PROHIBITED CONNECTIONS TO SANITARY SEWERS

SEWER LINES ARE STRICTLY PROHIBITED.

ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO SANITARY

ALL STORM SEWER CATCH BASINS AND MANHOLES SHALL MEET THE REQUIREMENTS OF THE WRITTEN SPECIFICATIONS. PIPE OPENINGS SHALL BE PRECAST. KNOCKOUT PANELS/SIDES ARE UNACCEPTABLE. CATCH BASINS SHALL BE INSTALLED WITH FINGER DRAINS TO ALLOW DRAINAGE OF THE STONE BASE INTO THE CATCH BASIN. CASTINGS FOR ALL MANHOLES AND CATCH BASINS SHALL MEET ODOT STANDARDS. CASTINGS SHALL BE ADA COMPLIANT. 6" UNDERDRAIN PIPES FOR STORM STRUCTURES IN PAVEMENT SHALL BE A MINIMUM OF 20' IN LENGTH. UNDERDRAINS SHALL BE BACKFILLED WITH #57 CRUSHED LIMESTONE AGGREGATE. PRIOR TO FINAL ACCEPTANCE OF THE PROJECT BY THE OWNER, THE CONTRACTOR SHALL ENSURE THAT ALL RECENTLY CONSTRUCTED IMPROVEMENTS AND EXISTING FEATURES IN OR ADJACENT TO THE IMPROVEMENTS ARE CLEAN AND FREE OF ANY AND ALL DEBRIS AND ALL

<u> ÆRIFICATION OF UNDERGROUND UTILITIES</u> THE SITE CONTRACTOR SHALL VERIFY THE EXISTENCE AND ACTUAL LOCATION (ALIGNMENT AND ELEVATION) OF THE EXISTING UTILITIES FOR THE PROJECT PRIOR TO ORDERING MATERIALS OR BEGINNING WORK. CONTRACTOR SHALL VERIFY CRITICAL UTILITY CROSSINGS WHICH COULD EFFECT ACCORDANCE WITH STANDARD CONSTRUCTION PRACTICE (REFER TO SWPPP). THE COMPLETION OF THE IMPROVEMENTS. THIS WILL LIKELY REQUIRE EXPLORATORY EXCAVATIONS TO BE PERFORMED BY EACH CONTRACTOR FOR WHICH HE WILL NOT BE DIRECTLY REIMBURSED. WHERE A PROPOSED CONDUIT TO BE CONNECTED TO OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, EACH CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES (LINE AND GRADE) BEFORE STARTING TO INSTALL THE PROPOSED CONDUIT. ANY CONFLICTS AND/OR DISCREPANCIES FROM THE PLAN INFORMATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER SO THE APPROPRIATE ADJUSTMENTS IN ALIGNMENT AND/OR GRADE MAY BE MADE PRIOR TO THE START OF CONSTRUCTION.

AT LEAST 72 HOURS PRIOR TO COMMENCING WORK ON THIS PROJECT THE CONTRACTOR(S) SHALL NOTIFY THE CITY OF MASSILLON UTILITY DEPARTMENT AND THE REGISTERED UTILITY PROTECTION AGENCY/SERVICE TO BEGIN CONSTRUCTION ACTIVITY ON THIS PROJECT. PROOF OF SUCH NOTIFICATION SHALL BE FILED WITH THE PROJECT ENGINEER. THE MARKING AND/OR LOCATION OF EXISTING UTILITIES SHALL BE COORDINATED TO STAY APPROXIMATELY TWO WORKING DAYS AHEAD OF THE PLANNED CONSTRUCTION. OHIO UTILITIES PROTECTION SERVICE: 1-800-362-2764 (CONTACT NON-MEMBERS DIRECTLY).

<u>'ESTING OF UNDERGROUND UTILITIES</u> ALL SANITARY SEWER AND WATER LINE UTILITIES SHALL BE TESTED IN ACCORDANCE WITH THE CITY OF MASSILLON SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE TO TEST. DOCUMENT, AND REPAIR ANY FAILING PORTIONS OF PIPE NOT MEETING THE TESTING REQUIREMENTS.

ALL PROPOSED STORM SEWER SHALL MEET THE REQUIREMENTS OF THE WRITTEN SPECIFICATIONS STORM SEWER PIPE MATERIALS SHALL MEET THE REQUIREMENTS OF ODOT 707.33 (SMOOTH LINED 2. GENERAL REQUIREMENTS — ANY STRUCTURE — MANHOLE, VALVE, HYDRANT, ETC. THAT CORRUGATED POLYETHYLENE) OR REINFORCED CONCRETE CIRCULAR PIPE PER ODOT 706.02 UNLESS OTHERWISE DENOTED ON PLANS.

ALL BUILDING DOWNSPOUT LINES SHALL BE POLYVINYL CHLORIDE PIPE (PVC) SDR—35 MEETING THE REQUIREMENTS OF ODOT 707.45. STANDARD BENDS AND FITTINGS SHALL BE USED FOR CHANGES IN DIRECTION AND/OR ELEVATION.

AT THE END OF THE PROJECT, AFTER FINAL SITE STABILIZATION IS COMPLE (70+% VEGETATIVE COVER ESTABLISHED), THE CONTRACTOR SHALL SUBMIT VIDEO EVIDENCE OF ALL STORM SEWERS — AN AS-BUILT SURVEY WILL NOT BE ACCEPTED. TO PROVE THE STORM SEWERS ARE CLEAR OF ANY SEDIMENT, TRASH OR DEBRIS. EACH STORM RUN MUCH BE INSPECTED. IN ACCORDANCE WITH ODOT 611.12 REQUIREMENTS AND A PERFORMANCE REPORT SHALL BE SUBMITTED ALONG WITH THE VIDEO FILES FOR REVIEW IN ACCORDANCE WITH ODOT 611.04 D. IF ANY SEDIMENT, TRASH OR DEBRIS IS PRESENT, THE CONTRACTOR SHALL CLEAN THE STORM SEWERS USING THE JET—VAC PROCESS RECOMMENDED BY THE MANUFACTURE AND RESUBMIT NEW VIDEO EVIDENCE AND PERFORMANCE REPORT OF THE STORM SEWERS, AT TO ADDITIONAL COST TO THE PROJECT. ANY STRUCTURAL DEFICIENCIES NOTED IN THE PERFORMANCE REPORTS MUST BE REMEDIATED IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS PRIOR TO ACCEPTANCE.

ALL SANITARY SEWER LINES SHALL BE PVC SDR—35 MEETING THE REQUIREMENTS OF ASTM D-3034 WITH JOINTS MEETING ASTM-3212. MINIMUM COVER OVER THE SANITARY SEWER LINE SHALL BE 4 FEET. MINIMUM SERVICE LATERALS SHALL BE 6" MIN. ALL SANITARY SEWER LINES SHALL MEET THE REQUIREMENTS OF THE WRITTEN SPECIFICATIONS. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE EXISTING SANITARY FLOW DURING CONSTRUCTION AND TESTING OF THE PROPOSED SANITARY SERVICE. THE CONTRACTOR SHALL COORDINATE THE METHOD FOR MAINTAINING THE EXISTING FLOW WITH THE GOVERNING AGENCY AND THE ENGINEER. BEDDING MATERIAL SHALL MEET THE REQUIREMENTS OF THE PIPE MANUFACTURER. DEFLECTION TESTING (ASTM D-2680) SHALL BE CONDUCTED 30 DAYS AFTER INSTALLATION AND BACKFILLING OF THE PIPE OR AS OTHERWISE DIRECTED BY THE ENGINEER. THE ALLOWABLE DEFLECTION RATE SHALL NOT EXCEED FIVE (5%) PERCENT. ALL TESTING SHALL BE PER CITY OF MASSILLON STANDARDS.

TESTS, A LOW PRESSURE AIR TEST MAY BE CONDUCTED PER RECOMMENDED STANDARDS FOR SEWAGE WORKS (TEN STATE STANDARDS). THE PROPOSED SANITARY SEWER SYSTEMS SHALL BE MANAGEMENT SYSTEM. TESTED. APPROVED. AND ACCEPTED PRIOR TO BEING PUT INTO SERVICE. ALL TESTING SHALL BE PER ODOT 611 REQUIREMENTS. MANHOLE CONSTRUCTION SHALL MEET THE REQUIREMENTS OF ASTM C-478 AND C-443. MANHOLES SHALL BE LEAKAGE TESTED IN ACCORDANCE WITH ASTM C-1244. ALL SANITARY MANHOLES SHALL BE VIDEO TAPED IN ACCORDANCE WITH ODOT 611

EXFILTRATION TESTING (OR INFILTRATION IF APPLICABLE) SHALL NOT EXCEED A MAXIMUM

RESTORATION OF DISTRUBED AREAS EXISTING DRIVES, PAVEMENT, SIGNS, LIGHT POLES AND OTHER APPURTENANCES DISTURBED DURING CONSTRUCTION BUT NOT SPECIFICALLY DESIGNATED FOR REMOVAL/REPLACEMENT SHALL BE RESTORED TO A CONDITION EQUAL TO THAT WHICH EXISTED PRIOR TO CONSTRUCTION AND TO COMPLETE SATISFACTION OF THE CITY ENGINEER.

THE SITE CONTRACTOR MUST PROTECT AND SUPPORT ANY EXISTING UTILITIES WITHIN OR ADJACENT TO THE PROJECT AREA. UTILITIES MUST BE KEPT IN SERVICE AT ALL TIMES.

PROOF ROLLING SHALL BE PERFORMED ON THE PREPARED COMPACTED SUBGRADE OF THE PROPOSED PARKING AREAS AND DRIVE AREAS PRIOR TO PLACEMENT OF ANY PAVEMENT BASE MATERIAL OR STAGING AGGREGATE. THE PROOF ROLLING SHALL BE PERFORMED IN THE PRESENCE OF THE SITE GEOTECHNICAL ENGINEER USING A FULLY LOADED TANDEM AXLE DUMP TRUCK OR VIA OTHER APPROVED MEANS. THE PROOF ROLLING OPERATION SHALL COVER THE ENTIRE WIDTH AND LENGTH OF THE PROPOSED AREAS. THE PURPOSE OF THIS PROCEDURE IS TO DETECT SOFT, YIELDING, CONTAMINATED AND/OR UNSTABLE ZONES WITHIN THE SUBGRADE. ANY SUCH ZONES THAT ARE FOUND SHALL BE CORRECTED. THE UNSATISFACTORY AREAS SHALL BE UNDERCUT AND REPLACED WITH CLEAN APPROVED MATERIAL, OR OTHERWISE STABILIZED/CORRECTED AS APPROVED/DIRECTED BY THE GEOTECHNICAL ENGINEER. NO ADDITIONAL PAYMENT WILL BE MADE TO THE CONTRACTOR FOR CORRECTION OF UNSUITABLE

PROOF ROLLING SHALL ALSO BE PERFORMED AS SPECIFIED ABOVE ON ALL AREAS/SURFACES UPON WHICH EMBANKMENTS ARE TO BE CONSTRUCTED PRIOR TO THE PLACEMENT OF ANY EMBANKMENT/FILL.

EACH CONTRACTOR SHALL MAINTAIN A SAFE WORKING ENVIRONMENT AT THE PROJECT SITE AT ALL TIMES. THE CONTRACTOR SHALL FOLLOW ALL THE O.S.H.A. REGULATIONS REGARDING OPEN TRENCHES AND EXCAVATIONS (TRENCH SAFETY). ADEQUATE BARRICADES, WARNING LIGHTS, SIGNS, FENCING. ETC. SHALL BE ERECTED AROUND THE CONSTRUCTION AREA DURING ALL NON-WORKING HOURS TO ALERT PERSONS OF THE POTENTIAL DANGER ASSOCIATED WITH THE AREA UNDER CONSTRUCTION AS WELL AS TO PREVENT ACCESS BY UNAUTHORIZED PERSONNEL TO THE CONSTRUCTION SITE. ALL TRENCHES SHALL BE BACKFILLED AT THE END OF EACH WORK DAY OR PROPERLY SECURED AS APPROVED BY THE ENGINEER. AT NO TIME SHALL ANY PERSONNEL ENTER EXISTING STRUCTURES/CHAMBERS WITHOUT PROPER SAFETY EQUIPMENT, INCLUDING BUT NOT LIMITED TO AIR PACKS, AIR MONITORS, AND/OR AIR SENSORS, BODY HARNESS WITH POSITIVE MEANS OF REMOVING A PERSON FROM THE STRUCTURE/CHAMBER. ALL WORK SHALL PERFORMED IN COMPLIANCE WITH APPLICABLE O.S.H.A. REQUIREMENTS INCLUDING THOSE SPECIFIED FOR ENTERING CONFINED SPACES.

THE CONTRACTOR SHALL STAY WITHIN THE LIMITS OF THE SUBJECT PROPERTY AT ALL TIMES. NO EXCAVATIONS AS REQUIRED TO MAINTAIN STABILITY OF BOTH THE EXCAVATION SIDES AND MATERIAL SHALL BE STORED NOR ANY WORK PERFORMED OUTSIDE THE LIMITS OF THE SUBJECT BOTTOM. PROPERTY. A PERMIT IS REQUIRED FROM THE CITY OF MASSILLON FOR WORK IN THE PUBLIC RIGHT-OF-WAY. MAINTAIN ACCESS TO THE PRIVATE RESIDENTIAL PROPERTIES ON STATE STREET

ALL KNOWN UTILITIES HAVE BEEN SHOWN ON THE PLANS, EACH CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND ELEVATIONS OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO IT IS THE RESPONSIBILITY OF THE SITE CONTRACTOR TO COORDINATE ALL DEMOLITION ITEMS WITH CONSTRUCTION. ALERT THE OHIO UTILITIES PROTECTION SERVICE (OUPS) AT 1-800-362-2764 AT LEAST 48 HOURS BEFORE ANY EXCAVATING IS INITIATED. THE CONTRACTOR SHALL CAREFULLY EXAMINE THE SITE AND ADJACENT PROPERTIES FOR INDICATIONS OF POSSIBLE EXISTING UNDERGROUND NATURAL GAS PIPE LINES WHICH MAY CROSS THROUGH THE SUBJECT SITE. THE CONTRACTOR SHALL NOTIFY THE ENGINEERS IF ANY SUCH EVIDENCE OF EXISTING PIPELINES ARE

CONSTRUCTED, INSPECTED, AND TESTED IN ACCORDANCE WITH THE OHIO DEPARTMENT OF PROJECT SITE AS NECESSARY/REQUIRED TO MAINTAIN SAFE VISIBILITY WITHIN AND/OR ADJACENT TRANSPORTATION (ODOT) AND THE CITY OF MASSILLON STANDARDS AND REGULATIONS. THE CITY TO THE SITE AND AVOID IMPACT ON DAILY OPERATIONS. METHODS FOR DUST CONTROL MUST BE OF MASSILLON SHALL BE NOTIFIED A MINIMUM OF 24 HOURS IN ADVANCE FOR SCHEDULING OF ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE

2. ALL UTILITIES INCLUDING WATER LINES AND SANITARY AND STORM SEWERS, SHALL BE

SANITARY SEWER ARE PROHIBITED. 4. TRENCHES FOR THE UTILITIES UNDER PAVEMENT SHALL BE BACKFILLED TO THE PAVEMENT SUBBASE WITH ODOT ITEM 304 LIMESTONE AGGREGATE TO REDUCE SETTLEMENT. THE EXISTING PAVEMENT SHALL BE NEATLY SAW-CUT PRIOR TO REMOVAL, AND BE REPLACED IN ACCORDANCE WITH THE DRAWING DETAILS.

5. ALL OPEN TRENCHES SHALL BE TEMPORARILY BACKFILLED OVERNIGHT, OR INSTALL TEMPORARY FENCING AND/OR STEEL PLATES WITH THE APPROVAL OF THE OWNER OR HIS REPRESENTATIVE.

S. LENGTHS OF PIPE SHOWN ON THIS DRAWING ARE APPROXIMATE. FIELD VERIFY AND PROVIDE

7. THE MINIMUM VERTICAL CLEARANCE BETWEEN UTILITIES AT ALL CROSSINGS IS 6" FROM THE SITE CONTRACTOR SHALL SAFELY AND PROPERLY MAINTAIN TRAFFIC ADJACENT TO, THROUGH, OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE. EXCEPT AS NOTED BELOW: MAINTAIN THE FOLLOWING CLEARANCES AT SEWER/WATER CROSSINGS.

EXACT LENGTHS REQUIRED.

SANITARY SEWER: 18" VERTICAL, 10' HORIZONTAL. B. TRANSITIONS BETWEEN DISSIMILAR SEWER PIPE MATERIALS SHALL BE WITH APPROPRIATE COMPRESSION STYLE FERNCO FITTINGS.

9. SANITARY AND STORM SEWER PRESSURE TEST IN ACCORDANCE WITH ASTM F-1417 AND MANUFACTURER'S RECOMMENDATIONS, DEPENDING ON SIZE OF PIPE. 10. SANITARY AND STORM SEWER DEFLECTION TEST IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. MAXIMUM PERMISSIBLE DEFLECTION 5.0%. 11. FIELD VERIFY AND REFER TO THE ELECTRICAL DRAWINGS FOR UNDERGROUND CONDUIT

THE SITE CONTRACTOR IS FULLY RESPONSIBLE FOR SOIL SEDIMENT POLLUTION FROM THE SITE AND THE PROPER PLACEMENT AND MAINTENANCE OF EROSION CONTROL ITEMS IN

OWNER AND CONTRACTOR SHALL COMPLY WITH CITY OF MASSILLON CONSTRUCTION STANDARDS AND SPECIFICATIONS DURING CONSTRUCTION. ADDITIONAL CONTROLS SHALL BE PROVIDED AS NECESSARY, OR AS DIRECTED BY THE PROJECT ENGINEER AT NO ADDITIONAL COST TO THE PROJECT. CITY INSPECTION IS REQUIRED FOR ALL WORK WITHIN THE STREET RIGHT OF WAY. CITY

STORM WATER POLLUTION PROTECTION.

OUTSIDE OF STREET R/W'S.

DOCUMENTS.

4. THE CONTRACTOR SHALL NOTIFY THE CITY OF MASSILLON 72 HOURS PRIOR TO WORK REQUIRING CITY INSPECTION. ALL CULVERTS, DITCHES, PAVEMENT, DRIVEWAYS, SHRUBS, SIGNS, FENCES, AND ANY OTHER PROPERTY OR EXISTING IMPROVEMENTS, EITHER PUBLIC OR PRIVATE, WHICH IS DAMAGED AS A RESULT OF THE WORK BY ANY CONTRACTOR SHALL BE RESTORED AND/OR REPLACED BY THE RESPECTIVE CONTRACTOR IN ACCORDANCE WITH CITY AND COUNTY SPECIFICATIONS. ANY DAMAGE TO EXISTING PROPERTY MARKERS AND MONUMENTS DURING CONSTRUCTION SHALL BE RE-ESTABLISHED BY A REGISTERED SURVEYOR AT THE COST OF THE RESPECTIVE CONTRACTOR.

<u>AS-BUILT DRAWING REQUIREMENTS</u> THE SITE CONTRACTOR SHALL PROVIDE AS—BUILT DRAWINGS FOR ALL SITE WORK IMPROVEMENTS UPON COMPLETION OF THE SITE WORK. FIELD MEASUREMENTS SHALL BE PERFORMED BY AND STAMPED A LICENSED SURVEYOR/ENGINEER. AS-BUILT DRAWINGS SHALL INCLUDE STORM SEWERS, SITE UTILITIES, WATER DISTRIBUTION SYSTEM, SANITARY SEWER SYSTEM, GRADING, BUILDING PAD, FINISH FLOOR, DETENTION BASIN, VOLUME & DISCHARGE RATE CERTIFICATION, OVERLAND FLOOD ROUTES & OTHER CRITICAL FEATURES. AS-BUILT DETENTION

ROUTING CALCULATIONS ARE REQUIRED! VARIES MORE THAN 2' HORIZONTALLY OR MORE THAN 2" VERTICALLY SHALL BE RE-DRAWN ON THE DRAWINGS AT THE AS-BUILT LOCATIONS.

3. FINAL AS—BUILT DRAWINGS SHALL BE SUBMITTED TO THE CITY, STARK SOIL & WATER CONSERVATION DISTRICT AND MANCHESTER LOCAL SCHOOLS ON PAPER SHOWING THE PROJECT TITLE, REVISED DATED, SURVEYOR/ENGINEER COMPANY NAME AND BEING LABELED "RECORD DRAWING" IN BOLD PRINT ON EACH SHEET. ALL AS-BUILT DRAWINGS SHALL BE COMPLETED ON EACH ENGINEERING PLAN SHEET. THE CREATION OF NEW SHEETS SOLELY FOR THE PURPOSE OF

WHICH SHALL INCLUDE ALL SURFACES, CONTOURS, AS-BUILT STRUCTURES AND PIPES, AND ALL AS-BUILT SURVEY POINTS LOCATED. SANITARY SEWER — SHOW AS—BUILT LOCATIONS OF ALL MANHOLES, CLEANOUTS, AND LATERAL ENDS, RE-DRAW WHERE NECESSARY ON PLAN AND/OR PROFILE SHEETS. SHOW NEW LENGTHS AND GRADE PERCENTAGES - CROSS OUT THE ORIGINAL NUMBERS. MANHOLES SHALL SHOW THE AS—BUILT RIM AND INVERT ELEVATIONS INCLUDING ELEVATIONS OF DROPS INSIDE THE MANHOLE. RIM ELEVATIONS MUST BE DONE AFTER FINAL FIELD ADJUSTMENTS HAVE BEEN MADE.

VERIFY THAT SANITARY SEWER LOCATIONS WILL FIT WITH ANY PROPOSED EASEMENTS IN AREAS

4. FINAL AS-BUILD DRAWINGS SHALL ALSO BE SUBMITTED TO MANCHESTER LOCAL SCHOOLS

AND PROJECT ENGINEER IN AN ELECTRONIC AUTODESK AUTOCAD CIVIL 3D COMPATIBLE FILE,

6. DETENTION BASINS AND/OR UNDERGROUND STORM WATER MANAGEMENT CHAMBER SYSTEMS - SHOW AS-BUILT LOCATIONS OF ALL DETENTION BASIN STRUCTURES INCLUDING ALL INLET AND OUTLET PIPE AND ORIFICE SIZES AND INVERT ELEVATIONS, DETENTION BASIN GRADING INCLUDING FOREBAYS. MICROPOOLS. EMERGENCY SPILLWAY. TOP OF EMBANKMENT AND BASIN SIDE SLOPES SHALL BE AS-BUILT SURVEYED TO VERIFY CONFORMANCE TO PLAN DOCUMENTS. THE AS-BUILT SURVEY SHALL BE SUBMITTED TO THE DESIGN ENGINEER TO VERIFY AND CONFIRM THAT ALL STORM WATER MANAGEMENT SYSTEM DESIGN REQUIREMENTS PER PLAN (OUTFLOWS, STORAGE VOLUMES AND WATER SURFACE ELEVATIONS) ARE SATISFIED BEFORE FINAL ACCEPTANCE. CONTRACTOR SHALL PROVIDE COMPLETE ASBUILT VOLUME AND ASBUILT ROUTING CALCULATIONS. IF THE DESIGN ENGINEER DETERMINES THAT THE BASIN OUTFLOW DISCHARGE RATES, AND OR DETENTION VOLUME ARE NOT IN CONFORMANCE WITH THE APPROVED DESIGN DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE CORRECTIONS TO THE GRADING, OUTLET STRUCTURE(S), STORM SEWER(S), OVERFLOW WEIR(S), FOREBAY(S), MICROPOOL(S) AND ANY ALLOWABLE LEAKAGE OF 100 GALLON/INCH OF PIPE DIAMETER/MILE/DAY. IN LIEU OF SAID WATER OTHER RELATED ITEMS INCLUDING ADDITIONAL ASBUILT DATA. ÀT NO ADDITIONAL COST TO THE PROJECT, UNTIL SAID DESIGN ENGINEER APPROVES THE CONSTRUCTED STORM WATER

> AS-BUILT DETENTION ROUTING CALCULATIONS ARE REQUIRED! THE AS-BUILT ROUTING CALCULATIONS SHALL BE PREPARED BY A LICENSED PROFESSIONAL ENGINEER AND SUBMITTED TO THE PROJECT ENGINEER FOR REVIEW. ALL CALCULATIONS SHALL INCLUDE PRE-DEVELOPED & POST-DEVELOPED RUNOFF CONDITIONS, WATER QUALITY VOLUME DRAWDOWN CALCULATIONS IN ACCORDANCE WITH THE OHIO EPA GENERAL CONSTRUCTION PERMIT OHCOOOOOS, AS-BUILT DETENTION BASIN RELEASE RATES AND PEAK STORAGE ELEVATIONS, BASED ON THE AS—BUILT POND VOLUME AND OUTLET STRUCTURE(S).

> 8. AT THE END OF THE PROJECT, AFTER FINAL SITE STABILIZATION IS COMPLE (70+% VEGETATIVE COVER ESTABLISHED), THE CONTRACTOR SHALL SUBMIT VIDEO EVIDENCE OF ALL STORM SEWERS AND UNDERGROUND STORMWATER MANAGEMENT CHAMBER SYSTEMS (IF APPLICABLE) TO PROVE THE STORM SEWERS AND UNDERGROUND STORMWATER MANAGEMENT CHAMBER SYSTEMS ARE CLEAR OF ANY SEDIMENT, TRASH OR DEBRIS. EACH STORM RUN AND UNDERGROUND STORMWATER MANAGEMENT CHAMBER SYSTEM ROW (IF APPLICABLE) SHALL BE INSPECTED, IN ACCORDANCE WITH ODOT 611.12 REQUIREMENTS AND A PERFORMANCE REPORT SHALL BE SUBMITTED ALONG WITH THE VIDEO FILES FOR REVIEW IN ACCORDANCE WITH ODOT 611.04 D. IF ANY SEDIMENT, TRASH OR DEBRIS IS PRESENT, THE CONTRACTOR SHALL CLEAN THE STORM SEWERS USING THE JET-VAC PROCESS RECOMMENDED BY THE MANUFACTURE AND RESUBMIT NEW VIDEO EVIDENCE AND PERFORMANCE REPORT OF THE STORM SEWERS, AT TO ADDITIONAL COST TO THE PROJECT. 9. IN THE EVENT THE CONTRACTOR FAILS TO PRODUCE ADEQUATE CLOSE OUT DOCUMENTS INCLUDING ASBUILTS AND VIDEO INSPECTION, THE DESIGN TEAM RESERVES THE RIGHT TO PERFORM AND/OR SUBCONTRACT THE REQUIRED SERVICES REQUIRED TO PRODUCE THE REQUIRED ASBUILT DOCUMENTS AND VIDEO INSPECTIONS. THE CONTRACTOR WILL THEN BE BACK CHARGED

> <u>AGGREGATE BASE AND BACKFILL</u> AGGREGATE SIZE, GRADATION, THICKNESS AND COMPACTION SHALL BE IN ACCORDANCE WITH THE DRAWINGS AND PROJECT GEOTECHNICAL ENGINEER'S REPORTS, REQUIREMENTS, AND RECOMMENDATIONS. RECYCLED #304 CONCRETE AGGREGATE IS NOT PERMITTED FOR USE ON THIS PROJECT. INCASE OF CONFLICT BETWEEN THE SPECIFICATIONS AND THE GEOTECHNICAL ENGINEER'S REPORTS, REQUIREMENTS, AND RECOMMENDATIONS THE GEOTECHNICAL ENGINEER'S REPORTS, REQUIREMENTS, AND RECOMMENDATIONS SHALL GOVERN.

FOR THE COST PLUS TEN PERCENT (10%) THE FEES ASSOCIATED WITH ACQUIRING THE REQUIRED

EXCAVATION AND TRENCHING SAFETY IN FEDERAL REGISTER, VOLUME 54, NO. 209 (OCTOBER, 1989), THE UNITED STATES DEPARTMENT OF LABOR. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AMENDED ITS "CONSTRUCTION STANDARDS FOR EXCAVATIONS, 29 CFR, PART 1926, SUBPART P" TO MANDATE THAT ALL EXCAVATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NEW OSHA GUIDELINES, INCLUDING BUT NOT LIMITED TO UTILITY TRENCHES, BASEMENT EXCAVATIONS OR FOUNDATIONS EXCAVATIONS. THE OSHA GUIDELINES SHALL BE FOLLOWED CLOSELY, AND STRICTLY ENFORCED.

2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DESIGNING AND CONSTRUCTING STABLE,

TEMPORARY EXCAVATIONS AND SHOULD SHORE, SLOPE OR BENCH THE SIDES OF THE

THE CONTRACTOR'S "RESPONSIBLE PERSON" AS DEFINED IN "CFR PART 1926" 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, NCLUDING UTILITY TRENCH EXCAVATION DEPTH, EXCEED THOSE SPECIFIED IN LOCAL, STATE AND FEDERAL SAFETY REGULATIONS. 4. LEWIS LAND PROFESSIONALS, INC. DOES NOT ASSUME RESPONSIBILITY FOR CONSTRUCTION SITE SAFETY OR THE CONTRACTOR'S ACTIVITIES: SUCH RESPONSIBILITY IS NOT BEING IMPLIED AND SHOULD NOT BE INFERRED SOILS ENCOUNTERED MAY BE SENSITIVE TO DISTURBANCES CAUSED BY CONSTRUCTION TRAFFIC AND TO CHANGES IN MOISTURE CONTENT. WET WEATHER PERIODS CAN INCREASE THE MOISTURE CONTENT AND CAUSE A SIGNIFICANT REDUCTION IN THE STRENGTH AND SUPPORT CAPABILITIES OF THE SOILS. THE CONTRACTOR SHALL USE CARE DURING THE GRADING OPERATIONS. THE CONTRACTOR SHALL SLOPE ALL BUILDING PADS AND PAVEMENT SUBGRADES TO MAINTAIN POSITIVE DRAINAGE AND PREVENT LOCAL PONDING OF RUNOFF WATER. 6. THE TRAFFIC OF HEAVY EQUIPMENT, INCLUDING COMPACTION EQUIPMENT, MAY CREATE PUMPING AND DETERIORATION OF THE SOIL STRUCTURE IN THE PRESENCE OF WATER. THE CONTRACTOR SHALL USE CAUTION WHILE GRADING IN THE WET SEASON, AND IF POSSIBLE, PERFORM ALL GRADING OPERATIONS DURING A DRY SEASON.

EARTHWORK NOTES CONTRACTOR SHALL PERFORM AN EARTHWORK CUT/FILL ANALYSIS DURING THE BIDDING PROCESS & SHALL NOTE ANY IMPORT AND OR EXPORTING OF SOIL NECESSARY TO ACHIEVE THE PROPOSED ELEVATIONS SHOWN ON THE PLANS AND ALL ASSOCIATED COSTS FOR IMPORTING AND OR EXPORTING SOILS. PRIOR TO ANY SITE GRADING.

CONTRACTOR SHALL IMPORT/EXPORT SUITABLE SOIL TO ACHIEVE THE PROPOSED ELEVATIONS SHOWN ON GRADING PLANS. CHANGE ORDERS WILL NOT BE PERMITTED FOR ANY CONTRACTORS THAT DO NOT PERFORM THEIR OWN EARTHWORK CALCULATIONS PRIOR TO SUBMITTING A BID.

<u>STORM SEWER NOTES:</u>

INLET MANHOLES IN PAVEMENT SHALL BE SLAB TOP ODOT PRECAST MANHOLES WITH EAST JORDAN IRON WORKS 3700M2 CASTING AND FRAME, OR APPROVED EQUAL. . INLET MANHOLES IN THE LAWN SHALL BE ODOT PRECAST MANHOLES WITH EAST JORDAN IRON WORKS 3700M CASTING AND FRAME, OR APPROVED EQUAL.

3. INLET MANHOLES AT CURBS SHALL BE ODOT PRECAST MANHOLES WITH EAST JORDAN IRON WORKS 7360 CASTING AND FRAME, OR APPROVED EQUAL.

INSPECTION IS REQUIRED FOR WORK RELATED TO SANITARY SEWER, STORM SEWER, WATERMAIN & 4. STORM MANHOLES SHALL BE ODOT PRECAST MANHOLES WITH EAST JORDAN IRON WORKS 3700A CASTING AND FRAME, OR APPROVED EQUAL. 5. ODOT 2-3 AND 2-4 CATCH BASINS IN THE LAWN SHALL HAVE SLAB TOPS WITH EAST

JORDAN IRON WORKS 5110M3 CASTING AND FRAME, OR APPROVED EQUAL

6. ODOT 2-3 AND 2-4 CATCH BASINS IN THE PAVEMENT SHALL HAVE SLAB TOPS WITH EAST JORDAN IRON WORKS 5235 FRAME AND EAST JORDAN IRON WORKS V-5622-80 GRATE, OR APPROVED EQUAL.

7. ODOT 2-2B CATCH BASINS IN THE LAWN SHALL HAVE EAST JORDAN IRON WORKS 5110M3 CASTING AND FRAME, OR APPROVED EQUAL.

8. ODOT 2-2B CATCH BASINS IN THE PAVEMENT SHALL HAVE EAST JORDAN IRON WORKS 5235 FRAME AND EAST JORDAN IRON WORKS V-5622-80 GRATE, OR APPROVED EQUAL. 9. ODOT 3A INLET BASINS SHALL HAVE EAT JORDAN IRON WORKS 7350M5 CASTING AND FRAME, OR APPROVED EQUAL.

10. CONTRACTOR MAY SUBSTITUTE PRECAST CATCH BASIN WITH 24"x36" INSIDE DIMENSIONS AND EAST JORDAN IRON WORKS 7030M2 CASTING AND GRATE AND EAST JORDAN IRON WORKS 7030T1 CURB HOOD FOR ODOT 3A INLET BASINS THROUGHOUT THE SITE.

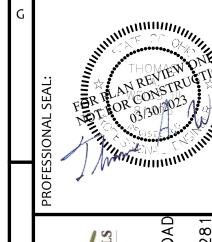
SANITARY SEWER NOTES: 1. SANITARY SEWER MANHOLES SHALL BE PRECAST WITH EAST JORDAN IRON WORKS CASTING AND FRAME. CASTING SHALL CLEARLY NOTE SANITARY SEWER.

1)CONTRACTOR SHALL PROVIDE, ERECT, AND MAINTAIN TEMPORARY BARRIERS, FENCES AND SECURITY DEVICES THROUGH THE DURATION OF THE PROJECT AS REQUIRED.

2) THE EXISTING SCHOOL UTILITY SERVICES SHALL REMAIN IN SERVICE AT ALL TIMES.

<u>ADDITIONAL WATERLINE NOTE.</u> THE CONTRACTOR SHALL MAKE EVERY EFFORT TO MAINTAIN A MINIMUM 18" OF VERTICAL CLEARANCE AT CROSSINGS AND A MINIMUM OF 10' HORIZONTAL SEPARATION BETWEEN THE PROPOSED WATER MAIN AND ANY PREVIOUSLY INDETERMINATELY LOCATED SEWERS FOUND UPON

2203-2



PROJECT NO 2203-3

DRAWN BY CHECKED BY **TUTILITY NOTES**

SCALE: 1" = 40'

SHEET NO

- PLAN PREPARED BY -LEWIS LAND PROFESSIONALS INC. LEWIS LAND 8691 WADSWORTH ROAD SUITE 100 WADSWORTH, OH 44281 (330) 335-8232