THREE CREEKS WETLAND RESTORATION PROJECT

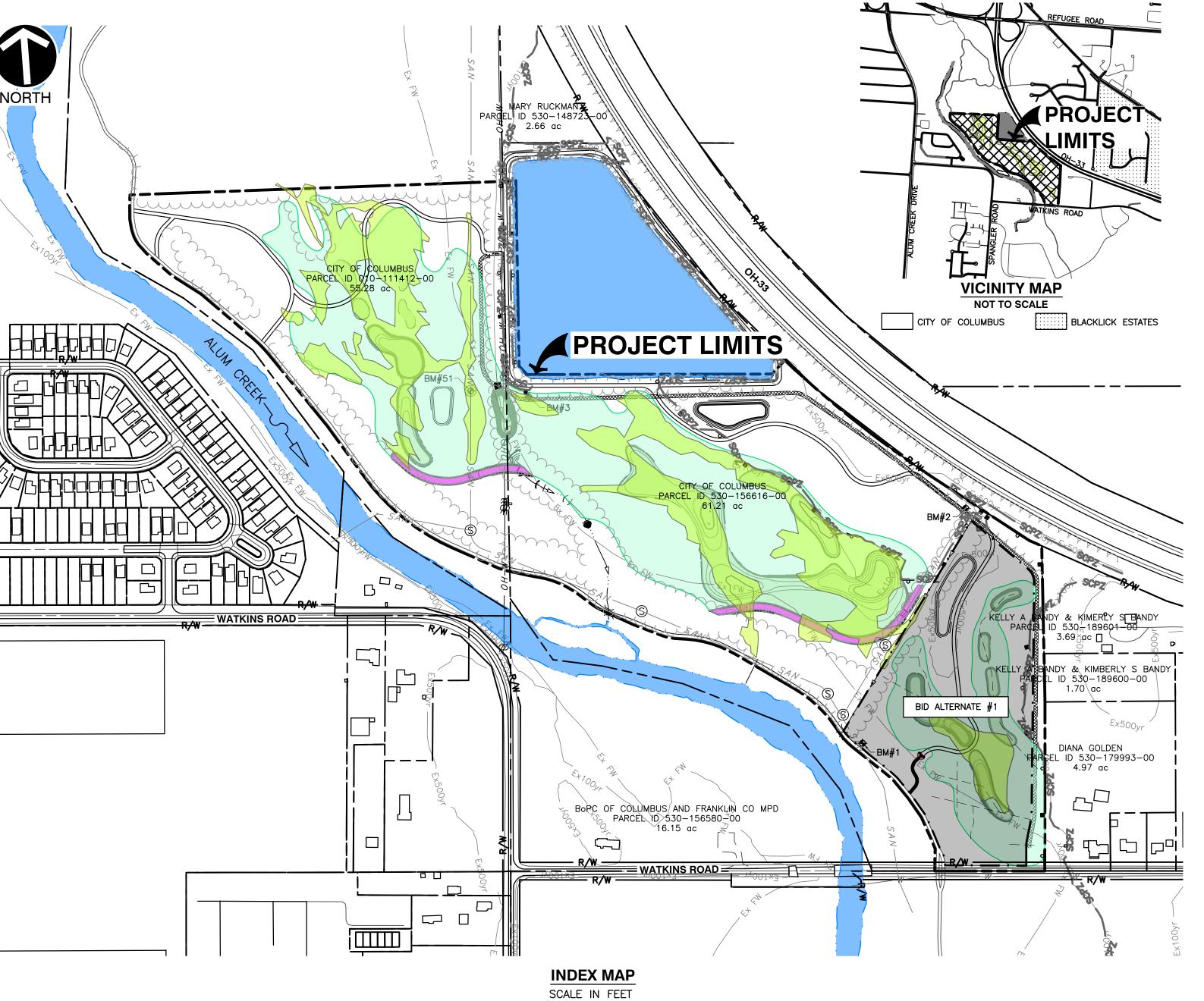
CITY OF COLUMBUS, FRANKLIN COUNTY, OHIO

SITE IMPROVEMENT PLAN INDEX TABLE		
SHEET NUMBER SHEET TITLE		
1	COVER SHEET	
2	GENERAL NOTES	
3	NORTHWESTERN EXISTING & DEMOLITION PLAN	
4	CENTRAL EXISTING & DEMOLITION PLAN	
5	SOUTHEASTERN EXISTING & DEMOLITION PLAN	
6	NORTHWESTERN SITE LAYOUT PLAN	
7	CENTRAL SITE LAYOUT PLAN	
8	SOUTHEASTERN SITE LAYOUT PLAN	
9	PROPOSED ADA PATH AND OVERLOOK LAYOUT PLAN	
10	WOODY DEBRIS PLAN	
11	STRUCTURE DETAILS	
12	STRUCTURE DETAILS	
13	INVASIVE REMOVAL PLAN	

SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	GENERAL NOTES
3	GENERAL NOTES
4	NORTHWESTERN STORMWATER POLLUTION PREVENTION PLAN
5	CENTRAL STORMWATER POLLUTION PREVENTION PLAN
6	SOUTHEASTERN STORMWATER POLLUTION PREVENTION PLAN
7	SWPPP NOTES
8	SWPPP NOTES AND DETAILS
9	SWPPP DETAILS
10	NORTHWESTERN GRADING PLAN
11	CENTRAL GRADING PLAN
12	SOUTHEASTERN GRADING PLAN
13	ADA PATH AND OVERLOOK PLAN
14	STRUCTURE DETAILS
15	STRUCTURE DETAILS
16	FLOODPLAIN GRADING PLAN

FINAL SITE COMPLIANCE PLAN INDEX TABLE (25345-00398)			
SHEET NUMBER SHEET TITLE			
1	COVER SHEET		
2	EXISTING SITE PLAN		
3	PROPOSED SITE PLAN		
4	PROPOSED ADA PATH AND OVERLOOK PLAN		

PUBLIC TREE PLAN INDEX TABLE (FSCP 25345-00398)		
SHEET NUMBER	SHEET TITLE	
1	COVER SHEET	
2	GENERAL NOTES	
3	TREE REMOVAL OVERVIEW PLAN	
4	TREE REMOVAL AREA PLAN	
5	TREE REMOVAL AREA PLAN	
6	EXISTING PUBLIC TREE TABLE	
7	EXISTING PUBLIC TREE TABLE	
8	EXISTING PUBLIC TREE TABLE	
9	EXISTING PUBLIC TREE TABLE	
10	PLANTING AND MITIGATION PLAN	
11	LANDSCAPE PLAN	
12	PLANTING DETAILS	
13	PLANTING TABLES	



APPLICANT

CITY OF COLUMBUS

1111 EAST BROAD STREET

CONTACT: KELLY MESSER, PE TITLE: PROJECT MANAGER

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COLUMBUS, OH 43205

PHONE: (614) 816-1875

RECREATION AND PARKS DEPARTMENT

ENGINEER/SURVEYOR

WORTHINGTON, OHIO 43085

TITLE: PROJECT MANAGER

PHONE: (614) 310-0175

EMAIL: JLOOPER@CECINC.COM

CONTACT: JESSICA LOOPER, PE

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

250 W. OLD WILSON BRIDGE ROAD, SUITE 250

SITE ADDRESS

COLUMBUS, OHIO 43207

3086 WATKINS ROAD

BENCHMARKS (NAVD88) +

THE NORTHING AND EASTING SHOWN ARE APPROXIMATE AND ONLY INTENDED TO PROVIDE RECOVERY OF THE BENCHMARK. THESE COORDINATES ARE NOT INTENDED TO BE USED FOR THE HORIZONTAL CONTROL OF THE PROJECT. THE HORIZONTAL CONTROL FOR THE PROJECT SHALL BE CONTROLLED BY THE MONUMENTS FOUND OR SET BY A PROFESSIONAL SURVEYOR.

EXISTING TOPOGRAPHIC SURVEY COLLECTED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. IN JUNE 2024 AND SUPPLEMENTED WITH OGRIP LIDAR DATA COLLECTED IN MAY 2024. ELEVATIONS WERE DETERMINED USING STATIC GPS OBSERVATIONS PERFORMED ON JUNE 24 OF THE YEAR 2024 AS BASED

INITIALS "CEC INC.". BASED ON AN NGS OPUS-S SOLUTION USING O.D.O.T. CORS NETWORK, OHIO SOUTH ZONE NAD 83 (2011 ADJUSTMENT) NAVD 88 (GEOID 18) DATUM.

TOP OF A 5/8" SOLID REBAR THIRTY INCHES IN LENGTH WITH A YELLOW PLASTIC CAP BEARING THE INITIALS "CEC INC.". BASED ON AN NGS OPUS-S SOLUTION USING O.D.O.T. CORS NETWORK, OHIO SOUTH ZONE NAD 83 (2011 ADJUSTMENT) NAVD 88 (GEOID 18) DATUM.

TOP OF A 5/8" SOLID REBAR THIRTY INCHES IN LENGTH WITH A YELLOW PLASTIC CAP BEARING THE INITIALS "CEC INC.". BASED ON AN NGS OPUS-S SOLUTION USING O.D.O.T. CORS NETWORK, OHIO SOUTH

CHISELED "X" ON THE WESTERN EDGE OF THE RIM OF MANHOLE ID 0100S0010 LOCATED SOUTHWEST OF

ELEVATION: 728.73

ELEVATION: 733.59

STATE PLANE COORDINATES - OHIO SOUTH ZONE*					
HORIZONTAL REFERENCE POINT COORDINATE LOCATIONS					
REF. PT.	DESCRIPTION	NORTHING	EASTING		
1	TRV 5/8 REBAR CEC INC.	694102.57	1851646.99		
2	TRV 5/8 REBAR CEC INC.	694880.22	1852061.09		
3	TRV 5/8 REBAR CEC INC.	695374.93	1850593.46		
51	BM 1 "X" IN WEST EDGE OF MH RIM	695410.53	1850395.77		

HORIZONTAL REF DATUM= NAD 83 (NSRS 2011)

UTILITY CONTACTS

AEP COLUMBUS SOUTHERN POWER 850 TECH CENTER DR GAHANNA, OHIO 43230

970 DUBLIN ROAD

COLUMBUS, OHIO 43215 PHONE: 614-525-3030

PHONE: 614-883-6803

TRAFFIC MANAGEMENT 1820 EAST 17TH AVENUE COLUMBUS, OHIO 43219

PHONE: 614-645-7393

CITY OF COLUMBUS DEPARTMENT OF PUBLIC SERVICE

CITY OF COLUMBUS DEPARTMENT OF PUBLIC UTILITIES
WATER AND SEWER SERVICES

910 DUBLIN ROAD COLUMBUS, OHIO 43215 PHONE: 614-645-8276



REGISTERED ENGINEER

2025-08-04 DATE NUMBER

THIS IS TO CERTIFY THAT GOOD ENGINEERING PRACTICES HAVE BEEN UTILIZED IN THE DESIGN OF THIS PROJECT AND THAT ALL MINIMUM STANDARDS AS DELINEATED BY THE CITY OF COLUMBUS STANDARDS HAVE BEEN MET, INCLUDING THOSE STANDARDS GREATER THAN MINIMUM WHERE, IN MY OPINION, THEY ARE NEEDED TO PROTECT THE SAFETY OF THE PUBLIC. THE SITE PLAN IS VALID FOR ONE (1) YEAR PERIOD FROM DATE OF APPROVAL, UNLESS A BUILDING PERMIT

ENGINEERING, SURVEYING AND LANDSCAPE ARCHITECTURE IN THE STATE OF NORTH CAROLINA WILL BE PROVIDED BY CEC SURVEYING AND LANDSCAPE ARCHITECTS OF NC, PLLC. SERVICES IN PUERTO RICO WILL BE PROVIDED BY CEC ENGINEERS & CONSULTANTS, LLC. LANDSCAPE ARCHITECTURE SERVICES IN THE STATE OF OHIO WILL BE PROVIDED BY CEC LANDSCAPE ARCHITECTS, LLC.

GOVERNING SPECIFICATIONS

- THE CONSTRUCTION OF THE WETLANDS SHALL FOLLOW ALL GOVERNING AUTHORITIES' REGULATIONS.
- 2. CONTRACTOR SHALL REFER TO THE CITY OF COLUMBUS CONSTRUCTION MATERIALS AND SPECIFICATIONS (CMS), LATEST ADDITION, TO BE SUPPLEMENTED WITH OHIO DEPARTMENT OF TRANSPORTATION (ODOT) CMS AS NOTES AND THE SPECIFICATIONS MADE PART OF THE CONTRACT DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.

<u>SURVEY</u>

1. EXISTING TOPOGRAPHIC SURVEY COLLECTED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. IN JUNE 2024 AND SUPPLEMENTED WITH OHIO GEOGRAPHICALLY REFERENCED INFORMATION PROGRAM (OGRIP) STATE LIDAR. ELEVATIONS WERE DETERMINED USING STATIC GPS OBSERVATIONS AS BASED ON A NGS OPUS-S SOLUTION USING O.D.O.T. CORS NETWORK, OHIO SOUTH ZONE NAD 83 (2011 ADJUSTMENT), NAVD 88 (GEOID 18) DATUM.

BENCHMARKS

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HOLDING, SETTING, AND MAINTAINING BENCHMARKS LOCATIONS THROUGHOUT THE LIFE OF THE PROJECT. IN THE EVENT THAT A BENCHMARK IS DISTURBED, THE CONTRACTOR AS DIRECTED BY THE ENGINEER, WILL RELOCATE OR REESTABLISH THE BENCHMARK. NO ADDITIONAL PAYMENT OR COMPENSATION WILL BE MADE FOR THIS WORK.

ELEVATIONS

1. ALL ELEVATIONS SHOWN REFER TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

<u>COORDINATES</u>

THE PROJECT DATUM ON THESE PLANS ARE BASED UPON THE SOUTH ZONE OF THE OHIO STATE PLANE SYSTEM. THE HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1983 (2011) (NAD 83). GRID FACTORS ARE NOT REQUIRED WHEN MAKING FIELD MEASUREMENTS.

VERIFICATIONS OF DIMENSIONS

1. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL PLAN ELEVATION DIMENSIONS PRIOR TO ORDERING MATERIALS FOR THE CONSTRUCTION OF THE VARIOUS BID ITEMS IN THE CONTRACT.

TREE CLEARING

1. TREE CLEARING SHALL ONLY OCCUR FROM OCTOBER 1ST THROUGH MARCH 31ST PER UNITED STATES FISH AND WILDLIFE SERVICE (USFWS) RANGE-WIDE INDIANA BAT PROTECTION ENHANCEMENT PLAN GUIDELINES, (JULY 2009) UNLESS SPECIAL PERMISSION IS GRANTED BY USFWS.

WASTE MATERIAL

1. ALL MATERIAL EXCAVATED AND NOT REUSED IN THE CONSTRUCTION OF THIS PROJECT SHALL BE REMOVED FROM THE PROJECT AND UNUSED DISPOSED OF BY THE CONTRACTOR.

<u>FILTER FABRIC</u>

1. FILTER FABRIC SHALL BE PLACED BELOW ALL STRUCTURES SHOWN IN THE DETAILS.

<u>UTILITIES</u>

1. 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. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THE STATUS AND LOCATION OF EACH UTILITY WHEN PERFORMING WORK WHICH MAY AFFECT THESE FACILITIES, INCLUDING PROBING, EXCAVATION, OR ANY OTHER PRECAUTION REQUIRED TO CONFIRM LOCATION. THE CONTRACTOR SHALL EXPOSE ALL UTILITIES OR STRUCTURES PRIOR TO CONSTRUCTION TO VERIFY THE VERTICAL AND HORIZONTAL EFFECT ON PROPOSED CONSTRUCTION. THE CONTRACTOR SHALL CALL, TOLL FREE, OHIO 811 CENTER (1-800-362-2764) TWO DAYS PRIOR TO CONSTRUCTION AND SHALL NOTIFY ALL UTILITY COMPANIES AT LEAST 48 HOURS PRIOR TO WORK IN THE VICINITY OF THEIR UNDERGROUND LINES. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE OR DISRUPTION TO UTILITY LINES WHICH ARE KNOWN ACTIVE AND ARE TO REMAIN IN OPERATION.

EROSION AND SEDIMENT CONTROL

- EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PERFORMED IN ACCORDANCE WITH THE SWPPP NOTES AND PLAN SHEET. IN THE EVENT THAT THE TEMPORARY EROSION AND POLLUTION CONTROL MEASURES ARE ORDERED BY THE ENGINEER DUE TO THE CONTRACTOR'S NEGLIGENCE, CARELESSNESS, OR FAILURE TO INSTALL PERMANENT CONTROLS AS PART OF THE WORK AS SCHEDULED, SUCH WORK SHALL BE PERFORMED BY THE CONTRACTOR AT HIS OWN EXPENSE.
- THE FIRST ORDER OF WORK FOR THE CONTRACTOR IS TO INSTALL SEDIMENT CONTROL STRUCTURES, FILTER SOCK, ETC. TO ESTABLISH CONTROL AT THE EARLIEST POSSIBLE DATE. INITIAL CLEARING AND GRUBBING IS ONLY TO BE WHAT IS NECESSARY IN ORDER TO ACCOMPLISH THESE OPERATIONS.
- 3. IN ADDITION, THE CONTRACTOR, A STORM WATER POLLUTION PERMIT CO-PERMITTEE, IS TO NAME AN INDIVIDUAL TO REVIEW THE EROSION CONTROL FEATURES AT A MINIMUM OF ONCE A WEEK DURING PERIODS OF HEAVY PRECIPITATION. AND/OR ACTIVE CONSTRUCTION TO ASSESS THE SUCCESS OF THE EROSION CONTROL STRUCTURES, REVEGETATION EFFORTS, AND SEE THE REPLACEMENT, CLEARING, AND/OR INSTALLATION OF ADDITIONAL FEATURES IF NECESSARY ARE CARRIED OUT.

CULTURAL RESOURCE PROTECTION

- CULTURAL RESOURCE INVESTIGATIONS IDENTIFIED TWO PREVIOUSLY RECORDED ARCHAEOLOGICAL SITES WITHIN THE PROJECT BOUNDARY (SITES 33FR3502 AND 33FR3503). NEITHER OF THE PREVIOUSLY RECORDED SITES WERE IDENTIFIED DURING A PHASE I ARCHAEOLOGICAL SURVEY OF THE PROJECT AREA CONDUCTED BY STONE ENVIRONMENTAL ENGINEERING & SCIENCE (STONE) FROM OCTOBER 2024 TO JANUARY 2025. ONE NEW, PREVIOUSLY UNRECORDED ARCHAEOLOGICAL SITE (33FR3608) WAS IDENTIFIED ON THE NORTHEASTERN PORTION OF THE PROJECT AREA DURING THE PHASE I INVESTIGATION. THE SITE LACKS INFORMATION TO BE LISTED IN THE NATIONAL REGISTER OF HISTORIC PLACES (NRHP). THEREFORE, NO CONSTRUCTION RESTRICTIONS WERE RECOMMENDED FOR CULTURAL RESOURCES.
- 2. IF THE EXCAVATION OPERATIONS ENCOUNTER REMAINS OR PREHISTORIC PEOPLE'S DWELLING SITES OR ARTIFACTS OF HISTORICAL OR ARCHEOLOGICAL SIGNIFICANCE, THE OPERATIONS SHALL BE TEMPORALLY DISCONTINUED IN THIS AREA AND THE CONTRACTOR SHALL NOTIFY THE CITY'S REPRESENTATIVE. THE CITY'S REPRESENTATIVE WILL CONTACT THE OHIO HISTORIC PRESERVATION OFFICE TO DETERMINE THE DISPOSITION OF THE FIND. AFTER CONSULTATION WITH THE OHIO HISTORIC PRESERVATION OFFICE, THE CITY'S REPRESENTATIVE MAY ELECT TO DISCONTINUE THE WORK IN THE AREA INDEFINITELY, RESUME NORMAL EXCAVATION, OR EXCAVATE FOR ARTIFACTS. WHEN DIRECTED BY THE CITY'S REPRESENTATIVE TO EXCAVATE FOR ARTIFACTS, THE CONTRACTOR SHALL EXCAVATE THE SITE IN SUCH A MANNER AS TO PRESERVE THE ARTIFACTS ENCOUNTERED AND SHALL REMOVE THEM FOR DELIVERY TO THE CUSTODY OF THE PROPER AUTHORITIES. THE CONTRACTOR SHALL NOT DISTURB ANY HISTORICAL OR CULTURAL BUILDINGS, FOUNDATION, STRUCTURE, OR MATERIALS ABOVE OR BELOW THE GROUND SURFACE.

L. <u>SITE CLEANUP</u>

- 1. DURING CONSTRUCTION AND PRIOR TO ACCEPTANCE OF ANY PUBLIC IMPROVEMENTS, THE OWNER/DEVELOPER SHALL REMOVE OR CAUSE TO BE REMOVED ALL REFUSE RUBBISH, UNUSED MATERIALS, EXCESS EARTH, FILL ROCK, DEBRIS, AND FOREIGN MATTER FROM ALL PUBLIC RIGHT OF WAY, IMPROVEMENTS, AND/OR EASEMENTS AS WERE DEPOSITED. LEFT. OR RESULTED FROM THE CONSTRUCTION IMPROVEMENTS OF ANY NATURE WITHIN THE DEVELOPMENT. SUCH REMOVAL SHALL TAKE PLACE WITHIN TWENTY-FOUR (24) HOURS AFTER BEING NOTIFIED BY THE COUNTY ENGINEER AND REGULATING AGENCIES.
- 2. THIS WORK SHALL BE PERFORMED IN A MANNER WHICH PREVENTS EROSION AS WELL AS PREVENTS STORM WATER FROM ACCUMULATING OR PONDING ON THE SITE. THE WORK SHALL ALSO BE PERFORMED IN A MANNER THAT PREVENTS DISRUPTING OR IMPEDING SURFACE DRAINAGE FROM ONSITE OR OFFSITE SOURCES AND PREVENTS ANY NEGATIVE EFFECTS ON ADJACENT PROPERTIES.

FEDERAL, STATE, AND LOCAL LAWS AND SAFETY REGULATIONS

1. THE CONTRACTOR AND ANY SUB-CONTRACTORS SHALL CONFORM TO APPLICABLE OSHA SAFETY REGULATIONS. THE CONTRACTOR AND ANY 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 THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SUB-CONTRACTOR TO INITIATE, MAINTAIN, AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE WORK.

CLEARING & GRUBBING LIMITS

CLEARING LIMITS SHALL BE EXTENDED TO A MAXIMUM LIMIT NECESSARY FOR CONSTRUCTION MATERIALS AND SHALL NOT EXTEND BEYOND CONSTRUCTION BOUNDARIES WHERE EARTHWORK ACTIVITIES ARE TO BE PERFORMED. GRUBBING SHALL ONLY TAKE PLACE WITHIN THE AREA AS NECESSARY. ALL COSTS ASSOCIATED WITH CLEARINGS & GRUBBING SHALL BE CONSIDERED INCIDENTAL TO BID ITEM 201.

O. <u>AS-BUILT DRAWINGS</u>

DURING CONSTRUCTION, THE CONTRACTOR AND THE ENGINEER SHALL WORK TOGETHER TO MAINTAIN A SET OF PRINTS SHOWING ANY CHANGES OR CORRECTIONS IN RED. THESE PRINTS SHALL BE SUBMITTED TO THE ENGINEER AT THE COMPLETION OF THE WORK.

COORDINATION OF WORK

CONTRACTOR IS MADE AWARE OF WORK BY OTHERS WITHIN THE PROJECT BOUNDARY. CONTRACTOR SHALL MAINTAIN ON-GOING COORDINATION THROUGHOUT THE LIFE CYCLE OF THIS PROJECT TO MINIMIZE CONFLICTS WITH THE ALUM CREEK TRUNK SOUTH SANITARY SEWER REHABILITATION PROJECT (CC 18773) OR ANY OTHER WORK BY OTHERS WITHIN THE PROJECT BOUNDARY.

PUBLIC SAFETY AROUND CONSTRUCTION AREA

THIS PROJECT IS LOCATED WITHIN A PUBLIC USE AREA. UNLESS OTHERWISE DIRECTED IN THE PLANS OR BY THE OWNER IN WRITING, PEDESTRIAN ACCESS FOR THE PUBLIC WILL BE MAINTAINED ALONG ALUM CREEK TRAIL AT ALL TIMES, AND THE CONTRACTOR IS ADVISED TO MAKE ACCOMMODATIONS TO MAINTAIN THE SAFETY OF THE PUBLIC. THE CONTRACTOR SHALL USE CONSTRUCTION FENCING AND/OR PORTABLE CONCRETE BARRIERS OR OTHER APPROVED TRAFFIC CONTROL DEVICES TO PROTECT FROM DROP-OFFS. THE CONTRACTOR SHALL RESTRICT FOOT TRAFFIC FROM THE CONSTRUCTION ZONE AT ALL TIMES THROUGH THE USE OF FENCING AS NECESSARY.

CONSTRUCTION ACCESS

CONTRACTOR SHALL DETERMINE CONSTRUCTION ACCESS TO THE PROJECT AREA(S) WITHOUT DISTURBING OPERATION OF PARK FACILITIES. TEMPORARY CLOSURE OF PARK DRIVES AND TRAILS SHALL BE APPROVED BY THE CITY OF COLUMBUS. THE CONTRACTOR SHALL RESTORE ALL ACCESS ROUTES WITHIN THE PROJECT AREA TO THEIR ORIGINAL CONDITION AND AT NO ADDITIONAL COST TO THE CITY.

CONTRACTOR SHALL SUBMIT A CONSTRUCTION ACCESS PLAN TO THE CITY FOR APPROVAL DELINEATING THE LOCATIONS OF CONSTRUCTION EQUIPMENT ENTRY TO THE PROJECT SITE THE PLAN SHALL BE SUBMITTED AT THE PRECONSTRUCTION MEETING AND PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SAFETY AT ALL ACCESS POINTS AT ALL TIMES DURING CONSTRUCTION.

ANY LANE OR SHOULDER CLOSURES OR RESTRICTIONS TO ADJACENT ROADWAYS SHALL BE IN ACCORDANCE WITH THE CITY OF COLUMBUS AND ODOT STANDARD CONSTRUCTION DRAWINGS. PERMITS MAY BE APPLICABLE.

BID ALTERNATVE ITEMS

WORK WITHIN THE EASTERN FIELD IS MADE PART OF BID ALTERNATE #1. THIS WORK SHALI INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR EROSION AND SEDIMENT CONTROLS, CLEARING AND GRUBBING, REMOVAL OF DRAIN TILES, GRADING OF WETLAND DEPRESSIONS, ADA ACCESS PATH, BENCHES, AND SIGNAGE, SITE STABILIZATION, AND PLANTING.

CONSTRUCTION SEQUENCING

THE CITY AND/OR THEIR REPRESNITATIVE WILL PROVIDE CONSTRUCTION OBSERVATION DURING THE CONSTRUCTION PHASE OF THIS PROJECT. THE GENERAL CONSTRUCTION SEQUENCE SHALL BE USED DURING IMPLEMENTATION OF THE PROPOSED PROJECT CONSTRUCTION. CONTRACTOR SHALL REFER TO THE APPROVED PERMITS FOR SPECIFIC CONSTRUCTION SEQUENCE ITEMS AND SHALL BE RESPONSIBLE FOR FOLLOWING THE APPROVED PLANS AND PERMIT CONDITIONS.

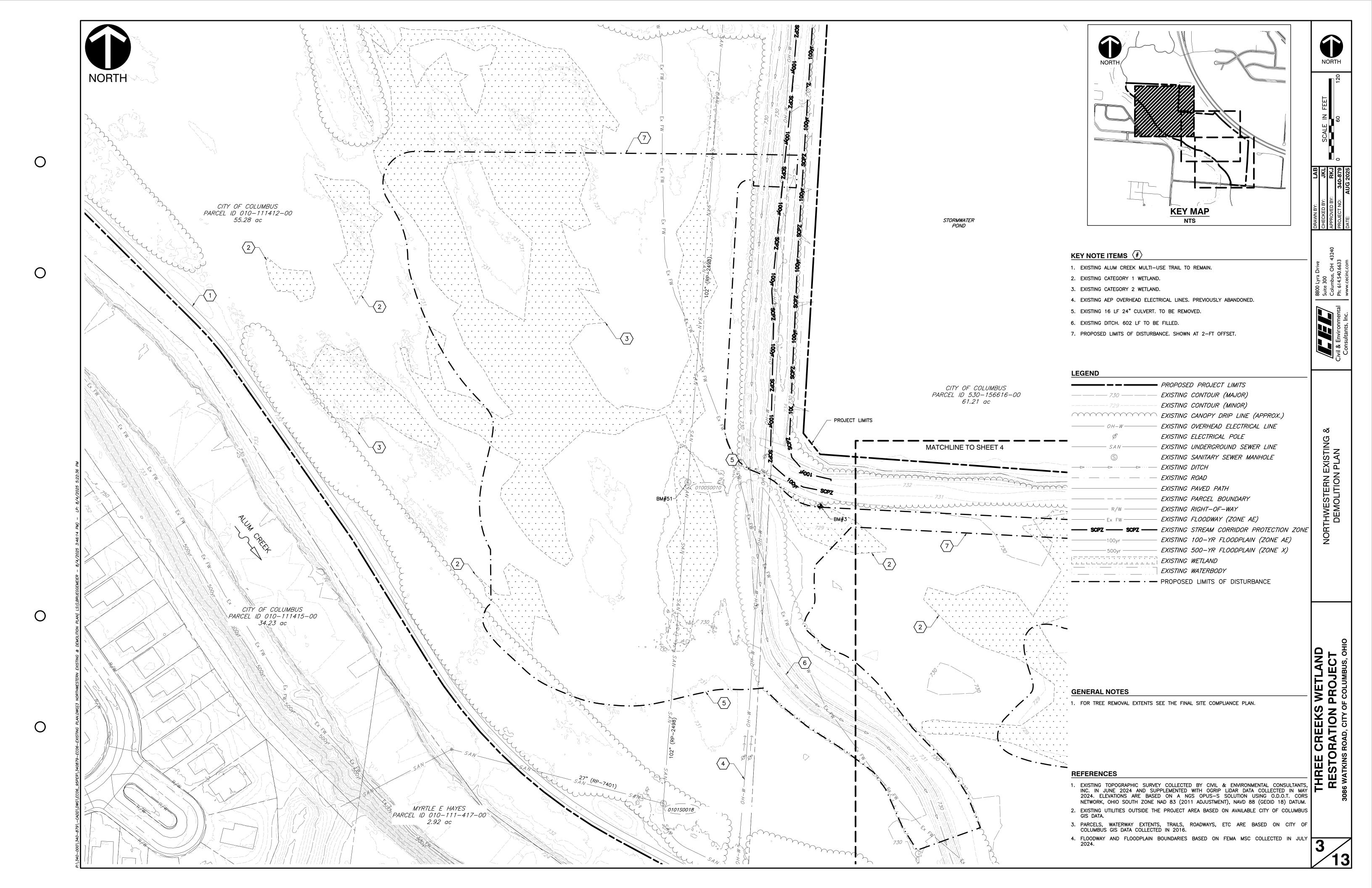
- 1. ESTABLISH ALL APPLICABLE PERMITS HAVE BEEN OBTAINED. PERMITS SHALL REMAIN ON-SITE THROUGHOUT THE PROJECT DURATION.
- 2. CONTRACTOR SHALL NOTIFY OHIO "811" CENTER (1-800-362-2764) A MINIMUM OF 2 DAYS PRIOR TO START OF CONSTRUCTION AND 2 DAYS PRIOR TO ANY EARTH DISTURBING ACTIVITIES. CONTRACTOR SHALL NOTIFY THE CITY ENGINEER OF ANY DISCREPANCIES BETWEEN THE DESIGN AND UTILITIES LOCATIONS AND/OR ADJOINING EASEMENTS AT THIS TIME.
- 3. HOLD A PRE-CONSTRUCTION MEETING ON-SITE. ATTENDEES SHALL INCLUDE BUT NOT BE LIMITED TO CITY OF COLUMBUS RECREATION AND PARKS DEPARTMENT DESIGN ENGINEER, CONSTRUCTION CONTRACTOR/SUPERINTENDENT. PROJECT REPRESENTATIVES FROM THE ACT PH II PROJECT, UTILITY REPRESENTATIVES, E&S INSPECTORS, USACE REPRESENTATIVE, ETC.
- 4. CLEAR MINIMUM AREA NECESSARY FOR INSTALLATION OF EROSION AND SEDIMENT (E&S) CONTROL MEASURES. THIS SHALL INCLUDE BUT NOT BE LIMITED TO ALL PERIMETER CONTROLS, CONSTRUCTION ENTRANCES, FILTER SOCK, ORANGE CONSTRUCTION FENCING, ETC. CONTRACTOR MUST OBTAIN APPROVAL FROM THE CITY ENGINEER/CONSTRUCTION MANAGER BEFORE PROCEEDING.
- 5. CONTRACTOR SHALL MOBILIZE EQUIPMENT, MATERIALS AND PREPARE STAGING AREA(S) AND STOCKPILE AREA(S) AND HAUL ROADS AS SHOWN ON THE PLANS. CONSTRUCTION TRAFFIC SHALL BE RESTRICTED TO THE PROJECT AREA BOUNDARIES OR THE DENOTED "LIMITS OF DISTURBANCE" OR "HAUL ROADS" ON THE PLANS.

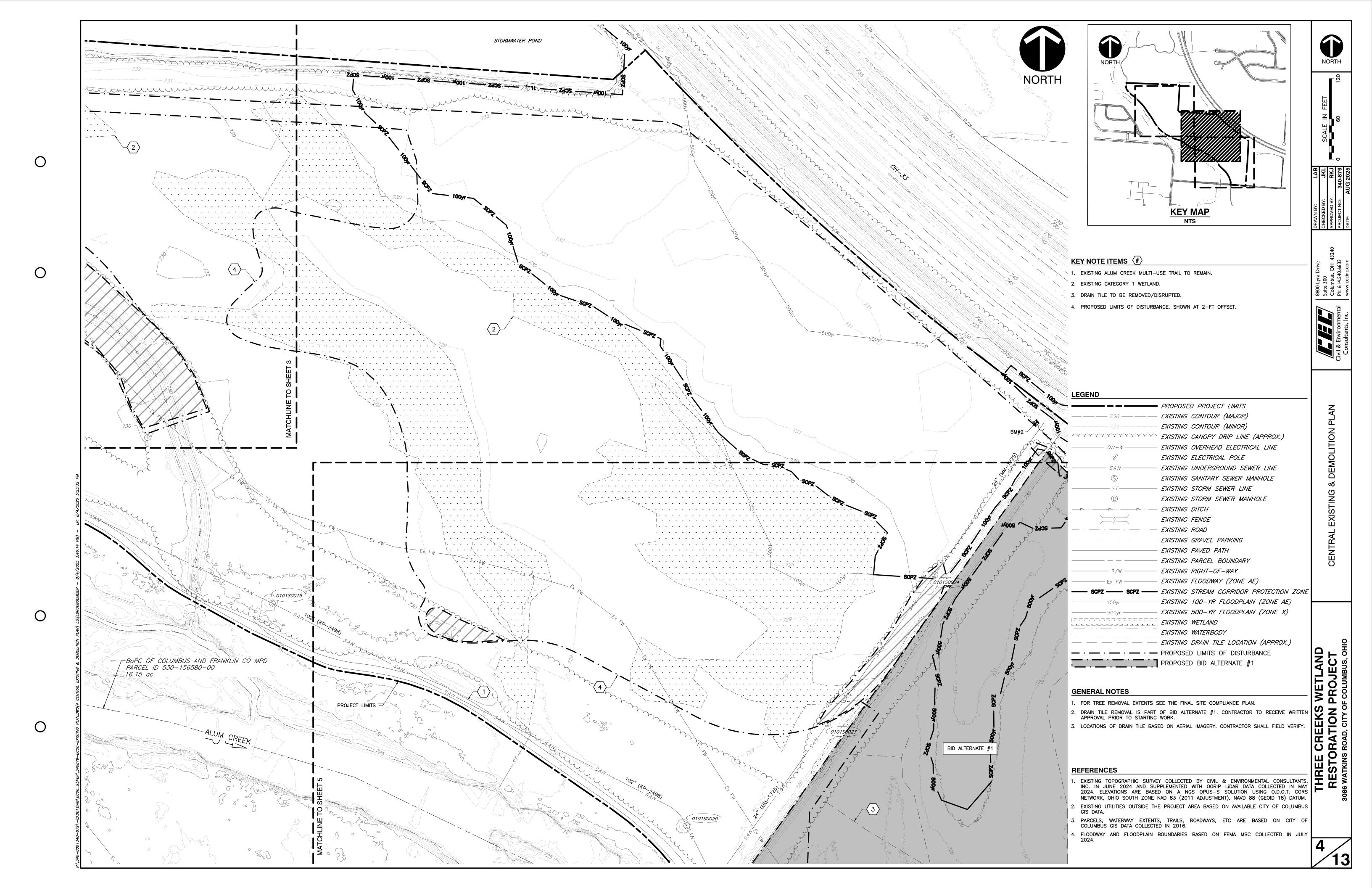
CONTRACTOR SHALL BE PREPARED TO ADHERE TO THE FLOOD EASEMENT CONSTRAINTS AND EXPECTATIONS FOR DEMOBILIZATION AND REMOBILIZING EQUIPMENT AND MATERIALS TO THE SITE EACH DAY.

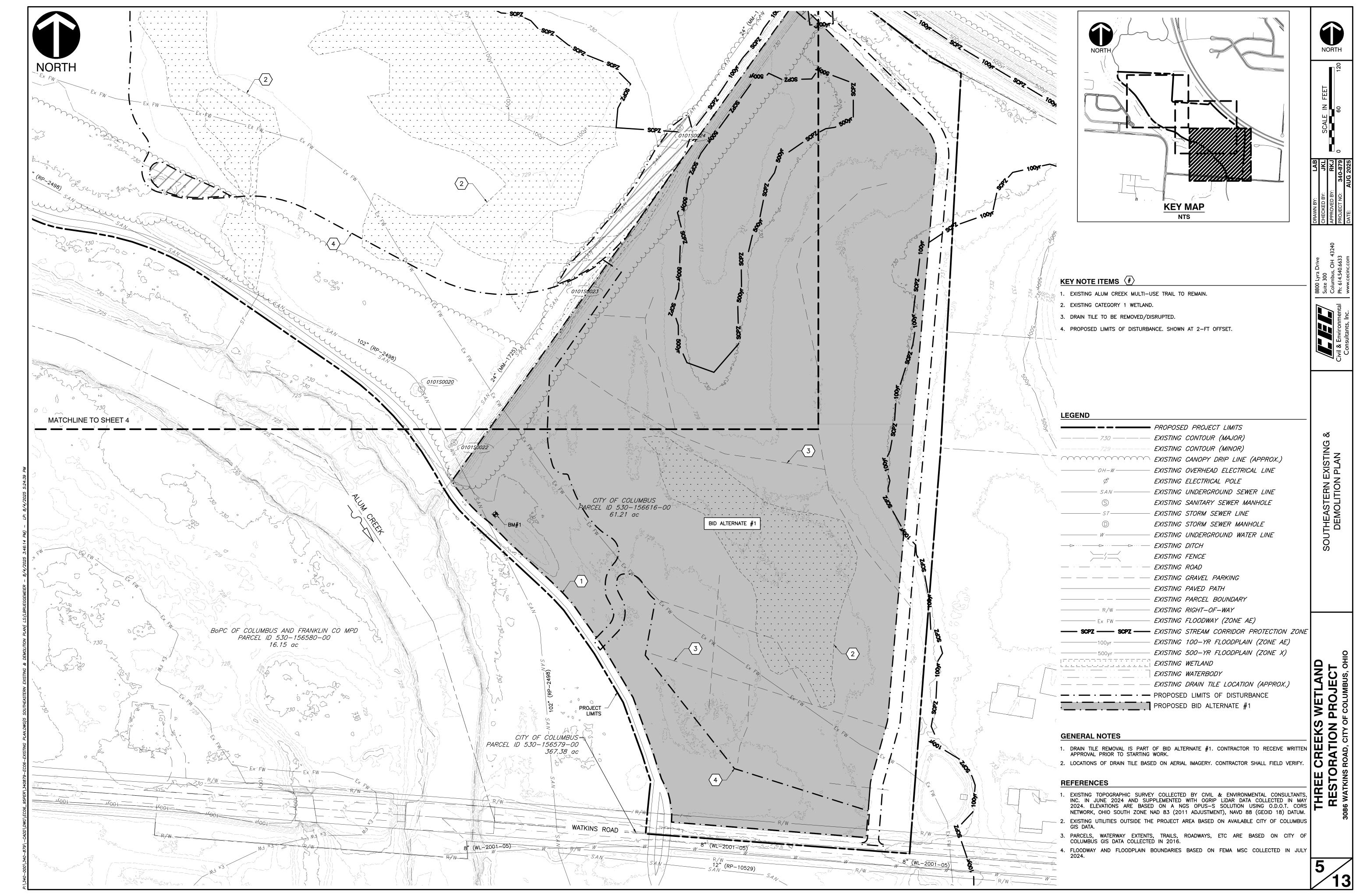
- 6. CLEAR AND GRUB REMAIN LIMITS OF DISTURBANCE, AS NECESSARY. NO AREA SHALL REMAIN DISTURBED BEYOND 14 DAYS. CONTRACTOR SHALL STAGE CLEARING AND GRUBBING AND REMAINING CONSTRUCTION ACTIVITIES TO MEET THIS TIME CONSTRAINT.
- 7. CONSTRUCT WETLANDS AND EARTHEN WATER DIVERSION BERMS. CONTRACTOR SHALL UTILIZE DESIGNATED STOCKPILE AREAS FOR EXCAVATED MATERIAL FROM PROPOSED WETLAND AREAS. NO MORE AREA SHALL BE DISTURBED BY GRADING / EXCAVATION THAN CAN BE PROTECTED BY THE END OF EACH WORKING DAY. THE INTENTION OF THIS RESTRICTION IS TO ENSURE GRADING OPERATIONS DO NOT OUTPACE STABILIZATION EFFORTS.
- 8. REMOVE CULVERTS AND PLUG DITCHES TO THE GRADES AND ELEVATIONS SHOWN. REMOVAL OF EXISTING ACCESS ROUTES SHALL BE COORDINATED WITH OTHER CONSTRUCTION FIRMS PERFORMING WORK ON-SITE. NOTIFY OTHER FIRM AT LEAST 10-DAYS BEFORE PERFORMING WORK.
- 9. PERFORM SEEDING AND PLANTING (INCLUDING LIVE STAKING) WITHIN 14 DAYS OF COMPLETION OF GRADING ACTIVITIES (MAY BE STAGED). PERMANENT SEEDING AND PLANTING SHALL ADHERE TO THE TIME PERIODS STATED ON THE PLANTING PLANS. ALL DISTURBED AREAS SHOULD HAVE ESTABLISHED GROUND COVER PRIOR TO DEMOBILIZATION.
- 10. ONCE THE AREA HAS BEEN 70% STABILIZED AND WITH PERMISSION OF THE ENGINEER / E&S INSPECTOR, CONTRACTOR MAY REMOVE E&S MEASURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OFF-SITE REMOVAL OF ALL TRASH. EXCESS BACKFILL, AND ANY OTHER INCIDENTAL MATERIALS PRIOR TO DEMOBILIZATION OF EQUIPMENT FROM THE SITE.

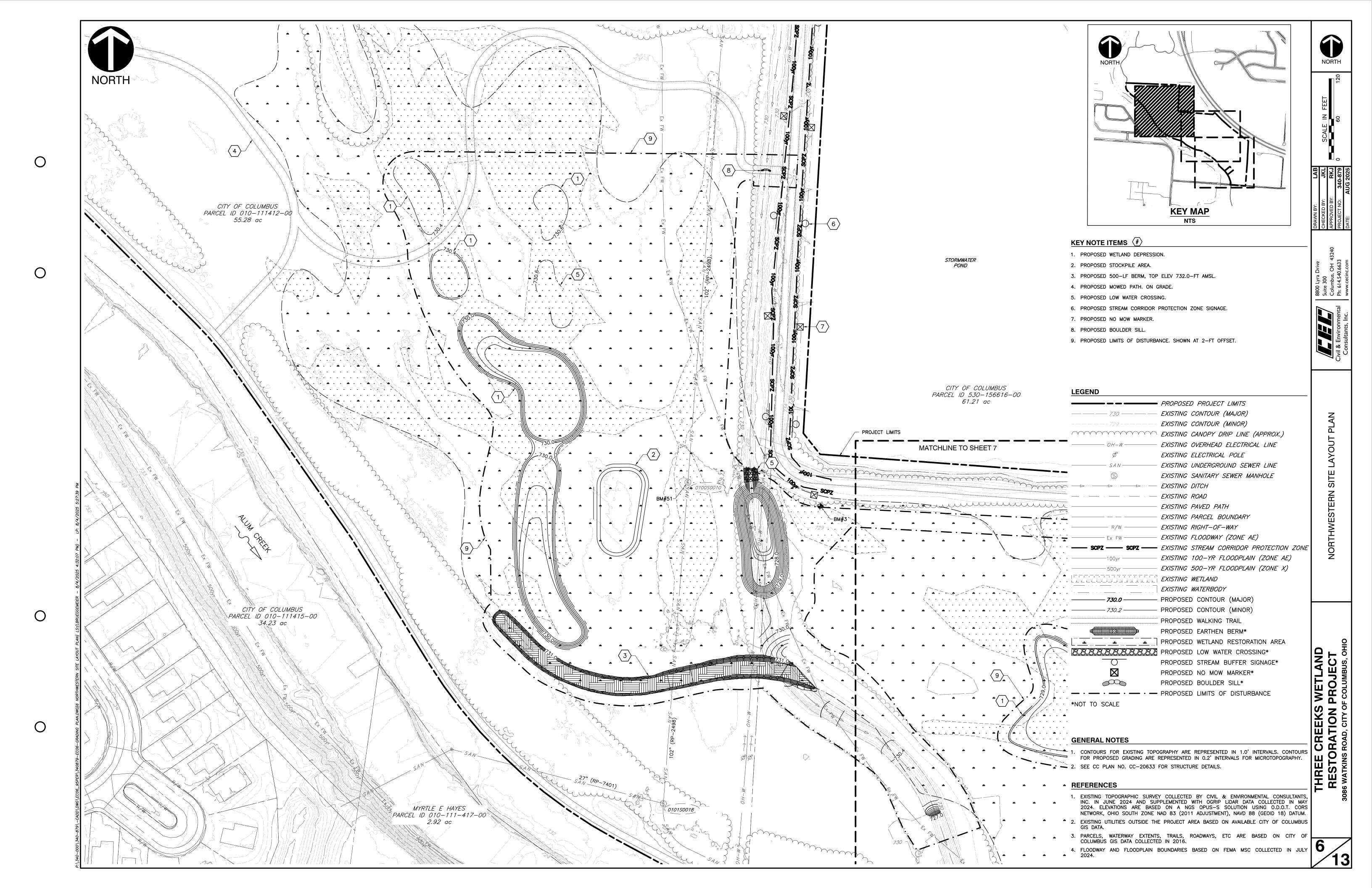
	PROPOSED PROJECT LIMITS
	EXISTING CONTOUR (MAJOR)
	EXISTING CONTOUR (MINOR)
	EXISTING CANOPY DRIP LINE (APPROX.)
	EXISTING OVERHEAD ELECTRICAL LINE
ø	EXISTING ELECTRICAL POLE
	EXISTING UNDERGROUND SEWER LINE
(S)	EXISTING SANITARY SEWER MANHOLE
<i>ST</i>	EXISTING STORM SEWER LINE
\bigcirc	EXISTING STORM SEWER MANHOLE
•	EXISTING UNDERGROUND WATER LINE
→ · · · → · · · → · · · →	EXISTING DITCH
/_/	EXISTING FENCE
/	EXISTING ROAD
	EXISTING GRAVEL PARKING
	EXISTING PAVED PATH
	EXISTING PARCEL BOUNDARY
R/W	EXISTING RIGHT-OF-WAY
Ex FW	EXISTING FLOODWAY
— SCPZ — SCPZ —	EXISTING STREAM CORRIDOR PROTECTION ZONE
Ex100yr	EXISTING 100-YR FLOODPLAIN
Ex500yr	EXISTING 500-YR FLOODPLAIN
	EXISTING WETLAND
	EXISTING WATERBODY
	EXISTING DRAIN TILE LOCATION (APPROX.)
730.0	PROPOSED CONTOUR (MAJOR)
730.2 ———	PROPOSED CONTOUR (MINOR)
	PROPOSED WALKING TRAIL
	PROPOSED OVERLOOK
	PROPOSED EARTHEN BERM*
	PROPOSED WETLAND RESTORATION AREA
<u>88888888</u> 8	PROPOSED LOW WATER CROSSING*
	PROPOSED ASPHALT PAVEMENT*
	PROPOSED STREAM BUFFER SIGNAGE*
\boxtimes	PROPOSED NO MOW MARKER*
	PROPOSED BOULDER SILL*
	PROPOSED WOODY DEBRIS HABITAT*
_ · _ · _ · _ · _	PROPOSED LIMITS OF DISTURBANCE

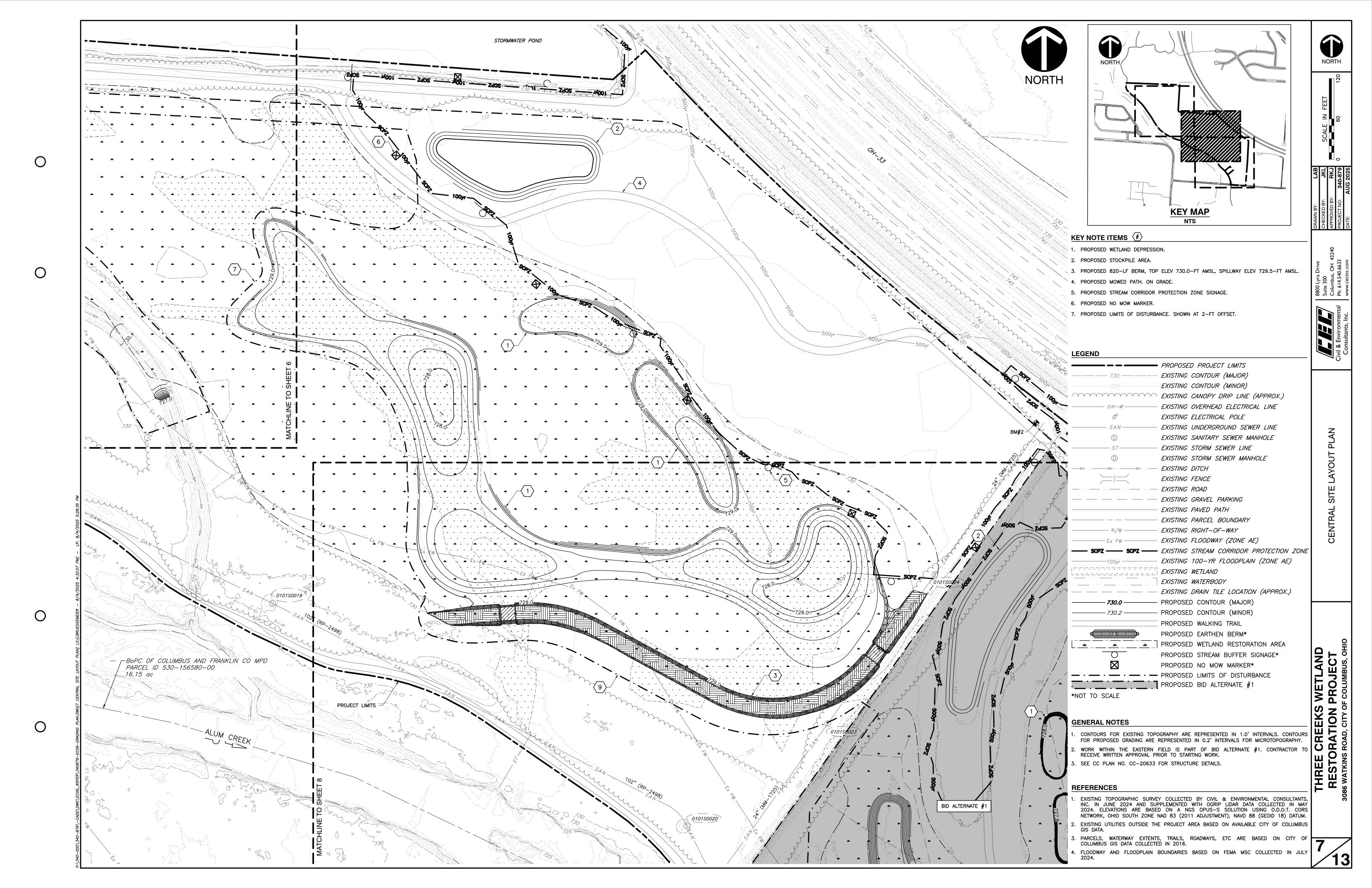
*NOT TO SCALE

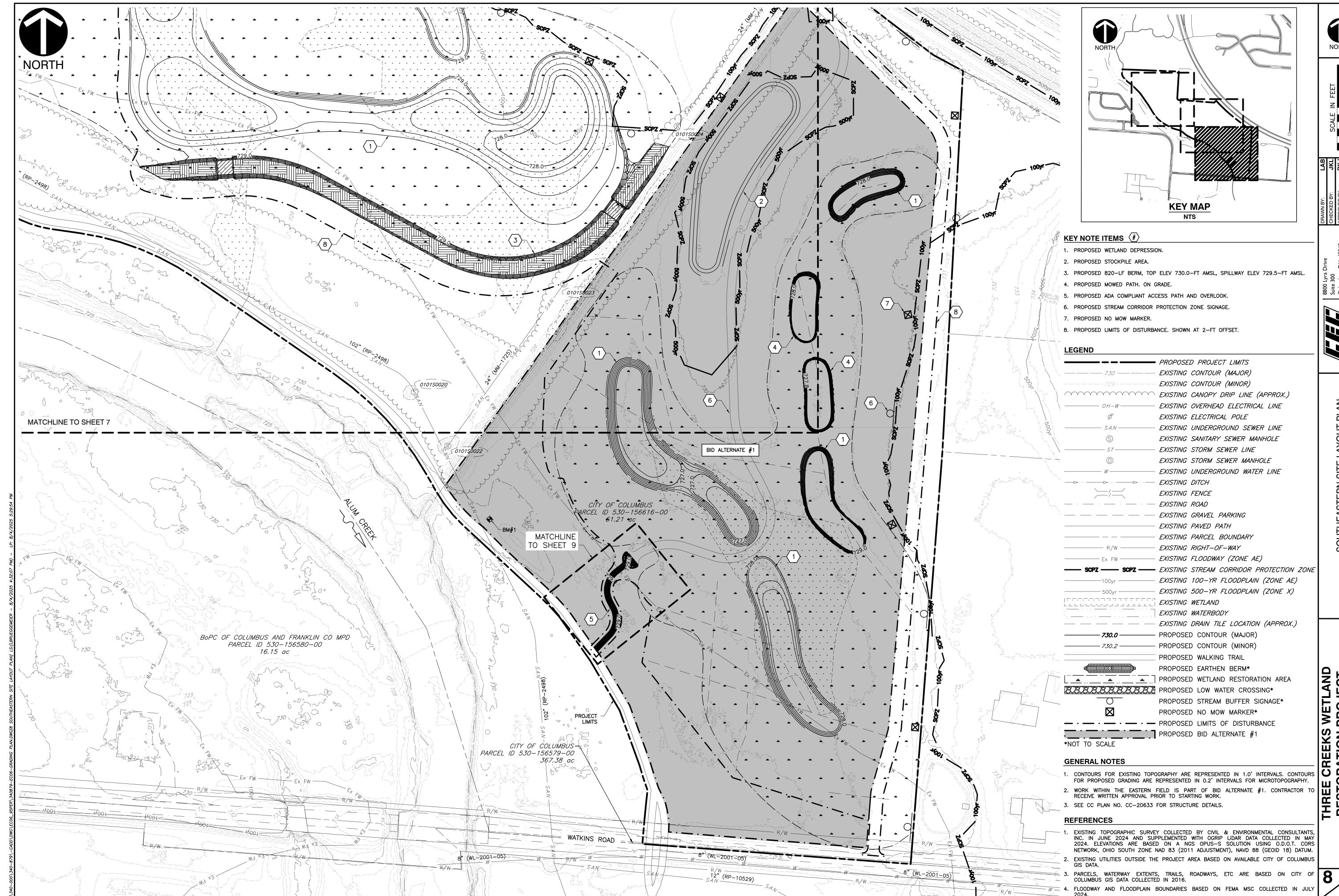


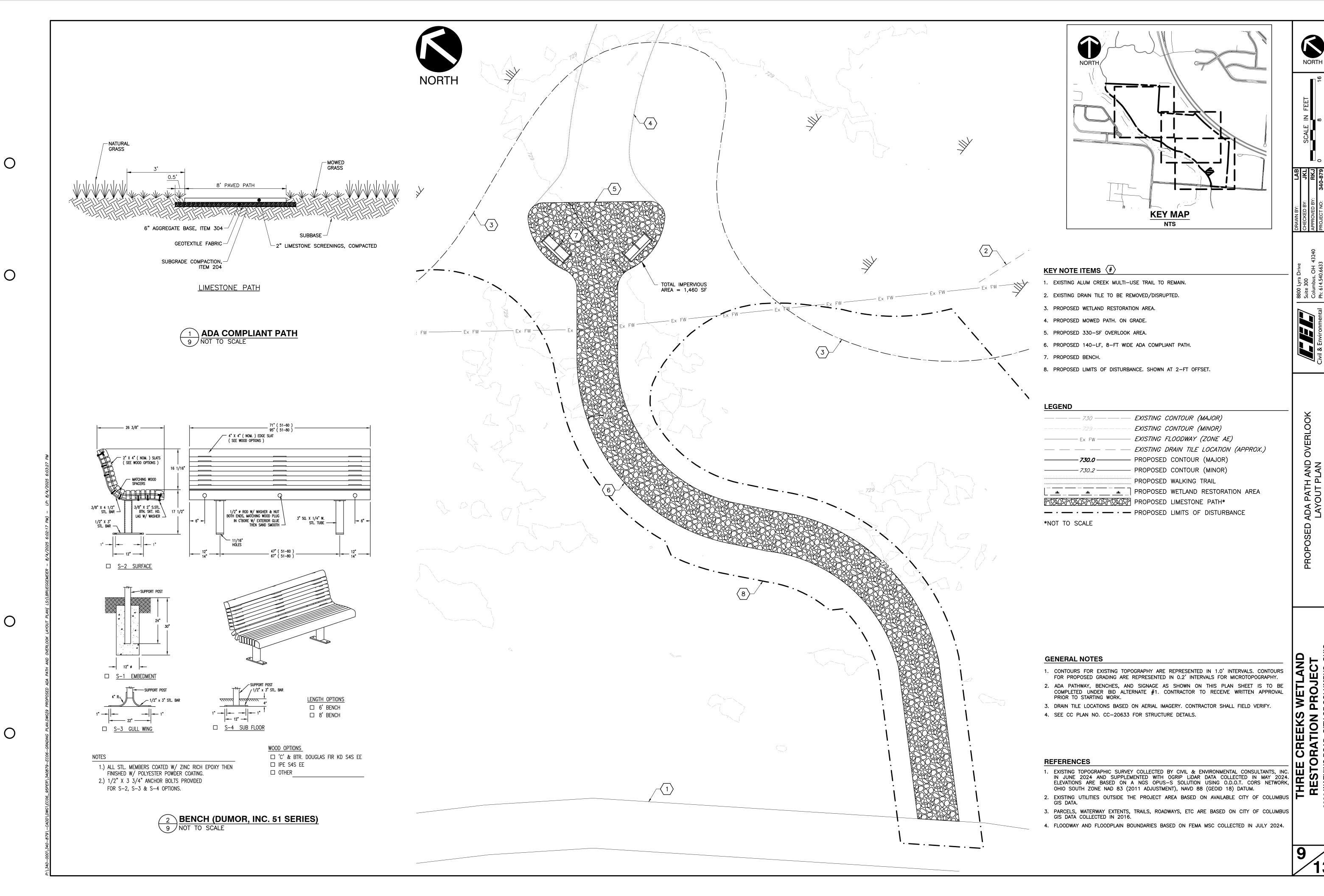




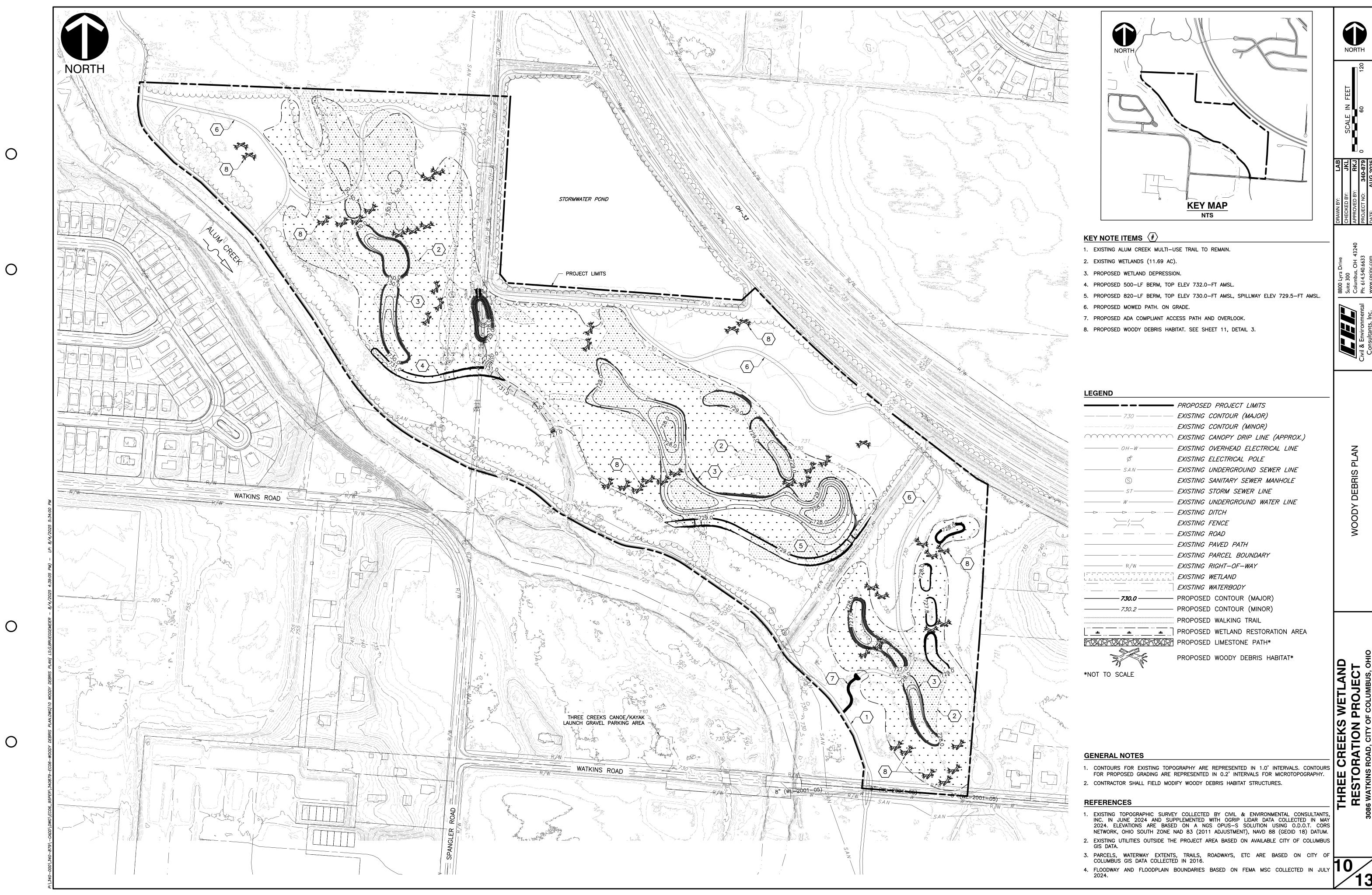


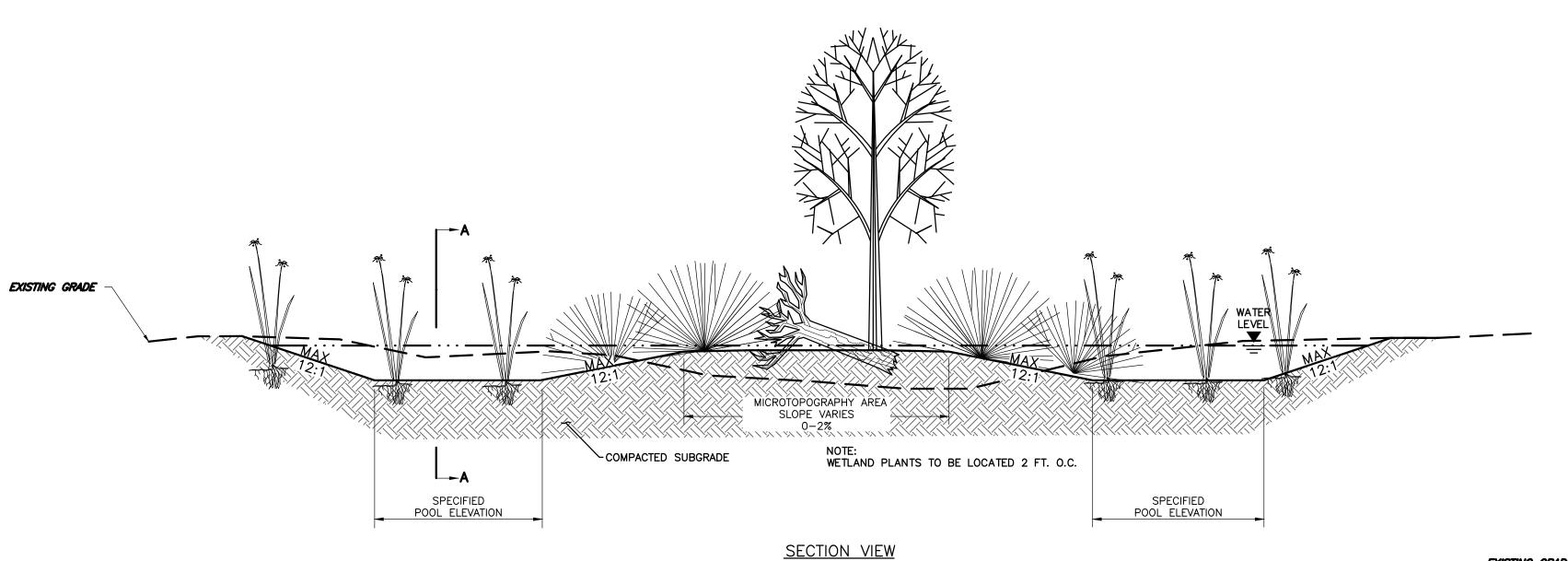






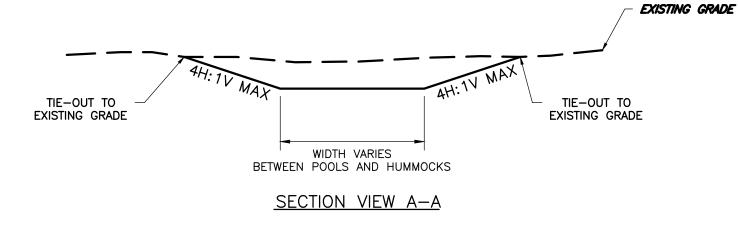
OVERLOOK PATH AND (





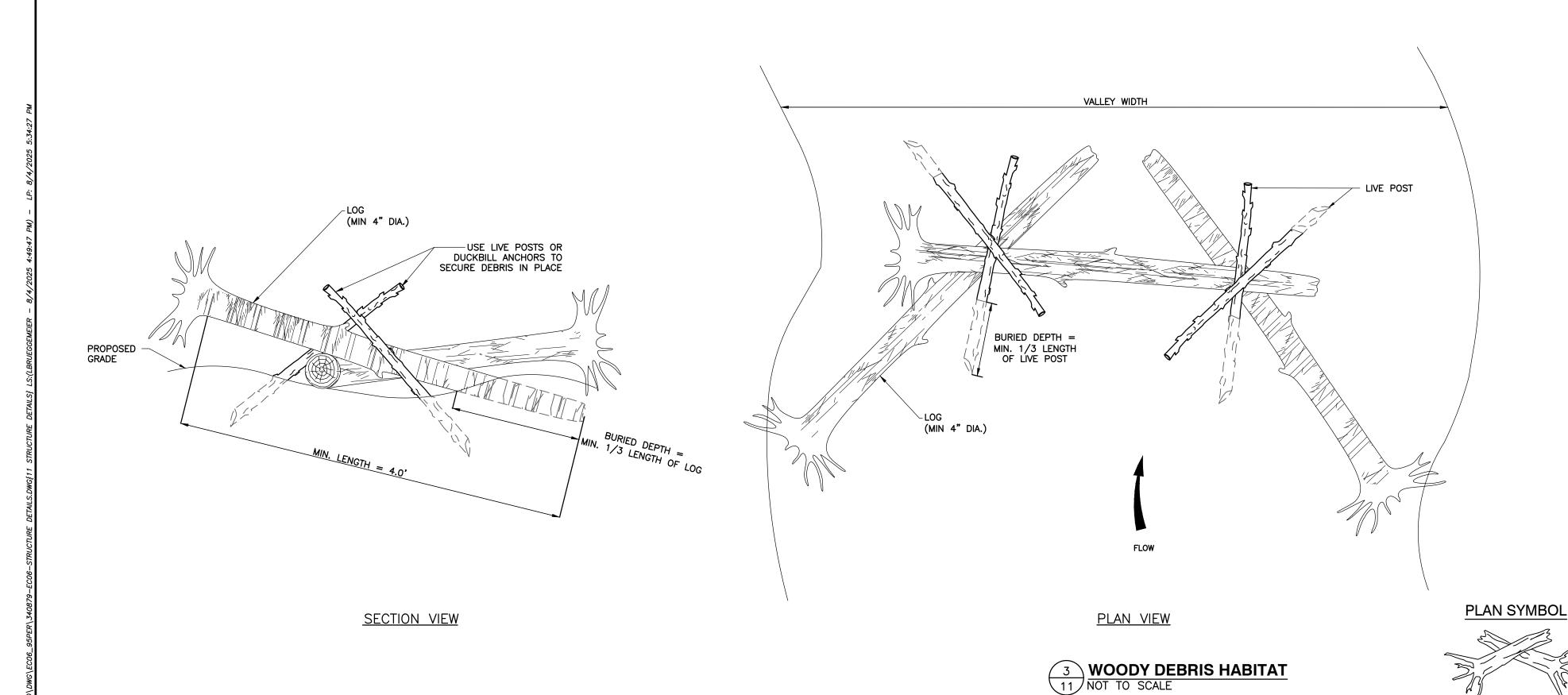
NOTES:

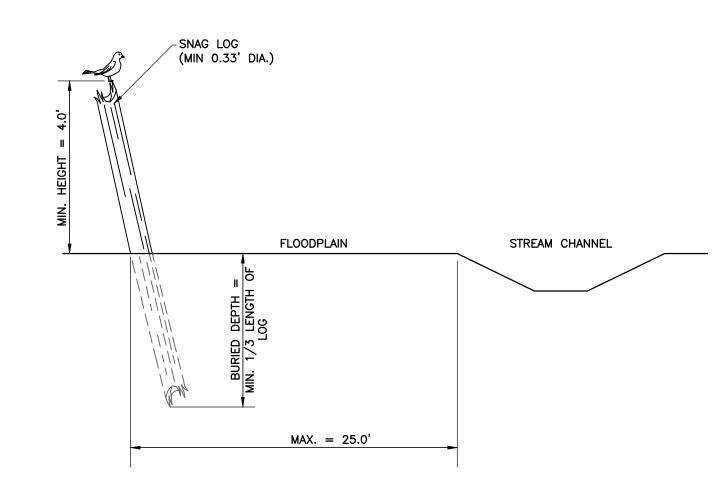
- 1. MICROTOPOGRAPHY AREAS ARE GRADED INTO THE EXISTING GROUND TO CREATE DEPRESSIONS FOR HYDROLOGY RETENTION. GRADED AREAS SHOULD NOT BE UNIFORM IN DEPTH AND INCLUDE HIGHER AREAS FOR ESTABLISHMENT OF HUMMOCK HABITATS. BOUNDARY EXTENTS, LOCATIONS, AND SIZES CAN BE MODIFIED PER DISCRETION OF ENGINEER OF CONSTRUCTION MANAGER ON—SITE. EXCESS MATERIAL SHOULD BE GRADED INTO VALLEY WALLS, UPLAND AREAS, OR LOWER ELEVATION AREAS IN THE FLOODPLAIN PER ENGINEER OR CONSTRUCTION MANAGER ON—SITE.
- 2. WETLAND SOILS HARVESTED ON-SITE SHOULD BE STOCKPILED AND SAVED FOR INCORPORATION INTO MICRO-TOPOGRAPHY AREAS.
- 3. FLOODPLAIN AND WILDLIFE HABITAT (3/D3) SHALL BE RANDOMLY INCORPORATED INTO THE MICRO-TOPOGRAPHY AREA. LOCATIONS OF HABITAT STRUCTURES CAN BE ADJUSTED IN THE FIELD, EQUIPMENT SHALL NOT BE USED IN EXISTING WETLANDS AND ONLY PLACED MANUALLY.
- 4. WETLAND SEED PER SPECIFICATIONS AND LIVE STAKES SHALL BE PLANTED IN MICRO-TOPOGRAPHY AREAS PER TABLES AND SPECIFICATIONS IN THE PLAN.



WETLAND CELL / MICROTOPOGRAPHY

NOT TO SCALE





<u>PLAN VIEW</u>

NOTE

- WOOD SNAG SHALL BE PLACED WITHIN 25 FEET OF THE TOP OF BANK OF THE PROPOSED RESTORATION AREAS.
- WOOD SNAG SHALL BE BURIED TO A DEPTH NO SHALLOWER THAN 1/3 OF THE TOTAL LENGTH OF THE LOG.
- 3. MINIMUM STICK-UP HEIGHT IS 4.0 FEET.
- 4. MINIMUM DIAMETER IS 4 INCHES.
- 5. LOG SHALL BE RELATIVELY STRAIGHT &. RECENTLY HARVESTED.
- ALL MATERIALS ARE TO BE APPROVED BY THE ENGINEER OR ENGINEER'S ON-SITE CONSTRUCTION MANAGER.





PHOTOGRAPHIC EXAMPLE

NOTES:

- STACKED OR CROSSED LARGE WOOD DEBRIS AND/OR LOGS OR BOULDERS, IF AVAILABLE ON-SITE SHALL ALSO BE PLACED WITHIN THE PROPOSED RESTORATION OR AREAS.
- 2. LARGE WOOD DEBRIS SHALL BE ANCHORED TO THE GROUND SURFACE TO WITHSTAND FLOOD FLOWS. LIVE POSTS OR DUCKBILL ANCHORS SHOULD BE USED TO HOLD LARGE WOOD DEBRIS IN PLACE. THE UPSTREAM PORTION OF THE LOG SHALL BE BURIED A MINIMUM OF 1/3 THE LENGTH OF THE LOG TO DISCOURAGE MOVEMENT AT FLOOD FLOWS.
- 3. MINIMUM LOG LENGTH (INCLUDING ROOT WAD) IS 4.0 FEET.
- 4. MINIMUM LOG DIAMETER IS 4 INCHES.
- 5. ALL MATERIALS ARE TO BE APPROVED BY THE ENGINEER OR ENGINEER'S ON-SITE CONSTRUCTION MANAGER.

. GENERAL

- 1.1. DRAIN TILE CONFIGURATIONS ARE USUALLY 2 TO 5 FEET IN DEPTH, ON AVERAGE AND MAY BE IN THE FORM OF A SINGLE TILE LINE OR AN EXTENSIVE ARRAY OF PARALLEL LINES.
- 1.2. DRAIN TILE ALIGNMENT SHALL BE IDENTIFIED THROUGH INTERPRETATION OF AERIAL IMAGERY OR SITE RECONNAISSANCE.
- 1.3. REMOVAL AND DISRUPTION IS DEPENDENT ON GEOLOGY, TOPOGRAPHY, DRAIN TILE SIZE/ELEVATION/GRADES/EXTENTS, AND DRAIN TILE QUALITY. THE DETAILS PROVIDED MAY BE ADJUSTED BASED ON FIELD CONDITIONS AS DETERMINED BY THE DESIGN ENGINEER.

2. SOIL DISTURBANCE:

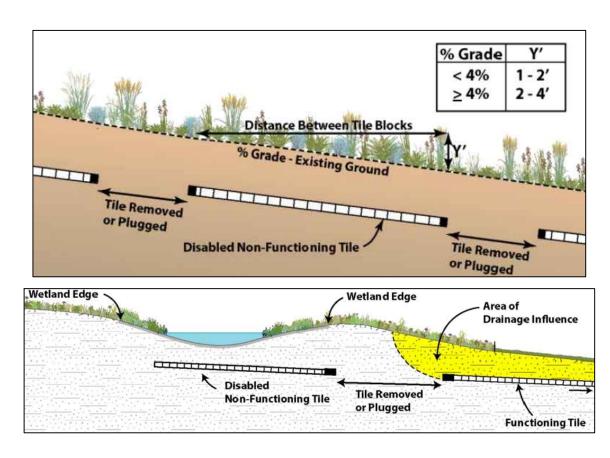
- 2.1. ONLY THE SOIL DIRECTLY ABOVE THE DRAIN TILE SHALL BE DISTURBED. NO MASS GRADING OR STRIPPING OF SURFACE SOIL.
- 2.2. TOP SOIL DEPTHS SHALL BE DETERMINED IN THE FIELD AND TOP SOIL SHALL BE MAINTAINED SEPARATELY FROM SUB SOIL.
- 2.3. EXCAVATED TRENCH SHOULD BE AT A 1:1 SLOPE AND BACKFILLED WITH THE SAME MATERIAL THAT WAS EXCAVATED FROM THE TRENCH.
- 2.4. SUB SOIL WILL BE USED TO BACKFILL ALL TRENCHES AND HOLES FIRST AND COMPACTED TO ACHIEVE DENSITIES EQUAL TO THE ADJACENT, UNDISTURBED UNDERLYING SOILS..
- 2.5. AT LEAST 6 TO 8 INCHES OF TOPSOIL SHOULD BE BACKFILLED ON TOP FOR PLANTING.

3. TILE DISRUPTION METHODS:

- 3.1. DISRUPTION OF DRAIN TILE EFFICIENCY CAN BE CONDUCTED THROUGH REMOVAL OR BLOCKING.
- 3.2. DRAIN TILE REMOVAL SHOULD BE PRIMARY PRACTICE UNLESS HIGH QUALITY WETLAND OR OTHER PROTECTED INFRASTRUCTURE IS ENCOUNTERED. ALL FRAGMENTS, DEBRIS, AND FILTER MATERIALS SHOULD BE REMOVED.
- 3.3. IN DRAIN TILE REMOVAL, A PLUG IS REQUIRED AT BOTH ENDS OF THE EXPOSED REMAINING TILE.
- 3.4. EXCAVATION CONDUIT OR TRENCH MUST BE BACKFILLED WITH HIGH CLAY CONTENT SUB-SOIL AND COMPACTED REPEATEDLY.
- 3.4.1. FILL MATERIALS SHALL BE HOLE PLUG (BENTONITE CHUNKS) OR SIMILAR MATERIAL.
- 3.4.1.1. PLUG FILL MATERIALS SHOULD BE INSERTED FOR AT LEAST ONE TO TWO FEET OF TILE END LEFT IN THE LANDSCAPE. NO TILE END WILL BE LEFT IN THE GROUND WITHOUT A
- 3.5. A MINIMUM OF A 20 FOOT SECTION OF DRAIN TILE SHOULD BE REMOVED OR PLUGGED AT THE PRIMARY TILE BLOCK OR DISRUPTION LOCATIONS TO ENSURE RESTORED WETLAND HYDROLOGY GROUND WATER TABLE.
- 3.5.1. SUBSEQUENT SUPPLEMENTAL TILE DISRUPTION OR BLOCKAGE SHOULD BE A MINIMUM OF 10 TO 20 FEET IN LENGTH.
- 3.6. INCREASED LENGTH OF DISRUPTION (REMOVAL OR BLOCK) MAY BE REQUIRED IN PERMEABLE SOILS SUCH AS SAND, GRAVEL, OR ORGANIC SOILS WHERE LATERAL DRAINAGE EFFECTS FROM DOWNSTREAM DRAINAGE SYSTEMS MAY BE INFLUENTIAL.
- 3.7. SUPPLEMENTAL TILE REMOVAL OR BLOCKS MAY BE REQUIRED IN SLOPED LANDSCAPES OR FLAT LANDSCAPES WITH EXTENDED LENGTHS OF TILE LINE. INCREASING THE FREQUENCY
 OF TILE DISRUPTION REDUCES THE EXCESSIVE HYDRAULIC "HEAD" PRESSURES AND THE POTENTIAL FOR BLOWOUTS OR SURFACE DISCHARGE IMMEDIATELY UPSTREAM OF THE
- 3.7.1. FOR LANDSCAPES WITH LESS THAN 3 TO 4 PERCENT AVERAGE SLOPE, SUPPLEMENTAL REMOVAL OR BLOCKAGE SHOULD BE SPACED EVERY ONE TO TWO FEET OF VERTICAL SLOPE OF THE LAND SURFACE.
- 3.7.2. FOR LANDSCAPES OVER 4 PERCENT SLOPE, SUPPLEMENTAL REMOVAL OR BLOCKAGE SHOULD BE SPACED EVERY TWO TO FOUR FEET OF VERTICAL SLOPE OF THE LANDSCAPE SURFACE.
- 3.8. ON LARGER SLOPES, RIPPING OR KNIFING THE LANDSCAPE AT A TRAJECTORY THAT IS PERPENDICULAR TO THE SLOPE AND TILE ALIGNMENT MAY BE A SUPPLEMENTAL CONSTRUCTION TECHNIQUE.
- 3.8.1. RIPPING OR KNIFING SHOULD ONLY OCCUR IN CONJUNCTION WITH DRAIN TILE REMOVAL OR BLOCKAGE. IT DOES NOT REPLACE THE ACTIVITIES DESCRIBED ABOVE NOR THE LENGTH OR SPACING REQUIREMENTS.

4. PROTECTION OF ADJACENT LANDS:

- 4.1 IN SITUATIONS WHERE PARTIAL DRAIN TILE REMOVAL, TIE IN WITH ADJACENT LANDOWNERS, OR SHARED DRAIN TILE SYSTEMS EXIST ON RECEIVING END:
- 4.1.1 OFFSET PLANNED TILE BLOCKS BY AT LEAST 25 FEET OR MORE FROM THE PROJECT/PROPERTY BOUNDARY TO PREVENT NEGATIVE OFF-SITE HYDROLOGIC IMPACTS.
- 4.1.2 REMOVE AND PLUG THE CONVEYING TILE SYSTEM.4.1.3 USE CAUTION TO NOT DAMAGE THE RECEIVING TILE SYSTEM.
- 4.2 IN SITUATIONS WHERE CONVEYING DRAIN TILES ENTER THE PROJECT AREA OR PROPERTY, DAYLIGHTING OR OUTLETTING OF THE UPSTREAM TILE INTO THE RESTORED WETLAND AREA WILL BE REQUIRED.



NOTE: IMAGES FROM MINNESOTA WETLAND RESTORATION GUIDE, BLOCKING SUBSURFACE DRAINAGE TILE TECHNICAL GUIDANCE DOCUMENT, PUBLICATION DATE OCTOBER 14, 2015

8800 Lyra Drive
Suite 300
Columbus, OH 4324
Ph: 614.540.6633
www.cecinc.com





3.1. GRASS SHOULD BE ALLOWED TO GROW 6 INCHES, EITHER AFTER MOWING OR FROM SPRING GROWTH, TO WEAKEN THE PLANT AND PROVIDE MAXIMUM SURFACE AREA

4.2. CONTRACTOR SHALL BREAK UP SOIL TO FACILITATE SEED GERMINATION BY DISKING

4.3. CONTRACTOR SHALL APPLY A SECOND HERBICIDE TREATMENT NO SOONER THAN

1. THIS METHOD SHALL APPLY TO LIVING, DORMANT, OR DEAD TREES AND SHRUBS LISTED IN OHIO ADMINISTRATIVE CODE (OAC) 901:5-30-01 DEPENDING ON SITE-SPECIFIC CONDITIONS AT THE TIME OF TREATMENT. THIS SHALL INCLUDE BUT NOT BE LIMITED TO AMUR HONEYSUCKLE, AUTUMN OLIVE, MULTIFLORA ROSE, OSAGE ORANGE, CALLERY PEAR,

2.1. CONTRACTOR SHALL CUT TREES AND SHRUBS DOWN TO A STUMP OR GIRDLE ENTIRE

DIFFERENT SPECIES REQUIRE DIFFERENT TREATMENT APPROACHES, MANY WITH REPEATED TREATMENT NEEDED ACROSS THE 2025 GROWING SEASON. CONTRACTOR SHALL BEGIN APPLICATION PROCESS IN MAY AND JUNE 2025 AND CONTINUE THROUGH THE 2025 GROWING SEASON UP TO FALL CONSTRUCTION. ADDITIONAL, REPEATED APPLICATION CYCLES

2. TREATMENT EXTENTS SHALL INCLUDE ALUM CREEK TRAIL NORTH TOWARDS SR 33 PARCEL BOUNDARY OR PONDS EDGE, AND FROM THE WESTERN TREE CANOPY, INCLUSIVE OF APPROXIMATELY 30-FEET INTO THE CANOPY LINE, EASTWARD TO THE PRIVATE PROPERTY

SCP WATER QUANTITY STRUCTURE NOTICE

DISTURBANCE AND INCREASE IN IMPERVIOUS AREA DO NOT EXCEED DE MINIMIS STANDARD. NO STORM WATER CONTROLS ARE REQUIRED.

FLOODPLAIN INFORMATION TABLE			
FLOODPLAIN INFORMATION	DATA	REFERENCE SHEET NO.	
FIRM PANEL NUMBER(S):	39049C0341K, 39049C0343K	N/A	
EFFECTIVE DATE OF FIRM PANEL(S):	6/17/2008	N/A	
FLOOD ZONE(S):	AE, X	4 THROUGH 6, 10 THROUGH 13, 16	
ANY FLOODWAY FILL OR OBSTRUCTIONS?:	YES*	N/A	
AMOUNT OF FILL IN 100-YR FLOODPLAIN:	2219 CY	16	
COMPENSATORY STORAGE AMOUNT:	6135 CY	16	
IS ANY TYPE OF LOMR BEING REQUESTED?:	NO	N/A	
BASE FLOOD ELEVATION:	731.8 FT (AVG)	N/A	
RESIDENTIAL OR NON-RESIDENTIAL STRUCTURE PROPOSED IN 100-YR FLOODPLAIN?	NO	N/A	

*THIS PROJECT IS PROPOSING GRADED WETLAND DEPRESSIONS AND LOW-PROFILE EARTHEN BERMS WITHIN THE FLOODWAY TO IMPROVE WATER RETENTION WITHIN THE PROJECT LIMITS. WORK WITHIN THE FLOODWAY WILL RESULT IN A NET CUT OF APPROXIMATELY 150 CY. TOTAL WORK WITHIN THE 100-YR FLOODPLAIN WILL RESULT IN A NET CUT OF 3,916 CY.

FEMA FLOODPLAIN DATA

THE WESTERN AND SOUTHERN PORTIONS OF THIS PROPERTY ARE LOCATED WITHIN REGULATORY FLOODWAY ZONE "AE" OF THE FIRM FLOOD INSURANCE RATE MAPS, COMMUNITY PANEL NOS. 39049C0341K AND 39049C0343K, WHICH BEAR AN EFFECTIVE DATE OF JUNE 17, 2008. THE CENTRAL AND EASTERN PORTIONS OF THIS PROPERTY ARE LOCATED WITHIN THE SPECIAL FLOOD HAZARD ZONE "AE" OF THE FIRM FLOOD INSURANCE RATE MAPS. THE NORTHEASTERN PORTION OF THIS PROPERTY IS LOCATED WITHIN 0.2% ANNUAL CHANCE FLOOD HAZARD AREA ZONE "X" OF THE FIRM FLOOD INSURANCE RATE MAPS. AN APPLICATION FOR A LETTER OF MAP REVISION (LOMR) WILL NOT BE SUBMITTED TO FEMA. ACCORDING TO FEMA PROVIDED CROSS-SECTIONS, THE BASE FLOOD ELEVATIONS (BFE) RANGE FROM 729.9 FT ON THE DOWNSTREAM LIMIT OF THE PROPERTY TO 733.6 FT ON THE UPSTREAM LIMIT OF THE PROPERTY. THE AVERAGE BFE OF THE PROPERTY IS 731.8 FT.

WORK WITHIN THE 100-YR FLOODPLAIN

WORK WITHIN THE 100-YR FLOODPLAIN WILL RESULT IN 6,135 CY OF CUT AND 2,219 CY OF FILL, WITH A NET CUT OF 3,916 CY. THE CUT AND FILL VOLUMES ARE SHOWN WITHIN THE TABLE BELOW, AND DETAILS OF HOW THESE VOLUMES WERE CALCULATED CAN BE FOUND ON SHEET 16.

FLOODPLAIN	N CUT/FILL	QUANTITIES	
CUT (CY)	FILL (CY)	NET (CY)	
6135	2219	-3916	

| BENCHMARKS (NAVD88) 💠

THE NORTHING AND EASTING SHOWN ARE APPROXIMATE AND ONLY INTENDED TO PROVIDE RECOVERY OF THE BENCHMARK. THESE COORDINATES ARE NOT INTENDED TO BE USED FOR THE HORIZONTAL CONTROL OF THE PROJECT. THE HORIZONTAL CONTROL FOR THE PROJECT SHALL BE CONTROLLED BY THE MONUMENTS FOUND OR SET BY A PROFESSIONAL SURVEYOR.

EXISTING TOPOGRAPHIC SURVEY COLLECTED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. IN JUNE 2024 AND SUPPLEMENTED WITH OGRIP LIDAR DATA COLLECTED IN MAY 2024. ELEVATIONS WERE DETERMINED USING STATIC GPS OBSERVATIONS PERFORMED ON JUNE 24 OF THE YEAR 2024 AS BASED ON A NGS OPUS-S SOLUTION USING O.D.O.T. CORS NETWORK, OHIO SOUTH ZONE 83 (GEOID 18)

TOP OF A 5/8" SOLID REBAR THIRTY INCHES IN LENGTH WITH A YELLOW PLASTIC CAP BEARING THE INITIALS "CEC INC.". BASED ON AN NGS OPUS-S SOLUTION USING O.D.O.T. CORS NETWORK, OHIO SOUTH ZONE NAD 83 (2011 ADJUSTMENT) NAVD 88 (GEOID 18) DATUM.

ELEVATION: 730.35

PARCEL ID: Q10-111412-00-

MYRTLE E HAYES PARCEL ID 010-111-417-00 2.92 ac

ENGINEER/SURVEYOR

WORTHINGTON, OHIO 43085

TITLE: PROJECT MANAGER

PHONE: (614) 310-0175

EMAIL: JLOOPER@CECINC.COM

CONTACT: JESSICA LOOPER, PE

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

250 W. OLD WILSON BRIDGE ROAD, SUITE 250

DIRECTOR, DEPARTMENT OF RECREATION AND PARKS

= WATKINS ROAD =

CITY OF COLUMBUS PARCEL ID 010-111415-00 34.23 ac

BENCHMARK 2: TOP OF A 5/8" SOLID REBAR THIRTY INCHES IN LENGTH WITH A YELLOW PLASTIC CAP BEARING THE INITIALS "CEC INC.". BASED ON AN NGS OPUS—S SOLUTION USING O.D.O.T. CORS NETWORK. OHIO SOUTH ZONE NAD 83 (2011 ADJUSTMENT) NAVD 88 (GEOID 18) DATUM.

ELEVATION: 731.30

ELEVATION: 728.73

ELEVATION: 733.59

BENCHMARK 3: TOP OF A 5/8" SOLID REBAR THIRTY INCHES IN LENGTH WITH A YELLOW PLASTIC CAP BEARING THE INITIALS "CEC INC.". BASED ON AN NGS OPUS-S SOLUTION USING O.D.O.T. CORS NETWORK, OHIO SOUTH ZONE NAD 83 (2011 ADJUSTMENT) NAVD 88 (GEOID 18) DATUM.

CHISELED "X" ON THE WESTERN EDGE OF THE RIM OF MANHOLE ID 0100S0010 LOCATED SOUTHWEST OF THE EXISTING STORMWATER POND..

	STATE PLANE COORDINATES - OHIO SOUTH ZONE*				
	HORIZONTAL REFERENCE POINT COORDINATE LOCATIONS				
REF. PT.	REF. PT. DESCRIPTION NORTHING EASTING				
1	TRV 5/8 REBAR CEC INC.	694102.57	1851646.99		
2	TRV 5/8 REBAR CEC INC.	694880.22	1852061.09		
3	TRV 5/8 REBAR CEC INC.	695374.93	1850593.46		
51	BM 1 "X" IN WEST EDGE OF MH RIM	695410.53	1850395.77		

HORIZONTAL REF DATUM= NAD 83 (NSRS 2011)

REFERENCES

CITY NO.

1. EXISTING TOPOGRAPHIC SURVEY COLLECTED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. IN JUNE 24, 2024 AND SUPPLEMENTED WITH OGRIP LIDAR DATA COLLECTED IN MAY 2024. ELEVATIONS ARE BASED ON A NGS OPUS-S SOLUTION USING O.D.O.T. CORS NETWORK, OHIO SOUTH ZONE NAD 83 (2011 ADJUSTMENT), NAVD 88 (GEOID 18) DATUM.

3. PARCELS, WATERWAY EXTENTS, TRAILS, ROADWAYS, ETC ARE BASED ON CITY OF COLUMBUS GIS DATA COLLECTED IN 2016.

4. FLOODWAY AND FLOODPLAIN BOUNDARIES BASED ON FEMA MSC COLLECTED IN JULY 2024.

GRANTOR

EASEMENT REFERENCE

PAGE

PLAN PREPARED BY: APPROVAL/DATE Civil & Environmental Consultants, Inc. 250 Old Wilson Bridge Road, Suite 250 - Worthington, OH 43085 Ph: 614.540.6633 · 888.598.6808 · Fax: 614.540.6638 ,,www.cecinc.com JESSICA LOOPER E-84224 84224 NUMBER REGISTERED ENGINEER DATE

FOR STORM SEWERS ONLY: SIGNATURES BELOW SIGNIFY ONLY CONCURRENCE WITH THE GENERAL PURPOSES AND GENERAL LOCATIONS OF THE PROJECT. ALL TECHNICAL DETAILS REMAIN THE RESPONSIBILITY OF THE ENGINEER PREPARING THE PLANS. FOR APPROVAL OF STORM SEWER ONLY. CITY ENGINEER/ADMINISTRATOR, DIVISION OF DESIGN AND CONSTRUCTION DATE ADMINISTRATOR, DIVISION OF POWER DATE ADMINISTRATOR, DIVISION OF SEWAGE AND DRAINAGE

OWNER/DEVELOPER

RECREATION AND PARKS DEPARTMENT

CITY OF COLUMBUS

1111 EAST BROAD STREET

PHONE: (614) 816-1875

CONTACT: KELLY MESSER, PE TITLE: PROJECT MANAGER

EMAIL: KNMESSER@COLUMBUS.GOV

COLUMBUS, OH 43205

INDEX MAP

SCALE IN FEET

ARCEL ID 530-156616-00

61.21 ac

BOPC OF COLUMBUS AND FRANKLIN CO MPD

PARCEL ID 530-156580-00

16.15 ac

WATKINS ROAD

PRIVATE STORM & GRADING FOR 3086 WATKINS ROAD CITY OF COLUMBUS, OHIO **COVER SHEET** DIVISION USE ONLY

8" (WL-2001-05)

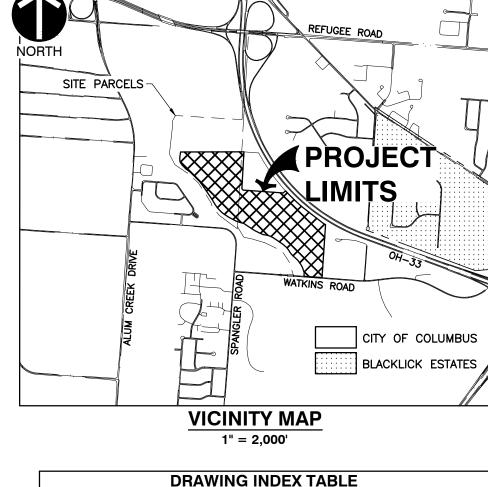
SITE ADDRESS

COLUMBUS, OHIO 43207

3086 WATKINS ROAD

DATE

DATE



DRAWING INDEX TABLE			
SHEET NUMBER	SHEET TITLE		
1	COVER SHEET		
2	GENERAL NOTES		
3	GENERAL NOTES		
4	NORTHWESTERN STORMWATER POLLUTION PREVENTION PLAN		
5	CENTRAL STORMWATER POLLUTION PREVENTION PLAN		
6	SOUTHEASTERN STORMWATER POLLUTION PREVENTION PLAN		
7	SWPPP NOTES		
8	SWPPP NOTES AND DETAILS		
9	SWPPP DETAILS		
10	NORTHWESTERN GRADING PLAN		
11	CENTRAL GRADING PLAN		
12	SOUTHEASTERN GRADING PLAN		
13	ADA PATH AND OVERLOOK PLAN		
14	STRUCTURE DETAILS		
15	STRUCTURE DETAILS		
16	FLOODPLAIN GRADING PLAN		

ESTIMATE OF QUANTITIES			
ITEM	QTY	UNIT	DESCRIPTION
STORM SEWER			
202	16.5	LF	24" CULVERT REMOVAL
SEDIMENT & EROSION CONTROL			
207	1	EA	STRUCTURE PROTECTION
207	1,300	LF	COMPOST FILTER SOCK
207	2	EA	COMPOST SOCK SEDIMENT TRAP
207	2	EA	ROCK CHECK DAM
207	23.7	CY	STABILIZED CONSTRUCTION ENTRANCE
659	3	AC	TEMPORARY SEEDING & MULCHING
THE QUANTITIES HAVE BEEN ESTABLISHED AS A MEANS FOR THE CITY TO ESTIMATE THE NECESSARY DEVELOPMENT FEES. THE CONTRACTOR SHALL COMPLETE HIS OWN TAKEOFF IN DETERMINING THE BID PRICE FOR THE BIAN IMPROVEMENT			

COLUMBUS STANDARD CONSTRUCTION DRAWINGS			
CITY OF COLUMBUS RECREATION AND PARKS			
400-402 1441 (7/1/2024)			
AA-S176	AA-S178		
	2230 (4/30/2018)		
THE STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS LISTED ABOVE SHALL BE CONSIDERED A PART OF THESE DRAWINGS.			

THE CURRENT PLAN IS BASED ON THE 2024 SWDM ALL PLANS (CC, OR FINAL SITE COMPLIANCE PLAN (FSCP)) IN AN EARLIER STATE OF DESIGN BY THE EFFECTIVE DATE OF THE 2024 SWDM WILL BE SUBJECT TO THE

REQUIREMENTS OF THE 2024 SWDM.

STREET FOR SANITARY SERVICE APPROVAL.

SANITARY SERVICES AND OTHER NON-STORM UTILITY CONNECTIONS ARE SHOWN ON THIS PLAN FOR REFERENCE ONLY. APPROVAL OF THIS PLAN DOES NOT CONSTITUTE APPROVAL OF THE SANITARY SERVICES, THEIR LOCATIONS, OR ANY OTHER NON-STORM WATER UTILITY. CONTACT THE DPU PERMIT OFFICE AT 111 N. FRONT

SITE DATA	TABLE
TOTAL SITE ACREAGE:	66.47 AC
TOTAL DISTURBED ACREAGE:	35.24 AC (0.01 AC WITHIN R/W)
DISTURBED IMPERVIOUS AREA:	0.00 AC (0.0 AC WITHIN R/W)
DISTURBANCE WITHIN R/W:	0.01 AC (CONSTRUCTION ENTRANCE)
PRE DEVELOPED IMPERVIOUS SITE AREA:	0.95 AC
PRE DEVELOPED % IMPERVIOUS SITE AREA:	1.43%
POST DEVELOPED IMPERVIOUS SITE AREA:	0.98 AC
POST DEVELOPED % IMPERVIOUS SITE AREA:	1.47%
NET CHANGE IN IMPERVIOUS SITE AREA:	1,460 SF

THREE CREEKS WETLAND RESTORATION PROJECT CITY OF COLUMBUS RECREATION AND PARKS DEPT. DIVISION OF SEWERAGE AND DRAINAGE DIVISION USE ONLY OWNER CONTRACTOR INSPECTOR SCALE: 1"=200' SHEET: 1 OF 16 AGREEMENT | COMPLETED RPD | CKD | CLD | CON. DR. CONTRACT DRAWING NO. RECORD PLAN NO. CC-20633

& KIMERLY S BANDY

530-189601-00

.KELLY A BANDY & KIMBERLY S BANDY · · · PARCEL D 530-189600-00

NA GOLDEN

PARCEI D 530-179993-00

4.97 ac

PARCEL

CITY OF COLUMBUS

PRELIMINARY SITE COMPLIANCE PLAN: 24601-00154

WATER SERVICE PLAN:

FINAL SITE COMPLIANCE PLAN:

PARCEL ID 530-156579-00 367.38 ac

25345-00398

COUNTY RECORDER

VOL.

DESCRIPTION

REVISIONS

2. EXISTING UTILITIES OUTSIDE THE PROJECT AREA BASED ON AVAILABLE CITY OF COLUMBUS GIS DATA.

ADMINISTRATOR, DIVISION OF WATER

*30 DAYS NOTICE

PROJECT NAME

DATE THE INSPECTION IS NEEDED

SW1. THE CITY OF COLUMBUS CONSTRUCTION AND MATERIALS SPECIFICATIONS (CMSC) 2025 EDITION. INCLUDING ALL REVISIONS AND SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS

THAT ARE A PART OF THIS PLAN UNLESS OTHERWISE NOTED.

HOURS IN ADVANCE OF THE ANTICIPATED START OF CONSTRUCTION, HOLIDAYS AND WEEKENDS

DIVISION OF SEWERAGE AND DRAINAGE (614) 645-7102 (614) 645-7788 DIVISION OF WATER DIVISION OF FIRE (614) 645-8308 (614) 645-4545 DIVISION OF POLICE (614) 645-0433 DIVISION OF TRANSPORTATION DIVISION OF DESIGN AND CONSTRUCTION (CONSTRUCTION) (614) 645-0433 DIVISION OF RECREATION AND PARKS* (614) 645-3300

EXCLUDED. WORK SHALL NOT COMMENCE UNTIL A PRE-CONSTRUCTION CONFERENCE IS HELD.

THE CONTRACTOR SHALL REQUEST INSPECTION BY EMAILING THE FOLLOWING INFORMATION TO PRIVATEDEVELOPMENT@COLUMBUS.GOV BY 2PM THE WORKING DAY PRIOR TO YOUR NEEDED

CONTACT NAME AND NUMBER CID AGREEMENT OR CC #, AGR OR DRAWER E #, EP #

SW3. 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 OF 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 TO WORK IN THE VICINITY OF THEIR UNDERGROUND LINES.

SW4. CONSTRUCTION OF THIS PROJECT MAY NOT BEGIN UNTIL THE EASEMENTS INDICATED HAVE BEEN RECORDED BY THE CITY.

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

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

SW7. 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 MATERIALS SPECIFICATIONS, CURRENT VERSION,

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 SPECIFICATIONS. PIPE AND STRUCTURES WITHOUT PROPER IDENTIFICATIONS 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 SHEETS 4 THROUGH 9 OF THIS PLAN. LAND-DISTURBING ACTIVITIES MUST COMPLY WITH ALL PROVISIONS OF THE DIVISION OF SEWERAGE AND DRAINAGE EROSION AND SEDIMENT CONTROL REGULATIONS. ALL LAND-DISTURBING ACTIVITIES SHALL BE SUBJECT TO INSPECTION AND SITE INVESTIGATION BY THE CITY OF COLUMBUS AND/OR THE OHIO EPA.

SW10. 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.

SW11. THE CONTRACTOR IS HEREBY NOTIFIED TO CONTACT THE CITY FORESTER OF THE RECREATION AND PARKS DEPARTMENT (614) 645-3350, AT LEAST 24 HOURS PRIOR TO ANY

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 TIME CONVENIENT TO THE CONTRACTOR.

THESE CHECKS WILL BE PERFORMED TO ENSURE THE FOLLOWING:

PROPER PLACEMENT OF EACH STRUCTURE.

CONSTRUCTION IN OR NEAR THE PARK PROPERTY.

- 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.

SW13. THE AMOUNT OF FILL WITHIN DESIGNATED FLOODPLAIN AREAS ONSITE IS 2,219 C.Y. THE AMOUNT OF FILL COMPENSATED WITHIN DESIGNATED FEMA FLOODPLAIN AREAS ONSITE IS 6,135 C.Y.

SW14. THE PONDING OR DETENTION AREAS 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 AS-BUILT 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 DESIGN STORAGE OF THE DETENTION FACILITY SHALL BE RESTORED BY THE OWNER/DEVELOPER AS DIRECTED BY THE CITY OF COLUMBUS.

SW15. 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, CONCRETE, RIP-RAP, ROCK CHANNEL PROTECTION, SODDING, POURING BOTTOMS, MUDDING LIFT HOLES, ETC.

THE CONTRACTOR AND SUB-CONTRACTOR 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 SALE RESPONSIBILITY OF THE CONTRACTOR AND SUB-CONTRACTOR TO INITIATE, MAINTAIN, AND SUPERVISE SAFETY REQUIREMENTS, PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE

THE IDENTITY AND LOCATION OF THE EXISTING UNDERGROUND UTILITY FACILITIES KNOWN TO BE LOCATED IN CONSTRUCTION AREA HAVE BEEN SHOWN ON THE PLANS AS ACCURATELY AS PROVIDED BY THE OWNER OF THE UNDERGROUND UTILITY. THE CITY OF COLUMBUS AND/OR DESIGN ENGINEER THE CONTRACTOR SHALL NOTIFY THE FOLLOWING DIVISIONS AS APPLICABLE AT LEAST 48 ASSUMES NO RESPONSIBILITY AS TO THE ACCURACY OF THE LOCATION OR DEPTHS OF THE UNDERGROUND FACILITIES SHOWN ON THE PLANS.

- 1. 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
- 2. THE FOLLOWING UTILITIES AND OWNERS ARE LOCATED WITHIN THE WORK LIMITS OF THIS 1. INCONVENIENCE TO THE ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC SHALL PROJECT AND SUBSCRIBE TO THE OHIO UTILITIES PROTECTION SERVICE (OUPS).

AEP COLUMBUS SOUTHERN POWER PHONE: 614-883-6803 850 TECH CENTER DR. GAHANNA, OHIO 43230

FRANKLIN COUNTY ENGINEER PHONE: 614-525-3030 970 DUBLIN ROAD COLUMBUS, OHIO 43215

CITY OF COLUMBUS PHONE: 614-645-7393 DEPARTMENT OF PUBLIC SERVICE

TRAFFIC MANAGEMENT 1820 EAST 17TH AVENUE COLUMBUS, OHIO 43219

CITY OF COLUMBUS PHONE: 614-645-8276 DEPARTMENT OF PUBLIC UTILITIES

WATER AND SEWER SERVICES 910 DUBLIN ROAD COLUMBUS, OHIO 43215

- 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. PRIVATE UTILITY MANHOLES WITHIN THE LIMITS OF THE WORK SHALL BE ADJUSTED TO GRADE BY THE RESPECTIVE UTILITY COMPANY AT THE CONTRACTOR'S EXPENSE.
- UTILITY POLES WITHIN INFLUENCE OF THE CONSTRUCTION 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. COST OF SAID REINFORCEMENT SHALL BE INCLUDED IN THE BID ITEMS ASSOCIATED WITH THAT WORK.

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING DUST CONTROL MEASURES IN ACCORDANCE WITH CMSC ITEM 616. DUST CONTROL OPERATIONS SHALL BE PERFORMED ON A PERIODIC BASIS AND/OR AS DIRECTED BY THE OWNER TO ALLEVIATE OR PREVENT THE DUST NUISANCE ORIGINATING WITHIN THE PROJECT WORK LIMITS. CALCIUM CHLORIDE ON AREAS TO BE SEEDED AND MULCHED WILL NOT BE PERMITTED. THE COST FOR ALL DUST CONTROL MEASURES SHALL BE INCLUDED IN THE PRICE BID FOR THE STORM SEWER IMPROVEMENTS.
- 2. THE CONTRACTOR SHALL KEEP STREETS/TRAILS FREE OF DIRT, SEDIMENT, OR MUD ON OR OFF THE PROJECT SITE. THE ENGINEER MAY DIRECT THE CONTRACTOR TO PERFORM STREET/TRAIL CLEANING PERIODICALLY OR ON A REGULAR INTERVAL IF EXCESSIVE AMOUNTS OF DIRT AND MUD ARE LEFT ALONG THE STREET/TRAIL. THIS MAY INCLUDE REMOVAL BY SWEEPING, POWER CLEANING, OR MANUAL METHODS. ALL MANUAL METHODS CONTRACTOR SHALL HAUL OFF DEBRIS/MATERIAL. PUSHING DEBRIS/MATERIAL TO SIDE OF TRAIL IS NOT PERMITTED. THE COST OF THIS WORK SHALL BE INCLUDED IN VARIOUS LINE ITEMS, UNLESS OTHERWISE SPECIFIED.

- 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 SHEETS 4 THROUGH 9 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.
- 2. 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.
- 3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE CITY OF COLUMBUS TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF INITIAL SITE LAND DISTURBANCE ON ANY SITE OF ONE (1) OR MORE ACRES. THIS INCLUDES SITE CLEARING, GRUBBING, AND ANY EARTH PRIMARY EROSION AND SEDIMENT CONTROL PRACTICES ARE MANDATED BY REGULATIONS TO BE IN PLACE FROM THE BEGINNING OF THE CONSTRUCTION ACTIVITY. PLEASE CONTACT THE STORMWATER MANAGEMENT OFFICE AT 614-645-6700 OR BY FAX AT 614-645-1506. DETAILS OF THIS REQUIREMENT MAY BE FOUND IN THE EROSION AND SEDIMENT POLLUTION CONTROL REGULATION (ADOPTED JUNE 1, 1994). FAILURE TO COMPLY MAY RESULT IN ENFORCEMENT ACTION AS DETAILED IN THE COLUMBUS CITY CODES SECTION
- 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. REFER TO SHEETS 4 THROUGH 9 FOR MORE DETAILS.

ON SITE CONTACT:

CITY OF COLUMBUS, RECREATION AND PARKS DEPARTMENT

1111 EAST BROAD STREET COLUMBUS, OH 43206

KELLY MESSER (614) 816–1875

EMAIL: KNMESSER@COLUMBUS.GOV THIS SITE IS TRIBUTARY TO ALUM CREEK.

OEPA GENERAL PERMIT: 4GC10346

 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

PLAN PREPARED BY:

- 2. IN THE EVENT THAT DEWATERING IS NECESSARY, THE CONTRACTOR IS REQUIRED TO PREPARE A 4. NO PERSON SHALL WORK ON DOP FACILITIES UNLESS THEY HAVE COMPLETED CONTRACTOR DEWATERING PLAN THAT WILL DESCRIBE HOW THE DEWATERING OPERATION WILL BE COMPLETED AND HOW THE PUMP EFFLUENT WILL BE MANAGED. THIS PLAN WILL BE PRESENTED TO THE CITY FOR REVIEW PRIOR TO ANY DEWATERING OPERATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO PLACE AND MAINTAIN THE NECESSARY SEDIMENT CONTROL MEASURES TO FILTER THE DEWATERING DISCHARGE. COST FOR THE ABOVE SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS IMPROVEMENT ITEMS

THE CONTRACTOR SHALL CAREFULLY PRESERVE BENCH MARKS, PROPERTY CORNERS, REFERENCE POINTS, STAKES AND OTHER SURVEY REFERENCE MONUMENTS OR MARKERS. IN CASES OF WILLFUL OR CARELESS DESTRUCTION, THE CONTRACTOR SHELL BE RESPONSIBLE FOR RESTORATIONS. RESETTING OF MARKERS SHALL BE PERFORMED BY AN OHIO PROFESSIONAL SURVEYOR AS APPROVED BY THE CITY ENGINEER.

RESTORATION AND CLEAN UP

BE KEPT TO ON ABSOLUTE MINIMUM. ALL WORK IS TO CONTINUE ON A UNIFORM BASIS AND ON SCHEDULE, PARTICULARLY THE RESTORATION AND CLEANUP OF DISTURBED AREAS AFTER

2. ALL FENCES, SIGNS, DRAINAGE STRUCTURES, VALVES, LANDSCAPING, ETC. REMOVED, DISTURBED OR DAMAGED DURING WORK WITHIN PUBLIC RIGHT-OF-WAYS. EASEMENT AREAS AND/OR UNDER THE PROJECT IMPROVEMENTS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. PAYMENT FOR SAME SHALL BE INCLUDED IN THE PRICE BID FOR THE STORM SEWER IMPROVEMENT.

THE CONTRACTOR IS TO OBTAIN ALL NECESSARY PERMITS. AN ORIGINAL PERMIT WITH RED SIGNATURES SHALL BE KEPT ONSITE AT ALL TIMES. WHEN EXCAVATING WITHIN PUBLIC RIGHT OF WAY LIMITS, THE CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT FROM THE DEPARTMENT OF PUBLIC SERVICE PERMIT OFFICE BY CALLING (614) 645-7497 BETWEEN THE HOURS OF 7:30AM AND 4:00PM MONDAY THROUGH FRIDAY. FAX: (614) 645-1876. EMAIL: COLSPERMITS@COLUMBUS.GOV

THE CONTRACTOR SHALL PERFORM FIELD RECONNAISSANCE TO BECOME ACQUAINTED WITH THE EXISTING SITE CONDITIONS AND THE POTENTIAL EFFECTS UPON THE WORK SCOPE. ANY PERFORMANCE OF ADDITIONAL SITE SUBSURFACE INVESTIGATIONS (TEST HOLES) SHALL BE COORDINATED IN ADVANCE WITH THE OWNER AS WARRANTED. EXCAVATED MATERIAL HALL BE REPLACED IN A CONTROLLED MANNER TO MINIMIZE IMPACT ON FIELD EARTHWORK OPERATIONS.

ALL CONSTRUCTION LAYOUT SERVICES FOR THIS PROJECT SHALL BE PROVIDED AT THE OWNER'S

OBSERVE AND CONFORM TO THE SPECIFIC REQUIREMENTS OF ALL RIGHTS-OF-WAY INCLUDING EASEMENTS, COURT ENTRIES, RIGHT-OF-ENTRY OR ACTION FILED IN COURT IN ACCORDANCE WITH THE CODE OF APPLICABLE GOVERNING AGENCY. THE COST OF THE OPERATIONS NECESSARY TO FULFILL SUCH REQUIREMENTS SHALL BE INCLUDED IN THE PRICE BID FOR THE STORM LOWER

IN ADDITION TO DIRECT REQUIREMENTS OF THE CONTRACT SPECIFICATIONS, THE CONTRACTOR SHALL

STORAGE OF EQUIPMENT AND MATERIALS

NO MATERIALS OR EQUIPMENT SHALL BE STORED WITHIN THE RIGHT-OF-WAY OR WITHIN ONE HUNDRED (100) FEET OF ANY INTERSECTING STREET OR DRIVEWAY. COMPLIANCE WITH THESE REQUIREMENTS, ALONG WITH ADDITIONAL PROVISIONS OF THE CONTRACT SPECIFICATIONS, SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR OF HIS LEGAL RESPONSIBILITIES OR LIABILITIES FOR THE SAFETY OF THE PUBLIC.

EARTHWORK AND GRADING NOTES

1. ANY EXISTING STORM INLETS IMPACTED BY THE NEW CONSTRUCTION ACTIVITY WILL NEED THE APPROPRIATE INLET PROTECTION FOR SEDIMENT CONTROL.

- 2. ALL EROSION AND SEDIMENTATION CONTROL PRACTICES ARE SUBJECT TO FIELD MODIFICATIONS AT THE DISCRETION OF THE CITY OF COLUMBUS, ENGINEER AND/ OR THE OHIO EPA.
- 3. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING EARTHWORK CALCULATIONS AND INCLUDING THE NECESSARY IMPORTING OR EXPORTING OF SOIL IN THE BASE BID.
- DETERMINATION OR SITE EARTHWORK EXCAVATION AND EMBANKMENT QUANTITIES SHALL BE IN ACCORDANCE WITH THE FOLLOWING CRITERIA:
- 5. STOCKPILING OF TOPSOIL AND/OR EXCESS MATERIAL FOR THESE IMPROVEMENTS OR OFFSITE HAULING OF TOPSOIL/SUITABLE MATERIAL, ETC. SHALL BE COORDINATED WITH THE OWNER. APPROPRIATE MEANS FOR SEDIMENTATION CONTROL OF THE ONSITE STOCKPILES SHALL BE PROVIDED AS A MATTER OF GENERAL PRACTICE IN ACCORDANCE WITH THE REQUIRED STANDARDS REFERENCED AS A PART OF THE SEDIMENT AND EROSION DETAILS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASSURE THAT A SUFFICIENT AMOUNT OF TOPSOIL REMAINS SO THAT ANY LANDSCAPING AND LANDSCAPE MOUNDING CAN BE COMPLETED.
- SPECIFICATIONS FOR GENERAL SITE EARTHWORK OPERATIONS (PREPARATION OF PAVEMENT SUBGRADES, ETC.) ALONG WITH REQUIREMENT STANDARDS (COMPACTION, PROOF ROLLING, ETC.) SHALL BE IN ACCORDANCE WITH THE SOILS REPORT. COPIES OF THE SOILS REPORT, IF COMPLETE, SHOULD BE OBTAINED FROM THE OWNER OR OWNER'S REPRESENTATIVE.
- 7. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN
- . FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- 9. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- 10. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.

CONVENIENCE FACILITIES

THE CONTRACTOR 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 THE STORM SEWER AND GRADING IMPROVEMENTS.

FOR DIVISION OF POWER

- 1. 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 OHIO 811 (PREVIOUSLY OUPS) AT 811 OR 1-800- 362-2764 FORTY-EIGHT HOURS PRIOR TO CONDUCTING ANY ACTIVITY WITHIN THE CONSTRUCTION AREA.
- 2. ANY PROJECT, BOTH PUBLIC OR PRIVATE, WITH IMPACTS REQUIRING RELOCATION, SUPPORT, PROTECTION, OR ANY OTHER ACTIVITY CONCERNED WITH THE CITY'S ELECTRICAL FACILITIES IN THE CONSTRUCTION AREA IS TO BE PERFORMED BY THE CONTRACTOR UNDER THE DIRECTION OF DOP PERSONNEL AND AT THE EXPENSE OF THE PROJECT.
- UNLESS PREVIOUSLY AUTHORIZED, DOP SHALL MAKE ALL FINAL CONNECTIONS TO DOP'S EXISTING ELECTRICAL SYSTEM AT THE EXPENSE OF THE PROJECT.

SAFETY ORIENTATION WITH DOP. ANY PERSON WORKING ON DOP FACILITIES ON LIVE CONDUCTORS OR CONDUCTORS THAT MAY BECOME LIVE SHALL COMPLY WITH DOP'S CONDUCTOR SAFETY POLICY (TDMIS-1603), HOLD CARD SYSTEM (TDMIS-1604) AND STREET LIGHT LOCK OUT TAG OUT PROCEDURE (MIS-1). PRIOR TO BEGINNING WORK ON DOP FACILITIES, EACH PERSON SLAL CONTACT DOP'S DISPATCH OFFICE AT 614-645-7627 AND PROVIDE THEIR NAME, PHONE NUMBER, LOCATION, DESCRIPTION OF WORK AND CIRCUIT NUMBER. AT COMPLETION OF WORK, EACH PERSON SHALL NOTIFY DOP'S DISPATCH OFFICE.

- 5. THE CONTRACTOR SHALL USE MATERIAL AND MAKE REPAIRS TO A CITY OF COLUMBUS STREET LIGHTING SYSTEM BY FOLLOWING DOP'S "MATERIAL AND INSTALLATION SPECIFICATIONS" (MIS) AND THE CITY OF COLUMBUS "CONSTRUCTION AND MATERIAL SPECIFICATIONS" (CMSC). ANY NEW OR RE-INSTALLED STREET LIGHT SYSTEM SHALL REQUIRE TESTING AS REFERRED TO IN SECTION 1001.18 OF THE CMSC MANUAL. CONTRACTORS WORKING ON STREET LIGHTING SHALL CONFORM TO DOP'S EXISTING <u>STREET LIGHT LOCKOUT/TAGOUT (LOTO) PROCEDURE</u>, MIS-1, COPIES OF WHICH ARE AVAILABLE FROM DOP AND ON THE CITY WEBSITE.
- EMERGENCIES: 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.

PRIOR TO SUBMISSION OF FINAL SITE COMPLIANCE PLAN, ANY ENTITY REQUESTING NON-PARK

COLUMBUS RECREATION AND PARKS DEPARTMENT STANDARD PLAN NOTE

USE/DEVELOPMENT MUST SUBMIT A NON-PARK USE OF PARKLAND (NPUP) APPLICATION TO CRPD PROPERTY MANAGER TINA MOHN AT TMMOHN@COLUMBUS.GOV TO SECURE A PERMIT TO ENTER CRPD PROPERTY. THE CONTRACTOR SHALL CONTACT COLUMBUS RECREATION & PARKS DEPARTMENT'S (CRPD) INSPECTOR, KEITH MAY, AT KAMAY@COLUMBUS.GOV THIRTY (30) CALENDAR DAYS PRIOR TO ANY WORK ON OR NEAR CRPD PROPERTY. THE CONTRACTOR SHALL SUBMIT A WORK SCHEDULE AND COORDINATE ACCESS WITH CRPD INSPECTOR PRIOR TO ANY WORK ON OR NEAR CRPD PROPERTY. SCHEDULED EVENTS BY CRPD SHALL TAKE PRECEDENCE OVER THE CONTRACTOR'S WORK SCHEDULE. AND THE CONTRACTOR SHALL ADJUST WORK SCHEDULE AS NECESSARY. THE CONTRACTOR SHALL NOT ENTER INTO A CRPD PROPERTY NOR STAGE/STORE ANY MATERIALS OR EQUIPMENT OUTSIDE THEIR WORK LIMITS ON CRPD PROPERTY WITHOUT A PERMIT OR ISSUED BY CRPD. THE PERMIT MUST BE POSTED ONSITE AT ALL TIMES. ANY AND ALL CRPD PARK AREAS DISTURBED BY THE CONTRACTOR DURING THE COURSE OF THEIR WORK ACTIVITIES SHALL BE RESTORED TO CONDITIONS THAT MEET OR EXCEED EXISTING CONDITIONS WITHIN THE TIME FRAMES NOTED IN THE APPROVED SCHEDULE AND SHALL BE TO THE SATISFACTION OF CRPD. UNLESS SPECIFIC PERMISSIONS ARE GRANTED BY CRPD, ACCESS TO, FROM, ON, OVER, UNDER, THOUGH, OR ACROSS CRPD PROPERTY IS NOT GRANTED OR IMPLIED. FAILURE TO HAVE A PERMIT IN PLACE THAT IS CONSISTENT WITH CRPD NPUP POLICY WILL RESULT IN DELAY OF FINAL SITE COMPLIANCE APPROVAL SIGNATURE BY RECREATION & PARKS/CITY FORESTER.

TEMPORARY TRAFFIC CONTROL

. ROAD CLOSURES AND BLOCKS ARE NOT FORESEEN AS PART OF THIS PROJECT. INTERMITTENT ROAD BLOCKS WILL BE PERMITTED FOR CONSTRUCTION ACTIVITIES ASSOCIATED WITH MOBILIZATION/DEMOBILIZATION AND DELIVERY OF MATERIALS. BLOCKS WILL BE KEPT TO THE MINIMUM TIME NEEDED FOR THE CONSTRUCTION ACITIVITY. IF AT ANYTIME THE CONTRACTOR FORESEES NEEDING LONGER CLOSURES OR EXTENDED ROAD BLOCKS, THE CONTRACTOR SHALL GIVE ADVANCE NOTIFICATION (WRITTEN AND VERBALLY) TO THE TEMPORARY TRAFFIC CONTROL COORDINATOR AT 614-645-0355 OR 614-645-5845 & THE DIVISION OF REFUSE COLLECTION'S OPERATION MANAGER AT 614-645-1675, WRITTEN NOTIFICATION TO PAVING THE WAY AT PAVINGTHEWAY@MORPC.ORG OR VERBAL TO (614)233-4200 , PROJECT ENGINEER, AND THE SENIOR SERVICE PLANNER OF COTA AT 614-308-4373 OR FAX 614-275-5933, INFORMING THEM OF ALL UPCOMING MAINTENANCE OF TRAFFIC CHANGES ON A WEEKLY BASIS. NOTIFICATION SHALL INCLUDE, BUT NOT BE LIMITED TO, WHAT, WHERE, WHEN, AND HOW PEDESTRIAN AND VEHICULAR TRAFFIC WILL BE AFFECTED, AND THE TEMPORARY TRAFFIC CONTROL PROCEDURES THE CONTRACTOR IS PLANNING TO USE. THE TYPE OF TRAFFIC CHANGE SHALL DETERMINE THE LENGTH OF ADVANCE NOTIFICATION REQUIRED:

TYPE OF CHANGE	ADVANCE NOTIFICATION NEEDED
DETOURS/ROAD CLOSURES	30-DAY NOTIF. PRIOR TO CLOSURE.
LANE CLOSURES LASTING 2 WEEKS OR MORE	2-WEEKS
LANE CLOSURES OF LESS THAN 2 WEEKS	3-DAYS
LANE CLOSURES OF 2 DAYS OR LESS	1-DAY

THE COTA SENIOR SERVICE PLANNER SHALL BE CONTACTED 30 DAYS PRIOR TO ANY PLANNED CLOSURE ON ASSIGNED COTA ROUTES. ANY OTHER UNFORESEEN IMPACTS TO TRAFFIC SHALL BE

PEDESTRIANS THROUGH, AROUND, OR DETOURED AWAY FROM THE CONSTRUCTION SITE. TRAFFIC CONTROL FOR PEDESTRIAN MOVEMENT SHALL BE AS PER CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS, CITY OF COLUMBUS STANDARD CONSTRUCTION DRAWINGS, AND FIGURES 6H—28 (TA—28) AND 6H—29 (TA—29) OF PART VI OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. WHEN NOT SHOWN ON A SIGNED PLAN, ALL SIDEWALK DIVERSIONS AND TEMPORARY MID-BLOCK CROSSINGS SHALL BE PRE-APPROVED BY THE PROJECT ENGINEER OR THE TEMPORARY TRAFFIC CONTROL COORDINATOR. ACCESS FOR PEDESTRIAN AND VEHICULAR TRAFFIC TO ALL ADJOINING PROPERTIES SHALL BE MAINTAINED AT ALL TIMES.

3. MAINTAINING TRAFFIC DURING HOLIDAYS AND SPECIAL EVENTS NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING

DESIGNATED HOLIDAYS OR SPECIAL EVENTS INCLUDING THE OHIO STATE FOOTBALL HOME GAMES. THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. CONTACT THE CITY OF COLUMBUS TEMPORARY TRAFFIC CONTROL COORDINATOR, 614-645-5845 OR CELL, 614-332-7472 FOR EVENT DATES, LOCATIONS, AND SCHEDULE, HOLIDAYS WILL CONSIST OF CHRISTMAS, NEW YEARS, FOURTH OF JULY-RED, WHITE AND BOOM FIREWORKS NIGHT (6:00AM-12MIDNIGHT), MEMORIAL DAY, LABOR DAY, AND THANKSGIVING. RED, WHITE AND BOOM, FIREWORKS CELEBRATION AND A MINIMUM OF ONE DAY PRIOR TO FIREWORKS NIGHT SHALL REQUIRE ALL TEMPORARY TRAFFIC CONTROL DEVICES TO BE REMOVED FROM THE PROJECT AREA AND PLACE EITHER IN A PRE-DETERMINED LOCATION APPROVED BY THE TEMPORARY TRAFFIC CONTROL COORDINATOR OR COMPLETELY

4. THE CONTRACTOR SHALL CONTACT THE CITY OF COLUMBUS TEMPORARY TRAFFIC CONTROL COORDINATOR FOR ANY ADDITIONAL MOT REQUIREMENTS FOR SPECIAL EVENTS, INCLUDING OSU FOOTBAL HOME GAMES.

- 5. THE CONTRACTOR SHALL MAINTAIN ALL PERMANENT TRAFFIC CONTROLS NOT IN CONFLICT WITH NORMAL TRAIL FLOW REQUIRE COORDINATION WITH CRPD'S NON PARK USE PROGRAM AT CONTROLS MAY BE TEMPORARILY RELOCATED OR COVERED, AS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL ASSUME ALL LIABILITY FOR MISSING, DAMAGED, OR IMPROPERLY
- 6. ANY WORK DONE BY THE DEPARTMENT OF PUBLIC SERVICE, 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.
- RECREATION AND PARKS DEPT. GREENWAYS PLANNER AT BRWESTALL@COLUMBUS.GOV OR (614) 645-2441 AND PROPERTY MANAGER, TINA MOHN AT TMMOHN@COLUMBUS.GOV OR (614) 645-3395, PRIOR TO ANY WORK COMMENCING. CONTRACTOR MUST PROVIDE A MINIMUM OF 2 WEEKS COORDINATION TIME FOR ONSITE MEETINGS, SIGNAGE PLACEMENT, RESTORATION PLANNING, DISTURBANCE AND/OR CLEARING LIMIT REVIEW. UNLESS SPECIFICALLY NOTED ON THESE PLANS, ACCESS OR USE OF ANY CITY BIKE PATH OR AREA ADJACENT TO A BIKE PATH IS NOT GRANTED OR IMPLIED.

8. BIKE PATH SHALL REMAIN OPEN AT ALL TIMES. IF A TEMPORARY CLOSURE IS ABSOLUTELY NECESSARY DUE TO CONTRACTOR'S ACTIVITIES, CONTRACTOR SHALL NOTIFY ENGINEER AND PARK RANGER IMMEDIATELY, PLACE SIGNAGE 500-FT IN ADVANCE TO NOTIFY PATH USERS OF CLOSURE, AND PROVIDE A TEMPORARY ROAD DETOUR AROUND THE CLOSURE.

1. THE REQUIREMENTS OF CMSC ITEM 653 SHALL GOVERN THE CONSTRUCTION OF THIS WORK FOUR INCHES OF TOPSOIL SHALL BE PLACED OVER ALL DISTURBED AREAS THAT ARE TO BE SEEDED AND MULCHED. FINAL GRADES SHALL CONFORM TO THOSE SHOWN ON THE PLANS. TOPSOIL FOUND SUITABLE BY THE PROJECT ENGINEER DURING CLEARING AND GRUBBING SHAL BE SEGREGATED FROM THE OTHER EXCAVATED MATERIAL AND STOCKPILED FOR REUSE PAYMENT FOR SEGREGATING, STOCKPILING AND REUSE OF STOCKPILED TOPSOIL SHALL BE INCLUDED IN THE AMOUNT BID FOR CMSC ITEM 624. IF STOCKPILED TOPSOIL IS INSUFFICIENT THE ENGINEER MAY DIRECT THE CONTRACTOR TO IMPORT ADDITIONAL TOPSOIL. IMPORTED TOPSOIL SHALL BE PAID FOR UNDER THE UNIT PRICE BID FOR CMSC ITEM 653, TOPSOIL FURNISHED AND PLACED, AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR IS URGED TO USE COM-TIL COMPOST IN TOPSOIL BLENDS. COM-TIL WILL BE PROVIDED AT NO COST TO THE CONTRACTOR AND MAY BE OBTAINED AT THE SOUTHWESTERLY COMPOSTING FACILITY, 7000 JACKSON PIKE, LOCKBOURNE, OHIO 43137 BETWEEN 7AM AND 3PM, MONDAY THROUGH FRIDAY. <u>NON-PERFORMANCE</u>

IN THE EVENT THAT IT BECOMES NECESSARY FRO THE CITY TO PERFORM WORK OF AN IMMEDIATE

NATURE (SUCH AS THE PLACEMENT OF BARRICADES OR REPLACEMENT OF SIGNS OR OTHER WARNING OR PROTECTIVE DEVICES) REQUIRED OF THE CONTRACTOR BY THIS CONTRACT BECAUSE OF FAILURE OR REFUSAL OF THE CONTRACTOR TO PERFORM SUCH WORK, THE CONTRACTOR SHALL REIMBURSE THE CITY AT THE RATE OF 2.5 TIMES THE ACTUAL COST OF LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO PERFORM SUCH WORK. OF THE CONTRACTOR REFUSES OR FAILS WITHIN A REASONABLE TIME TO PERFORM OR CAUSE THE PERFORMANCE OF SUCH WORK, THE CITY SHALL BE REIMBURSED BY THE CONTRACTOR IN THE AMOUNT PROVIDED HEREIN BY WAY OF A DEDUCTION FROM THE CONTRACTOR'S NET PAYMENT UNDER THE CONTRACT. REASONABLE TIME FOR ALL STREETS INVOLVED ON THIS CONTRACT IS 1 HOUR FROM THE TIME OF NOTIFICATION BY THE CITY.

- BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE OWNER, THE ENGINEER AND THE CONTRACTOR SHALL MAKE ANY INSPECTION OF ALI EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS THE ENGINEER SHALL KEEP RECORDS OF THE INSPECTION IN WRITING
- ALL EXISTING MANHOLES, CATCH BASINS, DRAINS, SEWERS, AND APPURTENANCES INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLE COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. THE CONTRACTOR SHALL CORRECT ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS TO THE SATISFACTION OF THE ENGINEER. THE ABOVE IS NOT APPLICABLE FOR STRUCTURES TO BE ABANDONED. THE CONTRACTOR SHALL REMOVE DEBRIS, SILT, ETC. FROM THE EXISTING MANHOLES AND CATCH BASINS THAT HAVE BEEN AFFECTED BY CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL MAINTAIN SERVICE IN EXISTING SEWERS DURING CONSTRUCTION.

IF THE CONTRACTOR ENCOUNTERS A PIPE OR CONNECTION TO A STORM SEWER THAT, IN THE ESTIMATE OF THE ENGINEER, MAY BE AN ILLICIT CONNECTION FROM AN ON-SITE SEWAGE DISPOSAL SYSTEM, COLUMBUS PUBLIC HEALTH SHALL BE CONTACTED AT (614) 645-6448 TO DETERMINE WHETHER THE PIPE MAY BE RECONNECTED TO THE CITY'S STORM SEWER SYSTEM.

ARCHEOLOGICAL/HISTORICAL RESOURCES

- 1. CULTURAL RESOURCE INVESTIGATIONS IDENTIFIED TWO PREVIOUSLY RECORDED ARCHAEOLOGICAL SITES WITHIN THE PROJECT BOUNDARY (SITES 33FR3502 AND 33FR3503). NEITHER OF THE PREVIOUSLY RECORDED SITES WERE IDENTIFIED DURING A PHASE I ARCHAEOLOGICAL SURVEY OF THE PROJECT AREA CONDUCTED BY STONE ENVIRONMENTAL ENGINEERING & SCIENCE (STONE) FROM OCTOBER 2024 TO JANUARY 2025. ONE NEW, PREVIOUSLY UNRECORDED ARCHAEOLOGICAL SITE (33FR3608) WAS IDENTIFIED ON THE NORTHEASTERN PORTION OF THE PROJECT AREA DURING THE PHASE I INVESTIGATION. THE SITE LACKS INFORMATION TO BE LISTED IN THE NATIONAL REGISTER OF HISTORIC PLACES (NRHP). THEREFORE, NO CONSTRUCTION RESTRICTIONS WERE RECOMMENDED FOR CULTURAL RESOURCES.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND SAFE MOVEMENT OF 2. IF THE EXCAVATION OPERATIONS ENCOUNTER REMAINS OR PREHISTORIC PEOPLE'S DWELLING SITES OR ARTIFACTS OF HISTORICAL OR ARCHEOLOGICAL SIGNIFICANCE, THE OPERATIONS SHALL BE TEMPORALLY DISCONTINUED IN THIS AREA AND THE CONTRACTOR SHALL NOTIFY THE CITY'S REPRESENTATIVE. THE CITY'S REPRESENTATIVE WILL CONTACT THE OHIO HISTORIC PRESERVATION OFFICE TO DETERMINE THE DISPOSITION OF THE FIND. AFTER CONSULTATION WITH THE OHIO HISTORIC PRESERVATION OFFICE, THE CITY'S REPRESENTATIVE MAY ELECT TO DISCONTINUE THE WORK IN THE AREA INDEFINITELY, RESUME NORMAL EXCAVATION, OR EXCAVATE FOR ARTIFACTS. WHEN DIRECTED BY THE CITY'S REPRESENTATIVE TO EXCAVATE FOR ARTIFACTS, THE CONTRACTOR SHALL EXCAVATE THE SITE IN SUCH A MANNER AS TO PRESERVE THE ARTIFACTS ENCOUNTERED AND SHALL REMOVE THEM FOR DELIVERY TO THE CUSTODY OF THE PROPER AUTHORITIES. THE CONTRACTOR SHALL NOT DISTURB ANY HISTORICAL OR CULTURAL BUILDINGS, FOUNDATION, STRUCTURE, OR MATERIALS ABOVE OR BELOW THE GROUND SURFACE.

NON-RUBBER TIRED VEHICLES

EXISTING CONDITIONS.

NON-RUBBER TIRED VEHICLES SHALL NOT BE MOVED ON PUBLIC STREETS, ROADS OR BIKE PATHS. THE TRANSPORTATION DIVISION MAY GRANT EXCEPTION WHERE SHORT DISTANCES AND SPECIAL CIRCUMSTANCES ARE INVOLVED. GRANTING OF EXCEPTIONS MUST BE IN WRITING AND ANY RESULTING DAMAGE MUST BE REPAIRED TO THE SATISFACTION OF THE APPROPRIATE JURISDICTION.

COLUMBUS RECREATION AND PARKS DEPARTMENT GREENWAY TRAIL NOTE

ALL ACTIVITIES THAT MAY BE ADJACENT TO, MAY POTENTIALLY DISTURB A COLUMBUS RECREATION & PARKS DEPARTMENT (CRPD) TRAIL, AND/OR HAVE ANY IMPACTS TO THE TEMPORARY TRAFFIC CONTROLS THROUGHOUT THIS PROJECT. PERMANENT TRAFFIC CRPD_NPUP@COLUMBUS.GOV. ACCESS OR USE OF GREENWAY TRAILS FOR ANY NON-PARK USE IS NOT GRANTED OR IMPLIED UNLESS A NON PARK USE APPLICATION HAS BEEN SUBMITTED, APPROVED, AND HAS A PERMIT ISSUED. ONCE APPROVED, THE CONTRACTOR SHALL CONTACT THE NPUP POINT OF CONTACT THIRTY (30) CALENDAR DAYS PRIOR TO ANY WORK COMMENCING FOR ONSITE COORDINATION, ONSITE MEETING, SIGNAGE, TRAFFIC CONTROL DETOUR PLAN. RESTORATION PLAN. DISTURBANCE AND/OR CLEARING LIMIT REVIEW. THE CONTRACTOR SHALL SUBMIT A VEHICLE/EQUIPMENT TRAFFIC PLAN INCLUDING IDENTIFICATION NUMBERS, TYPE OF VEHICLE/EQUIPMENT, AND WEIGHT OF VEHICLE/EQUIPMENT TO BE USED PRIOR TO THE START OF WORK. ONLY ANY OR ALL ACTIVITIES THAT MAY BE ADJACENT TO OR COULD POTENTIALLY DISTURB A CITY VEHICLES/EQUIPMENT APPROVED BY CRPD IN WRITING SHALL BE PERMITTED ON THE TRAIL. BIKE PATH OR HAVE ANY IMPACTS TO NORMAL BIKE PATH FLOW MUST CONTACT THE ADDITIONALLY, EXISTING TRAIL CONDITION MUST BE DOCUMENTED THROUGH PICTURES OR VIDEO BEFORE WORK BEGINS. IF THE TRAIL IS DAMAGED BY CONTRACTOR USE THE CONTRACTOR MUST REPAIR THE TRAIL BACK TO CONDITIONS THAT MEET OR EXCEED

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Environmental Consultants, Inc. 250 Old Wilson Bridge Road, Suite 250 - Worthington, OH 43085 Ph: 614.540.6633 · 888.598.6808 · Fax: 614.540.6638 www.cecinc.com

PRIVATE STORM & GRADING FOR THREE CREEKS WETLAND RESTORATION PROJECT 3086 WATKINS ROAD CITY OF COLUMBUS, OHIO GENERAL NOTES

CITY OF COLUMBUS RECREATION AND PARKS DEPT. DIVISION OF SEWERAGE AND DRAINAGE DIVISION USE ONLY

DIVISION USE ONLY	OWNER					
	CONTRACTOR					
	INSPECTOR				SCALE: N/A	SHEET: 2 OF 16
	AGREEMENT		COMPLETED			
	RPD	CKD	CLD	CON. DR	CONTRACT DRAWING NO.	RECORD PLAN NO.
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INDIANA BAT HABITAT PROTECTION

FOR ANY TREES DESIGNATED FOR REMOVAL THAT MAY BE POTENTIAL BAT HABITAT AREAS, REMOVAL SHALL ONLY OCCUR FROM OCTOBER 1ST TO MARCH 31ST. IF THE CONTRACTOR PREFERS TO REMOVE THE TREES OUTSIDE OF THIS TIME FRAME, A SURVEY MUST BE CONDUCTED ACCORDING TO THE UNITED STATES FISH AND WILDLIFE SERVICES AND BY A BIOLOGIST WITH ALL REQUIRED FEDERAL AND/OR STATE COLLECTION PERMITS TO DETERMINE THE PRESENCE OF ANY INDIANA BATS. THE DATA COLLECTED DURING THE SURVEY MUST BE PROVIDED TO THE CITY FORESTRY SECTION AT (614) 724–1276 ACCORDING TO THE CONDITIONS OF THE PERMIT AND ANY REGULATORY AUTHORITY REQUIREMENTS. IF NO BATS ARE PRESENT THE TREE SHALL BE REMOVED WITHIN 24 HOURS OF THE SURVEY BEING CONDUCTED. IF BATS ARE FOUND TO BE PRESENT, THEN TREE SHALL REMAIN AND A PROTECTION AND ENHANCEMENT PLAN WILL BE REQUIRED.

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 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. EXCEPT TREES, ALL CLEARING AND GRUBBING PERFORMED 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 KAMAY@COLUMBUS.GOV BEFORE WORK IS 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 (LATEST EDITION), ANSI A300 AND/OR CITY OF COLUMBUS EXECUTIVE ORDER 2015-01 FOR TREE REPLACEMENT STANDARDS.

PUBLIC TREE PROTECTION NOTE

ALL PUBLIC TREES AND THE GROUND IN THE CRITICAL ROOT ZONE, WHETHER SHOWN OR NOT SHOWN ON THE PLANS, ARE TO BE PROTECTED UNLESS A PERMIT TO REMOVE IS GIVEN BY COLUMBUS RECREATION & PARKS (CRPD) FORESTRY. THE CONTRACTOR SHALL PROTECT TREES NEAR OR ADJACENT TO THE WORK AREA TO AVOID DAMAGE TO ALL TREES THAT ARE TO REMAIN. HEAVY EQUIPMENT WILL NOT BE ALLOWED TO COMPACT THE SOIL OVER THE CRITICAL ROOT ZONE OF EXISTING PUBLIC TREES. RESTRICTED EQUIPMENT ACCESS ROUTES SHALL BE COORDINATED WITH CRPD FORESTRY AT FORESTRY@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. CONSTRUCTION MATERIALS, EXCAVATION DEBRIS, FUEL, EQUIPMENT, OR VEHICLES ARE NOT TO BE STOCKPILED, STORED, DUMPED, OR PARKED WITHIN THE CRITICAL ROOT ZONE 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 CRPD TREE TECHNICAL MANUAL. IF THERE IS A QUESTION REGARDING TREE PROTECTION NEEDS, THE CONTRACTOR MUST CONTACT THE CITY FORESTRY SECTION AT FORESTRY@COLUMBUS.GOV.

PUBLIC TREE IMPACT NOTE

ANY WORK ON OR WITHIN THE CRITICAL ROOT ZONE OF A PUBLIC TREE IS CONSIDERED AN IMPACT TO THE PUBLIC TREE. A PUBLIC TREE PLAN AND PERMIT FROM COLUMBUS RECREATION & PARKS FORESTRY IS REQUIRED FOR ANY PLAN WITH PUBLIC TREES IN THE WORK LIMITS. THE PUBLIC TREE PLAN SHALL DENOTE ALL PUBLIC TREES IN THE PROJECT'S WORK LIMITS. TREE INFORMATION SHALL CONFORM TO THE COLUMBUS TREE TECHNICAL MANUAL REQUIREMENTS AND BE PROVIDED BY A NATURAL RESOURCE PROFESSIONAL. FAILURE TO CONTACT THE CITY FORESTRY REPRESENTATIVE IN ADVANCE OF CONSTRUCTION WILL RESULT IN THE CONTRACTOR REIMBURSING FORESTRY FOR THE COST OF ANY AND ALL DAMAGE TO PUBLIC TREES.

PUBLIC TREE REMOVAL AND MITIGATION NOTE

NO PUBLIC TREE REMOVAL SHALL BE ATTEMPTED BY CONSTRUCTION PERSONNEL OR EQUIPMENT, ONLY UNDER THE SUPERVISION OF A CERTIFIED ARBORIST. ALL TREES REMOVED SHALL INCLUDE STUMP REMOVAL GROUND TO 18 INCHES; IF THE REMOVED TREE IS WITHIN 36" OF A PROTECTED TREE THE STUMP SHALL ONLY BE GROUND TO 2" DEPTH. ALL WOOD DEBRIS ON CITY OF COLUMBUS PROPERTY SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR BY THE END OF EACH WORK DAY. TREES APPROVED FOR REMOVAL BY CRPD FORESTRY SHALL BE MITIGATED IN ACCORDANCE WITH THE COLUMBUS TREE TECHNICAL MANUAL AND COLUMBUS CITY CODES CHAPTER

OAK WILT NOTE

TO PREVENT THE SPREAD OF OAK WILT, A FUNGAL DISEASE, OAK TREE SHALL ONLY BE PRUNED FROM NOVEMBER1 TO MARCH 1.

FORESTRY PERMIT NOTE

ANY WORK ON OR WITHIN THE CRITICAL ROOT ZONE OF A PUBLIC TREE REQUIRES A FORESTRY PERMIT. ALL APPLICABLE FEES MUST BE PAID PRIOR TO PERMIT ISSUANCE. REFER TO THE CRPD TREE TECHNICAL MANUAL FOR TREE REMOVAL, PRUNING, PROTECTION, AND MITIGATION STANDARDS.

THE FULL PUBLIC TREE PLAN WILL BE INCLUDED IN THE FINAL SITE COMPLIANCE PLAN SUBMITTAL.

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ROJECT TITLE: PRIVATE STORM & GRADING FOR
THREE CREEKS WETLAND RESTORATION PROJECT
3086 WATKINS ROAD
CITY OF COLUMBUS, OHIO
GENERAL NOTES

CITY OF COLUMBUS
RECREATION AND PARKS DEPT.
DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

DIVISION USE ONLY

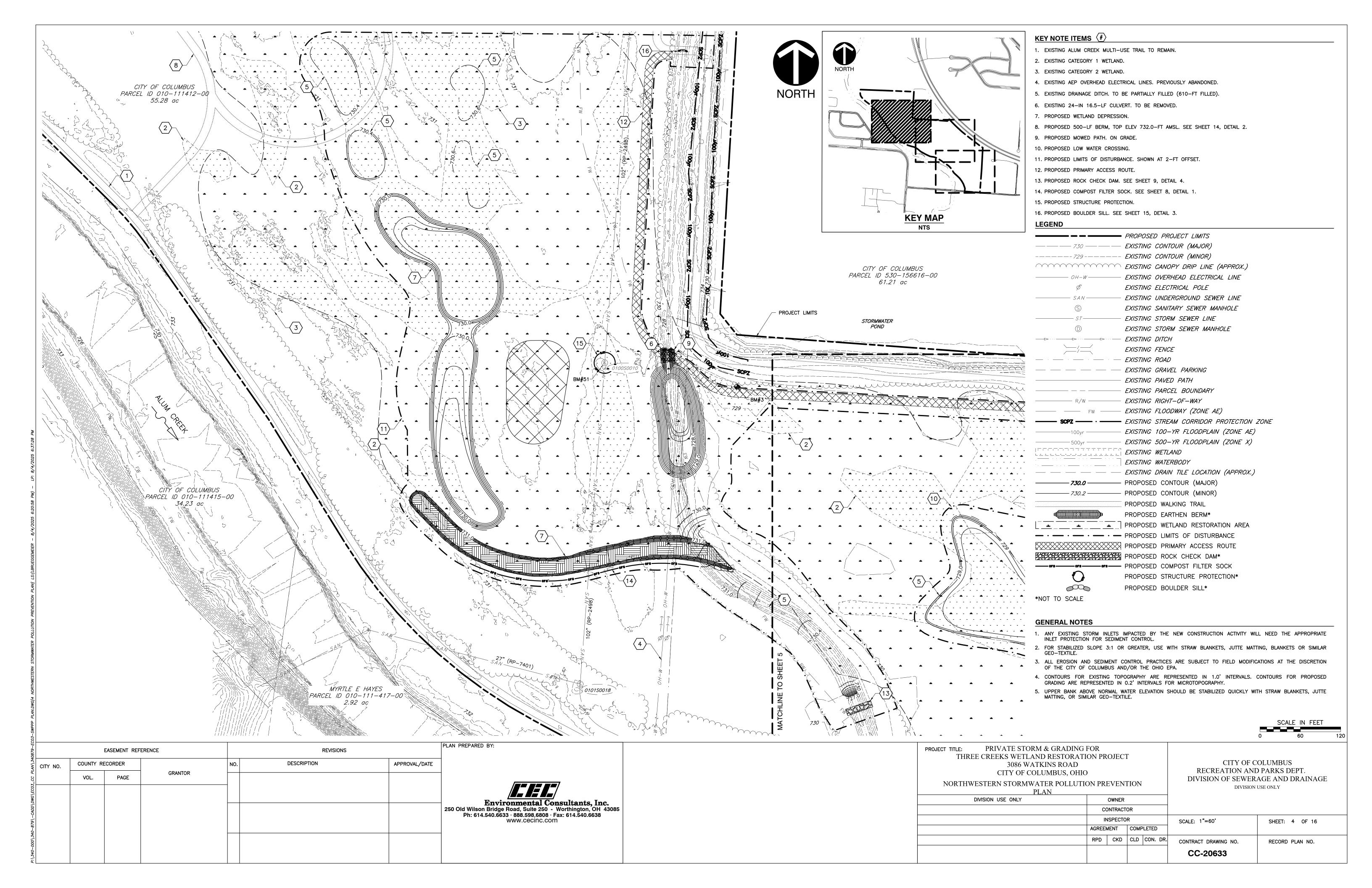
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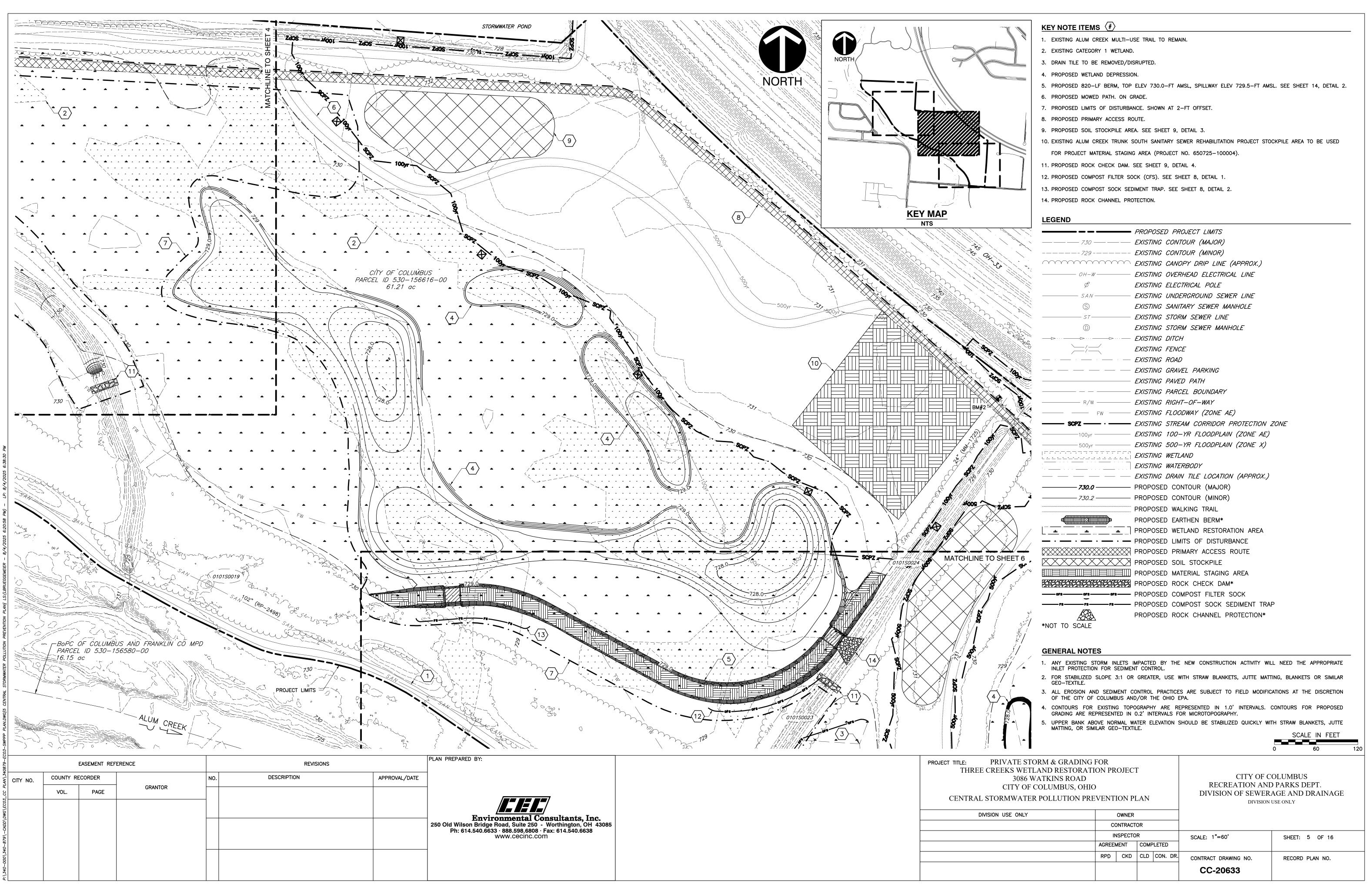
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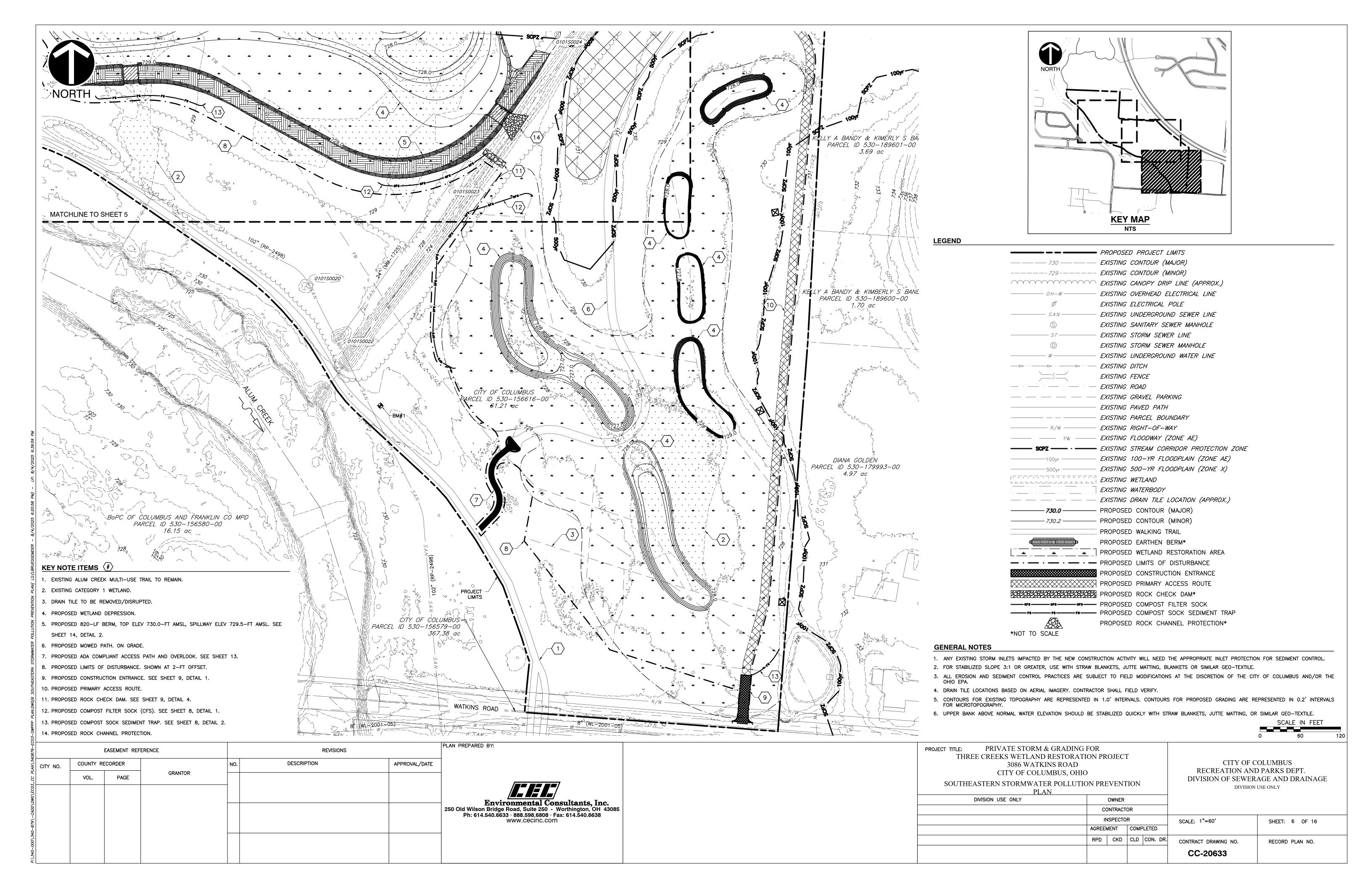
AGREEMENT COMPLETED

RPD CKD CLD CON. DR. CONTRACT DRAWING NO. RECORD PLAN NO.

CC-20633







SITE DATA PLAN DESIGNER: CIVIL & ENVIRONMENTAL CONSULTANTS, INC. 250 OLD WILSON BRIDGE ROAD, SUITE 250 WORTHINGTON, OH 43085 CONTACT: JESSICA LOOPER, P.E EMAIL: JLOOPER@CECINC.COM PHONE: (614) 310-0175 <u>DEVELOPER (ON-SITE CONTACT):</u>

1111 EAST BROAD STREET COLUMBUS, OHIO 43205 CONTACT: KELLY MESSER EMAIL: KNMESSER@COLUMBUS.GOV

CITY OF COLUMBUS, RECREATION AND PARKS DEPT.

PHONE: (614) 816-1875 PROJECT DESCRIPTION:

THIS PROJECT WILL PROVIDE HABITAT RESTORATION, ADDITIONAL FLOODPLAIN STORAGE, AND WATER QUALITY ENHANCEMENT THROUGH THE CREATION AND RESTORATION OF WETLANDS AT THE THREE CREEKS METRO PARK.

SURFACE FLOW THROUGHOUT THE PROJECT AREA IS SHEET FLOW. THE PROJECT MEETS THE MAXIMUM DRAINAGE AREA TO PERIMETER CONTROLS AS STATED IN TABLE 3: SEDIMENT BARRIER MAXIMUM DRAINAGE AREA BASED ON SLOPE, LOCATED IN THE OHIO EPA GENERAL PERMIT OHCO00006.

CONSTRUCTIONS SEQUENCE

THE CONSTRUCTION OF THE PROJECT CONSISTS OF ONE GENERAL PHASE OF E&S CONTROL FACILITIES TO BE INSTALLED IN ACCORDANCE WITH THE APPROVED E&S CONTROL PLAN AND THE LOCAL EROSION AND SEDIMENT POLLUTION CONTROL

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. THE CONTRACTOR IS TO MINIMIZE THE EXTENT AND DURATION OF EARTH DISTURBANCE. EACH STAGE SHALL BE COMPLETED AND IMMEDIATELY STABILIZED BEFORE ANY FOLLOWING STAGE IS INITIATED. THE CONTRACTOR IS TO MINIMIZE THE EXTENT AND DURATION OF EARTH DISTURBANCE. ANY DEVIATION FROM THE FOLLOWING SEQUENCE MUST BE APPROVED IN WRITING FROM THE OWNER REPRESENTATIVE/ENGINEER.

- 1. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL HOLD A ON-SITE PRECONSTRUCTION MEETING TO INCLUDE BUT NOT BE LIMITED TO ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE REGULATORY REPRESENTATIVE(S), THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE E&S PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT.
- 2. LAYOUT THE LIMITS OF THE CONSTRUCTION SITE, GRADING AND ESTABLISH BENCHMARKS AND REFERENCE POINTS.
- STAKE OUT THE LIMIT OF DISTURBANCE AS INDICATED ON THE CONSTRUCTION PLANS.
- 4. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, CONTRACTOR SHALL CONTACT THE LOCAL ONE CALL SYSTEM FOR THE LOCATION OF 5. CLEAR ONLY THOSE AREAS NECESSARY TO REACH AND INSTALL PERIMETER E&S CONTROLS. INSTALL SILT SOCK IN
- THE LOCATIONS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE SIZE SPECIFICATIONS ON THE E&S PLAN DRAWINGS AND THE E&S NARRATIVE AND THE STANDARD DETAIL. ALL PERIMETER E&S CONTROLS SHALL BE INSTALLED PARALLEL TO THE CONTOURS.
- 6. INSTALL THE ROCK CONSTRUCTION ENTRANCES IN THE LOCATIONS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE STANDARD DETAIL.
- BEGIN CLEARING AND GRUBBING WITHIN THE LIMITS OF DISTURBANCE.
- 8. BEGIN ROUGH GRADING OF THE SITE. FILL SLOPES SHOULD BE SEEDED AND MULCHED AS FILL IS BEING CONSTRUCTED.
- 9. BEGIN CONSTRUCTION OF THE WETLANDS AND/OR SPILLWAY. NOTIFY THE LICENSED PROFESSIONAL OR THEIR DESIGNEE AT LEAST TWO DAYS PRIOR TO THE START OF THE SPILLWAY CONSTRUCTION. UTILIZE A PUMPED WATER FILTER BAG AS NECESSARY. WATER FROM PUMPED WATER FILTER BAGS MUST BE TREATED FOR SEDIMENT REMOVAL PRIOR TO BEING DISCHARGED TO SURFACE WATERS OR STORMWATER INLETS.
- 10. FINALIZE GRADE AND STABILIZE ALL AREAS OF THE SITE. AS DISTURBED AREAS WITHIN A PROJECT APPROACH FINAL GRADE, PREPARATIONS SHOULD BE MADE FOR SEEDING AND MULCHING TO BEGIN. IN NO CASE SHOULD AN AREA EXCEEDING 15,000 SQUARE FEET, WHICH IS TO BE STABILIZED BY VEGETATION, REACH FINAL GRADE WITHOUT BEING SEEDED OR MULCHED. ALL UNPAVED DISTURBED AREAS SHALL BE STABILIZED IMMEDIATELY WITH SEED AND MULCH ONCE GRADING IS COMPLETE OR WITHIN FOUR (4) DAYS ONCE THE CONSTRUCTION HAS BEEN COMPLETED. INSTALL THE APPROPRIATE EROSION CONTROL BLANKETS FOR ALL SLOPES STEEPER THAN 3:1.
- 11. INSTALL PLANTINGS IN ACCORDANCE WITH THE PLANTING PLAN.
- 12. ONCE ALL AREAS HAVE BEEN PERMANENTLY STABILIZED, A UNIFORM 70% PERENNIAL VEGETATIVE COVER HAS BEEN ESTABLISHED ON ALL GRASSED AREAS, AND THE EROSION CONTROL BLANKET HAS BEEN INSTALLED AT LOCATIONS SHOWN ON THE PLANS, REMOVE ALL EROSION AND SEDIMENTATION CONTROL FACILITIES.
- 13. FILE A NOTICE OF TERMINATION (NOT) WITH THE OHIO EPA.

SITE DATA

THE CONTRACTOR SHALL PROVIDE A SCHEDULE OF OPERATIONS TO THE OWNER. SEDIMENTATION AND EROSION CONTROL FEATURES SHALL BE PLACED IN ACCORDANCE WITH THIS SCHEDULE

TOTAL ACREAGE WITHIN DRAINAGE AREA: 66.47 AC TOTAL DISTURBED ACREAGE: 35.24 AC PRE DEVELOPED IMPERVIOUS SITE AREA: 0.95 AC PRE DEVELOPED % IMPERVIOUS SITE AREA: 1.43%

POST DEVELOPED IMPERVIOUS SITE AREA:

POST DEVELOPED % IMPERVIOUS SITE AREA: PARCEL DATA

STREET ADDRESS: REFUGEE ROAD COLUMBUS, OHIO 43207 PARCEL: 010-111412-00 PARCEL SIZE: 55.28 ACRES+/-ZONING APPLICATION NUMBER: ZONING: GENERAL ZONING CATEGORY: RESIDENTIAL

HEIGHT DISTRICT: H-35 DESCRIPTION: PARKLAND AND GRASSLANDS (ADJACENT TO ALUM CREEK)

0.98

1.47%

3086 WATKINS ROAD STREET ADDRESS: COLUMBUS, OHIO 43207 PARCEL: 530-156616-00 PARCEL SIZE: 61.21 ACRES+/-**ZONING APPLICATION NUMBER:** ANNEX3734 ZONING: **GENERAL ZONING CATEGORY:** RESIDENTIAL

HEIGHT DISTRICT: H - 35DESCRIPTION: PARKLAND AND GRASSLANDS

EASEMENT REFERENCE

RECEIVING SYSTEM

ALL STORM WATER DRAINS TO ALUM CREEK

<u>ADJACENT AREAS:</u>

ADJACENT AREAS INCLUDE THREE CREEKS METRO PARK, STORMWATER POND, OH-33, AND AGRICULTURAL FIELD TO THE NORTH; RESIDENTIAL DEVELOPMENT TO THE WEST; ALUM CREEK FOLLOWED BY THREE CREEKS METRO PARK TO THE SOUTH; AND ALUM CREEK FOLLOWED BY RESIDENTIAL DEVELOPMENT TO THE WEST.

STORM WATER MANAGEMENT:

THE PROPOSED CONSTRUCTION ENTRANCE, ROCK CHECK DAM, COMPOST FILTER SOCK, STORM SEWER STRUCTURE PROTECTION, AND EROSION CONTROL BLANKET WILL BE USED IN THE MANAGEMENT OF CONSTRUCTION SITE STORM WATER

EXISTING SITE CONDITIONS:

EXISTING PARK WITH GRASS FIELDS, SCRUB/SHRUB AREAS, AND A PAVED TRAIL.

STORM WATER GENERAL PERMIT: 4GC10346

PLAN AVAILABILITY:

THIS PLAN MUST BE POSTED ON-SITE. A COPY OF THIS SWPPP PLAN AND THE APPROVED OHIO EPA STORMWATER PERMIT

(WITH THE SITE SPECIFIC NOI NUMBER) SHALL BE KEPT ON SITE AT ALL TIMES.

THE CONTRACTOR SHALL NOT USE CONSTRUCTION PROCEEDINGS, ACTIVITIES OR OPERATIONS THAT MAY UNNECESSARILY IMPACT THE NATURAL ENVIRONMENT OR THE PUBLIC HEALTH AND SAFETY, PROHIBITED CONSTRUCTION PROCEEDINGS,

- ACTIVITIES, OR OPERATIONS INCLUDE BUT NOT LIMITED TO: DISPOSING OF EXCESS OR UNSUITABLE EXCAVATED MATERIAL IN WETLANDS OR FLOODPLAINS, EVEN WITH THE
- PERMISSION OF THE PROPERTY OWNER. 2. INDISCRIMINATE, ARBITRARY, OR CAPRICIOUS OPERATION OF EQUIPMENT IN ANY STREAM CORRIDORS, ANY WETLANDS, ANY SURFACE WATERS, OR OUTSIDE THE EASEMENT LIMITS.
- PUMPING OF SEDIMENT-LADEN WATER FROM TRENCHES OR OTHER EXCAVATIONS INTO ANY SURFACE WATERS, STREAM CORRIDORS, ANY WETLANDS OR STORM DRAINS. DIRECT DISCHARGE OF SEDIMENT LADEN WATER TO THE B. 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.

- DISCHARGING POLLUTANTS SUCH AS CHEMICAL, FUEL, LUBRICANTS, BITUMINOUS MATERIALS, RAW SEWERAGE, AND OTHER HARMFUL WASTE INTO OR ALONGSIDE OF RIVERS, STREAMS IMPOUNDMENTS OR INTO NATURAL OR MAN-MADE CHANNELS LEADING THERETO.
- 5. PERMANENT OR UNSPECIFIED ALTERATIONS OF THE CONSTRUCTED AREA.
- 6. DAMAGING VEGETATION OUTSIDE OF THE CONSTRUCTION AREA.
- 7. DISPOSAL OF TREES, BRUSH AND OTHER DEBRIS IN ANY STREAM CORRIDORS ANY WETLANDS, ANY SURFACE WATERS, OR AT UNSPECIFIED LOCATIONS.
- 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 THÉ CITY ENGINEER FOR SAID PURPOSE.

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

STANDARD STORMWATER POLLUTION PREVENTION PLAN NOTES

- ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AND CUTS AND FILLS, SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
- AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE D. BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN. CONTRACTOR SHALL NOTIFY THE ENGINEER/OWNER REPRESENTATIVE AT THE PRECONSTRUCTION MEETING SHOULD ADDITIONAL AREAS OUTSIDE THE DESIGNATED LOD BE REQUIRED TO
- SOIL MAY BE TEMPORARILY STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAPS(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION, EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. TEMPORARY STOCKPILE HEIGHTS SHALL NOT EXCEED 10 FEET WHILE TEMPORARILY STORED. TEMPORARY STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER. STOCKPILE AREAS SHALL BE GRADED TO A MAXIMUM OF 2 FEET IN HEIGHT AND A MAXIMUM SIDE SLOPE OF 4H:1V UPON COMPLETION OF WETLAND GRADING.
- IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT (E&S) POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE LOCAL GOVERNING AGENCY.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL
- UNTIL THE SITE IS STABILIZED, ALL E&S BMPS SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL E&S BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND E. REMEDIAL MAINTENANCE WORK. INCLUDING CLEAN OUT. REPAIR. REPLACEMENT. REGRADING. RESEEDING. REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
- 7. A LOG SHOWING DATES THAT E&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
- 8. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
- 9. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE
- 10. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
- 11. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
- STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT

12. E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY

13. ALL CHANNELS SHALL BE KEPT FREE OF OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO FILL, ROCKS, LEAVES, WOODY DEBRIS, ACCUMULATED SEDIMENT, EXCESS VEGETATION, AND CONSTRUCTION MATERIAL/WASTES.

14. EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3H:1V OR STEEPER WITHIN 50 FEET OF A

SURFACE WATER AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE PLAN MAPS AND/OR DETAIL SHEETS. 15. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT OR GOVERNING

AGENCY FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPS.

PLAN PREPARED BY:

16. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY E&S BMPS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMPS SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE

GERMINATING SEASON.

17. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE OWNER.

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

BEST MANAGEMENT PRACTICES (BMPS)

THE E&S CONTROL FACILITIES FOR THE PROJECT ARE SHOWN ON THE E&S CONTROL PLAN. CONTROL MEASURES SHOWN ON THIS PLAN ARE MINIMUM CONTROLS TO PROTECT OFFSITE AREAS FROM SEDIMENT-LADEN RUNOFF, ADDITIONAL CONTROLS MAY BE REQUIRED DEPENDING ON THE PROGRESS OF CONSTRUCTION AND VARYING CONDITIONS ENCOUNTERED.

A. ROCK CONSTRUCTION ENTRANCE

A ROCK CONSTRUCTION ENTRANCE WILL BE PROVIDED AT THE LOCATION(S) SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE STANDARD DETAIL.

1. EXCAVATE THE AREA WHERE ROCK CONSTRUCTION ENTRANCE WILL BE CONSTRUCTED A MINIMUM OF 8 INCHES.

2. PLACE A LAYER OF SEPARATION GEOTEXTILE ALONG THE FULL LENGTH AND WIDTH OF PAD. THE STONE PAD

- SHOULD BE AT LEAST 50 FEET IN LENGTH AND 20 FEET IN WIDTH. PLACE_STONE ACROSS THE FULL LENGTH AND WIDTH OF THE VEHICLE INGRESS AND EGRESS AREA. STONE IS TO
- BE A MINIMUM 8 INCHES THICK. MAINTENANCE: THE ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED

DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ONSITE FOR THIS PURPOSE. AT THE END OF EACH CONSTRUCTION DAY. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK.

TEMPORARY AND PERMANENT SEEDING

THE LIMITS OF SEEDING AND MULCHING ARE AS SHOWN WITHIN THE PLAN. SEEDING HAS BEEN ASSUMED TO BE 5'-0" OUTSIDE THE WORK LIMITS OR THE RIGHT-OF-WAY WHICHEVER IS GREATER. ALL AREAS NOT DESIGNATED TO BE SEEDED SHALL REMAIN UNDER NATURAL GROUND COVER. THOSE AREAS DISTURBED OUTSIDE THE SEEDING LIMITS SHALL BE

TEMPORARY SEEDING: ANY AREA WHICH WILL BE LEFT DORMANT (UNDISTURBED) FOR MORE THAN 21 DAYS SHALL BE SEEDED WITHIN 7 DAYS OF TERMINATED WORK. DISTURBED AREAS WITHIN 50 FEET OF A STREAM, FIRST ORDER OR LARGER, SHALL BE STABILIZED WITHIN 2 DAYS OF INACTIVITY, TEMPORARY SEEDING CONSISTS OF SEEDING PREPARATION AND APPLICATION OF SEED, FERTILIZER, AND WATER. SOIL TEST IS RECOMMENDED TO DETERMINE PROPER APPLICATION RATE OF FERTILIZER AND IF LIME IS NECESSARY.

FERTILIZER 12-12-12 = 12 LB/1000 SQ. FT.STRAW MULCH = 2 TONS/ACRE = 300 G/1000 SQ. FT.

PERMANENT SEEDING: ANY AREA THAT IS AT FINAL GRADE SHALL BE SEEDED WITHIN 7 DAYS OF TERMINATED WORK, PERMANENT SEEDING CONSISTS OF SEEDBED PREPARATION AND APPLICATION OF SEED, FERTILIZER, AND WATER. SOIL TEST IS RECOMMENDED TO DETERMINE PROPER APPLICATION RATE OF FERTILIZER AND IF LIME IS NECESSARY. IDEAL CONDITIONS FOR PERMANENT SEEDING IS MARCH 1-MAY 31 AND AUGUST 1-SEPTEMBER 30.

C. STOCKPILE AREAS

CONTRACTOR SHALL USE THE STOCKPILE LOCATIONS SHOWN ON THE DRAWINGS. THE STOCKPILE WILL BE SURROUNDED WITH COMPOST FILTER SOCK TO PREVENT SEDIMENT-LADEN RUNOFF FROM ENTERING NATURAL DRAINAGE PATHWAYS. INSTALLATION: INSTALL COMPOST FILTER SOCK AS SHOWN ON THE PLANS.

NECESSARY TO ENSURE THE INTEGRITY OF THE SOCK CAN WITHSTAND AND HOLD THE SOIL IN ITS STOCKPILE LOCATION. COMPOST FILTER SOCK

MAINTENANCE: TEMPORARY STOCKPILES SHALL BE INSPECTED WEEKLY. REPAIR THE COMPOST FILTER SOCK AS

FILTER SOCK SHALL BE INSTALLED IN THE LOCATIONS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE STANDARD DETAIL PROVIDED.

- 1. FILTER SOCK SHALL BE INSTALLED PARALLEL TO THE BASE OF THE SLOPE OR OTHER DISTURBED AREA.
- 2. STAKES SHALL BE INSTALLED THROUGH THE MIDDLE OF THE FILTER SOCK ON 10 FOOT CENTERS, USING 2-INCH BY 2-INCH WOODEN STAKES. 3. STAKING DEPTH FOR SAND AND SILT LOAMS SHALL BE 12-INCH, AND 8-INCH FOR CLAY SOILS.
- 4. LOOSE COMPOST MAY BE BACKFILLED ALONG THE UP-SLOPE SIDE OF THE FILTER SOCK, FILLING THE SEAM BETWEEN THE SOIL SURFACE AND THE DEVICE, IMPROVING FILTRATION AND SEDIMENT RETENTION.

MAINTENANCE: ACCUMULATED SEDIMENTS SHALL BE REMOVED IN ALL CASES WHERE ACCUMULATIONS HAVE REACHED HALF THE ABOVE-GROUND HEIGHT OF THE SOCK. IF THE SOCK HAS BEEN DAMAGED, IT SHALL BE REPAIRED, OR REPLACED IF BEYOND REPAIR. THE FILTER MEDIA WILL BE DISPERSED ON SITE ONCE THE DISTURBED AREA HAS BEEN PERMANENTLY STABILIZED. ADHERE TO ANY MANUFACTURER'S RECOMMENDATIONS. PYRAMIDING SOCKS IS RECOMMENDED TO REPLACE FAILED COMPOST FILTER SOCK AND/OR IN AREAS WITH ANTICIPATED CHANNELIZED FLOW.

EROSION CONTROL BLANKET

NORTH AMERICAN GREEN SC150BN OR APPROVED EQUIVALENT EROSION CONTROL BLANKET WILL BE USED TO PREVENT FROSION FROM THE GRADING OPERATIONS AND INSTALLED ON PERMANENT SLOPES GREATER THAN 3H:1V. THE FROSION CONTROL BLANKETS WILL PROVIDE FROSION PROTECTION AND ASSIST WITH VEGETATION ESTABLISHMENT FOR UP TO 12 MONTHS. AFTER A 12 MONTH PERIOD THE BLANKETS WILL BIODEGRADE LEAVING A STABLE VEGETATED ROOT STRUCTURE.

- PREPARE SOIL ON ALL ESTABLISHED TEMPORARY AND PERMANENT SLOPES AND ANY NECESSARY APPLICATION OF SEED. SEE THE "SEEDING CRITERIA" TABLE LOCATED ON THE E&S CONTROL NOTES DRAWING BEFORE INSTALLING
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE EROSION CONTROL BLANKET IN A 6 INCH BY 6 INCH WIDE TRENCH WITH APPROXIMATELY 12 INCHES OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES APPROXIMATELY 12 INCHES APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12 INCH PORTION OF THE EROSION CONTROL BLANKET BACK OVER SEED AND COMPACTED SOIL SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES SPACED APPROXIMATELY 12 INCHES APART ACROSS THE WIDTH OF THE BLANKET.
- ROLL THE EROSION CONTROL BLANKET DOWN THE SLOPE. BLANKET WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES IN APPROPRIATE LOCATIONS AS RECOMMENDED BY THE MANUFACTURER.
- 4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2 TO 5 INCH OVERLAP.

MAINTENANCE: THE EROSION CONTROL BLANKETS SHALL BE INSPECTED WEEKLY AND AFTER EVERY RAINFALL EVENT TO LOOK FOR SCOUR/WASHOUT AREAS. ANY SCOURED AREAS SHALL BE FIXED IMMEDIATELY BY COMPACTING SOIL IN THE WASHOUT AREA AND PLACING SEED. ANY DAMAGED EROSION CONTROL BLANKETS SHALL BE REPLACED IMMEDIATELY. BLANKETS SHALL BE MAINTAINED UNTIL A UNIFORM 70% PERENNIAL VEGETATION HAS BEEN ESTABLISHED.

CONSTRUCTION WASTE RECYCLE/DISPOSAL

CONSTRUCTION WASTES ARE REFUSE MATERIALS THAT ARE EXISTING ON-SITE OR GENERATED DURING THE COURSE OF CONSTRUCTION AND INCLUDE, BUT ARE NOT LIMITED TO, PAPER, PLASTIC, RUBBER, WOOD, TEXTILE, AND METAL

INSTALLATION: THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING WASTE RECYCLING/DISPOSAL AREAS ON THE E&S CONTROL PLAN ONCE THEY HAVE BEEN DETERMINED. WASTE DISPOSAL STOCKPILES PLACED UPSTREAM OF TEMPORARY E&S CONTROL MEASURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL WASTE RECYCLING/DISPOSAL PERMITS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

MAINTENANCE: ALL CONSTRUCTION WASTE SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF AT A STATE-APPROVED WASTE SITE AND IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS. THE BURNING OF WASTE MATERIALS SHALL NOT BE PERMITTED.

G. <u>PUMPED WATER FILTER BAGS</u>

PUMPED WATER FILTER BAGS MAY BE USED, IF NECESSARY, TO PREVENT SEDIMENT-LADEN WATER THAT MAY BE PUMPED FROM TRENCHES OR PONDED AREAS FROM DISCHARGING INTO EXISTING DRAINAGE SYSTEMS BEFORE BEING treated. They shall be made from non—woven geotextile material sewn with high—strength DOUBLE-STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. PUMPING RATES SHALL NOT EXCEED ONE-HALF THE MANUFACTURER'S SPECIFICATIONS, OR 750 GPM, WHICHEVER IS LESS. THE FOLLOWING INSTRUCTIONS SHALL SPECIFY CONDITIONS FOR ITS USE

- INSTALL FILTER BAGS ON A WELL-VEGETATED (GRASSY), EROSION-RESISTANT AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE FLOW PATH SHALL BE PROVIDED.
- 2. BAGS SHALL NOT BE PLACED ON A SLOPE GREATER THAN 5%.
- BAGS MUST BE PLACED ON A DRY AREA AWAY FROM STREAMS AND WETLANDS
- PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED.
- 5. PUMP INTAKES SHOULD BE FLOATING AND SCREENED.

- FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE UNTIL THE PROBLEM IS CORRECTED
- FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME HALF FULL.
- A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES MUST BE
- 4. SPARE BAGS SHALL BE KEPT AVAILABLE ONSITE.
- 5. ALL CLEANOUT MATERIAL SHALL BE DISCARDED IN AN UPLAND AREA, REMOTE OF ANY STREAM OR WETLAND, WITHIN THE CONSTRUCTION RIGHT-OF-WAY. ALL AREAS WILL BE STABILIZED.

EXISTING WETLANDS SHALL NOT BE DISTURBED UNLESS OTHERWISE NOTED. EXISTING WETLANDS SHALL BE PROTECTED WITH ORANGE CONSTRUCTION FENCE. WHERE IMPACTS ARE AUTHORIZED CONTRACTOR SHALL MINIMIZE DISTURBANCE LIMITS TO THE MAXIMUM EXTENT PERFECTIBLE (MEP). CONTRACTOR SHALL UTILIZE TIMBER MATTING WHEN TRAVERSING

J. STRAW WAFFLI

UPPER BANK ABOVE NORMAL WATER ELEVATION SHOULD BE STABILIZED QUICKLY WITH STRAW BLANKETS, UTTE MATTING OR SIMILAR GEO-TEXTILE.

THE USE OF STRAW WAFFLES HAS PROVEN TO BE A VERSATILE AND EFFECTIVE ESC BMP, ESPECIALLY

- RESIDENTIAL SETTINGS. STRAW WAFFLES MAY BE SUBSTITUTED FOR SILT FENCE. 2. 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.
- 3. STRAW WAFFLES OR COMPOST ROLLS HAVE TO BE A MINIMUM OF 12 INCHES IN DIAMETER (OHIO EPA).

IF A SPILL OR RELEASE OF A REGULATED SUBSTANCE OCCURS ON-SITE AND CONTAMINATES THE SOIL, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO TEST THE SOIL TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH OHIO ENVIRONMENTAL PROTECTION AGENCY'S POLICY ON "MANAGEMENT OF FILL". SEE BELOW DEFINITIONS FOR CLEAN FILL AND ENVIRONMENTAL DUE DILIGENCE.

- CLEAN FILL: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS
- <u>ENVIRONMENTAL DUE DILIGENCE:</u> INVESTIGATIVE TECHNIQUES INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL.

RECYCLING & DISPOSAL OF MATERIALS

- ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS OF THE LOCAL GOVERNING AGENCY. NO WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE. CONSTRUCTION WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY.
- PROPER TRASH DISPOSAL, RECYCLING OF MATERIALS, PROPER MATERIALS HANDLING, AND SPILL PREVENTION AND CLEAN-UP REDUCE THE POTENTIAL FOR CONSTRUCTION SITE WASTES TO BE BE MOBILIZED BY STORMWATER RUNOFF AND CONVEYED TO SURFACE WATERS. UNDER NO CIRCUMSTANCES MAY EROSION CONTROL BMPS BE USED FOR TEMPORARY STORAGE OR DEMOLITION
- MATERIALS OF CONSTRUCTION WASTES. 4. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION

DISTRICT OR GOVERNING AGENCY FULLY IMPLEMENTED PRIOR TO BEING ACTIVATE GEOLOGIC FORMATIONS / SOIL CONDITIONS

- IF DURING CONSTRUCTION GEOLOGIC FORMATIONS ARE ENCOUNTERED, THE CONTRACTOR IS TO CONTACT THE OWNER, THE DESIGN PROFESSIONAL, THE LOCAL CONSERVATION DISTRICT, AND/OR THE LOCAL GOVERNING AGENCY FOR PROPER HANDLING OF THESE MATERIALS.
- 2. IF HIGH WATER TABLE IS ENCOUNTERED:
- KEEP EXCAVATIONS AS SHALLOW AS PRACTICAL;
- CONSTRUCT DURING DRY WEATHER;
- PUMPS AND WATER FILTER BAGS SHALL BE UTILIZED IF GROUNDWATER IS ENCOUNTERED;

INCLUDES SWEEPING, POWER CLEANING, AND (IF NECESSARY) MANUAL REMOVAL OF DIRT OR MUD IN THE STREET

- CONSTRUCT INTERMEDIATE DRAINS, IF NECESSARY TO CONTROL AND DISCHARGE WATER FROM FILLS. IF ERODIBLE SOILS ARE ENCOUNTERED:
 - UTILIZE EROSION CONTROL BLANKETS, SILT SOCKS, TEMPORARY AND PERMANENT SEEDING, AND DIVERSION CHANNELS TO MINIMIZE EROSION.

MINIMIZE SOIL COMPACTION TO THE FULLEST EXTENT POSSIBLE IN ALL UNIMPROVED AREAS AND BIO-RETENTION

CITY OF COLUMBUS

STORMWATER MANAGEMENT BMP AREAS.

PRIVATE STORM & GRADING FOR

THREE CREEKS WETLAND RESTORATION PROJECT

4. SOIL COMPACTION

STREET CLEANING (ON AN AS-NEEDED BASIS) IS REQUIRED THROUGH THE DURATION OF THIS CONSTRUCTION PROJECT. THIS

RECREATION AND PARKS DEPT CITY OF COLUMBUS, OHIO DIVISION OF SEWERAGE AND DRAINAGE SWPPP NOTES DIVISION USE ONLY DIVISION USE ONLY OWNER CONTRACTOR INSPECTOR SHEET: 7 OF 16 SCALE: N/A AGREEMENT | COMPLETED RPD | CKD | CLD | CON. DR. CONTRACT DRAWING NO. RECORD PLAN NO. CC-20633

COUNTY RECORDER DESCRIPTION APPROVAL/DATE CITY NO. GRANTOR VOL. PAGE

REVISIONS

Environmental Consultants, Inc. 250 Old Wilson Bridge Road, Suite 250 - Worthington, OH 43085 Ph: 614.540.6633 · 888.598.6808 · Fax: 614.540.6638 www.cecinc.com

3086 WATKINS ROAD

TABLE 1: 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

TABLE 2: 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 AREAS 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 ONSET OF WINTER WEATHER

WHERE VEGETATIVE STABILZATION TECHNIQUES MAY CAUSE STRUCTURAL INSTABILITY OR ARE OTHERWISE UNOBTAINABLE, ALTERNATIVE STABILIZATION TECHNIQUES MUST BE EMPLOYED. PERMANENT AND TEMPORARY STABILIZATION ARE DEFINED IN

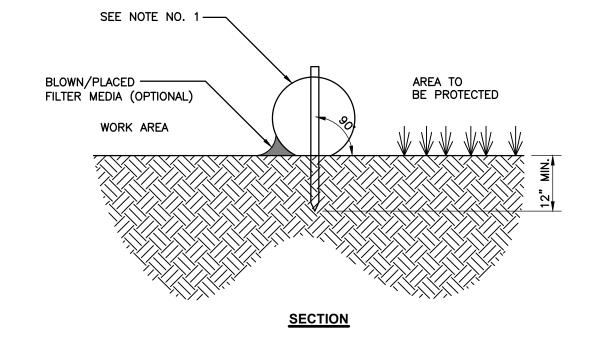
OATS TALL FESCUE ANNUAL RYEGRASS	3 1	128 LB.(4 BUSHEL)
	1	40 LB. 40 LB.
PERENNIAL RYEGRASS TALL FESCUE ANNUAL RYEGRASS	1 1 1	40 LB. 40 LB. 40 LB.
ANNUAL RYEGRASS PERENNIAL RYEGRASS CREEPING RED FESCUE KENTUCKY BLUEGRASS	1.25 3.25 0.4 0.4	55 LB. 142 LB. 17 LB. 17 LB.
OATS TALL FESCUE ANNUAL RYEGRASS	3 1 1	128 LB.(3 BUSHEL) 40 LB. 40 LB.
RYE TALL FESCUE ANNUAL RYEGRASS	3 1 1	112 LB.(2 BUSHEL) 40 LB. 40 LB.
WHEAT TALL FESCUE ANNUAL RYEGRASS	3 1 1	120 LB.(2 BUSHEL) 40 LB. 40 LB.
PERENNIAL RYE TALL FESCUE ANNUAL RYEGRASS	1	40 LB. 40 LB. 40 LB.
ANNUAL RYEGRASS PERENNIAL RYEGRASS CREEPING RED FESCUE KENTUCKY BLUEGRASS	1.25 3.25 0.4 0.4	40 LB. 40 LB. 40 LB.
	ANNUAL RYEGRASS PERENNIAL RYEGRASS CREEPING RED FESCUE KENTUCKY BLUEGRASS OATS TALL FESCUE ANNUAL RYEGRASS RYE TALL FESCUE ANNUAL RYEGRASS WHEAT TALL FESCUE ANNUAL RYEGRASS PERENNIAL RYE TALL FESCUE ANNUAL RYEGRASS PERENNIAL RYEGRASS ANNUAL RYEGRASS CREEPING RED FESCUE	ANNUAL RYEGRASS PERENNIAL RYEGRASS CREEPING RED FESCUE KENTUCKY BLUEGRASS O.4 OATS TALL FESCUE ANNUAL RYEGRASS TALL FESCUE TALL FESCUE ANNUAL RYEGRASS TALL FESCUE TALL F

	NOTES		
		LB/1000 SQ. FT.	NOTES
	GEN	ERAL USE	
CREEPING RED FESCUE	20-40	1/2-1	
DOMESTIC RYEGRASS	10-20	1/4-1/2	
KENTUCKY BLUEGRASS	10-20	1/4-1/2	
TALL FESCUE	40	1	
DWARF FESCUE	40	1	
	STEEP BAN	IKS OR CUT SLOPE	S
TALL FESCUE	40	1	
CROWN VETCH	10	1/4	DO NOT SEED LATER
TALL FESCUE	20	1/4	THAN AUGUST
FLAT PEA	20	1/2	DO NOT SEED LATER
TALL FESUCE	20	1/2	THAN AUGUST
	ROAD DITC	CHES AND SWALES	
TALL FESCUE	40	1	
DWARF FESCUE	90	2 1/4	
KENTUCKY BLUEGRASS	5		
	L	AWNS	
KENTUCKY BLUEGRASS	60	1 1/2	
PERENNIAL RYEGRASS	60	1 1/2	
KENTUCKY BLUEGRASS	60	1 1/2	FOR SHADED AREAS
CREEPING RED FESCUE	60	1 1/2	TON SHADED ANEAS

EASEMENT REFERENCE			REVISIONS	PLAN PREPARED BY:			
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							Environmental Consultants, Inc. 250 Old Wilson Bridge Road, Suite 250 - Worthington, OH 43 Ph: 614.540.6633 · 888.598.6808 · Fax: 614.540.6638 www.cecinc.com
							250 Old Wilson Bridge Road, Suite 250 - Worthington, OH 43 Ph: 614.540.6633 · 888.598.6808 · Fax: 614.540.6638
							www.cecinc.com

MATERIAL TYPE 3 MIL HDPE 5 M		5 MIL HDPE	5 MIL HDPE	MULTI-FILAMENT POLYPROPYLENE (MFPP)	HEAVY DUTY MULTI-FILAMENT POLYPROPYLENE (HDMFPP)	
MATERIAL CHARACTERISTICS PHOTO-DEGRADABLE PHOTO-DEGRADABLE		BIO-DEGRADABLE	PHOTO-DEGRADABLE	PHOTO-DEGRADABLE		
	12"	12"	12"	12"	12"	
SOCK DIAMETERS	18"	18"	18"	18"	18"	
SOCK DIAMETERS		24"	24"	24"	24"	
		32"	32"	32"	32"	
MESH OPENING	3/8"	3/8"	3/8"	3/8"	1/8"	
TENSILE STRENGTH		26 PSI	26 PSI	44 PSI	202 PSI	
ULTRAVIOLET STABILITY % ORIGINAL STRENGTH (ASTM G-155)	23% AT 1000 HR	23% AT 1000 HR		100% AT 1000 HR	100% AT 1000 HR	
MINIMUM FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEARS	
		TWO-F	PLY SYSTEMS	•		
				HDPE BIAXIAL	NET	
INNER CONTAINMENT NETTING			CONTINUOUSLY WOUND			
INNER CONTAINMENT NETTING			FUSION-WELDED JUNCTURES			
			3/4" X 3/4" MAX. APERTURE SIZE			
OUTER FILTRATION MESH			COMPOSITE POLYPROPYLENE FABRIC (WOVEN LAYER AND NON-WOVEN FLEECE MECHANICALLY FUSED VIA NEEDLE PUNCH)			
			3/16" MAX. APERTURE SIZE			
ORGANIC MATTER CONTENT				25%-100% (DRY WEI	GHT BASIS)	
ORGANIC PORTION				FIBROUS AND ELO	NGATED	
рН				5.5-8.5		

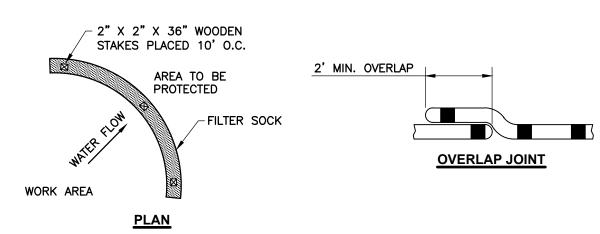
NOTES: 1. SOCK FABRIC COMPOSED OF BURLAP MAY BE USED ON PROJECTS LASTING 6 MONTHS OR LESS



MOISTURE CONTENT

SOLUBLE SALT CONCENTRATION

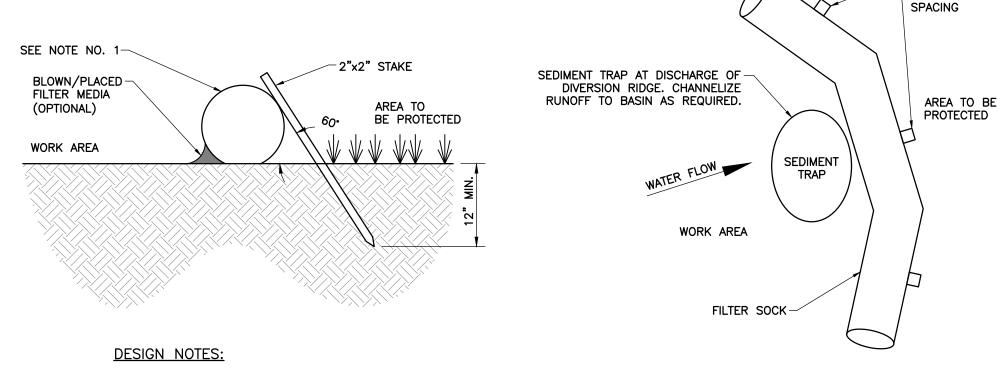
PARTICLE SIZE



1. COMPOST FILTER SOCK TO BE FILTREXX SILTSOXX OR APPROVED EQUIVALENT.

- 2. COMPOST FILTER SOCK SHALL BE A MIN 12" DIAMETER AT LOCATIONS SHOWN ON PLAN SET.
- 3. ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE COMPOST FILTER SOCK.
- 4. COMPOST FILTER SOCK SHALL BE INSPECTED, AT A MINIMUM, ONCE EVERY FOUR CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY PRECIPITATION EVENT OF 0.25 INCHES OR GREATER PER 24 HOUR PERIOD. DAMAGED COMPOST FILTER SOCK SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
- 5. COMPOST FILTER SOCK SHALL BE INSTALLED ON THE CONTOUR, PERPENDICULAR TO FLOW.





2"x2" STAKES ON 10' LINEAR

- 1. COMPOST SOCK SEDIMENT TRAP SHALL BE SIZED TO PROVIDE 2000 CUBIC FEET OF STORAGE CAPACITY FOR EACH ACRE TRIBUTARY TO THE TRAP.
- 2. MINIMUM BASE WIDTH IS EQUAL TO THE HEIGHT. 3. SEDIMENT ACCUMULATION SHALL NOT EXCEED 3 OF THE TOTAL HEIGHT OF THE TRAP.
 4. SOCKS SHALL BE OF LARGER DIAMETER AT THE BASE OF THE TRAP AND DECREASE IN DIAMETER FOR SUCCESSIVE LAYERS AS
- 5. ENDS OF THE TRAP SHALL BE A MINIMUM OF 1 FOOT HIGHER IN ELEVATION THAN THE MID—SECTION, WHICH SHALL BE LOCATED AT THE POINT OF DISCHARGE.

30%-60%

30%-50% PASS THROUGH 3/8" SIEVE

5.0 dS/M (MMHOS/CM) MAXIMUM

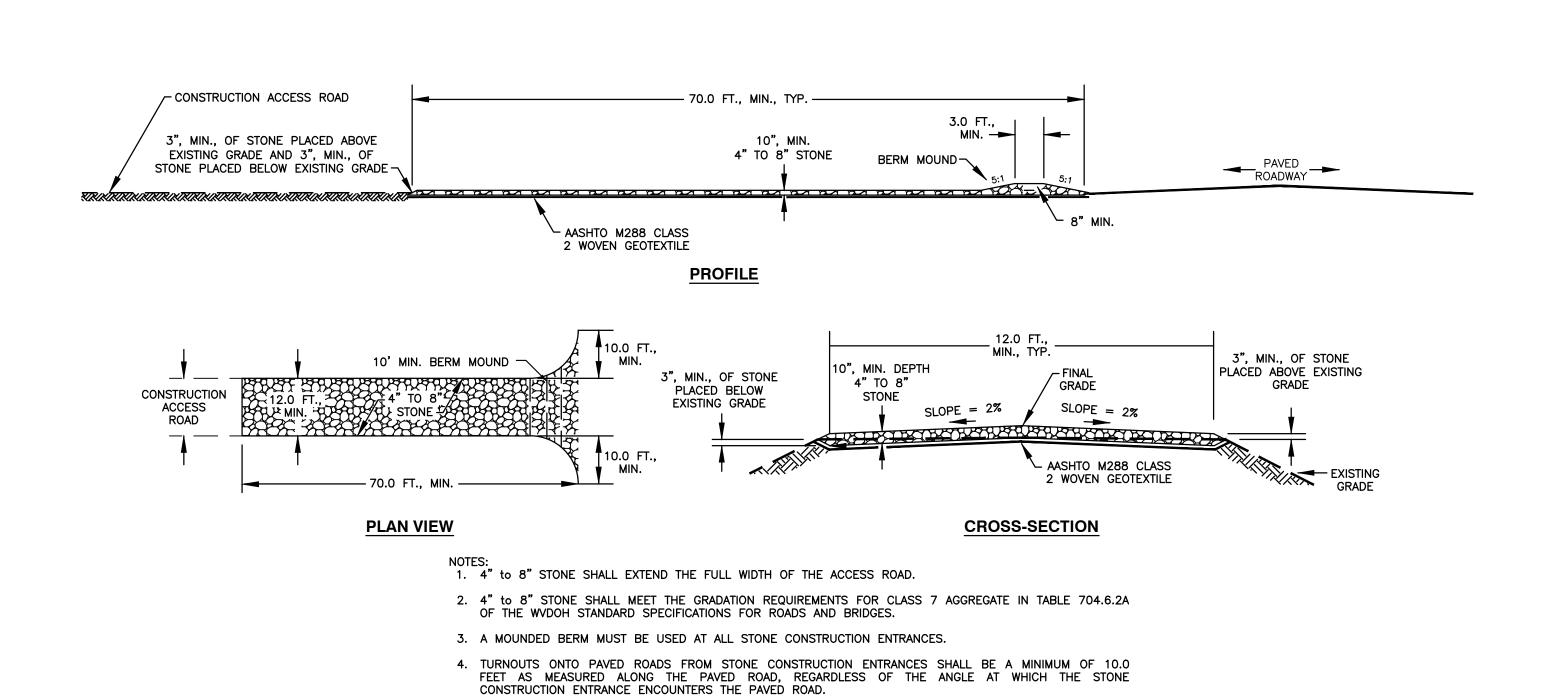
- 1. COMPOST SOCK TO BE FILTREXX SILTSOCK OR APPROVED EQUIVALENT. FILTER MEDIA FILL TO MEET APPLICATION
- 2. COMPOST SOCK SEDIMENT TRAPS SHALL NOT EXCEED THREE SOCKS HEIGHT AND SHALL BE STACKED IN PYRAMIDAL FORM. MINIMUM TRAP HEIGHT IS ONE 24" DIAMETER SOCK. CONTRACTOR TO INCREASE HEIGHT OF SEDIMENT TRAP AS NEEDED TO MEET RECEIVING FLOW DEPTHS..
- 3. COMPOST SOCK SEDIMENT TRAPS SHALL PROVIDE 2000 CUBIC FEET STORAGE CAPACITY WITH 12" FREEBOARD FOR EACH TRIBUTARY DRAINAGE ACRE. (SEE MANUFACTURER FOR ANTICIPATED SETTLEMENT.)
- 4. THE MAXIMUM TRIBUTARY DRAINAGE AREA IS 5.0 ACRES. SINCE COMPOST SOCKS ARE "FLOW-THROUGH," NO SPILLWAY IS
- 5. COMPOST SOCK SEDIMENT TRAPS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/3 THE HEIGHT OF THE SOCKS.
- 6. PHOTODEGRADABLE AND BIODEGRADABLE SOCKS SHALL NOT BE USED FOR MORE THAN ONE YEAR.

PRIVATE STORM & GRADING FOR

COMPOST SOCK SEDIMENT TRAP 7 NOT TO SCALE

THREE CREEKS WETLAND RESTORATION PROJECT CITY OF COLUMBUS 3086 WATKINS ROAD RECREATION AND PARKS DEPT. CITY OF COLUMBUS, OHIO DIVISION OF SEWERAGE AND DRAINAGE SWPPP NOTES AND DETAILS DIVISION USE ONLY DIVISION USE ONLY OWNER CONTRACTOR INSPECTOR SHEET: 8 OF 16 SCALE: N/A AGREEMENT | COMPLETED RPD | CKD | CLD | CON. DR. CONTRACT DRAWING NO. RECORD PLAN NO. CC-20633

PLAN PREPARED BY:



ANCHOR TOP EDGE OF -BLANKET IN 6" x 6" TRENCH PREPARED & SEEDED 6" MIN. TOPSOIL LAYER-12" OVERLAP AT ENDS OF BLANKETS EROSION CONTROL BLANKET — (NORTH AMERICAN GREEN S75BN) (OR APPROVED EQUAL) -STAPLES (STAPLE PATTERN A) ANCHOR TOP EDGE -OF BLANKET IN 6"x6" TRENCH

NOTES:

√ 8 NOT TO SCALE

- 1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED.
- 2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- 3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE.
- 4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
- 5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 12" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART.

- WIRE OR ZIP TIES TO SECURE

SAFETY FENCE TO POST

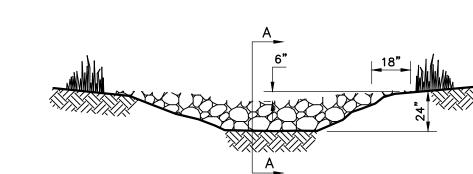
- STAKES: 72" T-POST DRIVEN 20" MIN. BELOW GRADE

-FINISHED GRADE

- 6. EROSION CONTROL BLANKETS SHALL BE INSTALLED ON ALL 3:1 OR STEEPER SLOPES WITH A MINIMUM OF 6 INCHES OF

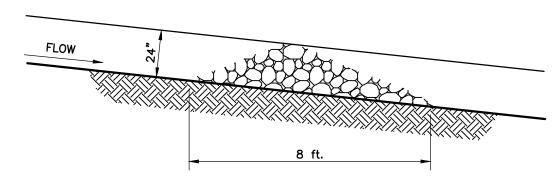
EROSION CONTROL BLANKET

STABILIZAED CONSTRUCTION ENTRANCE 、8 J NOT TO SCALE

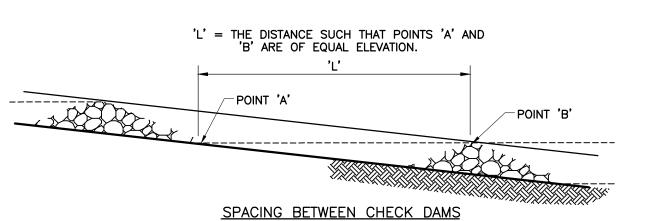


VIEW LOOKING UPSTREAM

KEY STONE INTO THE DITCH BANKS AND EXTEND IT BEYOND THE ABUTMENTS A MINIMUM OF 18" TO PREVENT OVER FLOW AROUND DAM.



SECTION A - A



- 1. ALL SENSITIVE AREAS SHALL BE PROTECTED AS PER PLAN.
- 2. SAFETY FENCE SHOULD BE FASTENED SECURELY TO THE T-POSTS.
- 3. THE FENCING MUST REMAIN IN PLACE DURING ALL PHASES OF CONSTRUCTION; ANY CHANGE OF THE PROTECTIVE FENCING MUST BE APPROVED BY THE

4 ROCK CHECK DAM 8 NOT TO SCALE

	TEMPORARY / PERMANENT SOIL STOCKPILE
8	NOT TO SCALE

1. LOCATE STOCKPILE A MINIMUM OF 50 FEET FROM THE TOP OF ANY STREAM BANK AND

5. THE TEMPORARY STOCKPILE SHOULD BE SEEDED, MULCHED OR OTHERWISE PROTECTED FROM EROSION AND SEDIMENTATION FOR STORAGE PERIODS THAT WILL EXCEED 4 DAYS.

2. INSTALL FILTER SOCK AROUND DOWN-GRADIENT PERIMETER OF STOCKPILE.

3. ESTABLISH MAXIMUM 5:1 SLOPES ON ALL SIDES OF STOCKPILE.

4. MAXIMUM HEIGHT OF STOCKPILES NOT TO EXCEED 2-FT.

┌18" COMPOST FILTER SOCK (TYP.)

NOTES:

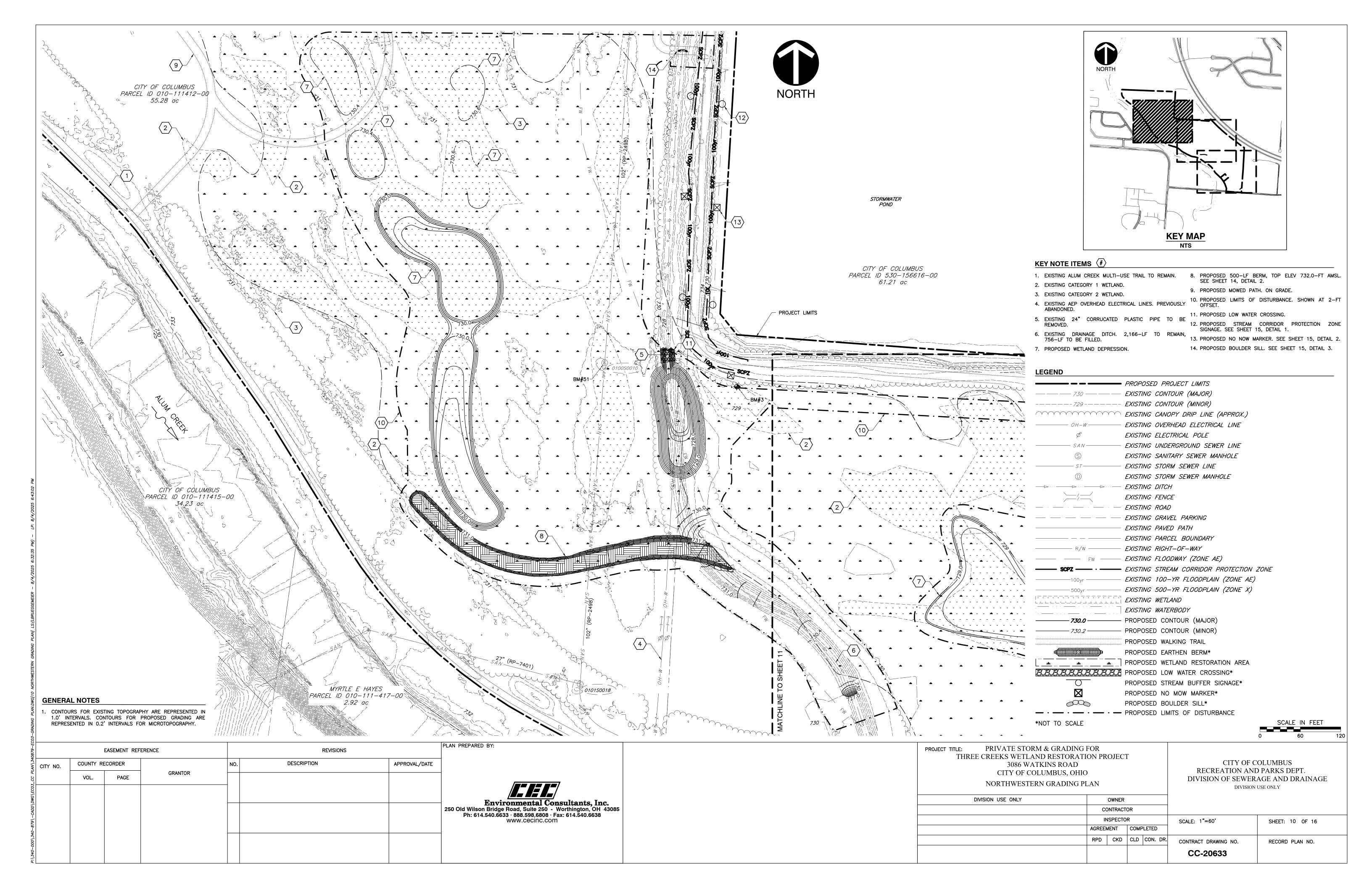
IN NON-AQUATIC, NON-WETLAND AREA.

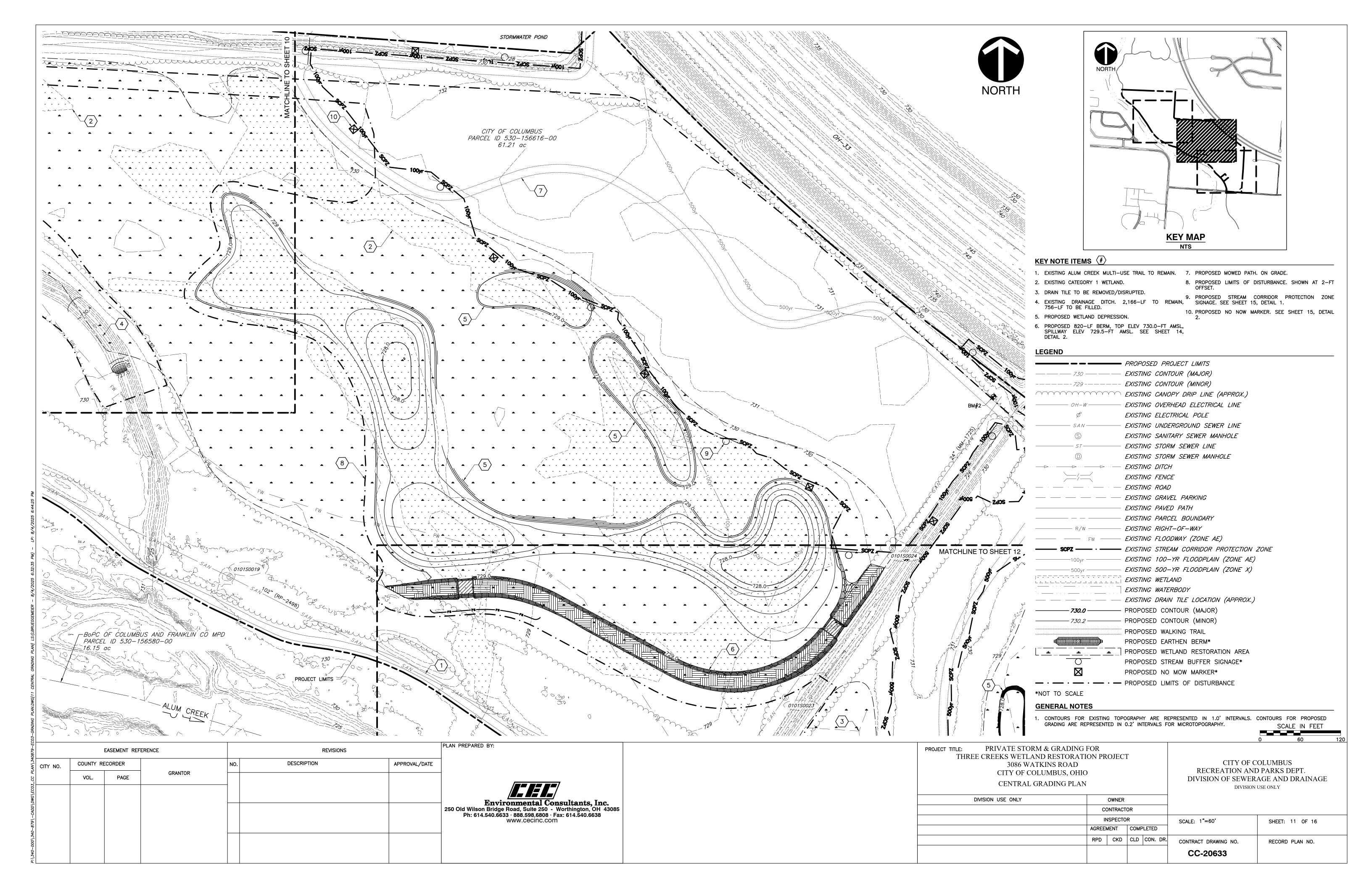
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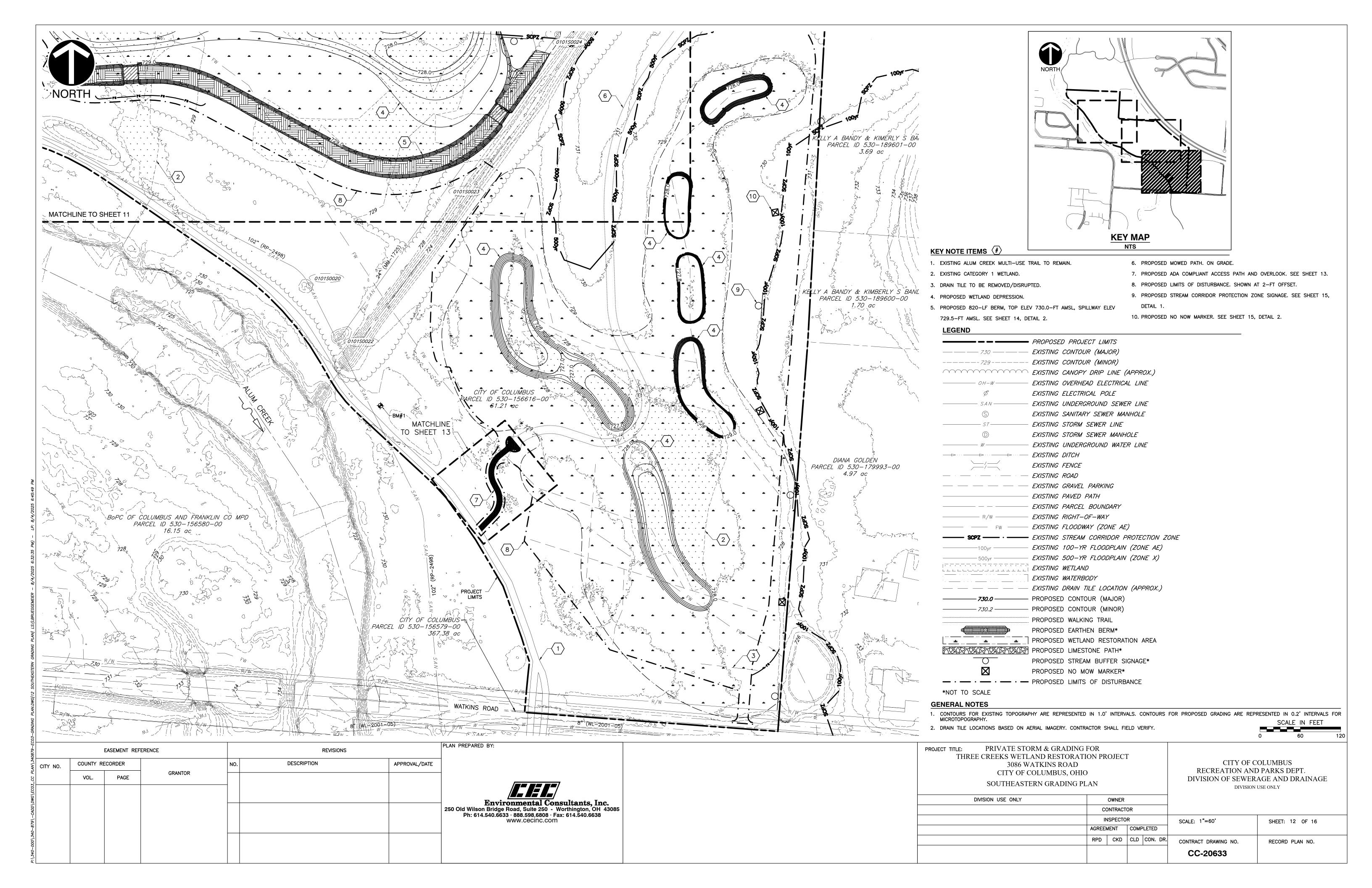
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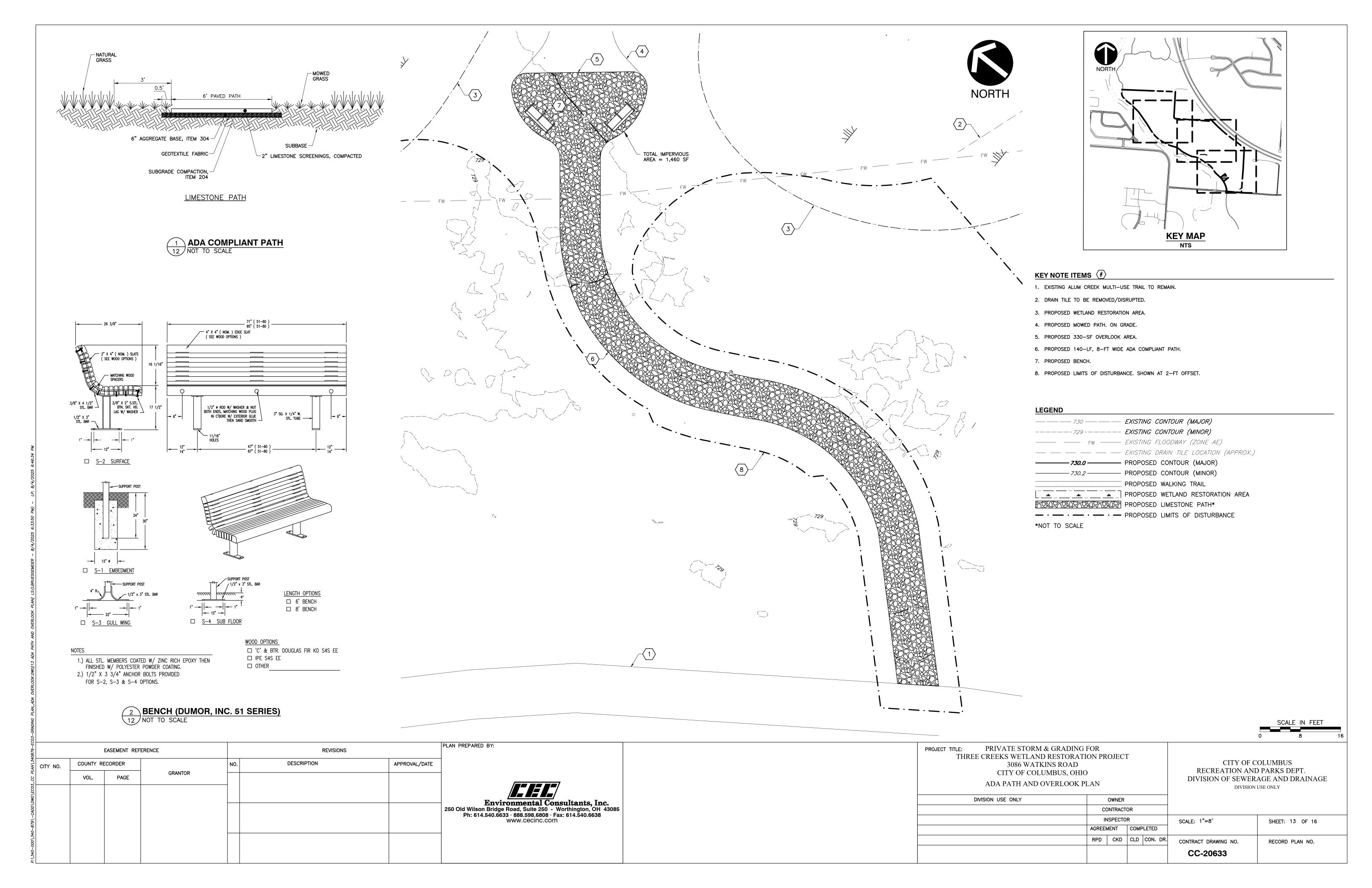
5 ORANGE CONSTRUCTION FENCE NOT TO SCALE

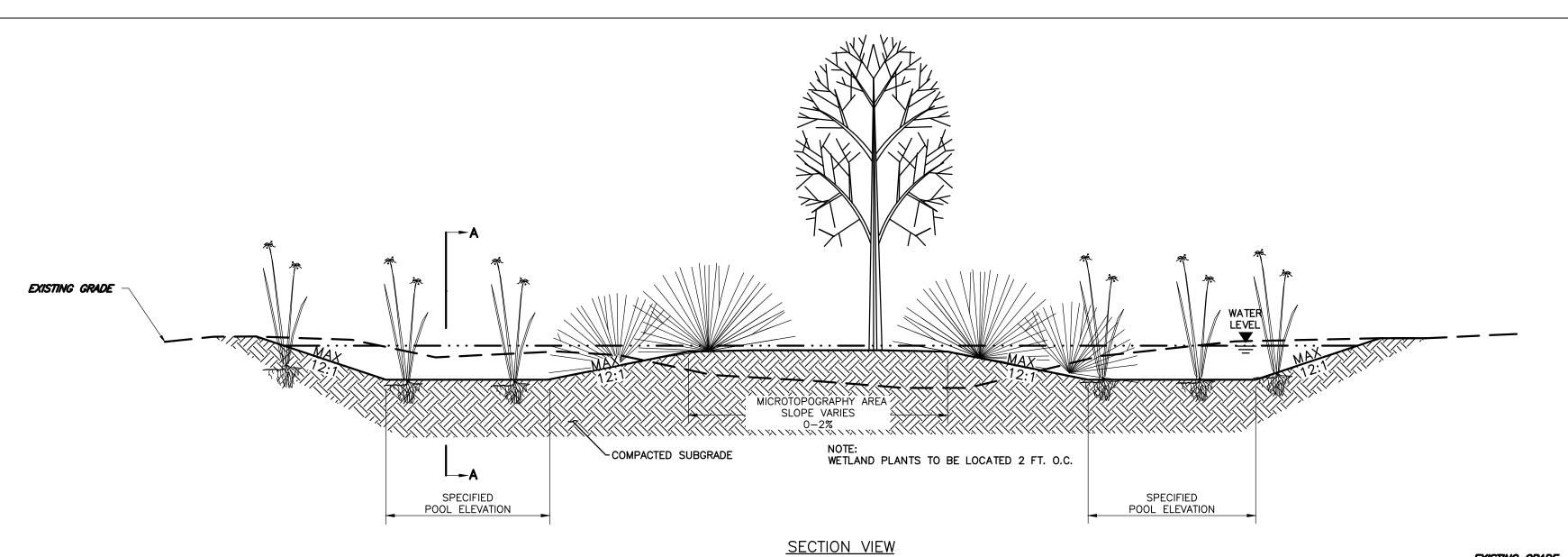
PROJECT TITLE: PRIVATE STORM & GRADING FOR THREE CREEKS WETLAND RESTORATION PROJECT 3086 WATKINS ROAD CITY OF COLUMBUS, OHIO SWPPP DETAILS						CITY OF COLUMBUS RECREATION AND PARKS DEPT. DIVISION OF SEWERAGE AND DRAINAGE DIVISION USE ONLY		
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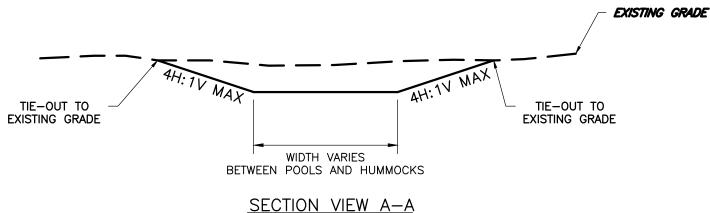






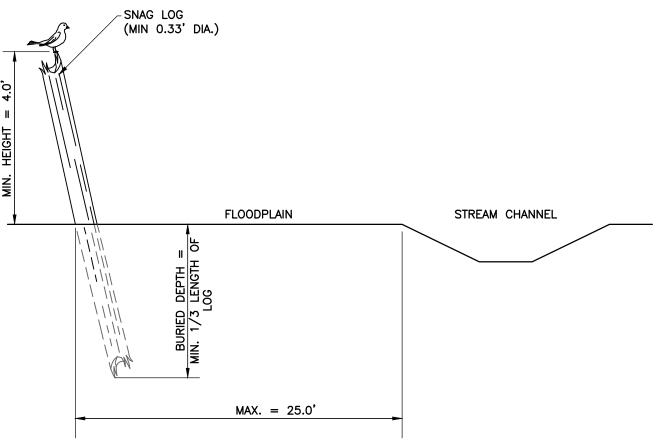
NOTES:

- 1. MICROTOPOGRAPHY AREAS ARE GRADED INTO THE EXISTING GROUND TO CREATE DEPRESSIONS FOR HYDROLOGY RETENTION. GRADED AREAS SHOULD NOT BE UNIFORM IN DEPTH AND INCLUDE HIGHER AREAS FOR ESTABLISHMENT OF HUMMOCK HABITATS. BOUNDARY EXTENTS, LOCATIONS, AND SIZES CAN BE MODIFIED PER DISCRETION OF ENGINEER OF CONSTRUCTION MANAGER ON—SITE. EXCESS MATERIAL SHOULD BE GRADED INTO VALLEY WALLS, UPLAND AREAS, OR LOWER ELEVATION AREAS IN THE FLOODPLAIN PER ENGINEER OR CONSTRUCTION MANAGER ON—SITE.
- 2. WETLAND SOILS HARVESTED ON-SITE SHOULD BE STOCKPILED AND SAVED FOR INCORPORATION INTO MICRO-TOPOGRAPHY AREAS.
- 3. FLOODPLAIN AND WILDLIFE HABITAT (3/D3) SHALL BE RANDOMLY INCORPORATED INTO THE MICRO-TOPOGRAPHY AREA. LOCATIONS OF HABITAT STRUCTURES CAN BE ADJUSTED IN THE FIELD, EQUIPMENT SHALL NOT BE USED IN EXISTING WETLANDS AND ONLY PLACED MANUALLY.
- 4. WETLAND SEED PER SPECIFICATIONS AND LIVE STAKES SHALL BE PLANTED IN MICRO-TOPOGRAPHY AREAS PER TABLES AND SPECIFICATIONS IN



6" MIN. ↓ HORIZONTAL OVERLAP

WETLAND CELL / MICROTOPOGRAPHY

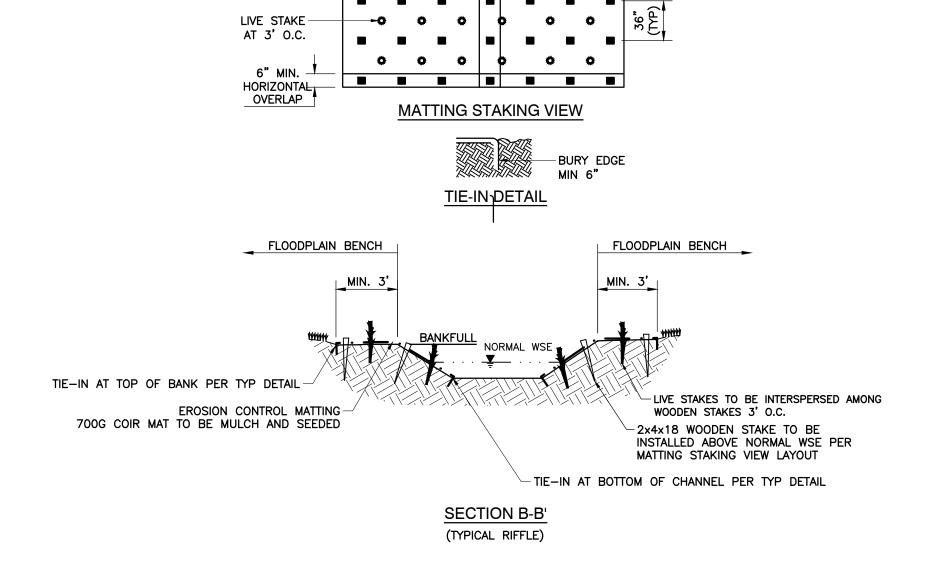


PLAN VIEW

NOTES:

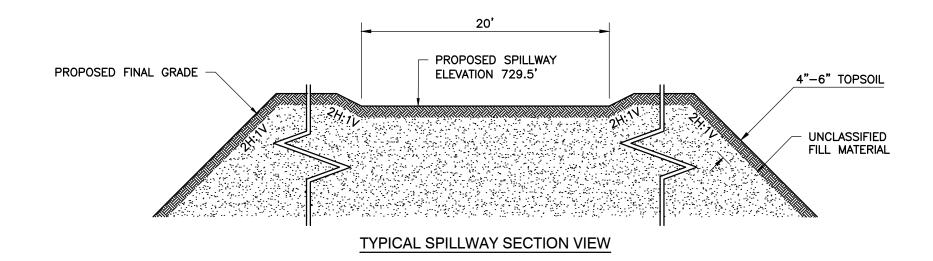
- 1. WOOD SNAG SHALL BE PLACED WITHIN 25 FEET OF THE TOP OF BANK OF THE PROPOSED RESTORATION AREAS.
- 2. WOOD SNAG SHALL BE BURIED TO A DEPTH NO SHALLOWER THAN 1/3 OF THE TOTAL LENGTH OF THE LOG.
- 3. MINIMUM STICK-UP HEIGHT IS 4.0 FEET.
- 4. MINIMUM DIAMETER IS 4 INCHES.
- 5. LOG SHALL BE RELATIVELY STRAIGHT &. RECENTLY HARVESTED.
- 6. ALL MATERIALS ARE TO BE APPROVED BY THE ENGINEER OR ENGINEER'S ON—SITE CONSTRUCTION MANAGER.

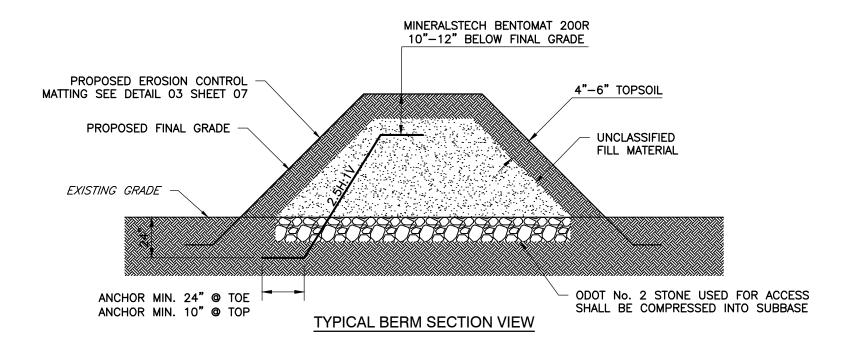
WOOD SNAG OR PERCH

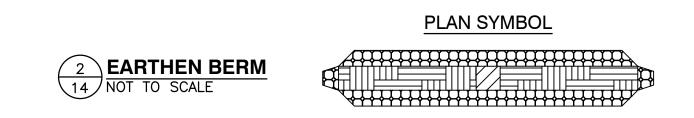


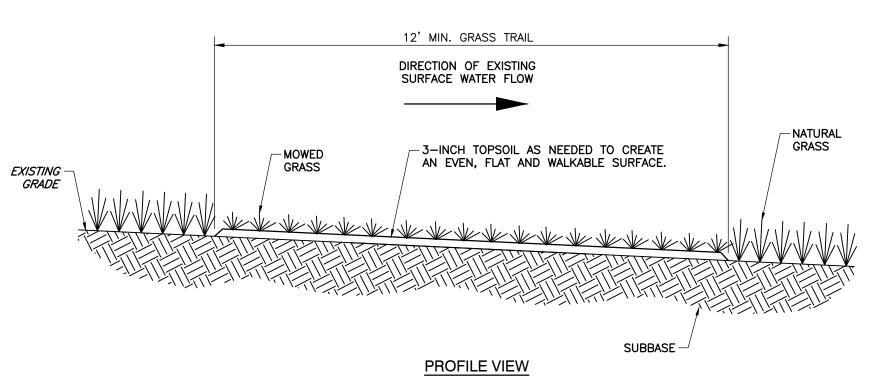
6" MIN. VERTICAL OVERLAP











NOTES:

1. EXISTING VEGETATION TO BE MOWED, DISCED, AND TOP DRESSED WITH TOPSOIL TO CREATE AN EVEN, FLAT AND WALKABLE SURFACE. SEE PLANTING SHEETS FOR SEEDING INFORMATION.

MOWED PATH

14 NOT TO SCALE

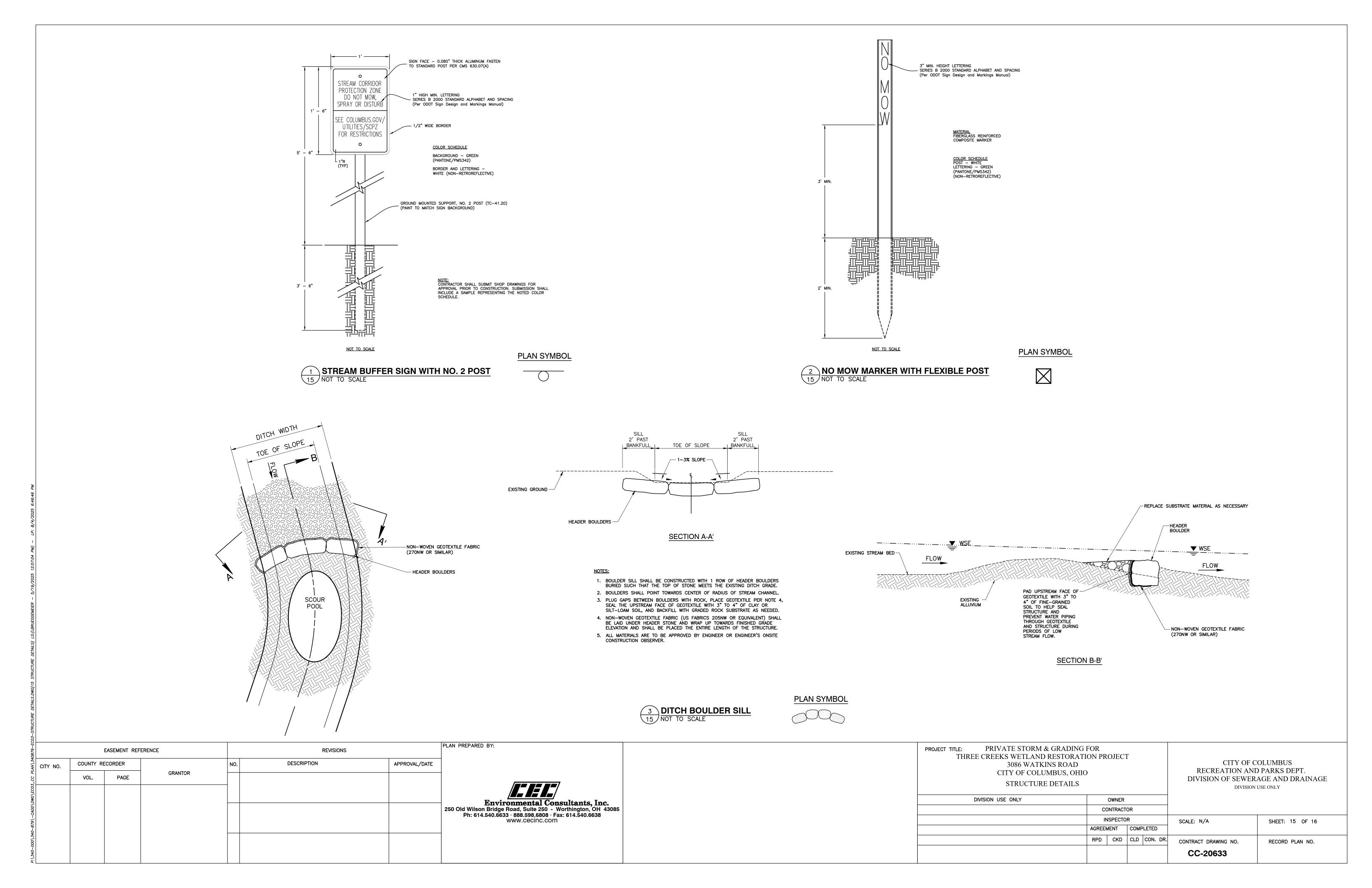
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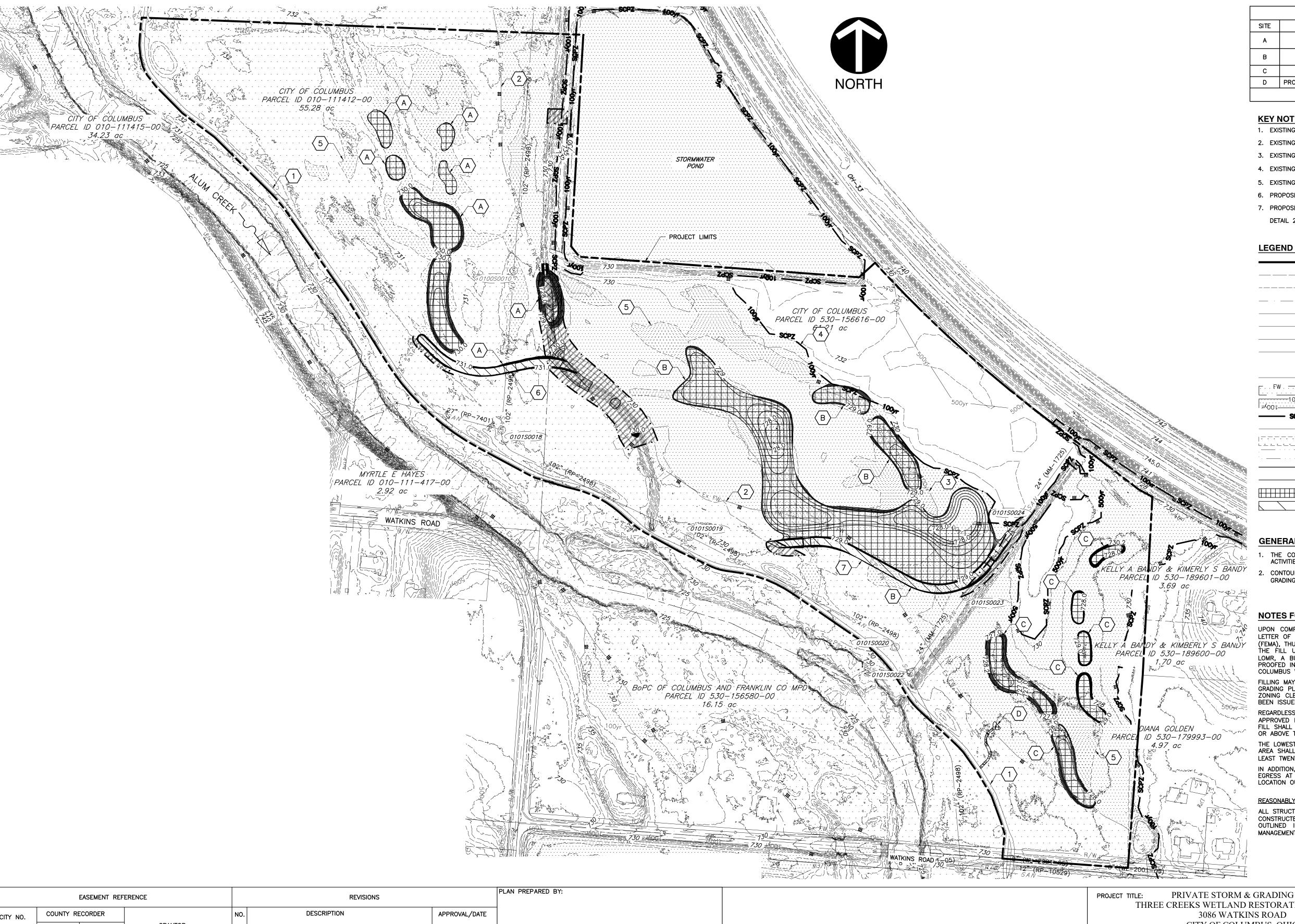
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Environmental Consultants, Inc.
250 Old Wilson Bridge Road, Suite 250 - Worthington, OH 43085
Ph: 614.540.6633 · 888.598.6808 · Fax: 614.540.6638

WWW.Cecinc.com

PROJECT TITLE: PRIVATE STORM & GRADING THREE CREEKS WETLAND RESTORATI 3086 WATKINS ROAD CITY OF COLUMBUS, OHIO STRUCTURE DETAILS	RECREATION ANI DIVISION OF SEWER	COLUMBUS D PARKS DEPT. AGE AND DRAINAGE USE ONLY				
DIVISION USE ONLY	OWNER					
	C	ONTRACT	OR			
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	FLOODPLAIN CUT/FILL QUANTITIES							
SITE	DESCRIPTION	CUT (CY)	FILL (CY)	NET (CY)				
A	PROPOSED WESTERN BERM AND WETLAND GRADING	1970	1356	-614				
В	PROPOSED CENTRAL BERM AND WETLAND GRADING	2935	700	-2235				
С	PROPOSED EASTERN WETLAND GRADING	1199	132	-1067				
D	D PROPOSED ADA COMPLIANT PATH AND OVERLOOK		31	0				
	TOTAL:	6135	2219	-3916				

KEY NOTE ITEMS (#)

1. EXISTING ALUM CREEK MULTI-USE TRAIL TO REMAIN.

- EXISTING FLOODWAY.
- 3. EXISTING 100-YR FLOODPLAIN.
- 4. EXISTING STREAM CORRIDOR PROTECTION ZONE (SCPZ).
- EXISTING WETLAND.
- 6. PROPOSED 500-LF BERM, TOP ELEV 732.0-FT AMSL. SEE SHEET 14, DETAIL 2.
- 7. PROPOSED 820-LF BERM, TOP ELEV 730.0-FT AMSL, SPILLWAY ELEV 729.5-FT AMSL. SEE SHEET 14, DETAIL 2.

LEGEND	
	PROPOSED PROJECT LIMITS
——————————————————————————————————————	EXISTING CONTOUR (MAJOR)
729	EXISTING CONTOUR (MINOR)
	EXISTING ROAD
	EXISTING PAVED PATH
	EXISTING PARCEL BOUNDARY
R/W	EXISTING RIGHT-OF-WAY
SAN	EXISTING UNDERGROUND SEWER LINE
S	EXISTING SANITARY SEWER MANHOLE
	EXISTING UNDERGROUND WATER LINE
FW	EXISTING FLOODWAY (ZONE AE) EXISTING 100-YR FLOODPLAIN (ZONE AE)
100yr100yr 100yr 100yr 100yr	EXISTING 100-YR FLOODPLAIN (ZONE AE)
	EXISTING STREAM CORRIDOR PROTECTION ZONE
500yr	EXISTING 500-YR FLOODPLAIN (ZONE X)
	EXISTING WETLAND
· · · · · · · · · · · ·	EXISTING WATERBODY
730.0	PROPOSED CONTOUR (MAJOR)
<i> 730.2</i>	PROPOSED CONTOUR (MINOR)
	PROPOSED 100-YR FLOODPLAIN CUT
	PROPOSED 100-YR FLOODPLAIN FILL

GENERAL NOTES

- THE CONTRACTOR SHALL ENSURE THAT THERE IS NO NET FILL AT THE CONCLUSION OF CONSTRUCTION ACTIVITIES AND PRIOR TO FINAL COMPLETION OF THE PROJECT.
- 2. CONTOURS FOR EXISTING TOPOGRAPHY ARE REPRESENTED IN 1.0' INTERVALS. CONTOURS FOR PROPOSED GRADING ARE REPRESENTED IN 0.2' INTERVALS FOR MICROTOPOGRAPHY.

NOTES FOR MASS GRADING PLANS NOT GOING TO FEMA

UPON COMPLETION OF THE FILL IN CONJUNCTION WITH THE MASS GRADING PLAN, AN APPLICATION FOR A LETTER OF MAP REVISION (LOMR) WILL NOT BE SUBMITTED TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), THUS ANY FUTURE SUBMITTAL TO FEMA WILL FIRST REQUIRE A NEW SITE GRADING PLAN WITH PROOF AS THE FILL USED AND PROPER PLACEMENT, INCLUDING COMPACTION. PRIOR TO THE EFFECTIVE DATE OF THE LOMR, A BUILDING CONSTRUCTED WITHIN THE DESIGNATED FILL AREA WILL BE ELEVATED AND/OR DRY FLOOR PROOFED IN ACCORDANCE WITH THE REQUIREMENTS OF C. C. CHAPTER 1150, FLOODPLAIN MANÁGEMENT OF THE COLUMBUS WATER, SEWER AND ELECTRICITY CODE.

FILLING MAY BE ALLOWED IN THE FLOODWAY FRINGE ONLY IF ASSOCIATED WITH A SITE GRADING PLAN. THE SITE GRADING PLAN SHALL BE FULLY DETAILED AND SUBMITTED AS PART OF AN APPLICATION FOR A CERTIFICATE OF ZONING CLEARANCE. FILL SHALL NOT BE PLACED UNTIL AFTER THE CERTIFICATE OF ZONING CLEARANCE HAS BEEN ISSUED FOR GRADING AND FILLING.

REGARDLESS OF ANY DETERMINATION ISSUED BY FEMA TO REMOVE AN AREA FILLED AS PERMITTED AND APPROVED FROM THE DESIGNATED SPECIAL FLOOD HAZARD AREA (SFHA), DEVELOPMENT WITHIN THAT AREA OF FILL SHALL BE CONSTRUCTED WITH THE LOWEST FLOOR LEVEL, EXCLUDING A BASEMENT OR CRAWL SPACE, AT OR ABOVE THE FLOOD PROTECTION ELEVATION.

THE LOWEST GRADE ADJACENT TO A BUILDING OR STRUCTURE TO BE CONSTRUCTED WITHIN THE DESIGNATED FILL AREA SHALL BE AT OR ABOVE THE FLOOD PROTECTION ELEVATION, WITH THAT GRADE ELEVATION TO EXTEND AT LEAST TWENTY (20) FEET FROM THE PROPOSED BUILDING TOWARDS THE FLOODWAY OR FLOODING SOURCE.

IN ADDITION, A RESIDENTIAL DWELLING WITHIN THE DESIGNATED FILL AREA MUST HAVE A MEANS OF INGRESS AND EGRESS AT OR ABOVE THE BASE FLOOD ELEVATION THAT EXTENDS CONTINUOUSLY FROM THE DWELLING TO A LOCATION OUTSIDE THE SPECIAL FLOOD HAZARD AREA WITHIN THE SUBJECT SITE.

REASONABLY SAFE FROM FLOODING

ALL STRUCTURES ASSOCIATED WITH FUTURE DEVELOPMENT WITHIN THE AREA OF THE FLOODPLAIN FILL SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD OF BEING "REASONABLY SAFE FROM FLOODING", AS OUTLINED IN TECHNICAL BULLETIN 10-01, DATED MAY 2001, PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) OR SUCCESSOR DOCUMENTS.

> SCALE IN FEET 150

EASEMENT REFERENCE			REVISIONS		PLAN PREPARED BY:		PROJECT TITLE: PRIVATE STORM & GRADING FOR THREE CREEKS WETLAND RESTORATION PROJECT				
CITY NO.	COUNTY RE	ECORDER	GRANTOR	NO.	DESCRIPTION	APPROVAL/DATE		3086 WATKINS RECITY OF COLUMBUS	CITY OF COLUMBUS RECREATION AND PARKS DEPT.		
	VOL.	PAGE	GRANTOR					FLOODPLAIN GRADII		DIVISION OF SEWERA	GE AND DRAINAGE
							Environmental Consultants, Inc.	DIVISION USE ONLY	OWNER		
							250 Old Wilson Bridge Road, Suite 250 - Worthington, OH 43085 Ph: 614.540.6633 · 888.598,6808 · Fax: 614.540.6638		CONTRACTOR		
							www.cecinc.com		INSPECTOR	SCALE: 1"=150'	SHEET: 16 OF 16
									AGREEMENT COMPLETED		
									RPD CKD CLD CON. [OR. CONTRACT DRAWING NO.	RECORD PLAN NO.
										CC-20633	

FINAL SITE COMPLIANCE PLAN

THREE CREEKS WETLAND RESTORATION PROJECT

CITY OF COLUMBUS, FRANKLIN COUNTY, OHIO

SANITARY SEWER NOTE

CONNECTION TO SANITARY SEWER CANNOT BE MADE WITHOUT OBTAINING A PERMIT FROM SEWER PERMIT OFFICE AT 11 NORTH FRONT STREET, 1ST FLOOR (614) 645-7490

<u>OR DIVISION OF POWER</u>

- 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 OHIO 811 (PREVIOUSLY OUPS) AT 811 OR 1-800- 362-2764 FORTY-EIGHT HOURS PRIOR TO CONDUCTING ANY ACTIVITY WITHIN THE
- ANY PROJECT, BOTH PUBLIC OR PRIVATE, WITH IMPACTS REQUIRING RELOCATION, SUPPORT, PROTECTION, OR ANY OTHER ACTIVITY CONCERNED WITH THE CITY'S ELECTRICAL FACILITIES IN THE CONSTRUCTION AREA IS TO
- UNLESS PREVIOUSLY AUTHORIZED, DOP SHALL MAKE ALL FINAL CONNECTIONS TO DOP'S EXISTING ELECTRICAL
- NO PERSON SHALL WORK ON DOP FACILITIES UNLESS THEY HAVE COMPLETED CONTRACTOR SAFETY ORIENTATION WITH DOP. ANY PERSON WORKING ON DOP FACILITIES ON LIVE CONDUCTORS OR CONDUCTORS THAT MAY BECOME LIVE SHALL COMPLY WITH DOP'S CONDUCTOR SAFETY POLICY (TDMIS-1603), HOLD CARD SYSTEM (TDMIS-1604) AND STREET LIGHT LOCK OUT TAG OUT PROCEDURE (MIS-1). PRIOR TO BEGINNING WORK ON DOP FACILITIES, EACH PERSON SHALL CONTACT DOP'S DISPATCH OFFICE AT 614-645-7627 AND PROVIDE THEIR NAME, PHONE NUMBER, LOCATION, DESCRIPTION OF WORK AND CIRCUIT NUMBER. AT COMPLETION OF WORK, EACH PERSON SHALL NOTIFY DOP'S DISPATCH OFFICE.
- THE CONTRACTOR SHALL USE MATERIAL AND MAKE REPAIRS TO A CITY OF COLUMBUS STREET LIGHTING SYSTEM BY FOLLOWING DOP'S "MATERIAL AND INSTALLATION SPECIFICATIONS" (MIS) AND THE CITY OF COLUMBUS "CONSTRUCTION AND MATERIAL SPECIFICATIONS" (CMSC). ANY NEW OR RE-INSTALLED STREET LIGHT SYSTEM SHALL REQUIRE TESTING AS REFERRED TO IN SECTION 1001.18 OF THE CMSC MANUAL. CONTRACTORS WORKING ON STREET LIGHTING SHALL CONFORM TO DOP'S EXISTING <u>STREET LIGHT LOCKOUT/TAGOUT (LOTO)</u> <u>PROCEDURE</u>, MIS-1, COPIES OF WHICH ARE AVAILABLE FROM DOP AND ON THE CITY WEBSITE.
- EMERGENCIES: 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.

THE CITY OF COLUMBUS SHALL BE GRANTED PERPETUAL REASONABLE ACCESS THERETO, IN, ON, OVER, UNDER ACROSS, ABOVE, WITHIN, AND THROUGH THE PARK EASEMENT FOR CONSERVATION PURPOSES RELATED TO THE PROPOSED WETLAND AND UPLAND HABITAT AREA. THIS SHALL INCLUDE BUT NOT BE LIMITED TO STORMWATER STORAGE AND DRAINAGE, EROSION PROTECTION, FLOOD STORAGE, WATER QUALITY PROTECTION, AND PRESERVATION AS OPEN, NATURAL GREEN SPACE OR WOODLAND.

FEMA FLOODPLAIN DATA

THE WESTERN AND SOUTHERN PORTIONS OF THIS PROPERTY ARE LOCATED WITHIN REGULATORY FLOODWAY ZONE "AE" OF THE FIRM FLOOD INSURANCE RATE MAPS, COMMUNITY PANEL NOS. 39049C0341K AND 39049C0343K, WHICH BEAR AN EFFECTIVE DATE OF JUNE 17, 2008. THE CENTRAL AND EASTERN PORTIONS OF THIS PROPERTY ARE LOCATED WITHIN THE SPECIAL FLOOD HAZARD ZONE "AE" OF THE FIRM FLOOD INSURANCE RATE MAPS. THE NORTHEASTERN PORTION OF THIS PROPERTY IS LOCATED WITHIN 0.2% ANNUAL CHANCE FLOOD HAZARD AREA OF THE FIRM FLOOD INSURANCE RATE MAPS. ACCORDING TO FEMA PROVIDED CROSS-SECTIONS, THE BASE FLOOD ELEVATIONS (BFE) RANGE FROM 729.9 FT ON THE DOWNSTREAM LIMIT OF THE PROPERTY TO 733.6 FT ON THE UPSTREAM LIMIT OF THE PROPERTY. THE AVERAGE BFE OF THE PROPERTY IS $731.8\,$ FT.

STREAM CORRIDOR PROTECTION ZONE NOTE

THE SCPZ AS SHOWN ON THIS PLAN SET IS SET TO THE FEMA DESIGNATED 100-YEAR FLOODWAY AS DEFINED IN THE CITY OF COLUMBUS STORMWATER DRAINAGE MANUAL. CURRENT EDITION, AND INCLUDES EXISTING WETLAND AREAS AS DELINEATED BY CEC ON JUNE 2024. MODIFICATIONS TO THIS BOUNDARY WILL BE REQUIRED FOR THIS PROJECT TO INCLUDE PROPOSED WETLAND FOOTPRINT. BOUNDARY EXTENTS SHALL BE REVIEWED AND APPROVED BY BUILDING & ZONING.

WORK WITHIN THE 100-YR FLOODPLAIN

WORK WITHIN THE 100-YR FLOODPLAIN WILL RESULT IN 6,135 CY OF CUT AND 2,219 CY OF FILL, WITH A NET CUT OF 3,916 CY. SEE CC PLAN NO. CC-20633.

EXPIRATION NOTE

DATE OF EXPIRATION: PLAN IS VALID FOR ONE (1) YEAR FROM DATE OF APPROVAL.

ID 530-148723-00 **VICINITY MAP PROJECT LIMITS** MYRTLE È HAYES PARCEL ID 010-111-417-00 2.92 ac PARCEL ID 530—189601—00 = := := := := WATKINS ROAD .A. BANDY & KIMBERLY S BANDY PARCEL ID 530-189600-00 BOPC OF COLUMBUS AND FRANKLIN' GO MPD PARCEL ID 530-156580-00 PARCEL NO 530-179993-00 16.15 ac WATKINS ROAD (60-FT R/W) CITY OF COLUMBUS PARCEL ID 530-156579-00 367.38 ac

PROJECT INFORMATION

SCOPE OF WORK

THE PROPOSED PROJECT WILL PROVIDE HABITAT RESTORATION AND FLOODPLAIN AND WATER QUALITY ENHANCEMENT THROUGH THE CREATION AND RESTORATION OF WETLANDS AT THE

PARCEL DATA

STREET ADDRESS: REFUGEE ROAD COLUMBUS, OHIO 43207 010-111412-00 PARCEL SIZE: 55.28 ACRES+/-ZONING APPLICATION NUMBER: GENERAL ZONING CATEGORY: RESIDENTIAL HEIGHT DISTRICT: 3086 WATKINS ROAD STREET ADDRESS:

COLUMBUS, OHIO 43207 PARCEL: 530-156616-00 PARCEL SIZE: 61.21 ACRES+/-ZONING APPLICATION NUMBER: ANNEX3734 GENERAL ZONING CATEGORY: RESIDENTIAL

HEIGHT DISTRICT: ZONE SETBACKS: ZONING: SIDE: 25' MIN. 50' MIN.

SITE DATA

SITE TOTAL ACREAGE: 66.47 AC TOTAL DISTURBED ACREAGE: 35.24 AC PRE DEVELOPED IMPERVIOUS AREA: 0.95 AC PRE DEVELOPED % IMPERVIOUS AREA: 1.43% POST DEVELOPED IMPERVIOUS AREA: 0.98 AC POST DEVELOPED % IMPERVIOUS AREA: 1.47% TOTAL IMPERVIOUS AREA ADDED: 1,240 SF **CANOPY IMPACTED:** 1.61 AC* 48.94 AC CANOPY TO BE RESTORED: *SEE PUBLIC TREE PLAN FOR INDIVIDUAL TREE REMOVAL.

REFUSE DATA CONTAINER TYPE

THE PROPOSED PROJECT WILL COMPLY WITH SECTIONS 3312.15 & 3321.01 DUMPSTER AREA;

DUMPSTER (PRIVATE)

	SHEET INDEX TABLE
SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	EXISTING SITE PLAN
3	PROPOSED SITE PLAN
4,117EOF	PROPOSED ADA PATH AND OVERLOOK PLAN
JESSICA LOC E-84224	TRACKING NUMBER:
E-84224 PEOISTER REGISTERED ENGINEER	
REGISTERED ENGINEER	NUMBER DATE

THIS IS TO CERTIFY THAT GOOD ENGINEERING PRACTICES HAVE BEEN UTILIZED IN THE DESIGN OF THIS PROJECT AND THAT ALL MINIMUM STANDARDS AS DELINEATED BY THE CITY OF COLUMBUS STANDARDS HAVE BEEN MET, INCLUDING THOSE STANDARDS GREATER THAN MINIMUM WHERE, IN MY OPINION, THEY ARE NEEDED TO PROTECT THE SAFETY OF THE PUBLIC. THE SITE PLAN IS VALID FOR ONE (1) YEAR PERIOD FROM DATE OF APPROVAL, UNLESS A BUILDING PERMIT HAS BEEN OBTAINED.

FINAL SITE COMPLIANCE PLAN # 25345-00398									
-D									
ט.									
ED									

REFERENCES

LEXISTING TOPOGRAPHIC SURVEY COLLECTED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. IN JUNE 24, 2024 AND SUPPLEMENTED WITH OGRIP LIDAR DATA COLLECTED IN MAY 2024. ELEVATIONS ARE BASED ON A NGS OPUS-S SOLUTION USING O.D.O.T. CORS NETWORK, OHIO SOUTH ZONE NAD 83 (2011 ADJUSTMENT), NAVD 88 (GEOID 18) DATUM.

2. EXISTING UTILITIES OUTSIDE THE PROJECT AREA BASED ON AVAILABLE CITY OF COLUMBUS GIS DATA.

3. PARCELS, WATERWAY EXTENTS, TRAILS, ROADWAYS, ETC ARE BASED ON CITY OF COLUMBUS GIS DATA COLLECTED IN 2016. 4. FLOODWAY AND FLOODPLAIN BOUNDARIES BASED ON FEMA MSC COLLECTED IN JULY 2024.

ENGINEER/SURVEYOR

EMAIL: JLOOPER@CECINC.COM

CIVIL & ENVIRONMENTAL CONSULTANTS, INC. 250 W. OLD WILSON BRIDGE ROAD, SUITE 250 WORTHINGTON, OHIO 43085 CONTACT: JESSICA LOOPER, PE TITLE: PROJECT MANAGER PHONE: (614) 310-0175

APPLICANT

CITY OF COLUMBUS RECREATION AND PARKS DEPARTMENT 1111 EAST BROAD STREET COLUMBUS, OH 43205 CONTACT: KELLY MESSER, PE TITLE: PROJECT MANAGER PHONE: (614) 816-1875

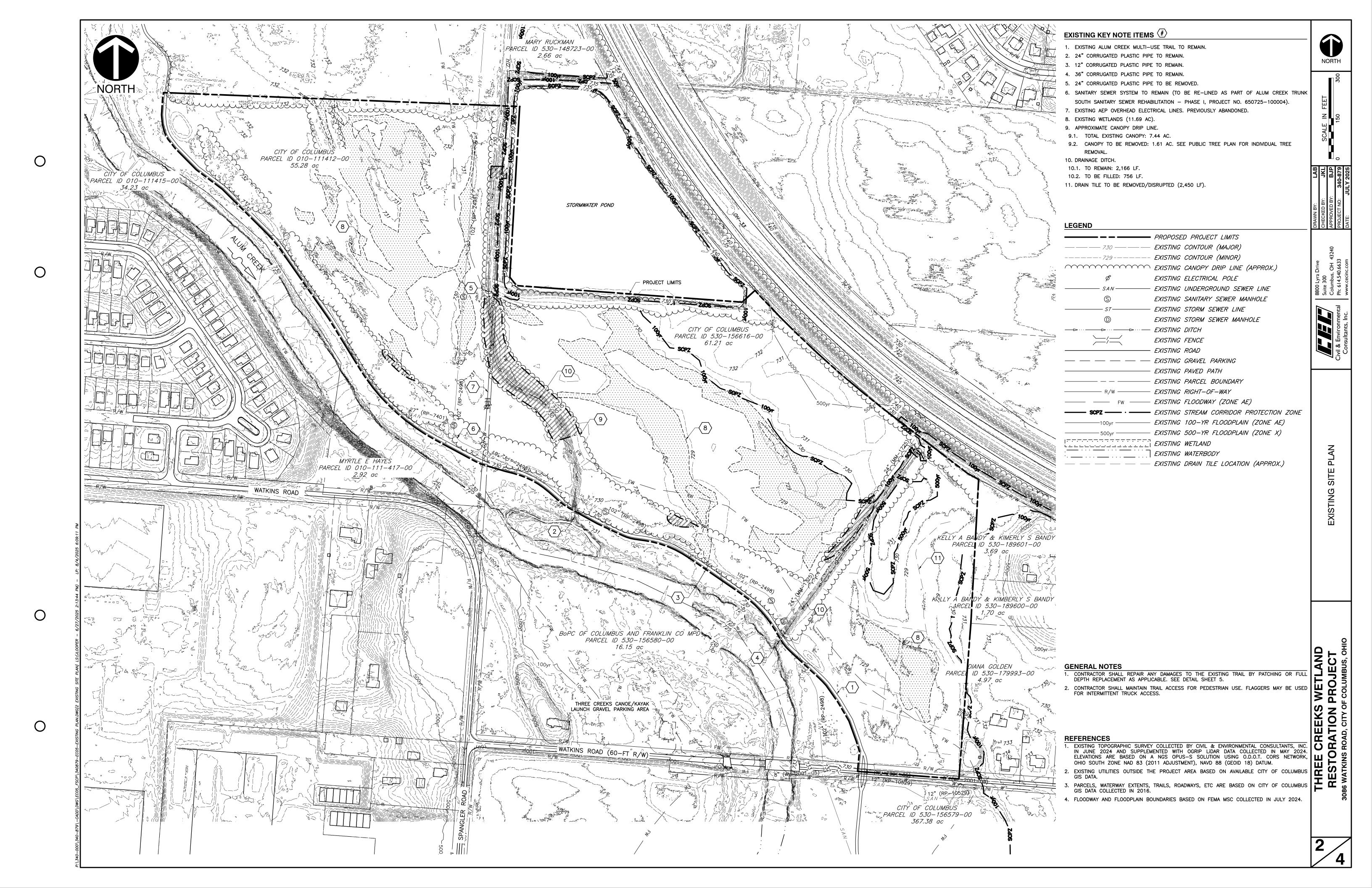
EMAIL: KNMESSER@COLUMBUS.GOV

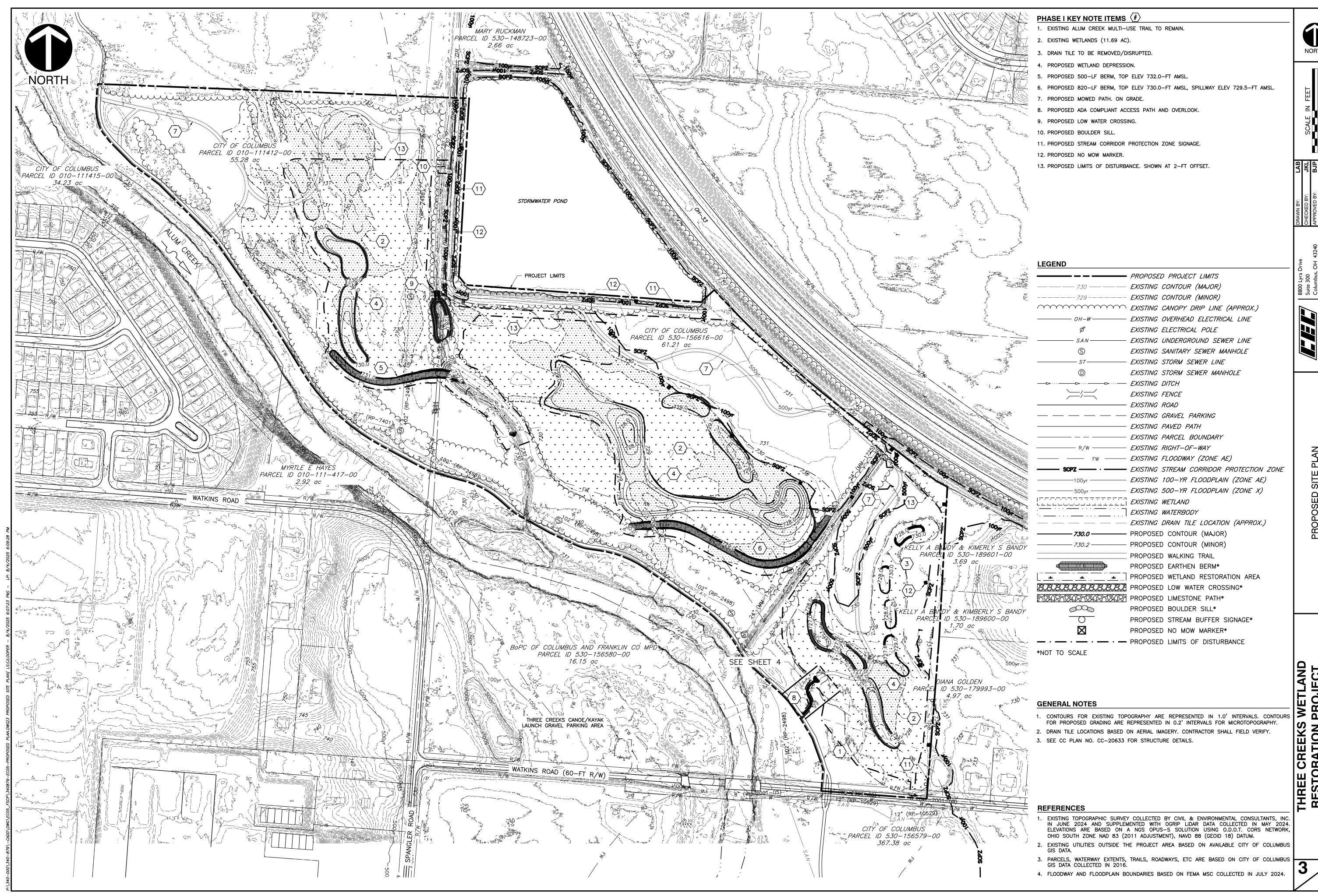
INDEX MAP SCALE IN FEET

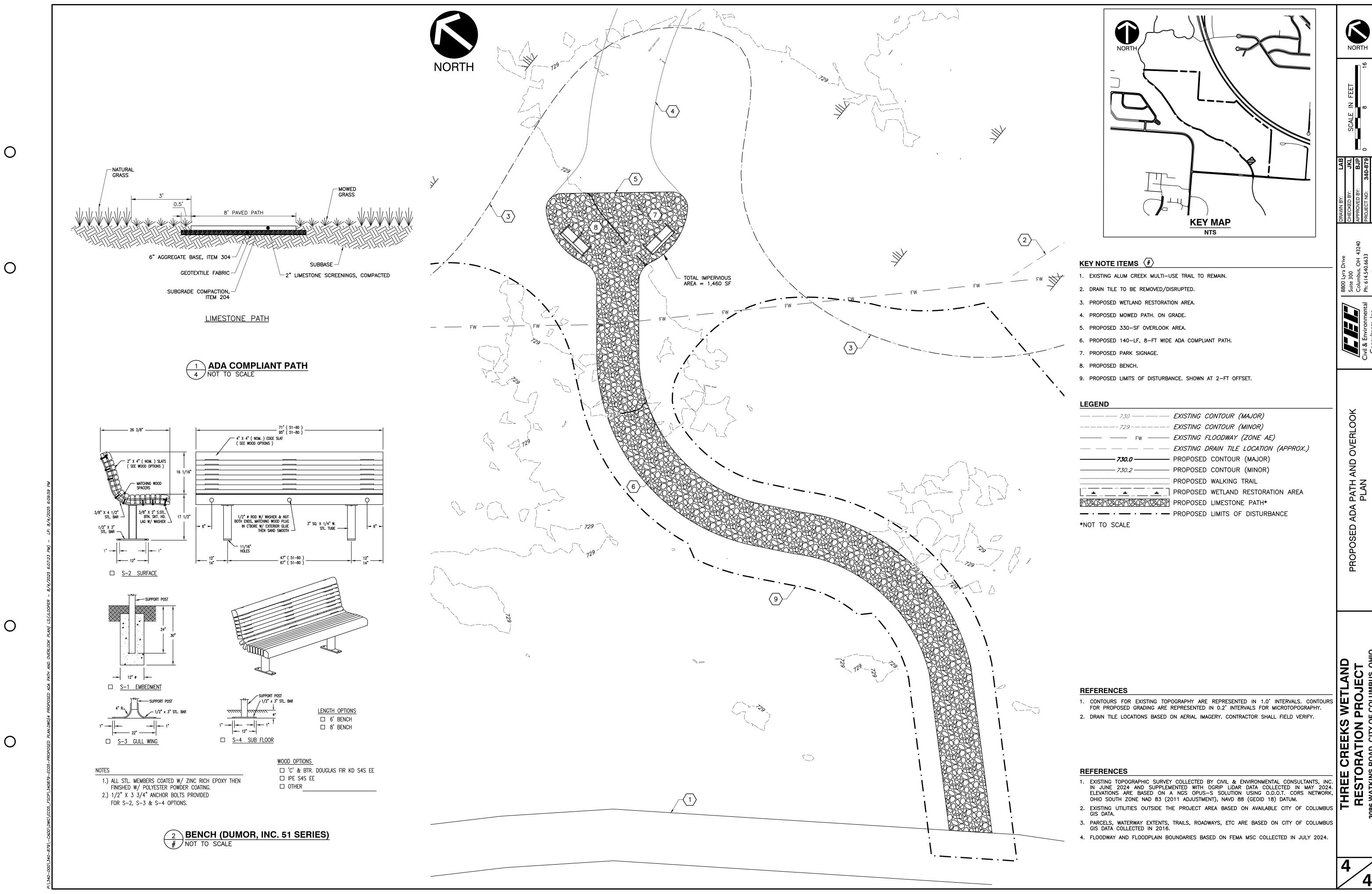
SITE ADDRESS 3086 WATKINS ROAD

COLUMBUS, OHIO 43207









THREE CREEKS WETLAND RESTORATION PROJECT

CITY OF COLUMBUS, FRANKLIN COUNTY, OHIO

2025

PROJECT INFORMATION

SCOPE OF WORK

THE PROPOSED PROJECT WILL PROVIDE HABITAT RESTORATION AND FLOODPLAIN AND WATER QUALITY ENHANCEMENT THROUGH THE CREATION AND RESTORATION OF WETLANDS AT THE THREE CREEKS METRO PARK.

PARCEL DATA

HEIGHT DISTRICT:

HEIGHT DISTRICT:

PARCEL:

PARCEL:

PARCEL SIZE:

ZONING APPLICATION NUMBER:

GENERAL ZONING CATEGORY:

REFUGEE ROAD

COLUMBUS, OHIO 432

910-111412-00

55.28 ACRES+/
788

RRR

RRR

RESIDENTIAL

H - 35

RESIDENTIAL

H - 35

STREET ADDRESS: 3086 WATKINS ROAD

PARCEL: 530-156616-00

PARCEL SIZE: 61.21 ACRES+/
ZONING APPLICATION NUMBER: ANNEX3734

ZONING: R1

ZONE SETBACKS:

ZONING: 50' |
SIDE: 25' |
REAR: 50' |

REFUSE DATA

CONTAINER TYPE DUMPSTER (PRIVATE)

NOTE:

NOTE:
THE PROPOSED PROJECT WILL COMPLY WITH SECTIONS 3312.15 & 3321.01 DUMPSTER AREA; AND3321.05 VISION CLEARANCE.

51	ΙĖ	DA	ΙΑ	IABI	LE

TOTAL SITE ACREAGE:

TOTAL DISTURBED ACREAGE:

DISTURBED IMPERVIOUS AREA:

DISTURBANCE WITHIN R/W:

PRE DEVELOPED IMPERVIOUS SITE AREA:

POST DEVELOPED IMPERVIOUS SITE AREA:

POST DEVELOPED % IMPERVIOUS SITE AREA:

NET CHANGE IN IMPERVIOUS SITE AREA:

1,460 SF

WORK WITHIN THE 100-YR FLOODPLAIN

WORK WITHIN THE 100-YR FLOODPLAIN WILL RESULT IN 6,135 CY OF CUT AND 2,219 CY OF FILL, WITH A NET CUT OF 3,916 CY. THE CUT AND FILL VOLUMES ARE SHOWN WITHIN THE TABLE BELOW, AND DETAILS OF HOW THESE VOLUMES WERE CALCULATED CAN BE FOUND ON SHEET 16.

FLOODPLAIN	N CUT/FILL	QUANTITIES
CUT (CY)	FILL (CY)	NET (CY)
6135	2219	-3916

JESSICA LOOPER

OHIO REGISTRATION NO. 84224

OWNER/DEVELOPER

CITY OF COLUMBUS
RECREATION AND PARKS DEPARTMENT
1111 EAST BROAD STREET
COLUMBUS, OH 43205
CONTACT: KELLY MESSER, PE
TITLE: PROJECT MANAGER
PHONE: (614) 816-1875
EMAIL: KNMESSER@COLUMBUS.GOV

ENGINEER/SURVEYOR

CIVIL & ENVIRONMENTAL CONSULTANTS, INC. 8800 LYRA DRIVE, SUITE 300 COLUMBUS, OHIO 43240 CONTACT: JESSICA LOOPER, PE TITLE: PROJECT MANAGER PHONE: (614) 310-0175 EMAIL: JLOOPER@CECINC.COM

ARBORIST

SCALE IN FEET

CIVIL & ENVIRONMENTAL CONSULTANTS, INC. 8800 LYRA DRIVE, SUITE 300 COLUMBUS, OHIO 43240 BRADLEY PETRU, MS, JPWS, ISA—CA MA—5819A TITLE: PRINCIPAL PHONE: (614) 310—0175 EMAIL: BPETRU@CECINC.COM

WATKINS ROAD

BENCHMARKS (NAVD88) +

THE NORTHING AND EASTING SHOWN ARE APPROXIMATE AND ONLY INTENDED TO PROVIDE RECOVERY OF THE BENCHMARK. THESE COORDINATES ARE NOT INTENDED TO BE USED FOR THE HORIZONTAL CONTROL OF THE PROJECT. THE HORIZONTAL CONTROL FOR THE PROJECT SHALL BE CONTROLLED BY THE MONUMENTS FOUND OR SET BY A PROFESSIONAL SURVEYOR.

EXISTING TOPOGRAPHIC SURVEY COLLECTED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. IN JUNE 2024 AND SUPPLEMENTED WITH OGRIP LIDAR DATA COLLECTED IN MAY 2024. ELEVATIONS WERE DETERMINED USING STATIC GPS OBSERVATIONS PERFORMED ON JUNE 24 OF THE YEAR 2024 AS BASED ON A NGS OPUS—S SOLUTION USING O.D.O.T. CORS NETWORK, OHIO SOUTH ZONE 83 (GEOID 18) DATUM.

BENCHMARK 1:

TOP OF A 5/8" SOLID REBAR THIRTY INCHES IN LENGTH WITH A YELLOW PLASTIC CAP BEARING THE INITIALS "CEC INC.". BASED ON AN NGS OPUS-S SOLUTION USING O.D.O.T. CORS NETWORK, OHIO SOUTH ZONE NAD 83 (2011 ADJUSTMENT) NAVD 88 (GEOID 18) DATUM.

ELEVATION: 730.35

SHEET INDEX TABLE

SHEET TITLE

COVER SHEET

GENERAL NOTES

TREE REMOVAL OVERVIEW PLAN

TREE REMOVAL AREA PLAN

TREE REMOVAL AREA PLAN

EXISTING PUBLIC TREE TABLE
EXISTING PUBLIC TREE TABLE
EXISTING PUBLIC TREE TABLE

EXISTING PUBLIC TREE TABLE

PLANTING AND MITIGATION PLAN

LANDSCAPE PLAN

PLANTING DETAILS

PLANTING TABLES

NCHMARK 2:

TOP OF A 5/8" SOLID REBAR THIRTY INCHES IN LENGTH WITH A YELLOW PLASTIC CAP BEARING THE INITIALS "CEC INC.". BASED ON AN NGS OPUS—S SOLUTION USING O.D.O.T. CORS NETWORK, OHIO SOUTH ZONE NAD 83 (2011 ADJUSTMENT) NAVD 88 (GEOID 18) DATUM.

BENCHMARK 3:

TOP OF A 5/8" SOLID REBAR THIRTY INCHES IN LENGTH WITH A YELLOW PLASTIC CAP BEARING THE INITIALS "CEC INC.". BASED ON AN NGS OPUS—S SOLUTION USING O.D.O.T. CORS NETWORK, OHIO SOUTH ZONE NAD 83 (2011 ADJUSTMENT) NAVD 88 (GEOID 18) DATUM.

ELEVATION: 728.73

BENCHMARK 51: CHISELED "X" ON THE WESTERN EDGE OF THE RIM OF MANHOLE ID 0100S0010 LOCATED SOUTHWEST OF THE

CHISELED "X" ON THE WESTERN EDGE OF THE RIM OF MANHOLE ID 0100S0010 LOCATED SOUTHWEST OF THE EXISTING STORMWATER POND..

ELEVATION: 733.59

REFERENCES

1. EXISTING TOPOGRAPHIC SURVEY COLLECTED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. IN JUNE 24, 2024 AND SUPPLEMENTED WITH OGRIP LIDAR DATA COLLECTED IN MAY 2024. ELEVATIONS ARE BASED ON A NGS OPUS-S SOLUTION USING O.D.O.T. CORS NETWORK, OHIO SOUTH ZONE NAD 83 (2011 ADJUSTMENT), NAVD 88 (GEOID 18)

SHEET NUMBER

2

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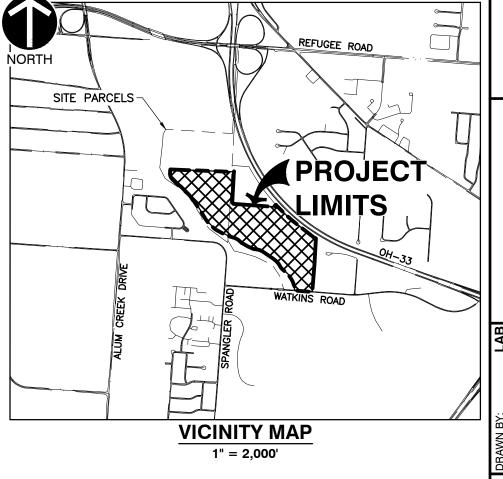
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13

2. EXISTING UTILITIES OUTSIDE THE PROJECT AREA BASED ON AVAILABLE CITY OF COLUMBUS GIS DATA.

3. PARCELS, WATERWAY EXTENTS, TRAILS, ROADWAYS, ETC ARE BASED ON CITY OF COLUMBUS GIS DATA COLLECTED IN 2016.

4. FLOODWAY AND FLOODPLAIN BOUNDARIES BASED ON FEMA MSC COLLECTED IN JULY 2024.





8600 Lyra Drive
Suite 300
Columbus, OH 43240
Ph: 614.540.6633
www.cecinc.com

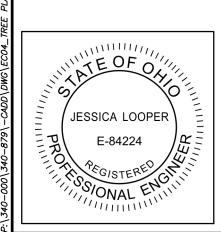


Civil & Con

/ER SHEET

HREE CREEKS WETLAI
RESTORATION PROJECTOR BOAD CITY OF COLUMBIES

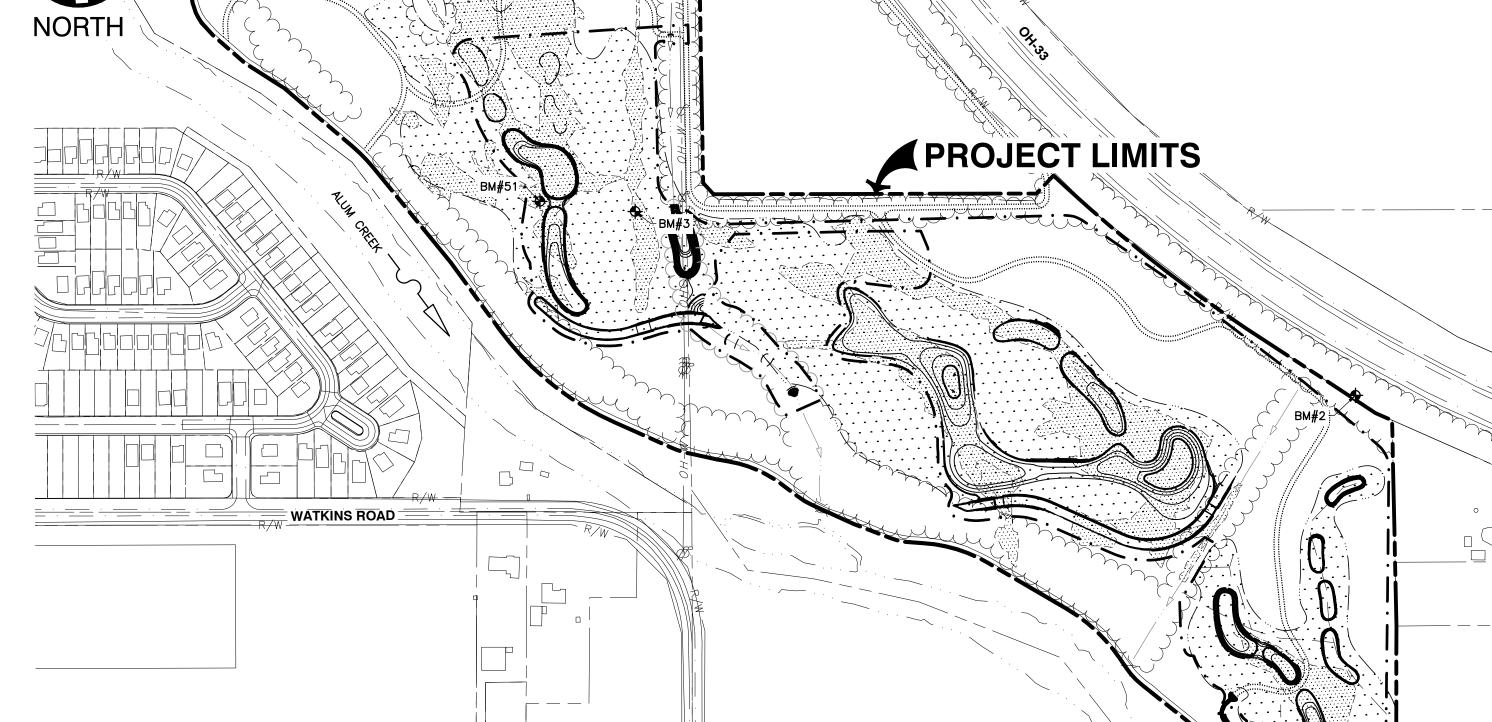
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PRELIMINARY SITE COMPLIANCE PLAN: 24601-00154
STORM CC PLAN: CC-20633
WATER SERVICE PLAN: N/A
FINAL SITE COMPLIANCE PLAN: TBD

DATE: 2025-08-04





PUBLIC TREE PROTECTION NOTE

ALL PUBLIC TREES AND THE GROUND IN THE CRITICAL ROOT ZONE, WHETHER SHOWN OR NOT SHOWN ON THE PLANS, ARE TO BE PROTECTED UNLESS A PERMIT TO REMOVE IS GIVEN BY COLUMBUS RECREATION & PARKS (CRPD) FORESTRY. THE CONTRACTOR SHALL PROTECT TREES NEAR OR ADJACENT TO THE WORK AREA TO AVOID DAMAGE TO ALL TREES THAT ARE TO REMAIN. HEAVY EQUIPMENT WILL NOT BE ALLOWED TO COMPACT THE SOIL OVER THE CRITICAL ROOT ZONE OF EXISTING PUBLIC TREES. RESTRICTED EQUIPMENT ACCESS ROUTES SHALL BE COORDINATED WITH CRPD FORESTRY AT FORESTRY@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. CONSTRUCTION MATERIALS, EXCAVATION DEBRIS, FUEL, EQUIPMENT, OR VEHICLES ARE NOT TO BE STOCKPILED, STORED, DUMPED. OR PARKED WITHIN THE CRITICAL ROOT ZONE 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 CRPD TREE TECHNICAL MANUAL. IF THERE IS A QUESTION REGARDING TREE PROTECTION NEEDS, THE CONTRACTOR MUST CONTACT THE CITY FORESTRY SECTION AT FORESTRY@COLUMBUS.GOV.

PUBLIC TREE IMPACT NOTE

ANY WORK ON OR WITHIN THE CRITICAL ROOT ZONE OF A PUBLIC TREE IS CONSIDERED AN IMPACT TO THE PUBLIC TREE. A PUBLIC TREE PLAN AND PERMIT FROM COLUMBUS RECREATION & PARKS FORESTRY IS REQUIRED FOR ANY PLAN WITH PUBLIC TREES IN THE WORK LIMITS. THE PUBLIC TREE PLAN SHALL DENOTE ALL PUBLIC TREES IN THE PROJECT'S WORK LIMITS. TREE INFORMATION SHALL CONFORM TO THE COLUMBUS TREE TECHNICAL MANUAL REQUIREMENTS AND BE PROVIDED BY A NATURAL RESOURCE PROFESSIONAL. FAILURE TO CONTACT THE CITY FORESTRY REPRESENTATIVE IN ADVANCE OF CONSTRUCTION WILL RESULT IN THE CONTRACTOR REIMBURSING FORESTRY FOR THE COST OF ANY AND ALL DAMAGE TO PUBLIC TREES.

PUBLIC TREE REMOVAL AND MITIGATION NOTE

NO PUBLIC TREE REMOVAL SHALL BE ATTEMPTED BY CONSTRUCTION PERSONNEL OR EQUIPMENT, ONLY UNDER THE SUPERVISION OF A CERTIFIED ARBORIST. ALL TREES REMOVED SHALL INCLUDE STUMP REMOVAL GROUND TO 18 INCHES; II THE REMOVED TREE IS WITHIN 36" OF A PROTECTED TREE THE STUMP SHALL ONLY BE GROUND TO 2" DEPTH. ALL WOOD DEBRIS ON CITY OF COLUMBUS PROPERTY SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR BY THE END OF EACH WORK DAY. TREES APPROVED FOR REMOVAL BY CRPD FORESTRY SHALL BE MITIGATED IN ACCORDANCE WITH THE COLUMBUS TREE TECHNICAL MANUAL AND COLUMBUS CITY CODES CHAPTER 912.

FORESTRY PERMIT NOTE

ANY WORK ON OR WITHIN THE CRITICAL ROOT ZONE OF A PUBLIC TREE REQUIRES A FORESTRY PERMIT. ALL APPLICABLE 1. PLANTS FEES MUST BE PAID PRIOR TO PERMIT ISSUANCE. REFER TO THE CRPD TREE TECHNICAL MANUAL FOR TREE REMOVAL, PRUNING, PROTECTION, AND MITIGATION STANDARDS.

TO PREVENT THE SPREAD OF OAK WILT, A FUNGAL DISEASE, OAK TREE SHALL ONLY BE PRUNED FROM NOVEMBER 1 TO

COLUMBUS RECREATION AND PARKS DEPARTMENT GREENWAY TRAIL NOTE

ALL ACTIVITIES THAT MAY BE ADJACENT TO, MAY POTENTIALLY DISTURB A COLUMBUS RECREATION & PARKS DEPARTMENT (CRPD) TRAIL, AND/OR HAVE ANY IMPACTS TO NORMAL TRAIL FLOW REQUIRE COORDINATION WITH CRPD'S NON PARK USE PROGRAM AT CRPD_NPUP@COLUMBUS.GOV. ACCESS OR USE OF GREENWAY TRAILS FOR ANY NON-PARK USE IS NOT GRANTED OR IMPLIED UNLESS A NON PARK USE APPLICATION HAS BEEN SUBMITTED, APPROVED, AND HAS A PERMIT ISSUED. ONCE APPROVED, THE CONTRACTOR SHALL CONTACT THE NPUP POINT OF CONTACT THIRTY (30) CALENDAR DAYS PRIOR TO ANY WORK COMMENCING FOR ONSITE COORDINATION, ONSITE MEETING, SIGNAGE, TRAFFIC CONTROL DETOUR PLAN, RESTORATION PLAN, DISTURBANCE AND/OR CLEARING LIMIT REVIEW. THE CONTRACTOR SHALL SUBMIT A VEHICLE/EQUIPMENT TRAFFIC PLAN INCLUDING IDENTIFICATION NUMBERS, TYPE OF VEHICLE/EQUIPMENT, AND WEIGHT OF VEHICLE/EQUIPMENT TO BE USED PRIOR TO THE START OF WORK. ONLY VEHICLES/EQUIPMENT APPROVED BY CRPD IN WRITING SHALL BE PERMITTED ON THE TRAIL. ADDITIONALLY, EXISTING TRAIL CONDITION MUST BE DOCUMENTED THROUGH PICTURES OR VIDEO BEFORE WORK BEGINS. IF THE TRAIL IS DAMAGED BY CONTRACTOR USE THE CONTRACTOR MUST REPAIR THE TRAIL BACK TO CONDITIONS THAT MEET OR EXCEED EXISTING CONDITIONS.

COLUMBUS RECREATION AND PARKS DEPARTMENT STANDARD PLAN NOTE

PRIOR TO SUBMISSION OF FINAL SITE COMPLIANCE PLAN, ANY ENTITY REQUESTING NON-PARK USE/DEVELOPMENT MUST SUBMIT A NON-PARK USE OF PARKLAND (NPUP) APPLICATION TO CRPD PROPERTY MANAGER TINA MOHN AT TMMOHN@COLUMBUS.GOV TO SECURE A PERMIT TO ENTER CRPD PROPERTY. THE CONTRACTOR SHALL CONTACT COLUMBUS RECREATION & PARKS DEPARTMENT'S (CRPD) INSPECTOR, KEITH MAY, AT KAMAY@COLUMBUS.GOV THIRTY (30) CALENDAR DAYS PRIOR TO ANY WORK ON OR NEAR CRPD PROPERTY. THE CONTRACTOR SHALL SUBMIT A WORK SCHEDULE AND COORDINATE ACCESS WITH CRPD INSPECTOR PRIOR TO ANY WORK ON OR NEAR CRPD PROPERTY. SCHEDULED EVENTS BY CRPD SHALL TAKE PRECEDENCE OVER THE CONTRACTOR'S WORK SCHEDULE, AND THE CONTRACTOR SHALL ADJUST WORK SCHEDULE AS NECESSARY. THE CONTRACTOR SHALL NOT ENTER INTO A CRPD PROPERTY NOR STAGE/STORE ANY MATERIALS OR EQUIPMENT OUTSIDE THEIR WORK LIMITS ON CRPD PROPERTY WITHOUT A PERMIT OR ISSUED BY CRPD. THE PERMIT MUST BE POSTED ONSITE AT ALL TIMES. ANY AND ALL CRPD PARK AREAS DISTURBED BY THE CONTRACTOR DURING THE COURSE OF THEIR WORK ACTIVITIES SHALL BE RESTORED TO CONDITIONS THAT MEET OR EXCEED EXISTING CONDITIONS WITHIN THE TIME FRAMES NOTED IN THE APPROVED SCHEDULE AND SHALL BE TO THE SATISFACTION OF CRPD. UNLESS SPECIFIC PERMISSIONS ARE GRANTED BY CRPD, ACCESS TO, FROM, ON, OVER, UNDER, THOUGH, OR ACROSS CRPD PROPERTY IS NOT GRANTED OR IMPLIED. FAILURE TO HAVE A PERMIT IN PLACE THAT IS CONSISTENT WITH CRPD NPUP POLICY WILL RESULT IN DELAY OF FINAL SITE COMPLIANCE APPROVAL SIGNATURE BY RECREATION & PARKS/CITY FORESTER.

GENERAL PLANTING NOTES

- THE PLANTING SHOULD BE COMPLETED ACCORDING TO THE PLAN AND SPECIFICATIONS THAT HAVE BEEN PROVIDED IN THE CONSTRUCTION PACKAGE. ALL SPECIFICATIONS CAN BE MODIFIED AND/OR ADJUSTED DEPENDING ON SITE-SPECIFIC CONDITIONS AND/OR PLANT AVAILABILITY UPON APPROVAL FROM THE PROJECT ENGINEER/ECOLOGIST.
- SIMILAR SUBSTITUTE PLANT SPECIES CAN BE USED IF THE SPECIFIED SPECIES ARE NOT AVAILABLE. SUBSTITUTE SPECIES MUST BE APPROVED BY THE PROJECT ENGINEER/ECOLOGIST.
- PLANTING AND SEEDING OUTSIDE THIS TIME PERIOD MUST BE PRE-APPROVED BY ENGINEER/ECOLOGIST. ADDITIONAL QUANTITY OF WORK (I.E., WATERING, MULCHING) AND PLANT SURVIVAL OF SPECIMENS PLANTED OUTSIDE OF THESE DATES WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- INSTALLER MUST HAVE EXPERIENCE SUCCESSFULLY COMPLETING PLANTING PROJECTS SIMILAR IN SIZE AND COMPLEXITY TO THIS PROJECT. INSTALLER TO MAINTAIN AN EXPERIENCED FULL—TIME SUPERVISOR ON THE PROJECT SITE WHEN PLANTING IS IN PROGRESS THAT SHALL ACT AS THE PRIMARY POINT OF CONTACT.
- PLANT HANDING AND INSTALLATION SHOULD BE PERFORMED BY A CONTRACTOR WITH EXPERIENCE IN LANDSCAPING AND PLANT PROPAGATION FOR WETLAND MITIGATION, REFORESTATION, AND/OR ECOLOGICAL RESTORATION WORK.

- THE SUPPLIER OF ALL SEEDS AND WOODY VEGETATION SHALL CERTIFY THAT ORIGIN OF THE SEEDS FROM WHICH THE PLANTS OR SEEDS WERE PRODUCED IS FROM HARDINESS ZONES 5, 6, OR 7, FROM THE EASTERN OR CENTRAL PORTIONS OF THE U.S., PRIOR TO PLANTING.
- 2. STOCK FURNISHED SHALL BE AT LEAST THE MINIMUM SIZE INDICATED. LARGER STOCK IS ACCEPTABLE AS LONG AS QUALITY AND VARIETY IS MAINTAINED AND DOES NOT PRESENT PROBLEMS WITH THE INSTALLATION PROCESS.
- QUANTITY REQUIREMENTS SHALL BE SATISFIED REGARDLESS OF PLANT STOCK SIZE.

PRODUCT HANDLING, STORAGE, AND DELIVERY

- 1. THE PLANT INSTALLATION CONTRACTOR IS RESPONSIBLE FOR MORTALITY AND REPLACEMENT BETWEEN RECEIVING DELIVERY AND INSTALLATION.
- DELIVERY
- 2.1. ALL PLANT MATERIAL SHALL BE TRANSPORTED AND STORED IN SUCH A WAY TO PREVENT ANY PHYSICAL DAMAGE.
- 3.1. HANDLE ALL PLANT STOCK SO THAT THE ROOTS OR ROOT-BALLS ARE ADEQUATELY PROTECTED FROM BREAKAGE, DIRECT SUN, WARM AIR, AND DRYING WINDS. CONTAINERIZED STOCK SHOULD BE WATERED FREQUENTLY TO KEEP SOIL MOIST. PLANTS WITH DRIED OUT TOPS OR ROOTS SHALL BE REJECTED.
- 3.2. PROTECT BARK, BRANCHES, AND ROOT SYSTEMS FROM SUN SCALD, DRYING, SWEATING, WHIPPING, STRONG WINDS, AND OTHER HANDLING AND TYING DAMAGE.
- 3.3. DO NOT BEND OR BIND-TIE TREES OR SHRUBS IN SUCH A MANNER AS TO DESTROY THEIR NATURAL SHAPE. PROVIDE PROTECTIVE COVERING OF PLANTS DURING DELIVERY. DO NOT DROP PLANTS DURING DELIVERY.
- 3.4. PRUNE ROOT STOCK AS NECESSARY BEFORE INSTALLATION. 3.5. IF PLANTING IS DELAYED MORE THAN 6 HOURS AFTER DELIVERY, SET PLANT MATERIALS IN SHADE, PROTECT FROM

WEATHER AND MECHANICAL DAMAGE, AND KEEP ROOTS MOIST AND FREE FROM FROST.

- 1.1. PLANT MATERIALS WILL BE HEALTHY AND FREE OF DISEASE, PESTS, MECHANICAL INJURY AND STRESS. PLANTS WITH LEAVES AND SHOOTS WILL APPEAR HEALTHY, WITH NO LEAF SPOTS, LEAF DISCOLORATIONS, CHLOROSIS, LEAF WILTING OR CURLING, OR EVIDENCE OF INSECT INFESTATION. PLANTS WILL EXHIBIT NORMAL PHYSICAL AND GROWTH CHARACTERISTICS TYPICAL OF THE SPECIES.
- 1.2. ROOTS SHALL NOT BE POT BOUND.
- 1.3. CONTAINER-GROWN PLANTS WILL BE FULLY ROOTED IN THE SOIL POTTING MEDIUM WITHOUT GIRDLING OF PRIMARY
- 1.4. PLANT SPECIES SHALL MEET THOSE LISTED ON THIS PLAN SET UNLESS APPROVED OTHERWISE.

- 2.1. SEED SHALL NOT BE WET, MOLDY, OR OTHERWISE DAMAGED FROM TRANSIT OR STORAGE. SEED SHOULD BE CLEAN
- 2.2. SEED MIXES SHALL MEET THOSE LISTED ON THIS PLAN SET UNLESS APPROVED OTHERWISE.
- 3. LIVE STAKES
- 3.1. COMMERCIALLY SUPPLIED OR FIELD HARVESTED LIVE STAKES SHALL BE AT LEAST ONE YEAR OLD, AND SHALL BE HARVESTED AND TRANSPORTED WHEN PLANTS ARE DORMANT (NOVEMBER 1 - MARCH 1).
- 3.2. THE SIZE OF STAKES SHALL RANGE FROM 1/2 INCH TO 1 INCH IN CALIPER AND AVERAGE 24 INCHES IN LENGTH WITH A MINIMUM PLANTED LENGTH OF 18 INCHES.

- 1. EXISTING AREAS WITH SUBSTANTIAL COVERAGE OF UNDESIRABLE GRASS SPECIES SHALL BE SPRAYED WITH GLYPHOSATE (ROUNDUP ® OR APPROVED EQUAL), SURFACTANT, AND AMMONIUM SULFATE MIX AT A RATE OF 1 QUART GLYPHOSATE PER ACRE, 7 OUNCES OF SURFACTANT, AND 17 POUNDS PER 100 GALLONS OF WATER OF AMMONIUM SULFATE. COOL SEASON GRASS ERADICATION REQUIRES ONE APPLICATION IN THE FALL AND ONE IN THE SPRING. GRASS SHOULD BE ALLOWED TO GROW 6 INCHES, EITHER AFTER MOWING OR FROM SPRING GROWTH, TO WEAKEN THE PLANT AND PROVIDE MAXIMUM SURFACE AREA FOR APPLICATION.
- COMPACTED SOIL SHALL BE RAKED, DISKED, OR AMENDED AS NECESSARY TO FACILITATE WATER INFILTRATION AND ROOT
- EXAMINE THE SUBGRADE AND TOPSOIL, VERIFY THE ELEVATIONS, AND OBSERVE THE CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED.
- ALL SOIL AMENDMENTS AND CONDITIONING SHALL BE COMPLETED PRIOR TO SEEDING AND PLANT MATERIAL INSTALLATION. DO NOT PROCEED WITH INSTALLATION UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED IN A MANNER
- SPECIES SHOULD BE PLANTED IN AREAS OF APPROPRIATE SOIL MOISTURE, AND HABITAT TYPE (UPLAND VS. WETLAND) BUT OTHERWISE IN A RANDOM FASHION INTERMIXING TREES AND SHRUBS.

6. SOIL MEDIUM FOR PLANTING SHALL BE FREE OF ANY ROCK FRAGMENTS LARGER THAN TWO INCHES IN SIZE, OR LARGE WOODY DEBRIS FRAGMENTS, AND BE COMPRISED PREDOMINANTLY OF LOAM TO SILTY CLAY LOAM SOILS.

7. CONTRACTOR SHALL ENSURE GROUND IS NOT FROZEN OR PRONE TO FROST, SNOW, OR DROUGHT AND AMBIENT AIR TEMPERATURES WILL REMAIN BELOW 70 DEGREES FAHRENHEIT (AVERAGE) DURING THE SELECTED SEEDING AND PLANTING

- 1. SEEDING SHALL BE PERFORMED BETWEEN NOVEMBER 1 THROUGH APRIL 31 OF ANY GIVEN YEAR. REFER TO TEMPORARY SEEDING SCHEDULE ON SHEET 4 FOR SEEDING OUTSIDE THIS WINDOW.
- 2. RAKE SEED LIGHTLY INTO THE TOP 1/4 TO 1/2 INCH OF TOPSOIL, ROLL LIGHTLY, AND WATER WITH A FINE SPRAY.
- PROTECT SEEDED AREAS AGAINST EROSION BY SPREADING STRAW MULCH IMMEDIATELY FOLLOWING COMPLETION OF SEEDING OPERATIONS IF OTHER EROSION CONTROL MEASURES ARE NOT OTHERWISE SPECIFIED.

- 1. PLANTING OF BARE ROOT TREE AND SHRUB SEEDLINGS (TUBELINGS) SHALL BE PERFORMED BETWEEN FEBRUARY THROUGH MAY 15. CONTRACTOR SHALL VERIFY TREES AND SHRUBS ARE IN A DORMANT CONDITION.
- 2. THE USE OF A PUNCH/PLANTING BAR, AUGER, REBAR, OR WATER-JET MAY BE USED TO PREDRILL HOLE IF NECESSARY. TAMP SOIL AROUND STAKE FOLLOWING INSTALL.
- 3. SEPARATE ROOTS AND SPREAD THEM OUT WHEN PLACING THE PLANT IN THE HOLE SO THAT THE ROOTS CAN GROW WITHOUT FURTHER CONSTRICTION OF THE ROOT BALL.
- 4. ALL BARE ROOT PLANTS SHALL BE SET STRAIGHT OR PLUMB FOR AN UPRIGHT GROWTH PATTERN.
- 5. SET CONTAINERIZED PLANT MATERIALS PLUMB AND CENTERED WITHIN HOLE, ENSURING THAT THE TOP OF BALL IS ELEVATED 2 TO 3 INCHES ABOVE THE SURROUNDING SOIL ELEVATIONS.
- 6. PLANTING HOLES SHALL BE BACKFILLED WITH THE SAME SOIL THAT WAS EXCAVATED FROM THE HOLE AFTER REMOVING ALL STONES, ROOTS, AND OTHER DEBRIS GREATER THAN 2 INCHES IN DIAMETER. 7. RAKE THE UNUSED EXISTING SOIL OUTSIDE THE PLANTING HOUSE, TAKING CARE NOT TO MOUND THE SOIL OR TO
- SIGNIFICANTLY ALTER THE EXISTING GRADES. 8. WATER EACH PLANT SPECIES TO THE POINT OF SOIL SATURATION IF NOT PLANTED IN AN EXISTING WET CONDITION.

- 1. LIVE STAKES SHALL BE ORIENTED PERPENDICULAR TO THE SLOPE WITH GROWING TIPS PROTRUDING FROM SURFACE.
- 2. REMOVE SIDE BRANCHES WITH THE REMAINING BARK INTACT. THE BOTTOM (BASAL) END SHALL BE CLEANLY CUT AT A 45 DEGREE OR SHARPER ANGLE AND THE TOP END SHOULD BE CUT SQUARE (FLAT), PROTRUDING NO MORE THAN SIX INCHES. (SEE DETAIL ON SHEET 18)

EGEND		
	PROPOSED PROJECT LIMITS	
	EXISTING CONTOUR (MAJOR)	
	EXISTING CONTOUR (MINOR)	
	EXISTING CANOPY DRIP LINE (APPROX.)	L
OH-W	EXISTING OVERHEAD ELECTRICAL LINE	
φ	EXISTING ELECTRICAL POLE	
>···_	EXISTING DITCH	
//	EXISTING FENCE	
_ · _ · _ · _ · _ · _	EXISTING ROAD	
	EXISTING GRAVEL PARKING	
	EXISTING PAVED PATH	
	EXISTING PARCEL BOUNDARY	
R/W	EXISTING RIGHT-OF-WAY	
	EXISTING WETLAND	LAB
	EXISTING WATERBODY	-
	EXISTING DRAIN TILE LOCATION (APPROX.)	
	EXISTING PUBLIC TREE*	ļ
T-XX*	EXISTING PUBLIC TREE (TO BE IMPACTED BY OTHERS)* EXISTING CRITICAL ROOT ZONE	DRAWN BY
T-XXR	PUBLIC TREE TO BE REMOVED*	
- OCF — OCF — OCF — OCF —	PROPOSED HIGH VISIBILITY FENCING	
	PROPOSED ROOT PRUNING	
	PROPOSED 12" MULCHING (AS NEEDED)	Sin C 5000
730.0 —	PROPOSED CONTOUR (MAJOR)	
730.2	PROPOSED CONTOUR (MINOR)	
	PROPOSED WALKING TRAIL	-
	PROPOSED OVERLOOK	
<u></u>	PROPOSED WETLAND RESTORATION AREA	
58888888888	PROPOSED LOW WATER CROSSING*	
	PROPOSED LIMESTONE PATH*	
	DDODOCED DOLLIDED CILL+	

PROPOSED BOULDER SILL* — · — · — PROPOSED LIMITS OF DISTURBANCE PROPOSED WETLAND SEEDING AREA

PROPOSED UPLAND SEEDING AREA PROPOSED WETLAND WOODY PLANTING AREA $|+ \ + \ + \ + \ + \ |$ Proposed wetland planting and live stake are PROPOSED UPLAND WOODY PLANTING AREA

PROPOSED 2" CAL. WETLAND TREES*

ACER RUBRUM / RED MAPLE BETULA NIGRA / RIVER BIRCH

QUERCUS PALUSTRIS / PIN OAK PLATANUS OCCIDENTALIS / AMERICAN SYCAMORE

QUERCUS BICOLOR / SWAMP WHITE OAK

SALIX NIGRA / BLACK WILLOW PROPOSED 2-GAL WETLAND SHRUBS*

A SERVICE SERV ALNUS SERRULATA / SMOOTH ALDER ARONIA ARBUTIFOLIA / RED CHOKEBERRY CEPHALANTHUS OCCIDENTALIS / BUTTONBUSH

SAMBUCUS CANADENSIS / AMERICAN ELDERBERRY PROPOSED 2" CAL. UPLAND TREES*

ACER SACCHARUM / SUGAR MAPLE CELTIS OCCIDENTALIS / COMMON HACKBERRY

CERCIS CANADENSIS / EASTERN REDBUD

LIRIODENDRON TULIPIFERA / TULIP POPLAR QUERCUS ALBA / WHITE OAK

QUERCUS MACROCARPA / BURR OAK

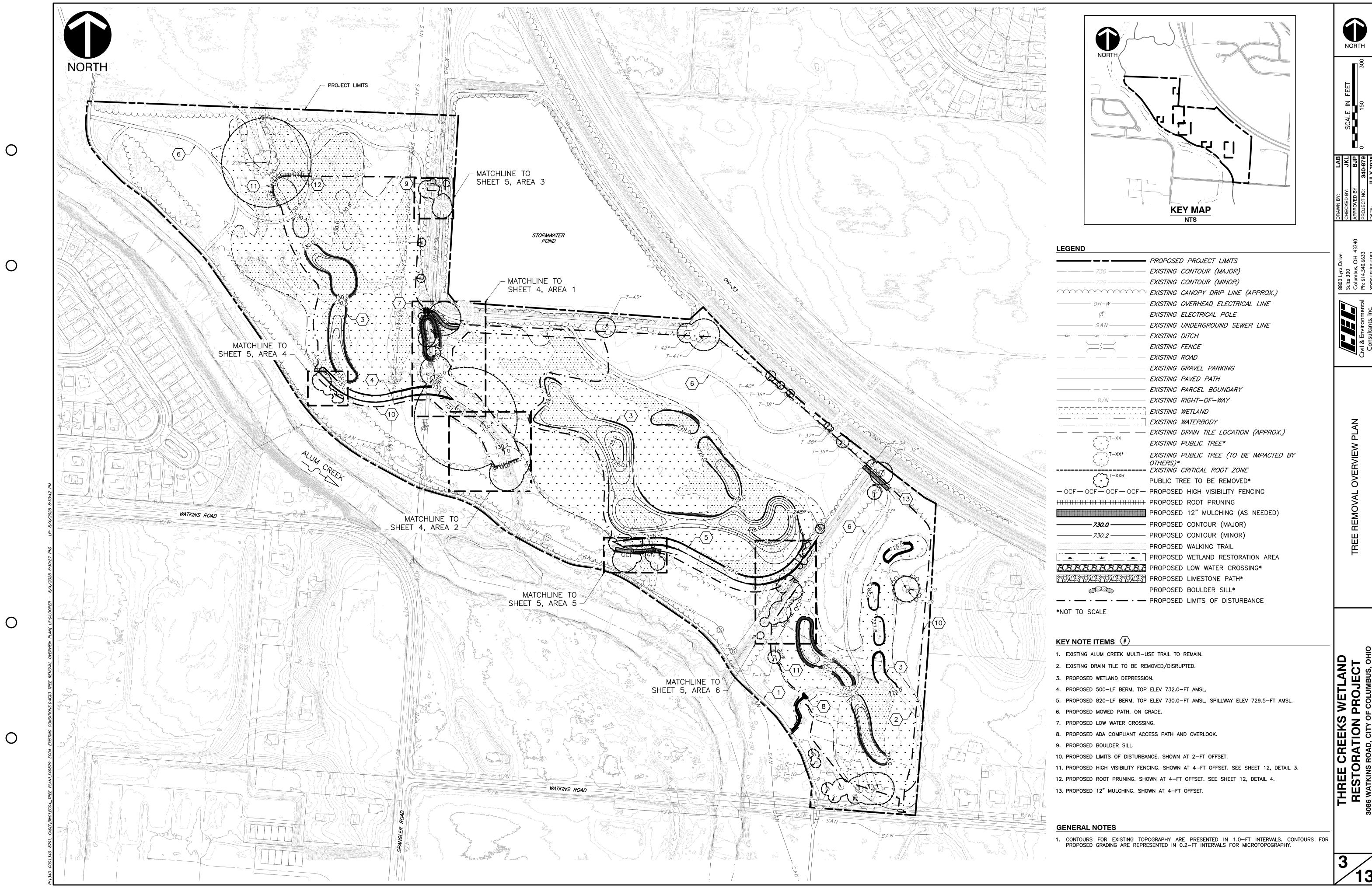
QUERCUS RUBRA / NORTHERN RED OAK

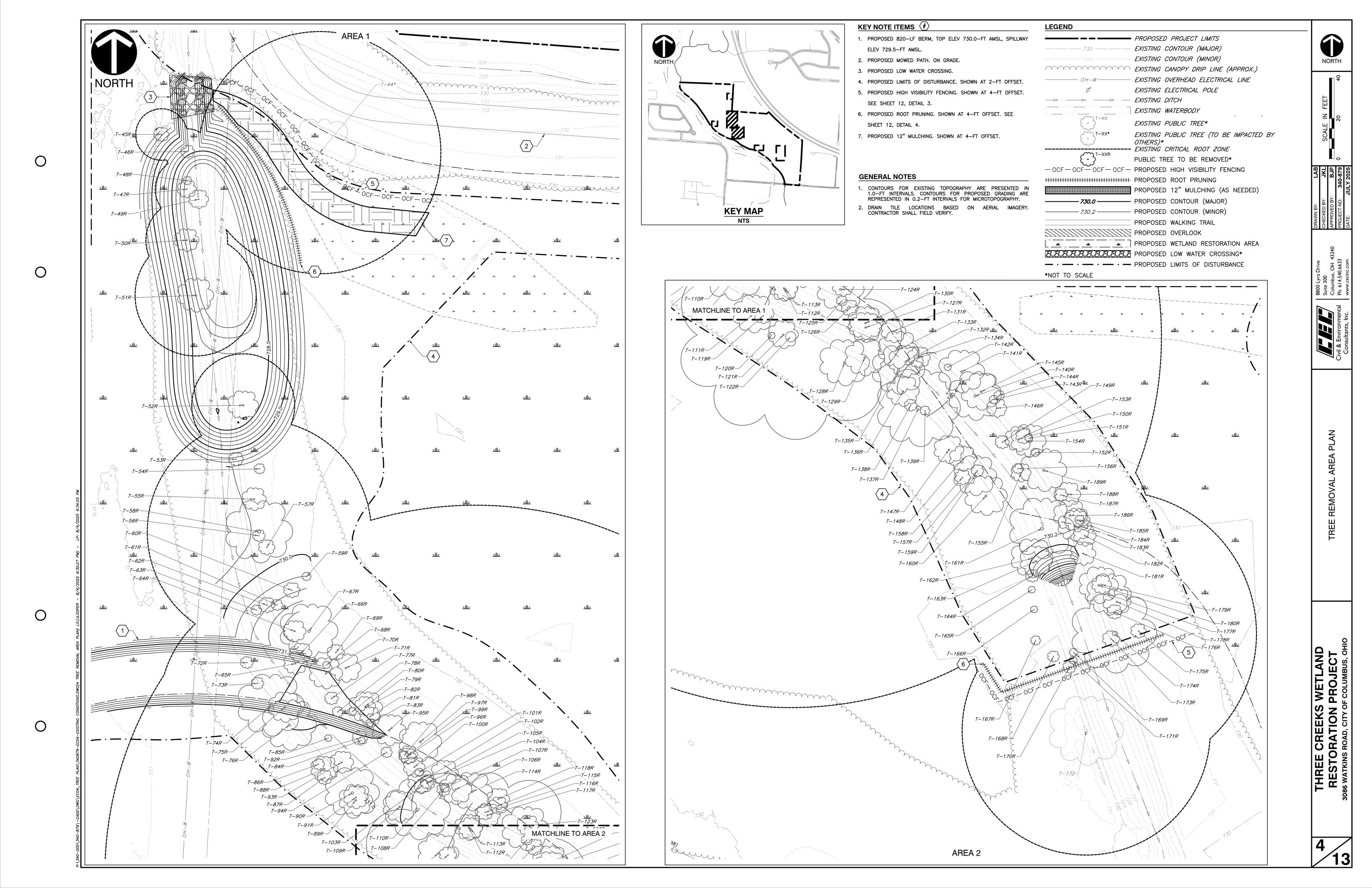
PROPOSED 2-GAL UPLAND SHRUBS*

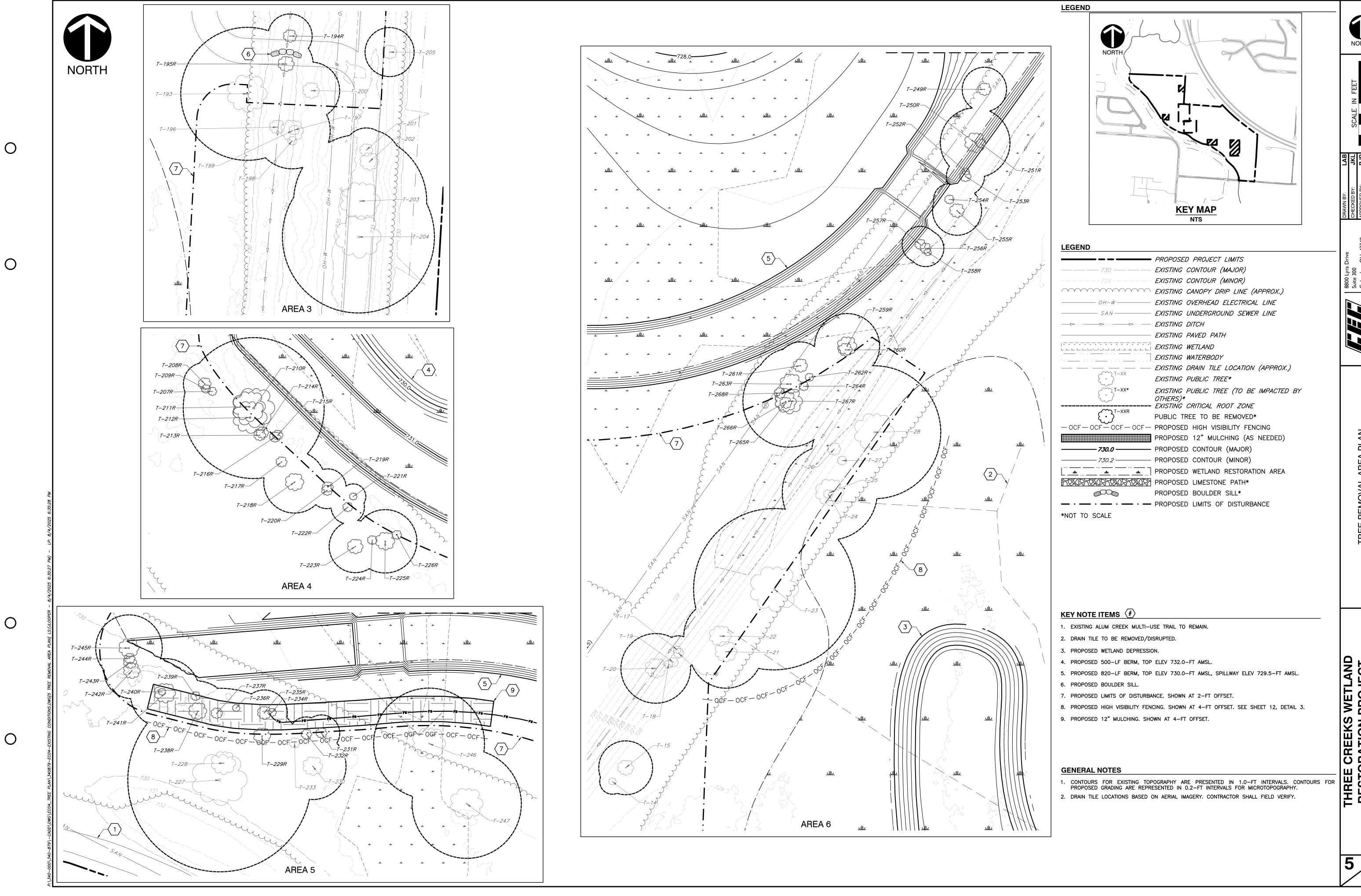
AMELANCHIER LAEVIS / ALLEGHENY SERVICEBERRY HAMAMELIS VIRGINIANA / COMMON WITCH HAZEL VIBURNUM DENTATUM / ARROWWOOD VIBURNUM VIBURNUM LENTAGO / NANNYBERRY

VIBURNUM PRUNIFOLIUM / BLACKHAW VIBURNUM

*NOT TO SCALE







THREE CREEKS WETLAND RESTORATION PROJECT 36 WATKINS ROAD, CITY OF COLUMBUS, OH

	COMMON NAME	BOTANICAL NAME	DIAMETER AT STANDARD HEIGHT (IN.)	CRITICAL ROOT ZONE RADIUS (FT.)	CONDITION	ACTION	PROTECTION MEASURES	MITIGATION REQUIRED (Y/N)	CONDITION ATTRIBUTE NOTES
44*	GREEN ASH	FRAXINUS PENNSYLVANICA	40	60	FAIR	ROOT PRUNE	ROOT PRUNING, 12" MULCHING AS NEEDED, HIGH VISIBILITY FENCING	NO	NO MITIGATION PROPOSED. TREE REMOVAL ASSOCIATED WITH OTHER PROJECT. DEAD LIMB, VINES, MULTI-TRUNK, PRUNE VINES
172 206	BUR OAK EASTERN COTTONWOOD	QUERCUS MACROCARPA POPULUS DELTOIDES	106.5	61.5 159.75	GOOD	ROOT PRUNE	ROOT PRUNING, HIGH VISIBILITY FENCING ROOT PRUNING, HIGH VISIBILITY FENCING	NO NO	VINES DEAD LIMB, MULTI TRUNK 37,37,32.5
-1*	WHITE ASH	FRAXINUS AMERICANA	38	57	POOR	REMOVE		NO	NO MITIGATION PROPOSED. TREE REMOVAL ASSOCIATED WITH OTHER PROJECT. DEAD LIMB, POOR STRUCTURE, TRUNK CO-DOMINANT, TRUNK CRACKED, DAMAGED BARK, CENTRAL TRUNKS ROTTING, WITCH'S BROOM
2*	WHITE ASH	FRAXINUS AMERICANA	38.5	57.75	POOR	REMOVE		NO	NO MITIGATION PROPOSED. TREE REMOVAL ASSOCIATED WITH OTHER PROJECT. DEAD LIMB, POOR STRUCTURE, TRUNK CO-DOMINANT, TRUNK CRACKED, DAMAGED BARK, ROT/DECAY
3*	WHITE ASH	FRAXINUS AMERICANA	31	46.5	POOR	REMOVE		NO	NO MITIGATION PROPOSED. TREE REMOVAL ASSOCIATED WITH OTHER PROJECT. DEAD LIMB, POOR STRUCTURE, TRUNK CO-DOMINANT, TRUNK CRACKED, DAMAGED BARK, ROT/DECAY
-5R	BOXELDER MAPLE	ACER NEGUNDO	8.5	12.75	FAIR	REMOVE		YES. PROPOSED RATIO OF 1:1	DEAD LIMB, VINES, ROT/DECAY
6R	BOXELDER MAPLE	ACER NEGUNDO	7.5	11.25 15.75	FAIR FAIR	REMOVE REMOVE		YES. PROPOSED RATIO OF 1:1 YES. PROPOSED RATIO OF 1:1	DEAD LIMB, VINES VINES
7R 8R	BLACK WALNUT GREEN ASH	JUGLANS NIGRA FRAXINUS PENNSYLVANICA	10.5	7.5	FAIR	REMOVE		YES. PROPOSED RATIO OF 1:1	DEAD LIMB, DEAD LOWER LIMBS
-9R	BOXELDER MAPLE	ACER NEGUNDO	11	16.5	POOR	REMOVE		NO	DEAD LIMB, VINES, CAVITY, POOR STRUCTURE, MAJOR CAVITY AT BASE OF TREE
OR	BLACK WALNUT	JUGLANS NIGRA	13.5	20.25	FAIR	REMOVE		YES. PROPOSED RATIO OF 1:1	VINES
1R	SILVER MAPLE BLACK WALNUT	ACER SACCHARINUM JUGLANS NIGRA	20	30	POOR FAIR	REMOVE REMOVE		NO YES. PROPOSED RATIO OF 1:1	POOR STRUCTURE, DEAD LIMB, CAVITY, SHALLOW ROOT, CAVITY AT BASE OF TREE TRUNK CO-DOMINANT, VINES
3R	BLACK WALNUT	JUGLANS NIGRA JUGLANS NIGRA	8	25.5 12	POOR	REMOVE		NO	DEAD LIMB, VINES, MULTI-TRUNK
4R	HACKBERRY	CELTIS OCCIDENTALIS	6	9	POOR	REMOVE		NO	POOR STRUCTURE, DEAD LIMB, VINES, SHALLOW ROOT
5R	HACKBERRY	CELTIS OCCIDENTALIS	13.5	20.25	FAIR	REMOVE		YES. PROPOSED RATIO OF 1:1	VINES, TRUNK CO-DOMINANT, DEAD LIMB, ROT/DECAY
SR	WHITE MULBERRY	MORUS ALBA	7	10.5	FAIR	REMOVE		YES. PROPOSED RATIO OF 1:1	VINES, MANY VINES
BR 7R	BLACK WALNUT EASTERN COTTONWOOD	JUGLANS NIGRA POPULUS DELTOIDES	37	13.5 55.5	FAIR GOOD	REMOVE REMOVE		YES. PROPOSED RATIO OF 1:1 YES. PROPOSED RATIO OF 1:1	POOR STRUCTURE, VINES DEAD LIMB, ROT/DECAY, ROT ON ONE BRANCH
PR	GREEN ASH	FRAXINUS PENNSYLVANICA	5	7.5	POOR	REMOVE		NO	VINES, POOR STRUCTURE, SHALLOW ROOT
OR	GREEN ASH	FRAXINUS PENNSYLVANICA	9	13.5	DEAD	REMOVE		NO	VINES
1R	OHIO BUCKEYE	AESCULUS GLABRA	6.5	9.75	POOR	REMOVE		NO NO	DEAD LIMB, POOR STRUCTURE, VINES, GROWING ENTWINED WITH DEAD BLACK LOCUST
2R R	HACKBERRY AMERICAN ELM	CELTIS OCCIDENTALIS ULMUS AMERICANA	9	13.5	FAIR POOR	REMOVE REMOVE		YES. PROPOSED RATIO OF 1:1	VINES, SHALLOW ROOTS DEAD LIMB, POOR STRUCTURE, VINES
SR IR	BLACK WALNUT	JUGLANS NIGRA	12.5	18.75	FAIR	REMOVE		YES. PROPOSED RATIO OF 1:1	DEAD LIMB, POOR STRUCTURE, ROT/DECAY, LEANING
iR	SLIPPERY ELM	ULMUS RUBRA	13	19.5	FAIR	REMOVE		YES. PROPOSED RATIO OF 1:1	DEAD LIMB, POOR STRUCTURE, VINES, LEANING
R	BLACK LOCUST	ROBINIA PSEUDOACACIA	12	18	DEAD	REMOVE		NO	POOR STRUCTURE
'R	HONEY LOCUST	GLEDITSIA TRIACANTHOS	32	48	GOOD	REMOVE		YES. PROPOSED RATIO OF 1:1	DEAD LIMB, VINES
BR BR	OHIO BUCKEYE BLACK WALNUT	AESCULUS GLABRA JUGLANS NIGRA	4.25 9.5	6.375 14.25	POOR FAIR	REMOVE REMOVE		NO YES. PROPOSED RATIO OF 1:1	DEAD LIMB, POOR STRUCTURE DEAD LIMB, POOR STRUCTURE
DR	OHIO BUCKEYE	AESCULUS GLABRA	18.5	27.75	FAIR	REMOVE			TRUNK CO-DOMINANT, VINES, DEAD LIMB, CAVITY
IR	OHIO BUCKEYE	AESCULUS GLABRA	17	25.5	GOOD	REMOVE		YES. PROPOSED RATIO OF 1:1	VINES
2R	BOXELDER MAPLE	ACER NEGUNDO	7	10.5	POOR	REMOVE		NO	VINES, DEAD LIMB, POOR STRUCTURE, ROT/DECAY
SR .	BLACK WALNUT	JUGLANS NIGRA	7	10.5	POOR	REMOVE		NO NO	POOR STRUCTURE, VINES
र २	BASSWOOD BASSWOOD	TILIA AMERICANA TILIA AMERICANA	36.75 18	55.125 27	FAIR FAIR	REMOVE REMOVE		YES. PROPOSED RATIO OF 1:1 YES. PROPOSED RATIO OF 1:1	DEAD LIMB, POOR STRUCTURE, MULTITRUNK DEAD LIMB, POOR STRUCTURE, MULTI-TRUNK
R	BUR OAK	QUERCUS MACROCARPA	30	45	GOOD	REMOVE		YES. PROPOSED RATIO OF 1:1	DEAD LIMB
R	OHIO BUCKEYE	AESCULUS GLABRA	7.5	11.25	POOR	REMOVE		NO	DEAD LIMB, VINES, ROT/DECAY, MANY DEAD LIMBS
BR	OHIO BUCKEYE	AESCULUS GLABRA	6	9	FAIR	REMOVE		YES. PROPOSED RATIO OF 1:1	DEAD LIMB
PR	OHIO BUCKEYE	AESCULUS GLABRA	11.5	17.25	POOR	REMOVE		NO NO	DEAD LIMB, POOR STRUCTURE, ROT/DECAY, CAVITY, DECAY AT BASE OF TREE
R R	OHIO BUCKEYE HACKBERRY	AESCULUS GLABRA CELTIS OCCIDENTALIS	11.5	7.5 17.25	FAIR POOR	REMOVE REMOVE		YES. PROPOSED RATIO OF 1:1	DEAD LIMB POOR STRUCTURE, ROT/DECAY, CAVITY, SMALL CAVITY AT BASE
2R	HACKBERRY	CELTIS OCCIDENTALIS	18.5	27.75	CRITICAL	REMOVE		NO	DEAD LIMB, POOR STRUCTURE, ROT/DECAY, CAVITY, MAJOR CAVITY/ROT AT BASE OF TREE
3R	HACKBERRY	CELTIS OCCIDENTALIS	5.25	7.875	POOR	REMOVE		NO	DEAD LIMB, POOR STRUCTURE, ROT/DECAY, CAVITY, GROWING OUT BASE OF CRITICAL CONDITION HACKBERRY
I R	OHIO BUCKEYE	AESCULUS GLABRA	4	6	POOR	REMOVE		NO	DEAD LIMB, POOR STRUCTURE
SR SR	OHIO BUCKEYE	AESCULUS GLABRA	4	6	POOR	REMOVE		NO NO	DEAD LIMB, POOR STRUCTURE
R R	HACKBERRY HACKBERRY	CELTIS OCCIDENTALIS CELTIS OCCIDENTALIS	6.5 8.5	9.75 12.75	FAIR POOR	REMOVE REMOVE		YES. PROPOSED RATIO OF 1:1	POOR STRUCTURE, SHALLOW ROOT POOR STRUCTURE, ROT/DECAY, CAVITY, SHALLOW ROOT, MAJOR CAVITY AT BASE OF TREE
BR .	HACKBERRY	CELTIS OCCIDENTALIS	15	22.5	FAIR	REMOVE		YES. PROPOSED RATIO OF 1:1	
PR	BITTERNUT HICKORY	CARYA CORDIFORMIS	18.5	27.75	GOOD	REMOVE		YES. PROPOSED RATIO OF 1:1	SHALLOW ROOT
DR	BITTERNUT HICKORY	CARYA CORDIFORMIS	30	45	GOOD	REMOVE		YES. PROPOSED RATIO OF 1:1	SHALLOW ROOT
IR	BASSWOOD	TILIA AMERICANA	13.5	20.25	CRITICAL	REMOVE		NO NO	POOR STRUCTURE, DEAD LIMB, ROT/DECAY, CAVITY, MULTI-TRUNK (3), ONE TRUNK SPLIT, CAVITY AT BASE OF ANOTHER.
R SR	BLACK LOCUST GREEN ASH	ROBINIA PSEUDOACACIA FRAXINUS PENNSYLVANICA	8.5	12.75 19.5	DEAD DEAD	REMOVE REMOVE		NO NO	PEST/DISEASE
-R	OHIO BUCKEYE	AESCULUS GLABRA	6.25	9.375	FAIR	REMOVE		YES. PROPOSED RATIO OF 1:1	DEAD LIMB, ROT/DECAY
R	OHIO BUCKEYE	AESCULUS GLABRA	18.75	28.125	GOOD	REMOVE		YES. PROPOSED RATIO OF 1:1	DEAD LIMB
R	BLACK LOCUST	ROBINIA PSEUDOACACIA	9.5	14.25	DEAD	REMOVE		NO	ROT/DECAY, CAVITY
'R	BLACK LOCUST	ROBINIA PSEUDOACACIA	23.5	35.25	FAIR	REMOVE		YES. PROPOSED RATIO OF 1:1	DEAD LIMB, ROT/DECAY DEAD LIMB POOR STRUCTURE
iR IR	OHIO BUCKEYE BLACK LOCUST	AESCULUS GLABRA ROBINIA PSEUDOACACIA	10.5	7.5 15.75	FAIR DEAD	REMOVE REMOVE		YES. PROPOSED RATIO OF 1:1	DEAD LIMB, POOR STRUCTURE ROT/DECAY
DR	HACKBERRY	CELTIS OCCIDENTALIS	12	18	FAIR	REMOVE		YES. PROPOSED RATIO OF 1:1	DEAD LIMB, ROT/DECAY
IR	HACKBERRY	CELTIS OCCIDENTALIS	5	7.5	FAIR	REMOVE		YES. PROPOSED RATIO OF 1:1	POOR STRUCTURE
2R	HACKBERRY	CELTIS OCCIDENTALIS	14.25	21.375	FAIR	REMOVE		YES. PROPOSED RATIO OF 1:1	POOR STRUCTURE
io I	HACKBERRY OHIO BUCKEYE	CELTIS OCCIDENTALIS AESCULUS GLABRA	8.25	12.375 12.75	FAIR FAIR	REMOVE REMOVE		YES. PROPOSED RATIO OF 1:1 YES. PROPOSED RATIO OF 1:1	POOR STRUCTURE DEAD LIMB
	BLACK LOCUST	ROBINIA PSEUDOACACIA	8.5 15	22.5	DEAD	REMOVE		NO	ROT/DECAY
łR .		ROBINIA PSEUDOACACIA	18	27	FAIR	REMOVE		YES. PROPOSED RATIO OF 1:1	DEAD LIMB, VINES, ROT/DECAY
-R SR	BLACK LOCUST	1	5	7.5	DEAD	REMOVE		NO	ROT DECAY
R R R	BLACK LOCUST BLACK LOCUST	ROBINIA PSEUDOACACIA	3	•	FAIR	REMOVE REMOVE		YES. PROPOSED RATIO OF 1:1	POOR STRUCTURE
R R R R	BLACK LOCUST BLACK LOCUST HACKBERRY	CELTIS OCCIDENTALIS	7.5	11.25	EAID	₩ L 44/ 11/L	İ	YES. PROPOSED RATIO OF 1:1	DEAD LIMB, POOR STRUCTURE
FR F	BLACK LOCUST BLACK LOCUST		7.5 18.5 36	11.25 27.75 54	FAIR GOOD	REMOVE		YES. PROPOSED RATIO OF 1:1	MULTI-TRUNK
FR F	BLACK LOCUST BLACK LOCUST HACKBERRY BLACK WALNUT	CELTIS OCCIDENTALIS JUGLANS NIGRA	18.5	27.75				YES. PROPOSED RATIO OF 1:1 YES. PROPOSED RATIO OF 1:1	MULTI-TRUNK POOR STRUCTURE
FR F	BLACK LOCUST BLACK LOCUST HACKBERRY BLACK WALNUT BASSWOOD BASSWOOD BITTERNUT HICKORY	CELTIS OCCIDENTALIS JUGLANS NIGRA TILIA AMERICANA TILIA AMERICANA CARYA CORDIFORMIS	18.5 36 22.5 15.5	27.75 54 33.75 23.25	GOOD FAIR FAIR	REMOVE REMOVE REMOVE		YES. PROPOSED RATIO OF 1:1 YES. PROPOSED RATIO OF 1:1	POOR STRUCTURE DEAD LIMB
4R	BLACK LOCUST BLACK LOCUST HACKBERRY BLACK WALNUT BASSWOOD BASSWOOD BITTERNUT HICKORY OHIO BUCKEYE	CELTIS OCCIDENTALIS JUGLANS NIGRA TILIA AMERICANA TILIA AMERICANA CARYA CORDIFORMIS AESCULUS GLABRA	18.5 36 22.5 15.5	27.75 54 33.75 23.25 19.5	GOOD FAIR FAIR POOR	REMOVE REMOVE REMOVE REMOVE		YES. PROPOSED RATIO OF 1:1 YES. PROPOSED RATIO OF 1:1 NO	POOR STRUCTURE DEAD LIMB DEAD LIMB, POOR STRUCTURE
4R	BLACK LOCUST BLACK LOCUST HACKBERRY BLACK WALNUT BASSWOOD BASSWOOD BITTERNUT HICKORY OHIO BUCKEYE OHIO BUCKEYE	CELTIS OCCIDENTALIS JUGLANS NIGRA TILIA AMERICANA TILIA AMERICANA CARYA CORDIFORMIS AESCULUS GLABRA AESCULUS GLABRA	18.5 36 22.5 15.5 13 22.75	27.75 54 33.75 23.25 19.5 34.125	GOOD FAIR FAIR POOR FAIR	REMOVE REMOVE REMOVE REMOVE REMOVE		YES. PROPOSED RATIO OF 1:1 YES. PROPOSED RATIO OF 1:1 NO YES. PROPOSED RATIO OF 1:1	POOR STRUCTURE DEAD LIMB DEAD LIMB, POOR STRUCTURE DEAD LIMB, CAVITY, MULTI-TRUNK
4R	BLACK LOCUST BLACK LOCUST HACKBERRY BLACK WALNUT BASSWOOD BASSWOOD BITTERNUT HICKORY OHIO BUCKEYE	CELTIS OCCIDENTALIS JUGLANS NIGRA TILIA AMERICANA TILIA AMERICANA CARYA CORDIFORMIS AESCULUS GLABRA	18.5 36 22.5 15.5	27.75 54 33.75 23.25 19.5	GOOD FAIR FAIR POOR	REMOVE REMOVE REMOVE REMOVE		YES. PROPOSED RATIO OF 1:1 YES. PROPOSED RATIO OF 1:1 NO	POOR STRUCTURE DEAD LIMB DEAD LIMB, POOR STRUCTURE
4R	BLACK LOCUST BLACK LOCUST HACKBERRY BLACK WALNUT BASSWOOD BASSWOOD BITTERNUT HICKORY OHIO BUCKEYE OHIO BUCKEYE BASSWOOD	CELTIS OCCIDENTALIS JUGLANS NIGRA TILIA AMERICANA TILIA AMERICANA CARYA CORDIFORMIS AESCULUS GLABRA AESCULUS GLABRA TILIA AMERICANA	18.5 36 22.5 15.5 13 22.75	27.75 54 33.75 23.25 19.5 34.125 15.375 13.5 21	GOOD FAIR FAIR POOR FAIR POOR	REMOVE REMOVE REMOVE REMOVE REMOVE REMOVE		YES. PROPOSED RATIO OF 1:1 YES. PROPOSED RATIO OF 1:1 NO YES. PROPOSED RATIO OF 1:1 NO	POOR STRUCTURE DEAD LIMB DEAD LIMB, POOR STRUCTURE DEAD LIMB, CAVITY, MULTI-TRUNK DEAD LIMB, POOR STRUCTURE ROT DECAY ROT DECAY
4R	BLACK LOCUST BLACK LOCUST HACKBERRY BLACK WALNUT BASSWOOD BASSWOOD BITTERNUT HICKORY OHIO BUCKEYE OHIO BUCKEYE BASSWOOD BLACK LOCUST BASSWOOD	CELTIS OCCIDENTALIS JUGLANS NIGRA TILIA AMERICANA TILIA AMERICANA CARYA CORDIFORMIS AESCULUS GLABRA AESCULUS GLABRA TILIA AMERICANA ROBINIA PSEUDOACACIA ROBINIA PSEUDOACACIA TILIA AMERICANA	18.5 36 22.5 15.5 13 22.75 10.25 9 14 12.5	27.75 54 33.75 23.25 19.5 34.125 15.375 13.5 21 18.75	GOOD FAIR FAIR POOR FAIR POOR DEAD DEAD POOR	REMOVE		YES. PROPOSED RATIO OF 1:1 YES. PROPOSED RATIO OF 1:1 NO YES. PROPOSED RATIO OF 1:1 NO NO NO NO	POOR STRUCTURE DEAD LIMB DEAD LIMB, POOR STRUCTURE DEAD LIMB, CAVITY, MULTI-TRUNK DEAD LIMB, POOR STRUCTURE ROT DECAY ROT DECAY POOR STRUCTURE, DEAD LIMB, ROT/DECAY, CAVITY
3R 4R 5R 6R 7R 8R 9R 0R 1R 2R 3R 4R 5R 6R 7R 8R 9R	BLACK LOCUST BLACK LOCUST HACKBERRY BLACK WALNUT BASSWOOD BASSWOOD BITTERNUT HICKORY OHIO BUCKEYE OHIO BUCKEYE BASSWOOD BLACK LOCUST BLACK LOCUST BASSWOOD BASSWOOD BASSWOOD	CELTIS OCCIDENTALIS JUGLANS NIGRA TILIA AMERICANA TILIA AMERICANA CARYA CORDIFORMIS AESCULUS GLABRA AESCULUS GLABRA TILIA AMERICANA ROBINIA PSEUDOACACIA ROBINIA PSEUDOACACIA TILIA AMERICANA TILIA AMERICANA	18.5 36 22.5 15.5 13 22.75 10.25 9	27.75 54 33.75 23.25 19.5 34.125 15.375 13.5 21 18.75 14.25	GOOD FAIR FAIR POOR FAIR POOR DEAD DEAD POOR POOR	REMOVE		YES. PROPOSED RATIO OF 1:1 YES. PROPOSED RATIO OF 1:1 NO YES. PROPOSED RATIO OF 1:1 NO NO NO NO NO NO NO	POOR STRUCTURE DEAD LIMB DEAD LIMB, POOR STRUCTURE DEAD LIMB, CAVITY, MULTI-TRUNK DEAD LIMB, POOR STRUCTURE ROT DECAY ROT DECAY POOR STRUCTURE, DEAD LIMB, ROT/DECAY, CAVITY DEAD LIMB, POOR STRUCTURE, TRUNK CO-DOMINANT
4R	BLACK LOCUST BLACK LOCUST HACKBERRY BLACK WALNUT BASSWOOD BASSWOOD BITTERNUT HICKORY OHIO BUCKEYE OHIO BUCKEYE BASSWOOD BLACK LOCUST BASSWOOD	CELTIS OCCIDENTALIS JUGLANS NIGRA TILIA AMERICANA TILIA AMERICANA CARYA CORDIFORMIS AESCULUS GLABRA AESCULUS GLABRA TILIA AMERICANA ROBINIA PSEUDOACACIA ROBINIA PSEUDOACACIA TILIA AMERICANA	18.5 36 22.5 15.5 13 22.75 10.25 9 14 12.5	27.75 54 33.75 23.25 19.5 34.125 15.375 13.5 21 18.75	GOOD FAIR FAIR POOR FAIR POOR DEAD DEAD POOR	REMOVE		YES. PROPOSED RATIO OF 1:1 YES. PROPOSED RATIO OF 1:1 NO YES. PROPOSED RATIO OF 1:1 NO NO NO NO	POOR STRUCTURE DEAD LIMB DEAD LIMB, POOR STRUCTURE DEAD LIMB, CAVITY, MULTI-TRUNK DEAD LIMB, POOR STRUCTURE ROT DECAY ROT DECAY POOR STRUCTURE, DEAD LIMB, ROT/DECAY, CAVITY

C	BLIC TREE TABLE (COI	· · · · · · · · · · · · · · · · · · ·	DIAMETER AT STANDARD HEIGHT (IN.)	CRITICAL ROOT ZONE RADIUS (FT.)	CONDITION	ACTION	PROTECTION MEASURES MITIGATION REQUIRED (Y/N)	CONDITION ATTRIBUTE NOTES	
	OHIO BUCKEYE	AESCULUS GLABRA	12	18	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB, VINES	
	HACKBERRY HACKBERRY	CELTIS OCCIDENTALIS CELTIS OCCIDENTALIS	26	39 9	FAIR POOR	REMOVE REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB, ROT/DECAY, SHALLOW ROOT POOR STRUCTURE, DEAD LIMB, VINES, ENTWINED WITH HONEYSUCKLE	_
	OHIO BUCKEYE	AESCULUS GLABRA	9.5	14.25	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB	
BITT	TTERNUT HICKORY	CARYA CORDIFORMIS	17.75	26.625	GOOD	REMOVE	YES. PROPOSED RATIO OF 1:1	SHALLOW ROOT	
	BASSWOOD	TILIA AMERICANA	27.5	41.25	FAIR	REMOVE	YES, PROPOSED RATIO OF 1:1	DEAD LIMB, POOR STRUCTURE, ROT/DECAY	
	BASSWOOD BOXELDER MAPLE	TILIA AMERICANA ACER NEGUNDO	22 19.5	33 29.25	FAIR CRITICAL	REMOVE REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB, DAMAGED BARK, CAVITY DEAD LIMB, ROT/DECAY, CAVITY, ROT AT BASE OF TREE	
	TTERNUT HICKORY	CARYA CORDIFORMIS	13.75	29.23	GOOD	REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB, ROTALECAT, CAVITT, ROTAL BASE OF TREE	
	BLACK WALNUT	JUGLANS NIGRA	19	28.5	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB, ROT/DECAY	
	OHIO BUCKEYE	AESCULUS GLABRA	22	33	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB, POOR STRUCTURE, MULTI-TRUNK	
	HACKBERRY	CELTIS OCCIDENTALIS	12.5	18.75	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB	
	BASSWOOD	TILIA AMERICANA	29	43.5	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	POOR STRUCTURE, DEAD LIMB, ROT/DECAY, MULTI-TRUNK	
	BASSWOOD	TILIA AMERICANA	18	27	GOOD	REMOVE	YES. PROPOSED RATIO OF 1:1	DAMAGED BARK	
	BASSWOOD	TILIA AMERICANA	46	69	POOR	REMOVE	NO NO	DEAD LIMB, POOR STRUCTURE, ROT/DECAY, CAVITY, MULTI-TRUNK, ROTTING AT TWO BASES	
	BASSWOOD	TILIA AMERICANA	7	10.5	CRITICAL	REMOVE	NO NO	POOR STRUCTURE, ROT/DECAY, CAVITY, CAVITY ROTTING AT BASE	
	BASSWOOD AMERICAN ELM	TILIA AMERICANA ULMUS AMERICANA	5.5 29	8.25 43.5	POOR GOOD	REMOVE REMOVE	NO YES. PROPOSED RATIO OF 1:1	POOR STRUCTURE, DEAD LIMB, CROWN DIEBACK, ROT/DECAY, CAVITY, ROT AT BASE OF TREE TRUNK CO-DOMINANT	
	GREEN ASH	FRAXINUS PENNSYLVANICA	25.5	38.25	DEAD	REMOVE	NO	ROT/DECAY	
	OHIO BUCKEYE	AESCULUS GLABRA	4	6	POOR	REMOVE	NO	POOR STRUCTURE, ROT/DECAY, CAVITY, SHALLOW ROOT, ROT AT BASE OF TREE	
	HACKBERRY	CELTIS OCCIDENTALIS	5	7.5	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB	
	HACKBERRY	CELTIS OCCIDENTALIS	5.75	8.625	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1		
0	OHIO BUCKEYE	AESCULUS GLABRA	22	33	CRITICAL	REMOVE	NO	DEAD LIMB, POOR STRUCTURE, ROT/DECAY, DAMAGED BARK, FLAKING BARK, MULTI-TRUNK	
0	OHIO BUCKEYE	AESCULUS GLABRA	11	16.5	CRITICAL	REMOVE	NO	DEAD LIMB, DAMAGE BARK	
	BUR OAK	QUERCUS MACROCARPA	16.5	24.75	GOOD	REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB DAMAGED BARK BOT DEGAY MILLET TRUME	
	OHIO BUCKEYE	AESCULUS GLABRA	15 7.75	22.5	CRITICAL	REMOVE	NO NO	DEAD LIMB, DAMAGED BARK, ROT DECAY, MULTI-TRUNK DEAD LIMB POOR STRUCTURE DAMAGED BARK ROT/DECAY CAVITY TRUNK CO-DOMINANT	
	BOXELDER MAPLE HACKBERRY	ACER NEGUNDO CELTIS OCCIDENTALIS	7.75 15	11.625 22.5	CRITICAL GOOD	REMOVE REMOVE	NO YES. PROPOSED RATIO OF 1:1	DEAD LIMB, POOR STRUCTURE, DAMAGED BARK, ROT/DECAY, CAVITY, TRUNK CO-DOMINANT	
	HACKBERRY	CELTIS OCCIDENTALIS CELTIS OCCIDENTALIS	4.5	6.75	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1		
	HACKBERRY	CELTIS OCCIDENTALIS	5	7.5	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	POOR STRUCTURE	
	HACKBERRY	CELTIS OCCIDENTALIS	9	13.5	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	POOR STRUCTURE, GROWING UNDER LARGER WALNUT	
	BLACK WALNUT	JUGLANS NIGRA	19.5	29.25	GOOD	REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB	
	OHIO BUCKEYE	AESCULUS GLABRA	11	16.5	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB	
	HACKBERRY	CELTIS OCCIDENTALIS	6	9	GOOD	REMOVE	YES. PROPOSED RATIO OF 1:1	DOOD STOUGHURE DEAD LIMB DAMAGED BARK BOT (DEGAY CAMITY MA IOD CAMITY (DOT DUNNING UP DAGE OF TREE	
	BLACK CHERRY	CARYA CORDIFORMIS PRUNUS SEROTINA	8.75	10.5 13.125	CRITICAL POOR	REMOVE REMOVE	NO NO	POOR STRUCTURE, DEAD LIMB, DAMAGED BARK, ROT/DECAY, CAVITY, MAJOR CAVITY/ROT RUNNING UP BASE OF TREE POOR STRUCTURE, DEAD LIMB, DAMAGED BARK	
	HAGBARK HICKORY	CARYA OVATA	23.75	35.625	GOOD	REMOVE	YES. PROPOSED RATIO OF 1:1	FOOK STRUCTURE, DEAD LIMB, DAMAGED BARK	
	HACKBERRY	CELTIS OCCIDENTALIS	23.5	35.25	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	POOR STRUCTURE, MULTI-TRUNK	
	BUR OAK	QUERCUS MACROCARPA	36	54	GOOD	REMOVE	YES. PROPOSED RATIO OF 1:1	TREE LEANING BUT OTHERWISE CONDITION IS OVERALL GOOD	
ВІ	BLACK WALNUT	JUGLANS NIGRA	23	34.5	POOR	REMOVE	NO	VINES, POOR STRUCTURE, TRUNK CO-DOMINANT, DAMAGED BARK, ROT/DECAY, CAVITY, ONE OF 2 TRUNKS DEAD	
	HACKBERRY	CELTIS OCCIDENTALIS	18	27	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	VINES, OVERALL FAIR CONDITION BUT NUMEROUS VINES	
	WHITE MULBERRY	MORUS ALBA	7.5	11.25	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	POOR STRUCTURE, SEVERE LEANING BUT OVERALL FAIR CONDITION	
	BOXELDER MAPLE	ACER NEGUNDO	4	6	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB, POOR STRUCTURE, LEANING WITH DEAD LIMBS	
	HACKBERRY WHITE MULBERRY	CELTIS OCCIDENTALIS MORUS ALBA	5.5	8.25	GOOD FAIR	REMOVE REMOVE	YES. PROPOSED RATIO OF 1:1 YES. PROPOSED RATIO OF 1:1	SMALL BUT IN GOOD HEALTH TRUNK CO-DOMINANT, HONEYSUCKLE INTERTWINE AND COMPETITION	
	BOXELDER MAPLE	ACER NEGUNDO	6.5	9.75	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB, POOR STRUCTURE, LEANING WITH POOR STRUCTURE	
	HACKBERRY	CELTIS OCCIDENTALIS	4.75	7.125	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	VINES	
Α	AMERICAN ELM	ULMUS AMERICANA	7.25	10.875	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB, SHALLOW ROOT	
	BOXELDER MAPLE	ACER NEGUNDO	4.5	6.75	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	POOR STRUCTURE, TRUNK CO-DOMINANT	
	OHIO BUCKEYE	AESCULUS GLABRA	9.5	14.25	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	POOR STRUCTURE, MULTI-TRUNK	
	OHIO BUCKEYE HACKBERRY	AESCULUS GLABRA CELTIS OCCIDENTALIS	47 8.5	70.5 12.75	FAIR FAIR	REMOVE REMOVE	YES. PROPOSED RATIO OF 1:1 YES. PROPOSED RATIO OF 1:1	VINES, MULTI-TRUNK VINES, SIGNIFICANT VINE COVERAGE PREVENTING GROWTH	
	OHIO BUCKEYE	AESCULUS GLABRA	8.5	12.75	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB, POOR STRUCTURE, MULTI-TRUNK	
	OHIO BUCKEYE	AESCULUS GLABRA	24.5	36.75	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB, MULTI-TRUNK	
	HACKBERRY	CELTIS OCCIDENTALIS	15.5	23.25	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB, POOR STRUCTURE, VINES	
	OHIO BUCKEYE	AESCULUS GLABRA	11	16.5	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB, VINES	
	OHIO BUCKEYE	AESCULUS GLABRA	21.75	32.625	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB, MULTI-TRUNK	
	HACKBERRY	CELTIS OCCIDENTALIS	14	21	POOR	REMOVE	NO YES PROPOSED BATIO OF 1.1	DEAD LIMB, ROT/DECAY, CAVITY, FORMER SECOND TRUNK DEAD	
	HACKBERRY OHIO BUCKEYE	CELTIS OCCIDENTALIS AESCULUS GLABRA	12.5 18.5	18.75 27.75	GOOD FAIR	REMOVE REMOVE	YES. PROPOSED RATIO OF 1:1 YES. PROPOSED RATIO OF 1:1	DEAD LIMB, MULTI-TRUNK	
	STERN COTTONWOOD	POPULUS DELTOIDES	14	21.75	POOR	REMOVE	NO	DEAD LIMB, MOLTI-TRONK DEAD LIMB, TRUNK CO-DOMINANT, TRUNK CRACKED, DAMAGED BARK, ROT/DECAY	
	OHIO BUCKEYE	AESCULUS GLABRA	5.5	8.25	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB DEAD LIMB	
	OHIO BUCKEYE	AESCULUS GLABRA	18	27	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB, MULTI-TRUNK	
	OHIO BUCKEYE	AESCULUS GLABRA	7.5	11.25	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB, MULTI-TRUNK	
	HAGBARK HICKORY	CARYA OVATA	14.25	21.375	GOOD	REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB, DEAD LIMBS RESULT OF OLD SELF PRUNING NOT RECENT.	
	STERN COTTONWOOD	POPULUS DELTOIDES	25.5	38.25	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB, TRUNK CO-DOMINANT	
	OHIO BUCKEYE	AESCULUS GLABRA	21	31.5	POOR	REMOVE	NO NO	DEAD LIMB, POOR STRUCTURE, VINES DEAD LIMB VINES	
	BLACK WILLOW BLACK WILLOW	SALIX NIGRA SALIX NIGRA	8.5 9	12.75 13.5	POOR CRITICAL	REMOVE REMOVE	NO NO	DEAD LIMB, VINES DEAD LIMB, POOR STRUCTURE, TRUNK DEVIATION FROM VERTICAL, TRUNK CRACKED, CAVITY	
	STERN COTTONWOOD	POPULUS DELTOIDES	4.75	7.125	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	VINES	
	BRADFORD PEAR	PYRUS CALLERYANA	6.75	10.125	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	HIGH FOLIAGE, CRITICAL ROOT MAY BE WITHIN LOD	
BR	BRADFORD PEAR	PYRUS CALLERYANA	4.75	7.125	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	HIGH FOLIAGE, CRITICAL ROOT MAY BE WITHIN LOD	
	STERN COTTONWOOD	POPULUS DELTOIDES	22.25	33.375	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB, VINES, PRUNE LOWER DEAD BRANCHES]
	STERN COTTONWOOD	POPULUS DELTOIDES	17	25.5	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	DEAD LIMB, VINES, TRUNK CO-DOMINANT	
	EUROPEAN ALDER	ALNUS GLUTINOSA	18	27	POOR	REMOVE	NO YES PROPOSED PATIO OF 1.1	ROT/DECAY, MULTITRUNK, SMALL ROT NEAR BASE, CRITICAL ROOT WITHIN LOD, CHANGE TO BLACK ALDER	
	STERN COTTONWOOD STERN COTTONWOOD	POPULUS DELTOIDES POPULUS DELTOIDES	6.25 6.5	9.375 9.75	FAIR FAIR	REMOVE REMOVE	YES. PROPOSED RATIO OF 1:1 YES. PROPOSED RATIO OF 1:1	VINES, CRITICAL ROOT WITHIN LOD VINES, CRITICAL ROOT MAY BE WITHIN LOD	
	STERN COTTONWOOD	POPULUS DELTOIDES POPULUS DELTOIDES	5.5	9.75 8.25	POOR	REMOVE	TES. PROPOSED RATIO OF 1:1	POOR STRUCTURE, VINES, LEANING	
	BRADFORD PEAR	PYRUS CALLERYANA	5.75	8.625	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	VINES, TRUNK CO-DOMINANT	
חם	STERN COTTONWOOD	POPULUS DELTOIDES	5.75	8.625	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	POOR STRUCTURE, VINES, SLIGHT LEAN	
			9.75	14.625	FAIR	REMOVE	YES. PROPOSED RATIO OF 1:1	HIGH FOLIAGE, CRITICAL ROOT MAY BE WITHIN LOD	
EASTE	BRADFORD PEAR	PYRUS CALLERYANA	9.75	14.025					
EASTE BR BO	BRADFORD PEAR BOXELDER MAPLE BOXELDER MAPLE	ACER NEGUNDO ACER NEGUNDO	5.75 5.75	8.625 8.625	FAIR FAIR	REMOVE REMOVE	YES. PROPOSED RATIO OF 1:1 YES. PROPOSED RATIO OF 1:1	DEAD LIMB, VINES VINES, TRUNK CO-DOMINANT	

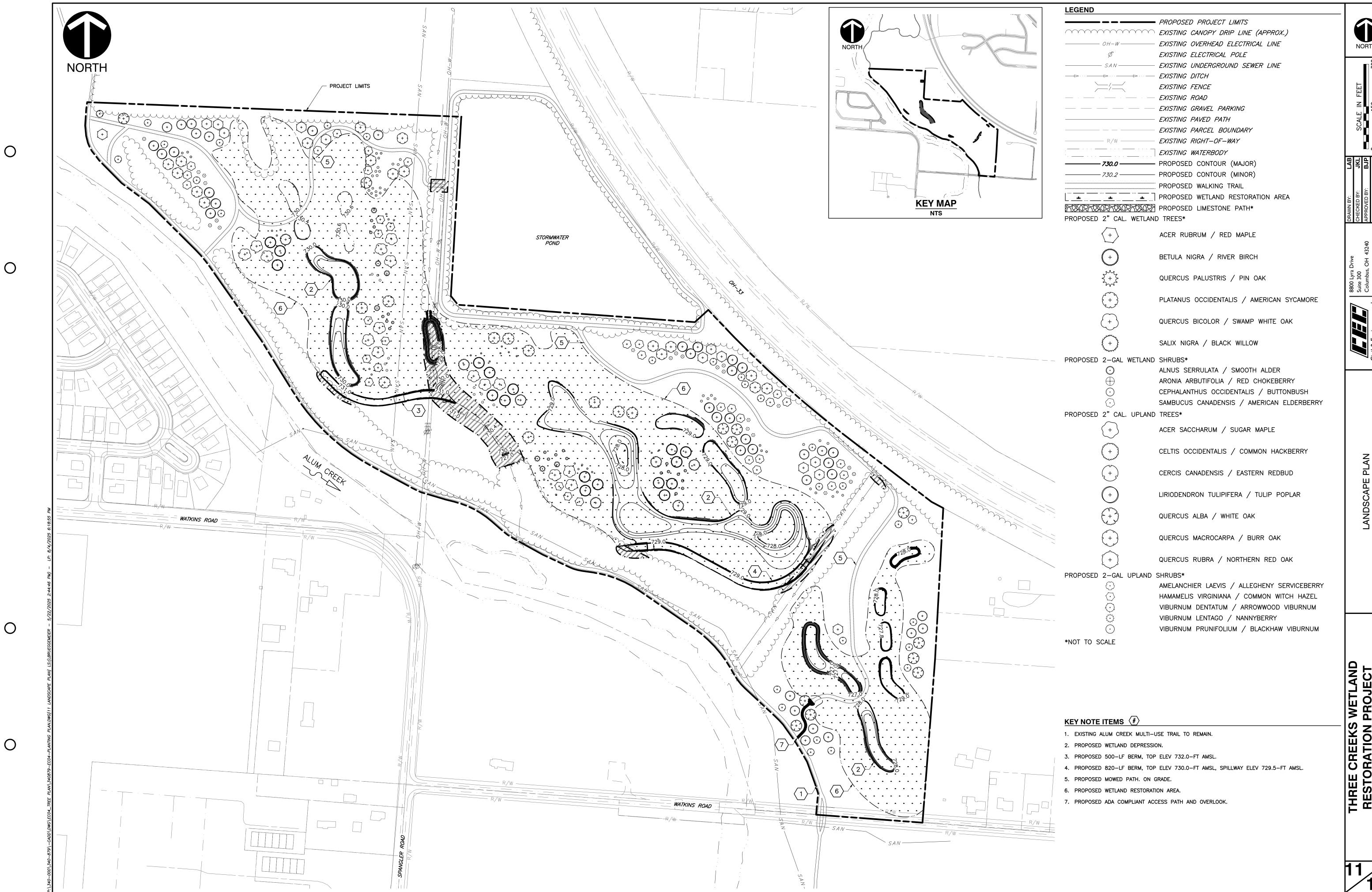
REE TAG ID	COMMON NAME	BOTANICAL NAME	DIAMETER AT STANDARD HEIGHT (IN.)	CRITICAL ROOT ZONE RADIUS (FT.)	CONDITION	ACTION	PROTECTION MEASURES	MITIGATION REQUIRED (Y/N)	CONDITION ATTRIBUTE NOTES
T-4	WHITE ASH	FRAXINUS AMERICANA	16	24	CRITICAL	DO NOT DISTURB		NO NO	DEAD LIMB, POOR STRUCTURE, TRUNK CO-DOMINANT, TRUNK CRACKED, DAMAGED BARK, ROT/DECAY, 2/3 TRUNKS DEAD
T-5	CRAB APPLE	MALUS CORONARIA	18	27	POOR	DO NOT DISTURB		NO	DEAD LIMB, TRUNK CO-DOMINANT
T-6	WHITE ASH	FRAXINUS AMERICANA	21	31.5	POOR	DO NOT DISTURB		NO	DEAD LIMB, POOR STRUCTURE, TRUNK CO-DOMINANT, TRUNK CRACKED, DAMAGED BARK, ROT/DECAY
T-7	RED MAPLE	ACER RUBRUM	15	22.5	POOR	DO NOT DISTURB		NO	TRUNK CO-DOMINANT, DAMAGED BARK, ROT/DECAY, CAVITY, DAMAGED BASE
T-8	RED MAPLE	ACER RUBRUM	15	22.5	FAIR	DO NOT DISTURB		NO	TRUNK CO-DOMINANT
T-9	RED MAPLE	ACER RUBRUM	12	18	FAIR	DO NOT DISTURB		NO	TRUCK CO-DOMINANT, ROT/DECAY, BASE DAMAGED
T-10	RED MAPLE	ACER RUBRUM	12	18	FAIR	DO NOT DISTURB		NO	TRUNK CO-DOMINANT,
T-11	RED MAPLE	ACER RUBRUM	11.5	17.25	FAIR	DO NOT DISTURB		NO	TRUNK CO-DOMINANT
T-12	RED MAPLE	ACER RUBRUM	10.5	15.75	POOR	DO NOT DISTURB		NO	TRUNK CO-DOMINANT, POOR STRUCTURE, ROT/DECAY, VINES, CO DOMINANCE STARTS AT 1FT FROM BASE
T-13	HONEY LOCUST	GLEDITSIA TRIACANTHOS	15	22.5	GOOD	DO NOT DISTURB	HIGH VISIBILITY FENCING	NO	VINES
T-14	BOXELDER MAPLE	ACER NEGUNDO	4	6	FAIR	DO NOT DISTURB		NO	, REMOVE THIS TREE AND MULTIPLE HONEYSUCKLE AND OSAGE.
T-15	GREEN ASH	FRAXINUS PENNSYLVANICA	8.5	12.75	CRITICAL	DO NOT DISTURB		NO	DEAD LIMB, TRUNK CO-DOMINANT, DAMAGED BARK
T-16	AMERICAN ELM	ULMUS AMERICANA	5.5	8.25	FAIR	DO NOT DISTURB	HIGH VISIBILITY FENCING	NO	DEAD LIMB, POOR STRUCTURE
T-17	BOXELDER MAPLE	ACER NEGUNDO	4.25	6.375	FAIR	DO NOT DISTURB	HIGH VISIBILITY FENCING	NO	VINES
T-18	BOXELDER MAPLE	ACER NEGUNDO	4.5	6.75	FAIR	DO NOT DISTURB	HIGH VISIBILITY FENCING	NO	
T-19	GREEN ASH	FRAXINUS PENNSYLVANICA	5.25	7.875	GOOD	DO NOT DISTURB	HIGH VISIBILITY FENCING	NO	
T-20	BLACK WILLOW	SALIX NIGRA	11	16.5	FAIR	DO NOT DISTURB	HIGH VISIBILITY FENCING	NO	DEAD LIMB, POOR STRUCTURE, LEANING
T-21	HONEY LOCUST	GLEDITSIA TRIACANTHOS	11.5	17.25	FAIR	DO NOT DISTURB	HIGH VISIBILITY FENCING	NO	TRUNK CO-DOMINANT, CO DOMINANCE STARTS 1 FT FROM BASE
T-22	WHITE MULBERRY	MORUS ALBA	11.5	17.25	POOR	DO NOT DISTURB	HIGH VISIBILITY FENCING	NO	DEAD LIMB, POOR STRUCTURE, TRUNK CO-DOMINANT, INVASIVE
T-23	RED MAPLE	ACER RUBRUM	25.5	38.25	FAIR	DO NOT DISTURB	HIGH VISIBILITY FENCING	NO	DEAD LIMB, TRUNK CRACKED, ROT/DECAY, FREEZE CRACKING
T-24	GREEN ASH	FRAXINUS PENNSYLVANICA	5	7.5	FAIR	DO NOT DISTURB	HIGH VISIBILITY FENCING	NO	POOR STRUCTURE, PRUNE DEAD BRANCHES
T-25	WHITE MULBERRY	MACLURA POMIFERA	15	22.5	POOR	DO NOT DISTURB	HIGH VISIBILITY FENCING	NO	DEAD LIMB, POOR STRUCTURE, TRUNK CO-DOMINANT, INVASIVE SPECIES
T-26	AMERICAN ELM	ULMUS AMERICANA	7	10.5	GOOD	DO NOT DISTURB	HIGH VISIBILITY FENCING	NO	DEAD LIMB, VINES, PRUNE DEAD LIMBS REMOVE POISON IVY
T-27	RED MAPLE	ACER RUBRUM	5	7.5	POOR	DO NOT DISTURB	HIGH VISIBILITY FENCING	NO	POOR STRUCTURE, ROT/DECAY, TRUNK DECAY
T-28	WHITE MULBERRY	MORUS ALBA	21	31.5	POOR	DO NOT DISTURB	HIGH VISIBILITY FENCING	NO	DEAD LIMB, POOR STRUCTURE, TRUNK CO-DOMINANT, VINES
T-29	BLACK CHERRY	PRUNUS SEROTINA	11.5	17.25	CRITICAL	DO NOT DISTURB		NO	DEAD LIMB, POOR STRUCTURE, TRUNK CRACKED, VINES, ROT/DECAY
T-30	HACKBERRY	CELTIS OCCIDENTALIS	8	12	FAIR	DO NOT DISTURB		NO	MULTI TRUNKED
T-31	SHAGBARK HICKORY	CARYA OVATA	30.5	45.75	GOOD	DO NOT DISTURB		NO	NO MITIGATION PROPOSED. TREE REMOVAL ASSOCIATED WITH OTHER PROJECT. DEAD LIMB. FEW DEAD LIMBS NEED TO BE PRUNED
T-32*	EASTERN COTTONWOOD	POPULUS DELTOIDES	27	40.5	GOOD	DO NOT DISTURB	HIGH VISIBILITY FENCING, 12" MULCHING AS NEEDED	NO	NO MITIGATION PROPOSED. TREE REMOVAL ASSOCIATED WITH OTHER PROJECT. MAY NEED TO PRUNE SOME LOWER LIMBS
T-33*	WHITE MULBERRY	MORUS ALBA	16.5	24.75	POOR	DO NOT DISTURB	HIGH VISIBILITY FENCING, 12" MULCHING AS NEEDED	NO	NO MITIGATION PROPOSED. TREE REMOVAL ASSOCIATED WITH OTHER PROJECT. DEAD LIMB, POOR STRUCTURE, PEST/DISEASE, CAVITY, ROT/DECAY, MULTI-TRUNKED, BLACK MOLD A
T-34*	BRADFORD PEAR	PYRUS CALLERYANA	12.5	18.75	FAIR	DO NOT DISTURB	HIGH VISIBILITY FENCING, 12" MULCHING AS NEEDED	NO	NO MITIGATION PROPOSED. TREE REMOVAL ASSOCIATED WITH OTHER PROJECT., SOME LIMBS LOST DURING SEWER CLEARING
T-35*	BLACK CHERRY	PRUNUS SEROTINA	15	22.5	POOR	DO NOT DISTURB		NO	NO MITIGATION PROPOSED. TREE REMOVAL ASSOCIATED WITH OTHER PROJECT. DEAD LIMB, VINES, TRUNK CO-DOMINANT, ROT/DECAY, CAVITY
T-36*	HACKBERRY	CELTIS OCCIDENTALIS	5	7.5	POOR	DO NOT DISTURB		NO	NO MITIGATION PROPOSED. TREE REMOVAL ASSOCIATED WITH OTHER PROJECT., TREE GROWING THROUGH METAL WIRE FENCE
T-37*	HACKBERRY	CELTIS OCCIDENTALIS	8	12	FAIR	DO NOT DISTURB		NO	NO MITIGATION PROPOSED. TREE REMOVAL ASSOCIATED WITH OTHER PROJECT. DEAD LIMB, DEAD LOWER BRANCHES
T-38*	WHITE MULBERRY	MORUS ALBA	9.5	14.25	POOR	DO NOT DISTURB		NO	NO MITIGATION PROPOSED. TREE REMOVAL ASSOCIATED WITH OTHER PROJECT. DEAD LIMB, ROT/DECAY, CAVITY, WEEPING DOWN SIDE
T-39*	WHITE MULBERRY	MORUS ALBA	9	13.5	POOR	DO NOT DISTURB		NO	NO MITIGATION PROPOSED. TREE REMOVAL ASSOCIATED WITH OTHER PROJECT. DEAD LIMB, VINES, SOME LIMBS REMOVED DURING SEWER CLEARING
T-40*	RED MULBERRY	MORUS RUBRA	12	18	CRITICAL	DO NOT DISTURB		NO	NO MITIGATION PROPOSED. TREE REMOVAL ASSOCIATED WITH OTHER PROJECT. DEAD LIMB, POOR STRUCTURE, DAMAGED BARK, ROT/DECAY, CAVITY, TREE GROWING INTO METAL FEI
T-41*	HACKBERRY	CELTIS OCCIDENTALIS	38	57	FAIR	DO NOT DISTURB		NO	CAUSING GIRDLING ON TRUNK. NO MITIGATION PROPOSED. TREE REMOVAL ASSOCIATED WITH OTHER PROJECT. DEAD LIMB, VINES, MULTI-TRUNK, NEED TO TRIM BACK DEAD LIMBS
T-42*	EASTERN COTTONWOOD	POPULUS DELTOIDES	23	34.5	GOOD	DO NOT DISTURB		NO	NO MITIGATION PROPOSED. TREE REMOVAL ASSOCIATED WITH OTHER PROJECT. VINES, REMOVE VINES, POSSIBLY TRIM LOWER BRANCHES
T-43*	HACKBERRY	CELTIS OCCIDENTALIS	23.5	35.25	FAIR	DO NOT DISTURB		NO NO	NO MITIGATION PROPOSED. TREE REMOVAL ASSOCIATED WITH OTHER PROJECT. DEAD LIMB, VINES, PRUNE BRANCHES AND VINES NO MITIGATION PROPOSED. TREE REMOVAL ASSOCIATED WITH OTHER PROJECT. DEAD LIMB, VINES, PRUNE BRANCHES AND VINES
Γ–190*	WHITE MULBERRY	MORUS ALBA	10	15	POOR	DO NOT DISTURB	HIGH VISIBILITY FENCING, 12" MULCHING AS NEEDED	NO	NO MITIGATION PROPOSED. TREE REMOVAL ASSOCIATED WITH OTHER PROJECT. DEAD LIMB, VINES, CAVITY, SHALLOW ROOT
T-191*	BOXELDER MAPLE	ACER NEGUNDO	10	15	POOR	DO NOT DISTURB	HIGH VISIBILITY FENCING, 12" MULCHING AS NEEDED	NO	NO MITIGATION PROPOSED. TREE REMOVAL ASSOCIATED WITH OTHER PROJECT. DEAD LIMB, POOR STRUCTURE, TRUNK CRACKED
T-192	GREEN ASH	FRAXINUS PENNSYLVANICA	5.5	8.25	POOR	DO NOT DISTURB	THOSE VIOLENTE PERONO, 12 INCESTING ACTUALDED	NO	DEAD LIMB, VINES
T-194	BOXELDER MAPLE	ACER NEGUNDO	7	10.5	CRITICAL	DO NOT DISTURB		NO	DEAD LIMB, POOR STRUCTURE, TRUNK DEVIATION FROM VERTICAL, DAMAGED BARK, NEARLY HORIZONTAL BUT LIVING
T-196	BOXELDER MAPLE	ACER NEGUNDO	8	12	CRITICAL	DO NOT DISTURB		NO	DEAD LIMB, POOR STRUCTURE, VINES, TRUNK DEVIACTION FROM VERTICAL, DAMAGED BARK, ROT/DECAY, CAVITY
T-197	BOXELDER MAPLE	ACER NEGUNDO	5.5	8.25	POOR	DO NOT DISTURB		NO	DEAD LIMB, POOR STRUCTURE, VINES, TRUNK CRACKED, DAMAGED BARK
T-198	BOXELDER MAPLE	ACER NEGUNDO	5	7.5	CRITICAL	DO NOT DISTURB		NO	DEAD LIMB, POOR STRUCTURE, TRUNK DEVIATION FROM VERTICAL, DAMAGE BARK, CROWN DIEBACK, ROT/DECAY
T-199	BOXELDER MAPLE	ACER NEGUNDO	12	18	POOR	DO NOT DISTURB		NO	DEAD LIMB, POOR STRUCTURE, VINES
Γ–201	HACKBERRY	CELTIS OCCIDENTALIS	7	10.5	FAIR	DO NOT DISTURB		NO	CRITICAL ROOT INSIDE LOD
Γ–202	EUROPEAN ALDER	ALNUS GLUTINOSA	10	15	FAIR	DO NOT DISTURB		NO	MULTI TRUNK, CHANGE TO BLACK ALDER.
-203	HACKBERRY	CELTIS OCCIDENTALIS	21	31.5	POOR	DO NOT DISTURB		NO	DEAD LIMB, VINES, CAVITY, ROT/DECAY, CAVITY NEAR BASE
T-204	EASTERN COTTONWOOD	POPULUS DELTOIDES	24	36	FAIR	DO NOT DISTURB		NO	DEAD LIMB, CRITICAL ROOT WITHIN LOD, MAY NEED REMOVAL DEPENDING ON GRADING, NEAR POND EDGE
T-205	BLACK WALNUT	JUGLANS NIGRA	7.75	11.625	POOR	DO NOT DISTURB		NO	POOR STRUCTURE, TRUNK CO-DOMINANT, VINES, DEAD LIMB, ONE CO-DOMINANT TRUNK DEAD
T-227	EASTERN COTTONWOOD	POPULUS DELTOIDES	29	43.5	FAIR	DO NOT DISTURB	HIGH VISIBILITY FENCING, 12" MULCHING AS NEEDED	NO	VINES, MULTI TRUNK, CRITICAL ROOT MAY BE WITHIN LOD
T-228	CRAB APPLE	MALUS CORONARIA	13	19.5	FAIR	DO NOT DISTURB	HIGH VISIBILITY FENCING, 12" MULCHING AS NEEDED	NO	MULTI TRUNK, CRITICAL ROOT MAY BE WITHIN LOD
1-220	AMERICAN SYCAMORE	PLATANUS OCCIDENTALIS	10.5	15.75	GOOD	DO NOT DISTURB	HIGH VISIBILITY FENCING	NO	CRITICAL ROOT MAY BE WITHIN LOD
	AMILITICAL STOCKHOIL		•	Ī.				+	
T-230R T-233R	AMERICAN SYCAMORE	PLATANUS OCCIDENTALIS	5.75	8.625	FAIR	DO NOT DISTURB	HIGH VISIBILITY FENCING, MULCHING AS NEEDED	NO NO	
T-230R			5.75 17.5	8.625 26.25	FAIR FAIR	DO NOT DISTURB DO NOT DISTURB	HIGH VISIBILITY FENCING, MULCHING AS NEEDED HIGH VISIBILITY FENCING, 12" MULCHING AS NEEDED	NO NO	VINES, TRUNK CO-DOMINANT, DEAD LIMB, CRITICAL ROOT MAY BE WITHIN LOD

*TREE IMPACT ASSOCIATED WITH ALUM CREEK TRUNK SOUTH SANITARY SEWER REHABILITATION - PHASE 1 CAPITAL IMPROVEMENTS PROJECT NO. 350725-100004.

TABLE 2	: REQUIRED TREE M	ITIGATION SUMMARY	/ TABLE
TYPE	UNIT QTY (IN @ DSH)	MITIGATION RATIO	MITIGATION REQUIRED (IN)
CRITICAL-DEAD-POOR	647	0	0
FAIR-GOOD	1905	1	1905
	1905		

TABLE 3:	PROPOSED TREE M	ITIGATION SUMMAR	Y TABLE
TYPE	UNIT QTY (EA)	INCHES PER UNIT	MITIGATION PROVIDED (IN)
2" CALIPER TREES	200	2	400
BARE ROOT SAPLINGS - TREES	12284	0.25	3071
		TOTAL	3471





2 SECOND CUT - REMOVES THE MAJORITY OF LIMB WEIGHT 3 THIRD CUT - ACHIEVES THE FINAL FINISHED CUT THAT CAN MOST EASILY HEAL OVER THE COMING MONTHS.

1 FIRST CUT - ENSURES THE LIMB DOES NOT TEAR DOWN INTO THE TRUNK BARK WHEN REMOVED

COLLAR CONIFER HARDWOOD

REDUCTION CUT - STUB CUT (PROHIBITED) - BRANCH REMOVAL

GENERAL NOTES:

- 1. WHEN PRUNING, PROTECT THE BRANCH COLLAR, WHICH IS ESSENTIAL FOR WOUNDS TO CLOSE.
- DO NOT LEAVE STUB.

UNEXCAVATED -EXISTING SOIL

EXCAVATED AND FIRMLY

NOT ALLOW THE ROOTS TO DRY OUT.

5. SLOWLY AND DEEPLY SOAK THE AREA WITH WATER.

PLACED NATIVE SOIL

IS HEAVY CLAY.

- 3. DO NOT FLUSH CUT AGAINST TRUNK.
- 4. CLIMBING IRONS OR SPIKES SHALL NOT BE USED ON ANY TREE THAT IS SCHEDULED FOR PRUNING. TREES SHALL BE RAISED NO MORE THAN $\frac{1}{2}$ THE HEIGHT OF THE TREE, EXCEPTIONS WITH APPROVAL OF THE RECREATION AND PARKS DEPARTMENT FORESTRY SECTION.

SEEDLING -

2X WIDTH OF ROOTS

1. CAREFULLY UNTANGLE THE ROOTS AND SOAK THE ROOTS IN WATER 3 TO 6 HOURS. DO

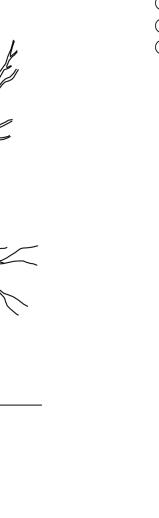
2. DIG THE PLANTING HOLE AS DEEP AS THE ROOTS AND AT LEAST TWICE AS WIDE. LOOSEN THE SIDES OF THE HOLE WITH A SHOVEL OR SPADE FORK, ESPECIALLY IF SOIL

3. FORM A CONE OF LOOSE SOIL IN THE CENTER OF THE HOLE AND SPREAD THE ROOTS OVER IT. POSITION THE PLANT'S HEIGHT SO THAT THE CROWN IS AT OR SLIGHTLY

4. FILL THE PLANTING HOLE AND COVER THE ROOTS WITH NATIVE SOIL ALONG THE SIDES OF THE PLANTING HOLE. TAMP DOWN GENTLY TO KEEP THE PLANT FIRMLY IN PLACE.

SOIL CONE-

5. FOLLOW ALL APPLICABLE STANDARDS IN THE COLUMBUS TREE TECHNICAL MANUAL.



CUT TOP OF STAKE SQUARE

PLANT WITH 2 TO 5 BUDS SCARS ABOVE GROUND LEVEL

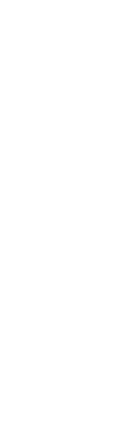
TRIM BRANCHES CLOSE

MAKE ANGLED CUT AT BUTT-END,

3/4-2 IN. DIAMETER

PLANT BUTT-END DOWN

TREE PRUNING NOT TO SCALE



PLANTING NOTES:

- 1. HARVEST WILLOW AND/OR ALDER SPECIES ON-SITE OR PURCHASE STAKES AND PLANT THROUGHOUT MICRO-TOPOGRAPHY ÁREAS, WETLAND CELLS AND ALONG STREAM BANKS AT A 12-FOOT CENTER SPACING RATE TO ACHIEVE AT LEAST 30 STEMS PER ACRE DURING THE DORMANT SEASON.
- 2. USE HEALTHY, STRAIGHT AND LIVE WOOD AT LEAST 1 YEAR OLD.

1. IDENTIFY COMPETING LEADERS, REMOVE OR

2. PRUNE MALFORMED BRANCHES.

IN ANY ONE YEAR.

REDUCTION CUTS

BRANCH.

PRUNE BACK LESS VIGOROUS BRANCHES.

3. REMOVE ANY CROSSING BRANCH WHICH WILL AFFECT OTHER BRANCHES GROWTH.

4. REMOVE NO MORE THAN 1/3 OF WATER SPROUTS

5. IF BRANCH ATTACHMENT IS NARROWER THAN IS

COMMON FOR THE SPECIES, REMOVE THE

6. PRUNE ANY BROKEN OR BADLY DAMAGED

7. PRUNE TEMPORARY BRANCHES WITH

(1) COMPETING LEADERS

(2) MALFORMED BRANCH

(3) CROSSING BRANCH

(4) WATER SPROUTS

(5) NARROW BRANCH ATTACHMENT

(6) BROKEN/DAMAGED BRANCH

(7) TEMPORARY BRANCHES

(8) SUCKERS

- 3. FOR STAKES HARVESTED ON-SITE, MAKE CLEAN CUTS AND DO NOT DAMAGE STAKES OR SPLIT ENDS DURING INSTALLATION; USE AN IRON BAR AND PILOT HOLE IN FIRM SOILS.
- 4. SOAK CUTTINGS FOR AT LEAST 24 HOURS PRIOR TO INSTALLATION. SOAK FOR 5-7 DAYS FOR BEST RESULTS.
- 5. BURY STAKE AT LEAST 3 LENGTH AND TAMP THE SOIL AROUND THE STAKE.

LIVE STAKE PLANTING 12 NOT TO SCALE

8. TWIST AND PULL OUT SUCKERS WHEN YOUNG.



PRIOR TO MULCHING, LIGHTLY TAMP SOIL AROUND THE ROOT BALL IN 3" LIFTS TO BRACE TREE. DO NOT OVER COMPACT.

WHEN THE PLANTING HOLE HAS BEEN

ROOT BALL TO SETTLE THE SOIL

TRUNK PROTECTION MIN 3' TALL-

SEE SCD 2179, BACKFILL WITHIN THE RIGHT OF WAY

HOLE SHALL BE 2X AS WIDE AS THE ROOT BALL

REMOVE THE TOP ⅓ OF WIRE BASKET, BURLAP, AND ALL TWINE FROM ROOTBALL

REMOVE CENTRAL LEADER.

SHOWN IN THE TREE PLAN.

DEPTH OF HOLE SHOULD BE DEPTH

OF ROOTBALL, NOT BELOW.

BACKFILLED, POUR WATER AROUND THE

MULCH - COMPOSTED BARK MULCH,

EXISTING SITE SOIL ADDED TO CREATE A

SMOOTH TRANSITION FROM THE TOP OF

THE RAISED ROOT BALL TO THE FINISHED

LOOSENED SOIL. DIG AND TURN THE SOIL TO REDUCE COMPACTION TO THE AREA

GRADE AT A 15% MAX. SLOPE

AND DEPTH SHOWN

MIN. 2" DEPTH. MAX. 4". LIGHTLY MULCH OVER ROOT BALL TO PREVENT DRYING. LEAVE A 2" DIA.

AREA AROUND THE TREE TRUNK FREE OF MULCH.

DRIGINAL GRADE

AT A MINIMUM 1:1. TOP OF PLANTING HOLE SHALL

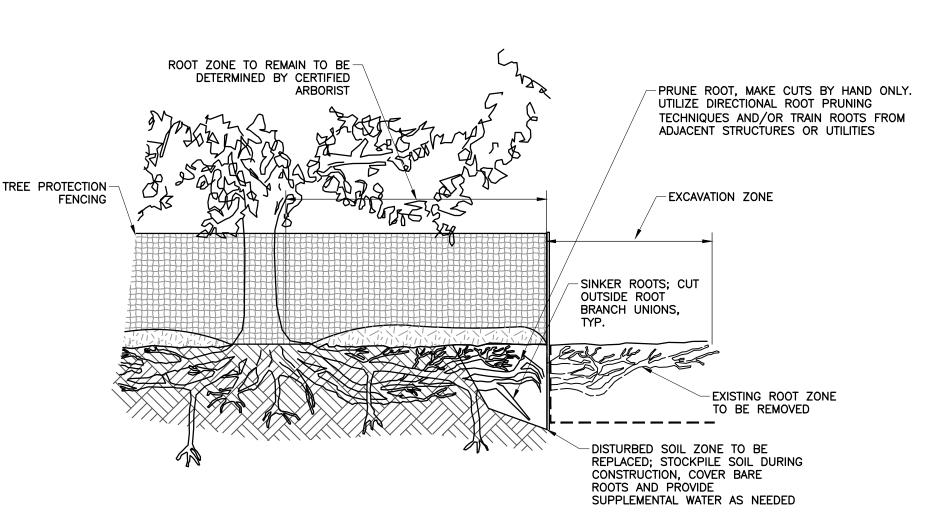
BE TWO (2) TIMES THE DIAMETER OF THE ROOT BALL.

PLANTING HOLE SHALL BE DUG TO THE SAME DEPTH

PLANTING HOLE SIDE SLOPED

AS THE ROOT BALL STRUCTURE.

-2"X2" HARDWOOD STAKES OR STUDDED T-POST (1.25LB. PER FOOT MIN.)



BIODEGRADEABLE TIES,

AT ROOT BALL PERIPHERY

— USE NATIVE SOIL FOR BACKFILL

- UNDISTURBED SOIL

BALLED AND BURLAPPED TREE PLANTING

1. REMOVE DEAD AND BROKEN BRANCHES AND ALL SUCKER GROWTH. DO NOT DAMAGE OR

2. THE TYPE OF TREES TO BE USED SHALL BE SELECTED FROM AN APPROVED LIST PROVIDED BY THE CITY AS FOUND IN THE TREE TECHNICAL MANUAL AND SHOWN IN THE TREE PLAN.

3. TREE SPACING AND MINIMUM TREE LAWN WIDTHS ALONG WITH THE TYPES OF TREES

4. STAKING OPTIONS: EITHER TO (2) VERTICAL OR THREE (3) GUY STAKES

ACCEPTABLE FOR TREE LAWNS CAN BE FOUND IN THE TREE TECHNICAL MANUAL AND

ROUND-TOPPED SOIL BERM 2" HIGH X

8" WIDE ABOVE ROOT BALL SURFACE SHALL BE CONSTRUCTED AROUND THE ROOT BALL. BERM SHALL BEGIN

-FINISH GRADE 3" BELOW WALK

GENERAL NOTES:

FLEXIBLE BIODEGRADABLE TIES-

TRUNK PROTECTION MIN 3' TALL-

ROUND-TOPPED SOIL BERM 2" HIGH X-

8" WIDE ABOVE ROOT BALL SURFACE

THE ROOT BALL. BERM SHALL BEGIN

BOTTOM OF ROOT BALL RESTS ON UNDISTURBED

PLAN VIEW

1 TREE PLANTING

PLAN

SECTION VIEW

CONTAINER PLANTING

-BIODEGRADABLE TIES

THE TREE PROTECTION ZONE (TPZ), FENCE RADIUS, IS THE AREA DEFINED BY THE CRITICAL ROOT ZONE

(TRUNK-DIAMETER AT STANDARD HEIGHT) WHICH IS

MULTIPLIER BY 1.5. EXAMPLE: 10"DSH X 1.5 = 15' CRZ,

(CRZ) WHERE CONSTRUCTION ACTIVITIES ARE PROHIBITED. CRZ IS DETERMINED BY THE DSH

TREE PROTECTION FENCE RADIUS.

METAL POST, MIMIMUM 4' TALL

CONSTRUCTION FENCING

—PREVAILING WIND

SHALL BE CONSTRUCTED AROUND

AT ROOT BALL PERIPHERY

SOIL OR RECOMPACTED SOIL

 FOR GROUPS OF TREES PLACE BARRICADES BETWEEN TREES AND CONSTRUCTION ACTIVITY AT THE EDGE OF THE TREES CRITICAL ROOT ZONE.

EXISTING UNDISTURBED SOIL

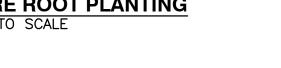
- 2. TREE PROTECTION IS REQUIRED WHEN CONSTRUCTION ACTIVITY ENCROACHES ON THE CRITICAL ROOT ZONE OF A TREE.
- 3. SEE COLUMBUS TREE TECHNICAL MANUAL FOR ADDITIONAL TREE PROTECTION REQUIREMENTS.

- 1. INSTALL TREE PROTECTION FENCING AS SHOWN ON THIS PLAN OR AS DIRECTED BY THE CERTIFIED ARBORIST. ANY ADJUSTMENTS TO FENCING LOCATIONS MUST BE PRE-APPROVED BY THE ARBORIST. ANY DEVIATION FROM THIS PLAN OR APPROVED CHANGE SHALL BE CORRECTED BY THE GENERAL CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.
- 2. ALL TREE NOTED FOR PRUNING, LIMB RESTRAINT, AND ROOT PRUNING SHALL BE SELECTED BY THE CERTIFIED ARBORIST.
- 3. NO STAGING, EQUIPMENT, OR VEHICLES SHALL BE PLACED WITHIN THE CRITICAL ROOT ZONE UNLESS INDICATED OTHERWISE ON PLAN.
- 4. COVER EXPOSED ROOTS AND PROVIDE SUPPLEMENTAL WATER AS NECESSARY. PROVIDE AN EXTENDED RECOVERY PERIOD IF LARGE ROOTS OR A LARGE PERCENTAGE OF ROOTS ARE REMOVED.

3 TREE PROTECTION FENCING 12/NOT TO SCALE







HEADING CUT (PROHIBITED) **CUT TYPES**

-BACKFILL SOIL LEVEL

NOF	RTH

Elderberry	Sambucus canadensis	FACW	3		738
				TOTAL:	2,952
* Wetland indicator status	based on Midwest USDA and USAC	E subregion.			
- Contractor must obtain ap	pproval prior to purchasing materials	and installing.			
- To be installed in conjunct	ion with woody bare-root plantings	but focused in bottom of de	epressional wetland habitat.		
- Install randomly at a rate	of 300 stems per acre.				

INDICATOR STATUS*

FACW

FACW

COEFFICIENT OF CONSERVATISM QUANTITY (EA)

738

738

TABLE 8: LIVE STAKES FOR THE 9.8-ACRE WETLAND LIVE STAKE AREAS.

Cephalanthus occidentalis

Cornus amomum

Salix nigra

COMMON NAME

SCIENTIFIC NAME

Silky Dogwood

Black Willow

Button Bush

TYPE	SCIENTIFIC NAME	COMMON NAME	INDICATOR STATUS*	COEFFICIENT OF CONSERVATISM	TOTAL UPLAND BAI ROOT QUANTITY
	Acer rubrum	Red Maple	FAC	2	11
	Betula Nigra	River Birch	FACW	9	17
	Quercus palustris	Pin Oak	FACW	5	7
2" CAL. TREES	Platanus occidentalis	American Sycamore	FACW	7	10
	Quercus bicolor	Swamp White Oak	FACW	7	15
	Salix nigra	Black Willow	OBL	2	7
				TOTAL:	67
	Alnus serrulata	Smooth Alder	OBL	6	21
	Aronia arbutifolia	Red Chokeberry	FACW	9	11
2-GAL. SHRUBS	Cephalanthus occidentalis	Buttonbush	OBL	6	17
	Sambucus canadensis	Elderberry	FAC	3	11
		,		TOTAL:	60
			TOTAL WOOD	Y SPECIES COMBINED:	127

TYPE	SCIENTIFIC NAME	COMMON NAME	INDICATOR STATUS*	COEFFICIENT OF CONSERVATISM	TOTAL WETLAND BA ROOT QUANTITY
	Acer Negundo	Boxelder	FAC	3	614
	Acer rubrum	Red Maple	FAC	2	614
	Salix amygdaloides	Peachleaf willow	FACW	3	614
	Betula Nigra	River Birch	FACW	9	767
	Carpinus caroliniana	American Hornbeam	FAC	5	614
	Celtis occidentalis	Common Hackberry	FAC	4	614
CANOPY TREES	Platanus occidentalis	American Sycamore	FACW	7	767
	Populus deltoides	Eastern Cottonwood	FAC	3	614
	Quercus bicolor	Swamp White Oak	FACW	7	767
	Quercus palustris	Pin Oak	FACW	5	767
	Salix nigra	Black Willow	OBL	2	460
	Ulmus americana	American Elm	FACW	2	460
			1	TOTAL:	7,674
	Alnus serrulata	Smooth Alder	OBL	6	256
	Aronia arbutifolia	Red Chokeberry	FACW	9	256
	Aronia melanocarpa	Black chokeberry	FACW	5	256
	Cephalanthus occidentalis	Buttonbush	OBL	6	256
	Cornus sericea	Red-Osier Dogwood	FACW	3	256
SHRUBS	Ilex verticillata	Common Winterberry	FACW	6	256
	Physocarpus opulifolius	Ninebark	FACW	4	256
	Salix sericea	Silky Willow	OBL	4	256
	Sambucus canadensis	Elderberry	FAC	3	256
	Viburnum lentago	Nannyberry	FAC	5	256
			-	TOTAL:	2,558
			TOTAL WOO	DY SPECIES COMBINED:	10,232
Wetland in	dicator status based on Midwest	: USDA and USACE subregion.			
Substitutio	ns may be made based upon avai	lability and coordination with en	gineer. No single spec	cies may comprise more t	han 20% of habitat.
May substit	cute containerized plant stock at	same density			

COMMON NAME	SCIENTIFIC NAME	INDICATOR STATUS*	COEFFICIENT OF CONSERVATISM	DENSITY	LBS PER ACRE	TOTAL QUANTIT
Virginia Wild Rye	Elymus virginicus	FACW	3	35.00%	5.25	102.47
Nodding Wild Rye	Elymus canadensis	FACU	6	17.00%	2.55	49.77
Riverbank Wild Rye	Elymus riparius	FACW	5	16.70%	2.51	48.89
Big Bluestem	Andropogon gerardii	FAC	5	4.00%	0.60	11.71
Showy Tick Trefoil	Desmodium canadense	FACU	4	3.12%	0.47	9.13
Deer-tongue Grass	Dichanthelium clandestin	FACW	2	3.00%	0.45	8.78
Wild Senna	Senna hebecarpa	FACW	4	3.00%	0.45	8.78
Black-eyed Susan	Rudbeckia hirta	FACU	1	2.50%	0.38	7.32
Common Milkweed	Asclepias syriaca	FACU	1	2.00%	0.30	5.86
Dense Blazingstar	Liatris spicata	FAC	7	2.00%	0.30	5.86
Switch Grass	Panicum virgatum	FAC	4	2.00%	0.30	5.86
Wild Bergamot	Monarda fistulosa	FACU	3	1.87%	0.28	5.47
Golden Alexanders	Zizia aurea	FAC	6	1.56%	0.23	4.57
Rose Milkweed	Asclepias incarnata	OBL	4	1.56%	0.23	4.57
Wingstem	Actinomeris alternifolia	FACW	5	1.25%	0.19	3.66
Yellow Coneflower	Ratibida pinnata	UPL	5	1.00%	0.15	2.93
Blue Vervain	Verbena hastata	FACW	4	0.62%	0.09	1.82
Autumn Bentgrass	Agrostis perennans	FAC	4	0.47%	0.07	1.38
Ohio Spiderwort	Tradescantia ohiensis	FACU	5	0.40%	0.06	1.17
Narrow Leaved Mountain Mint	Pycnanthemum tenuifolium	FAC	4	0.19%	0.03	0.56
Spotted Joe Pye	Eupatorium maculatum	OBL	6	0.19%	0.03	0.56
Woolgrass	Scirpus cyperinus	OBL	1	0.15%	0.02	0.44
Dwarf Goldenrod	Solidago nemoralis	UPL	2	0.12%	0.02	0.35
Path Rush	Juncus tenuis	FAC	1	0.10%	0.02	0.29
Stiff Goldenrod	Solidago rigida	FACU	8	0.10%	0.02	0.29
New England Aster	Aster novae-angliae	FACW	2	0.10%	0.02	0.29
		•	Total:	100.00%	15	292.8
- To be broadcast spread or seed	drilled at 15.0 lbs per acre.					
* Wetland indicator status based	on Midwest USDA and USACE s	subregion.				

TABLE 4: WETLAND SEED MIX FOR THE 31.0-ACRE WETLAND SEEDING AREAS.

Dichanthelium clandestin

Sparganium eurycarpum

Elymus virginicus

Elymus riparius

Bidens aristosa

Carex vulpinoidea

Carex frankii

Carex lurida

Carex comosa

Carex hystericina

Scirpus atrovirens

Verbena hastata

Actinomeris alternifolia

Eupatorium maculatum

Asclepias incarnata

Vernonia altissima

Alisma subcordatum

Tradescantia ohiensis

Eupatorium perfoliatum

Aster novae-angliae

Lobelia cardinalis

Cinna arundinacea

Lobelia siphilitica

Scirpus cyperinus

Mimulus ringens

Great/Soft-stemmed Bulrush | Schoenoplectus tabernaemontani | OBL

- Substitutions may be made based upon availability and coordination with engineer.

* Wetland indicator status based on Midwest USDA and USACE subregion.

Bidens cernua

Zizia aurea

- To be broadcast spread or seed drilled at 15.0 lbs per acre.

Scirpus acutus

Carex lupulina

Iris versicolor

Carex grayi

COMMON NAME

Virginia Wild Rye

Gray's sedge

Franks Sedge

Brown Fox Sedge

Fringed Sedge

Bristly Sedge

Porcupine Sedge

Common Hop Sedge

Northern Blue Flag

Dark Green Bulrush

Hard-stemmed Bulrush

Blue Vervain

Wingstem

Rose Milkweed

Spotted Joe Pye

Tall Ironweed

Water Plantain

Ohio Spiderwort

Golden Alexanders

Common Boneset

New England Aster

Cardinal Flower

Wood Reed

Great Lobelia

Woolgrass

Monkey Flower

Nodding Bur Marigold

Shallow/Lurid Sedge

Broadfruit Bur-Reed

Riverbank Wild Rye

Deer-tongue Grass

Tickseed Sunflower

SCIENTIFIC NAME

FACW

FACW

FACW

FACW

OBL

FACW

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OBL

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FACW

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OBL

FAC

OBL

OBL

FACU

OBL

FACW

OBL

FAC

FACW

OBL

OBL

FAC

INDICATOR COEFFICIENT OF STATUS* CONSERVATISM DENSITY LBS PER COUNTITY (LBS)

8.15%

8.00%

3.00%

2.50%

2.00%

1.00%

1.00%

1.00%

0.65%

0.62%

0.50%

0.31%

0.25%

0.25%

0.25%

0.25%

0.15%

0.12%

0.12%

0.10%

0.10%

0.07%

0.07%

0.10% 0.02

0.07% 0.01

Total: 100.00% 15.0

1.00%

7.00%

2

2

1

3

4

2

5

6

7

4

6

3

5

4

2

30.75% 4.61

4.00% 0.60

3.00% 0.45

3.00% 0.45

2.00% 0.30

18.00% 2.70 83.79

1.22

1.20

1.05

0.45

0.38

0.30

0.15

0.15

0.15

0.15

0.10

0.09

0.08

0.05

0.04

0.04

0.04

0.04

0.02

0.02

0.02

0.02

0.02

0.01

0.01

0.62% 0.09

143.14

37.94

37.24

32.59

18.62

13.97

13.97

9.31

9.31

4.66

4.66

4.66

4.66

3.03

2.89

2.89

2.33

1.44

1.16

1.16

1.16

1.16

0.70

0.56

0.56

0.47

0.47

0.33

0.33

0.33

13.97

11.64

Liriodendron tulipifera Tulip Poplar FACU 6 415 Quercus alba White Oak FACU 6 415 Quercus macrocarpa Bur Oak FAC 6 426 Quercus muehlenbergii Chinquapin Oak FACU 7 426 Prunus serotina Black Cherry FACU 3 415 TOTAL: 4,610 Aronia melanocarpa Black chokeberry FACW 5 221 Amelanchier laevis Serviceberry FAC 5 184 Cornus racemosa Gray Dogwood FAC 3 194 Corylus americana Hazelnut FACU 4 194 Hamamelis virginiana American Witchazel FACU 5 221 Sambucus canadensis Elderberry FAC 3 194 Viburnum lentago Nannyberry FAC 5 221 Viburnum dentatum Arrowwood FAC 2 194 Viburnum dentatum Arrowwood FAC 2 194 Viburnum prunifolium Blackhaw FACU 4 221 TOTAL: TOTAL: 1,844 TOTAL WOODLY SPECIES COMBINED: 6,454 Wetland indicator status based on Midwest USDA and USACE subregion.	TYPE	SCIENTIFIC NAME	COMMON NAME	INDICATOR STATUS*	COEFFICIENT OF CONSERVATISM	TOTAL UPLAND BARI ROOT QUANTITY
CANOPY TREES Certis canadensis Red Mulberry Red Celtis occidentalis Hackberry FAC 4 426 Cercis canadensis Redbud FACU 3 415 Gleditsia triacanthos Honey Locust FACU 4 415 Liriodendron tulipifera Tulip Poplar FACU 6 415 Quercus alba White Oak FACU 6 415 Quercus macrocarpa Bur Oak FACU 6 415 Quercus macrocarpa Bur Oak FACU 7 426 Prunus serotina Black Cherry FACU 3 415 TOTAL: 4,610 Aronia melanocarpa Black chokeberry FACU 5 184 Corruls racemosa Gray Dogwood FAC 3 194 Corylus americana Hazelnut FACU 4 194 Hamamelis virginiana American Witchazel FACU 5 221 Sambucus canadensis Elderberry FAC 5 221 Viburnum lentago Nannyberry FAC 5 221 Viburnum dentatum Arrowwood FAC 2 194 Viburnum prunifolium Blackhaw FACU 4 221 TOTAL: TOTAL: TOTAL: TOTAL TOTAL: FACU 5 221 Viburnum prunifolium Blackhaw FACU 4 221 TOTAL TOTAL: TOTAL TOTAL TOTAL: TOTAL		Acer saccharum	Sugar Maple	FACU	5	415
Celtis occidentalis		Quercus rubra	Red Oak	FACU	6	415
Cercis canadensis Redbud FACU 3		Morus rubra	Red Mulberry	FACU	7	426
CANOPY TREES Gleditsia triacanthos		Celtis occidentalis	Hackberry	FAC	4	426
TREES Liriodendron tulipifera Uliriodendron tulipifera Ulip Poplar TALL: Chinquapin Oak FACU FACU FACU FACU FACU FACU FACU FACU TOTAL: Aronia melanocarpa Black Cherry FACU FACU FACU FACU Black Cherry FACU		Cercis canadensis	Redbud	FACU	3	415
Aronia melanocarpa Black Chorry FACU 5 221 Amelanchier laevis Serviceberry FAC 3 194 Corrus racemosa Gray Dogwood FAC 3 194 Hamamelis virginiana American Witchazel FACU 5 221 Sambucus canadensis Elderberry FAC 3 194 Viburnum lentago Nannyberry FAC 5 221 Viburnum dentatum Arrowwood FAC 2 194 Viburnum dentatum Arrowwood FAC 2 194 Viburnum prunifolium Blackhaw FACU 4 221 TOTAL:	CANOPY	Gleditsia triacanthos	Honey Locust	FACU	4	415
Quercus macrocarpa Bur Oak FAC 6 426	TREES	Liriodendron tulipifera	Tulip Poplar	FACU	6	415
Quercus muehlenbergii Chinquapin Oak FACU 7 426 Prunus serotina Black Cherry FACU 3 415 TOTAL: 4,610 Aronia melanocarpa Black chokeberry FACW 5 221 Amelanchier laevis Serviceberry FAC 5 184 Cornus racemosa Gray Dogwood FAC 3 194 Corylus americana Hazelnut FACU 4 194 Hamamelis virginiana American Witchazel FACU 5 221 Sambucus canadensis Elderberry FAC 3 194 Viburnum lentago Nannyberry FAC 5 221 Viburnum dentatum Arrowwood FAC 2 194 Viburnum prunifolium Blackhaw FACU 4 221 Wetland indicator status based on Midwest USDA and USACE subregion. Substitutions may be made based upon availability and coordination with engineer. No single species may comprise more than 20% of habitat.		Quercus alba	White Oak	FACU	6	415
Prunus serotina Black Cherry FACU 3 415 TOTAL: 4,610 Aronia melanocarpa Black chokeberry FACW 5 221 Amelanchier laevis Serviceberry FAC 5 184 Cornus racemosa Gray Dogwood FAC 3 194 Corylus americana Hazelnut FACU 4 194 Hamamelis virginiana American Witchazel FACU 5 221 Sambucus canadensis Elderberry FAC 3 194 Viburnum lentago Nannyberry FAC 5 221 Viburnum dentatum Arrowood FAC 2 194 Viburnum prunifolium Blackhaw FACU 4 221 TOTAL WOODY SPECIES COMBINED: 6,454 Wetland indicator status based on Midwest USDA and USACE subregion.		Quercus macrocarpa	Bur Oak	FAC	6	426
TOTAL: Aronia melanocarpa Black chokeberry FACW 5 221 Amelanchier laevis Serviceberry FAC 5 184 Cornus racemosa Gray Dogwood FAC 3 194 Corylus americana Hazelnut FACU 4 194 Hamamelis virginiana American Witchazel FACU 5 221 Sambucus canadensis Elderberry FAC 3 194 Viburnum lentago Nannyberry FAC 3 194 Viburnum dentatum Arrowwood FAC 2 194 Viburnum prunifolium Blackhaw FACU 4 221 TOTAL: 1,844 TOTAL WOODY SPECIES COMBINED: 6,454 Wetland indicator status based on Midwest USDA and USACE subregion. Substitutions may be made based upon availability and coordination with engineer. No single species may comprise more than 20% of habitat.		Quercus muehlenbergii	Chinquapin Oak	FACU	7	426
Aronia melanocarpa Black chokeberry FACW 5 221 Amelanchier laevis Serviceberry FAC 5 184 Cornus racemosa Gray Dogwood FAC 3 194 Corylus americana Hazelnut FACU 4 194 Hamamelis virginiana American Witchazel FACU 5 221 Sambucus canadensis Elderberry FAC 3 194 Viburnum lentago Nannyberry FAC 5 221 Viburnum dentatum Arrowwood FAC 2 194 Viburnum prunifolium Blackhaw FACU 4 221 TOTAL: 1,844 TOTAL WOODY SPECIES COMBINED: 6,454 Wetland indicator status based on Midwest USDA and USACE subregion.		Prunus serotina	Black Cherry	FACU	3	415
Amelanchier laevis Serviceberry FAC 5 184 Cornus racemosa Gray Dogwood FAC 3 194 Corylus americana Hazelnut FACU 4 194 Hamamelis virginiana American Witchazel FACU 5 221 Sambucus canadensis Elderberry FAC 3 194 Viburnum lentago Nannyberry FAC 5 221 Viburnum dentatum Arrowwood FAC 2 194 Viburnum prunifolium Blackhaw FACU 4 221 TOTAL: 1,844 TOTAL WOODY SPECIES COMBINED: 6,454 Wetland indicator status based on Midwest USDA and USACE subregion.		TOTAL:	4,610			
Cornus racemosa Gray Dogwood FAC 3 194 Corylus americana Hazelnut FACU 4 194 Hamamelis virginiana American Witchazel FACU 5 221 Sambucus canadensis Elderberry FAC 3 194 Viburnum lentago Nannyberry FAC 5 221 Viburnum dentatum Arrowwood FAC 2 194 Viburnum prunifolium Blackhaw FACU 4 221 TOTAL: 1,844 TOTAL WOODY SPECIES COMBINED: 6,454 Wetland indicator status based on Midwest USDA and USACE subregion.		Aronia melanocarpa	Black chokeberry	FACW	5	221
SHRUBS Corylus americana Hazelnut FACU 4 194 Hamamelis virginiana American Witchazel FACU 5 221 Sambucus canadensis Elderberry FAC 3 194 Viburnum lentago Nannyberry FAC 5 221 Viburnum dentatum Arrowwood FAC 2 194 Viburnum prunifolium Blackhaw FACU 4 221 TOTAL: 1,844 TOTAL WOODY SPECIES COMBINED: 6,454 Wetland indicator status based on Midwest USDA and USACE subregion.		Amelanchier laevis	Serviceberry	FAC	5	184
SHRUBS Hamamelis virginiana American Witchazel FACU 5 221 Sambucus canadensis Elderberry FAC 3 194 Viburnum lentago Nannyberry FAC 5 221 Viburnum dentatum Arrowwood FAC 2 194 Viburnum prunifolium Blackhaw FACU 4 221 TOTAL: 1,844 TOTAL WOODY SPECIES COMBINED: 6,454 Wetland indicator status based on Midwest USDA and USACE subregion.		Cornus racemosa	Gray Dogwood	FAC	3	194
SHRUBS Sambucus canadensis Elderberry FAC 3 194 Viburnum lentago Nannyberry FAC 5 221 Viburnum dentatum Arrowwood FAC 2 194 Viburnum prunifolium Blackhaw FACU 4 221 TOTAL: 1,844 TOTAL WOODY SPECIES COMBINED: 6,454 Wetland indicator status based on Midwest USDA and USACE subregion. Substitutions may be made based upon availability and coordination with engineer. No single species may comprise more than 20% of habitat.		Corylus americana	Hazelnut	FACU	4	194
Sambucus canadensis Elderberry FAC 3 194 Viburnum lentago Nannyberry FAC 5 221 Viburnum dentatum Arrowwood FAC 2 194 Viburnum prunifolium Blackhaw FACU 4 221 TOTAL: 1,844 TOTAL WOODY SPECIES COMBINED: 6,454 Wetland indicator status based on Midwest USDA and USACE subregion. Substitutions may be made based upon availability and coordination with engineer. No single species may comprise more than 20% of habitat.	CHRURC	Hamamelis virginiana	American Witchazel	FACU	5	221
Viburnum dentatum Arrowwood FAC 2 194 Viburnum prunifolium Blackhaw FACU 4 221 TOTAL: 1,844 TOTAL WOODY SPECIES COMBINED: 6,454 Wetland indicator status based on Midwest USDA and USACE subregion. Substitutions may be made based upon availability and coordination with engineer. No single species may comprise more than 20% of habitat.	SHRUBS	Sambucus canadensis	Elderberry	FAC	3	194
Viburnum prunifolium Blackhaw FACU 4 221 TOTAL: 1,844 TOTAL WOODY SPECIES COMBINED: 6,454 Wetland indicator status based on Midwest USDA and USACE subregion. Substitutions may be made based upon availability and coordination with engineer. No single species may comprise more than 20% of habitat.		Viburnum lentago	Nannyberry	FAC	5	221
TOTAL: 1,844 TOTAL WOODY SPECIES COMBINED: 6,454 Wetland indicator status based on Midwest USDA and USACE subregion. Substitutions may be made based upon availability and coordination with engineer. No single species may comprise more than 20% of habitat.		Viburnum dentatum	Arrowwood	FAC	2	194
TOTAL WOODY SPECIES COMBINED: 6,454 Wetland indicator status based on Midwest USDA and USACE subregion. Substitutions may be made based upon availability and coordination with engineer. No single species may comprise more than 20% of habitat.		Viburnum prunifolium	Blackhaw	FACU	4	221
Wetland indicator status based on Midwest USDA and USACE subregion. Substitutions may be made based upon availability and coordination with engineer. No single species may comprise more than 20% of habitat.					TOTAL:	1,844
Substitutions may be made based upon availability and coordination with engineer. No single species may comprise more than 20% of habitat.				TOTAL WOOD	Y SPECIES COMBINED:	6,454
	Wetland inc	dicator status based on Midwes	st USDA and USACE subregion.		<u>'</u>	
	Substitution	s may be made based upon ava	ailability and coordination with en	gineer. No single spe	cies may comprise more	than 20% of habitat.
May substitute containerized plant stock at same density	May substit	ute containerized plant stock a	t same density			

TYPE	SCIENTIFIC NAME	COMMON NAME	INDICATOR STATUS*	COEFFICIENT OF CONSERVATISM	TOTAL UPLAND BARE ROOT QUANTITY
2" CAL. TREES	Acer saccharum	Sugar Maple	FACU	5	24
	Quercus rubra	Red Oak	FACU	6	13
	Celtis occidentalis	Hackberry	FAC	4	17
	Cercis canadensis	Redbud	FACU	3	28
	Liriodendron tulipifera	Tulip Poplar	FACU	6	22
	Quercus alba	White Oak	FACU	6	12
	Quercus macrocarpa	Bur Oak	FAC	6	17
				TOTAL:	133
2-GAL. SHRUBS	Amelanchier laevis	Serviceberry	FAC	5	13
	Hamamelis virginiana	American Witchazel	FACU	5	9
	Viburnum lentago	Nannyberry	FAC	5	12
	Viburnum dentatum	Arrowwood	FAC	2	10
	Viburnum prunifolium	Blackhaw	FACU	4	16
	TOTAL:				60
		193			