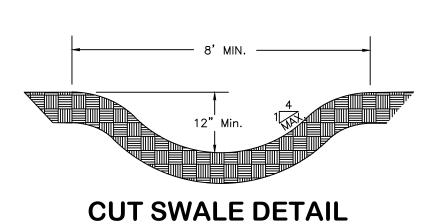
| FABRIC PROPERTIES | VALUES | TEST METHOD |
|--------------------------------|------------------|-------------|
| Minimum Tensile Strength | 120 lbs. (535 N) | ASTM D 4632 |
| Maximum Elongation at 60 lbs | 50% | ASTM D 4632 |
| Minimum Puncture Strength | 50 lbs (220 N) | ASTM D 4833 |
| Minimum Tear Strength | 40 lbs (180 N) | ASTM D 4533 |
| Apparent Opening Size | 0.84 mm | ASTM D 4751 |
| Minimum Permittivity | 1X10-2 sec1 | ASTM D 4491 |
| UV Exposure Strength Retention | 70% | ASTM G 4355 |

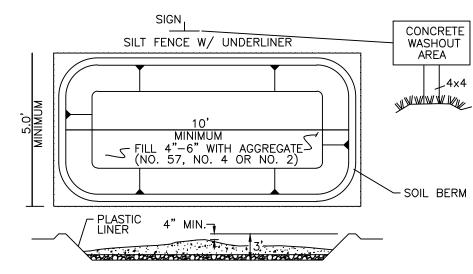
LIMITS OF WASTE **EXISTING GROUND -**2' CLAY CAP -SURFACE BENTONITE TRENCH PLUG GRAVEL BEDDING REFUSE 4 UTILITY LINE

- 1. BENTONITE PLUG TO BE KEYED INTO SURROUNDING MATERIAL A MINIMUM OF 6 INCHES.
- 2. HYDRATE BENTONITE CHIPS IN 6 IN. MAX. LIFTS AND PER MANUFACTURER'S RECOMMENDATIONS.
- 3. WHERE UTILITIES ARE TWO PER TRENCH, BENTONITE PLUG TO BE EXTENDED TO ENCOMPASS BOTH.

BENTONITE TRENCH PLUG

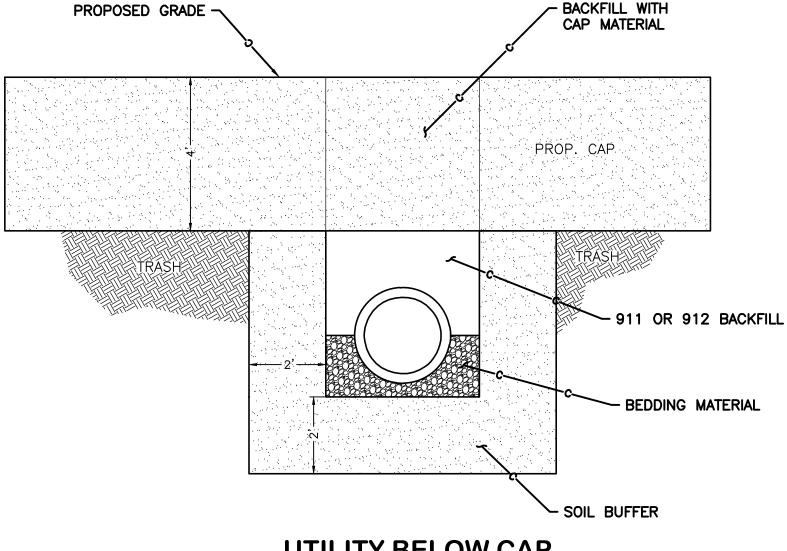
N.T.S.





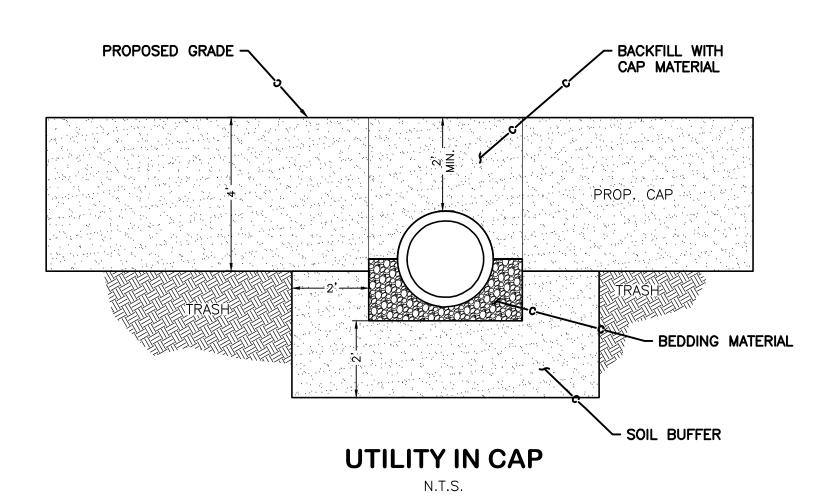
CONCRETE WASHOUT AREA

THE USE OF PORTABLE CONCRETE WASHOUT UNITS IN APPROVED (AND ENCOURAGED) FOR ALL CONSTRUCTION AREAS IN THE CITY OF COLUMBUS.



UTILITY BELOW CAP

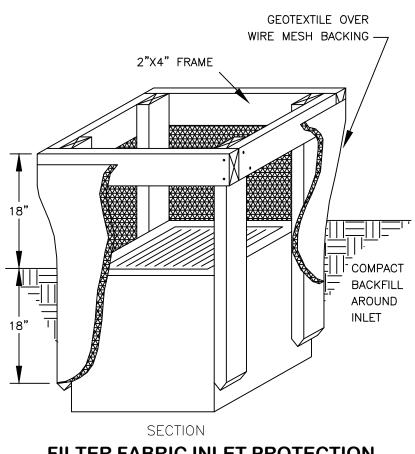
N.T.S.



AS PER PLAN: UTILITY IN CAP

SOME OF THE UTILITY LINES MAY BE INSTALLED BELOW THE EXISTING SOIL CAP LAYER. WHERE THIS OCCURS, THE TRENCHES WILL BE OVER EXCAVATED AND A MINIMUM OF 2 FEET OF CLEAN, COMPACTED FILL PLACED PRIOR TO THE INSTALLATION OF THE UTILITY LINE.

BENTONITE TRENCH PLUGS WILL BE INSTALLED WHERE UTILITY TRENCHES ENTER THE SITE AND ARE EXCAVATED BELOW THE SOIL CAP.



FILTER FABRIC INLET PROTECTION

- 1. INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE INLET BECOMES FUNCTIONAL.
- 2. THE EARTH AROUND THE INLET SHALL BE EXCAVATED COMPLETELY TO A DEPTH AT LEAST 18 INCHES.
- 3. THE WOODEN FRAME SHALL BE CONSTRUCTED OF 2-INCH BY 4-INCH CONSTRUCTION GRADE LUMBER. THE 2-INCH BY 4-INCH POSTS SHALL BE DRIVEN ONE (1) FT. INTO THE GROUND AT FOUR CORNERS OF THE INLET AND THE TOP PORTION OF 2-INCH BY 4-INCH FRAME ASSEMBLED USING THE OVERLAP JOINT SHOWN. THE TOP OF THE FRAME SHALL BE AT LEAST 6 INCHES BELOW ADJACENT ROADS IF PONDED WATER WILL POSE A SAFETY HAZARD TO TRAFFIC.
- 4. WIRE MESH SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT FABRIC WITH WATER FULLY IMPOUNDED AGAINST IT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY TO THE FRAME.
- 5. GEOTEXTILE MATERIAL SHALL HAVE AN EQUIVALENT OPENING SIZE OF 20-40 SIEVE AND BE RESISTANT TO SUNLIGHT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY. IT SHALL EXTEND FROM THE TOP OF THE FRAME TO 18 INCHES BELOW THE INLET NOTCH ELEVATION. THE GEOTEXTILE SHALL OVERLAP ACROSS ONE SIDE OF THE INLET SO THE ENDS OF THE CLOTH ARE NOT FASTENED TO THE SAME POST.
- 6. BACKFILL SHALL BE PLACED AROUND THE INLET IN COMPACTED 6-INCH LAYERS UNTIL THE EARTH IS EVEN WITH NOTCH ELEVATION ON ENDS AND TOP ELEVATION ON SIDES.
- 7. A COMPACTED EARTH DIKE OR CHECK DAM SHALL BE CONSTRUCTED IN THE DITCH LINE BELOW THE INLET IF THE INLET IS NOT IN A DEPRESSION. THE TOP OF THE DIKE SHALL BE AT LEAST 6 INCHES HIGHER THAN THE TOP OF THE
- TO BE USED ON STRUCTURE #'S: 2, 4, & 6.

VERTICAL INLET PROTECTION TO BE USED WHERE POSSIBLE AND ALWAYS IN AREAS TO BE GRASSED.

CITY OF COLUMBUS

| EASEMENT REFERENCE | | | FERENCE | REVISIONS | | | |
|--------------------|-----------------|------|---------|-----------|---------------------|---------|--|
| CITY NO. | COUNTY RECORDER | | CDANTOD | NO. | DESCRIPTION APPROVA | AL/DATE | |
| | VOL. | PAGE | GRANTOR | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
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| | | | | | | | |
| | | | | | | | |

PLAN PREPARED BY:

SWPPP DETAILS

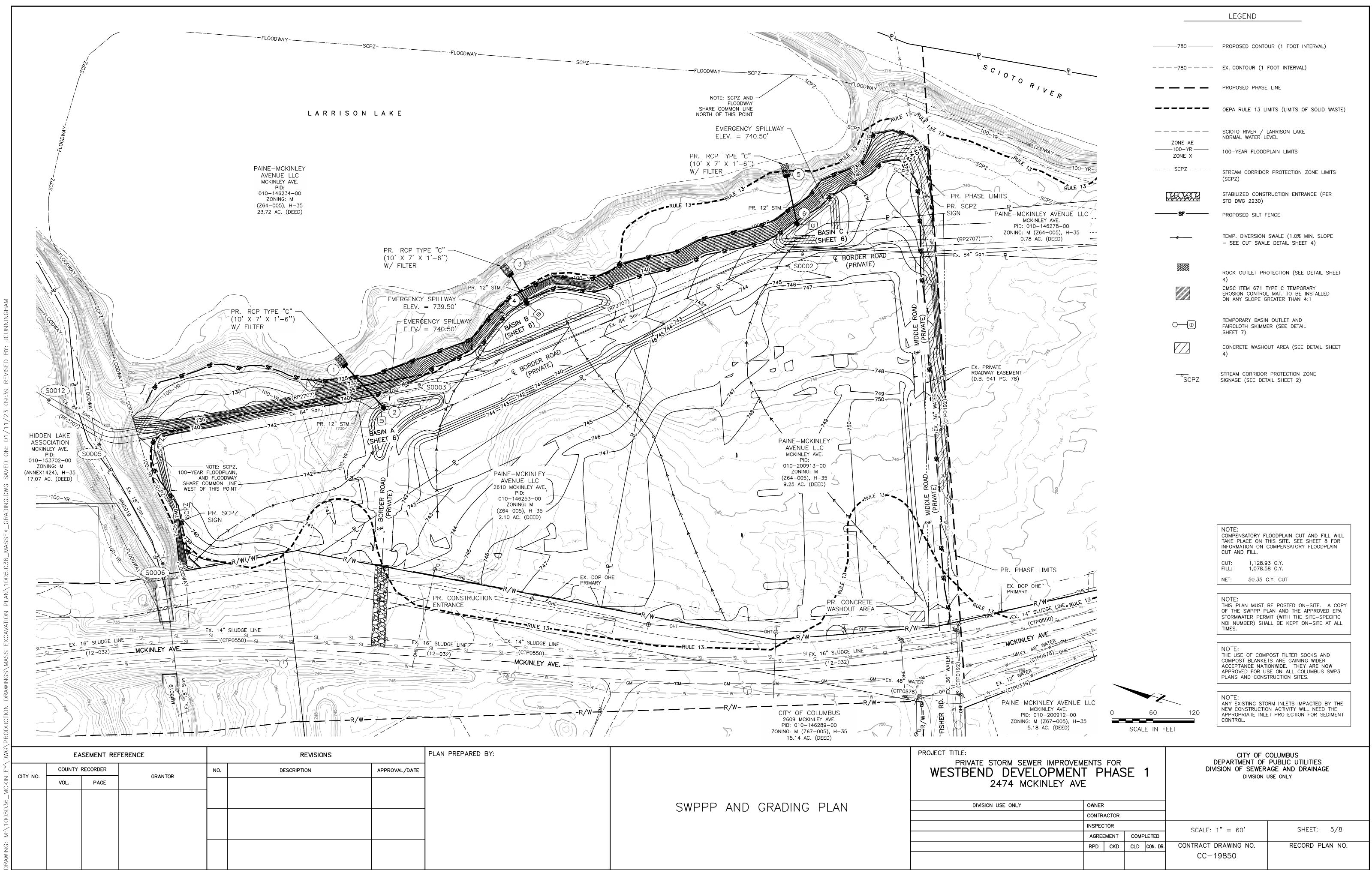
PROJECT TITLE: PRIVATE STORM SEWER IMPROVEMENTS FOR WESTBEND DEVELOPMENT PHASE 2474 MCKINLEY AVE

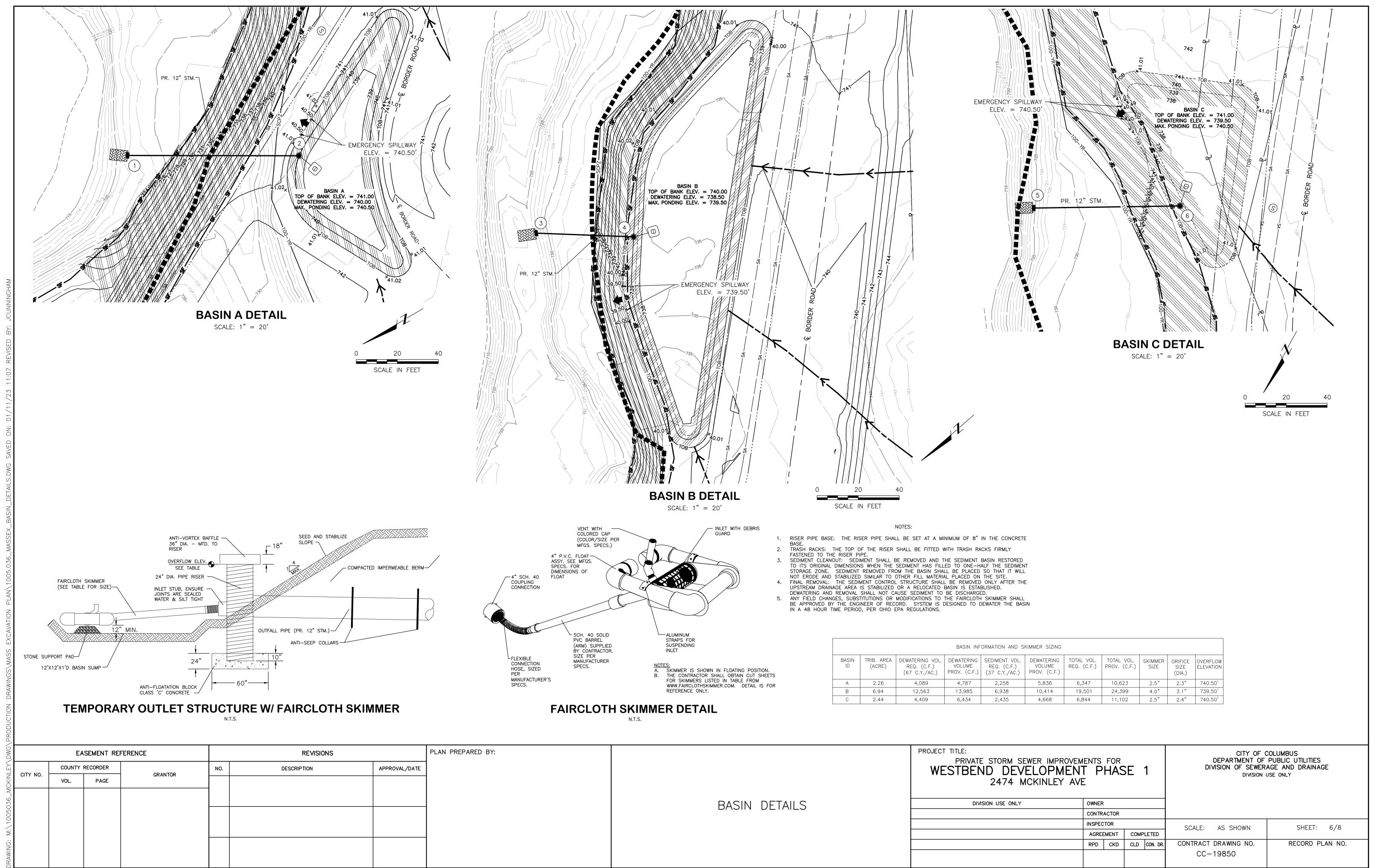
OWNER DIVISION USE ONLY

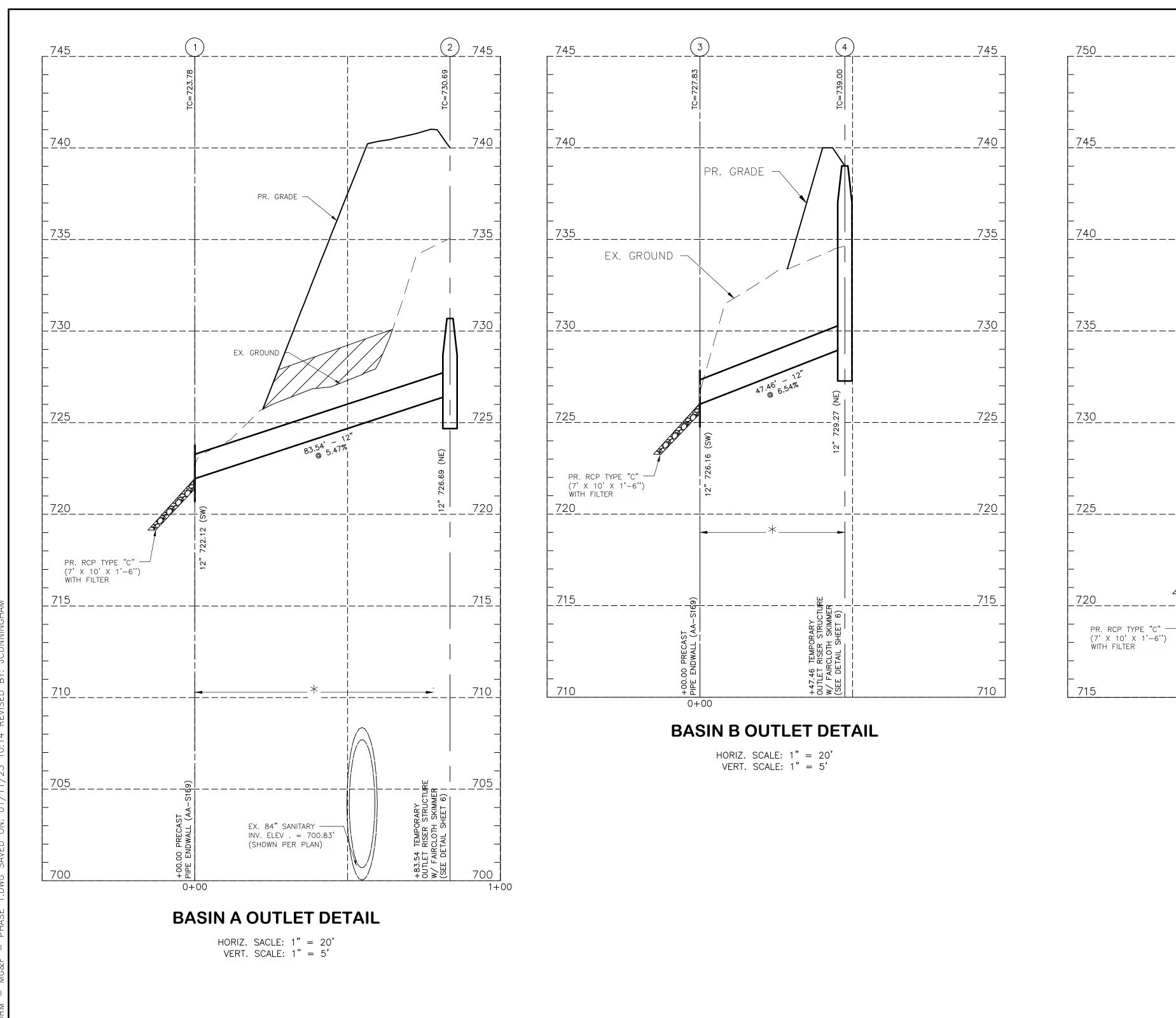
DEPARTMENT OF PUBLIC UTILITIES DIVISION OF SEWERAGE AND DRAINAGE DIVISION USE ONLY

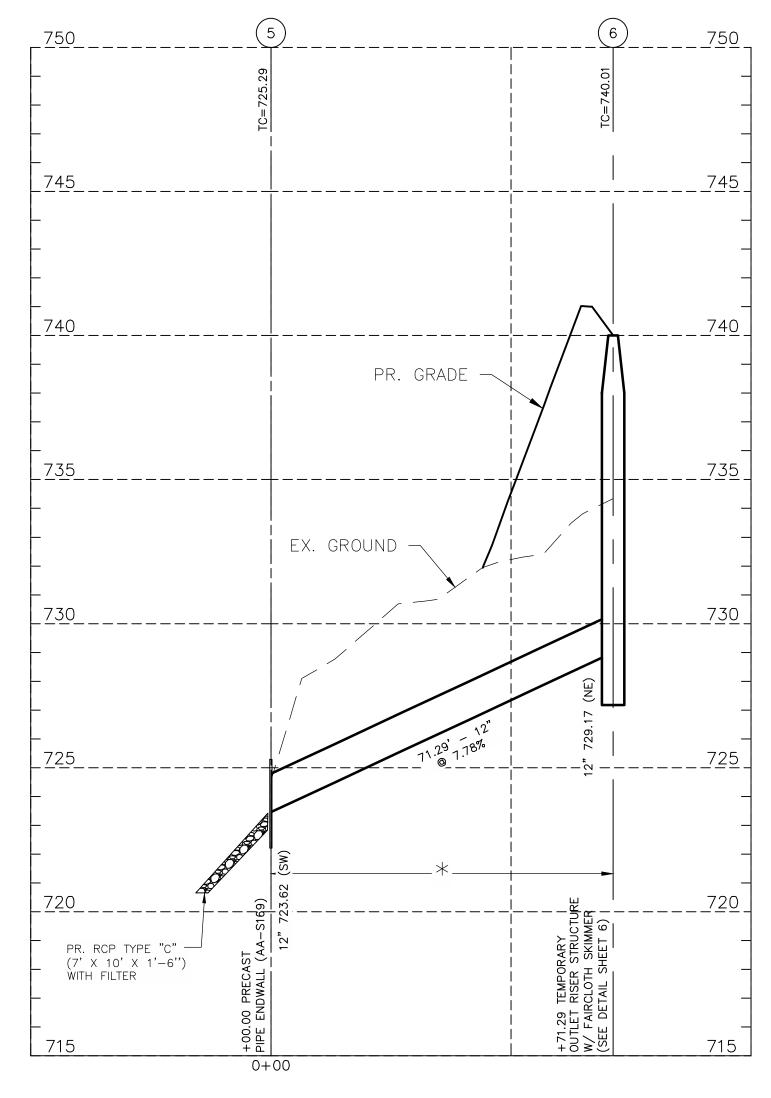
CONTRACTOR INSPECTOR SHEET: 4/8 SCALE: NONE AGREEMENT COMPLETED CONTRACT DRAWING NO. RPD | CKD | CLD | CON. DR. RECORD PLAN NO. CC-19850

PROJECT NO.: 1005.036 E.P. FERRIS & ASSOCIATES INC









BASIN C OUTLET DETAIL

HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 5'

STORM SEWER PIPE DESIGN

START STRUCTURE END STRUCTURE BEARING DISTANCE

1 2 S30° 21' 16"W 83.54'

3 4 S43° 00' 12"W 47.46'

S60° 37′ 25″W

STORM SEWER TABLE AS-BUILT DESIGN STRUCT. NO. NORTHING EASTING NORTHING EASTING 720873.28 1809582.81 2 720801.20 1809540.59 1809780.17 3 720681.29 1809747.80 4 720646.58 5 720339.24 1810036.50' 720304.27 1809974.37

5

PROJECT TITLE: PLAN PREPARED BY: EASEMENT REFERENCE REVISIONS CITY OF COLUMBUS PRIVATE STORM SEWER IMPROVEMENTS FOR WESTBEND DEVELOPMENT PHASE 1 DEPARTMENT OF PUBLIC UTILITIES COUNTY RECORDER DIVISION OF SEWERAGE AND DRAINAGE DESCRIPTION APPROVAL/DATE CITY NO. GRANTOR DIVISION USE ONLY 2474 MCKINLEY AVE PAGE STORM OUTLET PROFILES OWNER DIVISION USE ONLY CONTRACTOR INSPECTOR SCALE: HORIZ.: 1" = 20SHEET: 7/8 VERT.: 1" = 5'AGREEMENT COMPLETED CONTRACT DRAWING NO. RPD CKD CLD CON. DR. RECORD PLAN NO. CC-19850

HORIZ. SCALE: 1" = 30'

VERT. SCALE: 1" = 5'

LEGEND

k ITEM 911 COMPACTED BACKFILL

ITEM 912 COMPACTED GRANULAR MATERIAL

MINIMUM VERTICAL CLEARANCE OF 1.5' BETWEEN STORM SEWER, SANITARY, AND WATER CROSSINGS.

(CE) CONCRETE ENCASEMENT

(SGP)

SANITARY GRADE PIPE WITH WATER TIGHT
JOINTS. ALL STRUCTURES CONNECTED TO
SEWER CALLED OUT AS SANITARY GRADE
PIPE SHALL HAVE SANITARY GRADE PIPE
COUPLINGS AND CONFINED GASKETS.

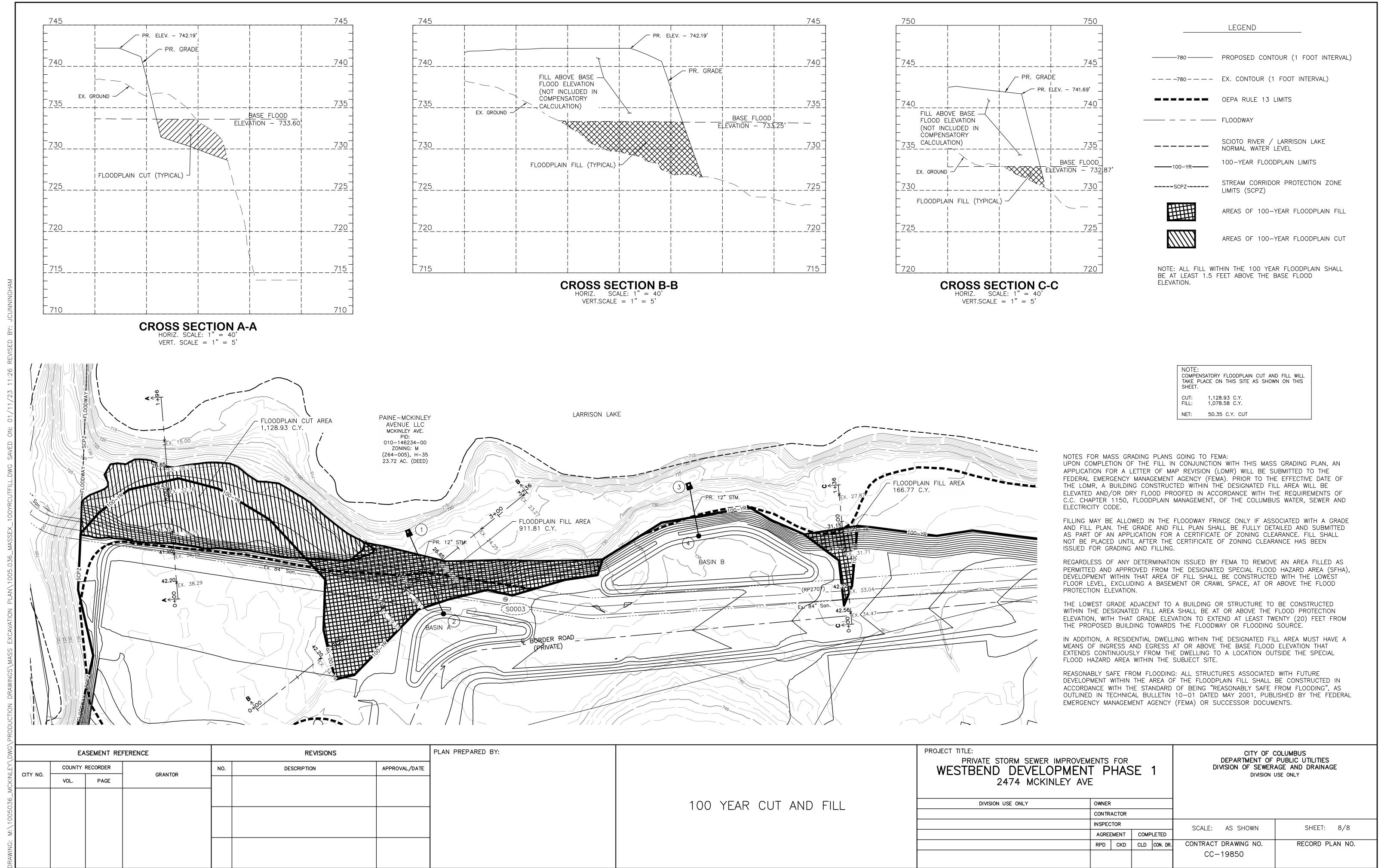
TG) STRUCTURE TO BE ADJUSTED TO GRADE

BENTONITE TRENCH PLUG REQUIRED AT ALL LOCATIONS WHERE STORM SEWER APPROXIMATELY EXITS THE PROJECT SITE. SEE DETAIL SHEET 3.

COMPACTED FILL AREA ITEM 203
EMBANKMENT

NOTE: PIPE INSTALLED IN AREAS OF FILL SHALL REQUIRE THE COMPACTED FILL TO BE PLACED 3' ABOVE THE TOP OF THE PIPE OR TO PROPOSED GRADE, WHICHEVER IS LESS, PRIOR TO PIPE INSTALLATION (SEE FILL AREAS ON PROFILES OF SUCH KNOWN LOCATIONS).

71.29'



APPENDIX H GEOTECHNICAL REPORT AND BORING LOGS



MAIN OFFICE

720 Greencrest Drive Westerville, OH 43081 614.895.1400 **phone** 614.895.1171 **fax**

YOUNGSTOWN OFFICE

8433 South Avenue Building 1, Suite 1 Boardman, OH 44514 330.965.1400 **phone** 330.965.1410 **fax** DAYTON OFFICE

2380 Bellbrook Avenue Xenia, OH 45385 937.736.2053 **phone**

www.gci2000.com

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YOUNGSTOWN OFFICE 8433 South Avenue Bldg 1, Suite 1 Boardman, OH 44514 614.895.1400 phone 614.895.1171 tax

330.965.1400 phone 330.965.1410 fax

www.gci2000.com

January 6, 2020

Mr. Joseph M. Reidy McKinley Avenue Acquisitions, LLC 842 North 4th Street, Suite 200 Columbus, Ohio 43215

Reference: Preliminary Geotechnical Assessment

Buckeye Auto Parts

2474 McKinley Avenue - Columbus, Ohio

GCI Project 19-G-22606-A

Dear Mr. Reidy:

As you authorized, GCI performed a series of test borings at the site as part of an environmental assessment of the subsurface conditions at the site. This report discusses the findings of the 16 test borings that were performed as part of the environmental study and provides a preliminary geotechnical assessment of the impact of the encountered subsurface conditions on the proposed mixed-use development.

SITE AND PROJECT DESCRIPTION

The project site is located due west of the Scioto River, straddling McKinley Avenue. A majority of the site is east of McKinley Avenue, with the Scioto River along its east boundary. A small segment of the site is located west of McKinley Avenue, with existing railroad tracks along its southwest boundary. Houses, a quarry, and a landfill have historically occupied parts of the property. The Buckeye Auto Parts salvage yard has occupied the property since the 1970s. An aerial image of the site is shown below. The photographs on the following pages show the site conditions near the time of the borings.



Site Aerial (obtained from Google Earth, dated March 2018)



Photo 1 (Taken from north-central portion of site, facing southeast)



Photo 2 (Taken from far northern end of site, facing east)



Photo 3 (Taken from eastern-central part of site, facing west)



Photo 4 (Taken from southern part of site, facing northwest)

We were provided with the Conceptual Master Plan, prepared by POD design, and dated December 19, 2019. The plan displays a layout of the proposed buildings and pavement areas. The layout also divides site into six zones as show on the image below.



Conceptual Master Plan (prepared by POD design)

A Site Data sheet is included within the Conceptual Master Plan and describes each zone as follows:

- Zone I: Five 3-story residential buildings;
- Zone II: One 3-story residential building, one 4-story residential building, one 1-story office building, and one 2-story office building;
- Zone III: Three 3-story residential buildings and one 1-story office building;
- Zone IV: Two 4-story residential buildings, one 5-story residential building, and four 1-story office buildings;
- Zone V: One 4-story residential building;
- Zone VI: Two 4-story residential buildings.

SUBSURFACE CONDITIONS

On November 11, 12, 13, 15, and 18, 2019, Envirocore (drilling contractor) performed sixteen (16) standard penetration test borings at the site. GCI representative Andy Shipley was on-site during drilling operations, noting auger spoil constituents and subsurface strata changes. Soil samples retrieved from the borings were classified by a GCI engineer in our laboratory. Attached to this report are two boring location plans (one over a site aerial and one over the site plan) and logs of the test boings. We summarize the subsurface findings below. Refer to the individual boring logs for more detailed information at specific boring locations.

Each of our borings encountered fill of variable constituents. In general, the encountered fills contained a soil-based matrix. This matrix consisted of sands, gravels, silts, and

clays, with sands being the most frequently observed component in our borings. Intermixed within the soil-based matrix were various components as described below:

- Wood was noted within many of our borings; in particular, borings DB-1, DB-8, and DB-12 contained depth ranges over which wood was the primary component.
- Cloth, glass, and metal were noted in some borings in relatively small quantities (significantly less than the observed wood).
- Cinders of an ash-like consistency were noted in many of our borings; the cinders were typically mixed with sands and other fines, giving the materials a dark gray color.
- Concrete fragments and brick fragments.

If we deemed appropriate, some fills were classified under the Unified Soil Classification System; these included Silty Sand with Gravel (SM), Silt (ML), Lean Clay (CL), Lean Clay with Sand (CL), Sandy Lean Clay (CL), and Sandy Lean Clay with Gravel (CL). A majority of the fill materials were noted as mixes, which we deemed as not fitting into a classification. On the logs, "mix" components are listed from highest quantity to lowest quantity constituents as noted in the split spoon samples.

Standard penetration testing N-values varied within the fills. Loose to dense granular fills and soft to hard cohesive fills were noted. N-values were random between borings and at various depth ranges within borings.

We noted moist, very moist, and wet (saturated) materials within our borings; these are noted as such on our logs. Groundwater seepage was encountered during drilling at respective depths of 23.5', 23', 8', 13', 20', and 18', in borings DB-1, DB-2, DB-8, DB-9, DB-11, and DB-12. Wet materials were noted below seepage levels. Practical implications with regards to moisture condition are discussed in the Geotechnical Evaluation section of this report. Note that soil moisture conditions and groundwater observations fluctuate due to changes in precipitation, climate, stabilization time, and other factors that may differ from the time the measurements were made.

Borings DB-1 to 6, DB-10, and DB-16 terminated within the fill at a depth of 25' below existing grade. Borings DB-7 and DB-11 encountered sampler refusal in fill and were terminated at respective depths of 7.1' and 24.4'. Borings DB-8, DB-9, and DB-12 to 15 encountered sampler refusal on what may be limestone bedrock at respective depths of 15', 10', 22', 14', 5.5', and 13.7'. The borings are summarized in the table on the following page.

| Boring | Groundwater Level During Drilling (ft) | Groundwater Level at Drilling Completion (ft) | Bottom of Boring Depth (ft) | Notes |
|--------|--|---|-----------------------------------|----------------------------------|
| DB-1 | 23.5 | 24 | 25 | - |
| DB-2 | 23 | 24.5 | 25 | - |
| DB-3 | - | = | 25 | - |
| DB-4 | - | = | 25 | - |
| DB-5 | - | = | 21.3 | Sampler refusal in fill at 21.3' |
| DB-6 | - | - | 25 | - |
| DB-7 | = | = | 7.1 | Sampler refusal in fill at 7.1' |
| DB-8 | 8 | 13 | 15.2 | Possible Bedrock at 15' |
| DB-9 | 13 | 13 | 25 | Possible Bedrock at 10' |
| DB-10 | = | = | 10.2 | - |
| DB-11 | 20 | 23.5 | 24.4 | Sampler refusal in fill at 24.4' |
| DB-12 | 18 | 18 | 22.2 | Possible Bedrock at 22' |
| DB-13 | - | - | 15.1 | Possible Bedrock at 14' |
| DB-14 | - | - | 5.9 | Possible Bedrock at 5.5' |
| DB-15 | = | - | 13.7 | Possible Bedrock at 13.7' |
| DB-16 | - | - | 25 | - |

No borings penetrated through the fill. As such, the fill depths and natural soils are not known. Additional "geotechnical" specific borings are recommended to evaluate fill depths and natural soils as they may impact foundation / site preparation approaches for the project.

ADDITIONAL BORINGS

This study consisted of 16 standard penetration test borings and is considered to be limited in scope considering the size of the property, the newness and potential fluidity of development plans, and the varying nature of the existing fills. <a href="Additional geotechnical specific borings will need to be performed to better characterize the fill conditions and fill depths, assess the natural soils, and presence of bedrock. This information is need to better assess appropriate foundation approaches.

PRELIMINARY GEOTECHNICAL EVALUATION

The fill poses geotechnical challenges for development, particularly with regards to settlement of structures and pavements. In our opinion, multiple foundation approaches may need to be utilized, depending upon the proposed development feature and the geotechnical conditions encountered. We discuss four foundation approaches in the following subsections. These approaches should be considered preliminary because the project scope has not been finalized and the depth of fill and natural soil has not been determined.

Approach 1 – Deep Dynamic Compaction

Based on the borings, ground improvement using deep dynamic compaction (DDC) is a viable approach for areas of the site although the high concentration of wood may be an

issue and will need further evaluation. A DDC specialty contractor should be consulted regarding attainable bearing capacities. Based on our experience with DDC in similar fill conditions, a 3,000 pounds per square foot (psf) bearing capacity will likely be the maximum achievable capacity under this approach. High building loads may preclude the use of DDC.

Based on our experience with DDC, the upper \pm 20 feet of material exhibits the most "improvement" (i.e., densification) from the process. DDC will be challenging in areas of the site exhibiting excessive moisture contents and significant wood content. Materials shown on our boring logs as "very moist" or "wet" may be difficult to "densify" due to the development of excess pore pressures, especially those with higher amounts of fine-grained materials.

Comments:

- Within favorable fill conditions (i.e., "normal" moisture content and minor wood content), DDC should be feasible for single-story commercial structures or light-weight residential structures (2- to 3-story wood-framed). Additional compactive effort should be applied along wall lines and at column locations for heavier and more settlement sensitive structures to reduce settlement potential. The other foundation approaches presented in this report would need to be utilized if the fill conditions are unfavorable to DDC (i.e., too wet to respond to DDC or too much deleterious materials, such as wood).
- A pre- and post-DDC boring plan will need to be implemented prior to starting any DDC activities to help assess the "improvement" of fills under the procedure.
- DDC will have a tendency to loosen the materials between the craters. GCI should be consulted prior to site activities to provide recommendations for remediation of DDC areas.
- The project team should anticipate challenges with DDC performed in late fall, winter, and early spring due to the upper level soils generally having higher moisture contents.
- As a minimum, the area to be compacted should be the building limits plus at least 20 feet outside the building perimeter. We also recommend DDC where sanitary lines are constructed. The DDC contactor should determine whether additional drops are needed.
- We recommend DDC be performed at the lowest possible elevation (i.e., before any new fill placement is performed).
- The DDC process could lower the densified area by 1 to 2 feet. Therefore, additional fill will be needed to complete site grading.

Approach 2 – Geopiers

This approach would consist of modifying the existing fills using geopiers. Temporary casing may be needed to install geopier elements through loose/soft zones of fills and below groundwater seepage. Obstructions in the fill (brick, concrete, metal, tanks, etc.) could be a problem during installation and will have to be dealt with on a case-by-case basis; this could include removing the obstruction. We anticipate that groundwater will be encountered during geopier installation; the specialty contractor will need to plan accordingly. Once the geopiers are installed, a shallow foundation system would be

used. Additional geotechnical specific borings will need to be performed to aid the geopier designer with pier spacing, size, depth, and bearing capacities.

Slab settlement could also be an issue with the geopiers option unless geopiers are installed below the entire building footprint to provide slab support. This will need to be further assessed in final design phases.

Approach 3 – Driven Piles

Based on the preliminary borings, this approach would involve driving piles through the fill to bear on bedrock. Shallow rock depths and/or excessively loose in-place materials may preclude this approach due to lateral support concerns. Additional borings will need to be performed to assess bedrock depths at building areas; rock coring will need to be performed as well.

Piles driven to refusal on bedrock would eliminate structure settlement concerns related to the existing fill. However, there is a potential for large obstructions within the fill, such as cobbles, boulders, metal, etc. Additional piles and pile cap/grade beam redesign would be needed if obstructions prevent piles from being installed to bedrock at the design locations. Slab constructed on fill could settle. This will need to be addresses in final design.

Approach 4 - Drilled Shafts

Shafts bearing on bedrock would eliminate structure settlement concerns related to the existing fill. The shafts should be designed to gain their support through end bearing, mostly likely on limestone bedrock. Additional borings with rock coring will need to be performed to attain approximate fill depths at proposed building areas and assess rock quality and hardness. We anticipate drilled shafts bearing in limestone bedrock can be designed for a preliminary end bearing capacity in the range of 20,000 to 40,000 psf. A negative skin friction value would need to be used for the depth of the fill, which can be provided after additional borings are performed. Note that groundwater seepage will be an issue with the construction of drilled shafts and will need to be addressed by the contractor.

Comments

In our opinion, portions of the site should respond well to DDC. However, the success of the DDC will depend largely on fill composition and moisture levels in the fill. Provided the site is prepared as recommended, we feel that total and differential settlement for light-weight structures should be within tolerable limits. However, settlement of footings supported on fill modified using DDC may vary due to variations in the fill, which presents risk.

Heavier and/or settlement sensitive buildings could settle more than desired under DDC-improved ground. If a particular tenant has a very strict settlement criterion, then the structure will need to be supported on deep foundations. There is still a risk of settlement associated with the existing fills if geopiers are used; however, we would consider the risk to be lower with geopier-improved ground in comparison to DDC-improved materials. Obstructions in the fill could present problems with pile installations as well as augering activities for geopiers or drilled shafts.

ADDITIONAL PRELIMINARY RECOMMENDATIONS

Site Preparation

Proposed development areas should be completely stripped of existing trees, vegetation, buildings, utilities, and scrap metal / auto parts, to expose the existing fill materials. This stripping process should be performed prior to any foundation or ground modification procedures. If a geopier or deep foundation approach is chosen, the earthwork contractor should proof-roll the exposed subgrade using a fully-loaded, tandem-axle dump truck (or equivalent) to identify potential soft, yielding subgrade areas. Soft spots

identified during the proof-roll should be undercut to firm, stable conditions, or otherwise stabilized.

Subgrade Stabilization

The stabilization of soft subgrades by disking, aerating/drying, and re-compaction may be feasible during traditionally drier times of the year. During wet seasons, partial undercutting and replacing of wet soils with structural fill, drying with soil additives such as lime, or use of geosynthetics may be needed to create a stable subgrade before placing controlled fills. The use of soil additives, such as lime and fly ash, or installation of geosynthetics should be reviewed by GCI prior to use in the field. Fewer problems with soft subgrades are expected if work is performed during traditionally drier times of the year (i.e., late spring, summer, and early fall). Traditionally wetter seasons (i.e., late fall, winter, and early spring) will contribute to more problems associated with soft, very moist subgrades.

New Fill Placement

Structural fill can be placed to design grade once subgrades are brought to firm and stable conditions. Non-organic site soils can be used as structural fill provided proper moisture control is maintained (if unsuitable items are found within the fill, they should be removed). Imported fill materials should be reviewed by our office prior to placement. Depending on the time of year of earthwork, the fill may require drying to achieve proper compaction.

Foundations and Floor Slabs

After additional borings are performed and ground improvement / deep foundation approaches are further assessed, recommendations can be provided.

Seismic Factor

Based on our preliminary borings, and provided the site is prepared as recommended, we would estimate the site as a Site Class D – stiff soil profile.

Pavements

Provided the site is prepared as described herein, conventional aggregate base and flexible asphalt wearing course pavements should be feasible. A specific pavement design is beyond the scope of work of this report; GCI can provide one if requested. Properly compacted, it is our opinion the site materials would have a preliminary CBR value of at least 3 (no actual testing has been performed during this subsurface exploration; this is based on our observation of the on-site materials and experience with similar project sites).

ENVIRONMENTAL

This report deals with geotechnical considerations for land development. There are environmental issues which are beyond the scope of this report. GCI has been providing environmental consulting to the project. Items such as the location and thickness of a clay cap, installation of a methane extraction system, the need for a vapor barrier below the floor slabs, etc., are environmental items that should be considered for the project. It is critical that these and other pertinent environmental considerations be coordinated with geotechnical aspects of site preparation.

CONSTRUCTION MATERIAL ENGINEERING AND TESTING

GCI provides construction materials engineering and testing (CoMET) services. For project continuity throughout construction, we recommend that GCI be retained to observe, test, and document the following:

- DDC, geopier and deep foundation installation,
- earthwork procedures (stripping, cut and fill earthwork, etc.),
- foundation and slab preparation (proof-rolling, excavations, etc.)
- concrete placement (footings, grade beams, slabs) and compressive strength testing, and
- structural steel (welds, bolts, etc.).

The purpose of this work is to assess that the intent of our recommendations is being followed and to make timely changes to our recommendations (as needed) in the event site conditions vary from those encountered in our borings. Please contact our field department to initiate these services.

FINAL

In the event that any changes in the nature or design of the project are planned, conclusions and recommendations contained in this report shall not be considered valid unless changes are reviewed and conclusions of this report are modified or verified in writing.

The preliminary recommendations contained in this report are the opinion of Geotechnical Consultants, Inc. based on the subsurface conditions found in the borings and available development information. The nature and extent of variations between borings might not become evident until construction. <u>Due to the nature of this site (i.e., random fill placed many years ago)</u>, abrupt variations in fill components and density should be anticipated. Depending on the encountered conditions, it may be necessary to re-evaluate the recommendations of this report.

This letter report has been prepared for the exclusive use of McKinley Avenue Acquisitions, LLC, and their consultants for specific application to the proposed development at 2474 McKinley Avenue in Columbus, Ohio in accordance with generally accepted soil and foundation engineering practices. No warranty, expressed or implied, is made.

It has been a pleasure to be of service to you on this project. If you have any questions or need for additional service, please contact GCI.

Respectfully submitted,

Geotechnical Consultants, Inc.

Jeffrey M. Holko, P.E. Project Manager

David W. Caprio, P.E.

Principal

Attachments: General Notes for Soil Sampling and Classifications

JEFFREY M. HOLKO E-82689

General Site Location Map Boring Location Plan

Borings Logs

Distribution: Mr. Joseph Reidy – McKinley Avenue Acquisitions - pdf copy via email

GCI File



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GENERAL NOTES FOR SOIL SAMPLING AND CLASSIFICATIONS

BORINGS, SAMPLING AND GROUNDWATER OBSERVATIONS:

Drilling and sampling were conducted in accordance with procedures generally recognized and accepted as standard methods of exploration of subsurface conditions. The borings were drilled using a truck-mounted drill rig using auger boring methods with standard penetration testing performed in each boring at intervals ranging from 1.5 to 5.0 feet. The stratification lines on the logs represent the approximate boundary between soil types at that specific location and the transition may be gradual.

Water levels were measured at drill locations under conditions stated on the logs. This data has been reviewed and interpretations made in the text of the report. Fluctuations in the level of the groundwater may occur due to other factors than those present at the time the measurements were made.

The Standard Penetration Test (ASTM-D-1586) is performed by driving a 2.0 inch O.D. split barrel sampler a distance of 18 inches utilizing a 140 pound hammer free falling 30 inches. The number of blows required to drive the sampler each 6 inches of penetration are recorded. The summation of the blows required to drive the sampler for the final 12 inches of penetration is termed the Standard Penetration Resistance (N). Soil density/consistency in terms of the N-value is as follows:

| COHESION | ILESS DENSITY | COHESIVE CONSISTENCY | | | |
|----------|---------------|----------------------|--------------|--|--|
| 0-10 | Loose | 0-4 | Soft | | |
| 10-30 | Medium Dense | 4-8 | Medium Stiff | | |
| 30-50 | Dense | 8-15 | Stiff | | |
| 50 + | Very Dense | 15-30 | Very Stiff | | |
| | • | 30 + | Hard | | |

SOIL MOISTURE TERMS

Soil Samples obtained during the drilling process are visually characterized for moisture content as follows:

| MOISTURE CONTENT | DESCRIPTION |
|---------------------|--|
| Damp | Soil moisture is much drier than the Atterberg plastic limit (where soils are cohesive) and generally more than 3% below Standard Proctor "optimum" moisture conditions. Soils of this moisture generally require added moisture to achieve proper compaction. |
| Moist | Soil moisture is near the Atterberg plastic limit (cohesive soils) and generally within ±3% of the Standard Proctor "optimum" moisture content. Little to no moisture conditioning is anticipated to be required to achieve proper compaction and stable subgrades. |
| Very Moist | Soil moisture conditions are above the Atterberg plastic limit (cohesive soils) and generally greater than 3% above Standard Proctor "optimum" moisture conditions. Drying of the soils to near "optimum" conditions is anticipated to achieve proper compaction and stable subgrades. |
| Wet | Soils are saturated. Significant drying of soils is anticipated to achieve proper compaction and stable subgrades. |

SOIL CLASSIFICATION PROCEDURE:

Soil samples obtained during the drilling process are preserved in plastic bags and visually classified in the laboratory. Select soil samples may be subjected to laboratory testing to determine natural moisture content, gradation, Atterberg limits and unit weight. Soil classifications on logs may be adjusted based on results of laboratory testing.

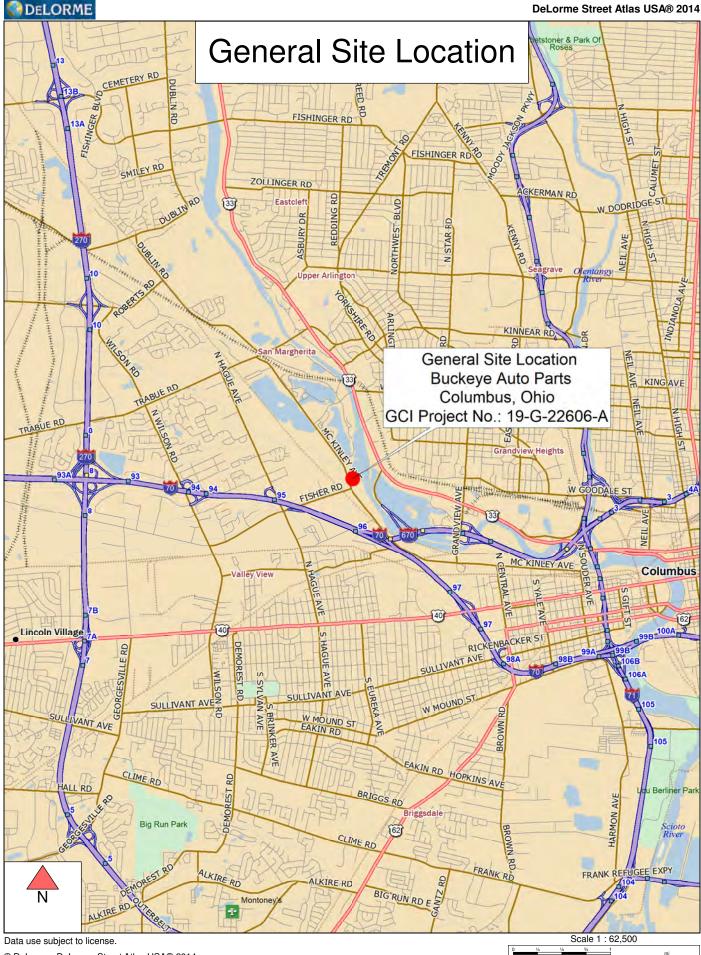
Soils are classified in accordance with the ASTM version of the Unified Soil Classification System. ASTM D-2487 "Classification of Soils for Engineering Purposes (Unified Soil Classification System) describes a system for classifying soils based on laboratory testing. ASTM D-2488 "Description and Identification of Soil (Visual-Manual Procedure) describes a system for classifying soils based on visual examination and manual tests.

Soil classifications are based on the following tables (see reverse side):

GENERAL NOTES FOR SOIL SAMPLING AND CLASSIFICATIONS

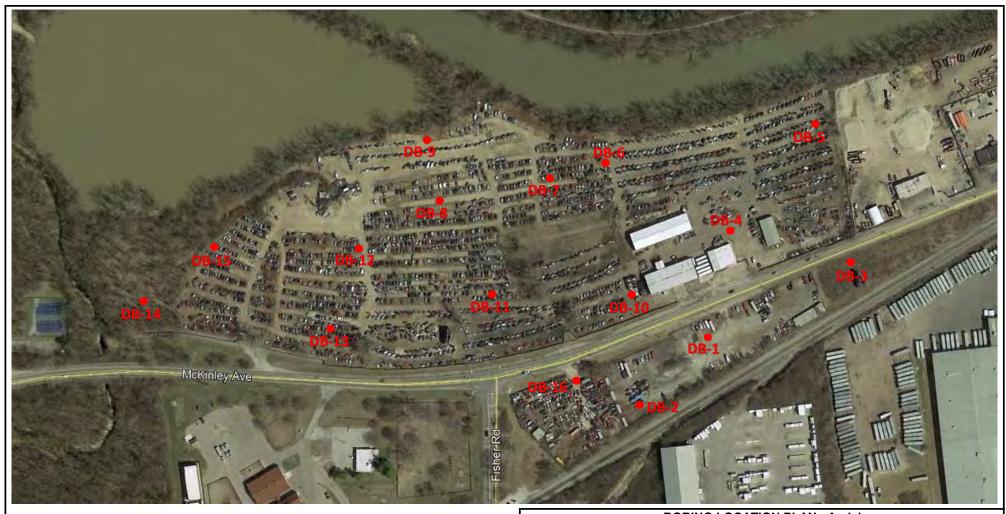
| | | PARTICLE SIZE DEFINITION | CONSTITUENT MODIFIERS | | | |
|-------------|---------|---|-----------------------|--------------|--|--|
| Boulders: | | >12" | | | | |
| Cobbles: | | 3" to 12" | Trace | Less than 5% | | |
| Gravel: | Coarse: | 3/4" to 3" | Few | 5-10% | | |
| | Fine: | No. 4 (3/16") to 3/4" | Little | 15-25% | | |
| Sand: | Coarse | No. 10 (2.0mm) to No. 4 (4.75mm) | Some | 30-45% | | |
| | Medium | No. 40 (0.425mm) to No. 10 (2.0mm) | Mostly | 50-100% | | |
| | Fine | No. 200 (0.074mm) to No. 40 (0.425mm) | | | | |
| Silt & Clay | | <0.074mm; classification based on overall plasticity; in general clay particles <0.005mm. | | | | |

| ASTM/UNIFIE | ED SOIL C | CLASSIFICATION AND SYMBOL CHART |
|---|--|--|
| (more than | | RSE-GRAINED SOILS aterials is larger than No. 200 sieve size) |
| | | Clean Gravel (less than 5% fines) |
| | GW | Well-graded gravel, gravel-sand mixtures, little or no fines |
| GRAVELS | GP | Poorly-graded gravels, gravel sand mixtures, little or no fines |
| More than 50% of coarse fraction larger | | Gravels with fines (more than 12% fines) |
| than No. 4 sieve size | GM | Silty gravels, gravel-sand-silt mixtures |
| | GC | Clayey gravels, gravel-sand-clay mixtures |
| | | Clean Sands (Less than 5% fines) |
| | SW | Well-graded sands, gravelly sands, little or no fines |
| SANDS | SP | Poorly-graded sands, gravelly sands, little or no fines |
| More than 50% of coarse fraction smaller | | Sands with fines (More than 12% fines) |
| than No. 4 sieve size | SM | Silty sands, sand-silt mixtures |
| | | 1 0 1 1 1 1 1 |
| | | Clayey sands, sand-clay mixtures In No. 200 sieve size), coarse-grained soils are classified as follows: |
| Less than 5 percent | smaller tha | n No. 200 sieve size), coarse-grained soils are classified as follows: |
| Less than 5 percent | FII | |
| Less than 5 percent | FII | |
| Less than 5 percent | FII ore of mat | |
| Less than 5 percent | FII ore of mat | |
| Less than 5 percent | FII ore of mat | |
| Less than 5 percent | FII ore of mat CL CL-ML | |
| Less than 5 percent Greater than 12 percent 5 to 12 percent (50% or m | FII ore of mate | |
| Less than 5 percent | FII ore of mate CL CL-ML OL MH | |



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1" = 5,208.3 ft Data Zoom 11-6





Boring Location

BORING LOCATION PLAN - Aerial

2474 McKinley Avenue

Columbus, Ohio

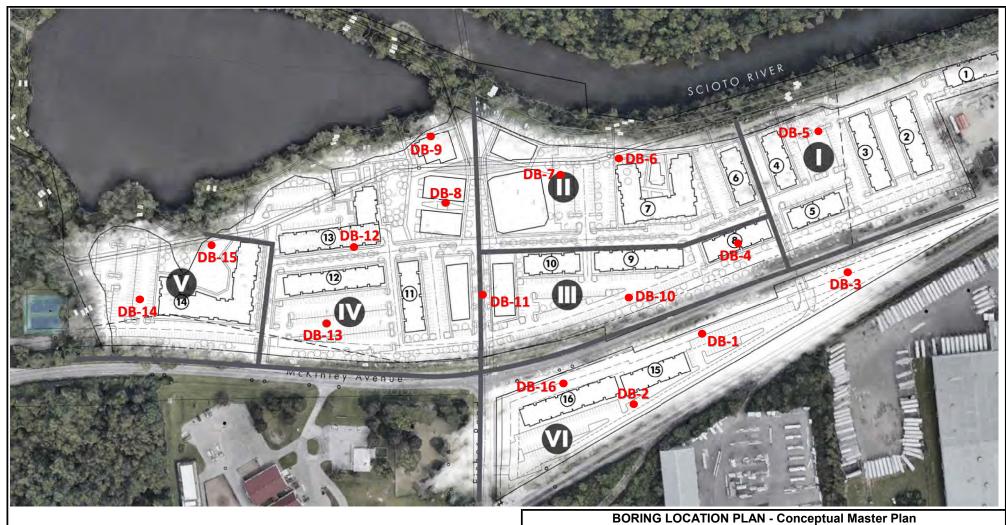
Aerial image obtained from Google Earth, dated March 2018

Project No.: 19-G-22606-A

Date: 01/06/2020 Drawn By: Jeffrey Holko

Scale: Not to Scale







2474 McKinley Avenue

Columbus, Ohio

Plan Prepared by POD design, dated December 19, 2019

Project No.: 19-G-22606-A

Date: 01/06/2020 Drawn By: Jeffrey Holko

Scale: Not to Scale



| PROJECT NAME | Buckeye Auto Parts - 2474 McKinley Ave., Columbus, OH | | BORING NO | DB- 1 |
|--------------|---|------------------|--------------|-------------------|
| | · | PROJ. | SURF. ELEV. | |
| CLIENT | McKinley Avenue Acquisitions, LLC | NO. 19-G-22606-A | DATE DRILLED | <u>11/11/2019</u> |

| CLIENI NO. 19-G-22000-A DATE DRILLED 11/11/2019 | | | | | | | | | | | | | | |
|---|--------------------------|--------------|--------|------|---------------|-------|---------------------|------------|--|---------------|------------------------------|----------------|-------------------------------|--|
| | GROUND WATER OBSERVATION | | | | | | | - | tions Used | | Wt. x 30" fall nless Density | | Sampler Consistency | |
| |)// CEE | T BELOW SU | DEACE | ATC | OMDI | ETIO | | race ew | Less than 5% 5 to 10% | 0 - 10 | Loose | | | |
| | | | | | | | I | ttle | 15 to 25% | 10 - 30 | Medium Dense | 4 - 8 | Soft Medium Stiff Stiff | |
| _ | | T BELOW SU | | | | | | ome | 30 to 45% 30 - 50 Dense 15 - 30 Very S | | | | | |
| | | T BELOW SU | | AT _ | | | | ostly | , | | | | | |
| | | ON OF BO | RING | | | | ring Loc | ation P | lan | | | | | |
| H | Pocket Penetrometer | Sample | Туре | | ws pe Samp | | Moisture Density | Strata | | | L IDENTIFICAT | | | |
| DEPTH | (tsf) | Depths | of | En | om | | or | Change | | | iclude color, type | | | |
| Ω | , , | | Sample | 0-6 | 6-12 | 12-18 | | Depth* | | Rock-cold | or, type, condition, | , hardness | | |
| | | 0.0-2.0 | SS | 11 | 33 | 6 | Moist | | FILL: Dark | Gray Silty | Sand with Grav | el; contains | cinders and | |
| | | | | 7 | | | | 1.5 | brick | C C:14 | C1:41- C | 14_ : | | |
| | | 2.0-4.0 | SS | 7 | 8 | 2 | Moist | 2.5 | X | | Sand with Grav | | | |
| | | | | 3 | | | | | FILL: Dark and cinders | brown mix | of clay/silt fine | es, sand, woo | d, gravel, | |
| | | 4.0-6.0 | SS | 6 | 7 | 6 | Very | | \sim | rv for 4' - 6 | ' depth sample | | | |
| 5 | | | | 1 | | | Moist | | X | , 0 | - F 30000 P 10 | | | |
| | | 6.0-8.0 | SS | 3 | 2 | 4 | Very | 6.0 | FILL Most | ly wood wi | th brick fragme | nte cand an | d gravel | |
| | | 0.0-0.0 | 55 | 9 | | | Moist | | Low recove | ry for 6' - 8 | ' depth sample | ins, sand, an | u graver | |
| | | 0.0.10.0 | aa | | | | 3.6 | 8.5 | \otimes | | | | | |
| | | 8.0-10.0 | SS | 3 | 6 | 8 | Moist | 0.5 | FILL: Brow | n mix of cl | ay/silt fines, sar | nd, gravel, gl | ass, cinders, | |
| 10 | | | | 9 | | | | 10.0 | and wood | | | | | |
| 10 | | 10.0-12.0 | SS | 8 | 5 | 7 | Very Moist | | FILL: Most | ly wood wi | th sand, clay/sil | t fines, and g | gravel | |
| | | | | 13 | | | WIOIST | | \bowtie | | | | | |
| | | | | | | | | | \bowtie | | | | | |
| | | 13.5-15.0 | SS | 7 | 6 | 4 | Moist | | \otimes | | | | | |
| | | | | | | | | | \otimes | | | | | |
| 15 | | | | | | | | | \bowtie | | | | | |
| | | | | | | | | | \boxtimes | | | | | |
| | | | | | | | | | \bowtie | | | | | |
| | | 10.5.20.0 | a a | 2 | 1 | | * 7 | 18.5 | \bowtie | | | | | |
| | | 18.5-20.0 | SS | 3 | 1 | 3 | Very Moist | 10.5 | FILL: Dark | brown mix | of clay/silt fine | es, sand, woo | d, gravel, | |
| 20 | | | | | | | | | and brick | | J | , , | , 0 | |
| 20 | | | | | | | | | \boxtimes | | | | | |
| | | | | | | | | | \bowtie | | | | | |
| | | | | | | | | | \bowtie | | | | | |
| | | 23.5-25.0 | SS | 5 | 6 | 3 | Wet | 23.5 | Water Seep | | | | | |
| | | | | | | | | 0.5.0 | FILL: Dark | gray mix o | f sand, clay/silt | fines, gravel | , and wood | |
| 25 | | | | | | | | 25.0 | × | | | | | |
| | | | | | | | | | | DOT | ГОМ OF BORI | NG: 25! | | |
| | | | | | | | | | | ВОТ | I OWI OF BORI | ING. 23 | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | figation lin | | | | | | | | | | | | |

^{*} The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



| PROJECT NAME | Buckeye Auto Parts - 2474 McKinley Ave., Columbus, OH | | BORING NO. | DB- 2 |
|--------------|---|-------------------------|--------------|------------|
| | • | PROJ. | SURF. ELEV. | |
| CLIENT | McKinley Avenue Acquisitions, LLC | NO. 19-G-22606-A | DATE DRILLED | 11/11/2019 |

| | NO. 19-G-22000-A DATE DRILLED 11/11/2019 | | | | | | | | | | | | | |
|-------|--|------------------|-------------------------|--------------|------------|------|---------------|---------------------------------------|--|----------------|------------------------------|---------------------------|------------------------|--|
| | GROU | J ND WATI | ER OB | SER | VAT | ION | | • | tions Used | | Wt. x 30" fall nless Density | on 2" O.D. | Sampler Consistency | |
| | 045 EEE | T BELOW SU | DEACE | AT C | OMBI | ETIO | I | ace w | Less than 5% 5 to 10% | 0 - 10 | Loose | | | |
| - | | | | | | | | ttle | 15 to 25% | 10 - 30 | Medium Dense | 4 - 8 | Soft Medium Stiff | |
| - | | | LOW SURFACE AT 24 HOURS | | | | | ome | 30 to 45% | 30 - 50 | Dense | 8 - 15 15 - 30 30 + | Stiff Very Stiff | |
| _ | | T BELOW SU | | AT _ | | | | ostly | 50 to 100% 50 + Very Dense 30 + Hard | | | | | |
| | LOCATI | ON OF BO | RING | | | | ring Loc | ation Pl | an | | | | | |
| H | Pocket | Sample | Туре | | ws pe | | Moisture | Strata | | SOI | L IDENTIFICAT | ION | | |
| DEPTH | Penetrometer (tsf) | Depths | of | Ere | Samp om | | Density or | Change | | | clude color, type | | | |
| D | (101) | From To | Sample | | 6-12 | | | Depth* | | Rock-colo | or, type, condition, | , hardness | | |
| | | 0.0-2.0 | SS | 12 | 9 | 2 | Moist | 0.6 | Topsoil | | | | | |
| | | | | 1 | | | | 1.5 | 💢 FILL: Gray | | / sand, gravel, a | | | |
| | | 2.0-4.0 | SS | 4 | 2 | 3 | Moist | (· | | | nd, clay/silt fin | es, gravel, co | oncrete, | |
| | | | | 4 | | | | 4.0 | brick, and c | | | | | |
| 5 | | 4.0-6.0 | SS | 4 | 4 | 3 | Moist | | FILL: Brow | n mix of cl | ay/silt fines, sar | nd, and wood | | |
| | | | | 1 | | | | 6.0 | × | | | | | |
| | | 6.0-8.0 | SS | 7 | 1 | 1 | Moist | | | n mix of sil | lty sand, gravel | , concrete, w | ood, and | |
| | | | | 1 | | | | | cloth | | | | | |
| | | 8.0-10.0 | SS | 3 | 1 | 2 | Very Moist | | | | | | | |
| 10 | | | | 3 | | | | 10.0 | X | | | | | |
| | | 10.0-12.0 | SS | 2 | 3 | 7 | Very Moist | | FILL: Brow cloth, cinde | n mix of class | ay/silt fines, sar | nd, gravel, co | oncrete, | |
| | | | | 10 | | | WIOISt | | Clour, chide | is, and grass | S | | | |
| | | | | | | | | (| \otimes | | | | | |
| | | 13.5-15.0 | SS | 3 | 1 | 1 | Very Moist | \ \ | \otimes | | | | | |
| 15 | | | | | | | WIOISt | < | $\stackrel{>}{\sim}$ | | | | | |
| | | | | | | | | | \otimes | | | | | |
| | | | | | | | | | X | | | | | |
| | | 10 5 20 0 | CC | 2 | 2 | 2 | V | 18.0 | FILT. D1- | | C _1/_:14 | -: | 4 -1-21 1 | |
| | | 18.5-20.0 | SS | 3 | 2 | 2 | Very Moist | < < < < < < < < < < < < < < < < < < < | glass | gray mix o | f clay/silt fines, | cinders, san | a, cloth, and | |
| 20 | | | | | | | | < | × Simos | | | | | |
| | | | | | | | | | \otimes | | | | | |
| | | | | | | | | | Water See | | | | | |
| | | 23.5-25.0 | SS | 6 | 2 | 2 | Wet | 23.0 | Water See | of brown co | ndy lean clay, v | wood and ale | | |
| | | 23.3-23.0 | ು | 0 | | | 44 Ct | | X ITLL. WIIX | oi oiowii sa | nay ican ciay, \ | voou, and ci | JUI | |
| 25 | | | | | | | | | \otimes | | | | | |
| | | | | | | | | | \bowtie | | | | | |
| | | | | | | | | 200 | \bowtie | | | | | |
| | | 28.5-30.0 | SS | 5 | 5 | 4 | Wet | 28.0 | FILL: Mix (| of dark oray | sand, wood, a | nd glass | | |
| | | 20.0 00.0 | - 55 | - | | · · | | 30.0 | | or amin gray | | 514100 | | |
| 30 | | | | | | | | 30.0 | 4 | | | | | |
| | | | | | | | | | | BOT | TOM OF BORI | NG: 30' | | |
| | | | | | | | | | | | | - | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | I | 1 | <u> </u> | | | <u> </u> | l . | | | | | |

^{*} The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



| PROJECT NAME | Buckeye Auto Parts - 2474 McKinley Ave., Columbus, OH | | BORING NO | DB- 3 |
|--------------|---|------------------|--------------|------------|
| | • | PROJ. | SURF. ELEV. | |
| CLIENT | McKinley Avenue Acquisitions, LLC | NO. 19-G-22606-A | DATE DRILLED | 11/11/2019 |

| CLII | ENT | McKin | iey Av | <u>enue</u> | Acq | uisiti | ons, LLC | <i></i> | | NO. 1 <u>9-</u> | ·G-22606-A DA | ATE DRILLED | 11/11/2019 | | |
|-------|--------------|-------------------|------------------------|-------------|----------|--------|---------------|------------------|---|--------------------|-----------------------|-------------------|-----------------------|--|--|
| | GROU | J ND WAT I | ER OB | SER | VAT | ION | | Propor | tions Used | 140 lb | Wt. x 30" fall | on 2" O.D. | Sampler | | |
| | | | | | | | | ace | Less than 5% | | nless Density | | Consistency | | |
| 1 | None FEE | ET BELOW SU | JRFACE | AT C | OMPL | ETIO | I | ew | 5 to 10% | 0 - 10 | Loose | 0 - 4 4 - 8 | Soft | | |
| _ | FEE | ET BELOW SU | OW SURFACE AT 24 HOURS | | | | | ttle ome | 15 to 25% 30 to 45% | 10 - 30 30 - 50 | Medium Dense Dense | 18-15 | Medium Stiff Stiff | | |
| | FEE | ET BELOW SU | JRFACE | AT | | HOUR | | ostly | 30 to 45% 30 - 50 Dense 15 - 30 Very S 50 to 100% 50 + Very Dense 30 + H | | | | | | |
| | | ION OF BO | | | | | ring Loc | | | , , | | | | | |
| | Pocket | | | Blo | ws pe | | Moisture | | | | | | | | |
| DEPTH | Penetrometer | Sample Depths | Type of | | Samp | | Density | Strata Change | | | L IDENTIFICAT | | | | |
| 邑 | (tsf) | From To | Sample | | | То | or | Depth* | | | or, type, condition | | | | |
| | | 0.0-2.0 | | 5 | 6-12 | 12-18 | | ^ | Tomasil | | , - J F -, | | | | |
| | | 0.0-2.0 | SS | | 9 | 10 | Moist | 0.2 | Topsoil | m miv of sa | and, gravel, con | crete and cla | xy/cilt fines | | |
| | | | | 9 | | | | | \bowtie | | - | cicic, and cir | ty/SHt THICS | | |
| | | 2.0-4.0 | SS | 5 | 9 | 9 | Moist | 3.0 | Mostly clay | noted from | n a 2' - 3' depth | | | | |
| | | | | 3 | | | | 4.0 | FILL: Gray | mix of lear | n clay and cinde | ers | | | |
| | | 4.0-6.0 | SS | 5 | 9 | 6 | Moist | 1.0 | FILL: Brow | n mix of sa | and, clay/silt fin | es, cinders, g | gravel, and | | |
| 5 | | | | 6 | | | | 6.0 | glass | | - | | | | |
| | | 6.0-8.0 | SS | 6 | 2 | 2 | Moist | 6.0 | X FILL: Dark | oray mix o | f clay/silt fines, | sand oravel | cinders | | |
| | | 0.0 0.0 | | 2 | <u> </u> | | 1,1015t | | concrete, we | ood, cloth, | and glass | - Juliu, 510 v Cl | ., 01114010, | | |
| | | 0.0.10.0 | a a | | _ | | T 7 | | \otimes | | | | | | |
| | | 8.0-10.0 | SS | 6 | 2 | 2 | Very Moist | | \otimes | | | | | | |
| 10 | | | | 2 | | | | | \bigotimes | | | | | | |
| 10 | | | | | | | | | \otimes | | | | | | |
| | | | | | | | | | \otimes | | | | | | |
| | | | | | | | | | \otimes | | | | | | |
| | | 13.5-15.0 | SS | 8 | 6 | 3 | Very | 13.5 | \(\) | | | | | | |
| | | | | | | | Moist | | FILL: Dark | brown mix | of sand, gravel | , concrete, cl | lay/silt fines, | | |
| 15 | | | | | | | | | wood, and c | cioui | | | | | |
| | | | | | | | | | \otimes | | | | | | |
| | | | | | | | | | \otimes | | | | | | |
| | | | | | | | | | \bigotimes | | | | | | |
| | | 18.5-20.0 | SS | 10 | 10 | 10 | Very | | Very low re | covery for | 18.5' - 20' depth | n sample | | | |
| | | | | | | | Moist | | \bowtie | | | | | | |
| 20 | | | | | | | | | \bowtie | | | | | | |
| | | | | | | | | | \boxtimes | | | | | | |
| | | | | | | | | | \bowtie | | | | | | |
| | | 22.5.25.0 | CC | 0 | 1 | 0 | Maist | 23.5 | \otimes | | | | | | |
| | | 23.5-25.0 | SS | 8 | 4 | 8 | Moist | 23.3 | K FILL: Light | Brown Sil | t (similar to lim | estone tailing | gs); contains | | |
| 25 | | | | | | | | 25.0 | sand and gra | avel | · - — — — — — — - | | - · · · | | |
| 23 | | | | | | | | | | | | | | | |
| | | | | | | | | | | BOT | TOM OF BORI | NG: 25' | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | 06 MODE | <u> </u> | <u> </u> | | | | 1 | | | | | | |

^{*} The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



| PROJECT NAME | Buckeye Auto Parts - 2474 McKinley Ave., Columbus, OH | | BORING NO | DB- 4 |
|--------------|---|-------------------------|--------------|------------|
| | | PROJ. | SURF. ELEV. | |
| CLIENT | McKinley Avenue Acquisitions, LLC | NO. 19-G-22606-A | DATE DRILLED | 11/12/2019 |

| | GROUND WATER OBSERVATION Proportions Used Trace Less than 5% NO. 19-G-22000-A DATE DRILLED 11/12/201 140 lb Wt. x 30" fall on 2" O.D. Sampler Cohesionless Density Cohesive Consistency | | | | | | | | | | | | | | |
|-------|---|-------------------|--------|------|---------------|----------|---------------------|---------------|-------------------------|---------------|----------------------|---------------------------|---------------------|--|--|
| | GROU | J ND WAT I | ER OB | SER | VAT | ION | | • | | 140 lb | Wt. x 30" fall | on 2" O.D. | Sampler | | |
| N | Jone FFF | ET BELOW SU | IDEVCE | AT C | OMDI | ETIO | | race w | Less than 5% 5 to 10% | 0 - 10 | Loose | | Soft | | |
| 1. | | | | | | | | ttle | 15 to 25% | 10 - 30 | Medium Dense | 4 - 8 | Medium Stiff | | |
| _ | | ET BELOW SU | | | | | | ome | 30 to 45% | 30 - 50 | Dense | 8 - 15 15 - 30 30 + | Stiff Very Stiff | | |
| | | ET BELOW SU | | AT _ | | | | ostly | 50 to 100% | 50 + | Very Dense | 30 + | Hard | | |
| | | ON OF BO | KING | TD:1 | | | ring Loc | ation P | an | | | | | | |
| Ħ | Pocket Penetrometer | Sample | Type | | ws pe Samp | | Moisture Density | Strata | | | L IDENTIFICAT | | | | |
| DEPTH | (tsf) | Depths From To | of | En | om | | or | Change Depth* | | | clude color, type | | | | |
| | | | Sample | 0-0 | | 12-18 | | , | V | | or, type, condition, | | | | |
| | | 0.0-2.0 | SS | 26 | 13 | 14 | Moist | 0.6 | | | with Gravel; co | | | | |
| | | | | 6 | | | | | glass | brown mix | of clay, sand, g | gravei, wood, | brick, and | | |
| | | 2.0-4.0 | SS | 8 | 6 | 6 | Moist | 3.0 | × 5 | | | | | | |
| | | | | 4 | | | | | | n mix of sa | nd, gravel, con | crete, wood, | and clay/silt | | |
| | | 4.0-6.0 | SS | 6 | 36 | 29 | Moist | 5.0 | fines 5.0 | | | | | | |
| 5 | | | | 4 | | | | 6.0 | | | | | | | |
| | | 6.0-8.0 | SS | 12 | 6 | 4 | Moist | 0.0 | avel k, clay/silt fi | nes, cinders. | | | | | |
| | | | | 8 | | | | | and glass | 0 | , , | , , | , , | | |
| | | 8.0-10.0 | SS | 5 | 5 | 6 | | 8.0 | X FILL Rrow | m Sandy I e | ean Clay; contai | ins wood | | | |
| | | 0.0-10.0 | - 55 | 19 | | | | 9.0 | △ | | n Clay; contains | | are and brief | | |
| 10 | | | | 17 | | | | | rill. Gray | Sanuy Leal | n Ciay, comains | s wood, cilla | ors, and offick | | |
| | | | | | | | | | \boxtimes | | | | | | |
| | | | | | | | | | \bigotimes | | | | | | |
| | | | | | | | | 13.0 | × | | | | | | |
| | | 13.5-15.0 | SS | 3 | 4 | 5 | Moist | | FILL: Gray | mix of clay | , sand, brick, co | oncrete, and | wood | | |
| | | | | | | | | | \otimes | | | | | | |
| 15 | | | | | | | | | X | | | | | | |
| | | | | | | | | | \bigotimes | | | | | | |
| | | | | | | | | | \otimes | | | | | | |
| | | 18.5-20.0 | SS | 5 | 4 | 5 | Very | | $\stackrel{>}{>}$ | | | | | | |
| | | 10.3 20.0 | 55 | | • | | Moist | | \otimes | | | | | | |
| 20 | | | | | | | | | \otimes | | | | | | |
| | | | | | | | | | $\langle \rangle$ | | | | | | |
| | | | | | | | | | \bowtie | | | | | | |
| | | | | | | | | 23.0 | X | | | | | | |
| | | 23.5-25.0 | SS | 1 | 0 | 0 | Very Moist | | \times | | od, clay/silt fine | • | | | |
| 25 | | | | | | | 1410121 | 25.0 | Possible vo | oid; spoon o | dropped with r | no hammer i | from 24'-25' | | |
| 25 | | | | | | | | | | | | | | | |
| | | | | | | | | | | BOT | TOM OF BORI | NG: 25' | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | <u> </u> | | | | | | | _ | | |

^{*} The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



| PROJECT NAME | Buckeye Auto Parts - 2474 McKinley Ave., Columbus, OH | | BORING NO | DB- 5 |
|--------------|---|------------------|--------------|------------|
| | · | PROJ. | SURF. ELEV. | |
| CLIENT | McKinley Avenue Acquisitions, LLC | NO. 19-G-22606-A | DATE DRILLED | 11/12/2019 |

| CLIE | NT | McKin | <u>ley Av</u> | <u>enue</u> | Acqı | <u>uisiti</u> | ons, LL | NO. 19-G-22606-A DATE DRILLED 11/12/2019 | | | | | | |
|-------|------------------------|------------|---------------|-------------|---------------|---------------|---------------------|--|---|--|--|--|--|--|
| | GROU | ND WATI | ER OB | SER | VAT | ION | | rtions Used 140 lb Wt. x 30" fall on 2" O.D. Sampler | | | | | | |
| _ | · | | | | | | | race | Less than 5% Cohesionless Density Cohesive Consistency | | | | | |
| N | | T BELOW SU | | | | | l l | ew ittle | 5 to 10% 0 - 10 Loose 0 - 4 Soft 15 to 25% 10 - 30 Medium Dense 4 - 18 Medium Stiff Stiff | | | | | |
| _ | | T BELOW SU | | | | | S | ome | 30 to 45% 30 - 50 Dense 8 - 13 Suff Very Stiff | | | | | |
| _ | | T BELOW SU | | AT _ | | | | lostly | - | | | | | |
| | | ON OF BO | RING | | | | ring Lo | | lan | | | | | |
| Ξl | Pocket Penetrometer | Sample | Type | | ws pe Samp | | Moisture Density | Strata | SOIL IDENTIFICATION | | | | | |
| DEPTH | (tsf) | Depths | of | Erc | _ | То | or | Change | Remarks include color, type of soil, etc. | | | | | |
| Д | ` ′ | | Sample | 0-6 | 6-12 | 12-18 | | Depth* Rock-color, type, condition, hardness | | | | | | |
| | | 0.0-2.0 | SS | 10 | 8 | 3 | Moist | | FILL: Gray mix of sand, clay/silt fines, gravel, concrete, glass, brick, and cinders | | | | | |
| | | | | 3 | | | | 2.0 | | | | | | |
| | | 2.0-4.0 | SS | 3 | 3 | 4 | Very Moist | | FILL: Brown mix of clay/silt fines, sand, gravel, and cloth | | | | | |
| | | | | 5 | | | Moist | 4.0 | | | | | | |
| اً | | 4.0-6.0 | SS | 5 | 4 | 2 | Very | | FILL: Gray mix of clay/silt fines, sand, and gravel | | | | | |
| 5 | | | | 3 | | | Moist | 6.0 | Low recovery at 4' - 6' depth sample | | | | | |
| | | 6.0-8.0 | SS | 4 | 0 | 0 | Very | 0.0 | FILL: Dark brown mix of clay/silt fines, sand, gravel, brick, | | | | | |
| • | | | | 0 | | | Moist | | cinders, and glass | | | | | |
| - | | 8.0-10.0 | SS | 2 | 1 | 1 | Very | 9.0 | Low recovery at 6' - 8' depth sample Possible void(s) in 6.5'-8' depth range | | | | | |
| | | | | 1 | | | Moist | 9.0 | FILL: Gray Lean Clay; contains cinders, gravel, and glass | | | | | |
| 10 | | | | | | | | | | | | | | |
| - | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| - | | 13.5-15.0 | SS | 2 | 1 | 2 | Very | | Odor at 13.5' - 15' depth sample interval | | | | | |
| - | | 13.3-13.0 | 33 | | 1 | | Moist | | Odor at 15.5 - 15 depui sample interval | | | | | |
| 15 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | 10.5 | | | | | | |
| | 1.0-2.25 | 18.5-20.0 | SS | 4 | 4 | 3 | Very Moist | 18.5 | FILL: Gray Lean Clay | | | | | |
| 20 | | | | | | | TVIOIST | | Files stay foun stay | | | | | |
| 20 | | 21.0-21.3 | SS | 50/4" | | | | 21.2 | FILL: Sample contained concrete fragments and fines | | | | | |
| Ī | | | | | | | | 21.3 | TILL. Sample contained concrete fragments and fines | | | | | |
| Ī | | | | | | | | | POTTOM OF POPING, 21-21 | | | | | |
| İ | | | | | | | | | BOTTOM OF BORING: 21.3' | | | | | |
| | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| - | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

^{*} The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



| PROJECT NAME | Buckeye Auto Parts - 2474 McKinley Ave., Columbus, OH | | BORING NO | DB- 6 |
|--------------|---|------------------|--------------|------------|
| | · | PROJ. | SURF. ELEV. | |
| CLIENT | McKinley Avenue Acquisitions, LLC | NO. 19-G-22606-A | DATE DRILLED | 11/12/2019 |

| CLII | ZIN1 | MICINIII | iey Av | enue | Acq | uisiu | ons, LLC | | | NO. 1 <u>9-</u> | G-22606-A DA | ATE DRILLED | 11/12/2019 | | |
|---------------|---------------------------|---|----------------------|----------|----------|-------|---------------------------------------|--|--|--------------------------------------|-------------------------------------|---|---|--|--|
| | GROU | J ND WAT | ER OB | SER | VAT | ION | | - | tions Used | | Wt. x 30" fall nless Density | on 2" O.D. | Sampler Consistency | | |
| <u>1</u> - | FEE | ET BELOW SU ET BELOW SU ET BELOW SU | JRFACE | AT 24 | HOU | RS | N Fe Li Sc | race ew ttle ome ostly | Less than 5% 5 to 10% 15 to 25% 30 to 45% 50 to 100% | 0 - 10 10 - 30 30 - 50 50 + | Loose Medium Dense Dense Very Dense | 0 - 4 4 - 8 8 - 15 15 - 30 30 + | Soft Medium Stiff Stiff Very Stiff Hard | | |
| | LOCAT | ON OF BO | RING | | Se | ee Bo | ring Loc | ation P | lan | l. | | | | | |
| DEPTH | Pocket Penetrometer (tsf) | Sample Depths From To | Type of Sample | on En | | | Moisture Density or Consist. | Strata Change Depth* | | Remarks in | L IDENTIFICATE | of soil, etc. | | | |
| | 4.5+ | 0.0-2.0 | SS | 6 | 4 | 8 | Moist | FILL: Brown Sandy Lean Clay with Gravel; contains b | | | | | | | |
| | | | | 10 | | | | | cinders | | | | | | |
| | | 2.0-4.0 | SS | 6 | 8 | 4 | Moist | | | | | | | | |
| | | 4.0-6.0 | SS | 3 | 5 | 6 | Moist | 5.0 | | | | | | | |
| 5 | | | | 6 | | | | 5.0 | FILL: Brow | n mix of sa | ndy lean clay a | nd fine sand | | | |
| | 4.0 | 6.0-8.0 | SS | 8 | 5 | 26 | Moist | | \bowtie | | Clay with Grav | | | | |
| | | | | 4 | | | | 8.0 Gray mix of sand and gravel noted at 7.5' - 8' depth | | | | | | | |
| | | 8.0-10.0 | SS | 14 | 1 | 1 | Moist | | FILL: Dark | gray mix o | f sand, gravel, a | and clay/silt | fines | | |
| 10 | | | | 14 | | | | | Wood piece | es noted at 9 | o' - 10' depth int | erval | | | |
| | | | | | | | | | | | | | | | |
| | | 13.5-15.0 | SS | 4 | 4 | 4 | Very Moist | 13.5 | FILL: Mix | clay/silt fine | s, gravel, | | | | |
| 15 | | | | | | | | | concrete, and wood | | | | | | |
| | | 18.5-20.0 | SS | 8 | 3 | 4 | Very | Vormalova as a system for 18.51. 201 don'th commit | | | n samnle | | | | |
| 200 | | 10.3-20.0 | 55 | 0 | 3 | | Moist | Very low recovery for 18.5' - 20' depth san | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| | | | | | | | | 23.0 | X | | | | | | |
| | | 23.5-25.0 | SS | 5 | 1 | 4 | Very Moist | 25.0 | FILL: Dark gravel | gray mix o | f sand, cinders, | clay/silt fine | es, wood, and | | |
| 25 | | | | | | | | 23.0 | | ВОТ | ГОМ OF BORI | NG: 25' | | | |
| | | | | | | | | | | | | | | | |
| | | | I | I | <u> </u> | ı | | I | | | | | _ | | |

^{*} The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



| PRO. | JECT NAM | TE <u>Buckey</u> | <u>e Auto</u> | <u>Par</u> | <u>ts - 2</u> | 474 I | <u> McKinle</u> | ey Ave., (| <u>Colum</u> | <u>bus, OF</u> | I | | B | ORING NO | <u>DB- 7</u> |
|--|--------------------------|-------------------|---------------|-------------|---------------|---------------|-----------------|------------------|--------------|------------------|--------------|-------------------|--|--------------------------|-----------------------|
| | | | | | | | | | | | PRO | | | URF. ELEV | |
| CLIE | ENT | McKin | <u>ley Av</u> | <u>enue</u> | Acq | <u>uisiti</u> | ons, LL | <u>C</u> | | | NO. | . 1 <u>9-</u> 0 | G-22606-A D | ATE DRILLED | <u>11/12/2019</u> |
| | GROU | JND WATI | ER OB | SER | VAT | ION | | Propor | rtions | Used | 14 | 10 lb | Wt. x 30" fall | on 2" O.D. | Sampler |
| | | | | | | | | race | | than 5% | | | less Density | | Consistency |
| <u> </u> | None FEE | T BELOW SU | JRFACE | AT C | OMPL | ETIO | I | ew | | 5 to 10% | | 10 | Loose | 0 - 4 | Soft |
| | FEE | T BELOW SU | JRFACE | AT 24 | 4 HOU | RS | | ittle | | 5 to 25% | 10 - | | Medium Dense | 0 - 4 4 - 8 8 - 15 | Medium Stiff Stiff |
| | FEE | T BELOW SU | IRFACE | АТ | | HOUR | | ome Iostly | | 0 to 45% to 100% | 30 - 50 + | | Dense Very Dense | 15 - 30 30 + | Very Stiff Hard |
| _ | | ON OF BO | | | | | | cation P | | 10 10070 | 30 . | | very Benise | 30 . | Time |
| | Pocket | lort of bo | Idirio | D1c | ws pe | | Moisture | | 1411 | | | | | | |
| TH | Penetrometer | Sample | Type | | Samp | | Density | Strata | | | ъ | | L IDENTIFICAT | | |
| DEPTH | (tsf) | Depths From To | of Sample | Fr | om | To | or | Change Depth* | | | | | clude color, type or, type, condition | | |
| | | | | 0-0 | 6-12 | | | _ | \.^.1 == | ., | Roci | K-COIC | r, type, condition | i, naruness | |
| | | 0.0-2.0 | SS | 10 | 10 | 7 | Moist | 0.2 | Top | | 1 | | -C-:141 | | |
| | | | | 6 | | | | | X LIL | L: Dark | brown | IIIIX | of silty sand a | na concrete ii | agments |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | \bowtie | | | | | | |
| | | | | | | | | | \bowtie | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | 2040 SS 6 3 3 M | | | | | | | | | | | | | | |
| | 2.0-4.0 SS 6 3 3 M | | | | | | Moist | | \bowtie | | | | | | |
| | | | | | | | | | \boxtimes | | | | | | |
| | | 3 | | | | | | | | | | | | | |
| | | | | | | | | 2.0 | \boxtimes | | | | | | |
| | | | | | | | | 3.0 | FII | L: Dark | orav n | nix o | f sand, clay/silt | fines cinder | s concrete |
| | | | | | | | | | frag | gments, a | and gra | vel (| odor noted) | inics, emider | s, concrete |
| | | | | | | | | | | | | | | | |
| | | | | | | | | 40 | | | | | | | |
| | | 4.0-6.0 | SS | 2 | 1 | 1 | Moist | 4.0 | × | 1- f | | l dan | th contains me | tal (adammata | 1) |
| | | 4.0-0.0 | 33 | 3 | 1 | 1 | Moist | | Sai | npie iron | n 4 - 0 | aep | ın contains me | iai (odor note | a) |
| | | | | 1 | | | | | | | | | | | |
| | | | | 1 | | | | | \bowtie | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | \bowtie | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | 6.0 | \bowtie | | | | | | | |
| | 6.0-7.1 SS 6 29 50/1' Ve | | | | | Very | | | | brown | mix (| of clay/silt fine | s, sand, and v | vood (odor | |
| | Mo | | | | | Moist | | not | ed) | | | | | | |
| | | | | | | | \bowtie | | | | | | | | |
| | | | | | | | \bowtie | | | | | | | | |
| | | | | | 7.1 | X | | | | | | | | | |
| | | | | | | | | | T | ОТТ | OM OF BORI | NG. 7.11 | | | |
| | | | | | | | | Е | OTI | OM OF BOKI | ING: /.I | | | | |
| | | | | | | | | | | | | | | | |
| $ldsymbol{ld}}}}}}$ | | | | | | | | | | | | | | | |



^{*} The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

| PROJECT NAME | Buckeye Auto Parts - 2474 McKinley Ave., Columbus, OH | | BORING NO | DB- 8 |
|--------------|---|------------------|--------------|------------|
| | | PROJ. | SURF. ELEV. | |
| CLIENT | McKinley Avenue Acquisitions, LLC | NO. 19-G-22606-A | DATE DRILLED | 11/13/2019 |

| CLIE | ENT | McKin | ley Avo | <u>enue</u> | Acqı | <u>uisiti</u> | ons, LLC | | NO. 19-G-22606-A DATE DRILLED 11/13/2019 | | |
|-------|--------------------|------------|---------|-------------|------------|---------------|--|--------------|--|--------------------------|--|
| | GROU | ND WATI | ER OB | SER | VAT | ION | 140 lb Wt. x 30" fall on 2" O.D. Sampler | | | | |
| 1 | 13.0 FEE | T BELOW SU | IRFACE | AT C | OMPL | ETIO | | race ew | | Less than 5% 5 to 10% | Cohesionless Density Cohesive Consistency 0 - 10 Loose 0 - 4 Soft |
| | | T BELOW SU | | | | | Li | ttle | | 15 to 25% | 10 - 30 Medium Dense 4 - 8 Medium Stiff 8 - 15 Stiff |
| | | T BELOW SU | | | | | | ome ostly | | 30 to 45% 50 to 100% | 30 - 50 Dense 15 - 30 Very Stiff 50 + Very Dense 30 + Hard |
| | | ON OF BO | | | | | ring Loc | | lar | 1 | |
| Ε | Pocket | Sample | Туре | | ws pe | | Moisture | Strata | | | SOIL IDENTIFICATION |
| DEPTH | Penetrometer (tsf) | Depths | of | | Samp om | | Density or | Change | | | Remarks include color, type of soil, etc. |
| ī | (102) | | Sample | 0-6 | 6-12 | 12-18 | Consist. | Depth* | | | Rock-color, type, condition, hardness |
| | | 0.0-2.0 | SS | 6 14 | 19 | 18 | Moist | 0.2 | | Topsoil | mir of compute for amounts and and alay/ailt fines |
| | | | | 17 | | | | 1.0 | \times | | mix of concrete fragments, sand, and clay/silt fines gray mix of sand and gravel |
| | | | | | | | | 2.0 | \bigotimes | | |
| | 3.75-4.25 | 2.0-4.0 | SS | 6 8 | 8 | 8 | Moist | | \otimes | FILL: Brow | n, Olive, and Gray Sandy Lean Clay with Gravel |
| | | | | | | | | | \otimes | | |
| | | 4.0-6.0 | SS | 3 | 6 | 7 | Vom | | \otimes | | |
| _ | | 4.0-0.0 | 33 | 9 | 0 | / | Very Moist | 5.0 | \bigotimes | | |
| 5 | | | | | | | | | | FILL: Dark | gray mix of clay, sand, cinders, and gravel |
| | 1.0-2.0 | 6.0-8.0 | SS | 3 | 3 | 4 | Very | 6.0 | \times | FILL · Most | ly wood with sand and clay/silt fines |
| | 1.0-2.0 | 0.0-0.0 | 55 | 4 | 3 | | Moist | | \otimes | TILL. MOSt. | ry wood with said and clay/sitt files |
| | | | | | | | | | \otimes | TT | . 01 |
| | | 8.0-10.0 | SS | 3 | 3 | 3 | Wet | | \otimes | Water Seep | page at 8' ry for 8' - 10' depth sample |
| | | 0.0 10.0 | | 4 | | | | | \otimes | 20,71000,0 | |
| | | | | | | | | | \otimes | | |
| 10 | | | | | | | | | \otimes | | |
| | | | | | | | | | \otimes | | |
| | | | | | | | | | \otimes | | |
| | | | | | | | | | \otimes | | |
| | | 13.5-14.3 | CC. | 27 | 50/2" | | Wat | 12.5 | \bigotimes | | |
| | | 13.3-14.3 | SS | 3/ | 50/3" | | Wet | 13.5 | \bigotimes | FILL: Mix o | of limestone fragments and fines |
| | | 15.0-15.2 | | | | | | | \bigotimes | | 6 |
| 15 | | SS | 50/2" | | | | 15.0 15.2 | X | Possible I in | mestone Bedrock | |
| | | | | | | | | 13.2 | | 1 03SIDIE LII | ilestone between |
| | | | | | | | | | | | BOTTOM OF BORING: 15.2' |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

^{*} The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



| PROJECT NAME | Buckeye Auto Parts - 2474 McKinley Ave., Columbus, OH | | BORING NO. | DB- 9 |
|--------------|--|--------------------------|--------------|------------|
| | · | PROJ. | SURF. ELEV. | |
| CLIENT | McKinley Avenue Acquisitions, LLC | NO. 1 <u>9-G-22606-A</u> | DATE DRILLED | 11/13/2019 |

| | GROUND WATER OBSERVATION Proportions Used Trace Less than 5% NO. 19-G-22000-A DATE DRILLED 11/15/2019 140 lb Wt. x 30" fall on 2" O.D. Sampler Cohesionless Density Cohesive Consistency | | | | | | | | | | | | | | |
|-------|---|-------------------|--------|----------|---------------|----------|---------------------|---|--|-------------------------|---------------------|---------------------------|----------------------|--|--|
| | GROU | JND WATI | ER OB | SER | VAT | ION | | • | | | | on 2" O.D. | Sampler | | |
| | 130 555 | T BELOW SU | DEACE | ATC | OMDI | ETIO | | ace w | Less than 5% 5 to 10% | 0 - 10 | Loose | | | | |
| _ | | | | | | | I | ttle | 15 to 25% | 10 - 30 | Medium Dense | 4 - 8 | Soft Medium Stiff | | |
| _ | | T BELOW SU | | | | | | ome | 30 to 45% | 30 - 50 | Dense | 8 - 15 15 - 30 30 + | Stiff Very Stiff | | |
| _ | | T BELOW SU | | AT _ | | | | ostly | 50 to 100% | 50 + | Very Dense | 30 + | Hard | | |
| | | ON OF BO | RING | | | | ring Loc | ation P | lan | | | | | | |
| Ħ | Pocket Penetrometer | Sample | Туре | | ws pe Samp | | Moisture Density | Strata | | | LIDENTIFICATI | | | | |
| DEPTH | (tsf) | Depths From To | of | Fr | om | To | or | Change Depth* | | | clude color, type | | | | |
| | | | Sample | 0-0 | _ | 12-18 | | Deptil . | V = | | r, type, condition, | | 1 | | |
| | | 0.0-2.0 | SS | 12 | 7 | 7 | Moist | FILL: Brown mix of sand, clay/silt fines, gravel, and c | | | | | | | |
| | | | | 6 | | | | 1.5 | FILL: Dark | brown mix | of sand, clay/si | ilt fines orav | el concrete | | |
| | | 2.0-4.0 | SS | 6 | 6 | 8 | Moist | | and cinders | orown mix | or suria, cray/si | iit iiiies, giuv | ei, concrete, | | |
| | | | | 10 | | | | | \bowtie | | | | | | |
| | | 4.0-6.0 | SS | 9 | 16 | 3 | Moist | 5.0 | 5.0 | | | | | | |
| 5 | | | | 5 | | | | | FILL: Brown mix of sandy lean clay, sand, and gravel | | | | | | |
| | | 6.0-8.0 | SS | 4 | 4 | 6 | Moist | 0.0 | FILL: Gray mix of sand, cinders, clay/silt fines, gravel | | | | | | |
| | | | | 3 | | | | 0.0 | and brick | | • | | | | |
| | | 8.0-10.0 | SS | 2 | 3 | 2 | Very | 8.0 | FILL: Brow | n mix of cla | ny, sand, gravel | brick and o | rinders | | |
| | | 0.0 10.0 | 55 | 2 | | <u> </u> | Moist | | X ILL. Bion | ii iiiix oi c ic | iy, sana, graver | , orien, una | omacis | | |
| 10 | | | | <u> </u> | | | | | \bowtie | | | | | | |
| | | | | | | | | | \bowtie | | | | | | |
| | | | | | | | | | \boxtimes | | | | | | |
| | | | | | | | | 12.5 | Water Seer | vaga at 13! | | | | | |
| | | 13.5-15.0 | SS | 1 | 2 | 1 | Wet | 13.5 | | | lers, wood, and | l gravel | | | |
| 15 | | | | | | | | | FILL: Mix of sand, cinders, wood, and gravel | | | | | | |
| 13 | | | | | | | | | \boxtimes | | | | | | |
| | | | | | | | | | \bowtie | | | | | | |
| | | | | | | | | | \bowtie | | | | | | |
| | 0.75-1.5 | 18.5-20.0 | SS | 1 | 2 | 3 | Very | 18.5 | X | | | | | | |
| | | | | | | | Moist | | FILL: Olive | Lean Clay | with Sand | | | | |
| 20 | | | | | | | | | \bowtie | | | | | | |
| | | | | | | | | | \bowtie | | | | | | |
| | | | | | | | | | \bowtie | | | | | | |
| | | 22.5.25.2 | 00 | _ | | 1.7 | 337 . | 23.5 | \bowtie | | | | | | |
| | | 23.5-25.0 | SS | 5 | 8 | 17 | Wet | 23.3 | FILL: Mix o | of limestone | fragments and | fine sand | | | |
| 25 | | | | | | | | 25.0 | X | | - | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | BOTT | OM OF BORI | NG: 25' | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | figation lin | I | 1 | 1 | <u> </u> | | <u> </u> | | | | | | | |

^{*} The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



| PRO | DJECT NAN | /IE Buckey | <u>e Auto</u> | <u>Par</u> | <u>ts - 2</u> | 474 | <u>McKinle</u> | <u>lumbus, OH</u> | [| | | ING NO | | | |
|-------|--------------------|-------------------|---------------|------------|---------------|----------------------|----------------|-------------------|-------------|---------------------------------|-------------------|-------------------|------------|---|-----------------------------|
| | | 3.6. 171 | | | | ,. | | C | | PROJ. | C 22(0() | | F. ELEV | | |
| CLI | ENT | McKin | <u>ley Av</u> | enue | Acq | uisiti | ons, LL | <u>C</u> | | | No. 1 <u>9</u> | <u>-G-22606-A</u> | DAT | E DRILLED | <u>11/15/2019</u> |
| | GROU | J ND WAT I | ER OB | SER | VAT | ION | | Propoi | rtio | ns Used | | Wt. x 30" | | | |
| Ι, | N | | The Lore | | | | | race | | Less than 5% | | nless Densit | | | Consistency |
| - | | ET BELOW SU | | | | | I | ew Little | | 5 to 10% 15 to 25% | 0 - 10 10 - 30 | | ose nse | 0 - 4 4 - 8 8 - 15 15 - 30 30 + | Soft Medium Stiff |
| - | | ET BELOW SU | | | | | S | Some | | 30 to 45% | 30 - 50 | Der | nse | 8 - 15 15 - 30 | Stiff Very Stiff Hard |
| _ | | ET BELOW SU | | | | | | Mostly | | 50 to 100% | 50 + | Very Der | nse | 30 + | Hard |
| | LOCAT | ION OF BO | RING | | | | | cation P | lan | | | | | | |
| H | Pocket | Sample | Туре | | ows pe | | Moisture | Strata | | | SO | IL IDENTIFIC | CATIO | N | |
| DEPTH | Penetrometer (tsf) | Depths | of | Er | Samp om | | Density or | Change | | | | nclude color, t | | | |
| Ω | | From To | Sample | | 6-12 | | | Depth* | | | | lor, type, condi | | | |
| | | 0.0-2.0 | SS | 47 | 18 | 16 | Moist | | \boxtimes | FILL: Dark | gray mix | of concrete fr | ragme | ents, gravel, | and sand |
| | | | | 16 | | | | | | | | | | | |
| | | | | | | | | 2.0 | | | | | | | |
| | | 2.0-4.0 | SS | 10 | 8 | 7 | Moist | 2.0 | | | n mix of s | and, gravel, | cinder | rs, brick, an | d clay/silt |
| | | | | 7 | | | | | \boxtimes | fines | | | | | |
| | | | | | | | | | | | | | | | |
| | | 4.0-6.0 | SS | 4 | 3 | 2 | Moist | | | No recovery | for 4' - 6' | depth sample | e | | |
| | | | | 1 | | | | | \bowtie | - · · · · · · · · · · · · · · · | | | - | | |
| • |) | | | | | | | | | | | | | | |
| | | 6.0-8.0 | SS | 4 | 8 | 7 | Moist | | | | | | | | |
| | | 0.0-8.0 | 33 | 6 | 0 | - | IVIOIST | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | 0.0.0.1 | ~~ | | | - 0 / - 1 | | | \boxtimes | | | | | | |
| | | 8.0-9.4 | SS | 3 | 2 | 50/5' | Moist | 0.0 | \boxtimes | | | | | | |
| | | | | | | | | 9.0 | Ħ | Possible Lin | nestone Be | edrock | | | |
| 10 | | 10.0-10.2 | SS | 50/2' | • | | | 10.2 | \Box | | | | | | |
| " | | | | | | |] | 10.2 | | | | | | | |
| | | | | | | | | | | | DOT' | ГОМ ОБ ВО | D INIC | Z. 10 2! | |
| | | | | | | | | | | | вот | IOM OF BO | IXINC | J. 10.2 | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
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^{*} The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

| | | | | | | | TES | ST BO | DRING LO | G | | | |
|-------|---------------------------|--|----------------------------|--|----------------|----------------------|---------------------------------|--------------------------------------|--|--|----------------|---|------------|
| PRO | JECT NAM | ⁄Œ <u>Bucke</u> y | <u>ye Auto</u> |) Par | <u>ts - 2</u> | 474] | McKinle | y Ave., | Columbus, OH | [| ВС | ORING NO | DB-11 |
| CLIE | ENT | McKin | ley Av | <u>enue</u> | : Acq | <u>uisiti</u> | ions, LLO | C | | PROJ. NO. 19-G-22 | | JRF. ELEV ATE DRILLED | 11/15/2019 |
| _ | 23.5 FEF FEF FEF | UND WATI ET BELOW SU ET BELOW SU ET BELOW SU ION OF BO | URFACE URFACE URFACE | AT C | COMPL 4 HOU | LETIO JRS HOUR | Tri Fe Li So | race ew ittle ome fostly | Less than 5% 5 to 10% 15 to 25% 30 to 45% 50 to 100% | O - 10 10 - 30 Med 30 - 50 | | on 2" O.D. S Cohesive C 0 - 4 4 - 8 8 - 15 15 - 30 30 + | |
| DEPTH | Pocket Penetrometer (tsf) | Sample Depths From To | Type of Sample | on Fr | ows pe | er 6" oler To | Moisture Density or | | | SOIL IDE Remarks include Rock-color, typ | | of soil, etc. | |
| 5 | | 0.0-2.0 2.0-4.0 4.0-6.0 6.0-8.0 8.0-10.0 | SS SS SS | 21 5 8 2 1 1 1 5 2 | 17 4 2 2 4 4 | 1 1 3 | Moist Moist Moist Very Moist | 8.0 | fragments, g | n and gray mix glass, and gravel mix of sand, cary for 8' - 10' degree for 8' - 10' de | elay/silt find | es, gravel, and | |
| 15 | | 13.5-15.0 | | 6 | 8 | 3 | Very Moist | 20.0 | FILL: Dark cinders No recovery | gray mix of sand for 18.5' - 20' d | | | nents, and |
| 20 | | | | | | | - | 20.0 | | of limestone frag | | | |



BOTTOM OF BORING: 24.4'

14 50/5"

Wet

24.4

23.5-24.4

25

SS

^{*} The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

| PROJECT NAME | Buckeye Auto Parts - 2474 McKinley Ave., Columbus, OH | | BORING NO | DB-12 |
|--------------|---|-------------------------|--------------|------------|
| | | PROJ. | SURF. ELEV. | |
| CLIENT | McKinley Avenue Acquisitions, LLC | NO. 19-G-22606-A | DATE DRILLED | 11/15/2019 |

| CLIE | ENT | <u>McKin</u> | ley Av | <u>enue</u> | Acqı | <u>uisiti</u> | ons, LLC | 3 | NO. 19-G-22606-A DATE DRILLED 11/15/20 |
|---|---------------------------|-----------------------------|----------------------|-------------|------|---------------|---------------------------------------|----------------------------|---|
| | GROU | J ND WAT I | ER OB | SER | VAT | ION | Tr | Propor | tions Used Less than 5% 140 lb Wt. x 30" fall on 2" O.D. Sampler Cohesionless Density Cohesive Consistency |
| FEET BELOW SURFACE AT COMPLETION FEET BELOW SURFACE AT 24 HOURS | | | | | | | N Fe | ew ittle | 5 to 10% 0 - 10 Loose 0 - 4 So 15 to 25% 10 - 30 Medium Dense 4 - 8 Medium Sti |
| _ | FEE | ET BELOW SU | JRFACE | AT _ | | HOUR | I | lostly | 30 to 45% 30 - 50 Dense 15 - 30 Very Still 50 to 100% 50 + Very Dense 30 + Har |
| | LOCATI | ON OF BO | RING | | Se | e Bo | ring Loc | ation P | an |
| DEPTH | Pocket Penetrometer (tsf) | Sample Depths From To | Type of Sample | on Fro | | | Moisture Density or Consist. | Strata Change Depth* | SOIL IDENTIFICATION Remarks include color, type of soil, etc. Rock-color, type, condition, hardness |
| | | 0.0-2.0 | SS | 21 | 19 | 20 | Moist | | FILL: Brown Sandy Lean Clay |
| | | | | 18 | | | | 2.0 | |
| | 4.5+ | 2.0-4.0 | SS | 8 | 16 | 26 | Moist | | FILL: Olive and Gray Sandy Lean Clay with Gravel |
| | 2.25 | 4.0-6.0 | SS | 7 | 9 | 12 | Moist | 4.0 | FILL: Gray mix of sandy lean clay, sand, cinders, and gravel |
| 5 | 2.23 | 1.0 0.0 | 55 | 12 | | 12 | Wioist | | 1122. Gray mix of sandy rean eray, sand, emders, and graver |
| | | 6.0-8.0 | SS | 2 | 3 | 4 | Moist | 6.0 | FILL: Dark gray mix of lean clay, sand, wood, and glass |
| | | | | 4 | | | | 8.0 | |
| | | 8.0-10.0 | SS | 6 | 8 | 4 | Very Moist | | FILL: Mix of wood and gray clay |
| 10 | | | | 2 | | | 1710150 | | No recovery for 8' - 10' depth sample |
| | | | | | | | | | |
| | | 13.5-15.0 | SS | 5 | 3 | 5 | Very | 13.0 | FILL: Mix of wood and clay/silt fines |
| 15 | | | | | | | Moist | | |
| | | | | | | | | | |
| | | | | | | | | 10.0 | Water Seepage at 18' |
| | | 18.5-20.0 | SS | 11 | 6 | 9 | Wet | 18.0 | FILL: Mix of limestone fragments, wood, sand, and fines |
| 20 | | | | | | | | | |
| | | 22.0-22.2 | SS | 50/2" | | | | | |
| | | | 33 | JU/2 | | | | 22.0 | Possible Limestone Bedrock |
| | | | | | | | | 22.2 | |
| 25 | | | | | | | | | BOTTOM OF BORING: 22.2' |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

^{*} The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



| PROJECT NAME | Buckeye Auto Parts - 2474 McKi | nley Ave., Columbus, OF | I | BORING NO | DB-13 |
|--------------|---------------------------------------|-------------------------|--------------------------|--------------|------------|
| | | | PROJ. | SURF. ELEV. | |
| CLIENT | McKinley Avenue Acquisitions, I | LC | NO. 1 <u>9-G-22606-A</u> | DATE DRILLED | 11/15/2019 |
| CDOID | D WATER ORGERYATION | T | 4.40 11 111/2 2011 | 6 II | |

| CLIE | CLIENT McKinley Avenue Acquisitions, LLC | | | | | | | | | | | D. 1 <u>9</u> | 2-G-22606-A DA | ATE DRILLED | <u>11/15/2019</u> |
|-------|--|-------------------|------------|-------|-------|-------|----------------|------------------|-----|--------------------------|---|------------------|---|--------------------------|-----------------------|
| | GROU | J ND WAT I | ER OB | SER | VAT | ION | | Proportions Used | | | 140 lb Wt. x 30" fall on 2" O.D. Sampler Cohesionless Density Cohesive Consistency | | | | |
| | Jone FFF | T BELOW SU | IDEACE | AT CO | ∩МРІ | FTIO | | race | | Less than 5% 5 to 10% | | hesio - 10 | Density Loose | | Consistency Soft |
| 1 | | T BELOW SU | | | | | Li | ttle | | 15 to 25% | 10 | - 30 | Medium Dense | 0 - 4 4 - 8 8 - 15 | Medium Stiff Stiff |
| _ | | T BELOW SU | | | | | | ostly | | 30 to 45% 50 to 100% | 30 50 | - 50 + | Dense Very Dense | 15 - 30 30 + | Very Stiff Hard |
| | | ON OF BO | | | | | ring Loc | | lan | | | | 1019 201110 | | 11414 |
| | Pocket | | | Blo | ws pe | | Moisture | Strata | | | | SC | OIL IDENTIFICAT | ION | |
| DEPTH | Penetrometer | Sample Depths | Type of | | Samp | | Density | Change | | | Rem | | include color, type | | |
| | (tsf) | From To | Sample | | 6-12 | | or Consist. | Depth* | | | Ro | ck-co | lor, type, condition, | , hardness | |
| | | 0.0-2.0 | SS | 6 | 4 | 7 | Moist | 0.4 | | Topsoil | | | | ,,, | |
| | | | | 7 | | | | | | FILL: Brow | n mix | c of s | and, gravel, and | clay/silt fine | es |
| | | | | | | | | | | | | | | | |
| | | 2.0-4.0 | SS | 5 | 7 | 7 | Moist | | | | | | | | |
| | | | | 3 | | | | | | | | | | | |
| | | | | | | | | 4.0 | | | | | | | |
| | | 4.0-6.0 | SS | 5 | 7 | 7 | Moist | | | FILL: Brow | n mix | c of c · 4' - | clay/silt fines, sar 6' depth sample | nd, and grave | el |
| 5 | | | | , | | | | | | 2011 1000 10 | 1) 101 | • | o depui sample | | |
| | | (0.00 | aa | 4 | | | | | | T | | | | | |
| | | 6.0-8.0 | SS | 2 | 3 | 3 | Moist | | | Limestone f | ragm | ents | in sample | | |
| | | | | | | | | | | | | | | | |
| | | 9 0 10 0 | SS | 2 | 4 | 1 | Maiat | | | | | | | | |
| | | 8.0-10.0 | 33 | 5 | 4 | 4 | Moist | | | | | | | | |
| | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | 13.5-14.6 | SS | 8 | 25 | 50/1" | Moist | 140 | | | | | | | |
| | | | | | | | | 14.0 | Ħ | Possible Lin | nesto | ne B | edrock | | |
| 15 | | 15.0-15.1 | SS | 50/1" | | | | 15.1 | 田 | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | F | 3OT | TOM OF BORIN | NG: 15.1' | |
| | | | | | | | | | | | | | | | |
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^{*} The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



| PR | OJECT NAN | 1E Buckey | <u>e Auto</u> | <u>Par</u> | <u>ts - 2</u> | 474 I | <u>McKinle</u> | ey Ave., | <u>Columbus, OF</u> | <u>I</u> | | BORING NO | DB-14 |
|-------|--------------------|------------------|---------------|-------------|---------------|---------------|----------------|--------------|---------------------------|----------------|-------------------|--------------------|----------------------|
| | | 3 # T71 | | | | ,. | | C | | PROJ. | C 22(0() | SURF. ELEV. | |
| CI | IENT | McKin | ley Av | <u>enue</u> | Acq | <u>uisiti</u> | ons, LL | <u>C</u> | | NO. 1 <u>9</u> | <u>-G-22606-A</u> | DATE DRILLED | <u>11/18/2019</u> |
| | GROU | J ND WATI | ER OB | SER | VAT | ION | | Propor | tions Used | | | all on 2" O.D. | |
| | NI | | | | | | | Trace | Less than 5% | | nless Density | | |
| | | ET BELOW SU | | | | | | ew Little | 5 to 10% 15 to 25% | 0 - 10 | | . 4 - 8 | Soft Medium Stiff |
| | | ET BELOW SU | | | | | S | Some | 30 to 45% | 30 - 50 | Dens | se 15 - 30 | Stiff Very Stiff |
| | | ET BELOW SU | | AT _ | | | | Mostly | 50 to 100% | 50 + | Very Dens | se 30 + | Hard |
| | LOCAT | ION OF BO | RING | | S | ee Bo | ring Lo | cation P | lan | | | | |
| 5 | Pocket | Sample | Туре | | ws pe | | Moisture | Strata | | SO | IL IDENTIFICA | ATION | |
| DEDTU | Penetrometer (tsf) | Depths | of | En | Samp om | | Density or | Change | | Remarks i | nclude color, ty | pe of soil, etc. | |
| 5 | (151) | From To | Sample | | | 12-18 | | Depth* | | Rock-co | lor, type, condit | ion, hardness | |
| | | 0.0-2.0 | SS | 4 | 5 | 6 | Moist | 0.2 | Topsoil | | | | |
| | | | | | | | | | FILL: Brow | n mix of s | and, gravel, c | lay/silt fines, an | d cinders |
| | | | | 8 | | | | | \bowtie | | | | |
| | | | | | | - | | | \otimes | | | | |
| | | | | | | | | | \otimes | | | | |
| | | | | | | | | | \bowtie | | | | |
| | | | | | | | | | \bowtie | | | | |
| | | | | | | | | 2.0 | \boxtimes | | | | |
| | 4.5+ | 2.0-4.0 | SS | 12 | 10 | 5 | Moist | 2.0 | FILL: Brow | n Sandy I | ean Clav | | |
| | | 2.0 | 55 | 12 | 10 | | 1,10150 | | | in Sundy L | cui ciuj | | |
| | | | | 8 | | | | | \bowtie | | | | |
| | | | | | | | | | \boxtimes | | | | |
| | | | | | | - | | | \otimes | | | | |
| | | | | | | | | | \boxtimes | | | | |
| | | | | | | | | | \bowtie | | | | |
| | | | | | | | | | \boxtimes | | | | |
| | | 4050 | CC | _ | 1 | _ | M | | $\bigotimes_{\mathbf{N}}$ | - C - 41 - 5 | 0.1.4 | 1. | |
| | | 4.0-5.9 | SS | 2 | 1 | 2 | Moist | | No recovery | y for 4' - 5. | 9' depth samp | ole | |
| | | | | 50/5" | | | | | \boxtimes | | | | |
| | | | | | | | | | \bowtie | | | | |
| | 5 | | | | | | | 5.0 | × | | | | |
| | | | | | | | | | FILL: Brow | n Silty Sa | nd with Grave | el | |
| | | | | | | | | 5.5 | | | | | |
| | | | | | | | | | Possible Lir | nestone Be | edrock | | |
| | | | | | | | | 5.9 | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | - | | | | BOT | TOM OF BO | RING: 5.9' | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |



^{*} The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

| PROJECT NAME | Buckeye Auto Parts - 2474 McKin | nley Ave., Columbus, OH | | BORING NO | DB-15 |
|--------------|--|-------------------------|--------------------|-------------------|------------|
| | | | PROJ. | SURF. ELEV. | |
| CLIENT | McKinley Avenue Acquisitions, I | LC | NO. 19-G-22606-A | DATE DRILLED | 11/18/2019 |
| GROUN | D WATER OBSERVATION | Proportions Used | 140 lb Wt. x 30" f | fall on 2" O.D. S | Sampler |

| CLIE | ENT | McKin | ley Av | <u>enue</u> | Acqı | <u>uisiti</u> | ons, LLC | | | NO. 19-G-22606-A DATE DRILLED 11/18/2019 | | | |
|-------|--------------------|-------------|--------|-------------|------------|---------------|---------------|--------------|-------------------------|--|--|--|--|
| | GROU | JND WAT | ER OB | SER | VAT | ION | | Propor | tions Used | 140 lb Wt. x 30" fall on 2" O.D. Sampler | | | |
| | Jono EEE | ET BELOW SU | DEACE | AT C | OMDI | ETIO | | race ew | Less than 5% 5 to 10% | Cohesionless Density Cohesive Consistency 0 - 10 Loose 0 - 4 Soft | | | |
| 1. | | ET BELOW SU | | | | | Li | ttle | 15 to 25% | 10 - 30 Medium Dense 4 - 8 Medium Stiff | | | |
| - | | ET BELOW SU | | | | | | ome ostly | 30 to 45% 50 to 100% | 30 - 50 Dense 15 - 30 Very Stiff 50 + Very Dense 30 + Hard | | | |
| - | | ON OF BO | | | | | ring Loc | - | | 11, 21 | | | |
| I | Pocket | Sample | Туре | | ws pe | r 6" | Moisture | Strata | | SOIL IDENTIFICATION | | | |
| DEPTH | Penetrometer (tsf) | Depths | of | Fre | Samp om | ler To | Density or | Change | | Remarks include color, type of soil, etc. | | | |
| ſΩ | (131) | From To | Sample | | 6-12 | | | Depth* | | Rock-color, type, condition, hardness | | | |
| | | 0.0-2.0 | SS | 8 | 17 | 8 | Moist | | FILL: Brow | on mix of clay/silt fines, sand, and cinders | | | |
| | | | | 0 | | | | | No recovery | y for 0' - 2' depth sample | | | |
| | | 20.40 | GG. | 0 | (| _ | M | 2.0 | × | | | | |
| | | 2.0-4.0 | SS | <u>8</u> 5 | 6 | 5 | Moist | | \bowtie | of clay/silt fines, cinders, and gravel | | | |
| | | | | | | | | | No recovery | y for 2' - 4' depth sample | | | |
| | 4.5+ | 4.0-6.0 | SS | 6 | 6 | 8 | Moist | 4.5 | \boxtimes | | | | |
| 5 | - | | | 7 | | | 1,1015 | 1.5 | Brown mix | of silty sand, gravel, and sandy lean clay | | | |
| | | | | | | | | | | | | | |
| | 4.5+ | 6.0-8.0 | SS | 7 | 8 | 13 | Moist | | \boxtimes | | | | |
| | | | | 13 | | | | | \boxtimes | | | | |
| | | | | | | | | | \boxtimes | | | | |
| | 4.5+ | 8.0-10.0 | SS | 9 | 17 | 16 | Moist | | \otimes | | | | |
| | | | | 22 | | | | | | | | | |
| 10 | | | | | | | | | | | | | |
| | | | | | | | | | \boxtimes | | | | |
| | | | | | | | | | \boxtimes | | | | |
| | | | | | | | | | \bigotimes | | | | |
| | | | | | | | | | \bigotimes | | | | |
| | | 13.5-13.7 | SS | 50/2" | | | | 13.5 | | y for 13.5' - 13.7' depth sample | | | |
| | | | | | | | | 13.7 | Possible Lin | mestone Bedrock | | | |
| 15 | | | | | | | | | | BOTTOM OF BORING: 13.7' | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
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^{*} The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



| PROJECT NAME | Buckeye Auto Parts - 2474 McKinley Ave., Columbus, OH | | BORING NO. | DB-16 |
|--------------|---|------------------|--------------|------------|
| | • | PROJ. | SURF. ELEV. | |
| CLIENT | McKinley Avenue Acquisitions, LLC | NO. 19-G-22606-A | DATE DRILLED | 11/18/2019 |

| CLIE | ENT | McKin | ley Av | <u>enue</u> | Acq | <u>uisiti</u> | ons, LLC | NO. 19-G-22606-A DATE DRILLED 11/18/2019 | |
|-------|--|-------------------|------------|-------------|-------|---------------|-----------------|--|---|
| | GROU | J ND WAT I | ER OB | SER | VAT | ION | | Propor | rtions Used 140 lb Wt. x 30" fall on 2" O.D. Sampler |
| | Jone EEE | T DELOW CL | DEACE | AT C | OMDI | ETIO | | race | Less than 5% Cohesionless Density Cohesive Consistency 5 to 10% 0 - 10 Loose 0 - 4 Soft |
| 1 | None FEET BELOW SURFACE AT COMPLETION FEET BELOW SURFACE AT 24 HOURS | | | | | | ittle | 5 to 10% | |
| _ | | T BELOW SU | | | | | | ome lostly | 30 to 45% 30 - 50 Dense 15 - 30 Very Stiff 50 to 100% 50 + Very Dense 30 + Hard |
| _ | | ON OF BO | | AI _ | | | ring Loc | | |
| | Pocket | ON OF BO | | R1o | ws pe | | Moisture | ation i | ian |
| DEPTH | Penetrometer | Sample Depths | Type of | | Samp | | Density | Strata Change | SOIL IDENTIFICATION Remarks include color, type of soil, etc. |
| DEF | (tsf) | From To | Sample | | om | To 12-18 | or | Depth* | Rock-color, type, condition, hardness |
| | | 0.0-2.0 | SS | 4 | 9 | 8 | Consist. Moist | _ | FILL: Brown mix of clay/silt fines, sand, gravel, and brick |
| | | | | 7 | | | | • | No recovery for 0' - 2' depth sample |
| | | 2.0-4.0 | SS | 5 | 6 | 11 | Moist | 2.0 | FILL: Gray Silty Sand with Gravel |
| | | 2.0 1.0 | | 14 | | 11 | IVIOISU | 4.0 | State only saile with staves |
| | | 4.0-6.0 | SS | 1 | 1 | 13 | Moist | 4.0 | FILL: Brown mix of sand, gravel, concrete fragments, and |
| 5 | | 0.0 | | 17 | 1 | 13 | 1110150 | | cinders |
| | 3.0 | 6.0-8.0 | SS | 10 | 6 | 5 | Moist | 6.0 | FILL: Brown mix of silty sand, sandy lean clay, and gravel |
| | | | | 6 | | | | | |
| | | 8.0-10.0 | SS | 7 | 8 | 9 | Moist | 8.0 | FILL: Brown mix of clay/silt fines, sand, gravel, brick, and |
| | | 0.0-10.0 | 55 | 12 | 0 | | Wioist | | cinders |
| 10 | | | | | | | | | No recovery fro 8' - 10' depth sample |
| | | | | | | | | | |
| | | | | | | | | | |
| | | 13.5-15.0 | SS | 3 | 1 | 1 | Very | 13.5 | |
| | | 13.3-13.0 | 33 | 3 | 1 | 1 | Moist | | FILL: Brown Sandy Lean Clay; contains brick fragments |
| 15 | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | 1.0 | 10 5 20 0 | CC | 7 | 5 | | X 7 | 18.5 | |
| | 1.0 | 18.5-20.0 | SS | 7 | 3 | 5 | Very Moist | 10.5 | FILL: Brown Sandy Lean Clay; contains wood and brick |
| 20 | | | | | | | | | fragments |
| | | | | | | | | | |
| | | | | | | | | | |
| | | 22.5.25.2 | 9.0 | - | | | | | |
| | | 23.5-25.0 | SS | 8 | 6 | 3 | Very Moist | | |
| 25 | | | | | | | | 25.0 | × |
| | | | | | | | | | D 077-11-1-11-11-11-11-11-11-11-11-11-11-11 |
| | | | | | | | | | BOTTOM OF BORING: 25.0' |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

^{*} The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



APPENDIX I SCPZ DELINEATION DETERMINATION

Stream Corridor Protection Zone Delineation Determination

The stream corridor protection zone for this development along the Scioto River has been determined using the COC SWDM 1.3.1 (Stream Corridor Protection Zone Delineation). From the southern edge of Larrison Lake to the south, the SCPZ has been determined to be 50 feet from the top of bank of the Scioto River. From the southern edge of Larrison Lake to the north, the SCPZ has been determined to be the same as the Federal Emergency Management Agency designated 100-year floodway. See Mass Excavation plans sheet 5 (Appendix G) for exact locations.