



February 02, 2023

City of Columbus, Department of Public Utilities
Division of Sewerage and Drainage
Attn: Mr. Greg Fedner, PE
Private Development Section Manager
910 Dublin Road
Columbus, OH 43215

Subject: South Outpost CC19843
Type II Variance from Stormwater Drainage Manual

Dear Mr. Fedner:

The following is our application for a Type II Variance Request from Section 2.3.1.4 of the 2021 City of Columbus Stormwater Drainage Manual for the proposed City of Columbus South Outpost project, submitted on behalf of the City of Columbus Department of Public Service. This project is located at 2260 Lockbourne Road, Columbus, OH 43207.

The project includes the demolition of the existing Marion Road Outpost and the construction of the new South Outpost Facility, which includes a new onsite stormwater management system. A public storm sewer replacement is planned with development, as discussed with DOSD early on during design, in order to lower the outlet elevation from the site. Lowering the storm sewer outlet is critical to the project as it provides more depth to allow for the proposed underground detention system. It also provides more depth for the onsite storm sewers which would otherwise be very shallow, given the flat nature of the existing site that slopes gently away from the outlet. This storm sewer replacement is along the east side of the Lockbourne Road, and extends from the site approximately 340' south to an existing 72" storm sewer (E2457). The existing storm sewer that is to be replaced was originally installed with CC1129.

Three different alignments were studied for the public storm sewer replacement, in which the preferred alignment was selected by DOSD. The preferred alignment places the centerline of the proposed storm sewer 6'-0" from the Right-of-Way line. Section 2.3.1.4 of the 2021 City of Columbus Stormwater Drainage Manual requires that all storm sewers that are to be publicly owned and operated have a minimum easement of 20 feet centered on the sewer, or 5 feet beyond the minimum trench limits on either side of the trench, whichever is greater. This section also requires that additional easements be provided along storm sewers within the public Right-of-Way that are less than 10 feet from the Right-of-Way line, to provide a total access width of 10 feet from the center of the storm sewer. We are seeking a Type II variance from Section 2.3.1.4 for approval of the storm sewer alignment less than 10' from the Right-of-Way line without an additional easement.

Exhibit Descriptions

Exhibits are provided to show a Minimal Impact Alternative, Full Compliance Alternative, and Preferred Alternative.



Minimal Impact Alternative

The Minimal Impact Alternative (Exhibit A) consists of installing the new storm sewer along the same alignment as the existing. This option complies with Section 2.3.1.4 of the 2021 Stormwater Drainage Manual. Similar to the Full Compliance Alternative, there are other complications that don't make this alternative practical. There is an existing 10-inch water main that extends parallel to the existing storm sewer that is within very close proximity (less than 2' center to center). Installing the new storm sewer along the same alignment places it within the required 10' of separation between storm sewers and water mains. This water main is currently planned to be abandoned by a current CIP project (WL22-C-2260), but construction on this project is not planned to begin until 2024, which will be after the installation of the storm sewer. Also, since the proposed storm sewer is being upsized, there may be a physical conflict with the water main since it is within such a close proximity. There are also concerns of how close the proposed storm sewer would be to the existing utility poles along the east side of Lockbourne Road. This option is better than the Full Compliance Alternative in that the impact to Lockbourne Road is reduced. However, the conflicts with the water main and the utility poles make this option not feasible.

Full Compliance Alternative

The Full Compliance Alternative (Exhibit B) consists of extending the new public storm sewer within the northbound lane of Lockbourne Road. The existing inlets along the east side of Lockbourne Road would be replaced at the same locations as to not change the drainage pattern, and tied into the new storm sewer. This storm sewer alignment meets the requirements Section 2.3.1.4 of the 2021 Stormwater Drainage Manual, however involves other complications due to more significant impacts to Lockbourne Road. Since the sewer would be located within the paved roadway, trenching for installation and future maintenance would require extensive pavement replacement and maintenance of traffic above and beyond the Minimal Impact and Preferred Alternatives. This will make installation and future maintenance of this sewer more difficult, expensive, and hazardous.

Preferred Alternative

The Preferred Alternative (Exhibit C) consists of extending the new storm sewer underneath the existing sidewalk between the overhead power lines and the Right-of-Way line. This alternative was selected by DOSD as their preferred alignment. This option does not have the same issues as the Full Compliance or Minimal Impact Alternatives as it completely moves the storm sewer outside of the limits of the roadway and creates a greater separation between the existing 10-inch water main. This option does impact the existing sidewalk and drive apron to the adjacent private property, but these impacts are less significant and less costly than the impacts to the roadway as discussed in the Full Compliance and Minimal Impact Alternatives. The issue with this alternative is that the centerline of the proposed storm sewer is located 6'-0" from the Right-of-Way line, which does meet the 10' requirement as outlined in Section 2.3.1.4 of the 2021 Stormwater Drainage Manual, thus the reason for this variance request.

Justification for Variance

It is our opinion that this deviation from Section 2.3.1.4 of the 2021 Stormwater Drainage Manual for the Preferred Alternative is justified by the following reasons:

- The Minimal Impact and Full Compliance alternatives are not practical due to increased impacts to the roadway (pavement replacement and maintenance of traffic) and conflicts



with existing utilities. The Preferred Alternative keeps the storm sewer clear of the roadway for easier installation and maintenance.

- It is relatively common for sewers or utility lines to have an easement that is not centered over the utility, as would be the case if this variance is granted.
- The proposed sewer can still be installed and maintained without the additional 4'-0" of easement.
- Obtaining an easement from the adjacent property owner would be a substantial cost to the project with little benefit. There is also no guarantee the property owner is willing to grant an easement.

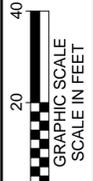
Please review this application and provide comments at your earliest convenience. If you have any questions, please contact our office at (614) 487-1650, or by email at justin.blood@korda.com.

Yours truly,

KORDA/NEMETH ENGINEERING, INC.
Consulting Engineers

A handwritten signature in blue ink that reads "Justin Blood". The signature is written in a cursive, flowing style.

Justin Blood, PE
Project Engineer



DESIGNED
KGW
CHECKED
JDB

STORM EXTENSION EXHIBIT

LOCKBOURNE RD

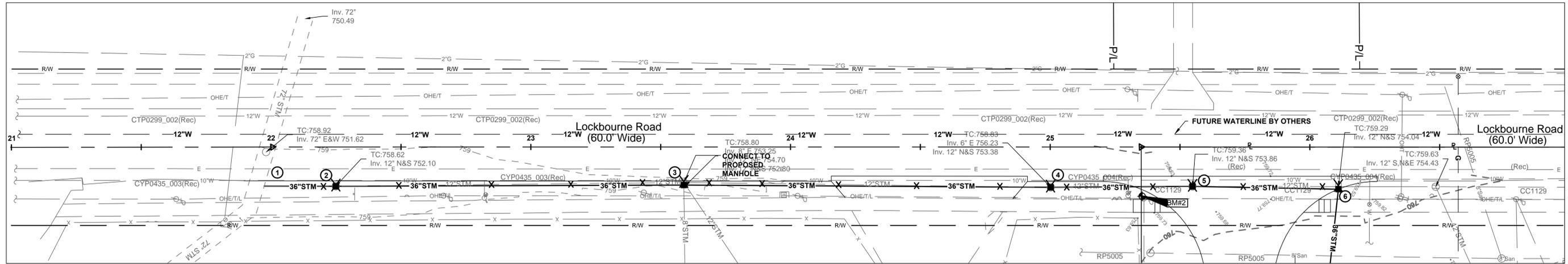


EXHIBIT A (MINIMAL IMPACT)

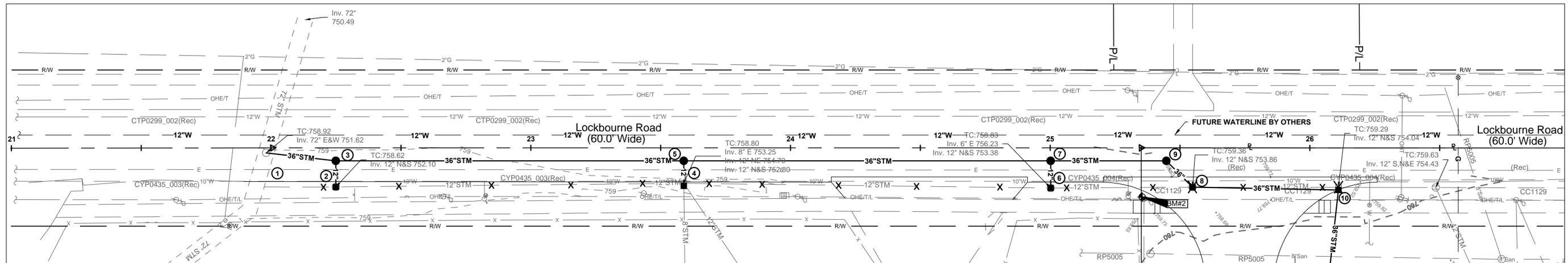


EXHIBIT B (FULL COMPLIANCE ALTERNATIVE)

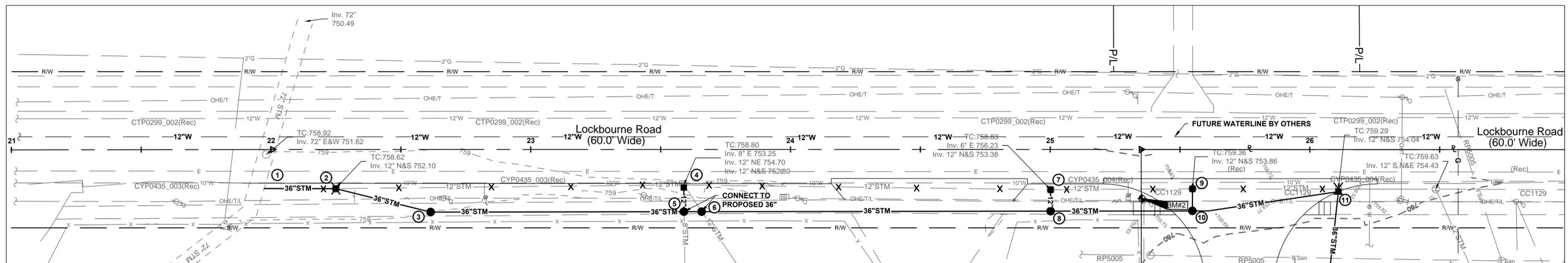


EXHIBIT C (PREFERRED ALTERNATIVE)

| EXISTING | | PROPOSED | |
|----------|---------------------------|----------|-------------------------|
| 800 | INDEX CONTOUR | | UTILITY METER |
| 799 | INTERMEDIATE CONTOUR | | VALVE |
| E | UNDERGROUND ELECTRIC LINE | | CATCH BASIN |
| OHT | OVERHEAD TELEPHONE LINE | | MANHOLE WITH OPEN GRATE |
| W | WATER LINE | | TELEPHONE POLE |
| G | GAS LINE | | POWER POLE |
| STM | STORM SEWER | | SIGN |
| SAN | SANITARY SEWER | | SPOT ELEVATION |
| FH | FIRE HYDRANT | | TOP OF CASTING |
| | | | BENCHMARK |
| | | | STRUCTURE NUMBER |

TO 708.53