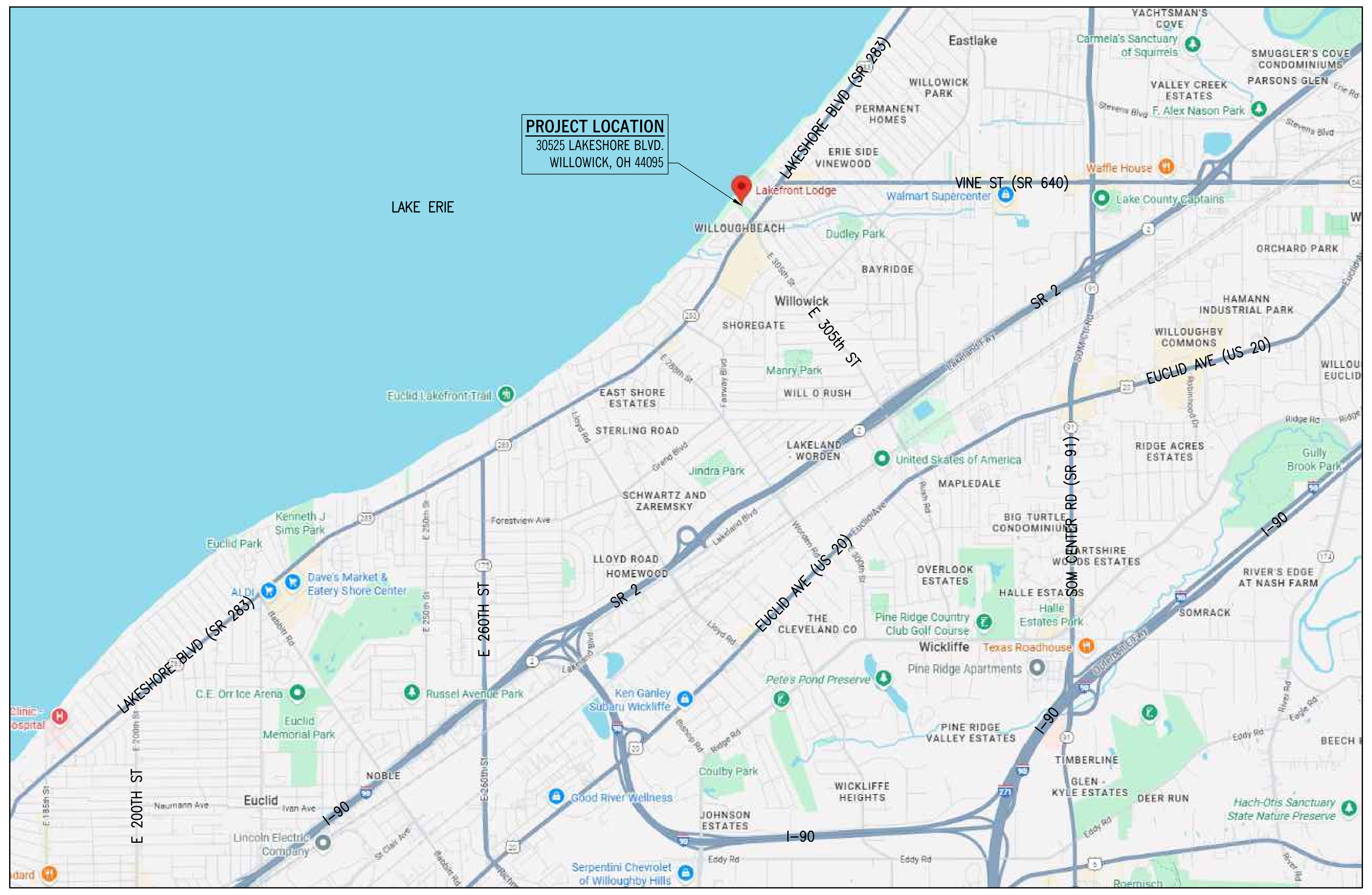
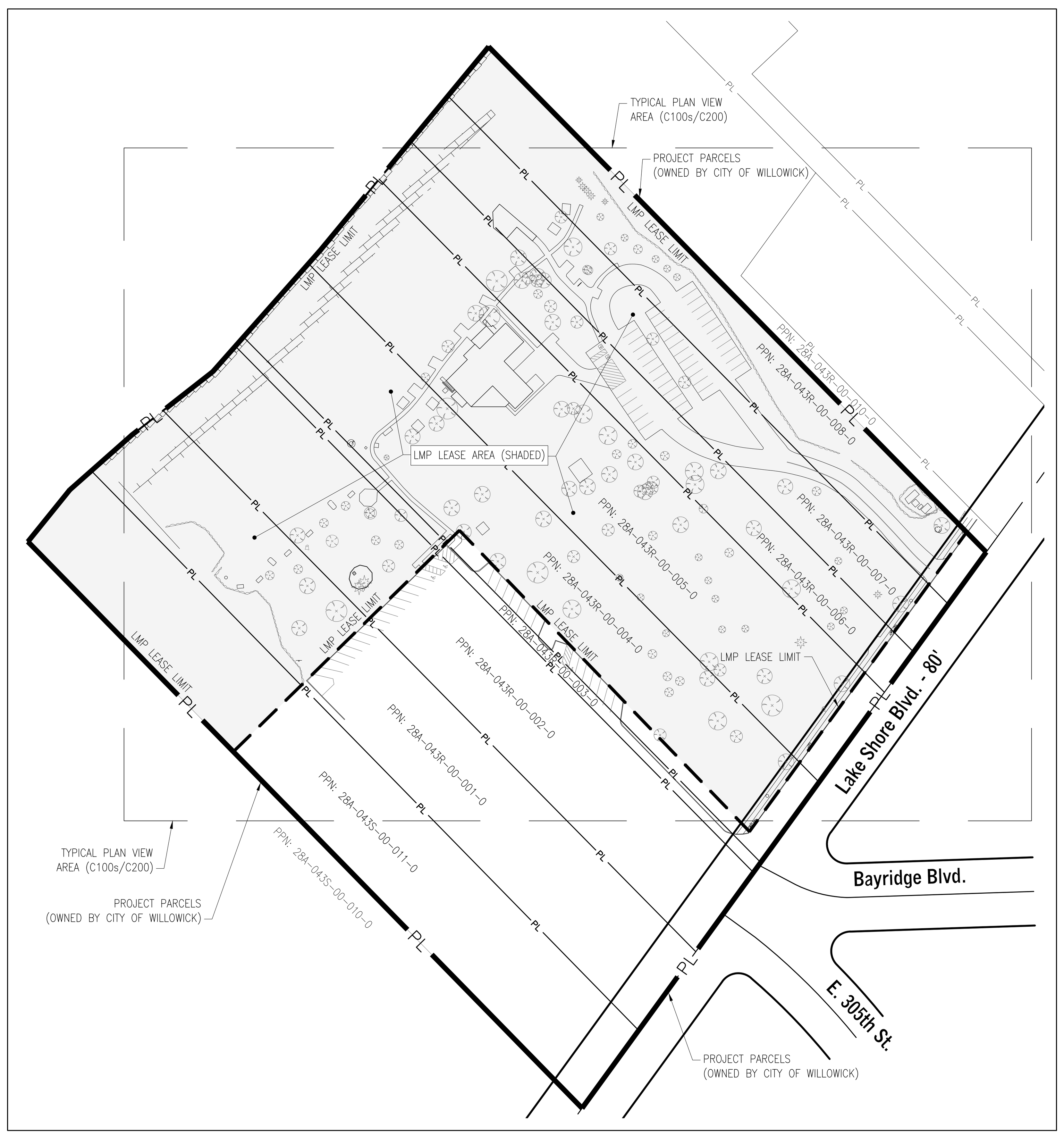
LAKEFRONT LODGE

30525 LAKESHORE BOULEVARD
WILLOWICK, OHIO 44095



PROJECT VICINITY MAP
NO SCALE



PROJECT PARCEL MAP
SCALE: 1" = 100'

PROJECT PARCEL DATA

PARCEL NUMBER	ADDRESS	AREA (AC)	OWNER
28-A-043-R-00-008-0	30535 LAKE SHORE BLVD	1.21	CITY OF WILLOWICK
28-A-043-R-00-007-0	30531 LAKE SHORE BLVD	1.16	CITY OF WILLOWICK
28-A-043-R-00-006-0	0 LAKE SHORE BLVD	0.95	CITY OF WILLOWICK
28-A-043-R-00-005-0	30525 LAKE SHORE BLVD	2.19	CITY OF WILLOWICK
28-A-043-R-00-004-0	0 LAKE SHORE BLVD	2.00	CITY OF WILLOWICK
28-A-043-R-00-003-0	0 LAKE SHORE BLVD	0.25	CITY OF WILLOWICK
28-A-043-R-00-002-0	30441 LAKE SHORE BLVD	2.00	CITY OF WILLOWICK
28-A-043-R-00-001-0	30435 LAKE SHORE BLVD	2.00	CITY OF WILLOWICK
28-A-043-S-00-011-0	30417 LAKE SHORE BLVD	2.00	CITY OF WILLOWICK

TOTAL PROJECT PARCEL AREA = 13.76 ACRES

PROPOSED DISTURBED AREA = 0.90 ACRES

LAND SURVEY NOTES

LAND SURVEY DATA SHOWN ON THE CIVIL PLAN SHEETS HAS BEEN REFERENCED FROM AN EXISTING CONDITIONS FIELD SURVEY PERFORMED BY WILLIAM C. VONDRA JR. (S-7478) OF LAND DESIGN CONSULTANTS.

DATED 02/27/2025
LDC CONTRACT NO. LAKEP1-2501
LDC FILE NAME BASE-LODGE

CIVIL ENGINEER

ROCKAWAY CIVIL LLC
10191 SPERRY ROAD
KIRTLAND, OHIO 44094
JOHN URBANICK, PE 66506
440 655 8182
JURBANICK@ROCKAWAYCIVIL.COM

CIVIL SHEET INDEX

PROJECT GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIALS INCLUDED ON THIS PROJECT SHALL BE IN ACCORDANCE WITH THE LATEST STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIALS SPECIFICATIONS AND THE CURRENT REQUIREMENTS OF THE CITY ENGINEER.
2. ANY DEFECTS IN THE CONSTRUCTION WITHIN THE RIGHT OF WAY INCLUDING MATERIALS OR WORKMANSHIP SHALL BE REPLACED OR CORRECTED BY REMOVAL AND REPLACEMENT BY THE CONTRACTOR OR OTHER APPROVED METHODS PRIOR TO ACCEPTANCE BY THE MUNICIPAL ENGINEER AT NO ADDITIONAL COST.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO ROAD SURFACES, SIGNS, GUARDRAILS, MAIL/PAPER BOXES, CULVERTS, EASEMENTS OR RIGHT OF WAYS DISTURBED BY CONSTRUCTION OF ANY PART OF THIS IMPROVEMENT. ALL DAMAGES SHALL BE RESTORED AT NO COST TO THE MUNICIPALITY TO THE ORIGINAL CONDITION. THE MUNICIPAL ENGINEER IN WRITING SHALL ACCEPT APPROVAL OF RESTORATION.
4. THE CONTRACTOR SHALL NOT COMMENCE WITH ANY FORM OF CONSTRUCTION WITHOUT NOTIFYING THE OFFICE OF THE MUNICIPAL ENGINEER AT LEAST TWENTY-FOUR (24) HOURS PRIOR TO STARTING CONSTRUCTION.
5. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS.
6. THE CONTRACTOR SHALL PROVIDE A TWENTY-FOUR (24) HOUR, SEVEN DAYS A WEEK EMERGENCY CONTACT LIST. THE CONTACT LIST SHALL INCLUDE CONTACT NAMES AND PHONE NUMBERS OF INDIVIDUALS WHO CAN BE REACHED AT ANY TIME. NO CONSTRUCTION SHALL OCCUR BEFORE CONTACT LIST IS PROVIDED TO THE MUNICIPALITY.
7. ALL LAWN AREAS REMOVED OR DISTURBED SHALL BE REPLACED BY SEEDING AND MULCHING IN ACCORDANCE WITH ITEM 659 OF ODOT SPECIFICATIONS AND SHALL BE RESEEDED AND MULCHED WHEN REQUESTED IF SATISFACTORY RE-ESTABLISHMENT OF LAWN DOES NOT OCCUR.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO THE EXISTING PUBLIC WATER, STORM AND SANITARY SYSTEM RESULTING FROM NON-CONFORMANCE WITH THE APPLICABLE STANDARDS OR THROUGH GENERAL NEGLIGENCE.
9. ALL VOIDS CREATED FROM BORING OF UTILITY LINES SHALL BE BACKFILLED WITH SAND OR GROUT. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES AND SHALL BACKFILL AND GRADE EXCAVATED AREAS TO ELIMINATE PONDING ON THE SITE.

DUST CONTROL:

10. THE CONTRACTOR SHALL SUPPLY ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY INCLUDING A DUST-FREE STREET SWEEPING DEVICE OR AS DIRECTED BY THE MUNICIPAL ENGINEER TO MAINTAIN ALL ROADWAYS BEING USED FOR ACCESS TO THE CONSTRUCTION SITE.

EROSION CONTROL:

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY EROSION CONTROL METHODS IN ACCORDANCE WITH CURRENT COUNTY AND STATE REQUIREMENTS AND AS REQUIRED BY THE MUNICIPAL ENGINEER. EROSION CONTROL MEASURES MUST BE IN PLACE PRIOR TO ANY CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL CLEAN ALL EXISTING STREETS OF MUD AND DIRT DURING THE CONSTRUCTION PHASE AS NEEDED OR DIRECTED BY THE MUNICIPAL ENGINEER.

GENERAL SEWER:

12. AT ALL STORM SEWER, SANITARY SEWER, AND/OR WATERMAIN INTERSECTIONS HAVING LESS THAN EIGHTEEN (18) INCH VERTICAL SEPARATION, ENCASE THE LOWER AND MONOLITHICALLY CRADLE THE UPPER PIPE IN 3000 PSI CONCRETE PER THE REQUIREMENTS OF THE UNIFORM STANDARDS CONCRETE ENCASEMENT DETAIL.

LINE AND GRADE CONTROL:

13. THE LINE AND GRADE OF SEWER MAINS SHALL BE CONTROLLED DURING SEWER CONSTRUCTION BY USE OF AN APPROVED LASER DEVICE. THE LINE AND GRADE OF THE LASER SHALL BE "CHECKED" FROM LINE AND GRADE STAKES AT A MAXIMUM OF FIFTY FOOT (50) INTERVALS.

EARTHWORK:

14. WHEREVER UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED THAT ARE NOT INDICATED ON THE PLANS, THE WORK SHALL BE DISCONTINUED UNTIL THE GEOTECHNICAL ENGINEER APPROVES THE METHOD AND MATERIAL TO BE INCORPORATED INTO THE WORK.
15. ALL UNFORESEEN UNDERGROUND OR ABOVE GROUND UTILITIES OR CONDITIONS THAT ARE DISCOVERED IN THE PROJECT AREA DURING CONSTRUCTION SHALL BE REPORTED BY THE CONTRACTOR TO THE DESIGN ENGINEER IMMEDIATELY FOR EVALUATION / POSSIBLE REDESIGN. THE FIELD DATA SHALL INCLUDE MATERIAL TYPE, SIZE, CONDITION, LOCATION, DEPTH / ELEVATION, ETC...

** REFER TO TRENCH EXCAVATION, BOTTOM PREPARATION AND BACKFILLING NOTES

MAINTENANCE OF TRAFFIC

INTERFERENCE WITH TRAFFIC:

1. THE CONTRACTOR SHALL MAINTAIN SAFE TRAFFIC CONDITIONS IN ACCORDANCE WITH THE MANUAL OF TRAFFIC CONTROL DEVICES. COORDINATE ALL LANE / ROAD CLOSURES WITH THE LOCAL MUNICIPAL ENGINEER(S).

TRAFFIC DIVERSION:

2. WHENEVER IT IS NECESSARY TO DIVERT TRAFFIC FROM ITS NORMAL CHANNEL INTO ANOTHER CHANNEL, SUCH DIVERSIONS SHALL BE CLEARLY MARKED BY CONES, DRUMS, BARRICADES OR TEMPORARY GUARDRAIL. IF THE MARKERS ARE LEFT IN PLACE AT NIGHT, SUITABLE LIGHTS SHALL BE PROVIDED AND MAINTAINED.

ONE WAY TRAFFIC:

3. WHENEVER ONE-WAY TRAFFIC IS ESTABLISHED, AT LEAST TWO FLAGGERS SHALL BE USED.

STREET CLOSING:

4. THE CONTRACTOR MAY NOT CLOSE THE STREET TO THROUGH TRAFFIC.

MAINTENANCE:

5. IF PROPER MAINTENANCE OF TRAFFIC FACILITIES AND/OR PROPER PROVISION FOR TRAFFIC CONTROL IS NOT BEING PROVIDED, THE MUNICIPALITY MAY TAKE NECESSARY STEPS TO CORRECT TRAFFIC MAINTENANCE. THE COST OF SUCH SERVICE WILL BE CHARGED TO THE CONTRACTOR.

PAVEMENT DRIVE APRONS, SIDEWALK, CURBS AND CURB RAMP REQUIREMENTS

GENERAL REQUIREMENTS:
THE FOLLOWING REQUIREMENTS APPLY TO ALL PAVEMENT DRIVE APRONS, SIDEWALKS AND CURB RAMPS. ALL PAVEMENT DRIVES, SIDEWALKS AND/OR CURB RAMPS SHALL CONFORM TO ODOT SPECIFICATIONS IF NOT SPECIFIED HEREIN. ALL PAVEMENT DRIVES, SIDEWALKS AND CURB RAMP REPLACEMENTS SHALL CONFORM TO THE GRADE OF THE EXISTING PAVEMENT DRIVE, SIDEWALK AND/OR CURB RAMP.

MATERIAL:

1. ALL CONCRETE SHALL BE CLASS "C" PER ODOT 499 AND PROPERLY CONSOLIDATED (NO SLAG).

NOTIFICATION TO RESIDENTS:

2. THE SCHEDULING FOR WORK SHALL BE DISCUSSED WITH EACH PROPERTY OWNER AFFECTED PRIOR TO COMMENCING THE CONSTRUCTION / REPLACEMENT OPERATION. EXCAVATION IN TRAFFIC AREAS SHALL NOT BE LEFT OPEN OVERNIGHT. ALL DRIVE APRON CONSTRUCTION SHALL FOLLOW A SCHEDULE THAT ALLOWS ACCESS TO AND FROM RESIDENCE, BUSINESS, ETC. AT ALL TIMES. THE DISRUPTION OF ACCESS TO DRIVEWAYS DUE TO THIS WORK SHALL BE KEPT TO A MINIMUM.

SIGNAGE:

3. THE CONTRACTOR MUST PROVIDE ADEQUATE SIGNS, MARKERS AND BARRICADES TO PROTECT PEDESTRIAN TRAFFIC, VEHICULAR TRAFFIC AND CONSTRUCTION PERSONNEL DURING THE PROGRESS OF THIS WORK. ADDITIONAL SIGNS INDICATING ENTRANCES FOR BUSINESSES IN A CONSTRUCTION ZONE ARE REQUIRED AS DIRECTED BY THE MUNICIPAL ENGINEER.

PAVEMENT DRIVE APRONS:

4. ALL PAVEMENT DRIVE APRONS SHALL HAVE A MINIMUM THICKNESS OF SIX (6) INCHES FOR RESIDENTIAL DRIVEWAYS AND EIGHT (8) INCHES FOR ALL OTHER DRIVEWAYS. REFER TO DETAILS.

R/W SIDEWALK:

5. ALL SIDEWALKS SHALL HAVE A MINIMUM THICKNESS OF FOUR (4) INCHES EXCEPT WITHIN THE LIMITS OF THE DRIVEWAYS, WHERE THE MINIMUM THICKNESS SHALL BE SIX (6) INCHES FOR ONE OR TWO FAMILY RESIDENTIAL DRIVEWAYS AND EIGHT (8) INCHES FOR ALL OTHER DRIVEWAYS.
6. ONE-HALF (1/2) INCH EXPANSION JOINTS SHALL BE PLACED AT INTERVALS NOT TO EXCEED FIFTY (50) FEET. EXPANSION JOINTS SHALL BE SEALED WITH 1/2" THICK SELF LEVELING URETHANE CHALK, LIMESTONE GRAY IN COLOR. ALL CONCRETE SIDEWALK AND/OR CURB SHALL BE OF MONOLITHIC CONSTRUCTION. ALL SIDEWALKS SHALL HAVE A FOUR (4) INCH MINIMUM SUBBASE, ODOT ITEM 304, COMPACTED TO 95% COMPACTION.

R/W CURB RAMPS:

7. CURB RAMPS SHALL BE PLACED AS SHOWN ON THE PLANS. ALL SIDEWALKS SHALL CONNECT TO THE PAVEMENT OR CURB AT INTERSECTIONS WITH WHEELCHAIR RAMPS AND ONE-HALF (1/2) INCH EXPANSION JOINTS BETWEEN THE WALK AND CURB. EXPANSION JOINTS SHALL BE SEALED WITH 1/2" THICK SELF LEVELING URETHANE CHALK, LIMESTONE GRAY IN COLOR. ALL CURB RAMPS SHALL MEET THE CURRENT ADA REQUIREMENTS. REFER TO DETAILS.

CONSTRUCTION SAW CUTTING:

8. WHERE IT IS NECESSARY TO DISTURB EXISTING PAVEMENT DRIVES, CURB RAMPS OR SIDEWALKS THE CONCRETE SHALL BE SAW CUT IN NEAT STRAIGHT LINES AS DIRECTED BY ENGINEER / MUNICIPALITY. THE DEPTH OF SAW CUT SHALL BE FULL DEPTH. WHERE IT IS NECESSARY TO DISTURB EXISTING PAVEMENT DRIVES, CURBS AND/OR WALKS THE ASPHALT CONCRETE SHALL BE LINE CUT WITH STRAIGHT VERTICAL EDGES. ALL CUT BITUMINOUS SURFACES SHALL BE SEALED WITH A 4" WIDE RUBBERIZED JOINT SEALER USING A SQUEEGEE.
9. CONCRETE SHALL BE REMOVED IN SECTIONS. SAW CUT LINES ARE TO TAKE PLACE AT EXISTING JOINTS.

CURING COMPOUND:

10. AN APPROVED SEALER SHALL SEAL ALL EXPOSED CONCRETE APPROPRIATE TO APPLICATION ON SURFACE OF CONCRETE. SEE CURRENT ODOT SPECIFICATIONS FOR APPLICATION METHODS.

STRUCTURES ENCOUNTERED:

11. THE CONTRACTOR SHALL ADJUST ANY "SURFACE STRUCTURE" IN THE AREA OF SIDEWALK AND/OR PAVEMENT DRIVE TO GRADE. THE CONTRACTOR SHALL FURNISH NECESSARY PARTS AND REPAIR ALL "SURFACE STRUCTURES" DAMAGED BY CONSTRUCTION OF IMPROVEMENT.

ASPHALT PAVEMENT CONSTRUCTION REQUIREMENTS

GENERAL REQUIREMENTS:
THE FOLLOWING REQUIREMENTS APPLY TO ALL PAVEMENT IMPROVEMENTS PLACED IN THE MUNICIPALITY.

COLD WEATHER:

1. NO ASPHALTIC PAVEMENT COURSE AND/OR CONCRETE PAVEMENT OR CURBING SHALL BE LAID ON FROZEN PAVEMENT, BASE OR SUBBASE.
2. SURFACE TEMPERATURES FOR ASPHALT PAVEMENT PLACEMENT SHALL BE 40 DEGREES FAHRENHEIT FOR THICKNESS GREATER THAN 1.5 INCHES AND 50 DEGREES FAHRENHEIT FOR SURFACE COURSES LESS THAN 1.5 INCHES. THE AIR TEMPERATURE SHOULD NOT BE LESS THAN 40 DEGREES FAHRENHEIT FOR ASPHALT PLACEMENT.
3. AMBIENT TEMPERATURE SHALL BE 35 DEGREE FAHRENHEIT AND RISING FOR CONCRETE PLACEMENT. WINTER PROTECTION SHALL BE IN EFFECT WHEN TEMPERATURES FALL BELOW 40 DEGREES FAHRENHEIT FOR A PERIOD OF 3 SUCCESSIVE DAYS. PROTECTION CONSISTS OF VISQUEEN AND BLANKETS.

EARTHWORK:

4. ALL FILLED AREAS, EXCLUDING TRENCHES WITHIN RIGHT-OF-WAY AREAS, SHALL BE COMPACTED IN ACCORDANCE WITH ODOT ITEM 203. IN ADDITION, FOR ANY FILL IN EXCESS OF TWO (2) FEET, AN APPROVED TESTING COMPANY IN ACCORDANCE WITH ODOT ITEM 203 SHALL PERFORM NUCLEAR COMPACTION TESTS.

ASPHALT PAVEMENT:

5. ALL MATERIAL MUST BE OBTAINED FROM A SOURCE APPROVED BY THE OHIO DEPARTMENT OF TRANSPORTATION. ASPHALT PAVING SHALL BE AS SHOWN ON THE TYPICAL SECTION.

MATERIALS:

6. AGGREGATE BASE – AGGREGATE BASE SHALL BE THE REQUIRED THICKNESS ACCORDING TO THE ATTACHED DETAILS AND IN ACCORDANCE TO ODOT ITEM 304. AGGREGATE BASE SHALL BE COMPACTED TO 98% MAXIMUM DENSITY.
7. SURFACE ASPHALT CONCRETE – SURFACE ASPHALT CONCRETE SHALL BE AS PER THE ATTACHED DETAILS. THE SURFACE COURSE SHALL BE FINISHED 1/4 INCH ABOVE THE GUTTER AND ALL CASTINGS IN ROADWAY.
8. INTERMEDIATE ASPHALT CONCRETE – INTERMEDIATE ASPHALT CONCRETE SHALL BE AS PER THE ATTACHED DETAILS.
9. BITUMINOUS AGGREGATE BASE – BITUMINOUS AGGREGATE BASE SHALL BE THE REQUIRED THICKNESS ACCORDING TO THE ATTACHED DETAILS AND IN ACCORDANCE TO ODOT ITEM 301.
10. JOINT SEALER – THE JOINT BETWEEN THE CONCRETE CURB AND PAVEMENT SURFACE SHALL BE SEALED WITH A FOUR (4) INCH WIDE APPLICATION OF RUBBERIZED JOINT SEALER OVERLAPPING THE CURB 1/2 INCH. THE SEAL SHALL BE LIGHTLY APPLIED IN A STRAIGHT LINE, SQUEEGEE AND LIGHTLY COVERED WITH SAND. THIS IS ALSO TO BE APPLIED TO THE PERIMETER OF UTILITY STRUCTURES IN PAVEMENT AREAS AS WELL AS WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT. THESE AREAS SHALL BE SEALED WITH A FOUR (4) INCH WIDE APPLICATION OF RUBBERIZED JOINT SEALER OVERLAPPING THE UTILITY CASTING/EXISTING PAVEMENT SURFACE BY 1/2 INCH.

ASPHALT PAVEMENT REPAIR:

11. ASPHALT PAVEMENT REPAIR SHALL CONFORM TO ALL ODOT REQUIREMENTS AND SPECIFICATIONS HEREIN. IN ADDITION ASPHALT PAVEMENT REPAIRS SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
    (A) SUBBASE REPAIR SHALL INCLUDE REMOVAL AND DISPOSAL OF DAMAGED AGGREGATE AND REPLACEMENT WITH COMPACTED ODOT ITEM 304 LIMESTONE. AREAS FOR REPAIR SHALL BE DETERMINED AS DIRECTED BY THE ENGINEER.
    (B) COLD WEATHER REPAIRS: DURING ADVERSE WEATHER CONDITIONS, LOW STRENGTH MORTAR (LSM) SHALL BE USED TO FILL THE TRENCH AND A 6" CONCRETE CAP TEMPORARILY INSTALLED USING A VISQUEEN BOND BREAKER.

ABUTTING ASPHALT CONTACT:

12. AT ANY POINT WHERE THE PROPOSED PAVEMENT MEETS EXISTING PAVEMENT, THE EXISTING PAVEMENT SHALL BE FULL DEPTH SAW CUT. THIS CUT SHALL BE PERPENDICULAR TO CENTERLINE REMOVING APPROXIMATELY ONE (1) FOOT OR ALL DAMAGED PAVEMENT AS DIRECTED BY THE ENGINEER. AN ADDITIONAL 18" OF ADJOINING ASPHALT SHALL BE MILLED 1 1/2" PRIOR TO APPLYING THE SURFACE COURSE. ASPHALT SURFACE CONCRETE PER DETAILS SHALL BE USED TO FEATHER THE TRANSITION AND MAINTAIN POSITIVE DRAINAGE BETWEEN THE EXISTING AND PROPOSED PAVEMENT.

UNDERGROUND UTILITY CONSTRUCTION REQUIREMENTS

UNDERGROUND UTILITIES:

1. UTILITIES INCLUDING GAS PIPES, TELEPHONE CABLES AND ELECTRICAL POWER AND STREET LIGHTING CIRCUITS ARE RECOMMENDED TO BE UNDERGROUND. ALL TRENCH BACKFILL IN PAVEMENT AREAS SHALL BE ODOT ITEM #304 AGGREGATE BASE COMPACTED BY VIBRATORY OR MECHANICAL TAMPING IN EIGHT (8) INCH LAYERS. ALL WIRING AND CABLES NOT CONTAINED WITHIN CONDUIT AND DIRECT BURIED, SHALL HAVE THEIR LOCATIONS MARKED WITH TECTO-TAPE OR FACSIMILE TWELVE (12) INCHES ABOVE SUCH DIRECT BURIED WIRING OR CABLE. REFER TO TRENCH EXCAVATION, BOTTOM PREPARATION AND BACKFILLING SECTION HEREIN.
2. ALL CONSTRUCTION OF UTILITY PIPE, CONDUIT, CABLE, WIRES, VAULTS AND PERTINENT EQUIPMENT SHALL COMPLY WITH THE CURRENT REGULATIONS OF THE PUBLIC UTILITIES COMMISSION OF OHIO AND WITH THE REQUIREMENTS OF THE UTILITIES INVOLVED.
3. THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS HAS BEEN OBTAINED BY DILIGENT FIELD CHECK AND SEARCHES OF AVAILABLE RECORDS. IT IS BELIEVED THAT THEY ARE ESSENTIALLY CORRECT, BUT THE DESIGN ENGINEER DOES NOT GUARANTEE THEIR ACCURACY OR COMPLETENESS AND THE CONTRACTOR IS THEREFORE URGED TO PROCEED WITH CAUTION.
4. EXISTING APPURTENANCES SUCH AS UTILITY POLES, VALVE BOXES, ETC. ARE TO BE SAFEGUARDED BY THE CONTRACTOR DURING CONSTRUCTION.
5. THE CONTRACTOR SHALL CONTACT THE UTILITIES PROTECTION SERVICE, 1-800-362-2764 AT LEAST FORTY-EIGHT (48) HOURS BEFORE ANY UNDERGROUND WORK IS COMMENCED IN EXISTING STREETS.

TRENCH EXCAVATION, BOTTOM PREPARATION AND BACKFILLING

GENERAL REQUIREMENTS:
ALL REQUIREMENTS FOR TRENCH EXCAVATION, BOTTOM PREPARATION AND BACKFILLING SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS AND DETAILS. NO BACKFILL MATERIAL SHALL BE FROZEN.

1. IF MATERIAL OTHER THAN ODOT ITEM 304 MATERIAL IS PROPOSED FOR USE AS TRENCH FILL WITHIN THE RIGHT-OF-WAY, A WRITTEN REQUEST MUST BE SUBMITTED TO THE MUNICIPAL ENGINEER. THE MATERIAL IS SUBJECT TO THE FOLLOWING REQUIREMENTS:
    (A) PROCTORS MUST BE CONDUCTED ON ALL FILL MATERIALS AND PLANNED COMPACTION METHODS SUBMITTED TO THIS OFFICE PRIOR TO ANY FILLING OPERATIONS BEING PERMITTED.
    (B) NEW PROCTORS MUST BE OBTAINED AS OFTEN AS THE SOIL MATERIAL CHANGES.
    (C) NO PROCTOR'S FROM PREVIOUS YEAR'S CONSTRUCTION WILL BE ACCEPTED.
    (D) SLAG IS NOT PERMITTED.
2. ALL CONDUITS SHALL BE INSTALLED ON A FIRM BED FOR ITS FULL LENGTH UNLESS OTHERWISE SPECIFIED.

TRENCH BACKFILLING:

3. WHERE BACKFILLING IS BEING PERFORMED, THE FOLLOWING SHALL CONFORM TO THE FOLLOWING LIMITS:
    (A) INSTALLATION UNDER PAVEMENT AND/OR WITHIN 45° ZONE OF INFLUENCE LINE OF PAVEMENT EDGE SHALL BE INSTALLED IN ACCORDANCE WITH ODOT ITEM 304 BACKFILL. THE ENTIRE TRENCH SHALL BE FILLED IN LAYERS NOT TO EXCEED EIGHT (8) INCHES IN THICKNESS AND COMPACTED WITH MECHANICAL TAMPERS AT THE SPECIFIED MOISTURE CONTENT UNTIL DRY DENSITY IS NOT LESS THAN 98% OF THE STANDARD PROCTOR. SLAG MATERIAL IS NOT ACCEPTABLE.
    (B) WITHIN THE RIGHT-OF-WAY (R/W) BUT NOT UNDER PAVEMENT OR NOT WITHIN 45° ZONE OF INFLUENCE LINE OF PAVEMENT EDGE, SUITABLE BACKFILL MATERIAL SHALL BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR, AT THE SPECIFIED MOISTURE CONTENT. THE ENTIRE TRENCH SHALL BE FILLED IN LAYERS NOT TO EXCEED EIGHT (8) INCHES WITH A MECHANICAL TAMPER.

TRENCH WIDTH:

4. WIDTHS OF TRENCHES SHALL BE HELD TO A MINIMUM TO ACCOMMODATE THE PIPE AND APPURTENANCES. NO SLAG IS ACCEPTABLE. THE TRENCH WIDTH SHALL BE MEASURED AT THE TOP OF THE PIPE BARREL AND SHALL CONFORM TO THE FOLLOWING LIMITS:
    (A) ALL PIPE HAVING A DIAMETER LESS THAN TWENTY-FOUR (24) INCHES SHALL HAVE A MINIMUM WIDTH OF NINE (9) INCHES MEASURED FROM OUTSIDE OF PIPE BARREL TO TRENCH WALL.
    (B) ALL PIPE HAVING A DIAMETER GREATER THAN TWENTY-FOUR (24) INCHES BUT LESS THAN SIXTY-SIX (66) INCHES SHALL HAVE A MINIMUM WIDTH OF TWELVE (12) INCHES MEASURED FROM OUTSIDE OF PIPE BARREL TO TRENCH WALL.
    (C) ALL PIPE HAVING A DIAMETER GREATER THAN SIXTY-SIX (66) INCHES SHALL HAVE A MINIMUM WIDTH OF FIFTEEN (15) INCHES MEASURED FROM OUTSIDE OF PIPE BARREL TO TRENCH WALL.

TRENCH PROTECTION:

5. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO PREVENT ANY CAVING OR SETTLING OF EXCAVATION OR TRENCH WALLS WHICH COULD ENDANGER THE SAFETY OF ANY PERSON ENGAGED IN THE WORK OR IN ANY WAY DAMAGE THE UNDERGROUND INSTALLATIONS OF ADJACENT UTILITIES OR PROPERTY; OR DIMINISH THE TRENCH WIDTH NECESSARY FOR THE PROPER CONSTRUCTION OF THE UNDERGROUND INSTALLATION OR OTHERWISE INJURE OR DELAY THE WORK. THE TYPE AND AMOUNT OF SUCH PROTECTION, SUCH AS TRENCH BOXES, SHEETING, SHORING, OR BRACING SHALL BE CONSISTENT WITH THE DEPTH AND WIDTH OF EXCAVATION, THE COMPOSITION AND WATER CONTENT OF THE SOIL, THE PROXIMITY OF STRUCTURES OR OTHER UTILITIES, THE VIBRATION FROM EQUIPMENT AND THE SPOIL PLACEMENT SHALL BE IN ACCORDANCE WITH THE LATEST OSHA REGULATIONS.

DEWATERING:

6. IN ORDER TO REDUCE GROUND WATER SEEPAGE AND PROVIDE A STABLE TRENCH BOTTOM IT MAY BE NECESSARY TO DEWATER PRIOR TO EXCAVATION OF THE SEWER TRENCH AND/OR PROVIDE TEMPORARY SUMPS.

FOUNDATION BOTTOM:

7. FOUNDATION MATERIAL BELOW THE PIPE AND SIX (6) INCHES OF SUBBEDDING SHALL BE SUITABLE MATERIAL THAT PREVENTS PIPE FROM DEFLECTION DUE TO SETTLEMENT. IF, IN THE ENGINEER'S OPINION, THE MATERIAL FORMING THE TRENCH BOTTOM IS NOT SUITABLE FOR A SOLID FOUNDATION, FURTHER DEPTH SHALL BE EXCAVATED AND THE SAME FILLED WITH MATERIAL AND THICKNESS SPECIFIED BY THE ENGINEER.

SUBBEDDING MATERIAL:

8. AFTER PREPARATION OF THE TRENCH BOTTOM, BEDDING MATERIAL SHALL BE PLACED BELOW PIPE. BEDDING MATERIAL SHALL BE #57 LIMESTONE WITH A MINIMUM THICKNESS OF SIX (6) INCHES AND SPREAD THE FULL WIDTH OF THE TRENCH BOTTOM. BEDDING MATERIAL SHALL NOT HAVE STANDING WATER AND BE FREE OF DEBRIS. ALL CONDUITS SHALL BE INSTALLED ON A FIRM BED FOR ITS FULL LENGTH..

PIPE PROTECTION:

9. ALL TRENCH EXCAVATION SHALL BE BACKFILLED IMMEDIATELY AFTER PIPE IS PLACED. AGGREGATE MATERIAL, #57 LIMESTONE, THOROUGHLY COMPACTED AND INSTALLED AS PER ASTM D-2321 SHALL PROTECT PIPE ACCORDING TO SPECIFICATIONS HEREIN. FLEXIBLE PIPE SHALL HAVE A MINIMUM COVERAGE OF TWELVE (12) INCHES OVER OUTSIDE PIPE BARREL. RIGID PIPE SHALL HAVE A MINIMUM COVERAGE OF SIX (6) INCHES OVER OUTSIDE PIPE BARREL.

SITE PREPARATION AND EARTHWORK NOTES

EARTHWORK NOTES

1. THE RECOMMENDATIONS INCLUDED IN THIS REPORT ARE NOT BASED ON TEST BORINGS, OR ANY KNOWN KNOWLEDGE OF SUBSURFACE CONDITIONS AT THE SITE. ANY FUTURE PROJECT DEVELOPMENT'S EXTENT AND DESIGN ARE UNKNOWN. THE INCLUDED RECOMMENDATIONS MUST BE CONSIDERED PRELIMINARY IN NATURE. ALL RECOMMENDATIONS HAVE BEEN MAINTAINED ON A HIGHLY GENERALIZED PLAN AND ARE NOT TO BE CONSTRUED AS SPECIFIC AND/OR FINALIZED. A DETAILED SITE INVESTIGATION INCLUDING TEST BORINGS, LABORATORY TESTS AND ANALYSIS WILL BE REQUIRED PRIOR TO ANY FINAL DESIGN FOR FUTURE IMPROVEMENTS.

SITE PREPARATION

2. PRECAUTIONS SHOULD BE EXERCISED DURING THE REMOVAL OF THE EXISTING BUILDING STRUCTURES AT THE PROPOSED SITE. ALL EXISTING FOUNDATIONS, FLOOR SLABS, BASEMENTS, ETC., SHOULD BE COMPLETELY REMOVED FROM THE SITE. THE EXCAVATIONS SHOULD BE CLEANED OF ALL FOREIGN DEBRIS AND THEN BACKFILLED WITH COMPACTED ENGINEERED FILL MATERIALS TO LESSEN POTENTIAL SETTLEMENT THAT MAY OCCUR.
3. FOLLOWING THE SITE CLEARING, STRIPPING AND UNDERCUTTING, AND PRIOR TO PLACING SUITABLE FILL, THE EXPOSED SUBGRADES SHOULD BE PROOFROLLED WITH A LOADED 20-TON TO 30-TON TANDEM-AXLE DUMP TRUCK UNTIL THE GRADE OFFERS A RELATIVELY UNYIELDING SURFACE. AREAS OF EXCESSIVE YIELDING SHOULD BE EXCAVATED AND BACKFILLED WITH COMPACTED SUITABLE FILL AND/OR THE UNSTABLE SOILS CAN BE STABILIZED BY CHOKING THE EXPOSED BEARING SURFACE WITH CRUSHED LIMESTONE OR SIMILAR COARSE AGGREGATE. AFTER THE EXISTING SUBGRADE MATERIALS ARE EXCAVATED PROPER CONTROL OF SUBGRADE COMPACTION AND THE PLACEMENT AND COMPACTION OF NEW FILL MATERIALS SHOULD BE PERFORMED.
4. IT IS RECOMMENDED THAT THE SITE PREPARATION, PROOFROLLING AND EARTHWORK ACTIVITIES SHOULD BE PERFORMED DURING A PERIOD OF DRY WEATHER, WHICH CAN SIGNIFICANTLY REDUCE THE REQUIRED EXTENT OF SOIL STABILIZATION, DRAINAGE AND SURFACE REPAIRS.
5. DURING SITE PREPARATION, BURN PITS, TRASH PITS OR OTHER ISOLATED DISPOSAL AREAS MAYBE ENCOUNTERED. ANY SUCH MATERIALS ENCOUNTERED DURING SITE WORK ON CONSTRUCTION SHOULD BE COMPLETELY EXCAVATED AND REMOVED FROM THE SITE.

SUITABLE FILL

6. SUITABLE FILL MATERIALS SHOULD CONSIST OF NON-EXPANSIVE MATERIALS, POTENTIALLY EXPANSIVE MATERIALS SHOULD NOT BE USED AS SUITABLE FILL MATERIAL. MATERIALS SELECTED FOR USE AS SUITABLE FILL SHOULD NOT CONTAIN ORGANIC MATTER, WASTE CONSTRUCTION DEBRIS, OR OTHER DELETERIOUS MATERIALS, FILL MATERIALS SHOULD GENERALLY HAVE A STANDARD PROCTOR MAXIMUM DRY DENSITY GREATER THAN 110 POUNDS PER CUBIC FOOT (PCF), AN ATTERBERG LIQUID LIMIT LESS THAN 40, A PLASTICITY INDEX OF LESS THAN 20, AND A MAXIMUM PARTICLE SIZE OF 2 INCHES OR LESS.
7. REPRESENTATIVE SAMPLES OF THE PROPOSED FILL MATERIAL SHOULD BE COLLECTED AT LEAST ONE WEEK PRIOR TO THE START OF THE FILLING OPERATIONS. THE SAMPLES SHOULD BE TESTED TO DETERMINE THE MAXIMUM DRY DENSITY, OPTIMUM MOISTURE CONTENT, PARTICLE SIZE DISTRIBUTION AND PLASTICITY CHARACTERISTICS. THESE TESTS ARE NEEDED TO DETERMINE IF THE MATERIAL IS ACCEPTABLE AS SUITABLE FILL AND FOR QUALITY CONTROL DURING THE COMPACTION PROCESS.
8. THE FILL SHOULD BE PLACED IN LAYERS OF NOT MORE THAN 8 INCHES IN THICKNESS, WITH EACH LAYER BEING COMPACTED TO A MINIMUM DENSITY OF 98 PERCENT OF THE MAXIMUM DRY DENSITY AND WITH +/- 2% OF THE OPTIMUM MOISTURE CONTENT, AS DETERMINED BY THE STANDARD PROCTOR METHOD ASTM D-698. MOISTURE CONTROL OF THE SUITABLE FILL MATERIALS MAY BE NECESSARY FOR COMPACTION.
9. SUITABLE FILL OPERATIONS WILL REQUIRE MONITORING/TESTING BY A GEOTECHNICAL CONSULTANT TO ENSURE PROPER COMPACTION REQUIREMENTS ARE MET.

GROUNDWATER CONTROL AND DRAINAGE

10. WATER SEEPING MAY BE ENCOUNTERED DURING FOUNDATION EXCAVATION AND DEMOLITION. ACCORDINGLY, A GRAVITY DRAINAGE SYSTEM, SUMP PUMP OR OTHER CONVENTIONAL DEWATERING PROCEDURE AS DEEMED NECESSARY BY THE FIELD CONDITIONS MAY BE NECESSARY. EVERY EFFORT SHOULD BE MADE TO KEEP THE EXCAVATIONS DRY IF WATER IS ENCOUNTERED.
11. POSITIVE SITE DRAINAGE SHOULD BE PROVIDED TO REDUCE INFILTRATION OF SURFACE WATER AROUND THE PERIMETER OF THE FILL AREA. OVERALL SITE AREA DRAINAGE IS TO BE ARRANGED IN A MANNER SUCH THAT THE POSSIBILITY OF WATER IMPOUNDING OVER THE STRUCTURAL FILL IS PREVENTED.

EXCAVATIONS

12. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DESIGNING AND CONSTRUCTING STABLE, TEMPORARY EXCAVATIONS AND SHOULD SHORE, SLOPE, OR BENCH THE SIDES OF THE EXCAVATIONS AS REQUIRED TO MAINTAIN STABILITY OF BOTH THE EXCAVATION SIDES AND BOTTOM. THE CONTRACTOR SHOULD EVALUATE THE SOIL EXPOSED IN THE EXCAVATIONS AS PART OF THE CONTRACTOR'S SAFETY PROCEDURES. IN NO CASE SHOULD SLOPE HEIGHT, SLOPE INCLINATION, OR EXCAVATION DEPTH INCLUDING UTILITY TRENCH EXCAVATION DEPTH, EXCEED THOSE SPECIFIED IN LOCAL, STATE AND FEDERAL SAFETY REGULATIONS.
13. MATERIALS REMOVED FROM THE EXCAVATION SHOULD NOT BE STOCKPILED IMMEDIATELY ADJACENT TO THE EXCAVATION, INASMUCH AS THIS LOAD MAY CAUSE A SUDDEN COLLAPSE OF THE EMBANKMENT.

WEATHER CONSIDERATIONS

14. THE SOILS COULD BE SENSITIVE TO DISTURBANCES CAUSED BY CONSTRUCTION TRAFFIC AND TO CHANGES IN MOISTURE CONTENT. DURING WET WEATHER PERIODS, INCREASES IN THE MOISTURE CONTENT OF THE SOIL CAN CAUSE SIGNIFICANT REDUCTION IN THE SOIL STRENGTH AND SUPPORT CAPABILITIES. CARE SHOULD BE EXERCISED DURING THE GRADING OPERATIONS AT THE SITE. TRAFFIC OF HEAVY EQUIPMENT, INCLUDING HEAVY COMPACTION EQUIPMENT, MAY VERY WELL CREATE PUMPING AND A GENERAL DETERIORATION OF THE SOILS IN THE PRESENCE OF WATER. THEREFORE, THE GRADING SHOULD, IF AT ALL POSSIBLE, BE PERFORMED DURING A DRY SEASON. A LAYER OF CRUSHED STONE MAY BE REQUIRED TO ALLOW THE MOVEMENT OF CONSTRUCTION TRAFFIC OVER THE SITE DURING THE RAINY SEASON. THE CONTRACTOR SHOULD MAINTAIN POSITIVE SITE DRAINAGE AND IF WET/PUMPING CONDITIONS OCCUR, THE CONTRACTOR WILL BE RESPONSIBLE TO OVER EXCAVATE THE WET SOILS AND REPLACE THEM WITH A PROPERLY COMPACTED ENGINEERED FILL.

STATE OF OHIO
JOHN URBANICK
E-66506
REGISTERED
PROFESSIONAL ENGINEER

ROCKAWAY CIVIL
Rockaway Civil LLC
10191 Sperry Road Kirtland Ohio 44094
440 655 8182 www.rockawaycivil.com

LAKEMETROPARKS

OHIO811.org Before You Dig

LAKEFRONT LODGE
30525 LAKESHORE BOULEVARD
WILLOWICK, OHIO 44095

Project Name

Sheet Revision

1	BID SET	05-20-2026

Project Issue

CIVIL COVER SHEET

Sheet Name

C001

Sheet #

RC Project # 26-001

DEMOLITION PLAN KEY NOTE LEGEND

1. MAKE FULL DEPTH SAW CUT AT PAVEMENT REMOVAL LIMITS

DEMOLITION PLAN NOTES

1. TBR = TO BE REMOVED
2. ETR = EXISTING TO REMAIN
3. OUPS SHALL BE CONTACTED 2 DAYS PRIOR TO ANY ON SITE EXCAVATION PERFORMED AS PART OF THIS PROJECT 1-800-362-2764.
4. THE MOST CURRENT VERSION OF OHIO'S RAINWATER AND LAND DEVELOPMENT MANUAL SHALL BE APPLICABLE TO THIS PROJECT.
5. THE CONTRACTOR SHALL CONDUCT OPERATIONS WITH A MINIMUM INTERFERENCE TO PUBLIC OR PRIVATE THOROUGHFARES. MAINTAIN INGRESS EGRESS AND ACCESS AT ALL TIMES. DO NOT CLOSE OR OBSTRUCT ROADWAYS AND SIDEWALKS WITHOUT APPROPRIATE PERMITS.
6. CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL OF ALL STRUCTURES, PADS, WALLS, FOUNDATIONS, PARKING, DRIVES, DRAINAGE STRUCTURES, UTILITIES , ETC..., IN A LOCATION APPROVED BY ALL GOVERNING AGENCIES. ALL ITEMS REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL.
7. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL DEMOLITION RELATED PERMITS, INCLUDING AN EPA NOTICE OF INTENT, IF NECESSARY.
8. THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES OR DEPARTMENTS PRIOR TO REMOVAL OR SHUTOFF OR INSTALLATION OF ANY UTILITIES. THE CONTRACTOR SHALL COORDINATE WORK WITH THE UTILITY COMPANIES AS TO WHICH PORTIONS ARE TO BE PERFORMED BY THE UTILITY COMPANY.
9. CONTRACTOR IS CAUTIONED THAT THE LOCATION AND/ OR ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 48 HOURS IN ADVANCE OF ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF THE UTILITIES.
10. EXISTING UTILITIES OR STRUCTURES NOT DESIGNATED FOR REMOVAL ARE TO REMAIN.
11. ALL WASTE OR DEBRIS GENERATED AS PART OF SITE DEMOLITION SHALL BE DISPOSED OF OFF SITE AS PER CURRENT GOVERNMENT REGULATIONS.
12. ALL PROJECT AREAS DESIGNATED TO BE PAVED OR BUILT UPON SHALL BE CLEARED AND GRUBBED AS PER PROJECT SPECIFICATIONS.
13. ANY FILL MATERIAL SALVAGED FROM GRADING OPERATIONS THAT CAN BE DETERMINED BY AN INDEPENDENT TESTING AGENCY TO BE SUITABLE, SHALL BE USED FOR FILL MATERIAL AS APPROPRIATE.
14. ALL EXISTING LANDSCAPING WITHIN THE PROJECT LIMITS SHALL BE REMOVED, EXCEPT AS SHOWN TO REMAIN. TREES BEING REMOVED SHALL HAVE THEIR STUMPS GROUND.
15. CONTRACTOR SHALL MAKE PROVISIONS FOR STORM WATER DURING DEMOLITION PROCESS.
16. ALL STRUCTURES, UTILITIES, ETC.. NOT DESIGNATED FOR REMOVAL SHALL BE PROTECTED BY THE CONTRACTOR DURING CONSTRUCTION.
17. DEMOLITION SHALL BE PERFORMED WITH CARE AND DUE DILIGENCE AS TO NOT DISRUPT THE OPERATION OF EXISTING UTILITY SERVICES TO REMAIN. ANY UTILITY DISCOVERED DURING DEMOLITION OR CONSTRUCTION, WHICH IS NOT SHOWN ON THE PLANS, SHALL BE REPORTED TO THE DESIGN ENGINEER FOR EVALUATION.
18. CONTRACTOR SHALL PROTECT ALL TREES AND LANDSCAPING NOTED TO REMAIN.
19. ALL ITEMS NOTED TO BE SALVAGED ARE TO BE PACKAGED BY THE CONTRACTOR AND TURNED OVER TO THE OWNER FOR REUSE. COORDINATE TURNOVER WITH OWNER.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION, RELOCATION, AND MAINTENANCE OF ALL EROSION CONTROL AND SEDIMENT PRACTICES.
21. OWNER SHALL PROVIDE ABATEMENT RELATED TO ASBESTOS, LEAD CONTAINING MATERIALS, MERCURY, ETC.. AS NEEDED PRIOR TO DEMOLITION.
22. EXISTING PAVEMENT TYPES SHOWN ARE SURFACE CONDITIONS. DIFFERENT PAVEMENT TYPES MAY EXIST BELOW THE SURFACE. THE COST TO COMPLETELY REMOVE UP TO 12 INCHES OF ALL EXISTING PAVEMENT SECTIONS SHALL BE INCLUDED AS PART OF THE BID.
23. ALL LAWN AREAS REMOVED OR DISTURBED SHALL BE REPLACED BY SEEDING AND MULCHING IN ACCORDANCE WITH ITEM 659 OF ODOT SPECIFICATIONS AND SHALL BE RESEEDED AND MULCHED WHEN REQUESTED IF SATISFACTORY RE-ESTABLISHMENT OF LAWN DOES NOT OCCUR.

STATE OF OHIO
JOHN URBANICK
E-66506
REGISTERED
PROFESSIONAL ENGINEER

ROCKAWAY CIVIL
Rockaway Civil LLC
10191 Sperry Road Kirtland Ohio 44094
440 655 8182 www.rockawaycivil.com

LAKEMETROPARKS

OHIO811.org Before You Dig

N

SCALE: 1"= 30'

LAKEFRONT LODGE

30525 LAKESHORE BOULEVARD
WILLOWICK, OHIO 44095

Project Name

Sheet Revision

1	BID SET	05-20-2026

Project Issue

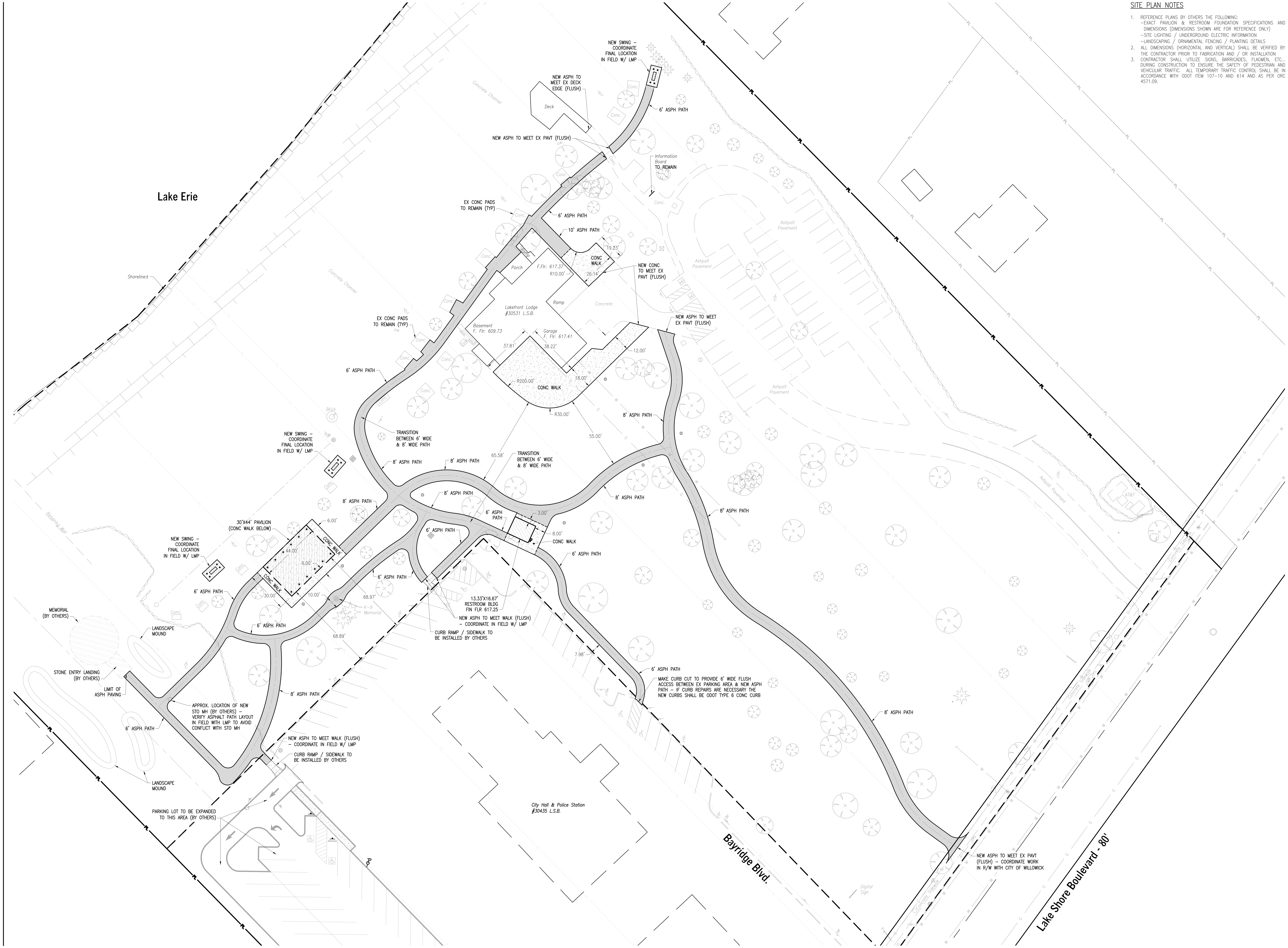
DEMOLITION PLAN

Sheet Name

C100

Sheet #

RC Project # 26-001



SITE PLAN NOTES

1. REFERENCE PLANS BY OTHERS THE FOLLOWING:
   - EXACT PAVILION & RESTROOM FOUNDATION SPECIFICATIONS AND DIMENSIONS (DIMENSIONS SHOWN ARE FOR REFERENCE ONLY)
   - SITE LIGHTING / UNDERGROUND ELECTRIC INFORMATION
   - LANDSCAPING / ORNAMENTAL FENCING / PLANTING DETAILS
2. ALL DIMENSIONS (HORIZONTAL AND VERTICAL) SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO FABRICATION AND / OR INSTALLATION
3. CONTRACTOR SHALL UTILIZE SIGNS, BARRICADES, FLAGMEN, ETC... DURING CONSTRUCTION TO ENSURE THE SAFETY OF PEDESTRIAN AND VEHICULAR TRAFFIC. ALL TEMPORARY TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH ODOT ITEM 107-10 AND 614 AND AS PER ORC 4571.09.

STATE OF OHIO JOHN URBANICK E-66506 REGISTERED PROFESSIONAL ENGINEER

ROCKAWAY CIVIL
Rockaway Civil LLC
10191 Sperry Road Kirtland Ohio 44094
440 655 8182 www.rockawaycivil.com

LAKEMETROPARKS

OHIO811.org Before You Dig

N

0 30'

SCALE: 1"= 30'

LAKEFRONT LODGE

30525 LAKESHORE BOULEVARD
WILLOWICK, OHIO 44095

Project Name

Sheet Revision

1	BID SET	05-20-2026

Project Issue

SITE PLAN

Sheet Name

C101

Sheet #

RC Project # 26-001

UTILITY PLAN KEY NOTE LEGEND

1. MAKE NEW CONNECTION ON EXISTING WATER SERVICE & INCLUDE VALVE FOR 1.5" DOMESTIC WATER SERVICE CONNECTION
2. MAKE NEW 6" WYE CONNECTION ON EXISTING SANITARY SEWER – FIELD VERIFY EXISTING SANITARY PIPE SIZE, MATERIAL, INVERT, ETC.
3. 6" PVC BEND (11.25°)
4. 6" PVC WYE W/ CLEANOUT (FLUSH W/ FINAL GROUND GRADE)
5. 4" SANITARY TO BUILDING – USE 6"X4" PVC REDUCER AS NECESSARY
6. FIELD VERIFY THE LOCATION, SIZE, DEPTH, ETC. OF EXISTING UTILITIES AT CROSSINGS WITH NEW UTILITIES – FIELD VERIFY 12" MIN VERTICAL CLEARANCE AT CROSSINGS PRIOR TO WORK – NOTIFY ENGINEER IF CONFLICTS ARE IDENTIFIED.

STORM STRUCTURE DATA

1. CB = CATCH BASIN
2. CI = CURB INLET
3. MH = MANHOLE
4. YD = YARD DRAIN (NYLOPLAST)
5. STORM CATCH BASINS NOT SPECIFICALLY LABELED SHALL BE ODOT 2-2 INSIDE DIMENSIONS. REFERENCE PLAN FOR THOSE STRUCTURES REQUIRING 2-3 OR 2-4 INSIDE DIMENSIONS.
6. STORM MANHOLES NOT SPECIFICALLY LABELED SHALL HAVE THE TYPICAL 48" INSIDE DIAMETER. REFERENCE PLAN FOR THOSE MANHOLES REQUIRING 60" OR 72" INSIDE DIAMETERS.
7. NO GRATES SHALL REST DIRECTLY ON PRECAST CONCRETE STRUCTURES.
8. ALL STORM STRUCTURE FRAME AND GRATES SHALL BE HEAVY DUTY AND SHALL BE "OPEN" GRATE TYPE FOR SURFACE INFLOW UNLESS SPECIFICALLY LABELED AS "SOLID". THE BELOW-LISTED CASTINGS (OR APPROVED EQUALS) ARE TO BE USED UNLESS NOTED OTHERWISE ON THE PLANS:
   - CATCH BASINS (TYPICAL)
     FRAME – EJIW 5250Z
     GRATE – EJIW 5250M
   - CATCH BASINS WITH ADA STYLE GRATE (ONLY WHERE NOTED ON PLAN)
     FRAME – EJIW V5622
     GRATE – EJIW V5622-80

STORM PIPE MATERIAL DATA

1. PP = DUAL WALLED POLYPROPYLENE PIPE PER ASTM F2764 (12-60 INCH) AND WATERTIGHT JOINTS PER ASTM D3212. USE ADS HP STORM OR APPROVED EQUAL.
2. HDPE = HIGH DENSITY POLYETHYLENE SEWER PIPE, WATERTIGHT BELL AND SPIGOT TYPE WITH RUBBER GASKETS AND SMOOTH INTERIOR, PER THE LATEST AASHTO M-294 SPECIFICATION.
3. PVC = SDR 35 POLYVINYL CHLORIDE PIPING PER ASTM D3034 WITH PREMIUM JOINTS PER ASTM F 477 ASTM D 3212.

UTILITY PLAN NOTES

GENERAL

1. CONTRACTOR SHALL VERIFY ALL UTILITY CROSSING DEPTHS, SIZES, TYPES, CONDITIONS, ETC.. PRIOR TO CONSTRUCTION AND SHALL NOTIFY DESIGN ENGINEER WITH ANY CONFLICTS.
2. CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO EXISTING ITEMS AND MATERIALS ENCOUNTERED DURING CONSTRUCTION. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL AND STATE CODES AND REGULATIONS.
3. CONTRACTOR SHALL COORDINATE WORK WITH ALL UTILITY AGENCIES AS NECESSARY TO INSURE PROPER INSTALLATION OF SITE UTILITIES.
4. COORDINATE UTILITY CONNECTIONS AT THE BUILDING(S) WITH THE ARCHITECTURAL / MEP PLANS.
5. ANY EXISTING UTILITY CONNECTIONS BEING ABANDONED SHALL BE DISCONNECTED AND/OR CAPPED AS PER JURISDICTION OF THE RESPECTIVE UTILITY AGENCY.
6. ALL NEW FLEXIBLE PUBLIC SEWER PIPE 8" AND LARGER WILL HAVE TO UNDERGO DEFLECTION TESTING AS PER THE REQUIREMENTS OF THE CITY ENGINEER.
7. ALL NEW STORM SEWER AND SANITARY SEWER IMPROVEMENTS SHALL BE INSTALLED, INSPECTED, AND TESTED AS PER THE CURRENT REQUIREMENTS OF THE CITY ENGINEER.
8. CONTRACTOR IS REQUIRED TO FIELD VERIFY THE EXISTING CONDITIONS (SIZE, CONDITION, PIPE MATERIAL, INVERT ELEVATION) OF ALL SANITARY SEWER AND STORM SEWER CONNECTION POINT(S). THESE FIELD VERIFICATIONS SHALL BE PERFORMED AS EARLY AS POSSIBLE DURING THE PROJECT CONSTRUCTION PERIOD. PRIOR TO FABRICATION OF ALL PRECAST STRUCTURES, THE CONTRACTOR SHALL CONFIRM WITH THE ARCHITECT/ENGINEER THAT THE FIELD VERIFIED CONDITIONS ARE SUITABLE FOR THE DESIGN. ALL ADDITIONAL PRECAST STRUCTURE RELATED WORK DUE TO THE LACK OF VERIFICATION OF EXISTING CONDITIONS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
9. ALL UNFORESEEN UNDERGROUND OR ABOVE GROUND UTILITIES OR CONDITIONS THAT ARE DISCOVERED IN THE PROJECT AREA DURING CONSTRUCTION SHALL BE REPORTED BY THE CONTRACTOR TO THE DESIGN ENGINEER IMMEDIATELY FOR EVALUATION / POSSIBLE REDESIGN. THE FIELD DATA SHALL INCLUDE MATERIAL TYPE, SIZE, CONDITION, LOCATION, DEPTH / ELEVATION, ETC..
10. PREMIUM BACKFILL SHALL BE USED FOR STORM SEWER AND SANITARY SEWERS UNDER PAVEMENT ON PRIVATE PROPERTY.

SANITARY

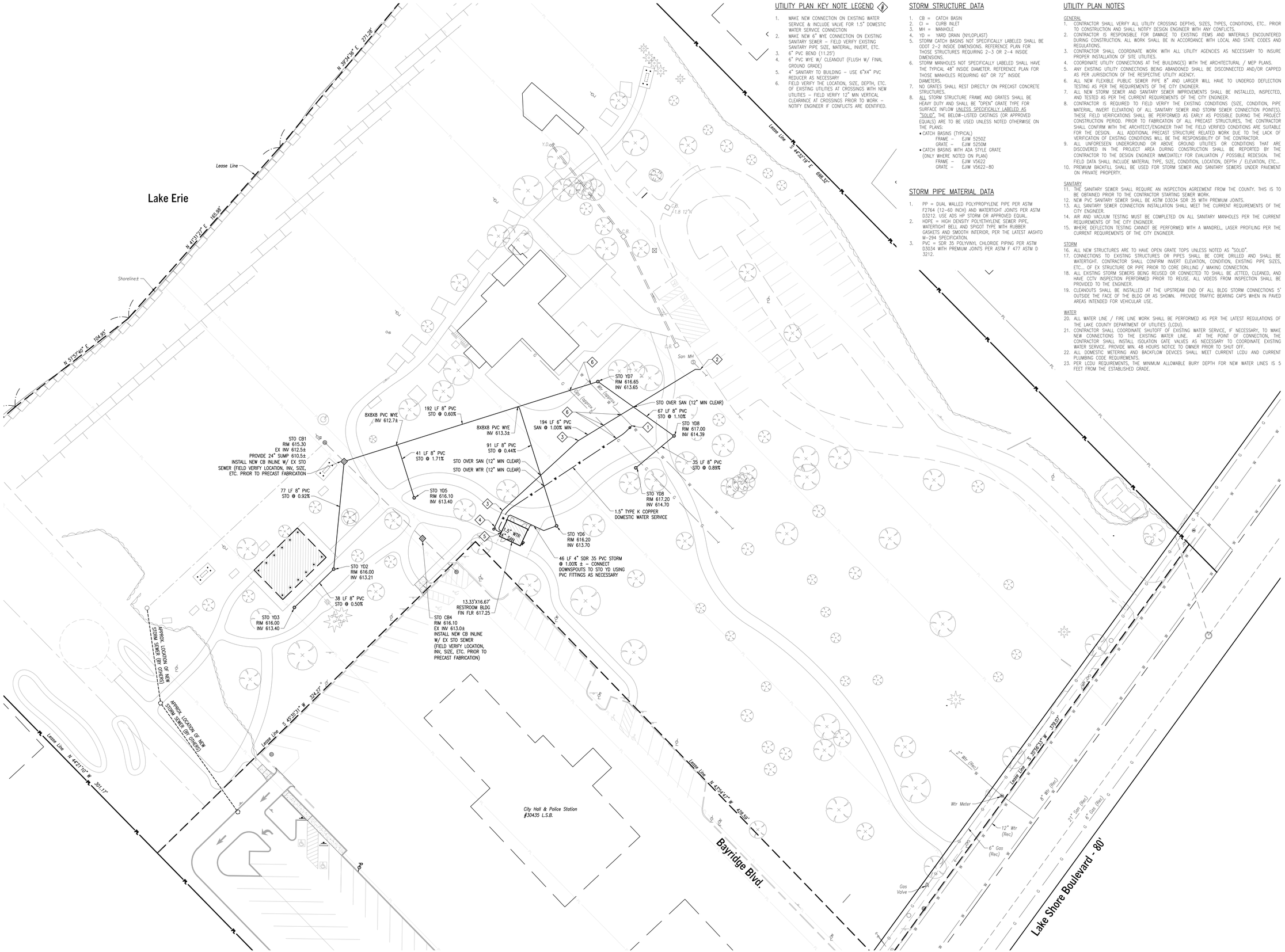
11. THE SANITARY SEWER SHALL REQUIRE AN INSPECTION AGREEMENT FROM THE COUNTY. THIS IS TO BE OBTAINED PRIOR TO THE CONTRACTOR STARTING SEWER WORK.
12. NEW PVC SANITARY SEWER SHALL BE ASTM D3034 SDR 35 WITH PREMIUM JOINTS.
13. ALL SANITARY SEWER CONNECTION INSTALLATION SHALL MEET THE CURRENT REQUIREMENTS OF THE CITY ENGINEER.
14. AIR AND VACUUM TESTING MUST BE COMPLETED ON ALL SANITARY MANHOLES PER THE CURRENT REQUIREMENTS OF THE CITY ENGINEER.
15. WHERE DEFLECTION TESTING CANNOT BE PERFORMED WITH A MANDREL, LASER PROFILING PER THE CURRENT REQUIREMENTS OF THE CITY ENGINEER.

STORM

16. ALL NEW STRUCTURES ARE TO HAVE OPEN GRATE TOPS UNLESS NOTED AS "SOLID".
17. CONNECTIONS TO EXISTING STRUCTURES OR PIPES SHALL BE CORE DRILLED AND SHALL BE WATERTIGHT. CONTRACTOR SHALL CONFIRM INVERT ELEVATION, CONDITION, EXISTING PIPE SIZES, ETC... OF EX STRUCTURE OR PIPE PRIOR TO CORE DRILLING / MAKING CONNECTION.
18. ALL EXISTING STORM SEWERS BEING REUSED OR CONNECTED TO SHALL BE JETTED, CLEANED, AND HAVE CCTV INSPECTION PERFORMED PRIOR TO REUSE. ALL VIDEOS FROM INSPECTION SHALL BE PROVIDED TO THE ENGINEER.
19. CLEANOUTS SHALL BE INSTALLED AT THE UPSTREAM END OF ALL BLDG STORM CONNECTIONS 5' OUTSIDE THE FACE OF THE BLDG OR AS SHOWN. PROVIDE TRAFFIC BEARING CAPS WHEN IN PAVED AREAS INTENDED FOR VEHICULAR USE.

WATER

20. ALL WATER LINE / FIRE LINE WORK SHALL BE PERFORMED AS PER THE LATEST REGULATIONS OF THE LAKE COUNTY DEPARTMENT OF UTILITIES (LCDU).
21. CONTRACTOR SHALL COORDINATE SHUTOFF OF EXISTING WATER SERVICE, IF NECESSARY, TO MAKE NEW CONNECTIONS TO THE EXISTING WATER LINE. AT THE POINT OF CONNECTION, THE CONTRACTOR SHALL INSTALL ISOLATION GATE VALVES AS NECESSARY TO COORDINATE EXISTING WATER SERVICE. PROVIDE MIN. 48 HOURS NOTICE TO OWNER PRIOR TO SHUT OFF.
22. ALL DOMESTIC METERING AND BACKFLOW DEVICES SHALL MEET CURRENT LCDU AND CURRENT PLUMBING CODE REQUIREMENTS.
23. PER LCDU REQUIREMENTS, THE MINIMUM ALLOWABLE BURY DEPTH FOR NEW WATER LINES IS 5 FEET FROM THE ESTABLISHED GRADE.



ENGINEER
STATE OF OHIO
JOHN URBANICK
E-66506
REGISTERED
PROFESSIONAL

ROCKAWAY CIVIL
Rockaway Civil LLC
10191 Sperry Road Kirtland Ohio 44094
440 655 8182 www.rockawaycivil.com

LAKEMETROPARKS

OHIO811.org Before You Dig

N 0 30'
SCALE: 1"= 30'

LAKEFRONT LODGE
30525 LAKESHORE BOULEVARD
WILLOWICK, OHIO 44095

Project Name

Sheet Revision

1	BID SET	05-20-2026

Project Issue

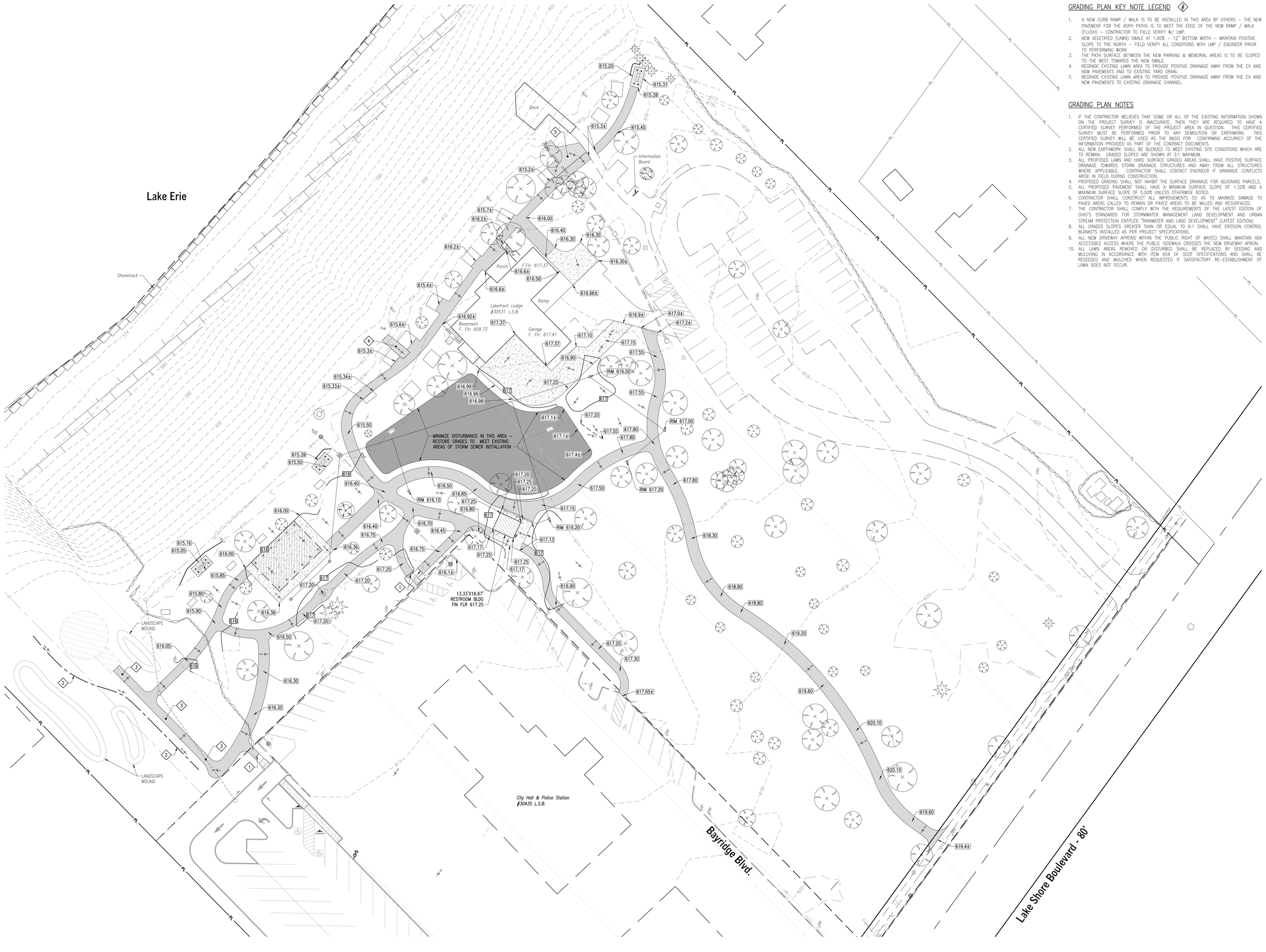
UTILITY PLAN

Sheet Name

C102

Sheet #

RC Project # 26-001



GRADING PLAN KEY NOTE LEGEND

1. A NEW CURB RAMP / WALK IS TO BE INSTALLED IN THIS AREA BY OTHERS – THE NEW PAVEMENT FOR THE ASPH PATHS IS TO MEET THE EDGE OF THE NEW RAMP / WALK (FLUSH) – CONTRACTOR TO FIELD VERIFY W/ LMP.
2. NEW VEGETATED (LAWN) SWALE AT 1.00% – 12" BOTTOM WIDTH – MAINTAIN POSITIVE SLOPE TO THE NORTH – FIELD VERIFY ALL CONDITIONS WITH LMP / ENGINEER PRIOR TO PERFORMING WORK.
3. THE PATH SURFACE BETWEEN THE NEW PARKING & MEMORIAL AREAS IS TO BE SLOPED TO THE WEST TOWARDS THE NEW SWALE.
4. REGRADE EXISTING LAWN AREA TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE EX AND NEW PAVEMENTS AND TO EXISTING YARD DRAIN.
5. REGRADE EXSITING LAWN AREA TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE EX AND NEW PAVEMENTS TO EXISTING DRAINAGE CHANNEL.

GRADING PLAN NOTES

1. IF THE CONTRACTOR BELIEVES THAT SOME OR ALL OF THE EXISTING INFORMATION SHOWN ON THE PROJECT SURVEY IS INACCURATE, THEN THEY ARE REQUIRED TO HAVE A CERTIFIED SURVEY PERFORMED OF THE PROJECT AREA IN QUESTION. THIS CERTIFIED SURVEY MUST BE PERFORMED PRIOR TO ANY DEMOLITION OR EARTHWORK. THIS CERTIFIED SURVEY WILL BE USED AS THE BASIS FOR CONFIRMING ACCURACY OF THE INFORMATION PROVIDED AS PART OF THE CONTRACT DOCUMENTS.
2. ALL NEW EARTHWORK SHALL BE BLENDED TO MEET EXISTING SITE CONDITIONS WHICH ARE TO REMAIN. GRADED SLOPES ARE SHOWN AT 3:1 MAXIMUM.
3. ALL PROPOSED LAWN AND HARD SURFACE GRADED AREAS SHALL HAVE POSITIVE SURFACE DRAINAGE TOWARDS STORM DRAINAGE STRUCTURES AND AWAY FROM ALL STRUCTURES WHERE APPLICABLE. CONTRACTOR SHALL CONTACT ENGINEER IF DRAINAGE CONFLICTS ARISE IN FIELD DURING CONSTRUCTION.
4. PROPOSED GRADING SHALL NOT INHIBIT THE SURFACE DRAINAGE FOR ADJOINING PARCELS.
5. ALL PROPOSED PAVEMENT SHALL HAVE A MINIMUM SURFACE SLOPE OF 1.20% AND A MAXIMUM SURFACE SLOPE OF 5.00% UNLESS OTHERWISE NOTED.
6. CONTRACTOR SHALL CONSTRUCT ALL IMPROVEMENTS SO AS TO MINIMIZE DAMAGE TO PAVED AREAS CALLED TO REMAIN OR PAVED AREAS TO BE MILLED AND RESURFACED.
7. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE LATEST EDITION OF OHIO'S STANDARDS FOR STORMWATER MANAGEMENT LAND DEVELOPMENT AND URBAN STREAM PROTECTION ENTITLED "RAINWATER AND LAND DEVELOPMENT" (LATEST EDITION).
8. ALL GRADED SLOPES GREATER THAN OR EQUAL TO 6:1 SHALL HAVE EROSION CONTROL BLANKETS INSTALLED AS PER PROJECT SPECIFICATIONS.
9. ALL NEW DRIVEWAY APRONS WITHIN THE PUBLIC RIGHT OF WAY(S) SHALL MAINTAIN ADA ACCESSIBLE ACCESS WHERE THE PUBLIC SIDEWALK CROSSES THE NEW DRIVEWAY APRON.
10. ALL LAWN AREAS REMOVED OR DISTURBED SHALL BE REPLACED BY SEEDING AND MULCHING IN ACCORDANCE WITH ITEM 659 OF ODOT SPECIFICATIONS AND SHALL BE RESEEDED AND MULCHED WHEN REQUESTED IF SATISFACTORY RE-ESTABLISHMENT OF LAWN DOES NOT occur.

STATE OF OHIO ENGINEER JOHN URBANICK E-66506 REGISTERED PROFESSIONAL

ROCKAWAY CIVIL
Rockaway Civil LLC
10191 Sperry Road Kirtland Ohio 44094
440 655 8182 www.rockawaycivil.com

LAKEMETROPARKS

OHIO811.org Before You Dig

N 0 30' SCALE: 1"= 30'

LAKEFRONT LODGE

30525 LAKESHORE BOULEVARD
WILLOWICK, OHIO 44095

Project Name

Sheet Revision

1	BID SET	05-20-2026

Project Issue

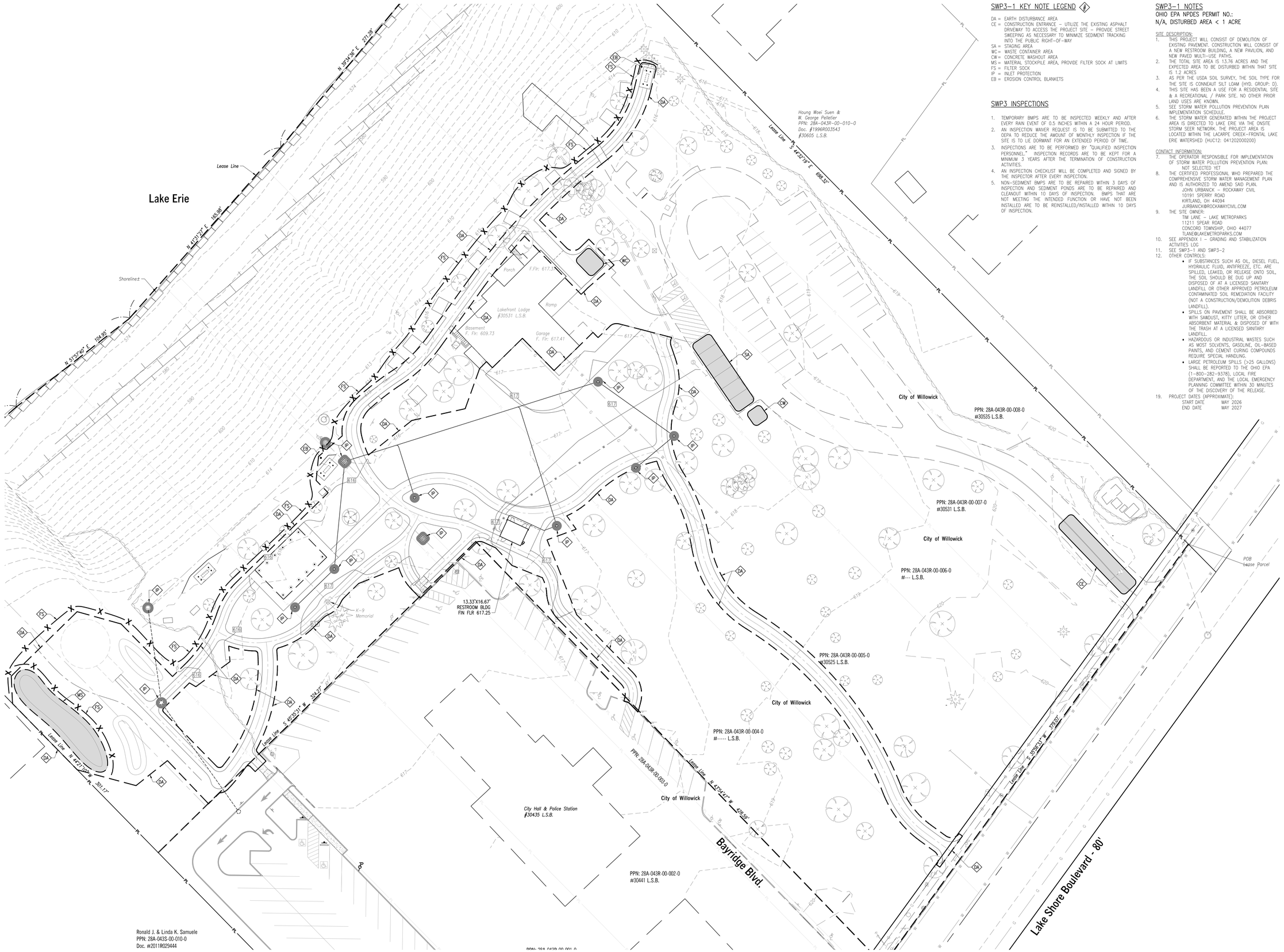
GRADING PLAN

Sheet Name

C103

Sheet #

RC Project # 26-001



SWP3-1 KEY NOTE LEGEND

DA = EARTH DISTURBANCE AREA
CE = CONSTRUCTION ENTRANCE – UTILIZE THE EXISTING ASPHALT DRIVEWAY TO ACCESS THE PROJECT SITE – PROVIDE STREET SWEEPING AS NECESSARY TO MINIMIZE SEDIMENT TRACKING INTO THE PUBLIC RIGHT-OF-WAY
SA = STAGING AREA
WC = WASTE CONTAINER AREA
CW = CONCRETE WASHOUT AREA
MS = MATERIAL STOCKPILE AREA, PROVIDE FILTER SOCK AT LIMITS
FS = FILTER SOCK
IP = INLET PROTECTION
EB = EROSION CONTROL BLANKETS

SWP3 INSPECTIONS

1. TEMPORARY BMPS ARE TO BE INSPECTED WEEKLY AND AFTER EVERY RAIN EVENT OF 0.5 INCHES WITHIN A 24 HOUR PERIOD.
2. AN INSPECTION WAIVER REQUEST IS TO BE SUBMITTED TO THE OEPA TO REDUCE THE AMOUNT OF MONTHLY INSPECTION IF THE SITE IS TO LIE DORMANT FOR AN EXTENDED PERIOD OF TIME.
3. INSPECTIONS ARE TO BE PERFORMED BY "QUALIFIED INSPECTION PERSONNEL." INSPECTION RECORDS ARE TO BE KEPT FOR A MINIMUM 3 YEARS AFTER THE TERMINATION OF CONSTRUCTION ACTIVITIES.
4. AN INSPECTION CHECKLIST WILL BE COMPLETED AND SIGNED BY THE INSPECTOR AFTER EVERY INSPECTION.
5. NON-SEDIMENT BMPS ARE TO BE REPAIRED WITHIN 3 DAYS OF INSPECTION AND SEDIMENT PONDS ARE TO BE REPAIRED AND CLEANOUT WITHIN 10 DAYS OF INSPECTION. BMPS THAT ARE NOT MEETING THE INTENDED FUNCTION OR HAVE NOT BEEN INSTALLED ARE TO BE REINSTALLED/INSTALLED WITHIN 10 DAYS OF INSPECTION.

SWP3-1 NOTES

OHIO EPA NPDES PERMIT NO.:
N/A, DISTURBED AREA < 1 ACRE

SITE DESCRIPTION:

1. THIS PROJECT WILL CONSIST OF DEMOLITION OF EXISTING PAVEMENT. CONSTRUCTION WILL CONSIST OF A NEW RESTROOM BUILDING, A NEW PAVILION, AND NEW PAVED MULTI-USE PATHS.
2. THE TOTAL SITE AREA IS 13.76 ACRES AND THE EXPECTED AREA TO BE DISTURBED WITHIN THAT SITE IS 1.2 ACRES
3. AS PER THE USDA SOIL SURVEY, THE SOIL TYPE FOR THE SITE IS CONNEAUT SILT LOAM (HYD. GROUP: D).
4. THIS SITE HAS BEEN A USE FOR A RESIDENTIAL SITE & A RECREATIONAL / PARK SITE. NO OTHER PRIOR LAND USES ARE KNOWN.
5. SEE STORM WATER POLLUTION PREVENTION PLAN IMPLEMENTATION SCHEDULE.
6. THE STORM WATER GENERATED WITHIN THE PROJECT AREA IS DIRECTED TO LAKE ERIE VIA THE ONSITE STORM SEER NETWORK. THE PROJECT AREA IS LOCATED WITHIN THE LACARPE CREEK–FRONTAL LAKE ERIE WATERSHED (HUC12: 041202000200)

CONTACT INFORMATION:

7. THE OPERATOR RESPONSIBLE FOR IMPLEMENTATION OF STORM WATER POLLUTION PREVENTION PLAN:
   NOT SELECTED YET
8. THE CERTIFIED PROFESSIONAL WHO PREPARED THE COMPREHENSIVE STORM WATER MANAGEMENT PLAN AND IS AUTHORIZED TO AMEND SAID PLAN.
   JOHN URBANICK – ROCKAWAY CIVIL
   10191 SPERRY ROAD
   KIRTLAND, OH 44094
   JURBANICK@ROCKAWAYCIVIL.COM
9. THE SITE OWNER:
   TIM LANE – LAKE METROPARKS
   11211 SPEAR ROAD
   CONCORD TOWNSHIP, OHIO 44077
   TLANE@LAKEMETROPARKS.COM
10. SEE APPENDIX I – GRADING AND STABILIZATION ACTIVITIES LOG
11. SEE SWP3-1 AND SWP3-2
12. OTHER CONTROLS:
    - IF SUBSTANCES SUCH AS OIL, DIESEL FUEL, HYDRAULIC FLUID, ANTIFREEZE, ETC. ARE SPILLED, LEAKED, OR RELEASE ONTO SOIL, THE SOIL SHOULD BE DUG UP AND DISPOSED OF AT A LICENSED SANITARY LANDFILL OR OTHER APPROVED PETROLEUM CONTAMINATED SOIL REMEDIATION FACILITY (NOT A CONSTRUCTION/DEMOLITION DEBRIS LANDFILL).
    - SPILLS ON PAVEMENT SHALL BE ABSORBED WITH SAWDUST, KITTY LITTER, OR OTHER ABSORBENT MATERIAL & DISPOSED OF WITH THE TRASH AT A LICENSED SANITARY LANDFILL.
    - HAZARDOUS OR INDUSTRIAL WASTES SUCH AS MOST SOLVENTS, GASOLINE, OIL-BASED PAINTS, AND CEMENT CURING COMPOUNDS REQUIRE SPECIAL HANDLING.
    - LARGE PETROLEUM SPILLS (>25 GALLONS) SHALL BE REPORTED TO THE OHIO EPA (1-800-282-9378), LOCAL FIRE DEPARTMENT, AND THE LOCAL EMERGENCY PLANNING COMMITTEE WITHIN 30 MINUTES OF THE DISCOVERY OF THE RELEASE..
19. PROJECT DATES (APPROXIMATE):
    START DATE MAY 2026
    END DATE MAY 2027

STATE OF OHIO ENGINEER JOHN URBANICK E-66506 REGISTERED PROFESSIONAL

ROCKAWAY CIVIL
Rockaway Civil LLC
10191 Sperry Road Kirtland Ohio 44094
440 655 8182 www.rockawaycivil.com

LAKE METROPARKS

OHIO811.org Before You Dig

N 0 30'
SCALE: 1"= 30'

LAKEFRONT LODGE

30525 LAKESHORE BOULEVARD
WILLOWICK, OHIO 44095

Project Name

Sheet Revision

1	BID SET	05-20-2026

Project Issue

SWP3-1

Sheet Name

C200

Sheet #

RC Project # 26-001

ADDITIONAL CONSTRUCTION SITE POLLUTION CONTROLS
(PER ODNR RAINWATER & LAND DEVELOPMENT MANUAL)

DESCRIPTION
ALTHOUGH SEDIMENT IS THE PRIMARY POLLUTANT OF CONCERN RESULTING FROM CONSTRUCTION ACTIVITY, OTHER POLLUTANTS NEED TO BE CONSIDERED AS WELL. THESE INCLUDE PETROCHEMICALS: FUEL, OIL AND ASPHALT; AND CONSTRUCTION CHEMICALS AND MATERIALS: PAINTS, SOLVENTS, FERTILIZER, SOIL ADDITIVES, CONCRETE WASH WATER, ETC. ALSO INCLUDED ARE SOLID WASTES AND CONSTRUCTION DEBRIS. KEEPING THESE SUBSTANCES FROM POLLUTING RUNOFF CAN BE ACCOMPLISHED TO A LARGE EXTENT THROUGH GOOD HOUSEKEEPING AND FOLLOWING THE MANUFACTURER'S RECOMMENDATIONS FOR THEIR USE AND DISPOSAL.

CONDITION WHERE PRACTICE APPLIES
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 ORC 3714. HAZARDOUS AND TOXIC SUBSTANCES ARE USED ON VIRTUALLY ALL CONSTRUCTION-SITES. GOOD MANAGEMENT OF THESE SUBSTANCES IS ALWAYS NEEDED.

PLANNING CONSIDERATIONS
GOOD EROSION AND SEDIMENT CONTROL WILL PREVENT SOME POLLUTANTS IN ADDITION TO SEDIMENT FROM LEAVING THE SITE; HOWEVER, POLLUTANTS CARRIED IN SOLUTION OR AS SURFACE FILMS ON RUNOFF WATER WILL BE CARRIED THROUGH MOST EROSION AND SEDIMENT CONTROL PRACTICES. THESE POLLUTANTS BECOME NEARLY IMPOSSIBLE TO CONTROL ONCE CARRIED OFFSITE IN RUNOFF. ADDING TO THE PROBLEM IS THE FACT THAT CONSTRUCTION WASTES, MANY CONTAINING TOXIC CHEMICALS, ARE ROUTINELY BURIED ON-SITE, DUMPED ON THE GROUND, POURED DOWN A STORM DRAIN, OR DISPOSED OF WITH CONSTRUCTION DEBRIS. SO WHILE TYPICAL EROSION AND SEDIMENT-CONTROL PRACTICES ARE IMPORTANT FOR CONTROLLING OTHER POLLUTANTS, ADDITIONAL PREVENTATIVE MEASURES ARE NEEDED.

REDUCING POLLUTANTS OTHER THAN SEDIMENTS DEPENDS HEAVILY ON CONSTRUCTION PERSONNEL AND HOW THEY CARRY OUT THEIR OPERATIONS. TO HELP FACILITATE THIS, PLANS SHOULD CONTAIN STANDARD NOTES CLEARLY STATING REQUIREMENTS TO CONTRACTORS. IT ALSO MAY BE APPROPRIATE TO INCLUDE REQUIREMENTS FOR SPECIFIC PROVISIONS FOR HAZARDOUS MATERIALS STORAGE, HANDLING AND DISPOSAL.

REQUIREMENTS
1. EDUCATE CONSTRUCTION PERSONNEL, INCLUDING SUBCONTRACTORS WHO MAY USE OR HANDLE HAZARDOUS OR TOXIC MATERIALS, MAKING THEM AWARE OF THE FOLLOWING GENERAL GUIDELINES:

   DISPOSAL AND HANDLING OF HAZARDOUS AND OTHER CONSTRUCTION WASTE

   DO:
   - PREVENT SPILLS
   - USE PRODUCTS UP
   - FOLLOW LABEL DIRECTIONS FOR DISPOSAL
   - REMOVE LIDS FROM EMPTY BOTTLES AND CANS WHEN DISPOSING IN TRASH
   - RECYCLE WASTES WHENEVER POSSIBLE

   DON'T:
   - DON'T POUR INTO WATERWAYS, STORM DRAINS OR ONTO THE GROUND
   - DON'T POUR DOWN THE SINK, FLOOR DRAIN OR SEPTIC TANKS
   - DON'T BURY CHEMICALS OR CONTAINERS
   - DON'T BURN CHEMICALS OR CONTAINERS
   - DON'T MIX CHEMICALS TOGETHER

2. WASTE DISPOSAL CONTAINERS SHALL BE PROVIDED FOR THE PROPER COLLECTION OF ALL WASTE MATERIAL INCLUDING CONSTRUCTION DEBRIS, SANITARY GARBAGE, PETROLEUM PRODUCTS AND ANY HAZARDOUS MATERIALS TO BE 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 IN ACCORDANCE WITH ORC 3714 AT AN APPROVED OHIO EPA CD&D LANDFILL.
3. 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 THAT DOES NOT ENCROACH UPON NATURAL WETLANDS, STREAMS OR THEIR FLOODPLAINS. FILLING OF STREAM SIDE AREAS IS FILL MAY NOT RESULT IN THE CONTAMINATION OF WATERS OF THE STATE, UNLESS PROHIBITED BY LOCAL ORDINANCE OR ZONING.
4. CONSTRUCTION AND DEMOLITION DEBRIS (CD&D) DISPOSAL. CD&D WASTE MUST BE DISPOSED OF IN ACCORDANCE WITH ORC 3714 AT AN APPROVED OHIO EPA CD&D LANDFILL. CD&D WASTE IS DEFINED AS ALL MATERIALS ATTACHED TO A STRUCTURE, WHICH IS BEING DEMOLISHED (FOR MATERIALS CONTAINING ASBESTOS SEE ITEM 12).
5. HANDLING CONSTRUCTION CHEMICALS. MIXING, PUMPING, TRANSFERRING OR OTHER HANDLING OF CONSTRUCTION CHEMICALS SUCH AS FERTILIZER, LIME, ASPHALT, CONCRETE DRYING COMPOUNDS, AND ALL OTHER POTENTIALLY HAZARDOUS MATERIALS SHALL BE PERFORMED IN AN AREA AWAY FROM ANY WATERCOURSE, DITCH OR STORM DRAIN.
6. 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. AN SPCC PLAN IS REQUIRED FOR SITES WITH ONE SINGLE ABOVEGROUND TANK OF 660 GALLONS OR MORE, ACCUMULATIVE ABOVEGROUND STORAGE OF 1330 GALLONS OR MORE, OR 42,000 GALLONS OF UNDERGROUND STORAGE. SOILS THAT HAVE BECOME CONTAMINATED MUST BE DISPOSED OF ACCORDANCE WITH ITEM 8 □CONTAMINATED SOILS.
7. CONCRETE WASH WATER/WASH OUTS. CONCRETE WASH WATER SHALL NOT BE ALLOWED TO FLOW TO STREAMS, DITCHES, STORM DRAINS, OR ANY OTHER WATER CONVEYANCE. A SUMP OR PIT WITH NO POTENTIAL FOR DISCHARGE SHALL BE CONSTRUCTED IF NEEDED TO CONTAIN CONCRETE WASH WATER. FIELD TILE OR OTHER SUBSURFACE DRAINAGE STRUCTURES WITHIN 10 FT. OF THE SUMP SHALL BE CUT AND PLUGGED. FOR SMALL PROJECTS, TRUCK CHUTES MAY BE RINSED ON THE LOT AWAY FROM ANY WATER CONVEYANCES.
8. CONTAMINATED SOILS. 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 LICENSED SANITARY LANDFILL OR OTHER APPROVED PETROLEUM CONTAMINATED SOIL REMEDIATION FACILITY (NOT A CONSTRUCTION/DEMOLITION DEBRIS LANDFILL). PLEASE BE AWARE THAT STORM WATER RUNOFF ASSOCIATED WITH CONTAMINATED SOILS ARE NOT AUTHORIZED UNDER OHIO EPA'S GENERAL STORM WATER PERMIT ASSOCIATED WITH CONSTRUCTION ACTIVITIES. IN THE EVENT THERE ARE LARGE EXTENSIVE AREAS OF CONTAMINATED SOILS ADDITIONAL MEASURES ABOVE AND BEYOND THE CONDITIONS OF OHIO EPA'S GENERAL CONSTRUCTION STORM WATER PERMIT WILL BE REQUIRED. DEPENDING ON THE EXTENT OF CONTAMINATION, ADDITIONAL TREATMENT AND/OR COLLECTION AND DISPOSAL MAY BE REQUIRED. ALL STORM WATER DISCHARGES ASSOCIATED WITH THE CONTAMINATED SOILS MUST BE AUTHORIZED UNDER AN ALTERNATE NPDES (NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT.
9. SPILL REPORTING REQUIREMENTS: SPILLS ON PAVEMENT SHALL BE ABSORBED WITH SAWDUST, KITTY LITTER OR OTHER ABSORBENT MATERIAL AND DISPOSED OF WITH THE TRASH AT A LICENSED SANITARY LANDFILL. HAZARDOUS OR INDUSTRIAL WASTES SUCH AS MOST SOLVENTS, GASOLINE, OIL-BASED PAINTS, AND CEMENT CURING COMPOUNDS REQUIRE SPECIAL HANDLING. SPILLS SHALL BE REPORTED TO OHIO EPA (1-800-282-9378). SPILLS OF 25 GALLONS OR MORE OF PETROLEUM PRODUCTS SHALL BE REPORTED TO OHIO EPA (1-800-282-9378), THE LOCAL FIRE DEPARTMENT, AND THE LOCAL EMERGENCY PLANNING COMMITTEE WITHIN 30 MIN. OF THE DISCOVERY OF THE RELEASE. ALL SPILLS, WHICH RESULT IN CONTACT WITH WATERS OF THE STATE, MUST BE REPORTED TO OHIO EPA'S HOTLINE.
10. OPEN BURNING. NO MATERIALS MAY BE BURNED WHICH CONTAIN RUBBER, GREASE, ASPHALT, OR PETROLEUM PRODUCTS SUCH AS TIRES, CARS, AUTO PARTS, PLASTICS OR PLASTIC COATED WIRE. (SEE OAC 3745-19) OPEN BURNING IS NOT ALLOWED IN RESTRICTED AREAS. RESTRICTED AREAS ARE DEFINED AS: 1) WITHIN CORPORATION LIMITS; 2) WITHIN 1000 FEET OUTSIDE A MUNICIPAL CORPORATION HAVING A POPULATION OF 1000 TO 10,000; AND 3) A ONE MILE ZONE OUTSIDE OF A CORPORATION OF 10,000 OR MORE. OUTSIDE A RESTRICTED AREA, NO OPEN BURNING CAN TAKE PLACE WITHIN A 1000 FEET OF AN INHABITED BUILDING LOCATED OFF THE PROPERTY WHERE THE FIRE IS SET. OPEN BURNING IS PERMISSIBLE IN A RESTRICTED AREA FOR THE FOLLOWING ACTIVITIES: HEATING TAR, WELDING AND ACETYLENE TORCHES, SMUDGE POTS AND SIMILAR OCCUPATIONAL NEEDS, AND HEATING FOR WARMTH OR OUTDOOR BARBEQUES. OUTSIDE OF RESTRICTED AREAS, OPEN BURNING IS PERMISSIBLE FOR LANDSCAPE WASTES (PLANT MATERIAL), LAND-CLEARING WASTES (PLANT MATERIAL, WITH PRIOR WRITTEN PERMISSION FROM OHIO EPA), AND AGRICULTURAL WASTES (MATERIAL GENERATED BY CROP, HORTICULTURAL, OR LIVESTOCK PRODUCTION PRACTICES. THIS INCLUDES FENCE POSTS AND SCRAP LUMBER, BUT NOT BUILDINGS).
11 DUST CONTROL/SUPPRESSANTS. DUST CONTROL IS REQUIRED TO PREVENT NUISANCE CONDITIONS. DUST CONTROLS MUST BE USED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND NOT BE APPLIED IN A MANNER, WHICH WOULD RESULT IN A DISCHARGE TO WATERS OF THE STATE. ISOLATION DISTANCES FROM BRIDGES, CATCH BASINS, AND OTHER DRAINAGEWAYS MUST BE OBSERVED. APPLICATION (EXCLUDING WATER) MAY NOT OCCUR WHEN PRECIPITATION IS IMMINENT AS NOTED IN THE SHORT TERM FORECAST. USED OIL MAY NOT BE APPLIED FOR DUST CONTROL.
12. OTHER AIR PERMITTING REQUIREMENTS: ALL CONTRACTORS AND SUB CONTRACTORS MUST BE MADE AWARE THAT CERTAIN ACTIVITIES ASSOCIATED WITH CONSTRUCTION WILL REQUIRE AIR PERMITS. ACTIVITIES INCLUDING BUT NOT LIMITED TO MOBILE CONCRETE BATCH PLANTS, MOBILE ASPHALT PLANTS, CONCRETE CRUSHERS, LARGE GENERATORS, ETC., WILL REQUIRE SPECIFIC OHIO EPA AIR PERMITS FOR INSTALLATION AND OPERATION. THESE ACTIVITIES MUST SEEK AUTHORIZATION FROM THE CORRESPONDING DISTRICT OF OHIO EPA. NOTIFICATION FOR RESTORATION AND DEMOLITION MUST BE SUBMITTED TO OHIO EPA FOR ALL COMMERCIAL SITES TO DETERMINE IF ASBESTOS CORRECTIVE ACTIONS ARE REQUIRED.
13. PROCESS WASTE WATER/LEACHATE MANAGEMENT. ALL CONTRACTORS SHALL BE MADE AWARE THAT OHIO EPA'S CONSTRUCTION GENERAL PERMIT ONLY ALLOWS THE DISCHARGE OF STORM WATER. OTHER WASTE STREAMS/DISCHARGES INCLUDING BUT NOT LIMITED TO VEHICLE AND/OR EQUIPMENT WASHING, LEACHATE ASSOCIATED WITH ON-SITE WASTE DISPOSAL, CONCRETE WASH OUTS, ETC. ARE A PROCESS WASTEWATER. THEY ARE NOT AUTHORIZED FOR DISCHARGE UNDER THE GENERAL STORM WATER PERMIT ASSOCIATED WITH CONSTRUCTION ACTIVITIES. ALL PROCESS WASTEWATERS MUST BE COLLECTED AND PROPERLY DISPOSED AT AN APPROVED DISPOSAL FACILITY. IN THE EVENT THERE ARE LEACHATE OUTBREAKS ASSOCIATED WITH ONSITE DISPOSAL, MEASURES MUST BE TAKEN TO ISOLATE THIS DISCHARGE FOR COLLECTION AND PROPER DISPOSAL. INVESTIGATIVE MEASURES AND CORRECTIVE ACTIONS MUST BE IMPLEMENTED TO IDENTIFY AND ELIMINATE THE SOURCE OF ALL LEACHATE OUTBREAKS.
14. TRENCH AND GROUND WATER CONTROL – NO SEDIMENT LADEN OR TURBID DISCHARGES FROM ARE PERMITTED TO DISCHARGE TO WATER RESOURCES OR WETLANDS. TRENCH OR GROUND WATER CONTAINING SEDIMENT MUST PASS THROUGH A SEDIMENT SETTLING POND OR OTHER EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE PRIOR TO DISCHARGE. ALTERNATIVELY, SEDIMENT MAY BE REMOVED BY SETTLING IN PLACE OR BY DEWATERING INTO FILTER BAG, SUMP PIT OR EQUALLY EFFECTIVE PRACTICE. GROUND WATER DEWATERING THAT DOES NOT CONTAIN SEDIMENT OR OTHER POLLUTANTS IS NOT REQUIRED TO BE TREATED PRIOR TO DISCHARGE. ENSURE THAT THE NON-SEDIMENT LADEN GROUND WATER DOES NOT BECOME POLLUTANT LADEN BY FLOWING OVER DISTURBED SOIL OR POLLUTANT SOURCES.
15. PERMIT TO INSTALL (PTI) REQUIREMENTS: ALL CONTRACTORS AND SUB CONTRACTORS MUST BE MADE AWARE THAT A PTI MUST BE SUBMITTED AND APPROVED BY OHIO EPA PRIOR TO THE CONSTRUCTION OF ALL CENTRALIZED SANITARY SYSTEMS, INCLUDING SEWER EXTENSIONS, AND SEWERAGE SYSTEMS (EXCEPT THOSE SERVING ONE, TWO, AND THREE FAMILY DWELLINGS) AND POTABLE WATER LINES. THE ISSUANCE OF AN OHIO EPA CONSTRUCTION GENERAL STORM WATER PERMIT DOES NOT AUTHORIZE THE INSTALLATION OF ANY SEWERAGE SYSTEM WHERE OHIO EPA HAS NOT APPROVED A PTI.

STORM WATER POLLUTION PREVENTION PLAN IMPLEMENTATION SCHEDULE:

ITEMS LISTED IN THIS IMPLEMENTATION SCHEDULE ARE TO BE ADDRESSED CHRONOLOGICALLY IN THE ORDER THEY ARE LISTED. THIS IMPLEMENTATION SCHEDULE IS TO BE USED AS A GENERAL GUIDE FOR STORM WATER POLLUTION PREVENTION ITEMS. AT A MINIMUM, ALL EROSION AND SEDIMENT CONTROLS ARE TO BE INSPECTED AT LEAST ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF ANY STORM EVENT GREATER THAN 0.5 INCH PER 24 HOUR PERIOD. EROSION AND SEDIMENT CONTROLS THAT ARE FOUND TO BE IN NEED OF REPAIR DURING THE INSPECTION ARE TO BE REPAIRED WITHIN 3 DAYS OF THE INSPECTION.

1. CONTRACTOR IS TO REVIEW THIS PLAN PRIOR TO INITIATING ANY WORK ON SITE. THE CONTRACTOR IS ALSO RESPONSIBLE FOR REVIEWING AND OBTAINING AN NPDES PERMIT FROM THE OHIO EPA PRIOR TO INITIALIZATION OF WORK ON THE SITE
2. CONSTRUCTION ACCESS DRIVE SHALL BE LIMITED AS SHOWN ON THE PLANS . ALL VEHICLES ENTERING THE SITE DURING CONSTRUCTION ARE TO USE THIS DRIVE FOR INGRESS AND EGRESS. THIS IS THE ONLY POINT OF INGRESS AND EGRESS TO BE USED DURING THE ENTIRE CONSTRUCTION PROCESS IN ORDER TO REDUCE CONSTRUCTION MATERIALS FROM BEING MOVED ONTO PUBLIC ROADWAYS. THE DRIVE IS TO BE INSPECTED FOR INTEGRITY AT THE END OF EACH DAY. REPAIRS ARE TO BE MADE AND THE DRIVE SHALL BE CLEANED AS NECESSARY
3. THE LIMITS OF DISTURBANCE / CLEARING SHALL BE STAKED OUT PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.
4. THE STAGING AREA IS TO BE INSTALLED AT THE LOCATION DEPICTED ON THIS SWPPP. ALL VEHICLES THAT ARE NOT IN USE OR ARE TO REMAIN OVERNIGHT ARE TO BE KEPT IN THE STAGING AREA AND SHALL NOT LIE IDLE IN ANY OTHER AREAS ON SITE.
5. INSTALL THE CONCRETE WASHOUT PIT AND BRING WASTE CONTAINERS TO THE SITE IMMEDIATELY. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT WASTE CONTROL PROCEDURES ARE BEING PERFORMED TO PREVENT POLLUTION INTO THE STORM WATER SYSTEM DURING CONSTRUCTION.
6. CONTRACTOR IS TO INSTALL ALL SEDIMENT AND EROSION CONTROL DEVICES PRIOR TO THE START OF DEMOLITION. EROSION AND SEDIMENT CONTROLS ARE TO BE INSTALLED WITHIN 7 DAYS OF GRUBBING. THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO, FILTER SOCKS, SILT FENCE, DANDY BAGS AND INLET PROTECTION. SILT FENCE POSTS ARE TO BE SET A MAXIMUM OF 6' FROM EACH OTHER AND THE ENDS OF THE GEOTEXTILE FABRIC OF THE SILT FENCE ARE TO BE SLOPED TOWARD THE UP SLOPE OF THE AREA IT IS SERVING TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SILT FENCE. SILT FENCE IS TO BE INSPECTED AT THE BEGINNING OF EACH DAY AND REPAIRS ARE TO BE MADE IMMEDIATELY. REPAIRS MAY INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING: TEARS IN THE GEOTEXTILE FABRIC, COLLAPSED POSTS FROM TOO MUCH RUNOFF OF SILT / SOIL, MISDIRECTION OF SEDIMENT DUE TO IMPROPER INSTALLATION OF EROSION, VANDALISM, ETC.
7. THE CONTRACTOR MUST INSTALL EROSION CONTROLS AND SEDIMENT CONTROLS INCLUDING, BUT NOT LIMITED TO, FILTER SOCKS, SILT FENCE, DIVERSION BERMS, SEDIMENT TRAPS) AS MORE AREAS BECOME DISTURBED THROUGHOUT CONSTRUCTION. THIS SHALL BE DONE PRIOR TO DISTURBING PREVIOUSLY UNDISTURBED LANDS
8. ALL TRENCH AND GROUND WATER COLLECTED IS TO BE PUMPED INTO THE SEDIMENT TRAP TO BE TREATED FOR WATER QUALITY AND DEWATERING DURING CONSTRUCTION.
9. THE SOIL IS TO BE STRIPPED OF ITS TOP ORGANIC LAYER AS NECESSARY ONLY AFTER ALL SEDIMENT AND EROSION CONTROLS HAVE BEEN INSTALLED AND INSPECTED FOR PROPER OPERATION.
10. CLEARING OF THE SITE AND STRIPPING OF EXISTING TOPSOIL WILL BE PERFORMED IN A MANNER THAT DOES NOT DISTURB NEIGHBORING LAND OR PUBLIC ROADWAYS FROM THEIR NORMAL CONDITION. DURING AND AT THE END OF EACH DAY OF TOPSOIL STRIPPING, THE DISTURBED SOIL IS TO BE TREATED WITH OEPA RECOMMENDED DUST SUPPRESSANTS SO THAT DUST DOES NOT ACCUMULATE NOR HAVE THE ABILITY TO SPREAD ONTO NEIGHBORING PROPERTIES, PUBLIC ROADWAYS, OR INTO STORM SEWER STRUCTURES DURING NORMAL WORKING HOURS.
11. ALL REUSABLE EXCAVATED EARTH IS TO BE PLACED AT A SEPARATE STOCKPILE LOCATION AS SHOWN ON THIS SWPPP, WHICH IS TO BE SURROUNDED BY SILT FENCE OR FILTER SOCK AT THE END OF THE FIRST DAY OF BUILDING OF THE STOCKPILES. IF THE STOCKPILE IS TO REMAIN UNDISTURBED FOR LONGER THAN A PERIOD OF 7 DAYS, THEN TEMPORARY SEEDING MUST BE PERFORMED ON THE STOCKPILE AS PER SPECIFICATIONS OF THE SWPPP. SILT FENCE OR FILTER SOCKS MUST BE PLACED AROUND THE PERIMETER OF THE SOIL STOCKPILE ONCE IT HAS BEEN ESTABLISHED.
12. TEMPORARY SEEDING IS TO TAKE PLACE AS PER THE SPECIFICATIONS DESCRIBED ON THE PLANS. TEMPORARY SEEDING IS TO BE PLACED IN AREAS THAT WILL REMAIN IDLE FOR LONGER THAN 7 DAYS.
13. CONSTRUCTION VEHICLES USED IN CONCRETE RELATED WORK ARE TO BE CLEANED OFF AT THE CONCRETE WASH OUT AREA AS DEPICTED ON THIS SWPPP. THIS IS TO BE PERFORMED AT THE END OF EACH DAY OF CONCRETE DEMOLITION AND AT THE END OF ENTIRE CONCRETE DEMOLITION PORTION OF PROJECT. IF THE PRIMARY CONCRETE WASH OUT AREA BECOMES TOO HARD AND DOES NOT ALLOW THE CONCRETE WASH OFF TO PROPERLY WASH OUT, THEN A NEW WASH OUT AREA SHALL BE CREATED AND USED FOR CLEANING WHILE THE OTHER WASH OUT AREA IS REPAIRED.
14. ALL EXCAVATED UTILITY TRENCHES MUST BE STABILIZED AT THE END OF EACH DAY WITH GRAVEL BACKFILL FROM THE BOTTOM OF THE TRENCH TO THE SURFACE TO PREVENT EROSION OF THE TRENCH OVERNIGHT.
15. ALL SPARE AND WASTE CONSTRUCTION MATERIALS ARE TO BE DISPOSED OF IN WASTE CONTAINERS, WHICH ARE TO BE EMPTIED PRIOR TO REACHING THEIR MAXIMUM CAPACITY. SPARE CONSTRUCTION MATERIALS MAY ALSO BE TRANSPORTED OFFSITE TO AN APPROPRIATE LOCATION DETERMINED BY THE CONTRACTOR (I.E. THE CONTRACTOR'S STORAGE WAREHOUSE), OTHERWISE MATERIALS ARE TO BE DISPOSED OF AT AN OFFSITE CONSTRUCTION AND DEBRIS DEMOLITION LANDFILL AS PER ORC 3714.
16. WHEN TOXIC MATERIALS (I.E. FUEL) ARE USED TO CLEAN THE MACHINERY, THE CLEANING MUST TAKE PLACE ON THE STAGING AREA. THE STAGING AREA MUST BE BARRICADED/BERMED AS TO NOT ALLOW RUNOFF FROM THE STAGING AREA ONTO PERMEABLE AREAS. THE TOXIC RUNOFF FROM CLEANING OF MACHINERY IS TO BE COLLECTED VIA VACUUM AND PLACED INTO BARRELS WHICH ARE TO BE DISPOSED OF OFF SITE AT A CONSTRUCTION AND DEBRIS DEMOLITION LANDFILL AS PER ORC 3714.

APPENDIX G – SWPPP AMENDMENT LOG

SWPPP CONTACT:			
AMENDMENT NUMBER	DESCRIPTION OF THE AMENDMENT	DATE OF AMENDMENT	AMENDMENT PREPARED BY

APPENDIX I – GRADING AND STABILIZATION ACTIVITIES LOG

SWPPP CONTACT:				
DATE GRADING ACTIVITY INITIATED	DESCRIPTION OF GRADING ACTIVITY	DATE GRADING ACTIVITY CEASED (INDICATE TEMPORARY OR PERMANENT)	DATE STABILIZATION MEASURED INITIATED	DESCRIPTION OF STABILIZATION MEASURE AND LOCATION

TEMPORARY SEEDING SPECIFICATIONS			
SEEDING DATE	SPECIES	LB/1,000 FT²	LB/ACRE
MARCH 1 TO AUGUST15	OATS TALL FESCUE ANNUAL RYEGRASS	3 1 1	128 (4 BUSHEL) 40 40
	PERENNIAL RYEGRASS TALL FESCUE ANNUAL RYEGRASS	1 1 1	40 40 40
	ANNUAL RYEGRASS PERENNIAL RYEGRASS CREEPING RED FESCUE KENTUCKY BLUEGRASS	1.25 3.25 0.40 0.40	55 142 17 17
	OATS TALL FESCUE ANNUAL RYEGRASS	3 1 1	128 (4 BUSHEL) 40 40
AUGUST 16 TO NOVEMBER 1	RYE TALL FESCUE ANNUAL RYEGRASS	3 1 1	112 (2 BUSHEL) 40 40
	WHEAT TALL FESCUE ANNUAL RYEGRASS	3 1 1	120 (2 BUSHEL) 40 40
	PERENNIAL RYEGRASS TALL FESCUE ANNUAL RYEGRASS	1 1 1	40 40 40
	ANNUAL RYEGRASS PRENNIAL RYEGRASS CREEPING RED FESCUE KENTUCKY BLUEGRASS	1.25 3.25 0.40 0.40	40 40 40 –
NOVEMBER 1 TO FEBRUARY 29	USE MULCH ONLY, SODDING PRACTICES, OR DORMANT SEEDING.		
NOTE: OTHER APPROVED SEED SPECIES MAY BE APPROVED.			

ADDITIONAL TEMPORARY STABILIZATION NOTES:

1. TEMPORARY SEEDING IS REQUIRED FOR ANY AREAS THAT WILL REMAIN IDLE OVER THE WINTER PRIOR TO THE ONSET OF WINTER WEATHER.
2. TEMPORARY SEEDING IS REQUIRED WITHIN 2 DAYS OF THE MOST RECENT DISTURBANCE FOR AN AREA WITHIN 50 FEET OF A SURFACE WATER OF THE STATE AND NOT AT FINAL GRADE THAT WILL REMAIN IDLE FOR 14 DAYS OR MORE.
3. TEMPORARY SEEDING IS REQUIRED ON ANY DISTURBED AREA, INCLUDING SOIL STOCKPILES THAT WILL LIE DORMANT FOR MORE THAN 14 DAYS, BUT LESS THAN ONE YEAR AND NOT WITHIN 50 FEET OF A SURFACE WATER OF THE STATE WITHIN 7 DAYS OF THE MOST RECENT DISTURBANCE.

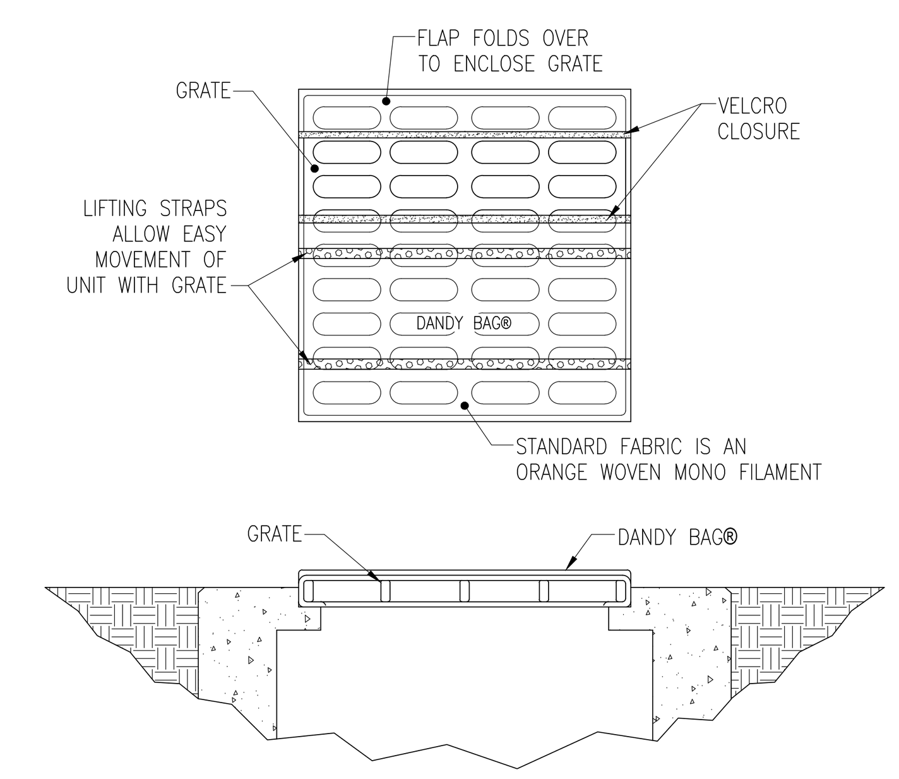
TEMPORARY SEEDING SPECIFICATIONS

PERMANENT SEEDING SPECIFICATIONS			
SEED MIX	SEEDING RATE		NOTES
	LB/ACRE	LB/1,000 FT²	
GENERAL USE			
CREEPING RED FESCUE DOMESTIC RYEGRASS KENTUCKY BLUEGRASS	20–40 10–20 20–40	0.50–1.00 0.25–0.50 0.50–1.00	FOR CLOSE MOWING AND FOR WATERWAYS WITH <2.0 FT/SEC VELOCITY
TALL FESCUE	40–50	1.00–1.25	
TURF-TYPE (DWARF) FESCUE	90	2.25	
STEEP BANKS OR CUT SLOPES			
TALL FESCUE	40–50	1.00–1.25	
CROWN VETCH TALL FESCUE	10–20 20–30	0.25–0.50 0.50–0.75	DO NOT SEED LATER THAN AUGUST
FLAT PEA TALL FESCUE	20–25 20–30	0.50–0.75 0.50–0.75	DO NOT SEED LATER THAN AUGUST
ROAD DITCHES AND SWALES			
TALL FESCUE	40–50	1.00–1.25	
TURF-TYPE (DWARF) FESCUE KENTUCKY BLUEGRASS	90 5	2.25 0.10	
LAWNS			
KENTUCKY BLUEGRASS PERENNIAL RYEGRASS	100–120 –	2.00 2.00	
KENTUCKY BLUEGRASS CREEPING RED FESCUE	100–120 –	2.00 1.50	FOR SHADED AREAS
NOTE: FOLLOWING SOIL TEST RECOMMENDATIONS IS PREFERRED TO FERTILIZER RATES SHOWN ABOVE			

ADDITIONAL PERMANENT SEEDING REQUIREMENTS:

1. PERMANENT SEEDING IS REQUIRED FOR ANY DISTURBED AREA THAT WILL LIE DORMANT FOR ONE YEAR OR MORE WITHIN 7 DAYS OF THE MOST RECENT DISTURBANCE.
2. PERMANENT SEEDING IS REQUIRED FOR ANY AREA WITHIN 50 FEET OF A SURFACE WATER BODY OF THE STATE AND AT FINAL GRADE WITHIN 2 DAYS OF REACHING FINAL GRADE.
3. PERMANENT SEEDING IS REQUIRED FOR ANY AREA AT FINAL GRADE WITHIN 7 DAYS OF REACHING FINAL GRADE.

PERMANENT SEEDING SPECIFICATIONS



INSTALLATION AND MAINTENANCE GUIDELINES

INSTALLATION: THE EMPTY DANDY BAG® SHOULD BE PLACED OVER THE GRATE AS THE GRATE STANDS ON END. IF USING OPTIONAL OIL ABSORBENTS; PLACE ABSORBENT PILLOW IN POUCH, ON THE BOTTOM (BELOW-GRADE SIDE) OF THE UNIT. ATTACH ABSORBENT PILLOW TO TETHER LOOP. TUCK THE ENCLOSURE FLAP INSIDE TO COMPLETELY ENCLOSE THE GRATE. HOLDING THE LIFTING DEVICES (DO NOT RELY ON LIFTING DEVICES TO SUPPORT THE ENTIRE WEIGHT OF THE GRATE), PLACE THE GRATE INTO ITS FRAME.

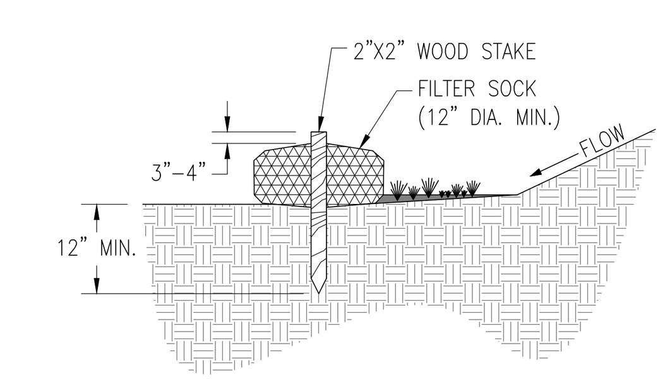
MAINTENANCE: REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM SURFACE AND VICINITY OF UNIT AFTER EACH STORM EVENT. REMOVE SEDIMENT THAT HAS ACCUMULATED WITHIN THE CONTAINMENT AREA OF THE DANDY BAG® AS NEEDED. IF USING OPTIONAL OIL ABSORBENTS; REMOVE AND REPLACE ABSORBENT PILLOW WHEN NEAR SATURATION.

ADS FLEX-STORM IS AN ACCEPTABLE INLET PROTECTION ALTERNATIVE.

** DANDY BAGS MAY ONLY BE USED FOR INLET PROTECTION WHEN THE DRAINAGE STRUCTURE IS COMPLETELY SURROUNDED BY PAVEMENT.

DANDY BAG**®
NOT TO SCALE

SPECIFICATIONS FOR
FILTER SOCK
(NOT TO SCALE)

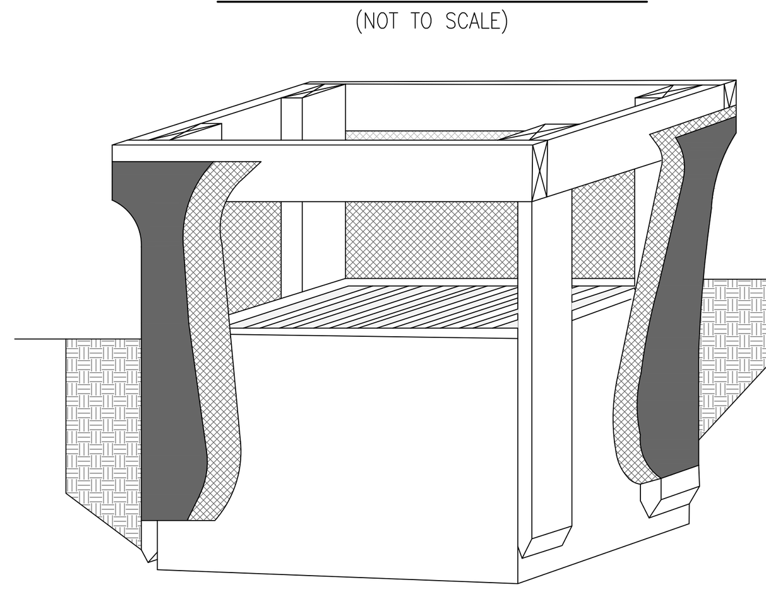


1. MATERIALS – COMPOST USED FOR FILTER SOCKS SHALL BE WEED, PATHOGEN AND INSECT FREE AND FREE OF REFUSE, CONTAMINANTS OR OTHER MATERIALS TOXIC TO PLANT GROWTH. THEY SHALL BE DERIVED FROM A WELL-DECOMPOSED SOURCE OF ORGANIC MATTER AND CONSIST OF PARTICLES RANGING FROM 3/8" TO 2".
2. FILTER SOCKS SHALL BE 3 OR 5 MILL CONTINUOUS, TUBULAR, HDPE 3/8" KNITTED MESH NETTING MATERIAL, FILLED WITH COMPOST PASSING THE ABOVE SPECIFICATIONS FOR COMPOST PRODUCTS.

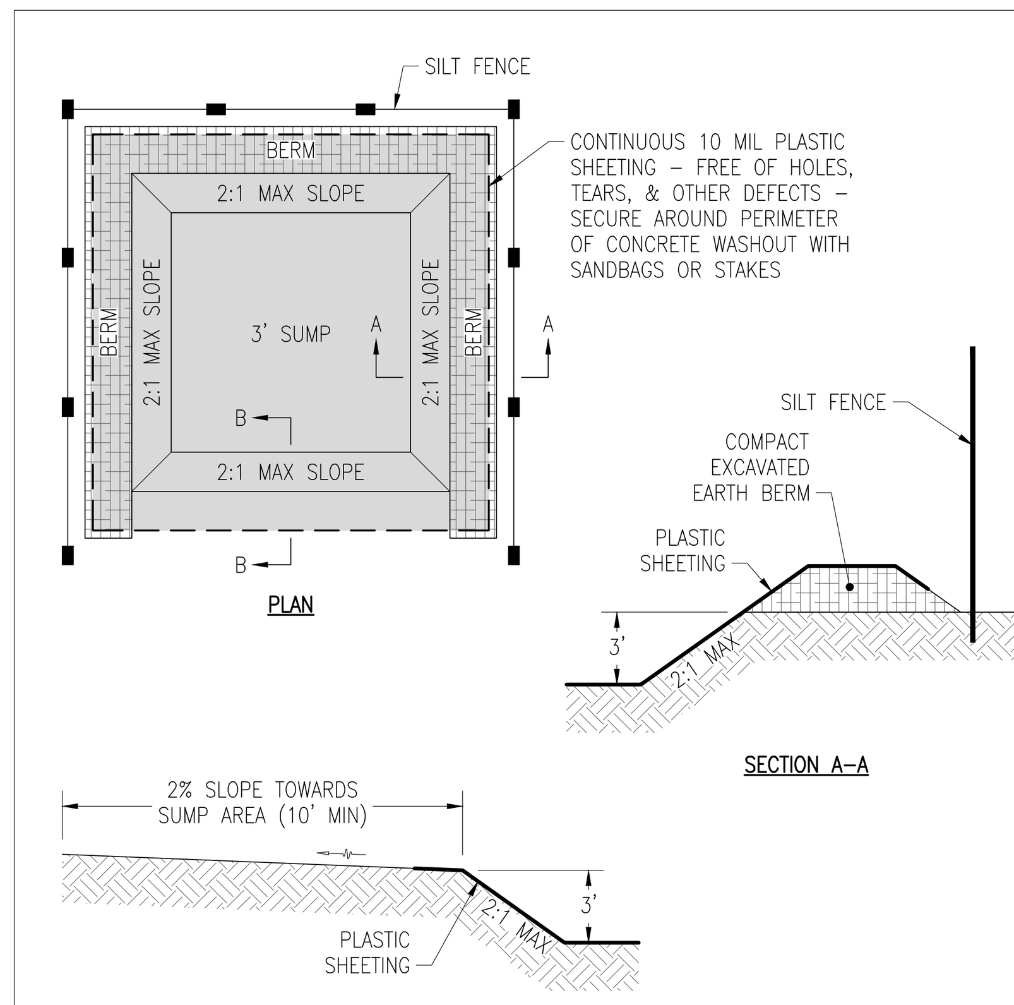
INSTALLATION
3. FILTER SOCKS WILL BE PLACED ON A LEVEL LINE ACROSS SLOPES, GENERALLY PARALLEL TO THE BASE OF THE SLOPE OR OTHER AFFECTED AREA. ON SLOPES APPROACHING 2:1, ADDITIONAL SOCKS SHALL BE PROVIDED AT THE TOP AND AS NEEDED MID-SLOPE
4. FILTER SOCKS INTENDED TO BE LEFT AS A PERMANENT FILTER OR PART OF THE NATURAL LANDSCAPE, SHALL BE SEEDED AT THE TIME OF INSTALLATION OF ESTABLISHMENT OF PERMANENT VEGETATION.
5. FILTER SOCKS ARE NOT TO BE USED IN CONCENTRATED FLOW SITUATIONS OR IN RUNOFF CHANNELS.

MAINTENANCE:
6. ROUTINELY INSPECT FILTER SOCKS AFTER EACH SIGNIFICANT RAIN, MAINTAINING FILTER SOCKS IN A FUNCTIONAL CONDITION AT ALL TIMES.
7. REMOVE SEDIMENTS COLLECTED AT THE BASE OF THE FILTER SOCKS WHEN THE REACH 1/3 OF THE EXPOSED HEIGHT OF THE PRACTICE.
8. WHERE THE FILTER SOCK DETERIORATES OR FAILS, IT WILL BE REPAIRED OR REPLACED WITH A MORE EFFECTIVE ALTERNATIVE.
9. REMOVAL – FILTER SOCKS WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED IN SUCH A WAY AS TO FACILITATE AND NOT OBSTRUCT SEEDLINGS.

SPECIFICATIONS FOR
GEOTEXTILE INLET PROTECTION
(NOT TO SCALE)



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



NOTES:
1. TEMPORARY TRUCK WASHOUT FACILITIES SHOULD BE CONSTRUCTED AS SHOWN ON THIS DETAIL. THE QUANTITY AND VOLUME SHOULD BE SUFFICIENT TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
2. THE WASHOUT AREA SHALL BE LOCATED ADJACENT TO A STABILIZED DRIVE/AREA.
3. CONCRETE WASTE SHALL BE CLEANED OUT PERIODICALLY TO MAINTAIN AN ADEQUATE VOLUME.
4. FOLLOWING CONSTRUCTION, THE WASHOUT SHALL BE REMOVED BY CONTRACTOR.

TEMPORARY CONCRETE WASHOUT DETAIL
NOT TO SCALE

STATE OF OHIO
JOHN URBANICK
E-66506
REGISTERED
PROFESSIONAL ENGINEER

ROCKAWAY CIVIL
Rockaway Civil LLC
10191 Sperry Road Kirtland Ohio 44094
440 655 8182 www.rockawaycivil.com

LAKEMETROPARKS

OHIO811.org Before You Dig

LAKEFRONT LODGE
30525 LAKESHORE BOULEVARD
WILLOWICK, OHIO 44095

Project Name

Sheet Revision

1	BID SET	05-20-2026

Project Issue

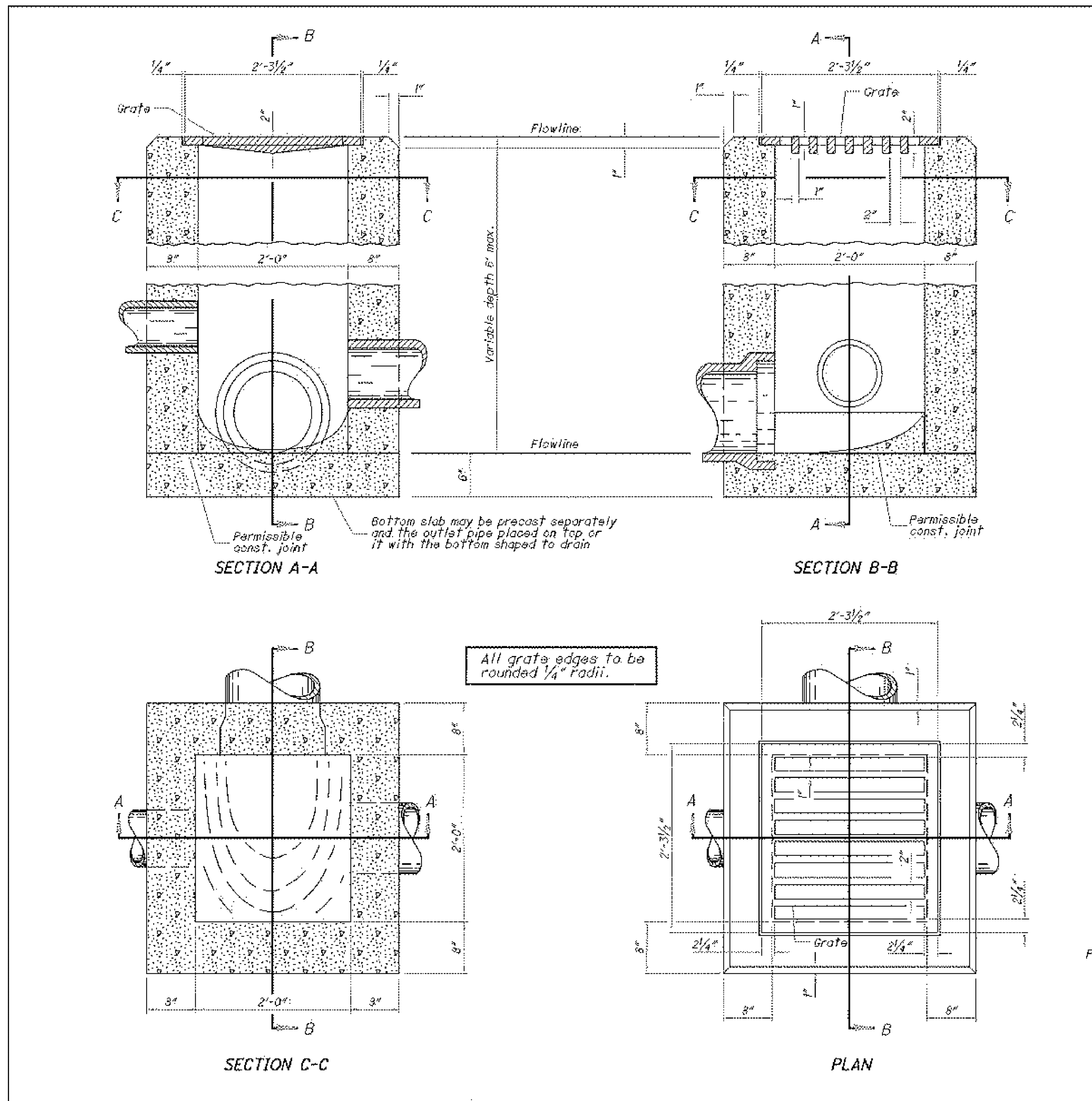
SWP3-2

Sheet Name

C201

Sheet #

RC Project # 26-001



NOTES

CATCH BASINS 2-2A, 2-2B & 2-2C: This sheet depicts Catch Basin 2-2B & 2-2C. See Sheet 1 of 2 for Catch Basin 2-2A.

CB-2-2B GRATE: Furnish a design essentially the same and equally as strong as the one shown (see Construction Information table), or meet the requirements of CMS 711.14. Provide grate openings and dimensions as shown here unless otherwise shown in the plans.

If necessary, bicycle safe grates will be specified in the plans. Furnish Neenah No. R-4859-S or EJ No. 5110M3 (00511043) grates or approved equals.

Place grate elevation 4" to 6" below normal ditch and return to normal 10' to 15' each side of inlet.

CB-2-2C FRAME & GRATE: ~~Where the catch basin is specified for use in a parking lot, Furnish Neenah No. R-1878-A5G or EJ No. V-5622 (45622010) frame and V-5622 (45622030) grate or approved equals. If necessary, bicycle safe grates will be specified in the plans. Furnish Neenah No. R-3405 grate or EJ No. 5252M (00525030) grate or approved equals.~~

On cast-in-place and precast units, provide a level surface on the catch basin 4" below the plan grate elevation for setting the frame and grate assembly. Provide a concrete apron to encase and secure the frame of a width not less than the thickness of the catch basin walls that the frame was placed on or as shown in the plans. Slope apron to provide local depression.

GRATE TEXT: Cast the following text into the top of the grate:

"DRAINS TO WATERWAY" and **"DUMP NO WASTE"**

Print text in bold, capital letters at least 1/2" high. "WATERWAY" may be substituted with "STREAM", "RIVER", "LAKE", etc. Actual placement and logo may vary per manufacturer.

WALLS: Construct brick or cast-in-place walls with a nominal 8" thickness. Provide precast walls at least 6" thick with sufficient reinforcing to permit shipping and handling without damage.

CONCRETE: Use 4000 psi compressive strength for cast-in-place concrete. Meet the requirements of CMS 706.13 for all precast concrete and mark with the catch basin number.

PRECAST BASE: If a precast base is used, set it deep enough so that the top can be placed on the base to provide the grate elevation specified in the plans. Do not use brick layers to adjust the top elevation.

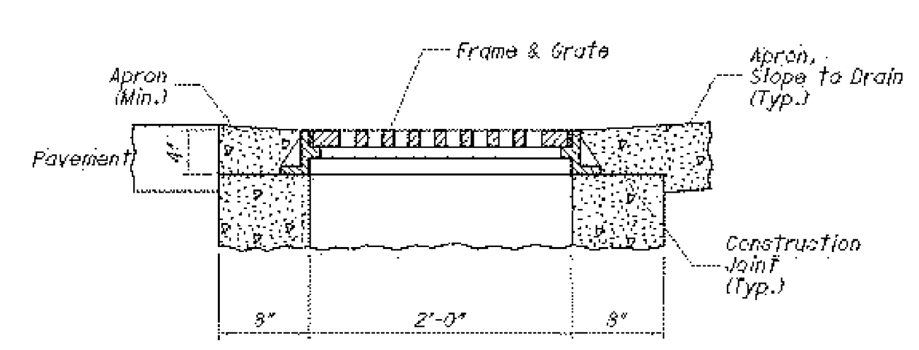
LOCATION AND ELEVATION: When given on the plans, location and elevation are at the top center of the grate.

MINIMUM DEPTH: The minimum depth of CB No. 2-2B is the outside diameter (O.D.) of the outlet pipe plus 4". The minimum depth of CB No. 2-2C is the outside diameter (O.D.) of the outlet pipe plus 8".

OPENINGS: Ensure pipe openings are the O.D. of the pipe being supplied plus 2" when fabricated or field cut. Fill any voids per C&MS 611.

~~**PAYMENT:** All materials and labor, including excavation and backfilling, are paid for under **Item 611 – Catch Basin, No. 2-(2B or 2C).**~~

CONSTRUCTION INFORMATION
Minimum weight of grate, 120 lbs.

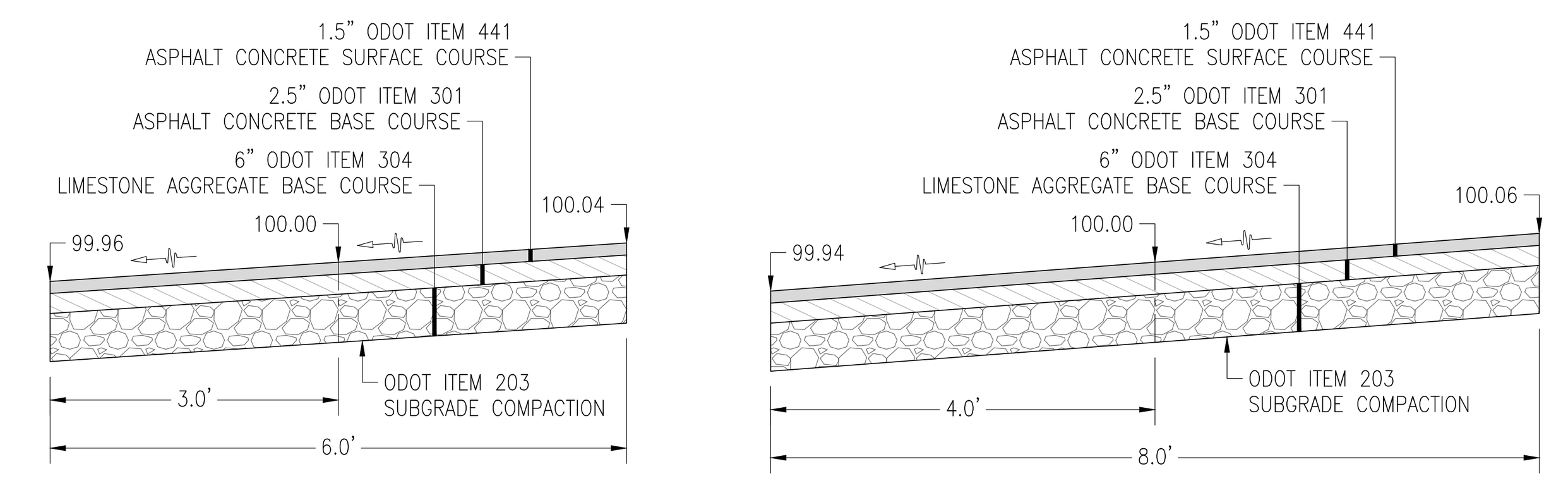


CATCH BASIN No. 2-2C

STATE OF OHIO DEPARTMENT OF TRANSPORTATION HYDRAULIC ENGINEER: Jeffery E. Syar
REVISIONS: 7-19-02, 7-15-05, 7-20-12, 1-18-13, 1-15-16, 7-20-18, 7-19-19
ROADWAY HYDRAULIC ENGINEER: M. Cozzoli
OFFICE OF HYDRAULICS ENGINEERING
STANDARD HYDRAULIC CONSTRUCTION DRAWING: CATCH BASINS No's 2-2A, 2-2B & 2-2C
CB-1.1
2/2

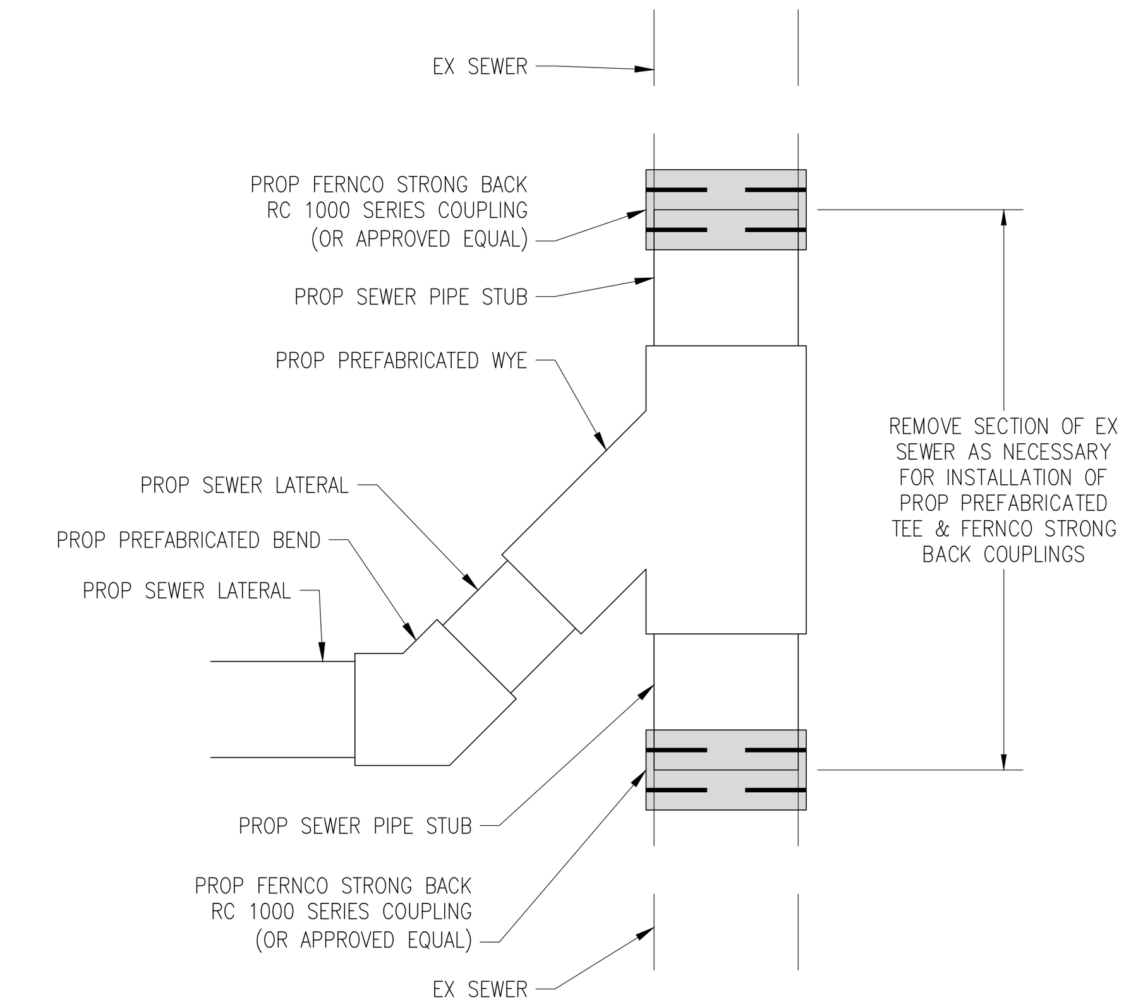
ADDITIONAL STORM CB NOTES

1. ALL CATCH BASINS IN PEDESTRIAN TRAFFIC AREAS REQUIRE EJIW V5622 FRAME & V5622-80. GRATES SHOULD BE ORIENTED PERPENDICULAR TO THE MAIN DIRECTION OF TRAFFIC.
2. ALL OTHER CATCH BASINS REQUIRE EJIW 5250Z FRAME & 5250M GRATE
3. CATCH BASINS LOCATED IN PAVED AREAS SHALL HAVE PERFORATED FINGERDRAINS / UNDERDRAINS EXTENDING AWAY FROM THE EDGES OF THE BASIN – REFER TO DETAIL



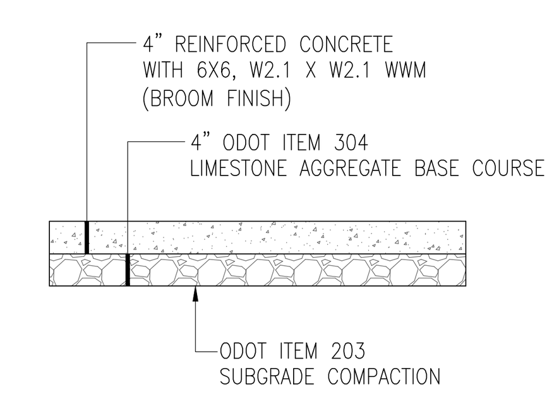
TYPICAL ASPHALT PATH DETAILS
NTS

NOTE:
SEE GRADING PLAN FOR ELEVATIONS & DIRECTION OF SLOPES.



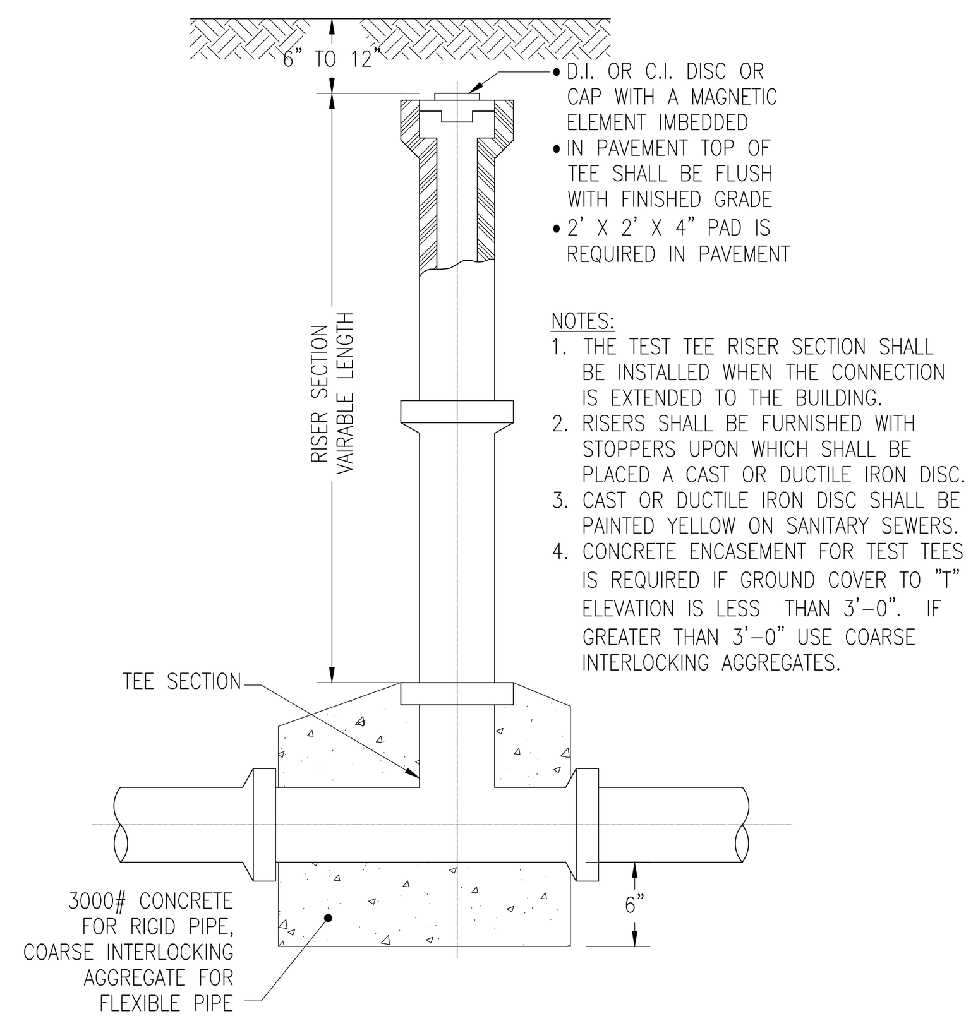
NEW SEWER WYE CONNECTION DETAIL
NTS

NOTES:
1. REFER TO UTILITY PLAN & DRAINAGE PLAN FOR PIPE SIZES & MATERIALS
2. EXISTING PIPE SIZES, MATERIALS, CONDITION, ETC. SHALL BE FIELD VERIFIED.



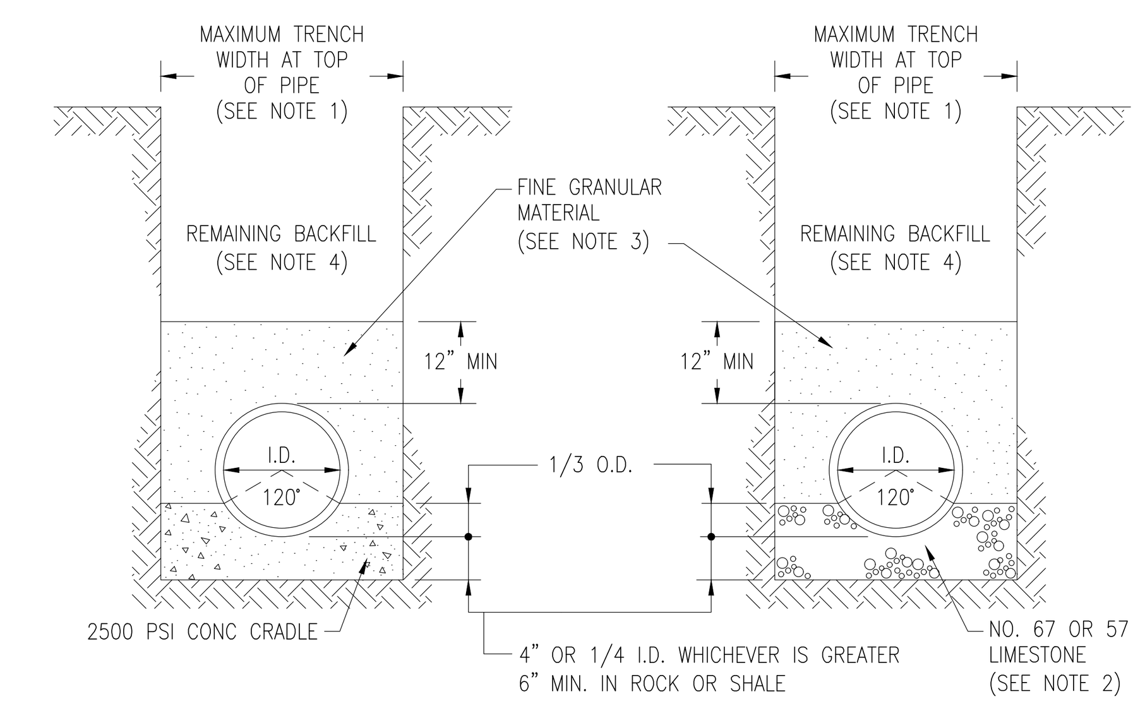
CONCRETE WALK DETAIL
NTS

CONCRETE PAVING NOTES
1. PROVIDE EXPANSION JOINTS AT 25' MAX SPACING
2. PROVIDE CONTRACTION JOINTS TO A DEPTH 1/4 THICKNESS AT 8' MAX SPACING
3. CONTRACTION JOINTS AT LIMITS OF CONCRETE SHALL BE PERPENDICULAR TO THE EDGES OF THE CONCRETE SURFACES
4. SUBMIT JOINT SPACING PLAN TO ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.



NOTES:
1. THE TEST TEE RISER SECTION SHALL BE INSTALLED WHEN THE CONNECTION IS EXTENDED TO THE BUILDING.
2. RISERS SHALL BE FURNISHED WITH STOPPERS UPON WHICH SHALL BE PLACED A CAST OR DUCTILE IRON DISC.
3. CAST OR DUCTILE IRON DISC SHALL BE PAINTED YELLOW ON SANITARY SEWERS.
4. CONCRETE ENCASEMENT FOR TEST TEES IS REQUIRED IF GROUND COVER TO "T" ELEVATION IS LESS THAN 3'-0". IF GREATER THAN 3'-0" USE COARSE INTERLOCKING AGGREGATES.

6" X 6" TEST TEE & 6" RISER
(FOR STORM AND SANITARY SEWERS)
NOT TO SCALE

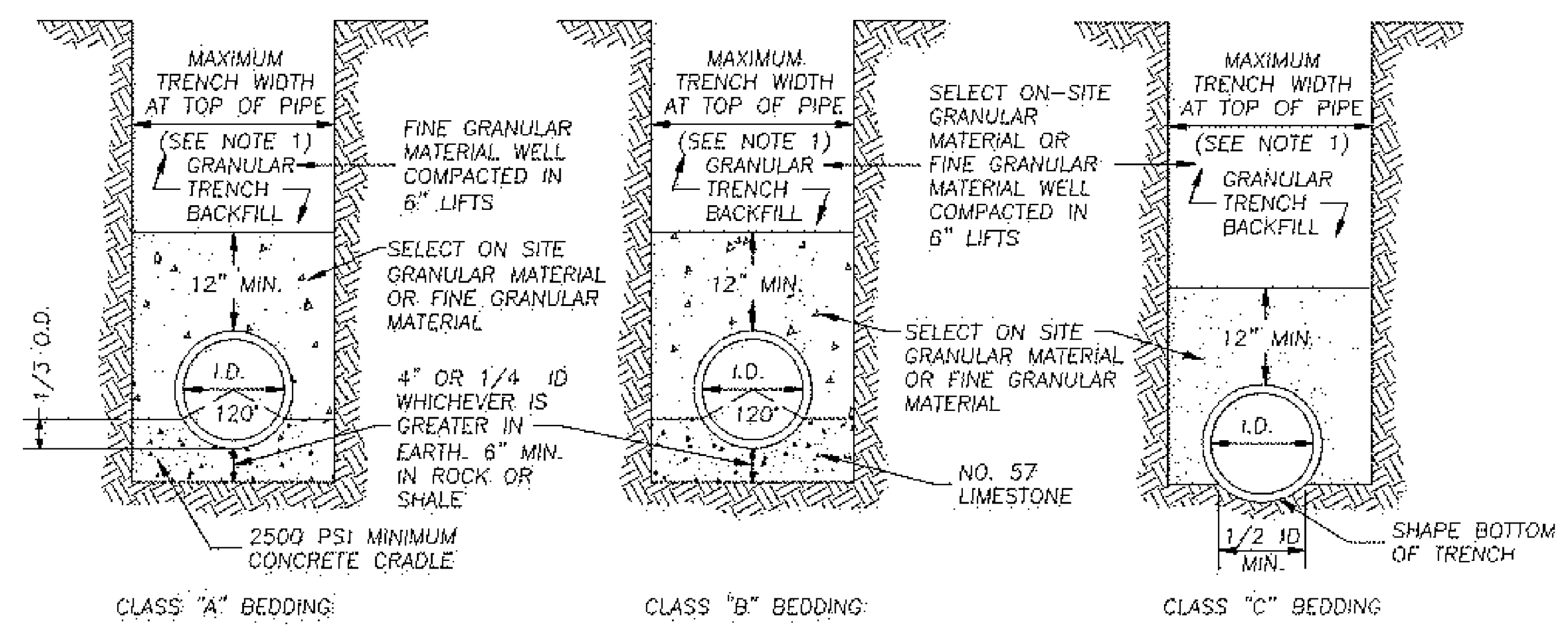


NOTES:
1. MAXIMUM TRENCH AT TOP OF PIPE SHALL BE O.D.+ 24" FOR ALL PIPES UP TO AND INCLUDING 24" I.D.; O.D.+ 30" FOR PIPE LARGER THAN 24" I.D. TO 66" I.D.; AND O.D.+ 48" FOR PIPE SIZES 72" AND OVER.
2. PIPE BEDDING SHALL BE NO. 67 OR NO. 57 LIMESTONE.
3. PIPE BACKFILL SHALL BE NO. 67 OR NO. 57 LIMESTONE TO 12" ABOVE TOP OF PIPE.
4. ALL BACKFILL SHALL BE TAMPED WITH MACHINE MOUNTED TAMPING EQUIPMENT. NO FLOODING, JETTING OR PUDDLING OF BACKFILL WILL BE PERMITTED. BACKFILL SHALL BE COMPLETED TO 100% OF MAXIMUM LABORATORY DRY DENSITY PER ASTM D698. REMAINING TRENCH BACKFILL SHALL BE PREMIUM FILL (ODOT ITEM 304 LIMESTONE) TO TOP OF TRENCH UNDER PAVEMENT.
5. ALL BEDDING SHALL BE CLASS 'B' UNLESS OTHERWISE NOTED ON THE PLANS OR AUTHORIZED BY THE ENGINEER.
6. SLAG SHALL NOT BE USED.
7. CLAY DAMS SHALL BE REQUIRED WHEN AND WHERE NECESSARY PER PLAN OR AS DIRECTED BY THE ENGINEER.

SEWER TRENCH & BEDDING DETAILS
NTS

LAKE COUNTY DEPARTMENT OF UTILITIES GENERAL WATER NOTES VR.14

1. ONLY WATER/SEWER CONTRACTORS LICENSED BY THE LAKE COUNTY BOARD OF COMMISSIONERS MAY INSTALL WATER MAINS.
2. THIS APPROVAL BY THE LCDU SHALL EXPIRE IF THE WATERLINE CONSTRUCTION HAS NOT BEEN INITIATED BY A DEVELOPER WITHIN (12) MONTHS OF THE EFFECTIVE APPROVAL DATE AS SHOWN ON THE ORIGINALLY SUBMITTED FOR APPROVAL BLUEPRINT COPY. (THIS IS NOT TO BE CONSTRUED AS THE DATE THAT IS SHOWN ON THE ORIGINAL MYLAR TITLE SHEET.)
3. THE CONTRACTOR SHALL NOTIFY THE LCDU AT LEAST 48 HOURS IN ADVANCE OF ANY WORK IN THEIR SYSTEMS.
4. THE LCDU SHALL PERFORM INSPECTION SERVICES. THE COST OF INSPECTION SHALL BE INCLUDED AS PART OF THIS CONSTRUCTION PROJECT AT THE CURRENT BASE RATE AS ESTABLISHED BY THE LAKE COUNTY BOARD OF COMMISSIONERS PER 8 HOUR DAY. (SEE SECTION 7 FEE SCHEDULE) COST FOR LAKE COUNTY INSPECTION FEE AND OTHER FEES SHALL BE INCLUDED IN THE UNIT PRICES BID FOR OTHER WATERLINE ITEMS. OVERTIME, WEEKENDS AND HOLIDAYS SHALL BE AT A RATE OF 1.5 THE BASE RATE.
5. WATERLINE WORK SHALL NOT BEGIN UNTIL THE AREAS OF CONSTRUCTION ARE ROUGH GRADED.
6. ALL WATERLINES ON THIS PROJECT SHALL BE LAID AT THE ELEVATIONS AND GRADES SHOWN ON THE DRAWINGS. HIGH POINTS IN THE WATERLINE MUST OCCUR AT THE STATIONED HYDRANT TEE LOCATIONS.
7. ALL HYDRANTS SHALL BE POSITIONED SO THAT THE STEAMER NOZZLES POINT IN THE DIRECTION SHOWN ON THE PLANS.
8. THE PROPOSED WATERLINE SHALL HAVE 5-FEET MINIMUM COVER OVER THE TOP OF POPE AT ALL PLACES, EXCEPT AT SPECIFIC HYDRANT TEE LOCATIONS AS SHOWN ON THE PLANS.
9. ALL BOLTS SHALL BE STAINLESS STEEL TYPE 304 OR 316, WITH ANTI-GALLING AGENT.
10. ALL SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR PRELIMINARY CHECKING. THE ENGINEER SHALL FORWARD CHECKED SHOP DRAWINGS TO THE LCDU FOR FINAL CHECKING AND APPROVAL.
11. THE LCDU SHALL PROVIDE WATER FOR THE NEW WATER MAIN WITHOUT COST FOR THE INITIAL OPERATION. ALL WATER FOR FLUSHING OPERATIONS SHALL BE PAID FOR BY THE CONTRACTOR AT CURRENT RATES AS ESTABLISHED BY THE LAKE COUNTY BOARD OF COMMISSIONERS PER 100 CUBIC FEET OF WATER USED. (SEE SECTION 7 FEE SCHEDULE.)
12. ALL WATER MAIN PIPE SHALL BE DUCTILE IRON PIPE, ANSI A21.51, THICKNESS CLASS 53, UNLESS OTHERWISE SHOWN ON THE PLANS, WITH PUSH-ON JOINTS, CEMENT LINED ANSI A21.4. FITTINGS TO BE FULL BODY-ONLY.
13. LOCATION OF STERILIZATION AND TESTING CONNECTIONS SHALL BE AS DIRECTED BY THE LCDU AND ALL COSTS ASSOCIATED WITH PLACING AND UTILIZING SAID STERILIZATION AND TESTING CONNECTIONS SHALL BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF THE WATER MAINS. NO BACTERIA SAMPLES ARE TO BE TAKEN FROM FIRE HYDRANTS.
14. LCDU WILL MAKE THE NECESSARY NEW SERVICE CONNECTION TAPS FOR THE CONTRACTOR AT CURRENT RATES AS ESTABLISHED BY THE LAKE COUNTY BOARD OF COMMISSIONERS PER 8-INCH AND GREATER TAPS WITHIN RIGHT OF WAY. (SEE SECTION 7 FEE SCHEDULE) SERVICE CONNECTIONS TO EXISTING BUILDINGS SHALL BE MADE BY THE CONTRACTOR.
15. NO WATER SERVICE CONNECTIONS TO ANY BUILDING SHALL BE PERMITTED PRIOR TO FINAL ACCEPTANCE BY THE LCDU INCLUDING RECTIFICATION OF ALL PUNCH LIST ITEMS.
16. ALL CURB STOP BOXES, VALVE BOXES, ETC. TO BE SET AS SHOWN ON THE PLANS. RIMS WILL BE RAISED OR LOWERED AND BOXES PLUMBED BY THE CONTRACTOR AT TIME OF HOUSE CONSTRUCTION WHEN FINAL YARD GRADING IS COMPLETED.
17. ALL PROJECT HYDRANTS SHALL HAVE A FIELD COAT OF APPROVED PAINT APPLIED BY THE CONTRACTOR WITH THE EXCEPTION OF HYDRANTS THAT ARE FACTORY PAINTED WITH A ONE COAT UV RESISTANT HIGH GLOSS 2-PART POLYURETHANE ENAMEL, COLOR AS SPECIFIED. IF THE COATING ON THE HYDRANT IS DAMAGED BEFORE INSTALLATION THE HYDRANT MUST BE PAINTED.
18. THE CONTRACTOR SHALL NOTIFY THE FIRE DEPARTMENT PRIOR TO ANY PRESSURE TESTING. FIRE DEPARTMENT SHALL WITNESS ANY PRESSURE TESTING.
19. ALL PROPOSED WATER LINES SHALL BE LAID OUT BY A REGISTERED SURVEYOR WITH GRADE STAKES AT A MINIMUM OF EVERY 50-FEET AND AT ALL FITTINGS AND A CUT SHEET PROVIDED PRIOR TO CONSTRUCTION.
20. THE CONTRACTOR/DEVELOPER SHALL SUBMIT A THREE YEAR MAINTENANCE BOND TO THE COMMISSIONERS BY DEVELOPER IN THE AMOUNT OF TEN PERCENT OF THE FINAL CONSTRUCTION COSTS AS CERTIFIED BY THE DEVELOPER'S ENGINEER, FOR PUBLIC EXTENSION PROJECTS.



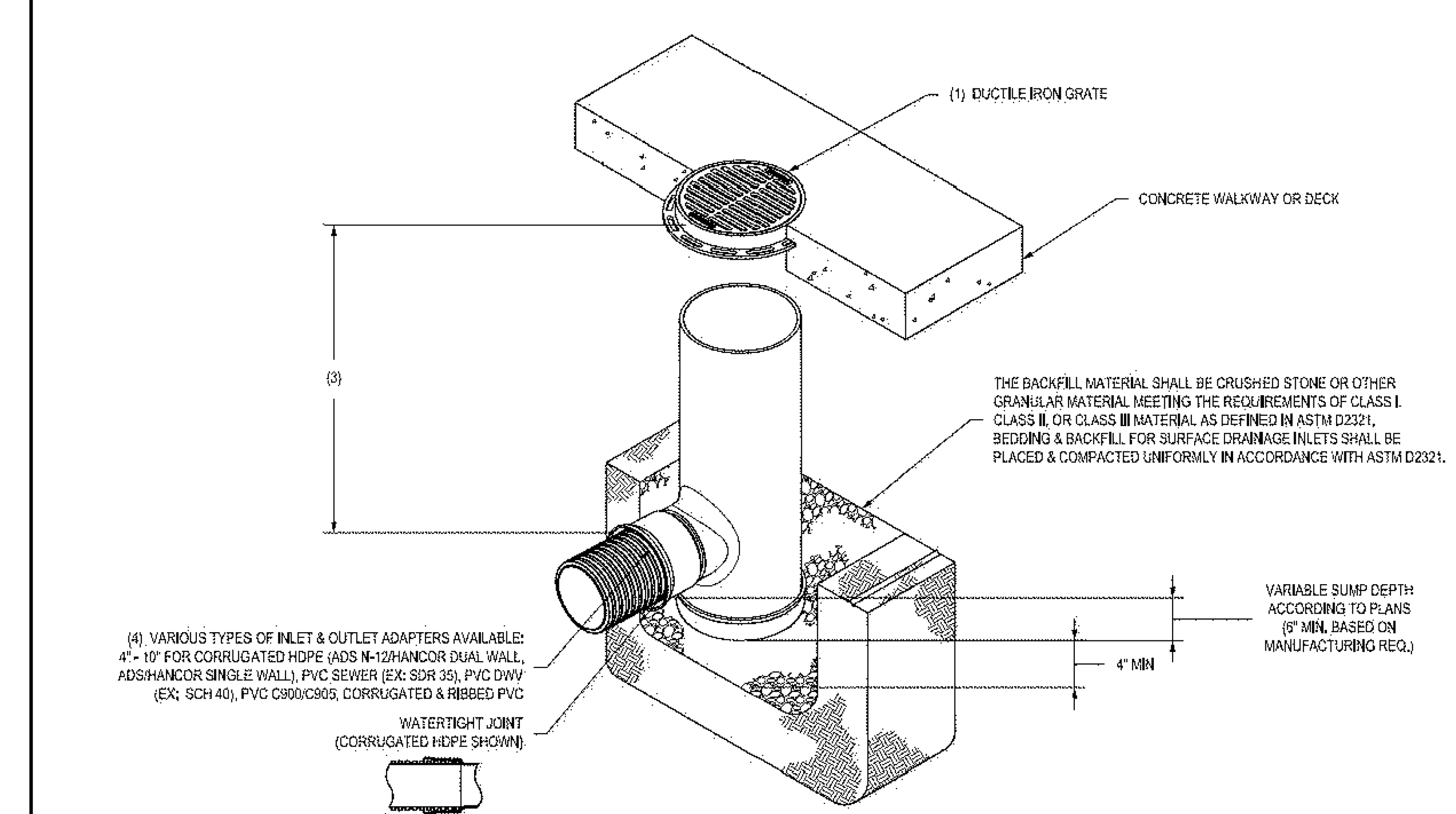
NOTES:
1. MAXIMUM TRENCH WIDTH AT TOP OF PIPE SHALL BE O.D. +24" FOR ALL PIPE SIZES UP TO AND INCLUDING 24" I.D. AND O.D. +30" FOR PIPE LARGER THAN 24" I.D.
2. GRANULAR TRENCH PIPE BACKFILL UNDER PAVEMENT AND STRUCTURES SHALL BE ODOT 304 LIMESTONE COMPACTED TO TOP OF TRENCH. SEE SECTION 1.24 FOR COMPACTION REQUIREMENTS. THE BACKFILL MATERIAL SHALL EXTEND A MINIMUM OF 3-FEET BEYOND EACH EDGE OF PAVEMENT OR STRUCTURE. IN AREAS OUTSIDE OF PAVEMENT, SELECT ON-SITE GRANULAR MATERIAL APPROVED BY LAKE COUNTY SANITARY ENGINEER MAY BE USED IN LIFTS NOT TO EXCEED 6-INCHES FOR PIPE BACKFILL ABOVE BEDDING.
3. ALL BEDDING SHALL BE CLASS "C" UNLESS OTHERWISE NOTED ON THE PLANS OR REQUIRED BY THE SANITARY ENGINEER.
4. SLAG SHALL NOT BE USED FOR BEDDING OR BACKFILL.
5. RECYCLED CONCRETE SHALL NOT BE USED.
6. CLAY DAMS SHALL BE REQUIRED WHEN AND WHERE NECESSARY PER THE SOLE DISCRETION OF THE LCDU.
7. THESE SPECIFICATIONS ARE TO BE CONSIDERED MINIMUM REQUIREMENTS AND ARE SUPERSEDED BY THE REQUIREMENTS OF THE LOCAL AUTHORITY WITH JURISDICTION OVER THE ROADWAY, WHEN APPLICABLE.

FIG 2.22.1

FOR WATER ONLY
SEE FIG 3.17.1 FOR SANITARY

LAKE COUNTY DEPARTMENT OF UTILITIES		
TRENCH AND BEDDING DETAILS		
DATE: 6-16	DRAWN BY: DDB	SCALE: NONE

NYLOPLAST 10" DRAIN BASIN: 2810AG _ _ X



Nyloplast
10 IN DRAIN BASIN QUICK SPEC INSTALLATION DETAIL
DATE 6-25-13

STATE OF OHIO JOHN URBANICK E-66506 REGISTERED PROFESSIONAL ENGINEER

ROCKAWAY CIVIL
Rockaway Civil LLC
10191 Sperry Road Kirtland Ohio 44094
440 655 8182 www.rockawaycivil.com

LAKE METROPARKS
OHIO811.org Before You Dig

LAKEFRONT LODGE
30525 LAKESHORE BOULEVARD
WILLOWICK, OHIO 44095

Project Name

Sheet Revision

1	BID SET	05-20-2026

Project Issue

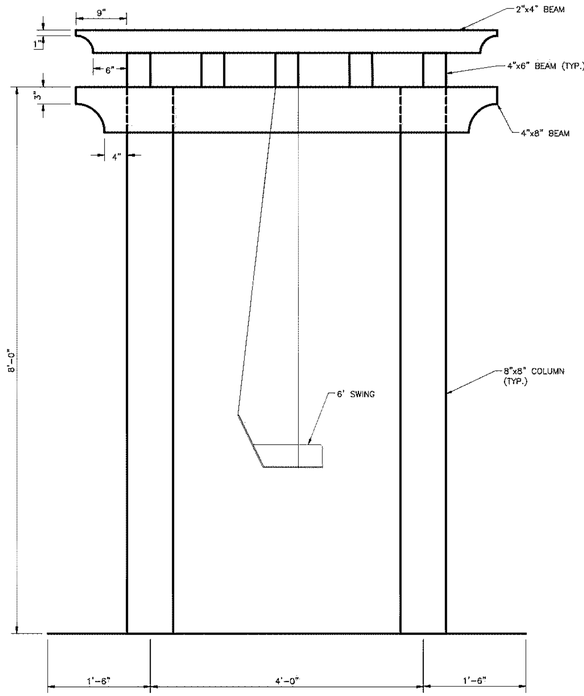
DETAILS

Sheet Name

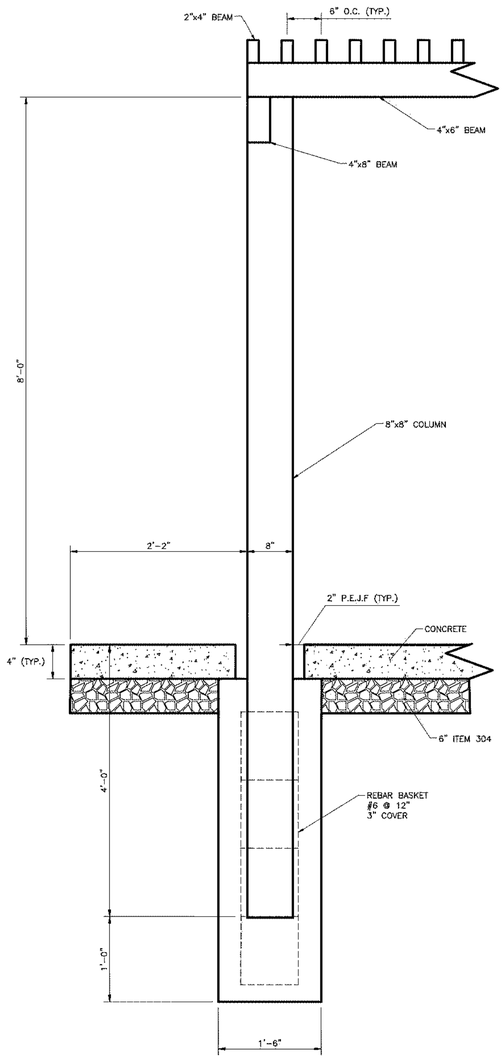
C300

Sheet #

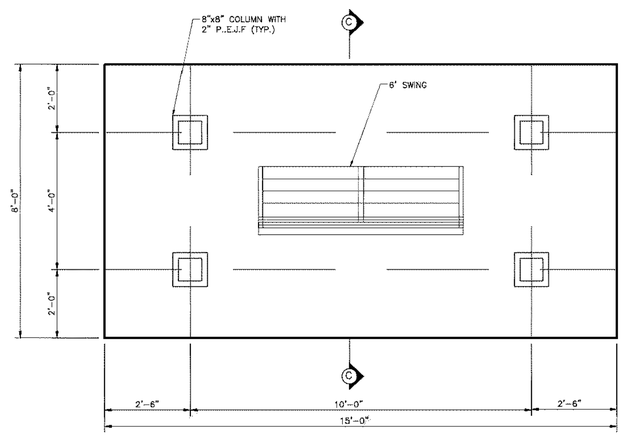
RC Project # 26-001



SECTION C-C DETAIL
SCALE: 1" = 1'



USER SWINGS EMBEDDMENT DETAIL
SCALE: 1" = 1'



USER SWINGS FOUNDATION PLAN
SCALE: 1" = 2'

NOTES:

1. MATERIALS FOR THE SWINGS WILL BE FURNISHED BY OWNER, CONTRACTOR SHALL PREPARE THE SITE AND POUR THE FOUNDATION AND THE SLAB. CONTRACTORS SHALL INSTALL THE SWINGS. CUT SHEETS FOR THE SWINGS WILL BE PROVIDED UPON REQUEST.
2. EXPANSION JOINT LOCATION AND SPACING PER ITEM 608.04.
3. SLABS AND CONCRETE WALKS SHOULD HAVE 4"X4" – W1.4XW1.4 WWF.
4. CONSTRUCTION JOINT SHALL BE EQUAL TO APPROXIMATELY THREE TIMES THE THICKNESS OF THE SLAB.

PRELIMINARY
NOT FOR CONSTRUCTION

OHIO811.org Before You Dig

DRAFT

REVISION RECORD

NO	DATE	DESCRIPTION

Civil & Environmental Consultants, Inc.
6150 Parkland Blvd.
Suite 115
Mayfield Heights, OH 44124
Ph: 440.544.1555
www.cecinc.com

ARCOLA CREEK PARK
SITE IMPROVMENTS

LAKE METROPARKS
LAKE COUNTY, OHIO

SWINGS FOUNDATION PLAN

DATE:	JAN. 2025
DRAWN BY:	GCL
CHECKED BY:	BL
DWG SCALE:	AS NOTED
PROJECT NO:	347-085
APPROVED BY:	

DRAWING NO.: 9
SHEET 9 OF 17

STATE OF OHIO ENGINEER JOHN URBANICK E-66506 REGISTERED PROFESSIONAL

ROCKAWAY CIVIL
Rockaway Civil LLC
10191 Sperry Road Kirtland Ohio 44094
440 655 8182 www.rockawaycivil.com

LAKEMETROPARKS

OHIO811.org Before You Dig

LAKEFRONT LODGE
30525 LAKESHORE BOULEVARD
WILLOWICK, OHIO 44095

Project Name

Sheet Revision

1	BID SET	05-20-2026

Project Issue

DETAILS
Sheet Name

C301
Sheet #

RC Project # 26-001