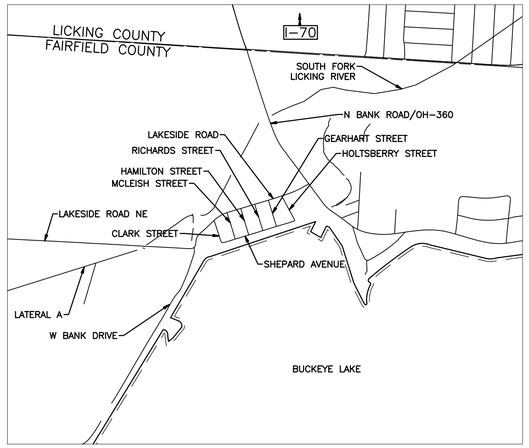


VICINITY MAP

NOT TO SCALE

FAIRFIELD COUNTY ENGINEER

WALNUT TOWNSHIP

NORTH WALNUT TOWNSHIP STORMWATER CONVEYANCE PROJECT LAKESIDE PHASES 2–4 – 90% DESIGN JULY 2025

INDEX OF SHEETS:

GENERAL NOTES ..... 2 – 3
GENERAL SUMMARY 4
STORM SEWER PLANS ..... 5 – 6
STORM SEWER PROFILES ..... 7 – 10
STORM SEWER TABLES AND DETAILS 11
EROSION CONTROL NOTES ..... 12 – 13
EROSION CONTROL PLANS ..... 14 – 15
PAVEMENT REPAIR PLANS ..... 16 – 17
PAVEMENT MILL AND OVERLAY PLANS ..... 18 – 19

ALL STREETS IN THIS DEVELOPMENT ARE PUBLIC.
SEE SHEET 3 FOR LEGEND/ABBREVIATIONS LIST.

PROJECT DESCRIPTION

PHASES 2–4 OF THE PROPOSED STORM SEWER INSTALLATION IN THE LAKESIDE NEIGHBORHOOD IN WALNUT TOWNSHIP, OHIO. THE PROJECT AIMS TO ENHANCE STORMWATER INFRASTRUCTURE AND STORMWATER MANAGEMENT, ADDRESSING ISSUES SUCH AS FLOODING.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: 0.35 ACRES

NOTICE OF INTENT
EARTH DISTURBED AREA: N/A (NOI NOT REQUIRED)

PER SECTION III.G.2.E.III OF THE OHIO CONSTRUCTION GENERAL PERMIT, LINEAR CONSTRUCTION PROJECTS (E.G., PIPELINE OR UTILITY LINE INSTALLATION) WHICH DO NOT RESULT IN THE INSTALLATION OF ADDITIONAL IMPERVIOUS SURFACE ARE NOT REQUIRED TO COMPLY WITH THE CONDITIONS OF PART III.G.2.E OF THE PERMIT. POST–CONSTRUCTION STORMWATER MANAGEMENT PRACTICES ARE NOT NECESSARY FOR THIS PROJECT.

PROJECT DISTURBANCE <1 ACRE, THEREFORE NOI IS NOT REQUIRED.

2023 SPECIFICATIONS

THE CONSTRUCTION AND MATERIAL SPECIFICATIONS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT. THE PROJECT QUANTITIES WERE DEVELOPED UTILIZING THE ONLINE VERSION OF THE CMS PUBLISHED 07/18/2025.

BENCHMARKS

THE BENCHMARKS AND ELEVATIONS SHOWN ON THIS MAP ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988. SAID ELEVATIONS ARE BASED UPON POSITIONAL SOLUTIONS DERIVED FROM RTK GNSS OBSERVATIONS USING THE OHIO DEPARTMENT OF TRANSPORTATION'S OHIO REAL TIME NETWORK EQUIPMENT AND SOFTWARE AND THE NATIONAL GEODETIC SURVEY'S GEOID18 MODEL AT TRAVERSE CONTROL POINTS NUMBERED 201 AND 202. ELEVATIONS OF SAID TRAVERSE CONTROL POINTS WERE THEN TRANSFERRED BY CONVENTIONAL LEVELING PROCEDURES TO THE PERMANENT BENCHMARKS LISTED HEREON. (FIELDWORK COMPLETED 07/2023).

BM#1 RAILROAD SPIKE ON THE NORTH SIDE OF A WOODEN UTILITY POLE LOCATED ON THE SOUTH SIDE OF SHEPARD AVENUE, BEING THE FIRST UTILITY POLE (100 FEET) EAST OF THE INTERSECTION WITH MCLEISH STREET.
ELEV. = 889.01 (NAVD 88)

BM #2 CHISELED "X" ON NORTH FLANGE BOLD OF FIRE HYDRANT LOCATED ON THE SOUTH SIDE OF LAKESIDE ROAD, BEING THE FIRST FIRE HYDRANT (100 FEET) EAST OF THE INTERSECTION WITH MCLEISH STREET.
ELEV. = 887.77 (NAVD 88)

BM #3 CHISELED "X" ON THE SOUTH FLANGE BOLT OF A FIRE HYDRANT LOCATED ON THE NORTH SIDE OF SHEPARD AVENUE, BEING THE FIRST FIRE HYDRANT (90 FEEET) WEST OF THE INTERSECTION WITH MCLEISH STREET.
ELEV. = 889.18 (NAVD 88)

OHIO Utilities Protection SERVICE
Call Before You Dig
CALL: 811 OR 1-800-362-2764

ENGINEERS SEAL:

SIGNED:_____
DATE:_____

PLAN PREPARED BY:
ms consultants, inc.
2221 SCHROCK ROAD
COLUMBUS, OHIO 43229

STANDARD CONSTRUCTION DRAWINGS

THE STANDARD DRAWINGS LISTED ON THESE PLANS SHALL BE CONSIDERED A PART THEREOF:

OHIO DEPARTMENT OF TRANSPORTATION

CB–2–2A (7/19/2024)
CB–2–2B (7/19/2024)
MH–3 (7/19/2024)
DM–1.1 (1/17/2025)
MT–97.10 (4/19/2019)
MT–101.60 (1/17/2025)
MT–101.90 (7/17/2020)

DEVELOPER/OWNER
WALNUT TOWNSHIP
TERRY HORN
PHONE: (740) 503–2200
TERRYHORN@WALNUTTOWNSHIP.COM

ENGINEER
ms consultants, inc.
CHAD BOYER, PE
2221 SCHROCK ROAD
COLUMBUS, OHIO 43229
PHONE: (614) 898–7100
CBOYER@MSCONSULTANTS.COM

I HEREBY APPROVED THESE PLANS AND DECLARE THAT THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY.

FAIRFIELD COUNTY ENGINEER:_____

DATE:_____

WE THE TRUSTEES OF WALNUT TOWNSHIP IN FORMAL SESSION, HEREBY APPROVE THESE PLANS:

TRUSTEE NAME: BILL YATES
TRUSTEE SIGNATURE:_____
DATE:_____

TRUSTEE NAME: TERRY W. HORN
TRUSTEE SIGNATURE:_____
DATE:_____

TRUSTEE NAME: DOUG LEITH
TRUSTEE SIGNATURE:_____
DATE:_____

HORIZONTAL SCALE IN FEET

TITLE SHEET

DESIGN AGENCY
ms consultants, inc.
engineers • architects • planners
2221 SCHROCK ROAD
COLUMBUS, OHIO 43229-1547
(614)-898-7100
Fax (614)-898-7570

DESIGNER

REVIEWER

PROJECT ID

SHEET	TOTAL
1	19

N:\03\61\44061-02\D_Design\Drawings\Sheet Sets\Title Sheet.dwg 28-Jul-25 4:00 PM

RD100 – ENGINEER DEFINED
DULY AUTHORIZED AGENT OF THE FAIRFIELD COUNTY ENGINEER ACTING WITHIN THE SCOPE OF HIS/HER AUTHORITY FOR PURPOSES OF ENGINEERING AND ADMINISTRATION OF THE CONTRACT.

RD101 – CONTRACTOR DEFINED
THE INDIVIDUAL, FIRM OR CORPORATION CONTRACTING WITH THE FAIRFIELD COUNTY ENGINEER FOR PERFORMANCE OF PRESCRIBED WORK, ACTING DIRECTLY OR THROUGH A DULY AUTHORIZED REPRESENTATIVE AND QUALIFIED UNDER THE PROVISIONS OF 5525.02 TO 5525.09, ORC, AND ANY AMENDMENTS THERETO.

RD102 – CONTINGENCY QUANTITIES
THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER.

RD103 – PROJECT CONTROL
VERTICAL POSITIONING:
ORTHOMETRIC HEIGHT DATUM – NAVD88
GEOID – GEOID12A

HORIZONTAL POSITIONING:
REFERENCE FRAME – NAD83(2011)
ELLIPSOID – GRS80
COORDINATE SYSTEM – OHIO STATE PLANE SOUTH
UNITS ARE IN U.S. SURVEY FEET

RD104 – WORK LIMITS
THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

RD105 – MATERIAL TESTING
THE COUNTY ENGINEER RESERVES THE RIGHT TO ORDER TESTING OF ALL MATERIALS USED.

RD106 – ROUNDING
THE ROUNDING AT SLOPE BREAK POINTS SHOWN ON THE TYPICAL SECTIONS APPLY TO ALL CROSS SECTIONS EVEN THOUGH OTHERWISE SHOWN.

RD107 – ITEM 201 – CLEARING AND GRUBBING
ALL TREES AND STUMPS WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING, EXCEPT THOSE OTHERWISE DESIGNATED BY THE ENGINEER.

LANDOWNERS SHALL BE ALLOWED TO SALVAGE THE WOOD FROM TREES BEING REMOVED FROM THEIR PROPERTY. TREES DESIGNATED AS BEING SALVAGED FOR WOOD, SHALL BE CUT ABOVE THE BASE AND PLACED OUTSIDE OF THE RIGHT–OF–WAY.

RD109 – ITEM 204 – PROOF ROLLING, AS PER PLAN
AN ESTIMATED QUANTITY FOR THIS ITEM HAS BEEN PROVIDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER. THE CONTRACTOR MAY UTILIZE A FULLY LOADED DUMP TRUCK, APPROVED BY THE ENGINEER, IN LIEU OF THE PROOF ROLLER REQUIREMENTS LISTED IN SPECIFICATION 204.06 A–G. ALL OTHER REQUIREMENTS PER 204.06 SHALL APPLY.

ITEM 204 PROOF ROLLING 1 HOUR.

RD112 – ITEM 407 – TACK COAT AND ITEM 407 – TACK COAT FOR INTERMEDIATE COURSE
THE RATE OF APPLICATION OF THE 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. FOR ESTIMATING PURPOSES ONLY, THE PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF:

407 NON–TRACKING TACK COAT FOR INTERMEDIATE COURSE 0.05 GAL/SQ.YD.
407 NON–TRACKING TACK COAT FOR BASE COURSE 0.080 GAL/SQ.YD.

RD114 – ITEM 441 – ASPHALT CONCRETE
THE HOT MIX ASPHALT MIXTURE SHALL BE COMPOSED OF AGGREGATE, ASPHALT BINDER, AND MODIFIERS (WHERE SPECIFIED) MEETING OHIO DEPARTMENT OF TRANSPORTATION (ODOT) REQUIREMENTS. PRIOR TO PRODUCING HOT MIX ASPHALT FOR THIS CONTRACT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL, A JOB MIX FORMULA (JMF) OR BITUMINOUS CONCRETE DATA SHEET.

THE JMF SHALL INCLUDE THE MIX TYPE PROPOSED FOR USE, AGGREGATE TYPE AND GRADATION, PERCENTAGE OF ASPHALT BINDER BY WEIGHT OF MIXTURE, GRADE OF ASPHALT BINDER, DESCRIPTION AND SOURCE OF MODIFIER (IF APPLICABLE), AND UNIT WEIGHT OF THE MIXTURE. THE JMF, OR DATA SHEET, SHALL HAVE PREVIOUSLY BEEN APPROVED FOR USE ON ODOT WORK.

RD116 – FARM DRAINS
ALL FARM DRAINS WHICH ARE ENCOUNTERED DURING CONSTRUCTION WILL EITHER BE REPAIRED OR PROVIDED WITH UNOBSTRUCTED OUTLETS.

EXISTING FARM DRAINS WHICH ARE LOCATED BELOW THE ROADWAY DITCH ELEVATIONS AND WHICH CROSS THE ROADWAY SHALL BE REPLACED WITHIN THE CONSTRUCTION LIMITS BY ITEM 611 CONDUIT, TYPE B, ONE COMMERCIAL SIZE LARGER THAN THE EXISTING CONDUIT.

EXISTING COLLECTORS AND ISOLATED FARM DRAINS WHICH ARE ENCOUNTERED ABOVE THE ELEVATION OF ROADWAY DITCHES SHALL BE OUTLETTED INTO THE ROADWAY DITCH BY ITEM 603 CONDUIT, TYPE F. THE OPTIMUM OUTLET, INVERT ELEVATION SHALL BE ONE FOOT ABOVE THE FLOWLINE ELEVATION OF THE DITCH. LATERAL FIELD TILES WHICH CROSS INTO THE LIMITS OF CONSTRUCTION SHALL BE INTERCEPTED BY ITEM 611 CONDUIT, TYPE F AND CARRIED IN A LONGITUDINAL DIRECTION TO AN ADEQUATE OUTLET OR ROADWAY CROSSING.

THE LOCATION, TYPE, SIZE AND GRADE OF REPLACEMENTS SHALL BE DETERMINED BY THE ENGINEER AND PAYMENT SHALL BE MADE ON FINAL MEASUREMENT.

EROSION CONTROL PADS AND ANIMAL GUARDS SHALL BE PROVIDED AT THE OUTLET END OF ALL FARM DRAINS AS PER STANDARD CONSTRUCTION DRAWING DM–1.1 EXCEPT WHEN THEY OUTLET INTO A DRAINAGE STRUCTURE. PAYMENT FOR THE EROSION CONTROL PADS AND ANIMAL GUARDS AND ANY NECESSARY BENDS, TEES OR OTHER FITTINGS SHALL BE INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEMS.

THE FOLLOWING CONTINGENCY QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE TO BE USED AS DIRECTED BY THE ENGINEER:

ITEM 611, 4" CONDUIT, TYPE F, 50 FOOT
ITEM 611, 6" CONDUIT, TYPE F, 50 FOOT
ITEM 611, 8" CONDUIT, TYPE F, 50 FOOT
ITEM 611, 12" CONDUIT, TYPE B, 50 FOOT
ITEM 611, 12" CONDUIT, TYPE F, 50 FOOT

RD118 – ITEM 614 – MAINTENANCE OF TRAFFIC
NOTICE OF CLOSURE SIGNS, SHALL BE ERECTED BY THE ENGINEER IN ADVANCE OF THE SCHEDULED ROAD CLOSURE. THE CONTRACTOR SHALL GIVE AT LEAST A TWO WEEK NOTICE TO THE ENGINEER IN ORDER TO ERECT THESE SIGNS.

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48"X 30" "ROAD CLOSED" SIGNS, SIGN SUPPORTS, BARRICADES, GATES, AND LIGHTS, AS DETAILED IN STANDARD CONSTRUCTION DRAWINGS MT–101.60 DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC.

ACCESS TO LOCAL PROPERTY OWNERS SHALL BE MAINTAINED AT ALL TIMES.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

AT THE END OF EACH WORK DAY, ANY OPEN EXCAVATION SHALL BE PROPERLY BACKFILLED AND TEMPORARILY SURFACED WITH AGGREGATE (E.G. STONE) TO RE–OPEN THE ROADWAY TO ALLOW FOR SAFE ACCESS FOR LOCAL RESIDENTIAL TRAFFIC. FOR ANY OPEN EXCAVATIONS THAT ARE NOT BACKFILLED, THE CONTRACTOR SHALL INSTALL ORANGE CONSTRUCTION FENCING AROUND THE OPEN EXCAVATION TO ENSURE PUBLIC SAFETY.

ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO PERFORM THIS WORK, INCLUDING THE PLACEMENT AND SUBSEQUENT REMOVAL OF TEMPORARY AGGREGATE SURFACING PRIOR TO FINAL ASPHALT RESTORATION SHALL BE INCLUDED IN THE LUMP SUM PAY ITEM FOR ITEM 614, MAINTENANCE OF TRAFFIC.

RD119 – ITEM 616 – DUST CONTROL
THE CONTRACTOR SHALL FURNISH AND APPLY WATER AND CALCIUM CHLORIDE FOR DUST CONTROL PURPOSES AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE DIRECTED BY THE ENGINEER, FOR DUST CONTROL:

ITEM 616 WATER 2 MGAL
ITEM 616 CALCIUM CHLORIDE 0.2 TON

E101 – ITEM 659 – SEEDING AND MULCHING
THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

ITEM 659 – SOIL ANALYSIS TEST	1 EACH
ITEM 659 – TOPSOIL	41 CY
ITEM 659 – SEEDING AND MULCHING	361 SY
ITEM 659 – COMMERCIAL FERTILIZER	0.1 TON
ITEM 659 – LIME	0.5 TON
ITEM 659 – WATER	6 MGAL

APPLY SEEDING AND MULCHING TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT–OF–WAY LINES AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT–OF–WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

RD121 – ITEM 690 – SPECIAL – MAILBOX REMOVED AND RESET
THIS WORK SHALL CONSIST OF REMOVING AND RESETTING EXISTING MAILBOX SUPPORTS. THE CONTRACTOR SHALL TAKE GREAT CARE IN REMOVING AND RESETTING MAILBOX SUPPORTS TO THE CORRECT DISTANCE FROM THE EDGE OF PAVEMENT AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT FOR DAMAGED OR IMPROPER HANDLING ON THEIR PART AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL POSTMASTER REGARDING THE TIMING OF THE MOVEMENT OF ANY MAILBOX TO BE REMOVED AND RESET.

MAILBOXES REMOVED AND RESET SOLELY FOR THE CONVENIENCE OF THE CONTRACTOR'S OPERATION OF CONSTRUCTION IN JUDGMENT OF THE ENGINEER SHALL NOT BE PAID FOR.

PAYMENT SHALL BE FOR FINAL PERMANENT INSTALLATIONS ONLY. ALL LABOR, MATERIAL, AND EQUIPMENT NEEDED TO COMPLETE THIS WORK SHALL BE INCLUDED IN ITEM 690 – SPECIAL, MAILBOX REMOVED AND RESET.

A QUANTITY OF 3 EACH OF ITEM SPECIAL, MAILBOX REMOVED AND RESET HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 690 – SPECIAL – MAILBOX REMOVED AND RESET 3 EACH

RD122 – ITEM 623 – MONUMENT, MISC.
ALL PROPERTY MONUMENTS DISTURBED WITHIN THE CONSTRUCTION LIMITS SHALL BE RESET BY A REGISTERED PROFESSIONAL SURVEYOR IN THE STATE OF OHIO. THE RESET MONUMENT SHALL BE LOCATED AT THE SAME LOCATION WITH THE SAME MATERIAL AND SIZE AS THAT WHICH WAS DISTURBED. ALL RESET MONUMENTS SHALL HAVE A CAP BEARING THE SURVEYOR'S OHIO REGISTRATION NUMBER AND/OR NAME OR COMPANY NAME AND THE WORD "RESET". COST TO PERFORM SAID WORK SHALL BE INCLUDED IN THE UNIT COST FOR ITEM 623 – RIGHT OF WAY MONUMENT, TYPE B.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE.

ITEM 623 – RIGHT OF WAY MONUMENT, TYPE B, CONTINGENCY ITEM 1 EACH

RD123 – OHIO UTILITIES PROTECTION SERVICE (OUPS)
IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT OUPS (800–362–2764) FOR EACH LOCATION WHERE DIGGING IS REQUIRED OR IN LOCATIONS WHERE POSTS ARE TO BE DRIVEN. NONMEMBER UTILITY COMPANIES MUST BE CALLED DIRECTLY BY THE CONTRACTOR. THE FOLLOWING LIST OF UTILITY OWNERS HAVE FACILITIES WITHIN THE PROJECT LIMITS:

MILLERSPORT WATER DEPARTMENT 0700
ATTN: CHASE WOOD
2205 REFUGEE STREET
MILLERSPORT, OHIO 43046
PHONE: (740) 467–2374

LICKING COUNTY WATER & WASTEWATER
ATTN: KEVIN EBY
65 EAST MAIN STREET #2
NEWARK, OHIO 43055
PHONE: (740) 670–5440

UTILITY PIPELINE LTD./KNOX ENERGY COOPERATIVE
ATTN: RAY GOODWIN
PO BOX 35519
CANTON, OHIO
CUSTOMER SERVICE: 1–888–863–0032
EMERGENCY PHONE: 1–888–784–6160

COLUMBIA GAS (NISOURCE)
ATTN: LARRY WILKIN
OFFICE: (740) 624–1900
CUSTOMER SERVICE: 1–800–344–4077
DAMAGE PREVENTION: 1–866–632–6243
EMAIL: LEWILKIN@NISOURCE.COM

AMERICAN ELECTRIC POWER DISTRIBUTION (AEP)
ATTN: BRENT GATES
700 MORRISON ROAD
GAHANNA, OHIO 43230
PHONE: (614) 883–6802
FAX: (614) 883–6868
AEP SOLUTION CENTER: (800) 277–2177

D104 – CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES
WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, NOTIFY THE ENGINEER BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, NOTIFY THE ENGINEER BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

D110 – DRAINAGE DISCHARGE CONTINUANCE
FURNISH A DRAINAGE DISCHARGE CONTINUANCE FOR ANY DRAINAGE DISCHARGE DISTURBED BY THE WORK AND NOT SHOWN IN THE PLANS. THE LOCATION, TYPE (CONDUIT OR SWALE), SIZE AND GRADE OF THE DRAINAGE DISCHARGE CONTINUANCE WILL BE AGREED TO BY THE ENGINEER.

FURNISH AN INSPECTION WELL AT THE RIGHT OF WAY LINE IN PER STANDARD CONSTRUCTION DRAWING DM–3.1 FOR EACH DRAINAGE DISCHARGE THAT OUTLETS THROUGH A CURB OPENING OR INTO A STORM SEWER OR DRAINAGE STRUCTURE. THE COST IS INCLUDED IN ITEM 611, INSPECTION WELL.

FURNISH A WELL GRADED TRANSITION BETWEEN THE DITCH AND THE SWALE WHEN OUTLETTING A SWALE TO A DITCH. THE COST FOR THE GRADED TRANSITION IS INCLUDED IN ITEM 203, EMBANKMENT, AS PER PLAN.

FURNISH AN EROSION CONTROL PAD AS SHOWN IN STANDARD CONSTRUCTION DRAWING DM–1.1 WHEN OUTLETTING A CONDUIT TO A DITCH. THE COST FOR THE EROSION CONTROL PAD IS INCLUDED IN ITEM 611, CONDUIT, MISC TYPE _ FOR DRAINAGE DISCHARGE CONTINUANCE.

FURNISH A DRILLED HOLE OR A CURB SECTION WHEN OUTLETTING A CONDUIT THROUGH A CURB OPENING. THE COST OF DRILLING OR FURNISHING THE CURB SECTION WITH HOLE IS INCLUDED IN ITEM 611, CONDUIT, MISC TYPE _ FOR DRAINAGE DISCHARGE CONTINUANCE.

FURNISH A DRILLED CORE HOLE WHEN OUTLETTING INTO A STORM SEWER OR DRAINAGE STRUCTURE. THE COST OF THE DRILLED CORE HOLE IS INCLUDED IN ITEM 611, CONDUIT, MISC TYPE _ FOR DRAINAGE DISCHARGE CONTINUANCE.

DOCUMENTATION

PROVIDE WRITTEN DOCUMENTATION TO THE ENGINEER AND TO THE DISTRICT R/W PERMIT OFFICE. THE DOCUMENTATION INCLUDES THE CONSTRUCTION PROJECT NUMBER, PID, COUNTY, ROUTE, SECTION, LATITUDE AND LONGITUDE OF THE DRAINAGE DISCHARGE AT THE R/W, THE NAME OF PROPERTY OWNER WITH ADDRESS, THE DATE THE DRAINAGE DISCHARGE WAS LOCATED, THE DATE THE DRAINAGE DISCHARGE CONTINUANCE WAS FURNISHED, A DETAILED DESCRIPTION OF THE WORK AND PICTURES OF THE DRAINAGE DISCHARGE CONTINUANCE (IN PDF OR JPEG FORMAT). THE DOCUMENTATION IS INCLUDED IN ITEM 611, CONDUIT, MISC TYPE _ FOR DRAINAGE DISCHARGE CONTINUANCE OR ITEM 203, EMBANKMENT, AS PER PLAN

DRAINAGE DISCHARGE CONTINUANCE REMOVAL

THE ENGINEER MAY REQUIRE THE NEWLY INSTALLED DRAINAGE DISCHARGE CONTINUANCE TO BE REMOVED.

REMOVE THE NEWLY INSTALLED CONDUIT AND ANY EXISTING CONDUIT TO THE RIGHT OF WAY LINE. FOR CONDUIT THAT OUTLETS THROUGH THE CURB, RESTORE THE CURB BY FILLING THE HOLE WITH CLASS QC 1 CONCRETE OR REPLACE THE CURB SECTION. FOR CONDUIT THAT OUTLETS TO A STORM SEWER OR DRAINAGE STRUCTURE LEAVE 6 INCHES PROTRUDING OUTSIDE OF THE CONDUIT. PLUG THE PROTRUDING CONDUIT WITH EITHER A MANUFACTURED CAP OR CLASS QC 1 CONCRETE. FOR CONDUIT THAT OUTLETS TO THE DITCH REMOVE THE EROSION CONTROL PAD. RESTORE ALL AREAS AS REQUIRED. PLUG THE EXISTING CONDUIT REGARDLESS OF SIZE AT THE RIGHT OF WAY LINE WITH CLASS QC 1 CONCRETE AND RESTORE ALL AREAS AS REQUIRED. ALL COSTS ARE INCLUDED IN ITEM 202, REMOVAL MISC.: CONDUIT.

DAM THE SWALE THAT OUTLETS TO THE DITCH AT THE R/W AS DIRECTED BY THE ENGINEER. ALL COSTS ARE INCLUDED IN ITEM 203, EMBANKMENT AS PER PLAN

REMOVE THE INSPECTION WELL AND RESTORE ALL AREAS AS REQUIRED. THE COST IS INCLUDED IN ITEM 202, REMOVAL MISC.: INSPECTION WELL.

CONDUIT MATERIAL TYPES

THE FOLLOWING CONDUIT MATERIAL TYPES ARE PERMITTED: 707.33, 707.41 NON–PERFORATED, 707.42, 707.43, 707.45, 707.46, 707.47, AND 707.51.

PAY ITEMS

EACH OF THE PAY ITEMS LISTED BELOW FOR CONDUIT MISCELLANEOUS TYPES B, C, E AND F FOR DRAINAGE DISCHARGE CONTINUANCE INCLUDE CONDUIT SIZES 2 INCH TO 10 INCH. THERE IS NO COST DIFFERENTIATION FOR SIZE IN THESE PAY ITEMS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER IN MAKING THE ABOVE DRAINAGE DISCHARGE CONTINUANCE:

ITEM 611 – INSPECTION WELL	2 EACH
ITEM 611 – CONDUIT, MISC.: TYPE C FOR DRAINAGE DISCHARGE CONTINUANCE	10 FT
ITEM 611 – CONDUIT, MISC.: TYPE E FOR DRAINAGE DISCHARGE CONTINUANCE	10 FT
ITEM 611 – CONDUIT, MISC.: TYPE F FOR DRAINAGE DISCHARGE CONTINUANCE	10 FT
ITEM 202 – REMOVAL MISC.: CONDUIT	10 FT
ITEM 202 – REMOVAL MISC.: INSPECTION WELL	10 EACH
ITEM 203 – EMBANKMENT, AS PER PLAN	10 CY

D114 – REVIEW OF DRAINAGE FACILITIES
PRIOR TO THE START OF WORK AND AGAIN BEFORE FINAL ACCEPTANCE, PERFORM AN INSPECTION WITH REPRESENTATIVES OF THE DEPARTMENT, CONTRACTOR AND LOCALS OF ALL EXISTING DRAINAGE FACILITIES THAT ARE TO REMAIN IN SERVICE WHICH MAY BE AFFECTED BY THE WORK.

THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES IS DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION ARE MAINTAINED BY THE DEPARTMENT.

CONFIRM ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE–MENTIONED PARTIES ARE MAINTAINED AND LEFT IN A CONDITION COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. THE CONTRACTOR IS RESPONSIBLE TO CORRECT ANY CHANGE IN THE CONDITION RESULTING FROM THEIR OPERATIONS AS DIRECTED AND APPROVED BY THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

D117 – MANHOLES, CATCH BASINS AND INLETS REMOVED OR ABANDONED
CAREFULLY REMOVE AND STORE ALL CASTINGS WITHIN THE RIGHT OF WAY FOR SALVAGE BY FAIRFIELD COUNTY FORCES.

PAYMENT FOR ALL OF THE ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 202 ITEM.

ITEM 832 – TEMPORARY EROSION AND SEDIMENT CONTROL
TEMPORARY SEDIMENT AND EROSION CONTROL BEST MANAGEMENT PRACTICES SHALL BE UTILIZED AT STORM SEWER INLETS.

ITEM 832 – INLET PROTECTION 32 EACH

SPECIAL CONDITIONS FOR THE NATIONWIDE PERMIT (LRH–205–00579–MUS–UNT)

1. ALL WORK WILL BE CONDUCTED IN ACCORDANCE WITH THE PLANS AND DRAWINGS SUBMITTED AS PART OF THE PRE–CONSTRUCTION NOTIFICATION (PCN) FOR THE THE NORTH WALNUT TOWNSHIP STORMWATER INFRASTRCUTURE PROJECT RECEIVED IN THIS OFFICE ON JULY 7, 2025.

2. ENCLOSED IS A COPY OF NATIONWIDE PERMIT 7, WHICH WILL BE KEPT AT THE SITE DURING CONSTRUCTION. A COPY OF THE NATIONWIDE PERMIT VERIFICATION, SPECIAL CONDITIONS, AND THE SUBMITTED CONSTRUCTION PLANS MUST BE KEPT AT THE SITE DURING CONSTRUCTION. THE PERMITTEE WILL SUPPLY A COPY OF THESE DOCUMENTS TO THEIR PROJECT ENGINEER RESPONSIBLE FOR CONSTRUCTION ACTIVITIES.

3. CONSTRUCTION ACTIVITIES WILL BE PERFORMED DURING LOW FLOW CONDITIONS TO THE GREATEST EXTENT PRACTICABLE. ADDITIONALLY, APPROPRIATE SITE SPECIFIC BEST MANAGEMENT PRACTICES FOR SEDIMENT AND EROSION CONTROL WILL BE FULLY IMPLEMENTED DURING CONSTRUCTION ACTIVITIES AT THE SITE.

4. UPON COMPLETION OF THE ACTIVITY AUTHORIZED BY THIS NATIONWIDE PERMIT VERIFICATION, THE ENCLOSED CERTIFICATION MUST BE SIGNED AND RETURNED TO THIS OFFICE ALONG WITH AS–BUILT DRAWINGS SHOWING THE LOCATION AND CONFIGURATION, AS WELL AS ALL PERTINENT DIMENSIONS AND ELEVATIONS OF THE ACTIVITY AUTHORIZED UNDER THIS NATIONWIDE PERMIT VERIFICATION.

5. NO AREA FOR WHICH GRADING HAS BEEN COMPLETED WILL BE UNSEEDED OR UNMULCHED FOR LONGER THAN 14 DAYS. ALL DISTURBED AREAS WILL BE SEEDED AND/OR REVEGETATED WITH NATIVE SPECIES AND APPROVED SEED MIXES (WHERE PRACTICABLE) AFTER COMPLETION OF CONSTRUCTION ACTIVITIES FOR STABILIZATION AND TO HELP PRECLUDE THE ESTABLISHMENT OF NON–NATIVE INVASIVE SPECIES.

6. SHOULD NEW INFORMATION REGARDING THE SCOPE AND/OR IMPACTS OF THE PROJECT BECOME AVAILABLE THAT WAS NOT SUBMITTED TO THIS OFFICE DURING OUR REVIEW OF THE PROPOSAL, THE PERMITTEE WILL SUBMIT WRITTEN INFORMATION CONCERNING PROPOSED MODIFICATION(S) TO THIS OFFICE FOR REVIEW AND EVALUATION, AS SOON AS PRACTICABLE.

7. IN THE EVENT ANY PREVIOUSLY UNKNOWN HISTORIC OR ARCHAEOLOGICAL SITES OR HUMAN REMAINS ARE UNCOVERED WHILE ACCOMPLISHING THE ACTIVITY AUTHORIZED BY THIS NATIONWIDE PERMIT AUTHORIZATION, THE PERMITTEE MUST CEASE ALL WORK IN WATERS OF THE UNITED STATES IMMEDIATELY AND CONTACT LOCAL, STATE AND COUNTY LAW ENFORCEMENT OFFICES (ONLY CONTACT LAW ENFORCEMENT ON FINDINGS OF HUMAN REMAINS), THE CORPS AT (304) 399–5210 AND OHIO STATE HISTORIC PRESERVATION OFFICE AT (614) 298–2000. THE CORPS WILL INITIATE THE FEDERAL, STATE, AND TRIBAL COORDINATION REQUIRED TO COMPLY WITH THE NATIONAL HISTORIC PRESERVATION ACT AND APPLICABLE STATE AND LOCAL LAWS AND REGULATIONS. FEDERALLY RECOGNIZED TRIBES ARE AFFORDED A GOVERNMENT–TO–GOVERNMENT STATUS AS SOVEREIGN NATIONS AND CONSULTATION IS REQUIRED UNDER EXECUTIVE ORDER 13175 AND 36 CFR PART 800.

8. THE PROJECT SITE LIES WITHIN THE RANGE OF THE INDIANA BAT (MYOTIS SODALIS), A FEDERALLY–LISTED ENDANGERED SPECIES. SEVERAL FACTORS HAVE CONTRIBUTED TO THE SPECIES' DECLINE, INCLUDING HABITAT LOSS, FRAGMENTATION OF HABITAT AND THE DISEASE WHITE NOSE SYNDROME. DURING WINTER, THE BAT SPECIES HIBERNATES IN CAVES AND ABANDONED MINES. SUITABLE SUMMER HABITAT FOR THE INDIANA BATS CONSISTS OF A WIDE VARIETY OF FORESTED/WOODED HABITATS WHERE THEY ROOST, FORAGE, AND TRAVEL AND MAY ALSO INCLUDE SOME ADJACENT AND INTERSPERSED NON–FORESTED HABITATS SUCH AS EMERGENT WETLANDS AND ADJACENT EDGES OF AGRICULTURAL FIELDS, OLD FIELDS AND PASTURES. THIS INCLUDES FORESTS AND WOODLOTS CONTAINING POTENTIAL ROOSTS (I.E., LIVE TREES AND/OR SNAGS ≥3 INCHES DIAMETER AT BREAST HEIGHT (DBH) THAT HAVE ANY EXFOLIATING BARK, CRACKS, CREVICES, HOLLOWS AND/OR CAVITIES), AS WELL AS LINEAR FEATURES SUCH AS FENCEROWS, RIPARIAN FORESTS, AND OTHER WOODED CORRIDORS. THESE WOODED AREAS MAY BE DENSE OR LOOSE AGGREGATES OF TREES WITH VARIABLE AMOUNTS OF CANOPY CLOSURE. INDIVIDUAL TREES MAY BE CONSIDERED SUITABLE HABITAT WHEN THEY EXHIBIT THE CHARACTERISTICS OF A POTENTIAL ROOST TREE AND ARE LOCATED WITHIN 1,000 FEET (305 METERS) OF OTHER FORESTED/WOODED HABITAT. THE PERMITTEE WILL PRESERVE WOODED/FORESTED HABITATS EXHIBITING ANY OF THE CHARACTERISTICS LISTED ABOVE WHEREVER POSSIBLE. SHOULD SUITABLE HABITAT BE PRESENT THAT CANNOT BE SAVED DURING CONSTRUCTION ACTIVITIES, ANY TREES ≥3 INCHES DBH WILL ONLY BE CUT BETWEEN OCTOBER 1 – MARCH 31.

HORIZONTAL SCALE IN FEET

GENERAL NOTES

DESIGN AGENCY

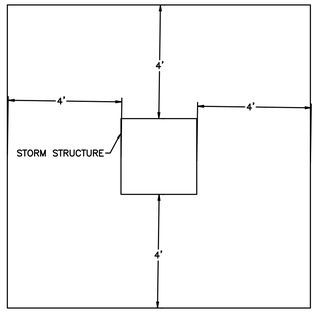
ms consultants, Inc.
engineers * architects * planners
2221 SCHROCK ROAD
COLUMBUS, OHIO 43229–1547
(614) 898–7100
Fax (614) 898–7570

DESIGNER

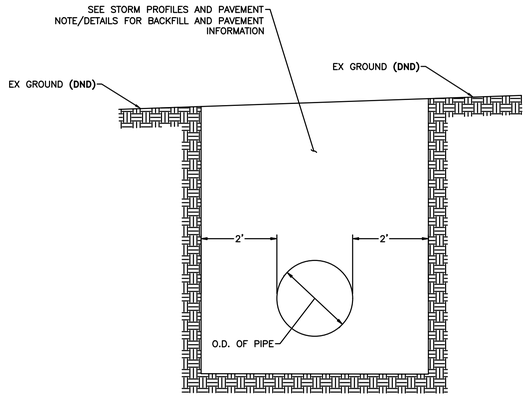
REVIEWER

PROJECT ID

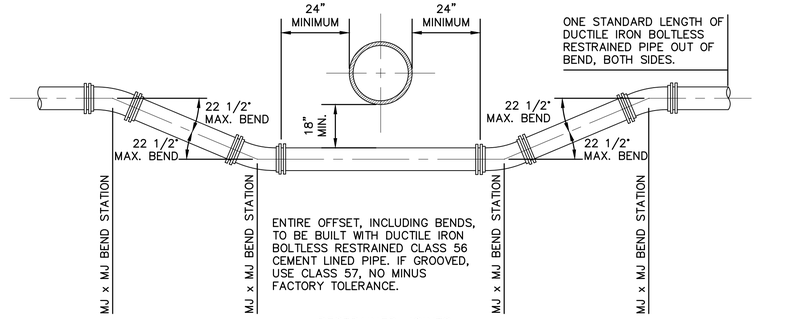
SHEET	TOTAL
2	19



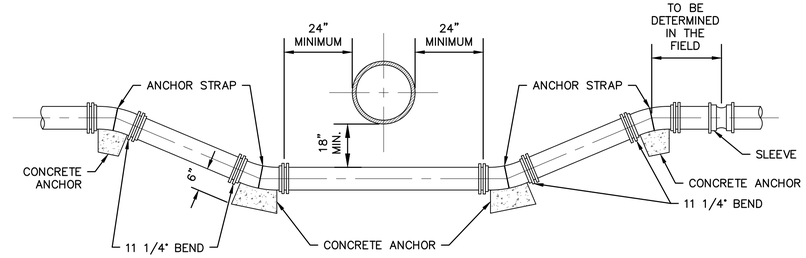
TYPICAL STORM STRUCTURE (MANHOLE/CB) PIT DIMENSION DETAIL
N.T.S.



TYPICAL STORM CONDUIT TRENCH WIDTH DETAIL
N.T.S.

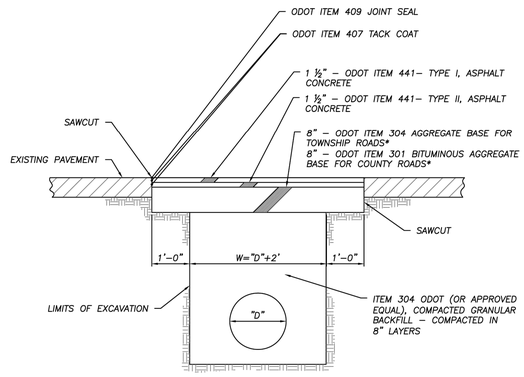


RESTRAINED JOINTS



THRUST BLOCKING

WATERMAIN LOWERING DETAIL
N.T.S.

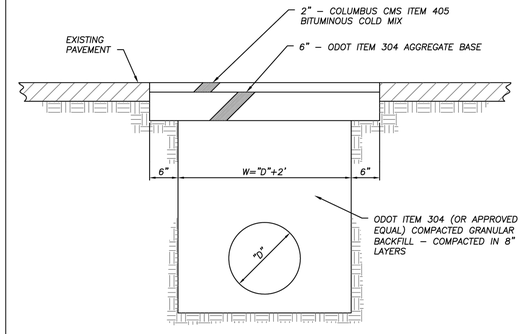


MAXIMUM PAY WIDTH IS TRENCH WIDTH (W) PLUS 2'–0". TRENCH WIDTH IS MEASURED 12" ABOVE THE TOP OF THE PIPE. TRENCH WIDTH MAY BE WIDER ABOVE THIS LINE BUT PAY WIDTH WILL NOT EXCEED W+2'.

TOWNSHIP/COUNTY ROADS
ASPHALT & CHIP/SEAL ROADWAYS*

*OR AS REQUIRED BY THE LOCAL ROAD AUTHORITY.

APPROVED	PERMANENT PAVEMENT REPLACEMENT	FAIRFIELD COUNTY OHIO
APPROVAL DATE		STANDARD CONSTRUCTION DWG.
REVISION DATE		DRAWING NO. Sa.S–17



NOTES:
1. UNLESS OTHERWISE APPROVED BY THE COUNTY, TEMPORARY PAVEMENT IS TO BE PLACED ON THE SAME DAY THE ORIGINAL PAVEMENT IS REMOVED.
2. TEMPORARY PAVEMENT TO BE REMOVED PRIOR TO INSTALLING PERMANENT PAVEMENT REPLACEMENT.
3. MAXIMUM PAY WIDTH IS TRENCH WIDTH (W) PLUS 1'–0". TRENCH WIDTH IS MEASURED 12" ABOVE THE TOP OF THE PIPE. TRENCH WIDTH MAY BE WIDER ABOVE THIS LINE BUT PAY WIDTH WILL NOT EXCEED W+1'–0".

APPROVED	TEMPORARY PAVEMENT REPLACEMENT	FAIRFIELD COUNTY OHIO
APPROVAL DATE		STANDARD CONSTRUCTION DWG.
REVISION DATE		DRAWING NO. Sa.S–16

LEGEND

EXISTING CONDITIONS

- EDGE OF PAVEMENT
- DRIVEWAY
- X — X — FENCE
- RIGHT OF WAY
- PROPERTY LINE
- DITCH
- W — W — WATER
- SAN — SAN — SANITARY
- ST — ST — STORM
- G — G — GAS
- OE — OE — OVERHEAD ELECTRIC

PROPOSED LAYOUT

- ST — ST — STORM

EXISTING SYMBOLS

- FIRE HYDRANT
- WATER VALVE
- SANITARY MANHOLE
- STORM INLET
- GAS VALVE
- G GAS METER
- BUILDING
- COMM POLE
- ELECTRIC POLE
- MB MAILBOX
- TREES

PROPOSED SYMBOLS

- STORM MANHOLE
- CATCH BASIN

ABBREVIATIONS

WTR ___ WATER SERVICE
GAS ___ GAS SERVICE
SAN ___ SANITARY SERVICE
STM ___ STORM SERVICE

HORIZONTAL SCALE IN FEET

GENERAL NOTES

DESIGN AGENCY

ms consultants, Inc.
engineers * architects * planners
2221 SCHROCK ROAD
COLUMBUS, OHIO 43229-1547
(614)-898-7100
Fax (614)-898-7670

DESIGNER

REVIEWER

PROJECT ID

SHEET	TOTAL
3	19

Sheet									Item	Grand Total	Unit	Description
3	5	6	14	15	16	17	18	19				
												Roadway
	0.5	0.5							201	1	LS	CLEARING & GRUBBING
	4								202	4	EA	CATCH BASIN OR INLET REMOVED
	4	4							SPEC	8	EA	ESTIMATED WATERLINE LOWERINGS
									SPEC	30	EA	ESTIMATED WATER SERVICE LOWERINGS
	1								623	1	EA	RIGHT OF WAY MONUMENT, TYPE B, CONTINGENCY ITEM
		4							690	4	EA	ITEM SPECIAL - MAILBOX REMOVED AND RESET
												Erosion Control
			1	1					616	2	MGAL	WATER
			0.1	0.1					616	0.2	TON	CALCIUM CHLORIDE
			25	22					653	47	CY	TOPSOIL FURNISHED AND PLACED
			219	192					659	411	SY	SEEDING AND MULCHING
			22	20					659	42	SY	REPAIR SEEDING AND MULCHING
			0.5	0.5					659	1	EA	SOIL ANALYSIS TEST
			0.05	0.05					659	0.1	TON	COMMERCIAL FERTILIZER
			0.25	0.25					659	0.5	TON	LIME
			3	3					659	6	MGAL	WATER
			16	16					832	32	EA	STORMWATER POLLUTION PREVENTION PLAN
												Drainage
	7	13							611	20	EA	MANHOLES, NO. 3, 48" BASE ID
	3								611	3	EA	MANHOLES NO. 3, 60" BASE ID
	16	16							611	32	EA	CATCH BASINS, NO 2-2B
	767	588							611	1355	LF	12" CONDUIT, TYPE B
	139	491							611	630	LF	18" CONDUIT, TYPE B
	0	316							611	316	LF	24" CONDUIT, TYPE B
	237	184							611	421	LF	30" CONDUIT, TYPE B
	521	0							611	521	LF	36" CONDUIT, TYPE B
	1	1							611	2	EA	INSPECTION WELL
	5	5							611	10	LF	CONDUIT, MISC. TYPE C FOR DRAINAGE DISCHARGE CONINUANCE
	5	5							611	10	LF	CONDUIT, MISC. TYPE E FOR DRAINAGE DISCHARGE CONINUANCE
	5	5							611	10	LF	CONDUIT, MISC. TYPE F FOR DRAINAGE DISCHARGE CONINUANCE
	25	25							611	50	LF	4" CONDUIT, TYPE F - CONTINGENCY ITEM
	25	25							611	50	LF	6" CONDUIT, TYPE F - CONTINGENCY ITEM
	25	25							611	50	LF	8" CONDUIT, TYPE F - CONTINGENCY ITEM
	25	25							611	50	LF	12" CONDUIT, TYPE B - CONTINGENCY ITEM
	25	25							611	50	LF	12" CONDUIT, TYPE F - CONTINGENCY ITEM
												Pavement
					615	699			202	1314	SY	PAVEMENT REMOVED
					0.5	0.5			204	1	HR	PROOF ROLLING - CONTINGENCY ITEM
					137	156			304	293	CY	AGGREGATE BASE (T=8")
					74	84			407	158	GAL	NON-TRACKING TACK COAT (0.06 GAL/SY)
					2635	3196			409	5831	LF	SAWING AND SEALING ASPHALT CONCRETE PAVEMENT JOINTS - JOINT SEAL
					26	30			441	56	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22 (T=1.5")
					26	30			441	56	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449), PG64-22 (T=1.5")
												Maintenance of Traffic
1									614	1	LS	MAINTENANCE OF TRAFFIC
												Alternate Items - Mill & Overlay
							2618	2623	254	5241	SY	PAVEMENT PLANING
							262	263	407	525	GAL	NON-TRACKING TACK COAT (0.10 GAL/SY)
							91	92	441	183	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22 (T=1.25")

N:\03\61\44061-02\D_Design\Drawings\Sheet Sets\General Summary Sheet.dwg 28-Jul-25 4:01 PM

HORIZONTAL SCALE IN FEET

GENERAL SUMMARY

DESIGN AGENCY

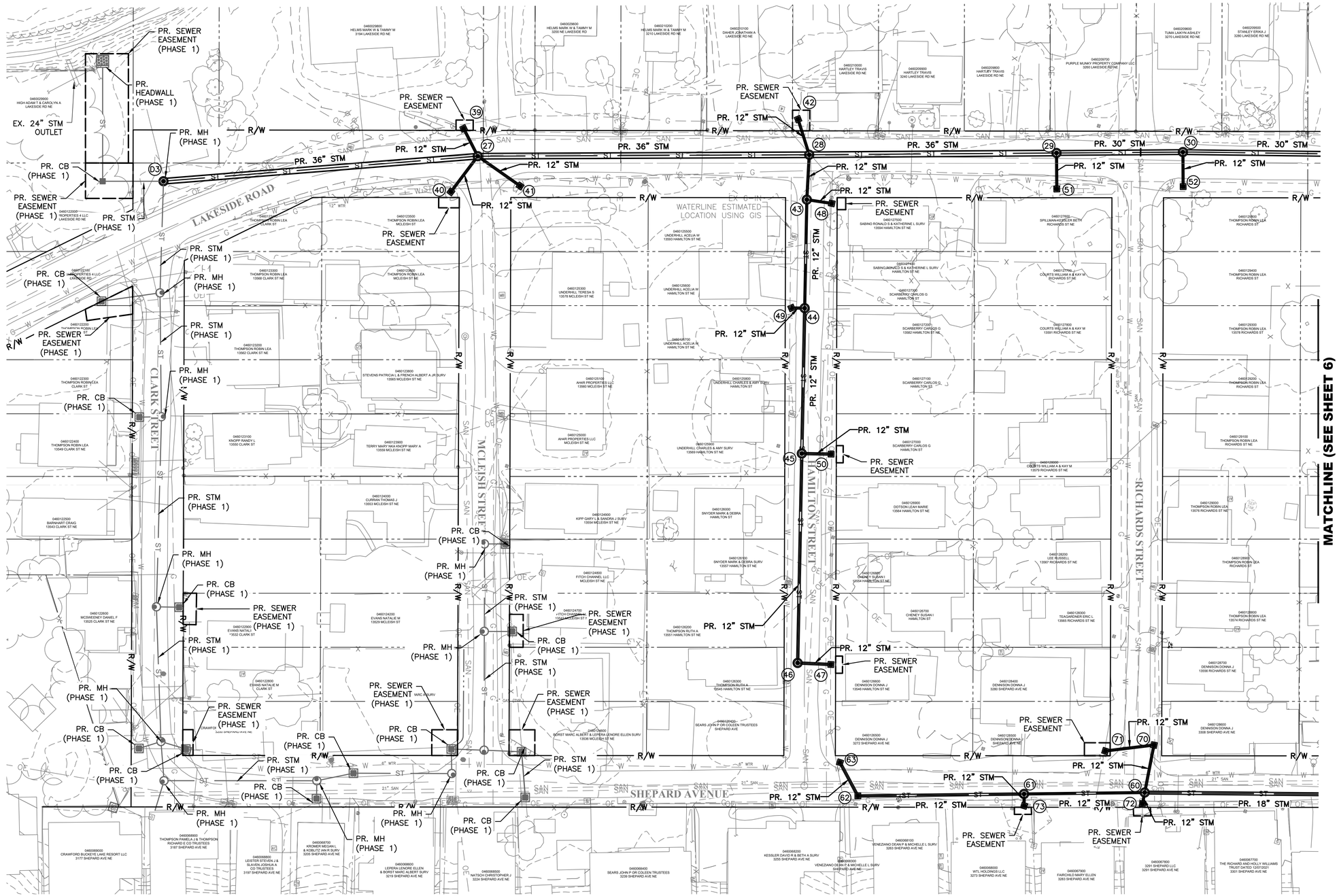
ms consultants, inc.
engineers + architects + planners
2221 SCHROCK ROAD
COLUMBUS, OHIO 43229-1547
(614)-898-7100
Fax: (614)-898-7670

DESIGNER

REVIEWER

PROJECT ID

SHEET	TOTAL
4	19



NOTES

CONTRACTOR RESPONSIBLE FOR FIELD LOCATING WATER SERVICES PRIOR TO INSTALLATION OF STORM SEWER. AN ALLOWANCE HAS BEEN MADE FOR WATER SERVICE RELOCATION.

HORIZONTAL SCALE IN FEET
0 30' 60'

PLAN VIEW 1

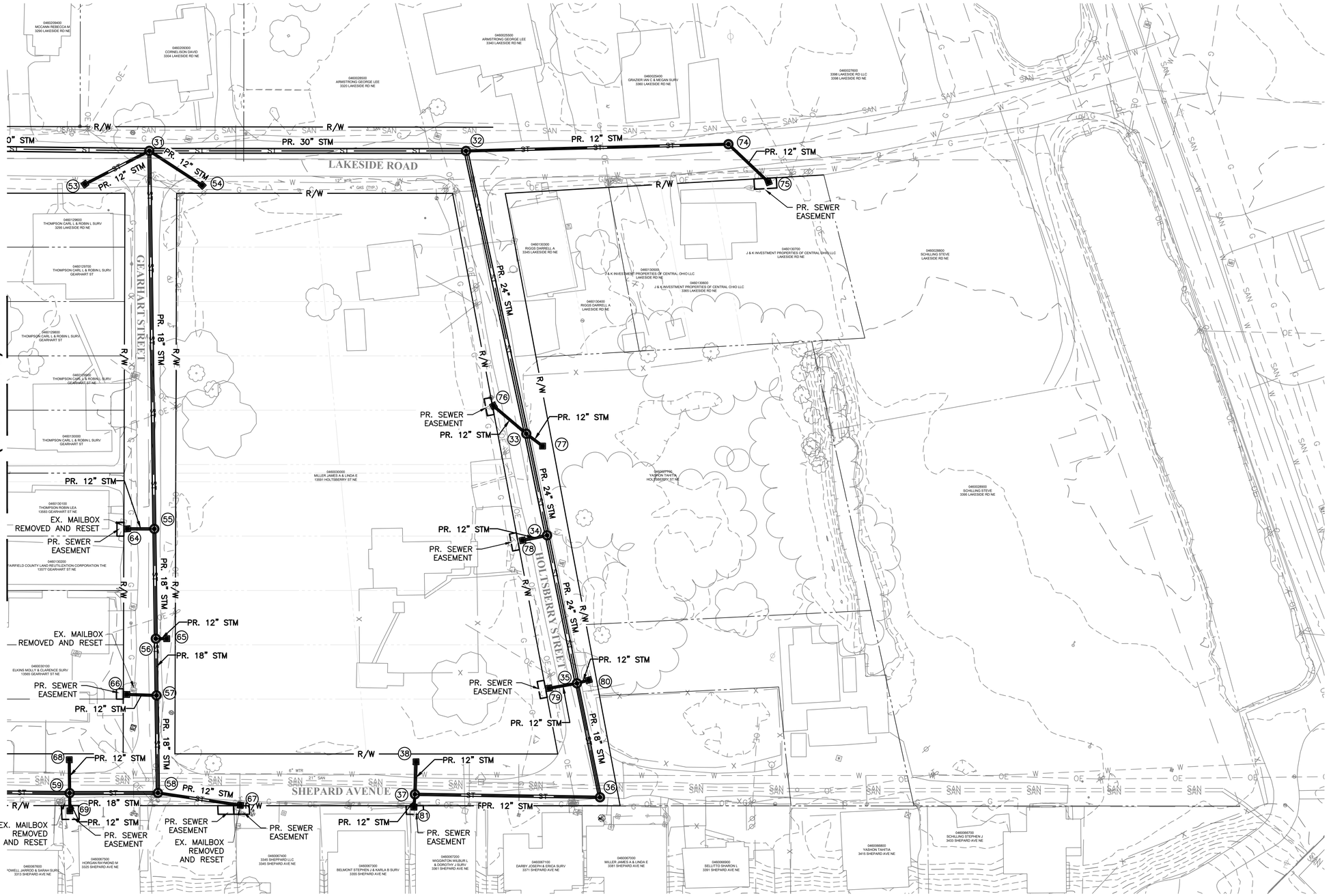
DESIGN AGENCY

ms consultants, Inc.
engineers * architects * planners
2221 SCHROCK ROAD
COLUMBUS, OHIO 43229-1547
(614)-898-7100
Fax (614)-898-7670

DESIGNER
REVIEWER
PROJECT ID

SHEET	TOTAL
5	19

N:\03\61\44061-02\D_Design\Drawings\Sheet Sets\Drawing1.dwg 28-Jul-25 4:01 PM



NOTES

CONTRACTOR RESPONSIBLE FOR FIELD LOCATING WATER SERVICES PRIOR TO INSTALLATION OF STORM SEWER. AN ALLOWANCE HAS BEEN MADE FOR WATER SERVICE RELOCATION.

HORIZONTAL SCALE IN FEET
0 30' 60'

PLAN VIEW 2

DESIGN AGENCY

ms consultants, inc.
engineers * architects * planners
2221 SCHROCK ROAD
COLUMBUS, OHIO 43229-1547
(614)-895-7700
Fax (614)-895-7570

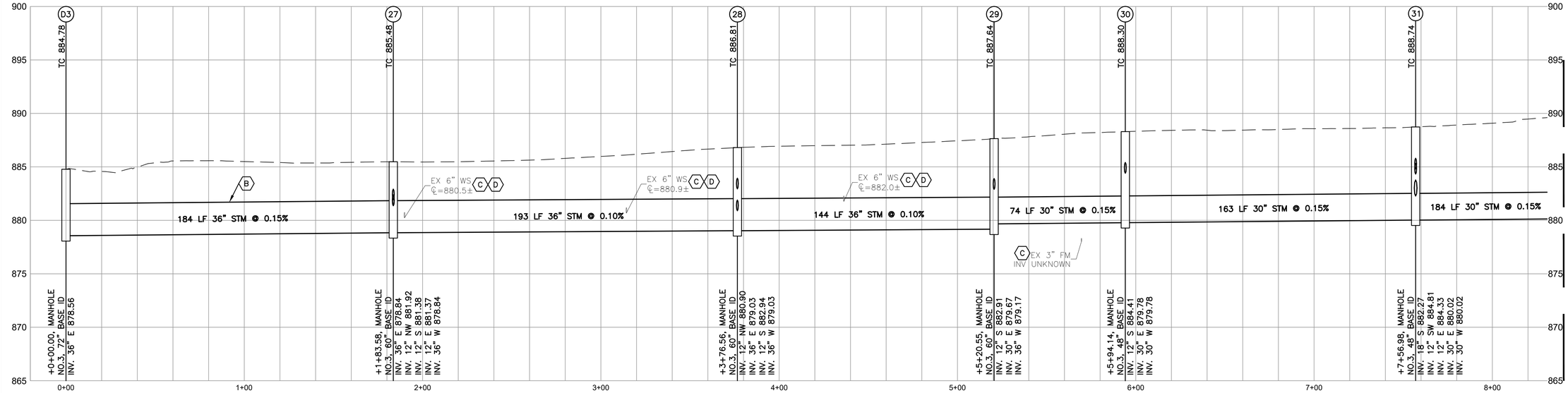
DESIGNER

REVIEWER

PROJECT ID

SHEET	TOTAL
6	19

N:\03\61\44061-02\D_Design\Drawings\Sheet Sets\Drawing2.dwg 28-Jul-25 4:01 PM



NOTES

(A) CAUTION! SPECIAL CARE SHALL BE PROVIDED FOR INSTALLATION OF THE STORM PIPE CROSSING THE EXISTING SANITARY PIPE. SANITARY PIPE SHALL BE PROTECTED DURING THE INSTALLATION OF THE STORM PIPE. THE PROPOSED STORM PIPE SHALL BE INSTALLED SUCH THAT A FULL LENGTH OF PIPE IS CENTERED OVER TOP OF THE EXISTING SANITARY, ENSURING NO PIPE JOINT IS OVER THE EXISTING SANITARY PIPE. CONTRACTOR TO USE EXTREME CAUTION DURING CONSTRUCTION. CONTRACTOR TO MAINTAIN 4" MINIMUM OUT TO OUT SEPARATION BETWEEN THE EXISTING SANITARY SEWER AND THE PROPOSED STORM SEWER. AUTHORITIES HAVING JURISDICTION (AHJ) TO CONFIRM IF SEPARATION VARIANCE IS REQUIRED WHERE 18" OF VERTICAL SEPARATION CANNOT BE MET/MAINTAINED.

(B) THIS PIPE SHALL BE CORED INTO STRUCTURE D3, WHICH WAS INSTALLED DURING PHASE 1.

(C) EXISTING UTILITIES HAVE BEEN ILLUSTRATED AT STANDARD DEPTHS AND HAVE NOT BEEN FIELD MEASURED/VERIFIED. CONTRACTOR TO EXPOSE THE EXISTING CROSSING FACILITIES/UTILITIES PRIOR TO CREATING AND SUBMITTING STORM STRUCTURE SHOP DRAWINGS TO THE ENGINEER AND PRIOR TO ORDERING STRUCTURES. THE CONTRACTOR SHALL MEASURE DEPTHS DOWN TO THE TOP OF THE CROSSING FACILITIES/UTILITIES FROM THE EXISTING SURFACE. THE CONTRACTOR SHALL NEATLY ORGANIZE THE FIELD MEASURED INFORMATION IN TABULAR FORM AND PROVIDE THE DEPTHS (WITH LOCATIONS) TO THE ENGINEER AND AUTHORITIES HAVING JURISDICTION (AHJ) FOR DEPTH CONFIRMATION. THE ENGINEER WILL REVIEW THE DEPTHS AND MAKE MODIFICATIONS TO THE PLANS PURSUANT TO WHAT THE EXISTING AND PROPOSED CONDITIONS PERMIT. EXISTING CROSSING FACILITIES/UTILITIES MAY REQUIRE LOWERING BY THEIR RESPECTIVE OWNER. THE LOWERING OF THE CROSSING FACILITIES/UTILITIES SHALL BE COORDINATED BY THE CONTRACTOR WITH THE FACILITY/UTILITY OWNER AHEAD OF STORM SEWER CONSTRUCTION.

(D) WATER LINE LOWERING REQUIRED, REFER TO SHEET 3 FOR DETAILS.

NOTES

ALL ELEVATIONS ON THIS PLAN ARE BASED ON NAVD 1988 DATUM, UNLESS OTHERWISE NOTED.

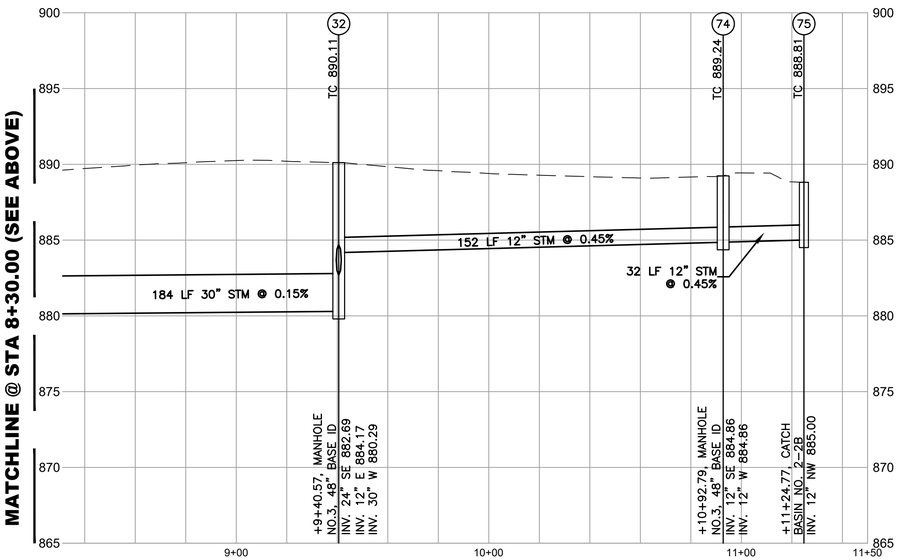
ALL BACKFILL SHALL BE COMPACTED TO THE DENSITY OF THE EXISTING GROUND UNLESS OTHERWISE NOTED.

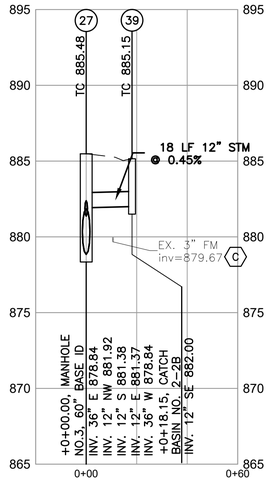
*BACKFILL USING SELECT EXCAVATED MATERIAL. USE MECHANICAL COMPACTION METHOD (TYPE C).

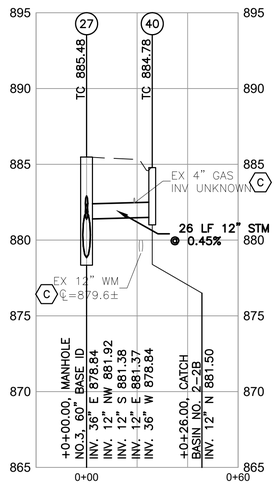
**BACKFILL WITH TYPE 2 STRUCTURAL BACKFILL PER CMS ITEM 703.11 (TYPE B).

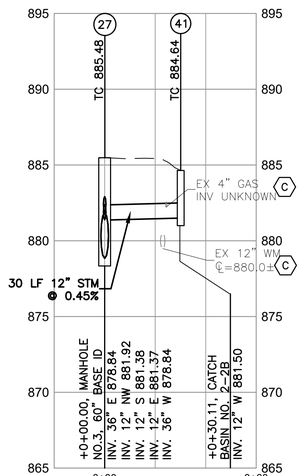
% RCP PER ODOT CMS 706.02 WITH TYPE 2 STRUCTURAL BACKFILL PER CMS ITEM 703.11 (TYPE B).

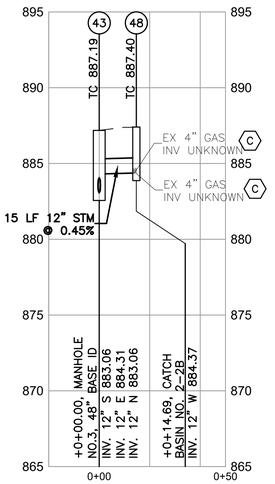
CONTRACTOR RESPONSIBLE FOR FIELD LOCATING WATER SERVICES PRIOR TO INSTALLATION OF STORM SEWER. AN ALLOWANCE HAS BEEN MADE FOR WATER SERVICE RELOCATION.











HORIZONTAL SCALE IN FEET 0 30' 60'

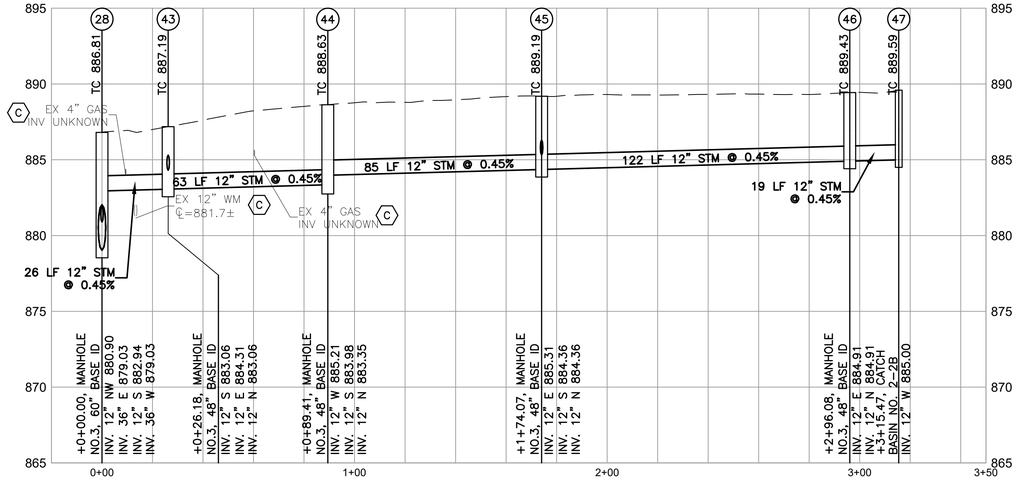
VERTICAL SCALE IN FEET 0 5' 10'

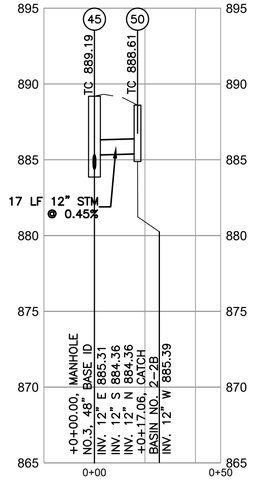
PROFILE SHEET 1 - PROFILE1

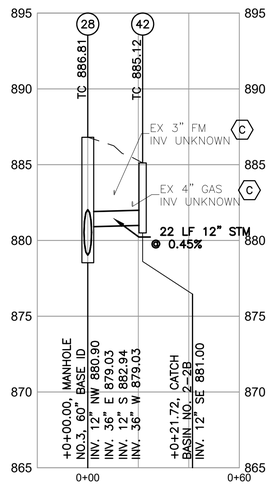
DESIGN AGENCY

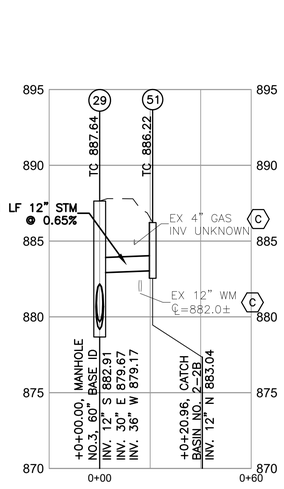
ms consultants, inc.
engineers * architects * planners
2221 SCHROCK ROAD
COLUMBUS, OHIO 43229-1547
(614) 898-7100
Fax (614) 898-7010

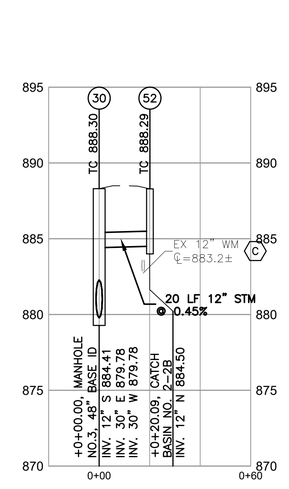
DESIGNER
REVIEWER
PROJECT ID
SHEET 7 / TOTAL 19











NOTES

(A) CAUTION! SPECIAL CARE SHALL BE PROVIDED FOR INSTALLATION OF THE STORM PIPE CROSSING THE EXISTING SANITARY PIPE. SANITARY PIPE SHALL BE PROTECTED DURING THE INSTALLATION OF THE STORM PIPE. THE PROPOSED STORM PIPE SHALL BE INSTALLED SUCH THAT A FULL LENGTH OF PIPE IS CENTERED OVER TOP OF THE EXISTING SANITARY, ENSURING NO PIPE JOINT IS OVER THE EXISTING SANITARY PIPE. CONTRACTOR TO USE EXTREME CAUTION DURING CONSTRUCTION. CONTRACTOR TO MAINTAIN 4" MINIMUM OUT TO OUT SEPARATION BETWEEN THE EXISTING SANITARY SEWER AND THE PROPOSED STORM SEWER. AUTHORITIES HAVING JURISDICTION (AHJ) TO CONFIRM IF SEPARATION VARIANCE IS REQUIRED WHERE 18" OF VERTICAL SEPARATION CANNOT BE MET/MAINTAINED.

(B) THIS PIPE SHALL BE CORED INTO STRUCTURE D3, WHICH WAS INSTALLED DURING PHASE 1.

(C) EXISTING UTILITIES HAVE BEEN ILLUSTRATED AT STANDARD DEPTHS AND HAVE NOT BEEN FIELD MEASURED/VERIFIED. CONTRACTOR TO EXPOSE THE EXISTING CROSSING FACILITIES/UTILITIES PRIOR TO CREATING AND SUBMITTING STORM STRUCTURE SHOP DRAWINGS TO THE ENGINEER AND PRIOR TO ORDERING STRUCTURES. THE CONTRACTOR SHALL MEASURE DEPTHS DOWN TO THE TOP OF THE CROSSING FACILITIES/UTILITIES FROM THE EXISTING SURFACE. THE CONTRACTOR SHALL NEATLY ORGANIZE THE FIELD MEASURED INFORMATION IN TABULAR FORM AND PROVIDE THE DEPTHS (WITH LOCATIONS) TO THE ENGINEER AND AUTHORITIES HAVING JURISDICTION (AHJ) FOR DEPTH CONFIRMATION. THE ENGINEER WILL REVIEW THE DEPTHS AND MAKE MODIFICATIONS TO THE PLANS PURSUANT TO WHAT THE EXISTING AND PROPOSED CONDITIONS PERMIT. EXISTING CROSSING FACILITIES/UTILITIES MAY REQUIRE LOWERING BY THEIR RESPECTIVE OWNER. THE LOWERING OF THE CROSSING FACILITIES/UTILITIES SHALL BE COORDINATED BY THE CONTRACTOR WITH THE FACILITY/UTILITY OWNER AHEAD OF STORM SEWER CONSTRUCTION.

(D) WATER LINE LOWERING REQUIRED, REFER TO SHEET 3 FOR DETAILS.

NOTES

ALL ELEVATIONS ON THIS PLAN ARE BASED ON NAVD 1988 DATUM, UNLESS OTHERWISE NOTED.

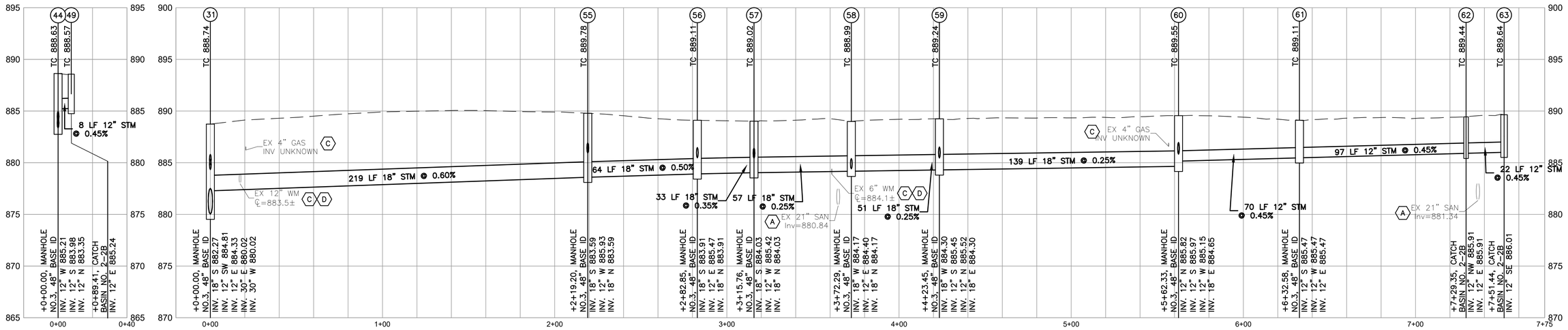
ALL BACKFILL SHALL BE COMPACTED TO THE DENSITY OF THE EXISTING GROUND UNLESS OTHERWISE NOTED.

*BACKFILL USING SELECT EXCAVATED MATERIAL. USE MECHANICAL COMPACTION METHOD (TYPE C).

**BACKFILL WITH TYPE 2 STRUCTURAL BACKFILL PER CMS ITEM 703.11 (TYPE B).

% RCP PER ODOT CMS 706.02 WITH TYPE 2 STRUCTURAL BACKFILL PER CMS ITEM 703.11 (TYPE B).

CONTRACTOR RESPONSIBLE FOR FIELD LOCATING WATER SERVICES PRIOR TO INSTALLATION OF STORM SEWER. AN ALLOWANCE HAS BEEN MADE FOR WATER SERVICE RELOCATION.



HORIZONTAL SCALE IN FEET 0 30' 60'
VERTICAL SCALE IN FEET 0 5' 10'

PROFILE SHEET 2 - PROFILE2

DESIGN AGENCY

ms consultants, inc.
engineers * architects * planners
2221 SCHROCK ROAD
COLUMBUS, OHIO 43229-1547
(614)-895-7700
Fax (614)-895-7570

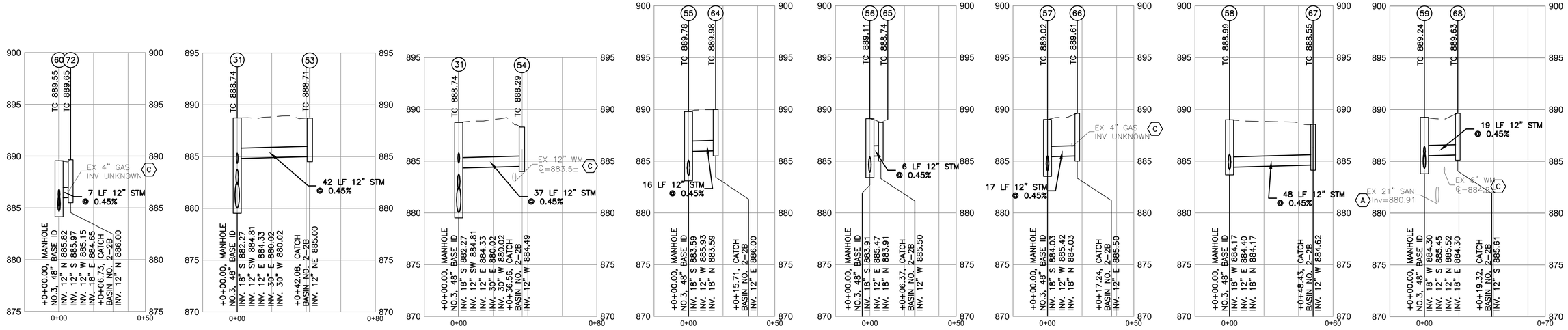
DESIGNER

REVIEWER

PROJECT ID

SHEET	TOTAL
8	19

N:\03\61\44061-02\D_Design\Drawings\Sheet Sets\Profile Sheet 2.dwg 28-Jul-25 4:01 PM



NOTES

(A) CAUTION! SPECIAL CARE SHALL BE PROVIDED FOR INSTALLATION OF THE STORM PIPE CROSSING THE EXISTING SANITARY PIPE. SANITARY PIPE SHALL BE PROTECTED DURING THE INSTALLATION OF THE STORM PIPE. THE PROPOSED STORM PIPE SHALL BE INSTALLED SUCH THAT A FULL LENGTH OF PIPE IS CENTERED OVER TOP OF THE EXISTING SANITARY, ENSURING NO PIPE JOINT IS OVER THE EXISTING SANITARY PIPE. CONTRACTOR TO USE EXTREME CAUTION DURING CONSTRUCTION. CONTRACTOR TO MAINTAIN 4" MINIMUM OUT TO OUT SEPARATION BETWEEN THE EXISTING SANITARY SEWER AND THE PROPOSED STORM SEWER. AUTHORITIES HAVING JURISDICTION (AHJ) TO CONFIRM IF SEPARATION VARIANCE IS REQUIRED WHERE 18" OF VERTICAL SEPARATION CANNOT BE MET/MAINTAINED.

(B) THIS PIPE SHALL BE CORED INTO STRUCTURE D3, WHICH WAS INSTALLED DURING PHASE 1.

(C) EXISTING UTILITIES HAVE BEEN ILLUSTRATED AT STANDARD DEPTHS AND HAVE NOT BEEN FIELD MEASURED/VERIFIED. CONTRACTOR TO EXPOSE THE EXISTING CROSSING FACILITIES/UTILITIES PRIOR TO CREATING AND SUBMITTING STORM STRUCTURE SHOP DRAWINGS TO THE ENGINEER AND PRIOR TO ORDERING STRUCTURES. THE CONTRACTOR SHALL MEASURE DEPTHS DOWN TO THE TOP OF THE CROSSING FACILITIES/UTILITIES FROM THE EXISTING SURFACE. THE CONTRACTOR SHALL NEATLY ORGANIZE THE FIELD MEASURED INFORMATION IN TABULAR FORM AND PROVIDE THE DEPTHS (WITH LOCATIONS) TO THE ENGINEER AND AUTHORITIES HAVING JURISDICTION (AHJ) FOR DEPTH CONFIRMATION. THE ENGINEER WILL REVIEW THE DEPTHS AND MAKE MODIFICATIONS TO THE PLANS PURSUANT TO WHAT THE EXISTING AND PROPOSED CONDITIONS PERMIT. EXISTING CROSSING FACILITIES/UTILITIES MAY REQUIRE LOWERING BY THEIR RESPECTIVE OWNER. THE LOWERING OF THE CROSSING FACILITIES/UTILITIES SHALL BE COORDINATED BY THE CONTRACTOR WITH THE FACILITY/UTILITY OWNER AHEAD OF STORM SEWER CONSTRUCTION.

(D) WATER LINE LOWERING REQUIRED, REFER TO SHEET 3 FOR DETAILS.

NOTES

ALL ELEVATIONS ON THIS PLAN ARE BASED ON NAVD 1988 DATUM, UNLESS OTHERWISE NOTED.

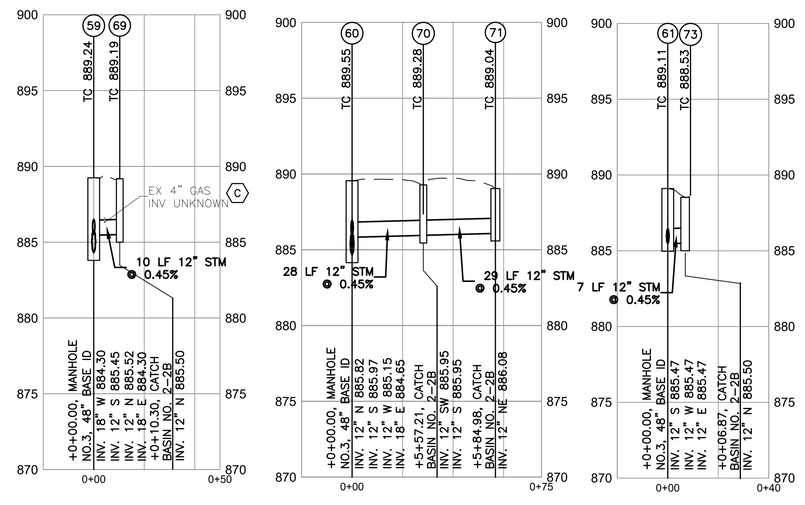
ALL BACKFILL SHALL BE COMPACTED TO THE DENSITY OF THE EXISTING GROUND UNLESS OTHERWISE NOTED.

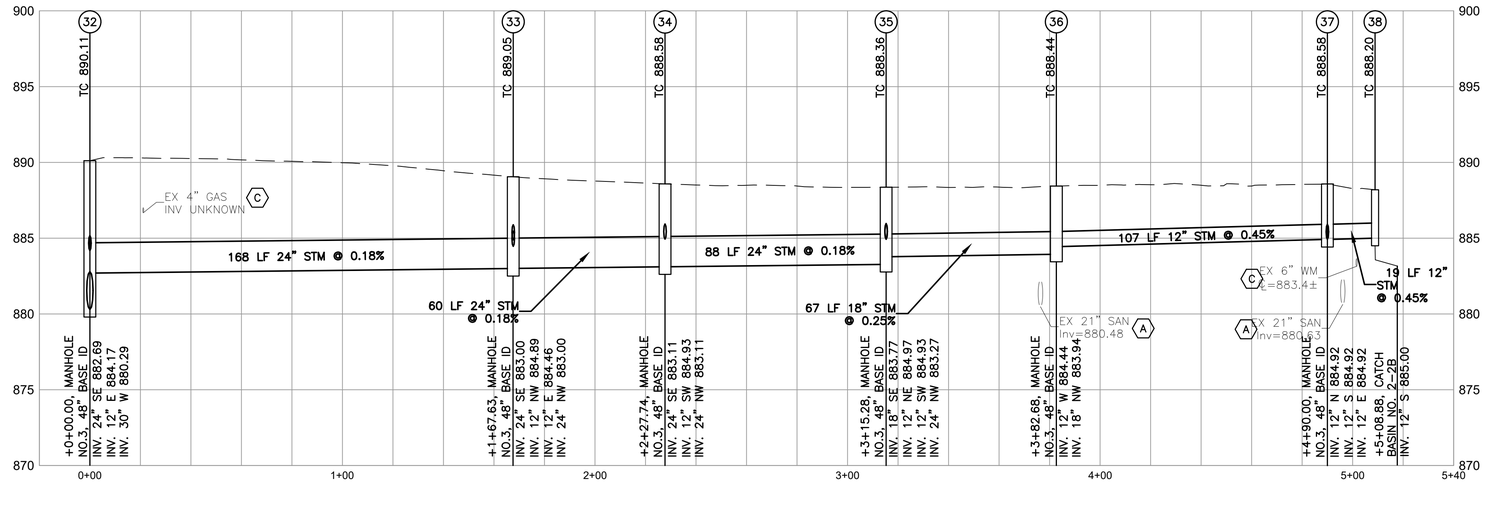
*BACKFILL USING SELECT EXCAVATED MATERIAL. USE MECHANICAL COMPACTION METHOD (TYPE C).

**BACKFILL WITH TYPE 2 STRUCTURAL BACKFILL PER CMS ITEM 703.11 (TYPE B).

% RCP PER ODOT CMS 706.02 WITH TYPE 2 STRUCTURAL BACKFILL PER CMS ITEM 703.11 (TYPE B).

CONTRACTOR RESPONSIBLE FOR FIELD LOCATING WATER SERVICES PRIOR TO INSTALLATION OF STORM SEWER. AN ALLOWANCE HAS BEEN MADE FOR WATER SERVICE RELOCATION.





HORIZONTAL SCALE IN FEET 0 30' 60'

VERTICAL SCALE IN FEET 0 5' 10'

PROFILE SHEET 3 - PROFILE3

DESIGN AGENCY

ms consultants, Inc.
engineers * architects * planners
2221 SCHROCK ROAD
COLUMBUS, OHIO 43229-1547
(614) 898-7100
Fax (614) 898-7010

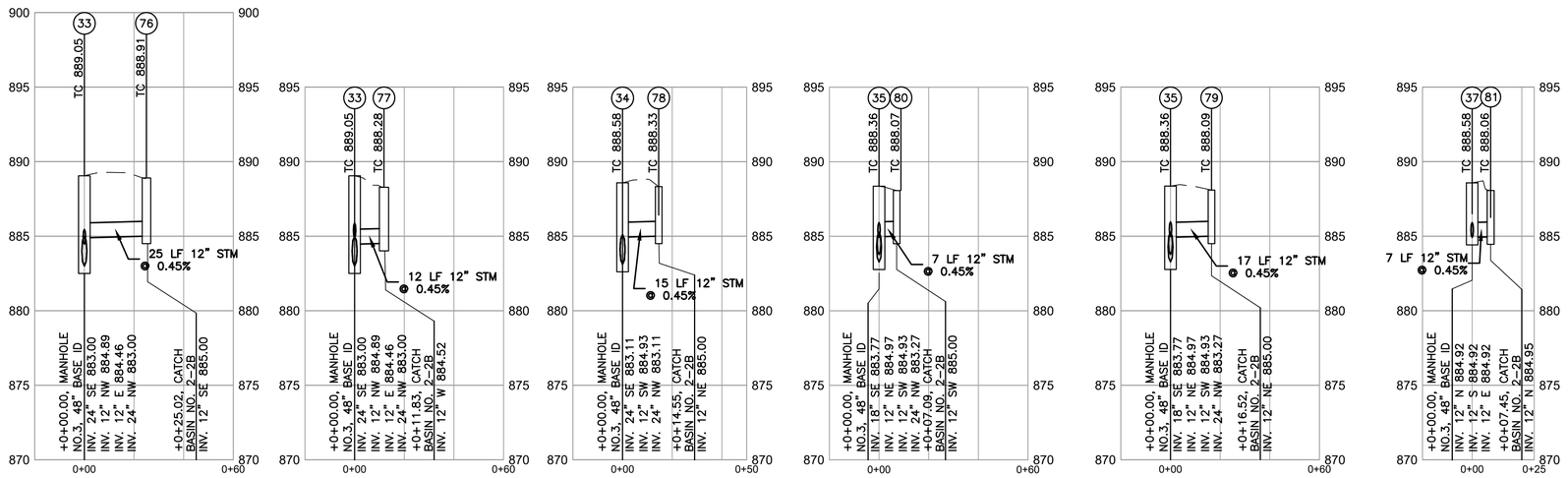
DESIGNER

REVIEWER

PROJECT ID

SHEET	TOTAL
9	19

N:\03\61\44061-02\D_Design\Drawings\Sheet Sets\Profile Sheet 3.dwg 28-Jul-25 4:01 PM



NOTES

Ⓐ CAUTION! SPECIAL CARE SHALL BE PROVIDED FOR INSTALLATION OF THE STORM PIPE CROSSING THE EXISTING SANITARY PIPE. SANITARY PIPE SHALL BE PROTECTED DURING THE INSTALLATION OF THE STORM PIPE. THE PROPOSED STORM PIPE SHALL BE INSTALLED SUCH THAT A FULL LENGTH OF PIPE IS CENTERED OVER TOP OF THE EXISTING SANITARY, ENSURING NO PIPE JOINT IS OVER THE EXISTING SANITARY PIPE. CONTRACTOR TO USE EXTREME CAUTION DURING CONSTRUCTION. CONTRACTOR TO MAINTAIN 4" MINIMUM OUT TO OUT SEPARATION BETWEEN THE EXISTING SANITARY SEWER AND THE PROPOSED STORM SEWER. AUTHORITIES HAVING JURISDICTION (AHJ) TO CONFIRM IF SEPARATION VARIANCE IS REQUIRED WHERE 18" OF VERTICAL SEPARATION CANNOT BE MET/MAINTAINED.

Ⓑ THIS PIPE SHALL BE CORED INTO STRUCTURE D3, WHICH WAS INSTALLED DURING PHASE 1.

Ⓒ EXISTING UTILITIES HAVE BEEN ILLUSTRATED AT STANDARD DEPTHS AND HAVE NOT BEEN FIELD MEASURED/VERIFIED. CONTRACTOR TO EXPOSE THE EXISTING CROSSING FACILITIES/UTILITIES PRIOR TO CREATING AND SUBMITTING STORM STRUCTURE SHOP DRAWINGS TO THE ENGINEER AND PRIOR TO ORDERING STRUCTURES. THE CONTRACTOR SHALL MEASURE DEPTHS DOWN TO THE TOP OF THE CROSSING FACILITIES/UTILITIES FROM THE EXISTING SURFACE. THE CONTRACTOR SHALL NEATLY ORGANIZE THE FIELD MEASURED INFORMATION IN TABULAR FORM AND PROVIDE THE DEPTHS (WITH LOCATIONS) TO THE ENGINEER AND AUTHORITIES HAVING JURISDICTION (AHJ) FOR DEPTH CONFIRMATION. THE ENGINEER WILL REVIEW THE DEPTHS AND MAKE MODIFICATIONS TO THE PLANS PURSUANT TO WHAT THE EXISTING AND PROPOSED CONDITIONS PERMIT. EXISTING CROSSING FACILITIES/UTILITIES MAY REQUIRE LOWERING BY THEIR RESPECTIVE OWNER. THE LOWERING OF THE CROSSING FACILITIES/UTILITIES SHALL BE COORDINATED BY THE CONTRACTOR WITH THE FACILITY/UTILITY OWNER AHEAD OF STORM SEWER CONSTRUCTION.

Ⓓ WATER LINE LOWERING REQUIRED, REFER TO SHEET 3 FOR DETAILS.

NOTES

ALL ELEVATIONS ON THIS PLAN ARE BASED ON NAVD 1988 DATUM, UNLESS OTHERWISE NOTED.

ALL BACKFILL SHALL BE COMPACTED TO THE DENSITY OF THE EXISTING GROUND UNLESS OTHERWISE NOTED.

*BACKFILL USING SELECT EXCAVATED MATERIAL. USE MECHANICAL COMPACTION METHOD (TYPE C).

**BACKFILL WITH TYPE 2 STRUCTURAL BACKFILL PER CMS ITEM 703.11 (TYPE B).

% RCP PER ODOT CMS 706.02 WITH TYPE 2 STRUCTURAL BACKFILL PER CMS ITEM 703.11 (TYPE B).

CONTRACTOR RESPONSIBLE FOR FIELD LOCATING WATER SERVICES PRIOR TO INSTALLATION OF STORM SEWER. AN ALLOWANCE HAS BEEN MADE FOR WATER SERVICE RELOCATION.

HORIZONTAL SCALE IN FEET 0 30' 60'

VERTICAL SCALE IN FEET 0 5' 10'

PROFILE SHEET 4 - PROFILE4

DESIGN AGENCY

ms consultants, inc.
engineers * architects * planners
2221 SCHROCK ROAD
COLUMBUS, OHIO 43229-1547
(614)-898-7100
Fax (614)-898-7676

DESIGNER

REVIEWER

PROJECT ID

SHEET	TOTAL
10	19

N:\03\61\44061-02\D_Design\Drawings\Sheet Sets\Profile Sheet 4.dwg 28-Jul-25 4:02 PM

STRUCTURE DATA TABLE

STRUCTURE #	STATION	LINE	NORTHING	EASTING	STRUCTURE TYPE (CASTING TYPE)	TOP OF CASTING	INVERT IN	INVERT OUT	SIZE (IN.)	LENGTH (LFT.)	CONNECTS TO STR.
D3	0+00	Structure 26 - 75	699747.0642	1962857.6236	MANHOLE NO.3, 72" BASE ID	884.78	36" (E) @ EL. 878.56				
27	1+84	Structure 26 - 75	699815.2407	1963028.0727	MANHOLE NO.3, 60" BASE ID	885.48	36" (E) @ EL. 878.84 12" (NW) @ EL. 881.92 12" (S) @ EL. 881.38 12" (E) @ EL. 881.37	36" (W) @ EL. 878.84	36	184	D3
28	3+77	Structure 26 - 75	699873.2457	1963212.1350	MANHOLE NO.3, 60" BASE ID	886.81	12" (NW) @ EL. 880.90 36" (E) @ EL. 879.03 12" (S) @ EL. 882.94	36" (W) @ EL. 879.03	36	193	27
29	5+21	Structure 26 - 75	699916.9018	1963349.3411	MANHOLE NO.3, 60" BASE ID	887.64	12" (S) @ EL. 882.91 30" (E) @ EL. 879.67	36" (W) @ EL. 879.17	36	144	28
30	5+94	Structure 26 - 75	699939.2158	1963419.4715	MANHOLE NO.3, 48" BASE ID	888.30	12" (S) @ EL. 884.41 30" (E) @ EL. 879.78	30" (W) @ EL. 879.78	30	74	29
31	7+57	Structure 26 - 75	699985.5108	1963575.5872	MANHOLE NO.3, 48" BASE ID	888.74	18" (S) @ EL. 882.27 12" (SW) @ EL. 884.81 12" (E) @ EL. 884.33 30" (E) @ EL. 880.02	30" (W) @ EL. 880.02	30	163	30
32	9+41	Structure 26 - 75	700039.8504	1963750.9540	MANHOLE NO.3, 48" BASE ID	890.11	24" (SE) @ EL. 882.69 12" (E) @ EL. 884.17	30" (W) @ EL. 880.29	30	184	31
33	1+68	Structure 32 - 38	699893.6460	1963832.9529	MANHOLE NO.3, 48" BASE ID	889.05	24" (SE) @ EL. 883.00 12" (NW) @ EL. 884.89 12" (E) @ EL. 884.46	24" (NW) @ EL. 883.00	24	168	32
34	2+28	Structure 32 - 38	699840.9812	1963861.9206	MANHOLE NO.3, 48" BASE ID	888.58	24" (SE) @ EL. 883.11 12" (SW) @ EL. 884.93	24" (NW) @ EL. 883.11	24	60	33
35	3+15	Structure 32 - 38	699764.1634	1963903.9066	MANHOLE NO.3, 48" BASE ID	888.36	18" (SE) @ EL. 883.77 12" (NE) @ EL. 884.97 12" (SW) @ EL. 884.93	24" (NW) @ EL. 883.27	24	88	34
36	3+83	Structure 32 - 38	699705.0188	1963936.2329	MANHOLE NO.3, 48" BASE ID	888.44	12" (W) @ EL. 884.44	18" (NW) @ EL. 883.94	18	67	35
37	4+90	Structure 32 - 38	699674.8711	1963833.2344	MANHOLE NO.3, 48" BASE ID	888.58	12" (N) @ EL. 884.92 12" (S) @ EL. 884.92	12" (E) @ EL. 884.92	12	107	36
38	5+09	Structure 32 - 38	699693.0839	1963828.2752	CATCH BASIN NO. 2-2B	888.20		12" (S) @ EL. 885.00	12	19	37
39	0+18	Structure 27 - 39	699828.2400	1963015.4129	CATCH BASIN NO. 2-2B	885.15		12" (SE) @ EL. 882.00	12	18	27
40	0+26	Structure 27 - 40	699790.7744	1963019.2645	CATCH BASIN NO. 2-2B	884.78		12" (N) @ EL. 881.50	12	26	27
41	0+30	Structure 27 - 41	699806.0058	1963056.7300	CATCH BASIN NO. 2-2B	884.64		12" (W) @ EL. 881.50	12	30	27
42	0+22	Structure 28 - 42	699891.0938	1963199.7654	CATCH BASIN NO. 2-2B	885.12		12" (SE) @ EL. 881.00	12	22	28
43	0+26	Structure 28 - 47	699847.8614	1963218.5502	MANHOLE NO.3, 48" BASE ID	887.19	12" (S) @ EL. 883.06 12" (E) @ EL. 884.31	12" (N) @ EL. 883.06	12	26	28
44	0+89	Structure 28 - 47	699787.1191	1963236.0918	MANHOLE NO.3, 48" BASE ID	888.63	12" (W) @ EL. 885.21 12" (S) @ EL. 883.98	12" (N) @ EL. 883.35	12	63	43
45	1+74	Structure 28 - 47	699705.7804	1963259.5813	MANHOLE NO.3, 48" BASE ID	889.19	12" (E) @ EL. 885.31 12" (S) @ EL. 884.36	12" (N) @ EL. 884.36	12	85	44
46	2+96	Structure 28 - 47	699588.5639	1963293.4320	MANHOLE NO.3, 48" BASE ID	889.43	12" (E) @ EL. 884.91	12" (N) @ EL. 884.91	12	122	45
47	3+15	Structure 28 - 47	699593.4682	1963312.1937	CATCH BASIN NO. 2-2B	889.59		12" (W) @ EL. 885.00	12	19	46
48	0+15	Structure 43 - 48	699850.0796	1963233.0738	CATCH BASIN NO. 2-2B	887.40		12" (W) @ EL. 884.37	12	15	43
49	0+89	Structure 28 - 47	699784.9933	1963228.7306	CATCH BASIN NO. 2-2B	888.57		12" (E) @ EL. 885.24	12	8	44
50	0+17	Structure 45 - 50	699710.5135	1963275.9709	CATCH BASIN NO. 2-2B	888.61		12" (W) @ EL. 885.39	12	17	45
51	0+21	Structure 29 - 51	699896.9273	1963355.6965	CATCH BASIN NO. 2-2B	886.22		12" (N) @ EL. 883.04	12	21	29
52	0+20	Structure 30 - 52	699920.0702	1963425.5632	CATCH BASIN NO. 2-2B	888.29		12" (N) @ EL. 884.50	12	20	30
53	0+42	Structure 31 - 53	699955.9605	1963545.6349	CATCH BASIN NO. 2-2B	888.71		12" (NE) @ EL. 885.00	12	42	31
54	0+37	Structure 31 - 54	699975.5031	1963610.7540	CATCH BASIN NO. 2-2B	888.29		12" (W) @ EL. 884.49	12	37	31
55	2+19	Structure 31 - 63	699777.0344	1963643.3243	MANHOLE NO.3, 48" BASE ID	889.78	18" (S) @ EL. 883.59 12" (W) @ EL. 885.93	18" (N) @ EL. 883.59	18	219	31

STRUCTURE DATA TABLE

STRUCTURE #	STATION	LINE	NORTHING	EASTING	STRUCTURE TYPE (CASTING TYPE)	TOP OF CASTING	INVERT IN	INVERT OUT	SIZE (IN.)	LENGTH (LFT.)	CONNECTS TO STR.
56	2+83	Structure 31 - 63	699716.5064	1963662.9907	MANHOLE NO.3, 48" BASE ID	889.11	18" (S) @ EL. 883.91 12" (E) @ EL. 885.47	18" (N) @ EL. 883.91	18	64	55
57	3+16	Structure 31 - 63	699685.2056	1963673.1608	MANHOLE NO.3, 48" BASE ID	889.02	18" (S) @ EL. 884.03 12" (W) @ EL. 885.42	18" (N) @ EL. 884.03	18	33	56
58	3+72	Structure 31 - 63	699631.4583	1963690.6681	MANHOLE NO.3, 48" BASE ID	888.99	18" (W) @ EL. 884.17 12" (E) @ EL. 884.40	18" (N) @ EL. 884.17	18	57	57
59	4+23	Structure 31 - 63	699616.2270	1963641.8228	MANHOLE NO.3, 48" BASE ID	889.24	18" (W) @ EL. 884.30 12" (S) @ EL. 885.45 12" (N) @ EL. 885.52	18" (E) @ EL. 884.30	18	51	58
60	5+62	Structure 31 - 63	699576.3965	1963508.7790	MANHOLE NO.3, 48" BASE ID	889.55	12" (N) @ EL. 885.82 12" (S) @ EL. 885.97 12" (W) @ EL. 885.15	18" (E) @ EL. 884.65	18	139	59
61	6+33	Structure 31 - 63	699554.7721	1963441.9402	MANHOLE NO.3, 48" BASE ID	889.11	12" (S) @ EL. 885.47 12" (W) @ EL. 885.47	12" (E) @ EL. 885.47	12	70	60
62	7+29	Structure 31 - 63	699524.9841	1963349.8686	CATCH BASIN NO. 2-2B	889.44	12" (NW) @ EL. 885.91	12" (E) @ EL. 885.91	12	97	61
63	7+51	Structure 31 - 63	699540.5140	1963334.1570	CATCH BASIN NO. 2-2B	889.64		12" (SE) @ EL. 886.01	12	22	62
64	0+16	Structure 55 - 64	699772.4262	1963628.3070	CATCH BASIN NO. 2-2B	889.98		12" (E) @ EL. 886.00	12	16	55
65	0+06	Structure 56 - 65	699718.3922	1963669.0711	CATCH BASIN NO. 2-2B	888.74		12" (W) @ EL. 885.50	12	6	56
66	0+17	Structure 57 - 66	699680.6537	1963656.5289	CATCH BASIN NO. 2-2B	889.61		12" (E) @ EL. 885.50	12	17	57
67	0+48	Structure 58 - 67	699638.8695	1963738.5286	CATCH BASIN NO. 2-2B	888.55		12" (W) @ EL. 884.62	12	48	58
68	0+19	Structure 59 - 68	699634.6096	1963635.8704	CATCH BASIN NO. 2-2B	889.63		12" (S) @ EL. 885.61	12	19	59
69	0+10	Structure 59 - 69	699606.4229	1963644.9741	CATCH BASIN NO. 2-2B	889.19		12" (N) @ EL. 885.50	12	10	59
70	5+57	Structure 31 - 63	699604.4297	1963505.7270	CATCH BASIN NO. 2-2B	889.28	12" (SW) @ EL. 885.95	12" (S) @ EL. 885.95	12	28	60
71	5+85	Structure 31 - 63	699592.7020	1963479.7011	CATCH BASIN NO. 2-2B	889.04		12" (NE) @ EL. 886.08	12	29	70
72	0+07	Structure 60 - 72	699569.7071	1963509.5073	CATCH BASIN NO. 2-2B	889.65		12" (N) @ EL. 886.00	12	7	60
73	0+07	Structure 61 - 73	699548.2360	1963444.0549	CATCH BASIN NO. 2-2B	888.53		12" (N) @ EL. 885.50	12	7	61
74	10+93	Structure 26 - 75	700088.7002	1963895.1225	MANHOLE NO.3, 48" BASE ID	889.24	12" (SE) @ EL. 884.86	12" (W) @ EL. 884.86	12	152	32
75	11+25	Structure 26 - 75	700074.6292	1963923.8401	CATCH BASIN NO. 2-2B	888.81		12" (NW) @ EL. 885.00	12	32	74
76	0+25	Structure 33 - 76	699903.4398	1963809.9345	CATCH BASIN NO. 2-2B	888.91		12" (SE) @ EL. 885.00	12	25	33
77	0+12	Structure 33 - 77	699889.6258	1963844.0761	CATCH BASIN NO. 2-2B	888.28		12" (W) @ EL. 884.52	12	12	33
78	0+15	Structure 34 - 78	699834.0034	1963849.1540	CATCH BASIN NO. 2-2B	888.33		12" (NE) @ EL. 885.00	12	15	34
79	0+17	Structure 35 - 79	699756.6353	1963889.2005	CATCH BASIN NO. 2-2B	888.09		12" (NE) @ EL. 885.00	12	17	35
80	0+07	Structure 35 - 80	699768.0150	1963909.8591	CATCH BASIN NO. 2-2B	888.07		12" (SW) @ EL. 885.00	12	7	35
81	0+07	Structure 37 - 83	699667.6200	1963834.9397	CATCH BASIN NO. 2-2B	888.06		12" (N) @ EL. 884.95	12	7	37

HORIZONTAL SCALE IN FEET

STORM SEWER TABLES AND DETAILS

DESIGN AGENCY

ms consultants, inc.
engineers * architects * planners
2221 SCHROCK ROAD
COLUMBUS, OHIO 43229-1547
(614) 898-7100
Fax (614) 898-7676

DESIGNER

REVIEWER

PROJECT ID

SHEET	TOTAL
11	19

PLAN DESIGNER: ms consultants, inc.
CHAD BOYER, PE
2221 SCHROCK ROAD
COLUMBUS, OHIO 43229
PHONE: 614-898-7100
CBOYER@MSCONSULTANTS.COM

OWNER/DEVELOPER: WALNUT TOWNSHIP
TERRY HORN
PHONE: 740-503-2200
TERRYHORN@WALNUTTOWNSHIP.COM

PROJECT DESCRIPTION: THE PURPOSE OF THIS PLAN IS TO INSTALL NEW STORMWATER INFRASTRUCTURE SUCH AS CATCH BASINS, MANHOLES, AND PIPING, SUFFICIENT TO REDUCE THE CURRENT FLOODING CONDITIONS PRESENT IN THE LAKESIDE NEIGHBORHOOD. THE IMPROVEMENTS INCLUDED IN THIS PLAN SET ARE PHASES 2-4 OF A LARGER STORM SEWER INSTALLATION.

EXISTING SITE CONDITIONS: SITE RUNOFF CURRENTLY DRAINS TO CATCH BASINS CONNECTED TO AN EXISTING STORM SEWER. THIS SITE IS TRIBUTARY TO THE LATERAL A, THENCEFORTH TRIBUTARY TO THE SOUTH FORK LICKING RIVER.

AREAS OF DISTURBANCE: THE PROJECT WILL INSTALL CATCH BASINS, MANHOLES AND PIPING. MINIMAL GRADING WILL BE COMPLETED TO PROMOTE POSITIVE DRAINAGE TO THE PROPOSED STORM NETWORK. ALL STORM SEWERS WITHIN THE PROJECT LIMITS SHALL BE PROTECTED WITH INLET PROTECTION MEASURES BY THE CONTRACTOR.

ADJACENT AREAS: THE SITE IS BOUNDED TO THE NORTH BY LAKESIDE ROAD AND LATERAL A. THE SITE IS BOUNDED TO THE SOUTH BY SHEPARD AVENUE. THE SITE IS BOUNDED TO THE WEST BY CLARK STREET.

EROSION AND SEDIMENT MEASURES: THE SITE IS BOUNDED TO THE EAST BY HOLTSBERRY STREET.
EROSION AND SEDIMENT WILL BE CONTROLLED BY THE USE OF INLET PROTECTION AT EXISTING INLETS.

MAINTENANCE: ALL EROSION CONTROL DEVICES ARE TO BE INSPECTED BY THE CONSTRUCTION SUPERINTENDENT DAILY AND AFTER SIGNIFICANT RAINFALLS. ANY DAMAGED FACILITIES ARE TO BE REPLACED/REPAIRED IMMEDIATELY AS MAY BE NECESSARY.

CONSTRUCTION SEQUENCE: THE CONTRACTOR SHALL INSTALL ALL EROSION CONTROL DEVICES IN ACCORDANCE WITH THE NOTES AND DETAILS ON THIS SHEET PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES. THE CONTRACTOR WILL THEN COMPLETE THE GRADING AND UTILITY IMPROVEMENTS. ONLY AFTER THE GRADING AND UTILITY WORK IS COMPLETED, EARTHWORK COMPLETED, AND AREAS SEEDED, MAY THE EROSION CONTROL DEVICES BE REMOVED.

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

OEPA NOI # N/A

MAINTENANCE:
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN THE SEDIMENTATION AND EROSION CONTROL FEATURES ON THIS PROJECT. ANY SEDIMENT OR DEBRIS WHICH HAS REDUCED THE EFFICIENCY OF A CONTROL SHALL BE REMOVED IMMEDIATELY. SHOULD A STRUCTURE OR FEATURE BECOME DAMAGED, THE CONTRACTOR SHALL REPAIR OR REPLACE AR NO ADDITIONAL COST TO THE OWNER.

INSPECTIONS:
THE NPDES PERMIT HOLDER, ALONG WITH THE CONTRACTOR, SHALL PROVIDE QUALIFIED PERSONNEL TO CONDUCT SITE INSPECTIONS, ENSURING PROPER FUNCTIONALITY OF THE EROSION AND SEDIMENTATION CONTROLS. ALL EROSION AND SEDIMENTATION CONTROLS ARE TO BE INSPECTED ONCE PER EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF A 0.5" STORM EVENT OR GREATER THAT OCCURS OVER A 24-HOUR PERIOD. RECORDS OF SITE INSPECTIONS SHALL BE KEPT AND MADE AVAILABLE TO JURISDICTIONAL AGENCIES IF REQUESTED.

CONTRACTOR RESPONSIBILITIES:
DETAILS HAVE BEEN PROVIDED ON THE PLANS IN AN EFFORT TO HELP THE CONTRACTOR PROVIDE EROSION AND SEDIMENTATION CONTROL. THE DETAILS SHOWN ON THE PLAN SHALL BE CONSIDERED A MINIMUM. ADDITIONAL OR ALTERNATE DETAILS MAY BE FOUND IN THE OHIO DEPARTMENT OF NATURAL RESOURCES (ODNR) RAINWATER AND LAND DEVELOPMENT MANUAL. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROVIDING NECESSARY AND ADEQUATE MEASURES FOR PROPER MAINTENANCE AND INSPECTION IN COMPLIANCE WITH THE OHIO CONSTRUCTION GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY.

THE CONTRACTOR SHALL PROVIDE A SCHEDULE OF OPERATIONS TO THE OWNER. THE SCHEDULE SHOULD INCLUDE A SEQUENCE OF THE PLACEMENT OF THE EROSION AND SEDIMENTATION CONTROL MEASURES THAT PROVIDES FOR CONTINUAL PROTECTION OF THE SITE THROUGHOUT EARTH MOVING ACTIVITIES.

PRIOR TO CONSTRUCTION OPERATIONS IN A PARTICULAR AREA, ALL SEDIMENTATION AND EROSION CONTROL FEATURES SHALL BE IN PLACE. FIELD ADJUSTMENTS WITH RESPECT TO LOCATIONS AND DIMENSIONS ME BE MADE BY THE ENGINEER AND THE OHIO EPA.

THE CONTRACTOR SHALL PLACE INLET PROTECTION FOR SEDIMENTATION CONTROL IMMEDIATELY AFTER THE CONSTRUCTION OF CATCH BASINS OR INLETS.

IT MAY BECOME NECESSARY TO REMOVE PORTIONS OF SEDIMENTATION CONTROLS DURING CONSTRUCTION TO FACILITATE GRADING OPERATIONS IN CERTAIN AREAS. HOWEVER, THE CONTROLS SHALL BE REPLACED UPON GRADING OR DURING ANY INCLEMENT WEATHER.

THE CONTRACTOR SHALL BE RESPONSIBLE TO HAVE THE CURRENT STORMWATER POLLUTION PREVENTION PLAN IMMEDIATELY AVAILABLE OR POSTED ON SITE.

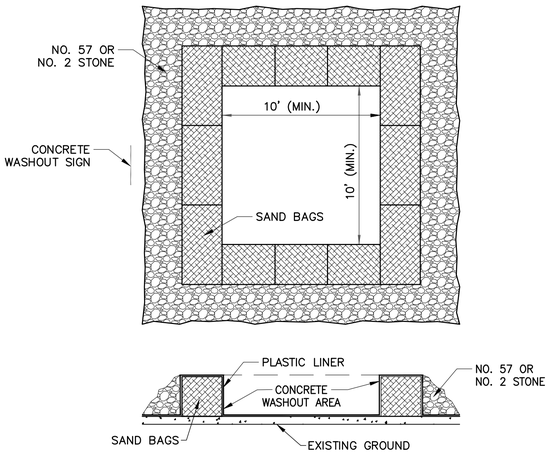
THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT OFFSITE SOIL BORROW AND EXPORT AREAS HAVE OHIO EPA NPDES PERMIT COVERAGE AND THAT APPROPRIATE EROSION AND SEDIMENTATION CONTROLS ARE PROPERLY INSTALLED AND MAINTAINED.

THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT OFF-SITE TRACKING OF SEDIMENTS BY VEHICLES AND EQUIPMENT IS MINIMIZED. ALL SUCH OFF-SITE SEDIMENT SHALL BE CLEANED UP DAILY.

THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT NO SOLID OR LIQUID WASTE IS DISCHARGED INTO STORMWATER RUNOFF. UNTREATED SEDIMENT-LADEN RUNOFF SHALL NOT FLOW OFF OF THE SITE WITHOUT BEING DIRECTED THROUGH A CONTROL PRACTICE.

THE COST FOR TEMPORARY CHANNELS, SEDIEMENT DAMS, SEDIMENT BASINS, AND OTHER APPURTENANT EARTH MOVING OPERATIONS SHALL BE INCLUDED IN THE PRICE BID FOR EROSION AND SEDIMENTATION CONTROL QUANTITIES.

CONCRETE WASHOUT



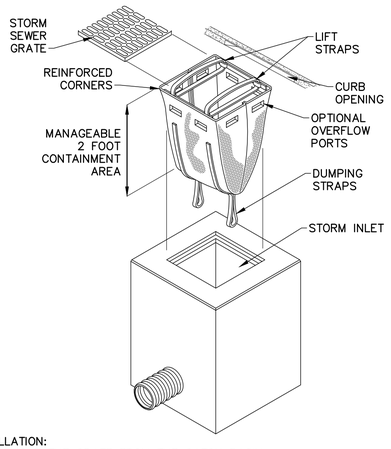
THE EXACT LOCATION OF THE CONCRETE WASHOUT(S) MAY BE FIELD LOCATED BY THE ONSITE PROJECT ENGINEER/CONTACT. APPLIES TO ALL SWPPP REVIEW PAGES.

THE USE OF PORTABLE CONCRETE WASHOUT UNITS IS APPROVED AND ENCOURAGED FOR ALL CONSTRUCTION AREAS IN THE CITY OF COLUMBUS.

CONCRETE TRUCKS SHALL UTILIZE AREAS TO WASHOUT TRUCKS. ACCUMULATED CONCRETE SHALL BE REMOVED FROM THE SITE AND DISPOSED PROPERLY.

AS AN ALTERNATIVE, CONTRACTOR SHALL USE A ROLL OFF BOX WITH LINER.

CATCH BASIN SEDIMENT FILTER DETAIL

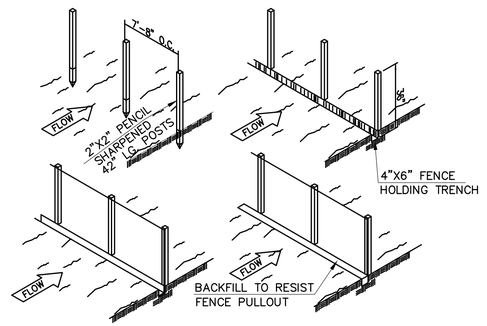


INSTALLATION:
1. REMOVE THE GRATE FROM THE CATCH BASIN.
2. STAND THE GRATE ON END. MOVE THE TOP LIFTING STRAPS OUT OF THE WAY AND PLACE THE GRATE INTO THE SEDIMENT FILTER UNIT SO THAT THE GRATE IS BELOW THE TOP STRAPS AND ABOVE THE LOWER STRAPS. THE GRATE SHOULD BE CRADLED BETWEEN THE UPPER AND LOWER STRAPS.
3. HOLDING THE LIFTING DEVICES, INSERT THE GRATE INTO THE INLET, BEING CAREFUL THAT THE GRATE REMAINS IN PLACE AND BEING CAREFUL NOT TO DAMAGE THE UNIT.

MAINTENANCE:
1. REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM THE VICINITY OF UNIT AFTER EACH STORM EVENT.
2. AFTER EACH STORM EVENT AND AT REGULAR INTERVALS, LOOK INTO THE UNIT. IF THE UNIT IS MORE THAN 1/3 FULL OF ACCUMULATED SEDIMENT, THE UNIT MUST BE EMPTIED.
3. TO EMPTY THE UNIT, USING THE LIFTING STRAPS LIFT THE UNIT OUT OF THE INLET AND REMOVE THE GRATE. TRANSPORT THE UNIT TO AN APPROPRIATE LOCATION FOR REMOVAL OF THE CONTENTS. HOLDING THE DUMPING STRAPS ON THE OUTSIDE AT THE BOTTOM OF THE UNIT, TURN THE UNIT UPSIDE DOWN, EMPTYING THE CONTENTS. REINSTALL UNIT AS ABOVE.
4. DISPOSE OF UNIT AND/OR ABSORBENT IN ACCORD WITH APPLICABLE FEDERAL, STATE, AND LOCAL ENVIRONMENTAL LAWS AND REGULATIONS.

*DANDY SACK, FRYEFLOW SYSTEMS INLET PROTECTION, FLEXSTORM INLET FILTER OR APPROVED EQUAL ARE ALL ACCEPTABLE.

SILT FENCE



FABRIC PROPERTIES	VALUES	TEST METHOD
GRAB TENSILE STRENGTH	90 LB. MINIMUM	ASTM 1682
MULLEN BURST STRENGTH	190 PSI MINIMUM	ASTM 3786
SLURRY FLOW RATE	.3 GAL./MIN./F^2 MAXIMUM	
EQUIVALENT OPENING SIZE	40-80	U.S STD. SIEVE CW-02215
ULTRAVIOLET RADIATION STABILITY	90% MINIMUM	ASTM-G-26

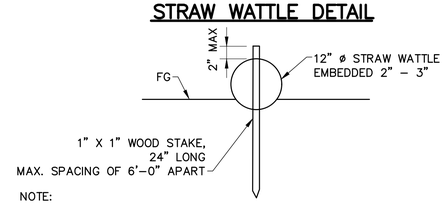
MAINTENANCE:

SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.

SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.

ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED, AND SEEDED.

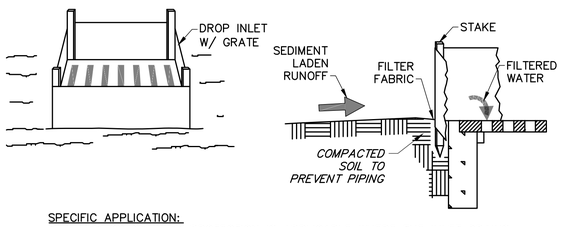
STRAW WATTLE DETAIL



NOTE:

1. STRAW WATTLES OR COMPOST ROLLS HAVE TO BE A MINIMUM OF 12 INCHES IN DIAMETER.
2. STRAW WATTLES INSTALLED ON PAVEMENT OR IMPERMEABLE SURFACES DO NOT NEED TO BE EMBEDDED.

DROP INLET SEDIMENT FILTER



SPECIFIC APPLICATION:
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NO GREATER THAN 5 PERCENT) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 CFS) ARE TYPICAL. THIS METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET AND HIGHWAY MEDIANS.

*DETAIL INCLUDED AS AN ALTERNATE TO CATCH BASIN SEDIMENT FILTER WHERE APPLICABLE

NOTE: THE USE OF STRAW WATTLES HAS BEEN PROVEN TO BE A VERSATILE AND EFFECTIVE ESC BMP, ESPECIALLY IN RESIDENTIAL SETTINGS. STRAW WATTLES MAY BE SUBSTITUTED FOR SILT FENCE.

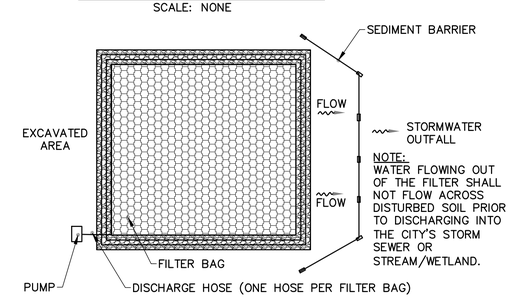
THE USE OF COMPOST FILTER SOCKS AND COMPOST BLANKETS ARE GAINING WIDER ACCEPTANCE NATIONWIDE. THEY ARE NOW APPROVED FOR USE ON ALL COLUMBUS SWP3 PLANS AND CONSTRUCTION SITES.

THIS SEDIMENT BARRIER UTILIZES STANDARD STRENGTH OR EXTRA STRENGTH SYNTHETIC FILTER FABRICS. IT IS DESIGNED FOR SITUATIONS IN WHICH ONLY SHEET OR OVERLAND FLOWS ARE EXPECTED.

MATERIAL PROPERTIES ARE:
1. THE HEIGHT OF A SILT FENCE SHALL NOT EXCEED 36 INCHES (HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE).
2. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL, CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM OF A 6 INCH OVERLAP, AND SECURELY SEALED.
3. POSTS SHALL BE SPACED AT A MAXIMUM OF 10 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 12 INCHES). WOOD POSTS WILL BE A MINIMUM OF 32" LONG. WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL NOT EXCEED 6 FEET.
4. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 INCHES WIDE AND 6 INCHES DEEP ALONG THE LINE OF THE POSTS AND UPSLOPE FROM THE BARRIER.
5. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1-INCH LONG, TIE WIRES, OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
6. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE AND 8 INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.
7. WHEN EXTRA STRENGTH FILTER FABRIC AND CLOSER POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH A CASE, THE FILTER FABRIC IS STAPLED OR WIRED DIRECTLY TO THE POSTS WITH ALL OTHER PROVISIONS OF ITEM NO. 6 APPLYING.
8. THE TRENCH SHALL BE BACKFILLED AND SOIL COMPACTED OVER THE FILTER FABRIC. SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
9. SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
10. TO PREVENT WATER PONDED BY THE SILT FENCE FROM FLOWING AROUND THE ENDS, EACH END SHALL BE CONSTRUCTED UPSLOPE SO THAT THE ENDS ARE AT A HIGHER ELEVATION.

DEWATERING FILTER BAG

SCALE: NONE



INSTALLATION:
THE CONTRACTOR SHALL PUMP MUDDY WATER ENCOUNTERED WITHIN EXCAVATED AREAS INTO A FILTER FABRIC BAG. THE BAG SHALL BE PLACED WITHIN A LEVEL UNDISTURBED AREA AS FAR AWAY FROM THE STORMWATER OUTFALL AS POSSIBLE. THE BAG SHALL BE PLACED ON TOP OF AN AGGREGATE PAD. ADDITIONALLY, A PERIMETER AGGREGATE BERM SHALL BE CONSTRUCTED AROUND THE BAG. PERIMETER CONTROLS SUCH AS COMPOST FILTER SOCKS OR SEDIMENT FENCE SHALL BE UTILIZED ALONG THE DOWNSTREAM SIDE OF THE BAG. THE PERIMETER CONTROLS SHALL BE INSTALLED TO ENSURE THAT THE WATER FLOWING OUT OF THE BAG DOES NOT FLOW AROUND THE ENDS OF THE CONTROLS. UPON COMPLETION, THE BAG SHALL BE REMOVED TO AN AREA AWAY FROM THE STORMWATER OUTFALL AND OPENED. THE ACCUMULATED SEDIMENT SHALL BE SPREAD OUT TO ALLOW TO DRY AND STABILIZED WITH VEGETATION. FILTER BAGS SHALL BE SIZED BASED UPON THE PUMPING INFLOW RATE

MAINTENANCE:
THE FILTER BAG SHALL BE REPLACED WHEN THE BAG IS HALF FILLED WITH SEDIMENT.

THE CONTRACTOR SHALL CONTACT THE PROJECT INSPECTOR/ENGINEER FOR CONSULTATIVE SERVICES IF DEWATERING ACTIVITIES OVERWHELM THE FILTER BAG AND PERIMETER CONTROLS. A SPECIAL WATER EVALUATION REQUESTS FORM (SWERF PERMIT) IS REQUIRED FOR DEWATERING INTO THE SANITARY SEWER SYSTEM.

HORIZONTAL SCALE IN FEET

EROSION CONTROL NOTES

DESIGN AGENCY

ms consultants, inc.
engineers + architects + planners
2221 SCHROCK ROAD
COLUMBUS, OHIO 43229-1547
(614) 898-7100
Fax (614) 898-7676

DESIGNER

REVIEWER

PROJECT ID

SHEET 12 | TOTAL 19

PERMANENT AND TEMPORARY SEEDING:

THE LIMITS OF SEEDING AND MULCHING ARE AS SHOWN WITHIN THE PLAN AS INDICATED BY THE LIMITS OF DISTURBANCE. ALL AREAS NOT DESIGNATED TO BE SEEDED SHALL REMAIN UNDER NATURAL GROUND COVER. THOSE AREAS DISTURBED OUTSIDE OF THE GRADING LIMITS SHALL BE SEEDED AND MULCHED AT THE CONTRACTOR'S EXPENSE.

SEEDING PROVIDED PER ITEM 659.

THE ONSITE CONTACTS RESPONSIBLE FOR SEDIMENT AND EROSION CONTROL ON THIS SITE ARE:

BMP INSTALLATION	TBD, ATTN : TBD	PHONE: TBD	EMAIL: TBD
BMP MAINTENANCE	SAME AS ABOVE	SAME AS ABOVE	SAME AS ABOVE
SITE STABILIZATION AND BMP REMOVAL	SAME AS ABOVE	SAME AS ABOVE	SAME AS ABOVE

NOTE: ALL EROSION AND SEDIMENT CONTROL PRACTICES ARE SUBJECT TO FIELD MODIFICATIONS AT THE DISCRETION OF WALNUT TOWNSHIP AND/OR THE OHIO EPA.

THIS PLAN MUST BE POSTED ON SITE. IF APPLICABLE, A COPY OF THE SWPPP PLAN AND THE APPROVED OEPA STORMWATER PERMIT (WITH THE SPECIFIC NOI NUMBER) SHALL BE KEPT ONSITE AT ALL TIME.

STREET CLEANING (ON AN AS–NEEDED BASIS) IS REQUIRED THROUGH THE DURATION OF THIS CONSTRUCTION PROJECT. THIS INCLUDES SWEEPING, POWER CLEANING AND (IF NECESSARY) MANUAL REMOVAL OF DIRT OR MUD IN STREET GUTTERS.

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

TABLE 1: PERMANENT STABILIZATION	
AREA REQUIRING PERMANENT STABILIZATION	TIME FRAME TO APPLY EROSION CONTROL
ANY AREAS THAT WILL LIE DORMANT FOR A YEAR OR MORE	WITHIN SEVEN (7) DAYS OF THE MOST RECENT DISTURBANCE
ANY AREAS WITHIN 50 FEET OF A SURFACE WATER OF THE STATE AND AT A FINAL GRADE	WITHIN TWO (2) DAYS OF REACHING FINAL GRADE
ANY AREAS AT FINAL GRADE	WITHIN SEVEN (7) DAYS OF REACHING FINAL GRADE WITHIN THAT AREA

TABLE 2: TEMPORARY STABILIZATION	
AREA REQUIRING TEMPORARY STABILIZATION	TIME FRAME TO APPLY EROSION CONTROL
ANY AREAS WITHIN 50 FEET OF A SURFACE WATER OF THE STATE AND AT A FINAL GRADE	WITHIN TWO (2) DAYS OF THE MOST RECENT DISTURBANCE IF THE AREA WILL REMAIN IDLE FOR MORE THAN FOURTEEN (14) DAYS
FOR ALL CONSTRUCTION ACTIVITIES, ANY DISTURBED AREAS THAT WILL BE DORMANT FOR MORE THAN FOURTEEN (14) DAYS BUT LESS THAN ONE YEAR, AND NOT WITHIN 50 FEET OF A SURFACE WATER OF THE STATE	WITHIN SEVEN (7) DAYS OF THE MOST RECENT DISTURBANCE WITHIN THE AREA. FOR RESIDENTIAL SUBDIVISIONS, DISTURBED AREAS MUST BE STABILIZED AT LEAST SEVEN (7) DAYS PRIOR TO TRANSFER OF PERMIT COVERAGE FOR THE INDIVIDUAL LOT(S)
DISTURBED AREAS THAT WILL BE IDLE OVER WINTER	PRIOR TO THE ONSET OF WINTER WEATHER

N:\03\61\44061-02\D_Design\Drawings\Sheet Sets\Erosion Control Notes.dwg 28-Jul-25 4:02 PM

HORIZONTAL SCALE IN FEET

EROSION CONTROL NOTES

DESIGN AGENCY

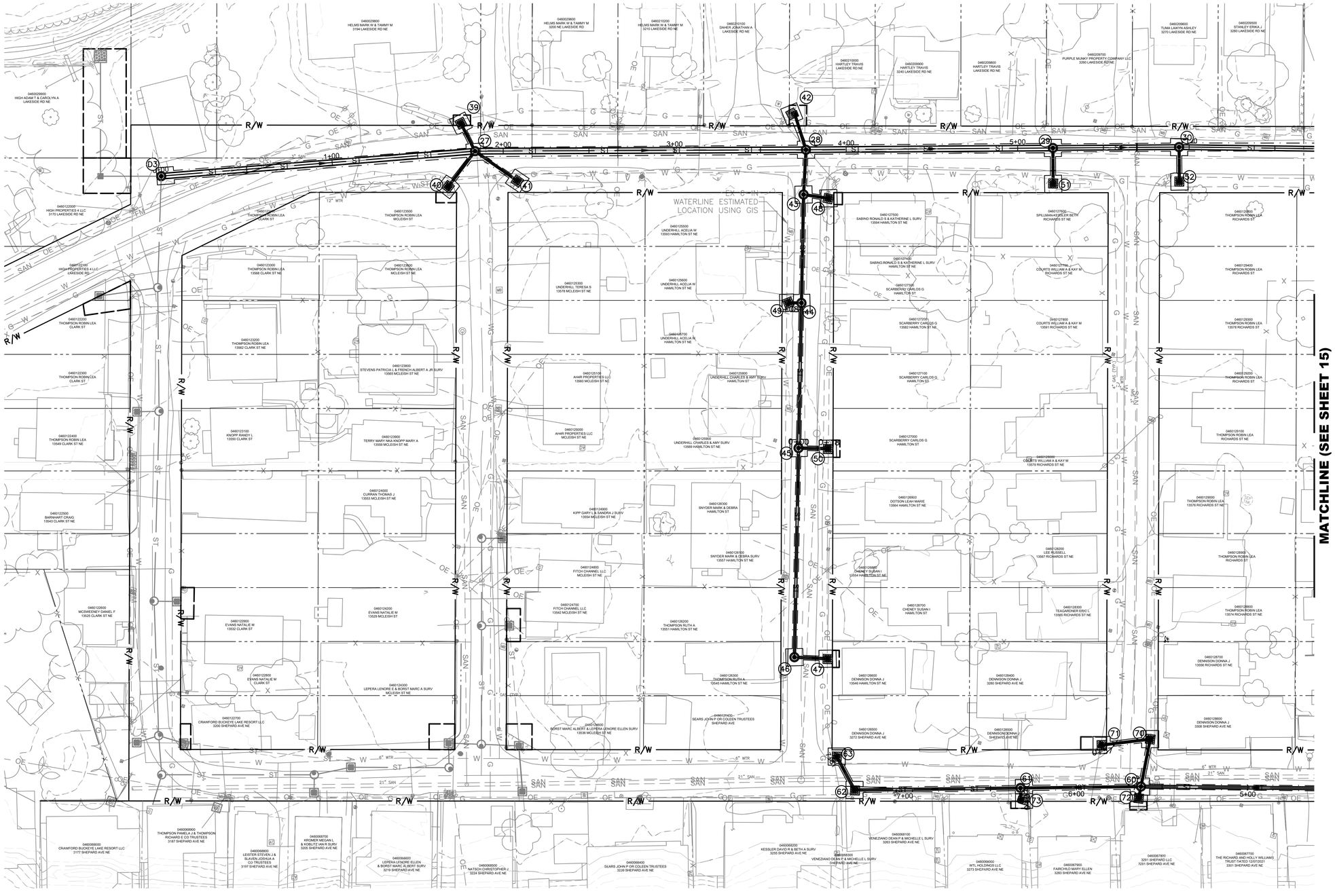
ms consultants, inc.
engineers * architects * planners
2221 SCHROCK ROAD
COLUMBUS, OHIO 43229-1547
(614)-898-7100
Fax (614)-898-7670

DESIGNER

REVIEWER

PROJECT ID

SHEET	TOTAL
13	19



LEGEND

— · — LIMITS OF DISTURBANCE

CATCH BASIN SEDIMENT FILTER (SEE DETAIL, SHEET 12)

NOTES

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

(B) ALL EROSION AND SEDIMENT CONTROL PRACTICES ARE SUBJECT TO FIELD MODIFICATION AT THE DISCRETION OF THE FAIRFIELD COUNTY ENGINEER AND/OR THE OEPA.

(C) UPPER BANK ABOVE NORMAL WATER ELEVATION SHOULD BE STABILIZED QUICKLY WITH STRAW BLANKETS, JUTE MATTING, OR SIMILAR GEOTEXTILE.

HORIZONTAL SCALE IN FEET
0 30' 60'

EROSION CONTROL PLAN

DESIGN AGENCY
ms consultants, Inc.
engineers • architects • planners
2221 BORROR ROAD
COLUMBUS, OHIO 43228-1547
(614)-898-7100
Fax (614)-898-7650

DESIGNER	
REVIEWER	
PROJECT ID	
SHEET 14	TOTAL 19

N:\03\61\44061-02\D_Design\Drawings\Sheet Sets\Erosion Control Plans.dwg 28-Jul-25 4:02 PM

LEGEND

— · — LIMITS OF DISTURBANCE

CATCH BASIN SEDIMENT FILTER (SEE DETAIL, SHEET 12)

NOTES

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

B. ALL EROSION AND SEDIMENT CONTROL PRACTICES ARE SUBJECT TO FIELD MODIFICATION AT THE DISCRETION OF THE FAIRFIELD COUNTY ENGINEER AND/OR THE OEPA.

C. UPPER BANK ABOVE NORMAL WATER ELEVATION SHOULD BE STABILIZED QUICKLY WITH STRAW BLANKETS, JUTE MATTING, OR SIMILAR GEOTEXTILE.

HORIZONTAL SCALE IN FEET
0 30' 60'

EROSION CONTROL PLAN

DESIGN AGENCY
ms consultants, inc.
engineers * architects * planners
2221 SCHROCK ROAD
COLUMBUS, OHIO 43229-1547
(614)-895-7100
Fax (614)-895-7570

DESIGNER

REVIEWER

PROJECT ID

SHEET	TOTAL
15	19

N:\03\61\44061-02\D_Design\Drawings\Sheet Sets\Erosion Control Plans 2.dwg 28-Jul-25 4:02 PM

LEGEND

ASPHALT PAVEMENT REPLACEMENT (SEE DETAIL SHEET 3)

ITEM 659 – SEEDING AND MULCHING

HORIZONTAL SCALE IN FEET
0 30' 60'

PAVEMENT REPAIR PLANS

DESIGN AGENCY
ms consultants, Inc.
engineers * architects * planners
2221 SCHROCK ROAD
COLUMBUS, OHIO 43229-1547
(614)-898-7100
Fax (614)-898-7670

DESIGNER

REVIEWER

PROJECT ID

SHEET	TOTAL
16	19

N:\03\61\44061-02\D_Design\Drawings\Sheet Sets\Pavement Repair Plans.dwg 28-Jul-25 4:02 PM

MATCHLINE (SEE SHEET 16)

LEGEND

ASPHALT PAVEMENT REPLACEMENT (SEE DETAIL SHEET 3)

ITEM 659 – SEEDING AND MULCHING

HORIZONTAL SCALE IN FEET
0 30' 60'

PAVEMENT REPAIR PLANS

DESIGN AGENCY

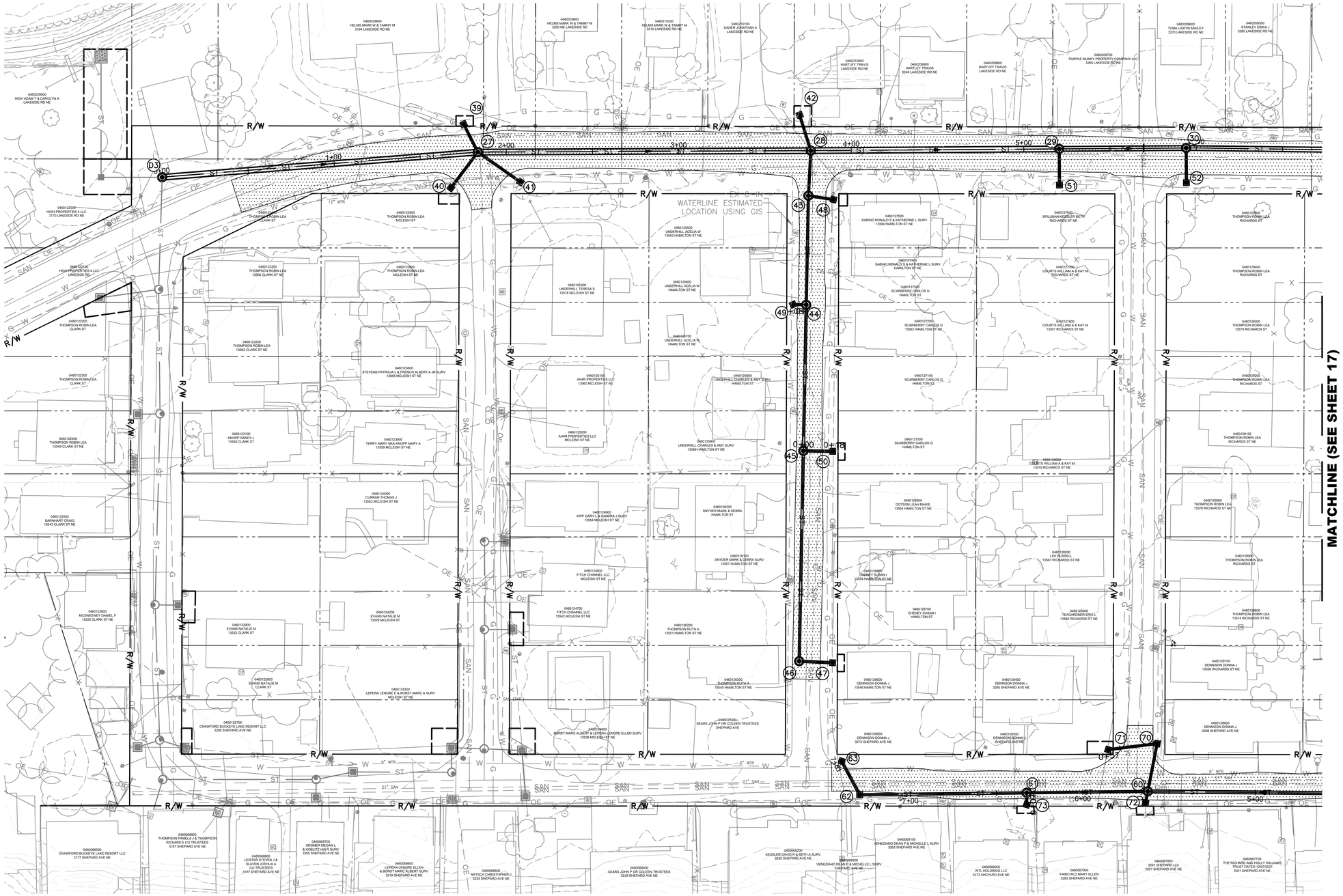
ms consultants, inc.
engineers • architects • planners
2221 SCHROCK ROAD
COLUMBUS, OHIO 43229-1547
(614)-898-7100
Fax (614)-898-7670

DESIGNER

REVIEWER

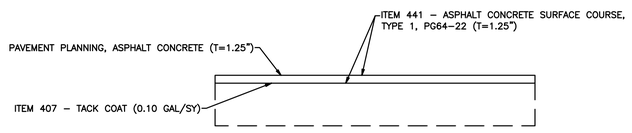
PROJECT ID

SHEET	TOTAL
17	19



LEGEND

MILL & OVERLAY (SEE TYPICAL SECTION THIS SHEET)



FULL WIDTH MILL & OVERLAY DETAIL
N.T.S.

LAKESIDE DRIVE:
FROM 115' WEST OF HAMILTON INTERSECTION TO 165' EAST OF HOLTSBERRY INTERSECTION

MCLEISH STREET:
INTERSECTION OF LAKESIDE DRIVE

HAMILTON STREET:
FROM INTERSECTION OF LAKESIDE DRIVE TO 40' NORTH OF SHEPARD AVENUE INTERSECTION

RICHARDS STREET:
INTERSECTION OF SHEPARD AVENUE

SHEPARD AVENUE:
FROM THE INTERSECTION OF HAMILTON STREET TO 40' EAST OF GEARHART INTERSECTION

HORIZONTAL SCALE IN FEET
0 30' 60'

PAVEMENT MILL AND OVERLAY PLANS

DESIGN AGENCY

ms consultants, Inc.
engineers • architects • planners
2221 EDISON ROAD
COLUMBUS, OHIO 43228-1847
(614)-898-7100
Fax (614)-898-7270

DESIGNER

REVIEWER

PROJECT ID

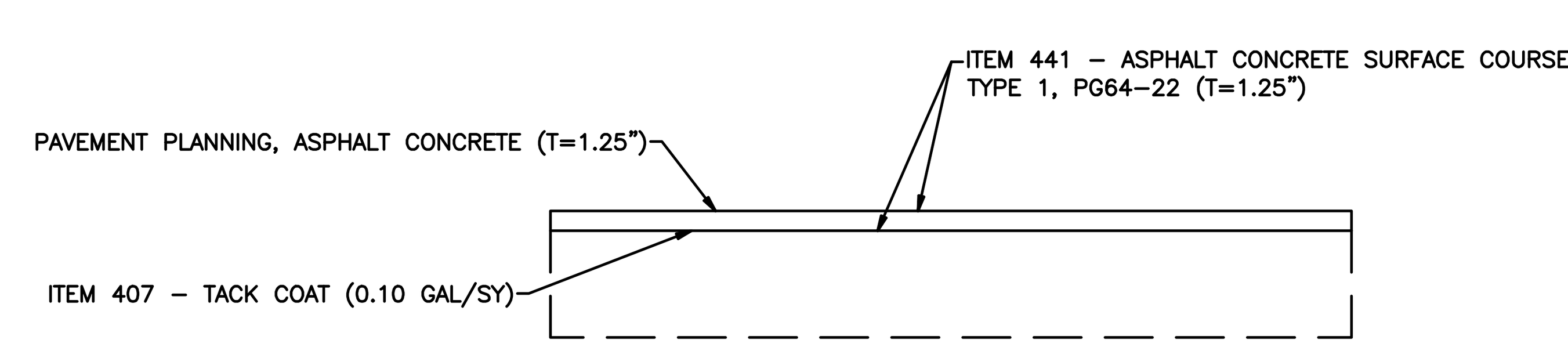
SHEET	TOTAL
18	19

PAVEMENT MILL AND OVERLAY PLANS

HORIZONTAL SCALE IN FEET
0 30' 60'

LEGEND

MILL & OVERLAY (SEE TYPICAL SECTION THIS SHEET)



FULL WIDTH MILL & OVERLAY DETAIL
N.T.S.

LAKESIDE DRIVE:
FROM 115' WEST OF HAMILTON INTERSECTION TO 165' EAST OF HOLTSBERRY INTERSECTION

GEARHART STREET:
FROM INTERSECTION OF LAKESIDE DRIVE TO INTERSECTION OF SHEPARD AVENUE

HOLTSBERRY STREET:
FROM INTERSECTION OF LAKESIDE DRIVE TO INTERSECTION OF SHEPARD AVENUE

SHEPARD AVENUE:
FROM 85' WEST OF HOLTSBERRY INTERSECTION TO THE INTERSECTION OF HOLTSBERRY

DESIGN AGENCY

ms consultants, inc.
engineers * architects * planners
2221 SCHROCK ROAD
COLUMBUS, OHIO 43229-1547
(614)-898-7100
Fax (614)-898-7570

DESIGNER

REVIEWER

PROJECT ID

SHEET	TOTAL
19	19

N:\03\61\44061-02\D_Design\Drawings\Sheet Sets\19 Pavement Mill & Overlay Plans.dwg 28-Jul-25 4:03 PM