



CINCINNATI
COLUMBUS
DAYTON

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TYPE II VARIANCE REQUEST

May 24, 2016

City of Columbus, Division of Sewerage & Drainage
910 Dublin Road
Columbus, Ohio 43215

ATTN: Mr. John Newsome, P.E., Administrator
Mr. Greg Fedner, P.E., Private Development Section Manager

RE: Polaris Pointe – Phase I (8886 Lyra Drive)
CC# 17376
PID# 31843101017000

Mr. Newsome and Mr. Fedner,

We submitted a request for a Type II Variance from the City of Columbus' Storm Water Drainage Manual on 4/1/16. We have since received comments and request for additional information on 5/3/16 from the Variance Committee on the initial submittal. We would like to respond, in detail, to each specific comment below:

1. Variance lacking on a strong supporting justification of hardship.

A primary goal of this project is to create an exciting, high-density, mixed-use development. Our original variance request denoted a substantial loss of development on this project for a fully compliant design (which would eliminate the retaining wall and provide side slopes/aquatic bench) justifying hardship. Those losses include:

Apartment Building – Loss of 18,816 SF of building + 52 parking spaces + the courtyard space becomes unusable and eliminates the pool

Office Building – Loss of 12,488 SF of building

These losses to the development would have a devastating effect on the project. Not only would the entire dynamic of the project change but the impact would also make this project economically not feasible. This is a substantial hardship given the impending investments by both the developer and the city for this project.

2. It is understood that this is a “phased” development (over 20 acres un-developed) of which this variance only applies to approximately ½ of the overall area.

Correct; however, only phase 1 is being proposed at this time. The phase 1 developer does not currently own the portion included within phase 2. However, from a storm water perspective, we have taken a more regional approach with the pond accommodating storm water quality requirements for the entire 20 acres.

3. The overall property is of significant size wherein the justification provided did not explore various potential BMP options (i.e. within the first phase in areas such as the proposed 2 courtyards as well as the remaining un-developed property).

The development team did consider many options prior to submitting the site plan to the City. We reviewed requirements for storm water and met with the city as plans were being developed. Previously, retaining walls have been used in storm water ponds throughout the City. These walls have been approved and accepted by the City without issue or variance. We did not anticipate the proposed wall was an issue as it was not flagged at the PSCP level. Unfortunately because of this, we are requesting this variance well down the path of construction drawings. In fact, mass grading has already been approved by the City.

JOB #: 140322.002



While the retaining wall does eliminate a portion of the aquatic bench, additional BMP's upstream of the water quality pond have been incorporated into Phase I of the project. A major section of the main entry drive utilizes pervious pavers, which are an approved BMP by the City. We are providing approximately 17,000sf of pervious pavers. Also, the entire Phase I site uses underground detention to meet water quantity requirements. This underground detention has extensive gravel backfill used in the system of approximately 23,000 of 9" gravel bedding that serves as pre-treatment. In addition, all storm water runoff enters the underground chamber through isolator rows, which offer another level of pre-treatment. Both of these BMP's provide for pre-treatment and infiltration of on-site storm water. It is likely similar BMP's will be used in the development of Phase II.

4. **Please explain the comments in the proposed "executive summary" which state that the proposed wet basin cannot fully incorporate the water quality volume which is a SWDM requirement.**

We apologize for any confusion. The basin does, in fact, meet the water quality volume requirement. The remaining storage in the basin does not fully meet the water quantity requirement. Therefore, upstream, underground detention is proposed.

5. **Is the "permanent pool" sized for 75% WQv PLUS an additional 20% for sediment accumulation as required?**

Yes; 95% WQv is 34,720 cf. The permanent pool volume is 109,200 cf.

6. **The reference to approvals for previous similar plans without a variance seems to be providing an argument along the lines of "two wrongs make it right".**

That was not the intent of the reference. The reference was made to indicate that previous interpretations of the Storm Water Drainage Manual did not indicate that all retaining walls along retention basins required a variance request or was considered "wrong." This is a diversion from past interpretations. We were asked to provide a few specific examples of past projects with basins/walls that had been approved which we provided.

7. **Regarding the following sentence on the Preferred Alternative – "Due to the proposed wall along these two sides, the 4:1 side slopes are not met and a safety bench is not proposed because it would not be accessible or maintainable." The safety bench would not be "constructible" under this condition versus "accessible or maintainable".**

Correct; a safety bench along a wall really becomes a moot point in this specific situation.

8. **It is understood that there will be pedestrian traffic within the development further encouraged with a sidewalk running along the proposed retaining wall to which you are seeking a variance to the "safety" requirements.**

This development is certainly intended to encourage pedestrian traffic and connectivity as an amenity of the development. Along the west/drive side of the basin, there will be a curb along the drive with a vehicular guardrail behind it and 4' green space with trees, light poles, and a continuous shrub hedge. Along the south side of the basin, the intent of the final build out in this area is a useable plaza space to be utilized by office and residential tenants as an amenity. Therefore, we have shown a 42" high pedestrian guardrail along this edge meeting Ohio Building Code requirements, Section 1013. We are providing the same measure that a 4th story balcony would provide on an apartment building. In addition, the City also has many examples of public spaces with public, pedestrian walks along waterways such as the improved Scioto Mile. Please reference the attached cross sections of both the west and south sides of the basin, Exhibit A. As discussed previously via meeting and email, it is our understanding that the City is accepting of these measures.

9. **It was encouraged to incorporate as many safety features as possible into the variance request.**

As noted above, we believe we are incorporating adequate safety features into the design. As discussed previously via meeting and email, it is our understanding that the City is accepting of these measures.



10. The only safety feature appears to be the 42-inch pedestrian guard-rail along the retaining wall.

As noted above, this is the proposed safety feature on the south side given the specific application. We are providing additional safety features on the west side. As discussed previously via meeting and email, it is our understanding that the City is accepting of these measures.

11. No dimensions, wall heights, total water depth, etc. were included in the variance narrative.

Based on review of the attached exhibits with difficult text size it appears the proposed retaining wall is approximately 15 feet in height which creates a high safety risk. In addition, the daily normal pool depth of 6 feet increases to nearly 8 feet during a 100 year storm event. There was a lack of discussion or detail of how the proposed wet basin is accessible in either “emergency” or “maintenance” conditions. The exhibits were not clear as to whether there is an adequate maintenance access along the proposed basin’s perimeter.

We did not intend to provide unclear data. We just believed that the overall intent was to be shown in the variance request as we have submitted fully scalable drawings for the storm water review. However, please reference full sized sheets attached that can be better read and dimensioned. These are a portion of the overall storm CC plans. The overall wall height is approximately 15’ from the bottom of the pond. The normal pool depth is 6’ and increases to 8.5’ during the 100-yr storm event.

For emergency or maintenance conditions, the pond can be accessed via the paths located south of the pond and also at the NW corner of the pond. We are showing an 8’ wide asphalt multi-use trail that runs along the north and east sides.

12. Explain how the WQv calculation based on 20+ acres (in Storm Water report) is used, but about ¼ of the OVERALL development does not appear to drain to the basin and 6+ ac drains in an “undeveloped” state. Will the outlet be retro fitted between this phase and the future southeastern phase?

The water quality calculation is based on the total build out of the entire site, so that the outlet structure would not have to be modified for the future case. After discussions with City staff, the outlet of the pond will be modified in the future and the water quality calculations will be displayed for only phase 1 at this time. The volume will be available for phase 2 and will be shown in the master drainage portion of the storm water management report, but it will not be included in the phase 1 calculations.

The developer is working closely with the City on this investment into the Polaris Centers of Commerce area. Both parties have made incredible efforts to make this exciting mixed-use project a reality. Unfortunately without this variance approval, the project would not move forward. We appreciate your consideration for this variance approval and hope we can expect word from the committee soon. Feel free to contact us with any additional questions. Thank you!

Sincerely,

THE KLEINGERS GROUP

Jennifer L. Knittle, P.E., LEED AP
Group Leader

cc: Raif Webster, VanTrust Real Estate, LLC; FILE



DESIGN DEVELOPMENT

STATUS:

REVISION

PROJECT NUMBER

2015.174

DRAWN BY:

MGP

DATE: _____

18 DEC 2015

SHEET NUMBER:

ma architects



CIVIL ENGINEERING | www.kleingers.com
SURVEYING | 350 Worthington Rd., Ste B
LANDSCAPE | Westerville, OH 43082
ARCHITECTURE | 614.882.4311

GENERAL NOTES (CONTINUED)

SITE VISIT

THE CONTRACTOR IS REQUIRED TO VISIT THE SITE AND FULLY INFORM HIMSELF CONCERNING ALL CONDITIONS AFFECTING THE SCOPE OF THE WORK. FAILURE TO VISIT THE SITE SHALL NOT RELIEVE HIM FROM ANY RESPONSIBILITY IN THE PERFORMANCE OF THE CONTRACT.

TRAFFIC

THE DIVISION OF PLANNING AND OPERATIONS SHALL LOCATE AND MARK ALL UNDERGROUND TRAFFIC CONTROL CABLES. THE TRAFFIC ENGINEERING SHOP SHALL BE NOTIFIED 645-7393 (FAX 645-5987) AT LEAST FORTY- EIGHT (48) HOURS (EXCLUDING SAT. & SUN.) PRIOR TO THE BEGINNING OF ANY WORK WITHIN 450 FEET OF ANY SIGNALIZED INTERSECTION(S) OR WITHIN ANY POSTED AREA WHERE THE DIVISION HAS UNDERGROUND CABLE. SIGNALS MANAGEMENT PERSONNEL 645-7963 SHALL BE NOTIFIED SIX (6) WEEKS IN ADVANCE FOR SIGNAL REVISIONS OR POLE RELOCATIONS.

NO EXCAVATION SHALL BE MADE WITHIN FIVE(5) FEET OF ANY POLE THAT SUPPORTS TRAFFIC SIGNAL DISPLAYS OR SIGNS BY MAST ARM OR SIGNAL SPAN. EXCAVATION WITHIN EIGHT(8) FEET, BUT MORE THAN FIVE(5) FEET SHALL REQUIRE ADDITIONAL SUPPORT(DOWN GUY, HEAD GUY, BASE GUY, ETC.). THE CONTRACTOR SHALL CONTACT DIVISION OF PLANNING AND OPERATIONS SIGNALS MANAGEMENT PERSONNEL AT 645-7963 AT LEAST FORTY-EIGHT (48) HOURS (EXCLUDING SAT. & SUN.) PRIOR TO THE BEGINNING OF SUCH EXCAVATION SO THAT THE CITY CAN APPROVE THE STABILIZATION SETUP BY THE CONTRACTOR. STABILIZATION WILL BE DONE BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

WHEN ANY TRAFFIC CONTROL DEVICE, CONDUIT, OR CABLE GETS DAMAGED, THE CONTRACTOR SHALL NOTIFY SIGNALS MANAGEMENT PERSONNEL AT 645-7963 BETWEEN 8:00 AM AND 4:30 PM, MONDAY THROUGH FRIDAY. AT OTHER TIMES OR IF SIGNALS MANAGEMENT PERSONNEL CANNOT BE REACHED, CONTACT THE TRAFFIC ENGINEERING MAINTENANCE SHOP AT 645-7963. LEAVE A MESSAGE ON THE ANSWERING MACHINE IF NECESSARY.

ANY WORK DONE BY THE DIVISION OF PLANNING AND OPERATIONS, INCLUDING INSTALLATION, RELOCATION, REMOVAL AND/OR REPLACEMENT OF TEMPORARY TRAFFIC CONTROL DEVICES AS A RESULT OF WORK DONE BY THE CONTRACTOR OR AS A RESULT OF NEGLIGENCE OF THE CONTRACTOR, SHALL BE AT THE CONTRACTORS' EXPENSE.

PAYMENT FOR ALL TRAFFIC MAINTENANCE ITEMS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR MAINTAINING TRAFFIC.

SPECIAL NOTES

THE CONTRACTOR AND SUB-CONTRACTORS SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS ALSO THE SOLE RESPONSIBILITY OF CONTRACTOR AND SUB-CONTRACTOR TO INITIATE, MAINTAIN, AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE WORK.

EXISTING UTILITIES

ALL EXISTING UTILITIES KNOWN TO EXIST HAVE BEEN SHOWN ON THESE PLANS IN THEIR APPROXIMATE LOCATION. PRIOR TO THE BEGINNING CONSTRUCTION OR EARTH MOVING OPERATIONS, THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF THE UTILITIES SHOWN. THE CONTRACTOR IS ALSO RESPONSIBLE FOR THE PROTECTION AND/OR RELOCATION OF ANY UTILITIES THAT MAY EXIST AND ARE NOT SHOWN.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE RELOCATION AND/OR PROTECTION OF ANY UTILITIES AS REQUIRED BY THE PLAN WITH THE OWNER OF THE AFFECTED UTILITY.

UTILITY POLES WITHIN INFLUENCE OF THE UTILITY OPERATIONS SHALL BE REINFORCED BY THE UTILITY COMPANY PRIOR TO THESE CONSTRUCTION ACTIVITIES. NOTIFICATION OF THE UTILITY COMPANY PRIOR TO CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

STORM SEWER

ALL CATCH BASINS WITH DEPTH GREATER THAN 4.5' SHALL BE PROVIDED WITH STEPS. STEPS SHALL MEET THE REQUIREMENTS OF ITEM 604.

DISTANCES SHOWN FOR BOTH SANITARY AND STORM SEWER PIPES ARE MEASURED FROM CENTER OF STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR ACTUAL FIELD CUT LENGTH. COORDINATES FOR STORM AND SANITARY STRUCTURES ARE SHOWN TO THE CENTER OF STRUCTURE, UNLESS OTHERWISE NOTED.

COMPACTED FILLS ARE TO BE MADE TO THE MINIMUM OF THREE FEET ABOVE THE CROWN OF ANY PROPOSED SEWER PRIOR TO CUTTING OF TRENCHES FOR PLACEMENT OF SAID SEWERS. ALL FILLS SHALL BE CONTROLLED, COMPACTED, AND INSPECTED BY AN APPROVED TESTING LABORATORY.

ROOF DRAINS, FOUNDATION DRAINS AND ALL OTHER CLEAR WATER CONNECTIONS TO THE SANITARY SEWER SYSTEMS ARE PROHIBITED.

ALL PROPOSED STORM SEWERS AND SURFACE OR OTHER DRAINAGE FACILITIES ARE TO BE PRIVATE AND MAINTAINED BY THE OWNER.

STORM SEWER PIPE SHALL BE BUILT IN CONFORMANCE WITH THE REQUIREMENTS OF ITEM 901 OF THE CITY OF COLUMBUS, CONSTRUCTION AND MATERIAL SPECIFICATIONS, CURRENT VERSION.

ALL EXISTING INVERTS ALONG THE PROPOSED TOP OF CASTING ELEVATIONS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION OF THE SEWER.

MANHOLE TOPS SHALL BE ADJUSTED TO FINAL GRADE AS DIRECTED BY THE ENGINEER. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 604.

THE FLOW IN ALL SEWERS, DRAINS, FIELD TILES AND WATERCOURSES ENCOUNTERED SHALL BE MAINTAINED BY THE CONTRACTOR AT HIS OWN EXPENSE, AND WHENEVER SUCH WATERCOURSES AND DRAINS ARE DISTURBED OR DESTROYED DURING THE PROSECUTION OF THE WORK, THEY SHALL BE RESTORED BY THE CONTRACTOR AT HIS OWN EXPENSE TO A CONDITION SATISFACTORY TO THE ENGINEER.

ALL DRAIN TILE AND STORM SEWERS DAMAGED, DISTURBED OR REMOVED AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED WITH THE SAME QUALITY PIPE OR BETTER, MAINTAINING THE SAME GRADIENT AS EXISTING. THE DRAIN TILE AND/OR STORM SEWER SHALL BE CONNECTED TO THE CURB SUBDRAIN, STORM SEWER SYSTEM OR OUTLETED INTO THE ROADWAY DITCH AS APPLICABLE. REPLACEMENT DRAIN TILE/STORM SEWER SHALL BE LAID ON COMPACTED BEDDING EQUAL IN DENSITY TO SURROUNDING STRATUM. REPLACEMENT SHALL BE DOWN AT THE TIME OF THE BACKFILL OPERATION. COST OF THIS WORK TO BE INCLUDED IN THE PRICE BID FOR THE VARIOUS IMPROVEMENT ITEMS.

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

ALL BEDDING SHALL BE IN ACCORDANCE WITH THE CITY OF COLUMBUS STANDARD DRAWING AA-S151 FOR RIGID PIPE SEWER (6" TO 108" DIAMETER), CITY OF COLUMBUS STANDARD DRAWING AA-S149 FOR FLEXIBLE PIPE SEWER (6" TO 60" DIAMETER), OR CITY OF COLUMBUS STANDARD DRAWING AA-S153 FOR RIGID PIPE SEWER (30 TO 108" DIAMETER).

IN ADDITION TO THE REQUIREMENTS OF AA-S140 AND AA-S151, ALL TRENCHES UNDER ROADWAY PAVEMENT SHALL BE A MINIMUM OF 36" WIDE TO ALLOW FOR MECHANICAL COMPACTION EQUIPMENT, HOETAMPS, JUMPING JACKS, ECT.

NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR EXPENSES INCURRED DUE TO SOIL CONDITIONS, GROUNDWATER, AND/OR ROCK EXCAVATION, ALL OF THESE ITEMS SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 901.

ALL YARD DRAINS SHALL BE ONE OF THE FOLLOWING: NYLOPLAST-ADS DRAIN BASIN, NDS DURACAST FABRICATED PVC CATCH BASIN, AGR-DRAIN CATCH BASIN, OR APPROVED EQUAL.

ALL CATCH BASINS PLACED WITHIN THE PAVEMENT SHALL HAVE HEAVY DUTY FRAMES AND GRATES.

STORM SEWER PIPE LABELED "STM" SHALL BE ONE OF THE FOLLOWING: PVC SDR-35, PVC PROFILE PIPE PER ODOT ITEM 707.42, HIGH DENSITY POLYETHYLENE PER ODOT ITEM 707.33, ALUMINIZED CORRUGATED METAL, ODOT ITEM 707.01, 707.02, OR REINFORCED CONCRETE PIPE. ODOT ITEM 706.02 CLASS IV. STORM SEWER PIPE LABELED "RCP" SHALL BE REINFORCED CONCRETE PIPE, ODOT ITEM 706.02 CLASS IV. ALL STORM IS TO BE INSTALLED PER ODOT ITEM 603. ALL STORM PIPE USED MUST HAVE A MANUFACTURER SPECIFIED FRICTION FACTOR OF 0.013 (m=0.013) OR LESS.

DEWATERING

THE COST OF ALL DEWATERING REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS IMPROVEMENT ITEMS.

THE DIRECT OR INDIRECT DISCHARGE OR PUMPING OF UNFILTERED SEDIMENT-LADEN WATER INTO THE STORM DRAINAGE SYSTEM OR WATERCOURSE IS ILLEGAL AND PROHIBITED.

ANY WELL, WELL POINT, PIT, OR OTHER DEVICE INSTALLED FOR THE PURPOSE OF LOWERING THE GROUND WATER TO FACILITATE CONSTRUCTION OF THIS PROJECT SHALL BE PROPERLY ABANDONED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 3745-9-10 OF THE OHIO ADMINISTRATIVE CODE OR IN ACCORDANCE WITH THE PROVISIONS OF THIS PLAN AS DIRECTED BY THE DIRECTOR OF PUBLIC UTILITIES OR HIS REPRESENTATIVE.

ANY CONTRACTOR INSTALLING ANY WELL, WELL POINT, PIT, OR OTHER DEVICE USED FOR THE PURPOSE OF REMOVING GROUND WATER FROM AN AQUIFER SHALL COMPLETE AND FILE A WELL LOG AND DRILLING REPORT FORM WITH THE OHIO DEPARTMENT OF NATURAL RESOURCES (ODNR), DIVISION OF WATER, WITHIN 30 DAYS OF THE WELL COMPLETION IN ACCORDANCE WITH THE OHIO REVISED CODE SECTION 1521.01 AND 1524.05 IN ADDITION, ANY SUCH FACILITY IS COMPLETED IN ACCORDANCE WITH SECTION 1521.16 OF THE OHIO REVISED CODE. FOR COPIES OF THE NECESSARY WELL LOG, DRILLING REPORT, OR REGISTRATION FORMS, PLEASE CONTACT: DIVISION OF WATER, OHIO DEPARTMENT OF NATURAL RESOURCES, FOUNTAIN SQUARE, COLUMBUS, OHIO 43224, (614)2656717.

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE TO THE ODNR FOR THE REGISTRY, MAINTENANCE AND ABANDONMENT OF ANY WITHDRAWAL DEVICE USED IN CONSTRUCTION OF THIS PROJECT.

TEMPORARY SOIL EROSION AND SEDIMENT CONTROL

EROSION AND SEDIMENT CONTROL MEASURES ARE INCLUDED AS A PART OF THIS PLAN. REFERENCE SHEETS 14 THROUGH 16 FOR EROSION CONTROL DETAILS.

IT IS THE RESPONSIBILITY OF THE SITE OWNER TO NOTIFY THE CITY OF COLUMBUS 2 WORKING DAYS PRIOR TO COMMENCEMENT OF THE INITIAL SITE LAND DISTURBANCE ON ANY SITE OF TWO OR MORE ACRES. THIS INCLUDES SITE CLEARING, GRUBBING, AND 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 MANAGEMENT OFFICE @ (614) 645-6700 OR FAX @ (614) 645-1840. DETAILS OF THIS REQUIREMENT MAY BE FOUND IN THE EROSION AND MANAGEMENT CONTROL REGULATION (ADOPTED JUNE 1, 1994). FAILURE TO COMPLY MAY RESULT IN ENFORCEMENT ACTION AS DETAILED IN THE CITY OF COLUMBUS CODES SECTION 1145.80.

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 FAILURE TO COMPLY WITH THESE REGULATIONS IS SUBJECT TO LEGAL ENFORCEMENT ACTION.

TEMPORARY AND/OR PERMANENT SEEDING WITHIN THE DESIGNATED WORK LIMITS SHALL BE COMPLETED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE MASS EXCAVATION IMPROVEMENTS. REFERENCE SHEET 15 FOR SEEDING SPECIFICATIONS.

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

DUST

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING DUST CONTROL MEASURE IN ACCORDANCE WITH C.M.S.C. ITEM 616. DUST CONTROL OPERATIONS SHALL BE PERFORMED ON A PERIODIC BASIS AND/OR AS DIRECTED BY THE ENGINEER AND/OR OWNER TO ALLEVIATE OR PREVENT THE DUST NUISANCE ORIGINATING WITHIN THE PROJECT LIMITS. THE COST FOR ALL DUST CONTROL MEASURES SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS IMPROVEMENT ITEMS.

FINGERDRAINS

OPENINGS SHALL BE PROVIDED AT DRAINAGE STRUCTURES TO ACCOMMODATE 4" DIAMETER PERFORATED PIPE FINGERDRAIN(S). THE FINGERDRAIN SHALL BE IN ACCORDANCE WITH CMSC ITEM 605 AND AS SHOWN.

THE FINGERDRAIN SHALL BE CONNECTED INTO THE INLET STRUCTURE AT A MINIMUM DEPTH OF 18" FROM PAVEMENT SURFACE WITHIN PARKING LOT AREAS.

ALL CATCH BASINS IN THE PAVEMENT ARE TO HAVE A MINIMUM OF 4, 4" PERFORATED FINGERDRAINS EXTENDING 10 LINEAR FEET FROM THE CATCH BASIN IN THE UPHILL DIRECTION AND CAPPED.

ALL CATCH BASINS IN THE CURB ARE TO HAVE A MINIMUM OF 2, 4" PERFORATED FINGERDRAINS EXTENDING 10 LINEAR FEET FROM THE CATCH BASIN IN THE UPHILL DIRECTION AND CAPPED.

THE UNDERDRAIN SHALL BE PROTECTED FROM HEAVY TRAFFIC AFTER INSTALLATION PRIOR TO PLACEMENT OF THE PROPOSED PAVING.

NON-RUBBER Tired VEHICLES

NON-RUBBER TIED VEHICLES SHALL NOT BE MOVED ON PUBLIC STREETS. EXCEPTIONS MAY BE GRANTED BY THE CITY ENGINEER WHERE SHORT DISTANCES AND SPECIAL CIRCUMSTANCES ARE INVOLVED. GRANTING OF EXCEPTIONS MUST BE IN WRITING, AND ANY DAMAGES MUST BE REPAIRED TO THE SATISFACTION OF THE CITY OF COLUMBUS.

STORAGE OF EQUIPMENT AND MATERIALS

NO MATERIALS, INCLUDING PIPE, SHALL BE STORED WITHIN THE PUBLIC RIGHT-OF-WAY OR WITHIN ONE HUNDRED (100) FEET OF ANY INTERSECTING STREET OR DRIVEWAY. DURING NON-WORKING HOURS, STORAGE OF EQUIPMENT SHALL COMPLY WITH THESE SAME REQUIREMENTS. COMPLIANCE WITH THESE REQUIREMENTS ALONG WITH ADDITIONAL PROVISIONS OF THE CONTRACT SPECIFICATIONS SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR OF HIS LEGAL RESPONSIBILITIES FOR THE SAFETY OF THE PUBLIC. THE CONTRACTOR SHALL INDICATE HIS INTENT WITH REGARD TO STORAGE OF THE MATERIAL AT THE PRE-CONSTRUCTION MEETING.

SANITARY FACILITIES

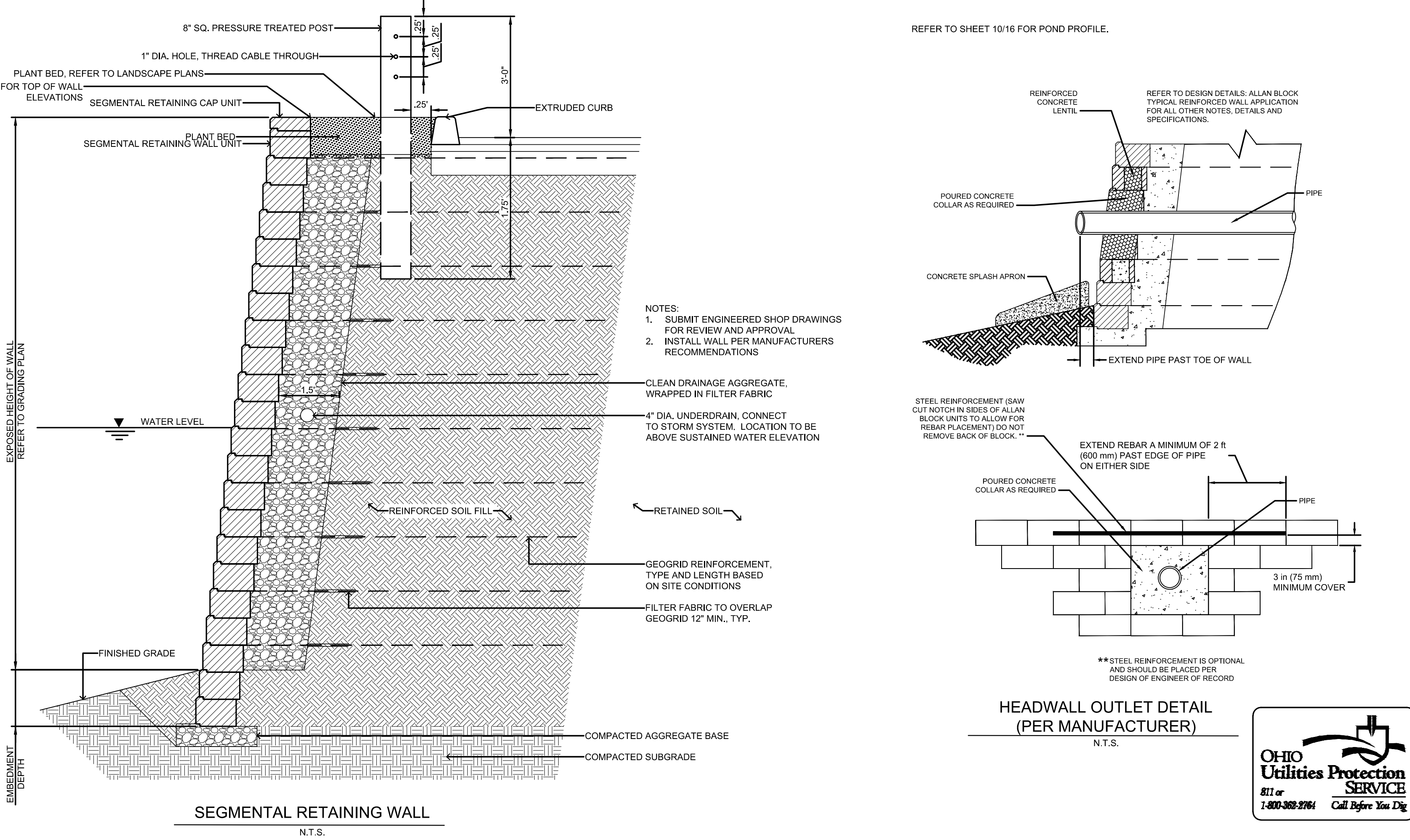
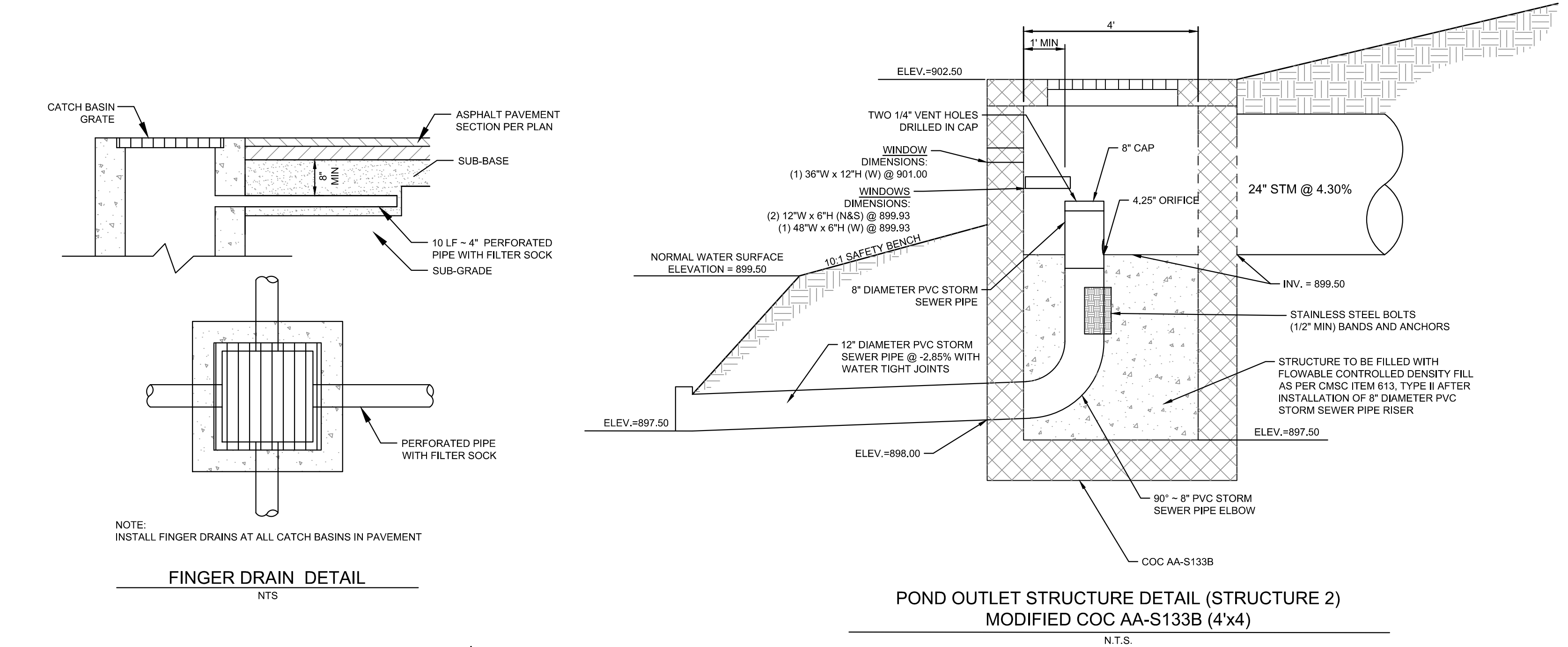
THE CONTRACTOR OR OWNER SHALL FURNISH AND MAINTAIN SANITARY CONVENIENCE FACILITIES FOR THE WORKMEN AND INSPECTORS FOR THE DURATION OF THE WORK. COST SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS IMPROVEMENT ITEMS.

FOR THE DIVISION OF POWER

THE DIVISION OF POWER HAS UNDERGROUND STREET LIGHTING IN THE PROJECT AREA. THE CONTRACTOR IS HEREBY **REQUIRED** TO CONTACT OUPS AT 1-800-362-2764 FORTY-EIGHT HOURS PRIOR TO CONDUCTING ANY ACTIVITY WITHIN THE CONSTRUCTION AREA. THE DOP DISPATCH OFFICE NUMBER IS: (614) 645-7627 (VOICE).

ANY REQUIRED RELOCATION, SUPPORT, PROTECTION, OR ANY OTHER ACTIVITY CONCERNED WITH THE CITY'S STREET LIGHTING SYSTEM IN THE CONSTRUCTION AREA IS TO BE PERFORMED 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. THE CONTRACTOR SHALL USE MATERIAL AND MAKE REPAIRS TO A CITY OF COLUMBUS STREET LIGHTING SYSTEM BY FOLLOWING DOP'S "MATERIAL AND INSTALLATION SPECIFICATIONS" (MS) AND THE CITY OF COLUMBUS "CONSTRUCTION AND MATERIAL SPECIFICATIONS - CITY OF COLUMBUS" (CMSC). ANY NEW OR RE-INSTALLED UNDERGROUND STREETLIGHT SYSTEM SHALL REQUIRE TESTING AS REFERRED TO IN SECTION 1000.18 OF THE CMS MANUAL. THE CONTRACTOR SHALL CONFORM TO DOP'S EXISTING CONDUCTOR SAFETY POLICY AND HOLD CARD SYSTEM, MIS-95, COPIES OF WHICH ARE AVAILABLE FROM DOP IF YOU HAVE ANY QUESTIONS. CALL SCOTT WOLFE AT (614) 724-4351 OR CHRIS VOGEL AT (614) 645-6936.

IF ANY ELECTRIC FACILITY BELONGING TO DOP IS DAMAGED IN ANY MANNER BY THE CONTRACTOR, ITS AGENTS, SERVANTS, OR EMPLOYEES, AND REQUIRES EMERGENCY REPAIRS, 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.



EASEMENT REFERENCE				REVISIONS			PLAN PREPARED BY: <div> THE KLEINGERS GROUP CIVIL ENGINEERING SURVEYING LANDSCAPE ARCHITECTURE www.kleingers.com 350 Worthington Rd, Ste B Westerville, OH 43082 614.882.4311</div>	PROJECT TITLE: PRIVATE STORM SEWER FOR POINTE AT POLARIS PHASE I 8886 LYRA DRIVE GENERAL NOTES AND DETAILS										CITY OF COLUMBUS DEPARTMENT OF PUBLIC UTILITIES DIVISION OF SEWERAGE AND DRAINAGE DIVISION USE ONLY			
CITY NO.	COUNTY RECORD		GRANTOR	NO.	DESCRIPTION	DATE		DIVISION USE ONLY					OWNER			SCALE: N.T.S.		SHEET: 2/16			
	VOL.	PAGE											CONTRACTOR								
													INSPECTOR								
													AGREEMENT			COMPLETED					
					RPD		CHK		CID		CON.DR.		CONTRACT DRAWING NO. CC-17376		RECORD PLAN NO.						
					INDEX DETAIL				RECORD FILE												

PLAN PREPARED BY:

THE KLEINGERS GROUP

CIVIL ENGINEERING | www.kleingers.com

SURVEYING

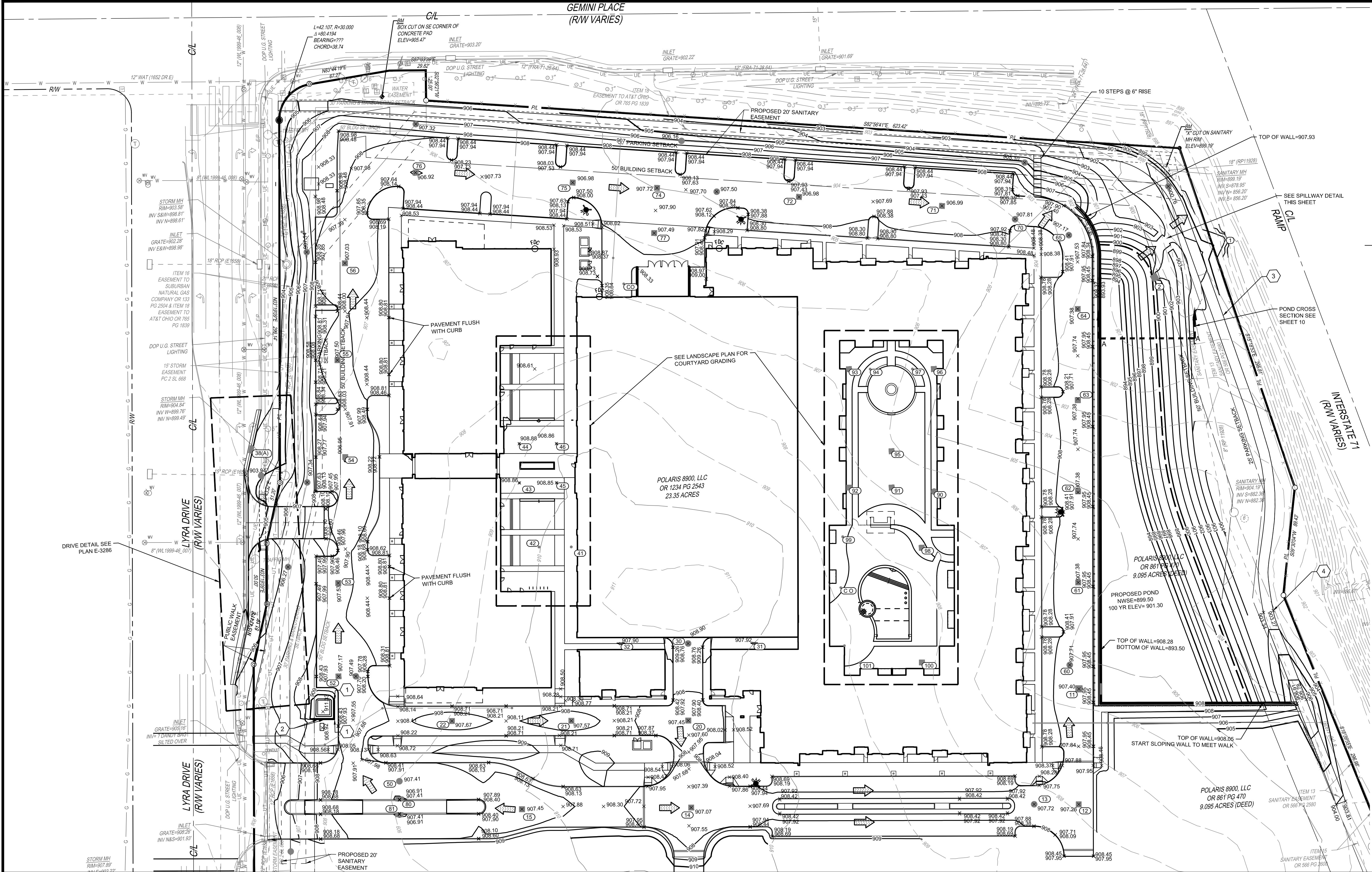
LANDSCAPE ARCHITECTURE

350 Worthington Rd, Ste B
Westerville, OH 43082
614.882.4311

DATE: 05-13-2016

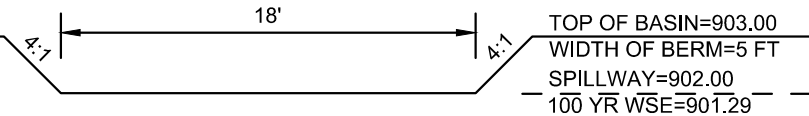
OHIO Utilities Protection SERVICE

811 or 1-800-388-5764 Call Before You Dig



GRADING LEGEND

- 905 EX CONTOUR
- 904 EX CONTOUR
- 905 PROPOSED CONTOUR
- 904 PROPOSED CONTOUR
- x908.00 PROPOSED SPOT ELEVATION
- SWALE
- FLOOD ROUTE



EMERGENCY SPILLWAY DETAIL
N.T.S.

CODED NOTES:

- 1 BOTTOM OF WALL = 908.45
TOP OF WALL = 910.33
- 2 BOTTOM OF WALL = 908.92
TOP OF WALL = 910.33
- 3 START WALK REPLACEMENT AT EXISTING GRADE
- 4 END WALK REPLACEMENT AT EXISTING GRADE



0 20 40 80



DATE: 05-13-2016

EASEMENT REFERENCE			
CITY NO.	COUNTY RECORD		GRANTOR
	VOL.	PAGE	

REVISIONS		
NO.	DESCRIPTION	DATE

PLAN PREPARED BY:


THE KLEINGERS GROUP

CIVIL ENGINEERING | www.kleingers.com
SURVEYING
LANDSCAPE ARCHITECTURE

350 Worthington Rd. Ste B
Westerville, OH 43082
614.882.4311

PROJECT TITLE: PRIVATE STORM SEWER FOR POINTE AT POLARIS PHASE I 8886 LYRA DRIVE GRADING PLAN			
DIVISION USE ONLY		OWNER	
		CONTRACTOR	
		INSPECTOR	
		AGREEMENT	COMPLETED
		RPD	CHK
		INDEX	CON.DR.
		DETAIL	RECORD
			FILE

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			FILE

CITY OF COLUMBUS DEPARTMENT OF PUBLIC UTILITIES DIVISION OF SEWERAGE AND DRAINAGE DIVISION USE ONLY			
SCALE: 1" = 40'		SHEET: 13/16	
CONTRACT DRAWING NO. CC-17376		RECORD PLAN NO.	