

OHIO DEPARTMENT OF NATURAL RESOURCES

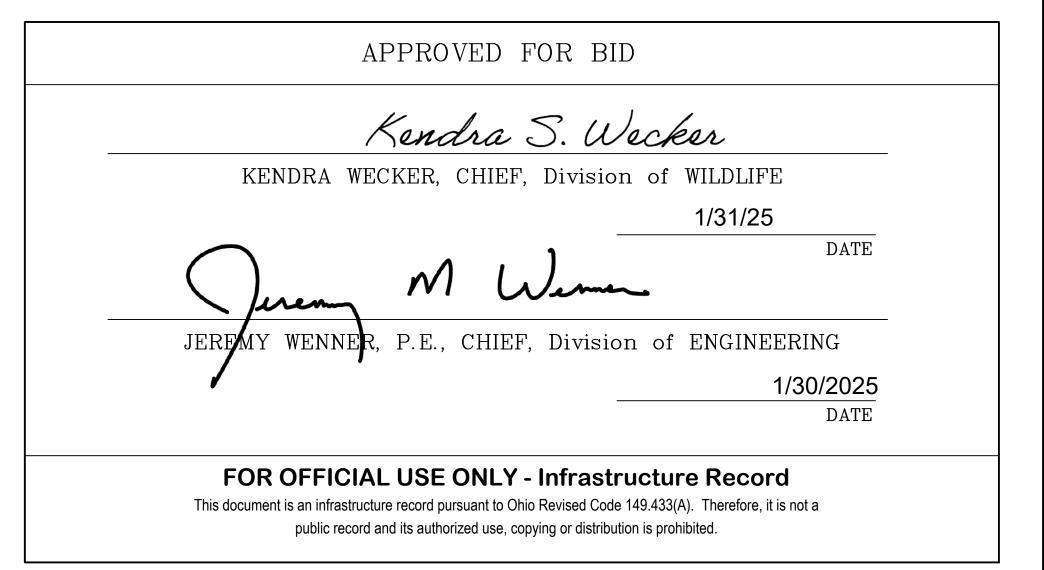
WILDLIFE-DISTRICT 3

AKRON, OHIO

YOUTH FISHING PONDS IMPROVEMENTS









IMPROVEMENT DRAWINGS

ELECTRICAL ENGINEERS SEAL -

GPD GROUP:

E -76700

DATE:



INDEX OF SHE	EETS	
TITLE SHEET	1	[G-001]
GENERAL NOTES	2	[G-002]
SURVEY CONTROL PLAN	3	[C-001]
EXISTING CONDITIONS AND KEY PLAN	4	[C-002]
SWPP NOTES	5	[C-100]
SWPP DETAILS	6	[C-101]
SWPP PLAN	7	[C-102]
DEMOLITION PLAN	8	[C-200]
CIVIL SITE PLAN	9	[C-201]
GRADING PLAN	10	[C-202]
CIVIL DETAILS	11	[C-203]
POND SUPPLY AND DISTRIBUTION PLAN	13	[W-100]
${\color{red} \textbf{POND SUPPLY AND DISTRIBUTION PROFILES}}$	14	[W-101]
PUMP STATION DETAILS	15	[W-102]
POND SUPPLY AND DISTRIBUTION DETAILS	16	[W-103]
ELECTRICAL SYMBOL LEGEND	17	[E-001]
ELECTRICAL SITE PLAN	18	[E-002]
ELECTRICAL DETAILS	19-21	[E-003-E-005]
ELECTRICAL ONE LINE DIAGRAM	22	[E-006]
LANDSCAPE NOTES AND DETAILS	23	[L-001]
OVERALL LANDSCAPE PLAN	24	[L-101]
LANDSCAPE ENLARGEMENTS	25	[L-102]

PLAN REPRODUCTION WARNING
THE PLANS HAVE BEEN PREPARED
FOR PRINTING ON ANSI D (22"x34")
SHEETS. PRINTING ON OTHER SIZE
SHEETS MAY DISTORT SCALES.
REFER TO GRAPHIC SCALES.



IMPROVEMENT DRAWINGS

WATER ENGINEERS SEAL -

GPD GROUP:

LUCAS A. MURRY

IMPROVEMENT DRAWINGS

CIVIL ENGINEERS SEAL -

GPD GROUP:

MATTHEW A.



PORTAGE LAKES
ODNR WILDLIFE DISTRICT 3
YOUTH FISHING PONDS

DESIGNED BY: DSS	PROJECT NUMBER: 2023335.03
DRAWN BY: DSS	SCALE: PER PLAN
CHECKED BY: MAL	DATE:
APPROVED BY: MAL	REVISED:

TITLE SHEET

G-001
SHEET NO:
1 OF 25

PROJECT DESCRIPTION:

THE OHIO DEPARTMENT OF NATURAL RESOURCES YOUTH FISHING PONDS IMPROVEMENTS PROJECT IS LOCATED IN PORTAGE LAKES OHIO. THE PROJECT FOCUSES ON THE REVITALIZATION OF THE YOUTH FISHING PONDS FACILITY WITH MULTIPLE POINTS OF IMPROVEMENTS INCLUDING THE RECONFIGURATION OF THE EXISTING PONDS, THE BURIAL OF ABOVE—GROUND TO UNDERGROUND ELECTRIC, AND THE INCLUSION OF SITE ACCESSIBILITY AND FEATURES BY DESIGNING ADA ACCESSIBLE FISHING ACCESS AND A PUBLIC GATHERING AREA. THIS PROJECT AIMS TO ENHANCE THE TWO ACRE FACILITY THROUGH THE IMPLEMENTATION OF ALL THE LISTED SITE IMPROVEMENTS ABOVE.

WHEN ON SITE, THE CONTRACTOR SHALL IMPLEMENT THE APPROPRIATE EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICE (BMP'S) IN ACCORDANCE WITH THE OHIO EPA. BMP ACTIVITIES SHALL ALSO BE CONDUCTED IN COMPLIANCE WITH ODNR WILDLIFE DISTRICT 3. THE VARIABILITY OF EROSION AND SEDIMENT CONTROL BMP'S MAY BE MODIFIED AS APPROPRIATE TO COMPLETE THE NECESSARY RESTORATION ACTIVITES.

GENERAL NOTES:

- 1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS, ORDINANCES AND PERMITS.
- 2. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING SURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.
- 3. WHERE CODES, STANDARDS, AND SPECIFICATIONS ARE CITED OR REFERRED, THE LATEST OR CURRENT EDITION SHALL APPLY UNLESS THE EDITION OR DATE IS SPECIFIED.
- 4. ALL WORK WITHIN THE RIGHTS OF WAY SHALL BE IN ACCORDANCE WITH THE GOVERNING JURISDICTION AND SPECIFICATIONS.
- 5. CONTRACTOR SHALL COORDINATE ANY MAINTENANCE OF TRAFFIC WITH THE GOVERNING JURISDICTION AND PARK MANAGEMENT PRIOR TO CONSTRUCTION.
- 6. REQUEST FOR DRIVE CLOSURE REQUIRES SUBMITTAL OF CLOSURE FOR OWNER APPROVAL. ALLOW 2—WEEK PROCESSING PERIOD FOR APPROVAL. CLOSRE FOR PAVEMENT OPERATIONS SHALL BE COORIDNATED DURING LOW TRAFFIC PERIOD.
- 7. THE CONTRACTOR SHALL USE ONLY ESTABLISHED ROADWAYS AND OBSERVE APPLICABLE WEIGHT RESTRICTIONS FOR VEHICLES AND/OR ROADWAYS. THE CONTRACTOR SHALL COORDINATE WITH ALL TOWNSHIPS AND COUNTIES TO CHECK IF A ROAD USER MAINTENANCE AGREEMENT (RUMA) IS REQUIRED. ANY COSTS RELATED TO THE RUMA SHALL BE PAID BY THE CONTRACTOR.
- 8. THE CONTRACTOR SHALL CONDUCT CONSTRUCTION OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED AND USED FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, OR OTHER ADJACENT OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM OWNER AND AUTHORITIES HAVING JURISDICTION. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR THE SAFETY AND SECURITY OF THE SITE. THE PROJECT SITE AND EQUIPMENT MUST BE PROTECTED FROM THE PUBLIC USING SECURITY FENCING.
- 10. DETAILS, NOTES, AND OTHER REFERENCES CONTAIN HEREIN MAY HAVE BEEN ATTAINED FROM OUTSIDE REFERENCE SOURCE LOCATIONS SUCH AS, BUT NOT LIMITED TO, LOCAL AUTHORITY AGENCIES, DESIGN REFERENCE MANUALS, MANUFACTURE'S RECOMMENDED DOCUMENTATION, OR OTHER INDUSTRY SOURCES. GPD DOES NOT WARRANT INFORMATION OR REPRESENTATION OF SAID CONTENT CONTAINED HEREIN, IT IS SHOWN SOLELY FOR REFERENCE ONLY OF DESIGN INTENT AT THE TIME OF PLAN PREPARATION. THE CONSTRUCTION TEAM MEMBERS (CONTRACTOR AND CONSTRUCTION MANAGER, WHERE APPLICABLE) SHALL OBTAIN THE MOST CURRENT DETAILED INFORMATION FROM THE RESPECTIVE SOURCE TO CONSTRUCT THE IMPROVEMENTS UNDER THE AUTHORITY OF THE RESPECTIVE GOVERNING AGENCIES. IF ANY DISCREPANCIES ARE DISCOVERED BETWEEN THE ORIGINAL DESIGN INTENT AND THE CONSTRUCTION TEAM OBTAINED REFERENCE MATERIAL, THE CONSTRUCTION MANAGER OR THE PROJECT'S CONTACT PERSON SHALL BE NOTIFIED PRIOR TO COMMENCING OF ASSOCIATED WORK.
- 11. NUMERICAL DIMENSIONS OR VALUES WILL TAKE PRECEDENCE OVER ANY SCALED DIMENSIONS OR VALUES ON THE CONSTRUCTION DOCUMENTS.
- 12. THESE PROJECT CONSTRUCTION DOCUMENTS SHALL NOT CONSTITUTE A CONTRACTUAL RELATIONSHIP BETWEEN GPD GROUP GLAUS, PYLE, SCHOMER, BURNS AND DEHAVEN, INC., AND THE CONTRACTOR, SUBCONTRACTOR OR AFFILIATED PARTIES.

EXISTING CONDITIONS AND SURVEY:

- 1. EXISTING FEATURES INFORMATION SHOWN ON THE CONSTRUCTION DRAWINGS IS BASED ON A FIELD SURVEY PERFORMED BY GPD GROUP GLAUS, PYLE, SCHOMER, BURNS AND DEHAVEN, INC. IN OCTOBER OF 2023. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING IMPROVEMENTS PER THESE PLANS.
- 2. THE LOCATIONS OF UNDERGROUND FACILITIES SHOWN ON THE PLANS ARE BASED ON GENERAL FIELD SURVEYS, OWNER RECORDS, AND COUNTY RECORDS. IT SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY TO BECOME FAMILIAR WITH THE SITE'S POSSIBLE BELOW GRADE FEATURES, INCLUDING BUT NOT LIMITED TO, ROOMS, VAULTS, UTILITIES, ETC. AND SHALL CONDUCT A WALK THROUGH WITH THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL CONTACT THE VARIOUS UTILITY COMPANIES TO LOCATE THEIR FACILITIES PRIOR TO STARTING CONSTRUCTION. NO ADDITIONAL COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR REPAIR TO DAMAGE CAUSED BY THEIR WORK FORCE TO FACILITIES WHICH ARE NOT INTENDED TO BE DISTURBED.

- 3. INFORMATION REGARDING THE REPORTED PRESENCE, SIZE, CHARACTER AND LOCATION OF EXISTING UNDERGROUND OR OVERHEAD UTILITIES HAS BEEN SHOWN ON THE CONSTRUCTION DRAWINGS AND RECORDED IN GOOD FAITH. THERE IS NO IMPLIED GUARANTEE OF THE ACCURACY OF THE INFORMATION.
- 4. THE CONTRACTOR SHALL CAREFULLY PRESERVE BENCHMARKS, PROPERTY CORNERS, REFERENCE POINTS AND ANY OTHER SURVEY MONUMENTS OR MARKERS. IF THE CONSTRUCTION ACTIVITIES RESULT IN THE DAMAGE TO ANY OF THESE FEATURES, THOSE ITEMS SHALL BE ACCURATELY RESTORED AT THE CONTRACTOR'S EXPENSE BY A LICENSED SURVEYOR REGISTERED IN THE STATE OF OHIO.
- 5. THE CONTRACTOR SHALL RUN AN INDEPENDENT VERTICAL CONTROL TRAVERSE TO CHECK BENCHMARKS AND A HORIZONTAL CONTROL TRAVERSE THROUGH THE REFERENCED PROJECT CONTROL DATUM TO CONFIRM GEOMETRIC DATA. IT IS THE CONTRACTORS RESPONSIBILITY TO NOTIFY THE A/E OF ANY DISCREPANCIES PRIOR TO THE START OF CONSTRUCTION.
- 6. ADDITIONAL INFORMATION CAN BE FOUND ON THE EXISTING CONDITIONS SHEET.

EROSION AND SEDIMENT CONTROL:

1. THE CONTRACTOR SHALL AT ALL TIMES ENSURE THAT BMP MEASURES PROTECTING EXISTING DRAINAGE FACILITIES AND WATERWAYS ARE IN PLACE PRIOR TO THE COMMENCEMENT OF ANY PHASE OF THE SITE CONSTRUCTION OR LAND DISTURBANCE. SEE SHEET 5 FOR SWPP NOTES.

DEMOLITION NOTES:

- 1. REGULATORY REQUIREMENTS: COMPLY WITH GOVERNING EPA NOTIFICATION REGULATIONS BEFORE STARTING DEMOLITION. COMPLY WITH HAULING AND DISPOSAL REGULATIONS OF AUTHORITIES HAVING JURISDICTION.
- 2. REMOVE AND LEGALLY DISPOSE OF ITEMS CALLED OUT TO BE REMOVED. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS. THOSE ITEMS INDICATED TO BE REINSTALLED, SALVAGED, OR TO REMAIN SHALL BE CLEANED, SERVICED, AND OTHERWISE PREPARED FOR REUSE. CONTRACTOR TO STORE AND PROTECT AGAINST DAMAGE. REINSTALL ITEMS IN LOCATIONS INDICATED.
- 3. PROMPTLY DISPOSE OF DEMOLISHED MATERIALS. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON—SITE. STORAGE OR SALE OF REMOVED ITEMS OR MATERIALS ON—SITE WILL NOT BE PERMITTED. NO BURNING OF ANY MATERIALS ON SITE SHALL BE PERMITTED.
- 4. IT IS NOT EXPECTED THAT ASBESTOS WILL BE ENCOUNTERED IN THE COURSE OF THIS CONTRACT. IF ANY MATERIALS SUSPECTED OF CONTAINING ASBESTOS ARE ENCOUNTERED, DO NOT DISTURB THE MATERIALS. IMMEDIATELY NOTIFY THE ODNR AND THE ARCHITECT/ENGINEER.
- 5. PROTECT ITEMS INDICATED TO REMAIN AGAINST DAMAGE AND SOILING THROUGHOUT CONSTRUCTION. WHEN PERMITTED BY THE ODNR AND THE ARCHITECT/ENGINEER, ITEMS MAY BE REMOVED TO A SUITABLE, PROTECTED STORAGE LOCATION THROUGHOUT CONSTRUCTION AND THEN CLEANED AND REINSTALLED IN THEIR ORIGINAL LOCATIONS. PROMPTLY REPAIR DAMAGES TO ADJACENT FACILITIES CAUSED BY DEMOLITION OPERATIONS AT THE CONTRACTORS COST.
- 6. CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED AND USED FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, OR OTHER ADJACENT OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM OWNER AND AUTHORITIES HAVING JURISDICTION. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS IF REQUIRED BY GOVERNING REGULATIONS.
- 7. THE CONTRACTOR SHALL CLEAN UP ALL DEBRIS AND MATERIALS RESULTING FROM CONSTRUCTION ACTIVITIES AND RESTORE ALL SURFACES, STRUCTURES, DITCHES, SIGNS, MAILBOXES, FENCES, GUARDRAILS OR OTHER PHYSICAL FEATURES OR PROPERTY DISTURBED OR DAMAGED DURING THE WORK UNDER THIS CONTRACT TO THEIR ORIGINAL CONDITION TO THE SATISFACTION OF THE ARCHITECT/ENGINEER. THE COST OF ALL SUCH WORK SHALL BE INCLUDED WITH THE VARIOUS RELATED WORK ITEMS.
- REFER TO THE DEMOLITION SPECIFICATIONS IN THE PROJECT MANUAL AND DEMOLITION SHEETS FOR ADDITIONAL INFORMATION.
- 9. ODNR RESERVES THE RIGHT OF FIRST REFUSAL FOR ALL DEMOLISHED OR SALVAGEABLE MATERIALS AND EQUIPMENT. THE CONTRACTOR SHALL COORDINATE WITH ODNR BEFORE ANY DEMOLITION ACTIVITIES ARE STARTED. ALL MATERIALS NOT DESIGNATED FOR SALVAGE SHALL BE DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH APPLICABLE REGULATIONS AND DIVISION 2 PROJECT SPECIFICATIONS.
- 10. CONTRACTOR SHALL REMOVE EXISTING PAVEMENT MARKINGS WITH SMALL HANDHELD GRINDERS, SCARIFIERS, BEAD BLASTING, SAND BLASTING, WATER BLASTING OR OTHER METHODS, WITH THE APPROVAL OF THE ENGINEER OF RECORD. TAKE CARE DURING MARKING REMOVAL TO NOT SCAR, DISCOLOR, OR OTHERWISE DAMAGE THE PAVEMENT SURFACE. DO NOT OVER PAINT OR USE OTHER METHODS OF COVERING MARKINGS IN LIEU OF REMOVAL. WATER BLASTING METHOD SHALL NOT BE USED DURING FREEZING WEATHER CONDITIONS,

CONSERVATION METHODS / SCHEDULING RESTRICTIONS:

- 1. THE OHIO DEPARTMENT OF NATURAL RESOURCES AND THE U.S. FISH AND WILDLIFE SERVICES RESTRICT THE TIMEFRAME OF TREE CLEARING DUE TO THE SUITABLE HABITAT EXISTING ON SITE FOR FEDERALLY ENDANGERED SPECIES.
- 2. ALL TREE CLEARING MUST OCCUR BETWEEN OCTOBER 1ST AND MARCH 31ST.
- 3. TREES THAT MUST BE REMOVED MUST BE MARKED AND REVIEWED WITH THE OWNER FOR APPROVAL PRIOR TO REMOVAL. TREES APPROVED FOR REMOVAL MUST BE FELLED WITHIN THE PERMISSIBLE BAT TREE CLEARING WINDOW.

CONSTRUCTION:

- 1. THE PROJECT DISTURBANCE LIMITS IS SHOWN ON THE CONSTRUCTION DRAWINGS. THE CONTRACTOR SHALL CONFINE ALL WORK AND/OR LAYDOWN AREAS WITHIN THE LIMITS IDENTIFIED ON THE DRAWINGS. STAGING WITHIN THE EXISTING PARKING LOT OUTSIDE OF PROJECT AREA MAY BE ALLOWED SUBJECT TO REVIEW AND APPROVAL OF CONTRACTOR STAGING PLAN.
- 2. A FIELD OFFICE IS NOT REQUIRED BY ODNR FOR THIS PROJECT, HOWEVER, THE CONTRACTOR CAN ELECT TO UTILIZE ONE AT THEIR DISCRETION.

UTILITIES:

- 1. ALL DIMENSIONS, GRADES, AND UTILITY LOCATIONS SHOWN ON THESE PLANS WERE BASED ON THE SURVEY. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO INFORMATION SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
- 2. CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES IMMEDIATELY AFTER BID IS AWARDED AND ENSURE THE UTILITY COMPANIES HAVE THE ESSENTIALS REQUIRED FOR COMPLETE SERVICE INSTALLATION. CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY TIME FRAMES ESTABLISHED BY UTILITY COMPANIES WHICH WILL NOT MEET OPENING DATE.
- 3. CONTRACTOR SHALL NOTIFY THE REGISTERED UTILITY PROTECTION SERVICE AND ALL UTILITY OWNERS HAVING FACILITIES IN THE CONSTRUCTION AREA WHO ARE NOT MEMBERS OF A REGISTERED UNDERGROUND UTILITY PROTECTION SERVICE. THE CONTRACTOR SHALL GIVE NOTIFICATION AS REQUIRED BY THE OHIO REVISED CODE PRIOR TO COMMENCING CONSTRUCTION OPERATIONS.
- 4. CONTRACTOR SHALL VERIFY THE SIZE, LOCATION, INVERT ELEVATION, AND CONDITION OF EXISTING UTILITIES WHICH ARE INTENDED TO BE UTILIZED AS A CONNECTION POINT FOR ALL PROPOSED UTILITIES PRIOR TO ANY CONSTRUCTION. CONTRACTOR TO ENSURE EXISTING UTILITIES ARE IN GOOD CONDITION AND FREE FLOWING (IF APPLICABLE). IF ELEVATIONS, SIZE, OR LOCATION DIFFER FROM WHAT IS SHOWN ON PLANS, CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER IMMEDIATELY.
- 5. WHERE PLANS PROVIDE FOR PROPOSED WORK TO BE CONNECTED TO, OR CROSS OVER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING THE PROPOSED WORK. IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE RESULTS IN A CHANGE IN THE PLAN, THE ARCHITECT/ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED WORK WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY. PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT ITEM.
- 6. FOR ANY CONFLICTS BETWEEN WATER SERVICE LINES AND OTHER EXISTING UTILITIES, THE WATER LINE SHALL BE LOWERED DURING CONSTRUCTION. A MINIMUM OF 18—INCHES VERTICAL AND 10—FEET HORIZONTAL CLEARANCE SHALL BE MAINTAINED BETWEEN THE WATER LINE AND ANY SANITARY SEWER OR STORM SEWER; 12—INCH MINIMUM CLEARANCE FOR OTHER UTILITIES PER OHIO EPA GUIDELINES. THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING UTILITIES AHEAD OF CONSTRUCTION OPERATIONS TO ALLOW FOR ADJUSTMENTS IN GRADE TO THE WATER LINE THAT MAY BE REQUIRED FOR ANY UTILITY CONFLICT. NO ADDITIONAL COMPENSATION WILL BE MADE TO THE CONTRACTOR FOR LOWERING THE WATER LINE TO AVOID CONFLICTS WITH EXISTING UTILITIES.
- 7. UTILITY SERVICE PROVIDERS RULES AND REQUIREMENTS TAKE PRECEDENCE OVER INFORMATION HEREIN. IF DISCREPANCY ARISES, CONTRACTOR SHALL FULLY COORDINATE WITH UTILITY SERVICE PROVIDER PRIOR TO START OF CONSTRUCTION.
- 8. MAINTAIN EXISTING UTILITIES INDICATED TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE THROUGHOUT CONSTRUCTION OPERATIONS.
- 9. DO NOT INTERRUPT EXISTING UTILITIES SERVING OCCUPIED OR OPERATING FACILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY OWNER'S REPRESENTATIVE AND AUTHORITIES HAVING JURISDICTION. PROVIDE TEMPORARY SERVICES DURING INTERRUPTIONS TO EXISTING UTILITIES, AS ACCEPTABLE TO OWNER AND TO GOVERNING AUTHORITIES CONTRACTOR.

BASIC CODE INFORMATION:

- 1. EXISTING BUILDING USE GROUP TO REMAIN IN THE SAME GROUP E
- 2. EXISTING BUILDING CONSTRUCTION TYPE TO REMAIN THE SAME TYPE 5-B

PRESERVATION / PROTECTION:

- CONTRACTOR SHALL MAINTAIN AND PRESERVE TREES AND SHRUBS NOT BEING REMOVED, INCLUDING THEIR ROOTS. TREE PROTECTION FENCING SHALL BE USED AT THE DRIP LINE OF ALL TREES AND SHRUBS WITHIN 50 FEET OF CONSTRUCTION EXCEPT AS SHOWN ON PLAN. FENCING SHALL REMAIN IN PLACE UNTIL FINAL INSPECTION FOLLOWING DEMOLITION. MATERIALS SHALL NOT BE STOCKPILED WITHIN THIS DEFINED AREA AND VEHICLES AND OTHER EQUIPMENT SHALL BE OPERATED TO AVOID SOIL COMPACTION.
- 2. FEEDER ROOTS SHOULD NOT BE CUT IN AN AREA EQUAL TO TWICE THE TREE CIRCUMFERENCE (MEASURED 6" ABOVE THE GROUND LINE IN INCHES) EXPRESSED IN FEET. (EXAMPLE: A CIRCUMFERENCE OF 10" WOULD HAVE A 'NO CUT' ZONE OF 20 FEET IN ALL DIRECTIONS FROM THE TREE). THIS SHOULD APPLY TO UTILITY SERVICES, IF FEASIBLE. THE ONLY EXCEPTION TO THIS REQUIREMENT WILL BE THOSE SPECIFICALLY ALLOWED BY THE LANDSCAPE ARCHITECT, SPECIFICATIONS OR AS INDICATION ON THE PLANS.

GEOTECHNICAL:

1. THE GEOTECHNICAL DATA REPORT, DATED JANUARY 2024, SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCY BETWEEN THE GEOTECHNICAL DATA REPORT AND CONSTRUCTION DOCUMENTS.

PIPING SPECIFICATIONS:

- 1. FOR PVC GRAVITY PIPE (POND OVERFLOW PIPING); PIPE SHALL BE SDR 35 PER ASTM D3034, JOINTS PER ASTM D3212, AND INSTALLED PER ASTM D2321 (CLASS II).
- 2. FOR HDPE PIPE (POND DISTRIBUTION PIPING); PIPE SHALL BE PER DR 11 HDPE PIPE MEETING ASTM F-714 STANDARDS WITH ASTM F-2620 OR F-1290 JOINTS AND ASTM D-2321 CLASS BEDDING. FITTINGS SHALL HAVE THE SAME PRESSURE RATING AS THE PIPE. BUTT FUSION FITTINGS SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM D-3261. JOINTS SHALL BE BUTT FUSED IN ACCORDANCE WITH THE PLASTIC PIPE INSTITUTE TR33 GUIDANCE DOCUMENT AND THE MANUFACTURER'S RECOMMENDATIONS.
- JISTRIBUTION SYSTEM SHALL BE SUBJECTED TO A HYDROSTATIC LEAKAGE TEST AT 100 PSI. THE CONTRACTOR SHALL BE RESPONSIBLE FOR BULKHEADING AND SECURING ALL FITTINGS AND PIPE. EACH SECTION TESTED SHALL BE SLOWLY FILLED TO EXPEL ALL AIR. LEAKAGE IS THE AMOUNT OF WATER THAT MUST BE SUPPLIED TO MAINTAIN THE TEST PRESSURE. NO ALLOWANCE WILL BE MADE FOR LEAKAGE AT VALVES AND BULKHEADS. THE DISTRIBUTION SYSTEM SHALL BE FILLED AND ALLOWED TO EQUILIBRATE FOR 24 HOURS PRIOR TO THE 2 HOUR LEAKAGE TEST. ALLOWABLE LEAKAGE IS:

 $L = (N*D*P^{(\frac{1}{2})})/7,400$ WHERE L = ALLOWABLE LEAKAGE (GAL/HR)

N = NUMBER OF JOINTS

D = DIAMETER (INCHES)

P = TEST PRESSURE (PSI)

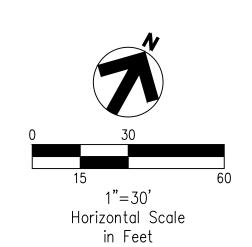
DISTRIBUTION SYSTEM VALVES SHALL BE FUSIBLE END DR 9 HDPE BALL VALVES WITH FULL BORE BODY INTENDEING FOR COMMERICAL WATER USE MEETING ASTM D-2513. VALVE FEATURES SHALL INCLUDE OVERTORQUE PROTECTION AND REPLACEABLE CONNECTOR UNDER LIVE CONDITIONS AND A STANDARD OPERATING NUT WITH QUARTER TURN OPEN/CLOSE OPERATION.

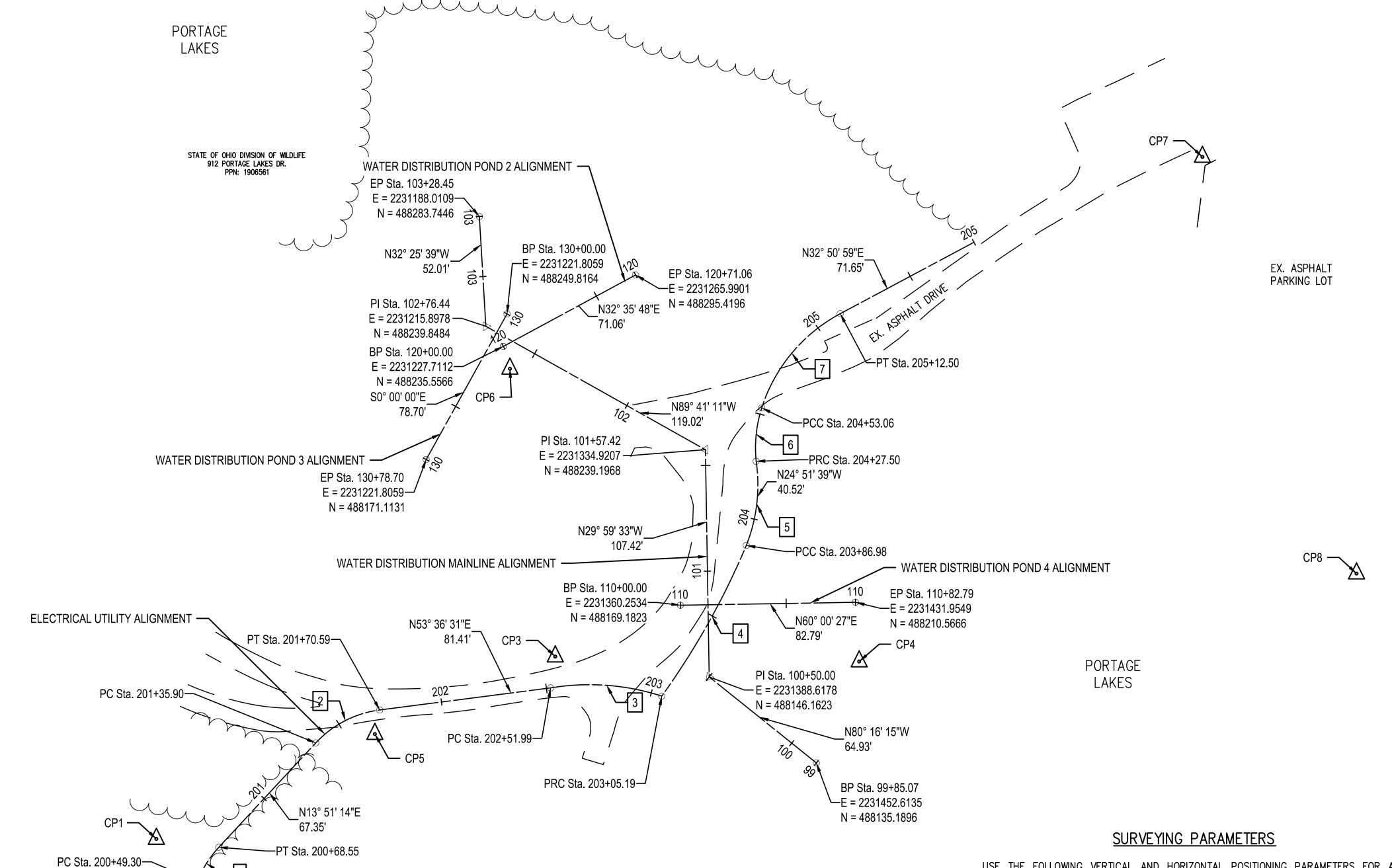




DESIGNED BY: DSS	PROJECT NUMBER: 2023335.03
DRAWN BY: DSS	SCALE: PER PLAN
CHECKED BY: MAL	DATE:
APPROVED BY: MAL	REVISED:

SHEET:





ELECTRICAL UTILITY ALIGNMENT CURVE DATA				
C/L CONST. CURVE DATA P.I. = Sta. 200+59.05 $\Delta = 22^{\circ} 02' 56"$ $Dc = 114^{\circ} 35' 30"$ $R = 50.00'$ $T = 9.74'$ $L = 19.24'$ $E = 0.94'$ $P.C. = Sta. 200+49.30$ $P.T. = Sta. 200+68.55$	C/L CONST. CURVE DATA P.I. = Sta. 201+53.97 Δ = 39° 45' 12" Dc = 114° 35' 30" R = 50.00' T = 18.08' L = 34.69' E = 3.17' P.C. = Sta. 201+35.90 P.T. = Sta. 201+70.59	C/L CONST. CURVE DATA P.I. = Sta. 202+79.11 Δ = 27° 24' 26" Dc = 51° 31' 25" R = 111.20' T = 27.12' L = 53.19' E = 3.26' P.C. = Sta. 202+51.99 P.T. = Sta. 203+05.19		
C/L CONST. CURVE DATA	C/L CONST. $ \frac{\text{CURVE DATA}}{\text{P.I.} = \text{Sta. } 204+07.71} $ $ \Delta = 29^{\circ} 46' 16" $ $ Dc = 73^{\circ} 28' 19" $ $ R = 77.98' $ $ T = 20.73' $ $ L = 40.52' $ $ E = 2.71' $ $ P.C. = \text{Sta. } 203+86.98 $ $ P.T. = \text{Sta. } 204+27.50 $	C/L CONST. $ \frac{\text{CURVE DATA}}{\text{P.I.} = \text{Sta. } 204 + 40.47} $ $ \Delta = 23^{\circ} 38' 52'' $ $ Dc = 92^{\circ} 31' 27'' $ $ R = 61.93' $ $ T = 12.96' $ $ L = 25.56' $ $ E = 1.34' $ $ P.C. = \text{Sta. } 204 + 27.50 $ $ P.T. = \text{Sta. } 204 + 53.06 $		
C/L CONST. $ \frac{\text{CURVE DATA}}{\text{P.I.} = \text{Sta. } 204 + 84.34} $ $ \Delta = 44^{\circ} 09' 59" $ $ Dc = 74^{\circ} 18' 49" $ $ R = 77.10' $ $ T = 31.28' $ $ L = 59.43' $ $ E = 6.10' $ $ P.C. = \text{Sta. } 204 + 53.06 $ $ P.T. = \text{Sta. } 205 + 12.50 $				

USE THE FOLLOWING VERTICAL AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL

- POSITIONING METHOD: ODOT VRS
 MONUMENT TYPE: 5/8" X 30" REBAR WITH RED "GPD" CAP

VERTICAL POSITIONING

- ORTHOMETRIC HEIGHT
- DATUM: NAVD88
 GEOID: GEOID 18

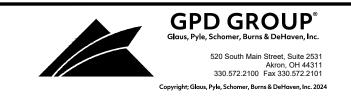
HORIZONTAL POSITIONING

- REFERENCE FRAME: NAD83 (2011)
- ELLIPSOID: GRS80
- MAP PROJECTION: LAMBERT CONFORMAL CONIC

• COORDINATE SYSTEM: OHIO STATE PLANE - NORTH

COMBINED SCALE FACTOR, TO GO FROM GRID TO GROUND: 1.0000000000 [UNITS ARE IN U.S. SURVEY FEET]

	SURVEY CONTROL			
POINT NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP1	487952.41	2231197.35	1002.98	MAGS NAIL SET
CP2	487982.59	2231423.43	_*	30 X 5/8" REBAR WITH GPD RED CAP
CP3	488119.27	2231320.35	983.41	30 X 5/8" REBAR WITH GPD RED CAP
CP4	488186.92	2231447.05	982.09	30 X 5/8" REBAR WITH GPD RED CAP
CP5	488045.87	2231263.58	983.97	MAGS NAIL SET
CP6	488227.82	2231235.57	982.67	MAGS -MAGHUB
CP7	488474.19	2231473.10	980.33	30 X 5/8" REBAR WITH GPD RED CAP
CP8	488337.33	2231632.37	_*	30 X 5/8" REBAR WITH GPD RED CAP
*CONTROL POI	*CONTROL POINT FALLS OUTSIDE OF EXISTING SURFACE LIMITS, NO ELEVATION DATA			



N8° 11' 41"W

EX. ASPHALT PARKING LOT

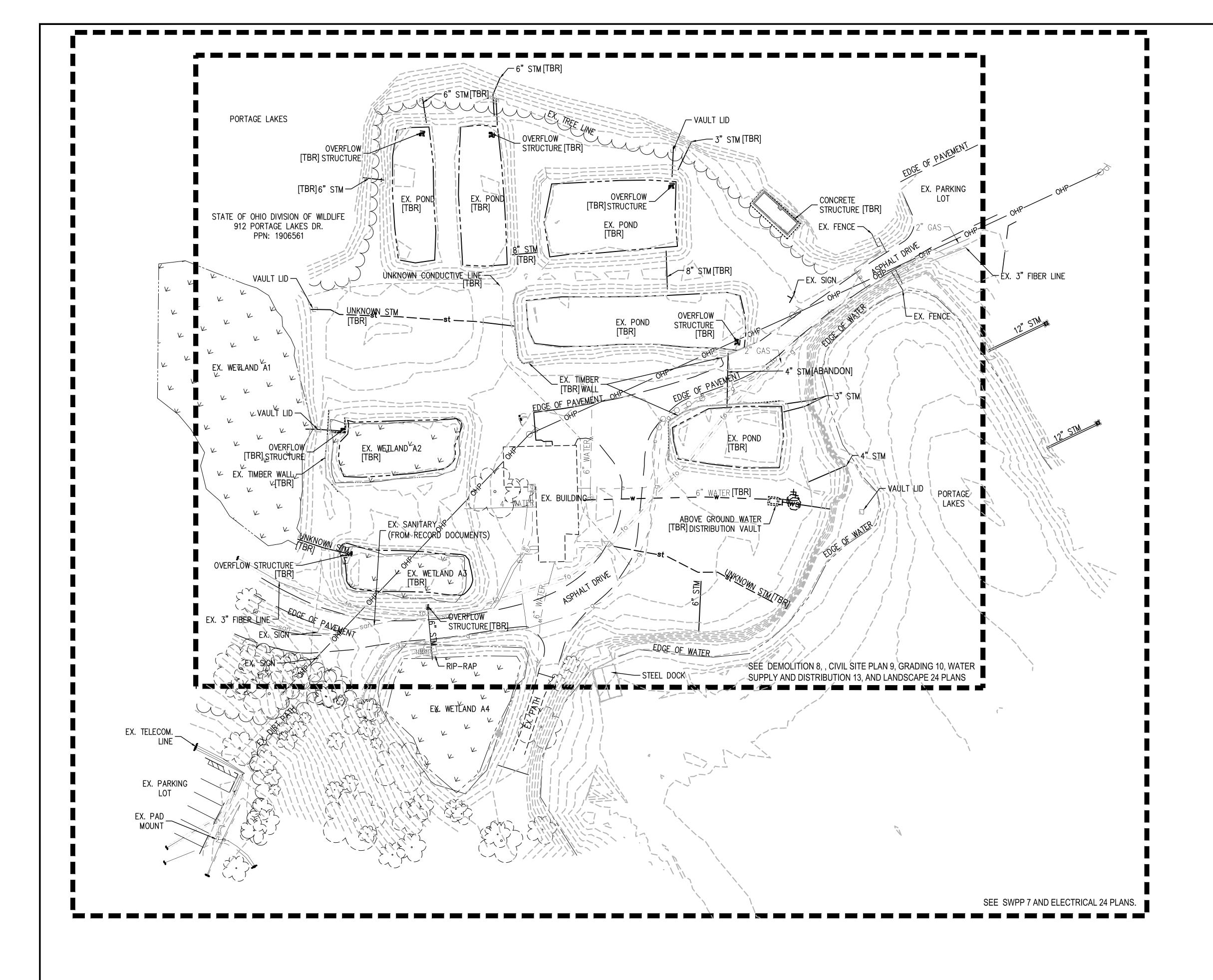


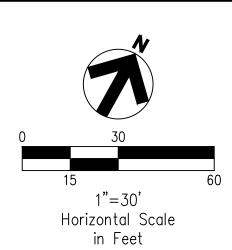
PORTAGE LAKES ODNR WILDLIFE DISTRICT 3 YOUTH FISHING PONDS

DESIGNED BY: DSS	PROJECT NUMBER: 2023335.03	
DRAWN BY: DSS	SCALE: PER PLAN	
CHECKED BY: MAL	DATE:	
APPROVED BY: MAL	REVISED:	

SURVEY CONTROL PLAN

C-001 SHEET NO: 3 OF 25









DESIGNED BY: DSS	PROJECT NUMBER: 2023335.03
DRAWN BY: DSS	SCALE: PER PLAN
CHECKED BY: MAL	DATE:
APPROVED BY: MAL	REVISED:

STORM WATER POLLUTION PREVENTION NOTES

- ALL WORK SPECIFIED AS AN ODOT ITEM SHALL BE GOVERNED BY THE CURRENT STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATION HANDBOOK AS WELL AS THE CURRENT EDITION OF THE ODNR RAINWATER AND LAND DEVELOPMENT MANUAL. IT IS THE CONSTRUCTION MANAGER'S RESPONSIBILITY TO POSSESS AND TO BE FAMILIAR WITH APPLICABLE SECTIONS.
- THESE CONTRACT DRAWINGS SHALL BE MADE AVAILABLE ON SITE AT ALL TIMES AND PRESENTED UPON REQUEST. IF UNFORESEEN STORM WATER POLLUTION IS ENCOUNTERED, ADDITIONAL STORM WATER POLLUTION PREVENTION (SWPP) MEASURES SHALL BE IMPLEMENTED TO MANAGE THE CURRENT SITE CONDITIONS WHICH MAY BE REQUESTED BY THE GEUAGA PARK DISTRICT OR PROJECT ENGINEER REPRESENTATIVE AT ANYTIME. SUCH REQUESTS AND CHANGE IN SITE CONDITIONS SHALL BE IMPLEMENTED IMMEDIATELY.
- ALL STORM WATER POLLUTION PREVENTION PRACTICES WILL BE INSTALLED BEFORE ANY OTHER EARTH MOVING OCCURS.
- ALL STORM WATER POLLUTION PREVENTION ITEMS SHALL BE INSTALLED AS SHOWN OR NOTED IN THESE PLANS.
- 5. FOR DISTURBED AREAS REMAINING DORMANT FOR OVER 14 DAYS, TEMPORARY EROSION CONTROLS SHALL BE APPLIED WITHIN 2 DAYS OF DISTURBANCE. ALL DISTURBED AND ERODED EARTH SHALL BE REGRADED AND SEEDED WITHIN 2 DAYS, AS DEFINED BY THE SEEDING SPECIFICATIONS, TO ESTABLISH STABILITY AND PROVIDE SEDIMENT CONTROL. WHERE POSSIBLE, TEMPORARY SEEDING GROWTH SHALL NOT BE MOWED UNTIL IT HAS GONE TO SEED FOR 1 YEAR.
- 6. PERMANENT VEGETATION SHALL BE INSTALLED WITHIN 2 DAYS AT THE COMPLETION OF ANY GRADED AREAS, WEATHER PERMITTING.
- PRIOR TO THE TIME THAT DRAINAGE DIVERTS TO INLETS, INLET SEDIMENT FILTERS SHALL BE INSTALLED AT ALL INLET STRUCTURES TO KEEP PIPING SYSTEMS FREE OF SILTATION.
- 8. SILT BARRIERS SHALL BE INSTALLED AROUND ALL EXISTING AND NEW STORM INLETS, CATCH BASINS, YARD DRAINS. INSTALL ROCK CHECK DAMS FOR HEADWALL INLETS FOR STORM WATER POLLUTION PREVENTION.
- 9. STORM WATER POLLUTION PREVENTION MEASURES SHALL BE INSTALLED AROUND ALL DIRT OR TOPSOIL STOCKPILES AND OTHER TEMPORARILY DISTURBED AREAS AS SHOWN ON THESE PLANS AND AS DIRECTED BY THE ENGINEER.
- 10. CONSTRUCTION MANAGER SHALL INSPECT ALL SWPPP MEASURES DAILY AND AFTER EVERY ½" RAINFALL EVENT. REPAIR AS NECESSARY TO PREVENT EROSION. SILTATION SHALL BE REMOVED FROM AREAS WHERE FAILURES HAVE OCCURRED AND CORRECTIVE ACTION TAKEN WITHIN 24 HOURS TO MAINTAIN ALL SWPP.
- 11. SILT BARRIERS, CONSTRUCTION ENTRANCES, AND SILT PERIMETER CONTROLS SHALL REMAIN IN PLACE UNTIL A GOOD STAND OF GRASS HAS BEEN OBTAINED AND/OR PAVING OPERATIONS ARE COMPLETE. CONSTRUCTION MANAGER SHALL KEEP SILT FROM ENTERING ANY STORM DRAINAGE SYSTEM. ONCE SITE HAS BEEN COMPLETELY STABILIZED, ANY SILT IN PIPES AND DRAINAGE SWALES SHALL BE REMOVED WITHIN 10 DAYS.
- 12. TEMPORARY SEDIMENTATION AND STORM WATER POLLUTION PREVENTION MEASURES MUST BE INSPECTED AND LOGGED BY THE CONSTRUCTION MANAGER FOR INSPECTION, LOGGING SHALL BE WEEKLY AND AFTER ${\cal H}''$ RAIN EVENTS.
- 13. UTILITY COMPANIES MUST COMPLY WITH ALL STORM WATER POLLUTION PREVENTION MEASURES AS DEFINED ON THE STORM WATER POLLUTION PREVENTION PLANS, DETAILS AND NOTES.
- 14. ALL EXISTING WATER COURSES WITHIN THE PROJECT LIMITS SHALL BE TEMPORARILY PROTECTED DURING LAND CLEARING AND GRADING OPERATIONS. SOILS WITHIN 50 FEET OF SAID WATER COURSES SHALL BE STABILIZED WITHIN 2 DAYS OF THE INITIAL CLEARING / GRADING OPERATION AS SHOWN ON PLANS.
- 15. IT IS THE CONSTRUCTION MANAGER'S RESPONSIBILITY TO MAINTAIN ALL SEDIMENTATION AND STORM WATER POLLUTION PREVENTION ITEMS AT ALL TIMES.
- 16. DUST CONTROL SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. IF POSSIBLE, GRADING SHALL BE DONE BY PHASING. IF PHASING IS NOT AN OPTION, DUST SHALL BE CONTROLLED WITH WATER DURING EARTHWORK. AFTER EARTHWORK OPERATIONS. THE EXPOSED SOILS SHALL BE COVERED WITH STRAW OR MULCH UNTIL SEEDED. SEE PROJECT SPECIFICATIONS, OIL IS NOT TO BE USED AS A DUST SUPPRESSANT.
- 17. ANY DISCHARGE OF HAZARDOUS MATERIALS / REGULATED SUBSTANCES ONTO A PERVIOUS SURFACE SHALL BE LEGALLY REMOVED AND PROPERLY TREATED OR PROPERLY DISPOSED OF, OR OTHERWISE REMEDIATED, SO THAT NO CONTAMINATION FROM THE DISCHARGE REMAINS ON-SITE.
- 18. IN THE EVENT OF HAZARDOUS MATERIALS / REGULATED SUBSTANCES SPILLS (25 OR MORE GALLONS OR ENOUGH TO CAUSE A SHEEN), THE CONSTRUCTION MANAGER MUST CONTACT THE FOLLOWING: OWNER (ODNR), THE OHIO EPA (AT 1-800-282-9378). THE LOCAL FIRE DEPARTMENT, AND THE LOCAL EMERGENCY PLANNING COMMITTEE (LEPC) WITHIN 30 MINUTES. CONTACT INFORMATION BELOW:

SUMMIT COUNTY LOCAL EMERGENCY PLANNING COMMITTEE (330) 643-2558 175 SOUTH MAIN STREET AKRON, OH 44308

OHIO DEPARTMENT OF NATURAL RESOURCES (ODNR) 1-800-642-2551 2045 MORSE ROAD COLUMBUS, OH, 43229

AKRON FIRE DEPARTMENT (330) 375-2311 166 S. HIGH STREET AKRON, OH 44308

- 19. INSTALL CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT FACILITY IF CONDITIONS ARE SUCH THAT MUD IS COLLECTING ON VEHICLE TIRES, THE TIRES MUST BE CLEANED BEFORE THE VEHICLES ENTER THE PUBLIC ROADWAY. THE SITE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT THE TRACKING OR FLOW OF MUD ONTO THE PUBLIC RIGHT-OF-WAY. ALL MATERIALS SPILLED. DROPPED. WASHED OR TRACKED FROM VEHICLES ONTO THE ROADWAY MUST BE REMOVED PROMPTLY.
- 20. IF NECESSARY, THE CONSTRUCTION MANAGER SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONSTRUCTION MANAGER SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONSTRUCTION MANAGER IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.
- 21. IF NECESSARY, ELECTRICAL, TELEPHONE, CABLE, WATER, FIBER OPTIC CABLE AND/OR GAS LINES NEEDING TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY. ADEQUATE TIME SHALL BE PROVIDED FOR RELOCATION AND CLOSE COORDINATION WITH THE UTILITY COMPANY IS NECESSARY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. CONSTRUCTION MANAGER SHALL PAY CLOSE ATTENTION TO EXISTING UTILITIES WITHIN ANY ROAD RIGHT OF WAY DURING CONSTRUCTION.
- 22. CONSTRUCTION MANAGER IS RESPONSIBLE FOR PLACING AND MAINTAINING CONSTRUCTION FENCE, SIGNS, ETC. TO WARN AND KEEP PEOPLE OFF SITE FOR THE DURATION OF THE PROJECT. IF AN EXISTING FENCE IS PARTIALLY AROUND THE PERIMETER OF THE SITE IT COULD BE UTILIZED AS A CONSTRUCTION FENCE DURING INFRASTRUCTURE WORK.
- 23. IF, FOR ANY REASON, THE PROJECT IS SUSPENDED, THE CONSTRUCTION MANAGER SHALL ENSURE THAT ALL INSTALLED EROSION MEASURES ARE FUNCTIONING AND PROPERLY MAINTAINED DURING THIS PERIOD, AND THAT ALL BARE SOILS ARE SEEDED AND MULCHED WITH TEMPORARY SEED MIXTURE.
- 24. PERIMETER CONTROLS SHALL BE INSTALLED/IMPLEMENTED PER THE CONSTRUCTION SEQUENCE IN THIS PLAN SET (AS REQUIRED). IN AREAS WHERE THE PLANS DO NOT SPECIFY, OR AREAS WHICH ARE IN ADDITION TO PLAN SPECIFICATIONS, PERIMETER CONTROLS SHALL BE INSTALLED/IMPLEMENTED WITHIN 7 DAYS OF GRUBBING ACTIVITIES AND PRIOR TO GRADING OF THE AREA THEY WILL CONTROL.

ADDITIONAL CONSTRUCTION SITE POLLUTION CONTROLS

- 1. SPILL REPORTING REQUIREMENTS: SPILLS ON PAVEMENT SHALL BE ABSORBED WITH SAWDUST OR KITTY LITTER AND DISPOSED OF WITH THE TRASH AT A LICENSED SANITARY LAND FILL. HAZARDOUS MATERIALS / REGULATED SUBSTANCES OR INDUSTRIAL WASTES SUCH AS MOST SOLVENTS, GASOLINE, OIL-BASED PAINTS, AND CEMENT CURING COMPOUNDS REQUIRE SPECIAL HANDLING. SPILLS SHALL BE REPORTED TO THE GEAUGA PARK DISTRICT (440-2286-9516) AND OHIO EPA (1-800-282-9378). SPILLS OF 25 GALLONS OR MORE OR ENOUGH TO CAUSE A SHEEN SHALL BE REPORTED TO THE GEAUGA PARK DISTRCIT, OHIO EPA, THE LOCAL FIRE DEPARTMENT (440-564-2261). AND THE LOCAL EMERGENCY PLANNING COMMITTEE (440-279-2170) WITHIN 30 MINUTES OF THE DISCOVERY OF THE RELEASE. ALL SPILLS WHICH CONTACT WATERS OF THE STATE MUST BE REPORTED TO OHIO EPA.
- 2. HAZARDOUS MATERIALS/REGULATED SUBSTANCES. IF SUBSTANCES SUCH AS OIL. DIESEL FUEL. HYDRAULIC FLUID, ANTIFREEZE, ETC. ARE SPILLED, LEAKED, OR RELEASED ONTO THE SOIL, THE SOIL SHOULD BE DUG UP AND DISPOSED OF AT A LICENSED SANITARY LAND FILL OR OTHER APPROVED PETROLEUM CONTAMINATED SOIL REMEDIATION FACILITY (NOT A CONSTRUCTION /DEMOLITION DEBRIS LAND FILL). NOTE THOSE STORM WATER RUNOFFS ASSOCIATED WITH CONTAMINATED SOILS ARE NOT AUTHORIZED UNDER OHIO EPA'S GENERAL STORM WATER PERMIT ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- OPEN BURNING. NO MATERIALS CONTAINING RUBBER, GREASE, ASPHALT, OR PETROLEUM PRODUCTS, SUCH AS TIRES, AUTO PARTS, PLASTICS OR PLASTIC COATED WIRE MAY BE BURNED (OAC 3745-19). OPEN BURNING IS NOT ALLOWED IN RESTRICTED AREAS, AS FOLLOWS:
 - 1) WITHIN CORPORATION LIMITS; 2) WITHIN 1000 FEET OUTSIDE A MUNICIPAL CORPORATION HAVING A POPULATION OF 1,000 TO 10.000: AND
 - 3) A ONE MILE ZONE OUTSIDE OF A CORPORATION OF 10,000 OR MORE. OUTSIDE OF RESTRICTED

NO OPEN BURNING IS ALLOWED WITHIN 1000 FEET OF AN INHABITED BUILDING ON ANOTHER PROPERTY. OPEN BURNING IS PERMISSIBLE IN A RESTRICTED AREA FOR: HEATING TAR, WELDING, SMUDGE POTS AND SIMILAR OCCUPATIONAL NEEDS, AND HEATING FOR WARMTH OR OUTDOOR BARBEQUES. OUTSIDE OF RESTRICTED AREAS, OPEN BURNING IS PERMISSIBLE FOR LANDSCAPE OR LAND-CLEARING WASTES (PLANT MATERIAL, WITH PRIOR WRITTEN PERMISSION FROM OHIO EPA), AND AGRICULTURAL WASTES, EXCLUDING BUILDINGS.

- 4. DUST CONTROL OR DUST SUPPRESSANTS SHALL BE USED TO PREVENT NUISANCE CONDITIONS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND IN A MANNER. WHICH PREVENT A DISCHARGE TO WATERS OF THE STATE. SUFFICIENT DISTANCE MUST BE PROVIDED BETWEEN APPLICATIONS AND NEARBY BRIDGES, CATCH BASINS, AND OTHER WATERWAYS. APPLICATION (EXCLUDING WATER) MAY NOT OCCUR WHEN RAIN IS IMMINENT AS NOTED IN THE SHORT TERM FORECAST. USED OIL MAY NOT BE APPLIED FOR DUST CONTROL.
- 5. PROCESS WASTE WATER/LEACHATE MANAGEMENT. OHIO EPA'S CONSTRUCTION GENERAL PERMIT ONLY ALLOWS THE DISCHARGE OF STORM WATER AND DOES NOT INCLUDE OTHER WASTE STREAMS/DISCHARGES SUCH AS VEHICLE AND/OR EQUIPMENT WASHING, ON-SITE SEPTIC LEACHATE CONCRETE WASH OUTS, WHICH ARE CONSIDERED PROCESS WASTEWATERS. ALL PROCESS WASTEWATERS MUST BE COLLECTED AND PROPERLY DISPOSED AT AN APPROVED DISPOSAL FACILITY. IN THE EVENT, LEACHATE OR SEPTAGE IS DISCHARGED; IT MUST BE ISOLATED FOR COLLECTION AND PROPER DISPOSAL AND CORRECTIVE ACTIONS TAKEN TO ELIMINATE THE SOURCE OF WASTE WATER.
- 6. PLEASE REFER TO THE OHIO RAINWATER AND LAND DEVELOPMENT MANUAL, CURRENT EDITION, FOR ADDITIONAL INFORMATION.

GENERAL CONSTRUCTION SEQUENCE

CONSTRUCTION ACTIVITIES, INCLUDING THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES, SHALL NOT BEGIN UNTIL ALL REQUIRED WORK AGREEMENTS HAVE BEEN OBTAINED. CONSTRUCTION SHALL NOT BEGIN UNTIL ALL SEDIMENT AND EROSION CONTROL MEASURES HAVE BEEN INSTALLED. THE CONSTRUCTION MANAGER SHALL MINIMIZE DISTURBANCE WITHIN THE WORKING AREAS WHEREVER POSSIBLE

- 1. INSTALL CONSTRUCTION ENTRANCE AS DETAILED ON PLANS. TEMPORARY CONSTRUCTION FENCING SHALL BE INSTALLED AROUND PERIMETER OF CONSTRUCTION SITE. FENCING SHALL BE USED TO RESTRICT OUTSIDE TRAFFIC TO SITE.
- 2. DELIVER CONSTRUCTION TRAILER TO SITE AND INSTALL TEMPORARY POWER AND TELEPHONE, IF REQUIRED. TEMPORARY UTILITY SERVICES ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 3. DELINEATE AND MARK EXISTING UTILITIES.
- 4. STAKE AND/OR FLAG LIMITS OF CLEARING.
- 5. CLEARING & GRUBBING. AS NECESSARY, FOR INSTALLATION OF PERIMETER CONTROLS. INSTALL SILT PERIMETER CONTROLS AS SHOWN ON PLANS. SILT PERIMETER CONTROLS SHALL BE INSTALLED LEVEL, ALONG THE CONTOURS, WITH ENDS TURNED UPSLOPE TO PREVENT CONCENTRATED FLOW AT THE SILT PERIMETER CONTROLS.
- 6. TOPSOIL SHALL BE STRIPPED AND STOCKPILED ON SITE FOR REUSE, OR REMOVED TO AN APPROVED OFFSITE SPOIL AREA.
- 7. BEGIN FILLING & GRADING AS REQUIRED TO REACH SUBGRADE. INSTALL POND LINER AT PROPOSED SUBGRADE ELEVATION AND PLACE SUBSTRATE MATERIAL TO PROPOSED GRADES.
- 8. UTILIZE DUST CONTROL MEASURES AS REQUIRED TO MINIMIZE AIR-BORNE POLLUTION BY METHODS APPROVED BY THE AUTHORIZING EPA OFFICE.
- 9. IN PROPOSED GRASS AREAS, REPLACE TOPSOIL, FINE GRADE AND SEED, AS REQUIRED. STABILIZE ALL DISTURBED AREAS WITH PERMANENT SEED AND MULCHING OR TEMPORARY SEEDING IMMEDIATELY UPON REACHING FINAL GRADE.
- 10. CONSTRUCT UNDERGROUND UTILITY WORK INCLUDING STORM WATER DISTRIBUTION NETWORK AND BURIAL OF OVERHEAD ELECTRIC TO UNDERGROUND ELECTRIC. INSTALL REQUIRED INLET PROTECTION.
- 11. COMPLETE SITEWORK AND FINAL CLEAN-UP. RESEED ANY AREAS THAT MAY REQUIRE ATTENTION IMMEDIATELY. NOTE THAT LAWN AREAS WILL NOT BE DEEMED STABLE UNTIL A MINIMUM 80% VEGETATIVE DENSITY HAS BEEN ACHIEVED.
- 12. MAINTAIN EROSION & SEDIMENTATION CONTROL MEASURES UNTIL THE SITE HAS BEEN COMPLETELY STABILIZED. ALL AREAS OF VEGETATIVE SURFACE, WHETHER PERMANENT OR TEMPORARY, SHALL BE CONSIDERED TO BE IN PLACE AND FUNCTIONAL WHEN THE REQUIRED UNIFORM RATE OF COVERAGE (80%) IS OBTAINED.
- 13. REMOVE SEDIMENT CONTROLS.

STORMWATER MANAGEMENT BMPS

PERMANENT SEEDING: BMP 1

CHAMPION BRAND SEED MIX OR APPROVED EQUAL.

SEE SHEET 23 FOR NOTES AND DETAILS.

BMP 2

SILT FENCE: SEE SHEET 6 FOR NOTES AND DETAILS.

COMPOSITE FILTER SOCK: SEE SHEET 6 FOR NOTES AND DETAILS.

DEWATERING BAG: BMP 3

SEE SHEET 6 FOR NOTES AND DETAILS.

OUTFALL ROCK CHANNEL PROTECTION: SEE SHEET 6 FOR NOTES AND DETAILS.

BMP 5

BMP 4

WASTE DISPOSAL, SOLID WASTE MATERIALS, HAZARDOUS WASTES, AND SANITARY WASTE: CONSTRUCTION PERSONNEL, INCLUDING SUBCONTRACTORS WHO MAY USE OR HANDLE HAZARDOUS OR TOXIC MATERIALS, SHALL BE MADE AWARE OF THE FOLLOWING GENERAL GUIDELINES REGARDING DISPOSAL AND HANDLING OF HAZARDOUS AND CONSTRUCTION

- A. PREVENT SPILLS
- B. USE PRODUCTS UP
- C. FOLLOW LABEL DIRECTIONS FOR DISPOSAL
- D. REMOVE LIDS FROM EMPTY BOTTLES AND CANS WHEN DISPOSING IN TRASH
- E. RECYCLE WASTES WHENEVER POSSIBLE
- F. DON'T POUR INTO WATERWAYS, STORM DRAINS OR ONTO THE GROUND
- G. DON'T POUR DOWN THE SINK, DOOR DRAIN OR SEPTIC TANKS
- H. DON'T BURY CHEMICALS OR CONTAINERS
- I. DON'T BURN CHEMICALS OR CONTAINERS
- J. DON'T MIX CHEMICALS TOGETHER
- CONTAINERS SHALL BE PROVIDED FOR THE PROPER COLLECTION OF ALL WASTE MATERIAL INCLUDING CONSTRUCTION DEBRIS, TRASH, PETROLEUM PRODUCTS AND ANY HAZARDOUS MATERIALS/REGULATED SUBSTANCES USED ON-SITE. CONTAINERS SHALL BE COVERED AND NOT LEAKING.
- ALL WASTE MATERIAL SHALL BE DISPOSED OF AT FACILITIES APPROVED FOR THAT MATERIAL. CONSTRUCTION DEMOLITION AND DEBRIS (CD&D) WASTE MUST BE DISPOSED OF AT AN OHIO EPA APPROVED CD&D LAND FILL.
- NO CONSTRUCTION RELATED WASTE MATERIALS ARE TO BE BURIED ON-SITE. BY EXCEPTION, CLEAN FILL (BRICKS, HARDENED CONCRETE, SOIL) MAY BE UTILIZED IN A WAY WHICH DOES NOT ENCROACH UPON NATURAL WETLANDS, STREAMS OR PLAINS OR RESULT IN THE CONTAMINATION OF WATERS OF THE STATE.
- WASTES GENERATED BY CONSTRUCTION ACTIVITIES (i.e. CONSTRUCTION MATERIALS SUCH AS PAINTS, SOLVENTS, FUELS, CONCRETE, WOOD, ETC) MUST BE DISPOSED OF IN ACCORDANCE WITH ORC 3734 AND OR5C 3714.

BMP 6

- STOCKPILED MATERIALS (STONE, TOPSOIL, ETC.) SHALL BE SURROUNDED WITH SILT FENCE. SILT FENCE SHALL BE INSPECTED AS SPECIFIED ON THIS SHEET.
- ALL PETROLEUM PRODUCTS. HAZARDOUS MATERIALS/REGULATED SUBSTANCES SHALL BE KEPT IN SEALED TANKS/CONTAINERS. TANKS/CONTAINERS AND VEHICLES SHALL BE INSPECTED REGULARLY FOR LEAKS. SPILLS SHALL BE REPORTED AS SPECIFIED ON THIS
- MIXING, PUMPING, TRANSFERRING OR OTHER HANDLING OF CONSTRUCTION CHEMICALS SUCH AS FERTILIZER, LIME, ASPHALT, CONCRETE DRYING COMPOUNDS, AND ALL OTHER POTENTIALLY HAZARDOUS MATERIALS/REGULATED SUBSTANCES SHALL BE PERFORMED IN AN AREA AWAY FROM ANY WATERCOURSE, DITCH OR STORM DRAIN.

EQUIPMENT FUELING AND MAINTENANCE:

- EQUIPMENT FUELING AND MAINTENANCE, OIL CHANGING, ETC., SHALL BE PERFORMED AWAY FROM WATERCOURSES, DITCHES OR STORM DRAINS, IN AN AREA DESIGNATED FOR THAT PURPOSE. THE DESIGNATED AREA SHALL BE EQUIPPED FOR RECYCLING OIL AND CATCHING SPILLS. SECONDARY CONTAINMENT SHALL BE PROVIDED FOR ALL FUEL OIL STORAGE TANKS. THESE AREAS MUST BE INSPECTED EVERY SEVEN DAYS AND WITHIN 24 HRS. OF A 0.5 INCH OR GREATER RAIN EVENT TO ENSURE THERE ARE NO EXPOSED MATERIALS WHICH WOULD CONTAMINATE STORM WATER.
- SITE OPERATORS MUST BE AWARE THAT SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) REQUIREMENTS MAY APPLY. A SPCC PLAN IS REQUIRED FOR SITES WITH ONE SINGLE ABOVE GROUND TANK OF 660 GALLONS OR MORE, ACCUMULATIVE ABOVE GROUND STORAGE OF 1330 GALLONS OR MORE. OR 42,000 GALLONS OF UNDERGROUND STORAGE.
- HAZARDOUS MATERIALS, REGULATED SUBSTANCES, AND CONTAMINATED SOILS MUST BE DISPOSED OF AS SPECIFIED ON THIS SHEET.

CONSTRUCTION ENTRANCE SEE SHEET 6 FOR NOTES AND DETAILS.

BMP 8

PROTECTIVE FENCING

CONCRETE WASHOUT AREA

SEE SHEET 6 FOR NOTES AND DETAILS.

SEE SHEET 6 FOR NOTES AND DETAILS.

SITE INSPECTIONS SHALL BE DONE WEEKLY AND AFTER EVERY RAINFALL EVENT EXCEEDING 1/2" OF RAINFALL. ALL NECESSARY REPAIRS SHOULD BE IMPLEMENTED IMMEDIATELY AFTER SUCH INSPECTIONS.

CONSTRUCTION MANAGER MAY SUBMIT A WAIVER REQUEST TO THE OEPA FOR A REDUCTION TO MONTHLY INSPECTIONS IF THE SITE WILL BE STABILIZED AND DORMANT FOR A LONG PERIOD OF TIME.

ONLY A QUALIFIED INSPECTION PERSONNEL IS TO PERFORM INSPECTIONS.

INSPECTOR SHALL BE RESPONSIBLE FOR PREPARING AND SIGNING WEEKLY AND ALL INTERMEDIATE EROSION CONTROL INSPECTION REPORTS AFTER EVERY INSPECTION. SUCH REPORTS SHALL BE MADE AVAILABLE TO THE GEAUGA PARK DISTRICT, ENGINEER, AND CITY / STATE OFFICIALS UPON THEIR REQUEST.

SUCH REPORTS SHALL BE KEPT FOR 3 YEARS AFTER TERMINATION OF CONSTRUCTION ACTIVITIES.





PORTAGE LAKES ODNR WILDLIFE DISTRICT 3 YOUTH FISHING PONDS

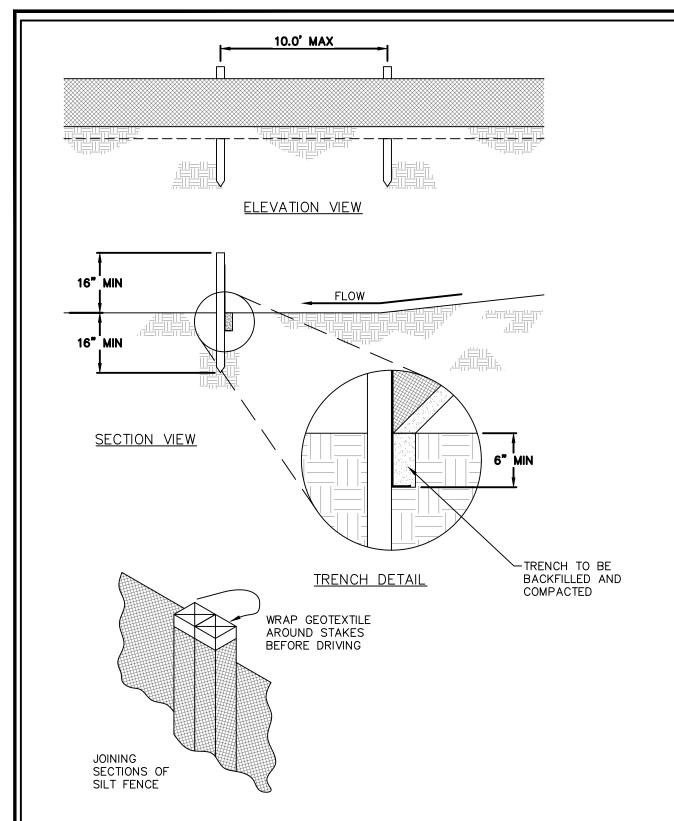
DESIGNED BY: DSS	PROJECT NUMBER: 2023335.03		
DRAWN BY: DSS	SCALE: PER PLAN		
CHECKED BY: MAL	DATE:		
APPROVED BY: MAL	REVISED:		

SWPP NOTES

C-100

SHEET:

5 OF 25



FENCE SPLICE DETAIL

TABLE 6.3.2 MINIMUM CRITERIA FO	<u>or silt fence fabri</u>	<u>IC (ODOT, 2013)</u>	
FABRIC PROPERTIES	VALUES	TEST METHOD	
FABRIC PROPERTIES Minimum Tensile Strength	120 lbs. (535 N)	ASTM D 4632	
Maximum Elongation at 60 lbs	50%	ASTM D 4632	
Minimum Puncture Strength	50 lbs. (220 N)	ASTM D 4833	
Minimum Tear Strength	40 lbs. (180 N)	ASTM D 4533	
Apparent Opening Size	≤ 0.84 mm	ASTM D 4751	
Minimum Permittivity	1X10-2 sec1	ASTM D 4491	
UV Exposure Strength Retention	70%	ASTM D 4355	

SILT FENCE DETAIL

(BMP 2)

SCALE: NTS

NOTES:

- 1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
- 2. ALL SILT FENCES SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS THAT MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
- 3. ENDS OF THE SILT FENCES SHALL BE BROUGHT UPSLOPE SLIGHTLY SO THAT WATER PONDED BY THE SILT FENCE WILL BE PREVENTED FROM FLOWING AROUND THE ENDS.
- BE PREVENTED FROM FLOWING AROUND THE ENDS.

 4. SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
- 5. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FEET (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE SILT FENCE.
- 6. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 INCHES ABOVE THE GROUND SURFACE.
- 7. THE SILT FENCE SHALL BE PLACED IN AN EXCAVATED OR SLICED TRENCH CUT A MINIMUM OF 6 INCHES DEEP. THE TRENCH SHALL BE MADE WITH A TRENCHER, CABLE LAYING MACHINE, SLICING MACHINE OR OTHER SUITABLE DEVICE THAT WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.
- 8. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE. A MINIMUM OF 8 INCHES OF GEOTEXTILE MUST BE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6—INCH DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND
- COMPACTED ON BOTH SIDES OF THE FABRIC.

 9. SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST WITH A MINIMUM 6-IN. OVERLAP PRIOR TO DRIVING INTO THE GROUND, (SEE DETAILS).
- 10. MAINTENANCE SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER THE FABRIC OR AROUND THE FENCE ENDS, OR IN ANY OTHER WAY ALLOWS A CONCENTRATED FLOW DISCHARGE, ONE OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE:
 - 1) THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED
 - 2) ACCUMULATED SEDIMENT SHALL BE REMOVED
 3) OTHER PRACTICES SHALL BE INSTALLED

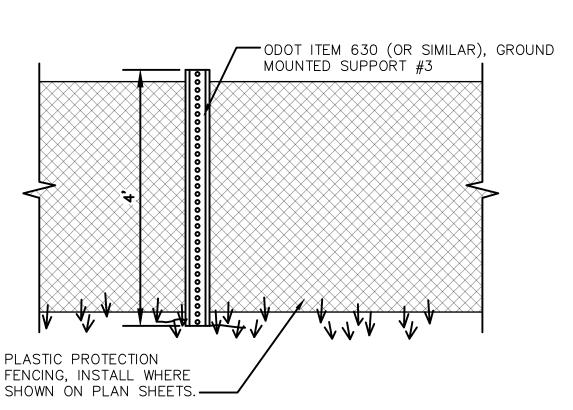
SEDIMENT DEPOSITS SHALL BE ROUTINELY REMOVED WHEN THE DEPOSIT REACHES APPROXIMATELY ONE—HALF OF THE HEIGHT OF THE SILT FENCE.

SILT FENCES SHALL BE INSPECTED AFTER EACH RAINFALL AND AT LEAST DAILY DURING A PROLONGED RAINFALL. THE LOCATION OF EXISTING SILT FENCE SHALL BE REVIEWED DAILY TO ENSURE ITS PROPER LOCATION AND EFFECTIVENESS. IF DAMAGED, THE SILT FENCE SHALL BE REPAIRED IMMEDIATELY.

CRITERIA FOR SILT FENCE MATERIALS

- 1. FENCE POST THE LENGTH SHALL BE A MINIMUM OF 32 INCHES. WOOD POSTS SHALL BE 2-BY-2-IN. NOMINAL DIMENSIONED HARDWOOD OF SOUND QUALITY. THEY SHALL BE FREE OF KNOTS, SPLITS AND OTHER VISIBLE IMPERFECTIONS, THAT WILL WEAKEN THE POSTS. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FT. POSTS SHALL BE DRIVEN A MINIMUM 16 INCHES INTO THE GROUND, WHERE POSSIBLE. IF NOT POSSIBLE, THE POSTS SHALL BE ADEQUATELY SECURED TO PREVENT OVERTURNING OF THE FENCE DUE TO
- SEDIMENT/WATER LOADING.

 2. SILT FENCE FABRIC SEE CHART BELOW.



NOTE:

- 1. ALL WETLANDS AND TREES ADJACENT TO WORK AREAS WILL BE MARKED WITH FLAGGING AND/OR CAUTION TAPE TO RESTRICT CONSTRUCTION ACCESS NOT DESIGNATED FOR REMOVAL, RESTORATION WORK, HAULING OR ACCESS.
- 2. IF FENCING BECOMES NECESSARY, FENCE MATERIAL SHALL BE PLASTIC (SNOW FENCE. ORANGE OR GREEN IN COLOR).
- 3. WETLAND MARKINGS, FENCING, AND POSTS SHALL BE REMOVED UPON PROJECT COMPLETION.

PROTECTION FENCING (BMP 8)

PLAN VIEW N.T.S.

ADAPTED FROM FILTREXX

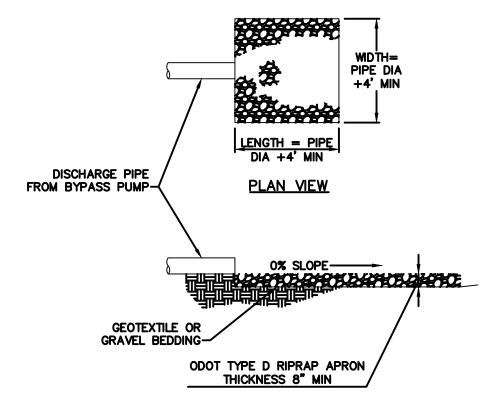
- 1. COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT.
- TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.
 ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES ½ THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER
- DESCRIBED ELSEWHERE IN THE PLAN.

 4. SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH ½ INCH STORM RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
- 5. BIODEGRADABLE FILTER SOCK SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

6. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

COMPOSITE FILTER SOCK

(BMP 2) SCALE: NTS



PROFILE VIEW

NOTES:

- 1. SUBGRADE FOR THE FILTER OR BEDDING AND RIPRAP SHALL BE PREPARED TO THE REQUIRED LINES AND GRADES AS SHOWN ON THE PLAN. THE SUBGRADE SHALL BE CLEARED OF ALL TREES, STUMPS, ROOTS, SOD, LOOSE ROCK, OR OTHER MATERIAL.
- 2. GEOTEXTILE SHALL CONFORM TO ODOT CMS 712.09 TYPE B AND BE SECURELY ANCHORED ACCORDING TO MANUFACTURERS' RECOMMENDATIONS.

 3. GEOTEXTILE SHALL BE LAID WITH THE LONG DIMENSION PARALLEL TO THE DIRECTION OF
- FLOW AND SHALL BE LAID LOOSELY BUT WITHOUT WRINKLES AND CREASES. WHERE JOINTS ARE NECESSARY, STRIPS SHALL BE PLACED TO PROVIDE A 12-IN. MINIMUM OVERLAP, WITH THE UPSTREAM STRIP OVERLAPPING THE DOWNSTREAM STRIP.
- 4. GRAVEL BEDDING SHALL BE ODOT NO. 67'S OR 57'S UNLESS SHOWN DIFFERENTLY ON THE DRAWINGS.
- 5. RIPRAP MAY BE PLACED BY EQUIPMENT BUT SHALL BE PLACED IN A MANNER TO PREVENT SLIPPAGE OR DAMAGE TO THE GEOTEXTILE.
- 6. RIPRAP SHALL BE PLACED BY A METHOD THAT DOES NOT CAUSE SEGREGATION OF SIZES. EXTENSIVE PUSHING WITH A DOZER CAUSES SEGREGATION AND SHALL BE AVOIDED BY DELIVERING RIPRAP NEAR ITS FINAL LOCATION WITHIN THE CHANNEL.
- 7. CONSTRUCTION SHALL BE SEQUENCED SO THAT OUTLET PROTECTION IS PLACED AND FUNCTIONAL WHEN THE STORM DRAIN, CULVERT, OR OPEN CHANNEL ABOVE IT BECOMES OPERATIONAL.
- 8. ALL DISTURBED AREAS WILL BE VEGETATED AS SOON AS PRACTICAL.

OUTFALL ROCK CHANNEL PROTECTION

(BMP 4) SCALE: NTS

L-------──WOOD STAKE (TYPICAL) — 6" MIN DEPTH GROUNDWATER TABLE AGGREGATE ALL AROUND CONTAINMENT MUST BE STRUCTURALLY SOUND AND LEAK FREE AND CONTAIN ALL LIQUID WASTES. CONTAINMENT DEVICES MUST BE OF SUFFICIENT QUANTITY OR VOLUME TO COMPLETELY CONTAIN THE LIQUID WASTES GENERATED. WASHOUT MUST BE CLEANED OR NEW FACILITIES CONSTRUCTED AND READY TO USE ONCE WASHOUT IS 75% FULL. 4. WASHOUT AREA(S) SHALL BE INSTALLED IN A LOCATION EASILY ACCESSIBLE BY CONCRETE TRUCKS. 5. ONE OR MORE AREAS MAY BE INSTALLED ON THE CONSTRUCTION SITE AND MAY BE RELOCATED AS CONSTRUCTION PROGRESSES. 6. AT LEAST WEEKLY REMOVE ACCUMULATION OF SAND AND AGGREGATE AND DISPOSE OF PROPERLY. **CONCRETE WASHOUT AREA**

ANCHOR BALES

WITH (2) 2"x2"x4' STAKES PER BALE

BALES TO BUTT

3'-0" MIN

SOIL

EMBEDMENT

SHALL /ASHOUT HERE

BACKGROUND

—FINISH GRADE

SIGN SHALL BE PLACED IN

A PROMINENT LOCATION

AT WASHOUT AREA

— 6" MIN IMBEDMENT

EXISTING GRADE —

WASHOUT SIGN

⊥POLYETHYLENE

— BINDING WIRE

- 30"± - STRAW BALE (TYPICAL)

SHEETING T

— AGGREGATE———

NOTES:

- 1. THE EXISTING GRAVEL DRIVE SHALL BE UTILIZED FOR CONSTRUCTION ENTRANCE. IF NECESSARY, INSTALL CONSTRUCTION ENTRANCE AS NOTED BELOW.
- STONE SIZE NO. 2 STONE SHALL BE USED, OR RECYCLED CONCRETE EQUIVALENT.
 THICKNESS STONE LAYER SHALL BE 6" THICK FOR STANDARD DUTY ACTIVITY AND 10" THICK FOR HEAVY
- DUTY ACTIVITY.

 4. DRIVEWAY WIDTH THE ENTRANCE SHALL BE AT LEAST 16' WIDE. CONTRACTOR SHALL ENSURE ALL VEHICLES UTILIZE THE CONSTRUCTION ENTRANCE UNTIL
- PAVEMENT IS IN PLACE.

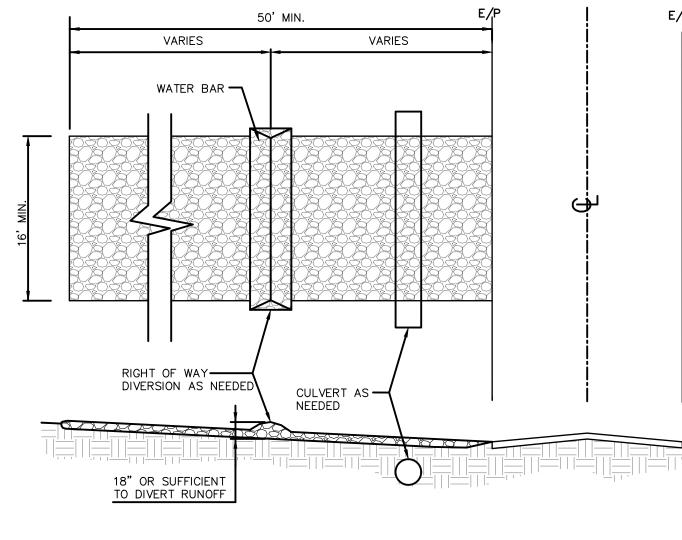
 5. BEDDING-A GEOTEXTILE SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE. IT SHALL HAVE A GRAB TENSILE STRENGTH OF AT LEAST 200 LBS. AND A MULLEN BURST STRENGTH OF AT LEAST 190 LBS.
- 6. CULVERT—A PIPE OR CULVERT SHALL BE CONSTRUCTED UNDER THE ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FLOWING ACROSS THE ENTRANCE FROM BEING DIRECTED OUT ONTO PAVED SURFACES.
- 7. WATER BAR A WATER BAR SHALL BE CONSTRUCTED AS PART OF THE CONSTRUCTION ENTRANCE IF NEEDED TO PREVENT SURFACE RUNOFF FROM FLOWING THE LENGTH OF THE CONSTRUCTION ENTRANCE AND OUT ONTO PAVED SURFACES.
- 8. MAINTENANCE TOP DRESSING OF ADDITIONAL STONE SHALL BE APPLIED AS CONDITIONS DEMAND. MUD SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADS, OR ANY SURFACE WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS, SHALL BE REMOVED IMMEDIATELY. REMOVAL SHALL BE ACCOMPLISHED BY SCRAPING OR SWEEPING.

 9. CONSTRUCTION ENTRANCES SHALL NOT BE RELIED
- OFF SITE TRACKING. VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION SHALL BE RESTRICTED FROM MUDDY AREAS.

 10. THE ENTRANCE SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS STABILIZED OR REPLACED WITH A

PERMANENT ROADWAY OR ENTRANCE.

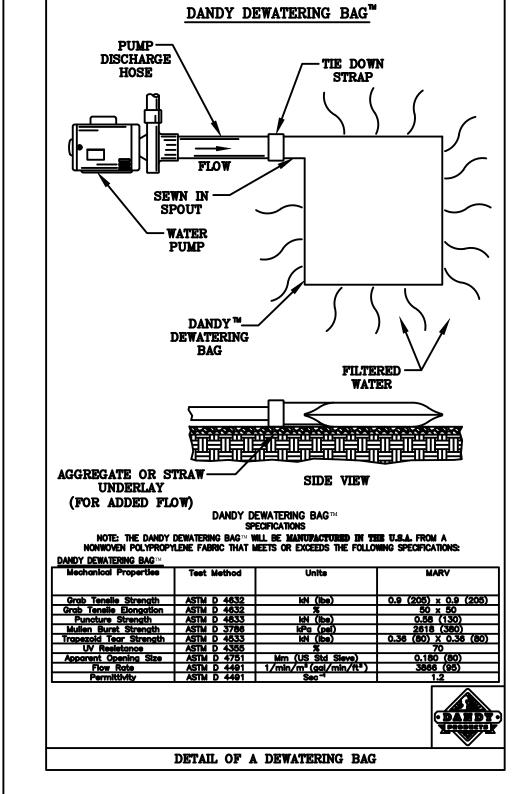
UPON TO REMOVE MUD FROM VEHICLES AND PREVENT



TEMPORARY CONSTRUCTION DRIVE ACCESS

(BMP 7)

SCALE: NTS



DEWATERING BAG
(BMP 3)
SCALE: NTS

GPD GROUP®
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.

520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax 300.572.2101

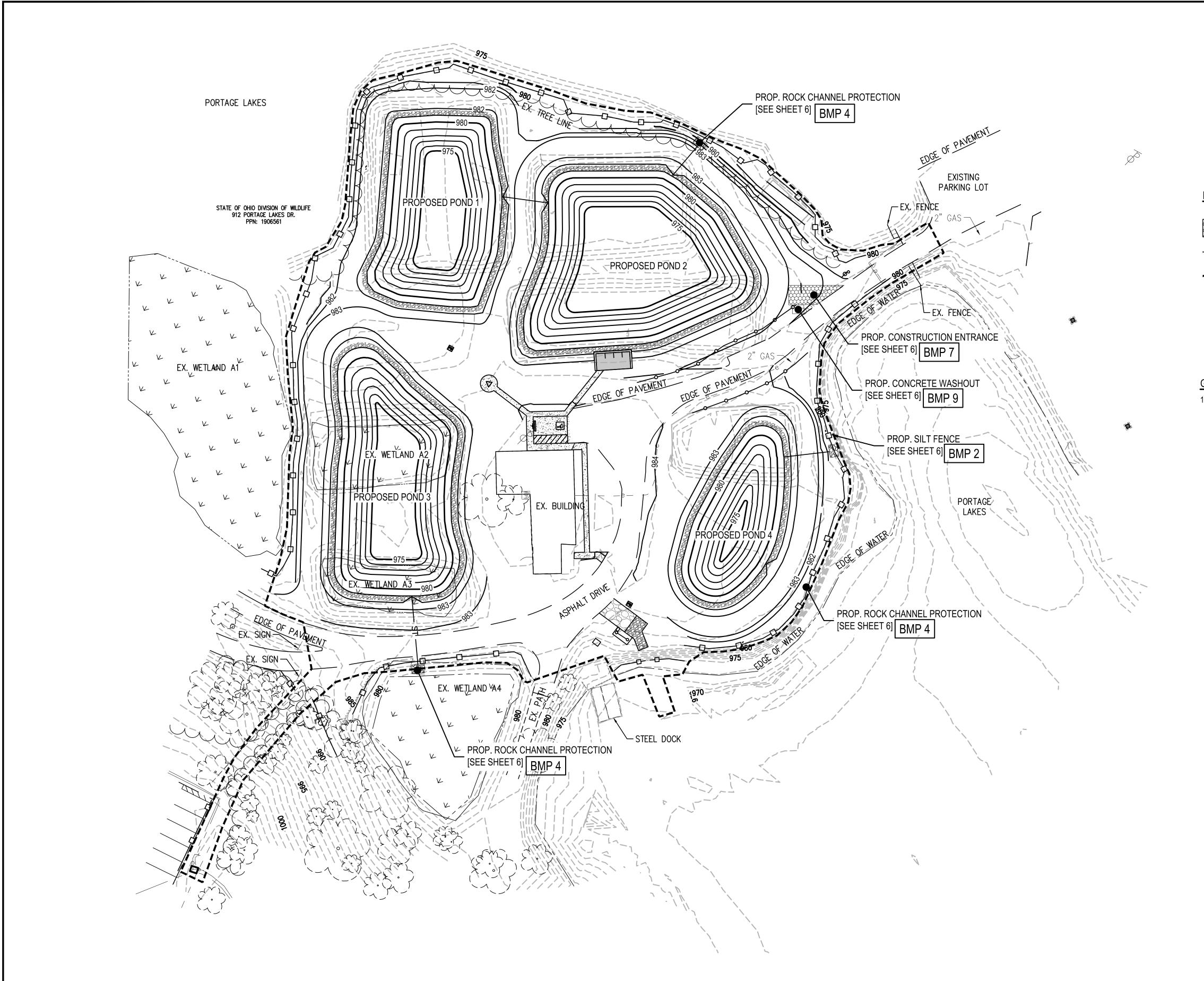
Copyright; Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2024

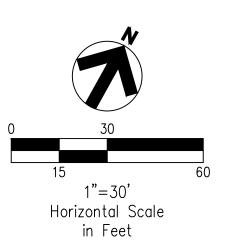
ENGINEERING
Ohio Department of Natural Resources

PORTAGE LAKES
ODNR WILDLIFE DISTRICT 3
YOUTH FISHING PONDS

DESIGNED BY: DSS
DRAWN BY: DSS
DRAWN BY: DSS
CHECKED BY: MAL
APPROVED BY: MAL
REVISED:

SWPP DETAILS





<u>LEGEND</u>

PROPOSED CONSTRUCTION ENTRANCE, SEE SHEET 6

PROPOSED SILT FENCE, SEE SHEET 6

LIMITS OF DISTURBANCE

GENERAL SHEET NOTES

1. SEE SURVEY CONTROL PLAN FOR ALIGNMENT DETAILS AND BENCHMARK INFORMATION [SHEET 3].

PROP. PERMANENT SEEDING AREAS
[SEE SHEET 24 FOR APPROPRIATE LOCATIONS]

DEWATERING BAG TO BE USED IF NECESSARY BMP 3 FOR TEMPORARY DEWATERING PUMPING DURING CONSTRUCTION. [SEE SHEET 6]

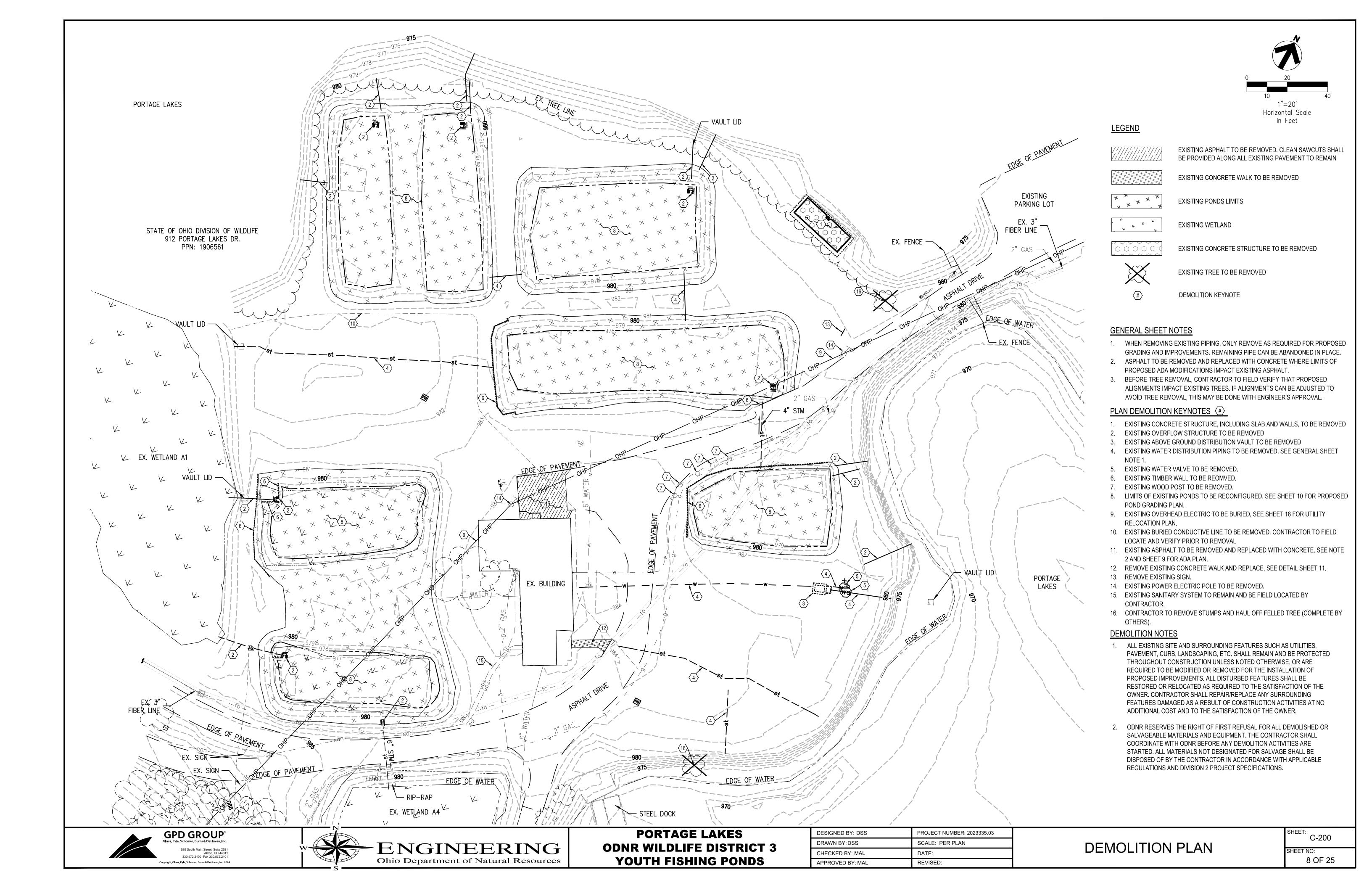
BMP 8 PROTECTIVE FENCING PLACEMENT TO BE DETERMINED IN FIELD. [SEE SHEET 6]

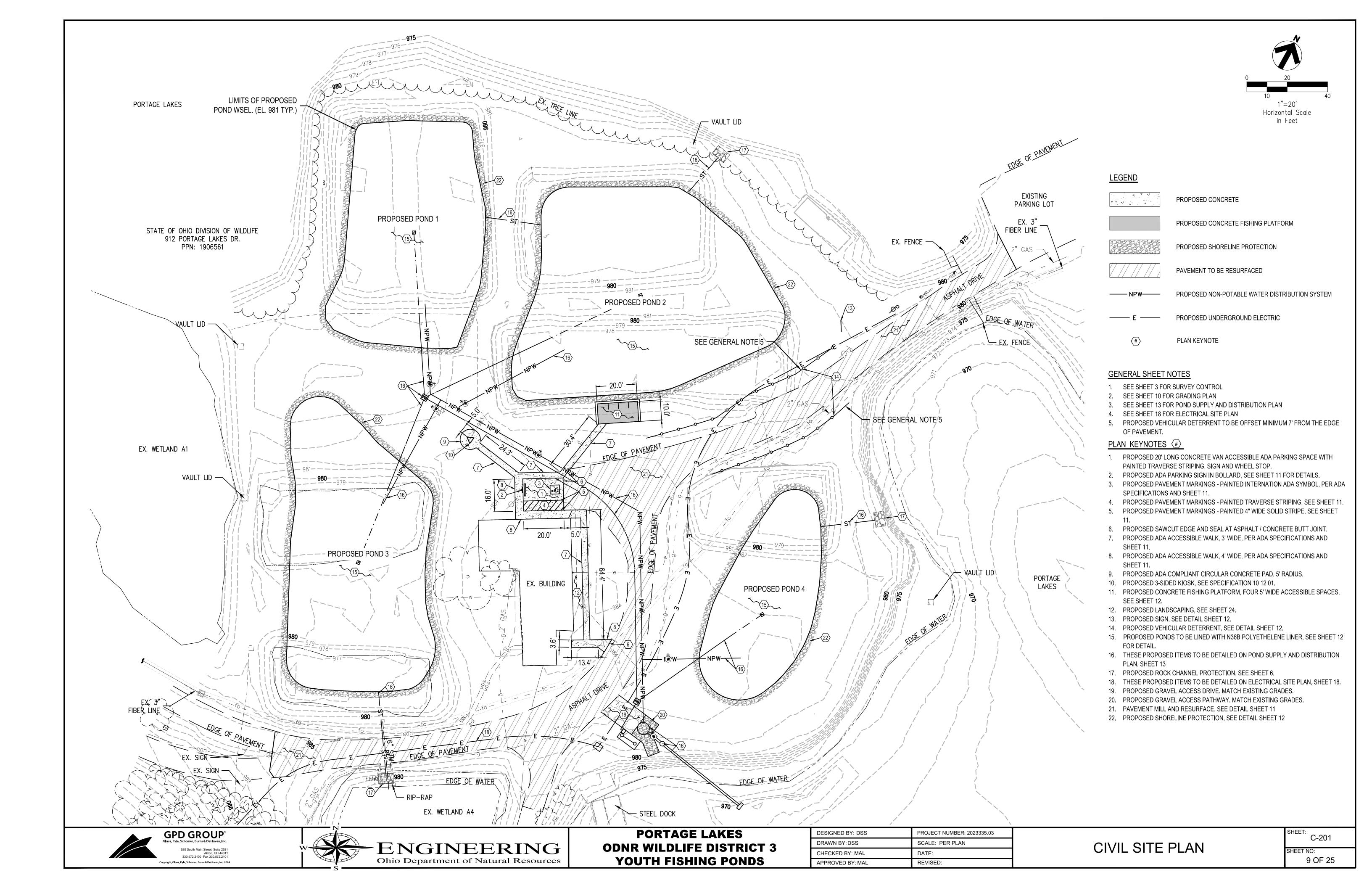


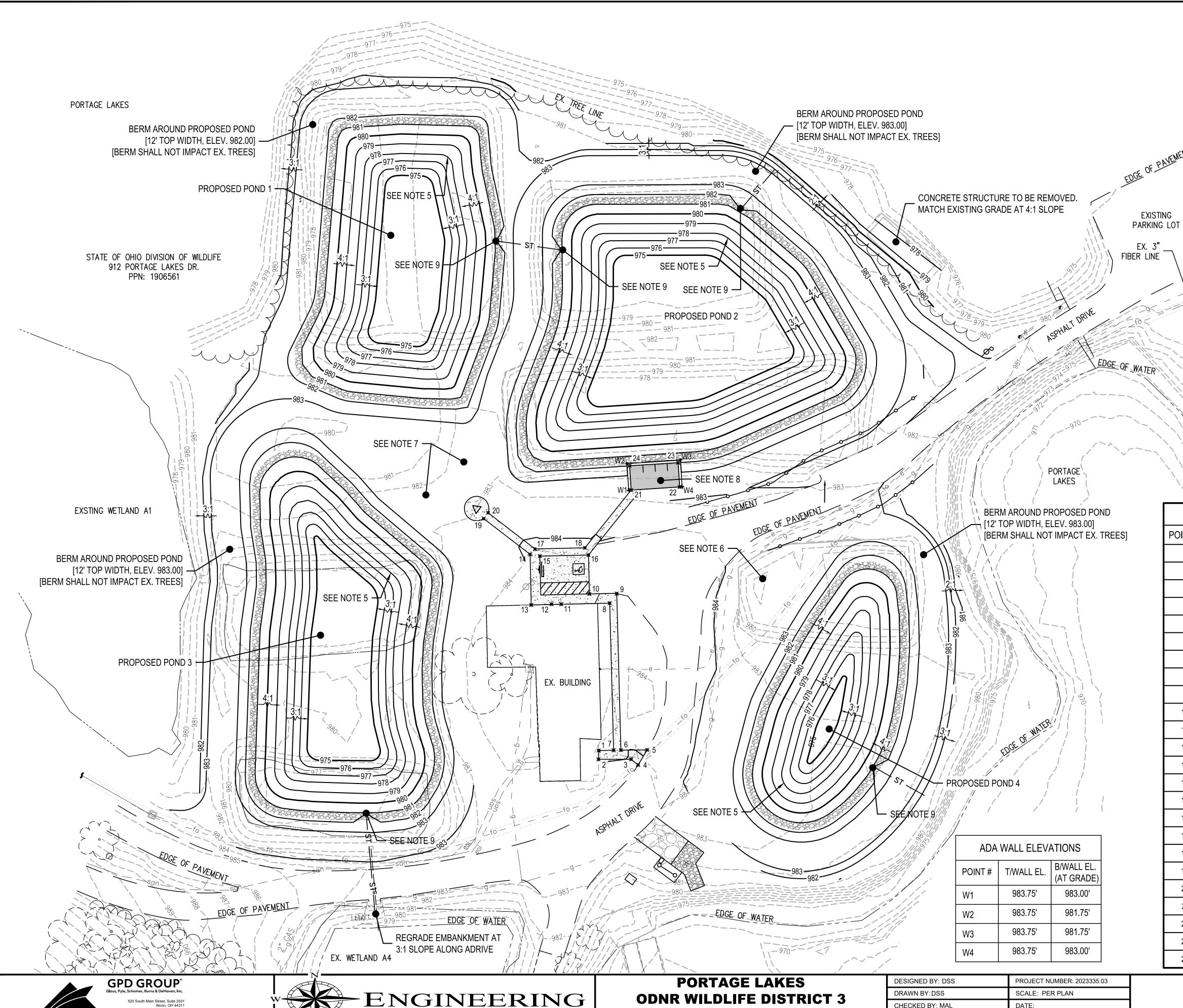


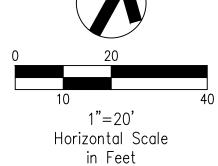


DESIGNED BY: DSS	PROJECT NUMBER: 2023335.03
DRAWN BY: DSS	SCALE: PER PLAN
CHECKED BY: MAL	DATE:
APPROVED BY: MAL	REVISED:









LEGEND (SEE SHEET X FOR GENERAL LEGEND)

PROPOSED/EXISTING SPOT ELEVATION EXISTING SPOT ELEVATION/ MATCH EXISTING GRADE PROPOSED ELEVATION @ FINISHED GROUND ELEVATION PROPOSED DRAINAGE SLOPE & DIRECTION PROPOSED CONTOUR

EXISTING CONTOUR

GENERAL SHEET NOTES

- CONTRACTOR SHALL IDENTIFY AND LOCATE ALL EXISTING UTILITIES INCLUDING BUT NOT LIMITED TO SANITARY, GAS, STORM, WATER, ELECTRIC, AND COMMUNICATION LINES PRIOR TO ANY DISTURBANCE OF THE SITE.
- 2. SEDIMENT AND EROSION CONTROL (SWPP) SHALL BE IN PLACE PRIOR TO CLEARING AND GRUBBING, REFER TO SHEET 7 FOR SWPP PLANS.
- 3. SEE SHEET 3 FOR BENCHMARK INFORMATION.
- 4. CONTRACTOR SHALL PROVIDE DRAINAGE MEASURES AS EARLY AS APPLICABLE TO MAINTAIN POSITIVE DRAINAGE DURING ALL PHASES OF THE PROJECT TO PREVENT PONDING, FLOODING, EROSION, AND MAINTAIN A DRY, WELL DRAINED SUBGRADE, AND DRY SITE.
- 5. ALL PROPOSED PONDS WILL HAVE GRADE BREAK AT ELEVATION 978'.
- TRANSITION FROM A 4:1 TO 3:1 SLOPE, SEE DETAIL ON SHEET 12. 6. EXISTING POND TO BE FILLED AND BROUGHT UP TO PROPOSED GRADE.
- AREA BETWEEN PONDS AND PROPOSED 3-SIDED KIOSK TO BE RAISED TO ELEVATION 983', ENSURE POSITIVE DRAINAGE TOWARDS PONDS.
- 8. PROPOSED ADA FISHING PLATFORM AT ELEVATION 983.25', SEE DETAIL ON
- PROPOSED SURFACE TO BE ADJUSTED TO COVER EXPOSED POND OVERFLOW

GRADING PLAN POINT TABLE				
POINT#	NORTHING	EASTING	EXISTING ELEVATION	PROPOSED ELEVATION
1	488167.197	2231336.236	984.18'	984.18
2	488163.977	2231337.901	984.11'	984.11
3	488170.478	2231349.593	983.81'	983.98
4	488169.869	2231353.280	983.83'	983.83
5	488177.075	2231353.525	983.95'	983.95
6	488171.747	2231344.142	984.07'	984.06
7	488170.258	2231341.537	984.11'	984.06
8	488222.336	2231310.794	984.63'	984.69
9	488227.187	2231311.413	984.78'	984.65
10	488221.605	2231301.639	984.72'	984.61
11	488212.308	2231293.597	984.60'	984.69
12	488210.353	2231290.059	984.69'	984.69
13	488206.034	2231282.943	984.30'	984.69
14	488223.993	2231272.437	984.03'	984.27
15	488225.317	2231276.297	984.13'	984.29
16	488235.416	2231293.560	984.27'	984.29
17	488226.926	2231273.107	983.95'	984.27
18	488237.298	2231290.837	984.17'	984.23
19	488227.581	2231248.599	983.10'	983.12
20	488230.548	2231249.046	983.07'	983.12
21	488267.261	2231295.934	982.60'	983.25
22	488278.071	2231312.761	982.56'	983.25
23	488286.485	2231307.356	980.75'	983.25
24	488275.675	2231290.529	980.37'	983.25

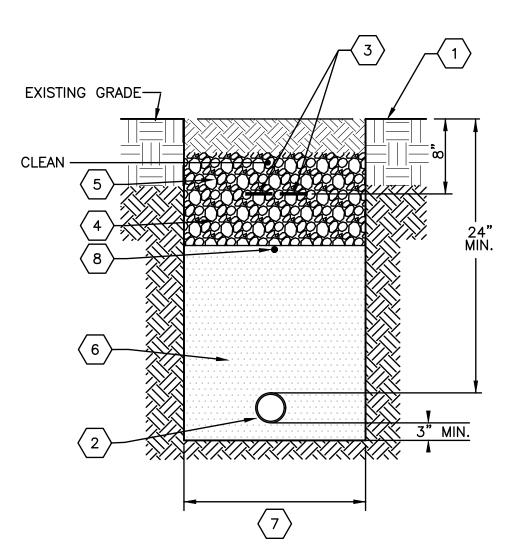


YOUTH FISHING PONDS

DESIGNED BY: DSS	PROJECT NUMBER: 2023335.03
DRAWN BY: DSS	SCALE: PER PLAN
CHECKED BY: MAL	DATE:
APPROVED BY: MAL	REVISED:

GRADING PLAN

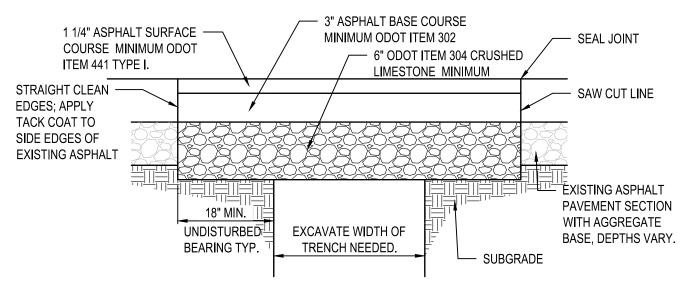
C-202 10 OF 25



DETAIL KEYNOTES

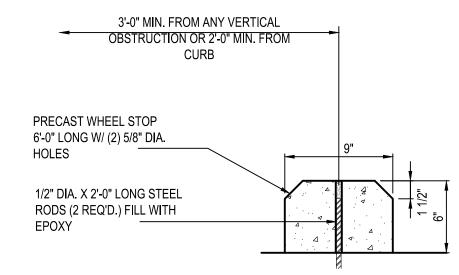
- 1. TOPSOIL AND SEED OR PAVEMENT, AS PER PLAN.
- 2. PVC SCHEDULE 40 AERATOR CONDUITS.
- 3. DETECTABLE WARNING TAPE RED WITH BLACK LETTERING INDICATING "AERATION" AND ROUTED ALONG CONDUIT PATH.
- 4. CLEAN ON-SITE MATERIALS MAY BE USED FOR BACKFILL IN LANDSCAPE AREAS. MATERIALS SHALL BE FREE OF STONES, RUBBLE, AND FROZEN BACKFILL; OTHERWISE, CONTRACTOR SHALL BRING IN CLEAN BACKFILL. COMPACT BACKFILL IN LIFTS.
- 5. GRANULAR BACKFILL (ODOT ITEM 304 LIMESTONE) TO BE USED UNDER PAVEMENT AND IN RIGHT OF WAY. TO DEPTH PER ODOT STANDARDS, WITH COMPACTED BACKFILL FOR REMAINDER PER ODOT STANDARDS.
- 6. SAND BEDDING.
- 7. EXCAVATE WIDTH OF TRENCH 18" (TYP.) AS REQUIRED. REFER TO WATER DISTRIBUTION PLAN FOR MORE DETAILS.
- 8. PROVIDE #10 AWG DIRECT BURIED RATED TRACE WIRE. PROVIDE 24" LOOP WITH PERMANENT WIRE TAG LABEL AT BOTH ENDS.

AERATOR CONDUIT TRENCH DETAIL

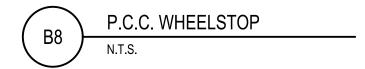


- PAVEMENT THICKNESSES SHOWN ARE MINIMUM VALUES, IF EXISTING PAVEMENT THICKNESS IS
- GREATER CONTRACTOR SHALL USE EXISTING PAVEMENT THICKNESS. ALL SUBGRADE AND PAVEMENT OPERATIONS AND MATERIALS SHALL MEET THE MINIMUM
- REQUIREMENTS OF OHIO DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS
- APPLY LIQUID ASPHALT AT ALL JOINTS BETWEEN CONCRETE AND ASPHALT AND WHERE PROPOSED ASPHALT MEETS EXISTING ASPHALT INCLUDING SAW CUT JOINTS.
- 4. NO RECYCLE MATERIAL SHALL BE PERMITTED IN ASPHALT SURFACE COURSE. SHALL BE 100% VIRGIN
- 5. RAP MATERIAL SHALL BE LIMITED TO A MAXIMUM OF 20% IN THE ASPHALT BASE COURSE. NO RAS IS PERMITTED
- 6. THE FINAL MIX DESIGN, PLACEMENT AND TESTING SHALL BE IN ACCORDANCE WITH THE LOCAL DOT / TRANSPORTATION CABINET SPECIFICATIONS.

ASPHALT PAVEMENT TRENCH REPAIR



- 1. SEE SITE PLAN FOR LOCATION AND QUANTITY OF WHEELSTOPS.
- 2. WHEN APPLICABLE IN CONCRETE PAVEMENTS, WHEEL STOPS SHALL BE ANCHORED TO CONCRETE WITH HDI+ 1/4" DROP-IN ANCHORS, 1" EMBEDMENT W/ 1/4" THREADED ROD.



NOTES:

KEYED NOTES

1 PAINT BACKGROUND BENJAMIN

M58-01 - WHITE 4" WIDTH

 $\langle 3 \rangle$ BOTTOM EDGE OF SYMBOL BOX

STALL.

SHALL MATCH END OF STALL

STRIPE AT DRIVE AISLE END OF

MOORE M58 SAFETY & ZONE

MARKING LATEX M58-30 - BLUE

(2) PAINT SYMBOL BENJAMIN MOORE M58 SAFETY & ZONE MARKING LATEX

ALL PAVEMENT MARKINGS TO BE WHITE PAVEMENT PAINT, UNLESS STATED OTHERWISE. ALL PAVEMENT MARKINGS WITHIN ADA AREAS SHALL BE PAINTED BLUE EXCEPT FOR COLORS DEFINED ON THE ADA PAVEMENT

MARKING (STRIPING) PAINT FOR PARKING SPACES, TRAFFIC

ARROWS, ADA PARKING AND SYMBOLS, ETC., PER LOCAL

REQUIREMENTS AND AS FOLLOWS:

PAVEMENT MARKINGS SHALL BE PER ODOT ITEM 642 TYPE 1.

PROVIDE A NON-SLIP AGGREGATE ADDITIVE TO MARKING PAINT USED AT ADA ACCESS RAMPS.

APPLY 2 COATS WITH STRAIGHT EDGES, YELLOW ON CONCRETE/WHITE ON ASPHALT EXCEPT WHEN MATCHING ADJACENT OR EXISTING COLOR WHEN THE PAVING IS AN EXPANSION OR SEGMENT OF A LARGER LOT. CONTRACTOR SHALL APPLY THE SECOND COAT NO SOONER THAN 30 DAYS OF APPLYING THE FIRST

3'-0" BACKGROUND WIDTH

| 2'-0" SYMBOL WIDTH |

Q PARKING STALL



MATCH EXISTING SLOPE

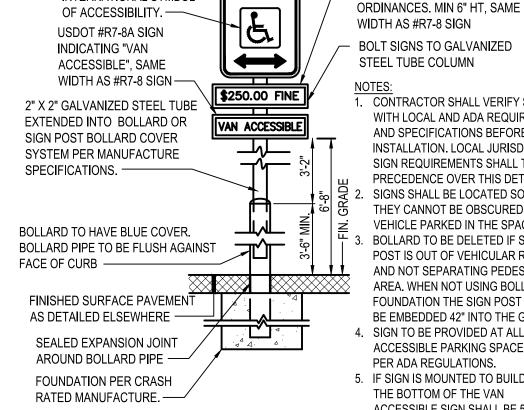
- 1.5" ASPHALT SURFACE COURSE (ODOT ITEM 441 TYPE I)
- TACK COAT AT 0.1 GAL/SY (ODOT ITEM 407) SINGLE CHIP SEAL, TYPE B (ODOT ITEM 422)
- EXISTING PAVEMENT BASE

- CONTRACTOR SHALL MILL DOWN EXISTING ASPHALT PAVEMENT 1-1/2" PER ODOT ITEM 254 BEFORE CONSTRUCTION OF RESURFACED TYPICAL SECTION.
- 2. PREPARED BASE SURFACE SHALL BE CLEAN AND FREE OF ANY LOOSE DEBRIS.
- 3. USE AIR COMPRESSOR (100 PSI MIN.) TO THOROUGHLY CLEAN ALL CRACKS PRIOR TO CHIP SEAL. PAVEMENT SHALL BE SWEPT AFTER CRACKS HAVE BEEN CLEAN OUT. 4. APPLY LIQUID ASPHALT AT ALL JOINTS BETWEEN CONCRETE AND ASPHALT AND WHERE

PROPOSED ASPHALT MEETS EXISTING ASPHALT INCLUDING SAW CUT JOINTS PER ODOT

- 5. CONTRACTOR SHALL MILL ALL PAVEMENT EDGES TO PROVIDE SMOOTH BUTT JOINT TRANSITIONS TO EXISTING PAVEMENT.
- 6. NO RECYCLE MATERIAL SHALL BE PERMITTED IN ASPHALT SURFACE COURSE. SHALL BE 100% VIRGIN LIMESTONE MIX.

RESURFACED ASPHALT PAVEMENT SECTION B2



RESERVE

PARKING

PROVIDE USDOT #R7-8

INTERNATIONAL SYMBOL

SIGN CONTAINING

BOLT SIGNS TO GALVANIZED STEEL TUBE COLUMN . CONTRACTOR SHALL VERIFY SIGN WITH LOCAL AND ADA REQUIREMENTS AND SPECIFICATIONS BEFORE INSTALLATION. LOCAL JURISDICTION SIGN REQUIREMENTS SHALL TAKE

PROVIDE SIGN INDICATING FINE.

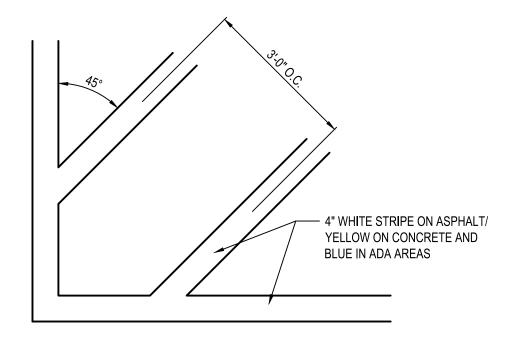
AMOUNT AND STYLE AS PER LOCAL

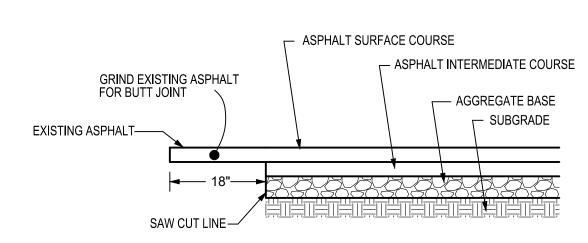
PRECEDENCE OVER THIS DETAIL. SIGNS SHALL BE LOCATED SO THAT THEY CANNOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE. BOLLARD TO BE DELETED IF SIGN POST IS OUT OF VEHICULAR REACH AND NOT SEPARATING PEDESTRIAN AREA. WHEN NOT USING BOLLARD FOUNDATION THE SIGN POST SHALL BE EMBEDDED 42" INTO THE GROUND. 4. SIGN TO BE PROVIDED AT ALL ACCESSIBLE PARKING SPACES AS PER ADA REGULATIONS. 5. IF SIGN IS MOUNTED TO BUILDING.

THE BOTTOM OF THE VAN ACCESSIBLE SIGN SHALL BE 5'-0" FROM THE FINISH GRADE.

CRASH RATED BOLLARDS SHALL BE PROVIDED AND INSTALLED AT ALL LOCATIONS WHICH ARE SEPARATING VEHICLES FROM PEDESTRIANS AND/OR STOREFRONTS REGARDLESS OR NOT OF BEING NOTED AS SUCH WITHIN THE PLANS. THE ANTICIPATED SPEED/PENETRATION RATING OF S20/P1 ACCORDING TO ASTM F3016/3016M IS TO BE UTILIZED - THE FINAL SPACING, RATINGS, AND INSTALLATION DETAILS SHALL BE IN ACCORDANCE WITH ASTM AND THE MANUFACTURER'S REQUIREMENTS FOR REQUIRED LOCATIONS AND POSSIBLE VEHICLE APPROACH SPEED. INSTALLER / CONTRACTOR SHALL BE OR BECOME CERTIFIED INSTALLERS PRIOR TO INSTALLATION. CONTRACT MANUFACTURER(S) FOR DETAILS.







TRANSVERSE STRIPING

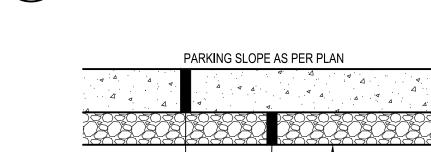
AS NOTED ON SITE PLAN

1.5% MAX.

1. CONTRACTOR SHALL INSTALL 1/2" PRE-FORMED EXPANSION JOINT

2. FIBER MAY BE USED IN PLACE OF STEEL REINFORCEMENT, SEE

MATERIAL AND JOINT SEALER WHERE PAVEMENT ABUTS BUILDING.



BUTT JOINT

- (1) 8" CONCRETE PAVEMENT SEE SPECIFICATION 03 30 00
- 6" AGGREGATE BASE SEE SPECIFICATION 31 20 00
- SUBGRADE COMPACTION SEE SPECIFICATION 31 20 00
- PROOF ROLLING SEE SPECIFICATION 31 20 00

NOTES:

4" THICK CONC. WALK

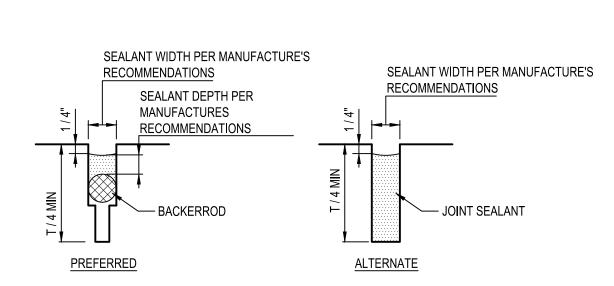
MINIMUM 4" AGGREGATE BASE

SEE SPEC 03 30 00 – 6"x6"-W1.4xW1.4 W.W.F. STEEL REINFORCEMENT

-FINISH GRADE

- APPLY LIQUID ASPHALT AT ALL JOINTS BETWEEN CONCRETE AND ASPHALT. APPLY CONCRETE SEALANT CONFORMING TO ASTM D6690 WHERE PROPOSED CONCRETE MEETS EXISTING CONCRETE.
- 2. CONCRETE PAVEMENT SHALL HAVE CONTROL JOINTS PER CONCRETE SPECIFICATION 03 30 00.

YPICAL CONCRETE PAVEMENT SECTION

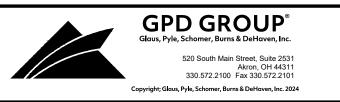




ADA PAVEMENT SYMBOL



CONCRETE SPECIFICATION 03 30 00. **CONCRETE WALK**

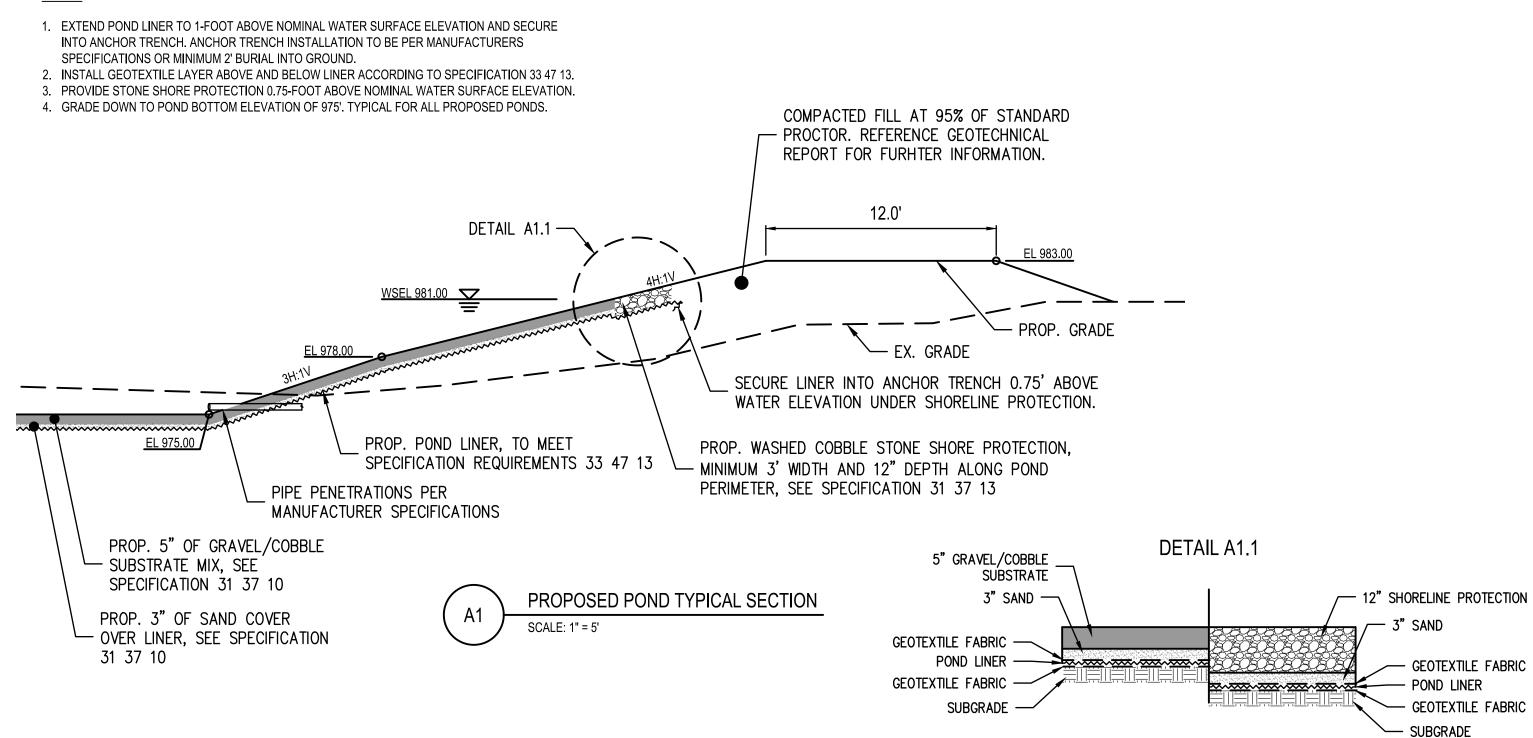


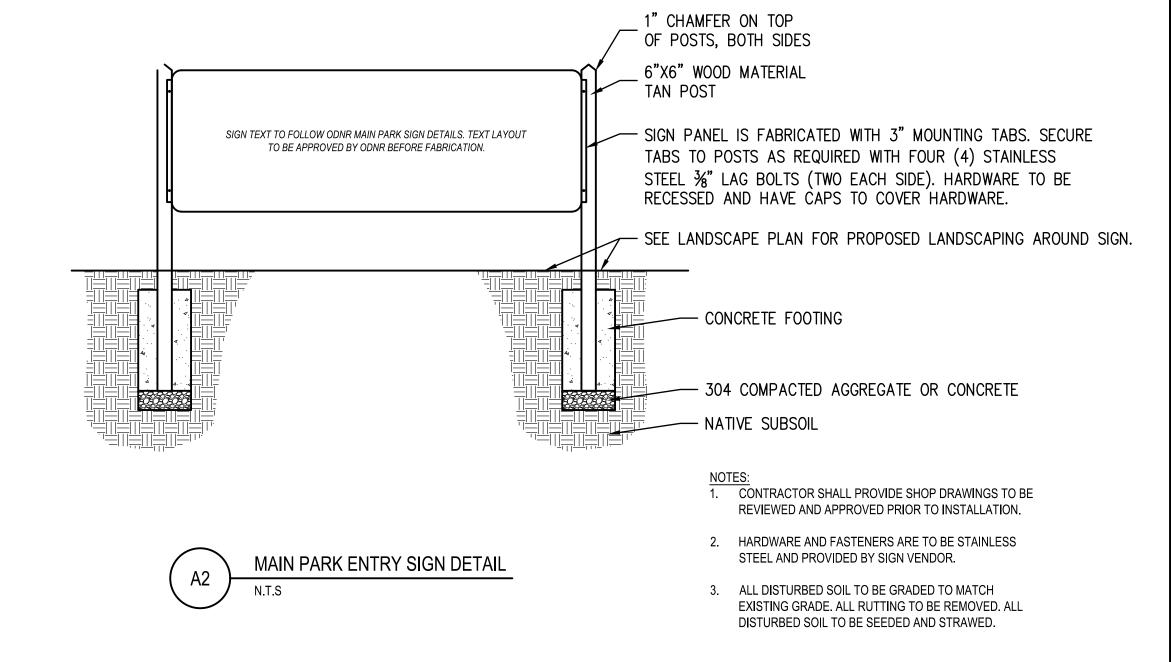


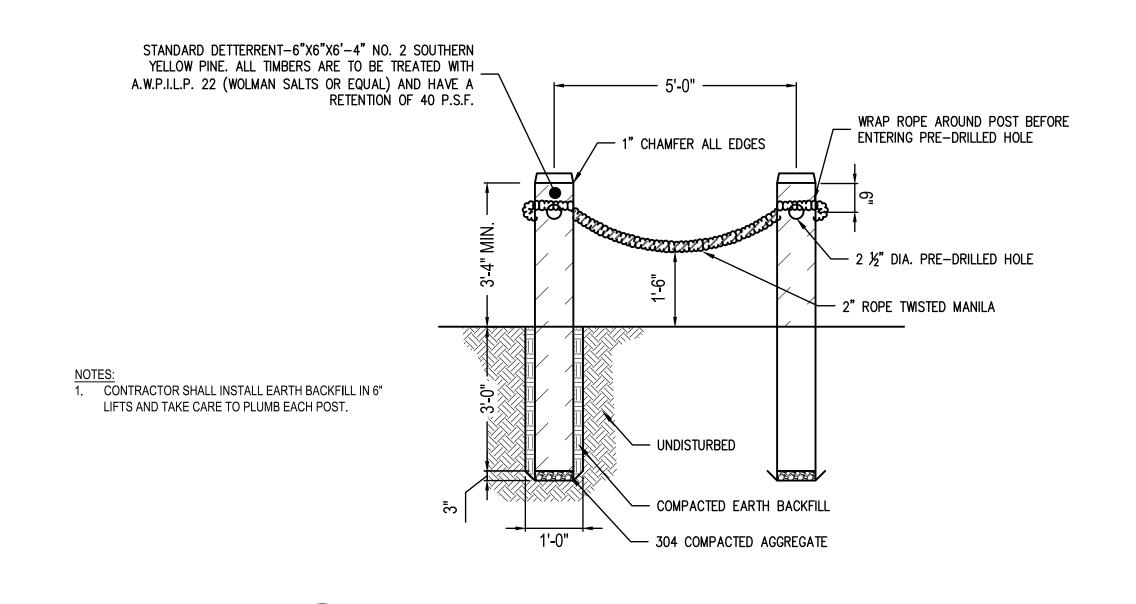
PORTAGE LAKES ODNR WILDLIFE DISTRICT 3 YOUTH FISHING PONDS

DESIGNED BY: DSS	PROJECT NUMBER: 2023335.03	
DRAWN BY: DSS	SCALE: PER PLAN	
CHECKED BY: MAL	DATE:	
APPROVED BY: MAL	REVISED:	İ

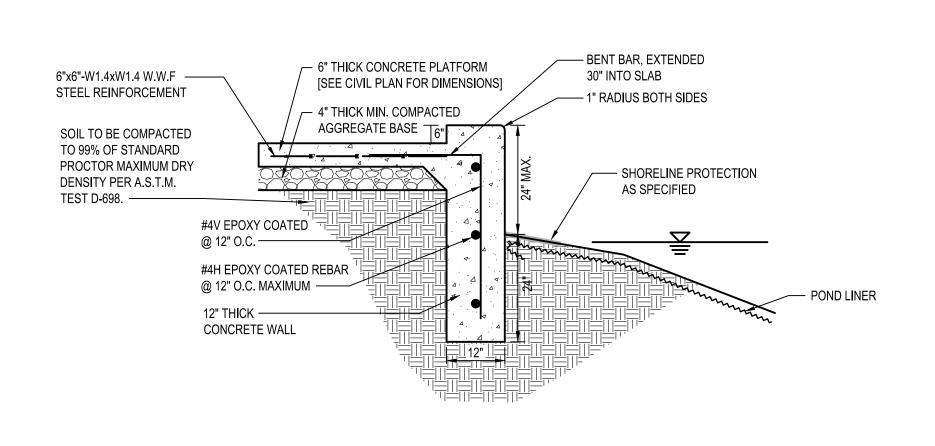


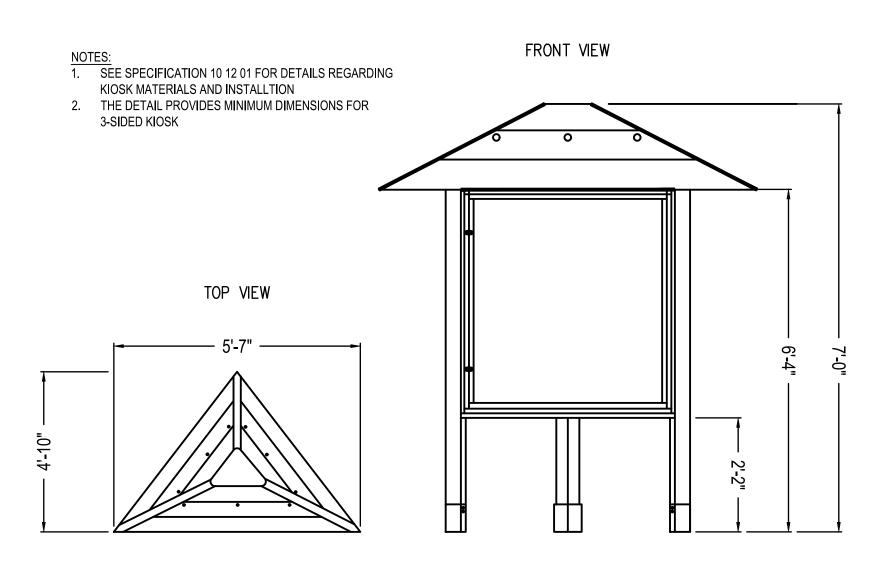






VEHICULAR DETERRENT



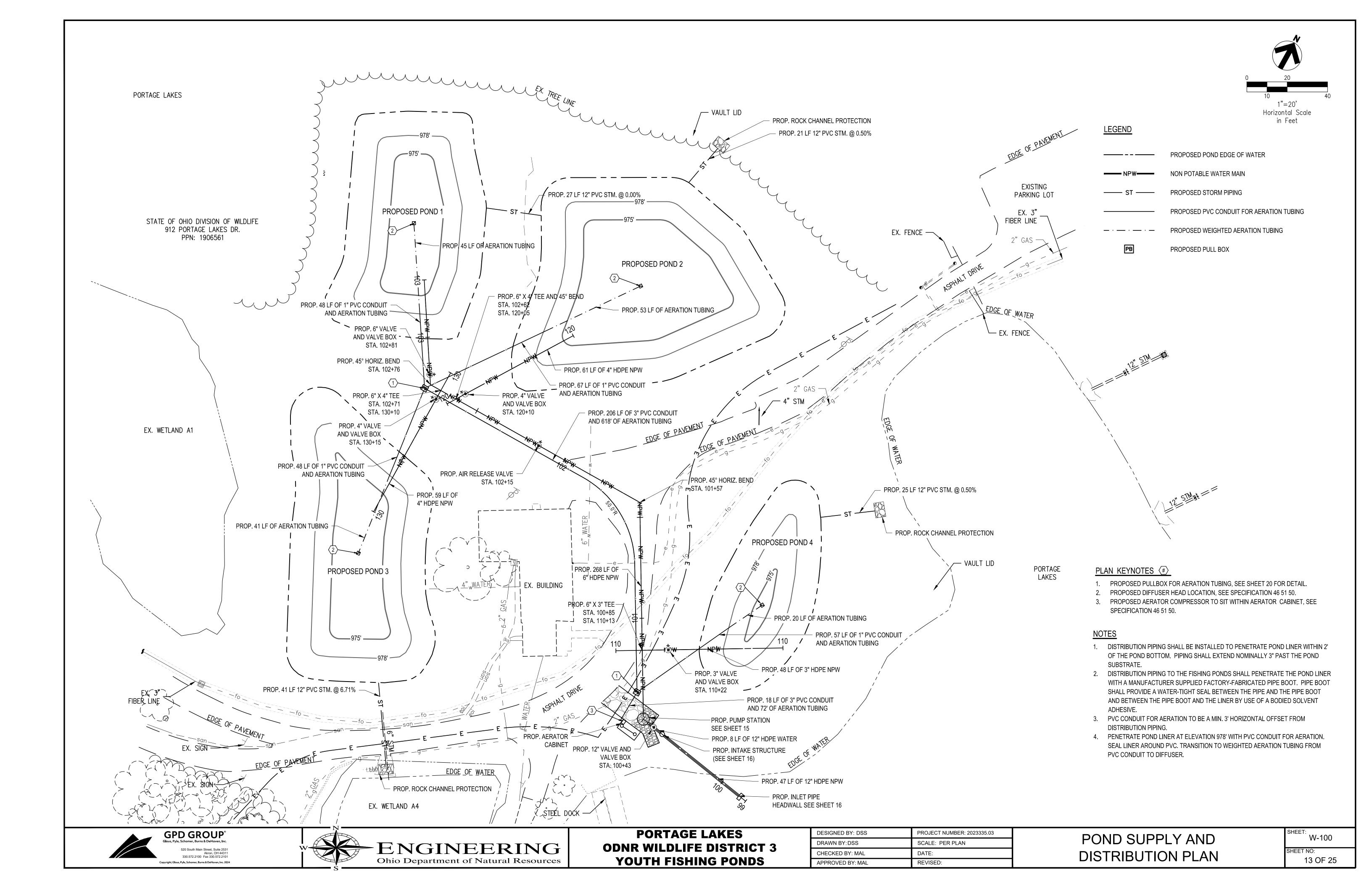


ADA FISHING PLATFORM AND WALL
N.T.S.

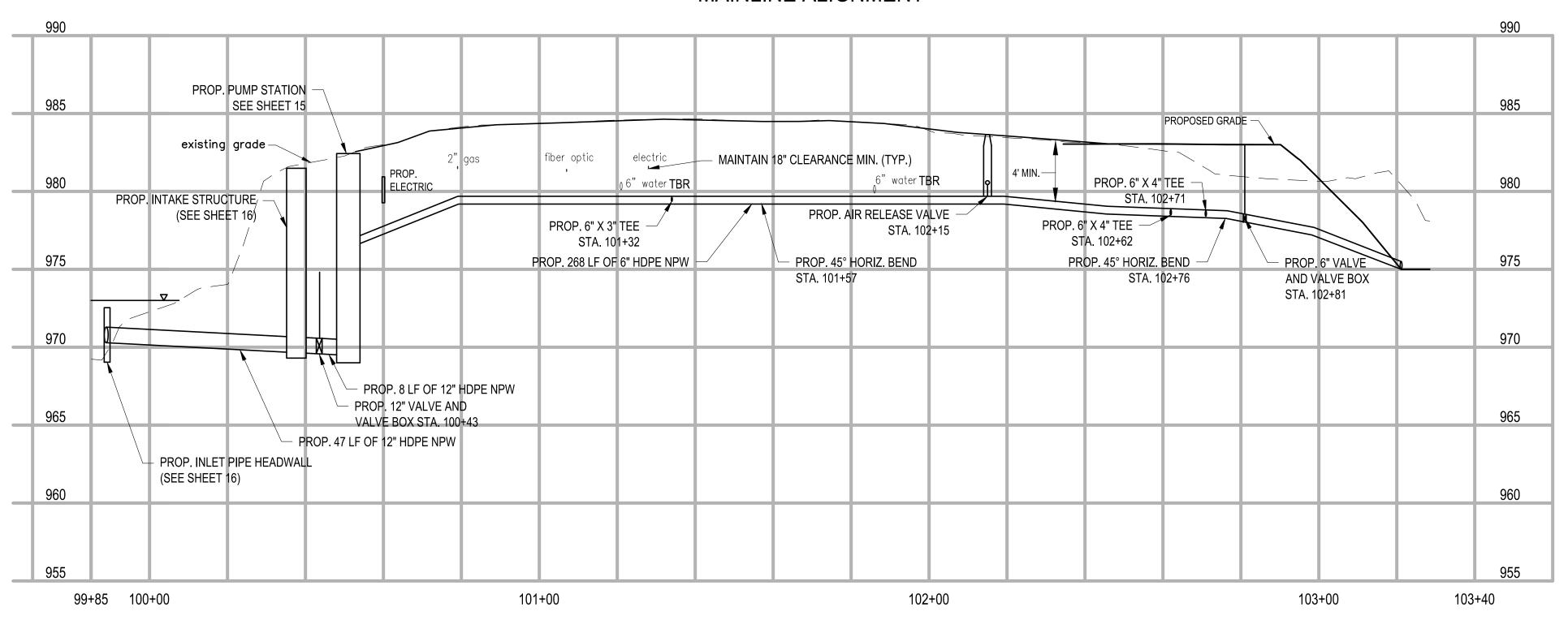


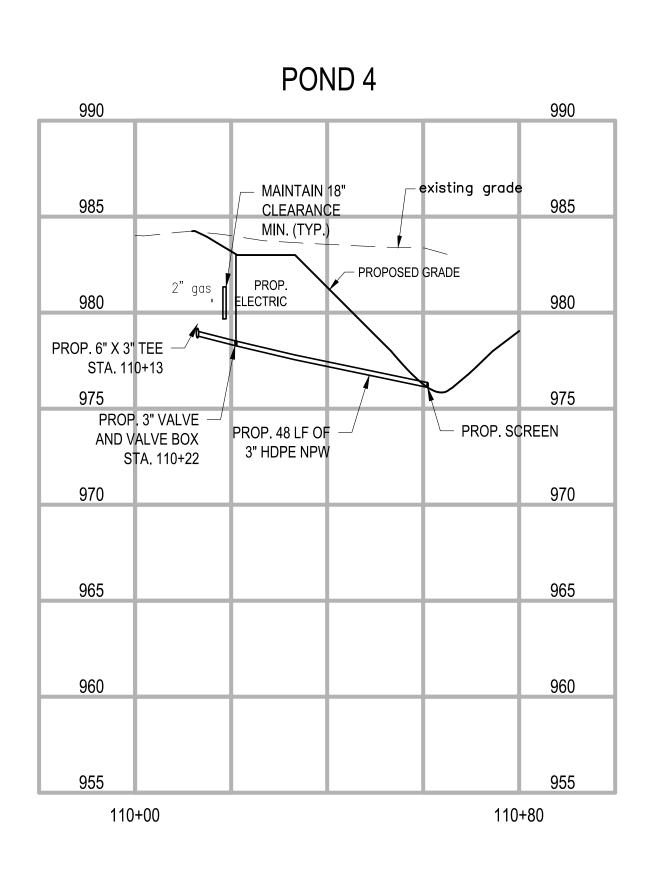


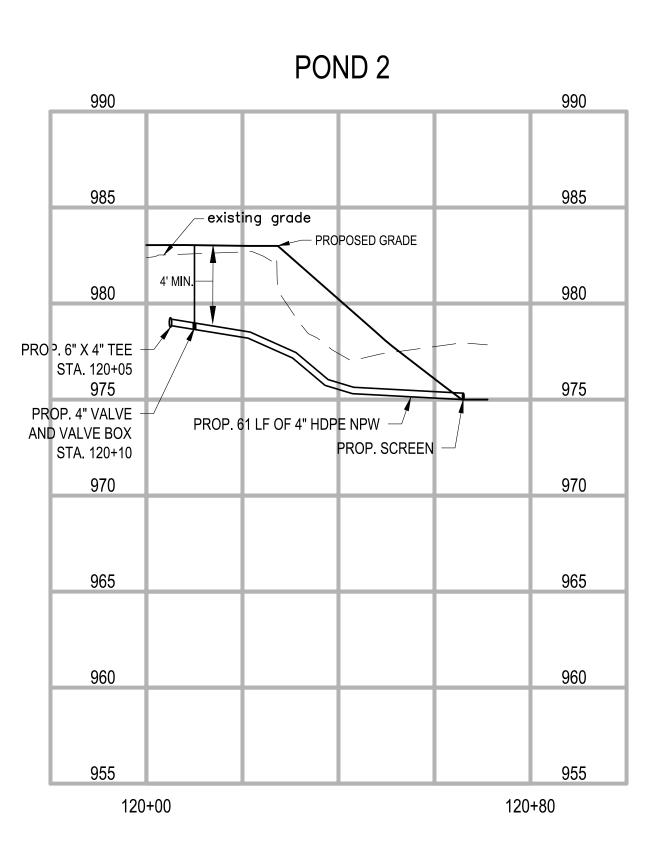
DESIGNED BY: DSS	PROJECT NUMBER: 2023335.03
DRAWN BY: DSS	SCALE: PER PLAN
CHECKED BY: MAL	DATE:
APPROVED BY: MAL	REVISED:

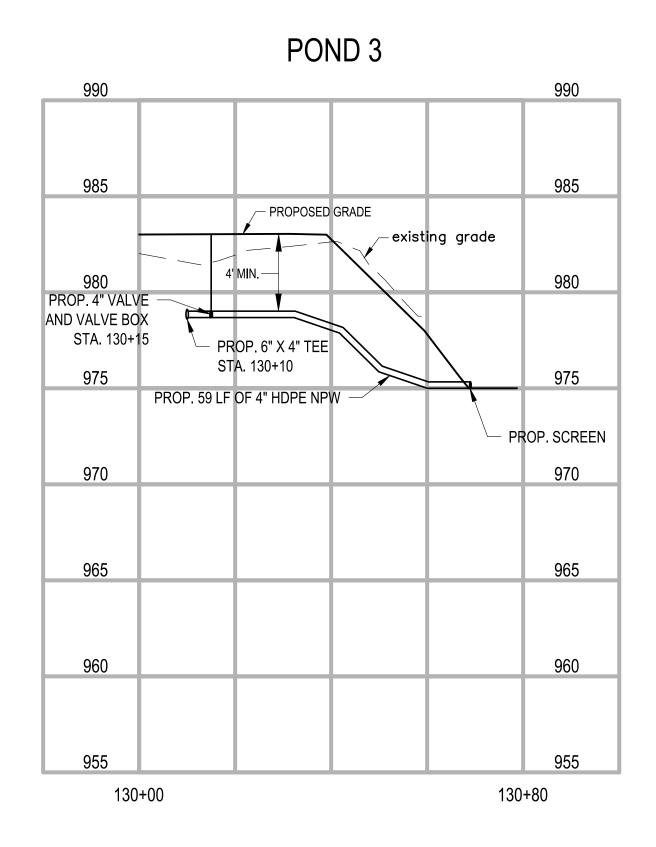


MAINLINE ALIGNMENT













PORTAGE LAKES
ODNR WILDLIFE DISTRICT 3
YOUTH FISHING PONDS

DESIGNED BY: DSS	PROJECT NUMBER: 2023335.03
DRAWN BY: DSS	SCALE: PER PLAN
CHECKED BY: MAL	DATE:
APPROVED BY: MAL	REVISED:

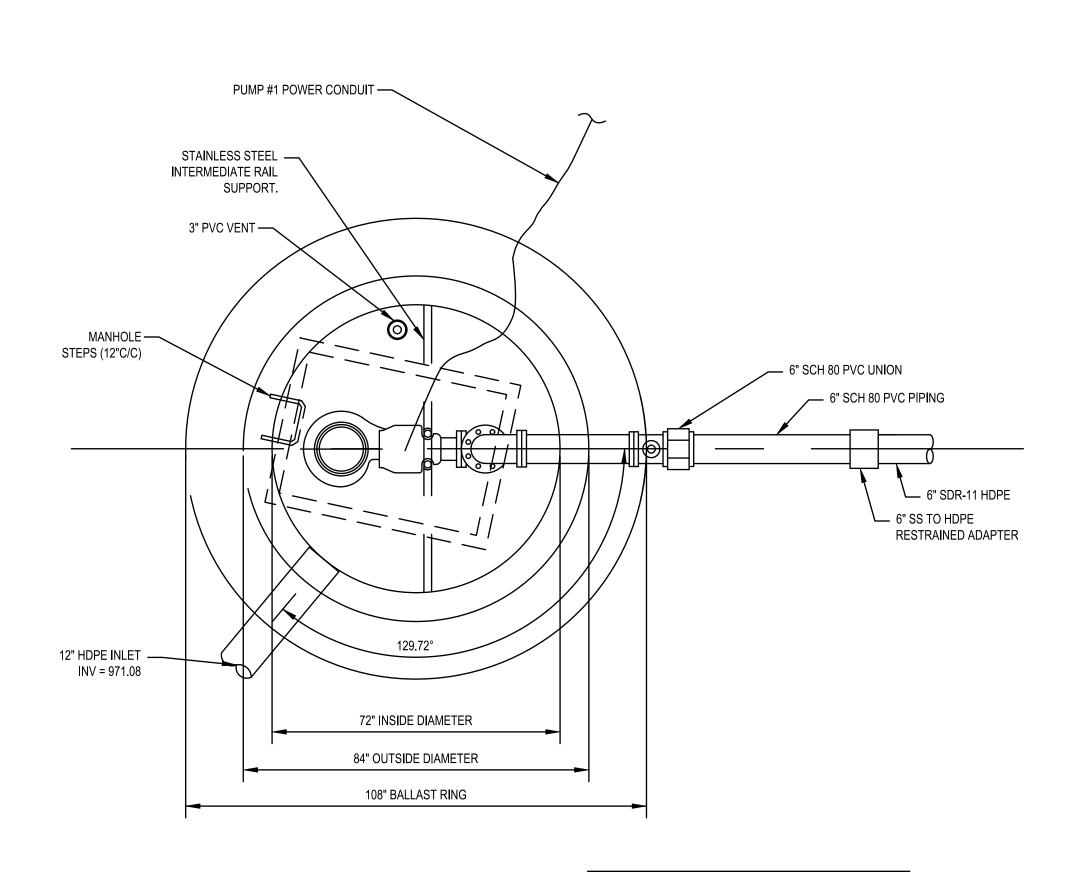
POND SUPPLY AND DISTRIBUTION PROFILES

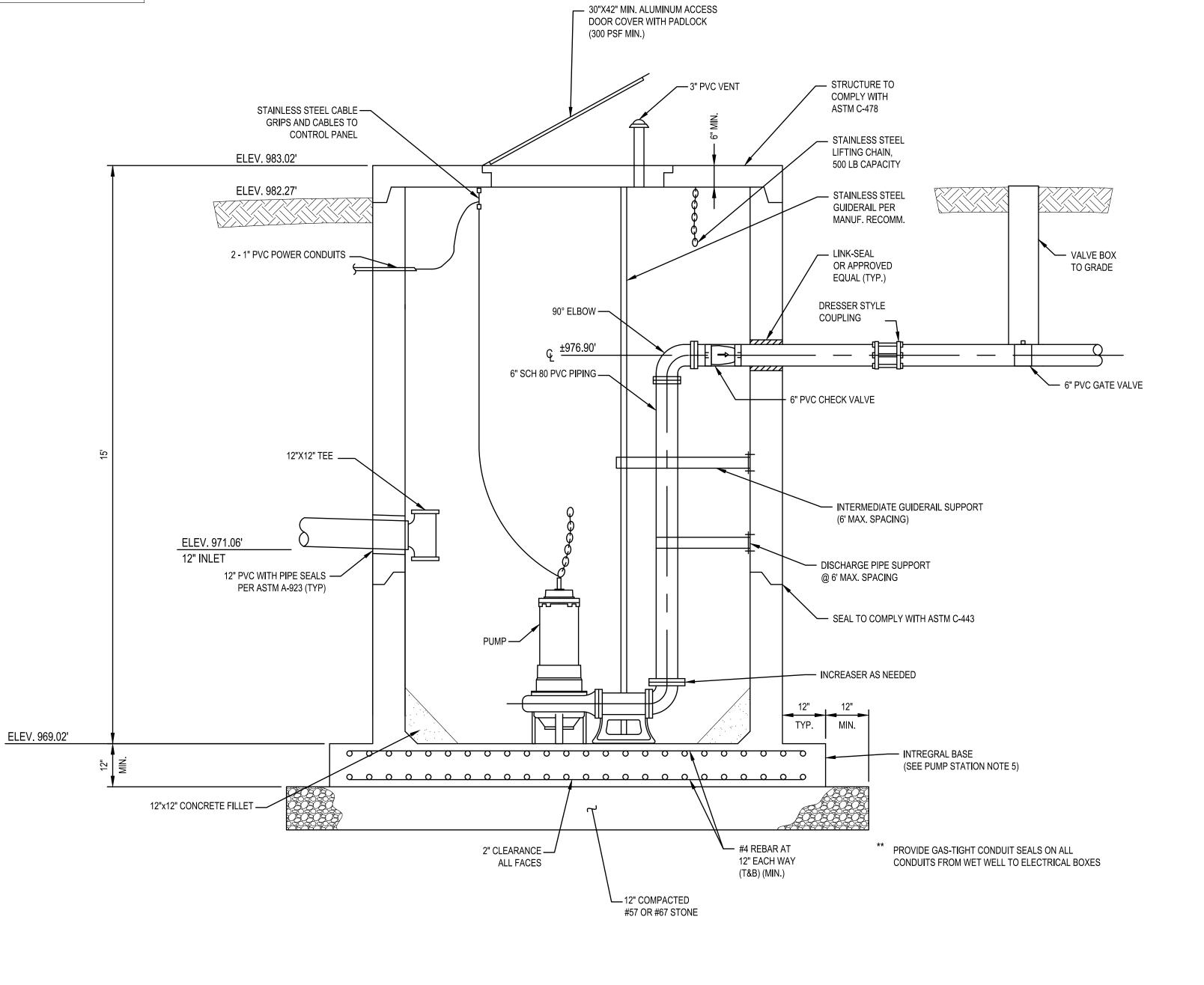
SHEET: W-101
SHEET NO: 14 OF 25

PUMP STATION NOTES

- 1. ALL HARDWARE, BRACKETS, SUPPORTS, RAILS, AND LIFTING CHAIN WITHIN THE WET WELL ARE TO BE STAINLESS STEEL.
- 2. CONTRACTOR IS RESPONSIBLE FOR SHEETING AND ENSURING THAT FLOTATION OF THE PROPOSED STRUCTURE WILL NOT OCCUR DURING CONSTRUCTION. PRESSURE RELIEF VALVES, SUMP PUMPS, TEMPORARY BALLAST, AND OTHER MEANS OF PREVENTING FLOTATION MAY BE REQUIRED UNTIL THE PUMP STATION EXCAVATION IS COMPLETELY BACKFILLED AND COMPACTED.

PART	SPEC	FICATIONS
PUMP STATION WET W	/ELL	PRE-CAST CONCRETE
BASIN DIAMETER	6'	
BASIN DEPTH	14.0	0'
PUMP		
TYPE	SOL	IDS HANDLING
HOR	SEPWR 5 HI	P (MAX)
VOL	TAGE 230	
PHAS	SE 1	
GPM	475	
TDH	21 F	EET
RPM	116	5
EVEL CONTROL	TIM	ED
CONTROL PANEL	PR	OVIDED AND TESTED BY PUMP STATION MANUFACTURER

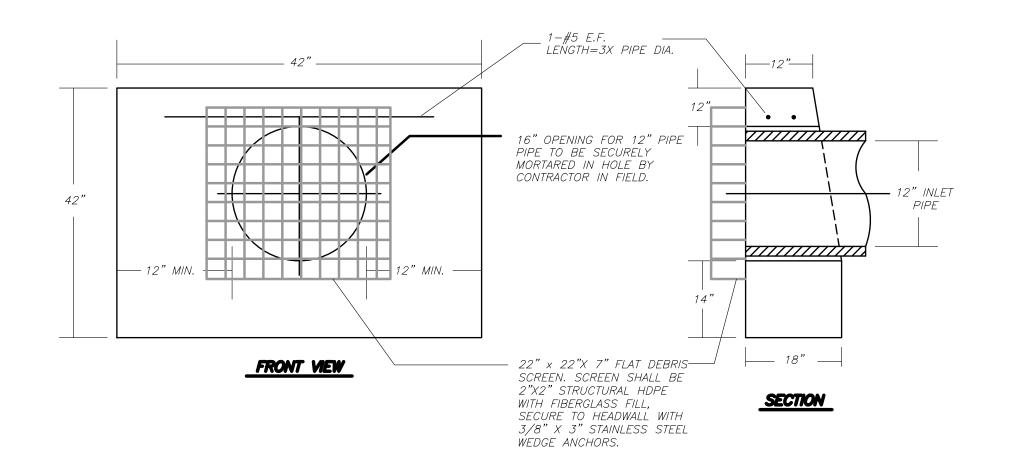








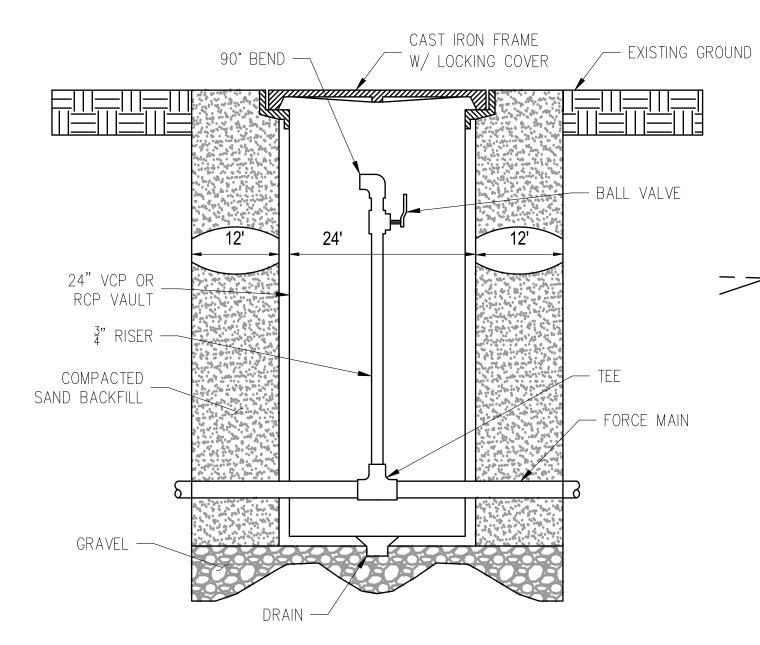
DESIGNED BY: DSS	PROJECT NUMBER: 2023335.03
DRAWN BY: DSS	SCALE: PER PLAN
CHECKED BY: MAL	DATE:
APPROVED BY: MAL	REVISED:



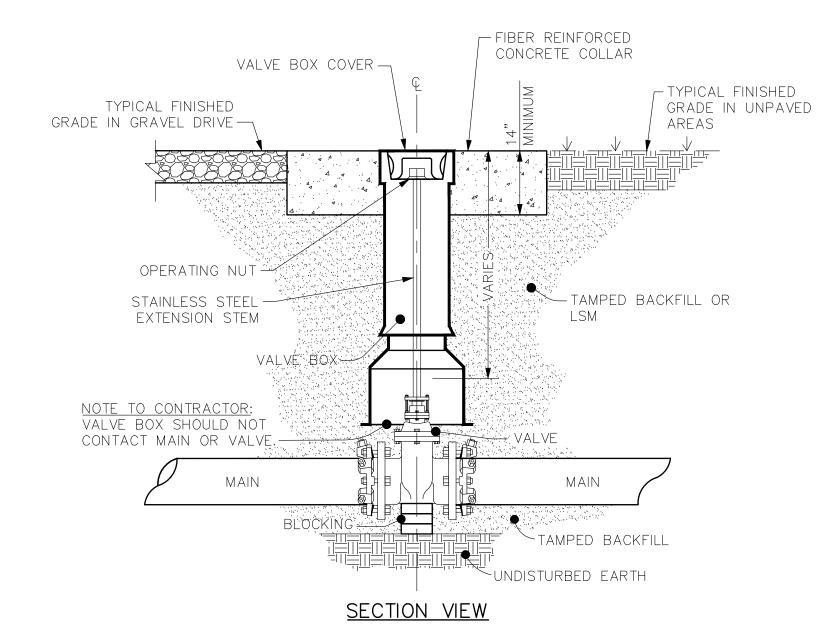
NOTES

- * CONCRETE TO TEST 4000 PSI @ 28 DAYS MIN.
- * REINFORCEMENT AS REQUIRED BY DESIGNER.
 IF NONE SPECIFIED, MANUFACTURER TO PROVIDE
 SUFFICIENT TO WITHSTAND HANDLING STRESSES.

INLET PIPE HEADWALL DETAIL
SCALE: NTS



AIR RELEASE ASSEMBLY



PROP. GRAVEL/SHORE

PROTECTION

LENGTH VARIES

12" PVC @ 0.50% ─**-**

OVERFLOW PIPE TYPICAL SECTION

NTS

WSEL 981.00 💟

12.0'

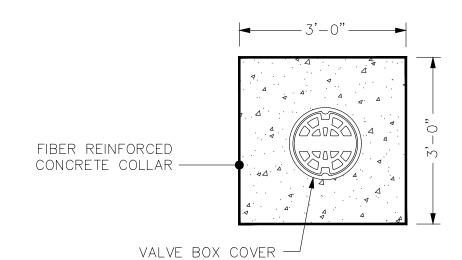
PROP. GRADE

- (12" COVER MIN. AT BERM)

18" THICK MIN.

PROP. ROCK CHANNEL PROTECTION

ODOT ITEM 703.19(B), TYPE D, —



<u>PLAN VIEW</u>

NOTES:

1. ONLY MANUFACTURED STAINLESS STEEL, SOLID ROD,

- VALVE BOX EXTENSIONS SHALL BE PERMITTED.

 2. PROVIDE EXTENSION STEM KITS, INCLUDING CENTERING RINGS.
- 3. ENSURE THE VALVE OPERATING NUT IS NO DEEPER THAN 6 INCHES BELOW THE VALVE BOX COVER.

STANDARD VALVE BOX INSTALLATION N.T.S.

Rubber seal ensures a PVC stoplogs with tight fit to prevent leakage. stainless steel lifting hooks. INLINE WATER LEVEL CONTROL STRUCTURE NOTES • CONSTRUCTED OF RUGGED PVC • STAINLESS STEEL SCREWS AND CUSTOM ANODIZED ALUMINUM CORNER EXTRUSIONS USED FOR STRENGTH AND DURABILITY • FLEXIBLE COUPLE ALLOWS PVC, PLASTIC <u>FEATURES</u> PIPE, OR OTHER MATERIALS TO BE EASILY ATTACHED • STOPLOGS MADE OF PVC IN 5" AND 7" HEIGHTS FOR ADJUSTABILITY • 5-YEAR WARRANTY STRUCTURE PROVIDE 12" PVC FISH SCREEN • PROVIDE ANTI-BALLAST RING TO PREVENT FLOATATION Comes with a handle to install and remove stoplogs. HANDLE TO ADJUST STOPLOGS IN-LINE STRUCTURE MULTI-LEVEL CONTROL

INLINE WATER LEVEL CONTROL STRUCTURE - 10.0' HEIGHT - 12" PIPE (INLET AND OUTLET)

PUMP STATION INLET STRUCTURE DETAILS

SCALE: NTS





PORTAGE LAKES
ODNR WILDLIFE DISTRICT 3
YOUTH FISHING PONDS

DESIGNED BY: DSS	PROJECT NUMBER: 2023335.03	
DRAWN BY: DSS	SCALE: PER PLAN	
CHECKED BY: MAL	DATE:	
APPROVED BY: MAI	REVISED.	i

POND SUPPLY AND DISTRIBUTION DETAILS

SHEET: W-102 SHEET NO: 16 OF 25

ELECTRICAL SYMBOLS

HOMERUN ROUTED EXPOSED IN UNFINISHED AREAS. DESIGNATION INDICATES HOMERUN TO PANEL "A" INDICATING CIRCUIT NUMBER(S) ALL WIRING SHALL BE #12 WITH GROUND WIRE UON (INCREASE) TO #10 FOR CIRCUITS OVER 75 FT.) - ALL HOMERUNS SHALL BE CONNECTED TO A 20 AMPERE, 1 POLE CIRCUIT BREAKER UON -QUANTITY OF CONDUCTORS AS NECESSARY TO ACCOMMODATE CIRCUITS AND CONTROL INDICATED. CONTRACTOR SHALL SIZE CONDUIT TO ACCOMMODATE QUANTITY OF WIRES WITHIN EACH HOMERUN -- 3/4" CONDUIT MINIMUM. BRANCH CIRCUIT CONDUIT/WIRE ROUTED EXPOSED IN UNFINISHED AREAS. PROVIDE WIRING AND SIZE CONDUIT AS NOTED FOR HOMERUN SYMBOL ABOVE -- 3/4" CONDUIT MINIMUM. CONDUIT INSTALLED BFG OR ROUTED BELOW FINISHED FLOOR UON. PROVIDE WIRING AND SIZE CONDUIT AS NOTED FOR HOMERUN SYMBOL ABOVE -- 3/4" CONDUIT MINIMUM. ——US——US—— PROP. UNDERGROUND SECONDARY SWITCH - 20 AMPERE, 120/277 VOLT, SINGLE POLE - MTD AT 46" AFF TO CENTERLINE OF DEVICE (44" TO BOTTOM) UON. SUBSCRIPTS INDICATE THE FOLLOWING 3=3-WAY; P=PILOT LIGHT, T=TIMER. PUSHBUTTON OPERATOR FOR MOTOR CONTROL - MOUNTED AT 46" AFF TO CENTERLINE OF DEVICE (44" TO BOTTOM) UON. REFER TO DRAWINGS AND/OR SPECIFICATIONS FOR MORE INFORMATION. DUPLEX RECEPTACLE - 20 AMPERE, 125 VOLT, GROUNDING TYPE -MOUNTED AT 18" AFF TO CENTERLINE OF DEVICE UON. SUBSCRIPT INDICATES FOLLOWING: GFI= GROUND FAULT CIRCUIT INTERUPTER. DUPLEX RECEPTACLE - 20 AMPERE, 125 VOLT, GROUNDING TYPE -MOUNTED AT 18" AFF TO CENTERLINE OF DEVICE UON. SUBSCRIPT INDICATES FOLLOWING: GFI= GROUND FAULT CIRCUIT INTERUPTER. DUPLEX RECEPTACLE - 20 AMPERE, 125 VOLT - GROUND FAULT CIRCUIT INTERRUPTER TYPE WITH WEATHERPROOF WHILE-IN-USE LOCKABLE HINGED COVER. MOUNTED AT 24" A.F.G. U.O.N. FULL VOLTAGE NON-REVERSING STARTER. NEMA SIZE AS SHOWN ON DRAWINGS. REFER TO MOTOR CONTROL CENTER SPECIFICATION FOR MORE INFORMATION. INSTALLED COMPLETE BY CONTRACTOR. ELECTRICAL PULL BOX. SIZED PER NEC ELECTRICAL HANDHOLE WEATHERPROOF EMERGENCY POWER OFF SWITCH COMBINATION STARTER WITH DISCONNECT MOTOR STARTER NON-FUSED DISCONNECT SWITCH FUSED DISCONNECT SWITCH \mathbf{Y} **TRANSFORMER** THERMOSTAT - PROVIDE A SINGLE-GANG BACKBOX MTD. AT 46" AFF TO CENTERLINE OF DEVICE (44" TO BOTTOM) UON, AND SHALL STUB 3/4" EMPTY CONDUIT WITH PULLSTRING INTO SPACE ABOVE ACCESSIBLE CEILING. COORDINATE LOCATIONS WITH M.C. PRIOR TO ROUGH-IN. 208/120 VOLT, 3 PHASE, 4 WIRE PANELBOARD 240/120 VOLT, 3 PHASE, 4 WIRE PANELBOARD SINGLE OR THREE PHASE MOTOR - SEE DRAWINGS FOR DESCRIPTION. E.C. SHALL PROVIDE A SINGLE POLE SWITCH NEAR UNIT FOR DISCONNECTING MEANS. JUNCTION BOX - MOUNTING HEIGHT AND SIZE AS REQUIRED BY CODE OR AS NOTED ON DRAWINGS. DOOR INTRUSION SWITCH, LIMIT SWITCH ROLLER TYPE

GENERAL CONSTRUCTION NOTES:

- 1. ALL CONDUIT PENETRATIONS THROUGH FIRE RATED WALLS, FLOORS, OR SHAFTS SHALL BE SEALED IN ACCORDANCE WITH SPECIFICATIONS.
- 2. FIELD VERIFY EXACT LOCATION OF EQUIPMENT WITH ASSOCIATED EQUIPMENT INSTALLER PRIOR TO ROUGH-IN. EXACT ELECTRICAL REQUIREMENTS SHALL BE VERIFIED IN THE FIELD WITH THE EQUIPMENT'S NAMEPLATE DATA. E.C. SHALL MAKE APPROPRIATE ADJUSTMENTS TO ASSOCIATED BREAKERS/DISCONNECT SWITCHES, BRANCH CIRCUIT WIRING, AND SIZE FUSES PER MANUFACTURER'S RECOMMENDATIONS.
- 3. THE PHRASE "PROVIDED BY" USED WITHIN THESE DOCUMENTS SHALL EXPLICITLY REPRESENT "FURNISHED AND INSTALLED BY".
- 4. ALL FLOOR MOUNTED ELECTRICAL EQUIPMENT SHALL BE INSTALLED AND BOLTED ON A 4" CONCRETE HOUSEKEEPING PAD OR AS NOTED ON CONSTRUCTION DRAWINGS.
- 5. CIRCUITS SHALL BE REARRANGED AS REQUIRED TO MAINTAIN THE MOST BALANCED LOADS ON EACH PHASE WITHIN EACH PANEL. E.C. SHALL PROVIDE A TYPED PANELBOARD SCHEDULE AND INSTALL IT ON INSIDE COVER OF EACH PANEL.
- 6. DRAWINGS ARE DIAGRAMATIC AND INDICATE GENERAL ARRANGEMENT ONLY. COORDINATE INSTALLATION WITH OTHER TRADES TO VERIFY THE ACTUAL SPACE CONDITIONS, HEADROOM, ETC. THAT IS TO BE MAINTAINED.
- 7. ALL BRANCH CIRCUITS SHALL BE PROVIDED WITH A SEPARATE NEUTRAL CONDUCTOR. NEUTRALS SHALL NOT BE SHARED.
- 8. ALL WORK ON THIS PROJECT SHALL COMPLY WITH THE LATEST EDITION OF NATIONAL ELECTRICAL CODE AS WELL AS ALL LOCAL CODES AND AUTHORITIES HAVING JURISDICTION.
- 9. CIRCUIT SEPARATION MUST BE CAREFULLY MAINTAINED AS FOLLOWS TO MINIMIZE NOISE AND INTERFERENCE INTO ADJACENT CIRCUITS:
- a. POWER CIRCUITS (120VAC, 277VAC) MAY BE ROUTED TOGETHER IN SAME CONDUIT AS 120VAC MOTOR OPERATORS BUT SHALL NOT BE ROUTED IN SAME CONDUIT AS 24VDC, INSTRUMENTS, OR ANALOG CIRCUITS.
- b. INSTRUMENTATION AND CONTROL CIRCUITS (24VDC) MAY BE ROUTED IN SAME CONDUIT BUT SHALL NOT BE ROUTED IN SAME CONDUIT AS POWER CIRCUITS OR ANALOG CIRCUITS.
- c. INSTRUMENTATION AND CONTROL CIRCUITS (ANALOG) MUST BE ROUTED IN A SEPARATE
- 10. DURING CONSTRUCTION, REFER TO EQUIPMENT MANUFACTURER SHOP DRAWINGS AND WIRING DIAGRAMS FOR INSTALLATION/TERMINATION DETAILS. PROVIDE JUNCTION BOXES, FITTINGS, CONDUIT SEALS, CONDUIT BUSHINGS WIRE NUTS, FASTENERS, CLAMPS, HARDWARE, AND CONTROL WIRE AS REQUIRED FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM. TERMINATE, IDENTIFY, AND SECURE CONDUCTORS AT BOTH ENDS COMPLETE.
- 11. LOCATION OF UNDERGROUND UTILITIES AND EQUIPMENT IS APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING LOCATION OF ALL EXISTING UTILITIES AND EQUIPMENT PRIOR TO COMMENCEMENT OF WORK.
- 12. ELECTRICAL PLAN IS DIAGRAMMATIC IN NATURE. SOME PLANS ARE SHOWN FOR INFORMATION ONLY. THE CONTRACTOR SHALL FIELD ROUTE CONDUITS AND COORDINATE FINAL LOCATION WITH OWNER. PROVIDE CONDUIT SEALS IN ALL CONDUITS WHERE REQUIRED.
- 13. ALL CIRCUITS SHALL BE MINIMUM #12AWG THWN(600V), COPPER IN 3/4" RMC UNLESS NOTED OTHERWISE. ALL WIRING INDOORS AND ABOVE GRADE SHALL BE INSTALLED IN RMC CONDUIT UNLESS NOTED OTHERWISE.
- 14. THE CONTRACTOR SHALL MAINTAIN A COMPLETE AS-BUILT SET OF PLANS AND CONDITIONS AND SUBMIT SAME TO ENGINEER WITHIN SEVEN DAYS OF COMPLETION OF CONSTRUCTION
- 15. THE CONTRACTOR SHALL NOTIFY OWNER IN WRITING 72 HOURS PRIOR TO ANY DISRUPTION OF UTILITY SERVICES.
- 16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING, COORDINATING AND COMPLYING WITH LOCAL AUTHORITIES HAVING JURISDICTION.
- 17. COVER AND/ OR PLUG ALL UNUSED OPENINGS IN ELECTRICAL EQUIPMENT OR BUILDING WITH APPROVED MATERIALS.
- 18. PROVIDE NEW EQUIPMENT IDENTIFICATION LABELS ON ALL NEW EQUIPMENT PER THE PROJECT SPECIFICATIONS.
- 19. PROVIDE NEW AND TYPED PANEL SCHEDULE INDEX ON ALL PANELS ADDED OR MODIFIED AS RESULT OF THE PROJECT.
- 20. USE OF "PROVIDE" ON THE PROJECT INFERS "FURNISH AND INSTALL".
- 21. ALL EXISTING EQUIPMENT TO REMAIN IS NOT SHOWN ON PLAN FOR CLARITY.

GENERAL NOTE:

NOT ALL SYMBOLS USED.

ELECTRICAL DIAGRAM SYMBOLS

<u> </u>	NORMALLY CLOSED CONTACT	$\dashv\vdash$	NORMALLY OPEN CONTACT
\Box	NO WIRE CONNECTION		UNDERGROUND
+	WIRE CONNECTION		ABOVE GRADE (EXPOSED)
	TERMINAL FOR CONNECTION FIELD WIRING		FUSE
***	CONTROL POWER TRANSFORMER	<u>_</u>	EARTH GROUND
CR	RELAY COIL	\otimes	SENSOR

(CR)	RELAY COIL	\otimes	SENSOR	
ABBREVIATIONS:				
AFF	ABOVE FINISHED FLOOR			
AFG	ABOVE FINISHED GI	RADE		
AHJ	AUTHORITY HAVING	JURISDICTIO	ON	
ARMS	ARC-FLASH REDUC	TION MAINT	ENANCE SWITCH	
BFG	BELOW FINISHED G	RADE		
BKR	(CIRCUIT) BREAKER			
CKT	CIRCUIT			
DE	DUAL ELEMENT (FU	SES)		
EC	ELECTRICAL CONTRA	ACTOR		
EF	EXHAUST FAN			
ETR	EXISTING DEVICE TO	D REMAIN		
FLR	FLOOR			
GC	GENERAL CONTRACT	ΓOR		
FCI/GFI	GROUND FAULT CIR	CUIT INTER	RUPTER	
GND	GROUND			
MFR	MANUFACTURER			
MC	MECHANICAL CONTRACTOR			
MCA	MINIMUM CIRCUIT A	MINIMUM CIRCUIT AMPACITY		
MOCP	MAXIMUM OVERCUR	RENT PROT	ECTIVE DEVICE	
NEC	NATIONAL ELECTRIC	AL CODE		
NF	NON FUSED			
NFPA	NATIONAL FIRE PRO	TECTION A	GENCY	
NIC	NOT IN CONTRACT			
PC	PLUMBING CONTRAC	CTOR		
ЗРМ	MULTI-FUNCTIONAL	THREE PHA	ASE MONITOR	
PFCC	POWER FACTOR CO	RRECTION	CAPACITOR	
RAC	RIGID ALUMINUM CO	TIUDNC		
RGS	RIGID GALVANIZED	STEEL CONI	DUIT	
SPD	SURGE PROTECTION	N DEVICE		
T-STAT	THERMOSTAT			
ETR	EXISTING TO REMAI	N		

WEATHERPROOF

TRANSFORMER

UNDERGROUND PRIMARY

UNDERGROUND SECONDARY

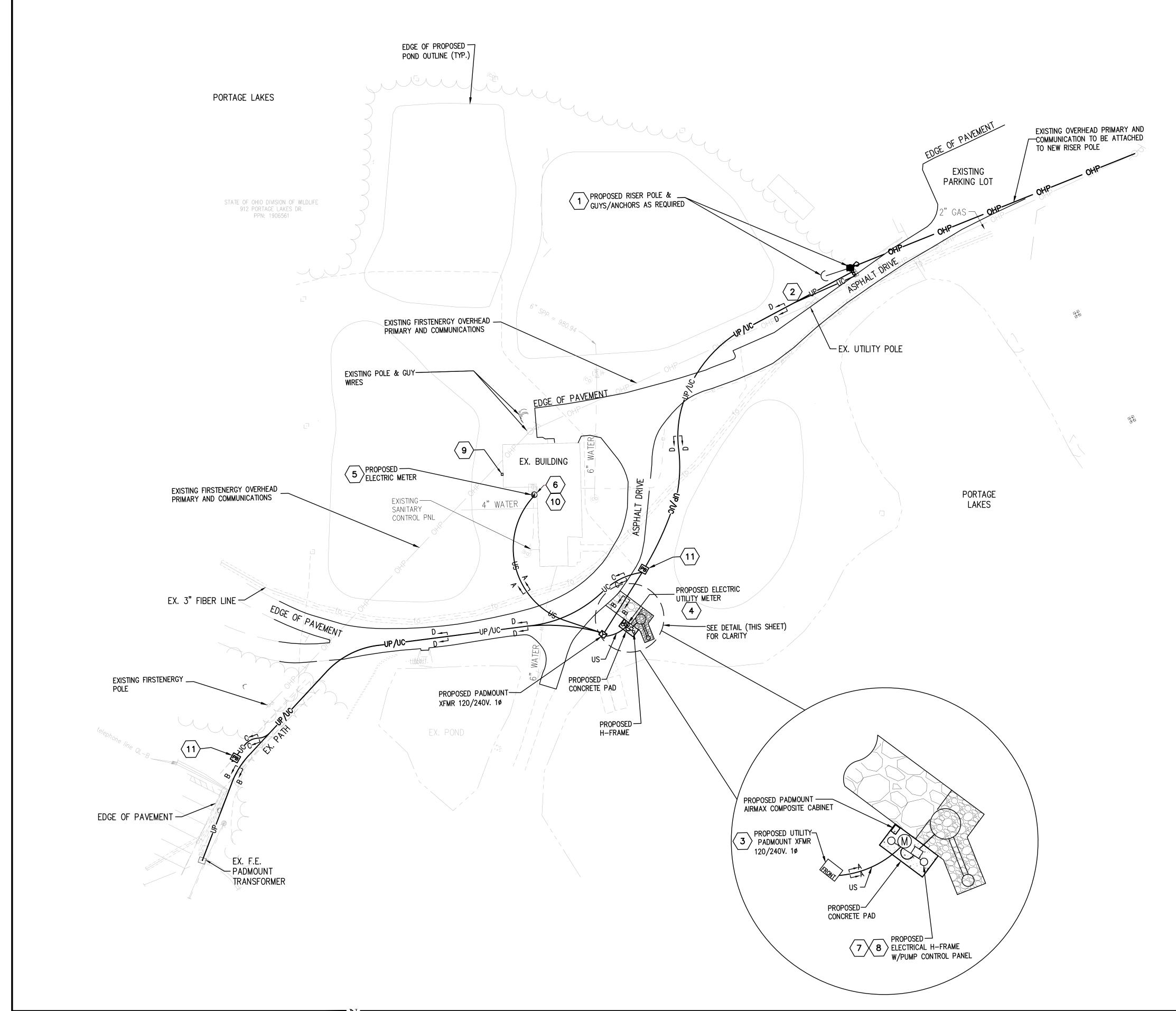
VARIABLE FREQUENCY DRIVE

UNDERGROUND ELECTRIC

PORTAGE LAKES ODNR WILDLIFE DISTRICT 3 YOUTH FISHING PONDS

DESIGNED BY: DSS PROJECT NUMBER: 2023335.03 DRAWN BY: DSS SCALE: PER PLAN CHECKED BY: MAL DATE: REVISED: APPROVED BY: MAL

XFMR



GENERAL SHEET NOTES

- 1. ANY AND ALL COSTS ASSOCIATED WITH TEMPORARY AND/OR STANDBY POWER REQUIRED ON THIS PROJECT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- 2. ALL EQUIPMENT ON THIS DRAWING IS NEW UNLESS NOTED OTHERWISE.
- 3. ETR = EXISTING TO REMAIN.
- 4. PROVIDE NEW PHENOLIC NAMEPLATES ON ALL NEW AND UNLABELED EXISTING EQUIPMENT AND AS REQUIRED BY DRAWINGS AND/OR SPECIFICATIONS.
- 5. SEE DRAWING E-001 ELECTRICAL SYMBOL LEGEND AND E-006 ELECTRICAL ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
- 6. SEE ELECTRICAL SITE PLANS ON DRAWINGS E-001 THRU E-006 FOR ADDITIONAL UNDERGROUND CONDUIT/WIRE INFORMATION.
- 7. UP = UNDERGROUND PRIMARY POWER.
- 8. UC = UNDERGROUND COMMUNICATIONS.
- 9. US = UNDERGROUND SECONDARY POWER.

SHEET KEYNOTES



1"=30'

Horizontal Scale

in Feet

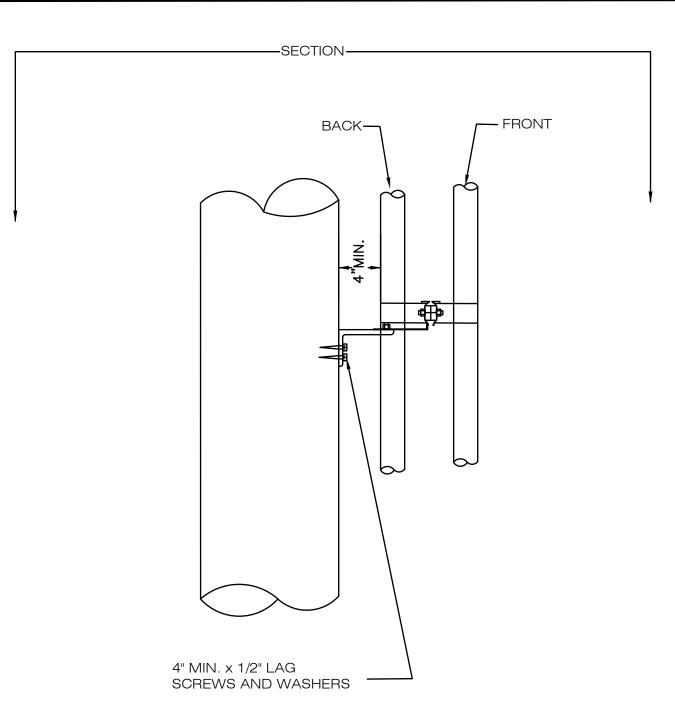
- 1. PROPOSED RISER POLE PROVIDED BY FIRSTENERGY. CONDUIT RISER PROVIDED BY CONTRACTOR PER FIRSTENERGY STANDARDS. SEE RISER POLE DETAIL ON DETAIL SHEET.
- PROPOSED FIRSTENERGY 12.47/7200 KV, 1ø UNDERGROUND DISTRIBUTION CIRCUIT TO BE ROUTED ALONG ASPHALT PATH. SEE SITE PLAN FOR DETAILS..
- 3. REFER TO PADMOUNT TRANSFORMER LOOP GROUNDING DETAIL ON DRAWING E-004.
- 4. PROVIDE UTILITY METER SOCKET ON ELECTRICAL SERVICE H-FRAME PER DETAIL ON DRAWING EL-05. ELECTRIC UTILITY METER PROVIDED BY FIRSTENERGY.
- 5. AQUATIC EDUCATION CENTER ELECTRIC UTILITY METER SOCKET, OUTDOOR RATED, TO REPLACE EXISTING METER SOCKET.
- 6. REPLACED SERVICE ENTRANCE CONDUCTORS TO EXISTING PANELBOARD AS REQUIRED.
- 7. PUMP CONTROL PANEL(PCP) WITH PROGRAMMABLE ON/OFF TIMER SEE PROJECT SPECS FOR DETAILS.
- PUMP CONTROL PANEL AND SUBMERSIBLE PUMP WITH PUMP POWER CABLE FURNISHED BY PUMP MANUFACTURER AND INSTALLED BY THE CONTRACTOR.
- 9. PROVIDE WEATHER RESISTANT GFCI RECEPTACLE WITH WHILE—IN—USE COVER FOR AERATION SYSTEM PUMP. COORDINATE EXACT LOCATION IN FIELD.
- 10. PROVIDE NEW 20A/1P CIRCUIT BREAKER IN AVAILABLE SPACE IN PANELBOARD TO SERVE RECEPTACLE.
- 11. PROVIDE COMMUNICATIONS PULLBOX. SEE DETAIL ON DRAWING E-004

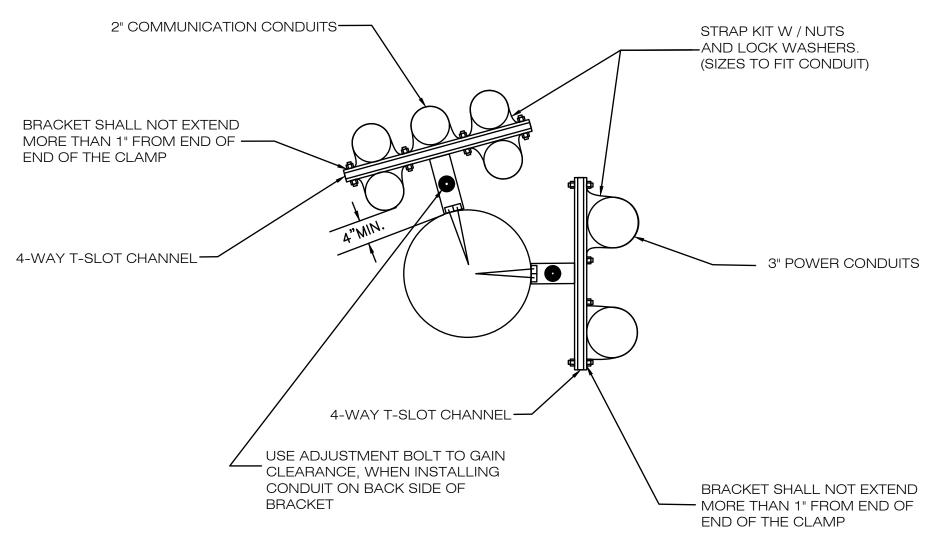
E-002

GPD GROUP®

Copyright; Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 202

520 South Main Street, Suite 2531 Akron, OH 44311 330.572.2100 Fax 330.572.2101

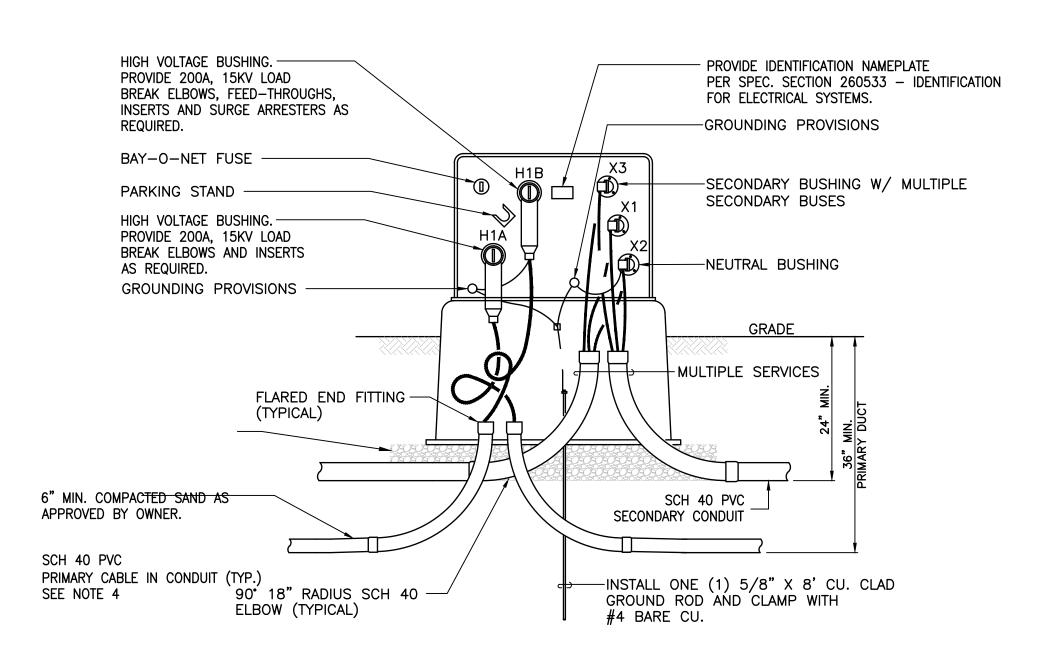




MANUFACTURED ASSEMBLY STANDOFF ATTACHMENT DETAIL

(TO BE SUPPLIED BY THE GC, AND INSTALLED BY FIRSTENERGY)

N.T.S.



- NOTES:

 1. ALL MATERIAL IN TRANSFORMER DETAIL FURNISHED AND INSTALLED BY CONTRACTOR UNLESS OTHERWISE NOTED.
- 2. TRANSFORMER FURNISHED AND INSTALLED BY FIRSTENERGY.
- 3. FIBER GLASS BOX PAD (NORDIC FIBERGLASS CBP-37-43 SERIES OR APPROVED EQUAL) FURNISHED AND INSTALLED BY CONTRACTOR PER TRANSFORMER SIZE.
- 4. PROVIDE SCHEDULE 80 CONDUITS WHERE ROUTED UNDER ANY DRIVEWAY, ROADWAY, AND PARKING LOTS AND SHALL EXTEND 5' PAST EACH EDGE.

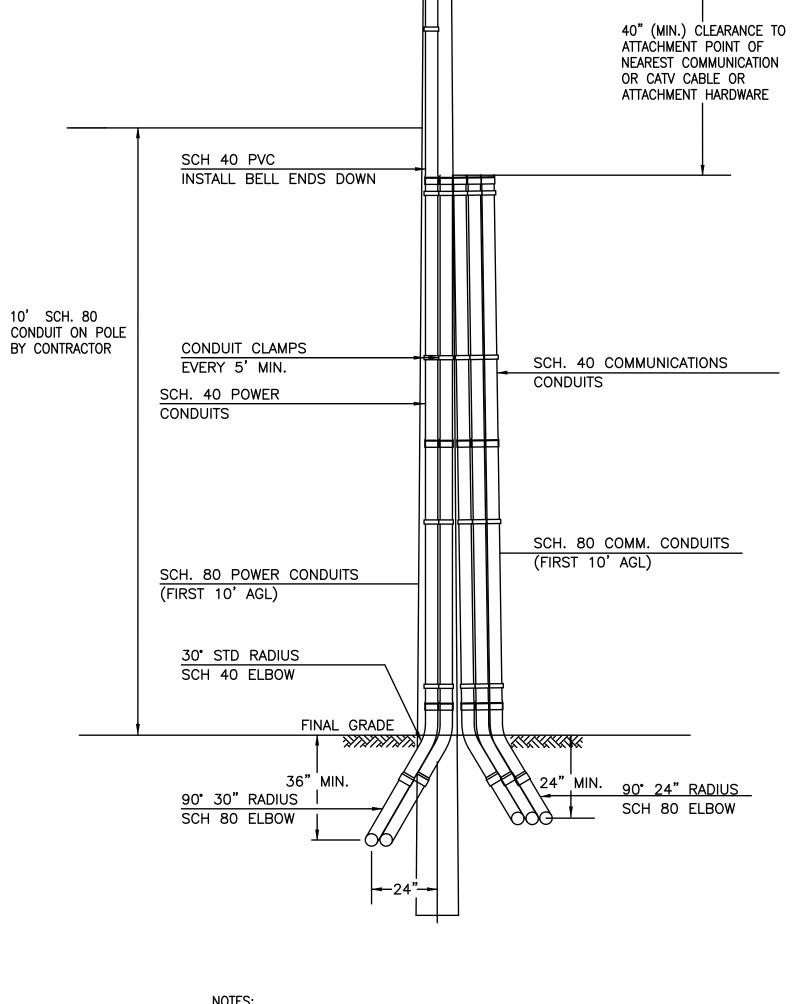
SINGLE PHASE TRANSFORMER DETAIL

N.T.S.





PROJECT NUMBER: 2023335.0



CABLE POSITIONER (ALUMAFORM CS-820)

CONCENTRIC CABLE

NEUTRAL POSITION

NEUTRAL

6"MIN.

15kV COLD SHRINK TERMINATOR (3M)

EQUIPMENT BRACKET

(ALUMAFORM #1HCA-C)

ARRESTER & BRACKET GROUND #6 BA CU

DUCT BELL END AND KELLUM CABLE GRIP

NOTES:

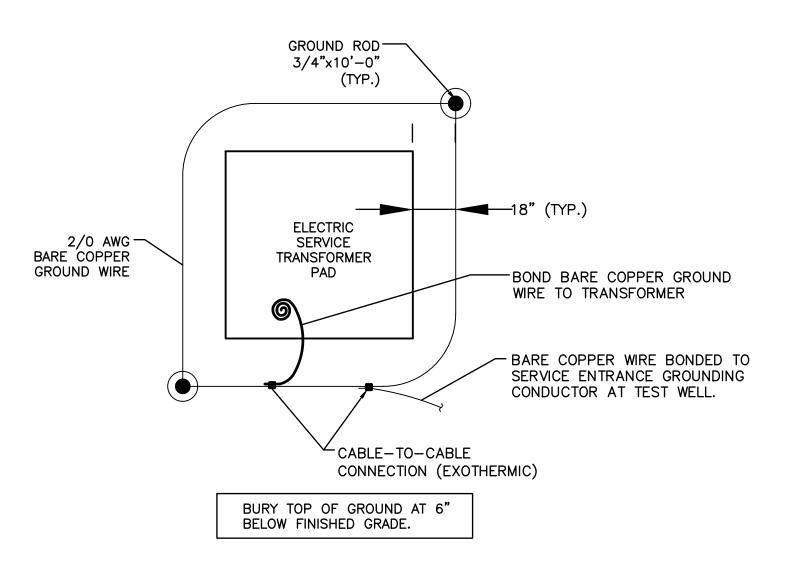
1. CAUTION: ONLY QUALIFIED PERSONNEL ARE PERMITTED TO INSTALL

1. CAUTION: ONLY QUALIFIED PERSONNEL ARE PERMITTED TO INSTALL ELECTRIC EQUIPMENT IN THE VICINITY OF ENERGIZED ELECTRICAL LINES AS DESCRIBED IN OSHA 1910 SUBPART R. & S.

- 2. GC SHALL DETERMINE THE LOCATION /POSISTION OF VERTICAL RISERS IN THE FIELD.
- 3. SUFFICIENT LENGTH OF CONTINUOUS CABLE, COILED AND TEMPORARILY ATTACHED 10' ABOVE GROUND, ON POLE TO CONNECT WITH OVERHEAD SOURCE. FIRSTENERGY WILL COMPLETE THE INSTALLATION ABOVE 10' ON THE POLE.

1¢ PRIMARY RISER POLE DETAIL

N.T.S.



ELECTRIC SERVICE TRANSFORMER PAD LOOP GROUNDING DETAIL

N.T.S.

PROVIDE WEATHER RESISTANT GFCI
RECEPTACLE WITH WHILE—IN—USE COVER
FOR AERATION SYSTEM PUMP.
COORDINATE EXACT LOCATION WITH IN
FIELD.
PROVIDE 2—#12, #12 GND IN 3/4" C.
TO DEDICATED CIRCUIT BREAKER IN
PUMP CONTROL PANEL

CONCRETE EQUIPMENT PAD. SEE
CONCRETE SLAB DETAIL ON
DRAWINGS.

UNISTRUT

PCP
METER
W/CAP

PLAN VIEW

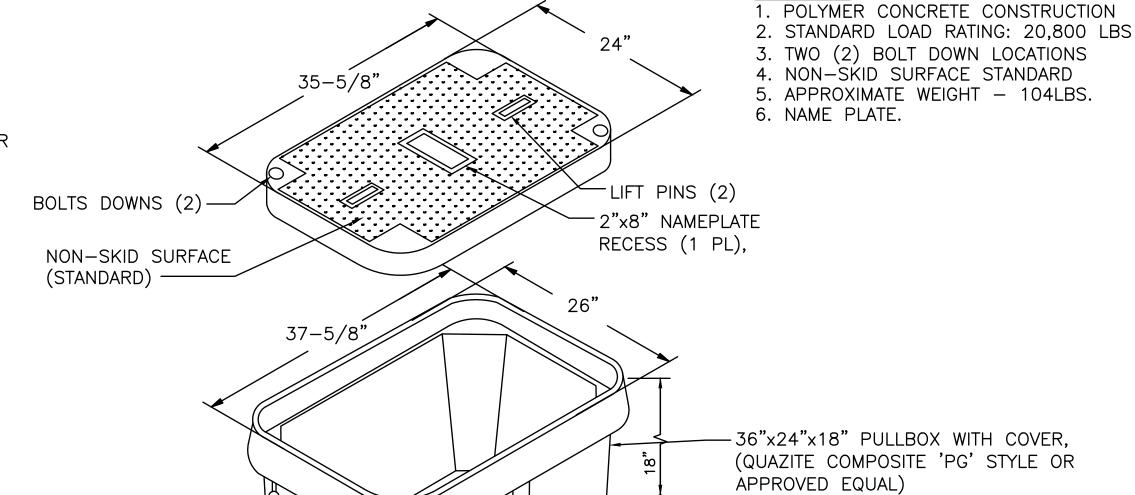
PULLBOX --PULL BOX COVER WITH IDENTIFICATION BELL ENDS-FURNISHED AND INSTALLED BY -COMPACTED SAND OR CONTRACTOR WASHED GRAVEL -90° 36" RADIUS **FIBERGLASS** SWEEP (TYPICAL) SCH 40 PVC-ONE (1) 5/8" X 10' CU. CLAD CONDUIT (TYP) GROUND ROD AND CLAMP

PULLBOX NOTES:

- 1. PULL BOX AND PULLBOX COVER FURNISHED AND INSTALLED BY CONTRACTOR.
- 2. CONDUIT FURNISHED AND INSTALLED WITH SIZE AS INDICATED.
- 3. DETAIL TYPICAL FOR POWER, CONTROL, AND COMMUNICATION CONDUIT INSTALLATION.
- 4. #57 WASHED GRAVEL SHALL EXTEND 6" BELOW BOTTOM OF BOXPAD AND 6" BEYOND PERIMETER FLANGE OF BOXPAD FOR DRAINAGE.
- 5. PROVIDE WITH SKID RESISTANT LID MARKED AS APPLICABLE, "ELECTRIC, "COMMUNICATIONS", ETC.
- 6. PROVIDE CONDUIT END COUPLING TYPICAL FOR ALL CONDUIT OR
- 7. PROVIDE 24" DIAMETER LOOP (MIN.) OF WIRE OR CABLE IN PULLBOX.

PULL BOX INSTALLATION DETAIL

N.T.S.



LID NOTES

BOX NOTES

2. STACKABLE FOOT

1. POLYMER CONCRETE CONSTRUCTION

3. APPROXIMATE WEIGHT - 150LBS.

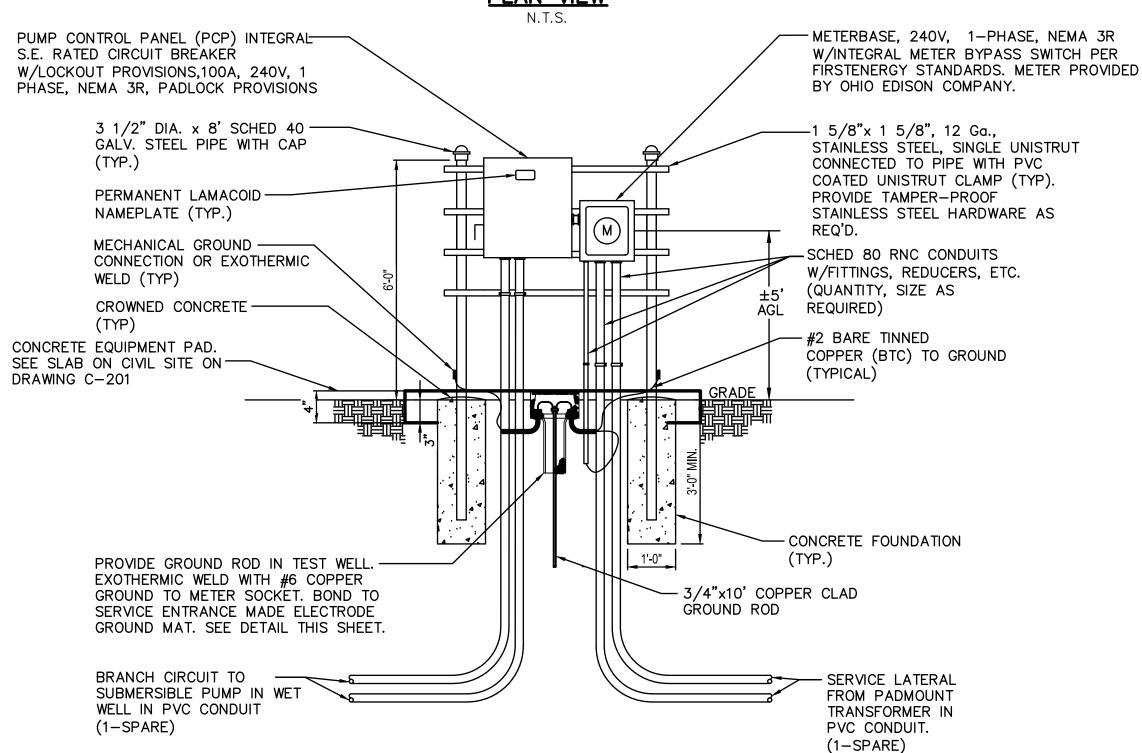
3/8"x3" HEX BOLT

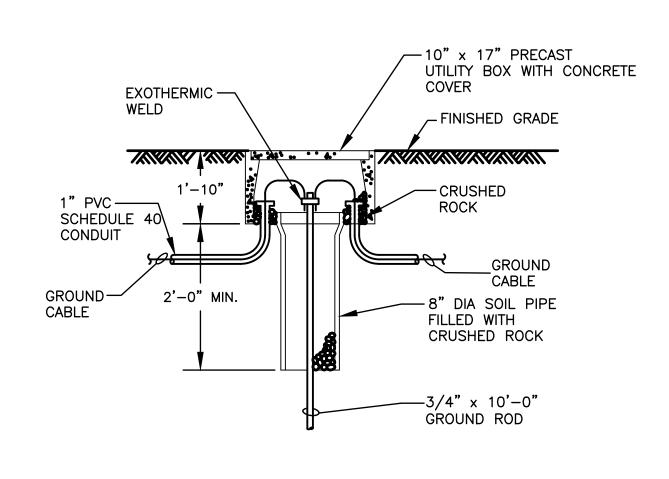
(2 EACH END)—

- 1. THIS UNIT HAS A WEIGHT RATING OF 20,800 LBS AND SHOULD BE PLACED IN LOCATIONS THAT MAY HAVE AN OCCASIONAL BUT NON-DELIBERATE LIGHT TO HEAVY VEHICLE EXPOSURE.
- 2. THIS PRODUCT SHOULD NOT BE PLACED IN FULL TRAFFIC OR DELIBERATE VEHICLE TRAFFIC AREA.
- 3. IN THE EVENT OF THE NEED FOR A FIBER OPTIC CABLE SPLICE, PROVIDE 48"Lx30"Wx24"D POLYMER CONCRETE HANDHOLE.

PULLBOX DETAIL

N.T.S.





GROUND ROD AND TEST WELL DETAIL N.T.S.

ELECTRIC SERVICE H-FRAME DETAIL N.T.S.





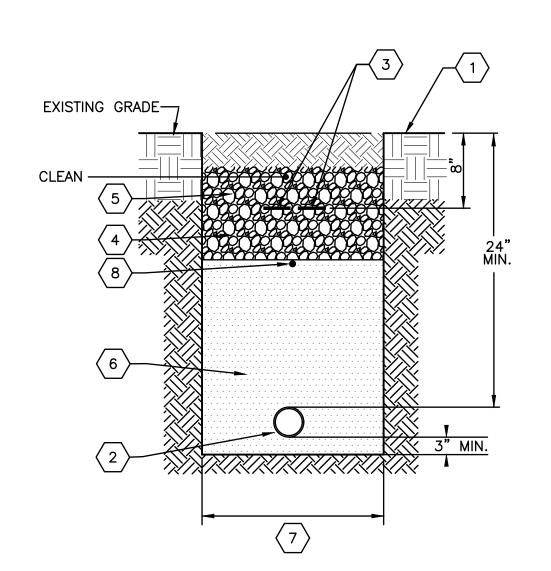
PORTAGE LAKES
ODNR WILDLIFE DISTRICT 3
YOUTH FISHING PONDS

DESIGNED BY: DSS	PROJECT NUMBER: 2023335.03
DRAWN BY: DSS	SCALE: PER PLAN
CHECKED BY: MAL	DATE:
APPROVED BY: MAL	REVISED:

ELECTRICAL DETAILS

E-004

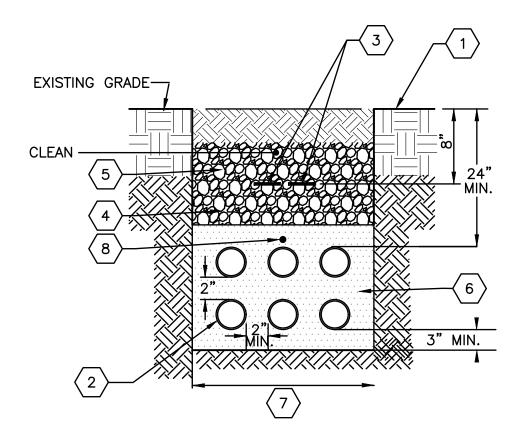
SHEET NO:
20 OF 25



SHEET KEYNOTES

- 1. TOPSOIL AND SEED OR PAVEMENT, AS PER PLAN.
- 2. PVC SCHEDULE 40 POWER CONDUITS.
- 3. DETECTABLE WARNING TAPE RED WITH BLACK LETTERING INDICATING "ELECTRIC" AND ROUTED ALONG CONDUIT PATH.
- 4. CLEAN ON-SITE MATERIALS MAY BE USED FOR BACKFILL IN LANDSCAPE AREAS. MATERIALS SHALL BE FREE OF STONES, RUBBLE, AND FROZEN BACKFILL; OTHERWISE, CONTRACTOR SHALL BRING IN CLEAN BACKFILL. COMPACT BACKFILL IN LIFTS.
- 5. GRANULAR BACKFILL (ODOT ITEM 304 LIMESTONE) TO BE USED UNDER PAVEMENT AND IN RIGHT OF WAY, TO DEPTH PER ODOT STANDARDS, WITH COMPACTED BACKFILL FOR REMAINDER PER ODOT STANDARDS.
- 6. SAND BEDDING.
- 7. EXCAVATE WIDTH OF TRENCH 18" (TYP.) AS REQUIRED. REFER TO SITE PLANS AND ONE LINE DIAGRAMS FOR MORE DETAILS.
- 8. PROVIDE #10 AWG DIRECT BURIED RATED TRACE WIRE. PROVIDE 24" LOOP WITH PERMANENT WIRE TAG LABEL AT

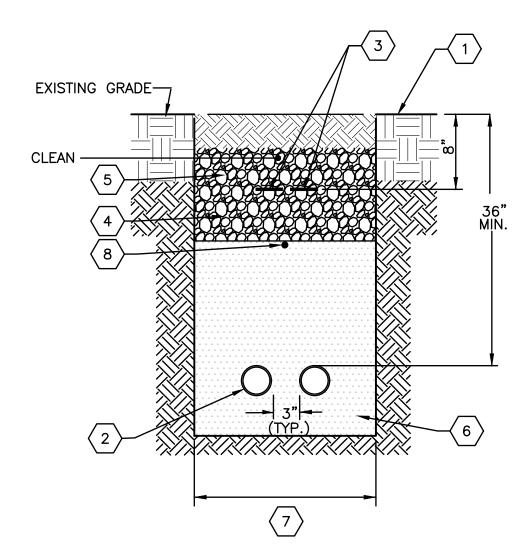
CONDUIT TRENCH DETAIL - A



SHEET KEYNOTES

- 1. TOPSOIL AND SEED OR PAVEMENT, AS PER PLAN.
- 2. 6-2" PVC SCHEDULE 40 COMMUNICATION CONDUITS.
- 3. DETECTABLE WARNING TAPE RED WITH BLACK LETTERING INDICATING "ELECTRIC" AND ROUTED ALONG CONDUIT PATH.
- 4. CLEAN ON-SITE MATERIALS MAY BE USED FOR BACKFILL IN LANDSCAPE AREAS. MATERIALS SHALL BE FREE OF STONES, RUBBLE, AND FROZEN BACKFILL; OTHERWISE, CONTRACTOR SHALL BRING IN CLEAN BACKFILL. COMPACT BACKFILL IN LIFTS.
- 5. GRANULAR BACKFILL (ODOT ITEM 304 LIMESTONE) TO BE USED UNDER PAVEMENT AND IN RIGHT OF WAY, TO DEPTH PER ODOT STANDARDS, WITH COMPACTED BACKFILL FOR REMAINDER PER ODOT STANDARDS.
- 6. SAND BEDDING.
- 7. EXCAVATE WIDTH OF TRENCH 18" (TYP.) AS REQUIRED. REFER TO SITE PLANS AND ONE LINE DIAGRAMS FOR MORE DETAILS.
- 8. PROVIDE #10 AWG DIRECT BURIED RATED TRACE WIRE. PROVIDE 24" LOOP WITH PERMANENT WIRE TAG LABEL AT BOTH ENDS.

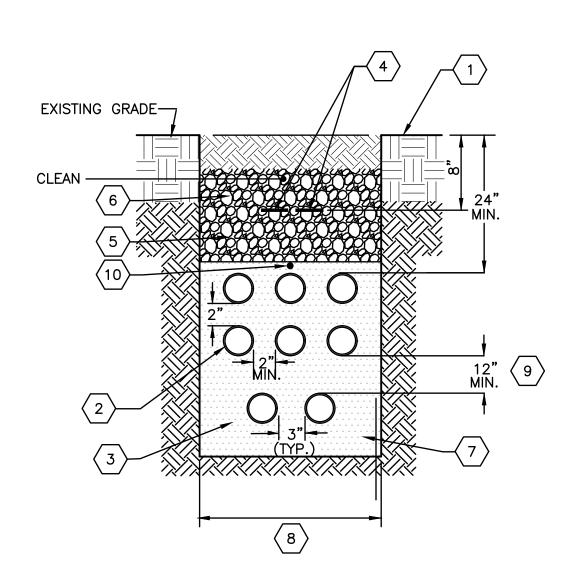
CONDUIT TRENCH DETAIL - C



SHEET KEYNOTES

- 1. TOPSOIL AND SEED OR PAVEMENT, AS PER PLAN.
- 2. PVC SCHEDULE 40 POWER CONDUITS.
- 3. DETECTABLE WARNING TAPE RED WITH BLACK LETTERING INDICATING "ELECTRIC" AND ROUTED ALONG CONDUIT PATH.
- 4. CLEAN ON-SITE MATERIALS MAY BE USED FOR BACKFILL IN LANDSCAPE AREAS. MATERIALS SHALL BE FREE OF STONES, RUBBLE, AND FROZEN BACKFILL; OTHERWISE, CONTRACTOR SHALL BRING IN CLEAN BACKFILL. COMPACT BACKFILL IN LIFTS.
- 5. GRANULAR BACKFILL (ODOT ITEM 304 LIMESTONE) TO BE USED UNDER PAVEMENT AND IN RIGHT OF WAY, TO DEPTH PER ODOT STANDARDS, WITH COMPACTED BACKFILL FOR REMAINDER PER ODOT STANDARDS.
- 6. SAND BEDDING.
- 7. EXCAVATE WIDTH OF TRENCH 18" (TYP.) AS REQUIRED. REFER TO SITE PLANS AND ONE LINE DIAGRAMS FOR MORE DETAILS.
- 8. PROVIDE #10 AWG DIRECT BURIED RATED TRACE WIRE. PROVIDE 24" LOOP WITH PERMANENT WIRE TAG LABEL AT BOTH ENDS.

CONDUIT TRENCH DETAIL - B



SHEET KEYNOTES

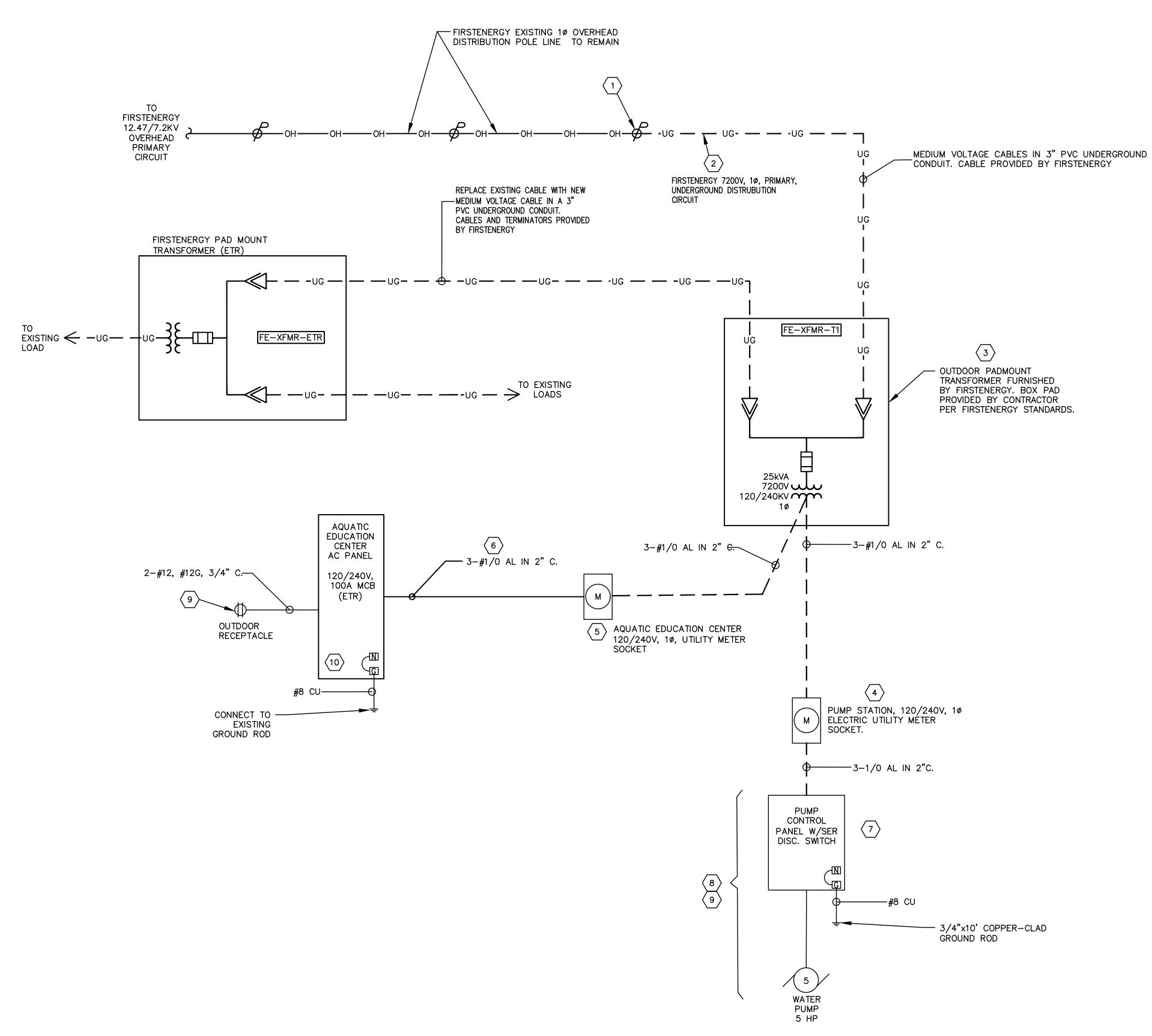
- 1. TOPSOIL AND SEED OR PAVEMENT, AS PER PLAN.
- 2. 6-2" PVC SCHEDULE 40 COMMUNICATION CONDUITS.
- 3. 2-3" PVC SCHEDULE 80 POWER CONDUITS.
- 4. DETECTABLE WARNING TAPE RED WITH BLACK LETTERING INDICATING "ELECTRIC" AND ROUTED ALONG CONDUIT PATH.
- 5. CLEAN ON-SITE MATERIALS MAY BE USED FOR BACKFILL IN LANDSCAPE AREAS. MATERIALS SHALL BE FREE OF STONES, RUBBLE, AND FROZEN BACKFILL; OTHERWISE, CONTRACTOR SHALL BRING IN CLEAN BACKFILL. COMPACT BACKFILL IN LIFTS.
- 6. GRANULAR BACKFILL (ODOT ITEM 304 LIMESTONE) TO BE USED UNDER PAVEMENT AND IN RIGHT OF WAY, TO DEPTH PER ODOT STANDARDS, WITH COMPACTED BACKFILL FOR REMAINDER PER ODOT STANDARDS.
- 7. SAND BEDDING.
- 8. EXCAVATE WIDTH OF TRENCH 18" (TYP.) AS REQUIRED. REFER TO SITE PLANS AND ONE LÌNE DIAGRAMS FOR MORE DETAILS.
- 9. MAINTAIN 12" MINIMUM VERTICAL AND HORIZONTAL SEPARATION BETWEEN COMMUNICATION CONDUITS ABOVE AND POWER CONDUITS BELOW.
- 10. PROVIDE #10 AWG DIRECT BURIED RATED TRACE WIRE. PROVIDE 24" LOOP WITH PERMANENT WIRE TAG LABEL AT BOTH ENDS.

CONDUIT TRENCH DETAIL - D



DESIGNED BY: DSS	PROJECT NUMBER: 2023335.03	
DRAWN BY: DSS	SCALE: PER PLAN	
CHECKED BY: MAL	DATE:	
APPROVED BY: MAL	REVISED:	

21 OF 25



GENERAL SHEET NOTES

- ANY AND ALL COSTS ASSOCIATED WITH TEMPORARY AND/OR STANDBY POWER REQUIRED ON THIS PROJECT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- 2. ALL EQUIPMENT ON THIS DRAWING IS NEW UNLESS NOTED OTHERWISE.
- 3. ETR = EXISTING TO REMAIN.
- 4. PROVIDE NEW PHENOLIC NAMEPLATES ON ALL NEW AND UNLABELED EXISTING EQUIPMENT AND AS REQUIRED BY DRAWINGS AND/OR SPECIFICATIONS.
- . SEE DRAWING E-001 ELECTRICAL SYMBOL LEGEND AND E-002 ELECTRICAL SITE PLAN FOR ADDITIONAL INFORMATION.
- S. SEE ELECTRICAL SITE PLANS ON DRAWINGS E-002 THRU E-006 FOR ADDITIONAL UNDERGROUND CONDUIT/WIRE INFORMATION.

SHEET KEYNOTES



- PROPOSED RISER POLE PROVIDED BY FIRSTENERGY. CONDUIT RISER PROVIDED BY CONTRACTOR PER FIRSTENERGY STANDARDS. SEE RISER POLE DETAIL ON DETAIL SHEET E-003.
- 2. PROPOSED FIRSTENERGY 7200V, 10 UNDERGROUND DISTRIBUTION CIRCUIT TO BE ROUTED ALONG ASPHALT PATH. SEE SITE PLAN FOR DETAILS.
- 3. REFER TO PADMOUNT TRANSFORMER LOOP GROUNDING DETAIL ON DRAWING E-004 AND UTILITY TRANSFORMER/BOXPAD INSTALLATION DETAIL ON DRAWING E-004.
- 4. PROVIDE UTILITY METER SOCKET ON ELECTRICAL SERVICE H-FRAME PER DETAIL ON DRAWING E-004. ELECTRIC UTILITY METER PROVIDED BY FIRSTENERGY.
- 5. AQUATIC EDUCATION CENTER ELECTRIC UTILITY METER SOCKET TO REPLACE EXISTING METER AND METER SOCKET.
- 6. REPLACE SERVICE ENTRANCE CONDUCTORS TO EXISTING PANELBOARD.
- 7. PUMP CONTROL PANEL (PCP) WITH PROGRAMMABLE ON/OFF TIMER. MOUNT ON ELECTRICAL H-FRAME. SEE PROJECT SPECIFICATIONS FOR DETAILS.
- 8. PUMP CONTROL PANEL AND SUBMERSIBLE PUMP WITH PUMP POWER CABLE FURNISHED BY PUMP MANUFACTURER AND INSTALLED BY THE CONTRACTOR.
- 9. PROVIDE GFCI RECEPTACLE ON H-FRAME ADJACENT TO PUMP CONTROL PANEL, WEATHER RESISTANT RATED WITH WHILE-IN-USE COVER FOR AERATION SYSTEM PUMP. COORDINATE EXACT LOCATION WITH EC IN FEILD.
- 10. PROVIDE NEW 20A/1P CIRCUIT BREAKER IN AVAILABLE SPACE IN PANELBOARD TO SERVE RECEPTACLE.

ELECTRICAL SERVICE LOAD TABLE SUMMARY

DESCRIPTION	CONTINUOUS (kWx125%) NON-CONTINUOUS (kWx100%)
AQUATIC EDUCATION CENTER 120/240V, 1ø, 100A LOAD CENTER (ETR)	10 KW (EST.)
PUMP CONTROL PANEL (PROPOSED)	7 KW
TOTAL	17 KW (EST.)

ELECTRICAL ONE LINE DIAGRAM N.T.S.



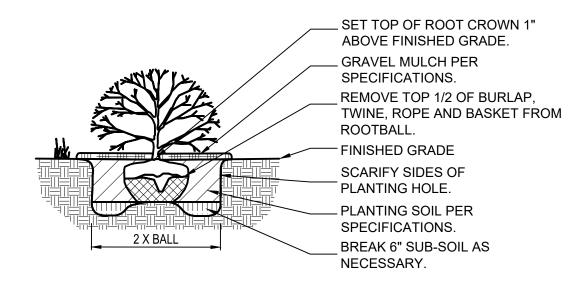


PORTAGE LAKES ODNR WILDLIFE DISTRICT 3 YOUTH FISHING PONDS

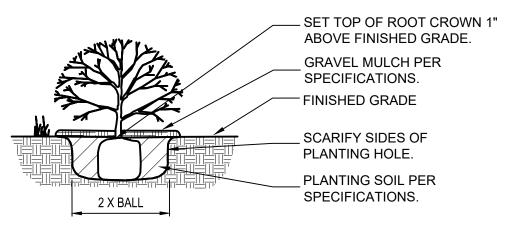
DESIGNED BY: DSS	PROJECT NUMBER: 2023335.03
DRAWN BY: DSS	SCALE: PER PLAN
CHECKED BY: MAL	DATE:
APPROVED BY: MAL	REVISED:

ELECTRICAL ONE LINE DIAGRAM

SHEET: E-006 22 OF 25



BALL & BURLAP SECTION

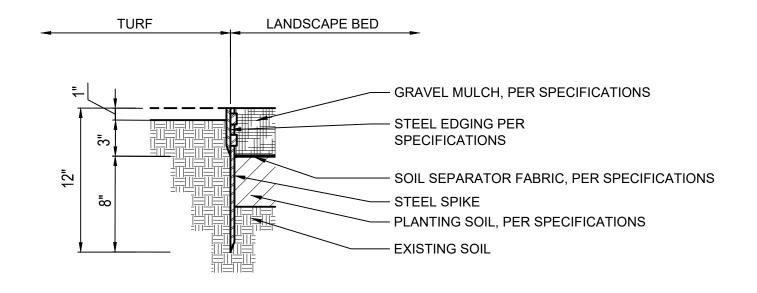


CONTAINER SECTION

GENERAL NOTES:

- PRUNE ROOTS IF BALL IS ROOTBOUND.
- 2. REMOVE ALL CONTAINERS AND NON-BIODEGRADABLE BURLAP.
- WHEN BACKFILLING PLANT PIT, PLACE PLANTING SOIL IN TWO LIFTS.
 AFTER FIRST LIFT, PUDDLE SOIL IN WITH WATER TO REMOVE ALL
 AIR POCKETS. PLACE SECOND LIFT AND CONTINUE TO PUDDLE AND
 FILL AS NECESSARY.





GENERAL NOTES:

USE WHEREVER GRAVEL MULCHED PLANTINGS TRANSITION TO TURF AREAS, INCLUDING LANDSCAPE PLANTING BEDS PER PLAN.



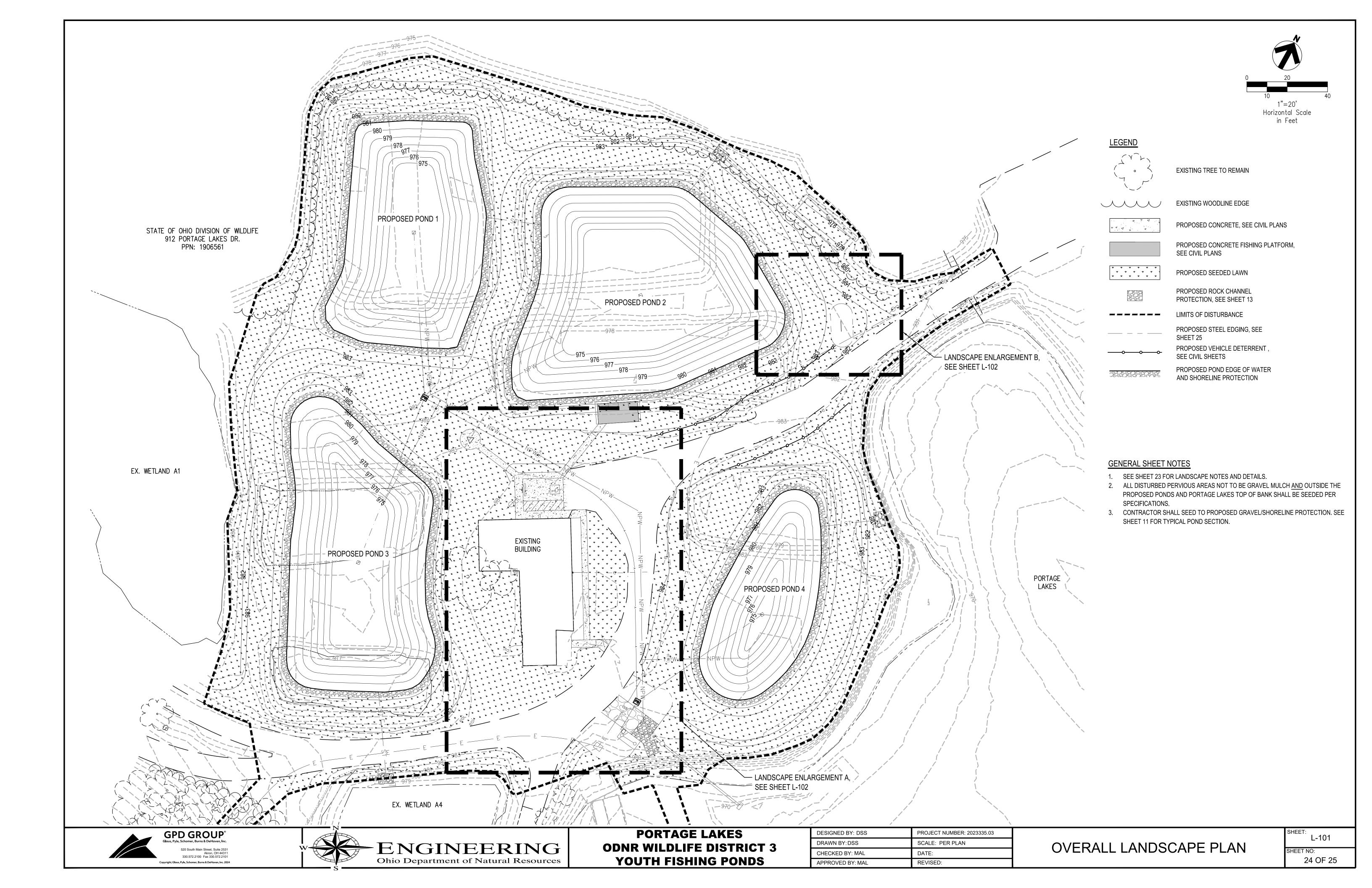


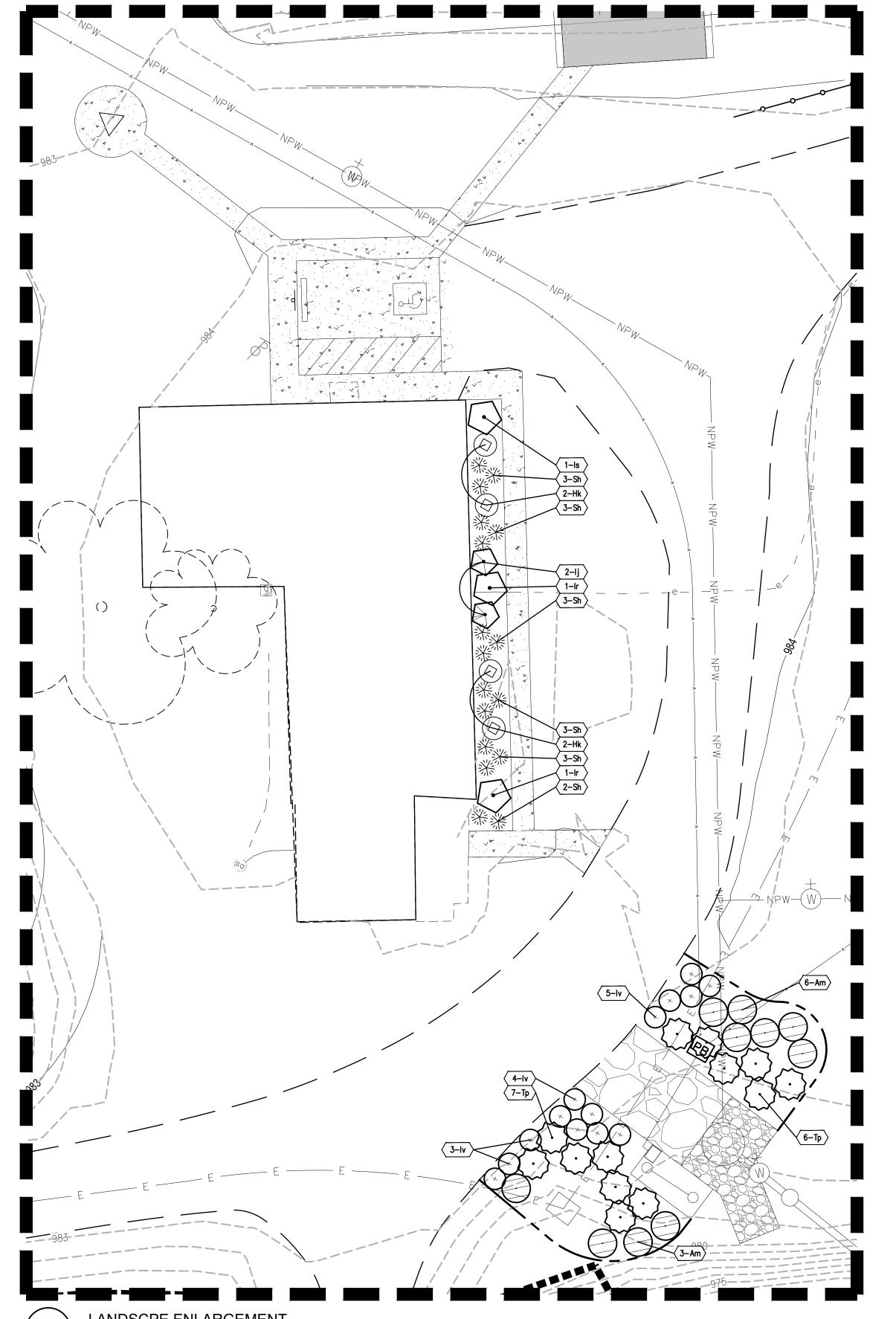


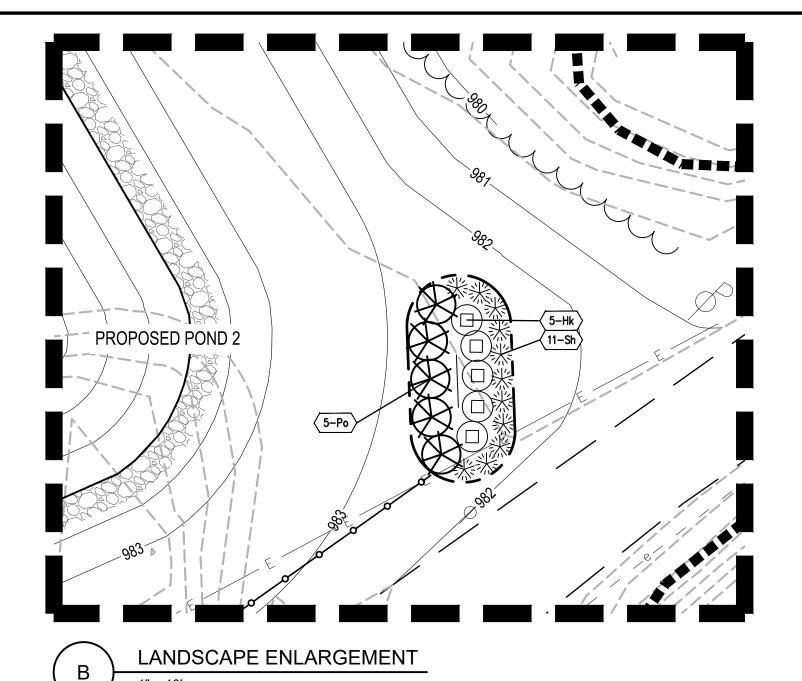
DESIGNED BY: DSS	PROJECT NUMBER: 2023335.03
DRAWN BY: DSS	SCALE: PER PLAN
CHECKED BY: MAL	DATE:
APPROVED BY: MAL	REVISED:

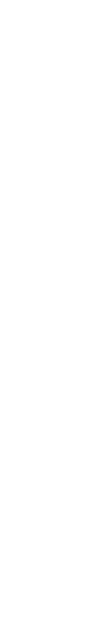
LANDSCAPE DETAILS

L-001 SHEET NO: 23 OF 25









EXISTING TREE TO REMAIN

Horizontal Scale in Feet

EXISTING WOODLINE EDGE

PROPOSED CONCRETE, SEE CIVIL PLANS

SEE CIVIL PLANS

PROPOSED STEEL EDGING

LIMITS OF DISTURBANCE

PROPOSED VEHICLE DETERRENT , SEE CIVIL SHEETS

PROPOSED POND EDGE OF WATER AND SHORELINE PROTECTION

PROPOSED PLANT QUANTITY AND SYMBOL

PROPOSED CONCRETE FISHING PLATFORM,

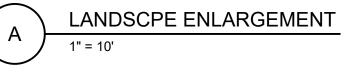
PROPOSED SHRUB / PERENNIAL

GENERAL SHEET NOTES

- 1. SEE SHEET 23 FOR LANDSCAPE DETAILS.
- 2. ALL PLANTED LANDSCAPE BEDS SHALL BE MULCHED WITH GRAVEL MULCH PER SPECIFICATIONS.
- 2. ALL DISTURBED PERVIOUS AREAS NOT TO BE GRAVEL MULCH <u>AND</u> OUTSIDE THE PROPOSED PONDS AND PORTAGE LAKES TOP OF BANK SHALL BE SEEDED PER SPECIFICATIONS.

PLANT LIST

Symbol	Botanical Name	Common Name	Quantity	Size	Condition	Remarks
Cymbol	Botamour Hamo	Common Name	Quartity	GIZO	Condition	romana
Am	Aronia melanocarpa 'Autumn Magic'	Autumn Magic Black Chokeberry	10	36" Ht.	Cont.	4' o/c
Hk	Hypericum kalmianum 'Gemo'	Kalm's St. Johnswort	9	18" Ht., No. 3	Cont.	3' o/c
lj	llex verticillata 'Jim Dandy'	Jim Dandy Winterberry Holly	2	24" Ht., No. 5	Cont.	2' o/c
lr	llex verticillata 'Red Sprite'	Red Sprite Winterberry Holly	3	24" Ht., No. 5	Cont.	2' o/c
lv	Itea virginica 'Merlot'	Merlot Virginia Sweetspire	14	18" Ht., No. 3	Cont.	Per Plan
Ро	Physocarpus opulifolius 'Tiny Wine'	Tiny Wine Ninebark	5	24" Ht., No. 5	Cont.	4' o/c
Sh	Sporobolus heterolepis	Prairie Dropseed	28	No. 2	Cont.	2.5' o/c
Тр	Thuja plicata 'Northern Spire'	Northern Spire Arborvitae	13	6' Ht.	B&B	Per Plan







PORTAGE LAKES
ODNR WILDLIFE DISTRICT 3
YOUTH FISHING PONDS

DESIGNED BY: DSS	PROJECT NUMBER: 2023335.03
DRAWN BY: DSS	SCALE: PER PLAN
CHECKED BY: MAL	DATE:
APPROVED BY: MAL	REVISED: